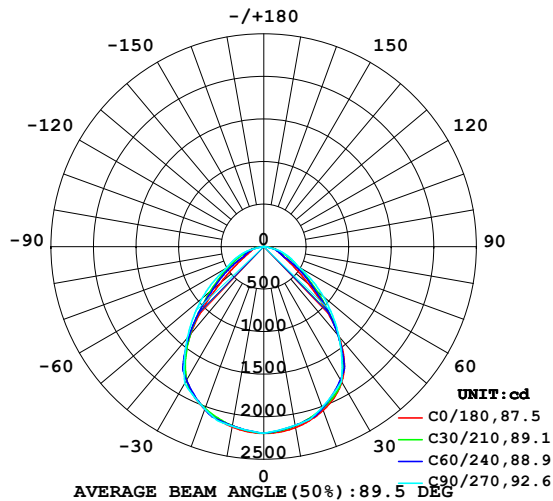


LUMINAIRE PHOTOMETRIC TEST REPORT

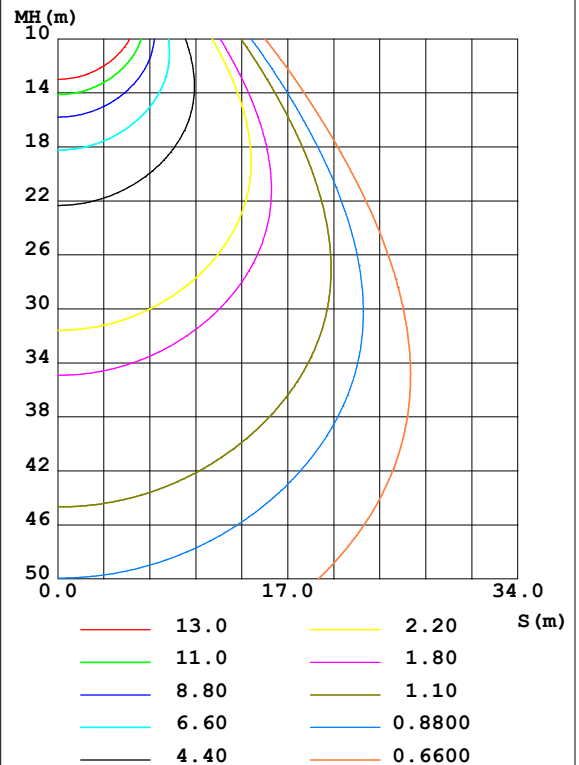
Test:U:219.90V I:0.1777A P:32.279W PF:0.9670 Freq:50.00Hz Lamp Flux:4530.38x1 lm		
NAME: GLM-BPL12030A-32W-D	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 140.35 lm/W			
MODEL		I _{max} (cd)	2194	S/MH (C0/180)	1.22
NOMINAL POWER (W)		LOR (%)	100.0	S/MH (C90/270)	1.24
RATED VOLTAGE (V)	220	TOTAL FLUX (lm)	4530.4	□ UP, DN (C0-180)	0.0, 49.5
NOMINAL FLUX (lm)	4530.38	CIE CLASS	DIRECT	□ UP, DN (C180-360)	0.0, 50.5
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:2021-09-22

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=1.1267]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

°	C0	C45	C90	C135	C180	C225	C270	C315	°	□ zone	□ total	%lum, lamp
10	2159	2133	2132	2129	2152	2136	2142	2140	0- 10	206.2	206.2	4.55,4.55
20	2047	2035	2010	2027	2032	2041	2030	2047	10- 20	590.9	797.1	17.6,17.6
30	1836	1790	1829	1772	1810	1789	1858	1805	20- 30	889.0	1686	37.2,37.2
40	1372	1404	1373	1376	1339	1388	1398	1412	30- 40	1006	2692	59.4,59.4
50	695.2	804.0	917.1	791.6	667.2	801.6	947.9	810.0	40- 50	825.8	3518	77.6,77.6
60	319.2	438.6	461.9	432.5	297.8	444.1	507.9	452.8	50- 60	524.9	4043	89.2,89.2
70	186.9	248.5	276.1	242.2	174.6	245.1	301.1	255.2	60- 70	304.1	4347	95.9,95.9
80	101.7	97.31	0	90.44	87.32	96.91	0	99.36	70- 80	167.3	4514	99.6,99.6
90	0	0	0	0	0	0	0	0	80- 90	16.22	4530	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): 3142 lm

%lum = 69.4%

%lamp = 69.4%

Conical surface Flux(120deg): 4042.7 lm

%lum = 89.2%

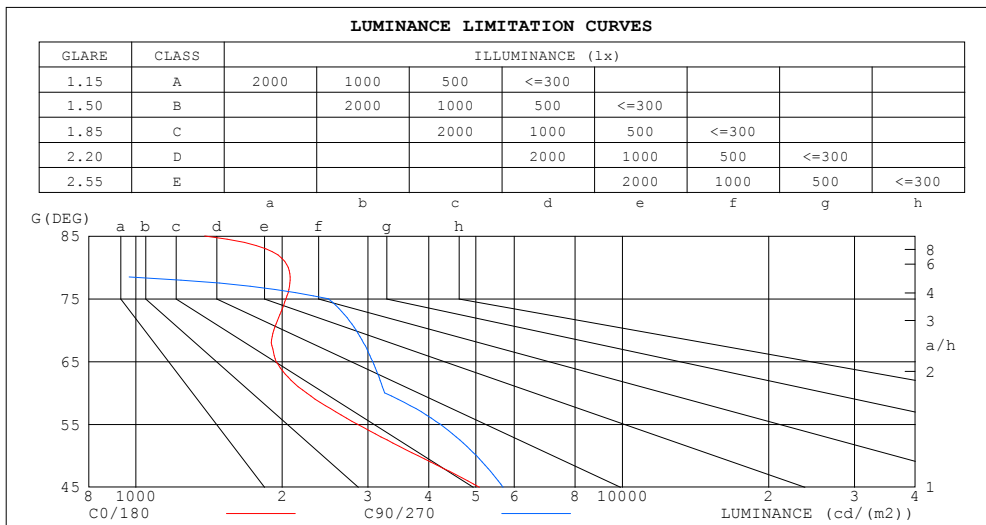
%lamp = 89.2%

H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-09-22

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=1.1267]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:219.90V I:0.1777A P:32.279W PF:0.9670 Freq:50.00Hz Lamp Flux:4530.38x1 lm		
NAME: GLM-BPL12030A-32W-D	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	1385	0
80	2058	0
75	2035	2488
70	1921	2837
65	1943	3069
60	2244	3247
55	2855	4225
50	3801	5014
45	5086	5690

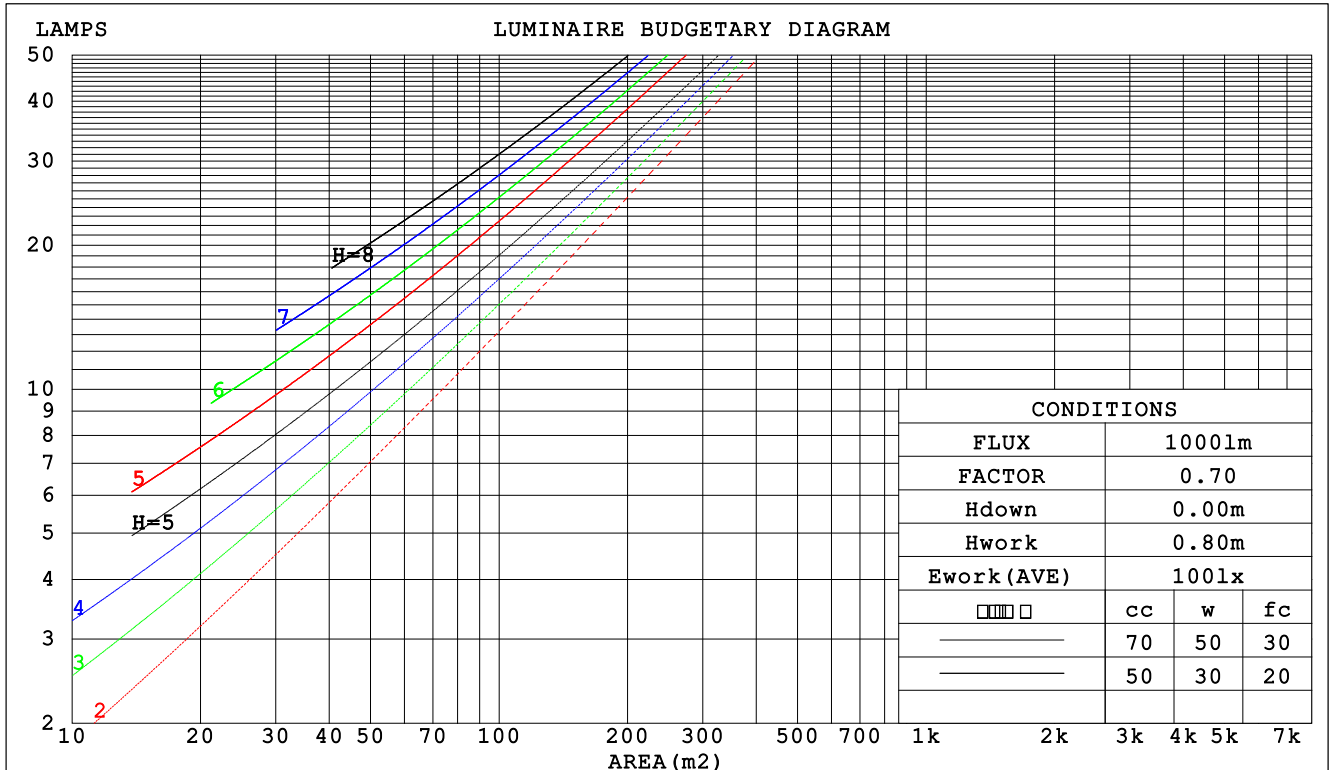
H(□) Range:-90 - 90DEG
 H(□) Interval: 1.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2021-09-22

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=1.1267]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:219.90V I:0.1777A P:32.279W PF:0.9670 Freq:50.00Hz Lamp Flux:4530.38x1 lm		
NAME: GLM-BPL12030A-32W-D	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															



H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-09-22

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=1.1267]
Remarks:

WEC AND CCEC

Test:U:219.90V I:0.1777A P:32.279W PF:0.9670 Freq:50.00Hz Lamp Flux:4530.38x1 lm		
NAME: GLM-BPL12030A-32W-D	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	.253 .144 .046	.247 .141 .045	.234 .134 .043	.222 .128 .041	.211 .122 .039	
2.0	.245 .134 .041	.239 .132 .041	.228 .127 .039	.217 .122 .038	.208 .118 .037	
3.0	.232 .123 .037	.226 .121 .036	.216 .117 .036	.207 .114 .035	.199 .110 .034	
4.0	.217 .113 .033	.213 .111 .033	.204 .108 .032	.196 .105 .032	.188 .102 .031	
5.0	.204 .104 .030	.200 .103 .030	.192 .100 .029	.185 .098 .029	.178 .095 .029	
6.0	.191 .096 .027	.188 .095 .027	.181 .093 .027	.175 .091 .027	.168 .089 .026	
7.0	.180 .089 .025	.177 .088 .025	.171 .086 .025	.165 .085 .025	.160 .083 .024	
8.0	.170 .083 .023	.167 .082 .023	.161 .081 .023	.156 .079 .023	.151 .078 .023	
9.0	.160 .078 .022	.158 .077 .022	.153 .076 .021	.148 .074 .021	.144 .073 .021	
10.0	.152 .073 .020	.149 .072 .020	.145 .071 .020	.141 .070 .020	.137 .069 .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	.176 .157 .139	.151 .134 .119	.103 .092 .083	.059 .054 .048	.019 .017 .016	
2.0	.166 .132 .104	.142 .114 .090	.097 .079 .062	.056 .046 .037	.018 .015 .012	
3.0	.157 .114 .080	.135 .098 .069	.092 .068 .048	.053 .040 .029	.017 .013 .009	
4.0	.149 .100 .063	.128 .087 .055	.088 .060 .039	.051 .035 .023	.016 .012 .008	
5.0	.142 .090 .051	.122 .077 .044	.084 .054 .031	.049 .032 .019	.016 .010 .006	
6.0	.135 .081 .042	.116 .070 .037	.080 .049 .026	.046 .029 .016	.015 .009 .005	
7.0	.128 .074 .036	.110 .064 .031	.076 .045 .022	.044 .026 .013	.014 .009 .004	
8.0	.122 .068 .031	.105 .059 .027	.073 .041 .019	.042 .024 .011	.014 .008 .004	
9.0	.117 .063 .027	.101 .055 .023	.070 .038 .017	.041 .023 .010	.013 .007 .003	
10.0	.112 .059 .024	.096 .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:2021-09-22

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=1.1267]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:219.90V I:0.1777A P:32.279W PF:0.9670 Freq:50.00Hz Lamp Flux:4530.38x1 lm										
NAME: GLM-BPL12030A-32W-D					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	16.4	17.7	16.6	17.9	18.1	16.8	18.2	17.1	18.4	18.6
3H	17.0	18.2	17.3	18.4	18.7	17.7	18.9	18.0	19.1	19.3
4H	17.3	18.5	17.6	18.7	18.9	18.1	19.3	18.4	19.5	19.7
6H	17.5	18.6	17.9	18.9	19.2	18.1	19.2	18.4	19.5	19.7
8H	17.6	18.7	17.9	18.9	19.2	18.1	19.1	18.4	19.4	19.7
12H	17.6	18.6	18.0	18.9	19.2	18.0	19.0	18.4	19.3	19.6
4H 2H	16.7	17.9	17.0	18.1	18.4	17.1	18.2	17.4	18.5	18.7
3H	17.6	18.7	18.0	18.9	19.2	18.0	19.0	18.4	19.3	19.6
4H	18.1	19.0	18.4	19.3	19.6	18.5	19.5	18.9	19.8	20.1
6H	18.4	19.3	18.8	19.6	20.0	18.6	19.4	19.0	19.8	20.1
8H	18.6	19.3	19.0	19.7	20.0	18.6	19.3	19.0	19.7	20.1
12H	18.6	19.3	19.0	19.7	20.1	18.5	19.2	18.9	19.6	20.0
8H 4H	18.3	19.1	18.7	19.4	19.8	18.7	19.5	19.1	19.8	20.2
6H	18.8	19.4	19.2	19.8	20.2	18.8	19.4	19.3	19.8	20.3
8H	19.0	19.5	19.4	19.9	20.4	18.8	19.3	19.2	19.8	20.2
12H	19.0	19.5	19.5	19.9	20.4	18.7	19.2	19.2	19.7	20.1
12H 4H	18.3	19.0	18.7	19.3	19.7	18.7	19.4	19.1	19.8	20.2
6H	18.8	19.3	19.2	19.8	20.2	18.8	19.4	19.3	19.8	20.3
8H	19.0	19.4	19.4	19.9	20.4	18.8	19.3	19.3	19.7	20.2
Variations with the observer position at spacings:										
S = 1.0H	+ 0.5 / - 0.6					+ 0.4 / - 0.5				
1.5H	+ 0.4 / - 0.6					+ 0.4 / - 0.6				
2.0H	+ 1.0 / - 1.2					+ 1.3 / - 1.8				

CIE Pub.117, 4530 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 5.2$)

H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-09-22

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=1.1267]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:219.90V I:0.1777A P:32.279W PF:0.9670 Freq:50.00Hz Lamp Flux:4530.38x1 lm		
NAME: GLM-BPL12030A-32W-D	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:

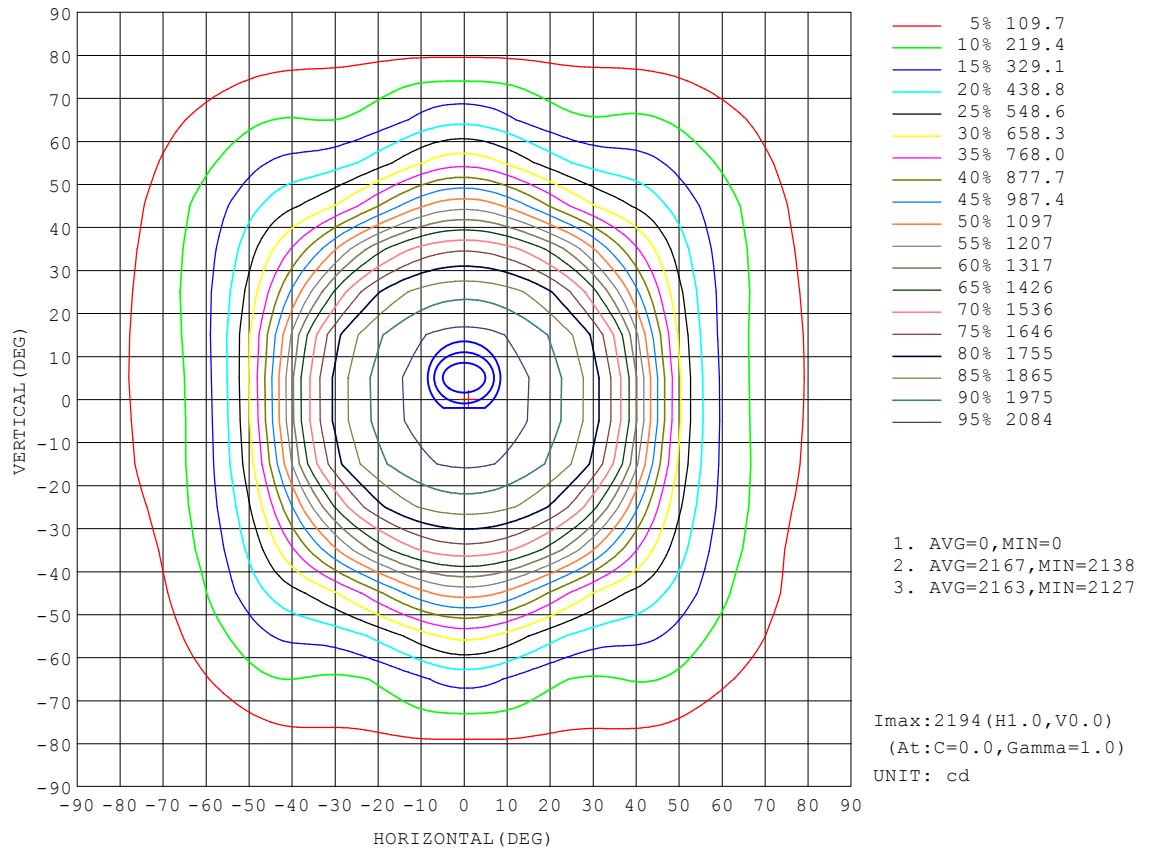
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	66	56	50	65	56	50	64	55	50	44
0.80	76	66	60	75	66	60	73	65	59	53
1.00	84	75	68	83	74	68	81	75	68	62
1.25	90	82	76	89	81	75	86	80	75	68
1.50	95	87	81	93	86	80	90	84	79	73
2.00	100	93	88	99	92	87	95	90	86	79
2.50	103	97	92	101	96	91	98	93	89	82
3.00	106	100	96	104	99	95	100	96	93	85
4.00	109	105	101	107	103	100	103	100	97	89
5.00	111	107	104	109	105	102	104	102	99	91
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:2021-09-22

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=1.1267]
Remarks:

ISOCANDELA DIAGRAM

Test:U:219.90V I:0.1777A P:32.279W PF:0.9670 Freq:50.00Hz Lamp Flux:4530.38x1 lm		
NAME: GLM-BPL12030A-32W-D	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:

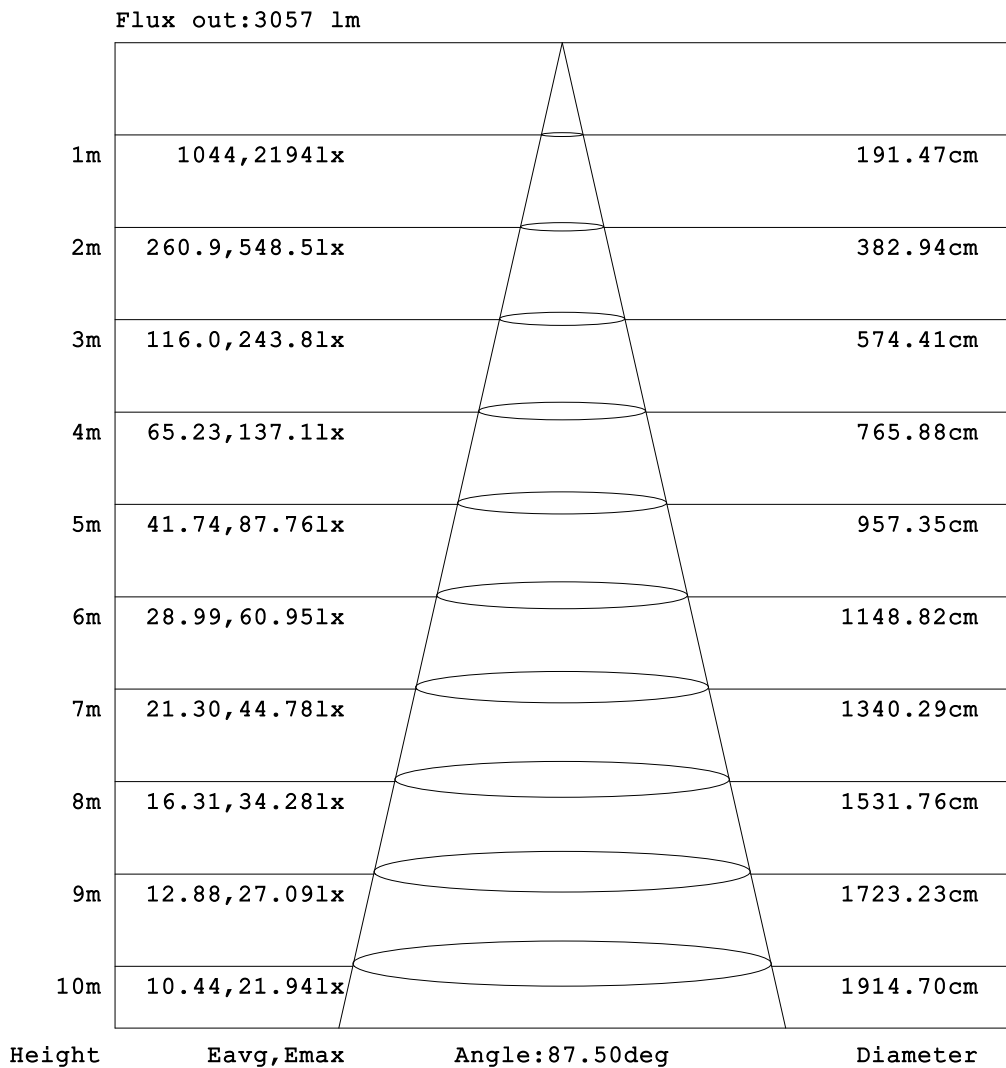


H() Range:-90 - 90DEG
H() Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-09-22

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=1.1267]
Remarks:

AAI Figure

Test:U:219.90V I:0.1777A P:32.279W PF:0.9670 Freq:50.00Hz Lamp Flux:4530.38x1 lm		
NAME: GLM-BPL12030A-32W-D	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:



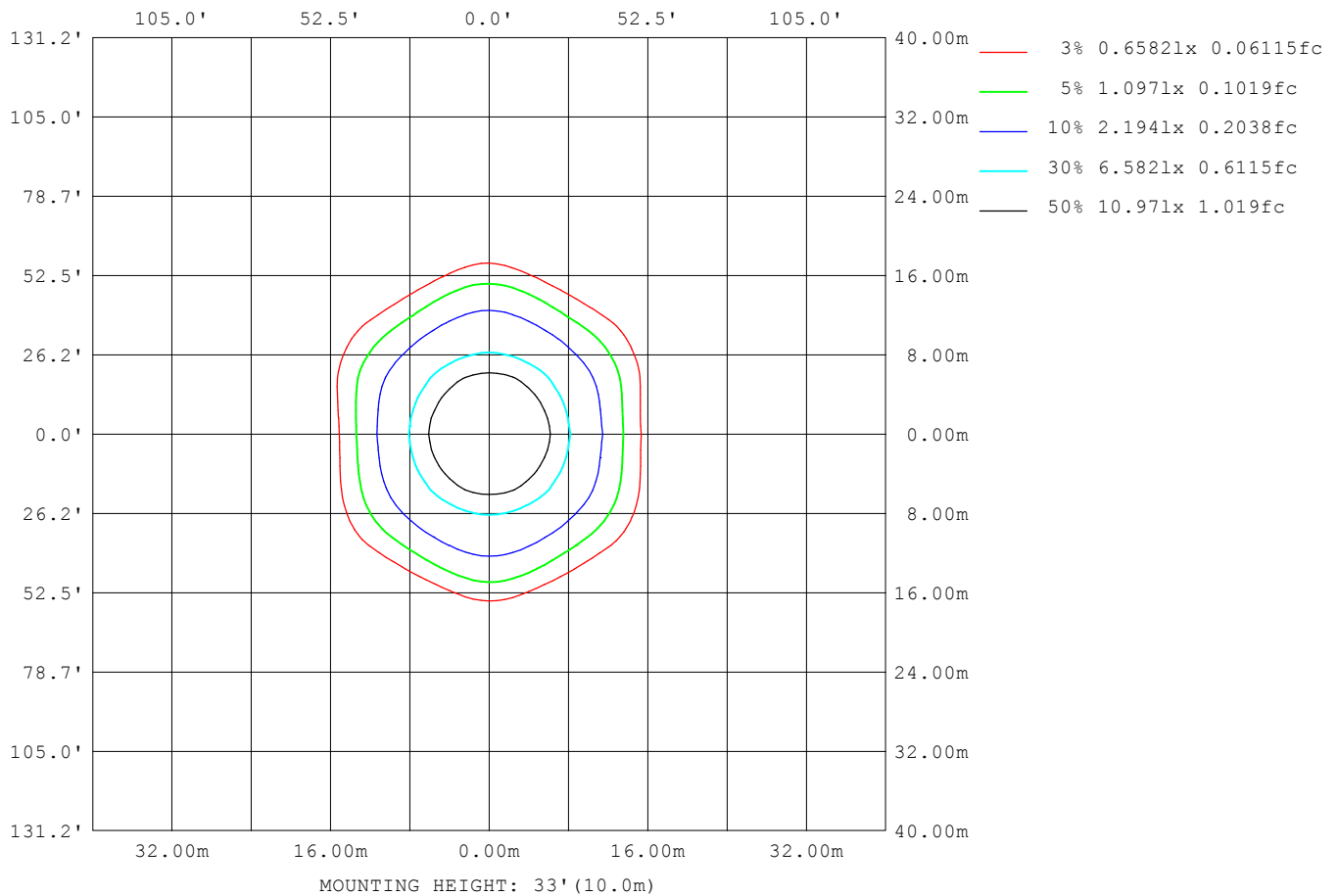
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

H(□) Range:-90 - 90DEG
 H(□) Interval: 1.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2021-09-22

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=1.1267]
 Remarks:

ISOLUX DIAGRAM

Test:U:219.90V I:0.1777A P:32.279W PF:0.9670 Freq:50.00Hz Lamp Flux:4530.38x1 lm		
NAME: GLM-BPL12030A-32W-D	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:2021-09-22

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=1.1267]
Remarks:

LED Avg.L Report

Test:U:219.90V I:0.1777A P:32.279W PF:0.9670 Freq:50.00Hz Lamp Flux:4530.38x1 lm		
NAME: GLM-BPL12030A-32W-D	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: EVERFINE	SUR.:	Shielding Angle:

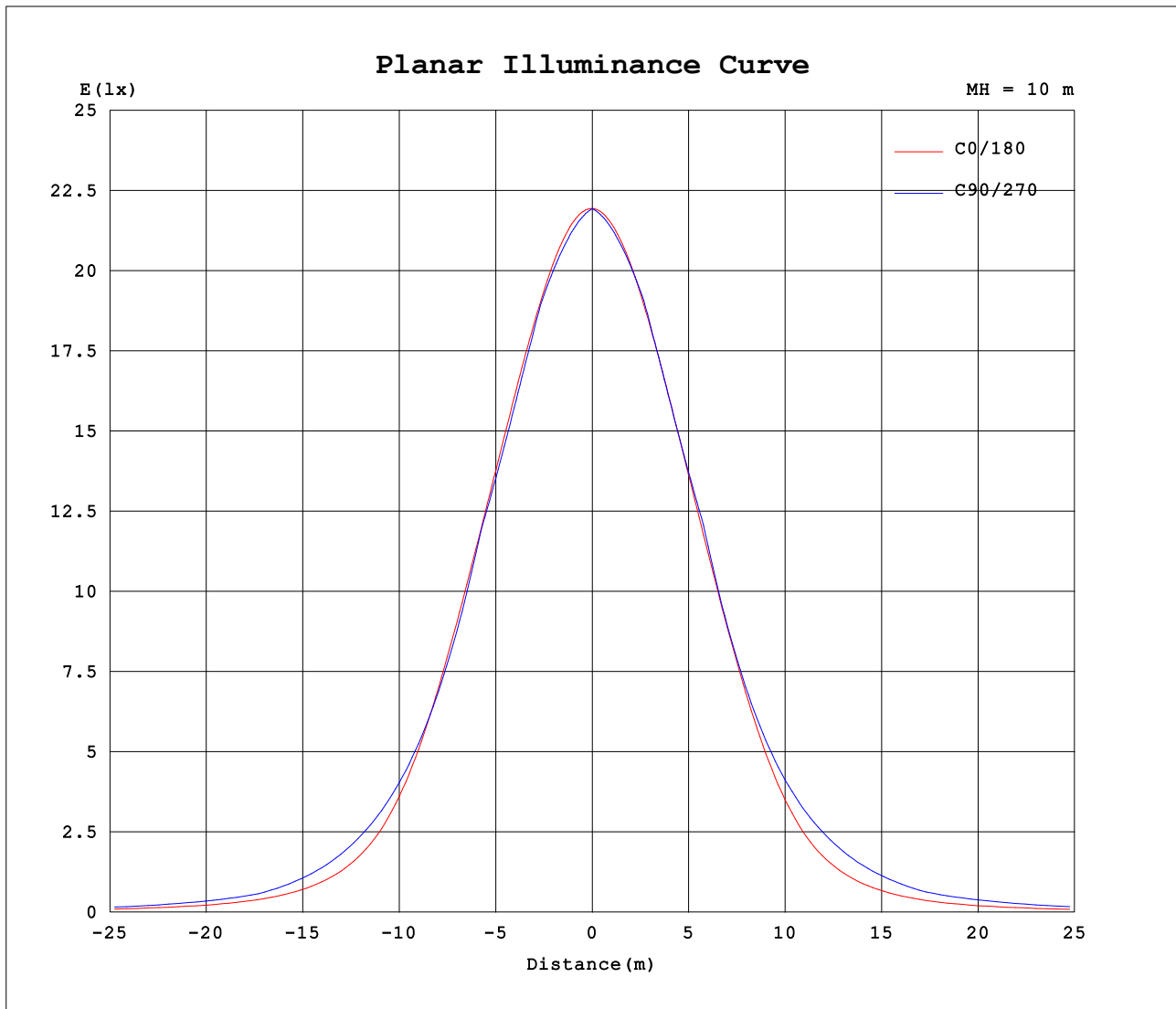
AvgL	cd/m2
L_0~180 (65) av	1871
L_0~180 (75) av	1960
L_0~180 (85) av	1101
L_90~270 (65) av	3216
L_90~270 (75) av	2587
L_90~270 (85) av	0
L_45 (65) av	2756
L_45 (75) av	2454
L_45 (85) av	0

Standard: GB/T 29293-2012

H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-09-22

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=1.1267]
Remarks:

Planar Illuminance Curve



H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2021-09-22

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=1.1267]
Remarks:

