

LED Downlight CATO Series CS8R-30S-830



Light Output Ratio:	100.0%	
Luminaire Power:	33.77 W	
SHR Nominal:	1.00	Calculated using the TM5
SHR Maximum:	1.15	fine grid method.

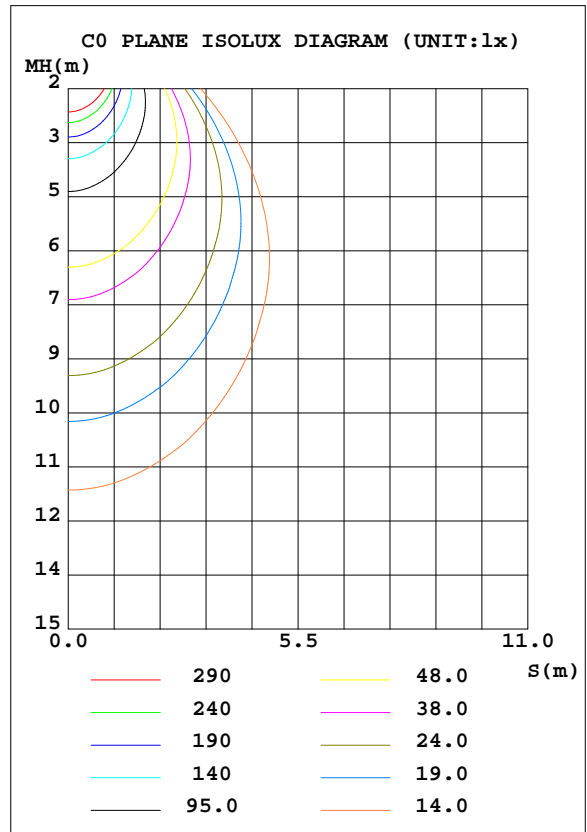
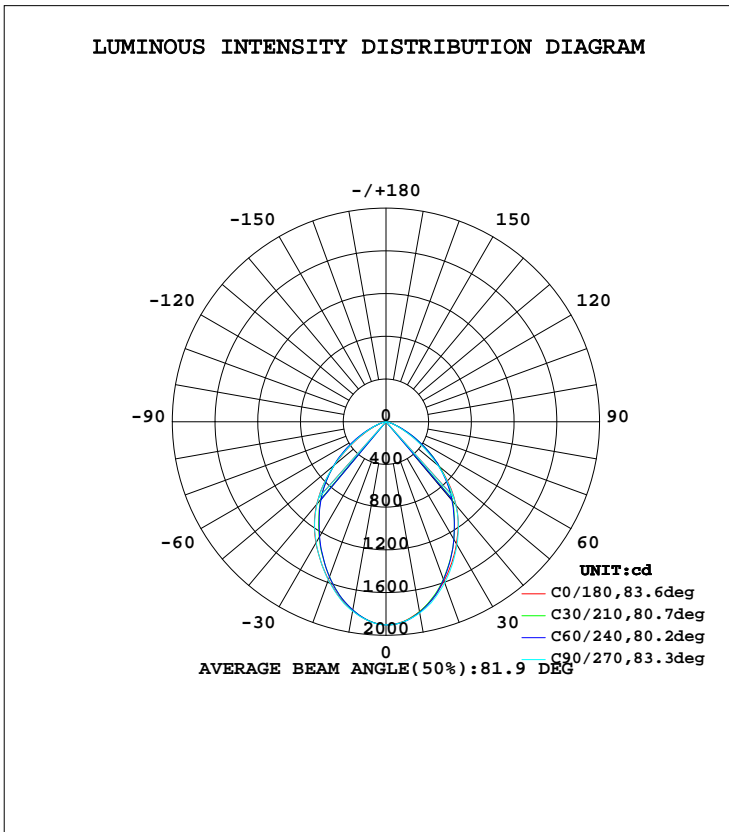
C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: Cao Chengpei  
 Test Date: 2014-08-30

$\gamma$  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:220.4V I:0.1551A P:33.77W PF:0.9888 Lamp Flux:3303.1lx1 lm		
NAME: CS8R-30S-830	TYPE:Downlight	SERIAL No.:
SPEC.:3000K	DIM.: L230mm*W230mm*H76mm	
MFR.: E-LITE LIGHTING CO.,LTD.		

DATA OF LAMP		PHOTOMETRIC DATA Eff: 97.81 lm/W			
MODEL	SAMSUNG-3000K	Imax(cd)	1902	S/MH(C0/180)	1.05
NOMINAL POWER(W)	36	LOR(%)	100.0	S/MH(C90/270)	1.05
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	3303.1	η UP, DN(C0-180)	0.0, 50.3
NOMINAL FLUX(lm)	3303.11	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0, 49.7
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



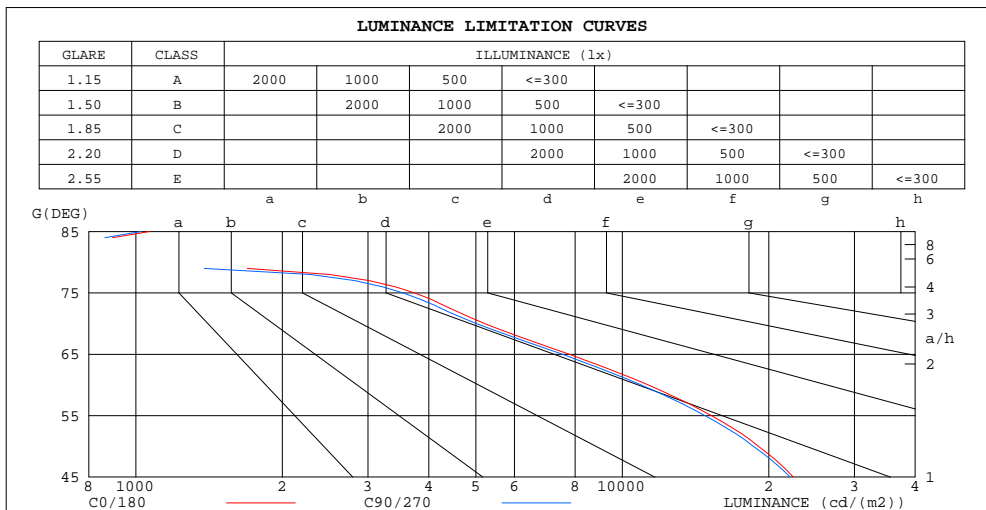
C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:Cao Chengpei  
 Test Date:2014-08-30

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:

**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	1806	1810	1818	1800	1798	1786	1801	1796	0- 10	176.6	176.6	5.35,5.35
20	1588	1575	1604	1560	1574	1539	1578	1552	10- 20	476.5	653.1	19.8,19.8
30	1320	1260	1330	1247	1312	1222	1307	1236	20- 30	655.4	1308	39.6,39.6
40	1021	955.3	1017	946.5	1009	925.3	1005	936.6	30- 40	704.3	2013	60.9,60.9
50	648.0	675.8	632.4	664.2	628.9	648.9	631.6	661.4	40- 50	624.6	2637	79.8,79.8
60	299.0	359.4	289.3	343.4	280.7	338.0	293.7	353.4	50- 60	421.8	3059	92.6,92.6
70	94.36	104.4	90.74	95.31	89.38	95.99	96.15	104.6	60- 70	187.4	3247	98.3,98.3
80	5.370	13.98	5.102	12.34	4.739	12.74	5.293	14.39	70- 80	50.29	3297	99.8,99.8
90	0.7861	0.5386	0.2849	0.2787	0.2100	0.2288	0.2163	0.7882	80- 90	6.225	3303	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	1068	1027
80	585	555
75	3741	3541
70	5215	5015
65	7774	7526
60	11305	10937
55	15250	14797
50	19057	18597
45	22472	22143

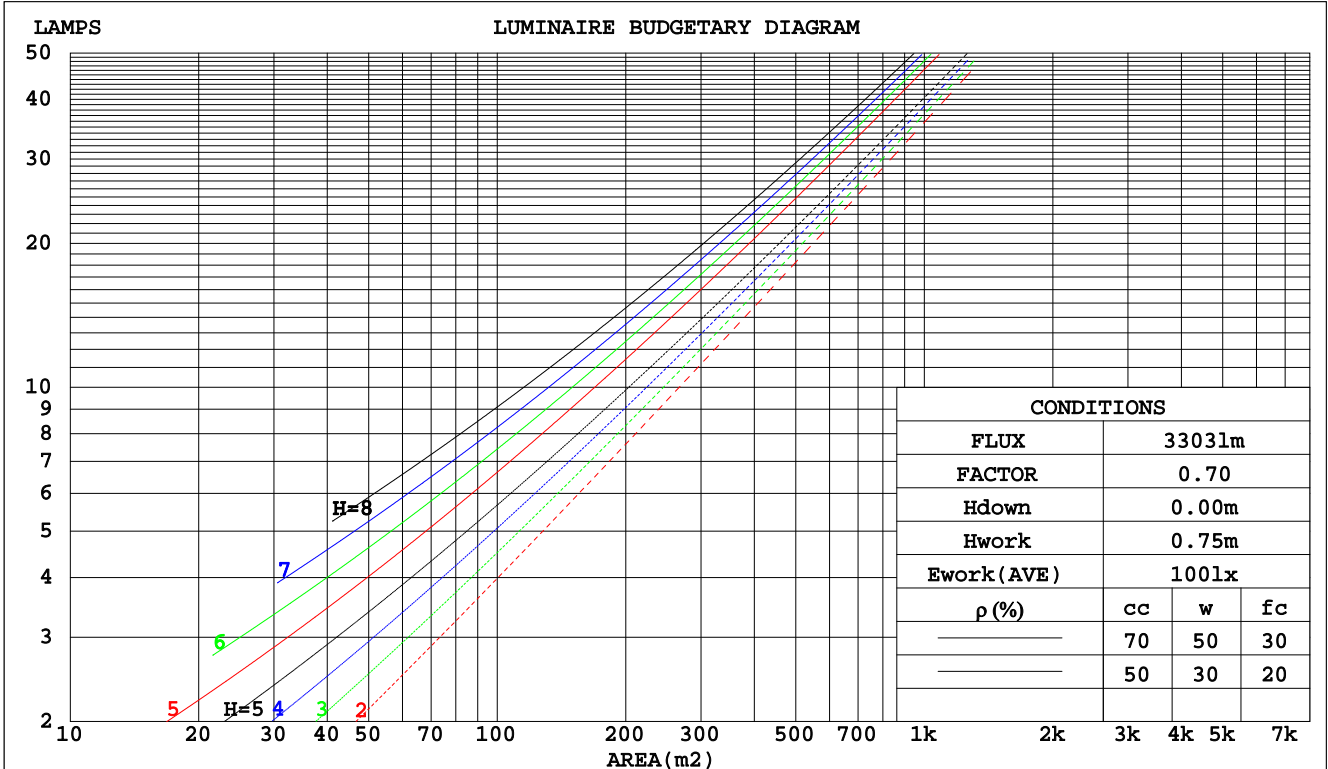
C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:Cao Chengpei  
 Test Date:2014-08-30

$\gamma$  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:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:220.4V I:0.1551A P:33.77W PF:0.9888 Lamp Flux:3303.1lx1 lm		
NAME: CS8R-30S-830	TYPE:Downlight	SERIAL No.:
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	1.08	1.04	1.01	1.05	1.02	.00	1.01	.99	.97	.97	.96	.94	.94	.92	.91	.89
2.0	.97	.91	.87	.95	.90	.86	.91	.87	.84	.88	.85	.82	.85	.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	.73	.67	.63	.71	.66	.62	.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	.57	.51	.62	.56	.51	.61	.55	.50	.59	.54	.50	.48
7.0	.60	.52	.46	.59	.51	.46	.57	.51	.46	.56	.50	.46	.55	.49	.45	.43
8.0	.55	.47	.42	.54	.47	.42	.53	.46	.42	.52	.46	.41	.51	.45	.41	.39
9.0	.51	.43	.38	.50	.43	.38	.49	.43	.38	.48	.42	.38	.47	.42	.38	.36
10.0	.47	.40	.35	.47	.40	.35	.46	.39	.35	.45	.39	.35	.44	.38	.35	.33



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:Cao Chengpei  
 Test Date:2014-08-30

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:

WEC AND CCEC

Test:U:220.4V I:0.1551A P:33.77W PF:0.9888 Lamp Flux:3303.11x1 lm		
NAME: CS8R-30S-830	TYPE:Downlight	SERIAL No.:
SPEC.:3000K	DIM.: L230mm*W230mm*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						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.238	.135	.043	.231	.132	.042	.218	.125	.040	.206	.119	.038	.195	.113	.036	
2.0	.232	.127	.039	.226	.125	.038	.215	.120	.037	.205	.115	.036	.196	.111	.035	
3.0	.222	.118	.035	.216	.116	.035	.207	.112	.034	.198	.108	.033	.189	.105	.032	
4.0	.210	.109	.032	.205	.107	.032	.196	.104	.031	.188	.101	.031	.181	.098	.030	
5.0	.198	.101	.029	.194	.099	.029	.186	.097	.029	.179	.094	.028	.172	.092	.028	
6.0	.186	.093	.027	.183	.092	.027	.176	.090	.026	.170	.088	.026	.164	.086	.026	
7.0	.176	.087	.025	.173	.086	.025	.167	.084	.024	.161	.082	.024	.156	.081	.024	
8.0	.166	.081	.023	.163	.080	.023	.158	.079	.023	.153	.077	.022	.148	.076	.022	
9.0	.157	.076	.021	.155	.075	.021	.150	.074	.021	.145	.073	.021	.141	.071	.021	
10.0	.149	.071	.020	.147	.071	.020	.142	.070	.020	.138	.069	.019	.134	.067	.019	

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	.103	.093	.083	.059	.054	.048	.019	.017	.016	
2.0	.164	.132	.105	.141	.114	.091	.096	.079	.063	.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	.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	.038	.079	.049	.027	.046	.029	.016	.015	.009	.005	
7.0	.127	.074	.036	.109	.064	.032	.075	.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	.115	.063	.027	.099	.054	.024	.069	.038	.017	.040	.023	.010	.013	.007	.003	
10.0	.110	.058	.024	.095	.051	.021	.066	.036	.015	.038	.021	.009	.012	.007	.003	

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:Cao Chengpei  
 Test Date:2014-08-30

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

Test:U:220.4V I:0.1551A P:33.77W PF:0.9888 Lamp Flux:3303.11x1 lm		
NAME: CS8R-30S-830	TYPE:Downlight	SERIAL No.:
SPEC.:3000K	DIM.: L230mm*W230mm*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	21.8	23.1	22.0	23.3	23.5	21.7	23.0	21.9	23.2	23.4
3H	22.0	23.2	22.3	23.4	23.6	21.9	23.1	22.2	23.3	23.5
4H	22.0	23.1	22.3	23.4	23.6	21.9	23.0	22.2	23.2	23.5
6H	21.9	23.0	22.2	23.2	23.5	21.8	22.9	22.1	23.1	23.4
8H	21.9	22.9	22.2	23.2	23.4	21.8	22.8	22.1	23.0	23.3
12H	21.8	22.8	22.2	23.1	23.4	21.7	22.7	22.1	23.0	23.3
4H 2H	22.0	23.1	22.3	23.4	23.6	21.9	23.0	22.2	23.3	23.5
3H	22.3	23.2	22.6	23.5	23.8	22.2	23.1	22.5	23.4	23.7
4H	22.3	23.2	22.7	23.5	23.8	22.2	23.1	22.6	23.4	23.7
6H	22.3	23.0	22.6	23.4	23.7	22.2	22.9	22.5	23.3	23.6
8H	22.2	22.9	22.6	23.3	23.7	22.1	22.8	22.5	23.2	23.6
12H	22.2	22.8	22.6	23.2	23.6	22.1	22.7	22.5	23.1	23.5
8H 4H	22.2	22.9	22.6	23.3	23.7	22.1	22.8	22.5	23.2	23.6
6H	22.2	22.8	22.6	23.2	23.6	22.1	22.7	22.5	23.1	23.5
8H	22.1	22.7	22.6	23.1	23.5	22.1	22.6	22.5	23.0	23.4
12H	22.1	22.6	22.6	23.0	23.5	22.0	22.5	22.5	22.9	23.4
12H 4H	22.2	22.8	22.6	23.2	23.6	22.1	22.7	22.5	23.1	23.5
6H	22.1	22.7	22.6	23.1	23.5	22.0	22.6	22.5	23.0	23.4
8H	22.1	22.5	22.6	23.0	23.5	22.0	22.5	22.5	22.9	23.4
Variations with the observer position at spacings:										
S = 1.0H	+ 0.7 / - 1.0					+ 0.7 / - 1.0				
1.5H	+ 0.4 / - 0.5					+ 0.4 / - 0.5				
2.0H	+ 1.5 / - 1.9					+ 1.5 / - 1.9				

CIE Pub.117 Corrected 3303 lm Total Lamp Luminous Flux.(8log(F/F0) = 4.2)

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:Cao Chengpei  
 Test Date:2014-08-30

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:

UTILIZATION FACTORS TABLE

Test:U:220.4V I:0.1551A P:33.77W PF:0.9888 Lamp Flux:3303.11x1 lm		
NAME: CS8R-30S-830	TYPE:Downlight	SERIAL No.:
SPEC.:3000K	DIM.: L230mm*W230mm*H76mm	
MFR.: E-LITE LIGHTING CO.,LTD.		

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	67	57	51	66	56	51	65	56	50	45
0.80	77	67	61	76	67	61	74	66	60	55
1.00	85	76	70	84	75	70	82	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	94	91	84
3.00	107	102	97	105	100	96	101	97	94	87
4.00	110	105	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: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:Cao Chengpei  
 Test Date:2014-08-30

$\gamma$  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:

ISOCANDELA DIAGRAM

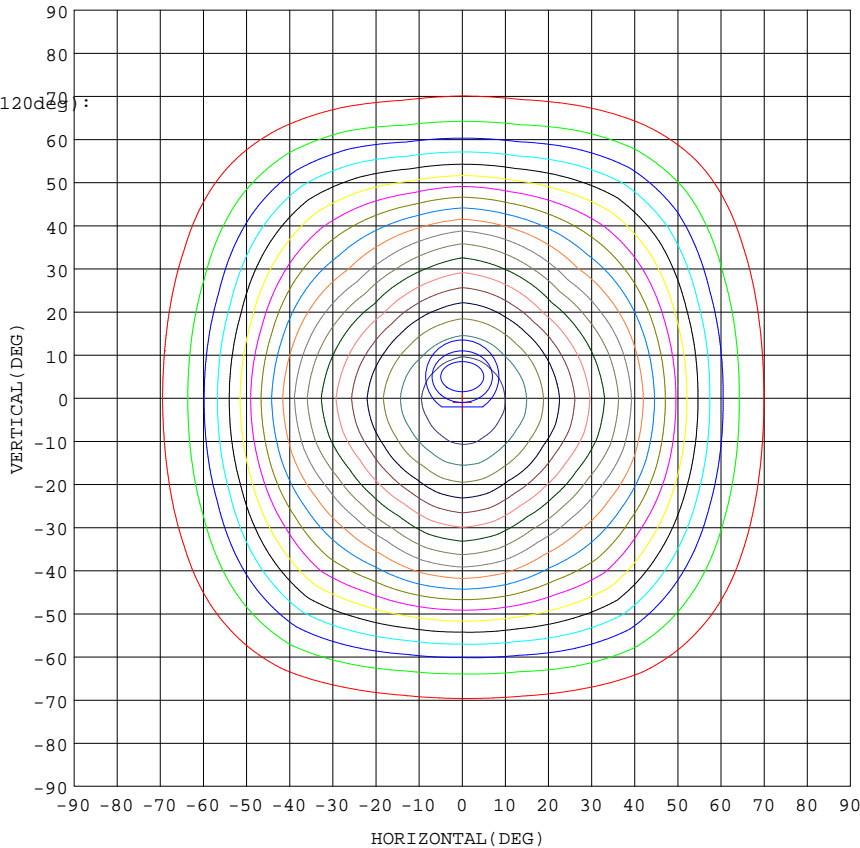
Test:U:220.4V I:0.1551A P:33.77W PF:0.9888 Lamp Flux:3303.11x1 lm		
NAME: CS8R-30S-830	TYPE:Downlight	SERIAL No.:
SPEC.:3000K	DIM.: L230mm*W230mm*H76mm	
MFR.: E-LITE LIGHTING CO.,LTD.		

Conical surface Flux(90deg):

2343.8 lm  
%lum = 71.0%  
%lamp = 71.0%

Conical surface Flux(120deg):

3059.2 lm  
%lum = 92.6%  
%lamp = 92.6%



1. AVG=1861,MIN=1821
2. AVG=1850,MIN=1779
3. AVG=1835,MIN=1731

Imax:1902(H0.0,V-1.0)  
(At:C=75.0,Gamma=1.0)  
UNIT: cd

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Cao Chengpei  
Test Date:2014-08-30

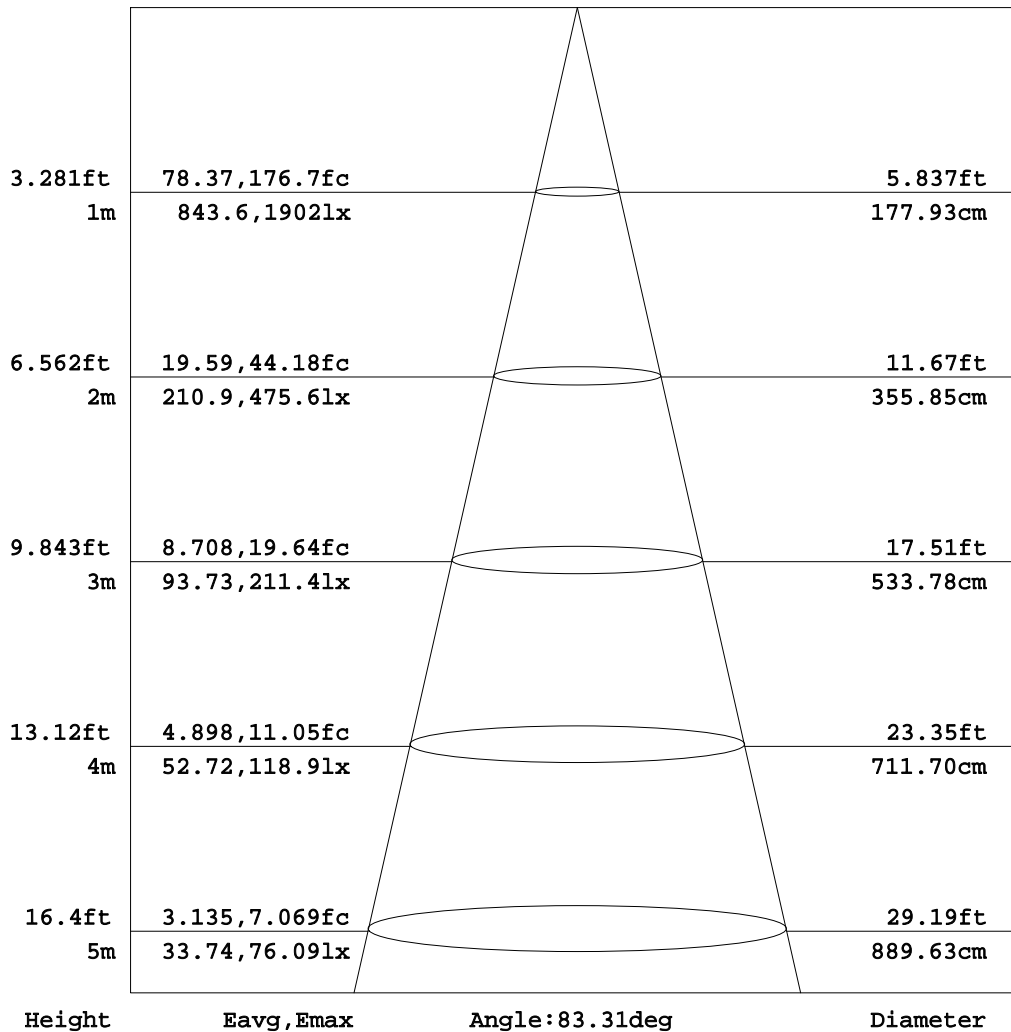
γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.288  
Humidity:53.0%  
Test Distance:5.780m [K=1.0000]  
Remarks:



AAI Figure

Test:U:220.4V I:0.1551A P:33.77W PF:0.9888 Lamp Flux:3303.11x1 lm		
NAME: CS8R-30S-830	TYPE:Downlight	SERIAL No.:
SPEC.:3000K	DIM.: L230mm*W230mm*H76mm	
MFR.: E-LITE LIGHTING CO.,LTD.		

Flux out:2149 lm



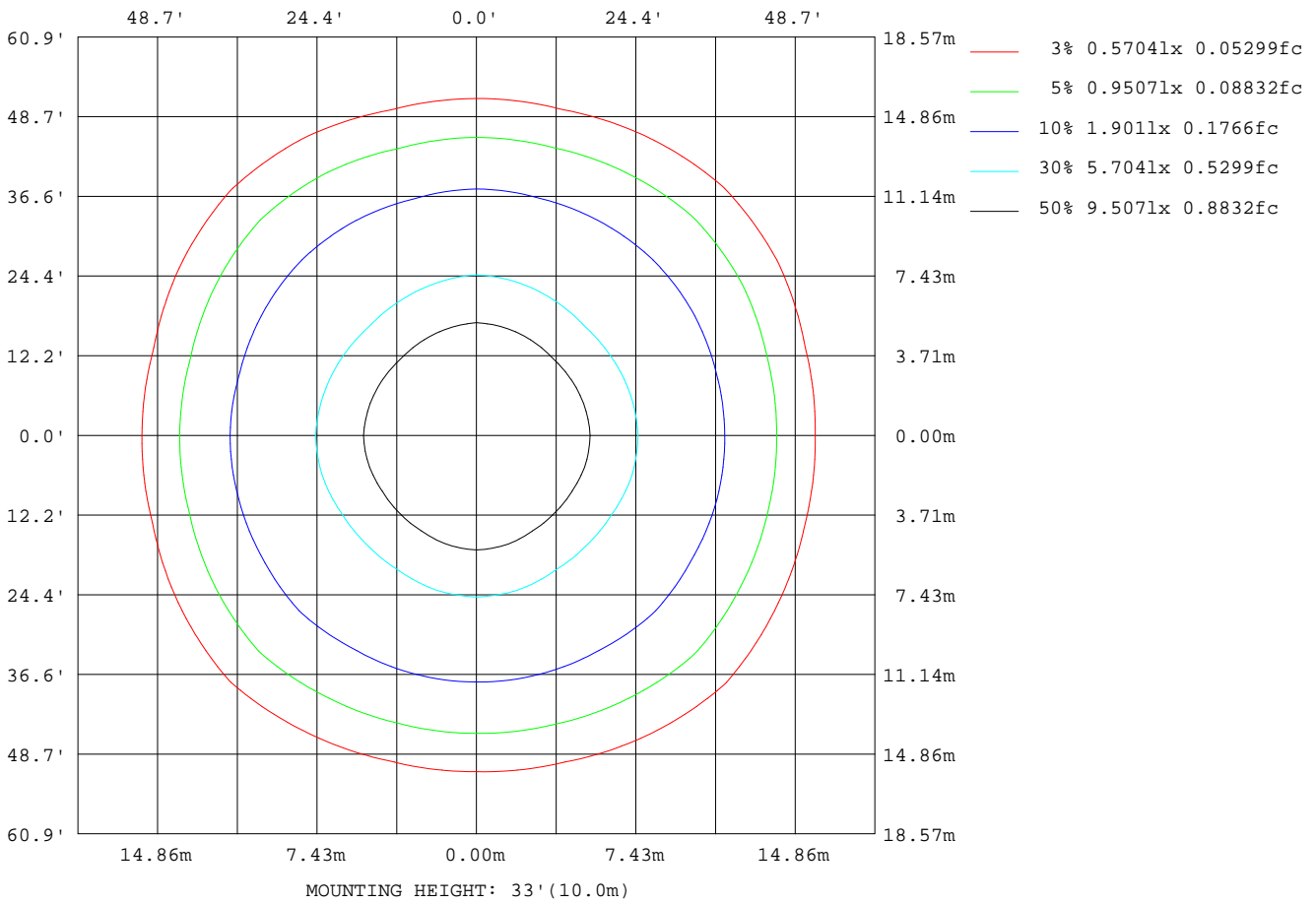
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Cao Chengpei  
Test Date:2014-08-30

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:

ISOLUX DIAGRAM

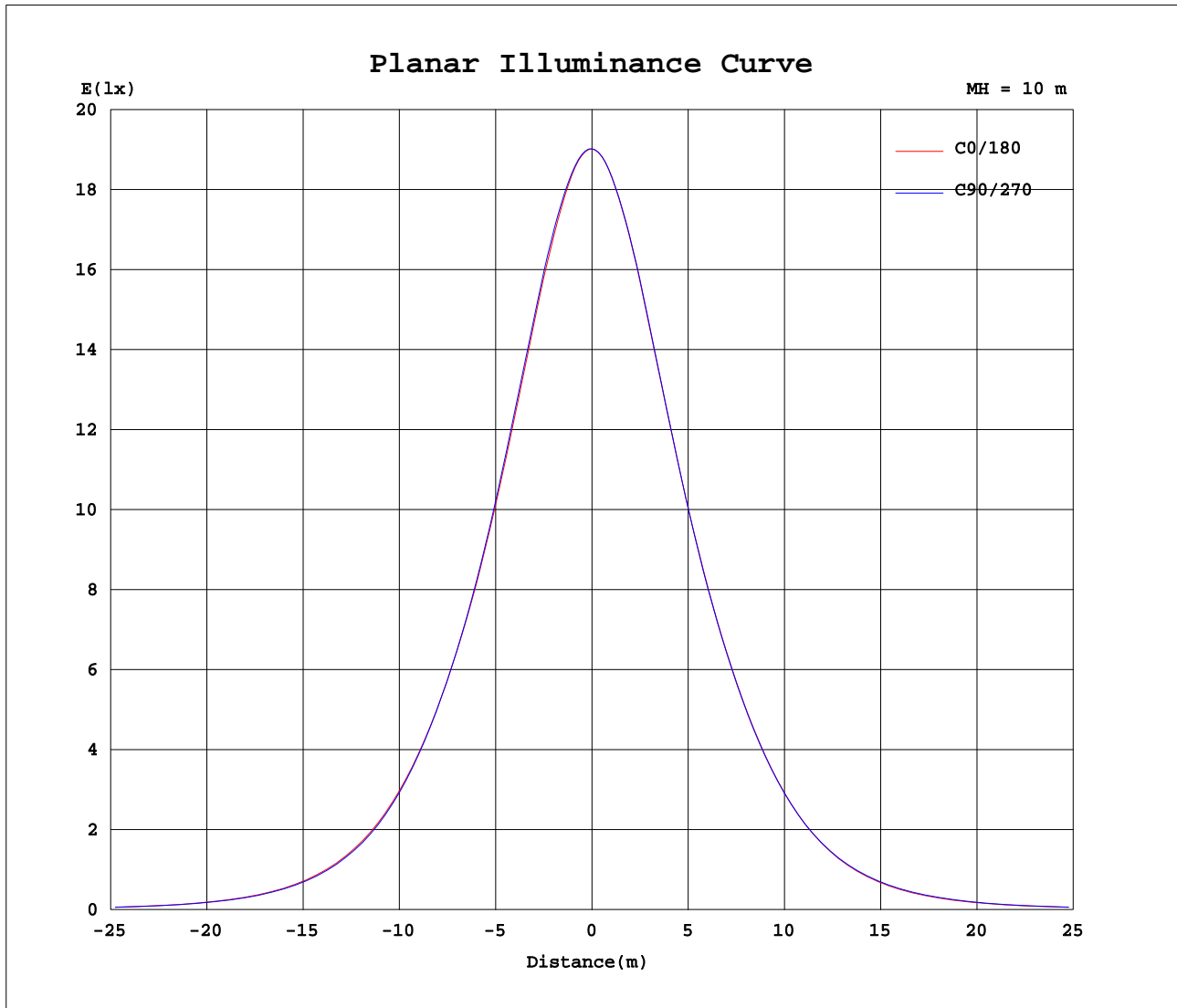
Test:U:220.4V I:0.1551A P:33.77W PF:0.9888 Lamp Flux:3303.11x1 lm		
NAME: CS8R-30S-830	TYPE:Downlight	SERIAL No.:
SPEC.:3000K	DIM.: L230mm*W230mm*H76mm	
MFR.: E-LITE LIGHTING CO.,LTD.		



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:Cao Chengpei  
 Test Date:2014-08-30

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:

Planar Illuminance Curve



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: Cao Chengpei  
 Test Date: 2014-08-30

$\gamma$  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:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.4V I:0.1551A P:33.77W PF:0.9888 Lamp Flux:3303.11x1 lm		
NAME: CS8R-30S-830	TYPE:Downlight	SERIAL No.:
SPEC.:3000K	DIM.: L230mm*W230mm*H76mm	
MFR.: E-LITE LIGHTING CO.,LTD.		

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	1901	1902	1902	1902	1902	1902	1902	1902	1902	1902	1902	1902	1901	1902	1902	1902	1902	1902	1902
5	1877	1879	1880	1882	1881	1883	1881	1880	1877	1875	1872	1872	1871	1869	1869	1868	1870	1869	1872
10	1806	1809	1807	1810	1812	1819	1818	1815	1805	1800	1795	1797	1798	1793	1791	1786	1790	1793	1801
15	1710	1712	1701	1701	1709	1724	1724	1717	1699	1692	1689	1695	1696	1688	1682	1673	1681	1690	1701
20	1588	1586	1570	1575	1575	1598	1604	1592	1564	1560	1555	1566	1574	1561	1545	1539	1547	1559	1578
25	1458	1449	1423	1418	1427	1459	1472	1452	1417	1404	1407	1431	1445	1424	1400	1382	1396	1418	1444
30	1320	1309	1272	1260	1271	1313	1330	1307	1260	1247	1254	1292	1312	1282	1252	1222	1244	1271	1307
35	1179	1165	1117	1103	1113	1162	1182	1157	1105	1093	1103	1148	1170	1137	1100	1069	1091	1127	1166
40	1021	1010	971	955	962	1003	1017	997	956	947	956	991	1009	979	952	925	946	971	1005
45	841	838	817	820	808	825	828	820	800	810	801	815	825	804	799	792	795	798	823
50	648	654	654	676	647	638	632	632	635	664	638	628	629	617	635	649	638	617	632
55	463	470	491	519	488	458	449	451	473	505	475	444	440	437	470	496	479	446	450
60	299	306	332	359	332	299	289	292	317	343	316	284	281	279	313	338	326	292	294
65	174	178	195	214	196	173	168	169	185	200	182	161	162	159	182	198	194	171	174
70	94.4	93.5	96.6	104	97.1	91.4	90.7	89.3	91.0	95.3	87.8	85.3	89.4	85.9	91.0	96.0	97.1	91.5	96.1
75	51.2	50.8	44.4	41.7	42.9	48.4	48.5	47.8	41.4	38.0	39.4	45.6	48.0	46.6	42.7	39.1	43.2	48.7	51.7
80	5.37	10.4	13.3	14.0	12.9	9.24	5.10	6.25	10.7	12.3	10.7	5.98	4.74	5.88	11.5	12.7	12.5	7.17	5.29
85	4.92	5.61	6.26	6.59	6.26	5.58	4.73	5.36	6.01	6.28	6.00	5.33	4.50	5.27	5.99	6.44	6.23	5.75	5.00
90	0.79	0.76	0.71	0.54	0.46	0.32	0.28	0.27	0.28	0.28	0.28	0.27	0.21	0.21	0.21	0.23	0.22	0.22	0.22

C Range: 0 - 360DEG	γ Range: 0 - 90DEG
C Interval: 15.0DEG	γ Interval: 1.0DEG
Test Speed: HIGH	Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.288
Temperature:25.3DEG	Humidity:53.0%
Operators:Cao Chengpei	Test Distance:5.780m [K=1.0000]
Test Date:2014-08-30	Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.4V I:0.1551A P:33.77W PF:0.9888 Lamp Flux:3303.11x1 lm		
NAME: CS8R-30S-830	TYPE:Downlight	SERIAL No.:
SPEC.:3000K	DIM.: L230mm*W230mm*H76mm	
MFR.: E-LITE LIGHTING CO.,LTD.		

Table--2

UNIT: cd

C(DEG) γ (DEG)	285	300	315	330	345												
0	1902	1902	1902	1902	1902												
5	1872	1874	1874	1876	1877												
10	1799	1800	1796	1801	1804												
15	1696	1693	1685	1692	1704												
20	1569	1556	1552	1562	1575												
25	1429	1409	1395	1414	1437												
30	1283	1260	1236	1262	1294												
35	1140	1107	1080	1108	1150												
40	982	959	937	963	997												
45	807	805	803	814	826												
50	624	642	661	660	646												
55	449	480	511	500	469												
60	294	327	353	343	306												
65	173	196	212	204	177												
70	93.5	101	105	102	93.5												
75	50.7	47.0	42.7	45.5	50.2												
80	7.30	14.0	14.4	14.7	11.3												
85	5.80	6.51	6.89	6.53	5.78												
90	0.33	0.52	0.79	1.01	1.27												

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:Cao Chengpei  
 Test Date:2014-08-30

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	1901	1902	1902	1902	1902	1902	1902	1902	1902	1902
3.0	1893	1895	1895	1896	1896	1897	1895	1895	1893	1893
6.0	1866	1869	1869	1871	1871	1873	1871	1870	1865	1864
9.0	1822	1826	1824	1828	1829	1834	1833	1830	1822	1818
12.0	1769	1772	1767	1770	1775	1785	1785	1780	1767	1759
15.0	1710	1712	1701	1701	1709	1724	1724	1717	1699	1692
18.0	1638	1638	1626	1626	1632	1650	1653	1644	1620	1616
21.0	1563	1560	1541	1547	1546	1571	1579	1565	1535	1528
24.0	1484	1477	1453	1450	1457	1487	1499	1481	1447	1435
27.0	1403	1393	1364	1356	1365	1401	1415	1394	1356	1344
30.0	1320	1309	1272	1260	1271	1313	1330	1307	1260	1247
33.0	1236	1221	1177	1164	1175	1222	1241	1217	1166	1154
36.0	1150	1135	1087	1072	1082	1131	1151	1126	1075	1062
39.0	1055	1043	1000	983.9	992.7	1036	1052	1031	985.4	974.8
42.0	950.9	942.9	910.5	900.7	901.8	933.5	944.0	928.3	894.9	891.4
45.0	840.6	838.3	816.5	819.7	807.9	824.8	828.3	819.6	799.8	809.7
48.0	725.9	728.3	720.0	734.8	711.2	713.0	710.6	706.9	701.8	724.1
51.0	611.2	616.0	620.8	644.9	624.8	601.1	595.6	594.6	603.4	633.0
54.0	499.1	506.3	524.2	551.3	520.0	493.0	484.4	486.3	505.6	537.5
57.0	393.6	401.0	426.1	454.8	423.8	391.2	381.3	384.3	408.9	439.4
60.0	299.0	306.2	331.8	359.4	331.6	299.0	289.3	292.4	317.0	343.4
63.0	218.7	224.3	245.6	268.9	246.7	218.1	211.4	213.7	233.6	253.5
66.0	154.0	156.7	171.5	188.7	173.0	152.9	149.1	149.0	162.2	175.4
69.0	106.5	106.2	112.5	123.8	113.6	104.2	102.7	101.5	106.2	112.6
72.0	74.63	73.34	70.66	73.63	70.22	70.92	71.35	69.81	66.56	66.85
75.0	51.22	50.80	44.39	41.68	42.88	48.39	48.48	47.81	41.43	38.00
78.0	27.56	29.34	25.17	22.75	23.82	27.63	25.15	26.54	22.54	20.49
81.0	5.076	5.986	7.620	10.64	7.849	5.970	4.932	5.730	6.594	9.309
84.0	4.954	5.699	6.401	6.788	6.422	5.670	4.773	5.446	6.141	6.466
87.0	4.865	5.398	5.908	6.141	5.912	5.388	4.667	5.200	5.764	5.907
90.0	0.7861	0.7632	0.7112	0.5386	0.4554	0.3203	0.2849	0.2703	0.2807	0.2787
G/C	150.0	165.0	180.0	195.0	210.0	225.0	240.0	255.0	270.0	285.0
0.0	1902	1902	1901	1902	1902	1902	1902	1902	1902	1902
3.0	1891	1891	1890	1888	1889	1888	1889	1889	1890	1890
6.0	1860	1860	1859	1856	1857	1855	1857	1857	1860	1860
9.0	1813	1814	1815	1811	1809	1805	1809	1811	1817	1816
12.0	1755	1760	1762	1756	1750	1743	1749	1756	1765	1763
15.0	1689	1695	1696	1688	1682	1673	1681	1690	1701	1696
18.0	1610	1618	1624	1612	1601	1596	1604	1612	1628	1621
21.0	1526	1539	1549	1534	1516	1509	1518	1531	1552	1541
24.0	1437	1458	1471	1452	1429	1414	1427	1447	1472	1458
27.0	1346	1375	1391	1368	1343	1318	1337	1361	1390	1372
30.0	1254	1292	1312	1282	1252	1222	1244	1271	1307	1283
33.0	1164	1206	1228	1195	1159	1129	1149	1185	1224	1198
36.0	1074	1118	1140	1106	1070	1039	1062	1097	1136	1109
39.0	986.0	1024	1043	1012	981.4	952.9	975.3	1004	1039	1015
42.0	895.7	922.4	937.8	911.1	891.4	872.6	887.1	903.2	933.9	913.4
45.0	801.3	814.9	825.3	803.7	798.6	791.9	794.9	797.9	823.0	807.1
48.0	703.9	703.1	707.6	692.3	700.3	708.3	701.2	690.2	708.4	697.7
51.0	606.7	589.9	589.8	580.9	601.9	619.2	606.4	583.1	593.8	588.8
54.0	508.4	479.7	476.3	472.6	502.9	528.3	510.7	479.8	484.7	483.7
57.0	409.5	376.5	371.9	370.5	404.9	432.9	415.9	381.8	383.5	384.4
60.0	315.7	284.3	280.7	279.2	312.5	338.0	325.7	292.2	293.7	294.0
63.0	230.9	205.1	204.2	202.5	230.0	250.6	243.0	214.8	217.0	216.9
66.0	159.1	142.0	144.2	140.8	160.1	174.3	171.5	151.2	154.8	153.2
69.0	102.8	96.68	100.7	97.03	105.6	112.9	113.2	103.8	108.5	105.7
72.0	64.55	66.84	70.95	67.88	67.40	67.86	70.62	71.40	76.04	73.59
75.0	39.41	45.57	48.03	46.63	42.67	39.09	43.16	48.72	51.75	50.74
78.0	21.39	24.63	24.25	25.06	23.59	21.21	23.75	27.07	27.29	28.43
81.0	6.711	5.722	4.670	5.637	6.619	9.559	7.589	6.150	5.171	6.176
84.0	6.149	5.425	4.537	5.345	6.117	6.632	6.387	5.838	5.026	5.878
87.0	5.636	5.142	4.495	5.081	5.660	6.093	5.911	5.527	4.935	5.622
90.0	0.2807	0.2703	0.2100	0.2121	0.2121	0.2288	0.2225	0.2225	0.2163	0.3265
G/C	300.0	315.0	330.0	345.0						
0.0	1902	1902	1902	1902						
3.0	1892	1892	1893	1894						
6.0	1862	1862	1865	1866						
9.0	1817	1814	1819	1821						
12.0	1760	1754	1760	1765						
15.0	1693	1685	1692	1704						
18.0	1612	1608	1619	1628						
21.0	1527	1523	1534	1548						

C Range: 0 - 360DEG

C Interval: 15.0DEG

Test Speed: HIGH

Temperature: 25.3DEG

Operators: Cao Chengpei

Test Date: 2014-08-30

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	1439	1428	1445	1465
27.0	1351	1331	1353	1381
30.0	1260	1236	1262	1294
33.0	1166	1141	1169	1206
36.0	1077	1050	1079	1120
39.0	988.8	963.7	992.4	1029
42.0	898.4	882.8	904.3	930.5
45.0	804.5	803.0	814.2	826.1
48.0	707.1	719.8	721.5	718.6
51.0	608.9	631.3	628.1	610.5
54.0	511.7	542.3	532.5	503.8
57.0	416.8	447.8	435.9	401.3
60.0	327.0	353.4	342.6	306.0
63.0	244.7	265.6	256.2	223.7
66.0	173.7	187.2	180.5	156.8
69.0	116.4	122.7	119.9	106.4
72.0	74.54	74.39	74.14	72.87
75.0	47.02	42.72	45.50	50.22
78.0	26.67	23.47	25.89	29.23
81.0	8.025	10.89	9.311	6.232
84.0	6.661	7.083	6.707	5.884
87.0	6.251	6.473	6.128	5.549
90.0	0.5199	0.7882	1.013	1.271

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: Cao Chengpei  
 Test Date: 2014-08-30

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: