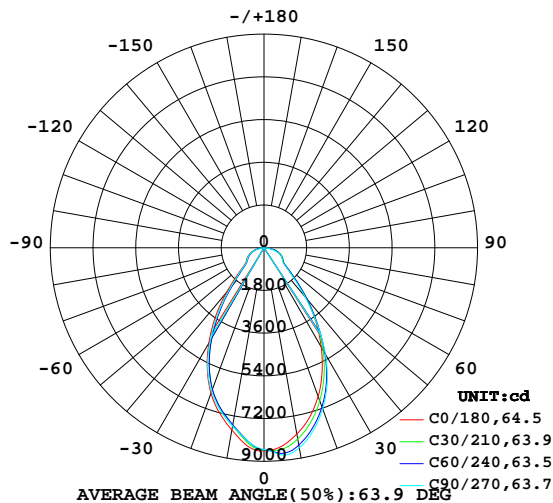


LUMINAIRE PHOTOMETRIC TEST REPORT

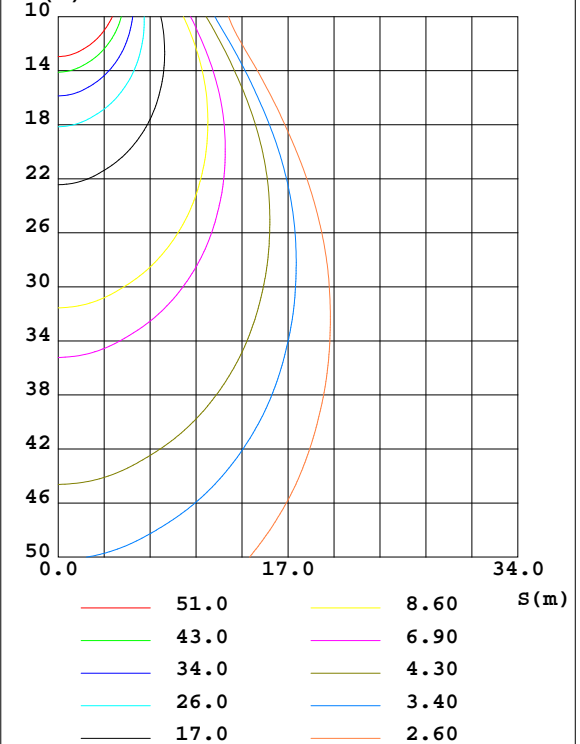
NAME: LED灯	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:21cm*16cm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 139.9 lm/W			
MODEL	ZGSM-GCD80H4	Imax(cd)	8781	S/MH(C0/180)	0.92
NOMINAL POWER(W)	80	LOR(%)	99.9	S/MH(C90/270)	0.92
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	11192	η UP,DN(C0-180)	0.0,52.7
NOMINAL FLUX(lm)	11200	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,47.2
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.00
TEST VOLTAGE(V)	220.1	η down(%)	99.9	CIBSE SHR MAX	1.00

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	7972	8322	8563	8188	7803	7568	7628	7737	0- 10	786.2	786.2	7.02,7.02
20	6670	7022	7227	6965	6533	6322	6462	6531	10- 20	2076	2862	25.6,25.6
30	4828	5095	5177	4945	4657	4353	4539	4591	20- 30	2656	5518	49.3,49.3
40	2764	2872	2695	2593	2461	2064	2198	2369	30- 40	2252	7770	69.4,69.4
50	1160	1236	1160	1057	1023	951.8	974.5	1024	40- 50	1259	9029	80.7,80.6
60	917.3	915.6	884.2	808.2	805.2	763.0	772.1	819.4	50- 60	828.3	9857	88.1,88
70	693.7	714.0	661.2	599.8	571.1	534.2	527.3	613.7	60- 70	720.0	10577	94.5,94.4
80	314.2	387.5	254.9	291.6	219.4	230.5	74.59	298.5	70- 80	480.4	11058	98.8,98.7
90	26.45	39.35	6.728	11.46	10.57	7.236	2.570	13.36	80- 90	133.9	11192	100,99.9
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): 8509.7 lm

%lum = 76.0%

%lamp = 76.0%

Conical surface Flux(120deg): 9857.3 lm

%lum = 88.1%

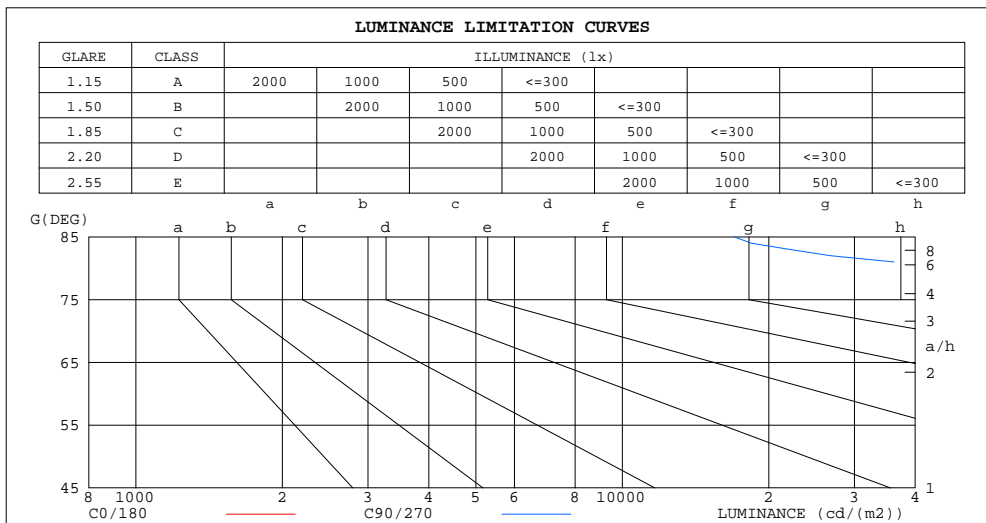
%lamp = 88.0%

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	47731	16976
80	53851	43696
75	63253	52514
70	60367	57534
65	57883	56295
60	54599	52630
55	51867	50071
50	53692	53720
45	75244	72018

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	.248	.141	.045	.242	.138	.044	.229	.131	.042	.217	.125	.040	.206	.119	.038		
2.0	.234	.128	.039	.228	.125	.039	.217	.120	.037	.206	.116	.036	.197	.111	.035		
3.0	.218	.116	.035	.213	.114	.034	.203	.110	.033	.194	.106	.033	.185	.103	.032		
4.0	.203	.105	.031	.198	.104	.031	.190	.101	.030	.182	.098	.029	.174	.095	.029		
5.0	.189	.096	.028	.185	.095	.028	.178	.093	.027	.171	.090	.027	.164	.088	.026		
6.0	.177	.089	.025	.174	.088	.025	.167	.086	.025	.161	.084	.025	.155	.082	.024		
7.0	.167	.082	.023	.164	.082	.023	.158	.080	.023	.152	.078	.023	.147	.076	.022		
8.0	.157	.077	.022	.155	.076	.022	.149	.075	.021	.144	.073	.021	.140	.072	.021		
9.0	.149	.072	.020	.146	.071	.020	.142	.070	.020	.137	.069	.020	.133	.068	.020		
10.0	.141	.068	.019	.139	.067	.019	.135	.066	.019	.131	.065	.018	.127	.064	.018		

ρ _{cc}	80%			70%			50%			30%			10%			0	
ρ _w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
ρ _{fc}	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	.176	.157	.139	.151	.134	.120	.103	.092	.083	.059	.053	.048	.019	.017	.016		
2.0	.164	.132	.105	.141	.114	.091	.096	.079	.063	.056	.046	.037	.018	.015	.012		
3.0	.154	.114	.082	.132	.098	.071	.091	.068	.050	.052	.040	.029	.017	.013	.010		
4.0	.145	.100	.065	.125	.086	.057	.086	.060	.040	.050	.035	.024	.016	.011	.008		
5.0	.137	.089	.053	.118	.077	.046	.081	.054	.033	.047	.032	.019	.015	.010	.006		
6.0	.130	.080	.044	.112	.069	.039	.077	.049	.027	.045	.029	.016	.014	.009	.005		
7.0	.123	.073	.038	.106	.063	.033	.073	.044	.023	.043	.026	.014	.014	.009	.005		
8.0	.117	.067	.032	.101	.058	.028	.070	.041	.020	.041	.024	.012	.013	.008	.004		
9.0	.112	.062	.028	.096	.054	.025	.067	.038	.017	.039	.022	.010	.013	.007	.003		
10.0	.107	.057	.025	.092	.050	.022	.064	.035	.015	.037	.021	.009	.012	.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					17.3	18.6	17.6	18.7	18.9	17.2	18.4	17.4	18.6	18.8
3H					19.0	20.1	19.2	20.3	20.5	18.7	19.8	19.0	20.1	20.3
4H					19.8	20.9	20.1	21.1	21.4	19.4	20.5	19.7	20.7	21.0
6H					20.4	21.5	20.8	21.7	22.0	19.9	20.9	20.2	21.2	21.4
8H					20.6	21.6	20.9	21.9	22.1	20.0	20.9	20.3	21.2	21.5
12H					20.7	21.7	21.1	22.0	22.2	20.0	20.9	20.3	21.2	21.5
4H 2H					17.9	18.9	18.2	19.2	19.4	17.7	18.8	18.0	19.0	19.3
3H					19.8	20.8	20.1	21.0	21.3	19.6	20.5	19.9	20.8	21.1
4H					20.8	21.7	21.2	22.0	22.3	20.5	21.3	20.8	21.6	22.0
6H					21.7	22.4	22.0	22.8	23.1	21.1	21.9	21.5	22.2	22.6
8H					21.9	22.6	22.3	23.0	23.4	21.3	22.0	21.7	22.3	22.7
12H					22.1	22.7	22.5	23.1	23.5	21.3	22.0	21.7	22.3	22.7
8H 4H					21.2	21.9	21.6	22.3	22.7	20.9	21.6	21.3	22.0	22.4
6H					22.3	22.9	22.7	23.3	23.7	21.8	22.3	22.2	22.7	23.2
8H					22.6	23.2	23.1	23.6	24.0	22.0	22.5	22.5	23.0	23.4
12H					22.9	23.4	23.4	23.8	24.3	22.2	22.7	22.7	23.1	23.6
12H 4H					21.3	21.9	21.7	22.3	22.7	21.0	21.6	21.4	22.0	22.4
6H					22.4	22.9	22.8	23.3	23.8	21.9	22.4	22.3	22.8	23.3
8H					22.8	23.3	23.3	23.7	24.2	22.2	22.7	22.7	23.1	23.6
Variations with the observer position at spacings:														
S = 1.0H					+ 0.3 / - 0.3					+ 0.3 / - 0.4				
1.5H					+ 0.4 / - 0.4					+ 0.5 / - 0.4				
2.0H					+ 0.3 / - 0.3					+ 0.3 / - 0.3				

CIE Pub.117, 11200 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = 8.4$)

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:

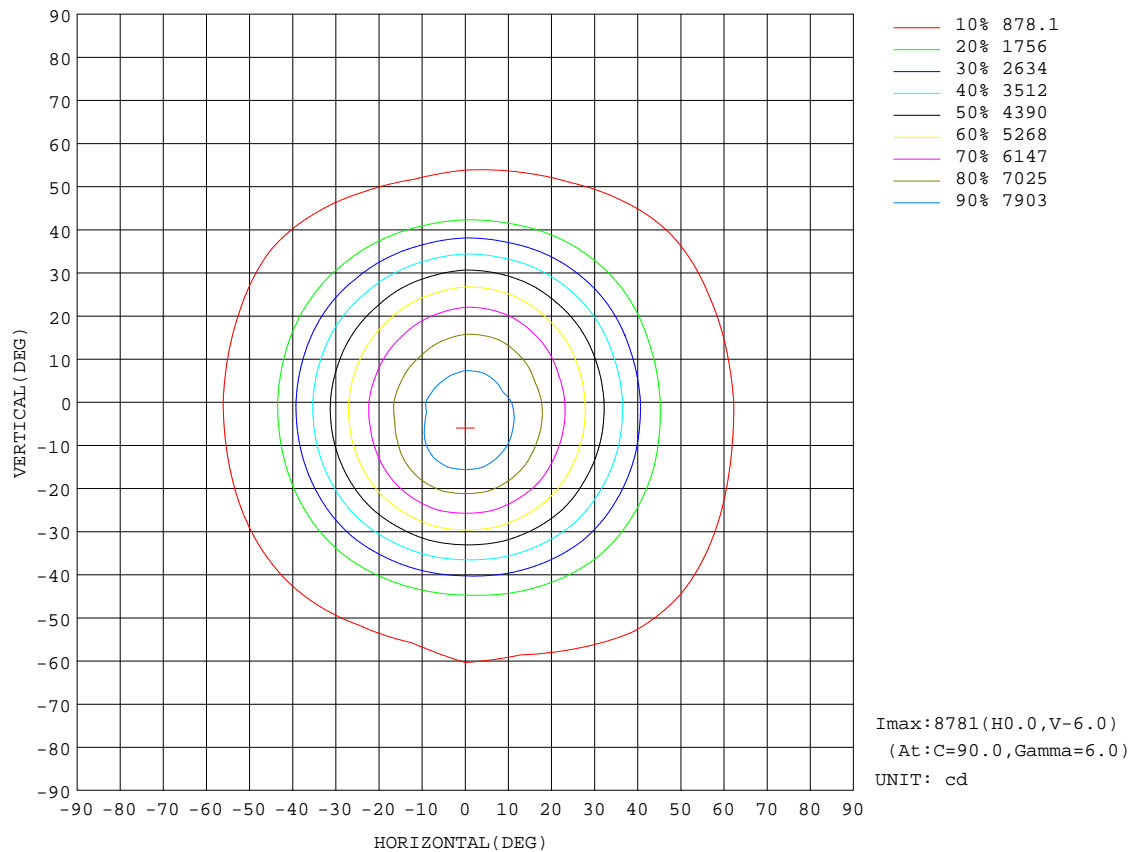
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) k(RI) x RCR = 5									
k = 0.60	73	64	59	72	64	59	71	63	58	53
0.80	81	73	67	81	72	67	79	72	67	61
1.00	88	79	74	87	79	74	85	79	73	68
1.25	93	85	80	92	85	80	90	83	79	73
1.50	97	90	84	95	89	84	93	87	83	77
2.00	102	95	90	100	94	90	97	92	88	82
2.50	104	99	94	103	97	93	99	95	91	84
3.00	107	102	97	105	100	96	101	97	94	87
4.00	110	106	102	108	104	101	104	101	98	90
5.00	112	108	105	109	106	104	105	103	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: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:



