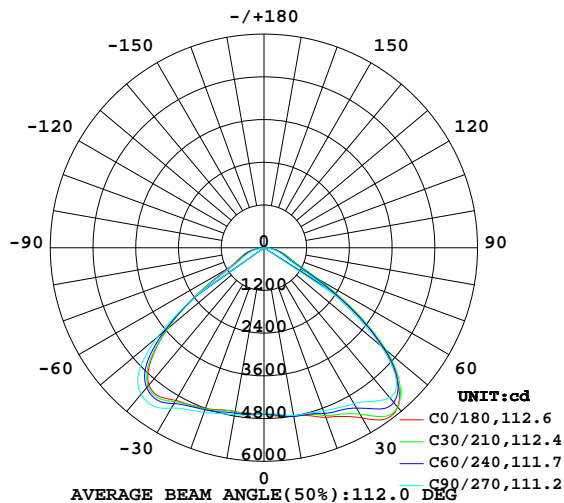


LUMINAIRE PHOTOMETRIC TEST REPORT

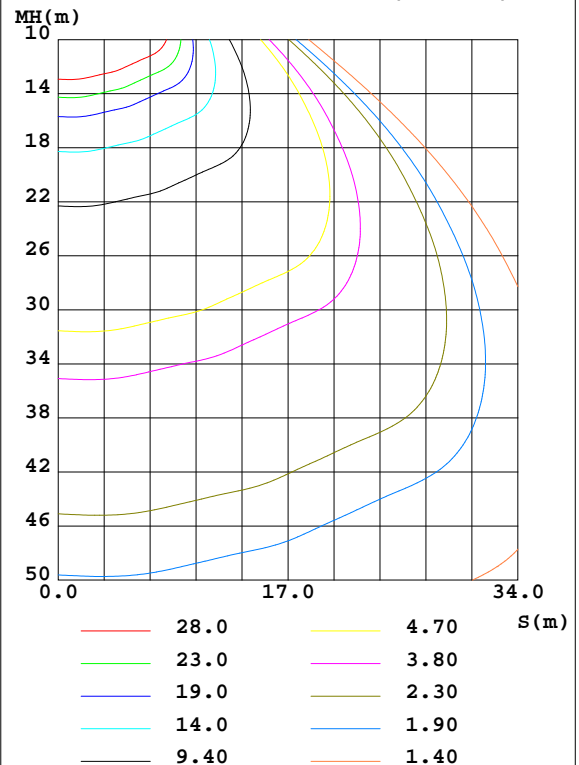
NAME: LED LIGHT	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:21cm*16cm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 125.23 lm/W
MODEL	ZGSM-GCD120H6	Imax(cd)	5937	S/MH(C0/180)	1.58	
NOMINAL POWER(W)	120	LOR(%)	100.2	S/MH(C90/270)	1.63	
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	15028	η UP,DN(C0-180)	0.0,51.2	
NOMINAL FLUX(lm)	15000	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,49.0	
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.75	
TEST VOLTAGE(V)	220.1	η down(%)	100.2	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

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	4798	4812	4780	4701	4673	4698	4762	4787	0- 10	450.8	450.8	3,3.01
20	5068	4983	4875	4811	4801	4830	4920	5017	10- 20	1367	1818	12.1,12.1
30	5523	5314	5058	4968	4954	5037	5205	5521	20- 30	2332	4150	27.6,27.7
40	5840	5767	5492	5117	5031	5080	5371	5632	30- 40	3380	7529	50.1,50.2
50	4339	4475	4281	3756	3554	3586	3907	4090	40- 50	3767	11296	75.2,75.3
60	1674	1666	1342	1241	1208	1036	1011	1249	50- 60	2327	13623	90.7,90.8
70	681.4	636.0	537.2	608.8	632.6	594.5	501.2	596.3	60- 70	826.9	14450	96.2,96.3
80	274.4	312.5	229.7	274.3	241.5	242.4	42.90	264.3	70- 80	463.0	14913	99.2,99.4
90	15.43	16.39	4.107	14.32	13.57	9.967	2.845	11.34	80- 90	115.0	15028	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): 9466.4 lm

%lum = 63.0%

%lamp = 63.1%

Conical surface Flux(120deg): 13623 lm

%lum = 90.7%

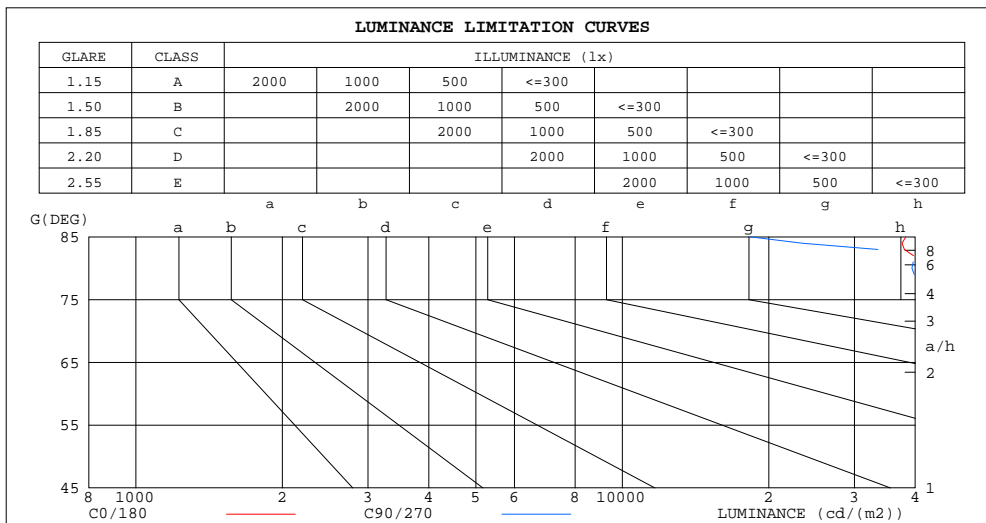
%lamp = 90.8%

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



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	38276	18322
80	47030	39372
75	58426	44174
70	59292	46748
65	66109	49972
60	99652	79899
55	160835	142426
50	200883	198233
45	223494	221133

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 LIGHT	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	.266	.151	.048	.259	.148	.047	.246	.141	.045	.234	.135	.043	.223	.129	.042	
2.0	.257	.141	.043	.251	.138	.043	.240	.133	.041	.229	.129	.040	.220	.124	.039	
3.0	.244	.130	.039	.239	.128	.038	.229	.124	.038	.219	.120	.037	.211	.117	.036	
4.0	.230	.119	.035	.225	.118	.035	.216	.115	.034	.208	.112	.034	.200	.109	.033	
5.0	.216	.110	.032	.212	.109	.032	.204	.106	.031	.196	.104	.031	.189	.101	.030	
6.0	.203	.102	.029	.199	.101	.029	.192	.098	.029	.185	.096	.028	.179	.094	.028	
7.0	.191	.094	.027	.187	.093	.027	.181	.092	.026	.175	.090	.026	.170	.088	.026	
8.0	.180	.088	.025	.177	.087	.025	.171	.085	.024	.166	.084	.024	.161	.082	.024	
9.0	.170	.082	.023	.167	.081	.023	.162	.080	.023	.157	.079	.023	.152	.077	.022	
10.0	.160	.077	.021	.158	.076	.021	.153	.075	.021	.149	.074	.021	.145	.073	.021	

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	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.178	.157	.138	.152	.135	.119	.104	.093	.082	.060	.054	.048	.019	.017	.015	
2.0	.168	.132	.102	.144	.114	.089	.099	.079	.062	.057	.046	.036	.018	.015	.012	
3.0	.160	.114	.078	.137	.099	.068	.094	.069	.048	.054	.040	.028	.017	.013	.009	
4.0	.152	.101	.061	.131	.087	.053	.090	.061	.038	.052	.036	.022	.017	.012	.007	
5.0	.145	.090	.049	.125	.078	.043	.086	.054	.030	.050	.032	.018	.016	.010	.006	
6.0	.139	.082	.041	.119	.071	.036	.082	.050	.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	.127	.069	.030	.109	.060	.026	.075	.042	.018	.044	.025	.011	.014	.008	.004	
9.0	.121	.064	.026	.104	.056	.023	.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 LIGHT					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					21.3	22.7	21.6	22.9	23.1	20.8	22.3	21.1	22.5	22.7
3H					21.5	22.8	21.8	23.0	23.3	20.9	22.3	21.2	22.5	22.7
4H					21.6	22.9	22.0	23.1	23.4	21.0	22.3	21.3	22.5	22.8
6H					21.8	22.9	22.1	23.2	23.4	21.1	22.2	21.4	22.5	22.8
8H					21.8	22.9	22.1	23.2	23.4	21.1	22.2	21.4	22.5	22.8
12H					21.8	22.8	22.1	23.1	23.4	21.0	22.1	21.4	22.4	22.7
4H 2H					21.3	22.6	21.6	22.8	23.1	20.9	22.1	21.2	22.4	22.6
3H					21.7	22.7	22.0	23.0	23.3	21.1	22.2	21.5	22.5	22.8
4H					21.9	22.9	22.3	23.2	23.5	21.3	22.3	21.7	22.6	22.9
6H					22.1	23.0	22.5	23.3	23.7	21.5	22.3	21.9	22.7	23.0
8H					22.2	23.0	22.6	23.4	23.7	21.5	22.3	21.9	22.7	23.0
12H					22.2	23.0	22.7	23.3	23.7	21.5	22.2	21.9	22.6	23.0
8H 4H					21.9	22.7	22.4	23.1	23.5	21.4	22.2	21.8	22.5	22.9
6H					22.3	22.9	22.7	23.3	23.8	21.6	22.3	22.1	22.7	23.1
8H					22.4	23.0	22.9	23.4	23.8	21.7	22.3	22.2	22.7	23.2
12H					22.5	23.0	23.0	23.4	23.9	21.8	22.3	22.2	22.7	23.2
12H 4H					21.9	22.6	22.3	23.0	23.4	21.4	22.1	21.8	22.5	22.9
6H					22.3	22.9	22.8	23.3	23.7	21.6	22.2	22.1	22.6	23.1
8H					22.4	22.9	22.9	23.4	23.8	21.8	22.3	22.2	22.7	23.2
Variations with the observer position at spacings:														
S = 1.0H					+ 0.5 / - 0.7					+ 0.8 / - 0.8				
1.5H					+ 0.4 / - 1.0					+ 0.5 / - 1.4				
2.0H					+ 1.6 / - 2.6					+ 1.9 / - 3.0				

CIE Pub.117, 15000 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 9.4)

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

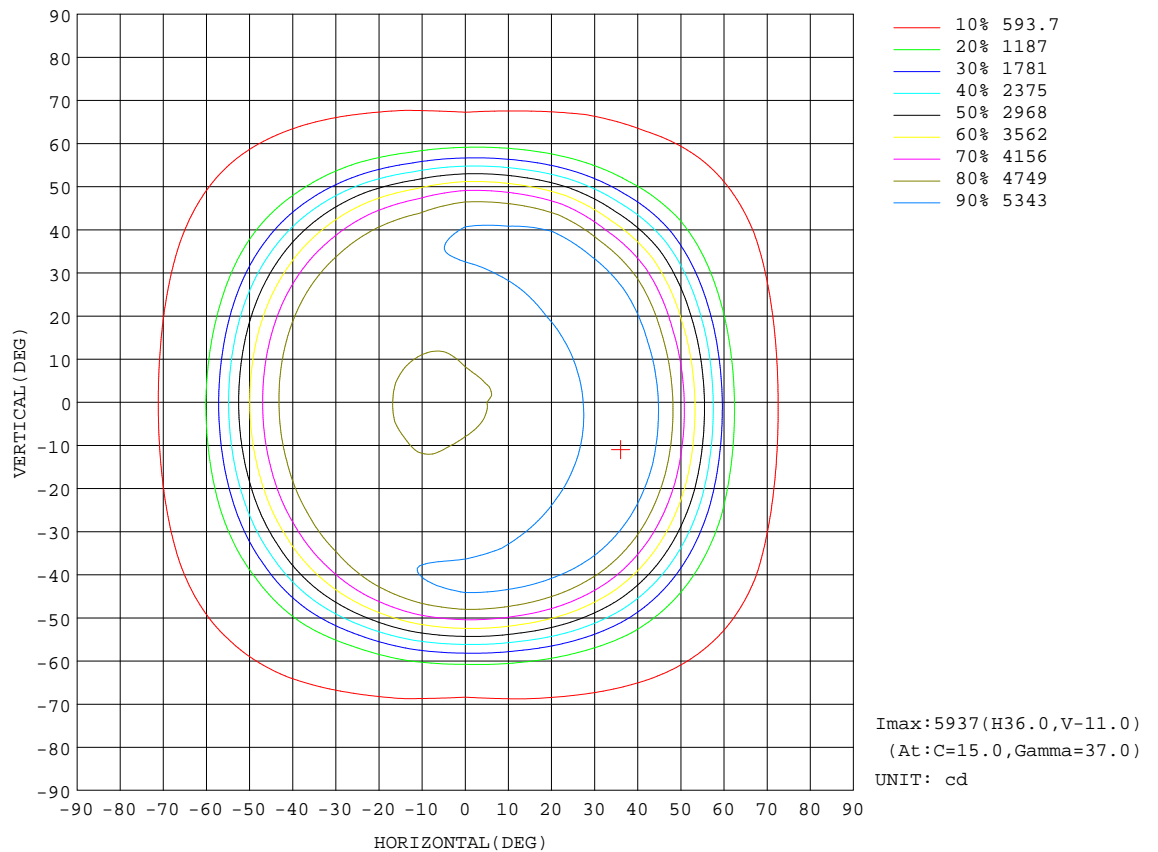
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) k(RI) x RCR = 5									
k = 0.60	60	49	42	59	48	42	58	48	41	35
0.80	71	60	53	70	60	53	68	59	52	46
1.00	80	70	64	79	70	63	77	71	63	56
1.25	88	78	72	86	78	72	84	76	71	64
1.50	92	84	78	91	83	77	88	81	76	69
2.00	99	92	86	97	90	85	94	88	84	77
2.50	102	95	90	100	94	89	97	91	87	80
3.00	105	99	94	103	98	93	99	95	91	83
4.00	108	103	99	106	102	98	102	98	95	87
5.00	110	106	102	108	104	101	103	100	98	89
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

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

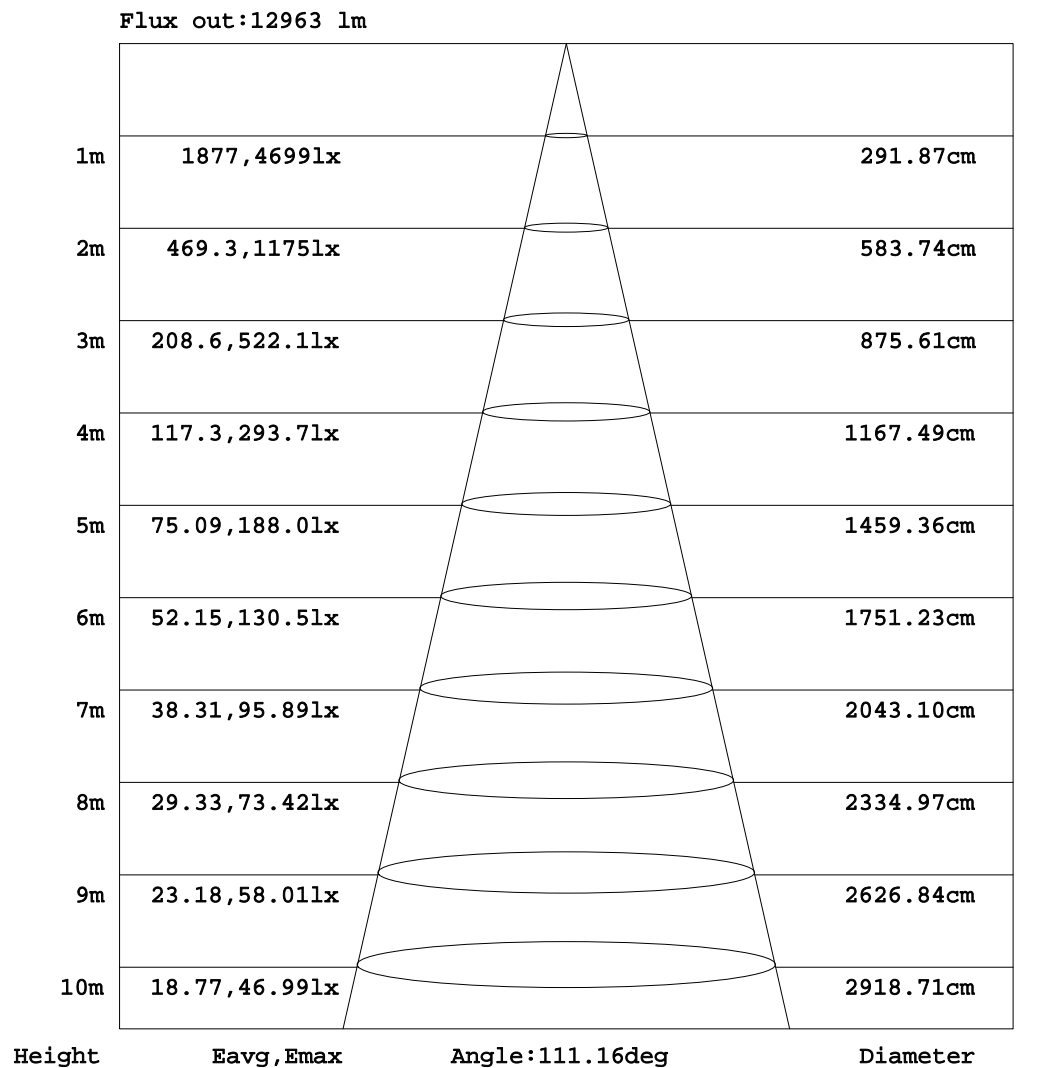


C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2017

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

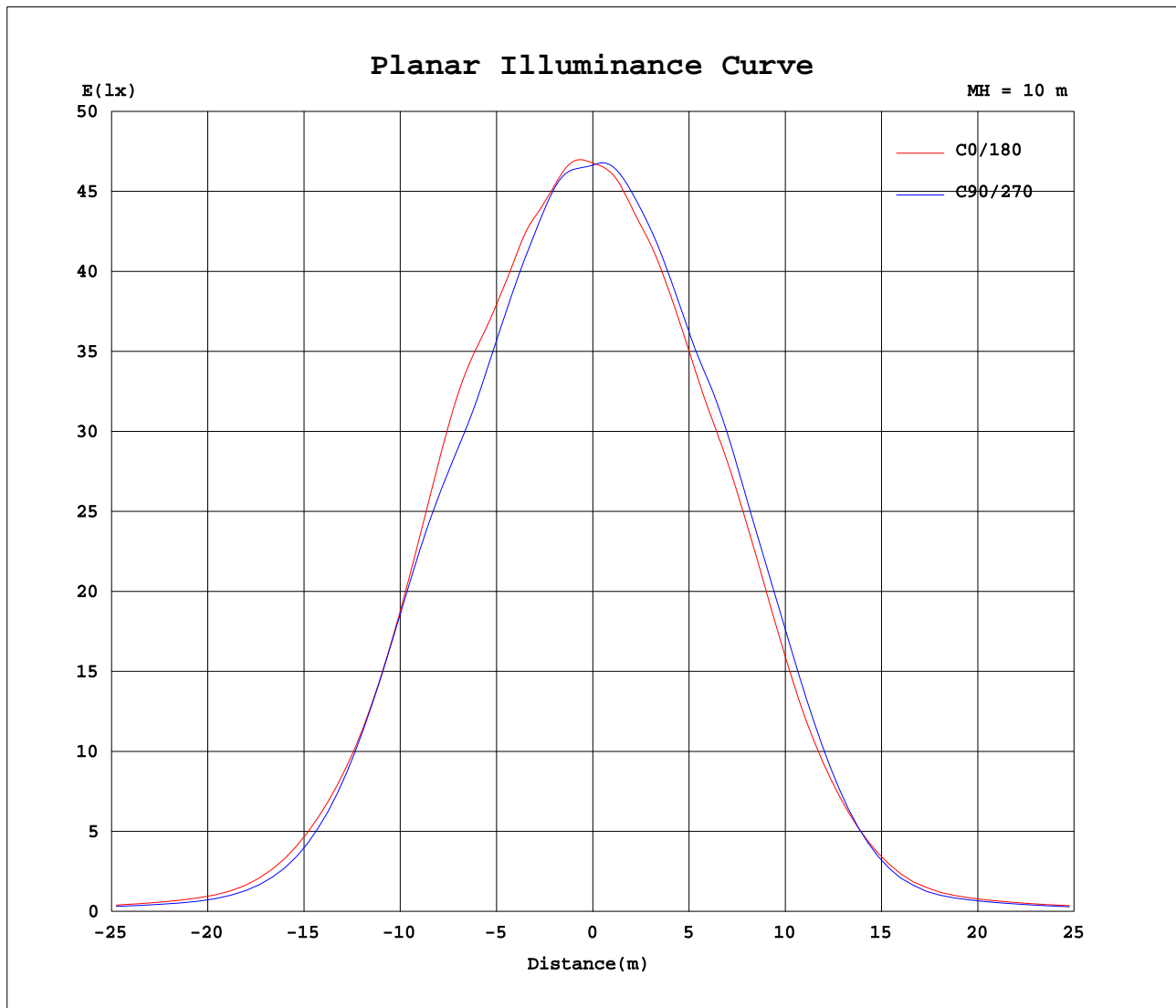


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:

