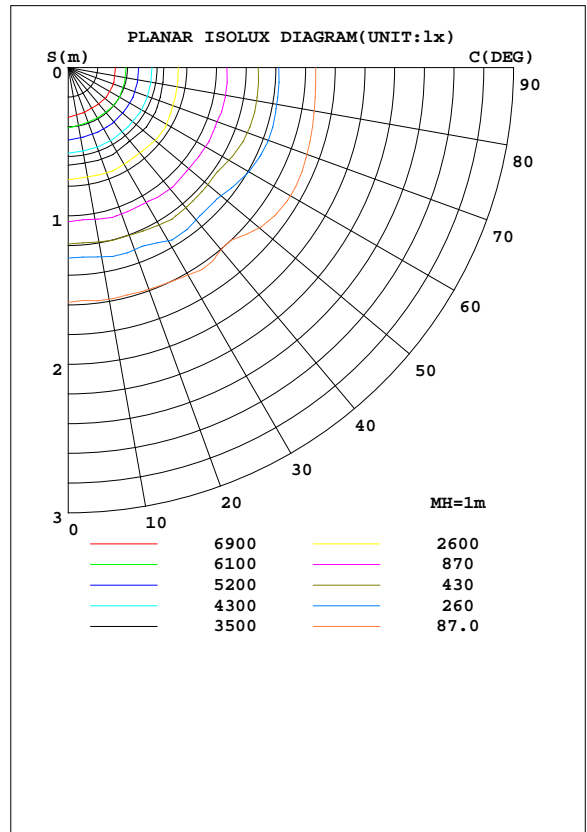
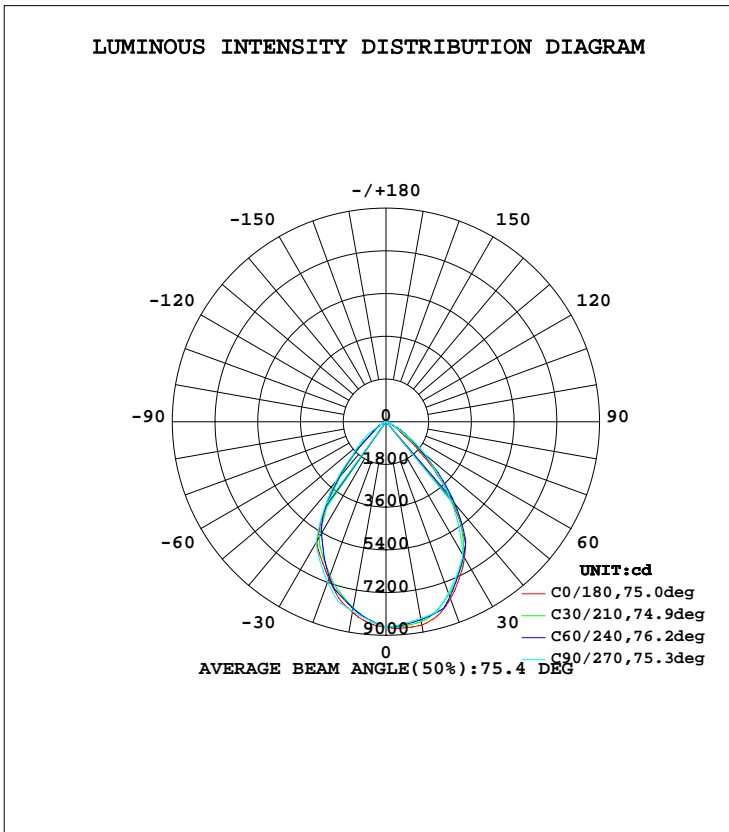


**EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT**

**LUMINAIRE PHOTOMETRIC TEST REPORT**

Test:U:220.0V I:0.6820A P:150.0W PF:0.9200 Lamp Flux:12164.3x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:410mm	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	M5-6-150-30-90	Imax(cd)	8724	S/MH(C0/180)	1.03
NOMINAL POWER(W)	150	LOR(%)	100.0	S/MH(C90/270)	1.05
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	12164	η UP, DN(C0-180)	0.0, 53.1
NOMINAL FLUX(lm)	12164.3	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0, 46.9
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.00
TEST VOLTAGE(V)		η down(%)	100.0	CIBSE SHR MAX	1.15



C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2014-08-29

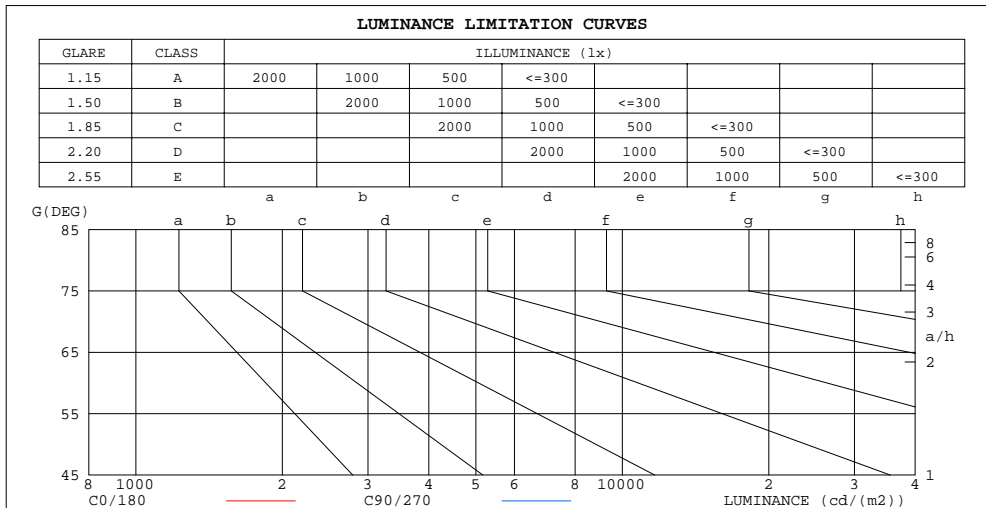
γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.288  
 Humidity:65.0%  
 Test Distance:7.000m [K=1.0000]  
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ZONAL FLUX DIAGRAM  
AND LUMINANCE LIMITATION CURVES

