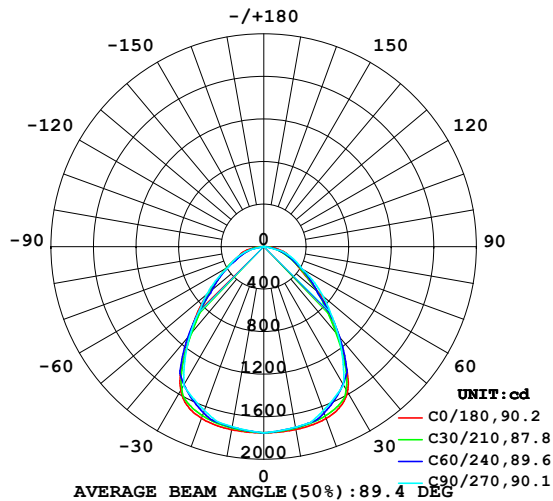


LUMINAIRE PHOTOMETRIC TEST REPORT

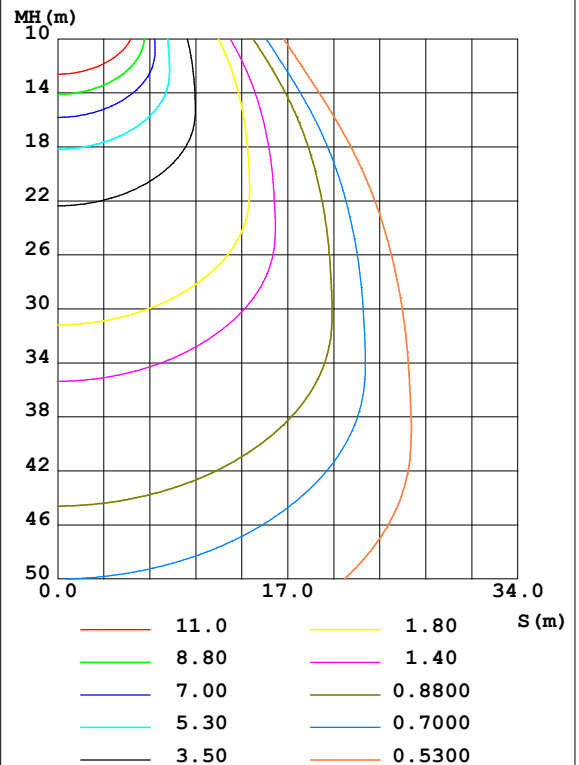
Test:U:220.24V I:0.1687A P:31.765W PF:0.9665 Freq:50.00Hz Lamp Flux:3831.53x1 lm		
NAME: GLM-SPL12030-32W-E (RA90)	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 120.62 lm/W			
MODEL		I _{max} (cd)	1750	S/MH (C0/180)	1.24
NOMINAL POWER (W)	27	LOR (%)	100.0	S/MH (C90/270)	1.24
RATED VOLTAGE (V)	220.0	TOTAL FLUX (lm)	3831.5	□ UP, DN (C0-180)	0.0, 50.3
NOMINAL FLUX (lm)	3831.53	CIE CLASS	DIRECT	□ UP, DN (C180-360)	0.0, 49.7
LAMPS INSIDE	1	□ up (%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	220	□ down (%)	100.0	CIBSE SHR MAX	1.30

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-10-18

V(B) Range:-75 - 75DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.290
Humidity:65.0%
Test Distance:7.500m [K=1.0267]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

°	C0	C45	C90	C135	C180	C225	C270	C315	°	□ zone	□ total	%lum,lamp
10	1745	1728	1724	1730	1747	1726	1719	1725	0- 10	165.8	165.8	4.33,4.33
20	1718	1693	1641	1697	1717	1689	1638	1686	10- 20	484.2	650.0	17,17
30	1576	1494	1501	1491	1562	1498	1508	1496	20- 30	742.9	1393	36.4,36.4
40	1090	1072	1094	1067	1082	1083	1076	1076	30- 40	820.0	2213	57.8,57.8
50	669.2	634.2	731.4	643.1	690.8	631.1	700.9	612.8	40- 50	659.8	2873	75,75
60	373.4	375.7	412.3	389.2	400.1	365.1	384.4	349.8	50- 60	467.7	3340	87.2,87.2
70	248.4	217.8	260.5	234.7	246.4	212.6	237.6	203.2	60- 70	307.1	3647	95.2,95.2
80	126.4	75.79	0	85.43	127.9	71.14	0	68.72	70- 80	164.8	3812	99.5,99.5
90	0	0	0	0	0	0	0	0	80- 90	19.37	3832	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): 2568.9 lm

%lum = 67.0%

%lamp = 67.0%

Conical surface Flux(120deg): 3340.3 lm

%lum = 87.2%

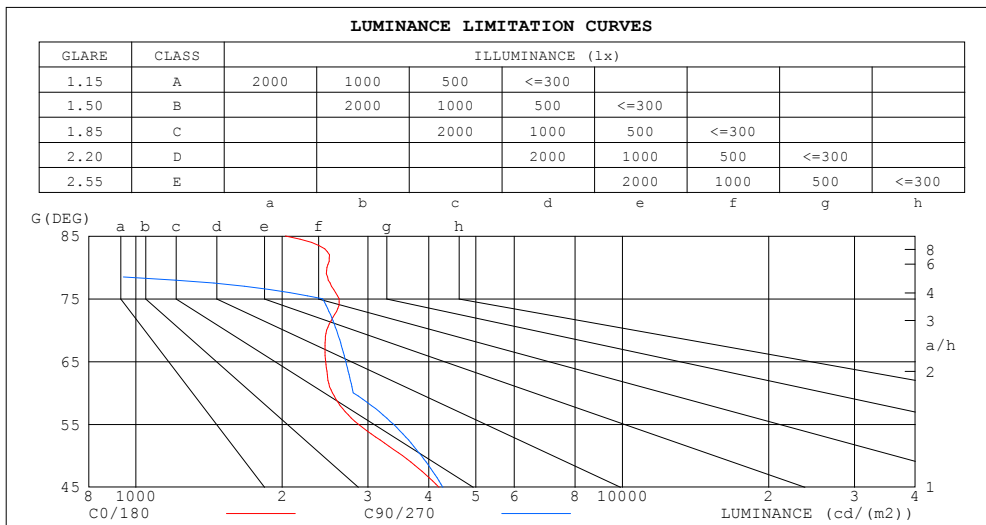
%lamp = 87.2%

H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-10-18

V(B) Range:-75 - 75DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.290
Humidity:65.0%
Test Distance:7.500m [K=1.0267]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:220.24V I:0.1687A P:31.765W PF:0.9665 Freq:50.00Hz Lamp Flux:3831.53x1 lm		
NAME: GLM-SPL12030-32W-E (RA90)	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	2029	0
80	2472	0
75	2619	2421
70	2467	2586
65	2456	2703
60	2536	2800
55	2868	3385
50	3535	3864
45	4200	4279

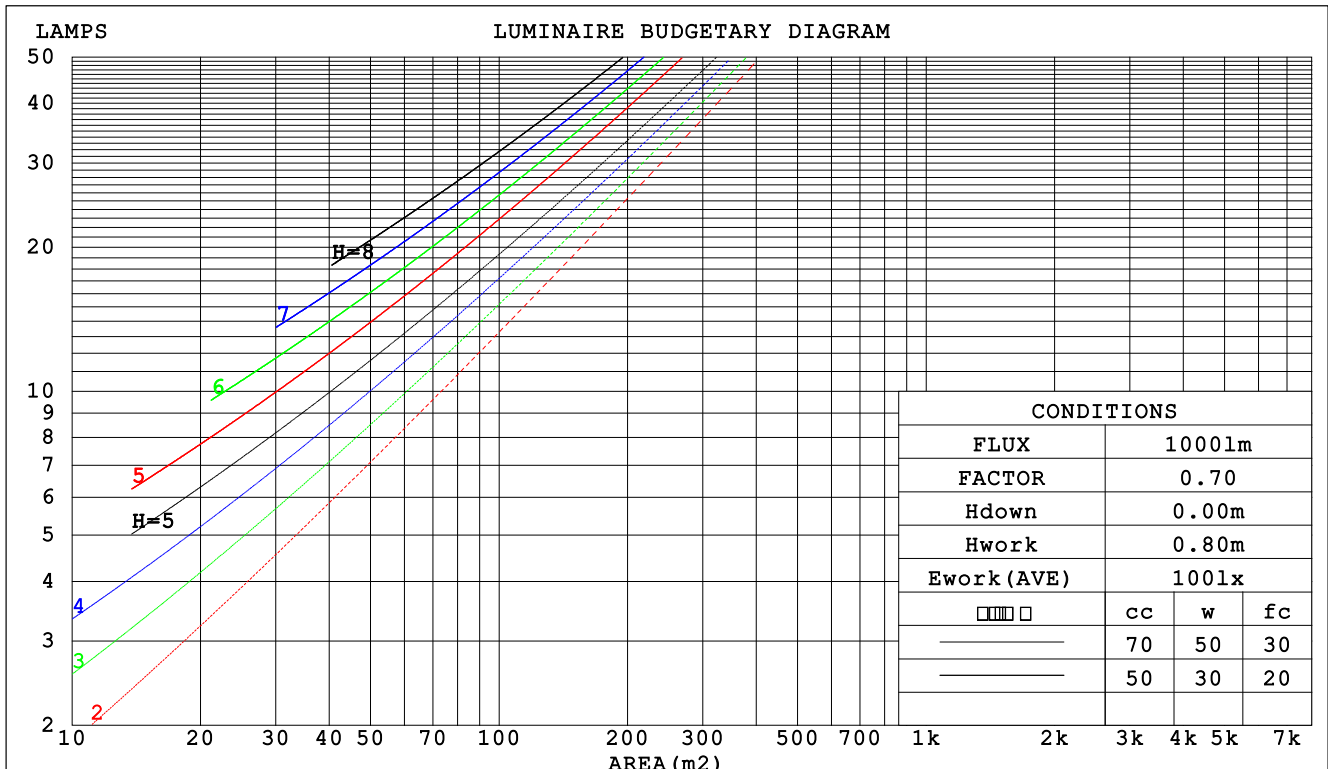
H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-10-18

V(B) Range:-75 - 75DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.290
Humidity:65.0%
Test Distance:7.500m [K=1.0267]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:220.24V I:0.1687A P:31.765W PF:0.9665 Freq:50.00Hz Lamp Flux:3831.53x1 lm		
NAME: GLM-SPL12030-32W-E (RA90)	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:

□cc	80%			70%			50%			30%			10%			0
□w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
□fc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)									
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	.00
1.0	1.06	1.03	.99	1.04	1.01	.98	.90	.97	.95	.96	.94	.92	.93	.91	.89	.87
2.0	.95	.89	.84	.93	.87	.83	.89	.85	.81	.86	.82	.79	.83	.80	.77	.75
3.0	.84	.77	.71	.83	.76	.71	.80	.74	.70	.77	.72	.68	.75	.71	.67	.65
4.0	.76	.68	.62	.75	.67	.62	.72	.66	.61	.70	.64	.60	.68	.63	.59	.57
5.0	.69	.60	.54	.68	.60	.54	.65	.59	.54	.64	.58	.53	.62	.57	.52	.51
6.0	.62	.54	.48	.61	.54	.48	.60	.53	.48	.58	.52	.47	.57	.51	.47	.45
7.0	.57	.49	.43	.56	.49	.43	.55	.48	.43	.53	.47	.43	.52	.46	.42	.40
8.0	.52	.44	.39	.52	.44	.39	.50	.44	.39	.49	.43	.38	.48	.42	.38	.36
9.0	.48	.41	.35	.48	.40	.35	.47	.40	.35	.46	.39	.35	.45	.39	.35	.33
10.0	.45	.37	.32	.44	.37	.32	.43	.37	.32	.42	.36	.32	.42	.36	.32	.30



H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-10-18

V(B) Range:-75 - 75DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.290
Humidity:65.0%
Test Distance:7.500m [K=1.0267]
Remarks:

WEC AND CCEC

Test:U:220.24V I:0.1687A P:31.765W PF:0.9665 Freq:50.00Hz Lamp Flux:3831.53x1 lm		
NAME: GLM-SPL12030-32W-E (RA90)	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:

□cc	80%	70%	50%	30%	10%	0
□w	50% 30% 10%	50% 30% 10%	50% 30% 10%	50% 30% 10%	50% 30% 10%	0
□fc	20%	20%	20%	20%	20%	0
RCR	RCR:Room Cavity Ratio Wall Exitance Coefficients (WEC)					
0.0						
1.0	.262 .149 .047	.255 .145 .046	.242 .139 .044	.230 .133 .043	.219 .127 .041	
2.0	.252 .138 .042	.246 .136 .042	.235 .131 .041	.225 .126 .039	.215 .122 .038	
3.0	.237 .126 .038	.232 .124 .037	.222 .120 .037	.213 .117 .036	.204 .113 .035	
4.0	.222 .115 .034	.218 .114 .034	.209 .111 .033	.201 .108 .032	.193 .105 .032	
5.0	.208 .106 .031	.204 .105 .030	.196 .102 .030	.189 .100 .030	.182 .097 .029	
6.0	.195 .098 .028	.191 .096 .028	.184 .094 .027	.178 .092 .027	.172 .090 .027	
7.0	.183 .090 .026	.179 .089 .025	.173 .088 .025	.167 .086 .025	.162 .084 .025	
8.0	.172 .084 .024	.169 .083 .024	.163 .082 .023	.158 .080 .023	.153 .079 .023	
9.0	.162 .078 .022	.160 .078 .022	.155 .076 .022	.150 .075 .022	.145 .074 .021	
10.0	.153 .074 .020	.151 .073 .020	.147 .072 .020	.142 .071 .020	.138 .070 .020	

□cc	80%	70%	50%	30%	10%	0
□w	50% 30% 10%	50% 30% 10%	50% 30% 10%	50% 30% 10%	50% 30% 10%	0
□fc	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	.177 .157 .138	.151 .134 .119	.104 .092 .082	.060 .053 .048	.019 .017 .015	
2.0	.167 .132 .103	.143 .114 .089	.098 .079 .062	.057 .046 .036	.018 .015 .012	
3.0	.158 .114 .079	.136 .098 .068	.093 .068 .048	.054 .040 .028	.017 .013 .009	
4.0	.150 .100 .062	.129 .087 .054	.089 .060 .038	.051 .035 .023	.016 .012 .007	
5.0	.143 .090 .051	.123 .078 .044	.084 .054 .031	.049 .032 .018	.016 .010 .006	
6.0	.136 .081 .042	.117 .070 .036	.081 .049 .026	.047 .029 .015	.015 .009 .005	
7.0	.129 .074 .035	.111 .064 .031	.077 .045 .022	.045 .027 .013	.014 .009 .004	
8.0	.123 .068 .030	.106 .059 .027	.073 .042 .019	.043 .025 .011	.014 .008 .004	
9.0	.118 .063 .027	.101 .055 .023	.070 .039 .016	.041 .023 .010	.013 .007 .003	
10.0	.112 .059 .024	.097 .051 .021	.067 .036 .015	.039 .021 .009	.013 .007 .003	

H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-10-18

V(B) Range:-75 - 75DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.290
Humidity:65.0%
Test Distance:7.500m [K=1.0267]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:220.24V I:0.1687A P:31.765W PF:0.9665 Freq:50.00Hz Lamp Flux:3831.53x1 lm										
NAME: GLM-SPL12030-32W-E (RA90)					TYPE:LED			WEIGHT:		
SPEC.:					DIM.:			SERIAL No.:1		
MFR.: EVERFINE					SUR.:			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	16.0	17.4	16.3	17.6	17.8	16.4	17.8	16.7	18.0	18.2
3H	17.1	18.3	17.3	18.5	18.8	17.6	18.8	17.9	19.1	19.3
4H	17.6	18.8	17.9	19.0	19.3	18.1	19.3	18.4	19.5	19.7
6H	18.0	19.1	18.3	19.4	19.6	18.1	19.2	18.4	19.5	19.8
8H	18.1	19.2	18.5	19.5	19.8	18.1	19.1	18.4	19.4	19.7
12H	18.2	19.2	18.5	19.5	19.8	18.0	19.0	18.3	19.3	19.6
4H 2H	16.4	17.6	16.7	17.8	18.0	16.7	17.9	17.0	18.1	18.4
3H	17.6	18.6	17.9	18.9	19.2	18.1	19.1	18.4	19.4	19.7
4H	18.2	19.2	18.6	19.5	19.8	18.7	19.6	19.1	20.0	20.3
6H	18.7	19.6	19.1	19.9	20.3	18.8	19.6	19.2	20.0	20.3
8H	18.9	19.7	19.3	20.1	20.5	18.7	19.5	19.1	19.9	20.3
12H	19.1	19.8	19.5	20.1	20.5	18.7	19.4	19.1	19.8	20.2
8H 4H	18.4	19.2	18.8	19.5	19.9	18.8	19.6	19.2	20.0	20.3
6H	19.0	19.7	19.5	20.1	20.5	19.0	19.6	19.4	20.0	20.4
8H	19.3	19.9	19.7	20.3	20.7	18.9	19.5	19.4	19.9	20.3
12H	19.4	19.9	19.9	20.4	20.8	18.9	19.4	19.3	19.8	20.3
12H 4H	18.4	19.1	18.8	19.4	19.8	18.8	19.5	19.2	19.9	20.3
6H	19.0	19.6	19.5	20.0	20.4	19.0	19.5	19.4	19.9	20.4
8H	19.3	19.8	19.8	20.2	20.7	18.9	19.4	19.4	19.8	20.3
Variations with the observer position at spacings:										
S = 1.0H	+ 0.3 / - 0.4					+ 0.4 / - 0.5				
1.5H	+ 0.3 / - 0.3					+ 0.2 / - 0.2				
2.0H	+ 0.8 / - 0.6					+ 0.7 / - 0.7				

CIE Pub.117, 3832 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 4.7$)

H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-10-18

V(B) Range:-75 - 75DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.290
Humidity:65.0%
Test Distance:7.500m [K=1.0267]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:220.24V I:0.1687A P:31.765W PF:0.9665 Freq:50.00Hz Lamp Flux:3831.53x1 lm		
NAME: GLM-SPL12030-32W-E (RA90)	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:

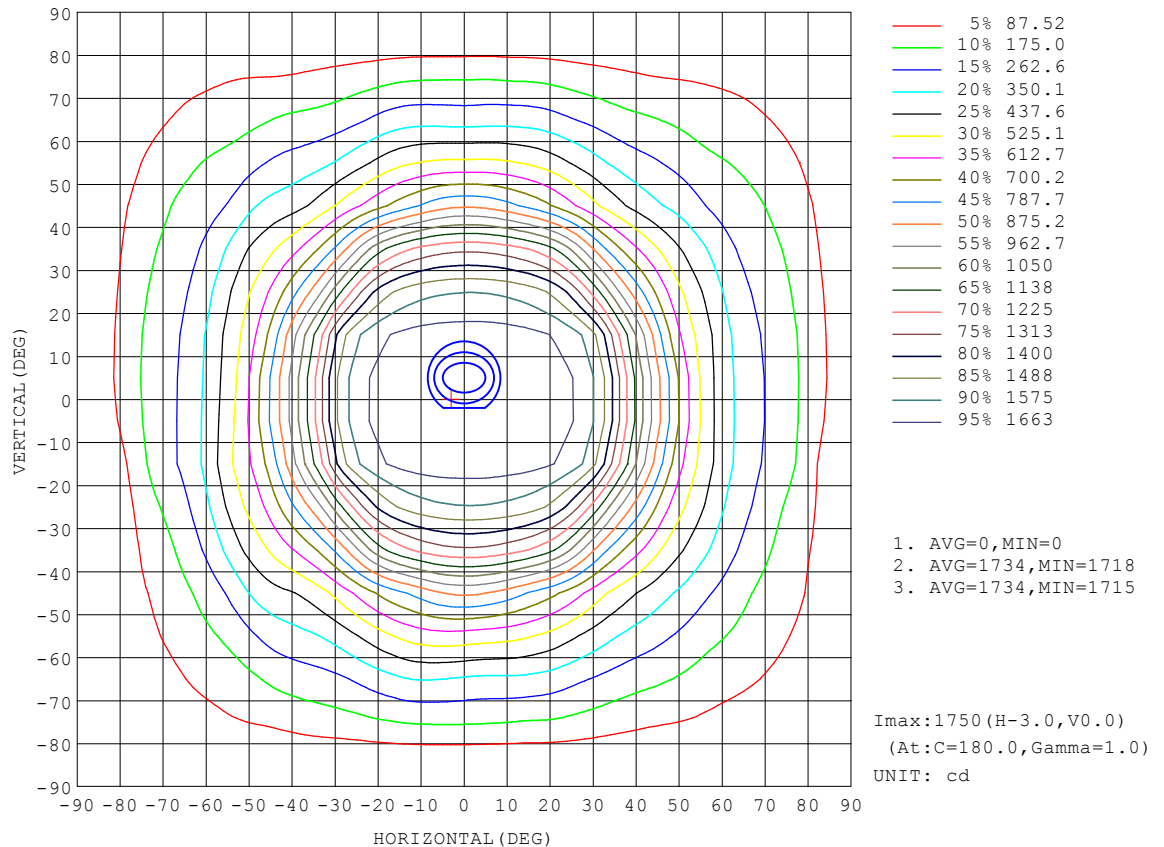
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	65	55	49	65	55	49	64	54	49	43
0.80	75	65	59	74	65	58	72	64	58	52
1.00	83	73	67	82	73	67	80	74	66	60
1.25	89	80	74	88	80	74	85	78	73	67
1.50	94	85	80	92	85	79	89	83	78	71
2.00	99	92	87	98	91	86	94	89	85	78
2.50	103	96	91	101	95	90	97	92	88	81
3.00	105	100	95	103	98	94	100	95	92	84
4.00	109	104	100	107	102	99	102	99	96	88
5.00	111	107	103	108	105	102	104	101	99	90
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-10-18

V(B) Range:-75 - 75DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.290
Humidity:65.0%
Test Distance:7.500m [K=1.0267]
Remarks:

ISOCANDELA DIAGRAM

Test:U:220.24V I:0.1687A P:31.765W PF:0.9665 Freq:50.00Hz Lamp Flux:3831.53x1 lm		
NAME: GLM-SPL12030-32W-E (RA90)	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:

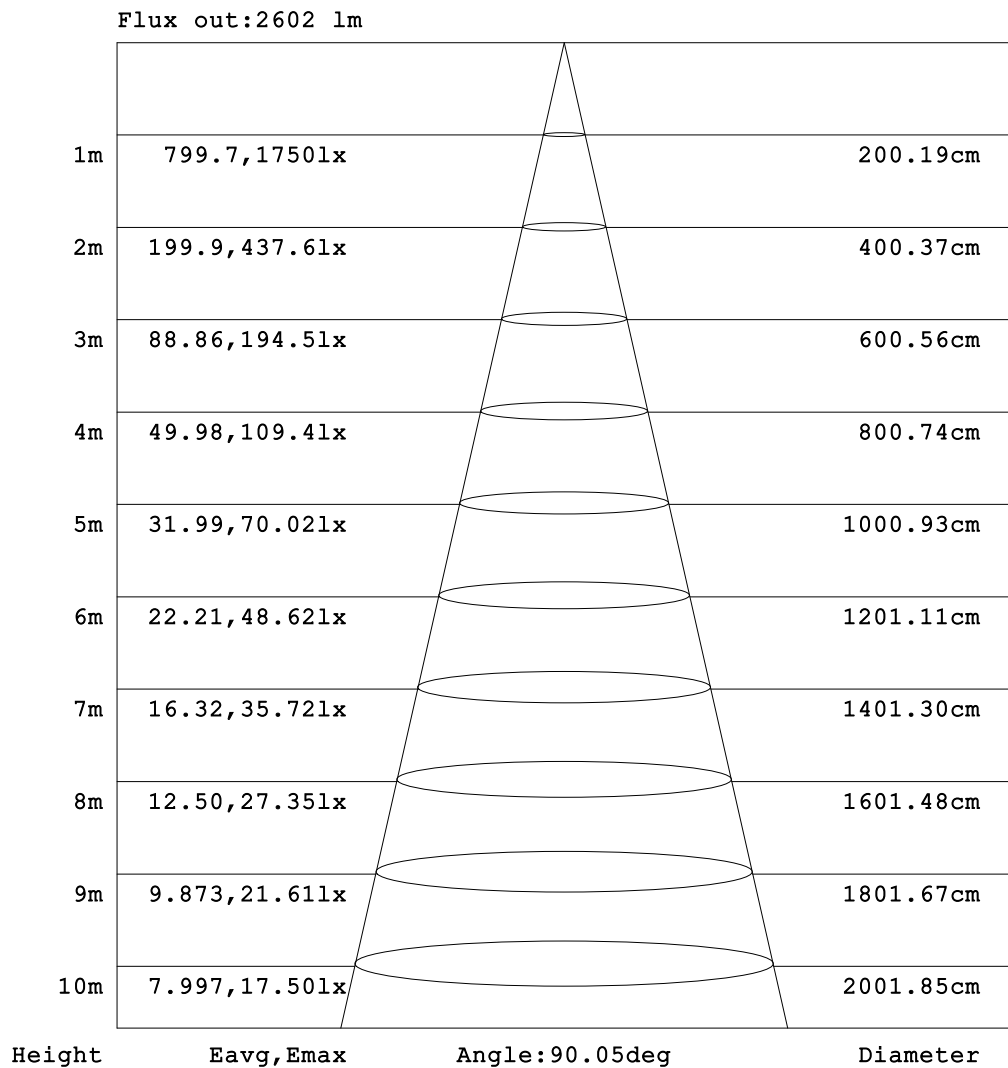


H() Range:-90 - 90DEG
H() Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-10-18

V(B) Range:-75 - 75DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.290
Humidity:65.0%
Test Distance:7.500m [K=1.0267]
Remarks:

AAI Figure

Test:U:220.24V I:0.1687A P:31.765W PF:0.9665 Freq:50.00Hz Lamp Flux:3831.53x1 lm		
NAME: GLM-SPL12030-32W-E (RA90)	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:



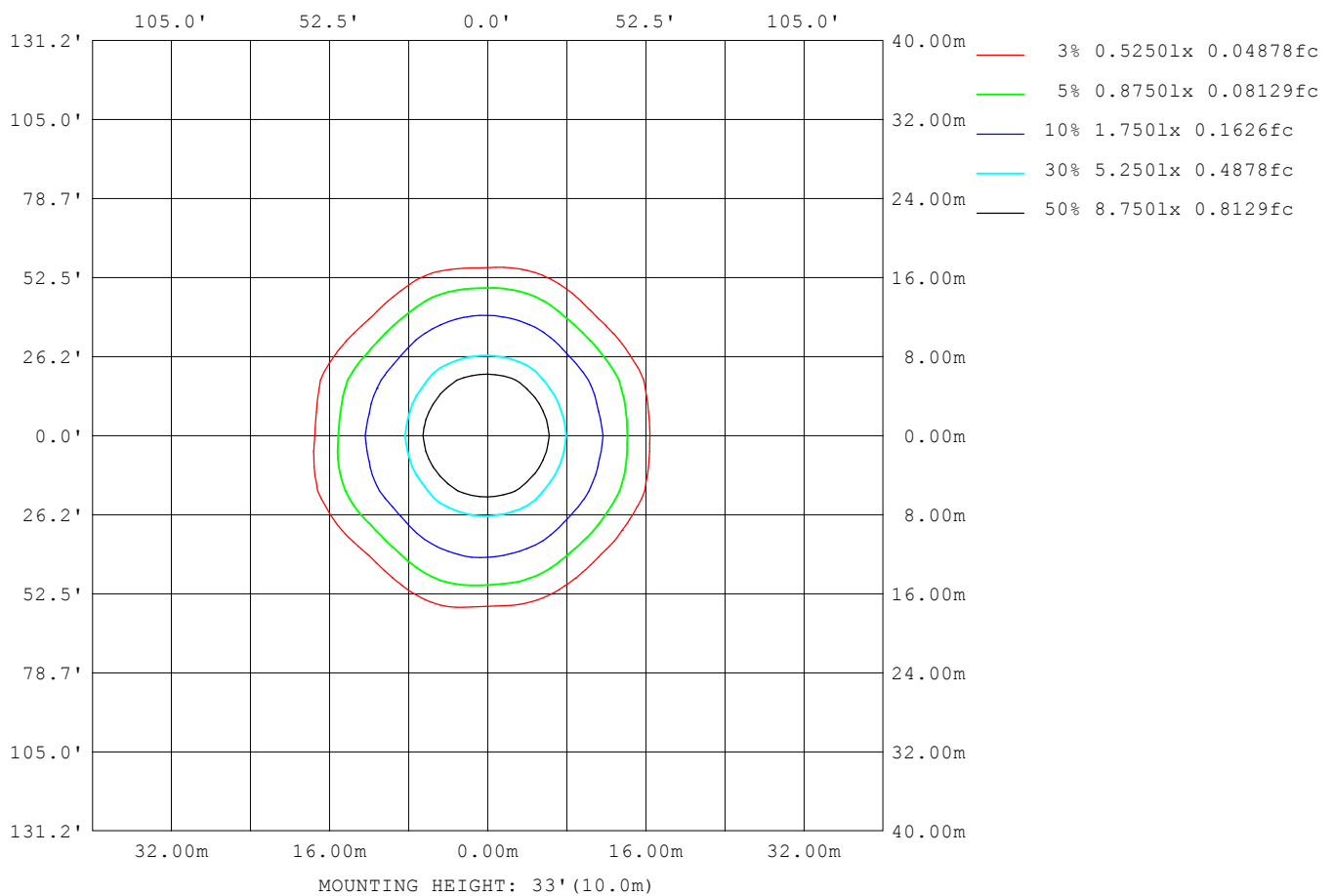
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

H(□) Range:-90 - 90DEG
 H(□) Interval: 1.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2021-10-18

V(B) Range:-75 - 75DEG
 V(B) Interval: 5.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.290
 Humidity:65.0%
 Test Distance:7.500m [K=1.0267]
 Remarks:

ISOLUX DIAGRAM

Test:U:220.24V I:0.1687A P:31.765W PF:0.9665 Freq:50.00Hz Lamp Flux:3831.53x1 lm		
NAME: GLM-SPL12030-32W-E (RA90)	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:



H(□) Range:-90 - 90DEG
 H(□) Interval: 1.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2021-10-18

V(B) Range:-75 - 75DEG
 V(B) Interval: 5.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.290
 Humidity:65.0%
 Test Distance:7.500m [K=1.0267]
 Remarks:

LED Avg.L Report

Test:U:220.24V I:0.1687A P:31.765W PF:0.9665 Freq:50.00Hz Lamp Flux:3831.53x1 lm		
NAME: GLM-SPL12030-32W-E (RA90)	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:

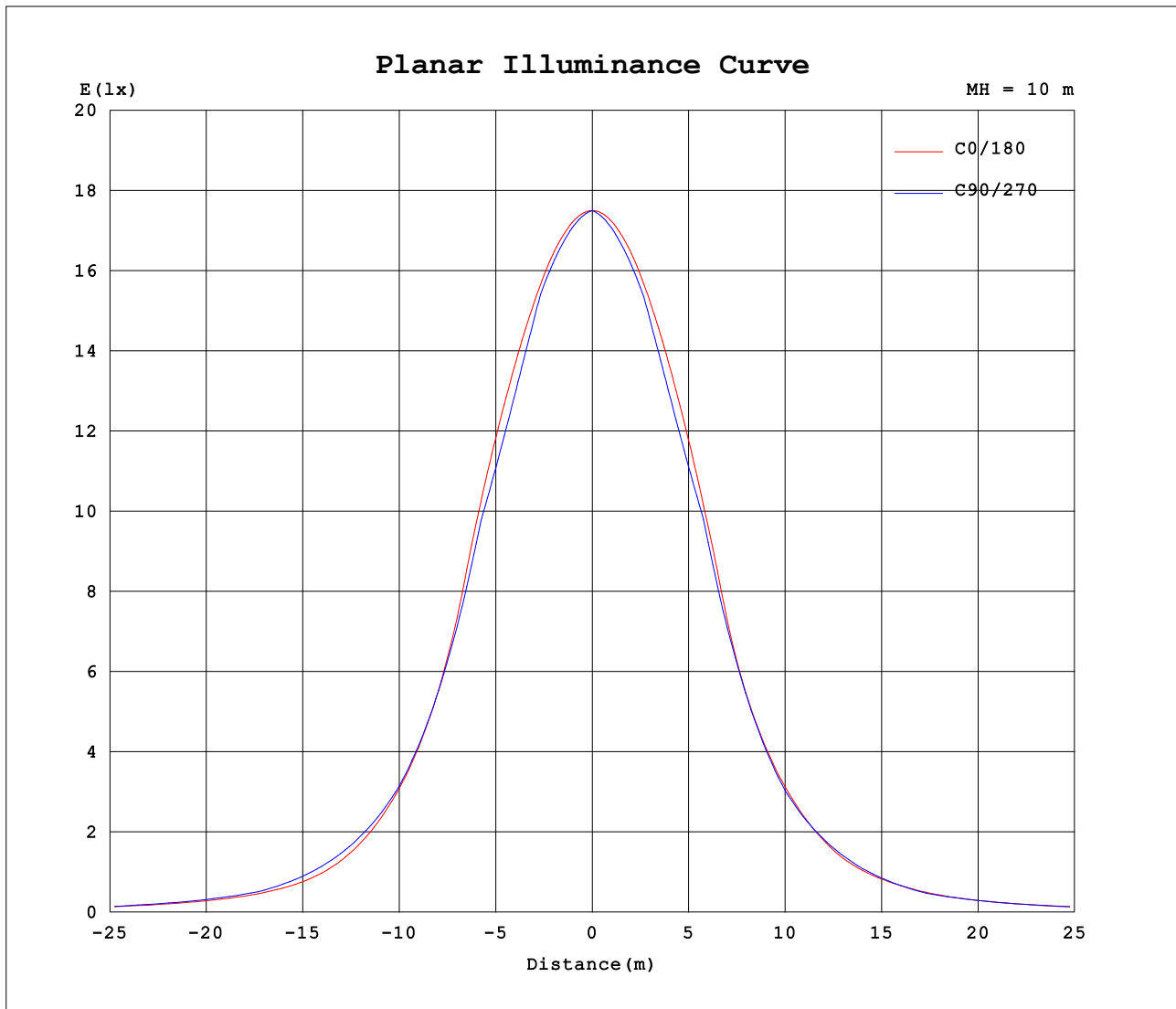
AvgL	cd/m2
L_0~180 (65) av	2470
L_0~180 (75) av	2636
L_0~180 (85) av	2108
L_90~270 (65) av	2601
L_90~270 (75) av	2288
L_90~270 (85) av	0
L_45 (65) av	2315
L_45 (75) av	1975
L_45 (85) av	0

Standard: GB/T 29293-2012

H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-10-18

V(B) Range:-75 - 75DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.290
Humidity:65.0%
Test Distance:7.500m [K=1.0267]
Remarks:

Planar Illuminance Curve



H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-10-18

V(B) Range:-75 - 75DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.290
Humidity:65.0%
Test Distance:7.500m [K=1.0267]
Remarks:

