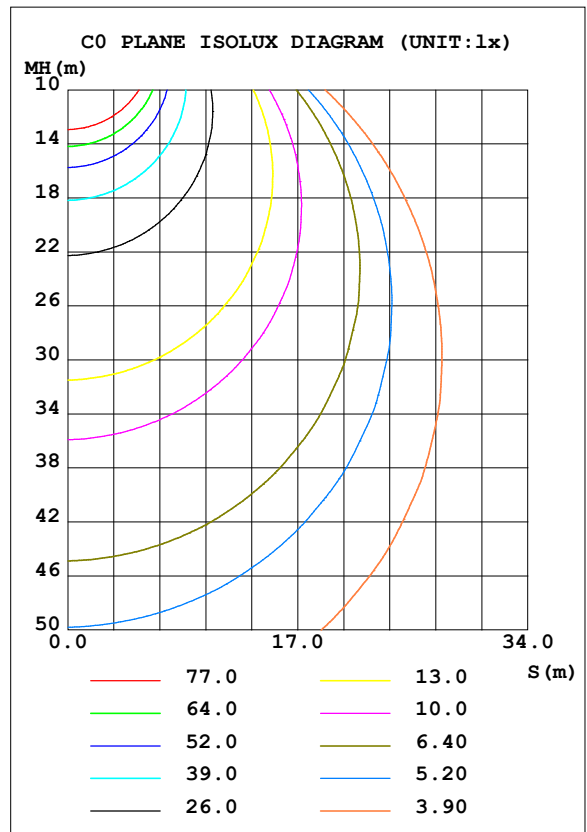
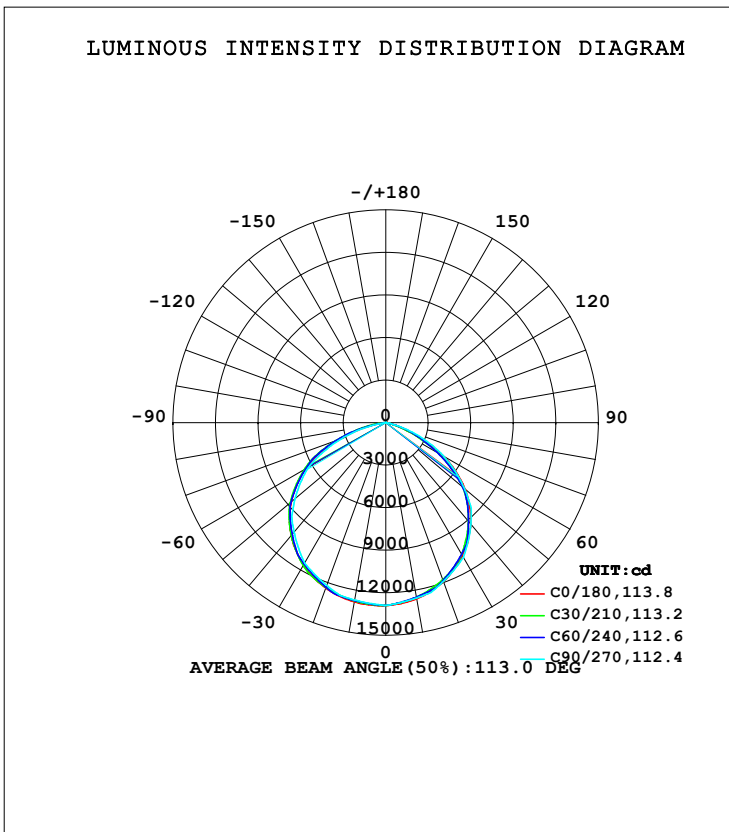


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:220.09V I:1.0534A P:233.24W PF:0.9803 Freq:50.00Hz Lamp Flux:34997.8x1 lm		
NAME: GLM-MXHB240(AH) 120°	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 150.05 lm/W			
MODEL		I _{max} (cd)	12918	S/MH (C0/180)	1.33
NOMINAL POWER (W)		LOR (%)	100.0	S/MH (C90/270)	1.31
RATED VOLTAGE (V)	220.0	TOTAL FLUX (lm)	34998	<input type="checkbox"/> UP, DN (C0-180)	0.0, 47.5
NOMINAL FLUX (lm)	34997.8	CIE CLASS	DIRECT	<input type="checkbox"/> UP, DN (C180-360)	0.0, 52.5
LAMPS INSIDE	1	<input type="checkbox"/> up (%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	220	<input type="checkbox"/> down (%)	100.0	CIBSE SHR MAX	1.35



H Range: -90 - 90 DEG
 H Interval: 1.0 DEG
 Test Speed: HIGH
 Temperature: 25.3 DEG
 Operators:
 Test Date: 2020-03-18

V(B) Range: -75 - 75 DEG
 V(B) Interval: 5.0 DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.290
 Humidity: 65.0%
 Test Distance: 7.500m [K=1.1867]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

mm	C0	C45	C90	C135	C180	C225	C270	C315	mm	□ zone	□ total	%lum, lamp
10	1261	1248	1255	1265	1283	1275	1270	1259	0- 10	1216	1216	3.47,3.47
20	1192	1185	1191	1223	1240	1243	1221	1208	10- 20	3509	4724	13.5,13.5
30	1082	1064	1097	1120	1160	1154	1145	1099	20- 30	5375	10099	28.9,28.9
40	933.3	917.1	934.0	994.6	1037	1044	1007	968.1	30- 40	6565	16665	47.6,47.6
50	730.8	696.3	724.7	804.3	870.4	873.5	835.6	774.2	40- 50	6848	23513	67.2,67.2
60	463.0	418.9	468.9	559.1	653.3	658.9	629.5	526.8	50- 60	6003	29516	84.3,84.3
70	148.9	141.1	197.0	269.7	352.8	391.3	331.0	242.6	60- 70	3981	33497	95.7,95.7
80	8.264	7.666	0	37.01	76.34	89.76	0	25.31	70- 80	1427	34924	99.8,99.8
90	4.844	0	0	0	2.825	0	0	0	80- 90	73.59	34998	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:×10cd									UNIT:lm		

Conical surface Flux(90deg): 20116 lm

%lum = 57.5%

%lamp = 57.5%

Conical surface Flux(120deg): 29516 lm

%lum = 84.3%

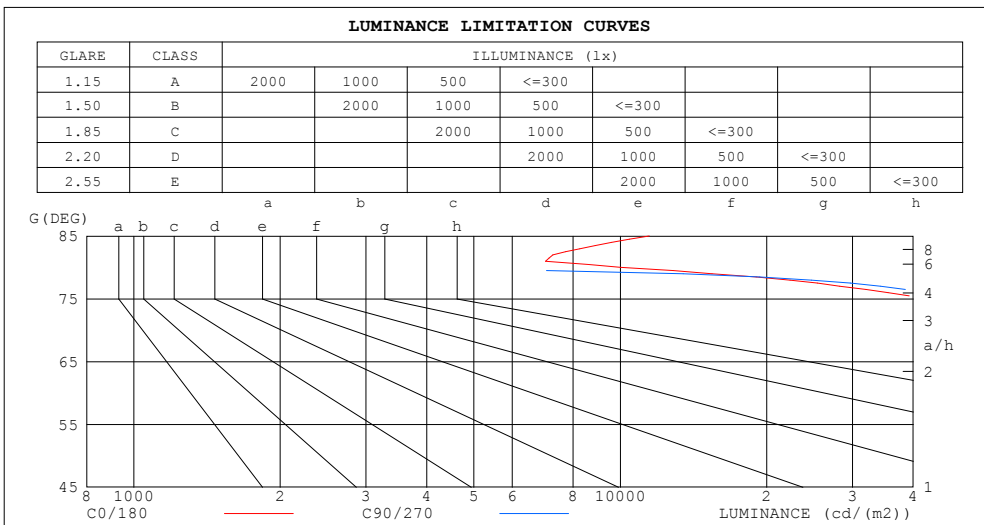
%lamp = 84.3%

H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2020-03-18

V(B) Range:-75 - 75DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.290
Humidity:65.0%
Test Distance:7.500m [K=1.1867]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:220.09V I:1.0534A P:233.24W PF:0.9803 Freq:50.00Hz Lamp Flux:34997.8x1 lm		
NAME: GLM-MXHB240(AH) 120°	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	11476	0
80	10020	0
75	42786	49647
70	91668	121248
65	145509	165844
60	194940	197417
55	222761	219049
50	239366	237364
45	249478	253862

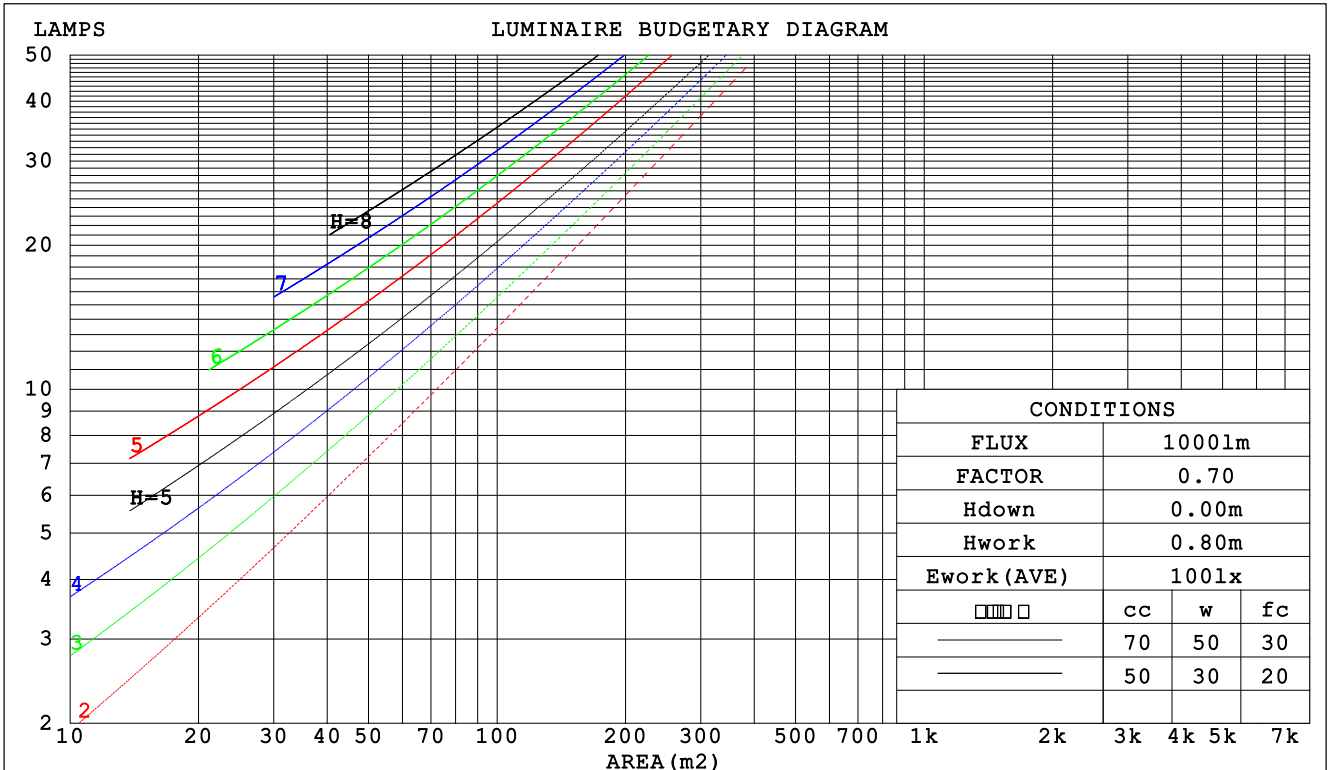
H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2020-03-18

V(B) Range:-75 - 75DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.290
Humidity:65.0%
Test Distance:7.500m [K=1.1867]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:220.09V I:1.0534A P:233.24W PF:0.9803 Freq:50.00Hz Lamp Flux:34997.8x1 lm		
NAME: GLM-MXHB240(AH) 120°	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	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	1.00
1.0	1.06	1.02	.98	1.03	.90	.97	.99	.96	.94	.95	.93	.91	.92	.90	.88	.86
2.0	.93	.86	.81	.91	.85	.80	.87	.82	.78	.84	.80	.76	.81	.78	.75	.73
3.0	.82	.74	.68	.80	.73	.67	.77	.71	.66	.75	.69	.65	.72	.68	.64	.62
4.0	.73	.64	.58	.71	.63	.57	.69	.62	.57	.66	.61	.56	.64	.59	.55	.53
5.0	.65	.56	.50	.64	.56	.49	.62	.54	.49	.60	.53	.48	.58	.52	.48	.46
6.0	.58	.50	.43	.57	.49	.43	.56	.48	.43	.54	.47	.42	.52	.47	.42	.40
7.0	.53	.44	.38	.52	.44	.38	.51	.43	.38	.49	.43	.38	.48	.42	.37	.35
8.0	.48	.40	.34	.48	.40	.34	.46	.39	.34	.45	.38	.34	.44	.38	.33	.32
9.0	.44	.36	.31	.44	.36	.31	.43	.35	.30	.41	.35	.30	.40	.35	.30	.28
10.0	.41	.33	.28	.40	.33	.28	.39	.32	.28	.38	.32	.27	.38	.32	.27	.26



H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2020-03-18

V(B) Range:-75 - 75DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.290
Humidity:65.0%
Test Distance:7.500m [K=1.1867]
Remarks:

WEC AND CCEC

Test:U:220.09V I:1.0534A P:233.24W PF:0.9803 Freq:50.00Hz Lamp Flux:34997.8x1 lm		
NAME: GLM-MXHB240(AH) 120°	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:	Shielding Angle:

<input type="checkbox"/> cc	80%	70%	50%	30%	10%	0
<input type="checkbox"/> w	50% 30% 10%	50% 30% 10%	50% 30% 10%	50% 30% 10%	50% 30% 10%	0
<input type="checkbox"/> fc	20%	20%	20%	20%	20%	0
RCR	RCR:Room Cavity Ratio		Wall Exitance Coefficients (WEC)			
0.0						
1.0	.276 .157 .050	.269 .154 .049	.256 .147 .047	.244 .141 .045	.233 .135 .044	
2.0	.269 .148 .045	.263 .145 .045	.252 .140 .043	.241 .135 .042	.231 .131 .041	
3.0	.254 .135 .041	.249 .133 .040	.239 .129 .039	.229 .126 .039	.221 .122 .038	
4.0	.238 .124 .036	.233 .122 .036	.224 .119 .036	.216 .116 .035	.208 .113 .034	
5.0	.222 .113 .033	.218 .112 .033	.210 .109 .032	.202 .107 .032	.195 .104 .031	
6.0	.207 .104 .030	.204 .103 .030	.196 .101 .029	.190 .099 .029	.183 .097 .029	
7.0	.194 .096 .027	.191 .095 .027	.184 .093 .027	.178 .091 .027	.173 .090 .026	
8.0	.182 .089 .025	.179 .088 .025	.173 .086 .025	.168 .085 .025	.163 .084 .024	
9.0	.171 .083 .023	.168 .082 .023	.163 .081 .023	.158 .079 .023	.154 .078 .023	
10.0	.161 .077 .021	.159 .077 .021	.154 .075 .021	.150 .074 .021	.145 .073 .021	

<input type="checkbox"/> cc	80%	70%	50%	30%	10%	0
<input type="checkbox"/> w	50% 30% 10%	50% 30% 10%	50% 30% 10%	50% 30% 10%	50% 30% 10%	0
<input type="checkbox"/> 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	.178 .156 .137	.152 .134 .118	.104 .092 .082	.060 .053 .047	.019 .017 .015	
2.0	.169 .132 .101	.145 .114 .087	.099 .079 .061	.057 .046 .036	.018 .015 .012	
3.0	.161 .114 .076	.138 .099 .066	.095 .068 .047	.055 .040 .027	.018 .013 .009	
4.0	.154 .101 .060	.132 .087 .052	.091 .061 .037	.053 .036 .022	.017 .012 .007	
5.0	.147 .090 .048	.126 .078 .042	.087 .055 .030	.050 .032 .018	.016 .010 .006	
6.0	.140 .082 .040	.120 .071 .035	.083 .050 .025	.048 .029 .015	.016 .010 .005	
7.0	.134 .075 .034	.115 .065 .030	.079 .046 .021	.046 .027 .012	.015 .009 .004	
8.0	.127 .069 .029	.110 .060 .025	.076 .042 .018	.044 .025 .011	.014 .008 .004	
9.0	.121 .064 .026	.105 .056 .022	.073 .039 .016	.042 .023 .009	.014 .008 .003	
10.0	.116 .060 .023	.100 .052 .020	.069 .037 .014	.040 .022 .008	.013 .007 .003	

H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2020-03-18

V(B) Range:-75 - 75DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.290
Humidity:65.0%
Test Distance:7.500m [K=1.1867]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:220.09V I:1.0534A P:233.24W PF:0.9803 Freq:50.00Hz Lamp Flux:34997.8x1 lm										
NAME: GLM-MXHB240(AH) 120°					TYPE:LED			WEIGHT:		
SPEC.:					DIM.:			SERIAL No.:1		
MFR.:					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	30.9	32.4	31.2	32.6	32.8	31.0	32.5	31.3	32.7	32.9
3H	31.4	32.7	31.7	33.0	33.2	31.8	33.1	32.0	33.3	33.6
4H	31.4	32.6	31.7	32.9	33.1	31.8	33.1	32.1	33.3	33.6
6H	31.3	32.5	31.6	32.7	33.0	31.7	32.9	32.0	33.2	33.4
8H	31.2	32.4	31.6	32.7	32.9	31.6	32.8	32.0	33.1	33.4
12H	31.2	32.3	31.5	32.6	32.9	31.6	32.7	31.9	33.0	33.3
4H 2H	31.2	32.5	31.5	32.7	33.0	31.3	32.5	31.6	32.8	33.0
3H	31.7	32.8	32.0	33.1	33.4	32.1	33.2	32.4	33.5	33.8
4H	31.7	32.7	32.1	33.0	33.4	32.2	33.2	32.5	33.5	33.8
6H	31.6	32.5	32.0	32.9	33.2	32.1	33.0	32.5	33.3	33.7
8H	31.6	32.4	32.0	32.8	33.2	32.0	32.9	32.4	33.2	33.6
12H	31.6	32.3	32.0	32.7	33.1	32.0	32.7	32.4	33.1	33.5
8H 4H	31.7	32.5	32.1	32.9	33.2	32.1	32.9	32.5	33.3	33.7
6H	31.6	32.3	32.1	32.7	33.1	32.0	32.7	32.5	33.1	33.5
8H	31.6	32.2	32.0	32.6	33.1	32.0	32.6	32.4	33.0	33.5
12H	31.6	32.1	32.0	32.5	33.0	31.9	32.5	32.4	32.9	33.4
12H 4H	31.6	32.4	32.0	32.8	33.2	32.0	32.8	32.5	33.2	33.6
6H	31.6	32.2	32.0	32.6	33.0	32.0	32.6	32.4	33.0	33.5
8H	31.5	32.1	32.0	32.5	33.0	31.9	32.5	32.4	32.9	33.4
Variations with the observer position at spacings:										
S = 1.0H	+ 0.4 / - 0.5					+ 0.4 / - 0.4				
1.5H	+ 0.4 / - 0.6					+ 0.3 / - 0.5				
2.0H	+ 0.9 / - 1.4					+ 0.9 / - 1.3				

CIE Pub.117, 34998 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 12.4)

H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2020-03-18

V(B) Range:-75 - 75DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.290
Humidity:65.0%
Test Distance:7.500m [K=1.1867]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:220.09V I:1.0534A P:233.24W PF:0.9803 Freq:50.00Hz Lamp Flux:34997.8x1 lm		
NAME: GLM-MXHB240(AH) 120°	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:	Shielding Angle:

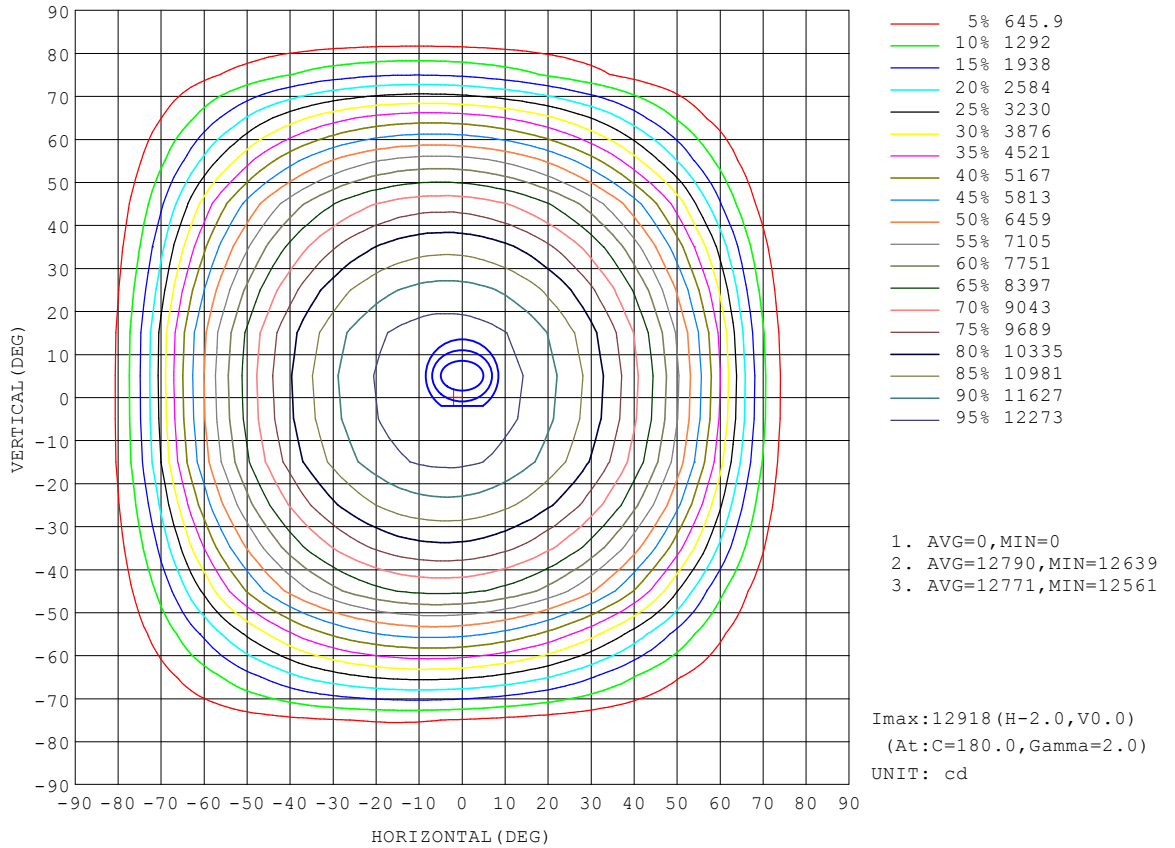
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	59	47	41	58	47	40	57	47	40	34
0.80	69	58	51	68	58	51	67	57	50	44
1.00	78	67	60	77	67	60	75	68	60	53
1.25	85	75	69	84	75	68	81	73	67	60
1.50	90	81	75	89	80	74	86	78	73	66
2.00	97	89	83	95	88	82	92	86	81	74
2.50	101	94	88	99	92	87	95	90	85	77
3.00	104	98	93	102	96	92	98	93	89	81
4.00	108	103	98	105	101	97	101	98	94	86
5.00	110	106	102	108	104	100	103	100	97	88
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:
Test Date:2020-03-18

V(B) Range:-75 - 75DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.290
Humidity:65.0%
Test Distance:7.500m [K=1.1867]
Remarks:

ISOCANDELA DIAGRAM

Test:U:220.09V I:1.0534A P:233.24W PF:0.9803 Freq:50.00Hz Lamp Flux:34997.8x1 lm		
NAME: GLM-MXHB240 (AH) 120°	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:	Shielding Angle:

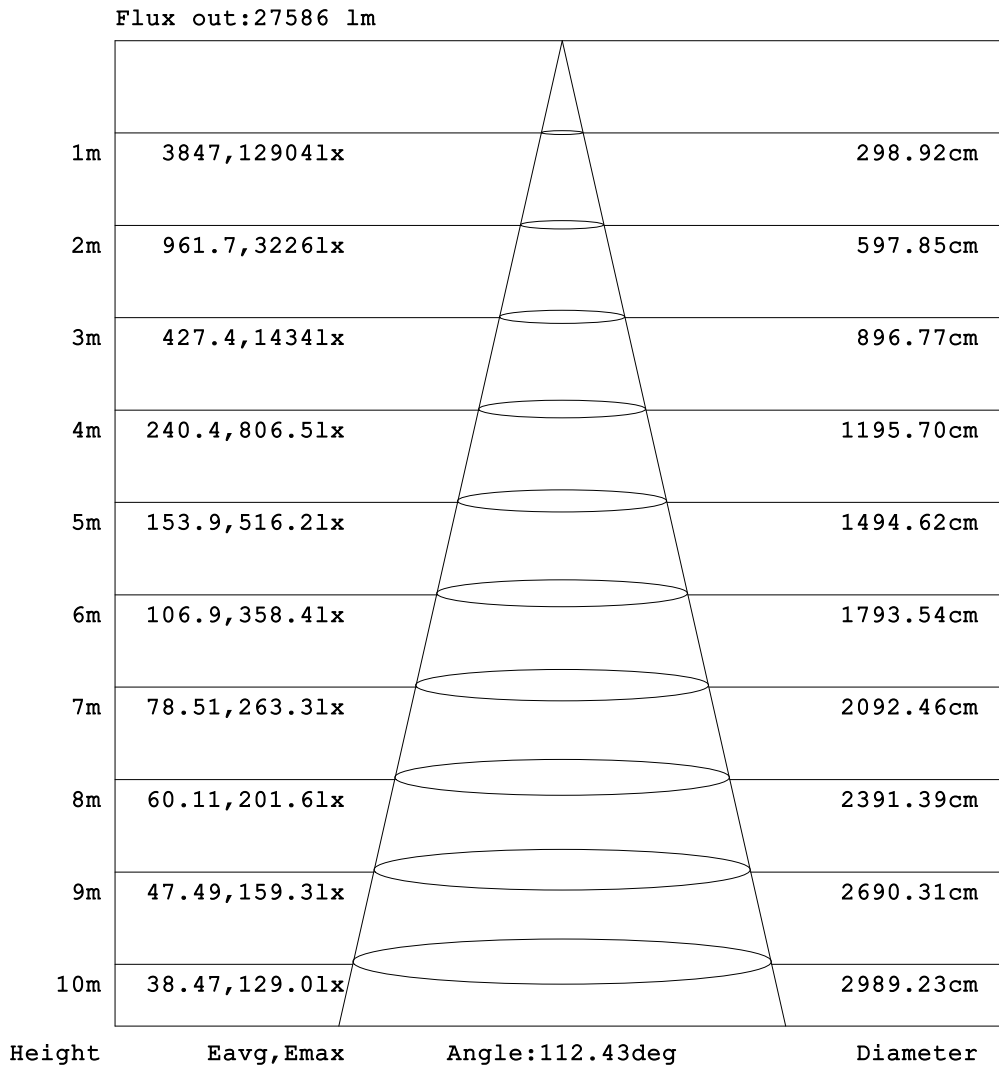


H(□) Range:-90 - 90DEG
 H(□) Interval: 1.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2020-03-18

V(B) Range:-75 - 75DEG
 V(B) Interval: 5.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.290
 Humidity:65.0%
 Test Distance:7.500m [K=1.1867]
 Remarks:

AAI Figure

Test:U:220.09V I:1.0534A P:233.24W PF:0.9803 Freq:50.00Hz Lamp Flux:34997.8x1 lm		
NAME: GLM-MXHB240 (AH) 120°	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:	Shielding Angle:



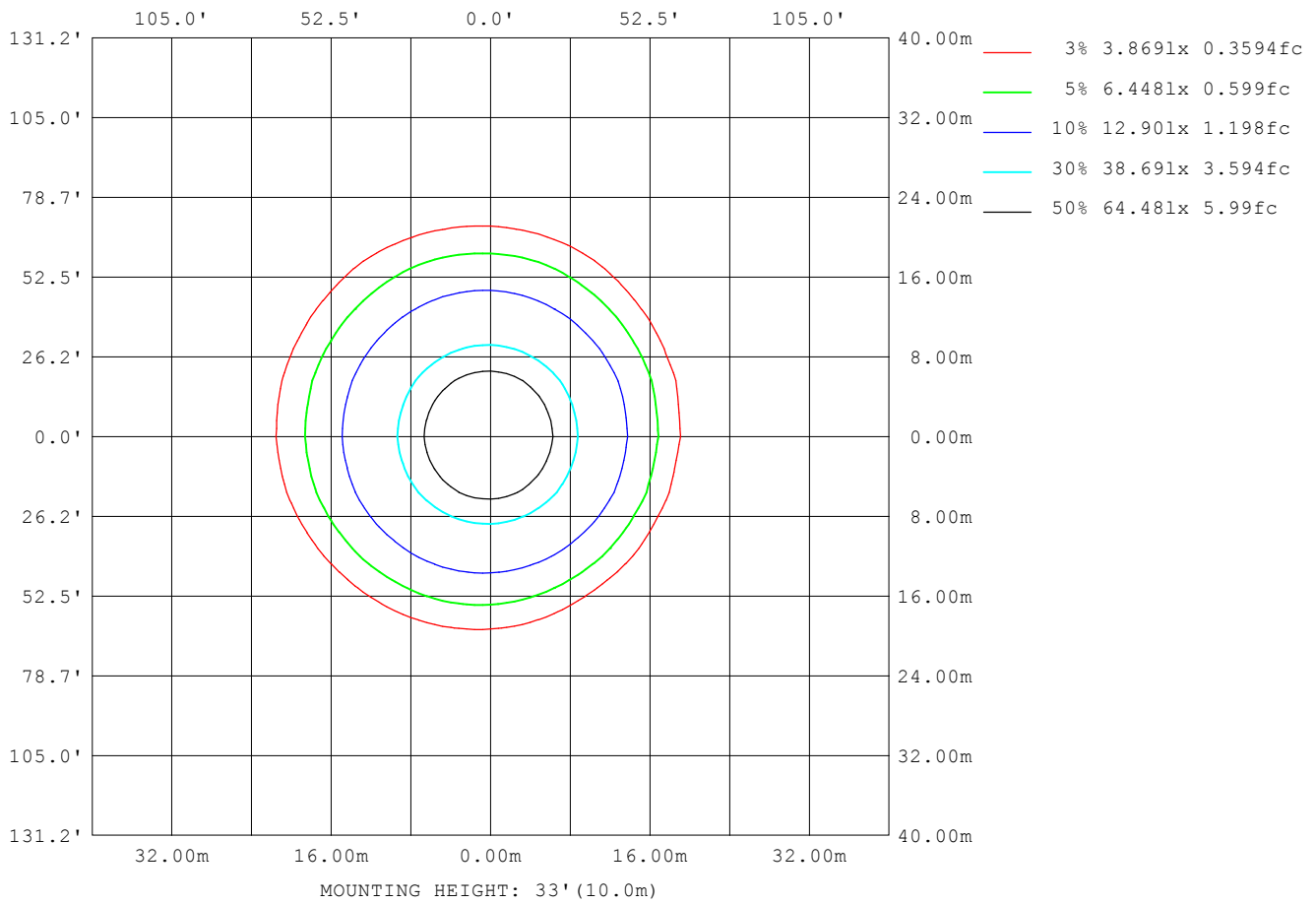
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2020-03-18

V(B) Range:-75 - 75DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.290
Humidity:65.0%
Test Distance:7.500m [K=1.1867]
Remarks:

ISOLUX DIAGRAM

Test:U:220.09V I:1.0534A P:233.24W PF:0.9803 Freq:50.00Hz Lamp Flux:34997.8x1 lm		
NAME: GLM-MXHB240(AH) 120°	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:	Shielding Angle:



H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2020-03-18

V(B) Range:-75 - 75DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.290
Humidity:65.0%
Test Distance:7.500m [K=1.1867]
Remarks:

LED Avg.L Report

Test:U:220.09V I:1.0534A P:233.24W PF:0.9803 Freq:50.00Hz Lamp Flux:34997.8x1 lm		
NAME: GLM-MXHB240 (AH) 120°	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:	Shielding Angle:

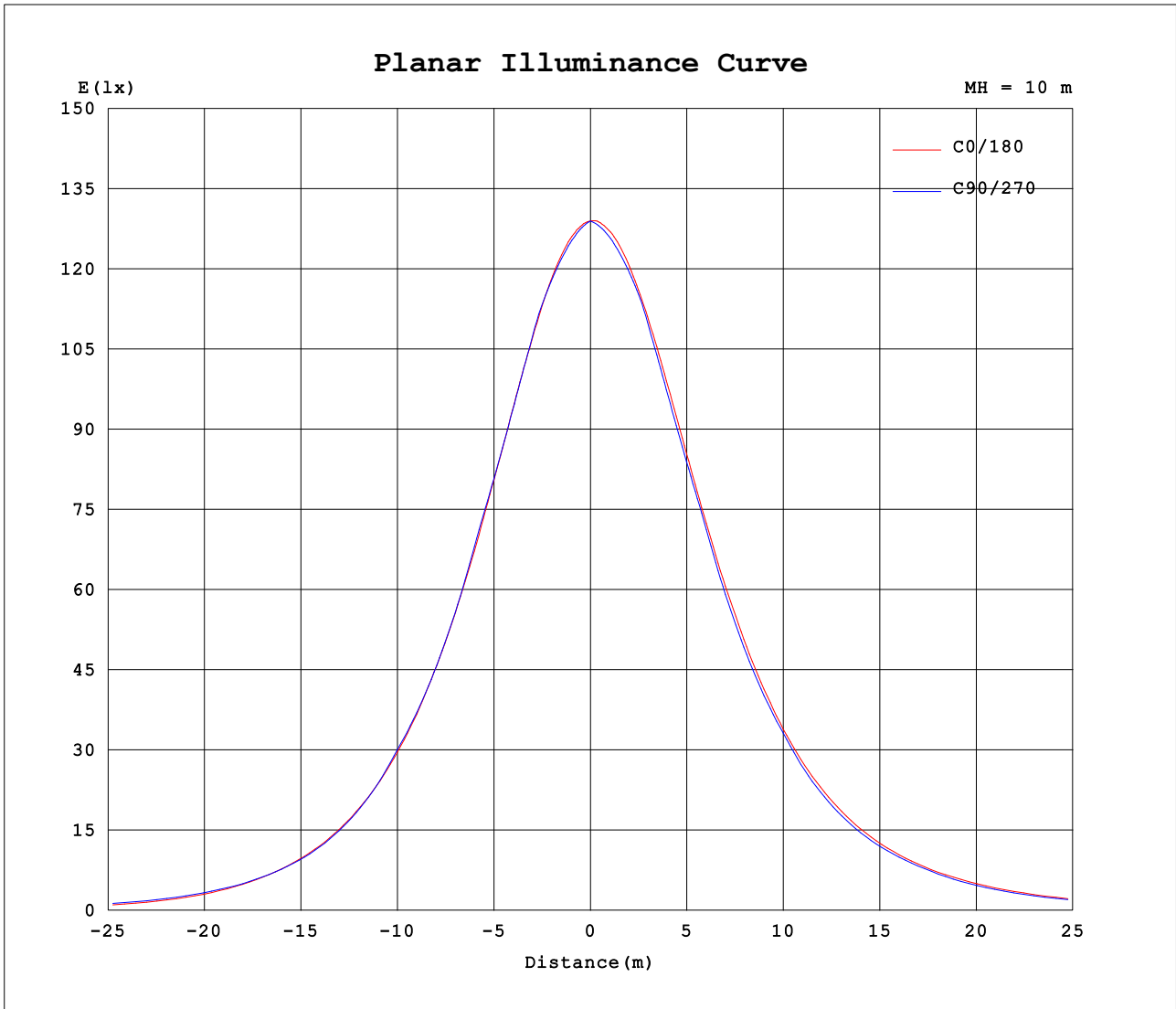
AvgL	cd/m2
L_0~180 (65) av	202222
L_0~180 (75) av	99192
L_0~180 (85) av	22532
L_90~270 (65) av	202541
L_90~270 (75) av	98774
L_90~270 (85) av	0
L_45 (65) av	197607
L_45 (75) av	117103
L_45 (85) av	0

Standard: GB/T 29293-2012

H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2020-03-18

V(B) Range:-75 - 75DEG
V(B) Interval: 5.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.290
Humidity:65.0%
Test Distance:7.500m [K=1.1867]
Remarks:

Planar Illuminance Curve



H(□) Range:-90 - 90DEG
 H(□) Interval: 1.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2020-03-18

V(B) Range:-75 - 75DEG
 V(B) Interval: 5.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.290
 Humidity:65.0%
 Test Distance:7.500m [K=1.1867]
 Remarks:

