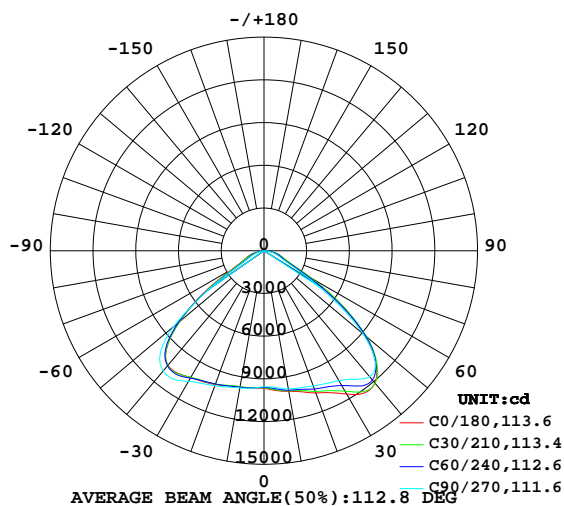


## LUMINAIRE PHOTOMETRIC TEST REPORT

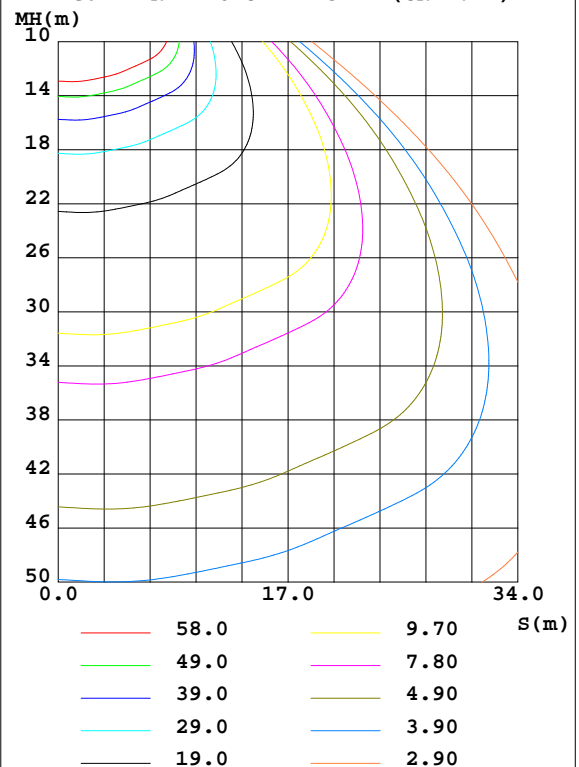
NAME: LED灯	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:21cm*16cm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 130.00 lm/W			
MODEL	ZGSM-GCD240H5	Imax(cd)	12308	S/MH(C0/180)	1.60
NOMINAL POWER(W)	240	LOR(%)	100.0	S/MH(C90/270)	1.65
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	31200	$\eta$ UP,DN(C0-180)	0.0,51.6
NOMINAL FLUX(lm)	31200	CIE CLASS	DIRECT	$\eta$ UP,DN(C180-360)	0.0,48.4
LAMPS INSIDE	1	$\eta$ up(%)	0.0	CIBSE SHR NOM	1.75
TEST VOLTAGE(V)	220.1	$\eta$ 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

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  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:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum, lamp
10	1003	997.2	984.8	964.8	971.7	970.4	978.9	984.1	0- 10	927.7	927.7	2.97,2.97
20	1063	1042	1010	991.3	999.5	995.1	1009	1033	10- 20	2829	3756	12,12
30	1162	1120	1054	1028	1028	1031	1060	1128	20- 30	4829	8585	27.5,27.5
40	1212	1203	1154	1069	1050	1049	1101	1147	30- 40	6974	15559	49.9,49.9
50	917.9	943.5	908.8	805.4	775.7	773.9	831.5	855.7	40- 50	7891	23450	75.2,75.2
60	374.8	371.1	287.8	258.2	258.4	223.2	191.8	270.1	50- 60	4975	28425	91.1,91.1
70	142.8	135.5	109.6	120.6	123.8	103.6	79.61	109.6	60- 70	1664	30088	96.4,96.4
80	61.72	70.81	42.52	53.13	43.41	33.70	16.12	43.12	70- 80	882.6	30971	99.3,99.3
90	5.636	6.319	1.569	3.235	2.605	1.827	0.6042	2.577	80- 90	229.0	31200	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:×10cd									UNIT:lm		

Conical surface Flux(90deg): 19591 lm

%lum = 62.8%

%lamp = 62.8%

Conical surface Flux(120deg): 28425 lm

%lum = 91.1%

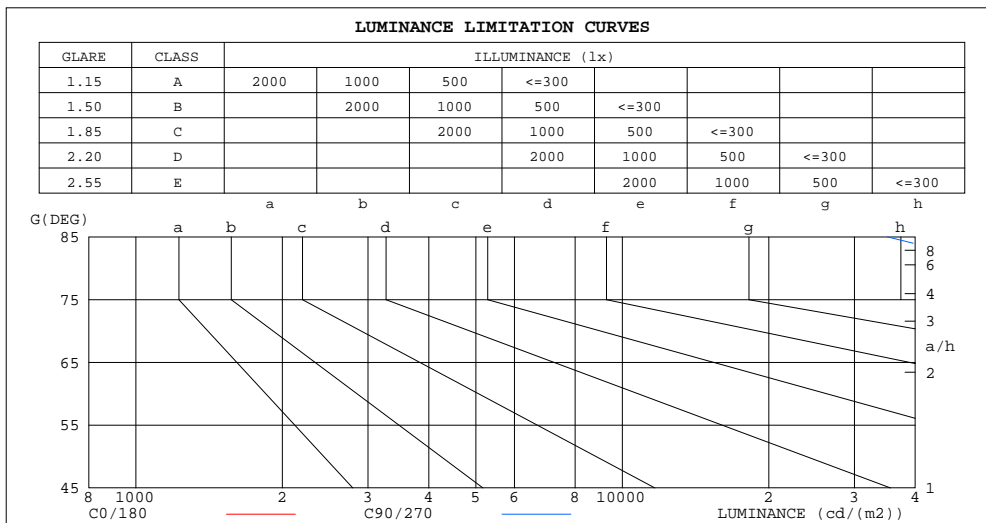
%lamp = 91.1%

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

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  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	86522	35040
80	105783	72869
75	124021	91456
70	124285	95333
65	136780	103110
60	223071	171301
55	344885	305994
50	425013	420791
45	467417	464837

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	.264	.150	.048	.257	.147	.047	.244	.140	.045	.232	.134	.043	.221	.128	.041		
2.0	.256	.140	.043	.250	.138	.042	.239	.133	.041	.228	.128	.040	.218	.123	.039		
3.0	.243	.129	.039	.238	.127	.038	.228	.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	.161	.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		

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						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	.088	.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	21.5	22.9	21.7	23.1	23.3	21.0	22.4	21.3	22.6	22.8				
3H	21.7	23.0	22.0	23.2	23.4	21.1	22.4	21.4	22.6	22.9				
4H	21.8	23.0	22.1	23.3	23.5	21.2	22.4	21.5	22.7	22.9				
6H	21.9	23.1	22.2	23.3	23.6	21.2	22.4	21.5	22.6	22.9				
8H	21.9	23.0	22.3	23.3	23.6	21.2	22.3	21.5	22.6	22.9				
12H	21.9	23.0	22.3	23.3	23.6	21.2	22.2	21.5	22.5	22.8				
4H 2H	21.5	22.7	21.8	23.0	23.2	21.1	22.3	21.4	22.6	22.8				
3H	21.8	22.9	22.2	23.2	23.5	21.3	22.4	21.7	22.7	23.0				
4H	22.1	23.0	22.4	23.4	23.7	21.5	22.5	21.9	22.8	23.1				
6H	22.3	23.2	22.7	23.5	23.9	21.6	22.5	22.0	22.8	23.2				
8H	22.4	23.2	22.8	23.6	23.9	21.6	22.4	22.1	22.8	23.2				
12H	22.4	23.2	22.9	23.5	23.9	21.6	22.4	22.1	22.7	23.1				
8H 4H	22.1	22.9	22.5	23.3	23.6	21.6	22.3	22.0	22.7	23.1				
6H	22.5	23.1	22.9	23.5	24.0	21.8	22.4	22.2	22.8	23.3				
8H	22.6	23.2	23.1	23.6	24.1	21.9	22.5	22.3	22.9	23.3				
12H	22.7	23.2	23.2	23.7	24.2	21.9	22.4	22.4	22.9	23.3				
12H 4H	22.1	22.8	22.5	23.2	23.6	21.6	22.3	22.0	22.7	23.1				
6H	22.5	23.1	23.0	23.5	23.9	21.8	22.4	22.3	22.8	23.3				
8H	22.7	23.2	23.1	23.6	24.1	21.9	22.4	22.4	22.9	23.4				
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 / - 1.4								
2.0H	+ 1.5 / - 2.5					+ 1.8 / - 2.9								

CIE Pub.117, 31200 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 12.0)

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:

## UTILIZATION FACTORS TABLE

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

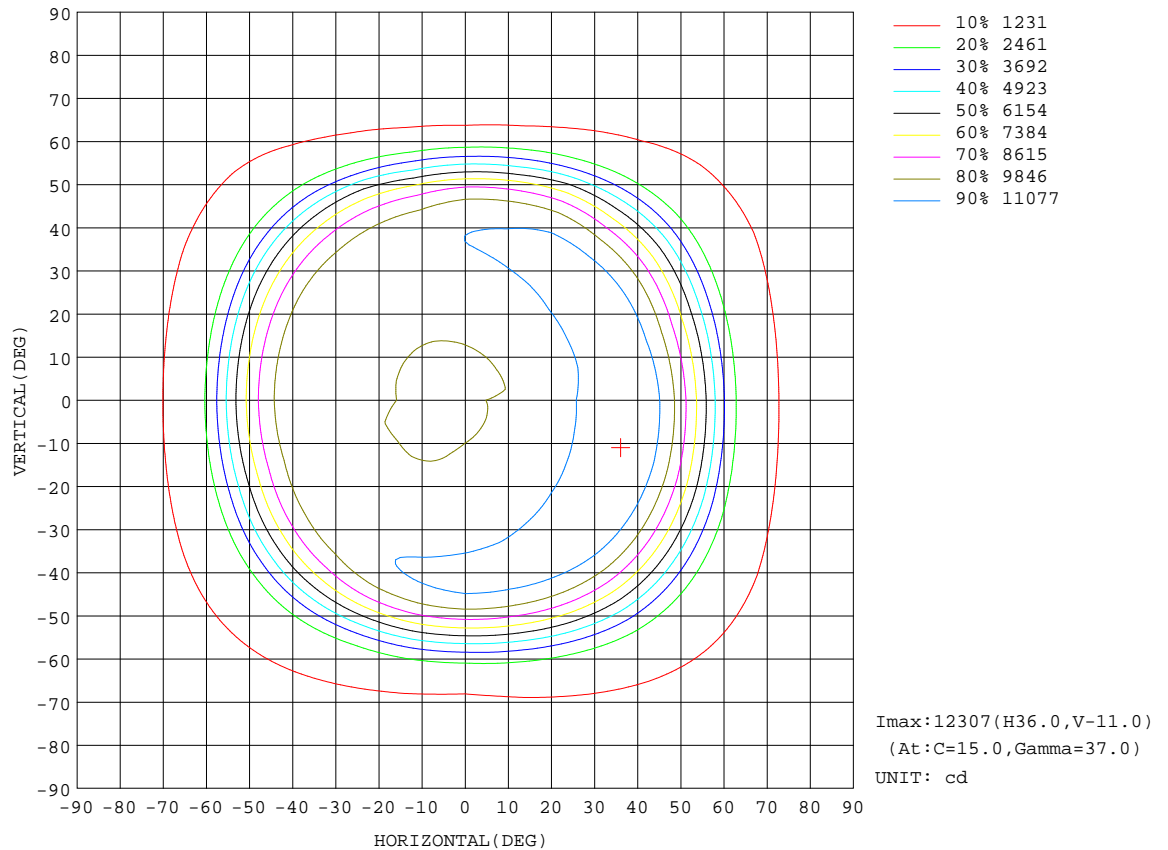
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	59	48	41	59	48	41	58	47	41	35
0.80	71	60	53	70	59	53	68	58	52	46
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	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

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  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:

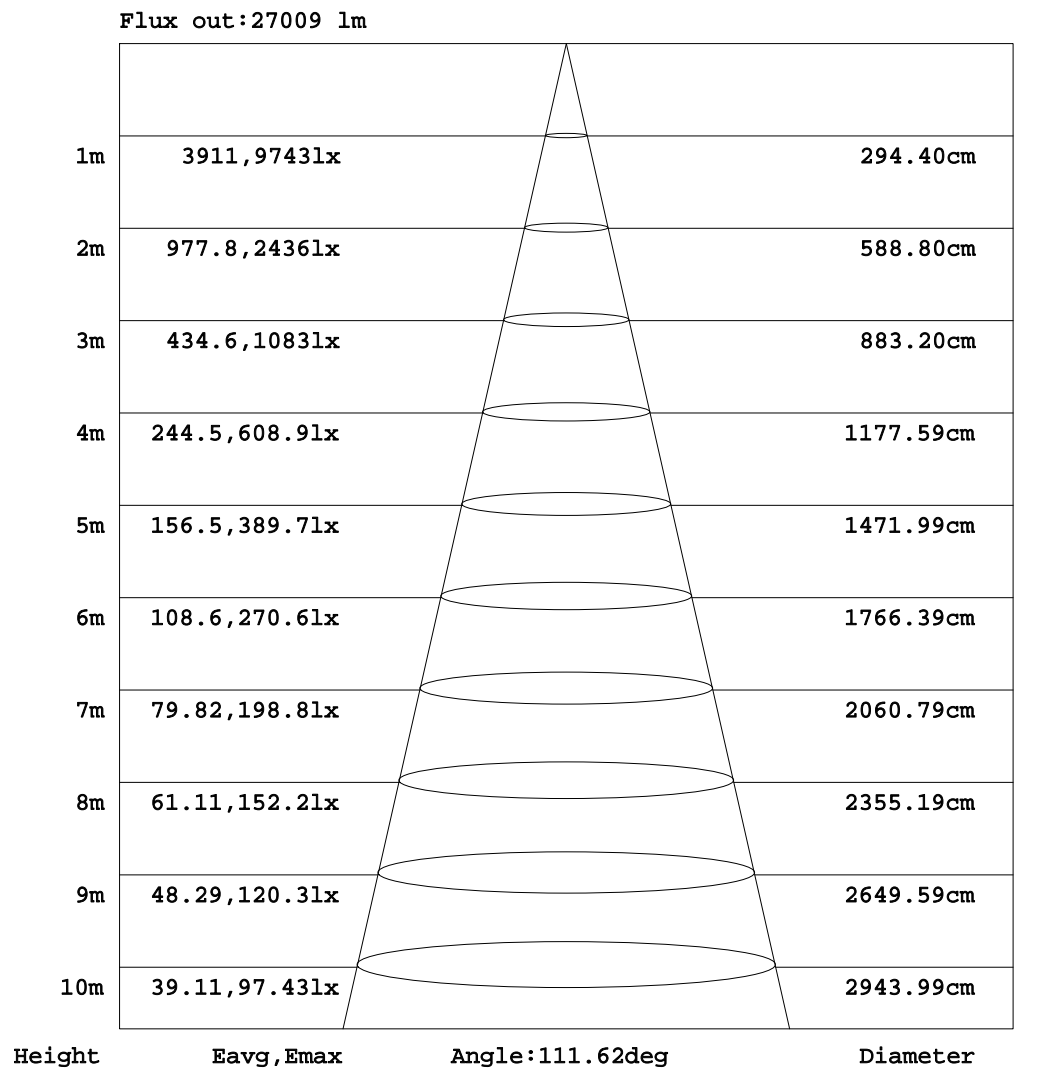


C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2017

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  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:



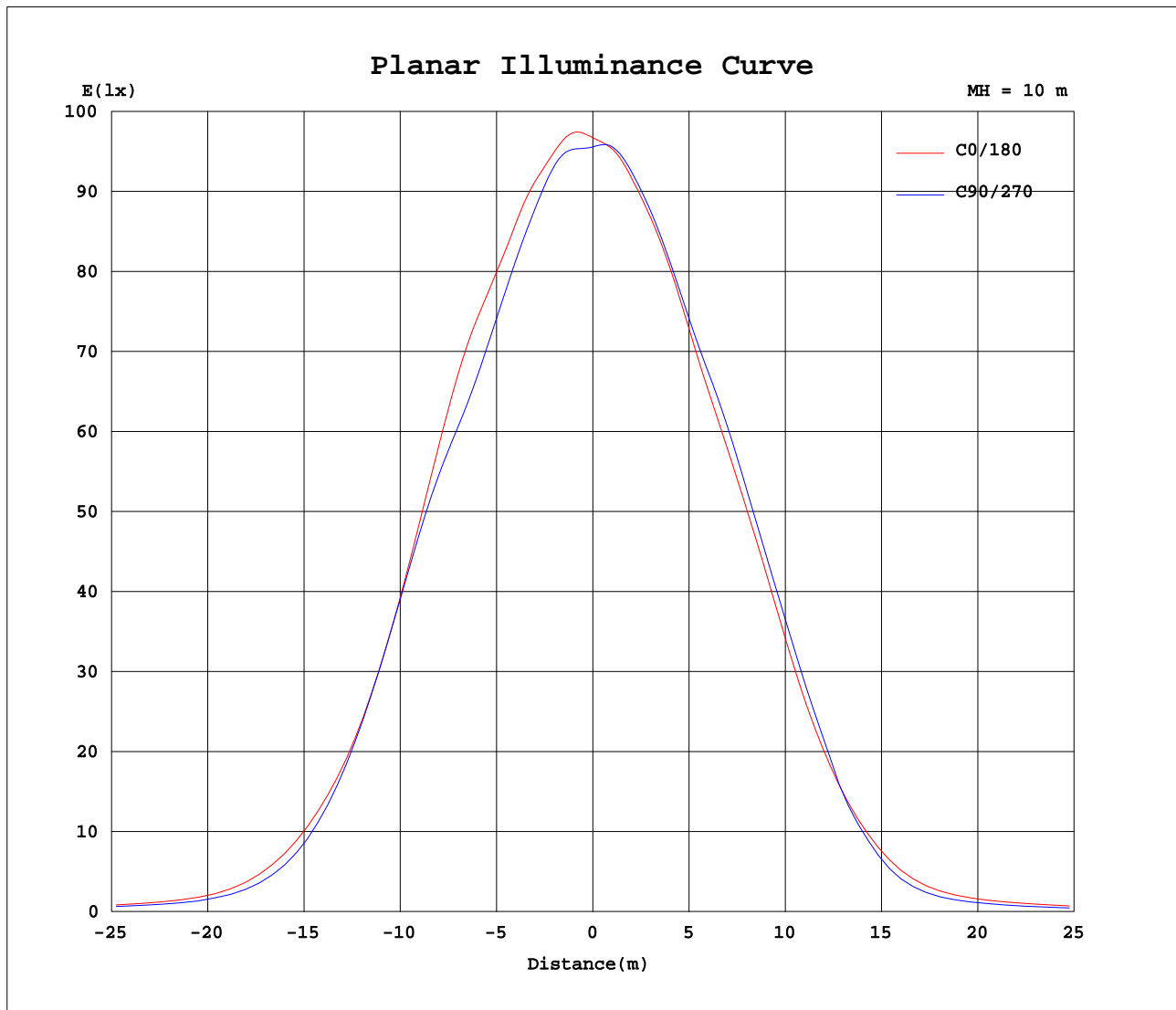
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  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-XXX240H5 110.GOS