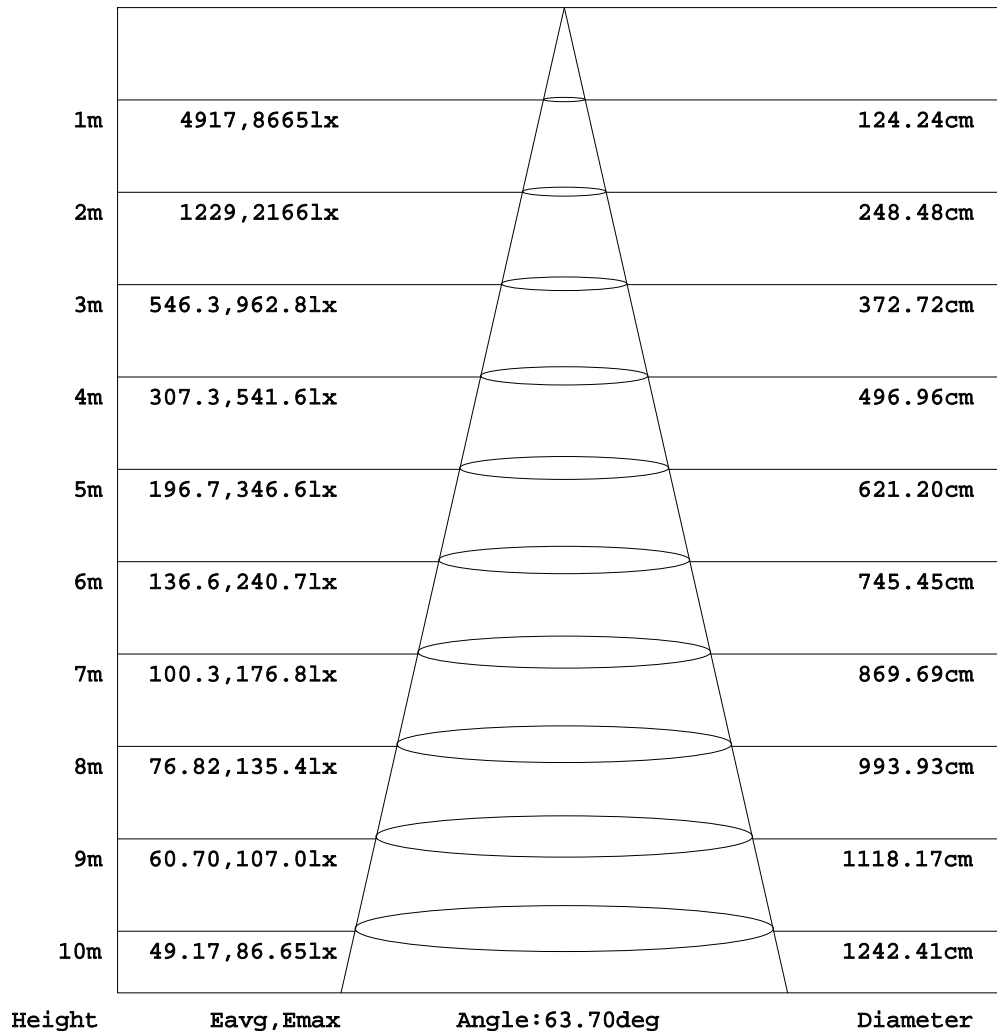
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2017

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:

Flux out:6031 lm

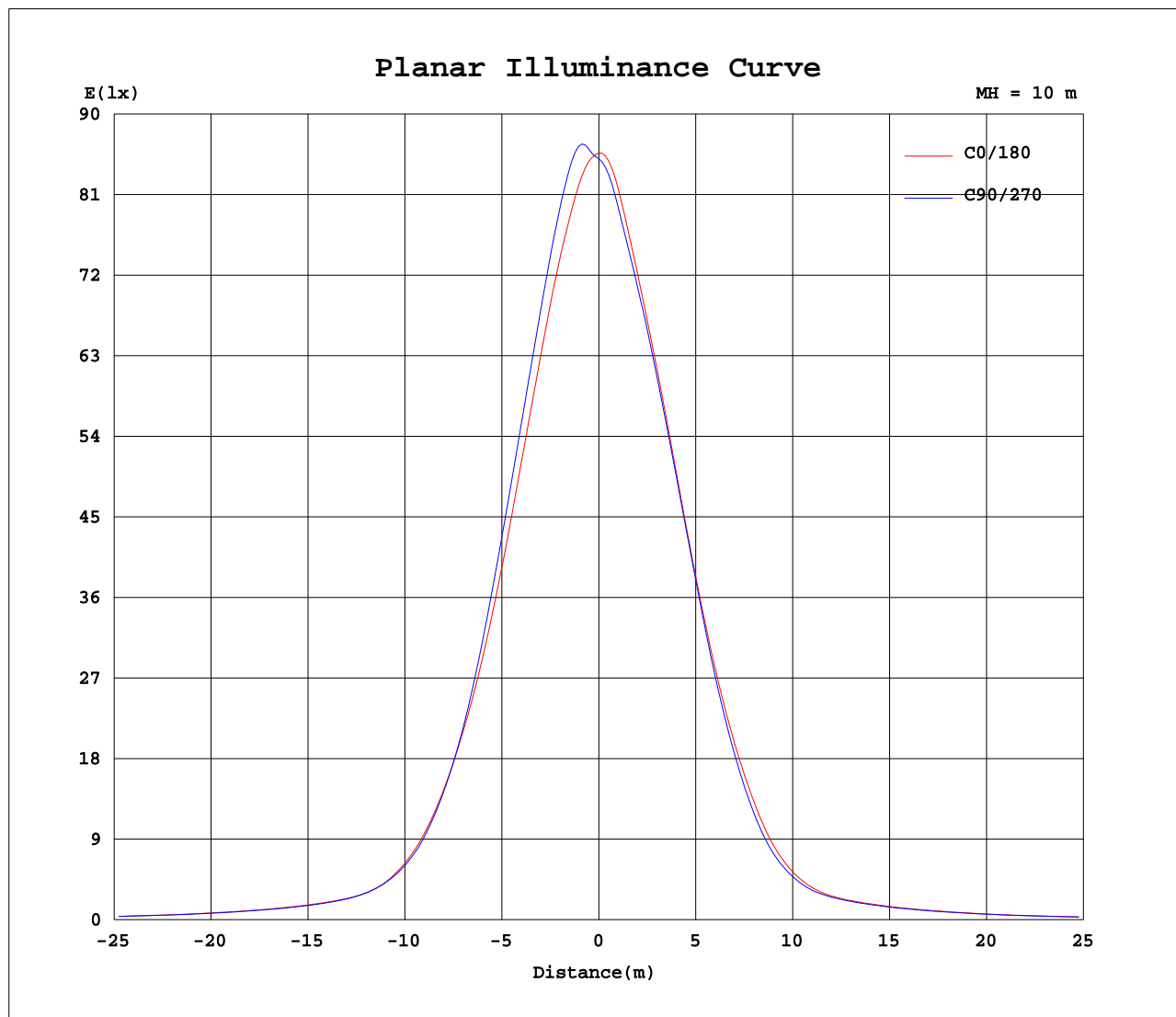


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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

