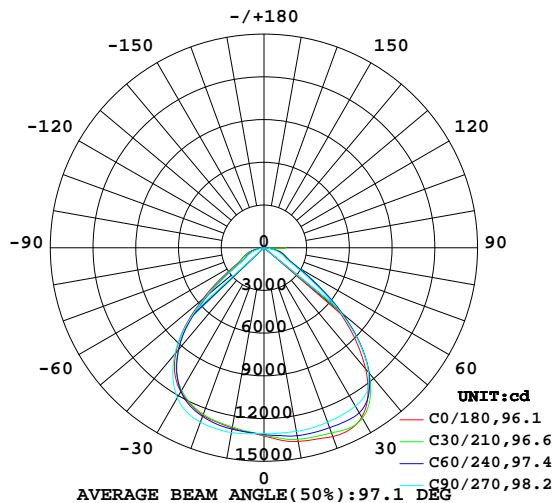


## LUMINAIRE PHOTOMETRIC TEST REPORT

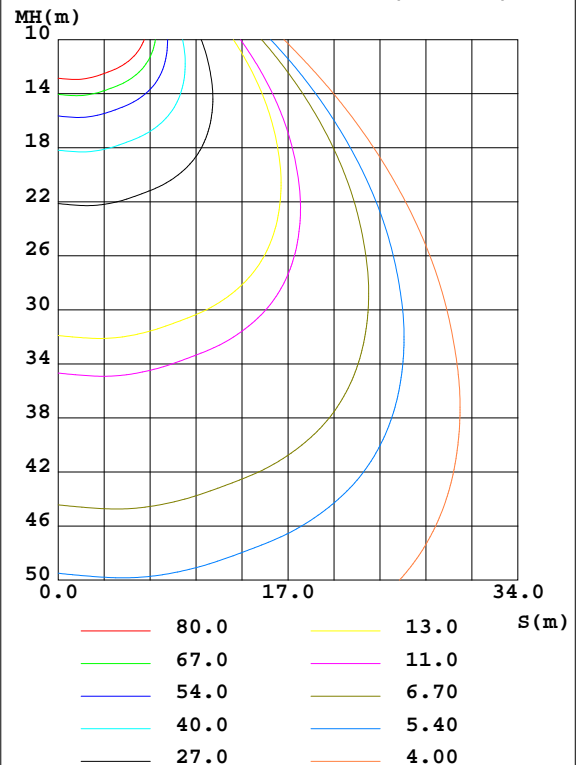
NAME: LED灯	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:21cm*16cm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 129.76 lm/W			
MODEL	ZGSM-GCD240H5	Imax(cd)	14158	S/MH(C0/180)	1.30
NOMINAL POWER(W)	240	LOR(%)	99.8	S/MH(C90/270)	1.34
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	31142	$\eta$ UP,DN(C0-180)	0.0,52.8
NOMINAL FLUX(lm)	31200	CIE CLASS	DIRECT	$\eta$ UP,DN(C180-360)	0.0,47.0
LAMPS INSIDE	1	$\eta$ up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	220.1	$\eta$ down(%)	99.8	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:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	1381	1355	1309	1274	1285	1284	1318	1346	0- 10	1254	1254	4.03,4.02
20	1411	1364	1303	1251	1252	1246	1304	1363	10- 20	3725	4979	16,16
30	1374	1365	1284	1205	1167	1150	1217	1291	20- 30	5965	10945	35.1,35.1
40	1111	1159	1142	1044	963.4	930.7	974.5	1014	30- 40	7300	18245	58.6,58.5
50	676.6	726.3	695.2	615.0	561.5	512.4	518.1	571.5	40- 50	6454	24699	79.3,79.2
60	268.1	279.9	238.9	211.9	207.5	178.1	156.6	206.8	50- 60	3436	28135	90.3,90.2
70	156.1	152.1	131.9	134.3	133.4	113.4	91.95	125.0	60- 70	1632	29768	95.6,95.4
80	75.68	83.29	54.33	62.27	51.99	39.10	19.05	50.83	70- 80	1002	30770	98.8,98.6
90	140.9	153.5	1.675	113.3	3.389	2.231	0.6712	3.032	80- 90	372.4	31142	100,99.8
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): 21755 lm

%lum = 69.9%

%lamp = 69.7%

Conical surface Flux(120deg): 28135 lm

%lum = 90.3%

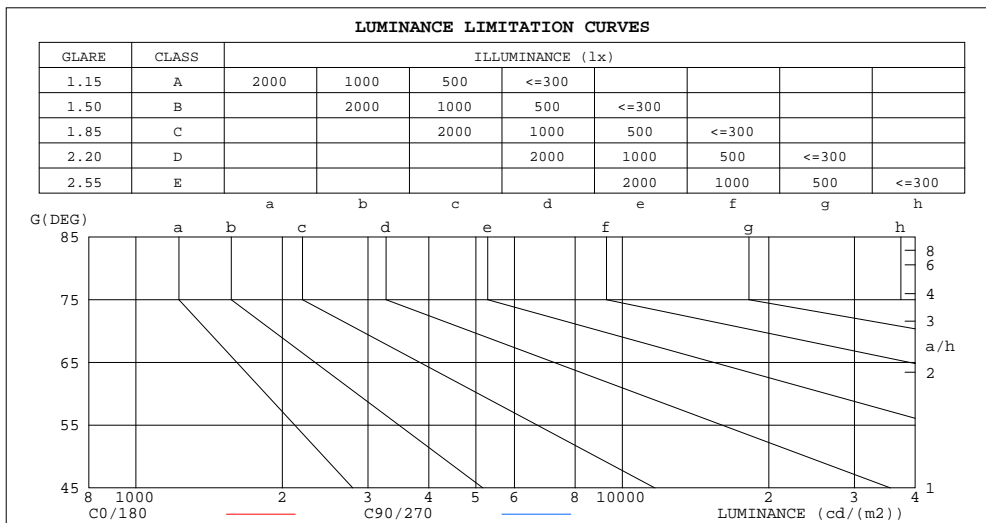
%lamp = 90.2%

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	108823	43158
80	129703	93117
75	145529	109382
70	135853	114734
65	131762	115413
60	159607	142227
55	234818	220594
50	313283	321910
45	380698	400301

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	.258	.147	.046	.251	.143	.045	.238	.137	.044	.226	.130	.042	.215	.125	.040		
2.0	.246	.135	.041	.240	.132	.041	.229	.127	.040	.219	.123	.038	.209	.118	.037		
3.0	.232	.123	.037	.227	.121	.037	.217	.117	.036	.208	.114	.035	.199	.110	.034		
4.0	.218	.113	.033	.213	.112	.033	.204	.108	.032	.196	.105	.032	.189	.103	.031		
5.0	.204	.104	.030	.200	.103	.030	.193	.100	.030	.185	.098	.029	.179	.095	.029		
6.0	.192	.096	.028	.189	.095	.027	.182	.093	.027	.175	.091	.027	.169	.089	.026		
7.0	.181	.089	.025	.178	.089	.025	.172	.087	.025	.166	.085	.025	.160	.083	.024		
8.0	.171	.083	.023	.168	.083	.023	.162	.081	.023	.157	.080	.023	.152	.078	.023		
9.0	.161	.078	.022	.159	.077	.022	.154	.076	.022	.149	.075	.021	.145	.074	.021		
10.0	.153	.073	.020	.151	.073	.020	.146	.072	.020	.142	.070	.020	.138	.069	.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	.190	.190	.190	.162	.162	.162	.111	.111	.111	.064	.064	.064	.020	.020	.020		
1.0	.176	.156	.138	.151	.134	.119	.103	.092	.082	.059	.053	.048	.019	.017	.015		
2.0	.166	.132	.103	.142	.114	.089	.097	.079	.062	.056	.046	.037	.018	.015	.012		
3.0	.157	.114	.079	.135	.098	.069	.092	.068	.048	.053	.040	.028	.017	.013	.009		
4.0	.149	.100	.063	.128	.087	.055	.088	.060	.038	.051	.035	.023	.016	.011	.007		
5.0	.142	.089	.051	.122	.077	.044	.084	.054	.031	.049	.032	.019	.016	.010	.006		
6.0	.135	.081	.042	.116	.070	.037	.080	.049	.026	.046	.029	.015	.015	.009	.005		
7.0	.129	.074	.036	.111	.064	.031	.076	.045	.022	.044	.026	.013	.014	.009	.004		
8.0	.123	.068	.031	.106	.059	.027	.073	.041	.019	.043	.024	.011	.014	.008	.004		
9.0	.117	.063	.027	.101	.055	.023	.070	.039	.016	.041	.023	.010	.013	.007	.003		
10.0	.112	.059	.024	.097	.051	.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	21.6	20.6	21.8	22.0	20.1	21.3	20.4	21.6	21.8
4H					20.7	21.8	21.0	22.1	22.3	20.3	21.5	20.6	21.7	22.0
6H					21.0	22.1	21.3	22.3	22.6	20.5	21.6	20.8	21.8	22.1
8H					21.1	22.1	21.4	22.4	22.7	20.5	21.6	20.8	21.8	22.1
12H					21.1	22.1	21.5	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	21.7	21.0	21.9	22.2	20.4	21.4	20.8	21.7	22.0
4H					21.2	22.1	21.5	22.4	22.7	20.8	21.7	21.1	22.0	22.3
6H					21.6	22.5	22.0	22.8	23.2	21.1	21.9	21.5	22.2	22.6
8H					21.8	22.6	22.2	22.9	23.3	21.1	21.9	21.6	22.3	22.6
12H					21.9	22.6	22.3	23.0	23.4	21.2	21.9	21.6	22.2	22.6
8H 4H					21.3	22.1	21.7	22.4	22.8	21.0	21.7	21.4	22.1	22.5
6H					22.0	22.6	22.4	23.0	23.4	21.4	22.0	21.9	22.4	22.9
8H					22.2	22.8	22.7	23.2	23.7	21.6	22.1	22.0	22.5	23.0
12H					22.4	22.9	22.9	23.4	23.8	21.7	22.1	22.1	22.6	23.1
12H 4H					21.3	22.0	21.7	22.4	22.8	21.0	21.7	21.4	22.1	22.5
6H					22.0	22.6	22.5	23.0	23.4	21.5	22.0	21.9	22.5	22.9
8H					22.3	22.8	22.8	23.2	23.7	21.7	22.2	22.2	22.6	23.1
Variations with the observer position at spacings:														
S = 1.0H					+ 0.6 / - 0.7					+ 0.7 / - 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, 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:

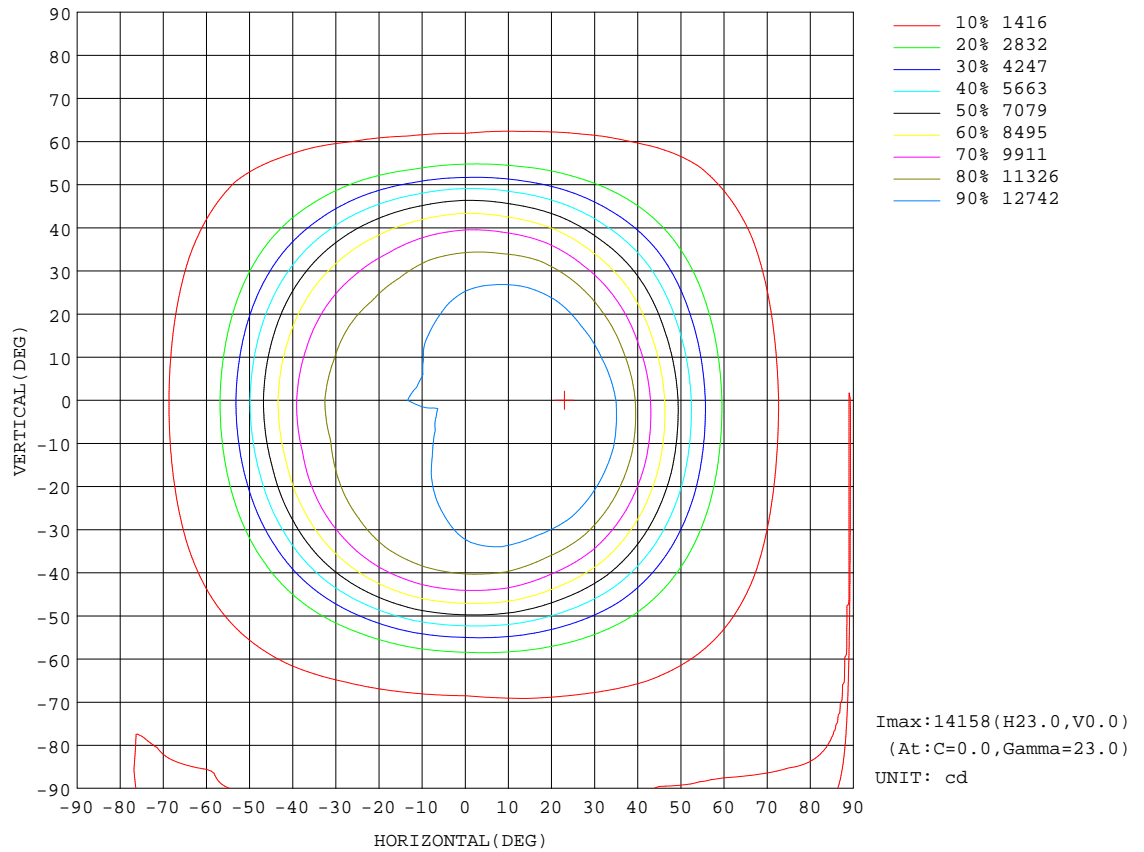
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT)    k(RI) x RCR = 5									
k = 0.60	65	55	49	65	55	49	64	54	49	43
0.80	75	66	59	75	65	59	73	64	59	53
1.00	84	74	68	82	74	68	80	75	67	61
1.25	90	81	76	89	81	75	86	79	74	68
1.50	94	86	81	93	86	80	90	84	79	73
2.00	100	93	88	98	92	87	95	90	86	79
2.50	103	97	92	101	95	91	98	93	89	82
3.00	106	100	96	104	99	95	100	96	92	85
4.00	109	104	100	106	102	99	102	99	96	88
5.00	111	107	103	108	105	102	104	101	99	90
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004										
Suspended										
SHRNM = 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:



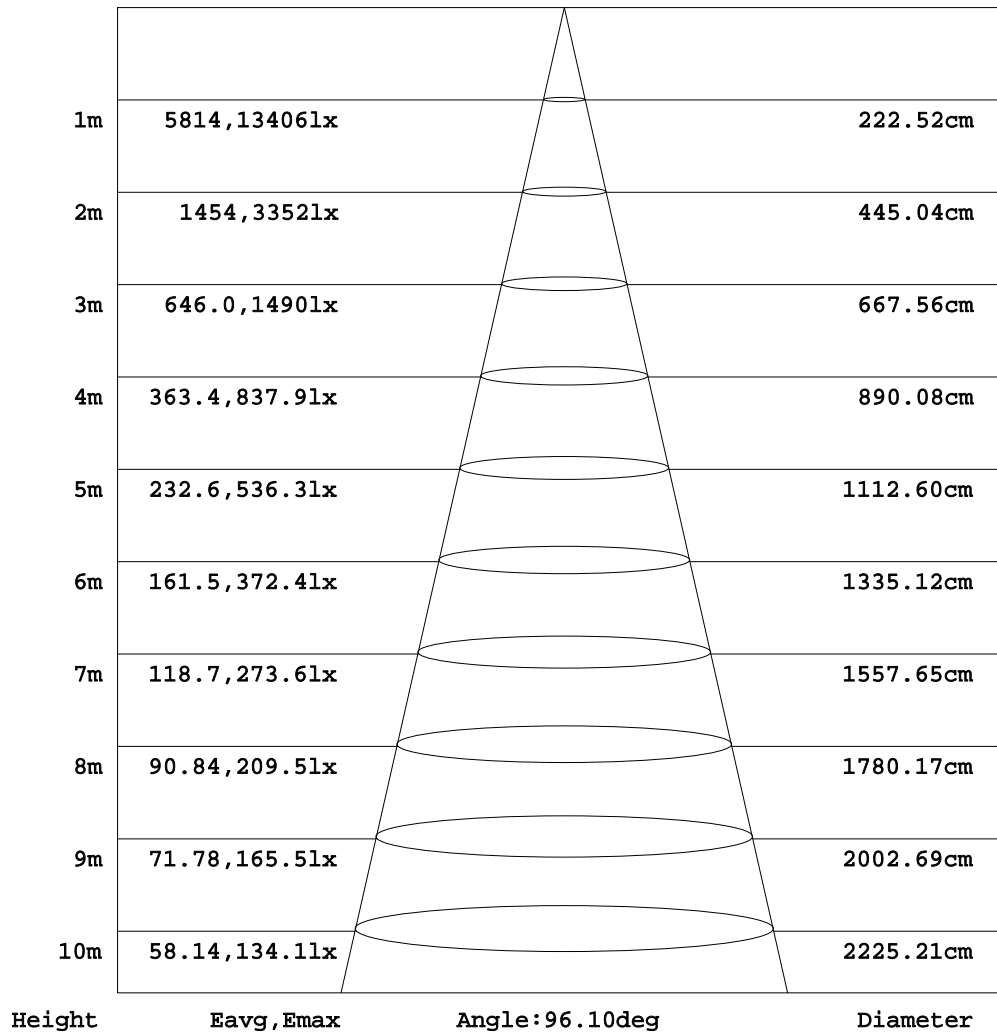
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2017

$\gamma$  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:24172 lm



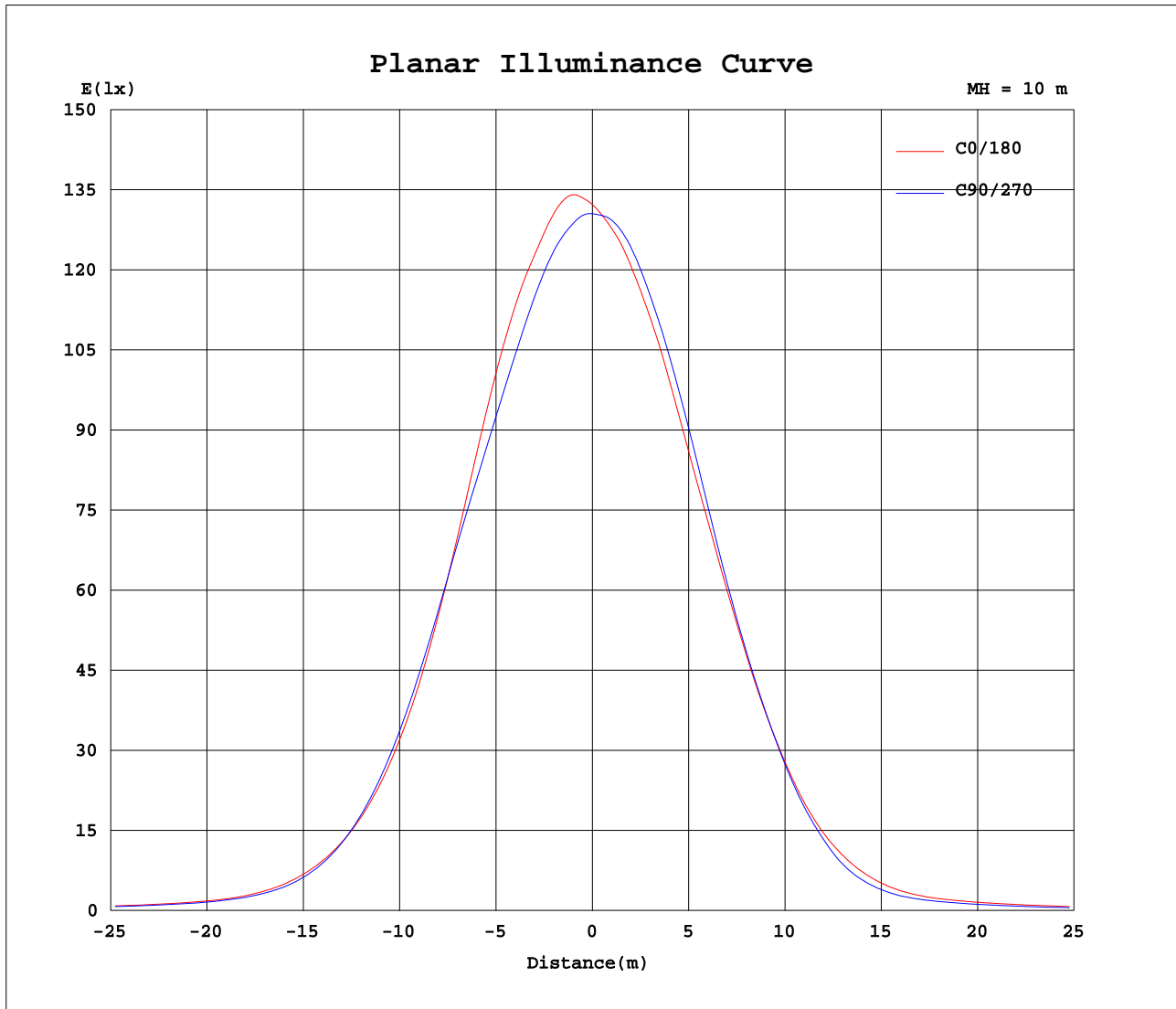
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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-XXX240H5 90.GOS