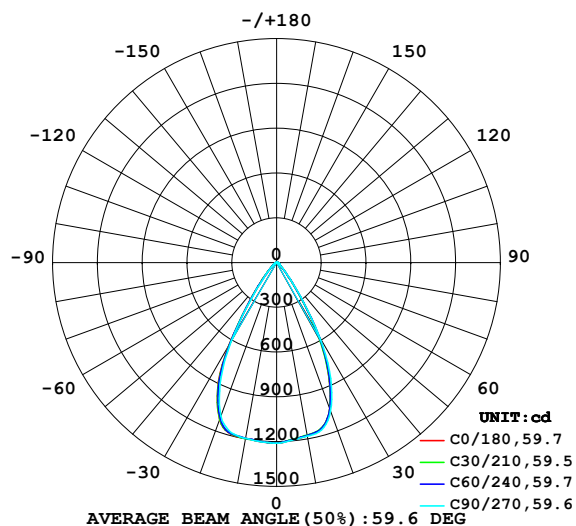


LUMINAIRE PHOTOMETRIC TEST REPORT

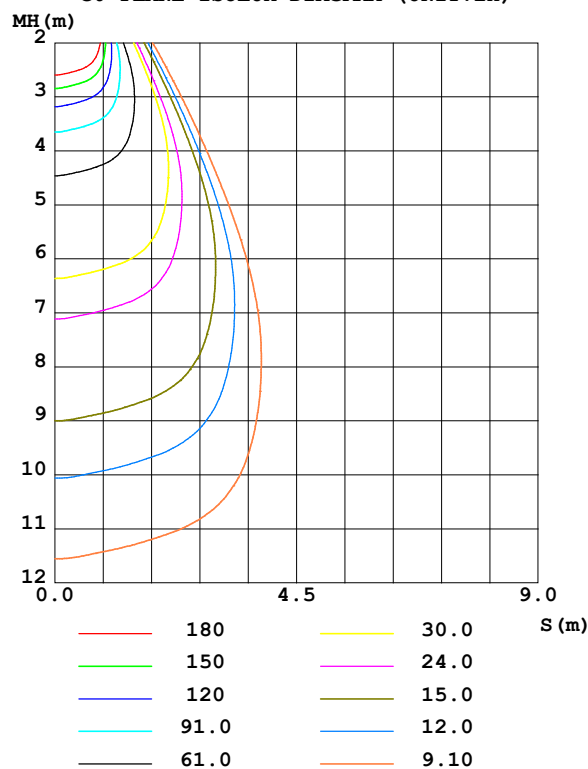
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.: 58	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 75.16 lm/W
MODEL	TL45-15G27-60-S	I _{max} (cd)	1211	S/MH (C0/180)	0.88	
NOMINAL POWER (W)	15	LOR (%)	100.0	S/MH (C90/270)	0.87	
RATED VOLTAGE (V)	220-240	TOTAL FLUX (lm)	1134.9	η UP, DN (C0-180)	0.0, 49.4	
NOMINAL FLUX (lm)	1134.94	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 50.6	
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.75	
TEST VOLTAGE (V)	230	η down (%)	100.0	CIBSE SHR MAX	0.90	

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

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:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

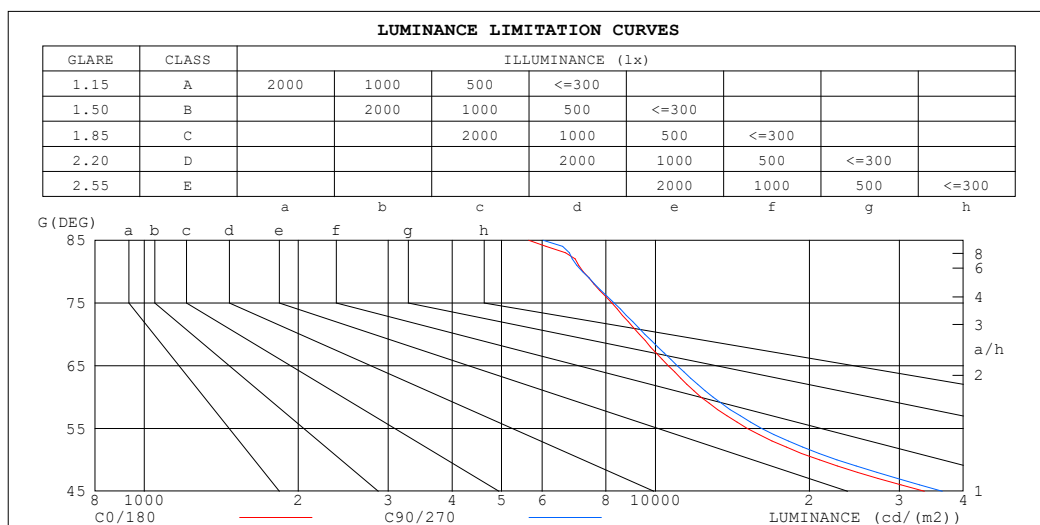
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	1178	1174	1181	1193	1197	1196	1195	1191	0- 10	114.1	114.1	10.1,10.1
20	1041	1049	1058	1101	1118	1106	1093	1054	10- 20	326.6	440.7	38.8,38.8
30	560.1	566.9	577.8	620.4	639.1	621.2	610.1	574.8	20- 30	393.8	834.5	73.5,73.5
40	126.0	129.4	134.0	147.5	153.8	151.5	143.3	131.2	30- 40	196.2	1031	90.8,90.8
50	35.43	36.64	38.48	43.70	45.74	44.77	42.45	38.17	40- 50	59.17	1090	96,96
60	16.14	16.46	17.12	19.86	20.22	19.61	18.69	17.28	50- 60	24.15	1114	98.2,98.2
70	8.368	8.427	8.613	9.791	9.733	9.318	9.001	8.647	60- 70	13.01	1127	99.3,99.3
80	3.299	3.306	3.303	3.544	3.351	3.223	3.144	3.175	70- 80	6.244	1133	99.9,99.9
90	0.8381	0.8167	0.7912	0.7724	0.4951	0.4923	0.4857	0.5019	80- 90	1.619	1135	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

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:

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	5650	6026
80	7223	7197
75	8216	8302
70	9303	9529
65	10590	11032
60	12273	12958
55	15129	16148
50	20957	22654
45	33580	36399

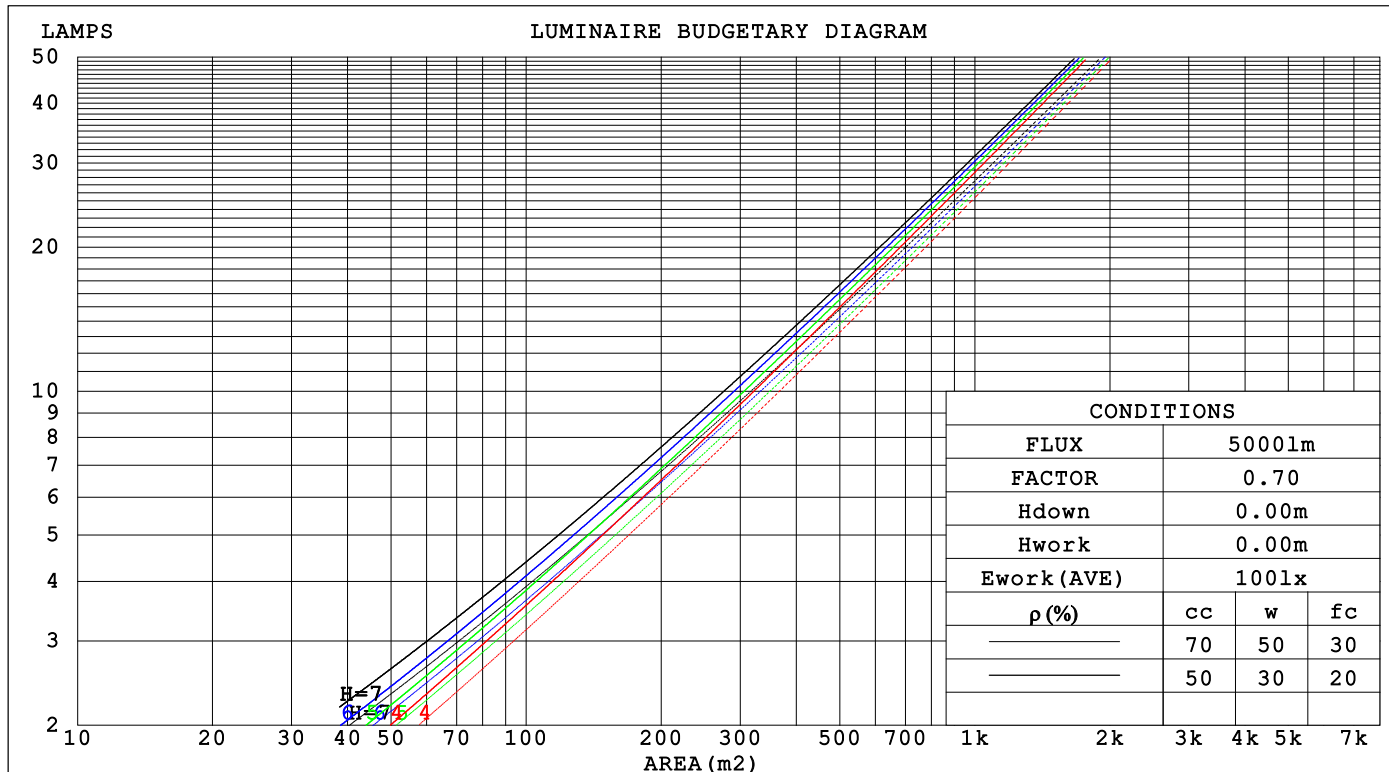
C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: AE
 Test Date: 2020-10-29

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:

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															



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	.183 .104 .033	.176 .101 .032	.164 .094 .030	.152 .088 .028	.141 .082 .026	
2.0	.175 .096 .029	.169 .093 .029	.159 .088 .027	.149 .083 .026	.140 .079 .025	
3.0	.166 .088 .026	.161 .086 .026	.152 .082 .025	.144 .079 .024	.136 .075 .023	
4.0	.158 .082 .024	.153 .080 .024	.146 .077 .023	.138 .074 .022	.132 .071 .022	
5.0	.150 .076 .022	.146 .075 .022	.139 .073 .021	.133 .070 .021	.127 .068 .020	
6.0	.143 .072 .020	.140 .071 .020	.134 .068 .020	.128 .066 .020	.123 .065 .019	
7.0	.136 .067 .019	.133 .066 .019	.128 .065 .019	.123 .063 .018	.118 .061 .018	
8.0	.130 .064 .018	.128 .063 .018	.123 .061 .018	.118 .060 .017	.114 .059 .017	
9.0	.125 .060 .017	.122 .060 .017	.118 .058 .017	.114 .057 .016	.110 .056 .016	
10.0	.119 .057 .016	.117 .057 .016	.114 .056 .016	.110 .055 .016	.107 .054 .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	.172 .157 .144	.147 .135 .124	.100 .093 .086	.058 .054 .050	.019 .017 .016	
2.0	.157 .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	.126 .087 .059	.108 .076 .051	.074 .053 .036	.043 .031 .022	.014 .010 .007	
6.0	.118 .078 .049	.102 .068 .043	.070 .047 .030	.041 .028 .018	.013 .009 .006	
7.0	.112 .071 .042	.096 .061 .036	.066 .043 .026	.039 .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	.058 .034 .017	.034 .020 .010	.011 .007 .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	19.9	20.9	20.1	21.0	21.2	20.1	21.1	20.3	21.2	21.4
3H	19.9	20.8	20.2	21.0	21.2	20.1	21.0	20.4	21.2	21.4
4H	20.0	20.8	20.2	21.0	21.2	20.2	21.0	20.4	21.2	21.4
6H	20.0	20.7	20.3	21.0	21.2	20.2	20.9	20.5	21.2	21.4
8H	19.9	20.7	20.3	21.0	21.2	20.1	20.9	20.5	21.2	21.4
12H	19.9	20.6	20.2	20.9	21.2	20.1	20.9	20.4	21.1	21.4
4H 2H	19.8	20.6	20.0	20.8	21.0	20.0	20.8	20.2	21.0	21.2
3H	19.9	20.6	20.2	20.9	21.2	20.1	20.8	20.4	21.1	21.4
4H	20.0	20.6	20.3	20.9	21.2	20.2	20.8	20.5	21.1	21.4
6H	20.0	20.6	20.4	20.9	21.3	20.2	20.8	20.6	21.1	21.5
8H	20.0	20.6	20.4	20.9	21.3	20.2	20.7	20.6	21.1	21.5
12H	20.0	20.5	20.4	20.9	21.3	20.2	20.7	20.6	21.1	21.5
8H 4H	19.9	20.4	20.3	20.8	21.2	20.1	20.6	20.5	21.0	21.4
6H	20.0	20.4	20.4	20.8	21.2	20.2	20.6	20.6	21.0	21.4
8H	20.0	20.4	20.5	20.8	21.3	20.2	20.6	20.7	21.0	21.5
12H	20.0	20.4	20.5	20.8	21.3	20.2	20.6	20.7	21.0	21.5
12H 4H	19.9	20.4	20.3	20.7	21.1	20.1	20.5	20.5	20.9	21.3
6H	20.0	20.4	20.4	20.8	21.2	20.2	20.5	20.6	21.0	21.4
8H	20.0	20.4	20.5	20.8	21.3	20.2	20.5	20.7	21.0	21.4
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 2.3 / - 2.9					+ 2.3 / - 2.9				
1.5H	+ 4.0 / - 2.6					+ 4.0 / - 2.6				
2.0H	+ 2.6 / - 1.3					+ 2.8 / - 1.4				

CIE Pub.117, 1135 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 0.4)
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:

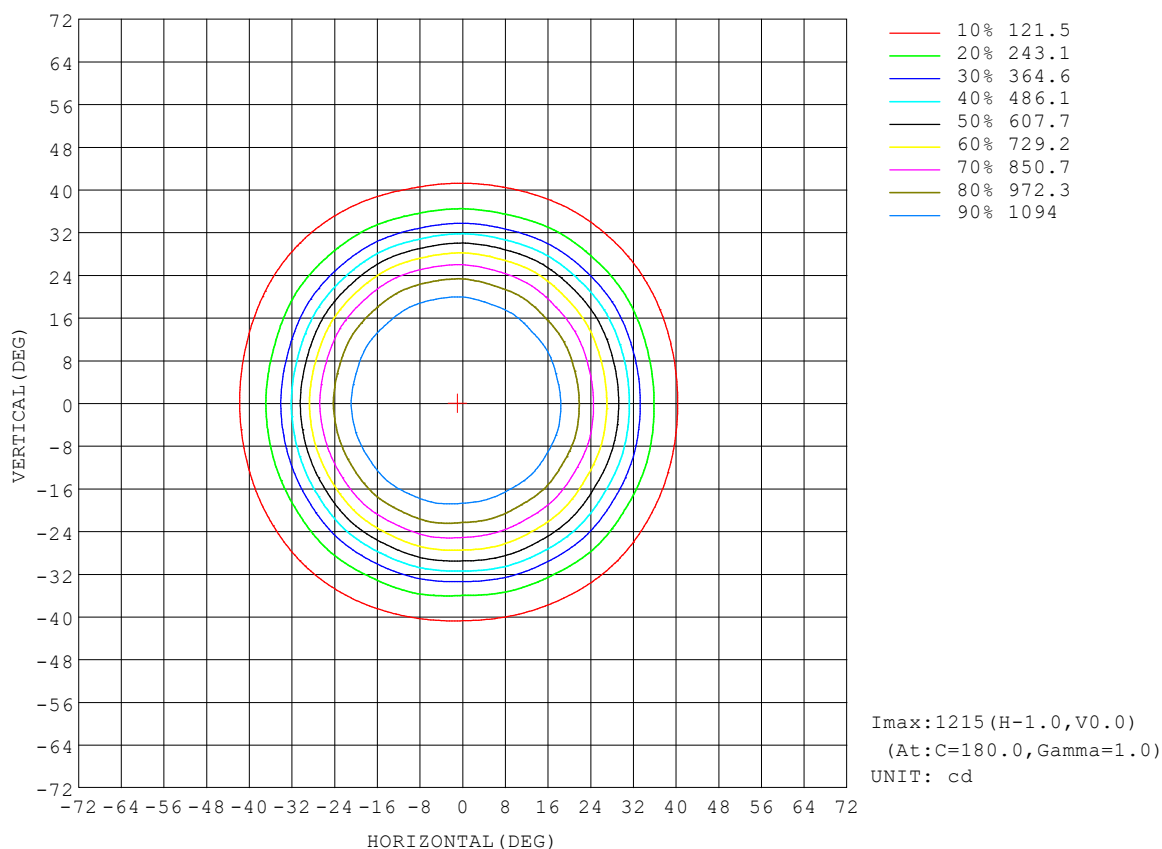
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	86	79	75	85	79	75	84	79	75	71
0.80	93	87	83	93	87	83	92	86	83	79
1.00	98	92	88	97	92	88	96	92	88	84
1.25	102	97	93	101	96	93	99	95	92	88
1.50	105	100	97	104	99	96	102	98	95	90
2.00	108	104	100	106	103	99	104	101	98	93
2.50	110	106	103	108	104	102	105	102	100	94
3.00	111	108	105	110	106	104	106	104	102	95
4.00	113	111	108	111	109	107	108	106	104	97
5.00	115	112	110	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

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:

ISOCANDELA DIAGRAM

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

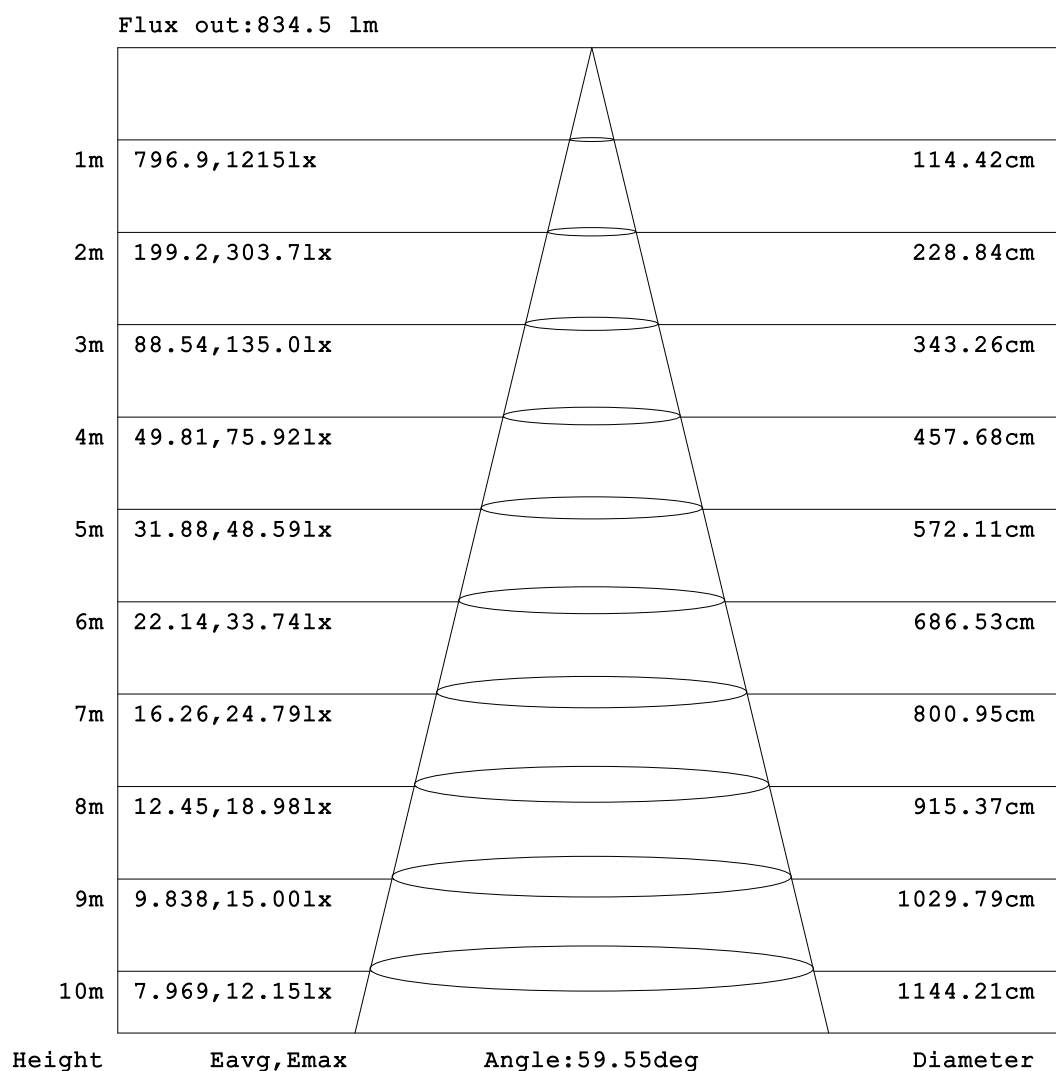


C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:AE
Test Date:2020-10-29

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:

AAI Figure

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



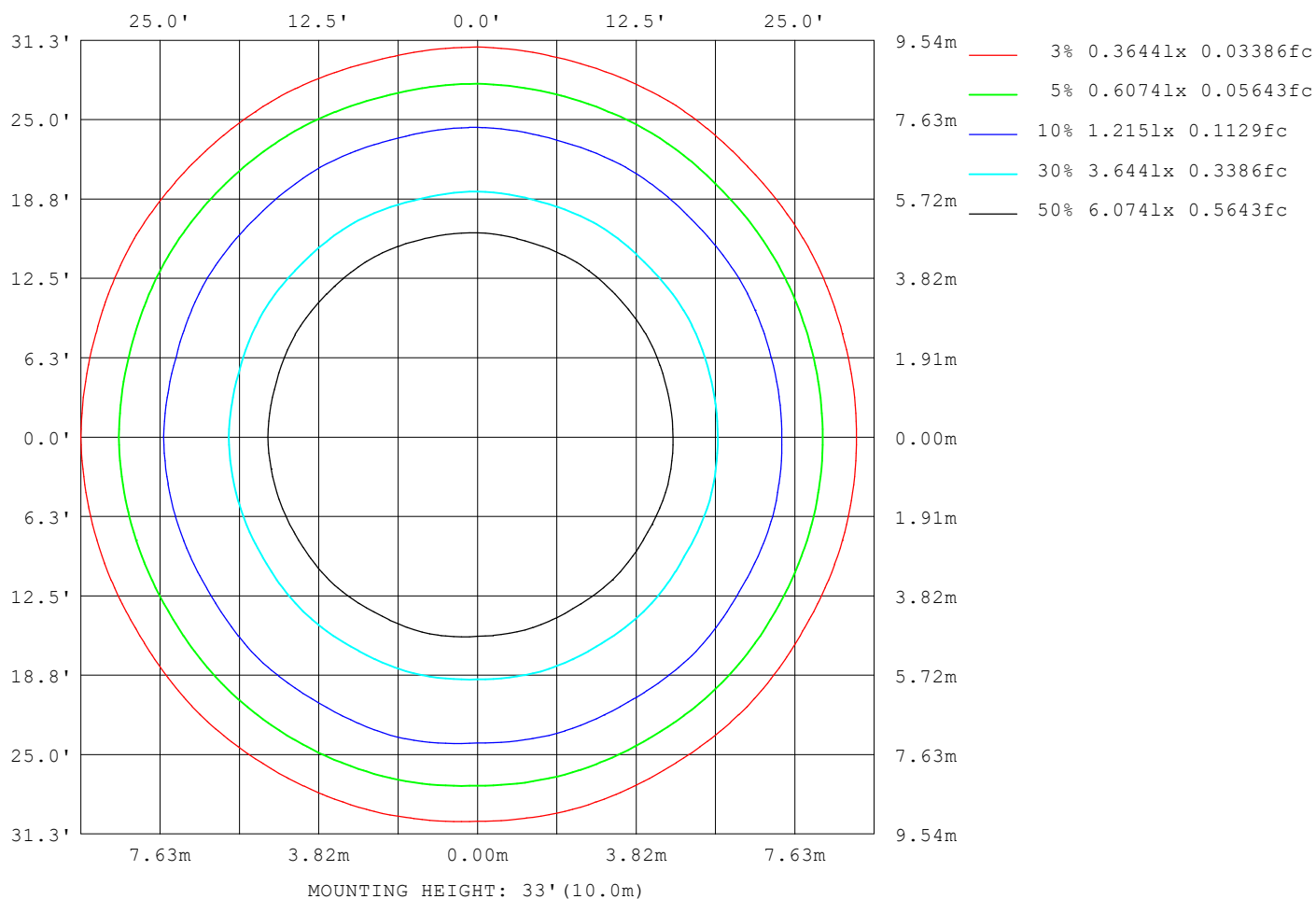
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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

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:

LED Avg.L Report

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

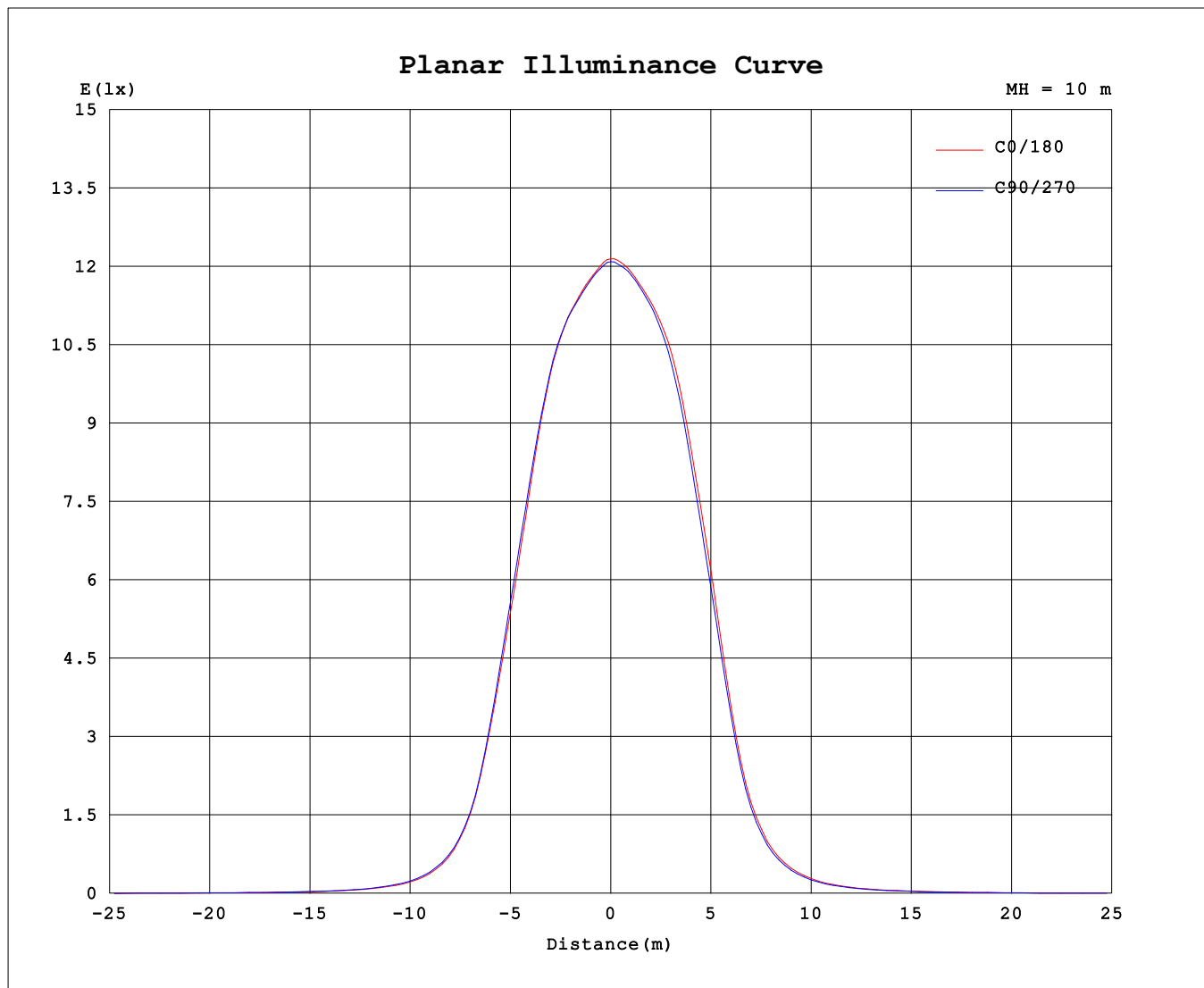
AvgL	cd/m2
L_0~180 (65) av	11668
L_0~180 (75) av	8609
L_0~180 (85) av	5084
L_90~270 (65) av	11415
L_90~270 (75) av	8333
L_90~270 (85) av	5077
L_45 (65) av	11708
L_45 (75) av	8574
L_45 (85) av	5098

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

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:

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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:

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

UNIT: cd

[illegible]

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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:

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