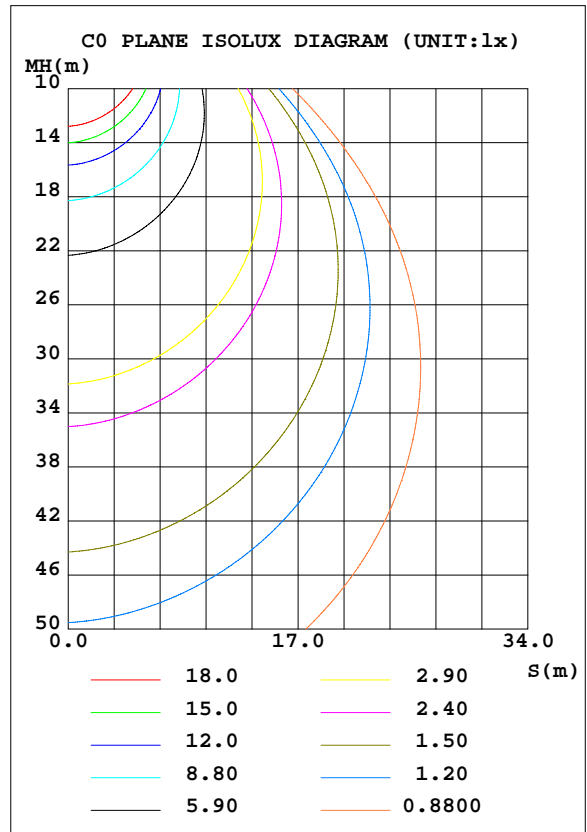
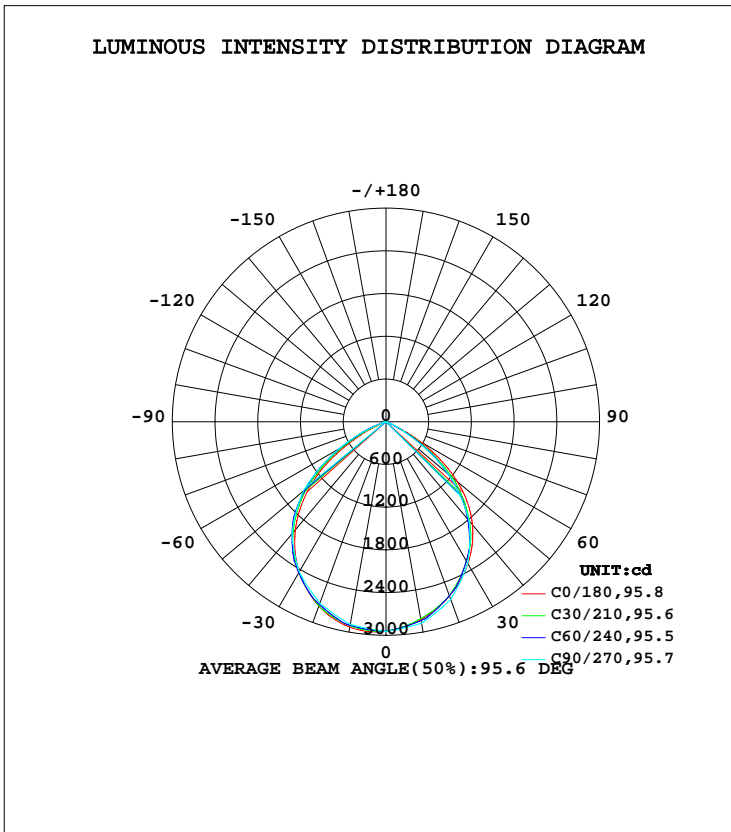


EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:125.4V I:0.3976A P:49.51W PF:0.9931 Lamp Flux:5964.52x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 120.47 lm/W			
MODEL		I _{max} (cd)	2957	S/MH(C0/180)	1.23
NOMINAL POWER(W)	50	LOR(%)	100.0	S/MH(C90/270)	1.23
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	5964.5	η UP, DN(C0-180)	0.0,47.2
NOMINAL FLUX(lm)	5964.52	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0,52.8
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	120	η down(%)	100.0	CIBSE SHR MAX	1.30



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:15 June 2016

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.350
 Humidity:65.0%
 Test Distance:7.850m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
5	2896	2888	2907	2930	2956	2935	2916	2895	0- 5	69.94	69.94	1.17,1.17
10	2821	2818	2872	2898	2929	2906	2889	2836	5- 10	206.8	276.8	4.64,4.64
15	2724	2727	2764	2833	2861	2847	2801	2758	10- 15	335.4	612.1	10.3,10.3
20	2604	2588	2655	2701	2756	2737	2713	2639	15- 20	449.6	1062	17.8,17.8
25	2464	2442	2475	2550	2610	2611	2574	2513	20- 25	545.4	1607	26.9,26.9
30	2300	2261	2295	2350	2437	2455	2435	2357	25- 30	618.0	2225	37.3,37.3
35	2111	2048	2056	2118	2226	2264	2244	2176	30- 35	664.8	2890	48.5,48.5
40	1889	1812	1816	1868	1980	2056	2053	1980	35- 40	680.7	3571	59.9,59.9
45	1626	1502	1479	1565	1694	1779	1784	1727	40- 45	661.9	4232	71,71
50	1309	1171	1142	1244	1370	1484	1514	1456	45- 50	600.7	4833	81,81
55	938.2	791.5	741.0	826.7	999.2	1096	1138	1093	50- 55	496.1	5329	89.3,89.3
60	552.8	425.6	340.3	425.5	566.2	702.8	761.8	713.0	55- 60	349.1	5678	95.2,95.2
65	166.2	159.1	179.5	157.1	208.7	333.7	403.8	304.6	60- 65	188.0	5866	98.4,98.4
70	43.95	34.59	18.82	31.11	39.68	101.5	45.84	71.98	65- 70	68.09	5934	99.5,99.5
75	25.69	18.88	10.73	16.40	21.23	28.52	28.49	28.55	70- 75	17.98	5952	99.8,99.8
80	10.79	8.251	2.645	7.156	9.359	13.22	11.14	14.63	75- 80	8.461	5961	99.9,99.9
85	6.729	0.9914	0	0.8936	5.159	3.082	0	3.258	80- 85	3.285	5964	100,100
90	1.655	0	0	0	1.377	0	0	0	85- 90	0.4379	5965	100,100
95									90- 95			
100									95-100			
105									100-105			
110									105-110			
115									110-115			
120									115-120			
125									120-125			
130									125-130			
135									130-135			
140									135-140			
145									140-145			
150									145-150			
155									150-155			
160									155-160			
165									160-165			
170									165-170			
175									170-175			
180									175-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 4232.5 lm

%lum = 71.0%
%lamp = 71.0%

Conical surface Flux(120deg): 5678.3 lm

%lum = 95.2%
%lamp = 95.2%

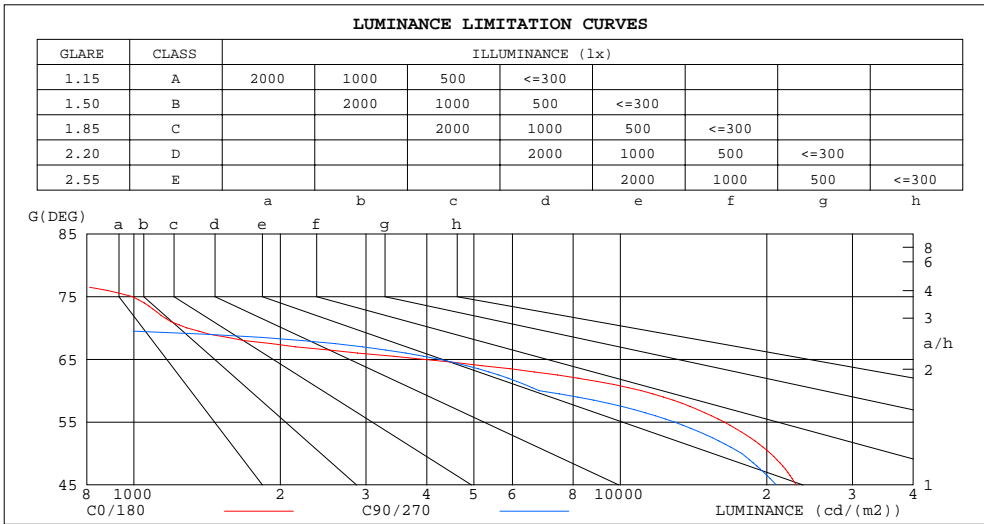
C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:15 June 2016

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.350
Humidity:65.0%
Test Distance:7.850m [K=1.0000]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINANCE LIMITATION CURVES

Test:U:125.4V I:0.3976A P:49.51W PF:0.9931 Lamp Flux:5964.52x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	772	0
80	621	152
75	993	415
70	1285	550
65	3932	4248
60	11055	6805
55	16356	12919
50	20363	17763
45	22998	20917

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:15 June 2016

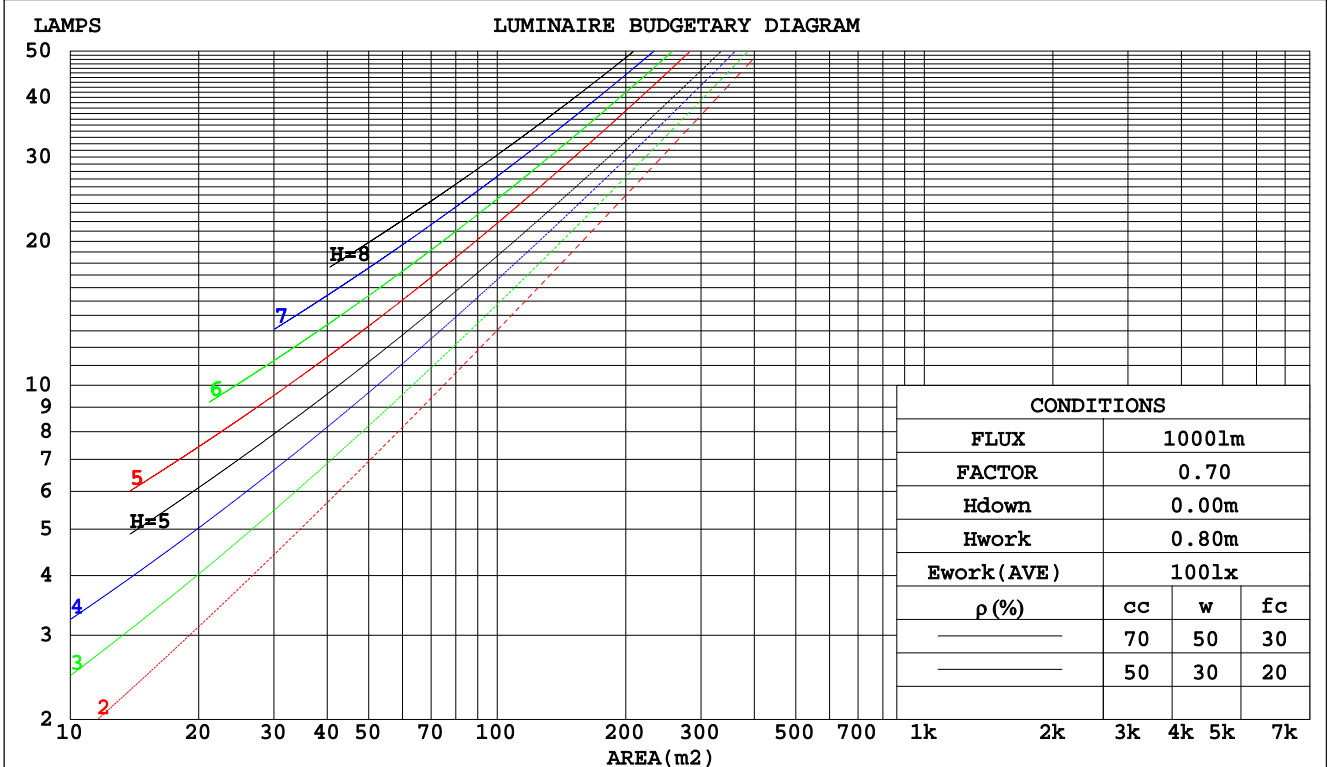
γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.350
 Humidity:65.0%
 Test Distance:7.850m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:125.4V I:0.3976A P:49.51W PF:0.9931 Lamp Flux:5964.52x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

pcc	80%			70%			50%			30%			10%			0
	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pw																
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio															
	Coefficients of Utilization(CU)															
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	.00
1.0	1.08	1.05	1.02	1.06	1.03	1.00	1.02	.99	.97	.98	.96	.94	.94	.93	.91	.89
2.0	.97	.92	.87	.95	.90	.86	.92	.88	.84	.89	.85	.82	.86	.83	.80	.79
3.0	.87	.80	.75	.86	.79	.74	.83	.78	.73	.80	.76	.72	.78	.74	.71	.69
4.0	.79	.71	.65	.77	.70	.65	.75	.69	.64	.73	.68	.63	.71	.66	.63	.61
5.0	.71	.63	.58	.70	.63	.57	.68	.62	.57	.66	.61	.56	.64	.60	.56	.54
6.0	.65	.57	.51	.64	.56	.51	.62	.55	.50	.60	.55	.50	.59	.54	.50	.48
7.0	.59	.51	.46	.58	.51	.46	.57	.50	.45	.55	.49	.45	.54	.49	.45	.43
8.0	.54	.46	.41	.53	.46	.41	.52	.46	.41	.51	.45	.41	.50	.44	.40	.39
9.0	.50	.42	.37	.49	.42	.37	.48	.42	.37	.47	.41	.37	.46	.41	.37	.35
10.0	.46	.39	.34	.46	.39	.34	.45	.38	.34	.44	.38	.34	.43	.38	.34	.32



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:15 June 2016

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.350
 Humidity:65.0%
 Test Distance:7.850m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

WEC AND CCEC

Test:U:125.4V I:0.3976A P:49.51W PF:0.9931 Lamp Flux:5964.52x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.232	.132	.042	.225	.129	.041	.212	.122	.039	.201	.116	.037	.190	.110	.035	
2.0	.229	.126	.039	.223	.123	.038	.212	.118	.037	.202	.113	.035	.192	.109	.034	
3.0	.220	.117	.035	.215	.115	.035	.205	.111	.034	.196	.107	.033	.188	.104	.032	
4.0	.209	.109	.032	.205	.107	.032	.196	.104	.031	.188	.101	.030	.181	.098	.030	
5.0	.198	.101	.029	.194	.100	.029	.186	.097	.029	.179	.095	.028	.173	.092	.028	
6.0	.187	.094	.027	.184	.093	.027	.177	.091	.026	.171	.089	.026	.165	.087	.026	
7.0	.177	.088	.025	.174	.087	.025	.168	.085	.024	.162	.083	.024	.157	.081	.024	
8.0	.168	.082	.023	.165	.081	.023	.159	.080	.023	.154	.078	.023	.149	.077	.022	
9.0	.159	.077	.021	.156	.076	.021	.151	.075	.021	.147	.074	.021	.142	.072	.021	
10.0	.151	.072	.020	.148	.072	.020	.144	.070	.020	.140	.069	.020	.136	.068	.020	

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.175	.157	.141	.150	.135	.121	.102	.093	.084	.059	.054	.049	.019	.017	.016	
2.0	.164	.132	.106	.140	.114	.091	.096	.079	.064	.055	.046	.037	.018	.015	.012	
3.0	.155	.114	.081	.133	.098	.071	.091	.068	.049	.053	.040	.029	.017	.013	.010	
4.0	.147	.100	.064	.126	.086	.056	.087	.060	.039	.050	.035	.023	.016	.011	.008	
5.0	.140	.089	.052	.120	.077	.045	.083	.054	.032	.048	.032	.019	.015	.010	.006	
6.0	.133	.081	.043	.115	.070	.037	.079	.049	.026	.046	.029	.016	.015	.009	.005	
7.0	.127	.074	.036	.109	.064	.032	.076	.045	.022	.044	.026	.013	.014	.009	.004	
8.0	.122	.068	.031	.105	.059	.027	.072	.041	.019	.042	.024	.011	.014	.008	.004	
9.0	.116	.063	.027	.100	.055	.024	.069	.038	.017	.040	.023	.010	.013	.007	.003	
10.0	.111	.059	.024	.096	.051	.021	.066	.036	.015	.039	.021	.009	.013	.007	.003	

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:15 June 2016

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.350
 Humidity:65.0%
 Test Distance:7.850m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

UGR(Unified Glare Rating) Table

Test:U:125.4V I:0.3976A P:49.51W PF:0.9931 Lamp Flux:5964.52x1 lm										
NAME:					TYPE:			WEIGHT:		
SPEC.:					DIM.:			SERIAL No.:		
MFR.:					SUR.:			Shielding Angle:		
ceiling/cavity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions	Viewed crosswise					Viewed endwise				
x = 2H y = 2H	21.5	22.8	21.7	23.0	23.2	20.8	22.1	21.1	22.3	22.5
3H	21.3	22.5	21.6	22.8	23.0	20.7	21.9	21.0	22.1	22.4
4H	21.2	22.4	21.5	22.6	22.9	20.6	21.8	20.9	22.0	22.2
6H	21.2	22.2	21.5	22.5	22.7	20.5	21.6	20.8	21.8	22.1
8H	21.1	22.1	21.4	22.4	22.7	20.5	21.5	20.8	21.8	22.0
12H	21.1	22.0	21.4	22.3	22.6	20.4	21.4	20.8	21.7	22.0
4H 2H	21.4	22.5	21.7	22.8	23.0	20.8	21.9	21.1	22.2	22.4
3H	21.3	22.2	21.6	22.5	22.8	20.7	21.7	21.0	21.9	22.2
4H	21.2	22.0	21.5	22.4	22.7	20.6	21.5	21.0	21.8	22.1
6H	21.1	21.9	21.5	22.2	22.6	20.5	21.3	20.9	21.6	22.0
8H	21.0	21.8	21.5	22.1	22.5	20.5	21.2	20.9	21.5	21.9
12H	21.0	21.6	21.4	22.0	22.4	20.4	21.1	20.8	21.4	21.8
8H 4H	21.0	21.7	21.4	22.1	22.5	20.5	21.2	20.9	21.5	21.9
6H	21.0	21.5	21.4	21.9	22.4	20.4	21.0	20.8	21.4	21.8
8H	20.9	21.4	21.4	21.9	22.3	20.3	20.9	20.8	21.3	21.7
12H	20.9	21.3	21.4	21.8	22.2	20.3	20.7	20.8	21.2	21.6
12H 4H	21.0	21.6	21.4	22.0	22.4	20.4	21.1	20.9	21.5	21.8
6H	20.9	21.4	21.4	21.8	22.3	20.3	20.9	20.8	21.3	21.7
8H	20.9	21.3	21.4	21.8	22.2	20.3	20.7	20.8	21.2	21.6
Variations with the observer position at spacings:										
S = 1.0H	+ 1.0 / - 1.3					+ 1.2 / - 1.8				
1.5H	+ 0.6 / - 0.9					+ 0.6 / - 0.6				
2.0H	+ 2.2 / - 5.9					+ 2.6 / - 7.4				

CIE Pub.117 Corrected 5965 lm Total Lamp Luminous Flux.(8log(F/F0) = 6.2)

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:15 June 2016

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.350
 Humidity:65.0%
 Test Distance:7.850m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

UTILIZATION FACTORS TABLE

Test:U:125.4V I:0.3976A P:49.51W PF:0.9931 Lamp Flux:5964.52x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	65	55	49	65	55	49	64	55	49	43
0.80	76	66	60	75	66	60	74	65	60	54
1.00	85	76	70	84	75	70	82	76	69	63
1.25	92	83	78	90	83	77	88	81	77	71
1.50	96	88	83	95	88	83	92	86	81	75
2.00	102	95	90	100	94	90	97	92	88	82
2.50	104	99	94	103	97	93	99	95	91	84
3.00	107	102	98	105	100	97	101	98	95	87
4.00	110	106	102	108	104	101	104	101	98	90
5.00	112	108	105	109	106	103	105	102	100	92
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

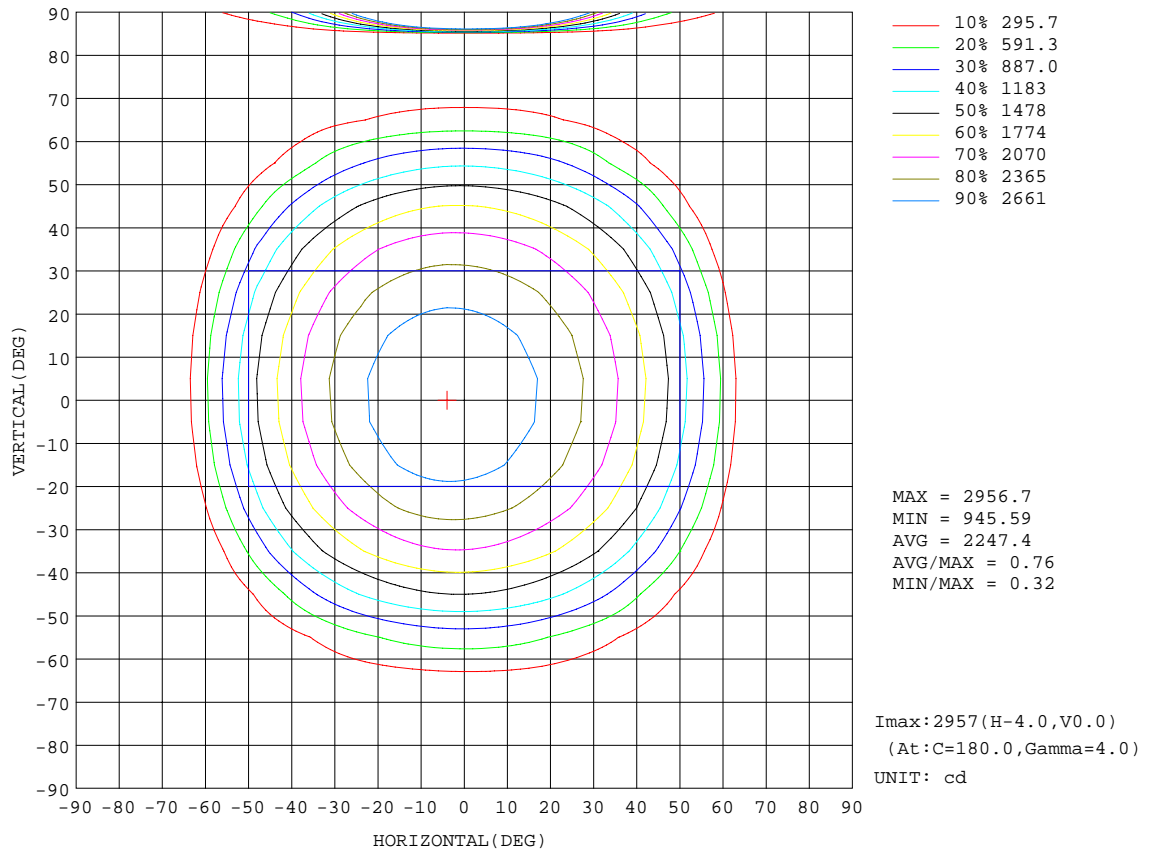
C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:15 June 2016

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.350
 Humidity:65.0%
 Test Distance:7.850m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ISOCANDELA DIAGRAM

Test:U:125.4V I:0.3976A P:49.51W PF:0.9931 Lamp Flux:5964.52x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



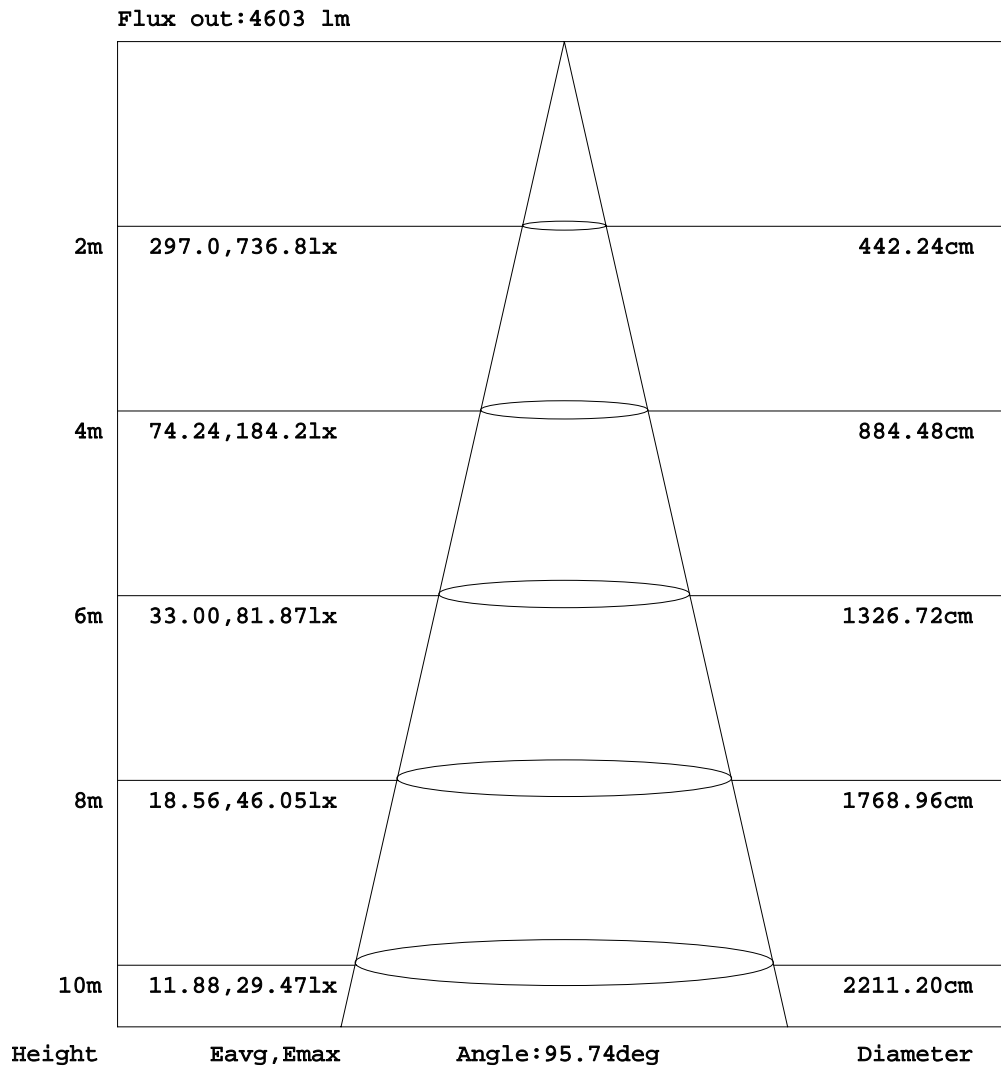
C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:15 June 2016

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.350
 Humidity:65.0%
 Test Distance:7.850m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

AAI Figure

Test:U:125.4V I:0.3976A P:49.51W PF:0.9931 Lamp Flux:5964.52x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

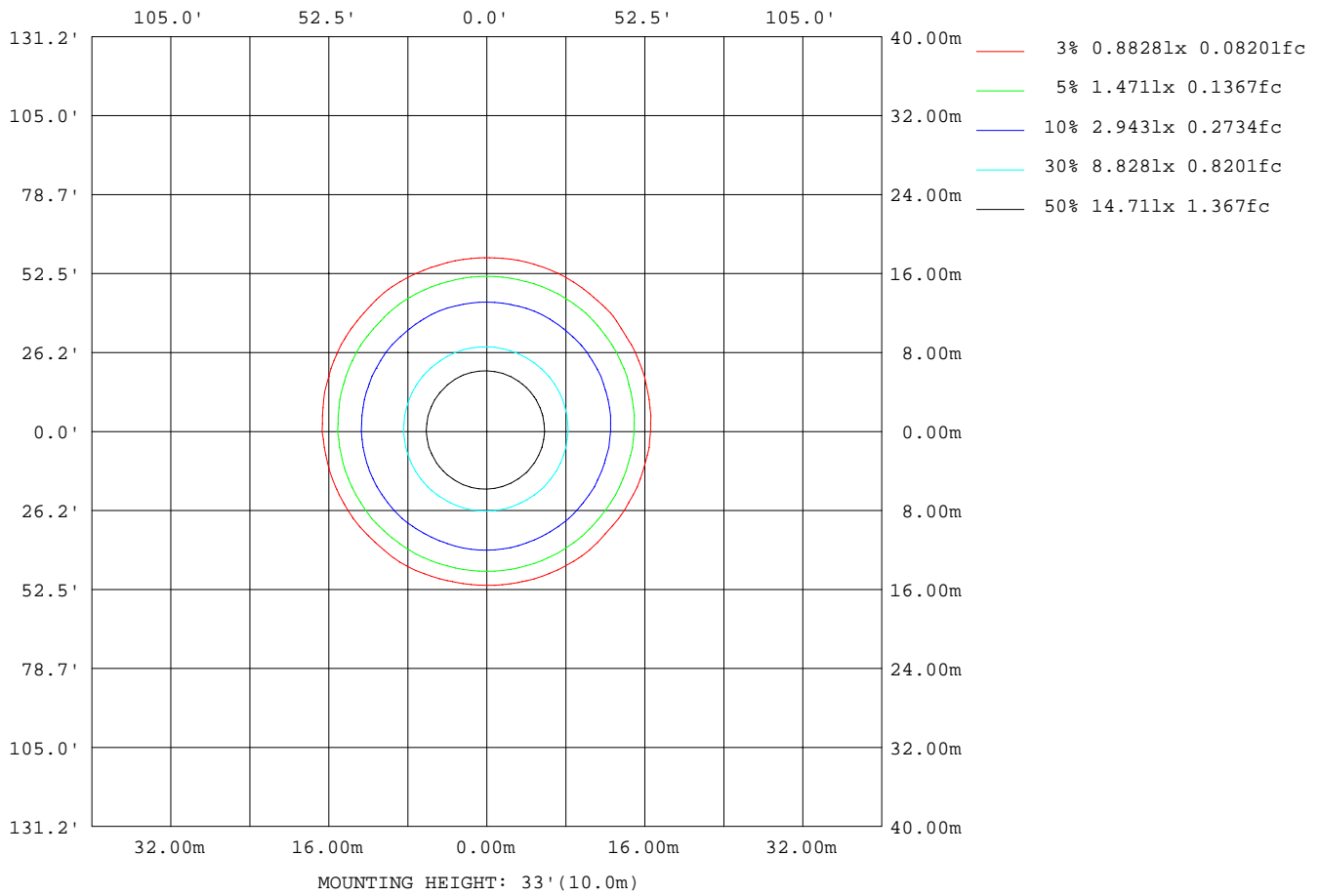
C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25DEG
 Operators:
 Test Date: 15 June 2016

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.350
 Humidity: 65.0%
 Test Distance: 7.850m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ISOLUX DIAGRAM

Test:U:125.4V I:0.3976A P:49.51W PF:0.9931 Lamp Flux:5964.52x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25DEG
 Operators:
 Test Date: 15 June 2016

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.350
 Humidity: 65.0%
 Test Distance: 7.850m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LED Avg.L Report

Test:U:125.4V I:0.3976A P:49.51W PF:0.9931 Lamp Flux:5964.52x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

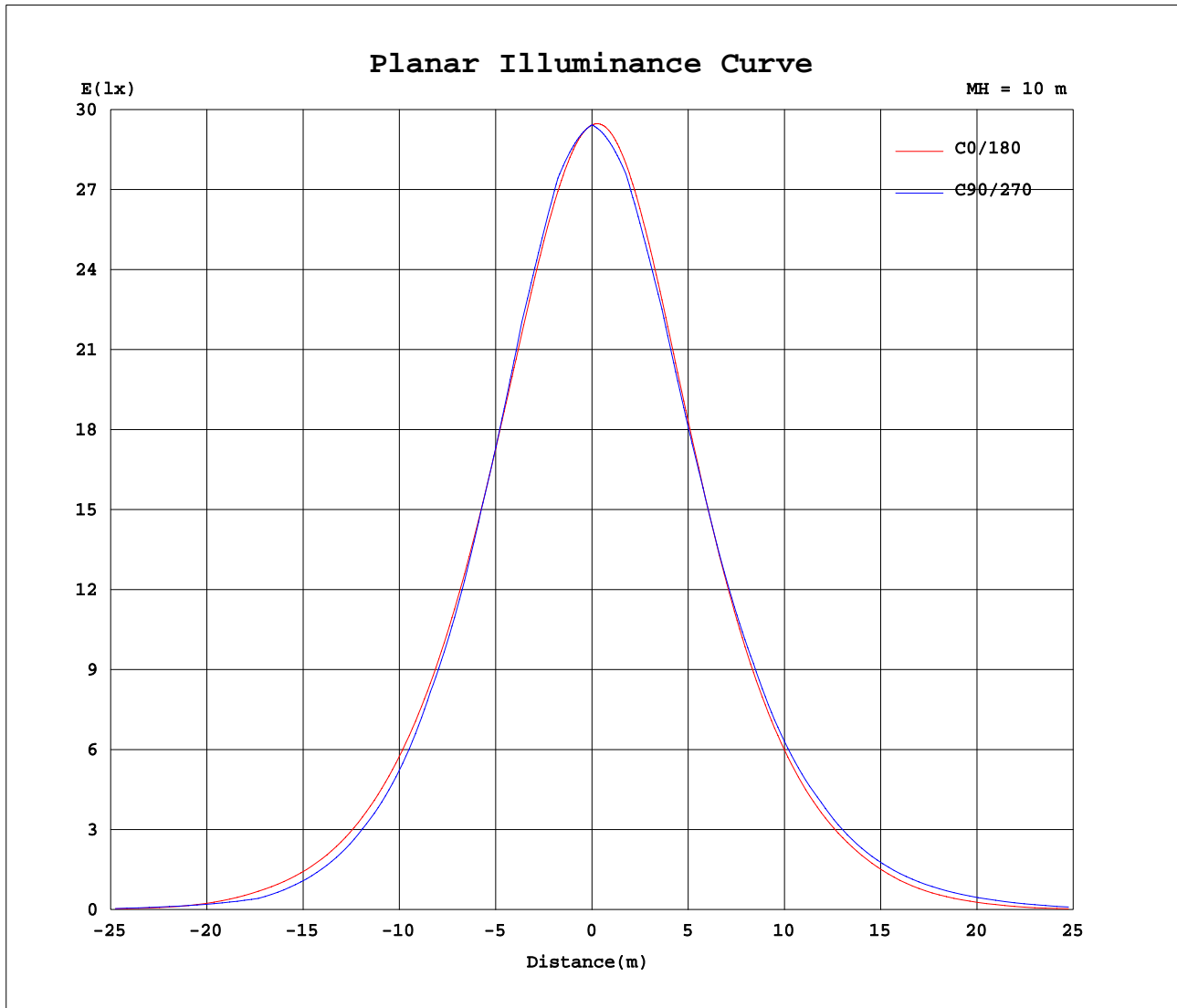
AvgL	cd/m2
L_0~180(65)av	4435
L_0~180(75)av	906
L_0~180(85)av	682
L_90~270(65)av	6902
L_90~270(75)av	758
L_90~270(85)av	0
L_45(65)av	5646
L_45(75)av	892
L_45(85)av	236

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:15 June 2016

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.350
 Humidity:65.0%
 Test Distance:7.850m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25DEG
 Operators:
 Test Date: 15 June 2016

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.350
 Humidity: 65.0%
 Test Distance: 7.850m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:125.4V I:0.3976A P:49.51W PF:0.9931 Lamp Flux:5964.52x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Table--1

UNIT: cd

C(DEG) γ (DEG)	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90
0	2943	2943	2943	2943	2943	2943	2943	2943	2943	2943	2943	2943	2943	2943	2943	2943	2943	2943	2943
5	2896	2893	2891	2889	2888	2887	2886	2886	2887	2888	2889	2891	2893	2895	2897	2899	2902	2905	2907
10	2821	2815	2811	2809	2807	2807	2809	2811	2814	2818	2823	2829	2835	2841	2848	2854	2860	2866	2872
15	2724	2716	2710	2707	2707	2709	2713	2720	2728	2727	2726	2727	2729	2733	2738	2744	2750	2757	2764
20	2604	2594	2587	2585	2587	2593	2598	2592	2589	2588	2591	2595	2601	2610	2619	2628	2637	2647	2655
25	2464	2450	2442	2441	2447	2446	2439	2436	2437	2442	2450	2448	2446	2447	2450	2455	2461	2468	2475
30	2300	2284	2277	2278	2275	2265	2262	2266	2271	2261	2256	2255	2257	2262	2268	2275	2282	2289	2295
35	2111	2092	2086	2088	2070	2065	2070	2060	2050	2048	2051	2057	2048	2042	2040	2042	2045	2050	2056
40	1889	1867	1863	1850	1836	1839	1822	1812	1814	1812	1795	1786	1782	1784	1789	1796	1804	1811	1816
45	1626	1601	1601	1572	1564	1547	1535	1542	1516	1502	1498	1501	1494	1482	1475	1471	1472	1475	1479
50	1309	1281	1269	1244	1228	1213	1209	1182	1170	1171	1157	1143	1132	1126	1125	1127	1132	1137	1142
55	938	913	891	875	852	844	824	809	795	792	784	775	767	761	754	749	745	742	741
60	553	538	514	497	493	459	455	430	411	426	434	417	401	387	376	365	355	346	340
65	166	167	151	146	151	142	146	120	156	159	127	96.5	128	155	172	180	182	181	180
70	43.9	43.0	41.5	40.9	39.2	38.5	38.1	42.8	33.3	34.6	39.1	46.7	53.7	54.9	49.3	39.4	28.7	21.1	18.8
75	25.7	24.7	24.4	24.1	23.5	22.7	21.5	21.1	20.3	18.9	17.4	16.7	16.0	15.3	14.4	13.2	11.7	10.8	10.7
80	10.8	10.5	11.0	12.6	13.3	12.7	11.4	10.5	9.46	8.25	7.13	6.13	5.20	4.34	3.60	3.02	2.64	2.53	2.64
85	6.73	6.62	5.64	4.99	4.63	3.60	2.31	1.76	1.32	0.99	0.73	0.53	0.36	0.24	0.15	0.08	0.04	0.01	0.00
90	1.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:15 June 2016

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.350
 Humidity:65.0%
 Test Distance:7.850m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:125.4V I:0.3976A P:49.51W PF:0.9931 Lamp Flux:5964.52x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Table--2

UNIT: cd

C(DEG) γ (DEG)	95	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	180	185
0	2943	2943	2943	2943	2943	2943	2943	2943	2943	2943	2943	2943	2943	2943	2943	2943	2943	2943	2943
5	2910	2913	2915	2918	2921	2923	2925	2928	2930	2933	2936	2938	2941	2944	2947	2950	2953	2956	2954
10	2877	2881	2885	2888	2891	2893	2895	2897	2898	2900	2901	2903	2906	2909	2913	2917	2923	2929	2924
15	2770	2777	2784	2791	2799	2806	2814	2823	2833	2841	2839	2837	2836	2837	2840	2845	2852	2861	2853
20	2662	2669	2675	2679	2683	2687	2691	2695	2701	2709	2720	2734	2731	2728	2729	2734	2743	2756	2747
25	2483	2491	2499	2508	2517	2527	2540	2550	2550	2552	2554	2562	2576	2583	2580	2584	2594	2610	2601
30	2301	2306	2310	2314	2318	2323	2330	2340	2350	2368	2370	2372	2381	2399	2406	2407	2417	2437	2430
35	2062	2067	2073	2079	2088	2098	2111	2112	2118	2129	2145	2161	2162	2172	2194	2193	2203	2226	2221
40	1820	1823	1824	1825	1826	1830	1837	1849	1868	1876	1883	1898	1919	1920	1934	1947	1954	1980	1976
45	1483	1489	1495	1504	1519	1540	1555	1557	1565	1580	1606	1607	1622	1642	1643	1665	1666	1694	1691
50	1144	1145	1144	1147	1154	1167	1187	1212	1244	1241	1252	1281	1288	1306	1320	1332	1341	1370	1366
55	742	746	752	762	775	789	798	809	827	849	871	877	903	912	948	948	966	999	998
60	338	342	351	366	387	408	425	435	426	425	451	464	472	490	505	520	536	566	574
65	177	174	169	162	149	127	94.0	122	157	154	121	146	152	157	159	176	185	209	216
70	21.0	26.8	35.9	45.7	52.4	52.1	44.1	35.5	31.1	29.4	39.7	34.4	34.1	34.3	35.4	36.1	37.2	39.7	40.7
75	10.8	10.8	11.7	13.1	14.1	14.7	15.1	15.4	16.4	17.5	18.1	18.2	19.0	19.4	19.9	19.9	20.3	21.2	21.5
80	2.63	2.62	2.87	3.36	4.04	4.77	5.55	6.32	7.16	8.09	8.83	9.25	10.4	11.3	11.2	10.0	9.04	9.36	9.44
85	0.01	0.04	0.08	0.14	0.22	0.34	0.48	0.66	0.89	1.20	1.61	2.15	3.20	4.10	4.30	4.78	4.99	5.16	4.82
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.38	0.00

C Range: 0 - 360DEG γ Range: 0 - 90DEG
 C Interval: 5.0DEG γ Interval: 0.5DEG
 Test Speed: HIGH Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.350
 Temperature: 25DEG Humidity: 65.0%
 Operators: Test Distance: 7.850m [K=1.0000]
 Test Date: 15 June 2016 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:125.4V I:0.3976A P:49.51W PF:0.9931 Lamp Flux:5964.52x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Table--3

UNIT: cd

C(DEG) γ (DEG)	190	195	200	205	210	215	220	225	230	235	240	245	250	255	260	265	270	275	280
0	2943	2943	2943	2943	2943	2943	2943	2943	2943	2943	2943	2943	2943	2943	2943	2943	2943	2943	2943
5	2951	2949	2946	2944	2942	2940	2937	2935	2933	2931	2929	2927	2925	2923	2920	2918	2916	2913	2911
10	2919	2916	2913	2910	2909	2907	2907	2906	2905	2905	2904	2903	2901	2899	2896	2893	2889	2884	2879
15	2848	2845	2844	2844	2846	2849	2852	2847	2841	2835	2830	2825	2821	2816	2811	2806	2801	2795	2789
20	2742	2740	2742	2748	2752	2745	2740	2737	2734	2733	2731	2730	2728	2726	2723	2718	2713	2706	2699
25	2599	2602	2610	2611	2607	2607	2608	2611	2615	2612	2606	2601	2597	2592	2588	2580	2574	2567	2560
30	2432	2442	2447	2442	2445	2448	2464	2455	2451	2450	2450	2451	2451	2451	2449	2441	2435	2428	2420
35	2229	2247	2243	2250	2264	2263	2262	2264	2273	2281	2275	2270	2266	2262	2258	2251	2244	2237	2230
40	1991	2000	2008	2029	2028	2033	2047	2056	2050	2050	2053	2057	2060	2062	2062	2059	2053	2045	2036
45	1715	1716	1739	1744	1754	1777	1775	1779	1790	1806	1807	1800	1796	1794	1792	1788	1784	1778	1771
50	1384	1398	1413	1423	1442	1446	1462	1484	1476	1476	1481	1488	1497	1506	1512	1516	1514	1508	1500
55	1012	1043	1041	1077	1067	1094	1097	1096	1106	1125	1136	1138	1138	1138	1139	1139	1138	1136	1135
60	594	614	632	651	671	682	692	703	726	743	748	749	750	752	756	760	762	762	761
65	241	250	262	286	285	297	335	334	348	378	405	414	415	413	409	405	404	406	412
70	43.6	48.2	54.1	54.7	74.3	84.1	66.5	102	137	160	154	134	111	87.9	68.0	52.2	45.8	51.8	66.7
75	21.7	22.1	22.5	23.4	23.8	25.3	28.4	28.5	23.8	25.2	27.3	28.9	29.9	30.3	30.2	29.2	28.5	28.8	29.3
80	10.6	12.3	13.3	13.4	13.2	13.0	13.0	13.2	13.6	13.8	14.1	13.5	12.4	11.0	10.3	10.7	11.1	10.4	10.1
85	4.64	4.97	5.22	5.21	4.34	3.65	3.20	3.08	2.73	2.15	1.65	1.11	0.66	0.34	0.15	0.04	0.00	0.04	0.15
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:15 June 2016

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.350
 Humidity:65.0%
 Test Distance:7.850m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:125.4V I:0.3976A P:49.51W PF:0.9931 Lamp Flux:5964.52x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Table--4

UNIT: cd

C(DEG) γ (DEG)	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355				
0	2943	2943	2943	2943	2943	2943	2943	2943	2943	2943	2943	2943	2943	2943	2943				
5	2908	2906	2903	2901	2899	2897	2895	2894	2893	2892	2891	2892	2892	2893	2894				
10	2873	2867	2861	2855	2848	2842	2836	2831	2826	2822	2819	2817	2816	2816	2818				
15	2783	2778	2772	2768	2763	2760	2758	2756	2745	2736	2729	2723	2720	2719	2720				
20	2690	2681	2672	2663	2654	2646	2639	2635	2632	2633	2623	2612	2604	2600	2600				
25	2553	2547	2540	2535	2531	2526	2513	2502	2494	2489	2489	2484	2471	2462	2459				
30	2411	2400	2390	2379	2369	2362	2357	2357	2344	2330	2322	2320	2312	2300	2296				
35	2223	2216	2211	2207	2204	2189	2176	2167	2163	2159	2142	2133	2135	2117	2108				
40	2025	2014	2003	1992	1983	1978	1980	1968	1953	1945	1943	1924	1916	1907	1890				
45	1765	1761	1759	1760	1755	1739	1727	1722	1726	1702	1690	1682	1662	1661	1632				
50	1490	1480	1469	1459	1453	1451	1456	1433	1417	1418	1393	1376	1357	1345	1320				
55	1134	1135	1136	1137	1131	1109	1093	1086	1075	1048	1043	1013	997	971	953				
60	760	758	753	743	728	714	713	689	655	653	628	625	594	578	570				
65	418	422	416	389	323	287	305	309	245	242	228	214	194	182	182				
70	87.1	111	134	146	135	101	72.0	53.2	71.3	59.8	51.6	49.5	48.3	45.8	44.9				
75	29.4	29.3	28.9	28.1	26.9	26.0	28.5	29.2	28.4	27.6	27.4	26.8	26.5	26.3	26.0				
80	11.0	12.6	13.9	14.6	14.6	14.7	14.6	14.5	15.0	15.6	16.0	16.0	15.1	12.6	10.8				
85	0.34	0.68	1.15	1.70	2.27	2.88	3.26	3.27	3.73	4.52	5.74	5.87	5.80	5.23	5.65				
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:15 June 2016

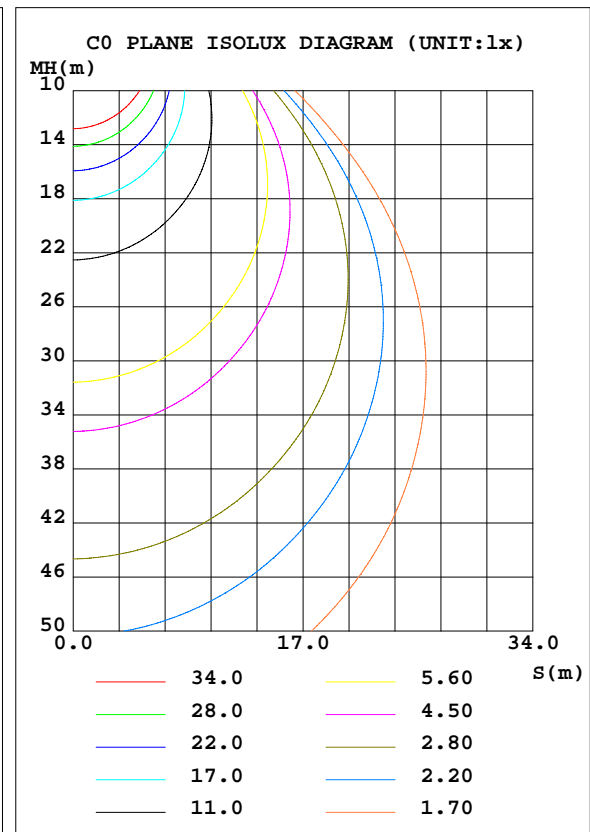
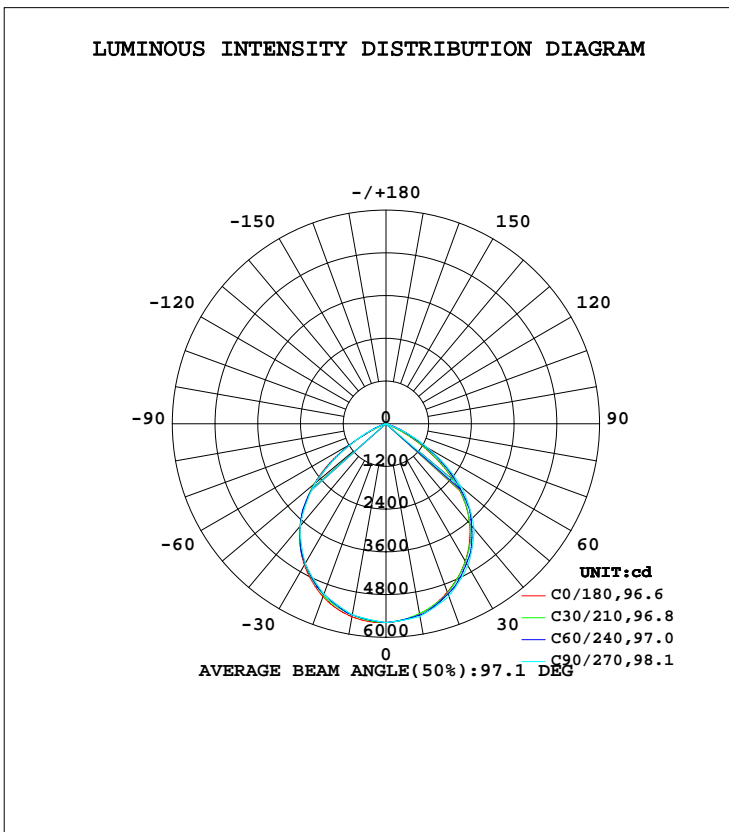
γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.350
 Humidity:65.0%
 Test Distance:7.850m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:221.3V I:0.4538A P:99.35W PF:0.9894 Lamp Flux:11580.2x1 lm		
NAME:		SERIAL No.:
SPEC.:		
MFR.:		

DATA OF LAMP		PHOTOMETRIC DATA Eff: 116.56 lm/W			
MODEL		I _{max} (cd)	5587	S/MH(C0/180)	1.22
NOMINAL POWER(W)	100	LOR(%)	100.0	S/MH(C90/270)	1.21
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	11580	η UP, DN(C0-180)	0.0,50.7
NOMINAL FLUX(lm)	11580.2	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0,49.3
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	220	η down(%)	100.0	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:2016-04-29

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.350
 Humidity:65.0%
 Test Distance:7.850m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
5	5537	5524	5540	5553	5575	5533	5516	5510	0- 5	132.8	132.8	1.15,1.15
10	5428	5433	5497	5492	5505	5449	5448	5410	5- 10	392.9	525.7	4.54,4.54
15	5261	5295	5328	5379	5368	5318	5269	5268	10- 15	638.1	1164	10,10
20	5037	5062	5159	5161	5168	5099	5091	5033	15- 20	856.9	2021	17.4,17.4
25	4772	4810	4882	4910	4898	4854	4813	4778	20- 25	1042	3063	26.4,26.4
30	4458	4501	4604	4588	4581	4545	4536	4461	25- 30	1185	4247	36.7,36.7
35	4089	4137	4229	4206	4202	4175	4143	4089	30- 35	1280	5527	47.7,47.7
40	3657	3732	3853	3793	3760	3759	3750	3681	35- 40	1317	6844	59.1,59.1
45	3137	3193	3312	3289	3239	3212	3170	3146	40- 45	1289	8133	70.2,70.2
50	2503	2612	2772	2753	2635	2625	2590	2568	45- 50	1177	9310	80.4,80.4
55	1757	1886	2058	2026	1926	1850	1828	1807	50- 55	979.1	10289	88.9,88.9
60	1007	1180	1343	1279	1117	1100	1066	1051	55- 60	698.5	10988	94.9,94.9
65	306.2	516.5	716.0	576.9	405.0	460.1	555.0	399.9	60- 65	388.4	11376	98.2,98.2
70	74.51	129.0	88.55	154.8	74.15	104.9	43.71	77.95	65- 70	142.5	11519	99.5,99.5
75	43.43	49.83	55.50	49.66	39.39	39.46	30.21	40.18	70- 75	35.47	11554	99.8,99.8
80	18.94	28.16	22.45	26.95	16.73	20.05	16.71	21.84	75- 80	17.28	11571	99.9,99.9
85	10.41	7.463	0	7.367	8.550	4.558	0	4.958	80- 85	7.700	11579	100,100
90	3.605	0	0	0	2.803	0	0	0	85- 90	1.059	11580	100,100
95									90- 95			
100									95-100			
105									100-105			
110									105-110			
115									110-115			
120									115-120			
125									120-125			
130									125-130			
135									130-135			
140									135-140			
145									140-145			
150									145-150			
155									150-155			
160									155-160			
165									160-165			
170									165-170			
175									170-175			
180									175-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 8132.8 lm

%lum = 70.2%
%lamp = 70.2%

Conical surface Flux(120deg): 10988 lm

%lum = 94.9%
%lamp = 94.9%

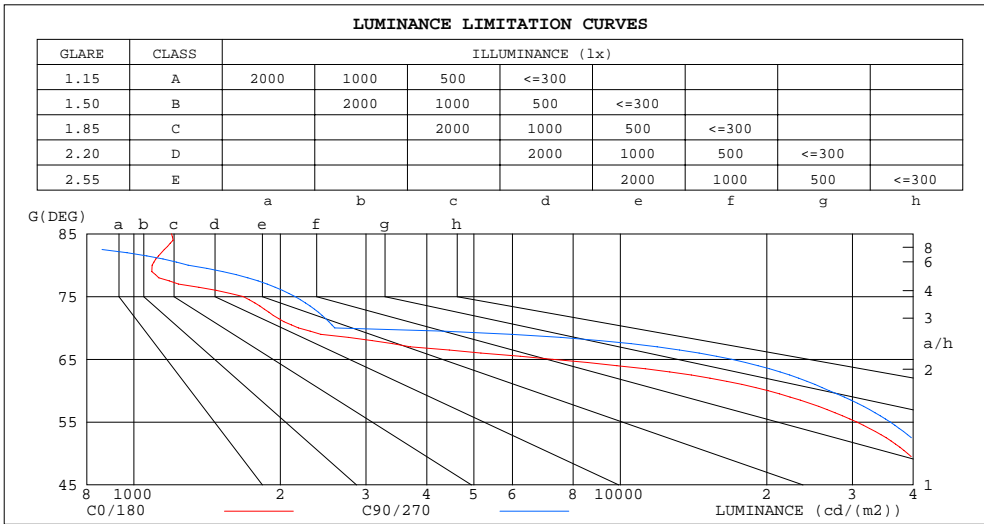
C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2016-04-29

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.350
Humidity:65.0%
Test Distance:7.850m [K=1.0000]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINANCE LIMITATION CURVES

Test:U:221.3V I:0.4538A P:99.35W PF:0.9894 Lamp Flux:11580.2x1 lm		
NAME:		SERIAL No.:
SPEC.:		
MFR.:		



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	1195	0
80	1091	1293
75	1678	2144
70	2178	2589
65	7246	16941
60	20132	26867
55	30627	35873
50	38947	43121
45	44364	46844

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25DEG
 Operators:
 Test Date: 2016-04-29

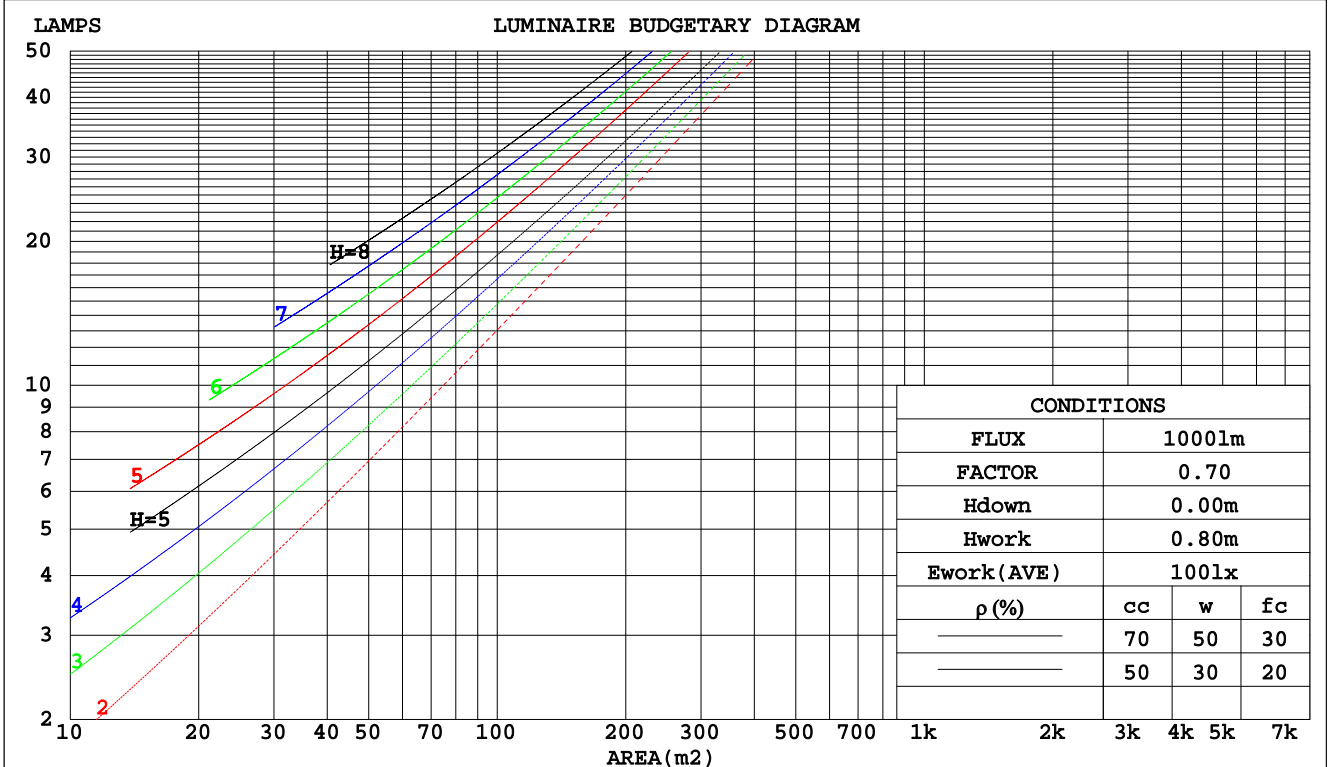
γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.350
 Humidity: 65.0%
 Test Distance: 7.850m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:221.3V I:0.4538A P:99.35W PF:0.9894 Lamp Flux:11580.2x1 lm		
NAME:		SERIAL No.:
SPEC.:		
MFR.:		

pcc	80%			70%			50%			30%			10%			0
	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pw																
pfc																
RCR	RCR:Room Cavity Ratio															
	Coefficients of Utilization(CU)															
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00
1.0	1.08	1.05	1.02	1.06	1.03	1.00	1.01	.99	.97	.98	.96	.94	.94	.93	.91	.89
2.0	.97	.91	.87	.95	.90	.86	.92	.87	.84	.88	.85	.82	.86	.83	.80	.78
3.0	.87	.80	.75	.85	.79	.74	.83	.77	.73	.80	.75	.72	.78	.74	.71	.69
4.0	.78	.71	.65	.77	.70	.65	.75	.69	.64	.72	.67	.63	.70	.66	.62	.60
5.0	.71	.63	.57	.70	.62	.57	.68	.61	.56	.66	.60	.56	.64	.59	.55	.53
6.0	.64	.56	.51	.63	.56	.50	.62	.55	.50	.60	.54	.50	.59	.53	.49	.47
7.0	.59	.51	.45	.58	.50	.45	.56	.50	.45	.55	.49	.44	.54	.48	.44	.42
8.0	.54	.46	.41	.53	.46	.41	.52	.45	.40	.51	.45	.40	.50	.44	.40	.38
9.0	.50	.42	.37	.49	.42	.37	.48	.41	.37	.47	.41	.36	.46	.40	.36	.35
10.0	.46	.39	.34	.45	.38	.34	.44	.38	.33	.44	.38	.33	.43	.37	.33	.32



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:2016-04-29

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.350
 Humidity:65.0%
 Test Distance:7.850m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

WEC AND CCEC

Test:U:221.3V I:0.4538A P:99.35W PF:0.9894 Lamp Flux:11580.2x1 lm		
NAME:		SERIAL No.:
SPEC.:		
MFR.:		

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.234	.133	.042	.227	.129	.041	.214	.123	.039	.202	.117	.037	.191	.111	.036	
2.0	.231	.126	.039	.225	.124	.038	.214	.119	.037	.203	.114	.036	.194	.110	.035	
3.0	.222	.118	.035	.216	.116	.035	.207	.112	.034	.198	.108	.033	.189	.105	.032	
4.0	.211	.109	.032	.206	.108	.032	.197	.105	.031	.189	.102	.031	.182	.099	.030	
5.0	.199	.102	.029	.195	.100	.029	.188	.098	.029	.181	.095	.028	.174	.093	.028	
6.0	.188	.094	.027	.185	.093	.027	.178	.091	.027	.172	.089	.026	.166	.087	.026	
7.0	.178	.088	.025	.175	.087	.025	.169	.085	.025	.163	.084	.024	.158	.082	.024	
8.0	.168	.082	.023	.166	.082	.023	.160	.080	.023	.155	.079	.023	.150	.077	.022	
9.0	.160	.077	.022	.157	.077	.021	.152	.075	.021	.147	.074	.021	.143	.073	.021	
10.0	.151	.073	.020	.149	.072	.020	.145	.071	.020	.140	.070	.020	.136	.069	.020	

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.175	.157	.140	.150	.135	.121	.102	.093	.084	.059	.054	.049	.019	.017	.016	
2.0	.164	.132	.105	.141	.114	.091	.096	.079	.064	.056	.046	.037	.018	.015	.012	
3.0	.155	.114	.081	.133	.098	.070	.091	.068	.049	.053	.040	.029	.017	.013	.010	
4.0	.147	.100	.064	.126	.087	.056	.087	.060	.039	.050	.035	.023	.016	.011	.008	
5.0	.140	.089	.052	.120	.077	.045	.083	.054	.032	.048	.032	.019	.015	.010	.006	
6.0	.134	.081	.043	.115	.070	.037	.079	.049	.026	.046	.029	.016	.015	.009	.005	
7.0	.128	.074	.036	.110	.064	.031	.076	.045	.022	.044	.026	.013	.014	.009	.004	
8.0	.122	.068	.031	.105	.059	.027	.073	.041	.019	.042	.024	.011	.014	.008	.004	
9.0	.116	.063	.027	.100	.055	.023	.070	.038	.017	.040	.023	.010	.013	.007	.003	
10.0	.111	.059	.024	.096	.051	.021	.067	.036	.015	.039	.021	.009	.013	.007	.003	

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:2016-04-29

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.350
 Humidity:65.0%
 Test Distance:7.850m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

UGR(Unified Glare Rating) Table

Test:U:221.3V I:0.4538A P:99.35W PF:0.9894 Lamp Flux:11580.2x1 lm										
NAME:						SERIAL No.:				
SPEC.:										
MFR.:										
ceiling/cavity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions	Viewed crosswise					Viewed endwise				
x = 2H y = 2H	24.2	25.5	24.4	25.7	25.9	24.9	26.3	25.2	26.4	26.6
3H	24.0	25.2	24.3	25.5	25.7	25.0	26.2	25.3	26.4	26.6
4H	23.9	25.1	24.2	25.3	25.6	24.9	26.0	25.2	26.3	26.5
6H	23.8	24.9	24.2	25.2	25.4	24.8	25.9	25.1	26.1	26.4
8H	23.8	24.8	24.1	25.1	25.4	24.8	25.8	25.1	26.0	26.3
12H	23.7	24.7	24.1	25.0	25.3	24.7	25.7	25.0	26.0	26.3
4H 2H	24.3	25.4	24.6	25.6	25.9	25.0	26.1	25.3	26.3	26.6
3H	24.1	25.1	24.5	25.4	25.7	25.0	26.0	25.4	26.3	26.6
4H	24.0	24.9	24.4	25.2	25.6	25.0	25.8	25.3	26.1	26.5
6H	24.0	24.7	24.4	25.1	25.4	24.9	25.6	25.3	26.0	26.3
8H	23.9	24.6	24.3	25.0	25.4	24.8	25.5	25.2	25.9	26.3
12H	23.9	24.5	24.3	24.9	25.3	24.8	25.4	25.2	25.8	26.2
8H 4H	23.9	24.6	24.3	25.0	25.4	24.8	25.5	25.2	25.9	26.3
6H	23.9	24.4	24.3	24.8	25.3	24.7	25.3	25.2	25.7	26.1
8H	23.8	24.3	24.3	24.7	25.2	24.7	25.2	25.2	25.6	26.1
12H	23.8	24.2	24.3	24.7	25.1	24.7	25.1	25.1	25.5	26.0
12H 4H	23.9	24.5	24.3	24.9	25.3	24.8	25.4	25.2	25.8	26.2
6H	23.8	24.3	24.3	24.7	25.2	24.7	25.2	25.2	25.6	26.1
8H	23.8	24.2	24.2	24.7	25.1	24.7	25.1	25.1	25.5	26.0
Variations with the observer position at spacings:										
S = 1.0H	+ 1.0 / - 1.3					+ 0.7 / - 1.0				
1.5H	+ 0.5 / - 0.7					+ 0.4 / - 0.6				
2.0H	+ 1.9 / - 4.1					+ 1.6 / - 2.8				

CIE Pub.117 Corrected 11580 lm Total Lamp Luminous Flux. (8log(F/F0) = 8.5)

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:2016-04-29

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.350
 Humidity:65.0%
 Test Distance:7.850m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

UTILIZATION FACTORS TABLE

Test:U:221.3V I:0.4538A P:99.35W PF:0.9894 Lamp Flux:11580.2x1 lm		
NAME:		SERIAL No.:
SPEC.:		
MFR.:		

REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	65	55	49	64	55	48	63	54	48	43
0.80	76	66	60	75	65	59	73	65	59	53
1.00	84	75	69	83	75	69	81	76	69	63
1.25	91	83	77	90	82	77	88	81	76	70
1.50	96	88	83	94	87	82	92	86	81	75
2.00	101	95	90	100	94	89	97	92	88	81
2.50	104	98	94	102	97	93	99	95	91	84
3.00	107	102	98	105	100	97	101	97	94	87
4.00	110	106	102	108	104	101	104	101	98	90
5.00	111	108	105	109	106	103	105	102	100	92
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

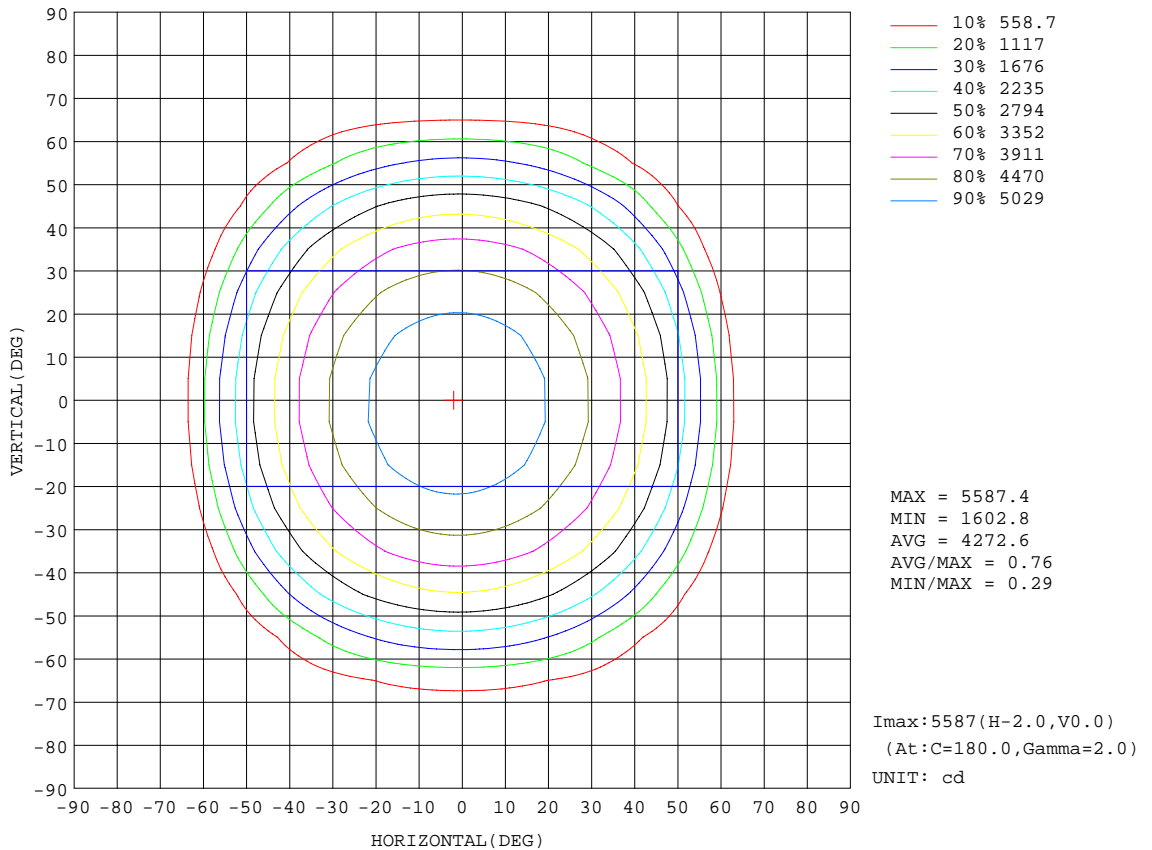
C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:2016-04-29

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.350
 Humidity:65.0%
 Test Distance:7.850m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ISOCANDELA DIAGRAM

Test:U:221.3V I:0.4538A P:99.35W PF:0.9894 Lamp Flux:11580.2x1 lm		
NAME:		SERIAL No.:
SPEC.:		
MFR.:		



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25DEG
 Operators:
 Test Date: 2016-04-29

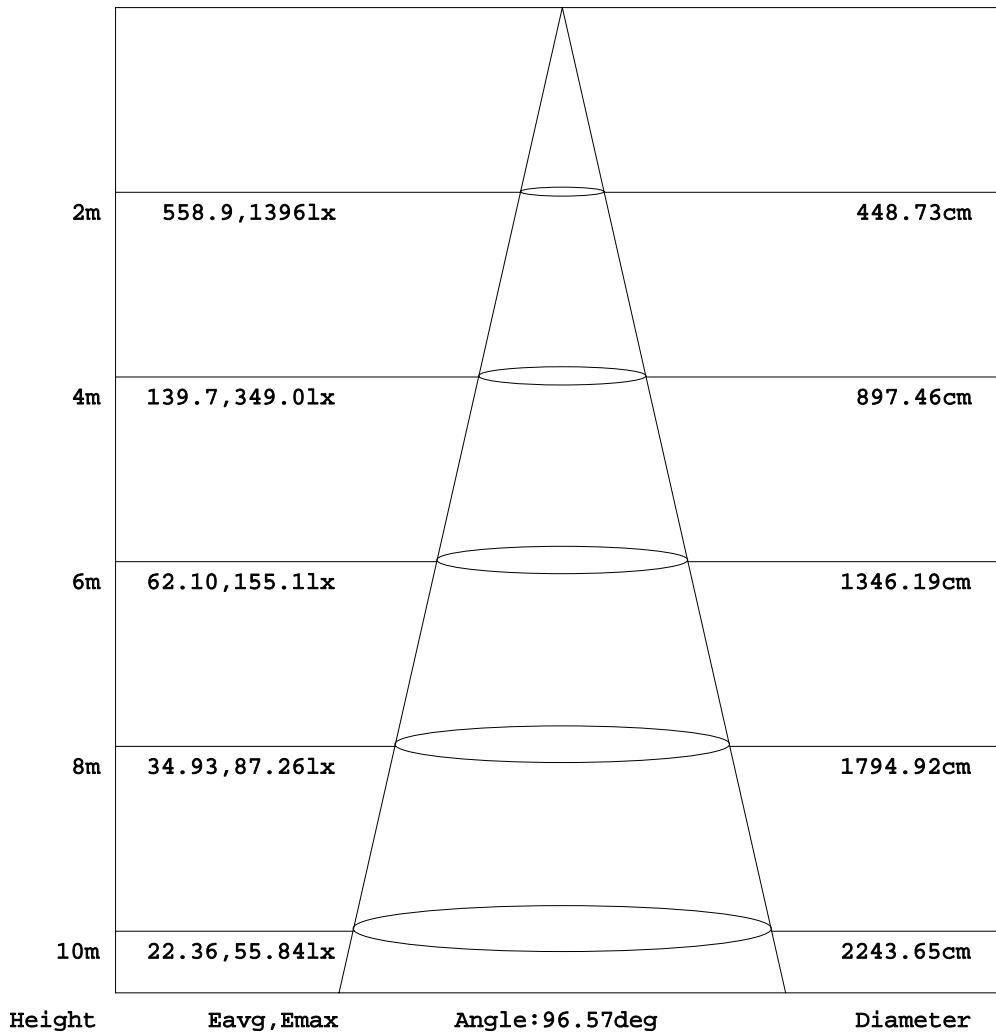
γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.350
 Humidity: 65.0%
 Test Distance: 7.850m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

AAI Figure

Test:U:221.3V I:0.4538A P:99.35W PF:0.9894 Lamp Flux:11580.2x1 lm		
NAME:		SERIAL No.:
SPEC.:		
MFR.:		

Flux out:8973 lm



Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

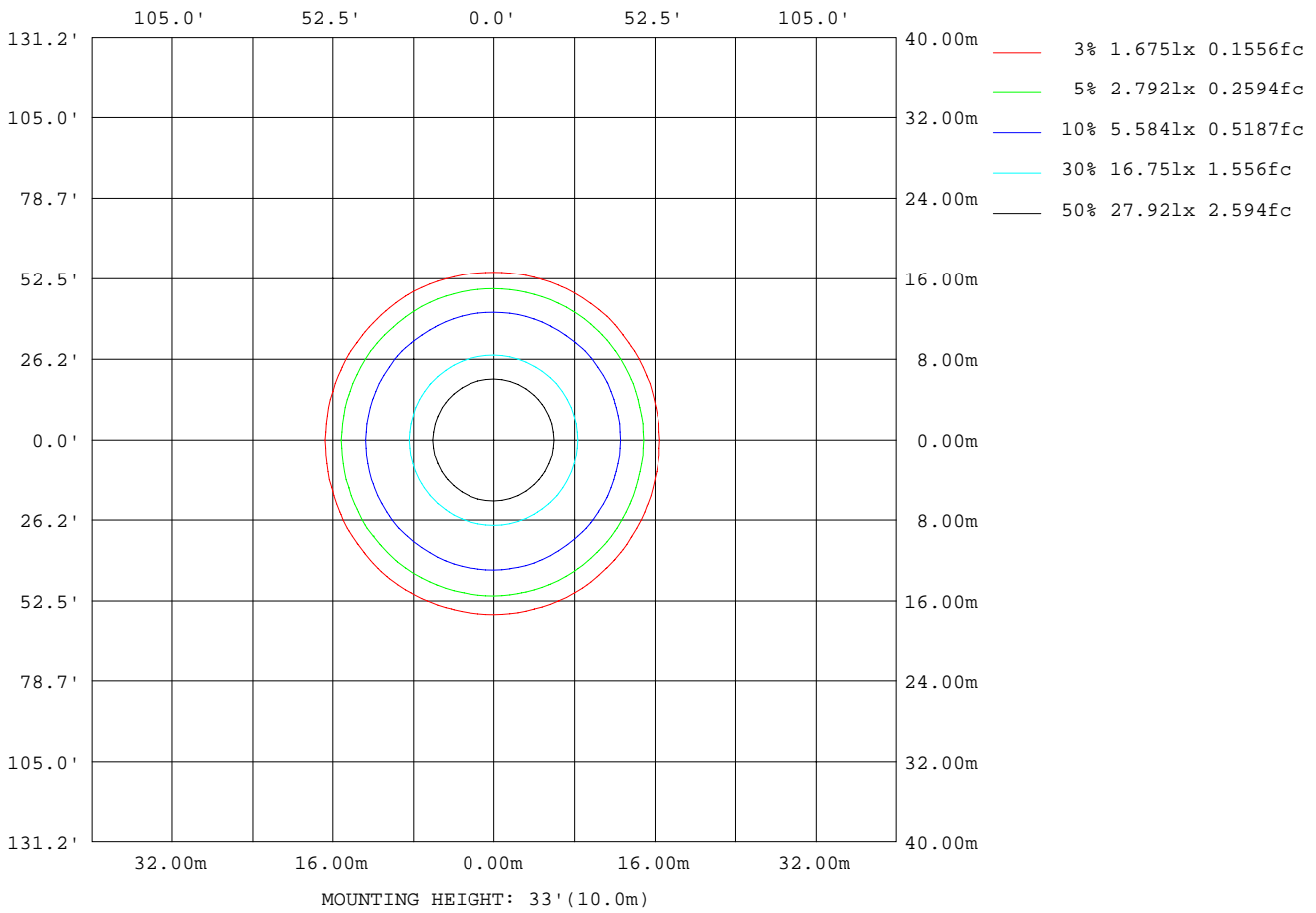
C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25DEG
 Operators:
 Test Date: 2016-04-29

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.350
 Humidity: 65.0%
 Test Distance: 7.850m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ISOLUX DIAGRAM

Test:U:221.3V I:0.4538A P:99.35W PF:0.9894 Lamp Flux:11580.2x1 lm		
NAME:		SERIAL No.:
SPEC.:		
MFR.:		



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25DEG
 Operators:
 Test Date: 2016-04-29

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.350
 Humidity: 65.0%
 Test Distance: 7.850m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LED Avg.L Report

Test:U:221.3V I:0.4538A P:99.35W PF:0.9894 Lamp Flux:11580.2x1 lm		
NAME:		SERIAL No.:
SPEC.:		
MFR.:		

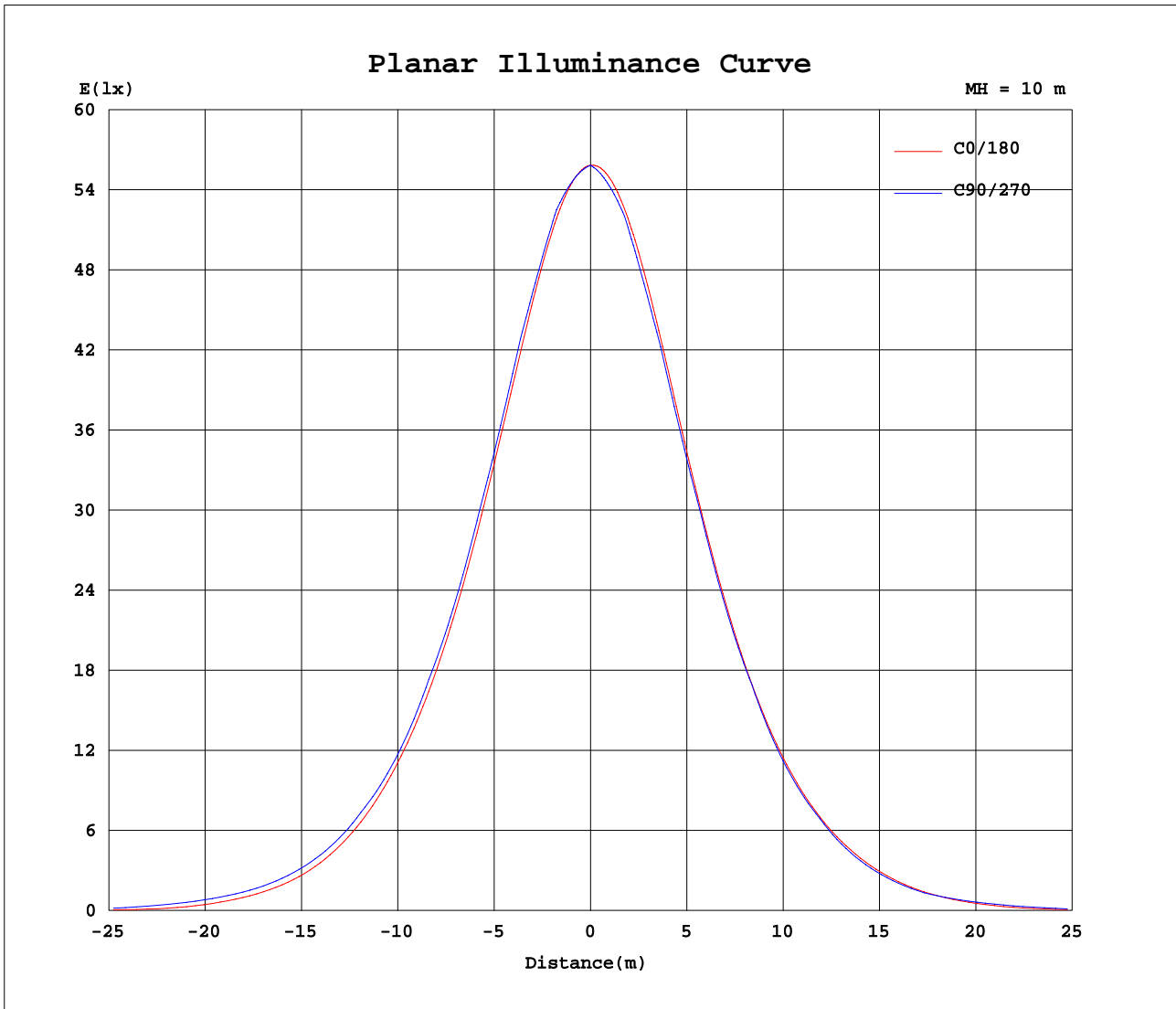
AvgL	cd/m2
L_0~180(65)av	8415
L_0~180(75)av	1600
L_0~180(85)av	1088
L_90~270(65)av	15037
L_90~270(75)av	1656
L_90~270(85)av	0
L_45(65)av	11555
L_45(75)av	1730
L_45(85)av	698

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:2016-04-29

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.350
 Humidity:65.0%
 Test Distance:7.850m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25DEG
 Operators:
 Test Date: 2016-04-29

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.350
 Humidity: 65.0%
 Test Distance: 7.850m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:221.3V I:0.4538A P:99.35W PF:0.9894 Lamp Flux:11580.2x1 lm		
NAME:		SERIAL No.:
SPEC.:		
MFR.:		

Table--1 UNIT: cd

C (DEG) \ γ (DEG)	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90
0	5584	5584	5584	5584	5584	5584	5584	5584	5584	5584	5584	5584	5584	5584	5584	5584	5584	5584	5584
5	5537	5533	5530	5527	5525	5524	5523	5523	5523	5524	5525	5526	5528	5530	5532	5534	5536	5538	5540
10	5428	5421	5416	5413	5412	5414	5416	5421	5426	5433	5440	5449	5457	5465	5472	5479	5486	5492	5497
15	5261	5251	5245	5244	5247	5254	5265	5279	5295	5295	5293	5294	5296	5300	5305	5310	5316	5322	5328
20	5037	5025	5020	5022	5032	5050	5065	5060	5059	5062	5069	5079	5091	5104	5117	5129	5141	5151	5159
25	4772	4758	4755	4764	4783	4787	4781	4784	4793	4810	4830	4834	4837	4843	4851	4859	4867	4875	4882
30	4458	4443	4445	4463	4471	4464	4469	4486	4505	4501	4504	4514	4529	4545	4560	4576	4587	4597	4604
35	4089	4073	4081	4106	4090	4096	4120	4120	4123	4137	4159	4185	4185	4188	4195	4204	4213	4222	4229
40	3657	3640	3657	3657	3653	3679	3674	3683	3711	3732	3724	3731	3746	3768	3790	3812	3831	3844	3853
45	3137	3119	3151	3124	3140	3140	3155	3199	3185	3193	3216	3252	3263	3260	3267	3278	3290	3302	3312
50	2503	2486	2503	2491	2499	2512	2552	2544	2567	2612	2607	2610	2625	2646	2677	2706	2733	2756	2772
55	1757	1746	1745	1760	1762	1799	1805	1839	1869	1886	1905	1935	1967	1990	2008	2025	2038	2049	2058
60	1007	1016	1015	1027	1055	1065	1089	1106	1148	1180	1205	1247	1279	1299	1311	1321	1332	1339	1343
65	306	331	338	363	387	422	426	451	522	516	522	587	675	711	722	722	721	718	716
70	74.5	75.2	76.5	79.5	81.5	85.9	99.6	128	90.1	129	193	246	255	228	190	153	122	98.7	88.5
75	43.4	43.3	43.9	44.8	45.6	46.3	46.3	48.1	50.2	49.8	45.1	46.2	48.4	50.5	52.3	54.0	55.8	55.8	55.5
80	18.9	18.5	20.8	26.2	29.3	30.0	29.4	28.4	27.8	28.2	28.3	28.2	28.2	27.6	25.8	23.1	21.2	21.1	22.5
85	10.4	11.1	12.6	13.9	15.1	15.7	13.8	10.4	8.39	7.46	6.25	4.80	3.53	2.41	1.45	0.74	0.31	0.08	0.00
90	3.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

C Range: 0 - 360DEG	γ Range: 0 - 90DEG
C Interval: 5.0DEG	γ Interval: 0.5DEG
Test Speed: HIGH	Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.350
Temperature:25DEG	Humidity:65.0%
Operators:	Test Distance:7.850m [K=1.0000]
Test Date:2016-04-29	Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:221.3V I:0.4538A P:99.35W PF:0.9894 Lamp Flux:11580.2x1 lm		
NAME:		SERIAL No.:
SPEC.:		
MFR.:		

Table--2

UNIT: cd

C(DEG) γ (DEG)	95	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	180	185
0	5584	5584	5584	5584	5584	5584	5584	5584	5584	5584	5584	5584	5584	5584	5584	5584	5584	5584	5584
5	5541	5543	5545	5546	5548	5549	5550	5551	5553	5554	5556	5558	5560	5562	5565	5568	5572	5575	5569
10	5499	5502	5502	5502	5501	5500	5497	5494	5492	5489	5487	5486	5485	5486	5488	5492	5498	5505	5492
15	5333	5338	5343	5348	5352	5357	5363	5370	5379	5385	5374	5364	5356	5352	5350	5352	5358	5368	5351
20	5165	5168	5171	5170	5168	5165	5163	5161	5161	5165	5173	5185	5172	5158	5149	5148	5154	5168	5145
25	4887	4893	4898	4902	4906	4913	4920	4924	4910	4900	4895	4896	4904	4901	4883	4876	4881	4898	4874
30	4607	4608	4606	4601	4595	4589	4585	4583	4588	4601	4586	4572	4567	4575	4570	4556	4560	4581	4555
35	4232	4234	4235	4233	4233	4235	4237	4219	4206	4203	4209	4214	4192	4185	4199	4180	4179	4202	4176
40	3855	3852	3844	3833	3819	3806	3795	3789	3793	3780	3766	3766	3777	3748	3746	3745	3735	3760	3730
45	3317	3320	3319	3320	3326	3340	3339	3310	3289	3282	3292	3263	3258	3260	3232	3240	3215	3239	3205
50	2776	2771	2759	2744	2729	2720	2720	2729	2753	2714	2685	2690	2663	2659	2644	2627	2612	2635	2596
55	2063	2065	2067	2067	2067	2067	2060	2037	2026	2024	2022	1978	1972	1940	1957	1915	1906	1926	1891
60	1345	1344	1343	1342	1337	1332	1327	1310	1279	1245	1221	1213	1174	1145	1125	1109	1103	1117	1096
65	720	728	735	737	724	691	622	584	577	564	480	474	472	441	418	414	396	405	396
70	98.2	124	158	196	234	261	263	221	155	101	138	113	91.7	87.7	84.7	76.6	73.5	74.2	73.9
75	56.1	56.9	55.9	54.0	51.7	48.9	45.8	43.5	49.7	50.0	46.7	43.8	43.2	41.5	40.6	39.1	38.8	39.4	38.5
80	22.2	21.3	22.3	24.9	27.2	28.1	27.9	27.3	26.9	26.2	26.3	26.8	27.0	26.5	23.9	19.0	16.1	16.7	16.2
85	0.08	0.31	0.71	1.38	2.35	3.50	4.74	6.05	7.37	8.04	9.62	12.2	13.9	13.6	12.1	10.6	8.91	8.55	8.07
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:2016-04-29

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.350
 Humidity:65.0%
 Test Distance:7.850m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:221.3V I:0.4538A P:99.35W PF:0.9894 Lamp Flux:11580.2x1 lm		
NAME:		SERIAL No.:
SPEC.:		
MFR.:		

Table--3

UNIT: cd

C (DEG) \ γ (DEG)	190	195	200	205	210	215	220	225	230	235	240	245	250	255	260	265	270	275	280
0	5584	5584	5584	5584	5584	5584	5584	5584	5584	5584	5584	5584	5584	5584	5584	5584	5584	5584	5584
5	5563	5558	5552	5548	5544	5540	5536	5533	5531	5528	5526	5524	5522	5520	5518	5517	5516	5514	5513
10	5482	5472	5465	5460	5455	5452	5450	5449	5449	5449	5449	5450	5450	5450	5450	5449	5448	5445	5442
15	5337	5328	5322	5319	5320	5323	5328	5318	5307	5299	5292	5286	5281	5278	5275	5272	5269	5266	5263
20	5130	5122	5121	5127	5132	5116	5106	5099	5095	5093	5092	5093	5094	5094	5094	5093	5091	5085	5080
25	4861	4859	4868	4864	4852	4847	4849	4854	4861	4853	4843	4836	4830	4825	4821	4818	4813	4809	4803
30	4547	4554	4556	4542	4542	4552	4561	4545	4536	4534	4534	4537	4540	4542	4542	4540	4536	4530	4520
35	4174	4190	4172	4176	4195	4184	4174	4175	4184	4199	4186	4175	4167	4161	4155	4150	4143	4136	4128
40	3736	3733	3732	3759	3741	3735	3750	3759	3742	3737	3739	3745	3752	3756	3758	3757	3750	3739	3726
45	3221	3203	3225	3213	3209	3237	3216	3212	3224	3248	3240	3216	3199	3188	3181	3176	3170	3162	3155
50	2596	2594	2598	2587	2600	2582	2591	2625	2588	2567	2558	2559	2566	2575	2584	2590	2590	2581	2568
55	1884	1905	1870	1881	1862	1881	1872	1850	1838	1842	1854	1856	1851	1844	1836	1831	1828	1824	1823
60	1093	1093	1097	1094	1109	1087	1089	1100	1108	1119	1122	1117	1103	1088	1077	1070	1066	1064	1065
65	407	399	409	420	413	393	462	460	428	444	523	561	574	573	565	558	555	556	560
70	76.3	82.0	81.1	82.0	94.9	114	77.5	105	149	187	199	182	150	114	78.2	52.2	43.7	53.5	79.6
75	38.3	38.6	38.4	38.7	38.2	39.8	40.5	39.5	35.9	37.5	39.4	40.5	39.9	37.6	33.6	30.6	30.2	31.1	34.5
80	17.7	20.8	22.1	21.8	21.0	20.6	19.9	20.0	20.4	20.6	20.6	19.7	17.6	15.4	14.7	15.8	16.7	15.3	14.6
85	7.92	8.37	8.93	8.84	7.45	6.08	5.00	4.56	4.01	3.21	2.41	1.63	0.96	0.49	0.22	0.06	0.00	0.06	0.22
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

C Range: 0 - 360DEG	γ Range: 0 - 90DEG
C Interval: 5.0DEG	γ Interval: 0.5DEG
Test Speed: HIGH	Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.350
Temperature:25DEG	Humidity:65.0%
Operators:	Test Distance:7.850m [K=1.0000]
Test Date:2016-04-29	Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:221.3V I:0.4538A P:99.35W PF:0.9894 Lamp Flux:11580.2x1 lm		
NAME:		SERIAL No.:
SPEC.:		
MFR.:		

Table--4

UNIT: cd

C(DEG)\ γ (DEG)	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355				
0	5584	5584	5584	5584	5584	5584	5584	5584	5584	5584	5584	5584	5584	5584	5584				
5	5512	5511	5510	5510	5509	5509	5510	5510	5512	5514	5516	5519	5523	5527	5532				
10	5438	5434	5429	5424	5419	5414	5410	5406	5404	5402	5402	5403	5406	5411	5419				
15	5261	5259	5257	5258	5259	5263	5268	5271	5259	5249	5241	5237	5236	5240	5248				
20	5073	5065	5056	5049	5042	5036	5033	5034	5038	5048	5036	5023	5016	5015	5023				
25	4798	4793	4791	4790	4793	4793	4778	4766	4761	4763	4772	4771	4755	4749	4755				
30	4508	4496	4484	4473	4464	4459	4461	4471	4457	4444	4444	4457	4453	4439	4440				
35	4120	4116	4115	4118	4124	4105	4089	4083	4087	4092	4076	4076	4097	4076	4071				
40	3711	3695	3680	3669	3663	3665	3681	3670	3652	3652	3665	3645	3654	3656	3640				
45	3151	3150	3159	3176	3181	3158	3146	3152	3177	3143	3137	3144	3130	3158	3123				
50	2550	2535	2524	2519	2523	2539	2568	2536	2523	2545	2515	2507	2502	2513	2492				
55	1823	1826	1828	1829	1822	1808	1807	1810	1804	1779	1788	1757	1761	1745	1747				
60	1069	1071	1068	1060	1050	1053	1051	1009	986	1008	985	1005	981	983	1001				
65	562	550	515	439	320	329	400	393	287	325	309	308	296	289	313				
70	114	146	169	169	138	100	78.0	69.7	90.8	77.2	74.4	73.5	74.0	73.0	73.8				
75	38.4	40.7	41.4	40.9	39.6	38.6	40.2	41.8	41.9	40.8	41.5	41.7	42.1	42.4	42.5				
80	15.8	18.3	20.7	21.9	22.1	22.1	21.8	21.8	22.6	23.2	24.0	24.5	23.2	19.7	18.1				
85	0.50	1.01	1.74	2.60	3.49	4.42	4.96	5.45	6.56	8.02	9.62	9.74	9.06	8.62	9.30				
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				

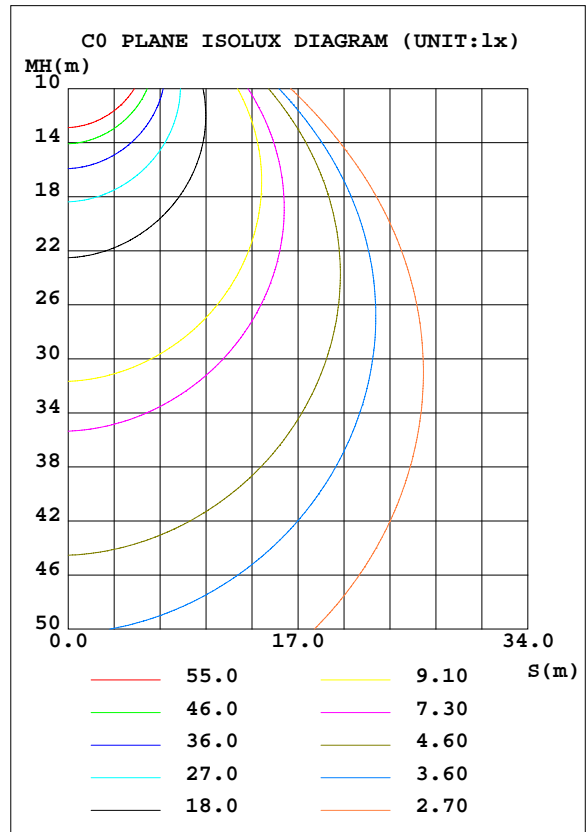
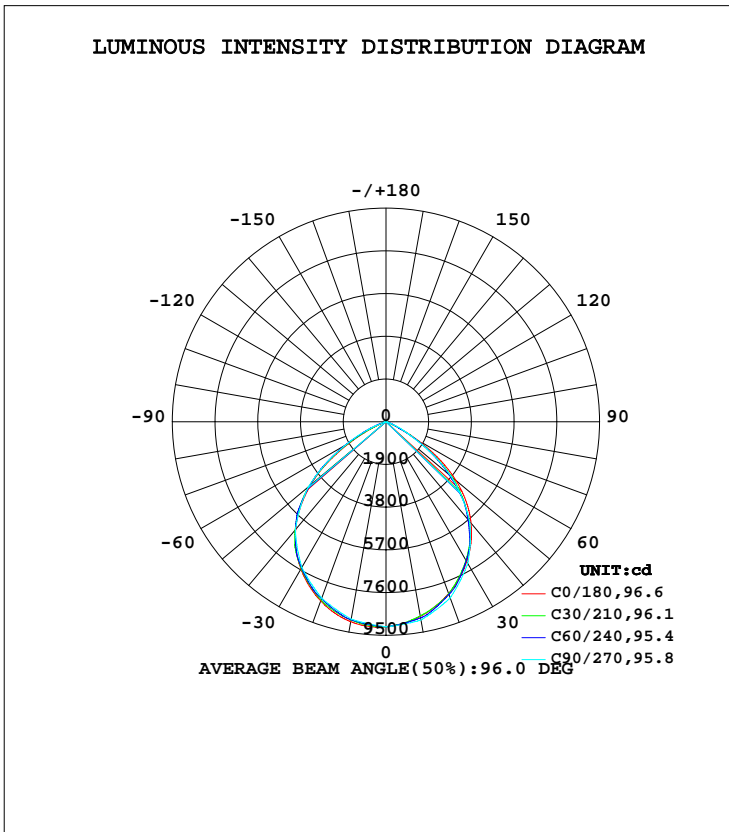
C Range: 0 - 360DEG C Interval: 5.0DEG Test Speed: HIGH Temperature:25DEG Operators: Test Date:2016-04-29	γ Range: 0 - 90DEG γ Interval: 0.5DEG Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.350 Humidity:65.0% Test Distance:7.850m [K=1.0000] Remarks:
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EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:121.4V I:1.259A P:151.9W PF:0.9944 Lamp Flux:18580.7x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 122.29 lm/W			
MODEL		I _{max} (cd)	9143	S/MH(C0/180)	1.24
NOMINAL POWER(W)	150	LOR(%)	100.0	S/MH(C90/270)	1.22
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	18581	η UP, DN(C0-180)	0.0,48.3
NOMINAL FLUX(lm)	18580.7	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0,51.7
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	120	η down(%)	100.0	CIBSE SHR MAX	1.30



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:15 June 2016

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.350
 Humidity:65.0%
 Test Distance:7.850m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
5	9007	8989	9039	9084	9135	9064	9019	8981	0- 5	216.8	216.8	1.17,1.17
10	8793	8805	8956	8990	9031	8945	8915	8800	5- 10	641.3	858.2	4.62,4.62
15	8500	8544	8650	8801	8811	8740	8633	8559	10- 15	1040	1899	10.2,10.2
20	8136	8127	8344	8421	8483	8394	8351	8189	15- 20	1396	3294	17.7,17.7
25	7696	7681	7809	7990	8068	8013	7916	7792	20- 25	1696	4990	26.9,26.9
30	7186	7126	7275	7415	7568	7537	7481	7301	25- 30	1925	6914	37.2,37.2
35	6589	6470	6535	6723	6968	6964	6876	6729	30- 35	2074	8989	48.4,48.4
40	5888	5742	5795	5970	6247	6315	6271	6104	35- 40	2127	11116	59.8,59.8
45	5054	4775	4785	5043	5389	5454	5390	5276	40- 45	2070	13186	71,71
50	4062	3750	3774	4069	4374	4522	4509	4380	45- 50	1879	15065	81.1,81.1
55	2875	2556	2553	2805	3162	3287	3294	3184	50- 55	1548	16614	89.4,89.4
60	1598	1423	1332	1554	1815	2054	2079	1954	55- 60	1080	17694	95.2,95.2
65	487.4	560.4	705.2	613.8	668.3	924.2	1098	806.2	60- 65	574.4	18268	98.3,98.3
70	138.4	133.1	78.07	141.3	150.3	253.7	116.1	193.2	65- 70	209.7	18478	99.4,99.4
75	78.20	70.47	48.34	70.17	80.53	88.67	75.93	85.73	70- 75	59.01	18537	99.8,99.8
80	35.95	34.06	18.60	34.22	36.40	45.35	35.78	45.09	75- 80	29.58	18567	99.9,99.9
85	19.55	5.949	0	6.298	19.53	10.99	0	10.22	80- 85	12.33	18579	100,100
90	6.748	0	0	0	5.258	0	0	0	85- 90	1.761	18581	100,100
95									90- 95			
100									95-100			
105									100-105			
110									105-110			
115									110-115			
120									115-120			
125									120-125			
130									125-130			
135									130-135			
140									135-140			
145									140-145			
150									145-150			
155									150-155			
160									155-160			
165									160-165			
170									165-170			
175									170-175			
180									175-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 13186 lm

%lum = 71.0%
%lamp = 71.0%

Conical surface Flux(120deg): 17694 lm

%lum = 95.2%
%lamp = 95.2%

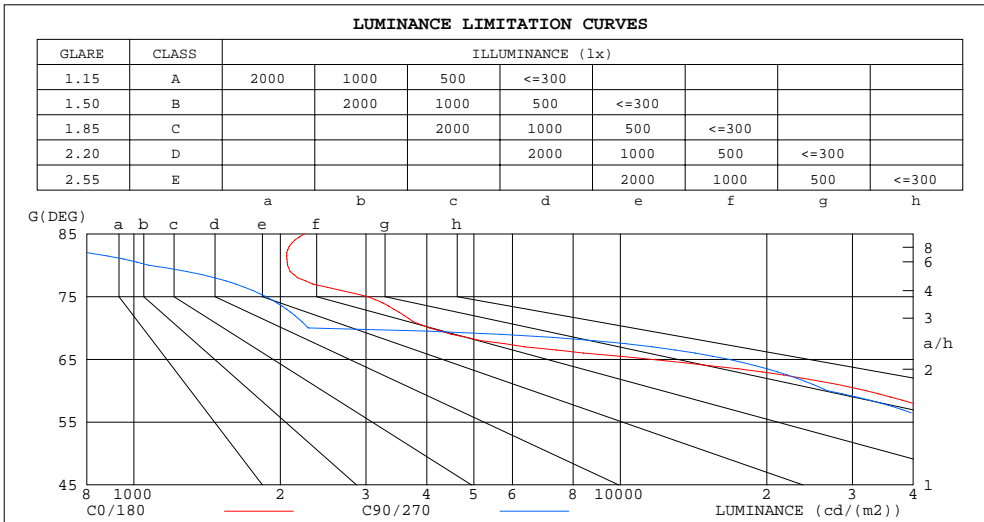
C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:15 June 2016

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.350
Humidity:65.0%
Test Distance:7.850m [K=1.0000]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINANCE LIMITATION CURVES

Test:U:121.4V I:1.259A P:151.9W PF:0.9944 Lamp Flux:18580.7x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	2243	0
80	2070	1071
75	3022	1868
70	4047	2283
65	11532	16687
60	31969	26648
55	50128	44511
50	63193	58708
45	71479	67664

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:15 June 2016

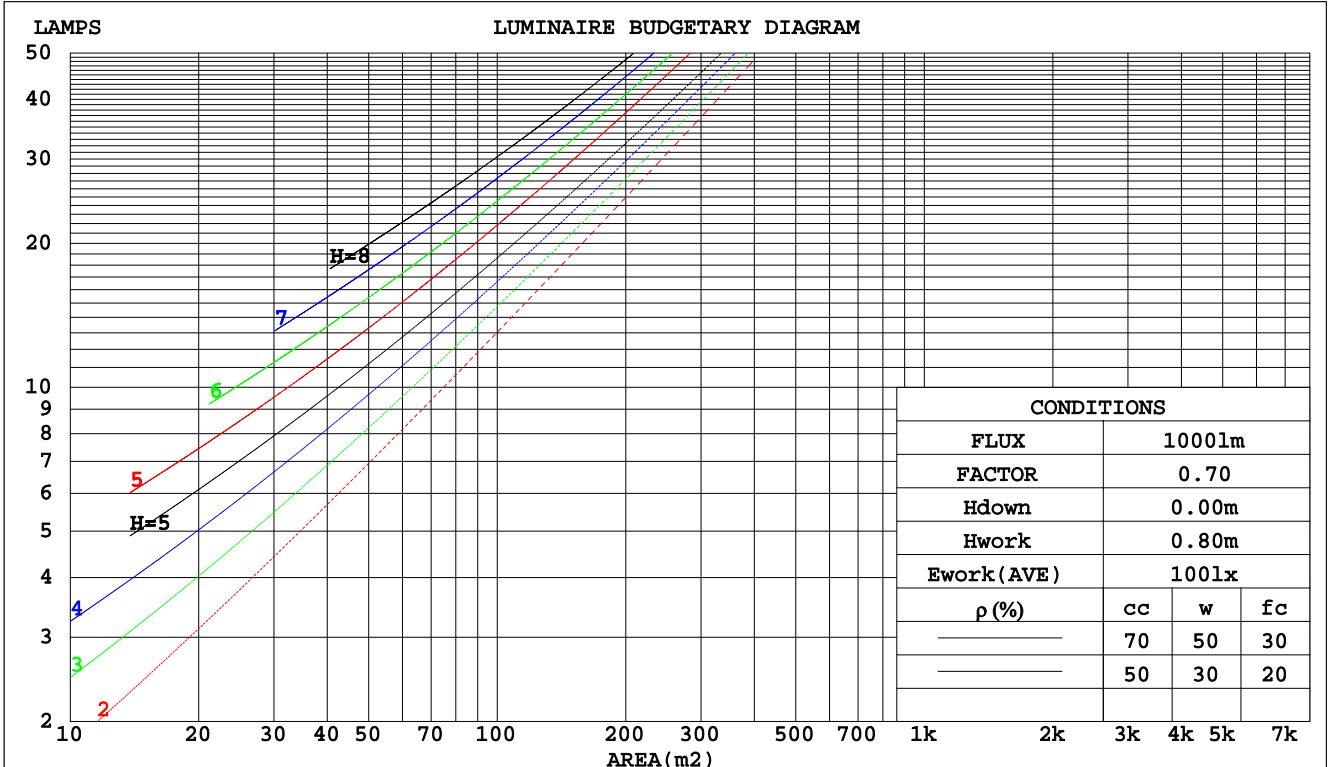
γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.350
 Humidity:65.0%
 Test Distance:7.850m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:121.4V I:1.259A P:151.9W PF:0.9944 Lamp Flux:18580.7x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)									
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00
1.0	1.08	1.05	1.02	1.06	1.03	1.00	1.02	.99	.97	.98	.96	.94	.94	.93	.91	.89
2.0	.97	.92	.87	.95	.90	.86	.92	.88	.84	.89	.85	.82	.86	.83	.80	.79
3.0	.87	.80	.75	.86	.79	.74	.83	.78	.73	.80	.76	.72	.78	.74	.71	.69
4.0	.79	.71	.65	.77	.70	.65	.75	.69	.64	.73	.68	.63	.71	.66	.63	.61
5.0	.71	.63	.58	.70	.63	.57	.68	.62	.57	.66	.61	.56	.64	.59	.56	.54
6.0	.65	.57	.51	.64	.56	.51	.62	.55	.50	.60	.55	.50	.59	.54	.50	.48
7.0	.59	.51	.46	.58	.51	.45	.57	.50	.45	.55	.49	.45	.54	.49	.45	.43
8.0	.54	.46	.41	.53	.46	.41	.52	.46	.41	.51	.45	.41	.50	.44	.40	.39
9.0	.50	.42	.37	.49	.42	.37	.48	.42	.37	.47	.41	.37	.46	.41	.37	.35
10.0	.46	.39	.34	.46	.39	.34	.45	.38	.34	.44	.38	.34	.43	.37	.34	.32



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:15 June 2016

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.350
 Humidity:65.0%
 Test Distance:7.850m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

WEC AND CCEC

Test:U:121.4V I:1.259A P:151.9W PF:0.9944 Lamp Flux:18580.7x1 lm														
NAME:					TYPE:					WEIGHT:				
SPEC.:					DIM.:					SERIAL No.:				
MFR.:					SUR.:					Shielding Angle:				

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.232	.132	.042	.226	.129	.041	.213	.122	.039	.201	.116	.037	.190	.110	.035	
2.0	.229	.126	.039	.223	.123	.038	.212	.118	.037	.202	.113	.035	.192	.109	.034	
3.0	.220	.117	.035	.215	.115	.035	.205	.111	.034	.196	.107	.033	.188	.104	.032	
4.0	.209	.109	.032	.205	.107	.032	.196	.104	.031	.188	.101	.030	.181	.098	.030	
5.0	.198	.101	.029	.194	.100	.029	.187	.097	.029	.179	.095	.028	.173	.092	.028	
6.0	.187	.094	.027	.184	.093	.027	.177	.091	.026	.171	.089	.026	.165	.087	.026	
7.0	.177	.088	.025	.174	.087	.025	.168	.085	.024	.162	.083	.024	.157	.082	.024	
8.0	.168	.082	.023	.165	.081	.023	.159	.080	.023	.154	.078	.023	.149	.077	.022	
9.0	.159	.077	.021	.156	.076	.021	.151	.075	.021	.147	.074	.021	.142	.072	.021	
10.0	.151	.072	.020	.148	.072	.020	.144	.071	.020	.140	.069	.020	.136	.068	.020	

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.175	.157	.140	.150	.135	.121	.102	.093	.084	.059	.054	.049	.019	.017	.016	
2.0	.164	.132	.106	.140	.114	.091	.096	.079	.064	.055	.046	.037	.018	.015	.012	
3.0	.155	.114	.081	.133	.098	.071	.091	.068	.049	.053	.040	.029	.017	.013	.010	
4.0	.147	.100	.064	.126	.086	.056	.087	.060	.039	.050	.035	.023	.016	.011	.008	
5.0	.140	.089	.052	.120	.077	.045	.083	.054	.032	.048	.032	.019	.015	.010	.006	
6.0	.133	.081	.043	.115	.070	.037	.079	.049	.026	.046	.029	.016	.015	.009	.005	
7.0	.127	.074	.036	.109	.064	.032	.076	.045	.022	.044	.026	.013	.014	.009	.004	
8.0	.122	.068	.031	.105	.059	.027	.072	.041	.019	.042	.024	.011	.014	.008	.004	
9.0	.116	.063	.027	.100	.055	.024	.069	.038	.017	.040	.023	.010	.013	.007	.003	
10.0	.111	.059	.024	.096	.051	.021	.066	.036	.015	.039	.021	.009	.013	.007	.003	

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:15 June 2016

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.350
 Humidity:65.0%
 Test Distance:7.850m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

UGR(Unified Glare Rating) Table

Test:U:121.4V I:1.259A P:151.9W PF:0.9944 Lamp Flux:18580.7x1 lm										
NAME:					TYPE:			WEIGHT:		
SPEC.:					DIM.:			SERIAL No.:		
MFR.:					SUR.:			Shielding Angle:		
ceiling/cavity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions	Viewed crosswise					Viewed endwise				
x = 2H y = 2H	25.5	26.8	25.7	27.0	27.2	25.2	26.5	25.4	26.7	26.9
3H	25.3	26.5	25.6	26.7	27.0	25.1	26.3	25.4	26.5	26.8
4H	25.2	26.3	25.5	26.6	26.8	25.0	26.2	25.3	26.4	26.6
6H	25.1	26.2	25.4	26.4	26.7	24.9	26.0	25.3	26.2	26.5
8H	25.1	26.1	25.4	26.4	26.6	24.9	25.9	25.2	26.2	26.4
12H	25.0	26.0	25.4	26.3	26.6	24.8	25.8	25.2	26.1	26.4
4H 2H	25.4	26.5	25.7	26.8	27.0	25.2	26.3	25.5	26.5	26.8
3H	25.3	26.2	25.6	26.5	26.8	25.1	26.1	25.5	26.4	26.7
4H	25.2	26.1	25.5	26.4	26.7	25.0	25.9	25.4	26.2	26.5
6H	25.1	25.9	25.5	26.2	26.6	24.9	25.7	25.3	26.0	26.4
8H	25.1	25.8	25.5	26.1	26.5	24.9	25.6	25.3	26.0	26.3
12H	25.0	25.7	25.4	26.0	26.4	24.8	25.5	25.3	25.9	26.3
8H 4H	25.1	25.8	25.5	26.1	26.5	24.9	25.6	25.3	26.0	26.3
6H	25.0	25.6	25.4	26.0	26.4	24.8	25.4	25.2	25.8	26.2
8H	24.9	25.4	25.4	25.9	26.3	24.8	25.3	25.2	25.7	26.1
12H	24.9	25.3	25.4	25.8	26.2	24.7	25.2	25.2	25.6	26.1
12H 4H	25.0	25.7	25.4	26.0	26.4	24.8	25.5	25.3	25.9	26.3
6H	24.9	25.4	25.4	25.9	26.3	24.8	25.3	25.2	25.7	26.1
8H	24.9	25.3	25.4	25.8	26.2	24.7	25.2	25.2	25.6	26.1
Variations with the observer position at spacings:										
S = 1.0H	+ 1.0 / - 1.3					+ 1.1 / - 1.5				
1.5H	+ 0.6 / - 0.9					+ 0.5 / - 0.6				
2.0H	+ 2.3 / - 5.5					+ 2.4 / - 5.9				

CIE Pub.117 Corrected 18581 lm Total Lamp Luminous Flux. (8log(F/F0) = 10.2)

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:15 June 2016

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.350
 Humidity:65.0%
 Test Distance:7.850m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

UTILIZATION FACTORS TABLE

Test:U:121.4V I:1.259A P:151.9W PF:0.9944 Lamp Flux:18580.7x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	65	55	49	65	55	49	64	55	49	43
0.80	76	66	60	75	66	60	74	65	60	54
1.00	85	76	70	84	75	70	82	76	69	63
1.25	92	83	78	90	83	77	88	81	77	71
1.50	96	88	83	95	88	83	92	86	81	75
2.00	102	95	90	100	94	90	97	92	88	82
2.50	104	99	94	103	97	93	99	95	91	84
3.00	107	102	98	105	100	97	101	98	95	87
4.00	110	106	102	108	104	101	104	101	98	90
5.00	112	108	105	109	106	103	105	102	100	92
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

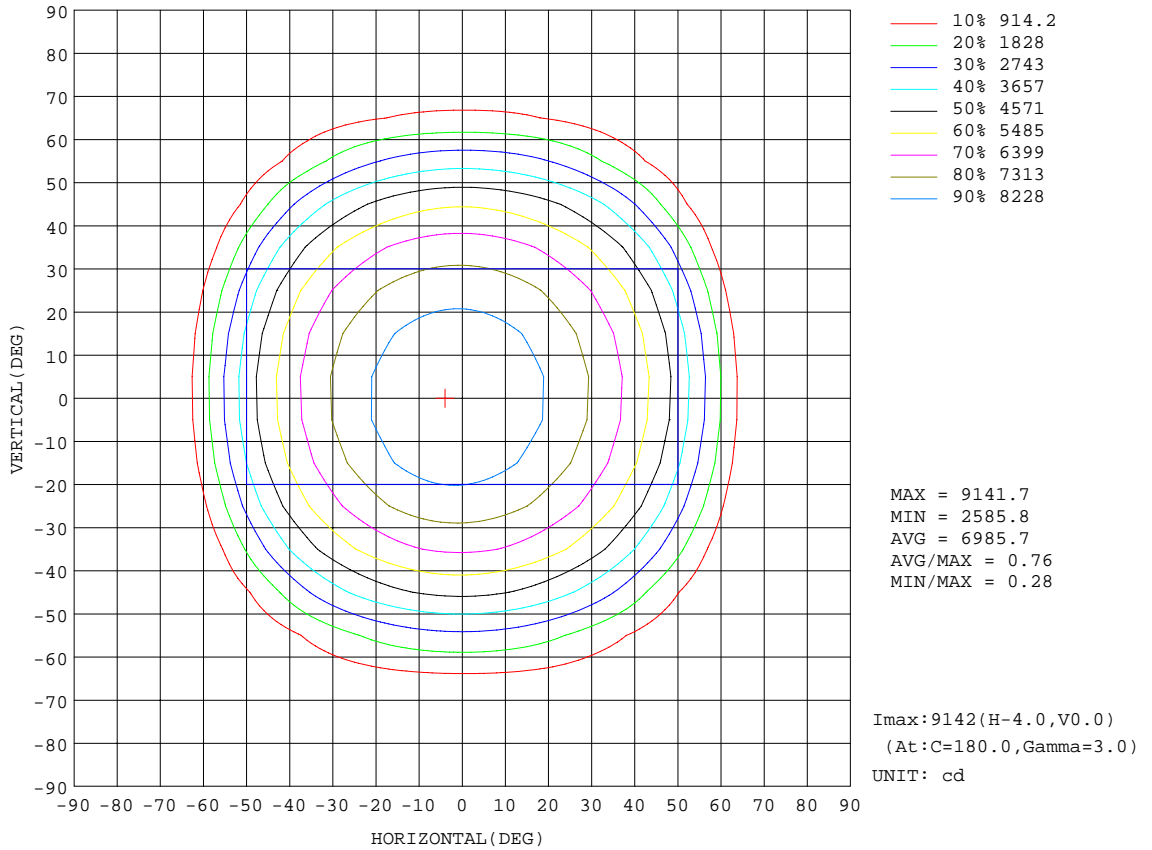
C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:15 June 2016

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.350
 Humidity:65.0%
 Test Distance:7.850m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ISOCANDELA DIAGRAM

Test:U:121.4V I:1.259A P:151.9W PF:0.9944 Lamp Flux:18580.7x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



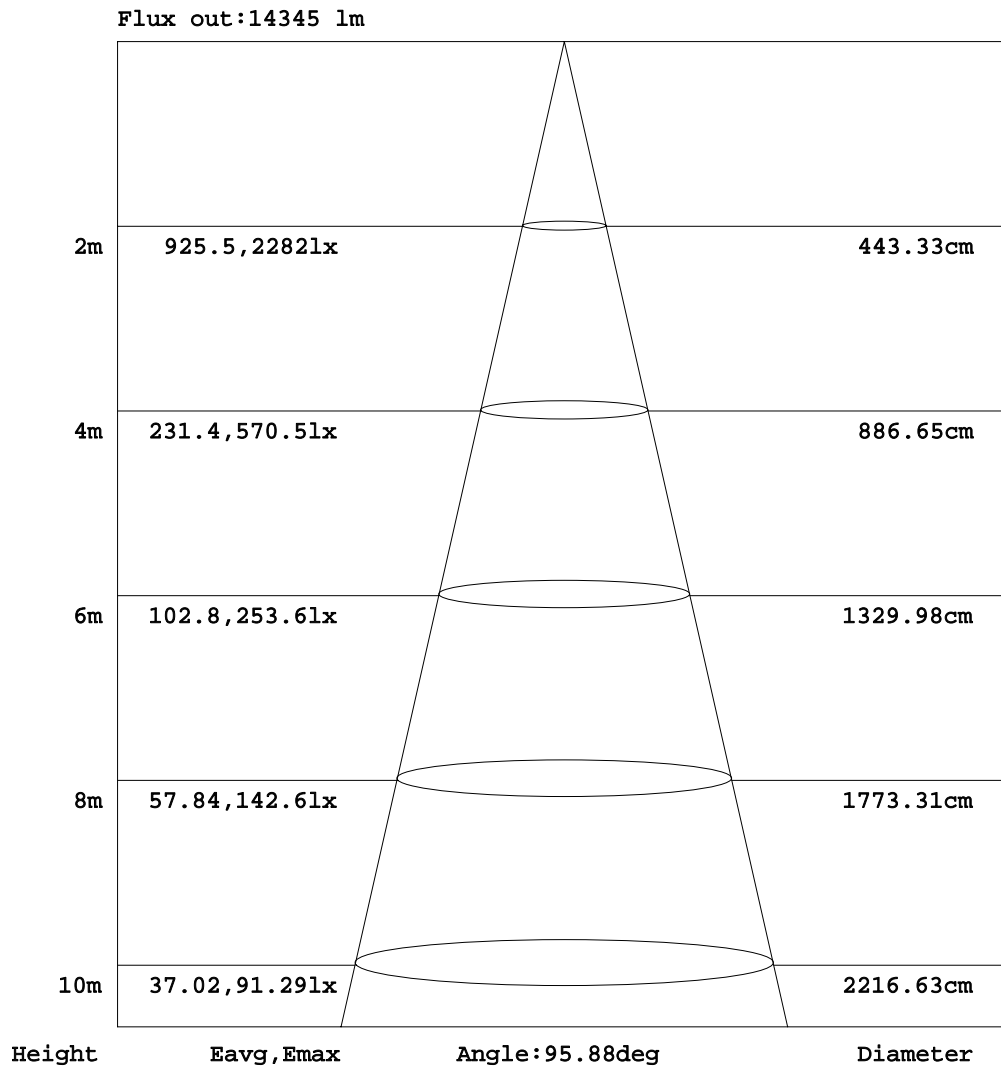
C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:15 June 2016

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.350
 Humidity:65.0%
 Test Distance:7.850m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

AAI Figure

Test:U:121.4V I:1.259A P:151.9W PF:0.9944 Lamp Flux:18580.7x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

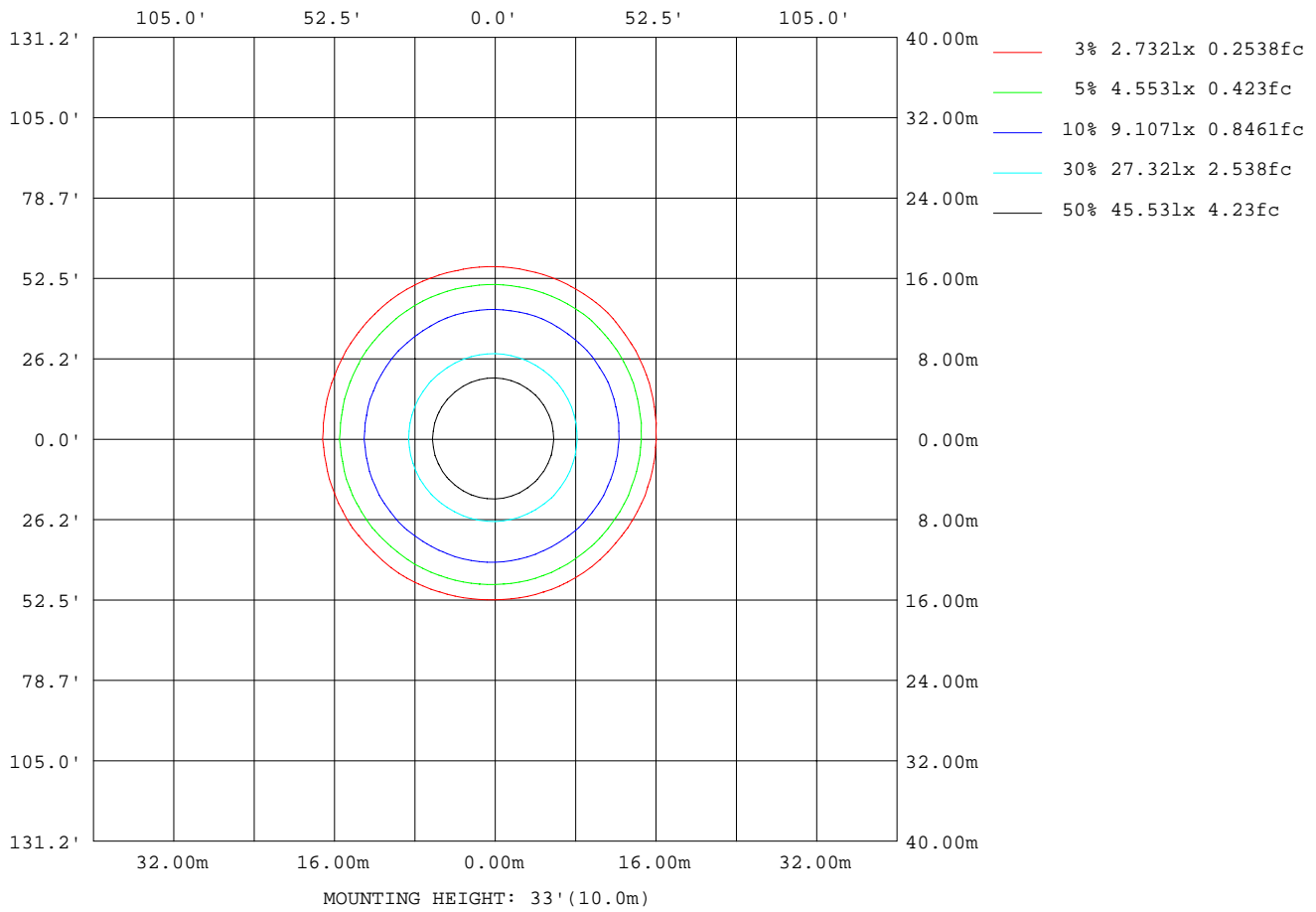
C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25DEG
 Operators:
 Test Date: 15 June 2016

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.350
 Humidity: 65.0%
 Test Distance: 7.850m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ISOLUX DIAGRAM

Test:U:121.4V I:1.259A P:151.9W PF:0.9944 Lamp Flux:18580.7x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25DEG
 Operators:
 Test Date: 15 June 2016

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.350
 Humidity: 65.0%
 Test Distance: 7.850m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LED Avg.L Report

Test:U:121.4V I:1.259A P:151.9W PF:0.9944 Lamp Flux:18580.7x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

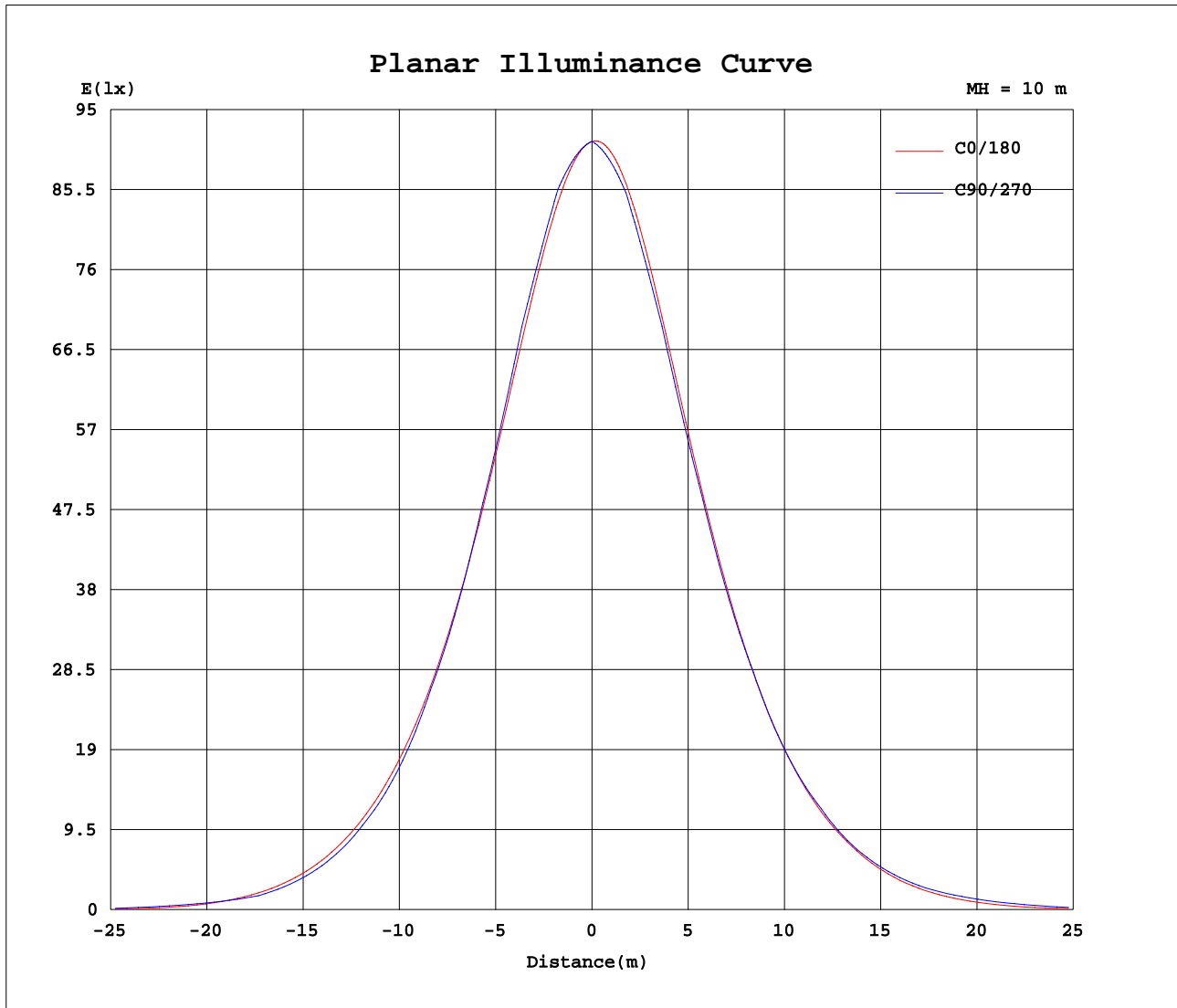
AvgL	cd/m2
L_0~180(65)av	13672
L_0~180(75)av	3066
L_0~180(85)av	2242
L_90~270(65)av	21329
L_90~270(75)av	2401
L_90~270(85)av	0
L_45(65)av	17181
L_45(75)av	3043
L_45(85)av	960

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:15 June 2016

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.350
 Humidity:65.0%
 Test Distance:7.850m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25DEG
 Operators:
 Test Date: 15 June 2016

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.350
 Humidity: 65.0%
 Test Distance: 7.850m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:121.4V I:1.259A P:151.9W PF:0.9944 Lamp Flux:18580.7x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Table--1

UNIT: cd

C(DEG) γ (DEG)	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90
0	9122	9122	9122	9122	9122	9122	9122	9122	9122	9122	9122	9122	9122	9122	9122	9122	9122	9122	9122
5	9007	9000	8994	8989	8986	8984	8984	8985	8987	8989	8994	8998	9003	9009	9015	9021	9027	9033	9039
10	8793	8780	8770	8764	8762	8765	8770	8779	8791	8805	8819	8837	8856	8874	8892	8910	8927	8942	8956
15	8500	8480	8467	8462	8465	8475	8493	8515	8542	8544	8542	8546	8554	8564	8580	8596	8613	8631	8650
20	8136	8108	8094	8092	8103	8126	8146	8130	8124	8127	8138	8156	8179	8206	8234	8264	8292	8319	8344
25	7696	7663	7649	7654	7676	7674	7655	7651	7660	7681	7711	7713	7712	7719	7732	7747	7766	7787	7809
30	7186	7145	7133	7148	7146	7117	7112	7129	7149	7126	7118	7124	7138	7159	7183	7208	7232	7254	7275
35	6589	6541	6532	6552	6502	6490	6510	6487	6468	6470	6490	6520	6499	6486	6484	6491	6502	6518	6535
40	5888	5832	5831	5800	5764	5779	5736	5718	5735	5742	5696	5677	5675	5688	5709	5734	5757	5778	5795
45	5054	4991	5006	4924	4912	4867	4845	4877	4808	4775	4773	4795	4784	4756	4743	4743	4752	4767	4785
50	4062	3990	3966	3898	3861	3827	3829	3756	3733	3750	3708	3678	3659	3658	3671	3693	3721	3749	3774
55	2875	2815	2763	2731	2673	2669	2610	2585	2570	2556	2536	2524	2526	2532	2534	2535	2537	2543	2553
60	1598	1576	1532	1514	1515	1454	1446	1402	1382	1423	1438	1415	1402	1393	1378	1361	1345	1335	1332
65	487	486	459	459	484	469	496	437	549	560	468	413	535	628	678	699	705	705	705
70	138	137	134	135	132	132	136	154	121	133	159	194	220	221	194	155	115	87.5	78.1
75	78.2	76.7	78.0	78.7	79.0	78.1	75.6	75.6	74.1	70.5	65.8	64.6	63.8	62.1	59.5	55.6	51.2	48.6	48.3
80	35.9	35.9	38.3	43.8	46.6	45.7	43.0	40.4	37.5	34.1	31.3	29.0	26.8	24.1	21.4	19.1	17.8	17.9	18.6
85	19.5	20.8	20.8	20.1	19.1	16.2	12.4	9.77	7.67	5.95	4.68	3.59	2.62	1.76	1.08	0.58	0.26	0.07	0.00
90	6.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:15 June 2016

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.350
 Humidity:65.0%
 Test Distance:7.850m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:121.4V I:1.259A P:151.9W PF:0.9944 Lamp Flux:18580.7x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Table--2

UNIT: cd

C(DEG) γ (DEG)	95	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	180	185
0	9122	9122	9122	9122	9122	9122	9122	9122	9122	9122	9122	9122	9122	9122	9122	9122	9122	9122	9122
5	9044	9050	9055	9061	9066	9070	9075	9079	9084	9088	9093	9098	9103	9108	9114	9121	9128	9135	9125
10	8967	8976	8983	8987	8990	8992	8992	8991	8990	8988	8988	8988	8990	8993	8998	9007	9018	9031	9012
15	8666	8683	8699	8714	8730	8745	8762	8780	8801	8815	8799	8785	8775	8770	8771	8778	8791	8811	8784
20	8363	8379	8391	8399	8404	8406	8409	8413	8421	8434	8454	8482	8466	8447	8438	8441	8456	8483	8451
25	7831	7852	7874	7896	7919	7947	7979	8003	7990	7982	7983	7998	8026	8035	8016	8013	8031	8068	8034
30	7292	7306	7318	7326	7335	7344	7359	7381	7415	7465	7457	7449	7461	7498	7507	7499	7520	7568	7536
35	6552	6569	6589	6611	6638	6674	6715	6713	6723	6748	6793	6837	6825	6843	6898	6887	6907	6968	6937
40	5806	5812	5819	5825	5834	5850	5875	5913	5970	5990	6005	6050	6112	6100	6133	6164	6176	6247	6218
45	4799	4816	4837	4867	4909	4968	5012	5018	5043	5089	5164	5164	5209	5263	5258	5317	5313	5389	5360
50	3787	3794	3801	3810	3830	3859	3906	3974	4069	4066	4092	4163	4179	4228	4253	4281	4295	4374	4344
55	2566	2584	2610	2642	2678	2716	2740	2761	2805	2869	2924	2923	2985	2999	3085	3061	3084	3162	3132
60	1340	1359	1385	1419	1458	1503	1548	1578	1554	1541	1591	1632	1638	1671	1690	1718	1749	1815	1813
65	707	710	708	690	647	570	461	521	614	610	489	563	567	578	574	611	623	668	678
70	86.7	114	155	197	226	234	213	175	141	123	165	146	139	142	143	145	144	150	151
75	48.5	50.6	55.3	59.8	62.7	64.3	64.9	65.4	70.2	73.5	74.5	74.2	75.9	76.5	77.3	77.1	78.3	80.5	79.4
80	18.4	18.3	19.5	21.8	24.7	27.5	29.7	31.8	34.2	37.2	40.0	42.3	44.8	46.2	44.5	39.7	36.0	36.4	35.8
85	0.07	0.27	0.60	1.11	1.83	2.74	3.79	4.96	6.30	8.12	10.5	13.6	17.1	19.9	20.5	20.5	19.9	19.5	17.6
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.26	0.00

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:15 June 2016

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.350
 Humidity:65.0%
 Test Distance:7.850m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:121.4V I:1.259A P:151.9W PF:0.9944 Lamp Flux:18580.7x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Table--3

UNIT: cd

C(DEG) γ (DEG)	190	195	200	205	210	215	220	225	230	235	240	245	250	255	260	265	270	275	280
0	9122	9122	9122	9122	9122	9122	9122	9122	9122	9122	9122	9122	9122	9122	9122	9122	9122	9122	9122
5	9116	9107	9098	9091	9083	9077	9071	9064	9059	9053	9048	9043	9038	9033	9028	9023	9019	9013	9008
10	8995	8981	8970	8961	8954	8950	8946	8945	8943	8941	8940	8939	8936	8932	8928	8922	8915	8904	8893
15	8763	8749	8741	8738	8741	8746	8754	8740	8722	8708	8695	8684	8674	8664	8653	8643	8633	8621	8610
20	8431	8423	8425	8435	8444	8420	8404	8394	8387	8383	8381	8380	8378	8375	8370	8361	8351	8337	8321
25	8018	8020	8035	8031	8013	8006	8007	8013	8023	8008	7990	7975	7963	7952	7940	7928	7916	7902	7888
30	7531	7549	7555	7538	7540	7555	7568	7537	7519	7509	7506	7506	7506	7505	7500	7492	7481	7465	7447
35	6945	6981	6961	6971	7005	6987	6968	6964	6972	6988	6962	6939	6925	6912	6901	6889	6876	6860	6842
40	6246	6256	6265	6316	6292	6283	6304	6315	6281	6266	6263	6269	6277	6283	6286	6282	6271	6250	6224
45	5412	5402	5456	5447	5449	5497	5462	5454	5467	5500	5485	5450	5428	5416	5409	5401	5390	5374	5358
50	4381	4405	4431	4431	4468	4448	4470	4522	4471	4444	4438	4446	4462	4483	4502	4512	4509	4492	4467
55	3159	3243	3210	3255	3257	3306	3306	3287	3289	3317	3334	3331	3324	3315	3308	3302	3294	3286	3280
60	1843	1870	1895	1919	1955	1990	2025	2054	2082	2107	2117	2115	2105	2096	2090	2085	2079	2074	2067
65	721	722	752	797	788	786	916	924	903	955	1076	1130	1143	1137	1122	1106	1098	1101	1111
70	159	165	178	171	208	237	182	254	342	412	418	376	313	245	182	134	116	136	183
75	78.7	79.2	79.5	81.4	81.6	85.5	90.4	88.7	79.3	83.4	88.2	90.4	90.1	87.6	82.8	77.6	75.9	78.6	83.6
80	38.7	43.4	46.4	47.0	46.4	45.6	44.9	45.4	45.7	46.0	45.7	43.4	39.2	35.0	33.2	34.5	35.8	34.1	33.0
85	17.3	18.9	20.5	20.9	17.9	14.3	12.1	11.0	9.22	7.23	5.34	3.58	2.13	1.11	0.49	0.13	0.00	0.13	0.48
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:15 June 2016

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.350
 Humidity:65.0%
 Test Distance:7.850m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:121.4V I:1.259A P:151.9W PF:0.9944 Lamp Flux:18580.7x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Table--4

UNIT: cd

C(DEG) γ (DEG)	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355				
0	9122	9122	9122	9122	9122	9122	9122	9122	9122	9122	9122	9122	9122	9122	9122				
5	9003	8999	8995	8990	8987	8984	8981	8979	8979	8979	8980	8983	8987	8992	8999				
10	8882	8869	8856	8841	8826	8813	8800	8788	8779	8771	8767	8764	8766	8771	8780				
15	8599	8588	8577	8569	8563	8559	8559	8556	8531	8509	8491	8480	8473	8475	8484				
20	8302	8282	8261	8239	8220	8203	8189	8181	8181	8188	8164	8135	8118	8111	8117				
25	7872	7859	7847	7839	7834	7826	7792	7764	7745	7738	7743	7732	7698	7679	7678				
30	7422	7398	7372	7347	7325	7308	7301	7305	7273	7242	7229	7234	7214	7179	7169				
35	6825	6811	6802	6800	6803	6763	6729	6709	6702	6698	6655	6638	6654	6603	6577				
40	6194	6163	6133	6107	6091	6086	6104	6073	6031	6012	6016	5964	5954	5935	5885				
45	5343	5335	5336	5351	5348	5304	5276	5271	5299	5228	5201	5188	5138	5148	5063				
50	4436	4405	4375	4352	4342	4351	4380	4318	4287	4309	4247	4208	4167	4148	4082				
55	3277	3278	3280	3282	3267	3218	3184	3175	3164	3103	3106	3032	3010	2946	2909				
60	2061	2050	2036	2016	1999	1987	1954	1876	1822	1804	1750	1745	1680	1647	1631				
65	1115	1103	1056	953	779	747	806	796	632	640	611	582	542	516	516				
70	242	303	353	372	339	263	193	154	198	170	151	146	145	140	140				
75	87.3	89.1	89.3	87.4	84.1	81.0	85.7	87.6	85.8	82.7	81.6	80.0	79.0	78.9	78.3				
80	35.1	39.4	43.3	45.2	45.7	45.5	45.1	45.1	45.9	46.5	46.8	45.9	42.2	36.5	34.3				
85	1.11	2.15	3.59	5.26	7.07	8.87	10.2	11.3	13.2	15.7	18.1	19.0	17.7	16.1	16.1				
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:15 June 2016

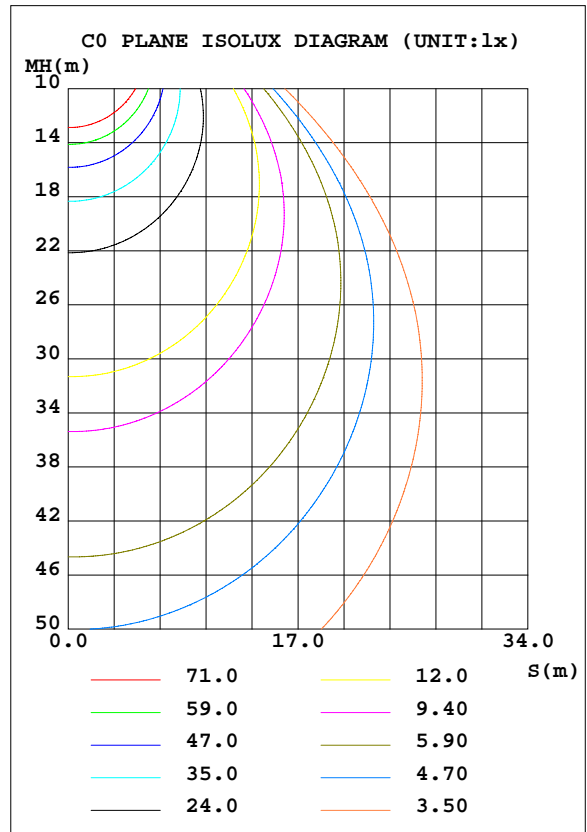
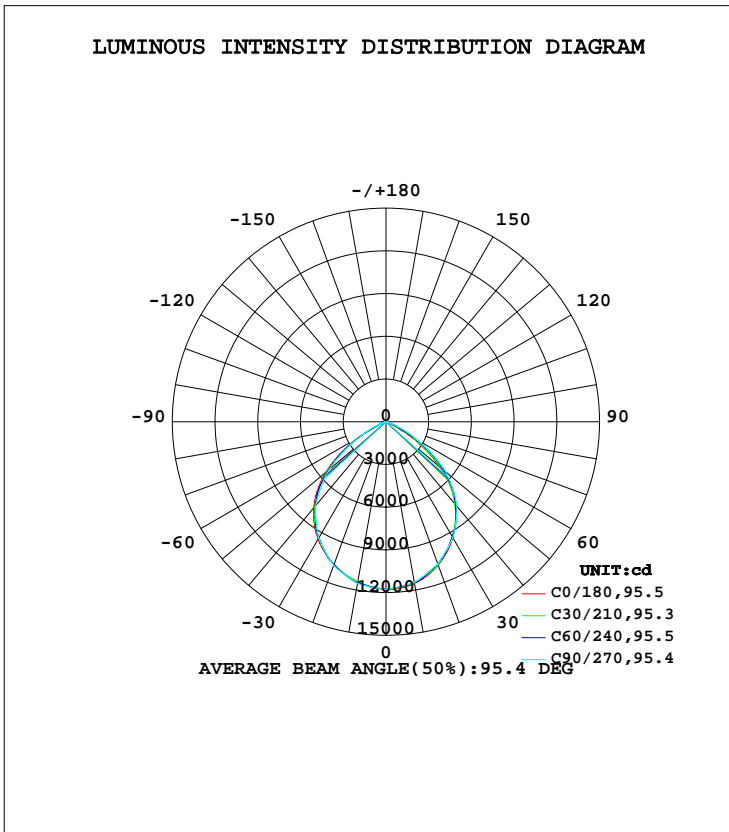
γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.350
 Humidity:65.0%
 Test Distance:7.850m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:217.0V I:1.021A P:216.9W PF:0.9790 Lamp Flux:23639.5x1 lm		
NAME:		SERIAL No.:
SPEC.:		
MFR.:		

DATA OF LAMP		PHOTOMETRIC DATA Eff: 109.00 lm/W			
MODEL		I _{max} (cd)	11770	S/MH(C0/180)	1.21
NOMINAL POWER(W)	200	LOR(%)	100.0	S/MH(C90/270)	1.20
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	23639	η UP, DN(C0-180)	0.0,50.4
NOMINAL FLUX(lm)	23639.5	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0,49.6
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	220	η down(%)	100.0	CIBSE SHR MAX	1.30



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:2016-05-03

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.350
 Humidity:65.0%
 Test Distance:7.850m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
5	1173	1165	1162	1161	1167	1163	1165	1167	0- 5	279.6	279.6	1.18,1.18
10	1153	1146	1147	1138	1144	1144	1154	1150	5- 10	826.4	1106	4.68,4.68
15	1119	1115	1105	1107	1110	1115	1114	1121	10- 15	1339	2445	10.3,10.3
20	1071	1062	1062	1056	1067	1065	1074	1067	15- 20	1793	4238	17.9,17.9
25	1011	1003	1001	1003	1015	1012	1009	1009	20- 25	2173	6411	27.1,27.1
30	939.4	931.6	939.7	938.3	953.3	943.4	944.2	936.1	25- 30	2463	8874	37.5,37.5
35	856.2	848.7	857.7	861.9	878.8	862.9	856.4	850.6	30- 35	2649	11523	48.7,48.7
40	758.0	759.2	775.8	776.8	788.7	774.4	768.7	755.5	35- 40	2713	14236	60.2,60.2
45	639.3	646.8	661.2	667.6	681.3	663.0	644.6	630.1	40- 45	2635	16871	71.4,71.4
50	493.9	525.9	546.6	550.2	550.2	543.3	520.5	495.3	45- 50	2381	19252	81.4,81.4
55	331.7	367.3	394.9	396.3	395.1	383.8	363.4	335.6	50- 55	1944	21196	89.7,89.7
60	171.8	211.2	243.3	245.5	234.0	226.4	206.4	187.9	55- 60	1350	22546	95.4,95.4
65	37.36	85.03	133.8	109.5	66.34	90.50	113.1	73.83	60- 65	709.7	23255	98.4,98.4
70	8.575	20.05	24.35	29.76	10.71	19.77	19.82	15.96	65- 70	252.4	23508	99.4,99.4
75	5.252	10.46	16.34	11.93	6.555	10.10	13.22	8.494	70- 75	75.49	23583	99.8,99.8
80	1.745	5.610	8.334	6.259	3.197	4.968	6.612	3.979	75- 80	40.17	23623	99.9,99.9
85	0.4986	1.244	0	1.503	0.4963	0.9246	0	0.6300	80- 85	15.13	23638	100,100
90	0.5736	0	0	0	0.5911	0	0	0	85- 90	0.9966	23639	100,100
95									90- 95			
100									95-100			
105									100-105			
110									105-110			
115									110-115			
120									115-120			
125									120-125			
130									125-130			
135									130-135			
140									135-140			
145									140-145			
150									145-150			
155									150-155			
160									155-160			
165									160-165			
170									165-170			
175									170-175			
180									175-180			
DEG	LUMINOUS INTENSITY:×10cd									UNIT:lm		

Conical surface Flux(90deg): 16871 lm

%lum = 71.4%
%lamp = 71.4%

Conical surface Flux(120deg): 22546 lm

%lum = 95.4%
%lamp = 95.4%

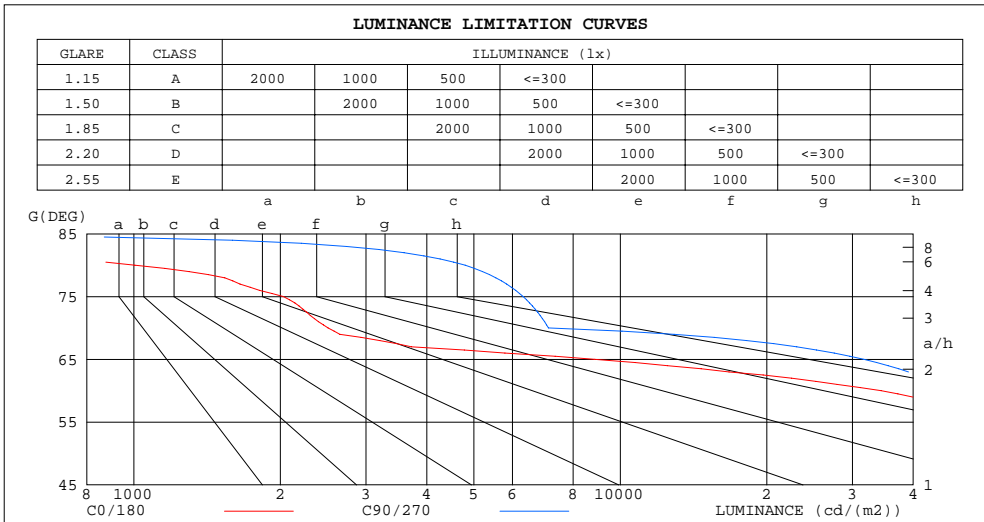
C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2016-05-03

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.350
Humidity:65.0%
Test Distance:7.850m [K=1.0000]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINANCE LIMITATION CURVES

Test:U:217.0V I:1.021A P:216.9W PF:0.9790 Lamp Flux:23639.5x1 lm		
NAME:		SERIAL No.:
SPEC.:		
MFR.:		



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	572	0
80	1005	4799
75	2029	6313
70	2507	7118
65	8839	31666
60	34365	48662
55	57824	68854
50	76842	85029
45	90407	93503

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25DEG
 Operators:
 Test Date: 2016-05-03

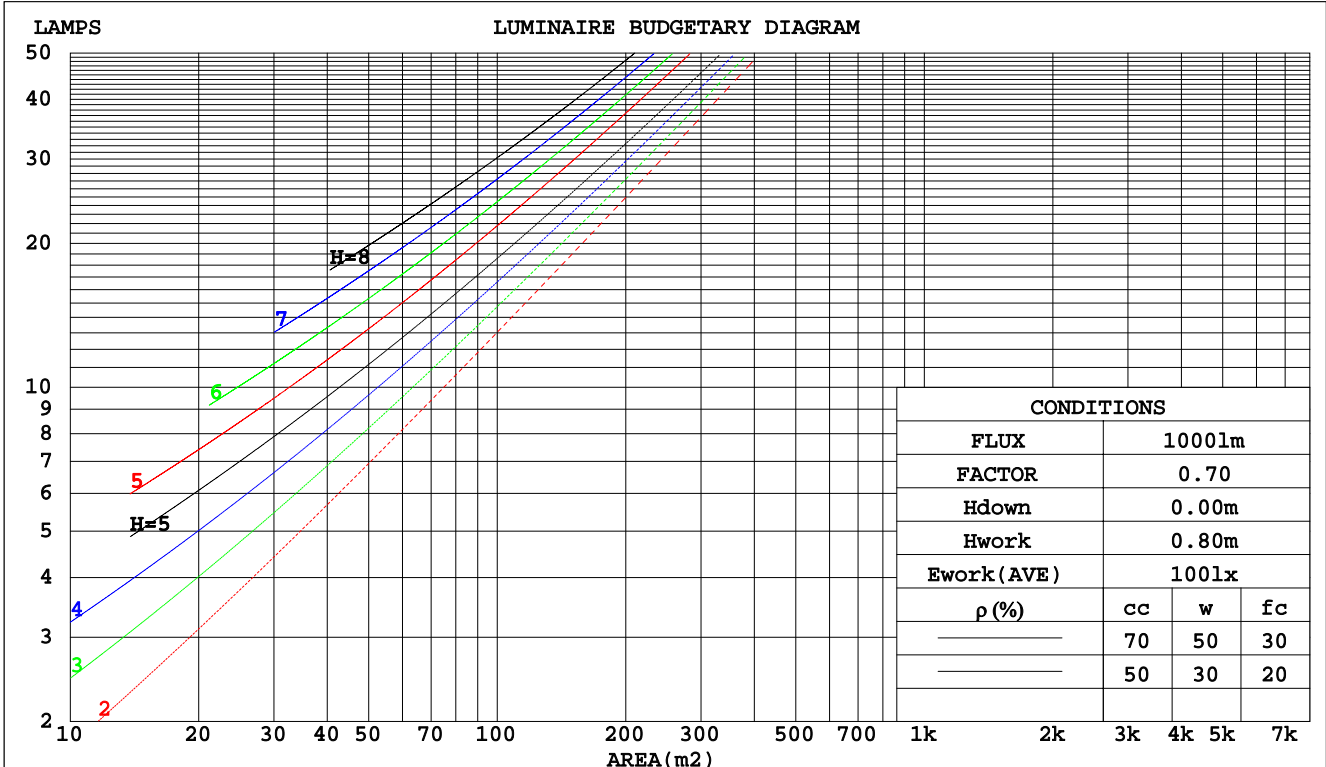
γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.350
 Humidity: 65.0%
 Test Distance: 7.850m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:217.0V I:1.021A P:216.9W PF:0.9790 Lamp Flux:23639.5x1 lm		
NAME:		SERIAL No.:
SPEC.:		
MFR.:		

pcc	80%			70%			50%			30%			10%			0
	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pw																0
pfc																0
RCR	RCR:Room Cavity Ratio Coefficients of Utilization(CU)															
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00
1.0	1.08	1.05	1.02	1.06	1.03	1.00	1.02	.99	.97	.98	.96	.94	.94	.93	.91	.89
2.0	.97	.92	.87	.95	.90	.86	.92	.88	.84	.89	.85	.82	.86	.83	.81	.79
3.0	.87	.81	.75	.86	.80	.75	.83	.78	.73	.80	.76	.72	.78	.74	.71	.69
4.0	.79	.71	.66	.77	.71	.65	.75	.69	.64	.73	.68	.64	.71	.66	.63	.61
5.0	.71	.63	.58	.70	.63	.57	.68	.62	.57	.66	.61	.56	.65	.60	.56	.54
6.0	.65	.57	.51	.64	.56	.51	.62	.56	.51	.61	.55	.50	.59	.54	.50	.48
7.0	.59	.51	.46	.58	.51	.46	.57	.50	.45	.56	.50	.45	.54	.49	.45	.43
8.0	.54	.47	.41	.54	.46	.41	.52	.46	.41	.51	.45	.41	.50	.45	.41	.39
9.0	.50	.43	.37	.49	.42	.37	.48	.42	.37	.47	.41	.37	.46	.41	.37	.35
10.0	.46	.39	.34	.46	.39	.34	.45	.38	.34	.44	.38	.34	.43	.38	.34	.32



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:2016-05-03

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.350
 Humidity:65.0%
 Test Distance:7.850m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

WEC AND CCEC

Test:U:217.0V I:1.021A P:216.9W PF:0.9790 Lamp Flux:23639.5x1 lm		
NAME:		SERIAL No.:
SPEC.:		
MFR.:		

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.232	.132	.042	.225	.128	.041	.212	.122	.039	.200	.115	.037	.189	.110	.035	
2.0	.228	.125	.038	.222	.122	.038	.211	.117	.036	.201	.113	.035	.192	.108	.034	
3.0	.219	.117	.035	.214	.115	.035	.204	.111	.034	.195	.107	.033	.187	.104	.032	
4.0	.209	.108	.032	.204	.107	.032	.195	.104	.031	.187	.101	.030	.180	.098	.030	
5.0	.198	.101	.029	.194	.099	.029	.186	.097	.028	.179	.094	.028	.172	.092	.028	
6.0	.187	.094	.027	.183	.093	.027	.176	.090	.026	.170	.088	.026	.164	.086	.026	
7.0	.177	.087	.025	.174	.086	.025	.167	.085	.024	.162	.083	.024	.156	.081	.024	
8.0	.167	.082	.023	.164	.081	.023	.159	.079	.023	.154	.078	.022	.149	.076	.022	
9.0	.158	.077	.021	.156	.076	.021	.151	.075	.021	.146	.073	.021	.142	.072	.021	
10.0	.150	.072	.020	.148	.072	.020	.144	.070	.020	.139	.069	.020	.135	.068	.020	

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.175	.157	.141	.150	.135	.121	.102	.093	.084	.059	.054	.049	.019	.017	.016	
2.0	.164	.132	.106	.140	.114	.091	.096	.079	.064	.055	.046	.037	.018	.015	.012	
3.0	.155	.114	.081	.133	.098	.071	.091	.068	.050	.053	.040	.029	.017	.013	.010	
4.0	.147	.100	.064	.126	.086	.056	.087	.060	.039	.050	.035	.023	.016	.011	.008	
5.0	.140	.089	.052	.120	.077	.045	.083	.054	.032	.048	.032	.019	.015	.010	.006	
6.0	.133	.081	.043	.114	.070	.037	.079	.049	.026	.046	.029	.016	.015	.009	.005	
7.0	.127	.074	.036	.109	.064	.032	.076	.045	.022	.044	.026	.013	.014	.009	.004	
8.0	.121	.068	.031	.104	.059	.027	.072	.041	.019	.042	.024	.011	.014	.008	.004	
9.0	.116	.063	.027	.100	.055	.024	.069	.038	.017	.040	.023	.010	.013	.007	.003	
10.0	.111	.059	.024	.096	.051	.021	.066	.036	.015	.039	.021	.009	.013	.007	.003	

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:2016-05-03

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.350
 Humidity:65.0%
 Test Distance:7.850m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

UGR(Unified Glare Rating) Table

Test:U:217.0V I:1.021A P:216.9W PF:0.9790 Lamp Flux:23639.5x1 lm		
NAME:		SERIAL No.:
SPEC.:		
MFR.:		

ceiling/cavity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions	Viewed crosswise					Viewed endwise				
x = 2H y = 2H	26.3	27.6	26.6	27.8	28.0	27.0	28.4	27.3	28.5	28.7
3H	26.2	27.3	26.4	27.6	27.8	27.1	28.3	27.4	28.5	28.7
4H	26.1	27.2	26.4	27.4	27.7	27.0	28.1	27.3	28.4	28.6
6H	26.0	27.0	26.3	27.3	27.5	26.9	28.0	27.2	28.2	28.5
8H	25.9	26.9	26.2	27.2	27.5	26.9	27.9	27.2	28.1	28.4
12H	25.9	26.8	26.2	27.1	27.4	26.8	27.8	27.1	28.1	28.3
4H 2H	26.4	27.5	26.7	27.7	28.0	27.0	28.1	27.3	28.4	28.6
3H	26.2	27.2	26.5	27.4	27.7	27.1	28.0	27.4	28.3	28.6
4H	26.1	27.0	26.5	27.3	27.6	27.0	27.9	27.3	28.2	28.5
6H	26.0	26.8	26.4	27.1	27.5	26.9	27.7	27.3	28.0	28.4
8H	26.0	26.7	26.4	27.0	27.4	26.9	27.6	27.3	27.9	28.3
12H	25.9	26.6	26.3	26.9	27.3	26.8	27.5	27.2	27.8	28.2
8H 4H	26.0	26.7	26.4	27.0	27.4	26.9	27.6	27.3	27.9	28.3
6H	25.9	26.5	26.3	26.9	27.3	26.8	27.4	27.2	27.8	28.2
8H	25.9	26.4	26.3	26.8	27.2	26.8	27.3	27.2	27.7	28.1
12H	25.8	26.2	26.3	26.7	27.2	26.7	27.1	27.2	27.6	28.1
12H 4H	25.9	26.6	26.4	27.0	27.4	26.8	27.5	27.2	27.8	28.2
6H	25.9	26.4	26.3	26.8	27.2	26.7	27.3	27.2	27.7	28.1
8H	25.8	26.2	26.3	26.7	27.2	26.7	27.1	27.2	27.6	28.1
Variations with the observer position at spacings:										
S = 1.0H	+ 1.1 / - 1.6					+ 0.8 / - 1.1				
1.5H	+ 0.6 / - 0.6					+ 0.4 / - 0.6				
2.0H	+ 2.3 / - 5.2					+ 1.9 / - 4.6				

CIE Pub.117 Corrected 23639 lm Total Lamp Luminous Flux. (8log(F/F0) = 11.0)

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:2016-05-03

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.350
 Humidity:65.0%
 Test Distance:7.850m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

UTILIZATION FACTORS TABLE

Test:U:217.0V I:1.021A P:216.9W PF:0.9790 Lamp Flux:23639.5x1 lm		
NAME:		SERIAL No.:
SPEC.:		
MFR.:		

REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	66	56	49	65	55	49	64	55	49	44
0.80	76	67	60	75	66	60	74	65	60	54
1.00	85	76	70	84	76	70	82	76	69	64
1.25	92	84	78	90	83	78	88	82	77	71
1.50	96	89	83	95	88	83	92	86	82	76
2.00	102	95	91	100	94	90	97	92	88	82
2.50	105	99	94	103	97	93	99	95	91	84
3.00	107	102	98	105	101	97	101	98	95	87
4.00	110	106	102	108	104	101	104	101	98	90
5.00	112	108	105	109	106	103	105	102	100	92
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

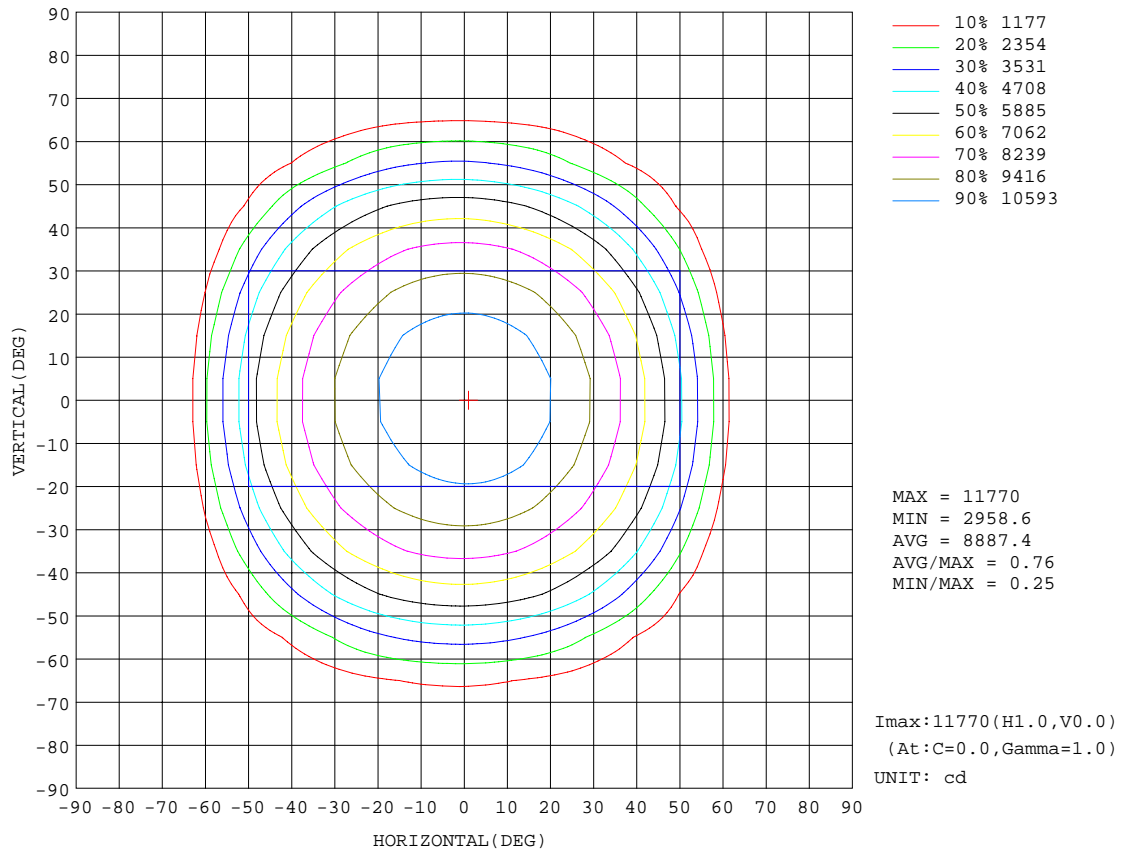
C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:2016-05-03

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.350
 Humidity:65.0%
 Test Distance:7.850m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ISOCANDELA DIAGRAM

Test:U:217.0V I:1.021A P:216.9W PF:0.9790 Lamp Flux:23639.5x1 lm		
NAME:		SERIAL No.:
SPEC.:		
MFR.:		



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:2016-05-03

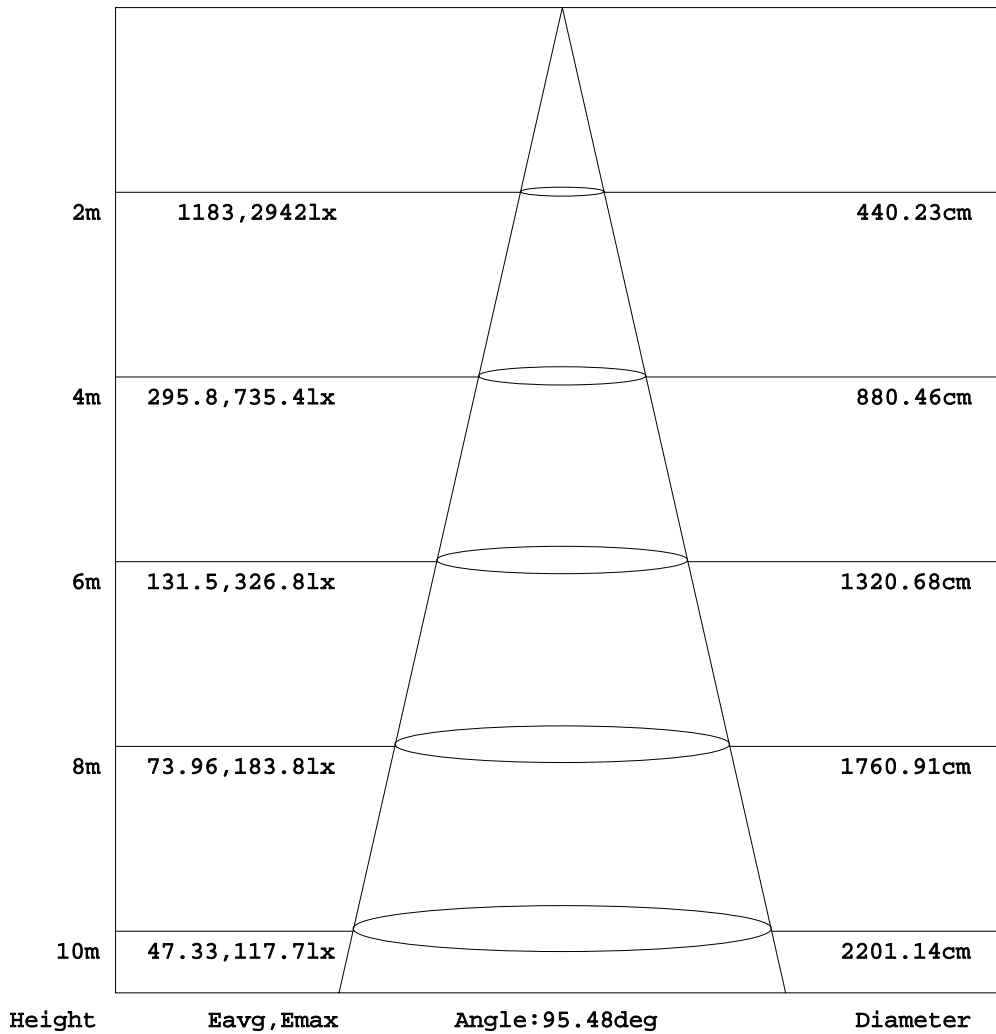
γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.350
 Humidity:65.0%
 Test Distance:7.850m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

AAI Figure

Test:U:217.0V I:1.021A P:216.9W PF:0.9790 Lamp Flux:23639.5x1 lm		
NAME:		SERIAL No.:
SPEC.:		
MFR.:		

Flux out:18341 lm



Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

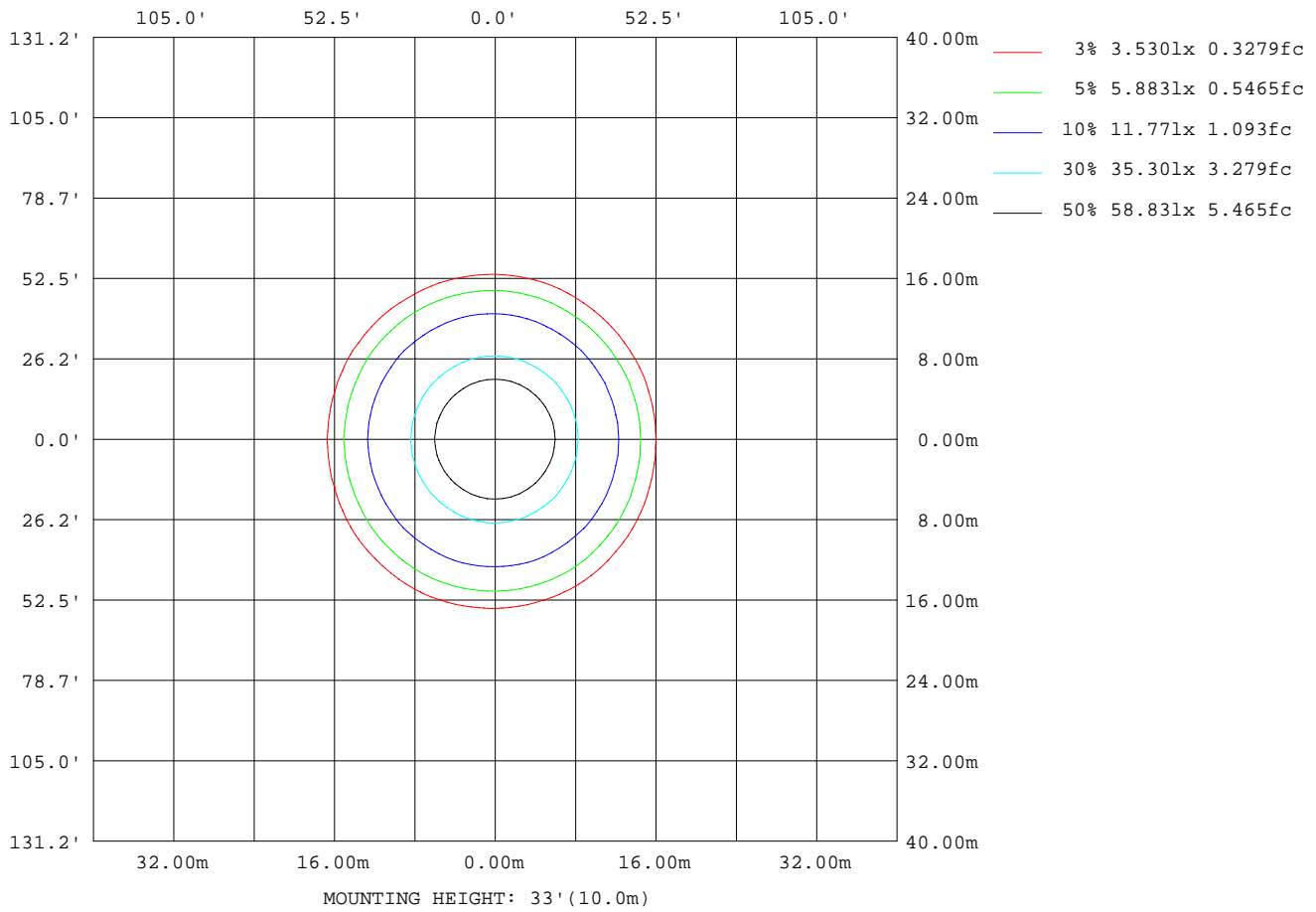
C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:2016-05-03

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.350
 Humidity:65.0%
 Test Distance:7.850m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ISOLUX DIAGRAM

Test:U:217.0V I:1.021A P:216.9W PF:0.9790 Lamp Flux:23639.5x1 lm		
NAME:		SERIAL No.:
SPEC.:		
MFR.:		



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25DEG
 Operators:
 Test Date: 2016-05-03

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.350
 Humidity: 65.0%
 Test Distance: 7.850m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LED Avg.L Report

Test:U:217.0V I:1.021A P:216.9W PF:0.9790 Lamp Flux:23639.5x1 lm		
NAME:		SERIAL No.:
SPEC.:		
MFR.:		

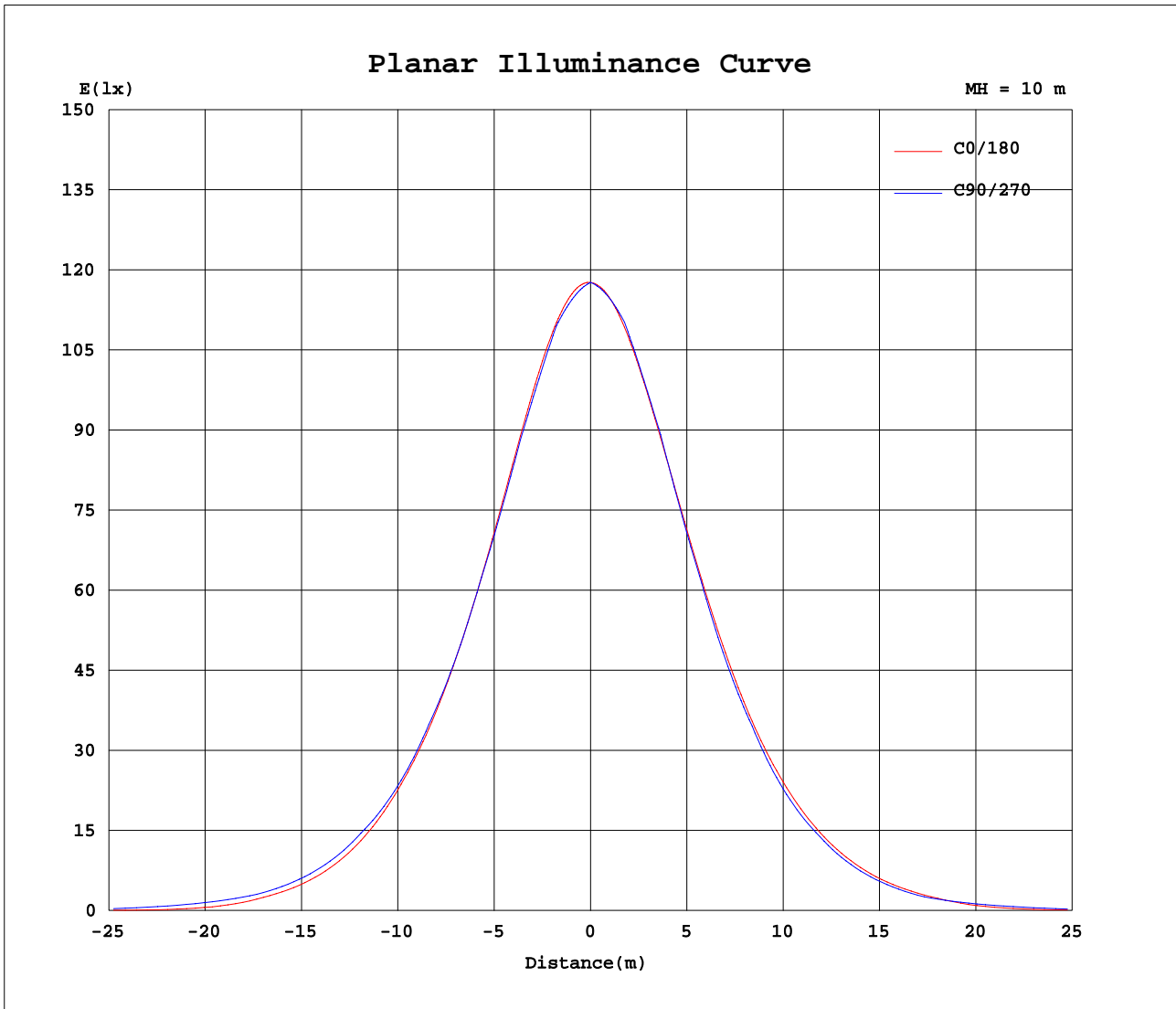
AvgL	cd/m2
L_0~180(65)av	12269
L_0~180(75)av	2281
L_0~180(85)av	571
L_90~270(65)av	29215
L_90~270(75)av	5710
L_90~270(85)av	0
L_45(65)av	21229
L_45(75)av	3958
L_45(85)av	1234

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:2016-05-03

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.350
 Humidity:65.0%
 Test Distance:7.850m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25DEG
 Operators:
 Test Date: 2016-05-03

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.350
 Humidity: 65.0%
 Test Distance: 7.850m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:217.0V I:1.021A P:216.9W PF:0.9790 Lamp Flux:23639.5x1 lm		
NAME:		SERIAL No.:
SPEC.:		
MFR.:		

Table--1

UNIT: x10cd

γ (DEG) C (DEG)	C (DEG)																		
	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90
0	1177	1177	1177	1177	1177	1177	1177	1177	1177	1177	1177	1177	1177	1177	1177	1177	1177	1177	1177
5	1173	1172	1170	1169	1168	1168	1167	1166	1166	1165	1165	1164	1164	1163	1163	1163	1162	1162	1162
10	1153	1151	1149	1147	1146	1146	1145	1145	1145	1146	1146	1147	1147	1148	1148	1148	1148	1148	1147
15	1119	1116	1113	1112	1112	1112	1113	1115	1117	1115	1113	1111	1110	1109	1108	1107	1106	1105	1105
20	1071	1067	1065	1064	1065	1068	1070	1066	1064	1062	1061	1061	1061	1062	1062	1063	1063	1063	1062
25	1011	1006	1004	1005	1008	1007	1004	1002	1002	1003	1005	1004	1003	1002	1002	1001	1001	1001	1001
30	939	935	934	936	936	932	930	932	934	932	931	931	932	934	935	937	938	939	940
35	856	851	851	855	849	847	850	848	847	849	852	856	855	855	855	855	856	857	858
40	758	753	756	754	751	754	752	752	756	759	758	759	761	764	767	770	772	775	776
45	639	636	643	636	639	638	640	648	646	647	651	658	659	658	657	658	659	660	661
50	494	492	496	494	497	501	509	509	516	526	523	524	527	531	536	539	543	545	547
55	332	332	333	337	339	348	350	358	364	367	373	381	386	388	390	390	391	393	395
60	172	174	175	179	188	191	196	202	205	211	218	222	226	230	232	234	236	240	243
65	37.4	40.2	40.5	43.7	51.8	58.5	65.2	70.8	87.2	85.0	76.0	74.7	97.8	114	122	127	129	132	134
70	8.57	8.87	9.98	11.8	13.3	14.5	15.8	20.1	15.7	20.1	26.9	34.8	40.2	40.7	37.0	32.1	27.8	24.9	24.3
75	5.25	5.29	5.24	5.50	6.34	7.54	8.39	9.24	9.87	10.5	10.9	11.7	12.4	13.2	14.0	14.7	15.3	15.7	16.3
80	1.74	1.84	1.86	2.06	2.74	3.28	3.88	4.82	5.26	5.61	6.14	6.77	7.52	8.08	8.39	8.44	8.14	7.99	8.33
85	0.50	0.62	0.81	0.66	0.72	1.26	1.29	1.21	1.23	1.24	1.20	1.10	0.95	0.73	0.49	0.28	0.12	0.03	0.00
90	0.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

C Range: 0 - 360DEG C Interval: 5.0DEG Test Speed: HIGH Temperature:25DEG Operators: Test Date:2016-05-03	γ Range: 0 - 90DEG γ Interval: 0.5DEG Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.350 Humidity:65.0% Test Distance:7.850m [K=1.0000] Remarks:
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EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:217.0V I:1.021A P:216.9W PF:0.9790 Lamp Flux:23639.5x1 lm	
NAME:	SERIAL No.:
SPEC.:	
MFR.:	

Table--2

UNIT: x10cd

C(DEG)\γ (DEG)	95	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	180	185
0	1177	1177	1177	1177	1177	1177	1177	1177	1177	1177	1177	1177	1177	1177	1177	1177	1177	1177	1177
5	1161	1161	1161	1161	1161	1160	1160	1160	1161	1161	1161	1162	1162	1163	1164	1165	1166	1167	1166
10	1146	1146	1145	1144	1142	1141	1140	1139	1138	1137	1137	1137	1137	1137	1138	1140	1142	1144	1142
15	1104	1104	1103	1103	1103	1103	1104	1105	1107	1108	1106	1104	1103	1103	1103	1105	1107	1110	1108
20	1062	1061	1059	1058	1057	1056	1056	1055	1056	1057	1059	1063	1061	1060	1059	1060	1063	1067	1064
25	1001	1000	1000	1000	1000	1001	1003	1004	1003	1002	1003	1004	1008	1009	1007	1008	1010	1015	1011
30	939	939	938	937	936	935	935	936	938	942	941	940	942	946	946	946	948	953	948
35	858	859	859	860	861	863	865	863	862	863	865	869	867	868	874	872	873	879	873
40	777	777	776	775	774	773	772	773	777	775	774	776	781	778	781	784	782	789	782
45	662	663	664	666	669	673	675	670	668	668	671	666	669	673	671	678	674	681	674
50	547	546	545	544	543	542	543	545	550	542	538	540	537	540	541	543	542	550	543
55	396	397	399	402	403	404	402	397	396	398	396	390	389	386	391	387	388	395	388
60	244	245	247	250	251	250	248	247	246	246	245	243	240	236	234	232	231	234	229
65	134	135	136	136	132	121	103	102	110	117	111	99.0	100	83.7	72.1	69.8	65.6	66.3	63.4
70	25.8	29.3	34.5	40.7	46.5	49.1	47.0	39.9	29.8	20.5	30.5	21.9	18.6	17.3	15.7	13.8	11.4	10.7	11.2
75	16.2	16.1	15.6	14.9	14.2	13.4	12.7	11.7	11.9	11.2	10.3	9.03	8.39	7.19	6.31	5.89	6.43	6.56	6.37
80	8.06	8.42	8.79	8.83	8.59	8.13	7.58	6.86	6.26	5.81	5.21	4.42	3.86	2.88	2.36	2.24	2.70	3.20	2.95
85	0.03	0.13	0.29	0.52	0.78	1.03	1.26	1.41	1.50	1.49	1.32	1.24	0.99	0.81	0.68	0.64	0.50	0.50	0.52
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.59	0.00

C Range: 0 - 360DEG γ Range: 0 - 90DEG
C Interval: 5.0DEG γ Interval: 0.5DEG
Test Speed: HIGH Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.350
Temperature:25DEG Humidity:65.0%
Operators: Test Distance:7.850m [K=1.0000]
Test Date:2016-05-03 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:217.0V I:1.021A P:216.9W PF:0.9790 Lamp Flux:23639.5x1 lm		
NAME:		SERIAL No.:
SPEC.:		
MFR.:		

Table--3

UNIT: x10cd

C (DEG) \ γ (DEG)	190	195	200	205	210	215	220	225	230	235	240	245	250	255	260	265	270	275	280
0	1177	1177	1177	1177	1177	1177	1177	1177	1177	1177	1177	1177	1177	1177	1177	1177	1177	1177	1177
5	1165	1165	1164	1164	1164	1163	1163	1163	1163	1164	1164	1164	1164	1164	1165	1165	1165	1165	1166
10	1141	1140	1140	1140	1141	1142	1143	1144	1145	1147	1148	1150	1151	1152	1153	1153	1154	1154	1154
15	1107	1106	1107	1108	1110	1113	1116	1115	1114	1113	1113	1113	1113	1113	1113	1114	1114	1114	1114
20	1063	1063	1065	1068	1070	1067	1066	1065	1066	1066	1068	1069	1071	1072	1073	1074	1074	1074	1073
25	1010	1011	1014	1014	1011	1009	1010	1012	1014	1013	1011	1010	1010	1009	1009	1009	1009	1009	1009
30	947	949	949	945	944	946	947	943	941	941	941	942	943	944	944	944	944	943	942
35	872	874	869	868	871	867	864	863	864	866	864	862	861	859	858	857	856	855	854
40	783	780	778	781	776	773	774	774	770	769	769	770	771	771	771	770	769	767	764
45	677	671	673	668	665	669	664	663	665	668	666	660	656	652	650	647	645	642	639
50	543	541	540	537	538	535	537	543	535	531	528	527	526	526	525	523	520	517	511
55	387	391	385	387	385	390	388	384	382	384	382	379	376	372	368	366	363	360	357
60	229	228	230	230	232	227	226	226	224	218	214	214	214	212	209	208	206	204	202
65	63.8	62.1	71.0	77.6	79.6	78.0	96.6	90.5	72.9	63.6	82.4	99.7	110	113	114	114	113	111	109
70	12.9	15.1	16.5	17.0	17.9	22.0	16.3	19.8	24.7	30.6	34.8	36.0	33.3	28.4	23.9	20.7	19.8	20.5	23.1
75	6.35	6.98	7.95	8.87	9.13	9.54	9.82	10.1	10.3	10.9	11.4	11.9	12.4	12.7	12.8	12.9	13.2	12.8	12.3
80	2.75	2.78	3.15	3.65	4.07	4.75	4.82	4.97	5.27	5.62	6.10	6.65	7.02	6.89	6.45	6.27	6.61	6.20	6.11
85	0.58	0.65	0.79	0.96	0.87	0.83	0.87	0.92	0.91	0.82	0.72	0.58	0.41	0.23	0.10	0.02	0.00	0.02	0.09
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

C Range: 0 - 360DEG	γ Range: 0 - 90DEG
C Interval: 5.0DEG	γ Interval: 0.5DEG
Test Speed: HIGH	Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.350
Temperature:25DEG	Humidity:65.0%
Operators:	Test Distance:7.850m [K=1.0000]
Test Date:2016-05-03	Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:217.0V I:1.021A P:216.9W PF:0.9790 Lamp Flux:23639.5x1 lm		
NAME:		SERIAL No.:
SPEC.:		
MFR.:		

Table--4

UNIT: x10cd

γ (DEG) \ C (DEG)	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355				
0	1177	1177	1177	1177	1177	1177	1177	1177	1177	1177	1177	1177	1177	1177	1177				
5	1166	1166	1166	1166	1166	1167	1167	1167	1168	1168	1169	1169	1170	1171	1172				
10	1154	1153	1152	1152	1151	1150	1150	1149	1148	1148	1148	1148	1149	1150	1151				
15	1114	1115	1115	1116	1117	1118	1121	1122	1119	1117	1115	1114	1114	1115	1116				
20	1072	1071	1070	1068	1068	1067	1067	1069	1071	1074	1071	1068	1066	1066	1068				
25	1008	1008	1008	1009	1010	1011	1009	1007	1007	1008	1011	1012	1008	1006	1007				
30	941	940	938	936	935	935	936	940	937	936	936	940	939	935	935				
35	853	853	854	855	857	853	851	850	852	855	851	852	858	853	852				
40	760	757	754	752	751	751	755	753	750	751	755	752	755	756	753				
45	637	636	637	639	639	633	630	631	637	630	630	634	632	641	634				
50	505	501	496	493	493	493	495	488	486	490	486	486	486	491	489				
55	355	352	349	344	340	337	336	334	331	330	332	328	330	328	329				
60	201	199	195	191	189	190	188	185	182	184	182	182	174	171	172				
65	107	101	90.0	72.0	53.9	60.6	73.8	75.4	56.2	58.4	48.7	46.1	39.3	37.6	38.5				
70	26.8	30.6	32.4	30.4	25.9	20.3	16.0	13.2	16.2	13.5	12.7	11.9	10.8	9.45	8.66				
75	11.9	11.3	10.7	10.0	9.43	8.80	8.49	8.03	7.48	7.08	6.70	6.02	5.21	4.90	4.98				
80	6.26	6.30	5.89	5.25	4.66	4.27	3.98	3.78	3.28	2.70	2.17	1.96	1.67	1.57	1.64				
85	0.21	0.36	0.51	0.61	0.65	0.67	0.63	0.58	0.56	0.58	0.58	0.49	0.43	0.42	0.43				
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				

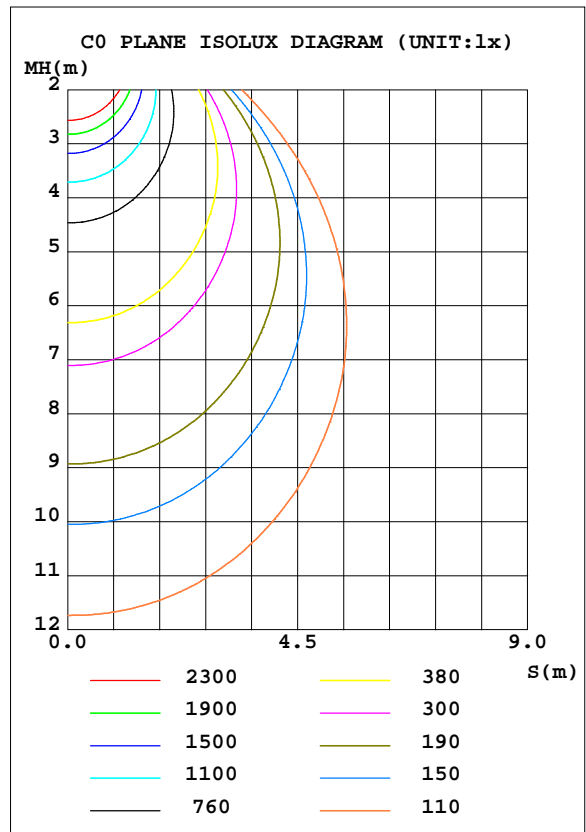
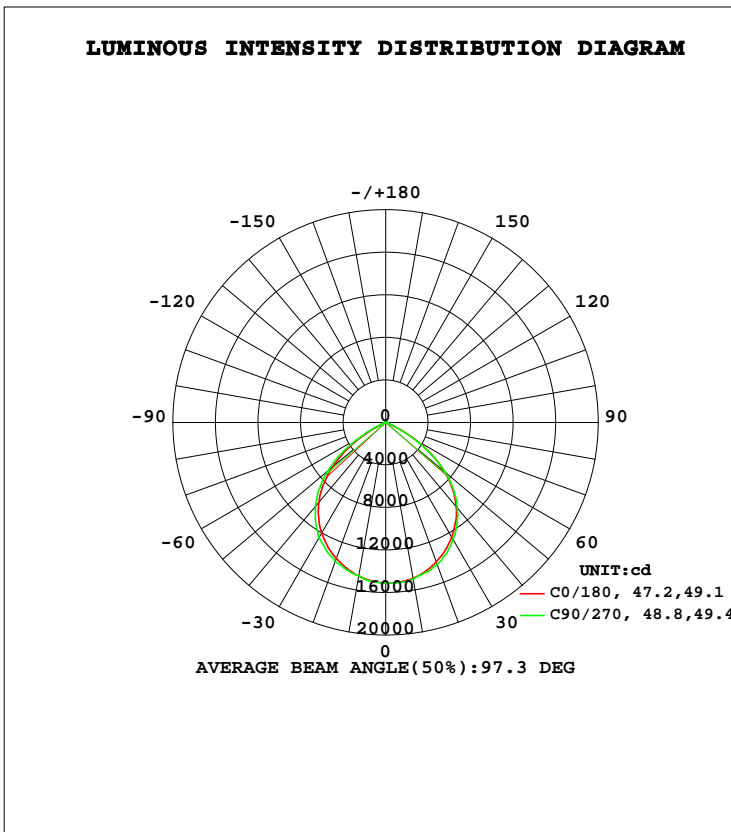
C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25DEG
 Operators:
 Test Date: 2016-05-03

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.350
 Humidity: 65.0%
 Test Distance: 7.850m [K=1.0000]
 Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.2V I:2.025A P:242.1W PF:0.9950 Lamp Flux:31394.8x1 lm		
NAME: SNC-H240HLT1A1	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: SNC OPTO ELECTRONIC CO.,LTD	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 129.68 lm/W			
MODEL	SNC-H240HLT1A1	I _{max} (cd)	15138	S/MH(C0/180)	1.19
NOMINAL POWER(W)	240	LOR(%)	100.0	S/MH(C90/270)	1.23
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	31395	η UP, DN(C0-180)	0.1, 50.5
NOMINAL FLUX(lm)	31394.8	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.1, 49.3
LAMPS INSIDE	1	η up(%)	0.2	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	120.0	η down(%)	99.8	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.2DEG
 Operators:Leo
 Test Date:2016-06-18

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.284
 Humidity:60.0%
 Test Distance:26.000m [K=1.3753]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	1487	1500	1493	1479	1465	1466	1466	1476	0- 10	1428	1428	4.55,4.55
20	1395	1427	1420	1373	1360	1365	1390	1383	10- 20	4066	5494	17.5,17.5
30	1242	1298	1266	1212	1203	1226	1254	1226	20- 30	6091	11585	36.9,36.9
40	1032	1097	1052	989.5	977.2	1015	1027	1015	30- 40	7141	18726	59.6,59.6
50	725.2	771.1	732.2	680.5	653.7	693.2	711.2	723.9	40- 50	6770	25497	81.2,81.2
60	320.8	333.0	294.9	251.5	235.8	264.0	284.7	308.7	50- 60	4500	29997	95.5,95.5
70	19.20	32.11	29.03	21.71	14.19	22.75	28.26	28.23	60- 70	1170	31166	99.3,99.3
80	4.245	8.450	7.575	6.195	2.975	6.080	7.420	7.956	70- 80	148.1	31314	99.7,99.7
90	0	0	0.1011	0	0	0	0.1179	0	80- 90	23.46	31338	99.8,99.8
100	0	0	0.5439	0	0	0	0.8992	0.0002	90-100	0.5203	31338	99.8,99.8
110	0.0702	0.2336	0.8290	0.3177	0.1699	0.2512	1.370	0.2455	100-110	2.485	31341	99.8,99.8
120	0.4373	0.6962	0.9248	0.7926	0.5648	0.6866	1.322	0.6791	110-120	5.821	31346	99.8,99.8
130	0.7829	1.159	1.605	1.242	0.7894	1.071	1.981	1.061	120-130	8.692	31355	99.9,99.9
140	1.096	1.438	1.900	1.467	1.212	1.423	2.111	1.431	130-140	11.11	31366	99.9,99.9
150	1.243	1.729	2.221	1.707	1.512	1.835	2.510	1.933	140-150	10.81	31377	99.9,99.9
160	1.468	2.142	2.634	2.125	1.726	2.008	2.570	2.313	150-160	9.288	31386	100,100
170	1.697	2.364	2.548	2.414	1.863	2.204	2.880	2.731	160-170	6.069	31392	100,100
180	2.093	2.455	2.693	2.480	2.120	2.069	2.530	2.501	170-180	2.314	31395	100,100
DEG	LUMINOUS INTENSITY: $\times 10\text{cd}$								UNIT:lm			

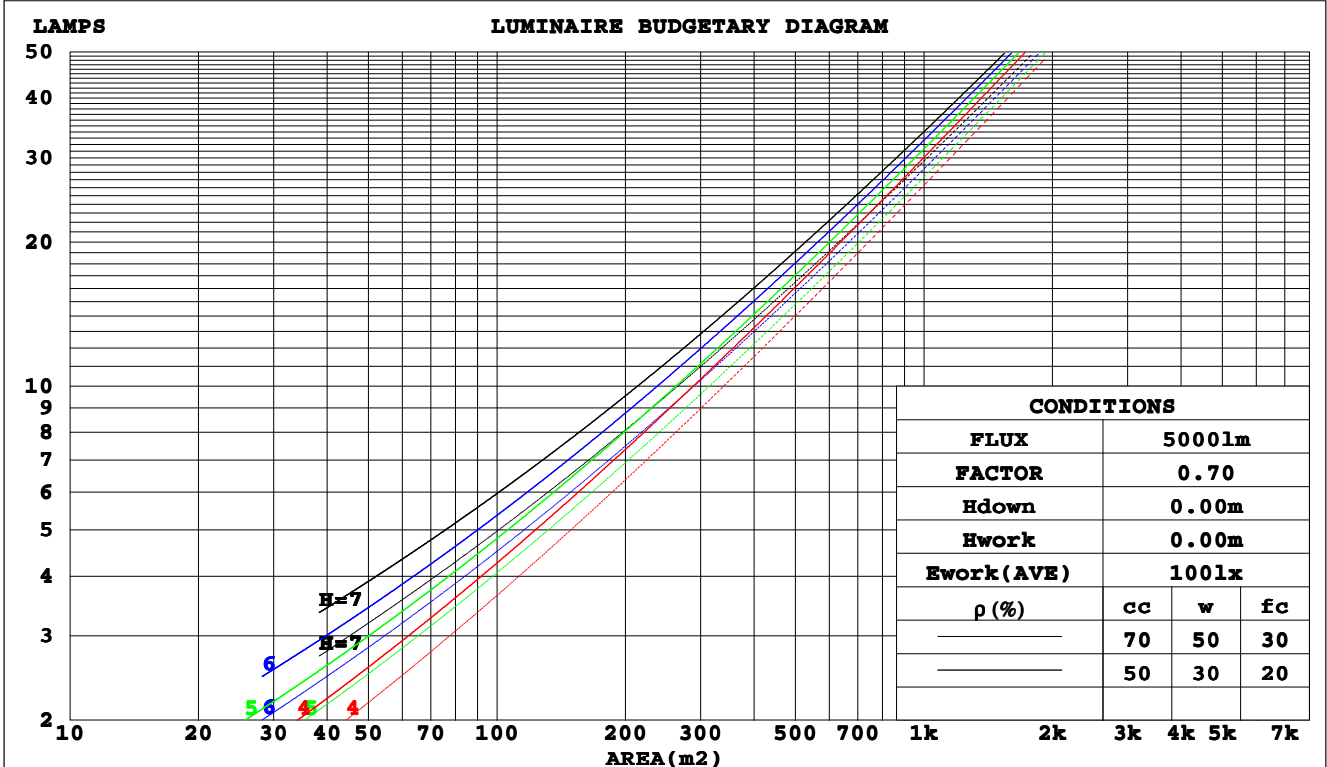
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.2DEG
Operators:Leo
Test Date:2016-06-18

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.284
Humidity:60.0%
Test Distance:26.000m [K=1.3753]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.2V I:2.025A P:242.1W PF:0.9950 Lamp Flux:31394.8x1 lm		
NAME: SNC-H240HLT1A1	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: SNC OPTO ELECTRONIC CO.,LTD	SUR.:	PROTECTION ANGLE:

ρcc	80%			70%			50%			30%			10%			0
	ρw	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio															
	Coefficients of Utilization(CU)															
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	.00
1.0	1.08	1.05	1.02	1.06	1.03	1.00	1.02	.99	.97	.98	.96	.94	.94	.93	.91	.89
2.0	.97	.92	.87	.95	.90	.86	.92	.88	.84	.89	.85	.82	.86	.83	.80	.78
3.0	.87	.80	.75	.86	.79	.74	.83	.78	.73	.80	.76	.72	.78	.74	.71	.69
4.0	.79	.71	.65	.77	.70	.65	.75	.69	.64	.73	.68	.63	.71	.66	.63	.61
5.0	.71	.63	.58	.70	.63	.57	.68	.62	.57	.66	.60	.56	.64	.59	.55	.54
6.0	.65	.57	.51	.64	.56	.51	.62	.55	.50	.60	.54	.50	.59	.54	.50	.48
7.0	.59	.51	.46	.58	.51	.45	.57	.50	.45	.55	.49	.45	.54	.49	.45	.43
8.0	.54	.46	.41	.53	.46	.41	.52	.45	.41	.51	.45	.40	.50	.44	.40	.38
9.0	.50	.42	.37	.49	.42	.37	.48	.42	.37	.47	.41	.37	.46	.41	.37	.35
10.0	.46	.39	.34	.46	.39	.34	.45	.38	.34	.44	.38	.34	.43	.37	.33	.32



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.2DEG
 Operators: Leo
 Test Date: 2016-06-18

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.284
 Humidity: 60.0%
 Test Distance: 26.000m [K=1.3753]
 Remarks:

WEC AND CCEC

Test:U:120.2V I:2.025A P:242.1W PF:0.9950 Lamp Flux:31394.8x1 lm		
NAME: SNC-H240HLT1A1	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: SNC OPTO ELECTRONIC CO.,LTD	SUR.:	PROTECTION ANGLE:

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.232	.132	.042	.225	.128	.041	.212	.122	.039	.200	.115	.037	.189	.110	.035	
2.0	.229	.125	.038	.223	.123	.038	.211	.118	.037	.201	.113	.035	.192	.108	.034	
3.0	.220	.117	.035	.214	.115	.035	.205	.111	.034	.196	.107	.033	.187	.104	.032	
4.0	.209	.109	.032	.204	.107	.032	.196	.104	.031	.188	.101	.030	.180	.098	.030	
5.0	.198	.101	.029	.194	.100	.029	.186	.097	.029	.179	.095	.028	.172	.092	.028	
6.0	.187	.094	.027	.184	.093	.027	.177	.091	.026	.170	.089	.026	.164	.087	.026	
7.0	.177	.088	.025	.174	.087	.025	.168	.085	.024	.162	.083	.024	.157	.081	.024	
8.0	.168	.082	.023	.165	.081	.023	.159	.080	.023	.154	.078	.023	.149	.077	.022	
9.0	.159	.077	.021	.156	.076	.021	.151	.075	.021	.147	.074	.021	.142	.072	.021	
10.0	.151	.072	.020	.148	.072	.020	.144	.071	.020	.140	.069	.020	.136	.068	.020	

ρ_{cc}	80%			70%			50%			30%			10%			0
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ_{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0																
1.0	.192	.192	.192	.164	.164	.164	.112	.112	.112	.064	.064	.064	.021	.021	.021	
2.0	.176	.158	.142	.151	.136	.122	.103	.093	.084	.059	.054	.049	.019	.017	.016	
3.0	.165	.134	.107	.142	.115	.093	.097	.080	.065	.056	.046	.038	.018	.015	.012	
4.0	.156	.115	.083	.134	.100	.072	.092	.069	.050	.053	.040	.030	.017	.013	.010	
5.0	.148	.102	.066	.127	.088	.057	.088	.061	.040	.051	.036	.024	.016	.012	.008	
6.0	.141	.091	.053	.121	.078	.046	.084	.055	.033	.048	.032	.019	.016	.011	.006	
7.0	.135	.082	.044	.116	.071	.039	.080	.050	.027	.046	.029	.016	.015	.010	.005	
8.0	.129	.075	.038	.111	.065	.033	.076	.046	.023	.044	.027	.014	.014	.009	.005	
9.0	.123	.069	.032	.106	.060	.028	.073	.042	.020	.043	.025	.012	.014	.008	.004	
10.0	.118	.064	.028	.101	.056	.025	.070	.039	.018	.041	.023	.010	.013	.008	.003	
10.0	.113	.060	.025	.097	.052	.022	.067	.037	.016	.039	.022	.009	.013	.007	.003	

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.2DEG
 Operators:Leo
 Test Date:2016-06-18

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.284
 Humidity:60.0%
 Test Distance:26.000m [K=1.3753]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:120.2V I:2.025A P:242.1W PF:0.9950 Lamp Flux:31394.8x1 lm										
NAME: SNC-H240HLT1A1					TYPE:			WEIGHT:		
SPEC.:					DIM.:			SERIAL No.:		
MFR.: SNC OPTO ELECTRONIC CO.,LTD					SUR.:			PROTECTION ANGLE:		
ceiling/cavity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions	Viewed crosswise					Viewed endwise				
x = 2H y = 2H	28.4	29.7	28.6	29.9	30.1	28.3	29.6	28.5	29.8	30.0
3H	28.2	29.4	28.5	29.6	29.9	28.2	29.4	28.4	29.6	29.8
4H	28.1	29.3	28.4	29.5	29.7	28.1	29.2	28.4	29.4	29.7
6H	28.0	29.1	28.4	29.4	29.6	28.0	29.0	28.3	29.3	29.6
8H	28.0	29.0	28.3	29.3	29.6	27.9	28.9	28.3	29.2	29.5
12H	27.9	28.9	28.3	29.2	29.5	27.9	28.9	28.2	29.1	29.4
4H 2H	28.4	29.5	28.7	29.8	30.0	28.3	29.5	28.6	29.7	29.9
3H	28.3	29.2	28.6	29.5	29.8	28.2	29.2	28.6	29.5	29.8
4H	28.2	29.1	28.5	29.4	29.7	28.1	29.0	28.5	29.3	29.6
6H	28.1	28.9	28.5	29.2	29.6	28.0	28.8	28.4	29.2	29.5
8H	28.0	28.8	28.5	29.1	29.5	28.0	28.7	28.4	29.1	29.5
12H	28.0	28.6	28.4	29.0	29.4	28.0	28.6	28.4	29.0	29.4
8H 4H	28.1	28.8	28.5	29.1	29.5	28.0	28.7	28.4	29.1	29.4
6H	28.0	28.5	28.4	28.9	29.4	27.9	28.5	28.4	28.9	29.3
8H	27.9	28.4	28.4	28.9	29.3	27.9	28.4	28.3	28.8	29.3
12H	27.9	28.3	28.4	28.8	29.2	27.9	28.3	28.3	28.7	29.2
12H 4H	28.0	28.6	28.4	29.0	29.4	28.0	28.6	28.4	29.0	29.4
6H	27.9	28.4	28.4	28.9	29.3	27.9	28.4	28.3	28.8	29.3
8H	27.9	28.3	28.4	28.8	29.2	27.9	28.3	28.3	28.7	29.2
Variations with the observer position at spacings:										
s = 1.0H	+ 1.0 / - 1.3					+ 1.0 / - 1.3				
1.5H	+ 0.4 / - 1.0					+ 0.4 / - 1.0				
2.0H	+ 1.7 / - 3.8					+ 1.8 / - 4.1				

CIE Pub.117 Corrected 31395 lm Total Lamp Luminous Flux.(8log(F/F0) = 12.0)

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.2DEG
Operators:Leo
Test Date:2016-06-18

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.284
Humidity:60.0%
Test Distance:26.000m [K=1.3753]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:120.2V I:2.025A P:242.1W PF:0.9950 Lamp Flux:31394.8x1 lm		
NAME: SNC-H240HLT1A1	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: SNC OPTO ELECTRONIC CO.,LTD	SUR.:	PROTECTION ANGLE:

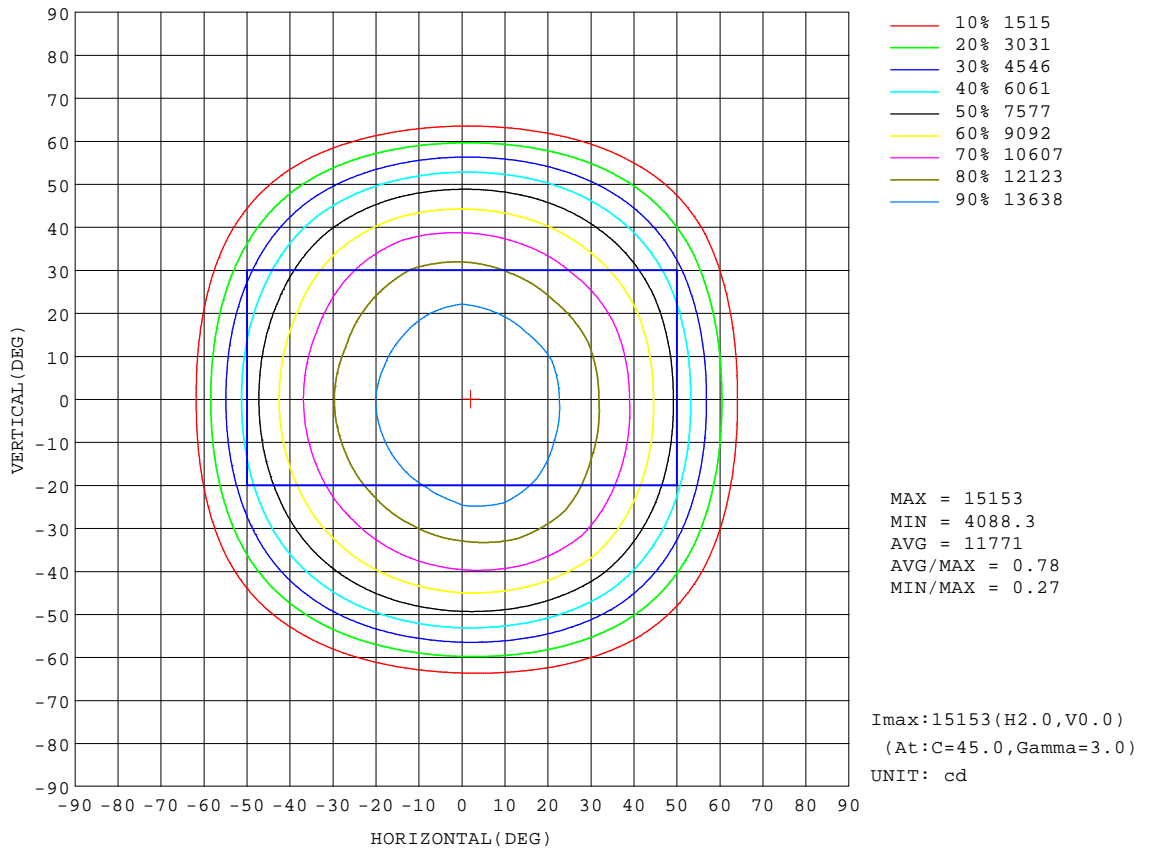
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	65	55	49	65	55	49	63	54	49	43
0.80	76	66	60	75	66	60	74	65	59	54
1.00	85	76	70	84	75	70	82	76	69	63
1.25	92	83	78	90	83	77	88	81	77	71
1.50	96	88	83	95	88	83	92	86	81	75
2.00	102	95	91	100	94	90	97	92	88	82
2.50	104	99	94	103	97	93	99	95	91	84
3.00	107	102	98	105	100	97	101	98	95	87
4.00	110	106	102	108	104	101	104	101	98	90
5.00	111	108	105	109	106	103	105	102	100	91
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.2DEG
Operators:Leo
Test Date:2016-06-18

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.284
Humidity:60.0%
Test Distance:26.000m [K=1.3753]
Remarks:

ISOCANDELA DIAGRAM

Test:U:120.2V I:2.025A P:242.1W PF:0.9950 Lamp Flux:31394.8x1 lm		
NAME: SNC-H240HLT1A1	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: SNC OPTO ELECTRONIC CO.,LTD	SUR.:	PROTECTION ANGLE:



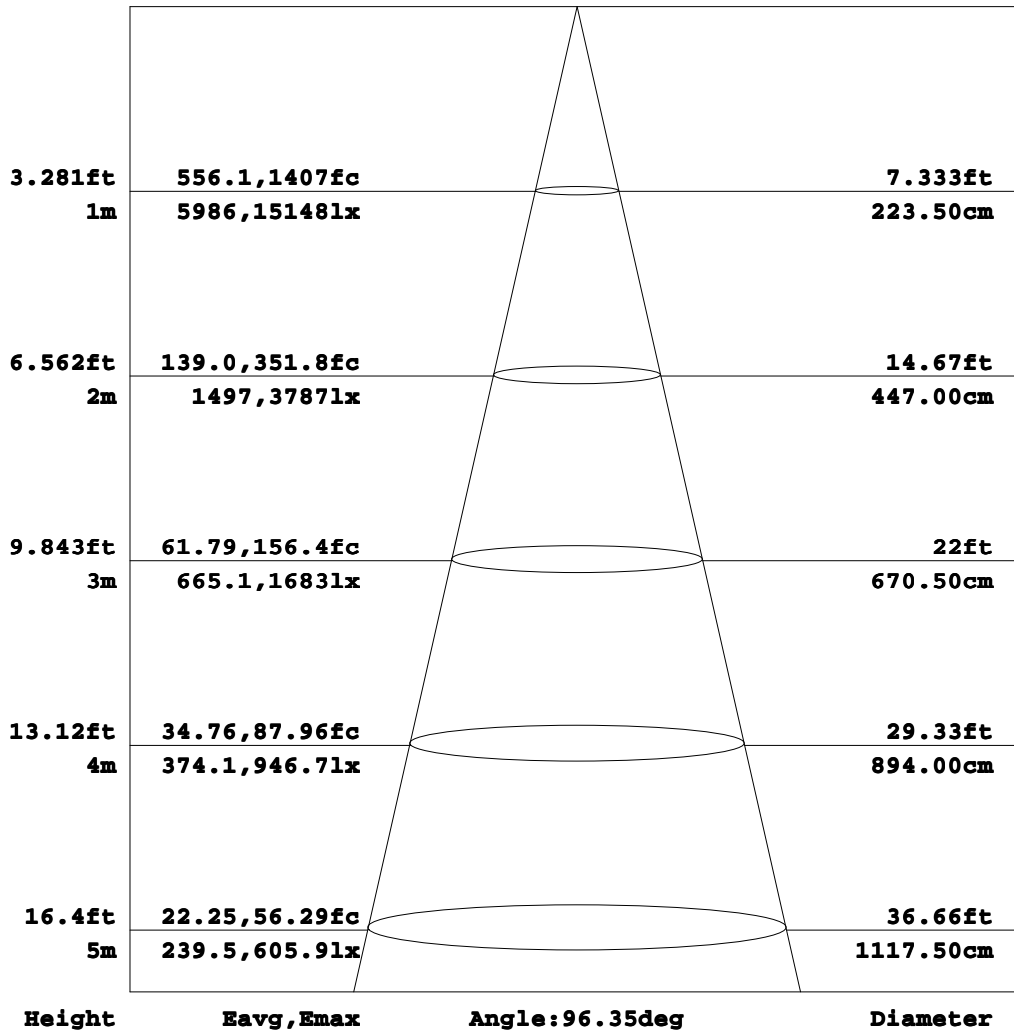
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.2DEG
Operators:Leo
Test Date:2016-06-18

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.284
Humidity:60.0%
Test Distance:26.000m [K=1.3753]
Remarks:

AAI Figure

Test:U:120.2V I:2.025A P:242.1W PF:0.9950 Lamp Flux:31394.8x1 lm		
NAME: SNC-H240HLT1A1	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: SNC OPTO ELECTRONIC CO.,LTD	SUR.:	PROTECTION ANGLE:

Flux out:24887 lm



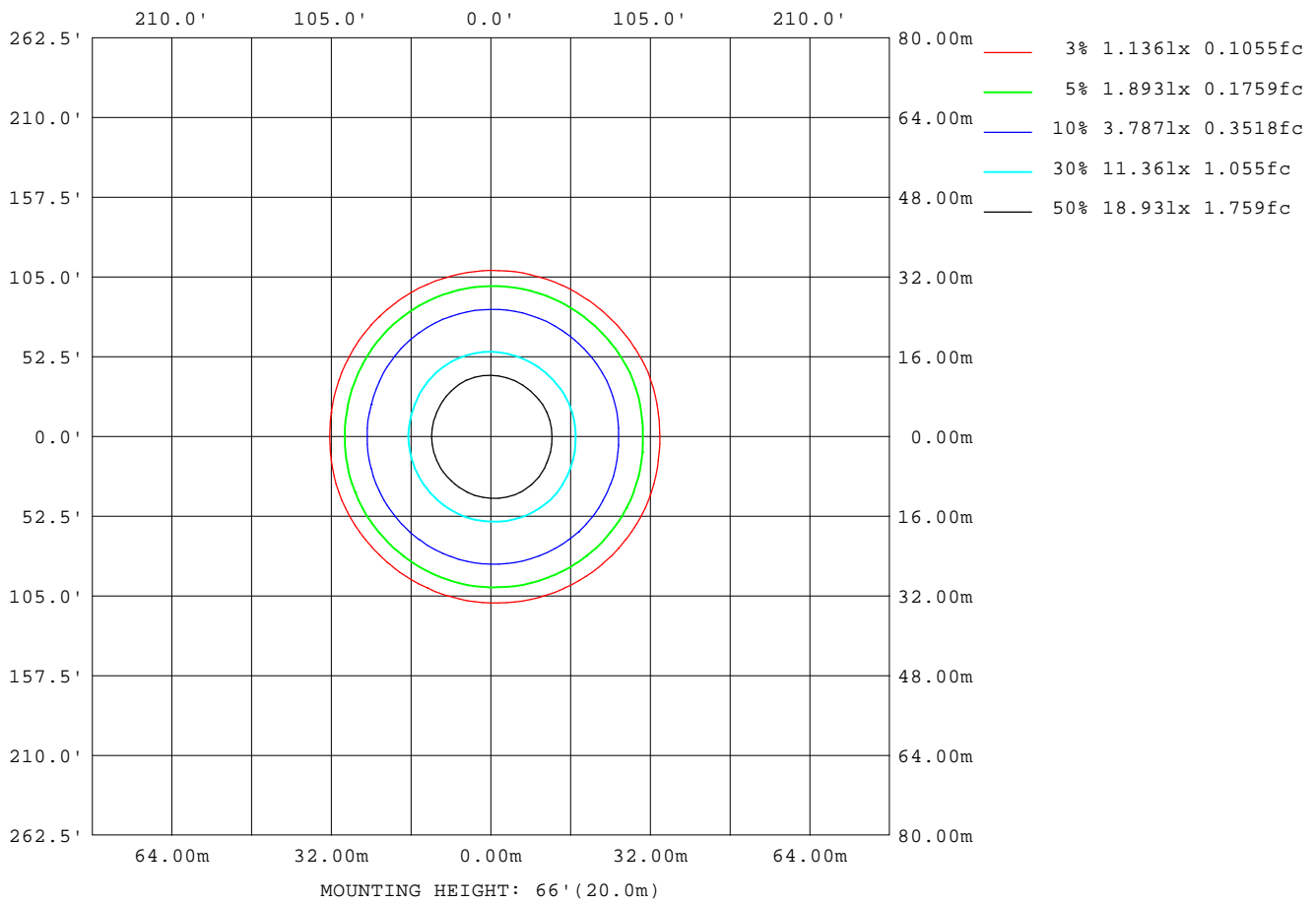
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.2DEG
 Operators:Leo
 Test Date:2016-06-18

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.284
 Humidity:60.0%
 Test Distance:26.000m [K=1.3753]
 Remarks:

ISOLUX DIAGRAM

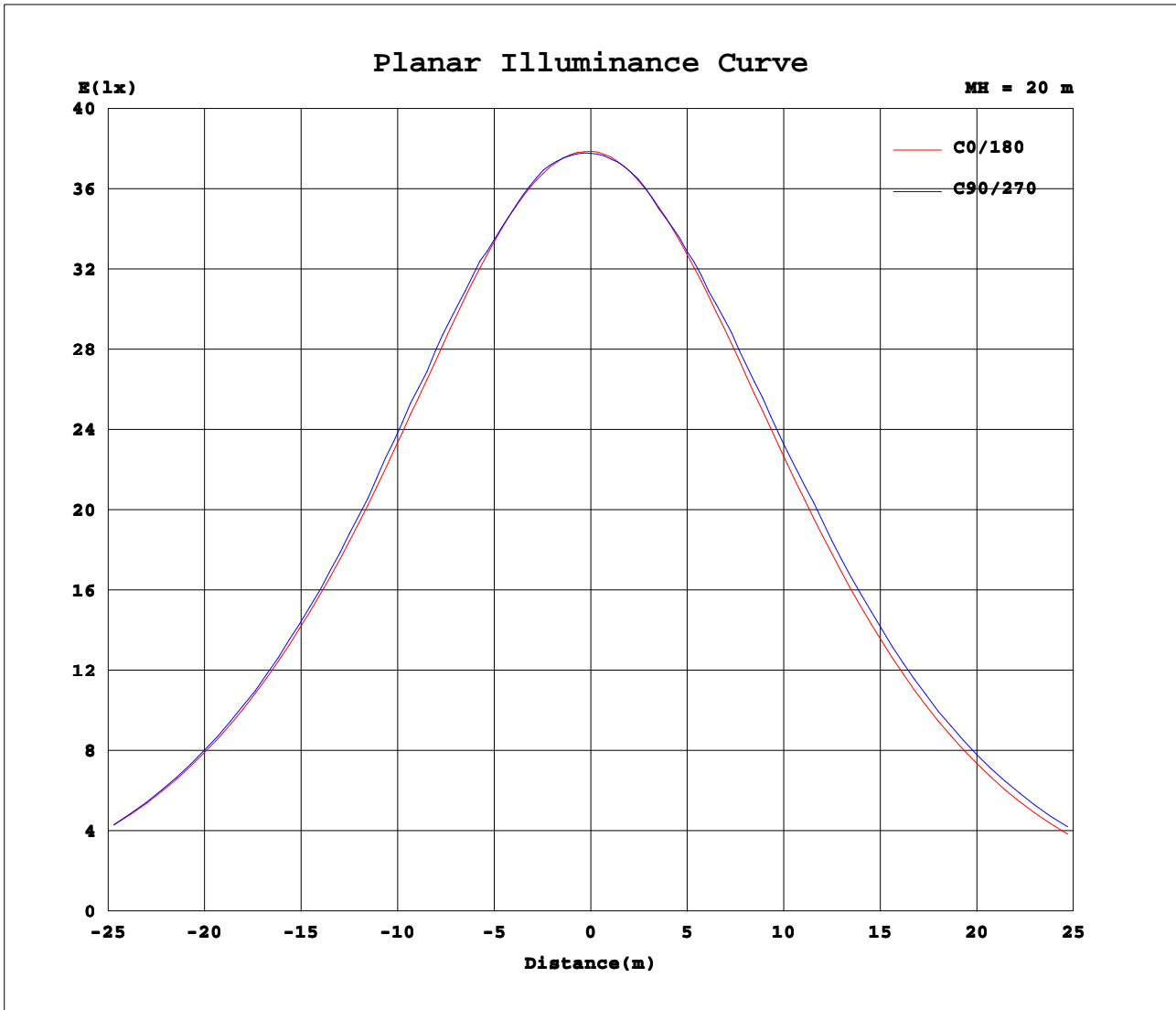
Test:U:120.2V I:2.025A P:242.1W PF:0.9950 Lamp Flux:31394.8x1 lm		
NAME: SNC-H240HLT1A1	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: SNC OPTO ELECTRONIC CO.,LTD	SUR.:	PROTECTION ANGLE:



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.2DEG
Operators: Leo
Test Date: 2016-06-18

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.284
Humidity: 60.0%
Test Distance: 26.000m [K=1.3753]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.2DEG
 Operators: Leo
 Test Date: 2016-06-18

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.284
 Humidity: 60.0%
 Test Distance: 26.000m [K=1.3753]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.2V I:2.025A P:242.1W PF:0.9950 Lamp Flux:31394.8x1 lm		
NAME: SNC-H240HLT1A1	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: SNC OPTO ELECTRONIC CO.,LTD	SUR.:	PROTECTION ANGLE:

Table--1

UNIT: x10cd

C(DEG) γ (DEG)	0	23	45	68	90	113	135	158	180	203	225	248	270	293	315	338			
0	1510	1510	1510	1510	1510	1510	1510	1510	1510	1510	1510	1510	1510	1510	1510	1510			
5	1506	1510	1514	1513	1512	1507	1501	1499	1497	1496	1498	1497	1501	1498	1503	1507			
10	1487	1493	1500	1499	1493	1487	1479	1472	1465	1464	1466	1467	1466	1475	1476	1490			
15	1449	1459	1470	1474	1460	1446	1430	1426	1420	1417	1423	1429	1435	1432	1438	1454			
20	1395	1409	1427	1433	1420	1391	1373	1369	1360	1358	1365	1379	1390	1382	1383	1400			
25	1327	1341	1367	1379	1360	1319	1299	1296	1289	1285	1302	1323	1325	1316	1311	1333			
30	1242	1265	1298	1304	1266	1237	1212	1207	1203	1202	1226	1254	1254	1232	1226	1251			
35	1147	1173	1209	1207	1167	1137	1110	1103	1101	1103	1131	1158	1149	1133	1130	1154			
40	1032	1060	1097	1083	1052	1019	989	981	977	980	1015	1039	1027	1017	1015	1037			
45	893	920	950	934	909	878	849	834	830	836	870	889	882	883	880	903			
50	725	751	771	756	732	707	680	664	654	661	693	708	711	720	724	741			
55	532	552	560	544	525	498	475	463	449	460	485	498	513	521	529	547			
60	321	336	333	318	295	270	251	249	236	250	264	274	285	297	309	330			
65	115	134	136	126	107	85.8	73.3	58.4	53.0	61.7	85.6	93.1	104	108	112	128			
70	19.2	26.1	32.1	29.9	29.0	24.6	21.7	20.5	14.2	20.3	22.7	25.4	28.3	27.6	28.2	26.8			
75	9.56	13.2	15.2	16.2	16.4	14.6	12.5	11.1	8.80	11.1	12.9	14.8	15.9	15.5	14.5	14.1			
80	4.25	5.44	8.45	9.72	7.57	8.62	6.20	3.47	2.97	3.40	6.08	8.58	7.42	9.25	7.96	6.19			
85	0.13	0.29	1.24	3.77	4.35	2.70	0.24	0.00	0.00	0.00	0.17	2.29	4.21	3.51	1.15	0.35			
90	0.00	0.00	0.00	0.01	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.00			
95	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.39	0.01	0.00	0.00			
100	0.00	0.00	0.00	0.12	0.54	0.17	0.00	0.00	0.00	0.00	0.00	0.09	0.90	0.14	0.00	0.00			
105	0.00	0.00	0.06	0.39	0.61	0.39	0.12	0.03	0.03	0.04	0.09	0.24	1.04	0.39	0.09	0.01			
110	0.07	0.12	0.23	0.64	0.83	0.63	0.32	0.20	0.17	0.18	0.25	0.43	1.37	0.61	0.25	0.13			
115	0.25	0.31	0.47	0.92	0.83	0.94	0.57	0.38	0.36	0.36	0.46	0.70	1.23	0.91	0.47	0.31			
120	0.44	0.50	0.70	1.06	0.92	1.05	0.79	0.60	0.56	0.56	0.69	0.91	1.32	1.00	0.68	0.53			
125	0.62	0.75	0.97	1.12	1.25	1.14	1.07	0.89	0.66	0.72	0.86	1.03	1.57	1.03	0.85	0.66			
130	0.78	0.89	1.16	1.74	1.60	1.70	1.24	1.01	0.79	0.90	1.07	1.46	1.98	1.69	1.06	0.83			
135	0.91	1.08	1.29	2.08	1.81	1.98	1.40	1.17	1.00	1.13	1.31	1.71	2.19	1.84	1.29	1.07			
140	1.10	1.29	1.44	2.30	1.90	2.08	1.47	1.33	1.21	1.36	1.42	1.89	2.11	1.96	1.43	1.26			
145	1.07	1.31	1.57	2.28	1.94	2.19	1.64	1.38	1.30	1.54	1.62	2.11	2.32	2.20	1.63	1.44			
150	1.24	1.46	1.73	2.29	2.22	2.13	1.71	1.54	1.51	1.73	1.84	2.20	2.51	2.23	1.93	1.67			
155	1.44	1.67	2.03	2.32	2.46	2.17	2.06	1.76	1.71	1.92	2.00	2.32	2.25	2.24	2.32	1.99			
160	1.47	1.73	2.14	2.34	2.63	2.17	2.12	1.86	1.73	1.84	2.01	2.23	2.57	2.45	2.31	1.96			
165	1.49	1.79	2.26	2.55	2.62	2.19	2.11	1.92	1.72	1.80	2.01	2.05	2.48	2.50	2.35	2.11			
170	1.70	1.98	2.36	2.67	2.55	2.47	2.41	1.99	1.86	1.89	2.20	2.46	2.88	3.04	2.73	2.42			
175	1.77	2.08	2.61	2.64	2.85	2.62	2.61	2.11	1.92	1.95	2.26	2.53	2.77	3.08	2.60	2.63			
180	2.09	2.08	2.45	2.55	2.69	2.49	2.48	2.01	2.12	2.13	2.07	2.41	2.53	2.65	2.50	2.56			

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.2DEG
 Operators: Leo
 Test Date: 2016-06-18

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.284
 Humidity: 60.0%
 Test Distance: 26.000m [K=1.3753]
 Remarks: