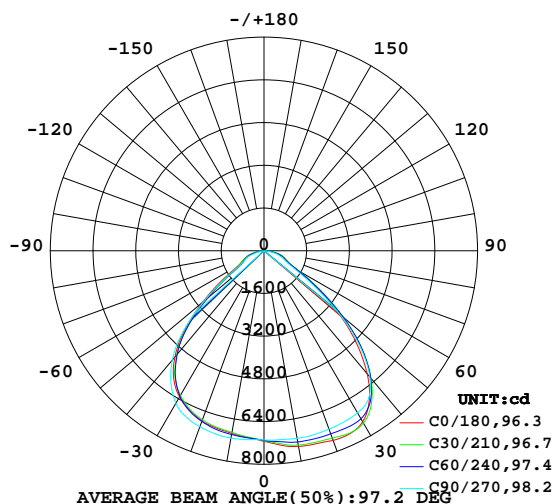


## LUMINAIRE PHOTOMETRIC TEST REPORT

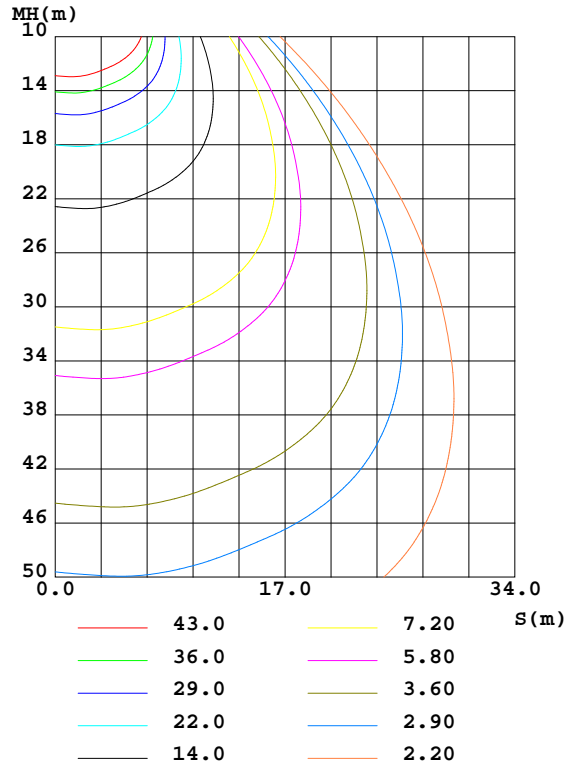
NAME: LED灯	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.: 21cm*16cm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 140.76 lm/W			
MODEL	ZGSM-GCD120H4	Imax(cd)	7587	S/MH(C0/180)	1.31
NOMINAL POWER(W)	120	LOR(%)	100.5	S/MH(C90/270)	1.35
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	16891	$\eta$ UP,DN(C0-180)	0.0,52.7
NOMINAL FLUX(lm)	16800	CIE CLASS	DIRECT	$\eta$ UP,DN(C180-360)	0.0,47.9
LAMPS INSIDE	1	$\eta$ up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	220.1	$\eta$ down(%)	100.5	CIBSE SHR MAX	1.35

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	7441	7339	7132	6951	6949	6933	7127	7299	0- 10	680.1	680.1	4.03,4.05
20	7558	7383	7110	6848	6786	6735	7020	7340	10- 20	2019	2699	16,16.1
30	7394	7374	7010	6601	6324	6227	6604	7026	20- 30	3234	5933	35.1,35.3
40	6019	6271	6169	5642	5189	5043	5342	5600	30- 40	3968	9901	58.6,58.9
50	3666	3929	3696	3244	3004	2784	2910	3205	40- 50	3506	13407	79.4,79.8
60	1442	1513	1265	1118	1117	980.3	937.3	1152	50- 60	1871	15278	90.4,90.9
70	827.0	813.7	705.9	721.9	718.7	684.3	616.4	748.5	60- 70	902.0	16180	95.8,96.3
80	402.2	443.4	308.6	331.1	281.9	254.7	83.71	337.0	70- 80	563.1	16743	99.1,99.7
90	32.76	37.62	6.547	16.90	16.86	12.16	3.350	17.29	80- 90	148.5	16891	100,101
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): 11808 lm

%lum = 69.9%

%lamp = 70.3%

Conical surface Flux(120deg): 15278 lm

%lum = 90.4%

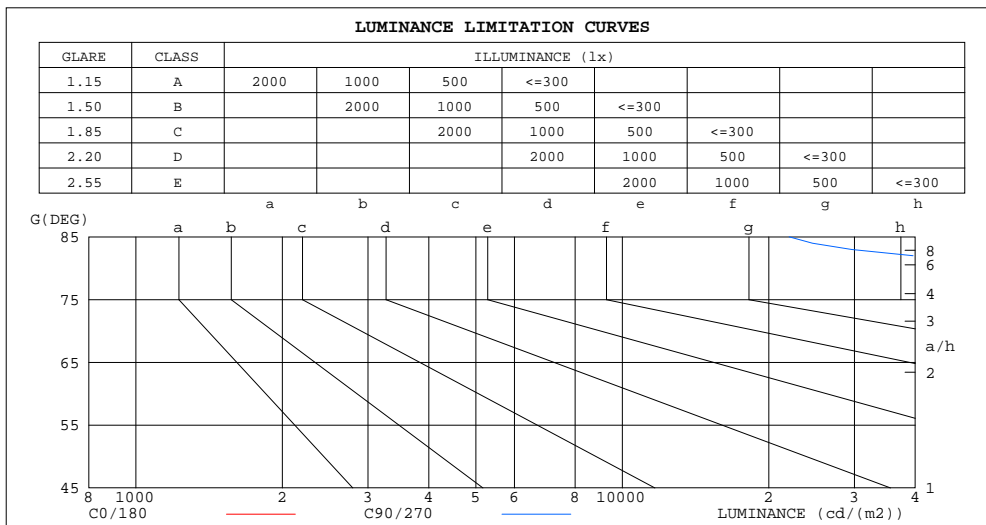
%lamp = 90.9%

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	57703	22027
80	68933	52892
75	77107	58434
70	71968	61429
65	69826	61537
60	85842	75327
55	127083	116753
50	169735	171151
45	206503	214653

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:

## 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	.257	.146	.046	.251	.143	.045	.237	.136	.044	.225	.130	.042	.214	.124	.040		
2.0	.247	.135	.042	.241	.133	.041	.230	.128	.040	.219	.123	.038	.210	.119	.037		
3.0	.233	.124	.037	.228	.122	.037	.218	.118	.036	.209	.114	.035	.200	.111	.034		
4.0	.219	.114	.033	.214	.112	.033	.206	.109	.033	.197	.106	.032	.190	.103	.031		
5.0	.206	.105	.030	.202	.104	.030	.194	.101	.030	.187	.098	.029	.180	.096	.029		
6.0	.193	.097	.028	.190	.096	.028	.183	.094	.027	.176	.092	.027	.170	.090	.027		
7.0	.182	.090	.026	.179	.089	.025	.173	.087	.025	.167	.086	.025	.161	.084	.025		
8.0	.172	.084	.024	.169	.083	.024	.163	.082	.023	.158	.080	.023	.153	.079	.023		
9.0	.163	.079	.022	.160	.078	.022	.155	.077	.022	.150	.075	.022	.146	.074	.021		
10.0	.154	.074	.020	.152	.073	.020	.147	.072	.020	.143	.071	.020	.139	.070	.020		

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	.192	.192	.192	.164	.164	.164	.112	.112	.112	.064	.064	.064	.021	.021	.021		
1.0	.178	.157	.139	.152	.135	.120	.104	.093	.083	.060	.054	.048	.019	.017	.016		
2.0	.167	.133	.104	.143	.114	.090	.098	.079	.063	.057	.046	.037	.018	.015	.012		
3.0	.158	.115	.080	.135	.099	.069	.093	.069	.049	.054	.040	.029	.017	.013	.009		
4.0	.150	.101	.063	.129	.087	.055	.088	.061	.039	.051	.036	.023	.016	.012	.008		
5.0	.143	.090	.051	.122	.078	.045	.084	.054	.031	.049	.032	.019	.016	.010	.006		
6.0	.136	.081	.042	.117	.071	.037	.081	.049	.026	.047	.029	.016	.015	.009	.005		
7.0	.129	.074	.036	.111	.064	.031	.077	.045	.022	.045	.027	.013	.014	.009	.004		
8.0	.124	.069	.031	.106	.059	.027	.074	.042	.019	.043	.025	.011	.014	.008	.004		
9.0	.118	.064	.027	.102	.055	.023	.070	.039	.017	.041	.023	.010	.013	.008	.003		
10.0	.113	.059	.024	.097	.052	.021	.067	.036	.015	.039	.021	.009	.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		19.9	21.2	20.1	21.4	21.6	19.7	21.1	20.0	21.3	21.5
	3H	20.3	21.5	20.6	21.8	22.0	20.1	21.3	20.4	21.5	21.8
	4H	20.6	21.8	20.9	22.1	22.3	20.3	21.5	20.6	21.7	22.0
	6H	20.9	22.0	21.3	22.3	22.6	20.5	21.6	20.8	21.8	22.1
	8H	21.0	22.1	21.4	22.4	22.6	20.5	21.5	20.8	21.8	22.1
	12H	21.1	22.1	21.4	22.4	22.7	20.5	21.5	20.8	21.8	22.1
4H	2H	19.9	21.1	20.2	21.4	21.6	19.8	21.0	20.1	21.3	21.5
	3H	20.6	21.6	21.0	21.9	22.2	20.4	21.4	20.7	21.7	22.0
	4H	21.1	22.0	21.5	22.3	22.7	20.8	21.7	21.1	22.0	22.3
	6H	21.6	22.4	22.0	22.8	23.1	21.1	21.9	21.4	22.2	22.6
	8H	21.8	22.5	22.2	22.9	23.3	21.1	21.9	21.5	22.2	22.6
	12H	21.9	22.6	22.3	22.9	23.3	21.1	21.8	21.6	22.2	22.6
8H	4H	21.3	22.0	21.7	22.4	22.8	20.9	21.7	21.3	22.1	22.4
	6H	21.9	22.5	22.4	22.9	23.4	21.4	22.0	21.8	22.4	22.8
	8H	22.2	22.7	22.6	23.2	23.6	21.6	22.1	22.0	22.5	23.0
	12H	22.4	22.9	22.9	23.3	23.8	21.6	22.1	22.1	22.6	23.0
12H	4H	21.3	22.0	21.7	22.3	22.7	21.0	21.6	21.4	22.0	22.4
	6H	22.0	22.5	22.4	22.9	23.4	21.5	22.0	21.9	22.4	22.9
	8H	22.3	22.7	22.7	23.2	23.7	21.7	22.1	22.1	22.6	23.1
Variations with the observer position at spacings:											
S = 1.0H		+ 0.6 / - 0.7					+ 0.7 / - 0.9				
1.5H		+ 0.3 / - 0.4					+ 0.5 / - 0.5				
2.0H		+ 1.5 / - 1.3					+ 1.9 / - 1.7				

CIE Pub.117, 16800 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 9.8)

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:

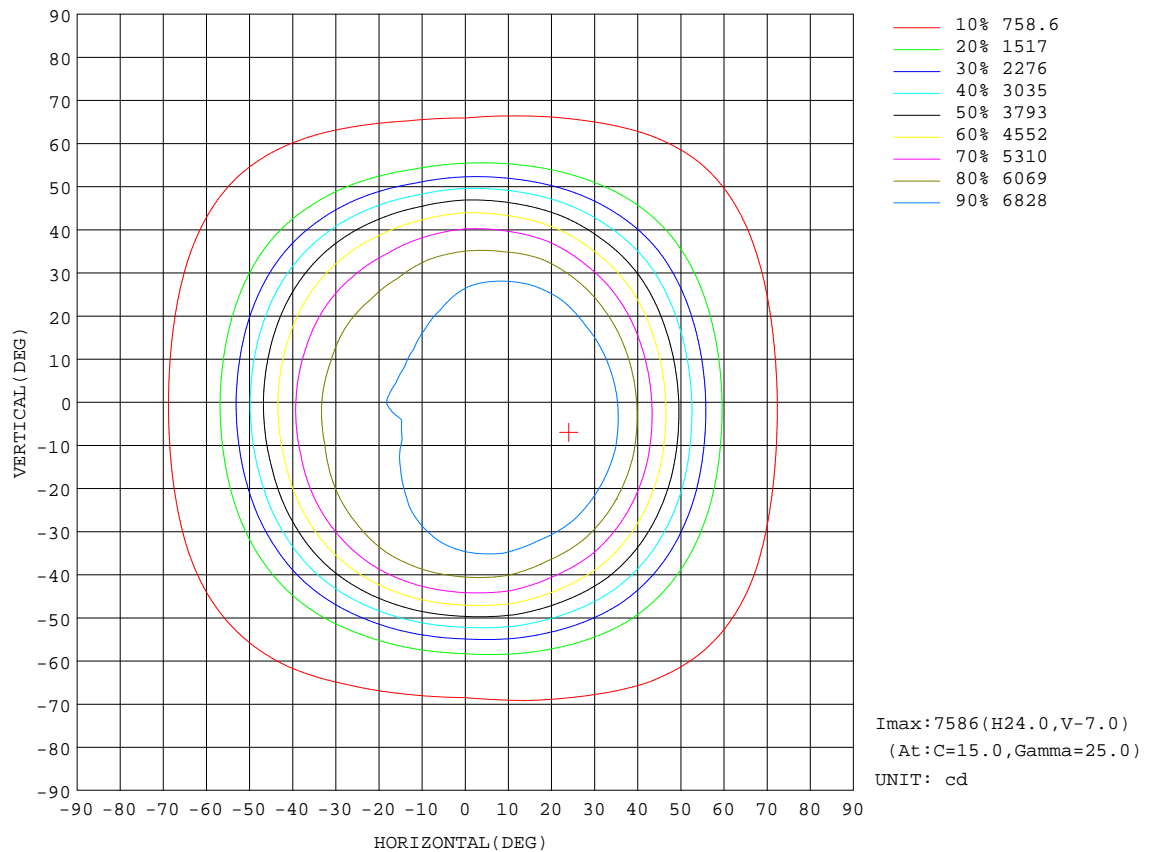
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT)    k(RI) x RCR = 5									
k = 0.60	66	56	49	65	55	49	64	55	49	43
0.80	76	66	60	75	66	60	73	65	59	53
1.00	84	75	69	83	74	68	81	75	68	62
1.25	91	82	76	89	81	76	87	80	75	69
1.50	95	87	81	94	86	81	91	85	80	73
2.00	101	94	89	99	93	88	96	91	86	80
2.50	104	97	93	102	96	92	98	94	90	82
3.00	106	101	96	104	99	95	101	97	93	85
4.00	110	105	101	107	103	100	103	100	97	89
5.00	111	107	104	109	106	103	105	102	99	91
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:



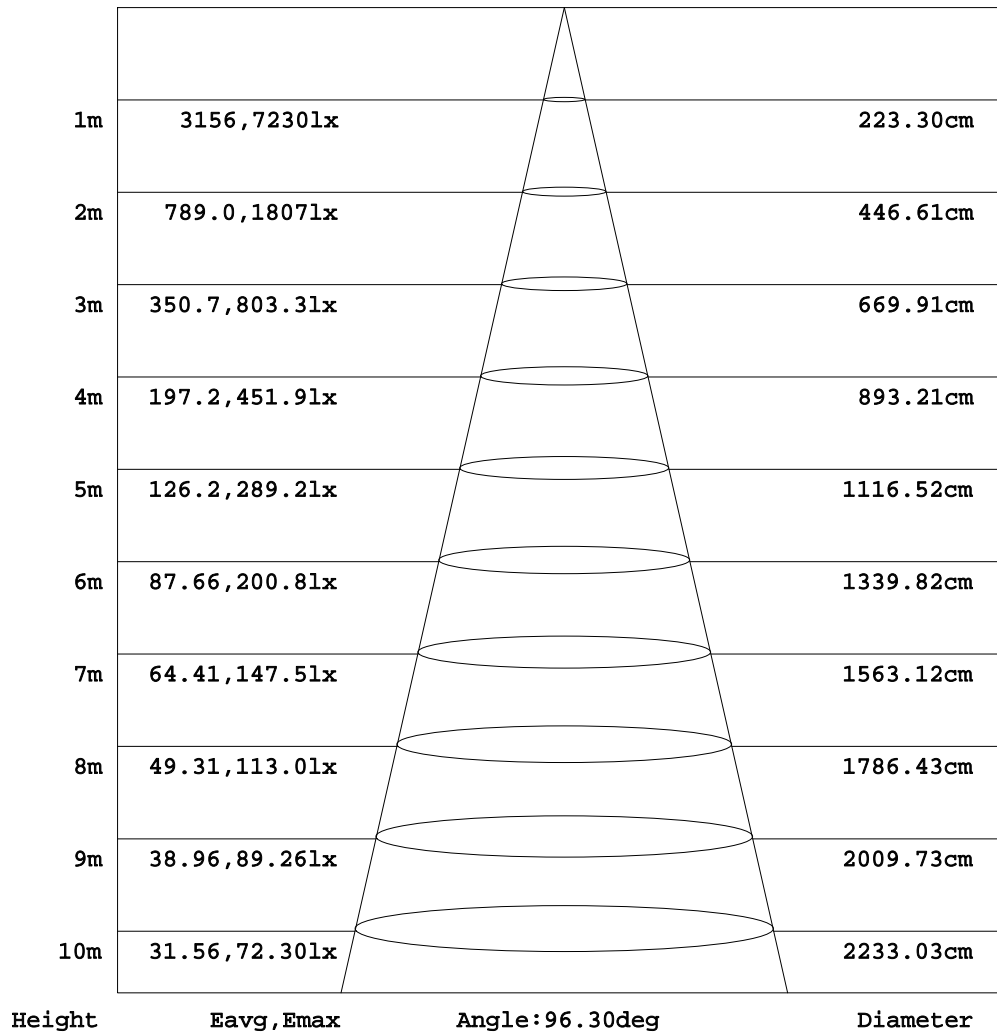
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2017

$\gamma$  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:

Flux out:13121 lm



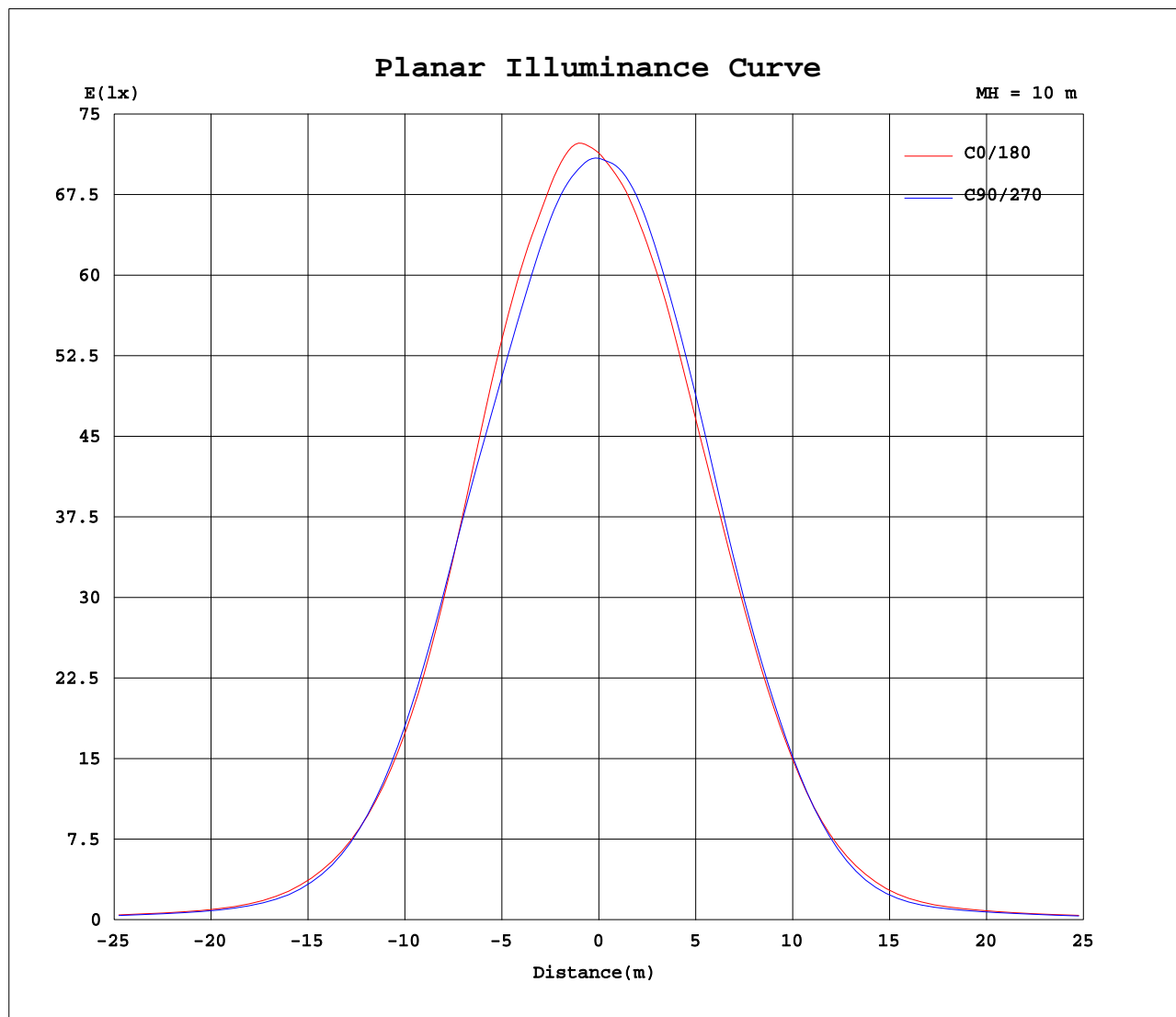
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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

$\gamma$  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\90\ZGSM-XXX120H4 90.GOS

E:\ies文件夹\H4 H5 H6 工厂灯嵌灯 3030 GOS\90\ZGSM-XXX120H4 90.GOS