

LED Downlight CATO Series C8F-20S-830



Light Output Ratio:	100.0%	
Luminaire Power:	21.51 W	
SHR Nominal:	1.00	Calculated using the TM5
SHR Maximum:	1.15	fine grid method.

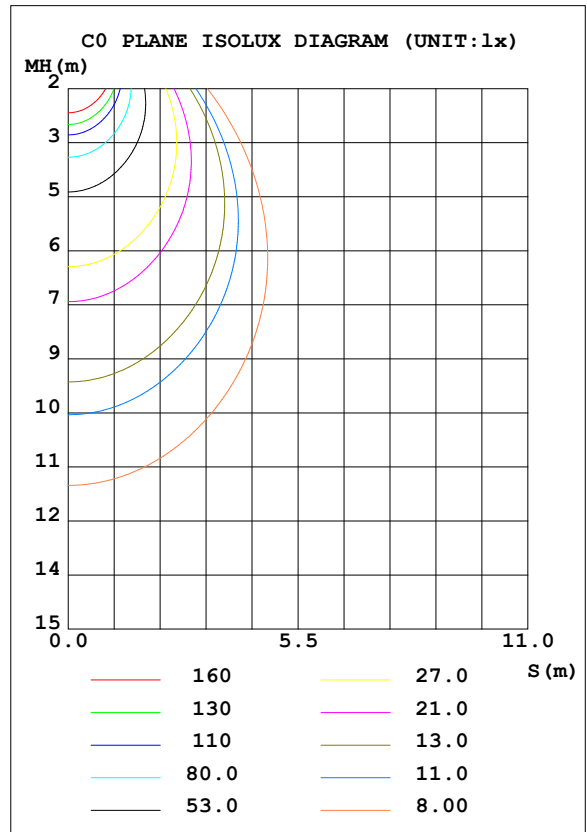
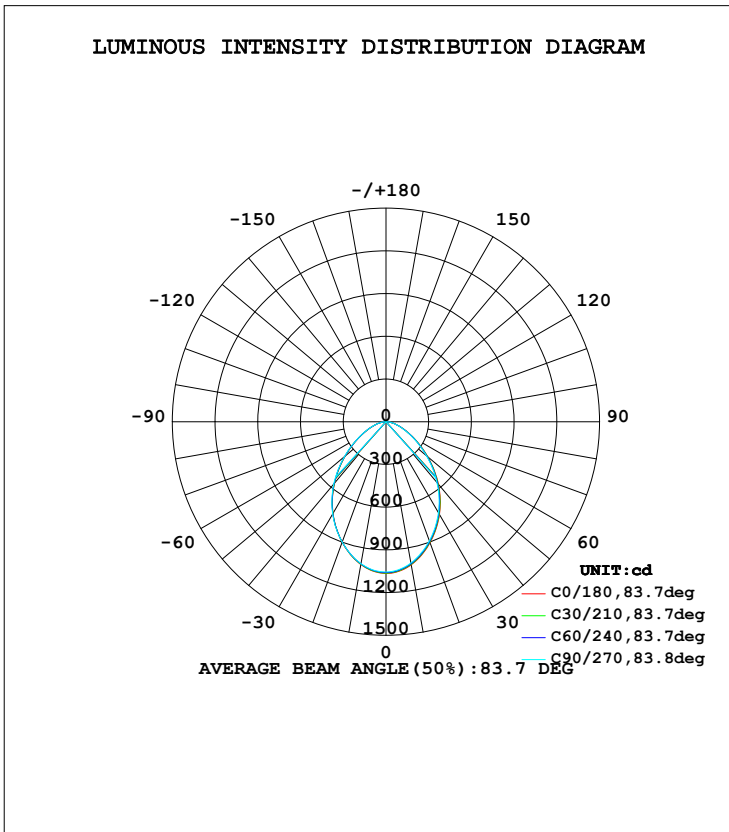
C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: Cao Chengpei  
 Test Date: 2014-09-02

$\gamma$  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:0.1018A P:21.51W PF:0.9593 Lamp Flux:2033.92x1 lm		
NAME: C8F-20S-830	TYPE:Downlight	SERIAL No.:
SPEC.:3000K	DIM.: φ230mm*H76mm	
MFR.: E-LITE LIGHTING CO.,LTD.		

DATA OF LAMP		PHOTOMETRIC DATA Eff: 94.54 lm/W			
MODEL	SAMSUNG-3000K	I <sub>max</sub> (cd)	1066	S/MH (C0/180)	1.07
NOMINAL POWER (W)	22	LOR (%)	100.0	S/MH (C90/270)	1.08
RATED VOLTAGE (V)	220	TOTAL FLUX (lm)	2033.9	η UP, DN (C0-180)	0.0, 49.8
NOMINAL FLUX (lm)	2033.92	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 50.2
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.00
TEST VOLTAGE (V)	220	η down (%)	100.0	CIBSE SHR MAX	1.15



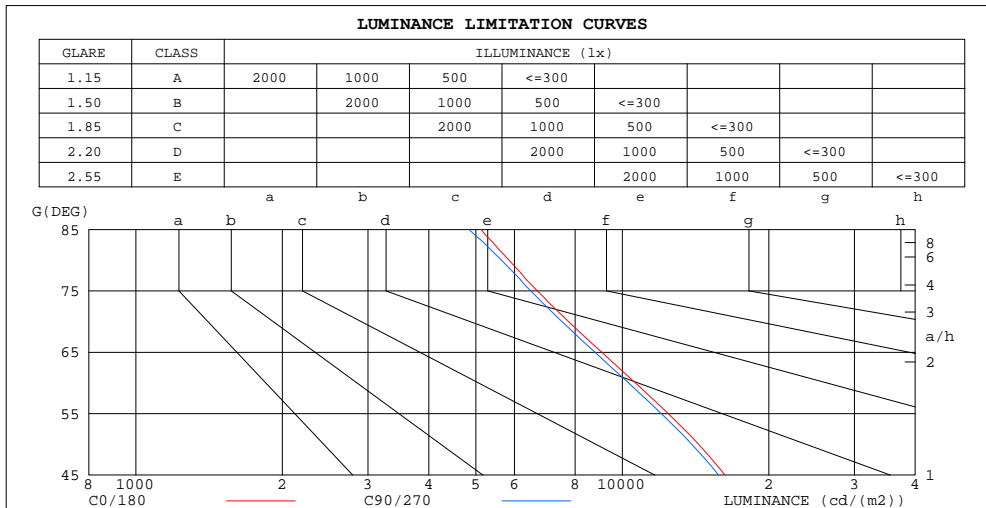
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**ZONAL FLUX DIAGRAM  
AND LUMINANCE LIMITATION CURVES**

**ZONAL FLUX DIAGRAM:**

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	$\#lum, lamp$
10	1020	1015	1007	1006	1018	1014	1012	1010	0- 10	98.75	98.75	4.86,4.86
20	904.5	899.3	890.6	889.2	900.3	897.6	899.4	896.8	10- 20	269.9	368.6	18.1,18.1
30	751.8	746.5	737.0	735.5	744.5	743.7	749.0	746.8	20- 30	378.5	747.1	36.7,36.7
40	572.8	567.9	557.6	556.1	562.7	563.1	570.5	569.9	30- 40	409.8	1157	56.9,56.9
50	383.1	379.7	371.0	369.3	373.5	374.3	381.2	381.6	40- 50	361.8	1519	74.7,74.7
60	221.0	219.5	213.9	212.6	215.0	215.3	220.3	220.2	50- 60	261.3	1780	87.5,87.5
70	110.1	109.9	106.8	106.2	107.4	107.5	110.2	109.9	60- 70	156.7	1937	95.2,95.2
80	42.17	42.08	40.70	40.38	40.96	41.18	42.39	42.37	70- 80	76.20	2013	99,99
90	0.3681	0.2620	0.2558	0.2537	0.2225	0.2454	0.4783	0.7757	80- 90	20.92	2034	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	5126	4839
80	5848	5644
75	6688	6486
70	7752	7518
65	9077	8791
60	10642	10300
55	12428	12027
50	14350	13897
45	16248	15769

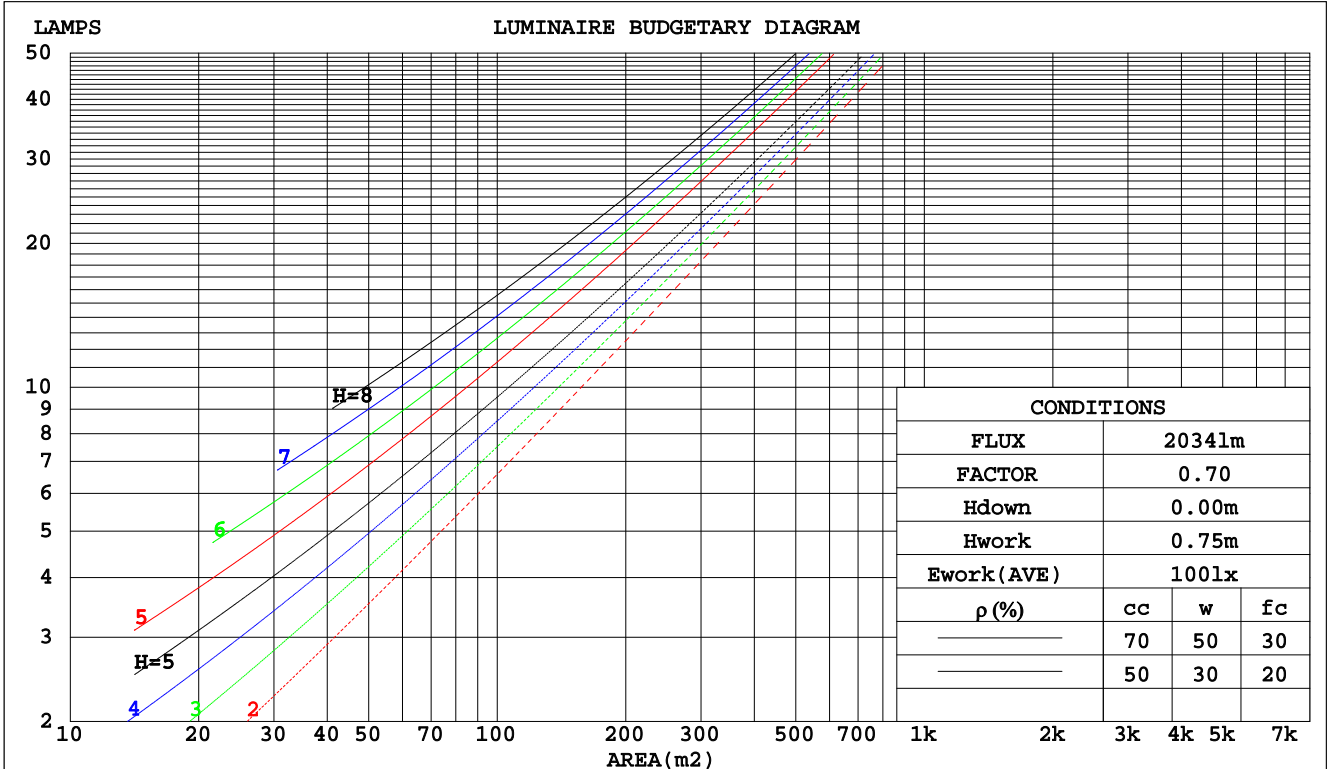
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CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:220.3V I:0.1018A P:21.51W PF:0.9593 Lamp Flux:2033.92x1 lm		
NAME: C8F-20S-830	TYPE:Downlight	SERIAL No.:
SPEC.:3000K	DIM.: φ230mm*H76mm	
MFR.: E-LITE LIGHTING CO.,LTD.		

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															
	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	1.06	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	.74	.70	.77	.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	.63	.54	.49	.62	.54	.48	.60	.53	.48	.58	.52	.48	.57	.51	.47	.45
7.0	.57	.49	.43	.56	.49	.43	.55	.48	.43	.54	.47	.43	.52	.47	.42	.41
8.0	.53	.45	.39	.52	.44	.39	.51	.44	.39	.49	.43	.39	.48	.43	.39	.37
9.0	.49	.41	.36	.48	.41	.36	.47	.40	.36	.46	.40	.35	.45	.39	.35	.33
10.0	.45	.38	.33	.45	.37	.33	.44	.37	.33	.43	.37	.32	.42	.36	.32	.31



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WEC AND CCEC

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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						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	.136	.042	.235	.131	.041	.225	.126	.039	.215	.122	.038	
3.0	.237	.126	.038	.232	.124	.037	.222	.120	.037	.213	.116	.036	.204	.113	.035	
4.0	.222	.115	.034	.217	.114	.034	.208	.110	.033	.200	.107	.032	.192	.105	.032	
5.0	.207	.106	.031	.203	.104	.030	.195	.102	.030	.188	.099	.030	.181	.097	.029	
6.0	.194	.097	.028	.190	.096	.028	.183	.094	.027	.177	.092	.027	.171	.090	.027	
7.0	.182	.090	.026	.179	.089	.025	.173	.087	.025	.167	.086	.025	.161	.084	.025	
8.0	.171	.084	.024	.168	.083	.023	.163	.081	.023	.158	.080	.023	.153	.078	.023	
9.0	.162	.078	.022	.159	.077	.022	.154	.076	.022	.149	.075	.021	.145	.074	.021	
10.0	.153	.073	.020	.150	.073	.020	.146	.071	.020	.142	.070	.020	.138	.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	.057	.046	.036	.018	.015	.012	
3.0	.158	.114	.079	.136	.098	.068	.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	.031	.106	.059	.027	.073	.042	.019	.043	.025	.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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 Humidity:53.0%  
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 Remarks:

UGR(Unified Glare Rating) Table

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SPEC.:3000K	DIM.: φ230mm*H76mm	
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	21.1	22.4	21.3	22.6	22.8	20.9	22.3	21.2	22.5	22.7
3H	21.8	23.1	22.1	23.3	23.6	21.7	23.0	22.0	23.2	23.4
4H	22.1	23.3	22.4	23.6	23.8	22.0	23.2	22.3	23.4	23.7
6H	22.3	23.5	22.7	23.7	24.0	22.2	23.3	22.5	23.6	23.8
8H	22.4	23.5	22.7	23.7	24.0	22.2	23.3	22.6	23.6	23.9
12H	22.4	23.5	22.8	23.7	24.0	22.3	23.3	22.6	23.6	23.9
4H 2H	21.4	22.6	21.7	22.8	23.1	21.3	22.5	21.6	22.7	22.9
3H	22.3	23.4	22.7	23.7	24.0	22.2	23.3	22.6	23.5	23.8
4H	22.7	23.7	23.1	24.0	24.3	22.6	23.6	23.0	23.9	24.2
6H	23.0	23.9	23.4	24.2	24.6	22.9	23.8	23.3	24.1	24.5
8H	23.2	23.9	23.6	24.3	24.7	23.0	23.8	23.4	24.2	24.5
12H	23.2	23.9	23.6	24.3	24.7	23.1	23.8	23.5	24.2	24.6
8H 4H	22.9	23.6	23.3	24.0	24.4	22.7	23.5	23.2	23.9	24.3
6H	23.3	23.9	23.7	24.3	24.7	23.2	23.8	23.6	24.2	24.6
8H	23.4	24.0	23.9	24.4	24.9	23.3	23.9	23.8	24.3	24.8
12H	23.6	24.1	24.1	24.5	25.0	23.4	23.9	23.9	24.4	24.9
12H 4H	22.8	23.6	23.3	23.9	24.3	22.7	23.4	23.2	23.8	24.2
6H	23.3	23.9	23.8	24.3	24.7	23.2	23.7	23.6	24.2	24.6
8H	23.5	24.0	24.0	24.4	24.9	23.4	23.9	23.9	24.3	24.8
Variations with the observer position at spacings:										
S = 1.0H	+ 0.4 / - 0.5					+ 0.4 / - 0.5				
1.5H	+ 0.2 / - 0.2					+ 0.2 / - 0.2				
2.0H	+ 0.7 / - 0.6					+ 0.7 / - 0.6				

CIE Pub.117 Corrected 2034 lm Total Lamp Luminous Flux.(8log(F/F0) = 2.5)

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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	54	48	64	54	48	63	54	48	42
0.80	74	64	58	74	64	58	72	63	57	51
1.00	82	73	67	81	72	66	79	73	66	60
1.25	89	80	74	88	79	74	85	78	73	66
1.50	93	85	79	92	84	79	89	83	78	71
2.00	99	92	87	98	91	86	94	89	84	77
2.50	102	96	91	101	95	90	97	92	88	81
3.00	105	100	95	103	98	94	99	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	98	90
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

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ISOCANDELA DIAGRAM

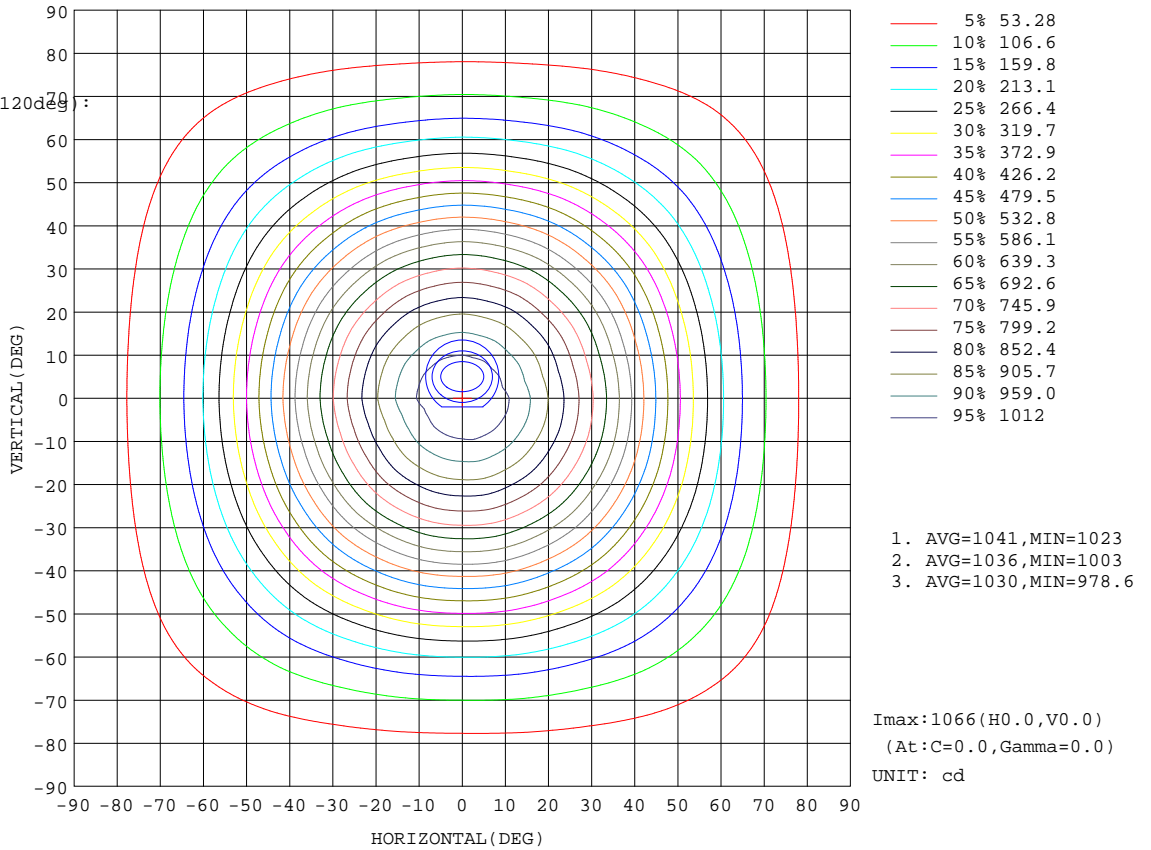
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Conical surface Flux(90deg):

1348.2 lm  
%lum = 66.3%  
%lamp = 66.3%

Conical surface Flux(120deg):

1780.1 lm  
%lum = 87.5%  
%lamp = 87.5%



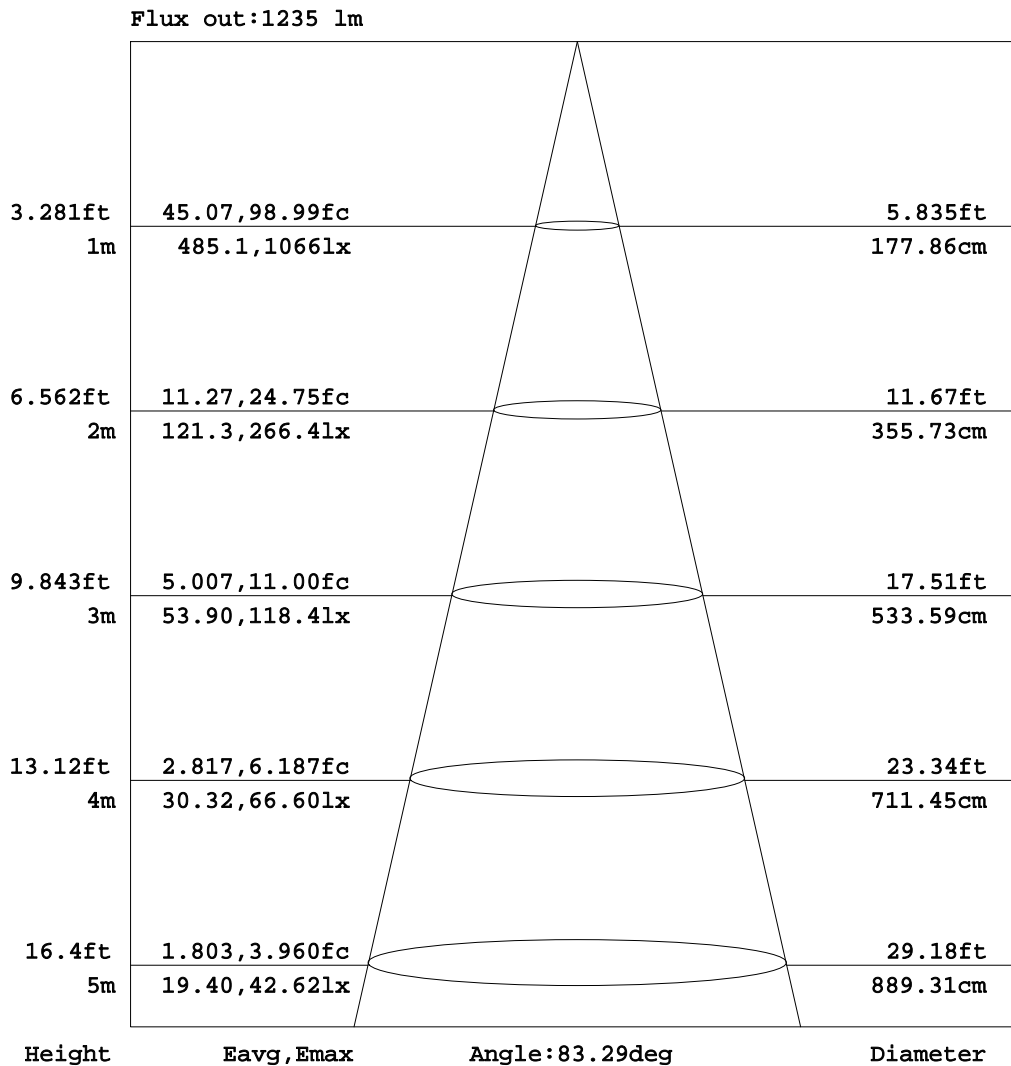
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**AAI Figure**

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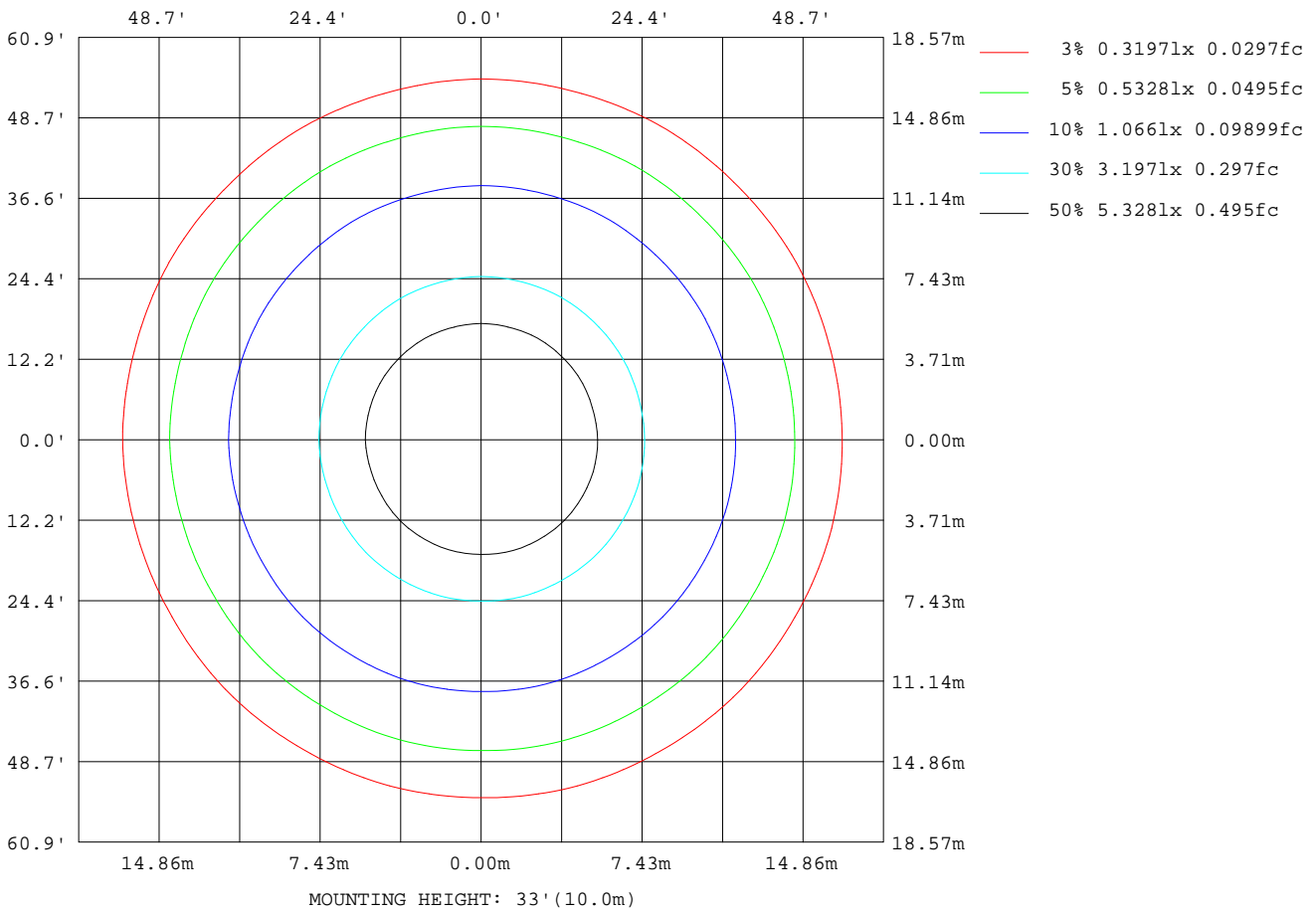
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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ISOLUX DIAGRAM

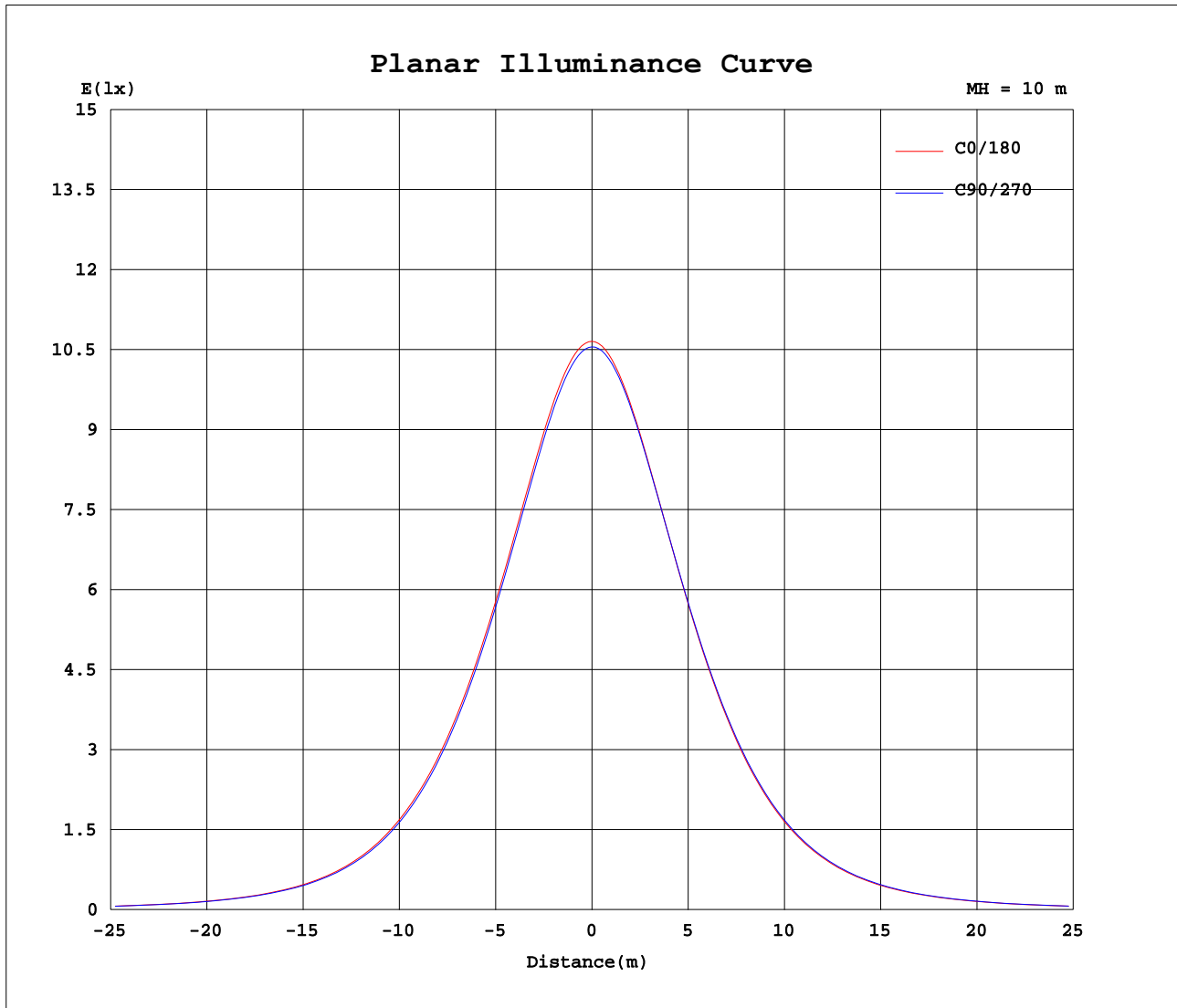
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Planar Illuminance Curve



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LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.3V I:0.1018A P:21.51W PF:0.9593 Lamp Flux:2033.92x1 lm		
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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	1066	1065	1063	1061	1059	1058	1055	1054	1054	1054	1053	1053	1066	1065	1063	1061	1059	1058	1055
5	1054	1053	1051	1049	1047	1046	1042	1041	1041	1041	1039	1040	1053	1052	1051	1048	1047	1046	1045
10	1020	1020	1017	1015	1012	1012	1007	1006	1006	1006	1004	1005	1018	1016	1017	1014	1014	1012	1012
15	969	969	965	963	960	960	955	954	953	954	951	953	966	964	964	962	963	961	962
20	905	904	901	899	896	895	891	890	889	889	886	888	900	899	900	898	899	898	899
25	832	832	828	826	822	822	817	817	816	816	813	815	826	824	826	824	827	826	828
30	752	752	748	747	742	742	737	737	735	735	732	734	744	743	745	744	747	746	749
35	665	666	661	660	655	655	650	650	648	649	645	647	656	655	658	656	660	659	663
40	573	573	569	568	563	563	558	558	555	556	552	554	563	561	564	563	567	566	570
45	477	478	474	473	468	468	463	464	461	462	458	460	467	465	469	467	471	471	475
50	383	384	380	380	375	375	371	372	369	369	366	367	373	372	375	374	378	377	381
55	296	297	294	294	290	290	286	287	284	285	282	283	288	287	290	289	292	291	295
60	221	222	219	220	217	217	214	214	212	213	210	211	215	214	216	215	218	217	220
65	159	160	158	158	156	157	154	154	153	153	151	152	155	154	156	155	157	157	159
70	110	111	109	110	108	109	107	107	106	106	104	106	107	106	108	107	109	109	110
75	71.9	72.8	71.5	72.0	70.7	71.3	69.7	70.0	68.8	69.4	68.0	69.0	70.2	69.4	70.6	70.2	71.5	71.0	72.2
80	42.2	42.6	41.9	42.1	41.3	41.6	40.7	40.8	40.1	40.4	39.6	40.1	41.0	40.6	41.2	41.2	41.9	41.7	42.4
85	18.6	18.8	18.3	18.4	17.9	18.0	17.5	17.5	17.1	17.3	16.9	17.2	17.8	17.5	18.0	17.9	18.4	18.3	18.8
90	0.37	0.31	0.28	0.26	0.26	0.25	0.26	0.25	0.26	0.25	0.26	0.26	0.22	0.22	0.23	0.25	0.29	0.39	0.48

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:Cao Chengpei  
 Test Date:2014-09-02

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:0.1018A P:21.51W PF:0.9593 Lamp Flux:2033.92x1 lm		
NAME: C8F-20S-830	TYPE:Downlight	SERIAL No.:
SPEC.:3000K	DIM.: φ230mm*H76mm	
MFR.: E-LITE LIGHTING CO.,LTD.		

Table--2

UNIT: cd

C (DEG) γ (DEG)	285	300	315	330	345												
0	1054	1054	1054	1053	1053												
5	1043	1044	1043	1044	1042												
10	1010	1012	1010	1012	1009												
15	960	962	959	962	959												
20	897	899	897	899	896												
25	826	828	825	828	824												
30	747	750	747	749	746												
35	661	664	661	664	660												
40	569	572	570	572	569												
45	474	478	475	478	474												
50	380	384	382	384	381												
55	294	297	295	297	295												
60	219	222	220	222	220												
65	158	160	159	161	159												
70	110	111	110	111	110												
75	71.6	72.8	71.9	73.0	71.9												
80	42.2	42.8	42.4	42.9	42.3												
85	18.7	19.0	18.8	19.1	18.8												
90	0.60	0.68	0.78	0.78	0.79												

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:Cao Chengpei  
 Test Date:2014-09-02

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	1066	1065	1063	1061	1059	1058	1055	1054	1054	1054
3.0	1062	1061	1059	1056	1054	1053	1050	1049	1049	1049
6.0	1049	1048	1046	1044	1041	1040	1037	1036	1036	1035
9.0	1029	1028	1025	1024	1021	1020	1016	1015	1014	1015
12.0	1002	1001	998.3	996.4	993.3	992.5	988.2	987.3	986.8	986.9
15.0	968.6	968.6	965.3	963.5	960.1	959.6	955.0	954.3	953.4	953.8
18.0	931.2	931.2	927.8	926.3	922.6	922.2	917.5	917.0	915.8	916.1
21.0	890.4	890.3	886.8	885.3	881.6	881.1	876.4	876.0	874.8	875.2
24.0	846.6	846.7	843.0	841.4	837.7	837.0	832.5	832.2	830.7	831.1
27.0	800.5	800.5	796.6	795.2	791.1	790.6	785.9	785.8	784.0	784.6
30.0	751.8	751.9	748.0	746.5	742.2	741.6	737.0	737.0	735.1	735.5
33.0	700.6	700.8	696.7	695.2	690.8	690.1	685.5	685.5	683.4	683.8
36.0	647.1	647.7	643.3	642.1	637.1	637.0	631.8	632.4	629.6	630.4
39.0	591.7	592.3	588.1	586.8	582.0	581.4	576.7	577.0	574.4	574.9
42.0	534.8	535.4	531.3	530.0	525.2	524.8	520.0	520.4	517.8	518.4
45.0	477.1	478.2	473.9	473.1	468.1	468.0	463.0	463.9	460.9	461.6
48.0	420.1	421.0	417.2	416.3	411.9	411.6	407.1	407.7	404.9	405.5
51.0	365.0	365.9	362.4	361.7	357.6	357.5	353.3	353.8	351.2	351.7
54.0	312.6	313.8	310.5	310.4	306.4	306.6	302.5	303.1	300.5	301.1
57.0	264.5	265.6	262.7	262.5	259.3	259.5	256.0	256.2	254.0	254.5
60.0	221.0	222.0	219.4	219.5	216.7	217.1	213.9	214.2	212.0	212.6
63.0	182.3	183.3	181.1	181.3	178.9	179.4	176.4	176.7	174.8	175.4
66.0	148.4	149.4	147.5	147.9	145.8	146.3	143.7	144.1	142.2	142.9
69.0	119.1	120.3	118.3	119.0	117.0	117.5	115.4	115.7	114.1	114.8
72.0	93.66	94.61	93.16	93.58	92.12	92.68	90.82	91.15	89.74	90.35
75.0	71.88	72.77	71.52	71.96	70.71	71.27	69.71	70.03	68.80	69.42
78.0	53.32	53.83	52.97	53.21	52.38	52.66	51.58	51.69	50.88	51.20
81.0	36.99	37.39	36.73	36.87	36.21	36.44	35.60	35.68	35.05	35.31
84.0	22.79	23.12	22.57	22.68	22.15	22.30	21.69	21.77	21.25	21.48
87.0	10.96	11.10	10.79	10.80	10.46	10.50	10.13	10.13	9.829	9.883
90.0	0.3681	0.3099	0.2828	0.2620	0.2599	0.2537	0.2558	0.2516	0.2558	0.2537
G/C	150.0	165.0	180.0	195.0	210.0	225.0	240.0	255.0	270.0	285.0
0.0	1053	1053	1066	1065	1063	1061	1059	1058	1055	1054
3.0	1048	1048	1061	1060	1059	1056	1055	1053	1052	1050
6.0	1034	1035	1048	1046	1046	1043	1042	1041	1040	1038
9.0	1012	1014	1027	1025	1025	1022	1022	1020	1020	1018
12.0	984.4	986.2	999.0	997.3	997.5	995.0	995.5	993.5	994.0	991.7
15.0	950.9	953.0	965.6	963.6	964.5	961.9	962.9	960.9	962.1	959.6
18.0	913.2	915.4	927.7	925.8	927.0	924.6	926.0	924.3	925.8	923.4
21.0	872.1	874.3	886.1	884.3	885.9	883.5	885.6	884.0	885.9	883.5
24.0	828.1	830.1	841.6	839.8	841.7	839.7	842.0	840.7	843.0	840.8
27.0	781.4	783.6	794.2	792.7	794.7	793.1	795.7	794.7	797.4	795.3
30.0	732.3	734.4	744.5	742.8	745.5	743.7	746.8	745.9	749.0	747.1
33.0	680.7	682.6	692.3	690.8	693.4	692.1	695.3	694.9	698.1	696.5
36.0	626.9	629.0	638.1	636.3	639.4	637.8	641.7	641.0	645.0	643.1
39.0	571.4	573.4	581.8	580.4	583.3	582.3	585.8	585.4	589.3	588.2
42.0	514.7	516.6	524.6	522.9	526.4	525.1	528.9	528.3	532.6	531.2
45.0	457.7	459.7	467.0	465.3	468.8	467.5	471.4	470.7	475.1	473.8
48.0	401.8	403.6	410.2	408.7	412.0	411.0	414.5	414.1	418.1	417.3
51.0	348.2	349.8	355.6	354.2	357.3	356.4	359.8	359.4	363.2	362.3
54.0	297.7	299.3	304.5	303.1	306.0	305.1	308.5	307.8	311.4	310.5
57.0	251.5	252.8	257.3	256.0	258.6	258.0	260.9	260.4	263.5	262.7
60.0	209.9	211.2	215.0	213.5	216.0	215.3	218.1	217.4	220.3	219.3
63.0	172.9	174.2	177.3	176.2	178.2	177.8	180.0	179.5	181.8	181.2
66.0	140.7	141.9	144.5	143.4	145.2	144.7	146.7	146.1	148.2	147.4
69.0	112.8	114.0	116.1	115.0	116.6	116.1	118.2	117.3	119.3	118.3
72.0	88.74	89.75	91.42	90.49	91.85	91.44	92.95	92.41	93.88	93.23
75.0	68.03	68.97	70.23	69.37	70.57	70.17	71.49	70.96	72.21	71.64
78.0	50.28	50.86	51.87	51.43	52.16	52.07	52.92	52.69	53.49	53.24
81.0	34.61	35.08	35.89	35.50	36.14	36.03	36.75	36.57	37.22	37.00
84.0	20.98	21.34	21.93	21.71	22.14	22.13	22.62	22.55	23.02	22.93
87.0	9.518	9.827	10.35	10.20	10.46	10.48	10.84	10.79	11.14	11.10
90.0	0.2558	0.2558	0.2225	0.2246	0.2267	0.2454	0.2870	0.3868	0.4783	0.6010
G/C	300.0	315.0	330.0	345.0						
0.0	1054	1054	1053	1053						
3.0	1051	1050	1050	1049						
6.0	1039	1038	1039	1037						
9.0	1020	1018	1020	1018						
12.0	993.6	991.5	993.7	991.1						
15.0	961.8	959.3	961.7	958.9						
18.0	925.7	923.0	925.6	922.4						
21.0	885.9	883.1	885.6	882.2						

C Range: 0 - 360DEG

C Interval: 15.0DEG

Test Speed: HIGH

Temperature: 25.3DEG

Operators: Cao Chengpei

Test Date: 2014-09-02

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	843.2	840.3	842.6	839.4
27.0	797.7	794.8	796.9	793.8
30.0	749.7	746.8	748.9	745.7
33.0	699.1	696.5	698.2	695.4
36.0	646.3	643.3	645.6	642.4
39.0	591.1	588.7	590.7	587.9
42.0	534.6	532.0	534.6	531.5
45.0	477.5	474.9	477.5	474.5
48.0	420.6	418.5	420.7	418.0
51.0	365.6	363.5	365.9	363.2
54.0	313.6	311.8	314.0	311.4
57.0	265.4	263.8	265.9	263.6
60.0	221.9	220.2	222.4	220.0
63.0	183.2	181.9	183.6	181.8
66.0	149.3	148.1	149.7	148.0
69.0	120.2	118.8	120.5	118.8
72.0	94.58	93.61	94.86	93.54
75.0	72.79	71.91	72.99	71.89
78.0	53.96	53.44	54.11	53.39
81.0	37.60	37.16	37.71	37.15
84.0	23.32	23.07	23.42	23.06
87.0	11.38	11.20	11.46	11.20
90.0	0.6779	0.7757	0.7798	0.7944

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: Cao Chengpei  
 Test Date: 2014-09-02

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: