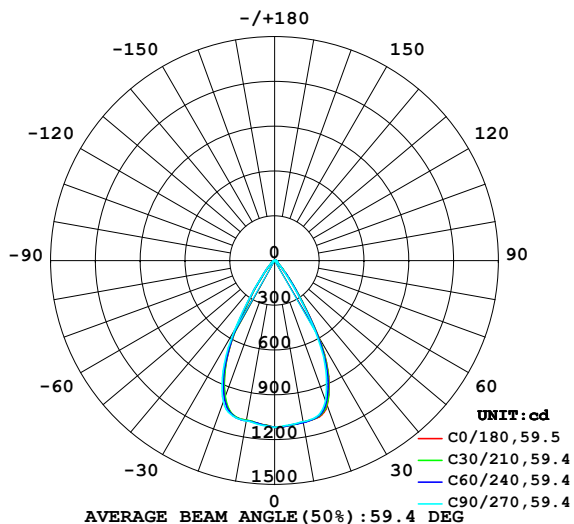


LUMINAIRE PHOTOMETRIC TEST REPORT

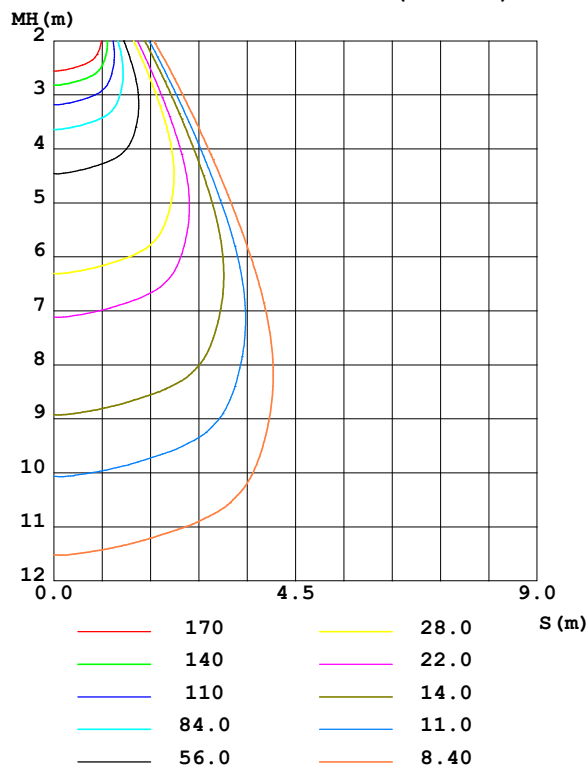
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.: 58	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 96.62 lm/W
MODEL	TL45-11G40-60-S	Imax (cd)	1120	S/MH(C0/180)	0.85	
NOMINAL POWER(W)	11	LOR(%)	100.0	S/MH(C90/270)	0.86	
RATED VOLTAGE(V)	220-240	TOTAL FLUX(lm)	1033.8	$\eta$ UP,DN(C0-180)	0.0,50.5	
NOMINAL FLUX(lm)	1033.85	CIE CLASS	DIRECT	$\eta$ UP,DN(C180-360)	0.0,49.5	
LAMPS INSIDE	1	$\eta$ up (%)	0.0	CIBSE SHR NOM	0.75	
TEST VOLTAGE(V)	230	$\eta$ down (%)	100.0	CIBSE SHR MAX	0.85	

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: AE  
Test Date: 2020-10-29

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity: 65.0%  
Test Distance: 7.240m [K=1.0000]  
Remarks:

### ZONAL FLUX DIAGRAM

#### ZONAL FLUX DIAGRAM:

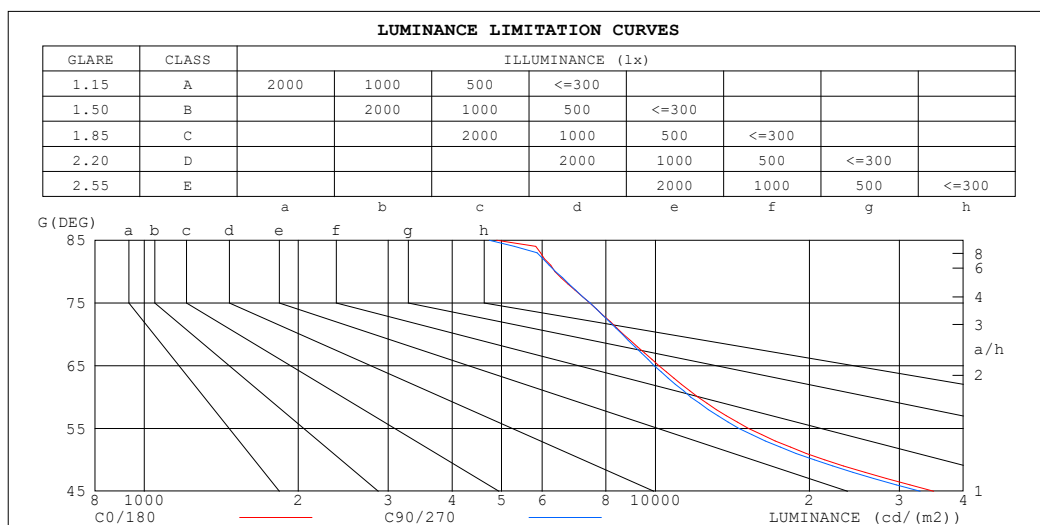
$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum, lamp
10	1099	1101	1096	1088	1087	1088	1090	1097	0- 10	105.0	105.0	10.2,10.2
20	1032	1024	997.6	984.3	974.5	970.5	1005	1018	10- 20	302.1	407.1	39.4,39.4
30	587.5	596.7	545.6	518.9	503.5	493.7	537.2	566.7	20- 30	364.7	771.8	74.7,74.7
40	131.4	137.6	123.1	114.1	108.0	106.5	114.2	125.6	30- 40	173.7	945.5	91.5,91.5
50	36.51	37.56	34.71	32.19	31.16	31.30	33.80	35.51	40- 50	50.33	995.8	96.3,96.3
60	16.04	16.16	15.47	14.45	14.30	14.74	16.23	15.98	50- 60	20.38	1016	98.3,98.3
70	7.850	8.048	7.773	7.274	7.071	7.231	8.041	7.788	60- 70	11.07	1027	99.4,99.4
80	2.926	3.021	2.922	2.660	2.415	2.432	2.741	2.760	70- 80	5.275	1033	99.9,99.9
90	0.6127	0.6111	0.6257	0.6873	0.4006	0.4113	0.3950	0.3632	80- 90	1.307	1034	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		

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:AE  
Test Date:2020-10-29

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:7.240m [K=1.0000]  
Remarks:

### LUMINANCE LIMITATION CURVES

NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.: 58	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	4890	4731
80	6360	6377
75	7442	7448
70	8662	8614
65	10162	9948
60	12107	11724
55	15218	14568
50	21438	20468
45	35015	32929

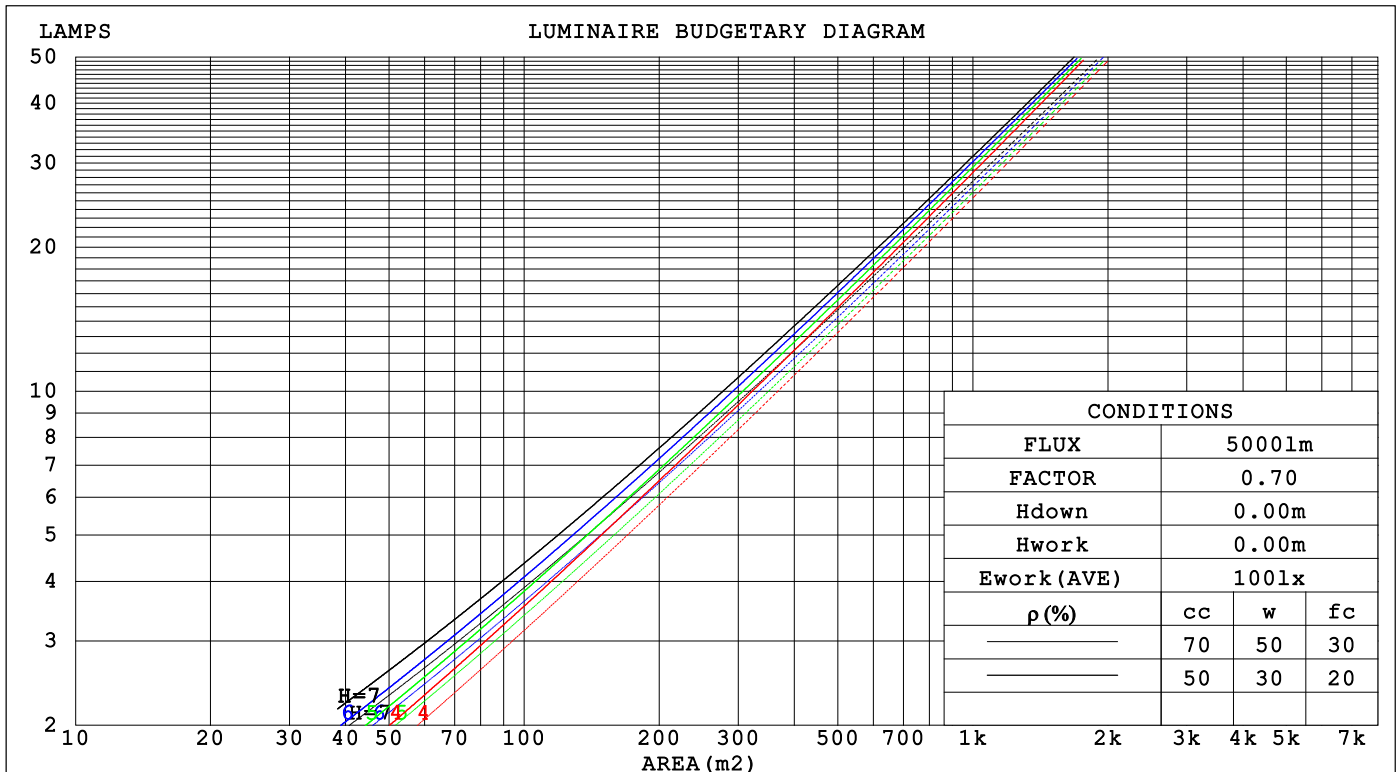
C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: AE  
 Test Date: 2020-10-29

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
 Humidity: 65.0%  
 Test Distance: 7.240m [K=1.0000]  
 Remarks:

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.: 58	Shielding Angle:

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															



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:AE  
Test Date:2020-10-29

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:7.240m [K=1.0000]  
Remarks:

### WEC AND CCEC

NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.: 58	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	.182 .103 .033	.175 .100 .032	.162 .093 .030	.151 .087 .028	.140 .081 .026	
2.0	.173 .095 .029	.168 .092 .028	.157 .087 .027	.147 .083 .026	.138 .078 .025	
3.0	.165 .088 .026	.160 .086 .026	.151 .082 .025	.142 .078 .024	.135 .074 .023	
4.0	.156 .081 .024	.152 .080 .024	.144 .077 .023	.137 .074 .022	.130 .071 .022	
5.0	.149 .076 .022	.145 .074 .022	.138 .072 .021	.132 .070 .021	.126 .067 .020	
6.0	.142 .071 .020	.138 .070 .020	.132 .068 .020	.127 .066 .019	.122 .064 .019	
7.0	.135 .067 .019	.132 .066 .019	.127 .064 .019	.122 .063 .018	.117 .061 .018	
8.0	.129 .063 .018	.127 .062 .018	.122 .061 .017	.118 .060 .017	.113 .058 .017	
9.0	.124 .060 .017	.122 .059 .017	.117 .058 .016	.113 .057 .016	.109 .056 .016	
10.0	.119 .057 .016	.117 .056 .016	.113 .055 .016	.109 .054 .015	.106 .053 .015	

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					Ceiling Cavity Exitance Coefficients(CCEC)
0.0	.190 .190 .190	.163 .163 .163	.111 .111 .111	.064 .064 .064	.020 .020 .020	
1.0	.171 .157 .145	.147 .135 .124	.100 .093 .086	.058 .054 .050	.018 .017 .016	
2.0	.156 .132 .112	.134 .114 .097	.092 .079 .068	.053 .046 .040	.017 .015 .013	
3.0	.144 .114 .089	.124 .098 .077	.085 .068 .054	.049 .040 .032	.016 .013 .010	
4.0	.134 .099 .072	.115 .085 .063	.079 .060 .044	.046 .035 .026	.015 .011 .009	
5.0	.125 .087 .059	.108 .076 .052	.074 .053 .036	.043 .031 .022	.014 .010 .007	
6.0	.118 .078 .050	.101 .068 .043	.070 .047 .031	.041 .028 .018	.013 .009 .006	
7.0	.111 .071 .042	.096 .061 .037	.066 .043 .026	.038 .025 .015	.012 .008 .005	
8.0	.106 .064 .036	.091 .056 .031	.063 .039 .022	.037 .023 .013	.012 .008 .004	
9.0	.101 .059 .031	.087 .051 .027	.060 .036 .019	.035 .021 .011	.011 .007 .004	
10.0	.096 .055 .027	.083 .048 .024	.057 .033 .017	.033 .020 .010	.011 .006 .003	

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:AE  
Test Date:2020-10-29

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:7.240m [K=1.0000]  
Remarks:

### UGR(Unified Glare Rating) Table

NAME:	TYPE:					WEIGHT:				
SPEC.:	DIM.:					SERIAL No.:				
MFR.:	SUR.: 58					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	20.8	21.7	21.0	21.9	22.1	20.4	21.4	20.7	21.6	21.7
3H	20.8	21.7	21.0	21.9	22.1	20.5	21.4	20.7	21.6	21.8
4H	20.8	21.6	21.1	21.8	22.1	20.5	21.3	20.8	21.5	21.8
6H	20.8	21.5	21.1	21.8	22.0	20.5	21.3	20.8	21.5	21.7
8H	20.7	21.5	21.1	21.8	22.0	20.5	21.2	20.8	21.5	21.7
12H	20.7	21.4	21.0	21.7	22.0	20.4	21.1	20.8	21.4	21.7
4H 2H	20.6	21.5	20.9	21.7	21.9	20.3	21.2	20.6	21.4	21.6
3H	20.7	21.4	21.0	21.7	22.0	20.4	21.1	20.7	21.4	21.7
4H	20.8	21.4	21.1	21.7	22.0	20.5	21.1	20.8	21.4	21.7
6H	20.8	21.3	21.1	21.7	22.0	20.5	21.1	20.9	21.4	21.8
8H	20.8	21.3	21.2	21.6	22.0	20.5	21.0	20.9	21.4	21.8
12H	20.7	21.2	21.2	21.6	22.0	20.5	21.0	20.9	21.3	21.7
8H 4H	20.7	21.2	21.1	21.6	21.9	20.4	20.9	20.8	21.3	21.7
6H	20.7	21.2	21.2	21.6	22.0	20.5	20.9	20.9	21.3	21.7
8H	20.7	21.1	21.2	21.6	22.0	20.5	20.9	20.9	21.3	21.7
12H	20.7	21.1	21.2	21.5	22.0	20.5	20.8	21.0	21.3	21.7
12H 4H	20.6	21.1	21.1	21.5	21.9	20.4	20.9	20.8	21.2	21.6
6H	20.7	21.1	21.1	21.5	21.9	20.4	20.8	20.9	21.3	21.7
8H	20.7	21.1	21.2	21.5	22.0	20.5	20.8	20.9	21.3	21.7
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 2.3 / - 3.3					+ 2.1 / - 3.1				
1.5H	+ 4.0 / - 2.8					+ 3.8 / - 2.6				
2.0H	+ 2.9 / - 1.5					+ 2.6 / - 1.4				

CIE Pub.117, 1034 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 0.1)  
Area: 0.00264 m2

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:AE  
Test Date:2020-10-29

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:7.240m [K=1.0000]  
Remarks:

### UTILIZATION FACTORS TABLE

NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.: 58	Shielding Angle:

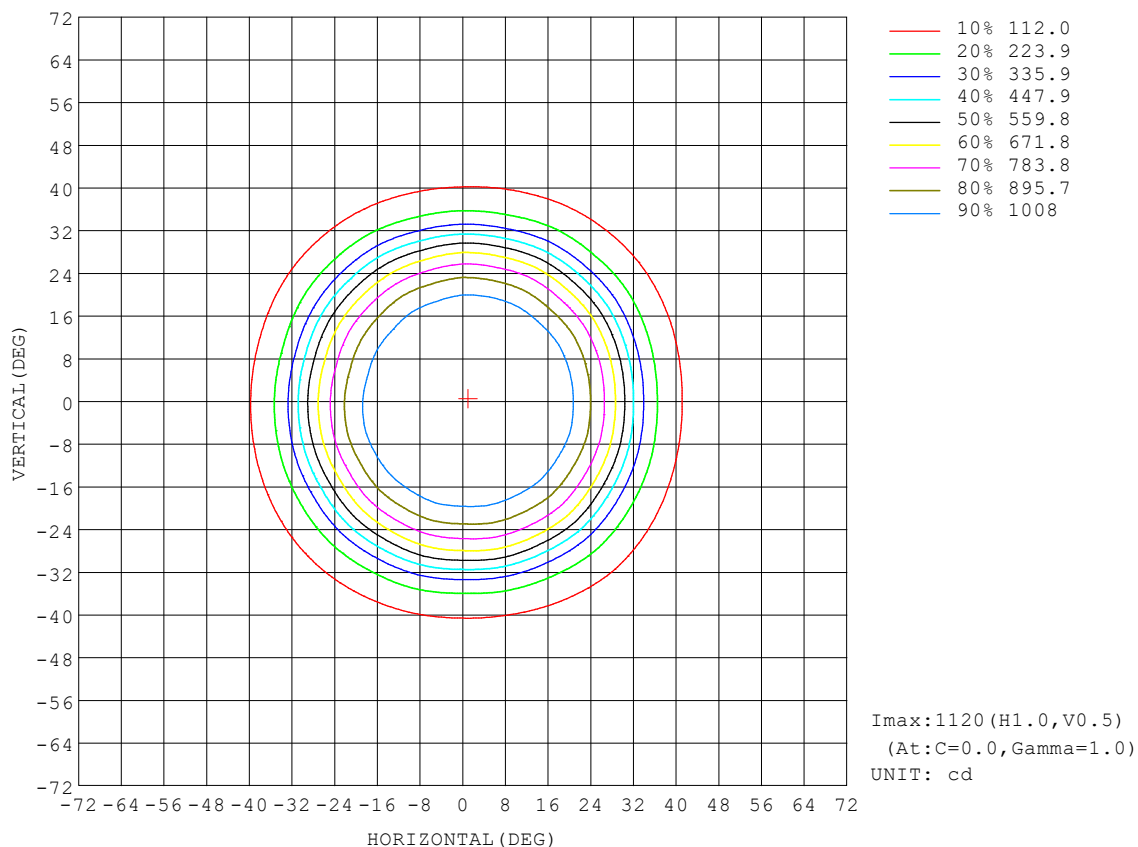
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	86	80	76	86	79	76	85	79	76	72
0.80	94	88	84	93	87	84	92	87	83	80
1.00	98	93	89	98	92	89	96	92	88	84
1.25	102	97	94	101	97	93	99	95	92	88
1.50	105	100	97	104	100	96	102	98	95	91
2.00	108	104	100	107	103	100	104	101	98	93
2.50	110	106	103	108	105	102	105	102	100	94
3.00	111	108	105	110	106	104	106	104	102	95
4.00	114	111	108	111	109	107	108	106	104	97
5.00	115	112	111	113	111	109	109	107	106	98
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: AE  
Test Date: 2020-10-29

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity: 65.0%  
Test Distance: 7.240m [K=1.0000]  
Remarks:

# ISOCANDELA DIAGRAM

NAME :	TYPE :	WEIGHT :
SPEC. :	DIM. :	SERIAL No. :
MFR. :	SUR. : 58	Shielding Angle :



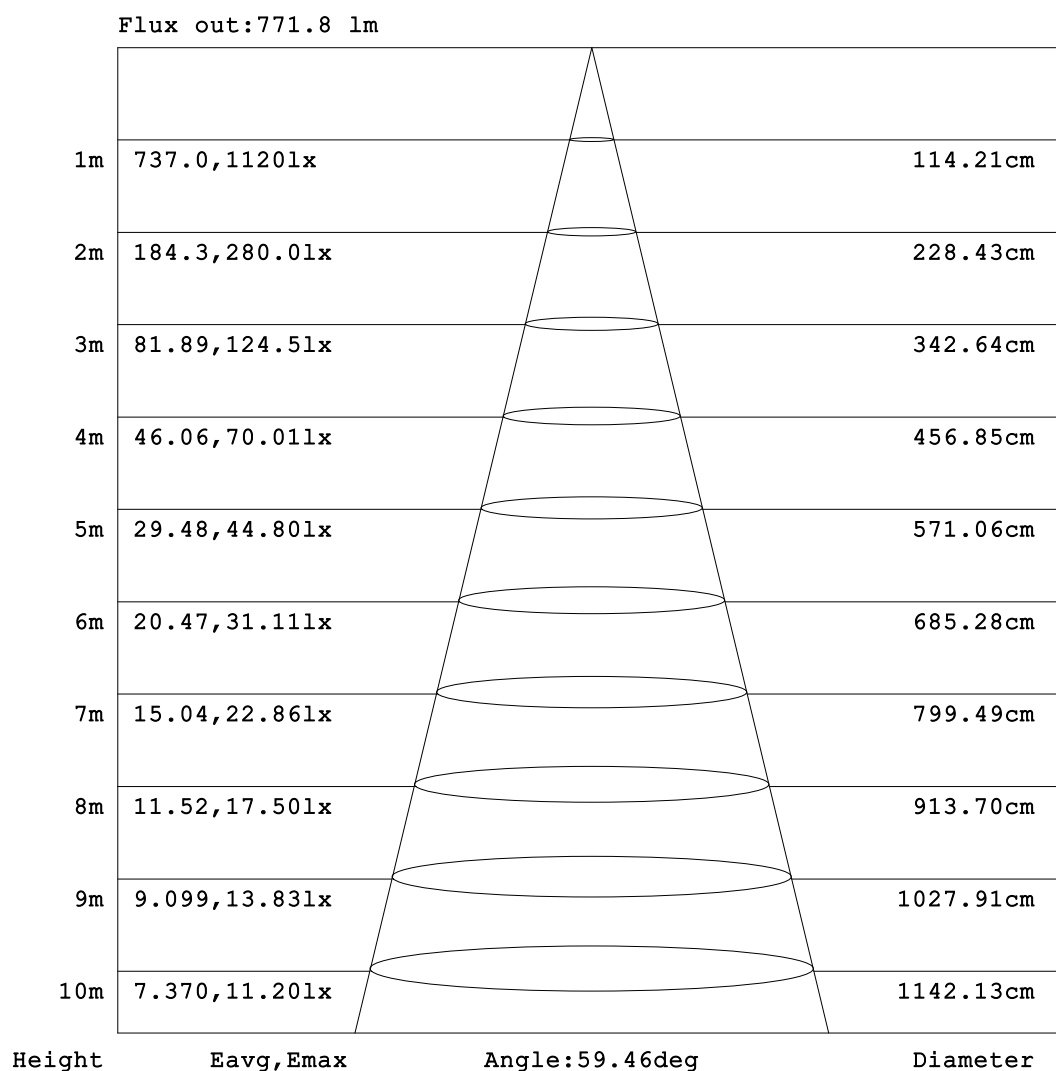
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:AE  
Test Date:2020-10-29

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:7.240m [K=1.0000]  
Remarks:



### AAI Figure

NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.: 58	Shielding Angle:



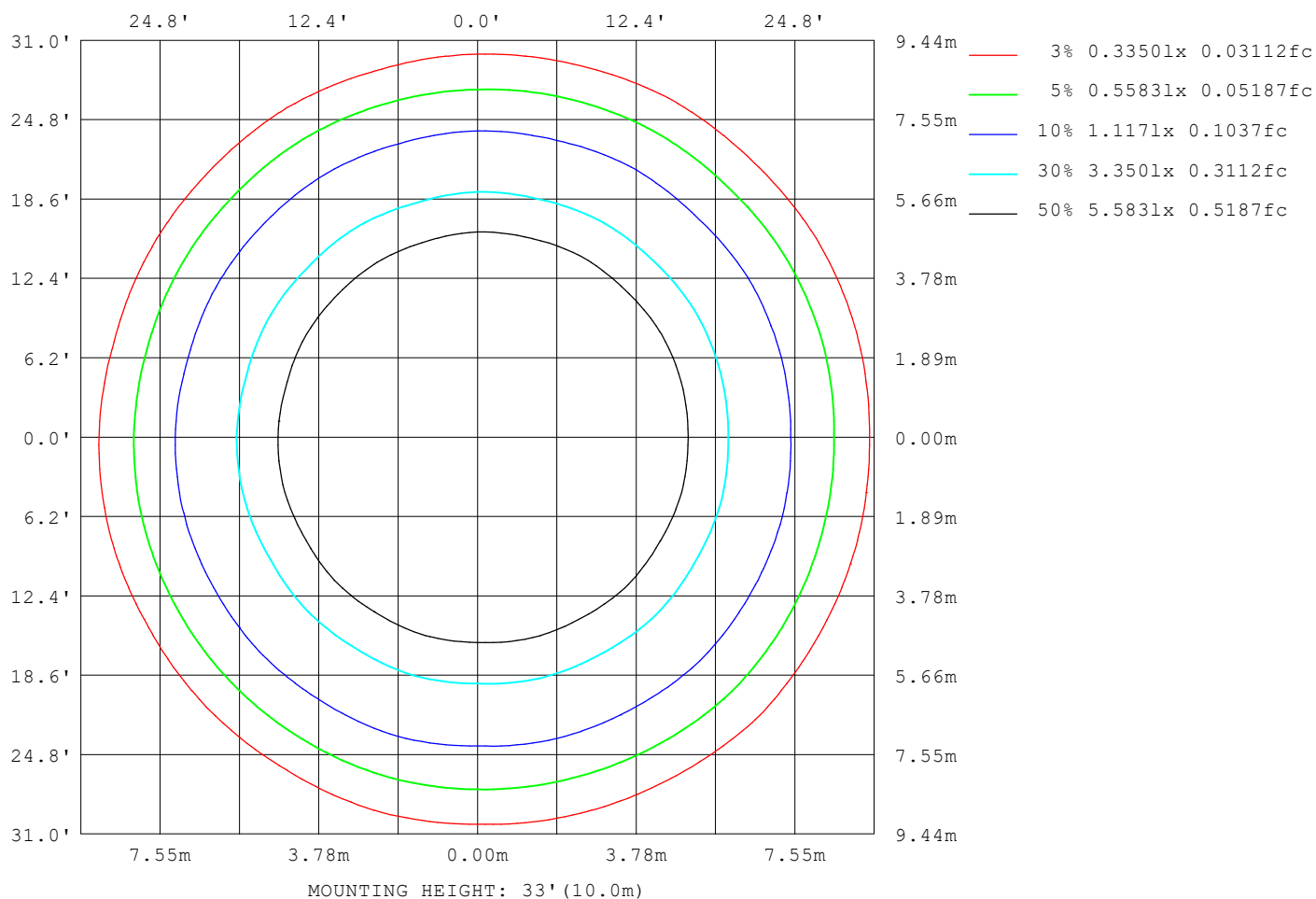
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: AE  
Test Date: 2020-10-29

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity: 65.0%  
Test Distance: 7.240m [K=1.0000]  
Remarks:

### ISOLUX DIAGRAM

NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.: 58	Shielding Angle:



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: AE  
Test Date: 2020-10-29

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity: 65.0%  
Test Distance: 7.240m [K=1.0000]  
Remarks:

### LED Avg.L Report

NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.: 58	Shielding Angle:

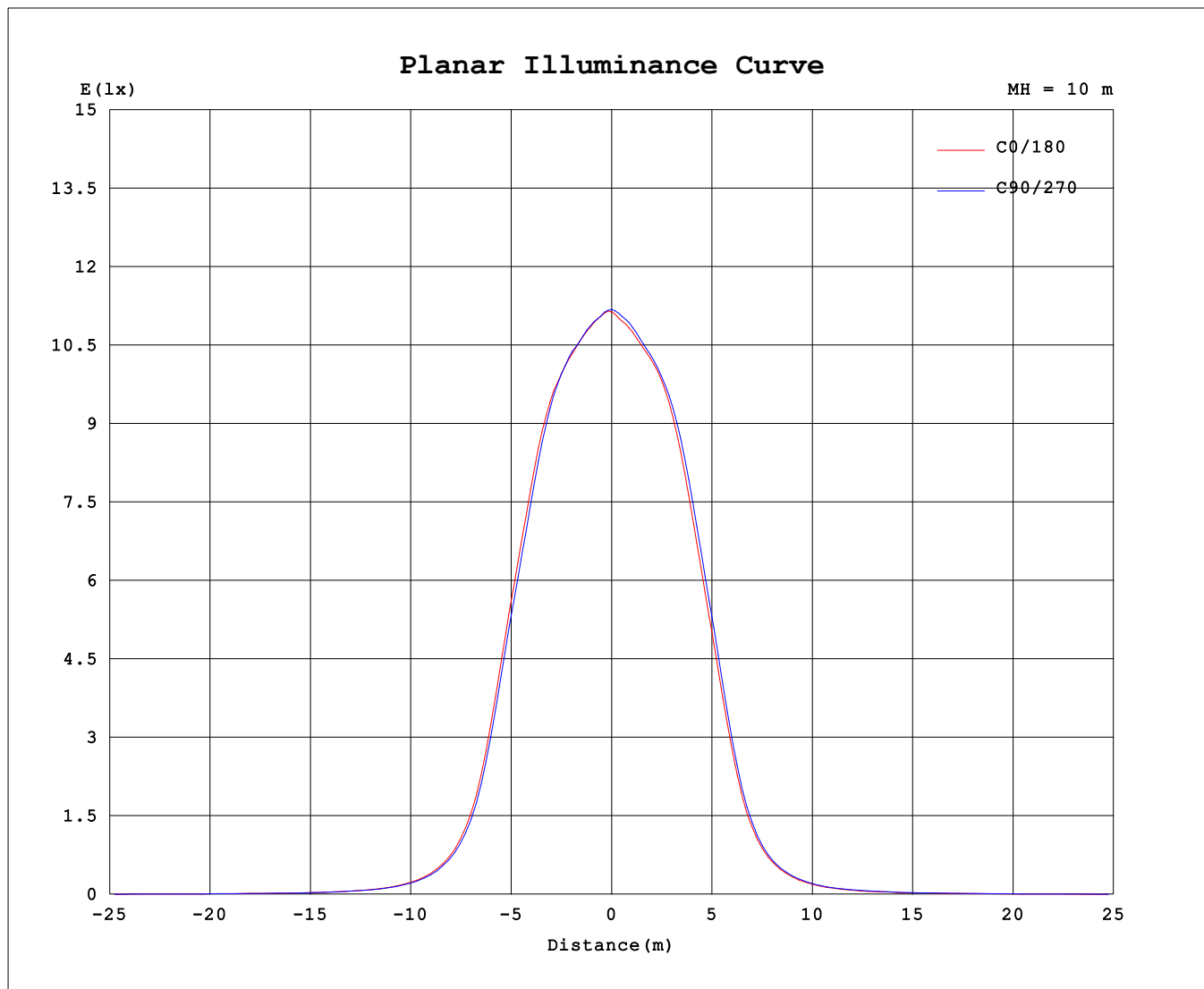
AvgL	cd/m2
L_0~180 (65) av	9696
L_0~180 (75) av	7014
L_0~180 (85) av	3993
L_90~270 (65) av	10195
L_90~270 (75) av	7458
L_90~270 (85) av	3938
L_45 (65) av	9827
L_45 (75) av	7139
L_45 (85) av	4084

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:AE  
Test Date:2020-10-29

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:7.240m [K=1.0000]  
Remarks:

## Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: AE  
Test Date: 2020-10-29

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity: 65.0%  
Test Distance: 7.240m [K=1.0000]  
Remarks:

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:7.240m [K=1.0000]
Remarks:

```

NAME :	TYPE :	WEIGHT :
SPEC. :	DIM. :	SERIAL No. :
MFR. :	SUR. : 58	Shielding Angle :

UNIT: cd

[illegible]

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:7.240m [K=1.0000]
Remarks:

```