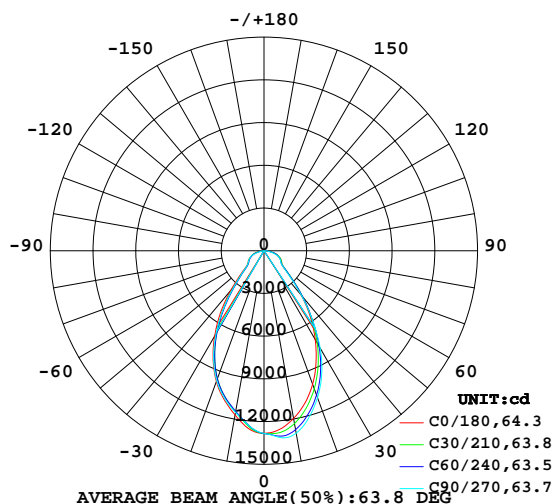


LUMINAIRE PHOTOMETRIC TEST REPORT

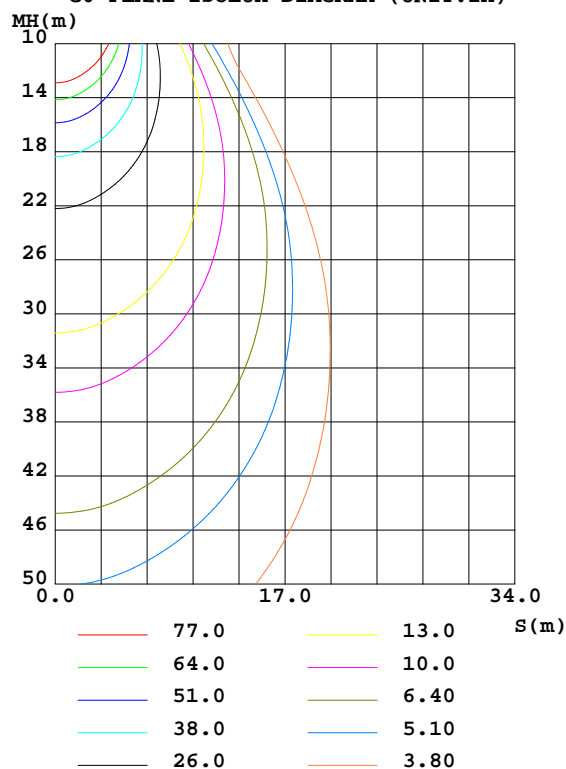
NAME: LED灯	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:21cm*16cm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 140.74 lm/W			
MODEL	ZGSM-GCD120H4	Imax(cd)	13221	S/MH(C0/180)	0.92
NOMINAL POWER(W)	120	LOR(%)	100.5	S/MH(C90/270)	0.92
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	16889	η UP,DN(C0-180)	0.0,53.1
NOMINAL FLUX(lm)	16800	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,47.5
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.00
TEST VOLTAGE(V)	220.1	η down(%)	100.5	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	1196	1255	1301	1237	1172	1144	1153	1171	0- 10	1186	1186	7.02,7.06
20	998.6	1058	1099	1054	977.8	953.0	971.9	985.9	10- 20	3135	4322	25.6,25.7
30	720.2	765.8	789.3	747.5	694.1	653.4	674.4	687.8	20- 30	3999	8320	49.3,49.5
40	410.7	430.1	410.3	389.4	364.0	310.7	326.3	354.1	30- 40	3377	11698	69.3,69.6
50	175.8	185.7	175.8	159.1	154.1	146.0	150.6	158.7	40- 50	1899	13596	80.5,80.9
60	140.6	138.6	133.7	123.0	122.8	118.2	120.6	128.4	50- 60	1268	14865	88,88.5
70	106.3	107.7	100.2	90.63	86.89	82.75	80.92	96.04	60- 70	1105	15970	94.6,95.1
80	48.15	58.53	40.20	44.04	33.40	33.36	9.107	43.03	70- 80	719.5	16689	98.8,99.3
90	4.259	6.422	0.9875	1.862	1.720	1.175	0.3821	2.081	80- 90	199.6	16889	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:×10cd									UNIT:lm		

Conical surface Flux(90deg): 12810 lm

%lum = 75.8%

%lamp = 76.2%

Conical surface Flux(120deg): 14865 lm

%lum = 88.0%

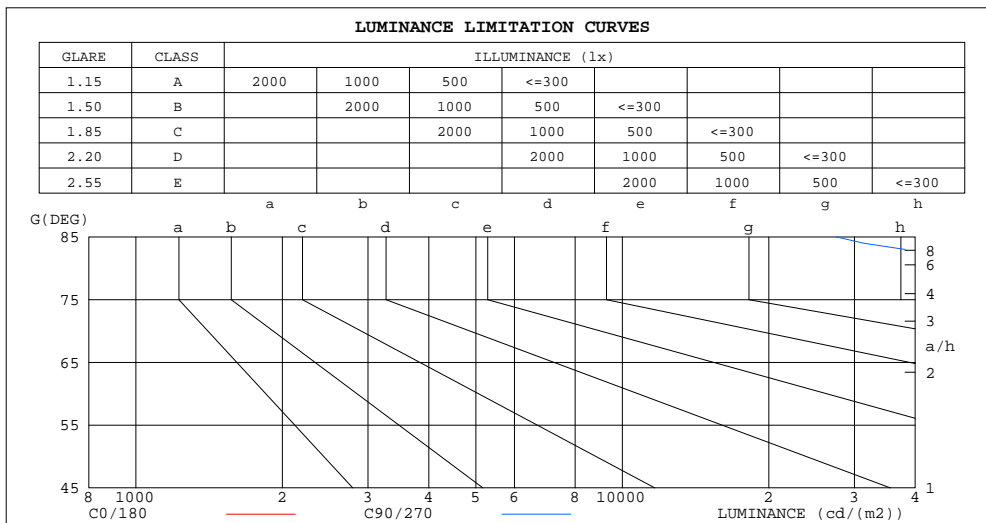
%lamp = 88.5%

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	73544	27499
80	82518	68891
75	96850	80015
70	92526	87158
65	88779	85043
60	83719	79587
55	79324	75598
50	81401	81386
45	112518	109318

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	
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
pfc	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)										
0.0																	
1.0	.250	.142	.045	.243	.139	.044	.230	.132	.042	.218	.126	.040	.207	.120	.039		
2.0	.235	.129	.040	.229	.126	.039	.218	.121	.038	.208	.116	.036	.198	.112	.035		
3.0	.219	.117	.035	.214	.115	.034	.204	.111	.034	.195	.107	.033	.187	.103	.032		
4.0	.204	.106	.031	.200	.104	.031	.191	.101	.030	.183	.098	.030	.176	.095	.029		
5.0	.191	.097	.028	.187	.096	.028	.179	.093	.027	.172	.091	.027	.166	.088	.027		
6.0	.179	.090	.026	.175	.088	.025	.169	.086	.025	.162	.084	.025	.156	.082	.024		
7.0	.168	.083	.024	.165	.082	.023	.159	.080	.023	.153	.079	.023	.148	.077	.023		
8.0	.158	.077	.022	.156	.077	.022	.150	.075	.021	.145	.074	.021	.141	.072	.021		
9.0	.150	.072	.020	.147	.072	.020	.143	.070	.020	.138	.069	.020	.134	.068	.020		
10.0	.142	.068	.019	.140	.068	.019	.136	.066	.019	.131	.065	.019	.128	.064	.018		

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	.191	.191	.191	.164	.164	.164	.112	.112	.112	.064	.064	.064	.021	.021	.021		
1.0	.177	.158	.140	.151	.135	.120	.104	.093	.083	.060	.054	.048	.019	.017	.016		
2.0	.165	.133	.106	.142	.114	.091	.097	.079	.064	.056	.046	.037	.018	.015	.012		
3.0	.155	.115	.082	.133	.099	.071	.091	.069	.050	.053	.040	.029	.017	.013	.010		
4.0	.146	.100	.066	.126	.087	.057	.086	.061	.040	.050	.035	.024	.016	.012	.008		
5.0	.138	.089	.053	.119	.077	.047	.082	.054	.033	.047	.032	.019	.015	.010	.006		
6.0	.131	.081	.045	.112	.070	.039	.078	.049	.027	.045	.029	.016	.015	.009	.005		
7.0	.124	.073	.038	.107	.064	.033	.074	.045	.023	.043	.026	.014	.014	.009	.005		
8.0	.118	.067	.032	.102	.058	.028	.070	.041	.020	.041	.024	.012	.013	.008	.004		
9.0	.112	.062	.028	.097	.054	.025	.067	.038	.018	.039	.022	.010	.013	.007	.003		
10.0	.107	.058	.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	18.8	19.0	17.2	18.4	17.4	18.6	18.8
3H		19.0	20.2	19.3	20.4	20.6	18.7	19.9	19.0	20.1	20.3
4H		19.9	20.9	20.2	21.2	21.4	19.4	20.5	19.7	20.8	21.0
6H		20.5	21.5	20.8	21.8	22.1	19.9	21.0	20.2	21.2	21.5
8H		20.7	21.7	21.0	21.9	22.2	20.0	21.0	20.4	21.3	21.6
12H		20.8	21.8	21.1	22.0	22.3	20.0	21.0	20.4	21.3	21.6
4H 2H		17.9	19.0	18.2	19.2	19.5	17.8	18.8	18.1	19.1	19.3
3H		19.9	20.8	20.2	21.1	21.4	19.6	20.5	19.9	20.8	21.1
4H		20.9	21.7	21.2	22.1	22.4	20.5	21.4	20.8	21.7	22.0
6H		21.7	22.5	22.1	22.8	23.2	21.1	21.9	21.5	22.3	22.6
8H		22.0	22.7	22.4	23.1	23.4	21.3	22.0	21.7	22.4	22.8
12H		22.2	22.8	22.6	23.2	23.6	21.4	22.0	21.8	22.4	22.8
8H 4H		21.3	22.0	21.7	22.3	22.7	20.9	21.6	21.3	22.0	22.4
6H		22.3	22.9	22.8	23.3	23.7	21.8	22.4	22.2	22.8	23.2
8H		22.7	23.2	23.2	23.7	24.1	22.1	22.6	22.5	23.0	23.5
12H		23.0	23.5	23.5	23.9	24.4	22.3	22.7	22.7	23.2	23.6
12H 4H		21.3	22.0	21.7	22.3	22.7	21.0	21.6	21.4	22.0	22.4
6H		22.4	22.9	22.9	23.4	23.8	21.9	22.4	22.4	22.9	23.3
8H		22.9	23.3	23.3	23.8	24.2	22.3	22.7	22.7	23.2	23.6
Variations with the observer position at spacings:											
S = 1.0H		+ 0.2 / - 0.3					+ 0.3 / - 0.4				
1.5H		+ 0.4 / - 0.3					+ 0.5 / - 0.4				
2.0H		+ 0.3 / - 0.3					+ 0.3 / - 0.3				

CIE Pub.117, 16800 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = 9.8$)

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:

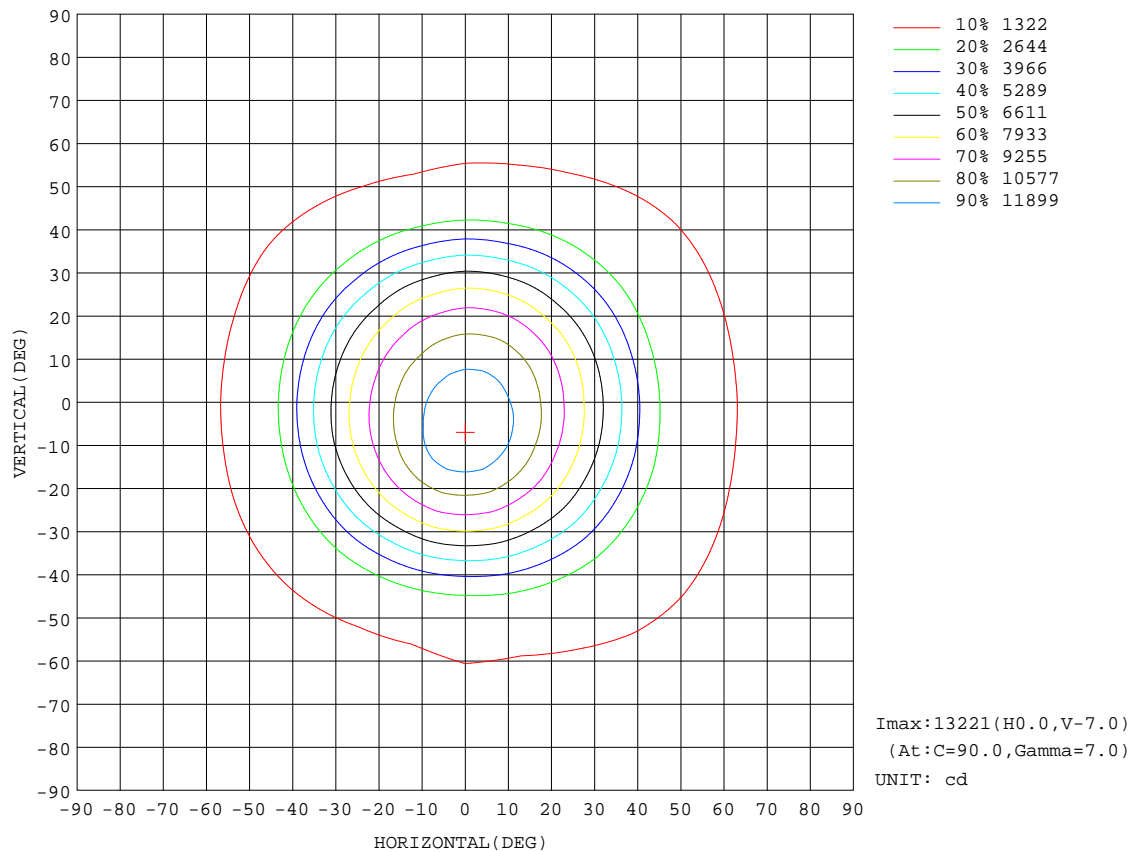
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	73	64	59	73	64	59	72	64	59	54
0.80	82	73	68	81	73	67	79	72	67	62
1.00	88	80	74	87	79	74	85	80	73	68
1.25	94	86	80	92	85	80	90	84	79	73
1.50	97	90	85	96	89	84	93	88	83	77
2.00	102	96	91	100	95	90	97	92	89	82
2.50	105	99	95	103	98	94	100	95	92	85
3.00	107	102	98	105	101	97	102	98	95	87
4.00	110	106	103	108	104	101	104	101	99	91
5.00	112	109	106	110	107	104	106	103	101	93
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:

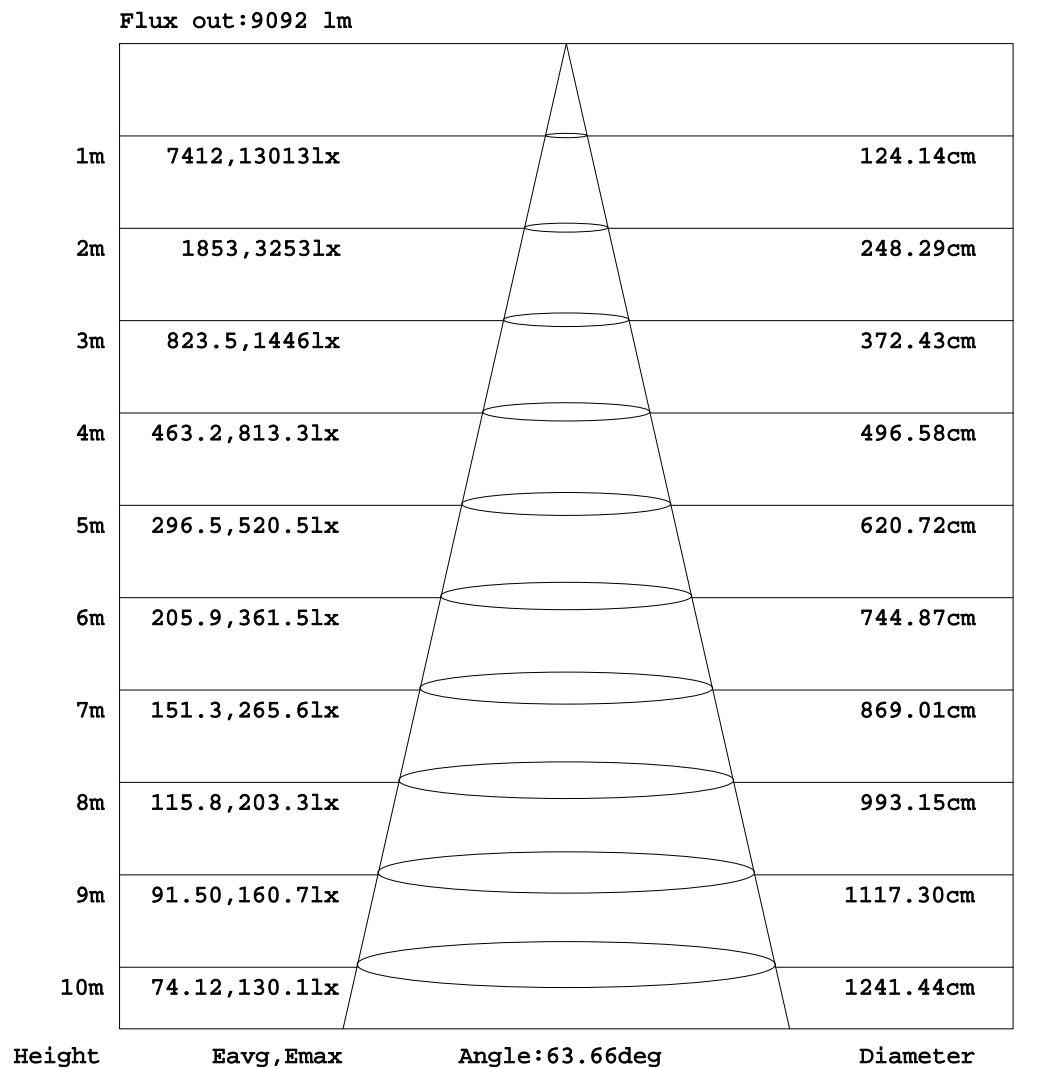


C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2017

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:

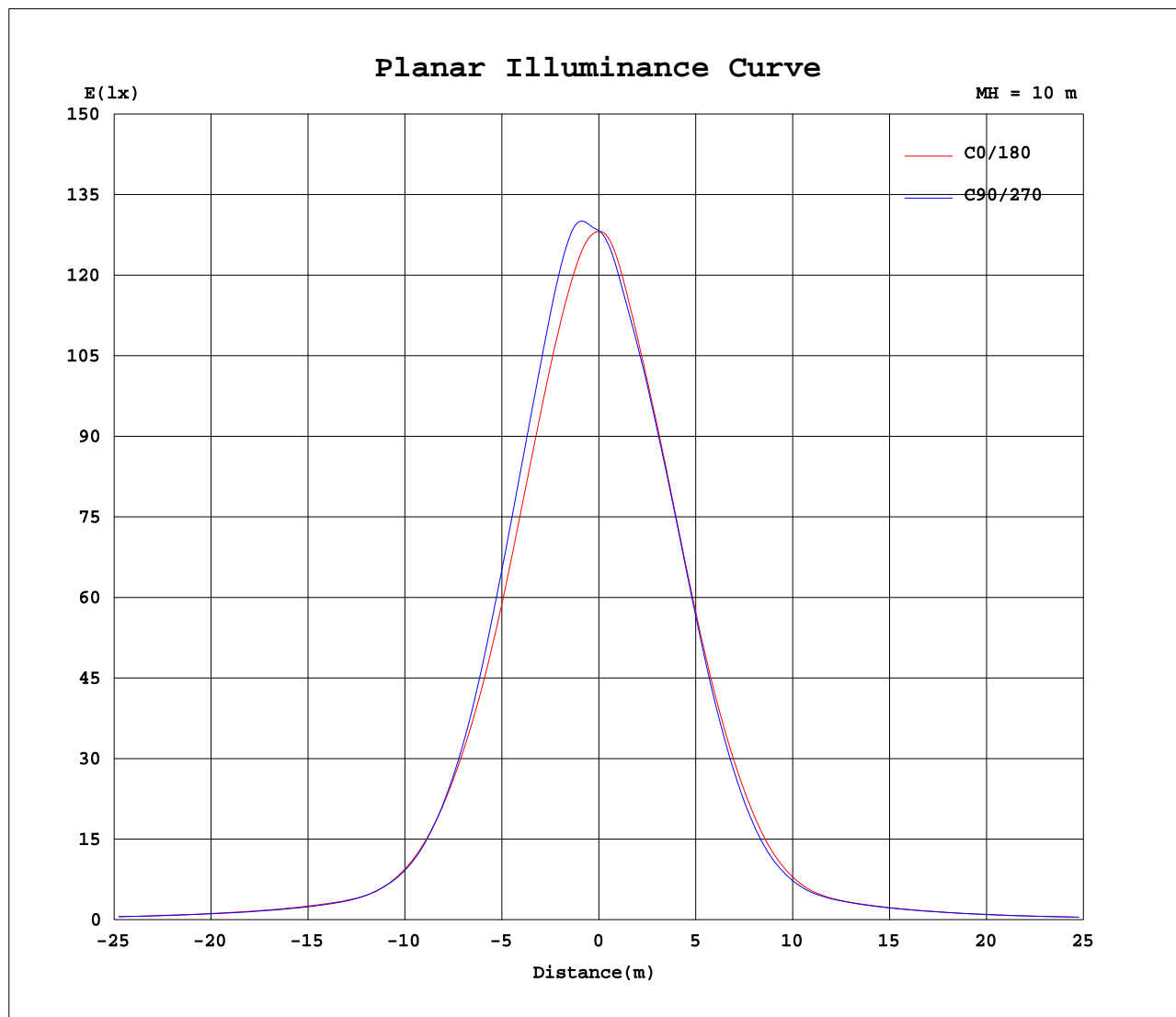


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:

