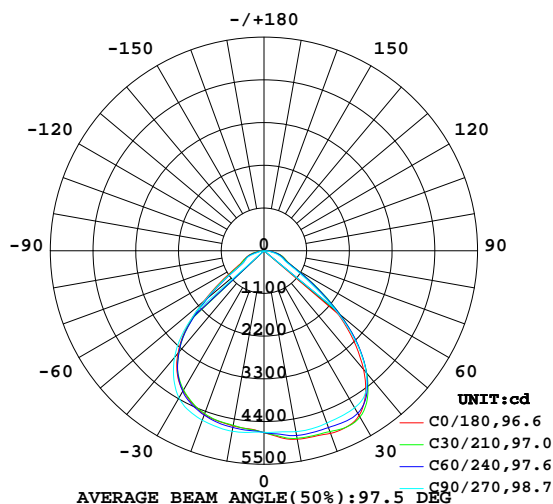


## LUMINAIRE PHOTOMETRIC TEST REPORT

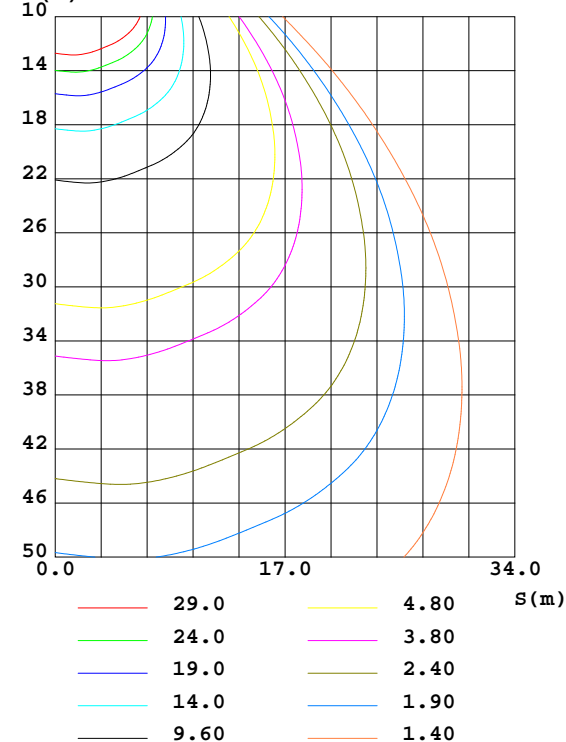
NAME: LED灯	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:21cm*16cm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 140.51 lm/W			
MODEL	ZGSM-GCD80H4	Imax(cd)	5031	S/MH(C0/180)	1.31
NOMINAL POWER(W)	80	LOR(%)	100.4	S/MH(C90/270)	1.35
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	11241	$\eta$ UP,DN(C0-180)	0.0,52.4
NOMINAL FLUX(lm)	11200	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(%)	100.4	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	4927	4873	4730	4599	4579	4582	4720	4850	0- 10	449.8	449.8	4,4.02
20	5005	4899	4722	4558	4489	4460	4646	4872	10- 20	1339	1789	15.9,16
30	4898	4898	4668	4384	4166	4136	4379	4682	20- 30	2146	3935	35,35.1
40	3990	4139	4093	3745	3447	3390	3585	3765	30- 40	2639	6574	58.5,58.7
50	2430	2591	2460	2154	2012	1900	1975	2178	40- 50	2345	8919	79.3,79.6
60	971.3	1005	849.8	749.1	758.0	646.1	624.3	782.6	50- 60	1255	10174	90.5,90.8
70	549.8	541.7	470.1	477.8	474.3	453.0	401.9	500.9	60- 70	599.7	10774	95.9,96.2
80	268.4	299.9	219.1	219.8	186.6	162.2	29.85	219.6	70- 80	369.8	11144	99.1,99.5
90	21.95	25.80	4.486	11.52	11.01	7.851	2.117	11.38	80- 90	96.64	11241	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): 7847.9 lm

%lum = 69.8%

%lamp = 70.1%

Conical surface Flux(120deg): 10174 lm

%lum = 90.5%

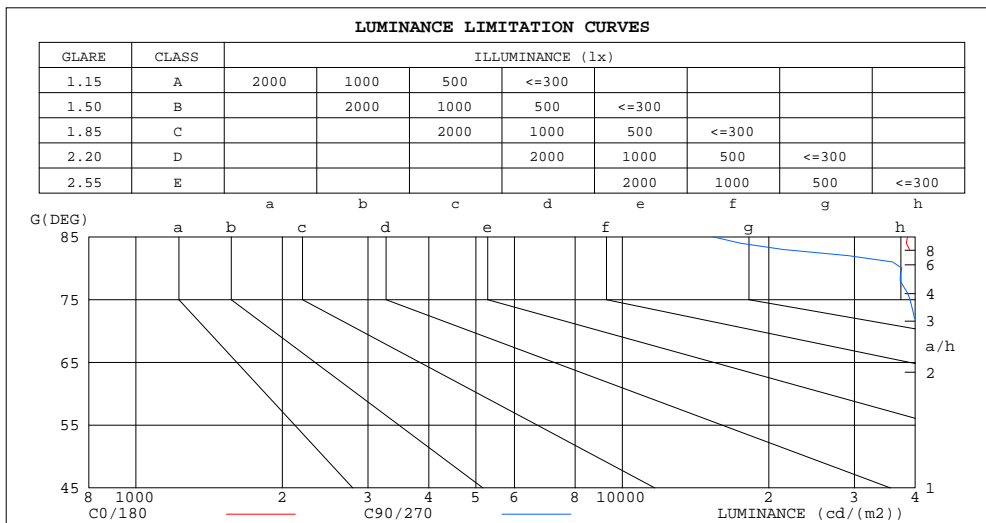
%lamp = 90.8%

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:

## 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	38549	15352
80	45993	37547
75	51321	39036
70	47841	40910
65	46286	40832
60	57815	50586
55	84419	77957
50	112529	113909
45	137111	142239

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	
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	.257	.146	.046	.250	.143	.045	.237	.136	.043	.225	.130	.042	.214	.124	.040		
2.0	.247	.135	.041	.241	.132	.041	.229	.127	.040	.219	.123	.038	.209	.118	.037		
3.0	.233	.124	.037	.227	.122	.037	.218	.118	.036	.208	.114	.035	.200	.111	.034		
4.0	.219	.114	.033	.214	.112	.033	.205	.109	.033	.197	.106	.032	.190	.103	.031		
5.0	.205	.105	.030	.201	.103	.030	.194	.101	.030	.186	.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	.085	.025	.161	.084	.025		
8.0	.172	.084	.024	.169	.083	.023	.163	.082	.023	.158	.080	.023	.153	.079	.023		
9.0	.162	.079	.022	.160	.078	.022	.155	.077	.022	.150	.075	.022	.146	.074	.021		
10.0	.154	.074	.020	.151	.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	.191	.191	.191	.163	.163	.163	.112	.112	.112	.064	.064	.064	.020	.020	.020		
1.0	.177	.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	.056	.046	.037	.018	.015	.012		
3.0	.158	.114	.080	.135	.099	.069	.093	.069	.049	.054	.040	.029	.017	.013	.009		
4.0	.150	.101	.063	.128	.087	.055	.088	.061	.039	.051	.036	.023	.016	.012	.008		
5.0	.142	.090	.051	.122	.078	.045	.084	.054	.031	.049	.032	.019	.016	.010	.006		
6.0	.136	.081	.042	.117	.070	.037	.080	.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	.123	.068	.031	.106	.059	.027	.073	.042	.019	.043	.025	.011	.014	.008	.004		
9.0	.118	.063	.027	.102	.055	.023	.070	.039	.017	.041	.023	.010	.013	.008	.003		
10.0	.113	.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					19.8	21.2	20.1	21.4	21.6	19.7	21.0	20.0	21.2	21.4
3H					20.3	21.5	20.6	21.7	22.0	20.0	21.3	20.3	21.5	21.7
4H					20.6	21.8	20.9	22.0	22.3	20.3	21.4	20.6	21.7	21.9
6H					20.9	22.0	21.2	22.3	22.5	20.4	21.5	20.8	21.8	22.1
8H					21.0	22.1	21.3	22.3	22.6	20.5	21.5	20.8	21.8	22.1
12H					21.0	22.1	21.4	22.4	22.6	20.4	21.5	20.8	21.7	22.0
4H 2H					19.9	21.1	20.2	21.3	21.6	19.8	21.0	20.1	21.2	21.5
3H					20.6	21.6	20.9	21.9	22.2	20.4	21.4	20.7	21.7	21.9
4H					21.1	22.0	21.4	22.3	22.6	20.7	21.6	21.1	22.0	22.3
6H					21.6	22.4	22.0	22.7	23.1	21.0	21.8	21.4	22.2	22.5
8H					21.7	22.5	22.2	22.9	23.2	21.1	21.9	21.5	22.2	22.6
12H					21.8	22.5	22.3	22.9	23.3	21.1	21.8	21.6	22.2	22.6
8H 4H					21.2	22.0	21.7	22.4	22.7	20.9	21.7	21.3	22.0	22.4
6H					21.9	22.5	22.3	22.9	23.4	21.4	22.0	21.8	22.4	22.8
8H					22.2	22.7	22.6	23.1	23.6	21.5	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					21.2	21.9	21.7	22.3	22.7	20.9	21.6	21.4	22.0	22.4
6H					22.0	22.5	22.4	22.9	23.4	21.4	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	23.0
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 / - 1.6				

CIE Pub.117, 11200 lm Total Lamp Luminous Flux Correct ( $8\log(F/F_0) = 8.4$ )

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:

## UTILIZATION FACTORS TABLE

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

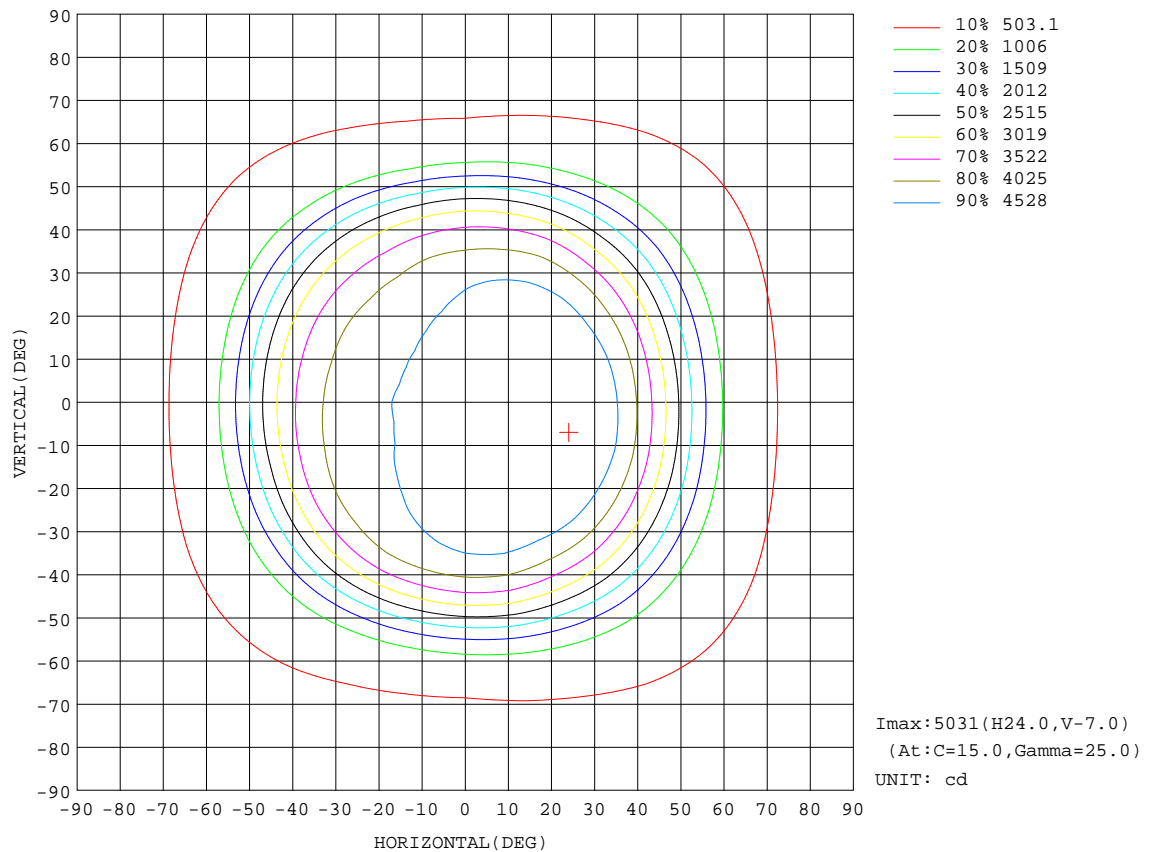
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	66	55	49	65	55	49	64	55	49	43
0.80	76	66	59	75	65	59	73	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	93	86	81	91	84	80	73
2.00	101	94	89	99	93	88	96	90	86	79
2.50	104	97	92	102	96	92	98	93	90	82
3.00	106	101	96	104	99	95	100	96	93	85
4.00	109	105	101	107	103	100	103	100	97	89
5.00	111	107	104	109	105	102	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:

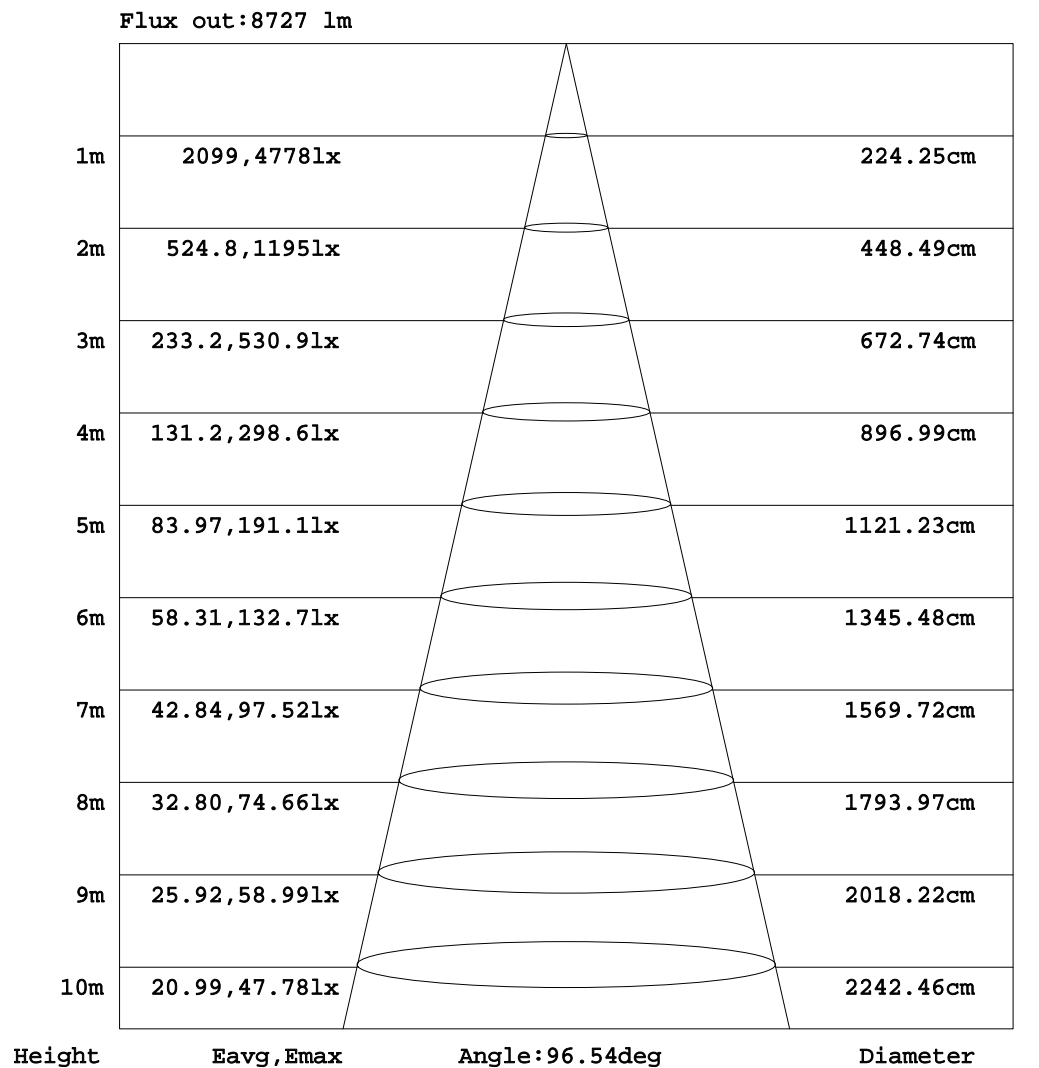


C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2017

$\gamma$  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:



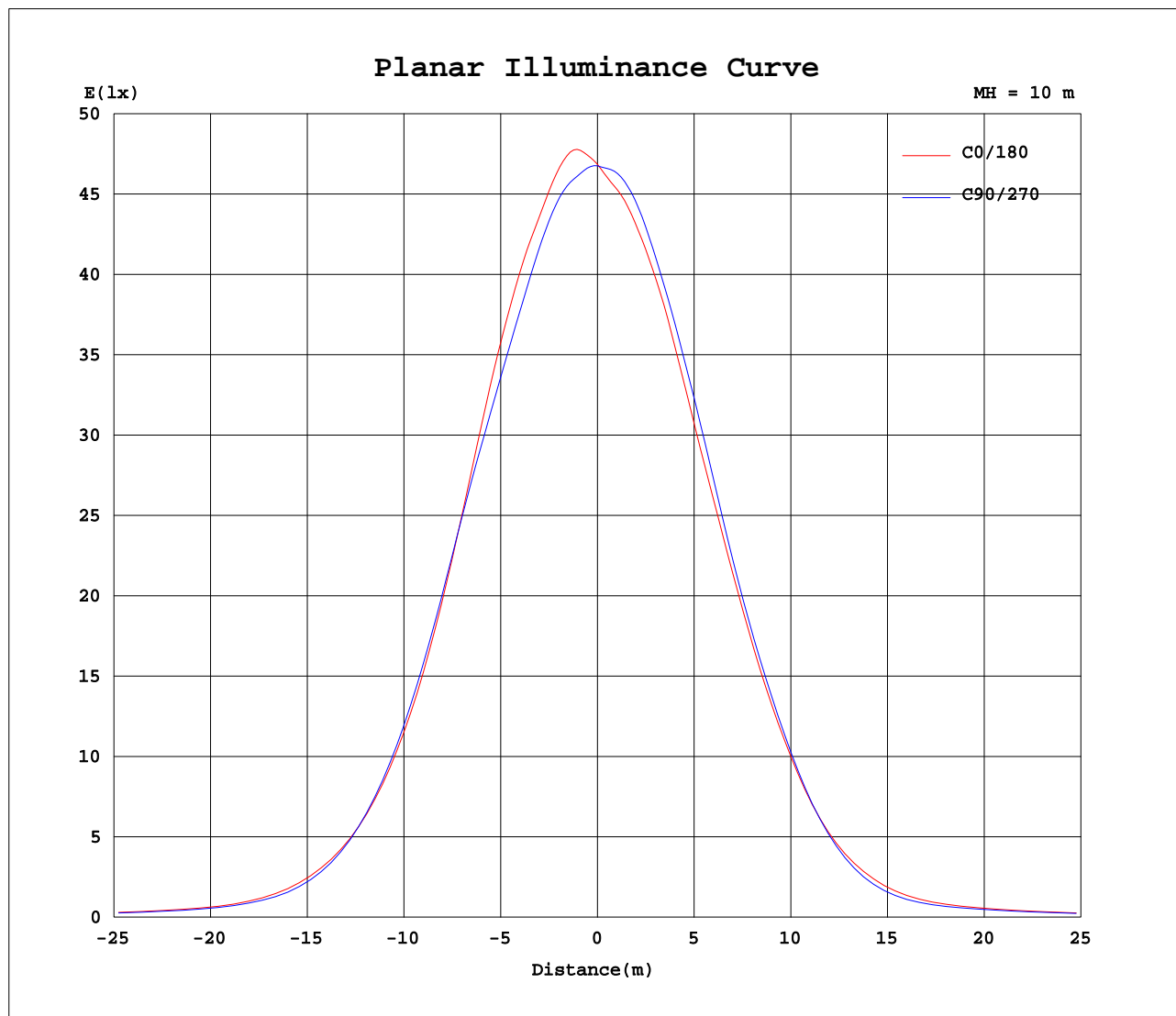
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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-XXX80H4 90.GOS