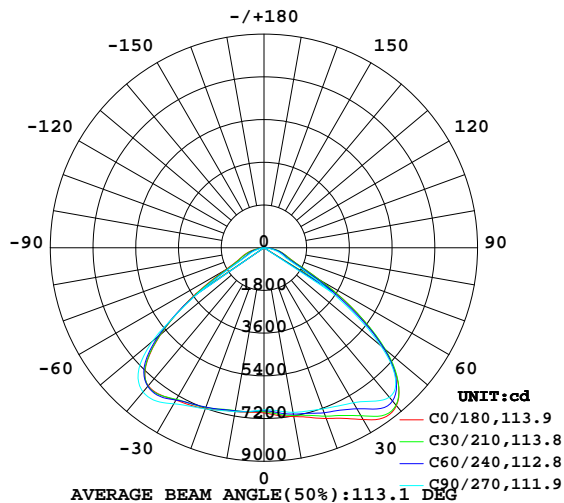


LUMINAIRE PHOTOMETRIC TEST REPORT

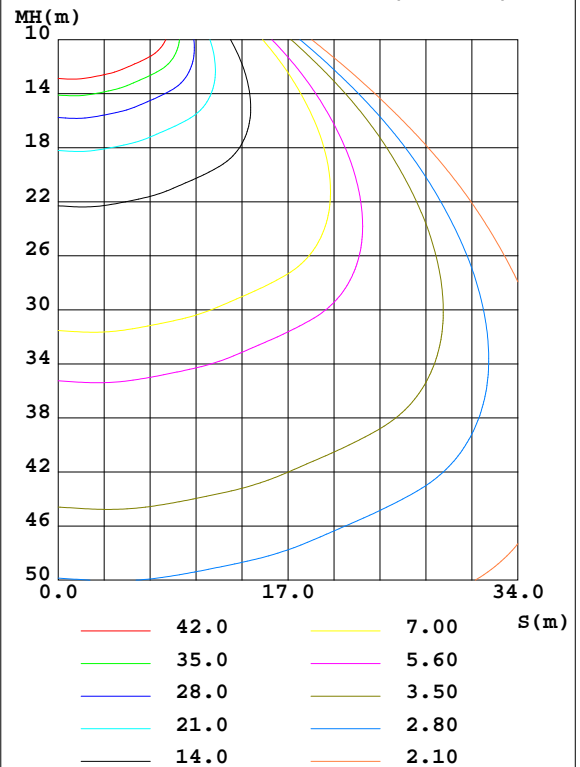
NAME: LED灯	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:21cm*16cm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 140.00 lm/W			
MODEL	ZGSM-GCD160H4	Imax(cd)	8801	S/MH(C0/180)	1.62
NOMINAL POWER(W)	160	LOR(%)	100.0	S/MH(C90/270)	1.67
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	22400	η UP,DN(C0-180)	0.0,51.3
NOMINAL FLUX(lm)	22400	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,48.7
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.75
TEST VOLTAGE(V)	220.1	η down(%)	100.0	CIBSE SHR MAX	1.75

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2017

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity:65.0%
 Test Distance:10.480m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	7223	7149	7042	6897	7008	6969	7011	7030	0- 10	664.3	664.3	2.97,2.97
20	7657	7480	7225	7084	7212	7146	7227	7379	10- 20	2027	2692	12,12
30	8358	8031	7542	7354	7416	7401	7595	8038	20- 30	3461	6152	27.5,27.5
40	8684	8567	8220	7628	7592	7587	7930	8210	30- 40	4994	11146	49.8,49.8
50	6606	6690	6439	5749	5698	5737	6157	6264	40- 50	5677	16823	75.1,75.1
60	2710	2613	2035	1837	1930	1718	1435	2070	50- 60	3620	20442	91.3,91.3
70	1013	956.4	771.3	847.3	885.8	722.9	534.9	761.1	60- 70	1186	21628	96.6,96.6
80	437.8	498.0	323.5	369.2	311.4	222.6	66.90	285.3	70- 80	615.1	22243	99.3,99.3
90	39.45	45.97	9.893	22.25	18.87	12.12	4.045	16.10	80- 90	157.1	22400	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		

Conical surface Flux(90deg): 14040 lm

%lum = 62.7%

%lamp = 62.7%

Conical surface Flux(120deg): 20442 lm

%lum = 91.3%

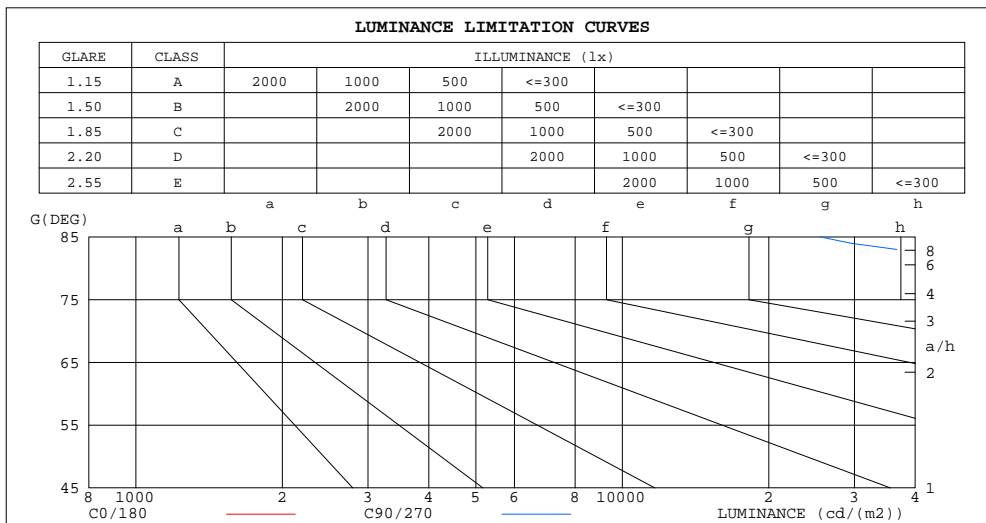
%lamp = 91.3%

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2017

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity:65.0%
 Test Distance:10.480m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

NAME: LED灯	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:21cm*16cm	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	61581	25499
80	75039	55442
75	88129	64285
70	88180	67121
65	97702	73121
60	161328	121153
55	248285	216452
50	305876	298138
45	335635	330166

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2017

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.480m [K=1.0000]
Remarks:

WEC AND CCEC

NAME: LED灯	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:21cm*16cm	Shielding Angle:

pcc	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	.263	.150	.047	.256	.146	.046	.243	.140	.045	.231	.133	.043	.220	.128	.041		
2.0	.256	.140	.043	.250	.137	.042	.238	.132	.041	.228	.128	.040	.218	.123	.039		
3.0	.243	.129	.039	.237	.127	.038	.227	.123	.037	.218	.120	.037	.210	.116	.036		
4.0	.229	.119	.035	.224	.117	.035	.215	.114	.034	.207	.111	.034	.199	.108	.033		
5.0	.215	.110	.032	.211	.108	.032	.203	.106	.031	.196	.103	.031	.189	.101	.030		
6.0	.202	.101	.029	.199	.100	.029	.192	.098	.029	.185	.096	.028	.179	.094	.028		
7.0	.190	.094	.027	.187	.093	.027	.181	.091	.026	.175	.090	.026	.169	.088	.026		
8.0	.179	.088	.025	.176	.087	.025	.171	.085	.024	.165	.084	.024	.160	.082	.024		
9.0	.169	.082	.023	.167	.081	.023	.162	.080	.023	.157	.079	.022	.152	.077	.022		
10.0	.160	.077	.021	.158	.076	.021	.153	.075	.021	.149	.074	.021	.145	.073	.021		

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	.152	.134	.119	.104	.092	.082	.060	.053	.048	.019	.017	.015		
2.0	.167	.132	.102	.143	.114	.089	.098	.079	.062	.057	.046	.036	.018	.015	.012		
3.0	.159	.114	.078	.137	.098	.068	.094	.068	.048	.054	.040	.028	.017	.013	.009		
4.0	.152	.101	.061	.130	.087	.053	.090	.061	.038	.052	.035	.022	.017	.012	.007		
5.0	.145	.090	.049	.124	.078	.043	.086	.054	.030	.050	.032	.018	.016	.010	.006		
6.0	.138	.082	.041	.119	.071	.035	.082	.049	.025	.048	.029	.015	.015	.010	.005		
7.0	.132	.075	.034	.114	.065	.030	.079	.045	.021	.046	.027	.013	.015	.009	.004		
8.0	.126	.069	.029	.109	.060	.026	.075	.042	.018	.044	.025	.011	.014	.008	.004		
9.0	.121	.064	.026	.104	.056	.022	.072	.039	.016	.042	.023	.010	.014	.008	.003		
10.0	.116	.060	.023	.100	.052	.020	.069	.037	.014	.040	.022	.008	.013	.007	.003		

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2017

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.480m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

NAME: LED灯					TYPE:					WEIGHT:				
SPEC.:					DIM.:					SERIAL No.:				
MFR.: EVERFINE					SUR.:21cm*16cm					Shielding 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					21.4	22.9	21.7	23.1	23.3	20.9	22.3	21.2	22.5	22.7
3H					21.6	22.9	21.9	23.2	23.4	21.0	22.3	21.3	22.5	22.8
4H					21.7	23.0	22.1	23.2	23.5	21.1	22.3	21.4	22.6	22.8
6H					21.9	23.0	22.2	23.3	23.6	21.1	22.3	21.4	22.5	22.8
8H					21.9	23.0	22.2	23.3	23.6	21.1	22.2	21.4	22.5	22.8
12H					21.9	22.9	22.2	23.2	23.5	21.1	22.1	21.4	22.4	22.7
4H 2H					21.5	22.7	21.8	22.9	23.2	21.0	22.2	21.3	22.5	22.7
3H					21.8	22.8	22.1	23.1	23.4	21.2	22.3	21.6	22.6	22.9
4H					22.0	23.0	22.4	23.3	23.6	21.4	22.3	21.8	22.7	23.0
6H					22.3	23.1	22.7	23.5	23.8	21.5	22.4	21.9	22.7	23.1
8H					22.3	23.1	22.8	23.5	23.9	21.5	22.3	22.0	22.7	23.1
12H					22.4	23.1	22.8	23.5	23.9	21.5	22.3	22.0	22.6	23.0
8H 4H					22.0	22.8	22.5	23.2	23.6	21.5	22.2	21.9	22.6	23.0
6H					22.4	23.1	22.9	23.5	23.9	21.7	22.3	22.1	22.7	23.2
8H					22.6	23.1	23.0	23.6	24.0	21.8	22.4	22.2	22.8	23.2
12H					22.7	23.2	23.2	23.6	24.1	21.8	22.3	22.3	22.8	23.2
12H 4H					22.0	22.7	22.5	23.1	23.5	21.4	22.2	21.9	22.5	22.9
6H					22.4	23.0	22.9	23.4	23.9	21.7	22.3	22.2	22.7	23.2
8H					22.6	23.1	23.1	23.5	24.0	21.8	22.3	22.3	22.8	23.2
Variations with the observer position at spacings:														
S = 1.0H					+ 0.5 / - 0.6					+ 0.7 / - 0.8				
1.5H					+ 0.4 / - 1.1					+ 0.5 / - 1.3				
2.0H					+ 1.5 / - 2.5					+ 1.8 / - 2.9				

CIE Pub.117, 22400 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 10.8)

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2017

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.480m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

NAME: LED灯	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:21cm*16cm	Shielding Angle:

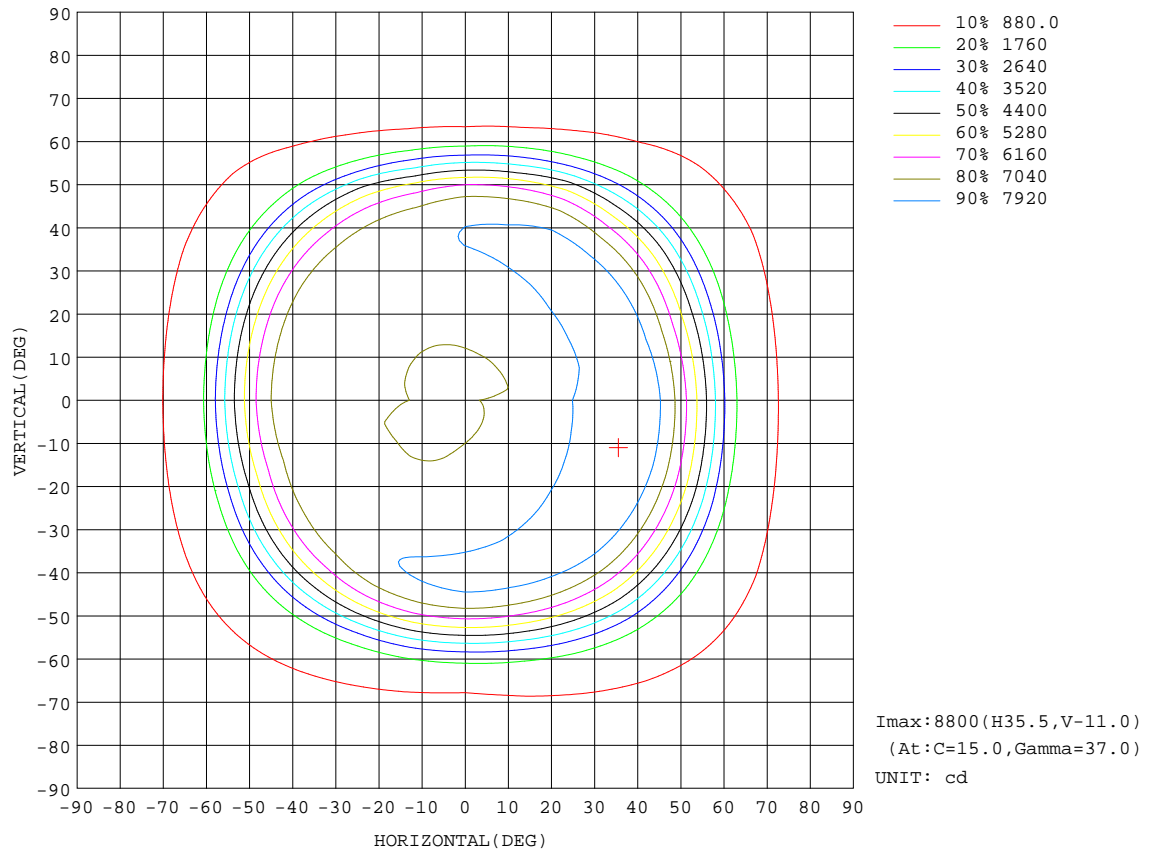
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	59	48	41	59	48	41	57	47	41	35
0.80	71	60	53	70	59	52	68	58	52	45
1.00	80	70	63	79	69	63	77	71	63	56
1.25	87	78	72	86	77	71	84	76	71	64
1.50	92	84	78	91	83	77	88	81	76	69
2.00	99	91	86	97	90	85	94	88	84	77
2.50	102	95	90	100	94	89	96	91	87	80
3.00	105	99	94	103	98	93	99	95	91	83
4.00	108	103	99	106	101	98	102	98	95	87
5.00	110	106	102	108	104	101	103	100	97	89
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:DAMIN
Test Date:2017

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.480m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

NAME: LED灯	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:21cm*16cm	Shielding Angle:

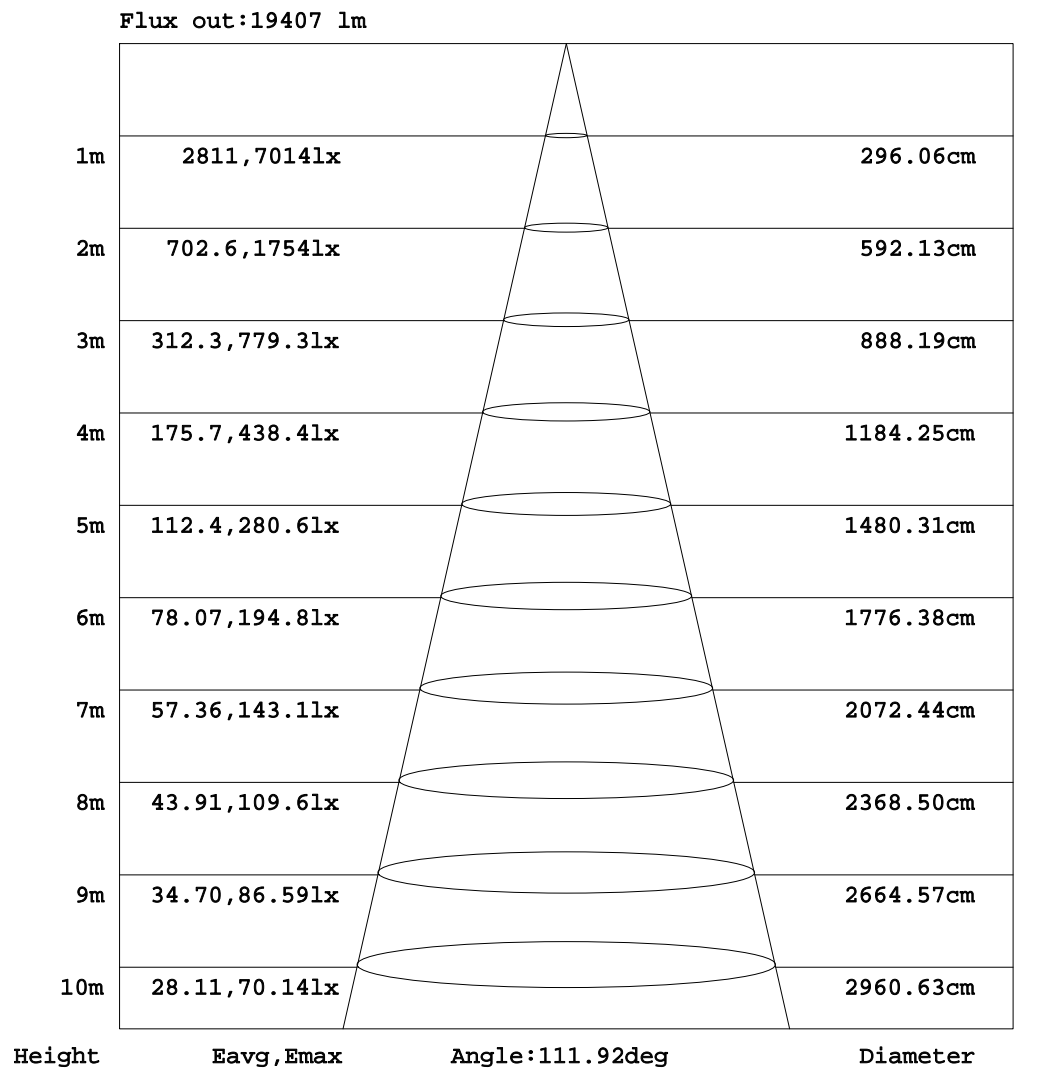


C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2017

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.480m [K=1.0000]
Remarks:

AAI Figure

NAME: LED灯	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:21cm*16cm	Shielding Angle:

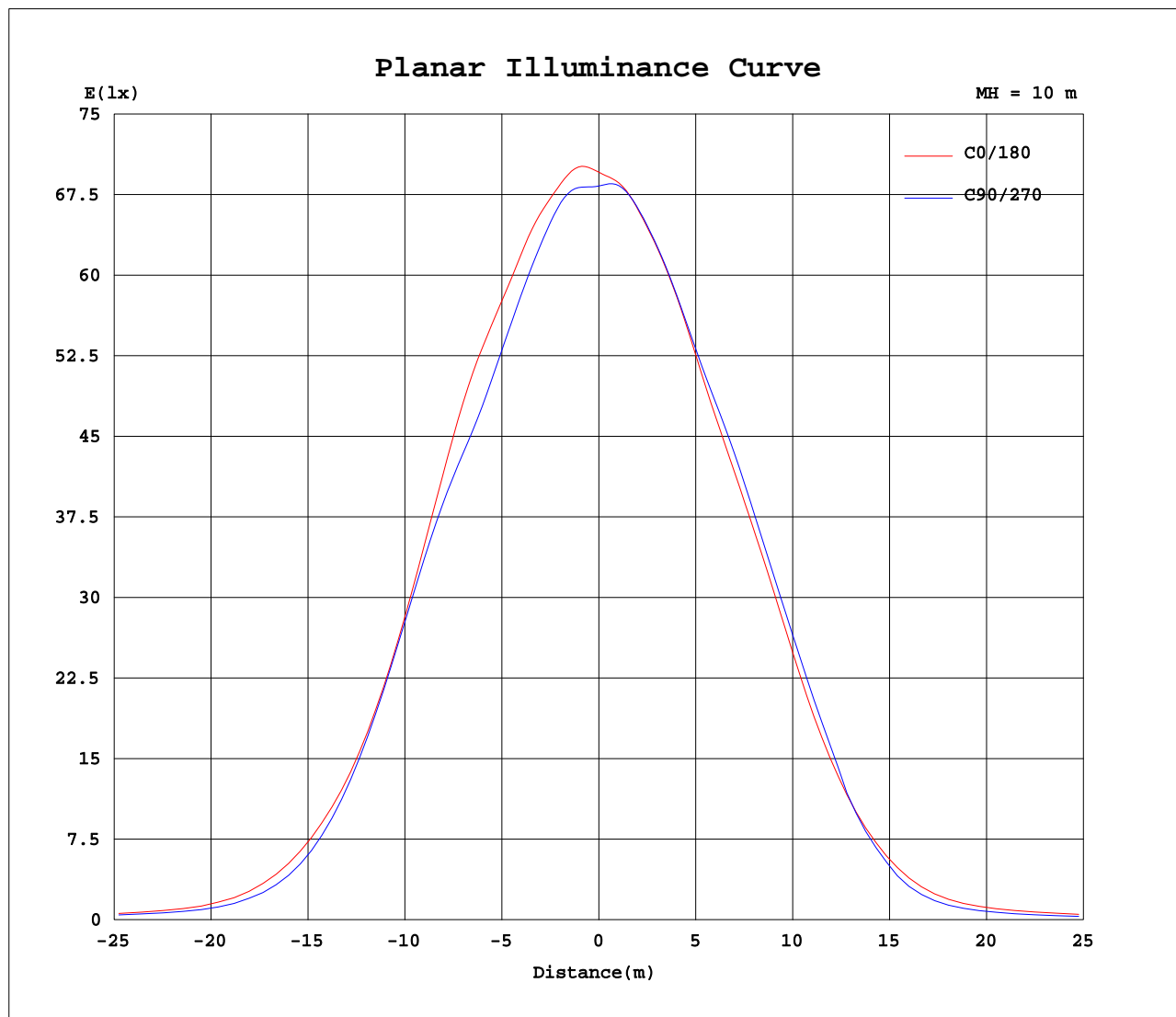


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2017

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.480m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 2017

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity: 65.0%
Test Distance: 10.480m [K=1.0000]
Remarks:

E:\ies文件夹\H4 H5 H6 工厂灯嵌灯 3030 GOS\110\ZGSM-XXX160H4 110.GOS