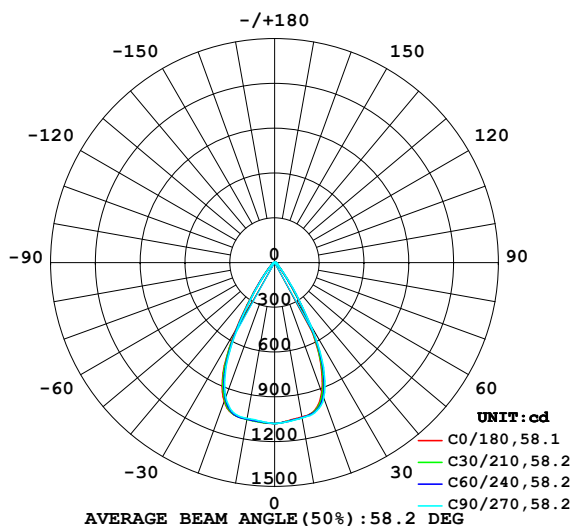


LUMINAIRE PHOTOMETRIC TEST REPORT

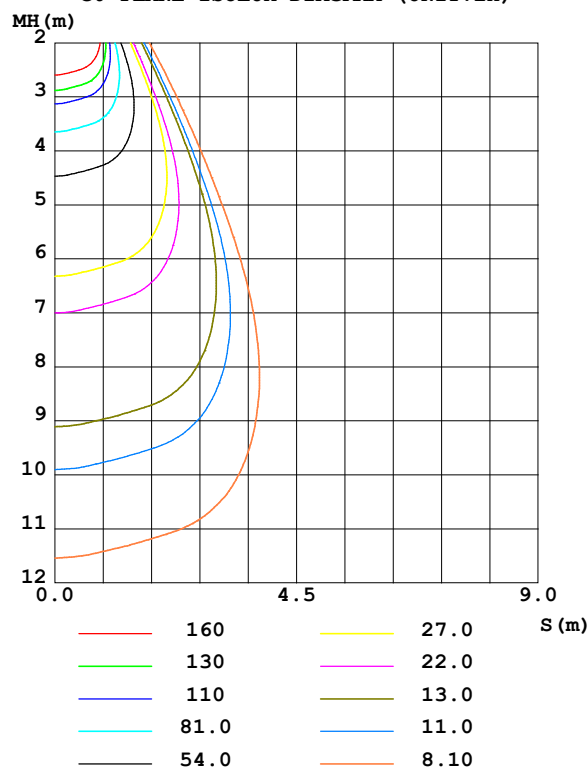
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.: 58	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 90.27 lm/W
MODEL	TL45-11G30-60-S	Imax (cd)	1078	S/MH(C0/180)	0.86	
NOMINAL POWER(W)	11	LOR(%)	100.0	S/MH(C90/270)	0.85	
RATED VOLTAGE(V)	220-240	TOTAL FLUX(lm)	965.85	η UP,DN(C0-180)	0.0,50.1	
NOMINAL FLUX(lm)	965.848	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,49.9	
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.75	
TEST VOLTAGE(V)	230	η 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

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:

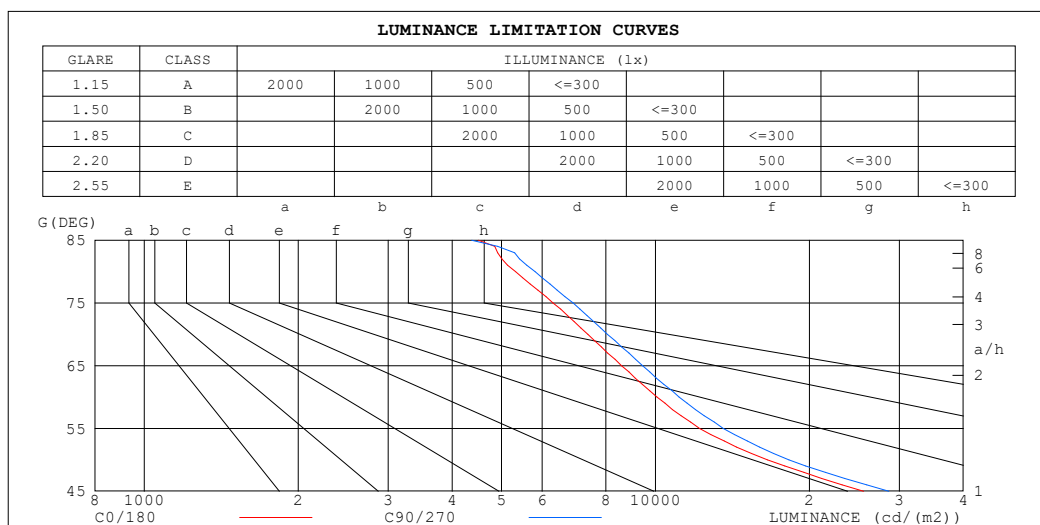
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	1051	1055	1057	1060	1063	1066	1061	1054	0- 10	101.6	101.6	10.5,10.5
20	924.3	949.6	963.0	981.1	988.7	967.8	959.2	938.1	10- 20	291.0	392.6	40.6,40.6
30	443.2	477.0	486.6	516.3	520.7	486.8	476.2	449.9	20- 30	342.1	734.7	76.1,76.1
40	92.46	98.88	103.9	113.8	119.4	107.4	103.6	96.88	30- 40	151.4	886.1	91.7,91.7
50	28.10	29.97	30.97	33.37	34.35	32.19	30.17	29.04	40- 50	44.44	930.6	96.3,96.3
60	13.28	14.67	14.68	15.15	15.28	14.71	14.03	13.53	50- 60	18.83	949.4	98.3,98.3
70	6.653	7.347	7.278	7.438	7.392	7.220	7.015	6.688	60- 70	10.35	959.7	99.4,99.4
80	2.440	2.642	2.665	2.710	2.542	2.507	2.407	2.328	70- 80	4.905	964.6	99.9,99.9
90	0.5670	0.5713	0.5519	0.5364	0.3050	0.3052	0.3092	0.3093	80- 90	1.203	965.8	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	4506	4372
80	5326	5813
75	6302	6898
70	7374	8059
65	8586	9432
60	10066	11122
55	12206	13576
50	16569	18249
45	25516	28595

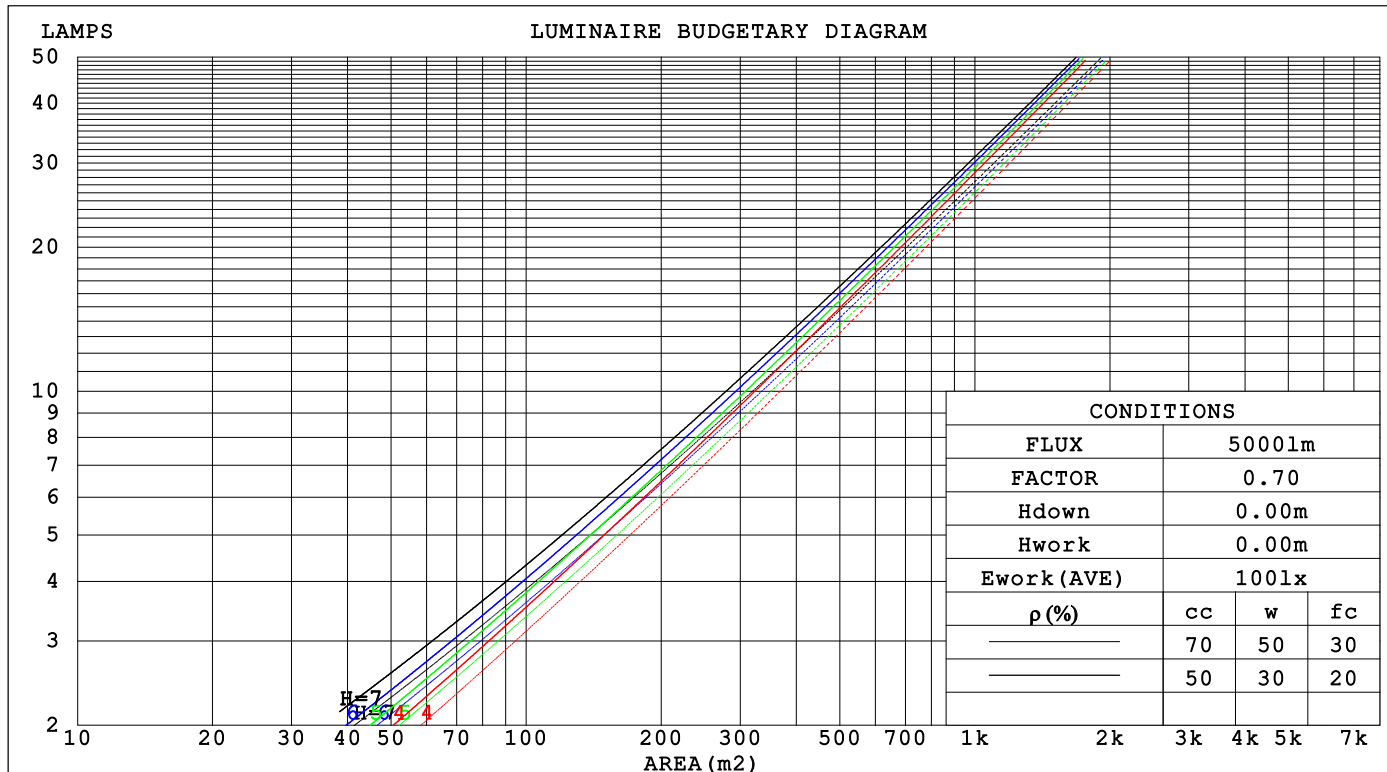
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: AE
Test Date: 2020-10-29

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	.180 .103 .032	.174 .099 .031	.161 .092 .029	.149 .086 .028	.139 .080 .026	
2.0	.172 .094 .029	.166 .092 .028	.156 .087 .027	.146 .082 .026	.137 .077 .024	
3.0	.163 .087 .026	.158 .085 .026	.149 .081 .025	.141 .077 .024	.133 .074 .023	
4.0	.155 .080 .024	.151 .079 .023	.143 .076 .023	.136 .073 .022	.129 .070 .021	
5.0	.147 .075 .022	.144 .074 .021	.137 .071 .021	.130 .069 .020	.125 .067 .020	
6.0	.140 .070 .020	.137 .069 .020	.131 .067 .020	.126 .065 .019	.120 .063 .019	
7.0	.134 .066 .019	.131 .065 .019	.126 .064 .018	.121 .062 .018	.116 .060 .018	
8.0	.128 .063 .018	.125 .062 .017	.121 .060 .017	.116 .059 .017	.112 .058 .017	
9.0	.123 .059 .017	.120 .059 .016	.116 .057 .016	.112 .056 .016	.108 .055 .016	
10.0	.118 .056 .016	.116 .056 .016	.112 .055 .015	.108 .054 .015	.105 .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 .113	.134 .114 .097	.092 .079 .068	.053 .046 .040	.017 .015 .013	
3.0	.144 .114 .089	.123 .098 .078	.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 .060	.107 .076 .052	.074 .053 .037	.043 .031 .022	.014 .010 .007	
6.0	.117 .078 .050	.101 .068 .043	.070 .047 .031	.040 .028 .018	.013 .009 .006	
7.0	.111 .070 .042	.095 .061 .037	.066 .043 .026	.038 .025 .015	.012 .008 .005	
8.0	.105 .064 .036	.091 .056 .031	.063 .039 .022	.036 .023 .013	.012 .008 .004	
9.0	.100 .059 .031	.086 .051 .027	.060 .036 .019	.035 .021 .012	.011 .007 .004	
10.0	.095 .055 .027	.082 .047 .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	19.3	20.2	19.5	20.4	20.5	19.6	20.6	19.9	20.7	20.9
3H	19.3	20.2	19.6	20.4	20.6	19.7	20.6	20.0	20.8	21.0
4H	19.4	20.2	19.6	20.4	20.6	19.8	20.6	20.0	20.8	21.0
6H	19.4	20.1	19.6	20.4	20.6	19.8	20.5	20.1	20.8	21.0
8H	19.3	20.1	19.6	20.3	20.6	19.7	20.5	20.0	20.7	21.0
12H	19.3	20.0	19.6	20.3	20.6	19.7	20.4	20.0	20.7	21.0
4H 2H	19.2	20.0	19.4	20.2	20.4	19.5	20.4	19.8	20.6	20.8
3H	19.3	20.0	19.7	20.3	20.6	19.7	20.4	20.0	20.7	21.0
4H	19.4	20.1	19.8	20.4	20.7	19.8	20.4	20.1	20.7	21.0
6H	19.5	20.0	19.8	20.4	20.7	19.8	20.4	20.2	20.7	21.1
8H	19.5	20.0	19.8	20.3	20.7	19.8	20.4	20.2	20.7	21.1
12H	19.4	19.9	19.9	20.3	20.7	19.8	20.3	20.2	20.7	21.1
8H 4H	19.4	19.9	19.8	20.2	20.6	19.7	20.3	20.1	20.6	21.0
6H	19.5	19.9	19.9	20.3	20.7	19.8	20.3	20.3	20.7	21.1
8H	19.5	19.9	19.9	20.3	20.7	19.9	20.2	20.3	20.7	21.1
12H	19.5	19.8	20.0	20.3	20.7	19.9	20.2	20.3	20.6	21.1
12H 4H	19.3	19.8	19.7	20.2	20.6	19.7	20.2	20.1	20.5	20.9
6H	19.4	19.8	19.9	20.2	20.7	19.8	20.2	20.2	20.6	21.0
8H	19.5	19.8	19.9	20.2	20.7	19.8	20.2	20.3	20.6	21.1
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 2.0 / - 2.6					+ 2.2 / - 2.6				
1.5H	+ 3.5 / - 2.2					+ 3.8 / - 2.2				
2.0H	+ 2.3 / - 1.3					+ 2.5 / - 1.2				

CIE Pub.117, 965.8 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:

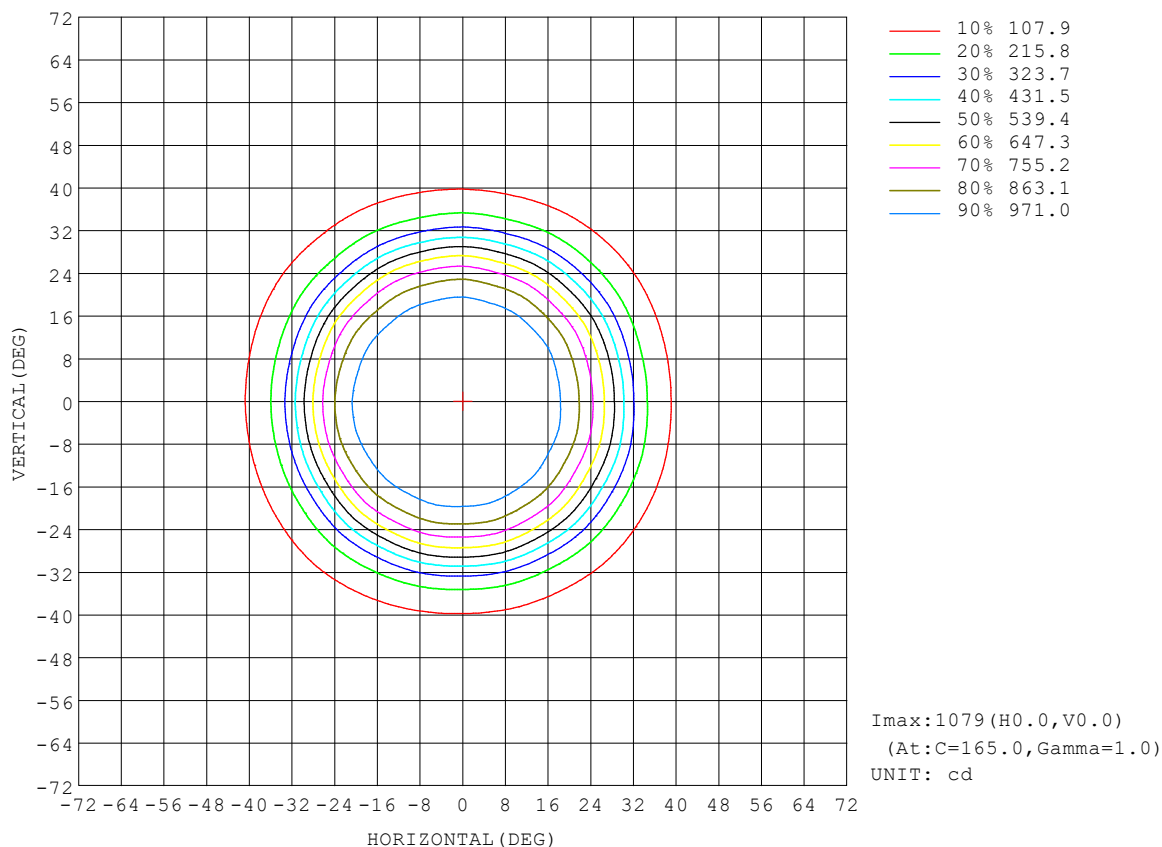
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	86	80	76	86	80	76	85	79	76	72
0.80	94	88	84	93	88	84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

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 :

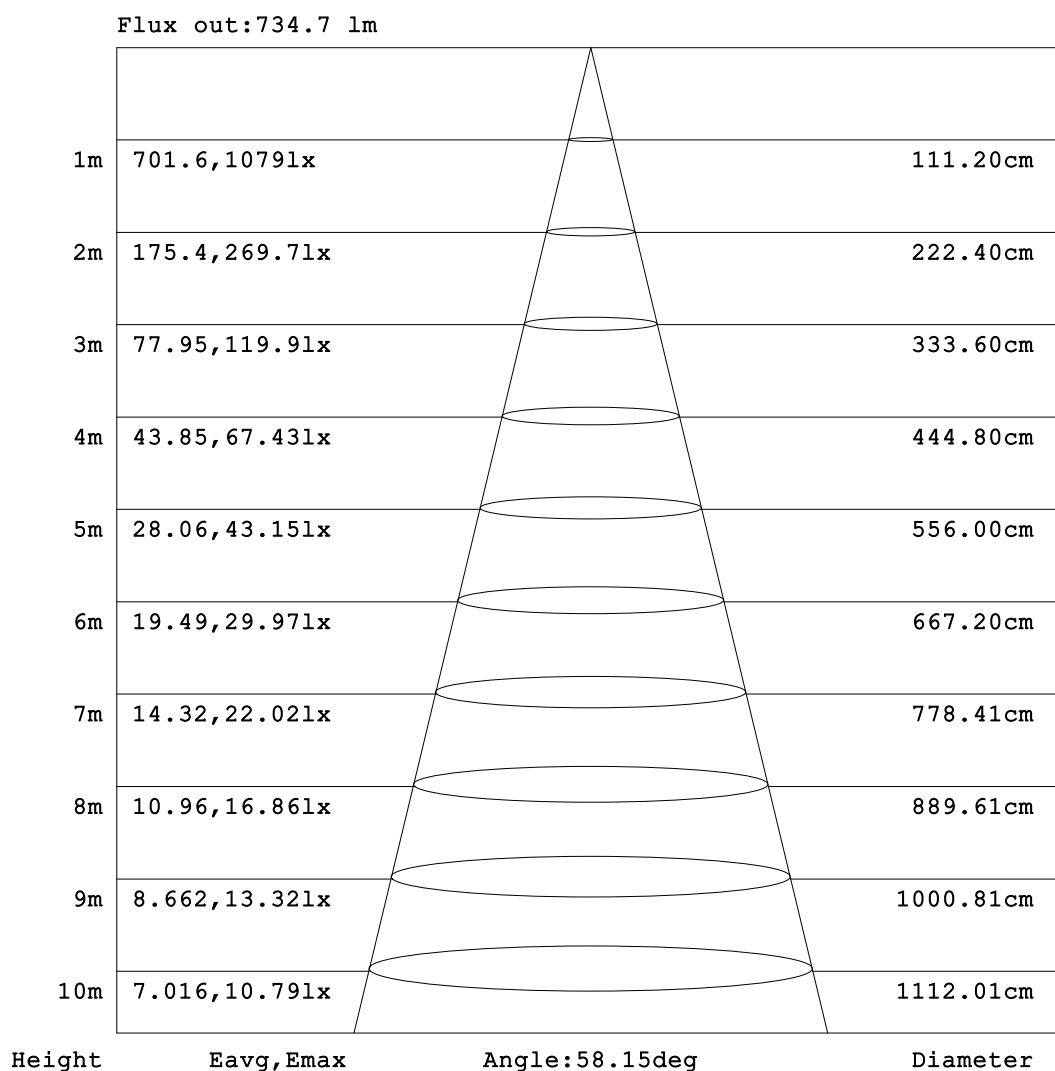


C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:AE
 Test Date:2020-10-29

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:



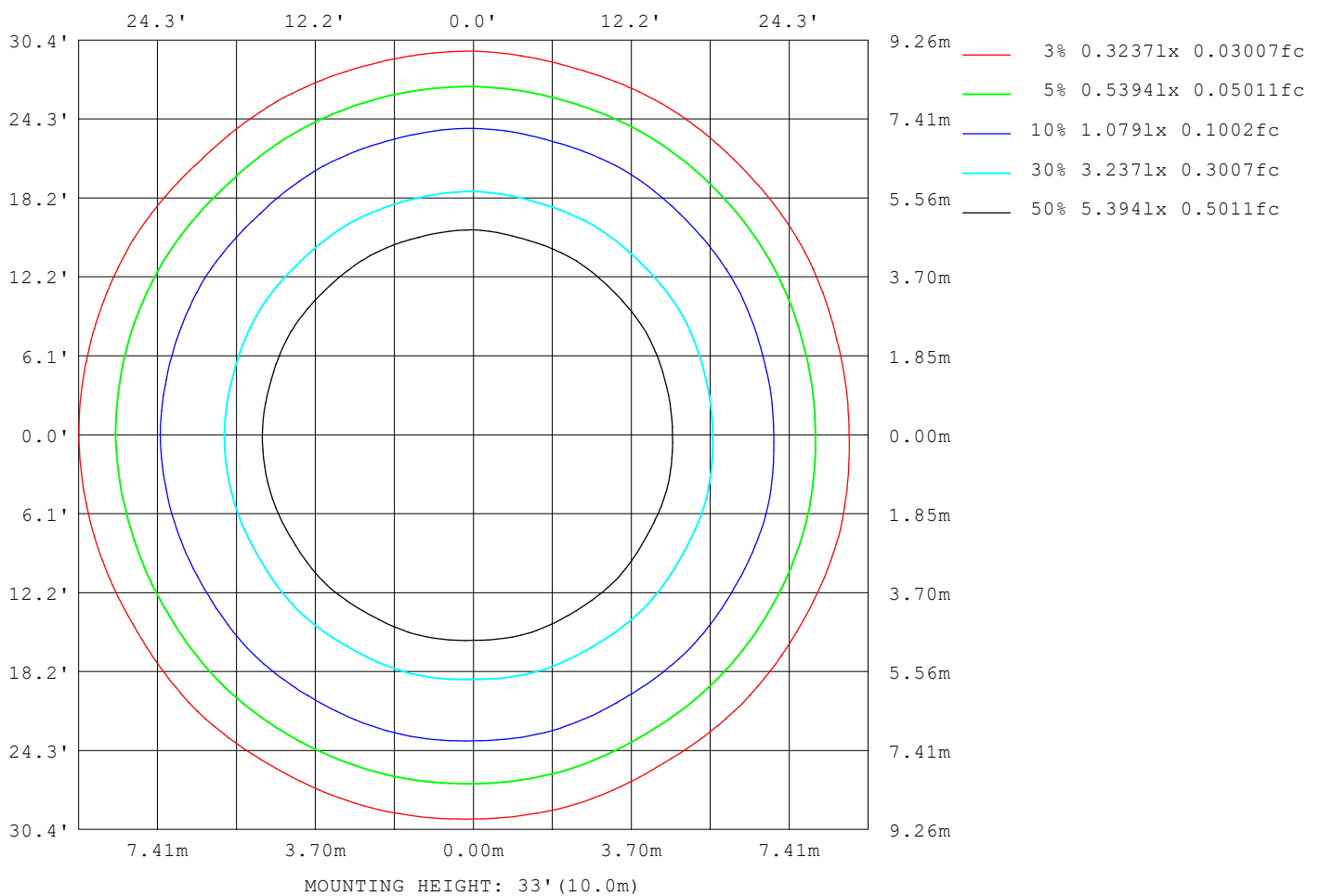
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:

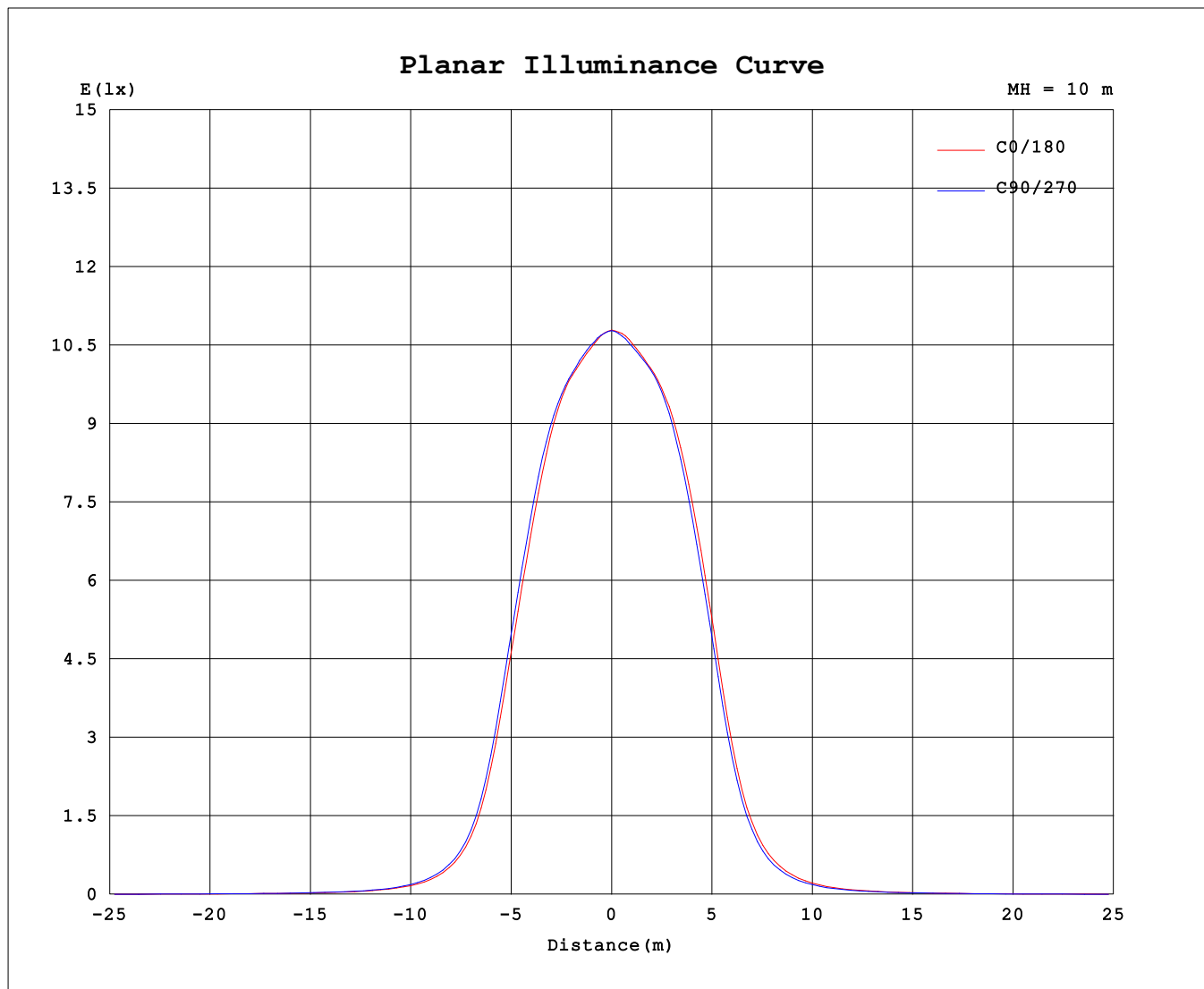
AvgL	cd/m2
L_0~180 (65) av	9131
L_0~180 (75) av	6571
L_0~180 (85) av	3825
L_90~270 (65) av	9264
L_90~270 (75) av	6714
L_90~270 (85) av	3812
L_45 (65) av	9331
L_45 (75) av	6733
L_45 (85) av	3833

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:

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:

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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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