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	lum, lamp
5	8718	8618	8541	8463	8500	8370	8385	8515	0- 5	204.8	204.8	1.68,1.68
10	8698	8500	8418	8140	8145	7937	8106	8336	5- 10	599.4	804.2	6.61,6.61
15	8452	8283	8295	7752	7694	7484	7827	8043	10- 15	961.2	1765	14.5,14.5
20	7930	7836	7692	7313	7047	7004	7184	7563	15- 20	1265	3031	24.9,24.9
25	7294	7174	7088	6651	6424	6218	6540	6831	20- 25	1484	4515	37.1,37.1
30	6616	6479	6484	5866	5832	5260	5897	5916	25- 30	1623	6138	50.5,50.5
35	5616	5538	5330	4869	4513	4248	4593	4891	30- 35	1631	7769	63.9,63.9
40	4138	4501	4176	3741	3143	3007	3289	3661	35- 40	1445	9214	75.7,75.7
45	2901	3152	3022	2462	1940	1944	1985	2428	40- 45	1125	10339	85,85
50	1594	1930	2170	1439	843.1	1061	1417	1369	45- 50	759.1	11098	91.2,91.2
55	719.3	826.4	1317	655.1	539.1	477.8	849.8	608.1	50- 55	466.2	11564	95.1,95.1
60	433.4	502.9	465.0	439.7	315.0	311.8	282.4	400.7	55- 60	274.1	11838	97.3,97.3
65	242.0	292.4	337.1	255.9	182.8	179.6	205.1	222.0	60- 65	149.0	11987	98.5,98.5
70	135.1	157.5	209.3	140.1	106.6	97.72	127.9	116.3	65- 70	91.96	12079	99.3,99.3
75	75.90	95.57	81.44	84.62	58.13	57.56	50.61	69.88	70- 75	54.31	12134	99.7,99.7
80	38.36	37.93	0	32.93	26.13	20.44	0	26.31	75- 80	24.64	12158	100,100
85	14.40	0	0	0	4.897	0	0	0	80- 85	5.541	12164	100,100
90	0.6049	0	0	0	0.6172	0	0	0	85- 90	0.4651	12164	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		



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	137660	0
80	184082	0
75	244385	262230
70	329070	509915
65	477164	664743
60	722325	774928
55	1044989	1913861
50	2067107	2812790
45	3419016	3561426

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2014-08-29

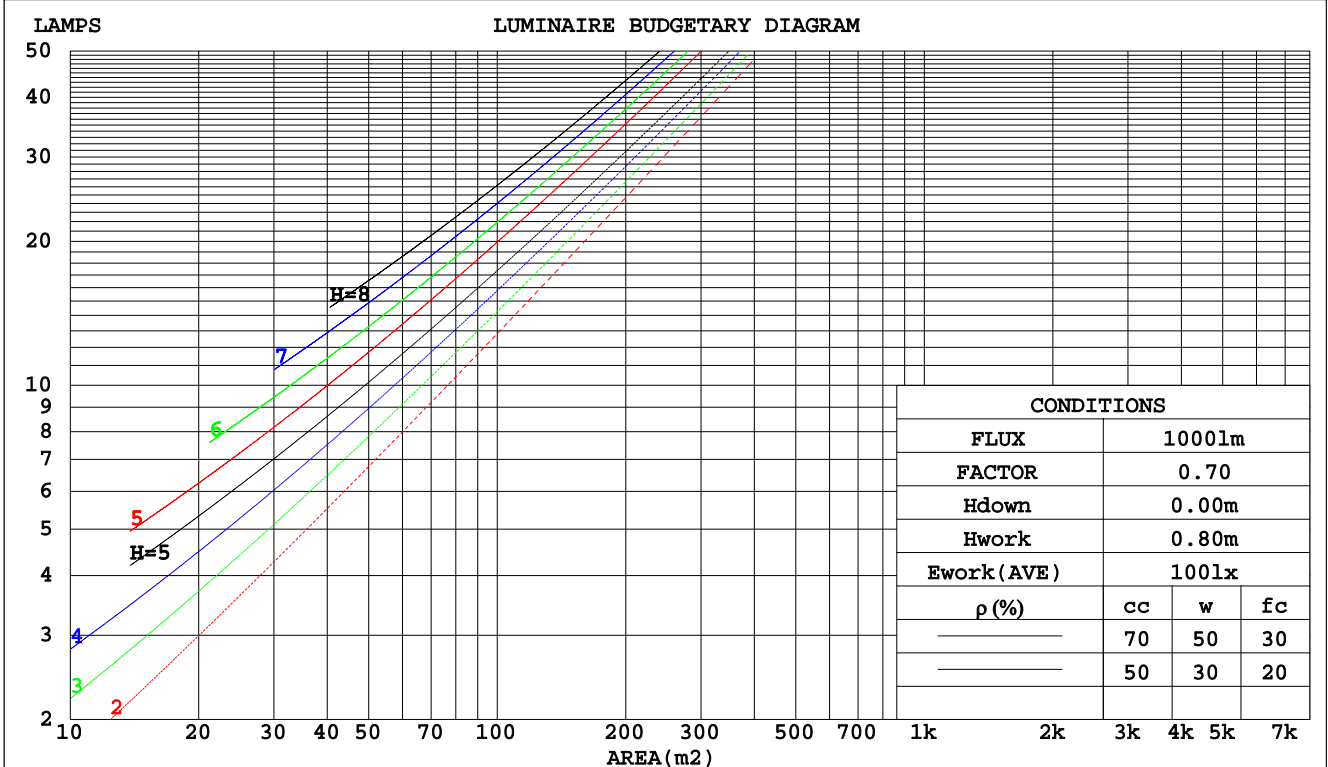
γ Range: 0 - 90DEG  
γ Interval: 0.5DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.288  
Humidity:65.0%  
Test Distance:7.000m [K=1.0000]  
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:220.0V I:0.6820A P:150.0W PF:0.9200 Lamp Flux:12164.3x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:410mm	PROTECTION 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	1.09	1.06	1.04	1.07	1.04	1.02	1.03	1.01	.99	.99	.97	.96	.96	.94	.93	.91
2.0	.00	.95	.91	.98	.94	.90	.95	.91	.88	.92	.89	.86	.89	.86	.84	.82
3.0	.91	.85	.81	.90	.84	.80	.87	.82	.79	.84	.81	.77	.82	.79	.76	.74
4.0	.84	.77	.72	.82	.76	.71	.80	.75	.71	.78	.73	.70	.76	.72	.69	.67
5.0	.77	.70	.65	.76	.69	.64	.74	.68	.64	.72	.67	.63	.70	.66	.63	.61
6.0	.71	.64	.59	.70	.63	.59	.68	.62	.58	.67	.62	.58	.65	.61	.57	.56
7.0	.66	.58	.54	.65	.58	.53	.63	.57	.53	.62	.57	.53	.61	.56	.52	.51
8.0	.61	.54	.49	.60	.54	.49	.59	.53	.49	.58	.52	.48	.57	.52	.48	.47
9.0	.57	.50	.45	.56	.50	.45	.55	.49	.45	.54	.49	.45	.53	.48	.45	.43
10.0	.53	.46	.42	.52	.46	.42	.52	.46	.42	.51	.45	.41	.50	.45	.41	.40



C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2014-08-29

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.288  
 Humidity:65.0%  
 Test Distance:7.000m [K=1.0000]  
 Remarks:

**EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT**

**WEC AND CCEC**

Test:U:220.0V I:0.6820A P:150.0W PF:0.9200 Lamp Flux:12164.3x1 lm														
NAME:					TYPE:LED					WEIGHT:				
SPEC.:					DIM.:					SERIAL No.:				
MFR.:					SUR.:410mm					PROTECTION 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	.208	.119	.038	.202	.115	.037	.189	.108	.035	.177	.102	.033	.166	.096	.031	
2.0	.203	.111	.034	.197	.109	.033	.186	.104	.032	.176	.099	.031	.167	.094	.030	
3.0	.194	.103	.031	.189	.101	.031	.180	.098	.030	.171	.094	.029	.163	.090	.028	
4.0	.185	.096	.028	.181	.095	.028	.173	.092	.027	.165	.089	.027	.158	.086	.026	
5.0	.176	.090	.026	.172	.088	.026	.165	.086	.025	.158	.083	.025	.152	.081	.024	
6.0	.167	.084	.024	.164	.083	.024	.157	.081	.023	.151	.079	.023	.146	.077	.023	
7.0	.159	.079	.022	.156	.078	.022	.150	.076	.022	.145	.074	.022	.140	.073	.021	
8.0	.151	.074	.021	.149	.073	.021	.144	.072	.020	.139	.070	.020	.134	.069	.020	
9.0	.144	.070	.019	.142	.069	.019	.137	.068	.019	.133	.067	.019	.129	.065	.019	
10.0	.138	.066	.018	.135	.065	.018	.131	.064	.018	.127	.063	.018	.124	.062	.018	

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	.173	.157	.142	.148	.135	.123	.101	.093	.085	.058	.054	.049	.019	.017	.016	
2.0	.160	.132	.109	.137	.114	.094	.094	.079	.066	.054	.046	.038	.017	.015	.013	
3.0	.150	.114	.085	.129	.098	.074	.088	.068	.052	.051	.040	.030	.016	.013	.010	
4.0	.141	.100	.068	.121	.086	.059	.083	.060	.042	.048	.035	.025	.015	.011	.008	
5.0	.133	.088	.055	.115	.077	.048	.079	.053	.034	.046	.031	.020	.015	.010	.007	
6.0	.127	.080	.046	.109	.069	.040	.075	.048	.028	.044	.028	.017	.014	.009	.006	
7.0	.120	.072	.039	.104	.063	.034	.072	.044	.024	.042	.026	.014	.013	.008	.005	
8.0	.115	.066	.033	.099	.058	.029	.068	.040	.020	.040	.024	.012	.013	.008	.004	
9.0	.110	.061	.029	.095	.053	.025	.065	.037	.018	.038	.022	.011	.012	.007	.004	
10.0	.105	.057	.025	.090	.050	.022	.063	.035	.016	.037	.021	.009	.012	.007	.003	

C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2014-08-29

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.288  
 Humidity:65.0%  
 Test Distance:7.000m [K=1.0000]  
 Remarks:

**EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT**

**UGR(Unified Glare Rating) Table**

Test:U:220.0V I:0.6820A P:150.0W PF:0.9200 Lamp Flux:12164.3x1 lm										
NAME:					TYPE:LED			WEIGHT:		
SPEC.:					DIM.:			SERIAL No.:		
MFR.:					SUR.:410mm			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	37.8	38.9	38.0	39.1	39.3	38.7	39.9	38.9	40.0	40.2
3H	37.7	38.7	37.9	38.9	39.2	38.7	39.7	38.9	39.9	40.2
4H	37.6	38.6	37.9	38.8	39.1	38.6	39.6	38.9	39.8	40.1
6H	37.5	38.5	37.8	38.7	39.0	38.5	39.5	38.8	39.7	40.0
8H	37.5	38.4	37.8	38.7	38.9	38.5	39.4	38.8	39.6	39.9
12H	37.5	38.3	37.8	38.6	38.9	38.4	39.3	38.8	39.6	39.8
4H 2H	37.7	38.7	38.0	38.9	39.1	38.5	39.5	38.8	39.8	40.0
3H	37.6	38.5	37.9	38.7	39.0	38.6	39.4	38.9	39.7	40.0
4H	37.6	38.3	37.9	38.6	39.0	38.5	39.3	38.9	39.6	39.9
6H	37.5	38.2	37.9	38.5	38.9	38.4	39.1	38.8	39.4	39.8
8H	37.5	38.1	37.9	38.5	38.8	38.4	39.0	38.8	39.4	39.7
12H	37.4	38.0	37.9	38.4	38.8	38.3	38.9	38.8	39.3	39.7
8H 4H	37.5	38.1	37.9	38.5	38.8	38.4	39.0	38.8	39.4	39.8
6H	37.4	37.9	37.9	38.3	38.8	38.3	38.8	38.8	39.2	39.6
8H	37.4	37.8	37.9	38.3	38.7	38.3	38.7	38.7	39.1	39.6
12H	37.4	37.7	37.8	38.2	38.7	38.2	38.6	38.7	39.1	39.5
12H 4H	37.4	38.0	37.8	38.4	38.8	38.4	38.9	38.8	39.3	39.7
6H	37.4	37.8	37.8	38.3	38.7	38.3	38.7	38.7	39.1	39.6
8H	37.4	37.7	37.8	38.2	38.7	38.2	38.6	38.7	39.1	39.5
Variations with the observer position at spacings:										
S = 1.0H	+ 2.0 / - 4.8					+ 1.6 / - 2.8				
1.5H	+ 2.1 / - 3.3					+ 1.4 / - 1.9				
2.0H	+ 4.5 / - 4.8					+ 3.6 / - 6.2				

CIE Pub.117 Corrected 12164 lm Total Lamp Luminous Flux. (8log(F/F0) = 8.7)

C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2014-08-29

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.288  
 Humidity:65.0%  
 Test Distance:7.000m [K=1.0000]  
 Remarks:

**EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT**

**UTILIZATION FACTORS TABLE**

Test:U:220.0V I:0.6820A P:150.0W PF:0.9200 Lamp Flux:12164.3x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:410mm	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	76	68	63	75	67	63	75	67	62	58
0.80	85	77	72	84	77	72	83	76	72	67
1.00	92	85	80	91	84	79	89	84	79	74
1.25	97	91	86	96	90	86	94	89	85	80
1.50	101	95	90	100	94	90	97	92	89	83
2.00	105	100	96	104	99	95	101	97	93	88
2.50	107	102	99	106	101	98	102	99	96	89
3.00	109	105	102	107	104	101	104	101	98	91
4.00	112	108	105	110	107	104	106	103	101	94
5.00	113	110	108	111	108	106	107	105	103	95
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:25.3DEG  
 Operators:DAMIN  
 Test Date:2014-08-29

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.288  
 Humidity:65.0%  
 Test Distance:7.000m [K=1.0000]  
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ISOCANDELA DIAGRAM

Test:U:220.0V I:0.6820A P:150.0W PF:0.9200 Lamp Flux:12164.3x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:410mm	PROTECTION ANGLE:

Conical surface Flux(90deg):

10339 lm

%lum = 85.0%

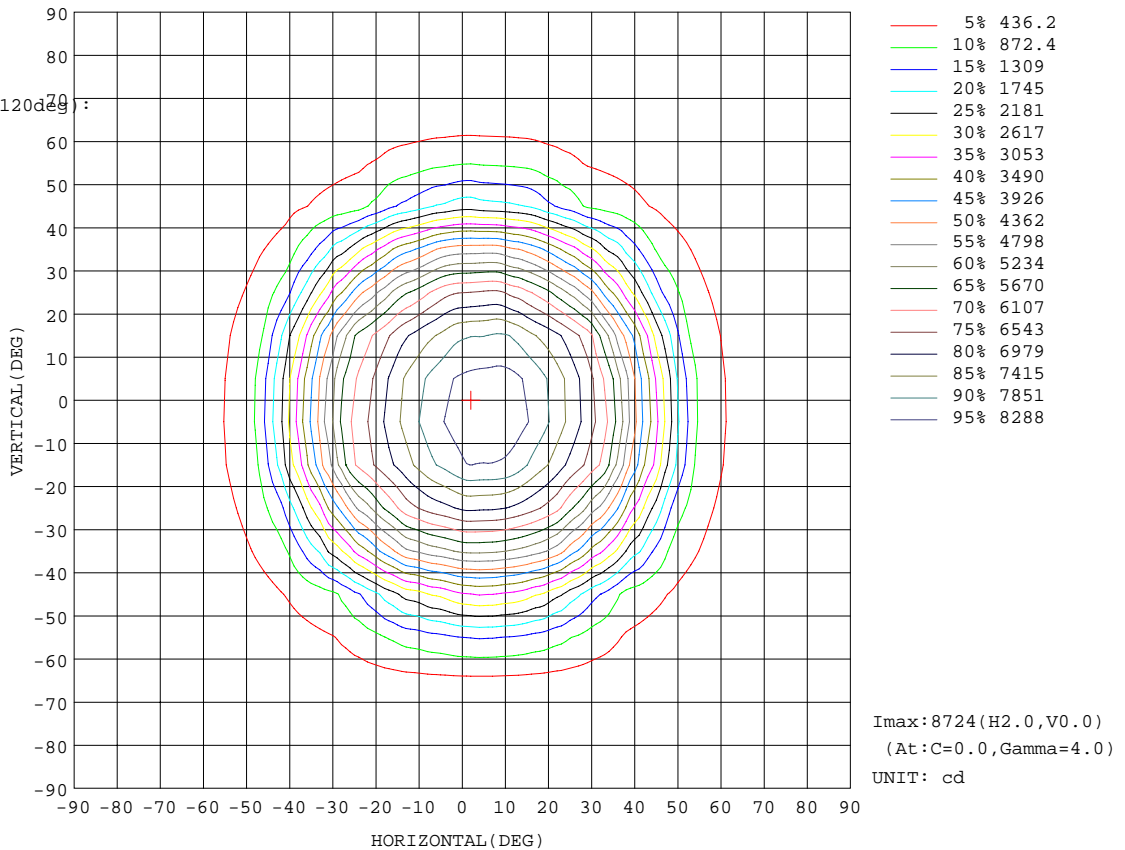
%lamp = 85.0%

Conical surface Flux(120deg):

11838 lm

%lum = 97.3%

%lamp = 97.3%



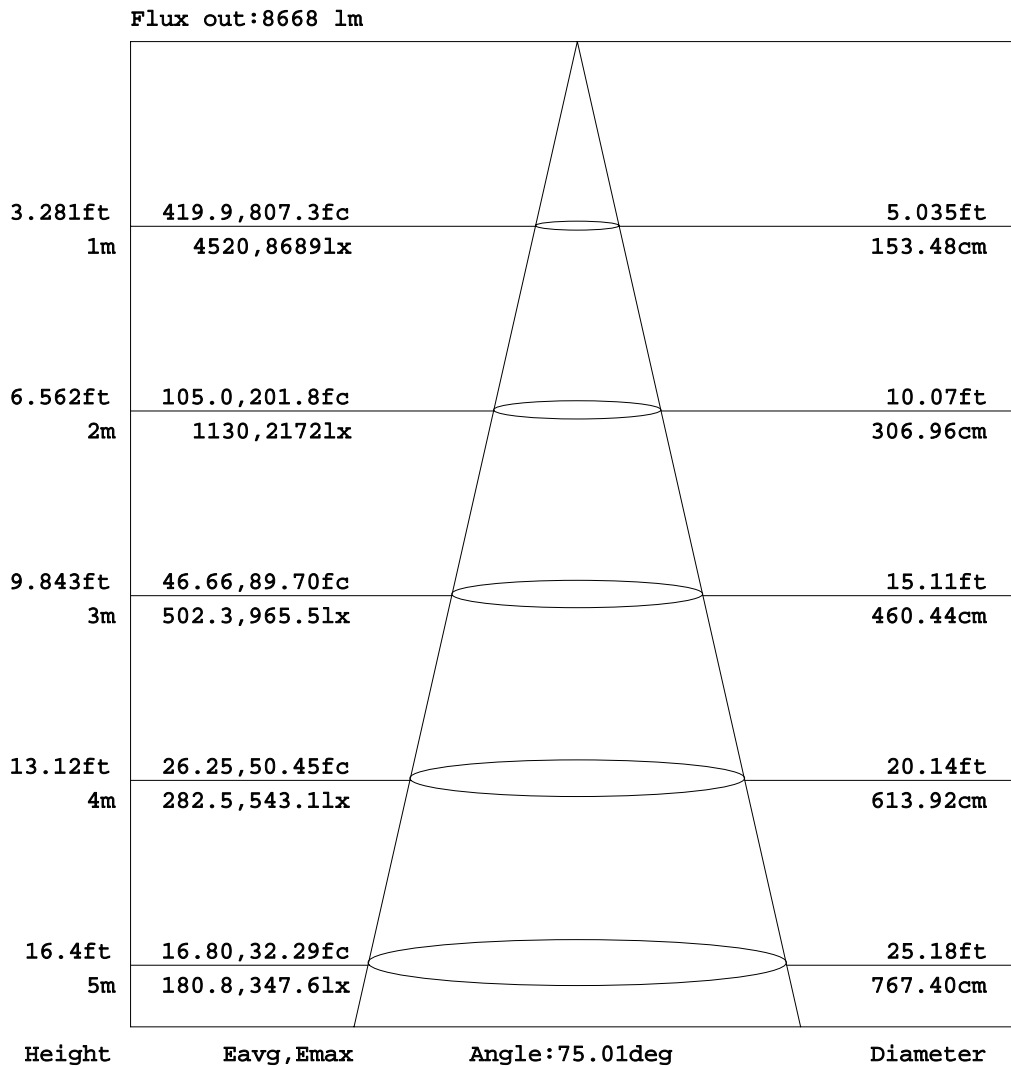
C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2014-08-29

γ Range: 0 - 90DEG  
γ Interval: 0.5DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.288  
Humidity:65.0%  
Test Distance:7.000m [K=1.0000]  
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

AAI Figure

Test:U:220.0V I:0.6820A P:150.0W PF:0.9200 Lamp Flux:12164.3x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:410mm	PROTECTION 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:25.3DEG  
 Operators:DAMIN  
 Test Date:2014-08-29

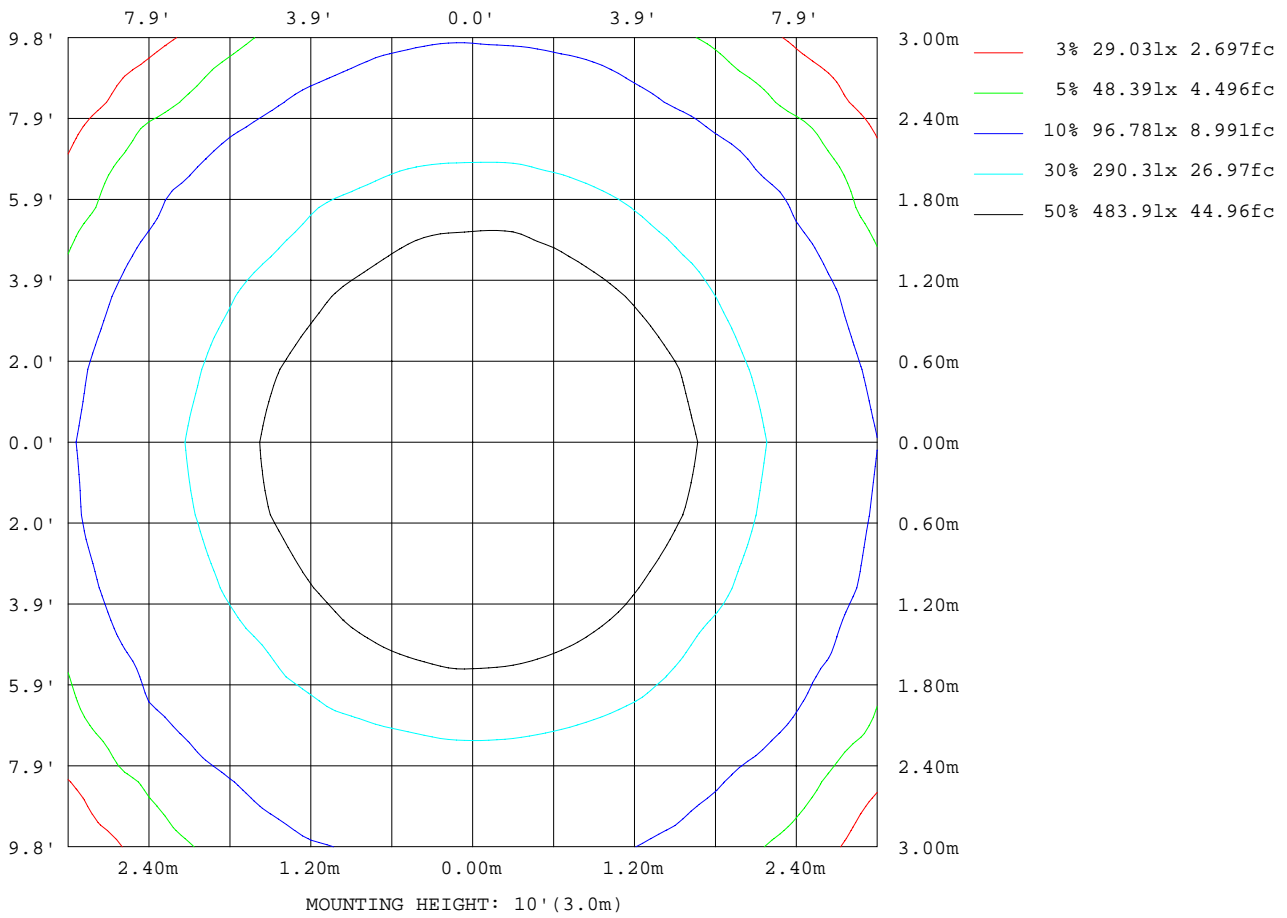
γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.288  
 Humidity:65.0%  
 Test Distance:7.000m [K=1.0000]  
 Remarks:



EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ISOLUX DIAGRAM

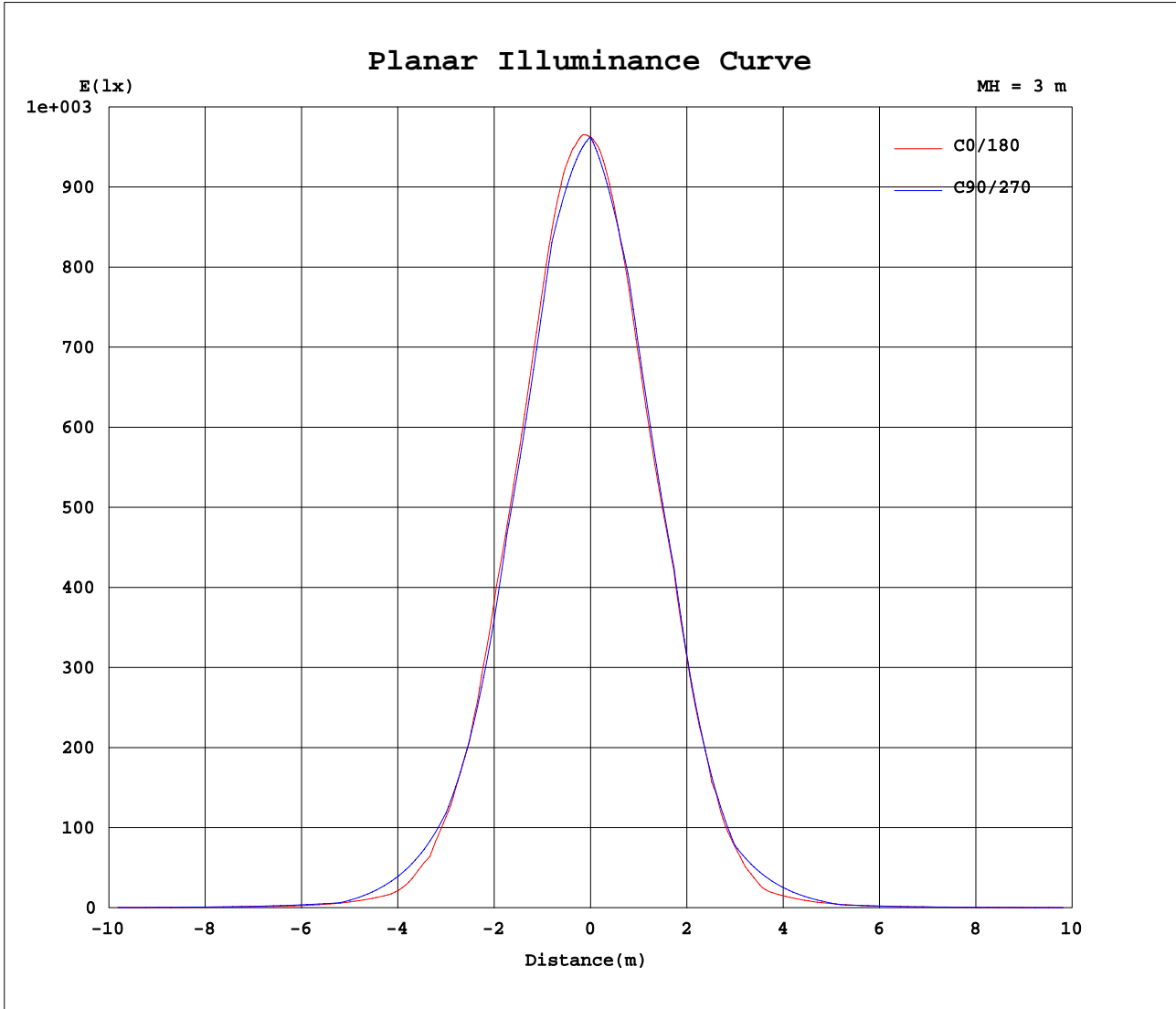
Test:U:220.0V I:0.6820A P:150.0W PF:0.9200 Lamp Flux:12164.3x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:410mm	PROTECTION ANGLE:



C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2014-08-29

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.288  
 Humidity:65.0%  
 Test Distance:7.000m [K=1.0000]  
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: DAMIN  
Test Date: 2014-08-29

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.288  
Humidity: 65.0%  
Test Distance: 7.000m [K=1.0000]  
Remarks:

**EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT**

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**LUMINOUS DISTRIBUTION INTENSITY DATA**

Test:U:220.0V I:0.6820A P:150.0W PF:0.9200 Lamp Flux:12164.3x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:410mm	PROTECTION 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	8664	8664	8664	8664	8664	8664	8664	8664	8664	8664	8664	8664	8664	8664	8664	8664	8664	8664	8664
5	8718	8705	8693	8681	8669	8658	8648	8638	8628	8618	8608	8599	8587	8577	8567	8557	8549	8545	8541
10	8698	8666	8636	8609	8584	8562	8544	8528	8514	8500	8484	8471	8463	8452	8441	8432	8424	8418	8418
15	8452	8390	8337	8295	8264	8244	8238	8244	8263	8283	8299	8311	8311	8307	8302	8290	8281	8285	8295
20	7930	7856	7801	7766	7748	7744	7744	7753	7786	7836	7874	7877	7860	7831	7781	7741	7699	7684	7692
25	7294	7219	7169	7141	7131	7139	7170	7219	7199	7174	7158	7164	7175	7173	7160	7129	7094	7076	7088
30	6616	6543	6504	6497	6523	6567	6530	6424	6407	6479	6500	6512	6524	6519	6506	6502	6487	6468	6484
35	5616	5533	5508	5538	5696	5764	5587	5482	5527	5538	5735	5873	5753	5627	5522	5446	5399	5352	5330
40	4138	4076	4153	4225	4266	4335	4364	4403	4391	4501	4479	4550	4504	4423	4364	4301	4263	4226	4176
45	2901	2794	2869	3033	2925	2980	2943	3166	3182	3152	3139	3131	3210	3212	3158	3161	3114	3096	3022
50	1594	1546	1574	1676	1672	1781	1833	1919	1908	1930	1860	1888	1987	2114	2180	2242	2225	2218	2170
55	719	705	724	773	822	756	992	1023	942	826	1050	1159	1272	1355	1398	1395	1369	1349	1317
60	433	427	445	448	464	469	468	475	492	503	592	660	686	675	630	571	519	482	465
65	242	239	245	253	261	262	267	286	299	292	283	269	288	305	318	329	337	339	337
70	135	136	138	142	143	148	155	155	147	158	169	180	191	199	204	208	211	211	209
75	75.9	76.5	78.6	79.6	82.2	83.3	83.6	87.8	92.0	95.6	98.3	99.6	99.0	96.6	92.9	88.9	85.2	82.6	81.4
80	38.4	39.1	40.3	41.9	43.2	45.0	45.6	45.2	43.4	37.9	31.6	25.4	19.4	14.0	9.24	5.33	2.41	0.61	0.00
85	14.4	15.3	17.0	17.9	16.3	8.00	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
90	0.60	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-2000A_V1 SYSTEM V2.0.288
Temperature:25.3DEG	Humidity:65.0%
Operators:DAMIN	Test Distance:7.000m [K=1.0000]
Test Date:2014-08-29	Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.0V I:0.6820A P:150.0W PF:0.9200 Lamp Flux:12164.3x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:410mm	PROTECTION 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	8664	8664	8664	8664	8664	8664	8664	8664	8664	8664	8664	8664	8664	8664	8664	8664	8664	8664	8664
5	8530	8521	8508	8495	8484	8478	8473	8467	8463	8460	8458	8456	8457	8460	8466	8475	8486	8500	8475
10	8395	8358	8323	8290	8254	8213	8182	8158	8140	8125	8112	8100	8094	8090	8093	8104	8121	8145	8098
15	8248	8177	8108	8026	7965	7921	7872	7813	7752	7705	7671	7641	7621	7614	7614	7628	7655	7694	7630
20	7643	7577	7514	7480	7463	7431	7390	7371	7313	7227	7167	7118	7076	7045	7023	7013	7020	7047	6975
25	7042	6969	6922	6896	6852	6805	6761	6685	6651	6667	6716	6629	6550	6486	6441	6414	6408	6424	6344
30	6443	6383	6355	6322	6265	6219	6038	5917	5866	5830	5894	6030	6039	5894	5738	5699	5738	5832	5670
35	5281	5227	5253	5275	5373	5300	5219	5022	4869	4910	4830	4741	4793	4676	4597	4476	4436	4513	4365
40	4105	4010	4023	4020	4039	3941	3861	3804	3741	3626	3567	3417	3372	3413	3258	3146	3095	3143	3013
45	2928	2785	2755	2786	2697	2633	2567	2525	2462	2496	2232	2185	2084	2103	1999	1893	1877	1940	1814
50	2094	1988	1904	1884	1720	1493	1379	1370	1439	1401	1299	1111	1026	1077	1009	872	846	843	817
55	1276	1236	1199	1178	1090	974	801	680	655	733	688	611	601	576	561	561	534	539	511
60	468	487	519	548	554	533	484	449	440	412	380	378	367	351	337	332	316	315	302
65	330	320	308	293	276	258	238	246	256	250	236	219	212	205	197	191	185	183	177
70	206	201	196	189	181	171	161	150	140	130	133	131	125	119	115	111	109	107	104
75	81.9	83.7	86.2	88.7	90.5	90.9	89.8	87.7	84.6	80.7	76.2	71.3	69.1	67.2	63.9	61.4	59.6	58.1	56.8
80	0.60	2.37	5.20	8.94	13.4	18.2	23.3	28.2	32.9	36.6	37.4	36.7	34.8	32.2	30.5	28.6	26.8	26.1	25.4
85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.30	8.95	9.08	8.45	5.72	4.90	4.91
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	0.62	0.00

C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2014-08-29

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.288  
 Humidity:65.0%  
 Test Distance:7.000m [K=1.0000]  
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.0V I:0.6820A P:150.0W PF:0.9200 Lamp Flux:12164.3x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:410mm	PROTECTION 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	8664	8664	8664	8664	8664	8664	8664	8664	8664	8664	8664	8664	8664	8664	8664	8664	8664	8664	8664
5	8452	8432	8415	8401	8390	8383	8375	8370	8367	8365	8361	8359	8361	8365	8371	8377	8385	8393	8403
10	8058	8025	7998	7977	7960	7948	7940	7937	7944	7959	7984	8015	8043	8064	8077	8091	8106	8122	8134
15	7576	7534	7503	7478	7462	7457	7465	7484	7507	7525	7548	7587	7652	7727	7780	7805	7827	7844	7848
20	6922	6889	6872	6871	6899	6944	6981	7004	6993	6971	6976	6986	7024	7088	7148	7173	7184	7212	7252
25	6286	6249	6236	6249	6287	6337	6242	6218	6218	6197	6198	6245	6332	6439	6510	6541	6540	6583	6650
30	5556	5501	5485	5616	5601	5415	5283	5260	5259	5370	5427	5465	5580	5763	5893	5912	5897	5965	6042
35	4317	4331	4334	4377	4292	4213	4243	4248	4253	4351	4465	4433	4415	4507	4588	4597	4593	4638	4730
40	2984	2994	3069	3001	2976	2994	2962	3007	3111	3079	3114	3163	3118	3160	3229	3263	3289	3282	3353
45	1771	1811	1802	1763	1741	1776	1846	1944	1902	1919	1866	1907	1845	1858	1893	1928	1985	1919	1976
50	803	831	909	866	799	1021	1077	1061	979	811	875	1030	1135	1211	1310	1366	1417	1364	1368
55	515	499	486	493	488	484	543	478	495	507	562	643	729	751	801	823	850	828	841
60	303	295	292	297	296	280	297	312	322	321	315	336	341	322	302	286	282	293	318
65	174	172	172	170	168	176	181	180	170	158	167	175	183	191	197	202	205	207	207
70	102	101	99.0	99.4	101	98.9	93.5	97.7	102	106	111	115	118	121	124	126	128	129	130
75	55.6	54.7	54.8	53.6	53.0	55.1	56.6	57.6	58.1	58.2	57.6	56.4	54.8	53.1	51.6	50.6	50.6	51.7	53.8
80	25.1	24.8	24.3	25.1	25.4	24.7	23.0	20.4	17.5	14.4	11.3	8.24	5.50	3.20	1.46	0.37	0.00	0.38	1.52
85	5.19	5.00	4.36	3.01	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
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:25.3DEG  
 Operators:DAMIN  
 Test Date:2014-08-29

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.288  
 Humidity:65.0%  
 Test Distance:7.000m [K=1.0000]  
 Remarks:

**EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT**

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**LUMINOUS DISTRIBUTION INTENSITY DATA**

Test:U:220.0V I:0.6820A P:150.0W PF:0.9200 Lamp Flux:12164.3x1 lm		
NAME:	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:410mm	PROTECTION 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	8664	8664	8664	8664	8664	8664	8664	8664	8664	8664	8664	8664	8664	8664	8664				
5	8415	8429	8444	8460	8479	8497	8515	8535	8556	8577	8599	8622	8645	8669	8693				
10	8148	8168	8195	8227	8262	8298	8336	8364	8395	8429	8467	8506	8550	8597	8646				
15	7872	7921	7974	8009	8029	8037	8043	8053	8067	8089	8120	8165	8222	8289	8366				
20	7325	7408	7450	7478	7522	7562	7563	7559	7575	7602	7631	7665	7708	7765	7838				
25	6722	6719	6694	6725	6705	6744	6831	6945	7082	7070	7066	7069	7089	7133	7201				
30	6052	5935	5953	5892	5881	5895	5916	6011	6157	6351	6447	6424	6370	6379	6467				
35	4753	4802	4849	4912	4951	4881	4891	4922	5073	5098	5234	5273	5251	5286	5405				
40	3385	3466	3509	3538	3573	3664	3661	3705	3610	3726	3811	3958	3990	3975	3990				
45	2055	2158	2153	2203	2298	2318	2428	2411	2471	2439	2481	2564	2562	2594	2688				
50	1373	1340	1195	1081	1062	1224	1369	1456	1421	1286	1298	1385	1405	1377	1434				
55	862	841	783	721	618	616	608	729	742	657	667	694	674	694	689				
60	354	381	396	395	387	398	401	380	363	390	402	396	403	410	412				
65	205	202	196	190	183	204	222	227	223	213	219	225	223	227	230				
70	131	130	129	127	124	120	116	112	122	126	124	124	127	128	131				
75	56.6	59.9	63.1	66.0	68.2	69.4	69.9	69.6	68.6	67.1	68.8	70.3	70.4	72.1	73.2				
80	3.41	5.99	9.20	13.0	17.1	21.6	26.3	30.7	33.3	34.8	35.3	34.9	35.4	35.7	36.7				
85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.61	11.1	12.7	13.1	13.4				
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:25.3DEG  
 Operators:DAMIN  
 Test Date:2014-08-29

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.288  
 Humidity:65.0%  
 Test Distance:7.000m [K=1.0000]  
 Remarks: