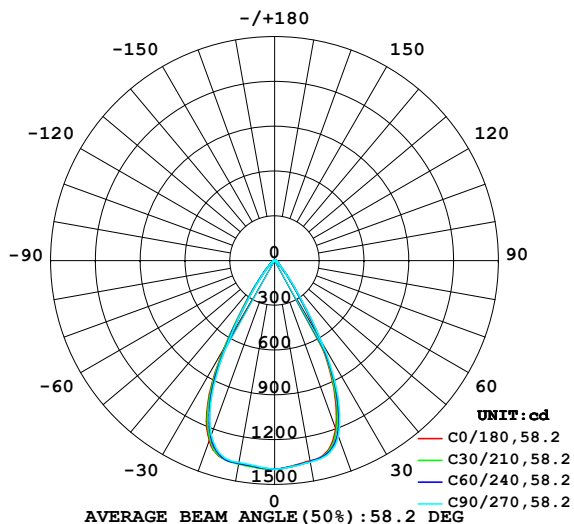


LUMINAIRE PHOTOMETRIC TEST REPORT

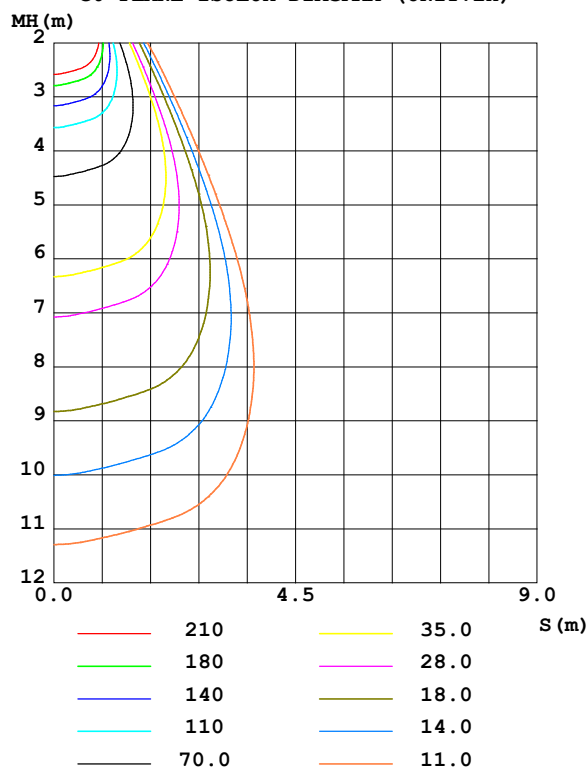
NAME:	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.: 58	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 82.98 lm/W
MODEL	TL45-15G30-60-S	I _{max} (cd)	1398	S/MH(C0/180)	0.86	
NOMINAL POWER(W)	15	LOR(%)	100.0	S/MH(C90/270)	0.84	
RATED VOLTAGE(V)	220-240	TOTAL FLUX(lm)	1252.9	η UP,DN(C0-180)	0.0,50.1	
NOMINAL FLUX(lm)	1252.92	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:

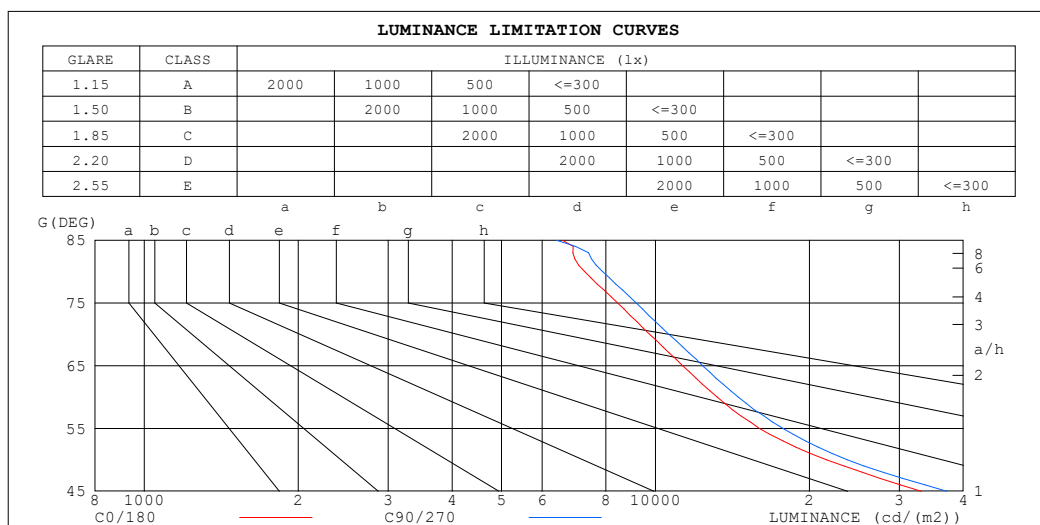
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	1363	1368	1371	1375	1378	1382	1374	1366	0- 10	131.7	131.7	10.5,10.5
20	1197	1230	1249	1273	1282	1254	1242	1214	10- 20	377.2	508.9	40.6,40.6
30	573.2	618.7	632.7	672.4	679.2	631.5	616.6	580.5	20- 30	443.4	952.3	76,76
40	121.9	128.3	135.9	148.0	155.9	140.2	133.9	126.1	30- 40	196.6	1149	91.7,91.7
50	36.58	39.06	40.35	43.39	44.77	41.78	39.05	37.58	40- 50	57.72	1207	96.3,96.3
60	17.37	19.16	19.17	19.79	20.00	19.17	18.27	17.60	50- 60	24.50	1231	98.3,98.3
70	8.771	9.700	9.597	9.819	9.781	9.514	9.247	8.776	60- 70	13.56	1245	99.3,99.3
80	3.320	3.606	3.615	3.687	3.489	3.410	3.292	3.153	70- 80	6.531	1251	99.9,99.9
90	0.9361	0.9414	0.8810	0.8708	0.5655	0.5703	0.6069	0.6158	80- 90	1.756	1253	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	6585	6402
80	7266	7881
75	8434	9168
70	9746	10623
65	11303	12363
60	13201	14518
55	15974	17766
50	21628	23765
45	33114	37111

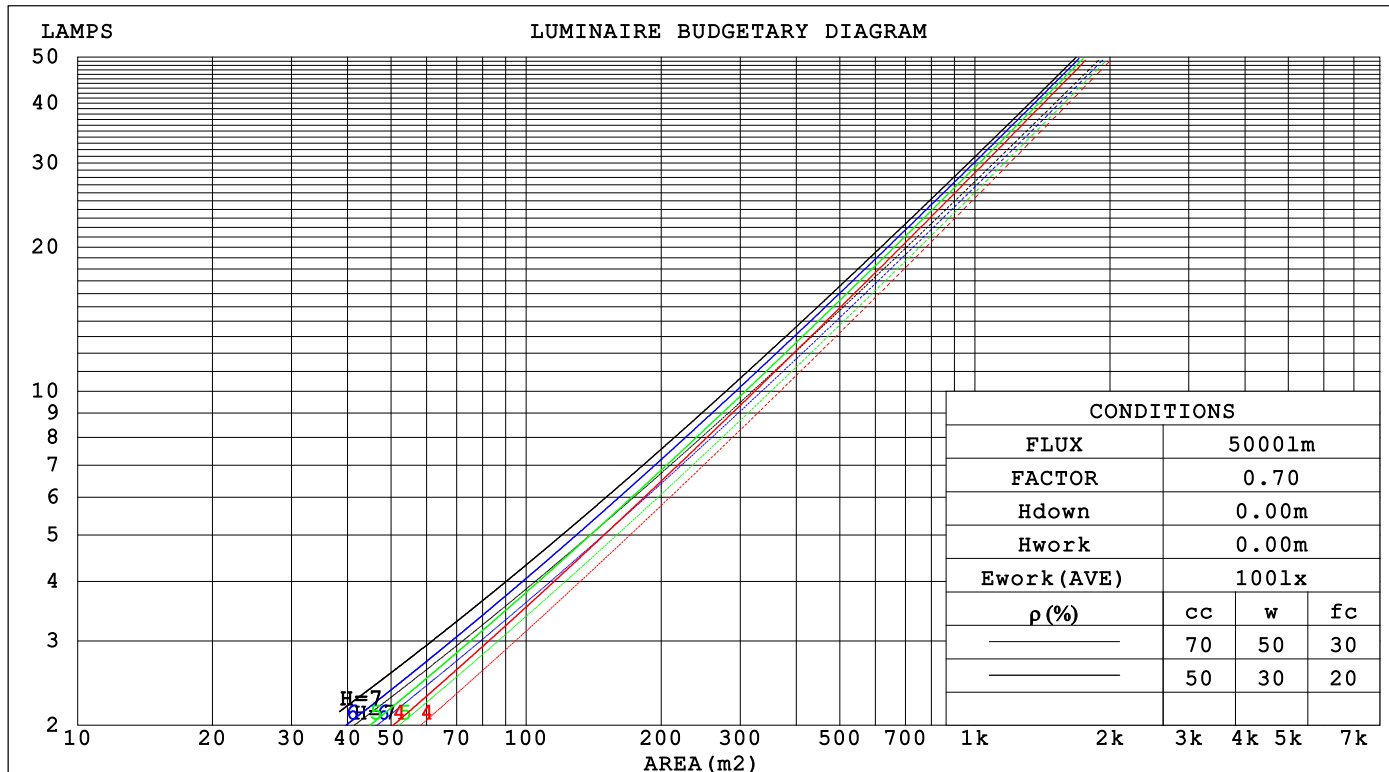
C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: AE
 Test Date: 2020-10-29

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
pf	20%	20%	20%	20%	20%	0
RCR	RCR:Room Cavity Ratio					Wall Exitance Coefficients(WEC)
0.0						
1.0	.181 .103 .033	.174 .099 .032	.161 .093 .030	.150 .086 .028	.139 .081 .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 .081 .024	.151 .079 .023	.143 .076 .023	.136 .073 .022	.129 .070 .021	
5.0	.147 .075 .022	.144 .074 .021	.137 .071 .021	.131 .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	.126 .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
pf	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	.123 .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 .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	.096 .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	19.7	20.6	19.9	20.8	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	19.7	20.4	20.6	19.8	20.6	20.1	20.8	21.1
6H	19.4	20.2	19.7	20.4	20.6	19.8	20.6	20.1	20.8	21.1
8H	19.4	20.1	19.7	20.4	20.6	19.8	20.5	20.1	20.8	21.0
12H	19.4	20.1	19.7	20.3	20.6	19.8	20.5	20.1	20.7	21.0
4H 2H	19.2	20.0	19.5	20.2	20.5	19.6	20.4	19.8	20.6	20.8
3H	19.4	20.1	19.7	20.3	20.6	19.7	20.5	20.1	20.7	21.0
4H	19.4	20.1	19.8	20.4	20.7	19.8	20.5	20.2	20.8	21.1
6H	19.5	20.1	19.9	20.4	20.7	19.9	20.5	20.3	20.8	21.1
8H	19.5	20.0	19.9	20.4	20.7	19.9	20.4	20.3	20.8	21.1
12H	19.5	20.0	19.9	20.4	20.7	19.9	20.4	20.3	20.7	21.1
8H 4H	19.4	19.9	19.8	20.3	20.7	19.8	20.3	20.2	20.7	21.0
6H	19.5	19.9	19.9	20.3	20.7	19.9	20.3	20.3	20.7	21.1
8H	19.5	19.9	20.0	20.3	20.8	19.9	20.3	20.4	20.7	21.2
12H	19.6	19.9	20.0	20.3	20.8	19.9	20.3	20.4	20.7	21.2
12H 4H	19.4	19.9	19.8	20.2	20.6	19.7	20.2	20.1	20.6	21.0
6H	19.5	19.9	19.9	20.3	20.7	19.9	20.2	20.3	20.7	21.1
8H	19.5	19.9	20.0	20.3	20.8	19.9	20.2	20.4	20.7	21.1
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 1.9 / - 2.5					+ 2.2 / - 2.5				
1.5H	+ 3.5 / - 2.1					+ 3.8 / - 2.1				
2.0H	+ 2.2 / - 1.2					+ 2.4 / - 1.1				

CIE Pub.117, 1253 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 0.8)
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:

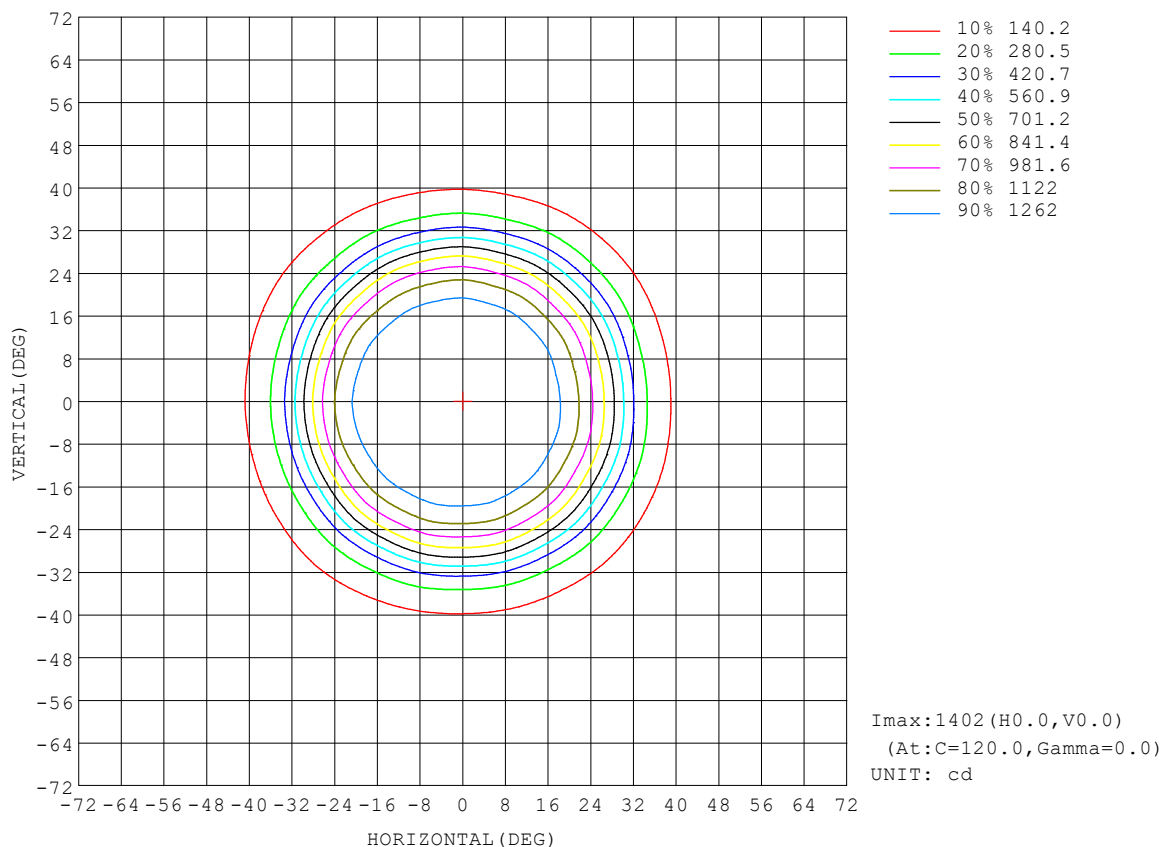
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	86	80	76	86	80	76	85	79	76	72
0.80	94	88	84	93	88	84	92	87	83	80
1.00	98	93	89	98	92	89	96	92	88	84
1.25	103	97	94	101	97	93	100	95	92	88
1.50	105	100	97	104	100	96	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	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

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 :

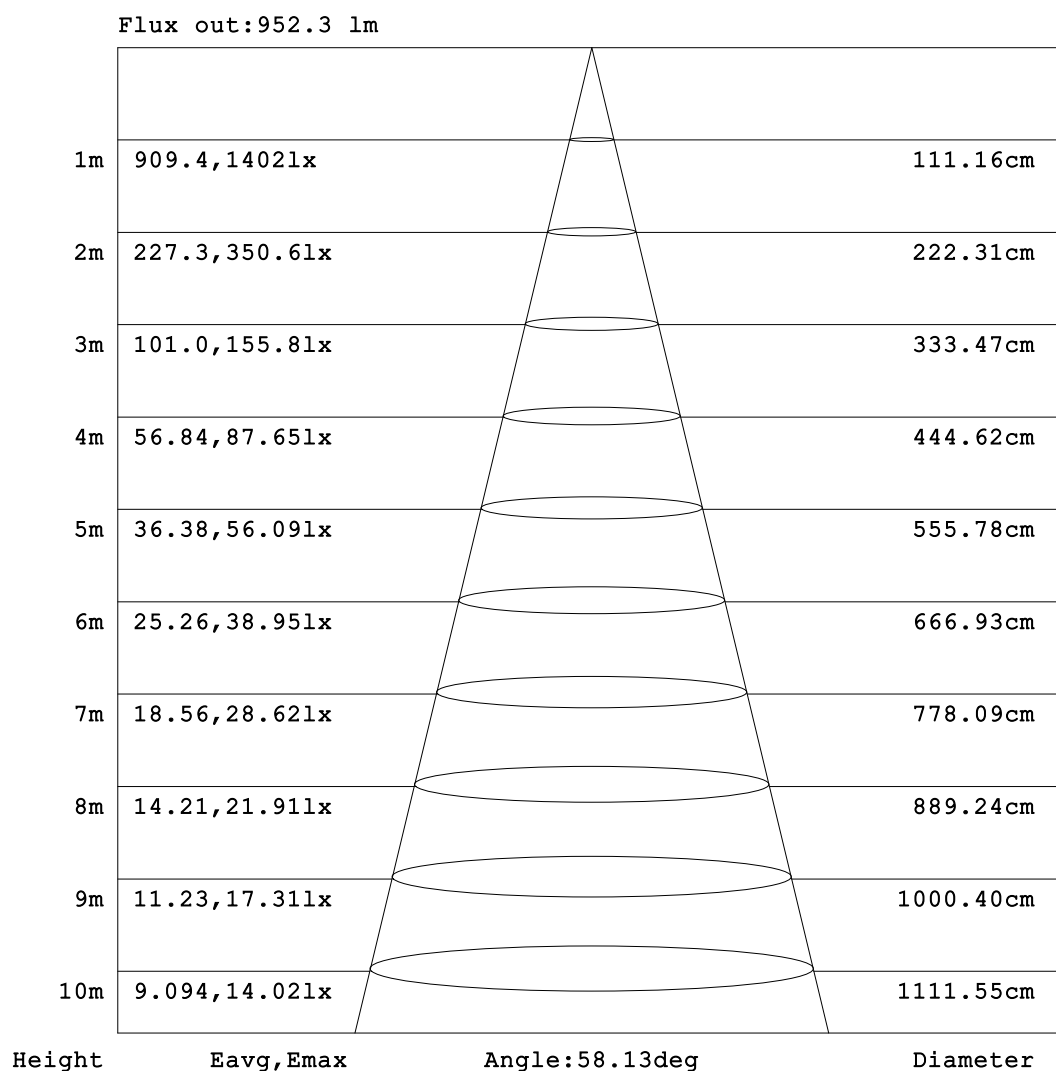


C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:AE
Test Date:2020-10-29

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:



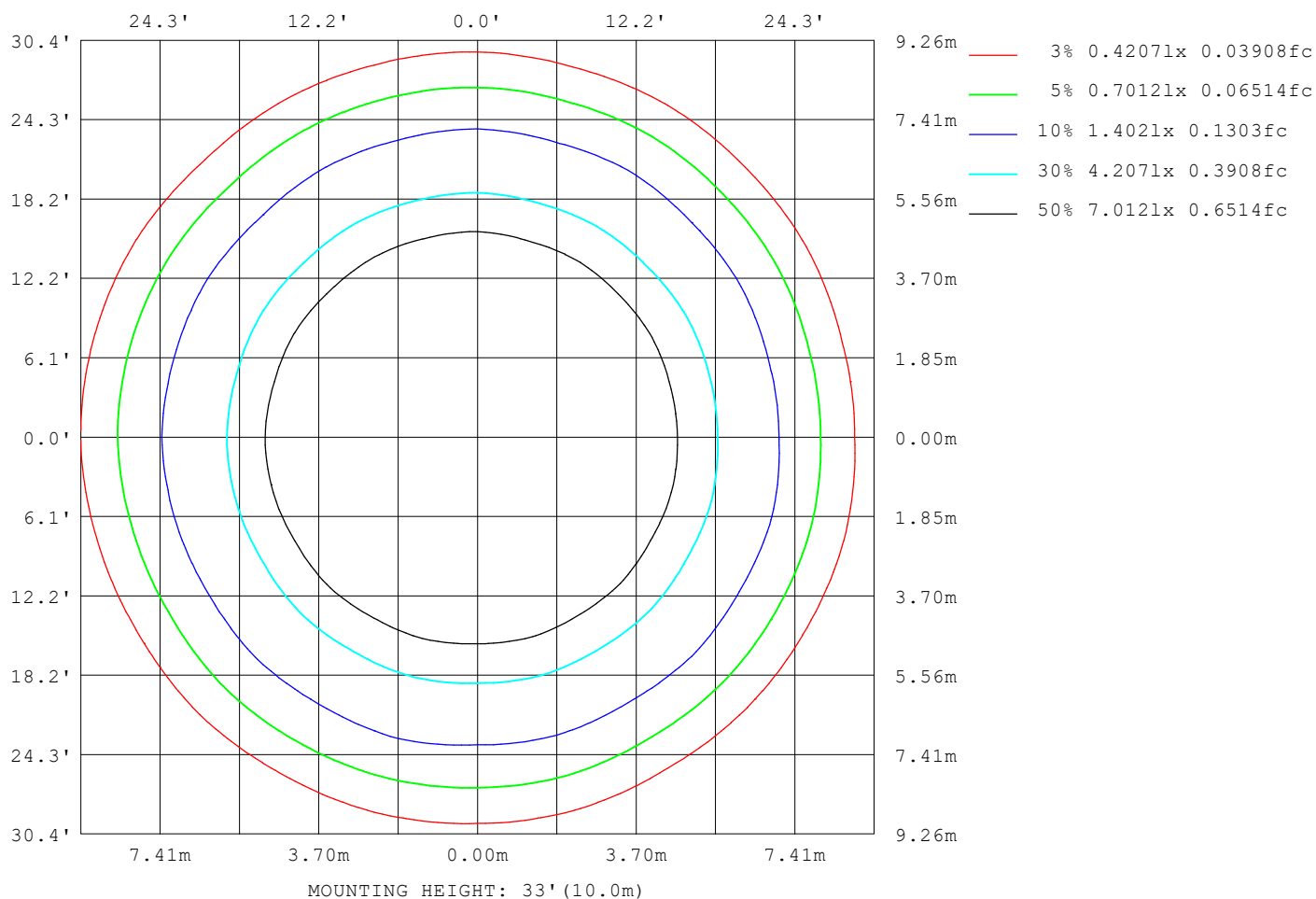
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:

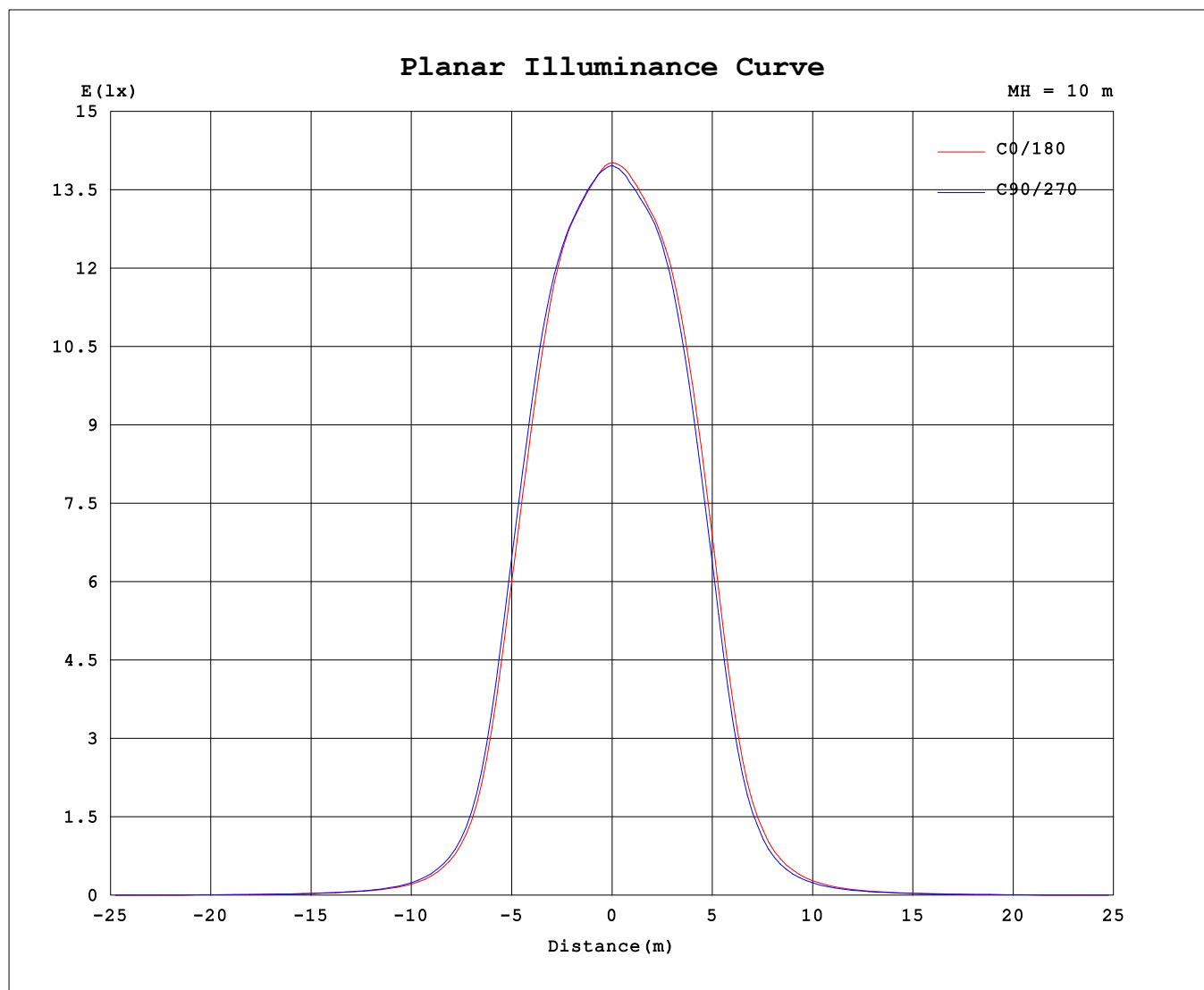
AvgL	cd/m2
L_0~180 (65) av	11984
L_0~180 (75) av	8785
L_0~180 (85) av	5774
L_90~270 (65) av	12124
L_90~270 (75) av	8943
L_90~270 (85) av	5720
L_45 (65) av	12217
L_45 (75) av	8962
L_45 (85) av	5739

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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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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