

LED Downlight CATO Series CS6F-10S-840



Light Output Ratio:	100.0%	
Luminaire Power:	13.45 W	
SHR Nominal:	1.25	Calculated using the TM5
SHR Maximum:	1.25	fine grid method.

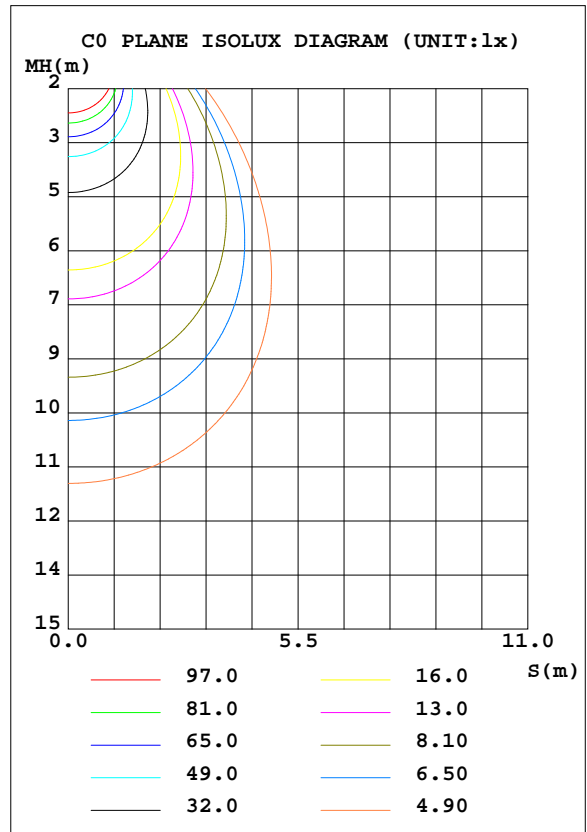
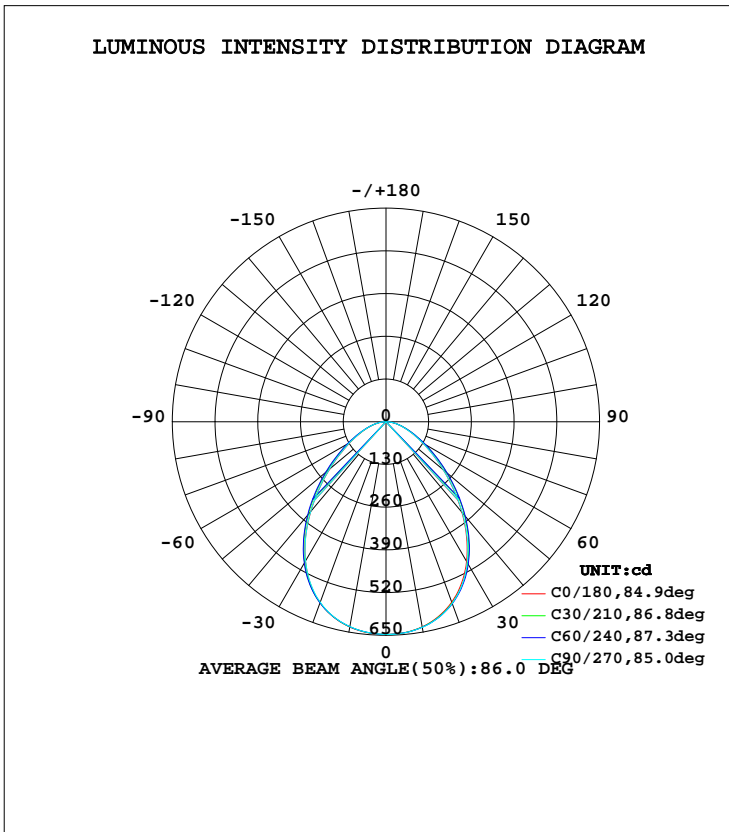
C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: Cao Chengpei  
 Test Date: 2014-08-29

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.288  
 Humidity: 53.0%  
 Test Distance: 5.780m [K=1.0000]  
 Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:220.3V I:0.0662A P:13.45W PF:0.9221 Lamp Flux:1310.17x1 lm		
NAME: CS6F-10S-840	TYPE:Downlight	SERIAL No.:
SPEC.:4000K	DIM.: L169mm*W169mm*H66mm	
MFR.: E-LITE LIGHTING CO.,LTD.		

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	SAMSUNG-4000K	Imax(cd)	647.6	S/MH(C0/180)	1.14
NOMINAL POWER(W)	13	LOR(%)	100.0	S/MH(C90/270)	1.14
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	1310.2	η UP, DN(C0-180)	0.0, 50.2
NOMINAL FLUX(lm)	1310.17	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0, 49.8
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	220	η down(%)	100.0	CIBSE SHR MAX	1.25



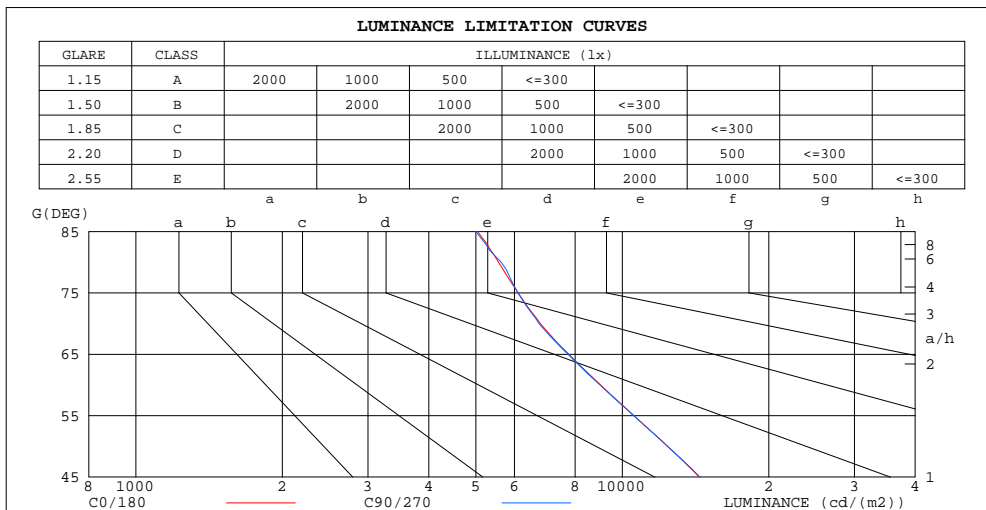
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 Remarks:

**ZONAL FLUX DIAGRAM  
AND LUMINANCE LIMITATION CURVES**

**ZONAL FLUX DIAGRAM:**

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	$\Phi$ lum,lamp
10	633.8	635.2	635.2	634.9	634.5	633.2	633.2	633.0	0- 10	61.16	61.16	4.67,4.67
20	584.7	589.8	588.6	590.5	586.0	586.7	585.0	586.6	10- 20	173.3	234.5	17.9,17.9
30	490.6	502.9	494.6	503.3	490.4	497.7	489.7	498.4	20- 30	251.1	485.5	37.1,37.1
40	359.3	380.0	361.4	378.7	356.3	372.8	356.6	375.6	30- 40	270.7	756.2	57.7,57.7
50	227.4	248.8	227.6	245.9	223.5	241.8	225.0	245.7	40- 50	230.8	987.0	75.3,75.3
60	128.9	141.8	128.4	139.3	126.6	137.2	128.2	140.5	50- 60	161.8	1149	87.7,87.7
70	66.26	71.27	65.88	69.90	65.46	69.24	66.65	70.94	60- 70	97.08	1246	95.1,95.1
80	27.60	29.48	27.96	29.16	27.55	29.04	28.37	29.60	70- 80	49.54	1295	98.9,98.9
90	0.2038	0.2620	0.2204	0.4034	0.2745	0.2974	0.2807	0.2932	80- 90	14.79	1310	100,100
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	5041	4997
80	5565	5637
75	6105	6102
70	6783	6744
65	7766	7729
60	9023	8993
55	10564	10550
50	12387	12399
45	14393	14437

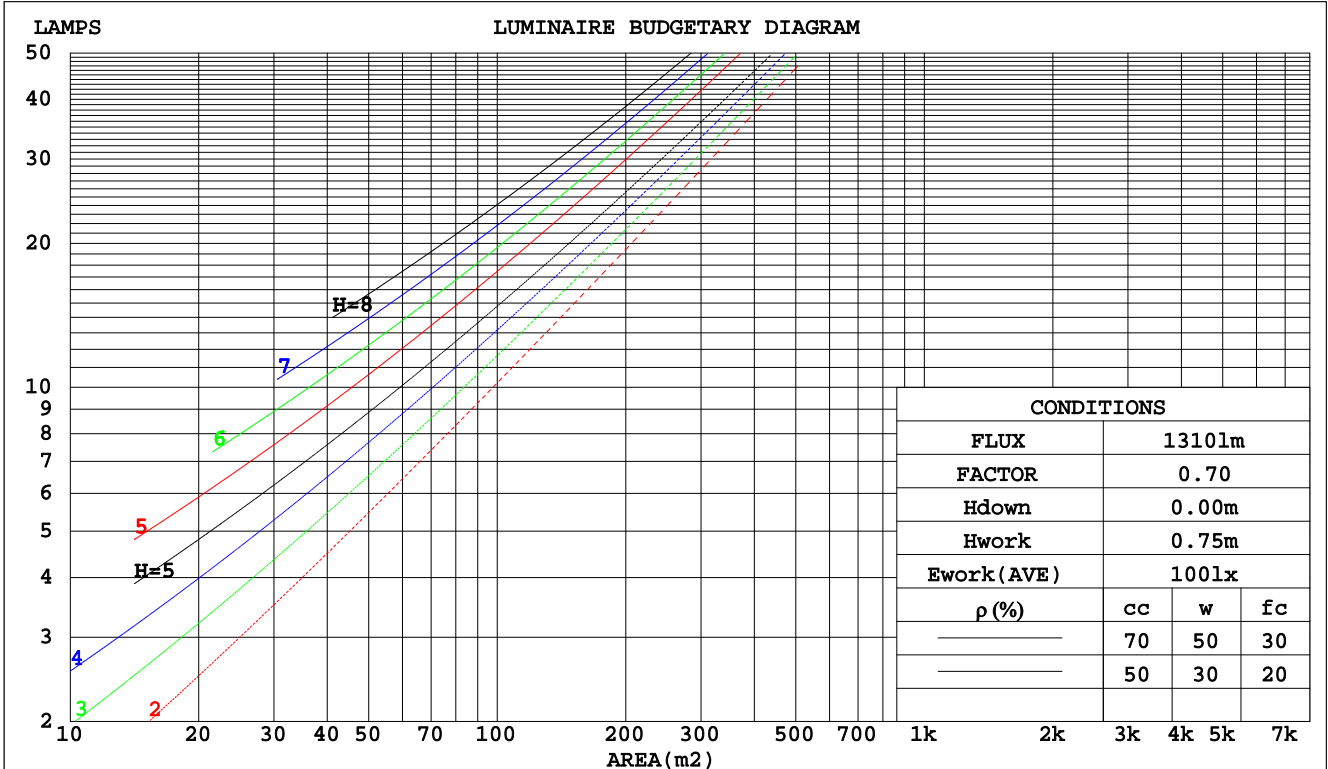
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 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.288  
 Humidity:53.0%  
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 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:220.3V I:0.0662A P:13.45W PF:0.9221 Lamp Flux:1310.17x1 lm		
NAME: CS6F-10S-840	TYPE:Downlight	SERIAL No.:
SPEC.:4000K	DIM.: L169mm*W169mm*H66mm	
MFR.: E-LITE LIGHTING CO.,LTD.		

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	.00
1.0	1.06	1.03	.99	1.04	1.01	.98	.90	.97	.95	.96	.94	.92	.92	.91	.89	.87
2.0	.95	.89	.84	.93	.87	.83	.89	.85	.81	.86	.82	.79	.83	.80	.77	.75
3.0	.85	.77	.72	.83	.76	.71	.80	.75	.70	.78	.73	.69	.75	.71	.68	.66
4.0	.76	.68	.62	.75	.68	.62	.72	.66	.61	.70	.65	.60	.68	.63	.60	.58
5.0	.69	.61	.55	.68	.60	.55	.66	.59	.54	.64	.58	.53	.62	.57	.53	.51
6.0	.63	.55	.49	.62	.54	.49	.60	.53	.48	.58	.52	.48	.57	.52	.47	.45
7.0	.57	.49	.44	.57	.49	.44	.55	.48	.43	.54	.48	.43	.52	.47	.43	.41
8.0	.53	.45	.39	.52	.45	.39	.51	.44	.39	.50	.43	.39	.49	.43	.39	.37
9.0	.49	.41	.36	.48	.41	.36	.47	.40	.36	.46	.40	.36	.45	.39	.35	.34
10.0	.45	.38	.33	.45	.38	.33	.44	.37	.33	.43	.37	.33	.42	.36	.32	.31



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WEC AND CCEC

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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	.264	.150	.048	.257	.147	.047	.244	.140	.045	.232	.134	.043	.221	.128	.041	
2.0	.252	.138	.042	.246	.135	.042	.234	.130	.040	.224	.126	.039	.214	.121	.038	
3.0	.236	.126	.038	.231	.124	.037	.221	.120	.036	.212	.116	.036	.203	.113	.035	
4.0	.221	.115	.034	.216	.113	.033	.207	.110	.033	.199	.107	.032	.192	.104	.032	
5.0	.207	.105	.030	.202	.104	.030	.195	.101	.030	.187	.099	.029	.181	.097	.029	
6.0	.194	.097	.028	.190	.096	.028	.183	.094	.027	.176	.092	.027	.170	.090	.027	
7.0	.182	.090	.025	.178	.089	.025	.172	.087	.025	.166	.085	.025	.161	.084	.025	
8.0	.171	.084	.023	.168	.083	.023	.163	.081	.023	.157	.080	.023	.152	.078	.023	
9.0	.161	.078	.022	.159	.077	.022	.154	.076	.022	.149	.075	.021	.145	.073	.021	
10.0	.153	.073	.020	.150	.073	.020	.146	.071	.020	.141	.070	.020	.137	.069	.020	

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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	.177	.157	.138	.152	.134	.119	.104	.092	.082	.060	.053	.048	.019	.017	.015	
2.0	.167	.132	.103	.143	.114	.089	.098	.079	.062	.056	.046	.036	.018	.015	.012	
3.0	.158	.114	.079	.135	.098	.069	.093	.068	.048	.054	.040	.028	.017	.013	.009	
4.0	.150	.100	.063	.129	.087	.054	.088	.060	.038	.051	.035	.023	.016	.012	.007	
5.0	.142	.090	.051	.122	.078	.044	.084	.054	.031	.049	.032	.018	.016	.010	.006	
6.0	.135	.081	.042	.116	.070	.037	.080	.049	.026	.047	.029	.015	.015	.009	.005	
7.0	.129	.074	.036	.111	.064	.031	.077	.045	.022	.045	.027	.013	.014	.009	.004	
8.0	.123	.068	.031	.106	.059	.027	.073	.042	.019	.043	.024	.011	.014	.008	.004	
9.0	.117	.063	.027	.101	.055	.023	.070	.039	.017	.041	.023	.010	.013	.007	.003	
10.0	.112	.059	.024	.097	.051	.021	.067	.036	.015	.039	.021	.009	.013	.007	.003	

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γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.288  
 Humidity:53.0%  
 Test Distance:5.780m [K=1.0000]  
 Remarks:

UGR(Unified Glare Rating) Table

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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	20.5	21.9	20.8	22.1	22.3	20.6	21.9	20.8	22.1	22.3
3H	21.3	22.5	21.6	22.8	23.0	21.3	22.6	21.6	22.8	23.0
4H	21.6	22.8	21.9	23.0	23.3	21.6	22.8	21.9	23.1	23.3
6H	21.8	22.9	22.1	23.2	23.5	21.9	23.0	22.2	23.2	23.5
8H	21.9	23.0	22.2	23.2	23.5	21.9	23.0	22.3	23.3	23.6
12H	21.9	23.0	22.3	23.3	23.6	22.0	23.0	22.3	23.3	23.6
4H 2H	20.9	22.1	21.2	22.3	22.6	20.9	22.1	21.2	22.4	22.6
3H	21.8	22.9	22.2	23.2	23.4	21.9	22.9	22.2	23.2	23.5
4H	22.3	23.2	22.6	23.5	23.8	22.3	23.2	22.7	23.5	23.9
6H	22.6	23.4	23.0	23.8	24.1	22.6	23.5	23.0	23.8	24.2
8H	22.7	23.5	23.1	23.9	24.2	22.8	23.5	23.2	23.9	24.3
12H	22.8	23.5	23.2	23.9	24.3	22.9	23.6	23.3	23.9	24.3
8H 4H	22.4	23.2	22.8	23.5	23.9	22.4	23.2	22.8	23.6	24.0
6H	22.9	23.5	23.3	23.9	24.3	22.9	23.6	23.4	24.0	24.4
8H	23.1	23.6	23.5	24.1	24.5	23.1	23.7	23.6	24.1	24.6
12H	23.2	23.7	23.7	24.2	24.6	23.3	23.8	23.8	24.2	24.7
12H 4H	22.4	23.1	22.8	23.5	23.9	22.4	23.1	22.9	23.5	23.9
6H	22.9	23.5	23.4	23.9	24.4	23.0	23.5	23.4	23.9	24.4
8H	23.2	23.6	23.6	24.1	24.6	23.2	23.7	23.7	24.1	24.6
Variations with the observer position at spacings:										
S = 1.0H	+ 0.4 / - 0.5					+ 0.4 / - 0.5				
1.5H	+ 0.1 / - 0.3					+ 0.1 / - 0.3				
2.0H	+ 0.7 / - 0.7					+ 0.7 / - 0.8				

CIE Pub.117 Corrected 1310 lm Total Lamp Luminous Flux.(8log(F/F0) = 0.9)

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 Remarks:

UTILIZATION FACTORS TABLE

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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	49	63	54	48	43
0.80	75	65	59	74	65	58	72	64	58	52
1.00	83	73	67	82	73	67	80	74	66	60
1.25	89	80	74	88	80	74	85	78	73	67
1.50	94	85	80	92	85	79	89	83	78	71
2.00	99	92	87	98	91	86	95	89	85	78
2.50	103	96	91	101	95	90	97	92	88	81
3.00	105	100	95	103	98	94	100	95	92	84
4.00	109	104	100	106	102	99	102	99	96	88
5.00	111	107	103	108	105	102	104	101	99	90
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

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ISOCANDELA DIAGRAM

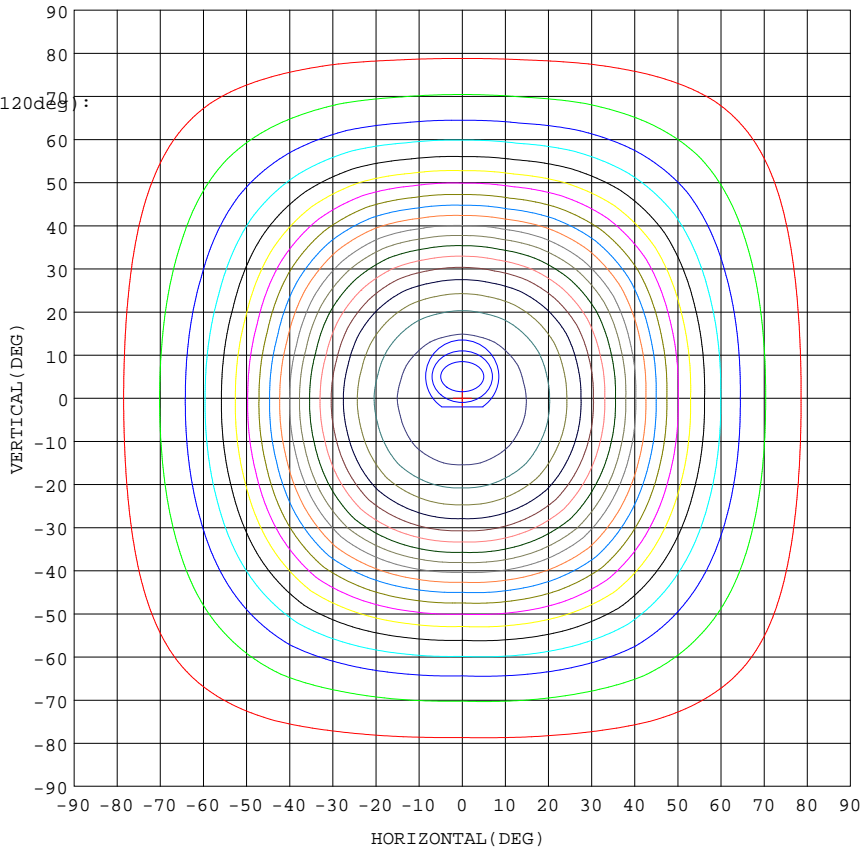
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Conical surface Flux(90deg):

879.38 lm  
 %lum = 67.1%  
 %lamp = 67.1%

Conical surface Flux(120deg):

1148.8 lm  
 %lum = 87.7%  
 %lamp = 87.7%



1. AVG=642.2, MIN=637.0
2. AVG=640.6, MIN=630.2
3. AVG=638.4, MIN=621.1

Imax:647.6(H0.0,V0.0)  
 (At:C=0.0,Gamma=0.0)  
 UNIT: cd

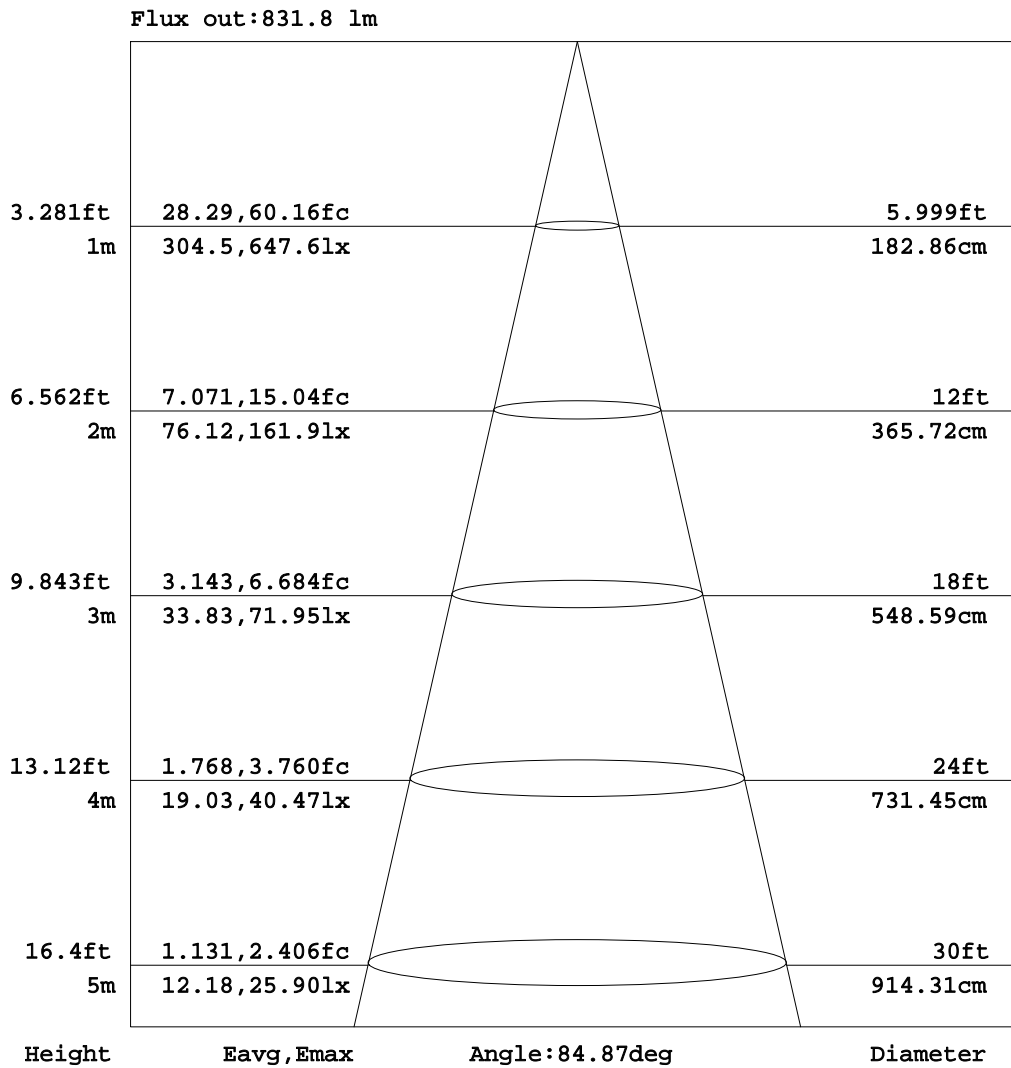
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AAI Figure

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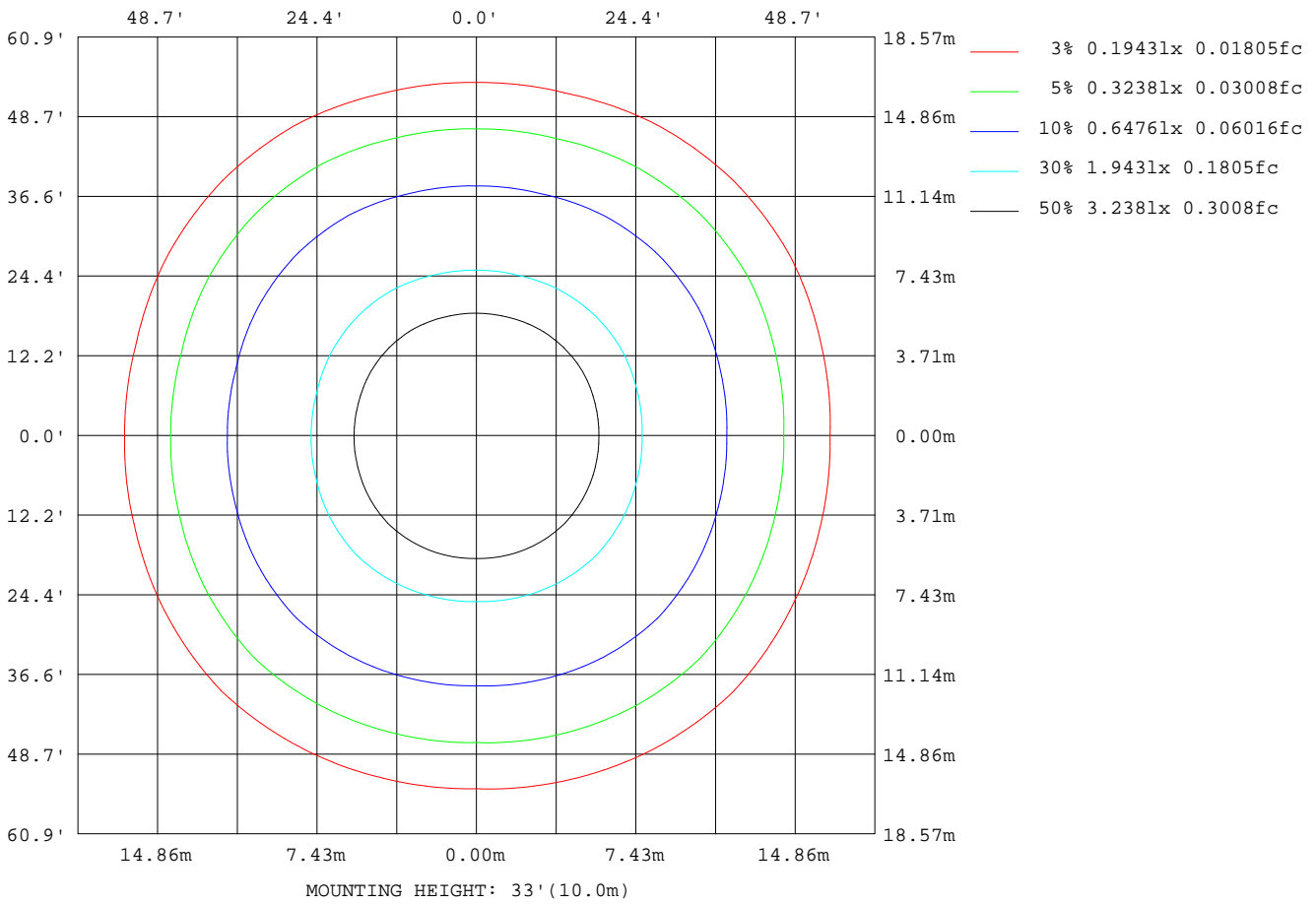
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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ISOLUX DIAGRAM

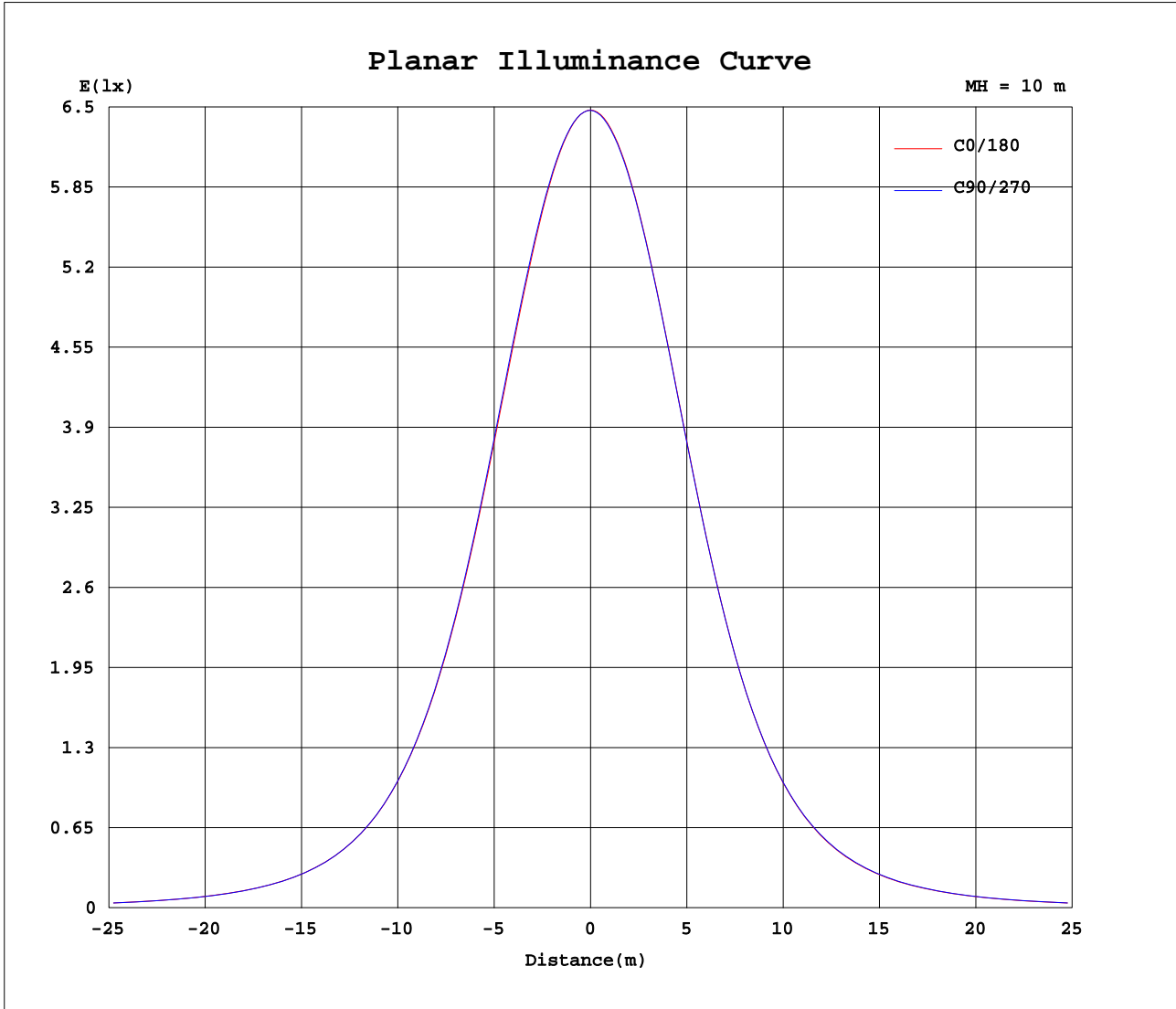
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Planar Illuminance Curve



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**LUMINOUS DISTRIBUTION INTENSITY DATA**

Test:U:220.3V I:0.0662A P:13.45W PF:0.9221 Lamp Flux:1310.17x1 lm		
NAME: CS6F-10S-840	TYPE:Downlight	SERIAL No.:
SPEC.:4000K	DIM.: L169mm*W169mm*H66mm	
MFR.: E-LITE LIGHTING CO.,LTD.		

Table--2

UNIT: cd

C(DEG) γ (DEG)	285	300	315	330	345																		
0	647	647	647	647	646																		
5	643	644	643	643	643																		
10	633	633	633	633	633																		
15	614	615	615	615	614																		
20	585	587	587	587	585																		
25	543	547	548	548	545																		
30	490	496	498	499	493																		
35	427	436	440	440	432																		
40	358	370	376	375	365																		
45	290	302	309	308	297																		
50	227	239	246	245	234																		
55	173	183	189	188	179																		
60	129	137	140	140	133																		
65	94.3	99.4	102	101	96.6																		
70	66.8	70.0	70.9	71.1	68.0																		
75	45.8	47.4	47.9	47.9	46.3																		
80	28.5	29.5	29.6	29.5	28.4																		
85	13.0	13.5	13.5	13.8	13.2																		
90	0.31	0.31	0.29	0.26	0.26																		

C Range: 0 - 360DEG C Interval: 15.0DEG Test Speed: HIGH Temperature:25.3DEG Operators:Cao Chengpei Test Date:2014-08-29	γ Range: 0 - 90DEG γ Interval: 1.0DEG Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.288 Humidity:53.0% Test Distance:5.780m [K=1.0000] Remarks:
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## Photometric Data Table [cd]

G/C	0.0	15.0	30.0	45.0	60.0	75.0	90.0	105.0	120.0	135.0
0.0	647.6	647.3	647.3	647.2	647.3	647.3	647.3	647.2	647.1	646.9
3.0	646.4	646.4	646.3	646.4	646.4	646.5	646.5	646.5	646.3	646.1
6.0	642.9	643.1	643.0	643.3	643.4	643.5	643.4	643.5	643.1	642.9
9.0	636.6	637.0	637.1	637.7	637.7	638.0	637.8	638.0	637.6	637.4
12.0	627.2	627.9	628.1	629.1	629.2	629.6	629.6	629.6	629.3	629.1
15.0	614.4	615.4	615.9	617.3	617.3	617.8	617.2	618.0	617.7	617.7
18.0	597.8	599.2	600.1	602.0	601.9	602.3	601.4	602.4	602.4	602.7
21.0	577.3	579.1	580.6	583.0	582.6	582.6	581.4	582.8	583.2	583.8
24.0	552.6	554.8	556.9	560.1	559.2	558.7	556.9	558.7	559.8	560.9
27.0	523.6	526.3	529.4	533.4	532.0	530.4	527.8	530.3	532.2	534.1
30.0	490.6	493.9	498.0	502.9	500.9	498.1	494.6	497.6	500.7	503.3
33.0	453.9	457.6	463.1	468.7	466.1	461.9	457.4	461.0	465.3	468.8
36.0	414.4	418.9	425.3	432.1	428.4	423.0	417.3	421.5	426.9	431.7
39.0	373.3	378.2	385.8	393.2	388.8	382.0	375.5	380.1	386.7	392.1
42.0	331.5	336.7	345.2	353.2	348.2	340.1	333.2	337.9	345.4	351.5
45.0	290.7	295.8	304.7	313.3	307.7	299.0	291.6	296.4	304.2	310.8
48.0	251.7	256.7	265.6	274.0	268.5	259.5	252.2	256.7	264.6	271.1
51.0	215.8	220.3	228.7	236.5	231.4	222.8	215.8	220.0	227.4	233.6
54.0	183.1	187.3	194.7	201.8	196.9	189.4	183.0	186.8	193.2	198.8
57.0	154.2	157.7	164.0	170.0	165.9	159.4	153.9	157.0	162.5	167.2
60.0	128.9	131.8	136.7	141.8	138.2	133.1	128.4	131.2	135.2	139.3
63.0	106.7	109.2	112.8	117.0	114.0	110.1	106.3	108.5	111.5	114.8
66.0	87.58	89.63	92.09	95.38	92.98	90.30	87.15	88.97	90.91	93.54
69.0	71.20	72.78	74.35	76.85	75.01	73.23	70.79	72.20	73.40	75.35
72.0	57.31	58.34	59.48	61.13	59.94	58.66	57.09	57.91	58.65	59.94
75.0	45.13	45.93	46.65	47.86	47.03	46.29	45.11	45.75	46.17	46.97
78.0	34.26	34.89	35.36	36.34	35.89	35.54	34.68	35.20	35.34	35.77
81.0	24.42	24.93	25.26	26.23	25.96	25.41	24.48	25.04	25.50	26.05
84.0	15.38	15.80	16.15	16.55	15.94	15.83	15.27	15.65	15.78	16.13
87.0	7.207	7.521	7.494	7.680	7.437	7.427	7.099	7.402	7.368	7.593
90.0	0.2038	0.2371	0.2662	0.2620	0.2807	0.2641	0.2204	0.3348	0.3951	0.4034
G/C	150.0	165.0	180.0	195.0	210.0	225.0	240.0	255.0	270.0	285.0
0.0	646.7	646.3	647.6	647.3	647.3	647.2	647.3	647.3	647.3	647.2
3.0	645.6	645.2	646.4	646.1	646.0	645.8	645.9	645.7	645.8	645.8
6.0	642.3	641.8	643.0	642.4	642.4	642.1	642.2	641.9	642.0	642.0
9.0	636.4	635.9	637.0	636.2	636.3	635.9	636.1	635.6	635.8	635.6
12.0	627.8	627.1	628.1	627.1	627.4	626.9	627.1	626.5	626.8	626.5
15.0	615.9	614.8	615.6	614.4	615.1	614.7	615.0	614.0	614.5	614.0
18.0	600.5	598.8	599.3	598.0	599.3	599.1	599.5	598.0	598.2	597.8
21.0	581.1	578.6	578.6	577.5	579.5	579.7	580.1	577.8	577.7	577.4
24.0	557.5	554.1	553.6	552.5	555.6	556.3	556.5	553.2	552.6	552.6
27.0	529.8	525.3	524.1	523.2	527.6	528.9	529.0	524.3	523.2	523.3
30.0	498.2	492.4	490.4	489.7	495.6	497.7	497.4	491.2	489.7	489.9
33.0	462.9	455.7	452.9	452.6	460.0	463.0	462.3	454.7	452.3	453.0
36.0	424.8	416.3	412.5	412.6	421.7	425.5	424.5	415.3	412.3	413.3
39.0	384.7	374.9	370.5	371.1	381.3	386.2	384.6	374.5	370.6	372.2
42.0	343.7	332.9	328.1	329.0	340.3	345.9	344.2	333.0	328.8	330.7
45.0	302.8	291.9	286.9	287.9	299.8	305.6	303.9	292.2	287.9	289.9
48.0	263.4	252.6	247.9	249.2	260.6	266.7	264.7	253.5	249.1	251.3
51.0	226.4	216.4	211.9	213.2	224.0	229.7	228.0	217.6	213.5	215.6
54.0	192.3	183.6	179.7	180.9	190.6	195.6	194.2	184.9	181.5	183.3
57.0	161.8	154.4	151.2	152.2	160.5	164.8	163.6	155.9	153.0	154.6
60.0	134.7	129.0	126.6	127.0	134.0	137.2	136.7	130.2	128.2	129.2
63.0	110.9	106.7	104.9	105.3	110.9	113.3	113.1	107.9	106.5	107.3
66.0	90.46	87.52	86.32	86.45	90.80	92.44	92.56	88.56	87.76	88.20
69.0	72.99	71.08	70.31	70.28	73.59	74.63	74.88	71.98	71.56	71.80
72.0	58.35	56.97	56.55	56.70	58.88	59.74	59.86	58.00	57.65	57.95
75.0	45.77	44.87	44.64	44.72	46.31	46.86	47.07	45.81	45.65	45.81
78.0	34.77	34.13	34.04	34.10	35.31	35.69	36.00	35.12	35.02	35.10
81.0	25.03	24.47	24.46	24.46	25.47	25.88	26.05	25.06	24.99	25.07
84.0	16.09	15.62	15.63	15.66	16.48	16.33	16.48	15.92	15.85	15.86
87.0	7.424	7.556	7.606	7.630	7.920	7.854	7.960	7.708	7.639	7.614
90.0	0.3972	0.3556	0.2745	0.3182	0.2745	0.2974	0.3286	0.3348	0.2807	0.3140
G/C	300.0	315.0	330.0	345.0						
0.0	647.1	646.9	646.7	646.3						
3.0	645.8	645.6	645.4	645.1						
6.0	642.1	641.8	641.8	641.6						
9.0	636.0	635.6	635.7	635.3						
12.0	627.1	626.7	626.9	626.1						
15.0	614.9	614.5	614.8	613.6						
18.0	599.3	599.1	599.2	597.5						
21.0	579.7	579.7	579.9	577.6						

C Range: 0 - 360DEG

C Interval: 15.0DEG

Test Speed: HIGH

Temperature: 25.3DEG

Operators: Cao Chengpei

Test Date: 2014-08-29

γ Range: 0 - 90DEG

γ Interval: 1.0DEG

Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.288

Humidity: 53.0%

Test Distance: 5.780m [K=1.0000]

Remarks:

## Photometric Data Table [cd]

24.0	556.0	556.5	556.6	553.4
27.0	527.9	529.3	529.5	525.3
30.0	496.2	498.4	498.6	493.0
33.0	460.8	464.3	464.3	457.5
36.0	423.0	427.4	427.4	419.1
39.0	383.0	388.8	388.3	378.9
42.0	342.5	349.0	348.4	337.9
45.0	302.4	309.1	308.4	297.3
48.0	263.4	270.5	269.4	258.4
51.0	227.0	233.6	232.6	222.1
54.0	193.6	199.4	198.5	188.9
57.0	163.4	168.4	167.5	159.3
60.0	136.7	140.5	139.9	132.9
63.0	113.3	116.1	115.8	110.1
66.0	92.90	94.77	94.72	90.24
69.0	75.30	76.44	76.57	73.20
72.0	60.26	61.16	61.11	58.85
75.0	47.42	47.93	47.92	46.30
78.0	36.28	36.46	36.41	35.22
81.0	26.19	26.27	26.18	25.19
84.0	16.47	16.53	16.82	16.06
87.0	7.914	7.871	7.999	7.758
90.0	0.3119	0.2932	0.2641	0.2641

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: Cao Chengpei  
 Test Date: 2014-08-29

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.288  
 Humidity: 53.0%  
 Test Distance: 5.780m [K=1.0000]  
 Remarks: