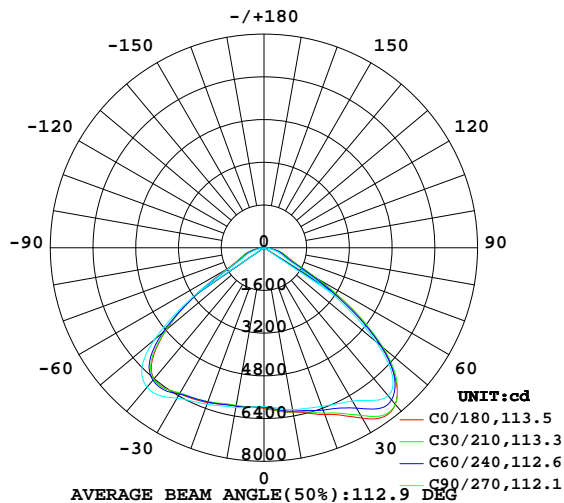


LUMINAIRE PHOTOMETRIC TEST REPORT

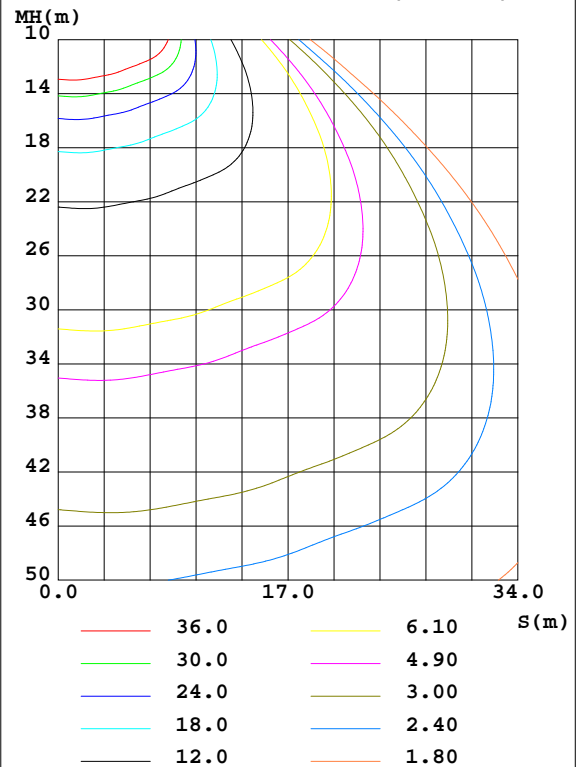
NAME: LED灯	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:21cm*16cm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 130.00 lm/W			
MODEL	ZGSM-GCD150H5	Imax(cd)	7803	S/MH(C0/180)	1.60
NOMINAL POWER(W)	150	LOR(%)	100.0	S/MH(C90/270)	1.67
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	19500	η UP,DN(C0-180)	0.0,51.1
NOMINAL FLUX(lm)	19500	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,48.9
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	6254	6231	6157	6017	6017	6007	6073	6127	0- 10	577.7	577.7	2.96,2.96
20	6648	6535	6326	6167	6171	6132	6240	6427	10- 20	1760	2337	12,12
30	7369	7124	6630	6383	6313	6317	6506	7038	20- 30	3006	5344	27.4,27.4
40	7655	7563	7236	6577	6412	6423	6813	7223	30- 40	4348	9692	49.7,49.7
50	5723	5817	5480	4885	4773	4842	5363	5479	40- 50	4909	14601	74.9,74.9
60	2244	2183	1669	1581	1630	1458	1465	1817	50- 60	3122	17723	90.9,90.9
70	863.8	816.3	660.7	752.3	797.1	755.7	625.1	752.0	60- 70	1060	18783	96.3,96.3
80	348.6	402.4	284.9	335.6	300.6	281.5	87.59	314.7	70- 80	574.0	19357	99.3,99.3
90	20.15	23.05	5.510	19.91	18.24	13.70	3.391	14.74	80- 90	143.4	19500	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): 12200 lm

%lum = 62.6%

%lamp = 62.6%

Conical surface Flux(120deg): 17723 lm

%lum = 90.9%

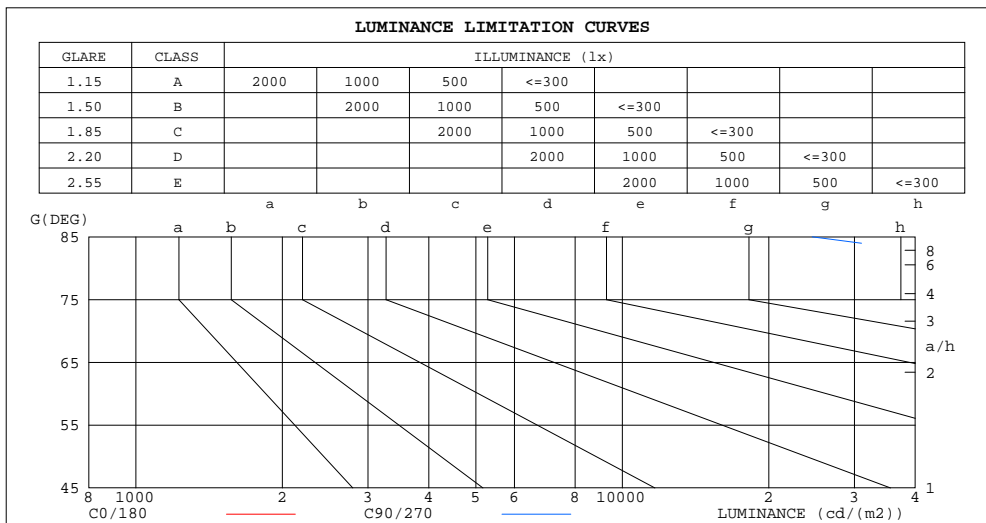
%lamp = 90.9%

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	48047	24567
80	59744	48826
75	74418	54562
70	75163	57491
65	83146	61902
60	133553	99353
55	212843	179672
50	264987	253717
45	293547	286516

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	.265	.151	.048	.258	.147	.047	.245	.140	.045	.233	.134	.043	.222	.128	.041		
2.0	.257	.141	.043	.251	.138	.043	.239	.133	.041	.229	.128	.040	.219	.124	.039		
3.0	.244	.130	.039	.238	.128	.038	.228	.124	.038	.219	.120	.037	.210	.116	.036		
4.0	.229	.119	.035	.225	.118	.035	.216	.114	.034	.208	.111	.034	.200	.109	.033		
5.0	.216	.110	.032	.211	.109	.032	.204	.106	.031	.196	.104	.031	.189	.101	.030		
6.0	.203	.102	.029	.199	.100	.029	.192	.098	.029	.185	.096	.028	.179	.094	.028		
7.0	.191	.094	.027	.187	.093	.027	.181	.092	.026	.175	.090	.026	.169	.088	.026		
8.0	.180	.088	.025	.177	.087	.025	.171	.085	.024	.166	.084	.024	.161	.082	.024		
9.0	.169	.082	.023	.167	.081	.023	.162	.080	.023	.157	.079	.023	.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	.168	.132	.102	.144	.114	.088	.098	.079	.062	.057	.046	.036	.018	.015	.012		
3.0	.159	.114	.078	.137	.098	.068	.094	.068	.047	.054	.040	.028	.017	.013	.009		
4.0	.152	.101	.061	.130	.087	.053	.090	.061	.037	.052	.035	.022	.017	.012	.007		
5.0	.145	.090	.049	.125	.078	.043	.086	.054	.030	.050	.032	.018	.016	.010	.006		
6.0	.139	.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	22.8	21.6	23.0	23.2	20.8	22.3	21.1	22.5	22.7
3H					21.5	22.9	21.8	23.1	23.3	20.9	22.2	21.2	22.5	22.7
4H					21.7	22.9	22.0	23.2	23.4	21.0	22.2	21.3	22.5	22.7
6H					21.8	22.9	22.1	23.2	23.5	21.0	22.2	21.3	22.4	22.7
8H					21.8	22.9	22.1	23.2	23.5	21.0	22.1	21.4	22.4	22.7
12H					21.8	22.8	22.1	23.1	23.4	21.0	22.1	21.3	22.4	22.7
4H 2H					21.4	22.6	21.7	22.9	23.1	20.9	22.1	21.2	22.4	22.6
3H					21.7	22.8	22.0	23.0	23.3	21.1	22.2	21.5	22.5	22.8
4H					21.9	22.9	22.3	23.2	23.5	21.3	22.2	21.6	22.6	22.9
6H					22.1	23.0	22.5	23.3	23.7	21.4	22.3	21.8	22.6	23.0
8H					22.2	23.0	22.6	23.4	23.7	21.4	22.2	21.9	22.6	23.0
12H					22.2	22.9	22.7	23.3	23.7	21.4	22.2	21.9	22.5	23.0
8H 4H					22.0	22.7	22.4	23.1	23.5	21.3	22.1	21.8	22.5	22.9
6H					22.3	22.9	22.7	23.3	23.8	21.6	22.2	22.0	22.6	23.0
8H					22.4	23.0	22.9	23.4	23.8	21.7	22.2	22.1	22.7	23.1
12H					22.5	23.0	23.0	23.4	23.9	21.7	22.2	22.2	22.6	23.1
12H 4H					21.9	22.6	22.4	23.0	23.4	21.3	22.1	21.8	22.4	22.8
6H					22.3	22.9	22.7	23.3	23.7	21.6	22.2	22.0	22.6	23.0
8H					22.4	22.9	22.9	23.4	23.8	21.7	22.2	22.2	22.6	23.1
Variations with the observer position at spacings:														
S = 1.0H					+ 0.6 / - 0.7					+ 0.8 / - 0.9				
1.5H					+ 0.4 / - 1.0					+ 0.6 / - 1.3				
2.0H					+ 1.6 / - 2.7					+ 1.9 / - 3.1				

CIE Pub.117, 19500 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 10.3)

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:

UTILIZATION FACTORS TABLE

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

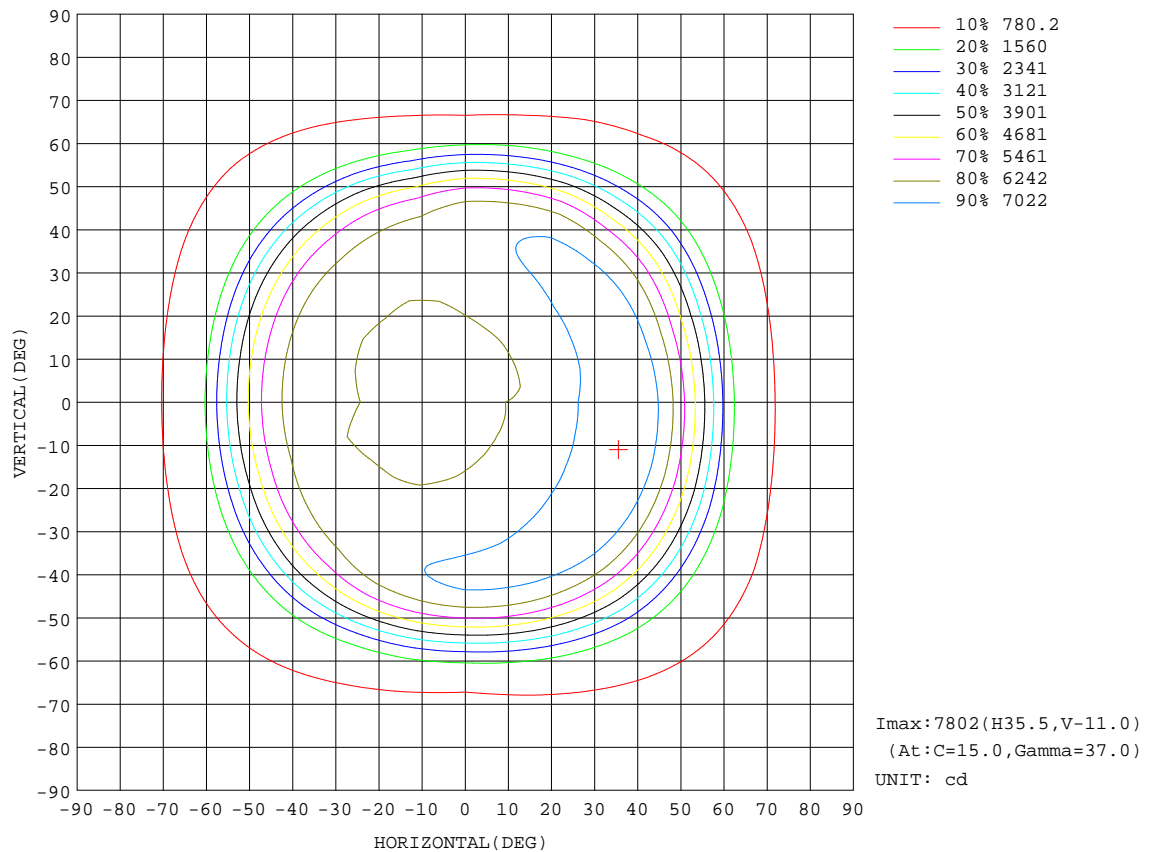
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	59	48	41	59	48	41	57	47	41	35
0.80	71	60	53	70	59	52	68	58	52	45
1.00	80	70	63	79	69	63	77	70	62	56
1.25	87	78	72	86	77	71	83	76	70	64
1.50	92	84	77	91	83	77	88	81	76	69
2.00	99	91	86	97	90	85	94	88	84	76
2.50	102	95	90	100	94	89	96	91	87	80
3.00	105	99	94	103	97	93	99	95	91	83
4.00	108	103	99	106	101	98	102	98	95	87
5.00	110	106	102	108	104	100	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:



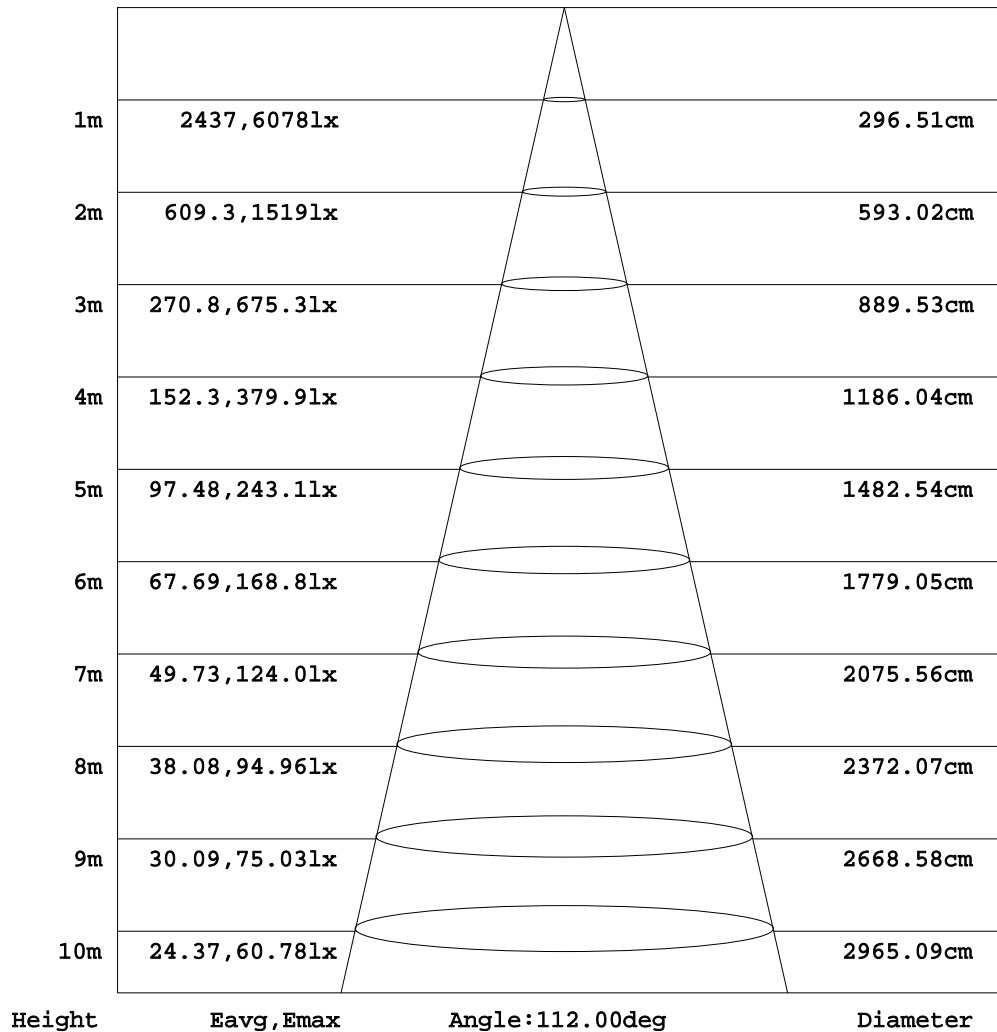
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2017

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:

Flux out:16828 lm

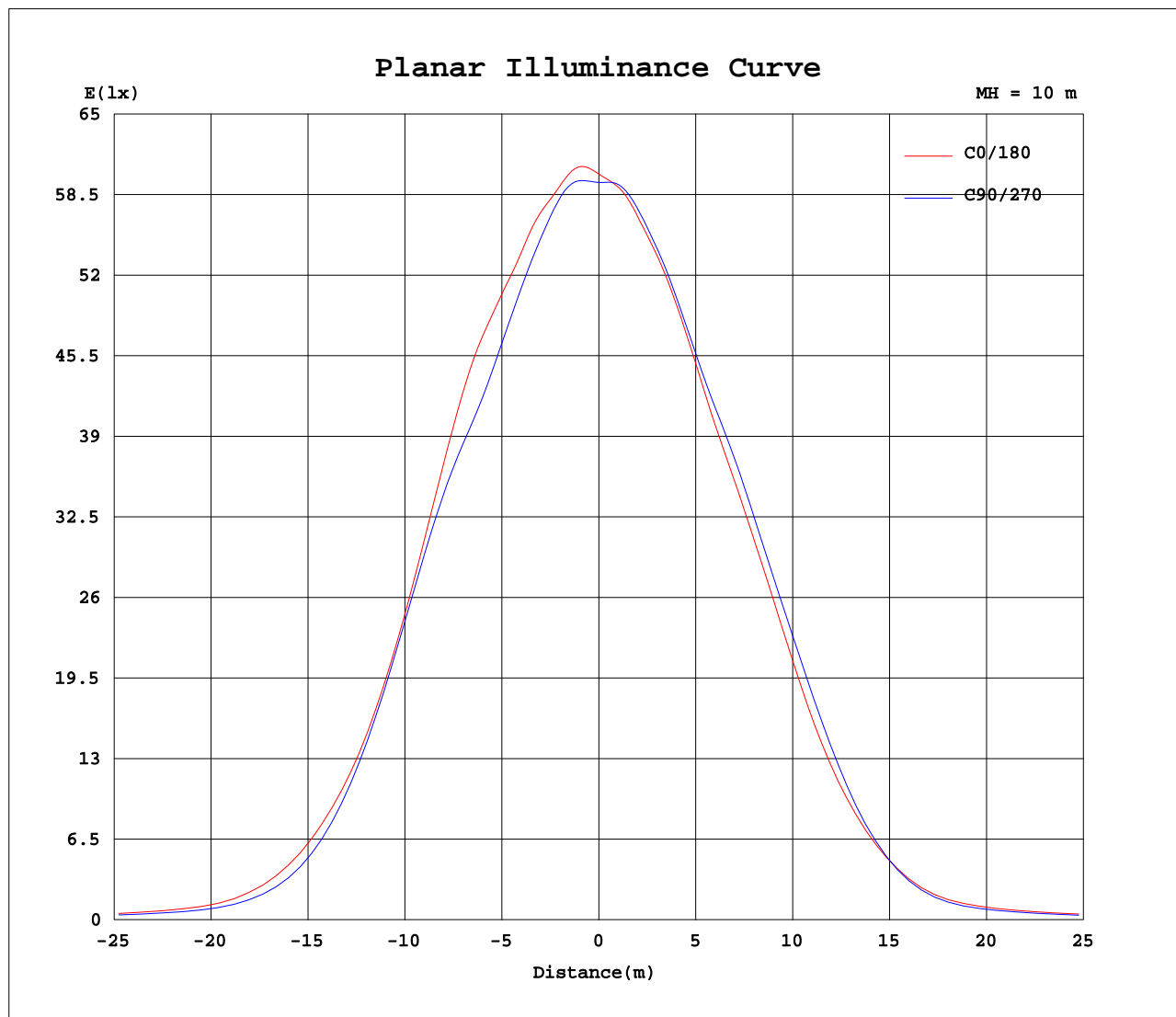


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:

