

LED Downlight CATO Series CS8F-20S-830



Light Output Ratio:	100.0%	
Luminaire Power:	21.6 W	
SHR Nominal:	1.25	Calculated using the TM5
SHR Maximum:	1.25	fine grid method.

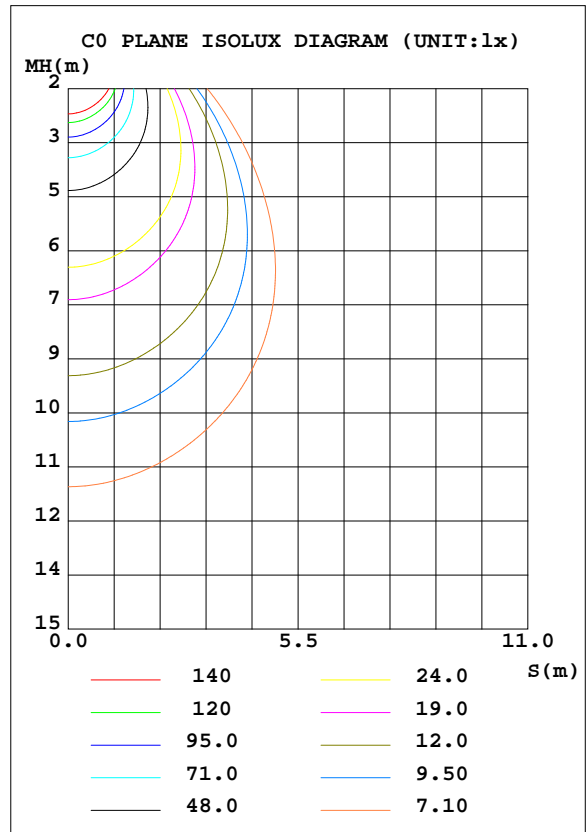
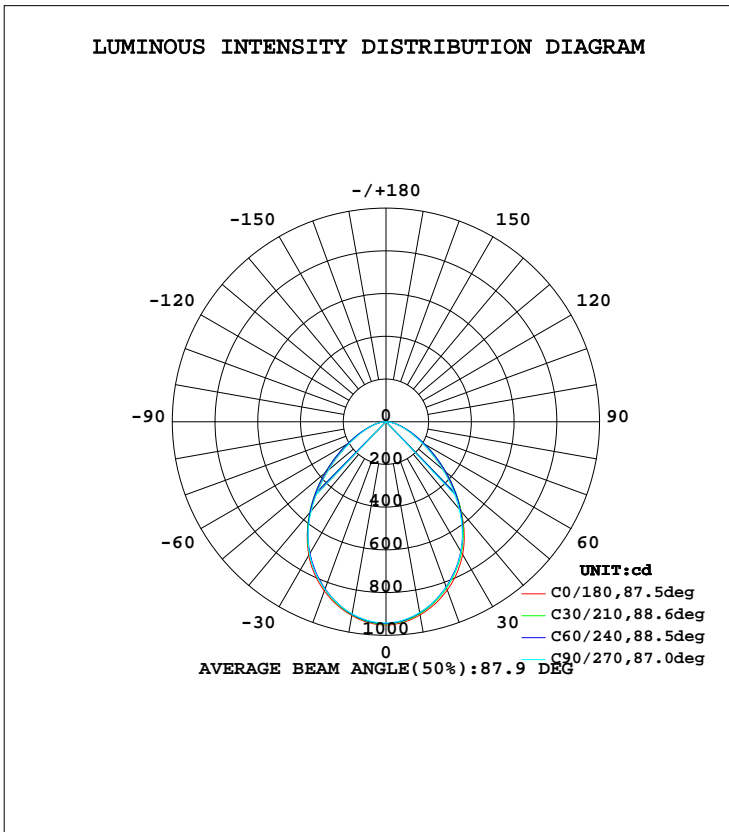
C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Cao Chengpei
 Test Date: 2014-08-29

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:

LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:220.3V I:0.1022A P:21.60W PF:0.9596 Lamp Flux:1909.5x1 lm		
NAME: CS8F-20S-830	TYPE:Downlight	SERIAL No.:
SPEC.:3000K	DIM.: L230mm*W230mm*H76mm	
MFR.: E-LITE LIGHTING CO.,LTD.		

DATA OF LAMP		PHOTOMETRIC DATA Eff: 88.42 lm/W			
MODEL	SAMSUNG-3000K	I _{max} (cd)	951.3	S/MH(C0/180)	1.15
NOMINAL POWER(W)	22	LOR(%)	100.0	S/MH(C90/270)	1.15
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	1909.5	η UP, DN(C0-180)	0.0, 49.7
NOMINAL FLUX(lm)	1909.5	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0, 50.3
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	220	η down(%)	100.0	CIBSE SHR MAX	1.25



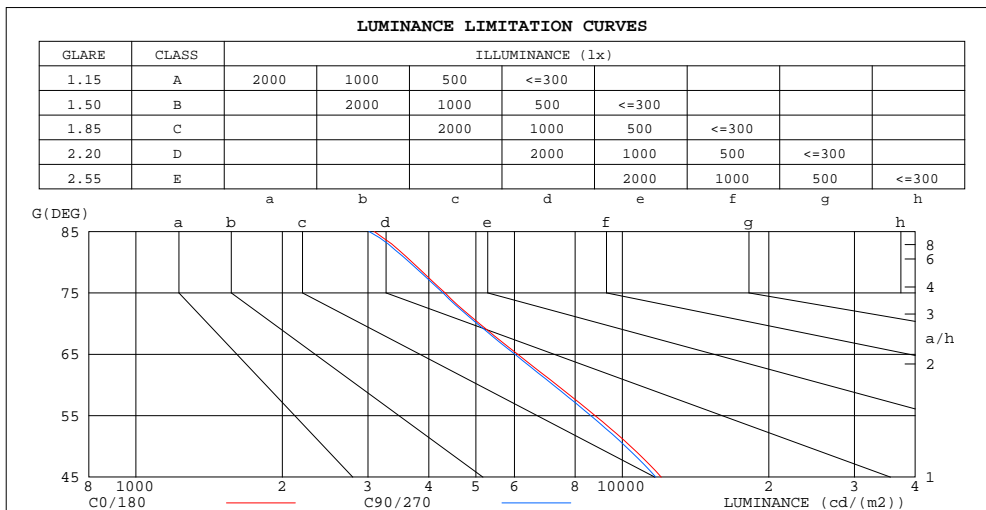
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**ZONAL FLUX DIAGRAM
AND LUMINANCE LIMITATION CURVES**

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	Φ lum,lamp
10	918.5	911.1	906.8	905.5	921.7	915.7	913.3	907.4	0- 10	88.48	88.48	4.63,4.63
20	838.7	825.2	824.9	819.9	843.5	831.9	835.6	823.8	10- 20	246.4	334.8	17.5,17.5
30	717.7	703.9	702.4	698.3	722.8	711.5	715.4	704.6	20- 30	355.6	690.5	36.2,36.2
40	547.1	549.9	533.1	544.2	550.7	556.8	544.2	552.0	30- 40	393.9	1084	56.8,56.8
50	353.7	374.7	345.4	369.6	354.8	378.0	350.4	375.7	40- 50	349.3	1434	75.1,75.1
60	194.0	215.2	190.8	211.8	194.1	215.1	192.1	214.7	50- 60	248.1	1682	88.1,88.1
70	91.96	103.1	91.01	101.3	92.56	102.1	91.94	102.5	60- 70	143.5	1825	95.6,95.6
80	33.97	37.23	33.54	36.61	34.49	37.27	34.68	37.53	70- 80	66.72	1892	99.1,99.1
90	0.2288	0.2308	0.2267	0.2329	0.2329	0.4845	0.7528	0.5760	80- 90	17.54	1910	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	3091	3014
80	3698	3651
75	4324	4282
70	5083	5030
65	6095	6016
60	7333	7212
55	8795	8614
50	10403	10157
45	12019	11715

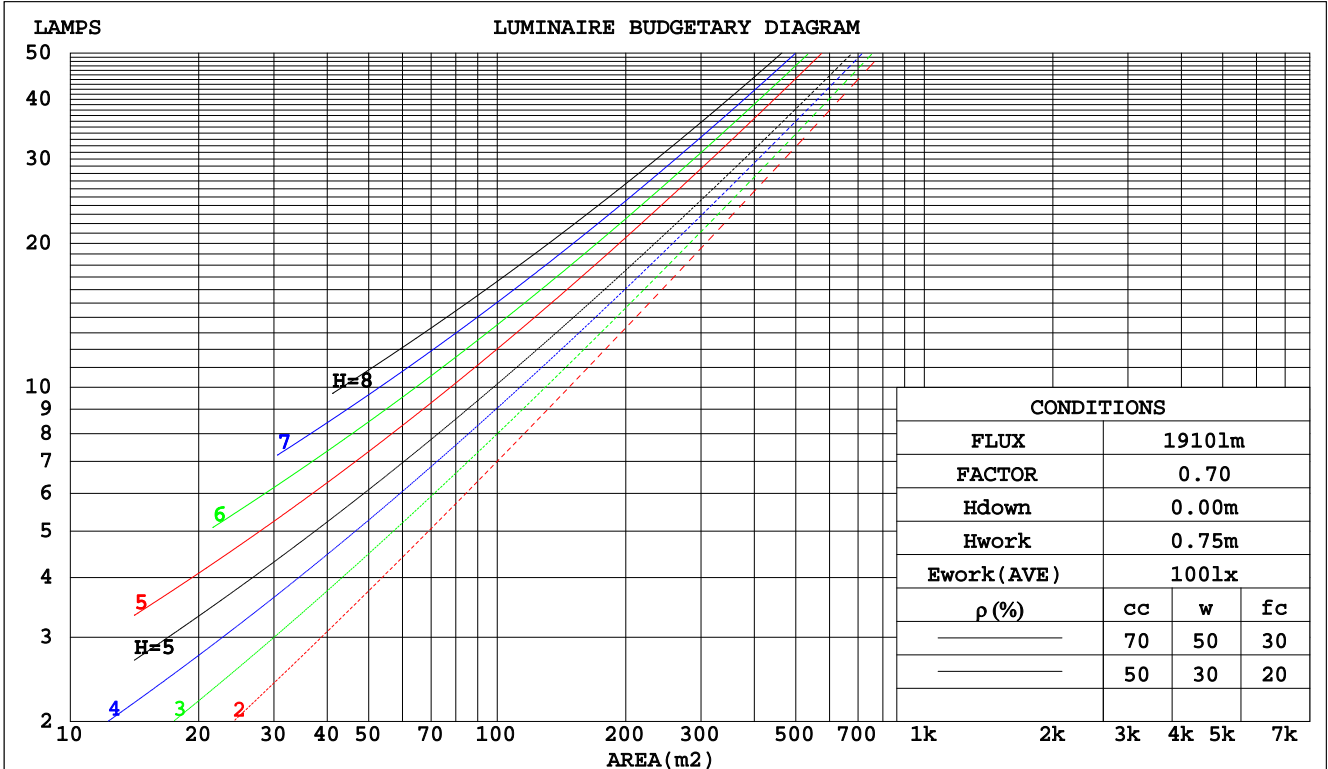
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 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

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SPEC.:3000K	DIM.: L230mm*W230mm*H76mm	
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	.93	.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	.74	.70	.78	.73	.69	.75	.71	.67	.65
4.0	.76	.68	.62	.75	.67	.62	.72	.66	.61	.70	.65	.60	.68	.63	.59	.57
5.0	.69	.61	.55	.68	.60	.54	.66	.59	.54	.64	.58	.53	.62	.57	.53	.51
6.0	.62	.54	.48	.62	.54	.48	.60	.53	.48	.58	.52	.47	.57	.51	.47	.45
7.0	.57	.49	.43	.56	.49	.43	.55	.48	.43	.53	.47	.43	.52	.47	.42	.40
8.0	.52	.45	.39	.52	.44	.39	.51	.44	.39	.49	.43	.39	.48	.43	.38	.37
9.0	.48	.41	.36	.48	.40	.35	.47	.40	.35	.46	.40	.35	.45	.39	.35	.33
10.0	.45	.37	.33	.44	.37	.32	.43	.37	.32	.43	.36	.32	.42	.36	.32	.30



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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	.262	.149	.047	.255	.146	.046	.242	.139	.044	.230	.133	.043	.219	.127	.041	
2.0	.251	.138	.042	.245	.135	.042	.234	.130	.040	.223	.125	.039	.214	.121	.038	
3.0	.237	.126	.038	.231	.124	.037	.221	.120	.036	.212	.116	.036	.204	.113	.035	
4.0	.221	.115	.034	.217	.113	.034	.208	.110	.033	.200	.107	.032	.192	.104	.032	
5.0	.207	.106	.031	.203	.104	.030	.195	.102	.030	.188	.099	.030	.181	.097	.029	
6.0	.194	.097	.028	.191	.096	.028	.184	.094	.027	.177	.092	.027	.171	.090	.027	
7.0	.182	.090	.026	.179	.089	.025	.173	.087	.025	.167	.086	.025	.162	.084	.025	
8.0	.172	.084	.024	.169	.083	.023	.163	.082	.023	.158	.080	.023	.153	.079	.023	
9.0	.162	.078	.022	.159	.078	.022	.154	.076	.022	.150	.075	.021	.145	.074	.021	
10.0	.153	.073	.020	.151	.073	.020	.146	.072	.020	.142	.071	.020	.138	.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	.177	.157	.138	.151	.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	.062	.129	.087	.054	.089	.060	.038	.051	.035	.023	.016	.012	.007	
5.0	.143	.090	.051	.122	.078	.044	.084	.054	.031	.049	.032	.018	.016	.010	.006	
6.0	.136	.081	.042	.117	.070	.037	.080	.049	.026	.047	.029	.015	.015	.009	.005	
7.0	.129	.074	.035	.111	.064	.031	.077	.045	.022	.045	.027	.013	.014	.009	.004	
8.0	.123	.068	.030	.106	.059	.027	.073	.042	.019	.043	.025	.011	.014	.008	.004	
9.0	.118	.063	.027	.101	.055	.023	.070	.039	.016	.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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 Humidity:53.0%
 Test Distance:5.780m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

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MFR.: E-LITE LIGHTING CO.,LTD.		

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	19.9	21.3	20.2	21.5	21.7	19.9	21.2	20.1	21.4	21.6
3H	20.6	21.9	20.9	22.1	22.3	20.6	21.8	20.8	22.0	22.3
4H	20.8	22.0	21.1	22.3	22.5	20.8	22.0	21.1	22.2	22.5
6H	21.0	22.1	21.3	22.4	22.6	20.9	22.0	21.2	22.3	22.6
8H	21.0	22.1	21.3	22.4	22.6	21.0	22.0	21.3	22.3	22.6
12H	21.0	22.1	21.4	22.3	22.6	21.0	22.0	21.3	22.3	22.6
4H 2H	20.3	21.5	20.6	21.7	22.0	20.2	21.4	20.5	21.7	21.9
3H	21.1	22.2	21.5	22.4	22.7	21.1	22.1	21.4	22.4	22.7
4H	21.4	22.4	21.8	22.7	23.0	21.4	22.4	21.8	22.7	23.0
6H	21.7	22.5	22.1	22.9	23.2	21.7	22.5	22.0	22.8	23.2
8H	21.8	22.5	22.2	22.9	23.3	21.7	22.5	22.1	22.9	23.2
12H	21.8	22.5	22.2	22.9	23.3	21.8	22.5	22.2	22.9	23.3
8H 4H	21.6	22.3	22.0	22.7	23.1	21.5	22.3	21.9	22.7	23.0
6H	21.9	22.5	22.3	22.9	23.4	21.9	22.5	22.3	22.9	23.3
8H	22.0	22.6	22.5	23.0	23.5	22.0	22.6	22.5	23.0	23.4
12H	22.1	22.6	22.6	23.1	23.5	22.1	22.6	22.6	23.0	23.5
12H 4H	21.5	22.2	22.0	22.6	23.0	21.5	22.2	21.9	22.6	23.0
6H	21.9	22.5	22.4	22.9	23.3	21.9	22.5	22.3	22.9	23.3
8H	22.1	22.6	22.6	23.0	23.5	22.0	22.5	22.5	23.0	23.4
Variations with the observer position at spacings:										
S = 1.0H	+ 0.4 / - 0.5					+ 0.4 / - 0.5				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.8 / - 0.8					+ 0.7 / - 0.9				

CIE Pub.117 Corrected 1910 lm Total Lamp Luminous Flux.(8log(F/F0) = 2.2)

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 Remarks:

UTILIZATION FACTORS TABLE

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SPEC.:3000K	DIM.: L230mm*W230mm*H76mm	
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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	64	54	48	64	54	48	63	53	48	42
0.80	74	64	58	74	64	58	72	63	57	51
1.00	83	73	67	81	72	66	79	73	66	60
1.25	89	80	74	88	79	74	85	78	73	67
1.50	94	85	79	92	84	79	89	83	78	71
2.00	99	92	87	98	91	86	94	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

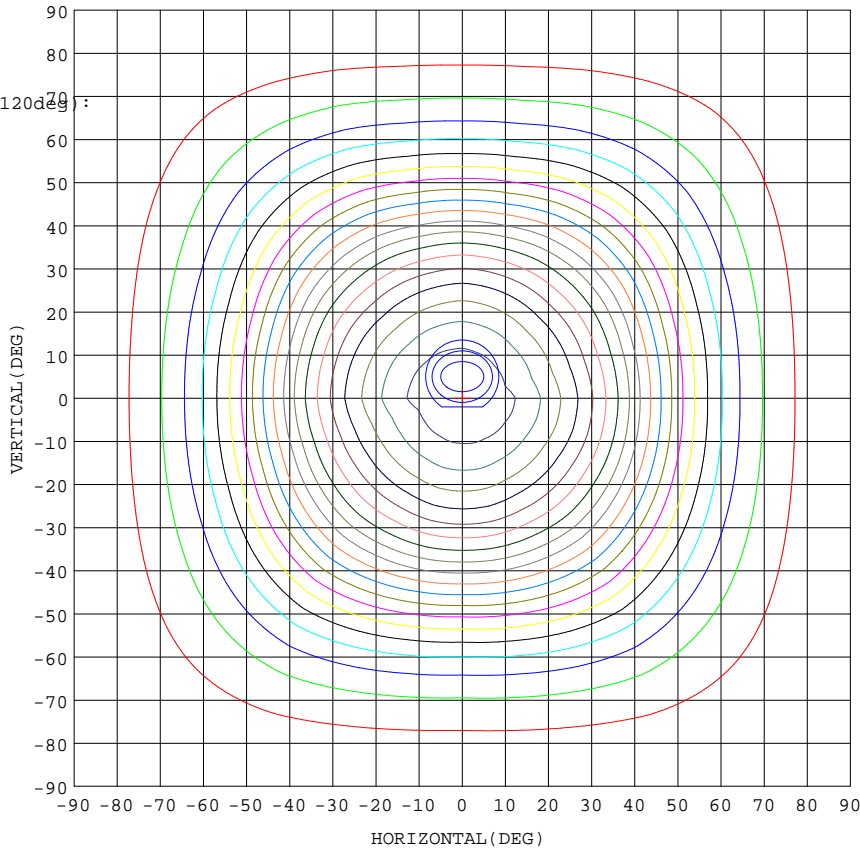
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Conical surface Flux(90deg):

1269.3 lm
%lum = 66.5%
%lamp = 66.5%

Conical surface Flux(120deg):

1681.8 lm
%lum = 88.1%
%lamp = 88.1%



1. AVG=932.0, MIN=919.4
2. AVG=928.9, MIN=906.4
3. AVG=924.2, MIN=890.3

Imax:951.3(H0.0,V0.0)
(At:C=0.0,Gamma=0.0)
UNIT: cd

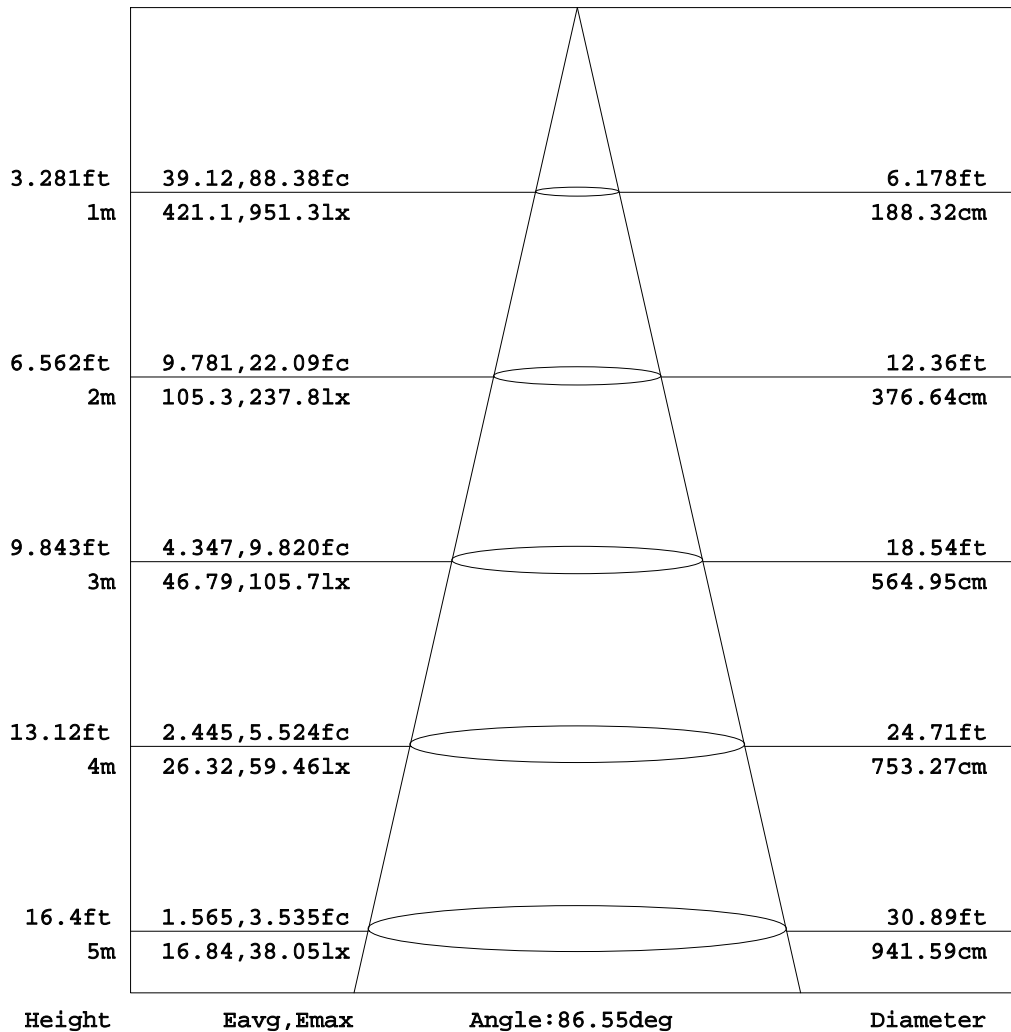
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AAI Figure

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Flux out:1234 lm



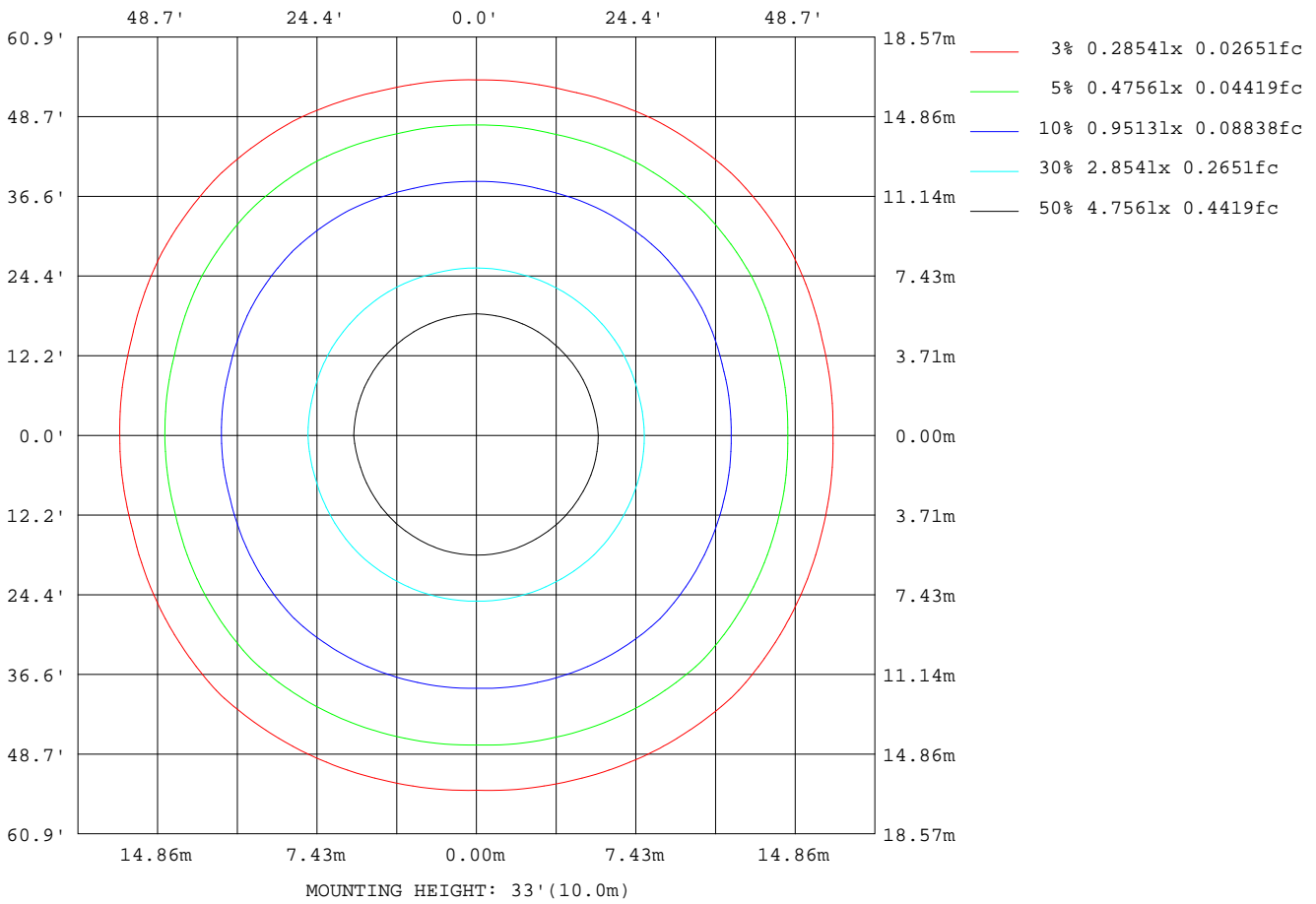
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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ISOLUX DIAGRAM

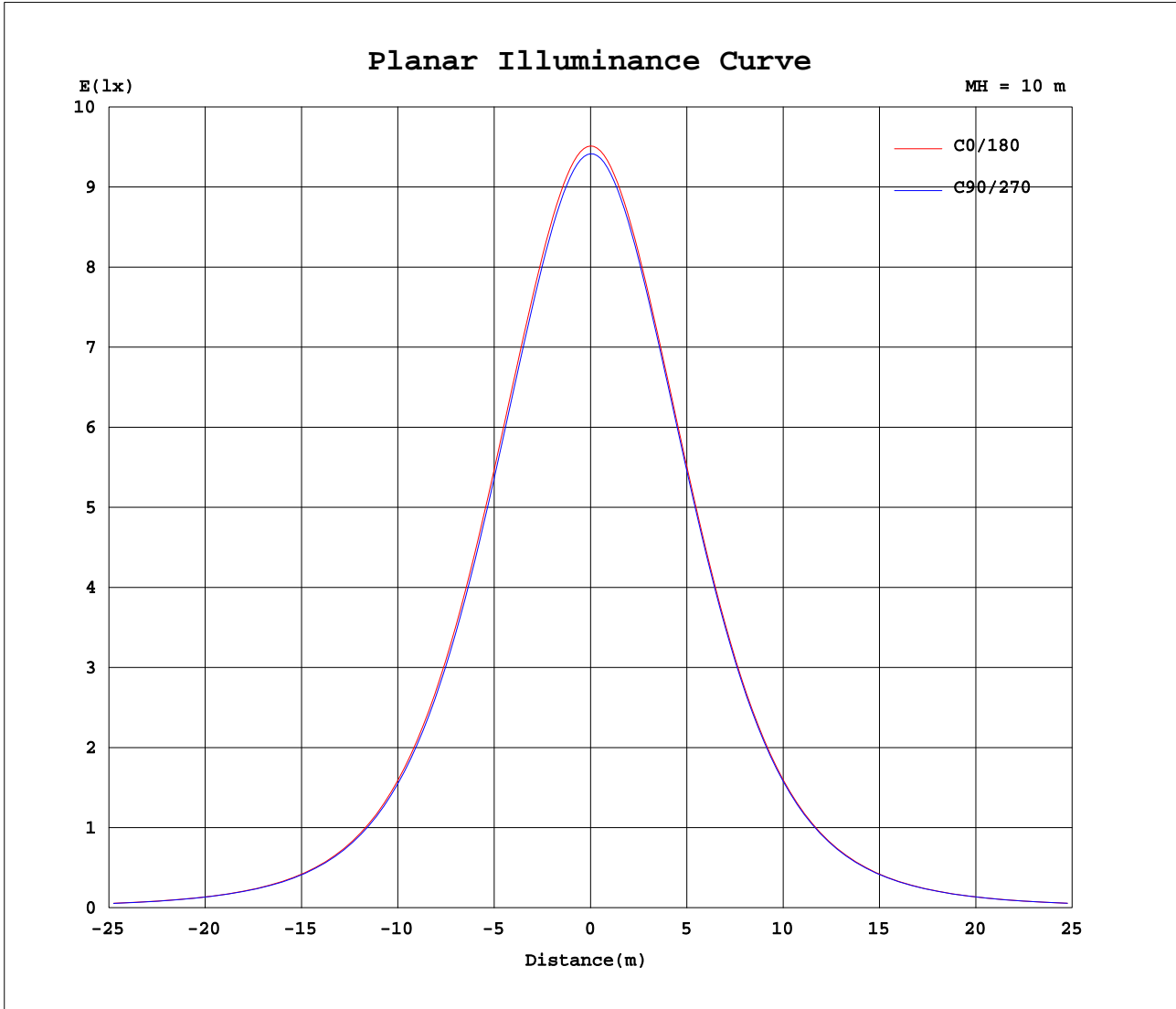
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Planar Illuminance Curve



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LUMINOUS DISTRIBUTION INTENSITY DATA

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Table--1

UNIT: cd

C(DEG) γ (DEG)	0	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270
0	951	949	947	946	944	943	942	941	940	939	938	937	951	949	947	946	944	943	942
5	942	940	938	936	934	933	932	931	930	930	929	929	944	942	941	939	938	936	935
10	919	917	913	911	909	908	907	907	905	906	905	906	922	919	918	916	915	913	913
15	883	881	876	873	871	872	871	870	867	868	868	872	888	884	883	879	879	879	879
20	839	836	829	825	823	825	825	824	820	820	821	827	844	840	837	832	833	834	836
25	784	781	772	769	766	770	769	768	763	763	765	772	789	785	781	776	777	778	781
30	718	715	707	704	701	703	702	702	697	698	699	706	723	719	717	711	712	712	715
35	638	637	632	631	626	626	623	624	622	625	624	628	643	641	642	639	638	634	636
40	547	548	548	550	543	538	533	536	538	544	541	539	551	550	557	557	554	545	544
45	450	453	457	463	454	445	438	443	449	458	451	445	452	453	466	468	463	449	447
50	354	358	367	375	365	353	345	351	360	370	361	351	355	358	373	378	372	355	350
55	267	272	281	290	281	269	261	267	277	286	277	266	267	270	286	292	285	269	264
60	194	199	207	215	207	197	191	196	204	212	204	194	194	197	210	215	210	196	192
65	136	140	146	153	147	140	135	138	144	150	144	137	136	138	148	152	148	138	135
70	92.0	94.6	98.5	103	99.1	94.8	91.0	93.7	97.3	101	97.0	92.7	92.6	93.3	99.8	102	100	93.5	91.9
75	59.2	60.7	62.6	65.6	63.0	60.8	58.6	60.2	61.9	64.5	61.7	59.6	59.6	59.8	63.7	64.8	64.1	60.2	59.5
80	34.0	34.9	35.8	37.2	36.0	34.9	33.5	34.5	35.3	36.6	35.3	34.3	34.5	34.7	36.7	37.3	37.0	35.1	34.7
85	14.3	14.7	15.0	15.6	15.0	14.6	13.9	14.4	14.7	15.2	14.7	14.4	14.6	14.8	15.7	15.9	16.0	15.2	15.1
90	0.23	0.22	0.23	0.23	0.23	0.22	0.23	0.22	0.23	0.23	0.23	0.22	0.23	0.30	0.37	0.48	0.62	0.73	0.75

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:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.3V I:0.1022A P:21.60W PF:0.9596 Lamp Flux:1909.5x1 lm		
NAME: CS8F-20S-830	TYPE:Downlight	SERIAL No.:
SPEC.:3000K	DIM.: L230mm*W230mm*H76mm	
MFR.: E-LITE LIGHTING CO.,LTD.		

Table--2

UNIT: cd

C(DEG)	285	300	315	330	345														
0	941	940	939	938	937														
5	933	933	931	930	929														
10	911	910	907	907	906														
15	876	874	871	871	871														
20	832	828	824	825	826														
25	777	773	768	770	772														
30	711	709	705	706	707														
35	633	634	633	634	631														
40	543	550	552	551	544														
45	447	460	465	463	450														
50	353	368	376	372	358														
55	267	282	290	287	272														
60	194	208	215	212	199														
65	137	147	152	150	140														
70	92.8	99.5	103	101	94.6														
75	59.8	63.8	65.3	64.7	60.5														
80	34.9	36.8	37.5	37.2	35.1														
85	15.2	16.0	16.1	16.0	15.0														
90	0.75	0.66	0.58	0.44	0.35														

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]

G/C	0.0	15.0	30.0	45.0	60.0	75.0	90.0	105.0	120.0	135.0
0.0	951.3	949.3	947.3	945.8	944.2	942.9	941.7	940.6	939.6	938.9
3.0	947.9	945.9	943.6	941.9	940.1	939.0	937.6	936.9	935.9	935.6
6.0	938.7	936.7	933.8	932.3	930.2	929.4	927.8	927.3	926.2	926.2
9.0	924.3	922.4	918.9	917.3	914.9	914.5	912.7	912.6	911.1	911.5
12.0	905.8	903.6	899.3	897.3	894.9	895.0	893.5	893.3	891.4	891.9
15.0	883.4	880.9	875.6	873.3	870.9	871.8	870.5	870.1	867.4	867.9
18.0	857.7	854.9	848.4	845.5	843.1	845.0	844.3	843.5	839.9	840.2
21.0	828.5	825.5	817.8	814.5	812.2	815.0	814.6	813.6	809.1	809.1
24.0	795.7	792.5	784.1	780.4	778.1	781.4	781.3	780.1	775.1	775.1
27.0	758.8	755.7	747.1	743.7	741.0	744.2	743.8	742.9	737.8	738.2
30.0	717.7	714.8	706.8	703.9	700.6	703.0	702.4	701.7	697.3	698.3
33.0	671.4	669.5	662.9	661.1	656.8	657.7	656.1	656.1	653.2	655.4
36.0	620.7	620.0	615.5	615.5	609.8	608.7	605.7	607.0	605.8	609.7
39.0	566.1	566.7	565.2	566.7	559.8	556.2	551.8	554.2	555.8	561.0
42.0	508.6	510.5	512.0	515.7	507.6	501.3	495.4	499.1	503.2	510.0
45.0	449.6	453.0	457.2	463.2	453.8	445.3	438.2	442.9	449.3	457.6
48.0	391.3	395.7	402.5	409.8	399.9	389.6	381.7	387.1	395.5	404.5
51.0	335.5	340.2	348.8	357.2	347.3	335.8	327.7	333.3	342.9	352.3
54.0	283.2	288.5	297.6	306.6	296.8	285.3	277.2	283.0	292.6	302.1
57.0	236.0	240.9	250.1	258.8	250.0	239.0	231.4	236.8	246.2	254.9
60.0	194.0	198.5	207.0	215.2	207.4	197.5	190.8	195.6	204.0	211.8
63.0	157.5	161.6	168.7	176.0	169.4	161.1	155.2	159.5	166.5	173.1
66.0	126.3	129.9	135.5	141.7	136.2	129.8	124.7	128.5	133.7	139.3
69.0	99.89	102.8	107.0	112.1	107.7	102.9	98.78	101.7	105.7	110.2
72.0	77.57	79.84	82.81	86.75	83.40	79.98	76.78	79.11	81.86	85.24
75.0	59.20	60.68	62.57	65.55	62.98	60.84	58.63	60.15	61.87	64.45
78.0	43.27	44.41	45.73	47.61	46.03	44.45	42.84	43.96	45.20	46.81
81.0	29.66	30.46	31.23	32.46	31.36	30.43	29.24	30.09	30.78	31.91
84.0	17.80	18.40	18.73	19.47	18.78	18.35	17.52	18.10	18.40	19.10
87.0	7.943	8.236	8.235	8.488	8.158	8.079	7.655	7.948	7.958	8.237
90.0	0.2288	0.2225	0.2288	0.2308	0.2267	0.2204	0.2267	0.2225	0.2267	0.2329
G/C	150.0	165.0	180.0	195.0	210.0	225.0	240.0	255.0	270.0	285.0
0.0	938.1	937.3	951.3	949.3	947.3	945.8	944.2	942.9	941.7	940.6
3.0	934.8	934.5	948.9	946.8	945.4	943.5	942.3	940.7	939.7	938.3
6.0	925.6	925.9	940.6	938.4	937.2	935.3	934.3	932.6	931.7	930.0
9.0	911.0	912.0	927.0	924.8	923.7	921.3	920.8	919.1	918.5	916.4
12.0	891.8	893.8	909.3	906.7	905.3	902.5	902.4	900.9	900.9	898.4
15.0	868.3	871.6	887.5	884.4	882.5	879.0	879.4	878.6	879.4	876.2
18.0	841.1	845.8	862.3	858.9	856.1	851.8	852.7	852.7	854.3	850.7
21.0	810.6	816.5	833.6	829.7	826.2	821.3	822.5	823.3	825.6	821.6
24.0	776.8	783.6	801.1	797.0	793.0	787.6	789.0	790.4	793.2	788.8
27.0	739.7	746.8	764.2	760.2	756.6	751.1	752.3	753.4	756.6	752.2
30.0	699.4	705.8	722.8	719.1	716.6	711.5	712.3	712.1	715.4	711.1
33.0	655.5	660.3	676.3	673.4	672.9	668.8	668.8	666.5	669.2	665.6
36.0	608.3	611.0	625.2	623.1	625.7	622.8	621.9	616.8	618.4	615.5
39.0	558.0	557.8	569.8	569.1	574.6	573.9	571.2	563.3	563.2	561.9
42.0	505.3	501.9	511.6	511.9	520.9	522.0	518.1	506.9	505.4	505.2
45.0	451.0	444.8	451.9	453.4	465.5	468.3	463.3	449.1	446.5	447.2
48.0	396.7	387.9	392.9	395.3	409.4	414.1	407.9	392.0	388.0	389.9
51.0	343.7	333.4	336.3	339.3	354.6	360.1	353.7	336.8	332.2	334.6
54.0	293.1	282.3	283.8	286.9	302.4	308.3	301.9	285.1	280.3	282.9
57.0	246.2	235.6	236.2	239.3	253.8	259.8	253.7	238.1	233.4	236.2
60.0	203.8	194.1	194.1	196.6	209.9	215.1	210.1	195.9	192.1	194.3
63.0	166.1	157.9	157.8	159.9	171.0	175.7	171.3	159.6	156.3	158.3
66.0	133.4	127.2	127.0	128.2	137.3	140.8	137.8	128.2	125.9	127.1
69.0	105.4	100.6	100.4	101.3	108.5	111.0	108.9	101.5	99.71	100.7
72.0	81.65	78.24	78.22	78.75	84.07	85.89	84.52	79.05	77.86	78.48
75.0	61.69	59.55	59.61	59.84	63.71	64.82	64.11	60.15	59.48	59.81
78.0	45.14	43.62	43.78	44.10	46.60	47.45	46.94	44.44	43.85	44.21
81.0	30.79	29.93	30.19	30.36	32.08	32.56	32.40	30.73	30.42	30.59
84.0	18.39	18.00	18.22	18.41	19.52	19.81	19.81	18.84	18.64	18.76
87.0	7.810	7.842	8.163	8.275	8.791	8.983	9.146	8.782	8.739	8.780
90.0	0.2267	0.2184	0.2329	0.2953	0.3660	0.4845	0.6176	0.7258	0.7528	0.7507
G/C	300.0	315.0	330.0	345.0						
0.0	939.6	938.9	938.1	937.3						
3.0	937.4	936.2	935.4	934.3						
6.0	929.2	927.5	926.9	925.4						
9.0	915.5	913.3	912.8	911.4						
12.0	897.0	894.3	894.1	893.1						
15.0	874.2	870.7	871.1	870.6						
18.0	847.8	843.6	844.5	844.9						
21.0	817.9	813.3	814.7	815.8						

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	784.8	780.0	781.7	783.3
27.0	748.5	743.8	745.6	747.1
30.0	708.7	704.6	706.4	706.9
33.0	665.2	662.5	663.8	662.6
36.0	618.2	617.1	617.9	614.2
39.0	567.6	568.8	568.5	562.1
42.0	514.3	517.6	516.5	507.1
45.0	459.5	464.6	462.8	450.4
48.0	404.1	411.1	408.3	394.3
51.0	350.1	358.1	354.7	339.6
54.0	298.6	306.9	303.4	288.1
57.0	250.8	258.9	255.4	241.0
60.0	207.6	214.7	211.8	198.5
63.0	169.5	175.6	173.0	161.8
66.0	136.4	141.1	139.2	129.9
69.0	108.0	111.5	110.1	102.7
72.0	83.96	86.32	85.37	79.80
75.0	63.76	65.25	64.69	60.54
78.0	46.75	47.78	47.25	44.56
81.0	32.29	32.78	32.51	30.64
84.0	19.77	19.97	19.78	18.61
87.0	9.215	9.111	9.069	8.520
90.0	0.6551	0.5760	0.4430	0.3494

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: