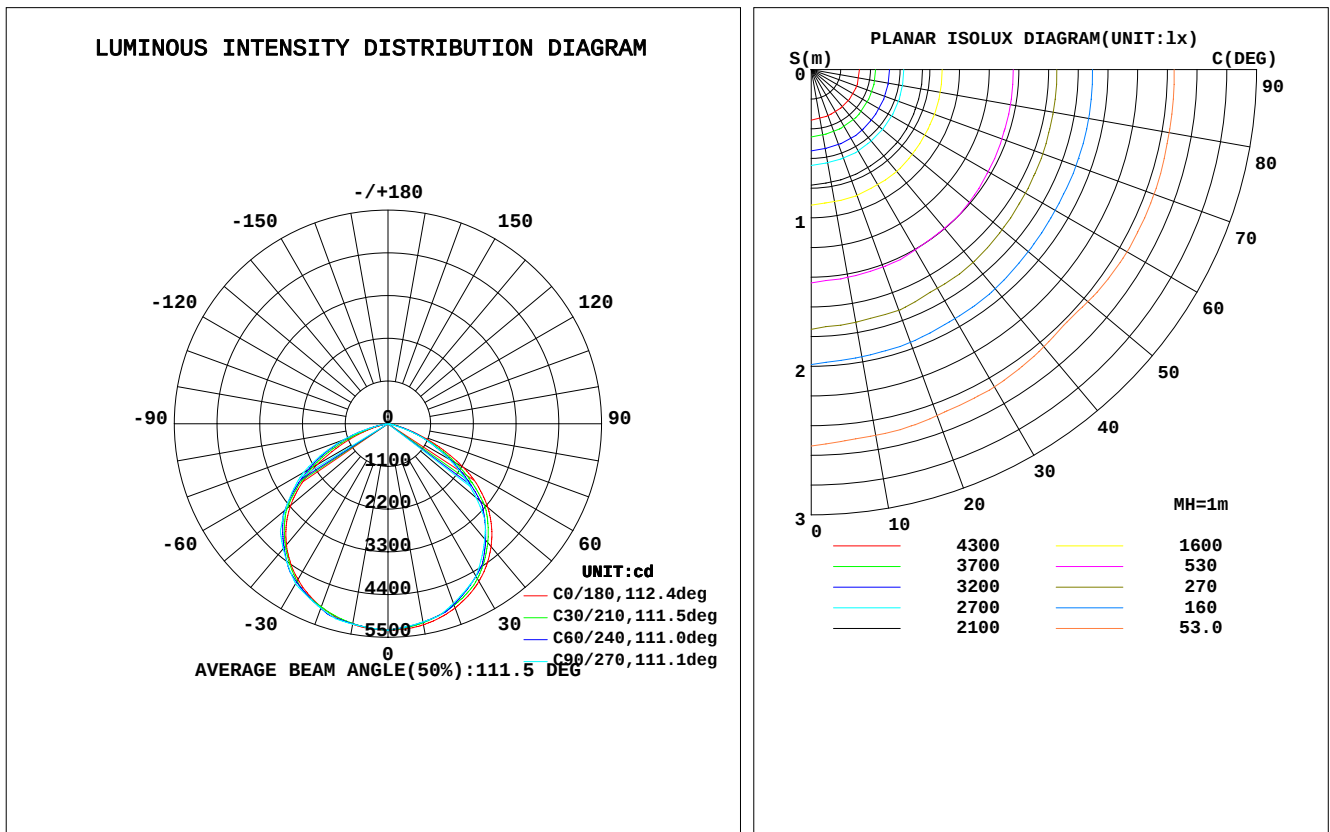


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:219.9V I:0.4547A P:98.52W PF:0.9852 Lamp Flux:14153x1 lm		
NAME: GLM-MXHB100(AH) 120°	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 143.65 lm/W			
MODEL		I _{max} (cd)	5316	S/MH(C0/180)	1.30
NOMINAL POWER(W)		LOR(%)	100.0	S/MH(C90/270)	1.32
RATED VOLTAGE(V)	230.0	TOTAL FLUX(lm)	14153	η UP, DN(C0-180)	0.0, 47.7
NOMINAL FLUX(lm)	14153	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0, 52.3
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	230	η down(%)	100.0	CIBSE SHR MAX	1.35



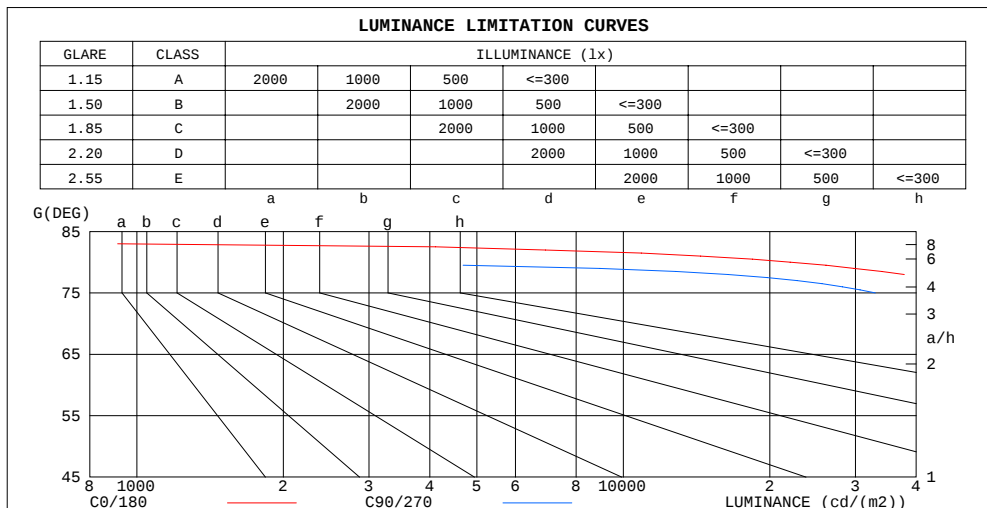
C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2020-03-18

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.290
 Humidity:65.0%
 Test Distance:7.500m [K=1.1133]
 Remarks:

ZONAL FLUX DIAGRAM AND LUMINANCE LIMITATION CURVES

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	ϕ zone	ϕ total	%lum, lamp
5	5302	5260	5249	5255	5295	5277	5277	5280	0- 5	126.4	126.4	0.89, 0.89
10	5256	5191	5182	5180	5240	5227	5239	5234	5- 10	375.1	501.5	3.54, 3.54
15	5171	5100	5115	5085	5152	5154	5200	5167	10- 15	613.9	1115	7.88, 7.88
20	5050	4988	4923	4975	5021	5067	5052	5083	15- 20	836.1	1952	13.8, 13.8
25	4887	4780	4730	4766	4848	4884	4904	4906	20- 25	1031	2983	21.1, 21.1
30	4686	4545	4538	4523	4634	4675	4757	4700	25- 30	1197	4180	29.5, 29.5
35	4432	4286	4206	4259	4376	4435	4477	4472	30- 35	1325	5505	38.9, 38.9
40	4130	3993	3875	3956	4069	4168	4198	4211	35- 40	1405	6910	48.8, 48.8
45	3774	3566	3543	3519	3706	3792	3918	3833	40- 45	1436	8347	59, 59
50	3356	3113	2963	3067	3272	3390	3451	3433	45- 50	1409	9756	68.9, 68.9
55	2848	2624	2383	2569	2745	2959	2985	3000	50- 55	1303	11059	78.1, 78.1
60	2233	1947	1803	1881	2102	2329	2518	2355	55- 60	1126	12185	86.1, 86.1
65	1516	1280	1266	1225	1419	1692	1876	1709	60- 65	881.9	13067	92.3, 92.3
70	885.0	736.8	730.0	700.3	825.6	1099	1234	1116	65- 70	609.1	13676	96.6, 96.6
75	384.7	357.3	193.7	335.5	338.7	588.5	592.4	597.9	70- 75	344.6	14020	99.1, 99.1
80	86.84	45.02	0	37.23	53.67	142.9	0	141.7	75- 80	122.2	14143	99.9, 99.9
85	0	0	0	0	0	0	0	0	80- 85	10.30	14153	100, 100
90	0	0	0	0	0	0	0	0	85- 90	0.0492	14153	100, 100
95									90- 95			
100									95-100			
105									100-105			
110									105-110			
115									110-115			
120									115-120			
125									120-125			
130									125-130			
135									130-135			
140									135-140			
145									140-145			
150									145-150			
155									150-155			
160									155-160			
165									160-165			
170									165-170			
175									170-175			
180									175-180			
LUMINOUS INTENSITY:cd									UNIT:lm			
DEG												



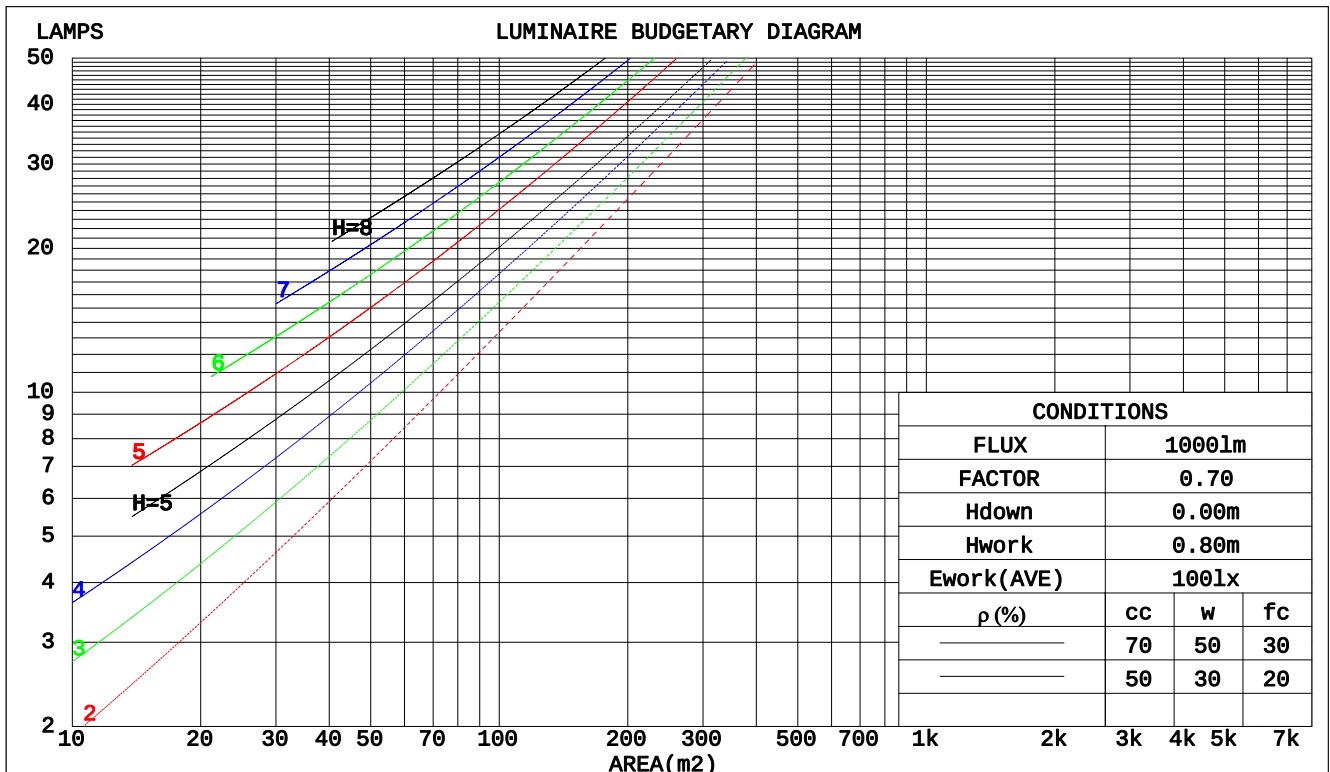
C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators:
 Test Date: 2020-03-18

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE G0-2000B_V1 SYSTEM V2.0.290
 Humidity: 65.0%
 Test Distance: 7.500m [K=1.1133]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:219.9V I:0.4547A P:98.52W PF:0.9852 Lamp Flux:14153x1 lm		
NAME: GLM-MXHB100(AH) 120°	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:	PROTECTION ANGLE:

ρ _{CC}	80%			70%			50%			30%			10%			0
ρ _W	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ _{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	.99	1.04	1.00	.97	.90	.97	.94	.96	.93	.91	.92	.90	.89	.87
2.0	.93	.87	.82	.92	.86	.81	.88	.83	.79	.85	.81	.77	.82	.79	.76	.74
3.0	.83	.75	.69	.81	.74	.68	.78	.72	.67	.75	.70	.66	.73	.69	.65	.63
4.0	.73	.65	.59	.72	.64	.58	.70	.63	.57	.67	.61	.57	.65	.60	.56	.54
5.0	.66	.57	.51	.65	.56	.50	.62	.55	.50	.60	.54	.49	.59	.53	.49	.47
6.0	.59	.50	.44	.58	.50	.44	.56	.49	.44	.55	.48	.43	.53	.47	.43	.41
7.0	.54	.45	.39	.53	.45	.39	.51	.44	.39	.50	.43	.38	.49	.43	.38	.36
8.0	.49	.41	.35	.48	.40	.35	.47	.40	.35	.46	.39	.34	.45	.39	.34	.32
9.0	.45	.37	.31	.44	.37	.31	.43	.36	.31	.42	.36	.31	.41	.35	.31	.29
10.0	.41	.34	.28	.41	.33	.28	.40	.33	.28	.39	.33	.28	.38	.32	.28	.26



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2020-03-18

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.290
 Humidity:65.0%
 Test Distance:7.500m [K=1.1133]
 Remarks:

WEC AND CCEC

Test:U:219.9V I:0.4547A P:98.52W PF:0.9852 Lamp Flux:14153x1 lm								
NAME: GLM-MXHB100(AH) 120°				TYPE:LED			WEIGHT:	
SPEC.:				DIM.:			SERIAL No.:1	
MFR.:				SUR.:			PROTECTION ANGLE:	

ρ_{cc}	80%			70%			50%			30%			10%			0	
ρ_w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
ρ_{fc}	20%			20%			20%			20%			20%			0	
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)										
0.0																	
1.0	.269	.153	.048	.262	.149	.047	.249	.143	.046	.237	.137	.044	.226	.131	.042		
2.0	.263	.144	.044	.257	.142	.044	.246	.137	.042	.235	.132	.041	.226	.128	.040		
3.0	.250	.133	.040	.244	.131	.039	.234	.127	.039	.225	.123	.038	.216	.120	.037		
4.0	.234	.122	.036	.230	.120	.036	.221	.117	.035	.212	.114	.034	.205	.111	.034		
5.0	.219	.112	.032	.215	.110	.032	.207	.108	.032	.200	.105	.031	.193	.103	.031		
6.0	.205	.103	.029	.201	.102	.029	.194	.100	.029	.188	.097	.029	.181	.095	.028		
7.0	.192	.095	.027	.189	.094	.027	.182	.092	.027	.176	.090	.026	.171	.089	.026		
8.0	.180	.088	.025	.177	.087	.025	.172	.086	.024	.166	.084	.024	.161	.083	.024		
9.0	.170	.082	.023	.167	.081	.023	.162	.080	.023	.157	.079	.023	.153	.077	.022		
10.0	.160	.077	.021	.158	.076	.021	.153	.075	.021	.149	.074	.021	.145	.073	.021		

ρ _{CC}	80%			70%			50%			30%			10%			0	
ρ _W	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0	
ρ _{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	.156	.138	.152	.134	.118	.104	.092	.082	.060	.053	.048	.019	.017	.015		
2.0	.168	.132	.101	.144	.114	.088	.099	.079	.061	.057	.046	.036	.018	.015	.012		
3.0	.161	.114	.077	.138	.098	.067	.095	.068	.047	.055	.040	.028	.018	.013	.009		
4.0	.153	.101	.061	.131	.087	.053	.090	.061	.037	.052	.036	.022	.017	.012	.007		
5.0	.146	.090	.049	.125	.078	.042	.086	.054	.030	.050	.032	.018	.016	.010	.006		
6.0	.139	.082	.040	.120	.071	.035	.083	.050	.025	.048	.029	.015	.015	.010	.005		
7.0	.133	.075	.034	.114	.065	.030	.079	.045	.021	.046	.027	.013	.015	.009	.004		
8.0	.127	.069	.029	.109	.060	.026	.075	.042	.018	.044	.025	.011	.014	.008	.004		
9.0	.121	.064	.026	.104	.056	.022	.072	.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		

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2020-03-18

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.290
Humidity:65.0%
Test Distance:7.500m [K=1.1133]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:219.9V I:0.4547A P:98.52W PF:0.9852 Lamp Flux:14153x1 lm											
NAME: GLM-MXHB100(AH) 120°						TYPE:LED			WEIGHT:		
SPEC.:						DIM.:			SERIAL No.:1		
MFR.:						SUR.:			PROTECTION 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		31.4	32.8	31.6	33.0	33.2	30.7	32.2	31.0	32.4	32.6
	3H	32.1	33.4	32.4	33.6	33.9	31.4	32.7	31.7	33.0	33.2
	4H	32.1	33.4	32.5	33.7	33.9	31.4	32.7	31.7	32.9	33.2
	6H	32.1	33.3	32.4	33.5	33.8	31.3	32.5	31.6	32.8	33.0
	8H	32.0	33.2	32.4	33.5	33.7	31.3	32.4	31.6	32.7	33.0
	12H	32.0	33.1	32.3	33.4	33.7	31.2	32.3	31.6	32.6	32.9
4H	2H	31.7	32.9	32.0	33.2	33.4	31.1	32.4	31.4	32.6	32.9
	3H	32.4	33.5	32.8	33.8	34.1	31.9	33.0	32.2	33.3	33.6
	4H	32.5	33.5	32.9	33.9	34.2	31.9	32.9	32.3	33.2	33.6
	6H	32.5	33.4	32.9	33.7	34.1	31.9	32.7	32.3	33.1	33.4
	8H	32.5	33.3	32.9	33.6	34.0	31.8	32.6	32.2	33.0	33.4
	12H	32.4	33.2	32.8	33.5	33.9	31.8	32.5	32.2	32.9	33.3
8H	4H	32.5	33.3	32.9	33.7	34.1	31.9	32.7	32.3	33.1	33.5
	6H	32.5	33.2	32.9	33.6	34.0	31.8	32.5	32.3	32.9	33.3
	8H	32.5	33.0	32.9	33.5	33.9	31.8	32.4	32.3	32.8	33.3
	12H	32.4	32.9	32.9	33.4	33.8	31.8	32.3	32.2	32.7	33.2
12H	4H	32.5	33.2	32.9	33.6	34.0	31.9	32.6	32.3	33.0	33.4
	6H	32.5	33.0	32.9	33.5	33.9	31.8	32.4	32.3	32.8	33.3
	8H	32.4	32.9	32.9	33.4	33.8	31.8	32.3	32.2	32.7	33.2
Variations with the observer position at spacings:											
S = 1.0H	+ 0.3 / - 0.4					+ 0.4 / - 0.5					
1.5H	+ 0.4 / - 0.6					+ 0.3 / - 0.7					
2.0H	+ 0.8 / - 1.0					+ 0.8 / - 1.1					

CIE Pub.117 Corrected 14153 lm Total Lamp Luminous Flux.(8log(F/F0) = 9.2)

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2020-03-18

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.290
Humidity:65.0%
Test Distance:7.500m [K=1.1133]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:219.9V I:0.4547A P:98.52W PF:0.9852 Lamp Flux:14153x1 lm		
NAME: GLM-MXHB100(AH) 120°	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:	PROTECTION 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	48	41	59	48	41	58	47	41	35
0.80	70	59	52	69	58	52	67	58	51	45
1.00	79	68	62	78	68	61	76	69	61	54
1.25	86	76	70	85	76	69	82	74	69	62
1.50	91	82	76	89	81	75	87	79	74	67
2.00	98	90	84	96	89	83	93	87	82	75
2.50	101	94	89	99	93	88	96	90	86	78
3.00	104	98	93	102	97	92	98	94	90	82
4.00	108	103	99	106	101	98	102	98	95	86
5.00	110	106	102	108	104	101	103	100	98	89
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2020-03-18

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.290
Humidity:65.0%
Test Distance:7.500m [K=1.1133]
Remarks:

ISOCANDELA DIAGRAM

Test:U:219.9V I:0.4547A P:98.52W PF:0.9852 Lamp Flux:14153x1 lm		
NAME: GLM-MXHB100(AH) 120°	TYPE: LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:	PROTECTION ANGLE:

Conical surface Flux(90deg):

8346.5 lm

%lum = 59.0%

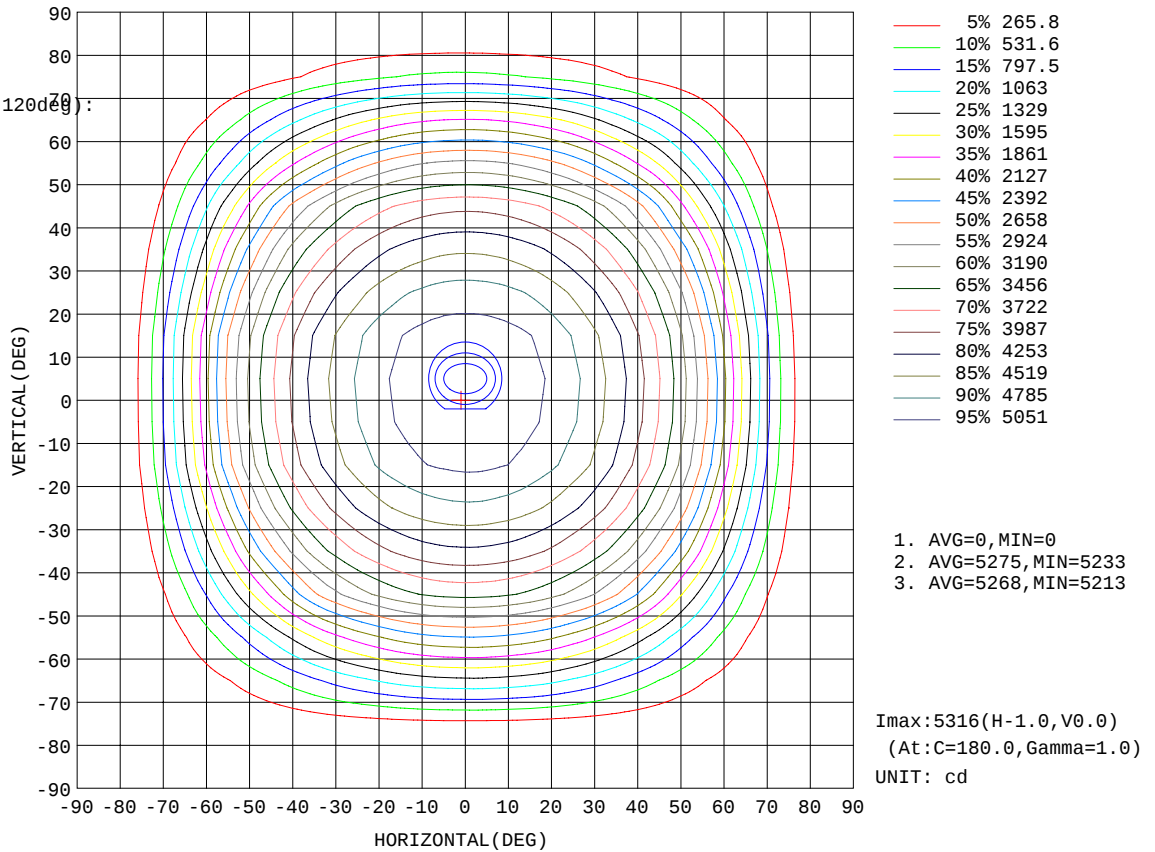
%lamp = 59.0%

Conical surface Flux(120deg):

12185 lm

%lum = 86.1%

%lamp = 86.1%

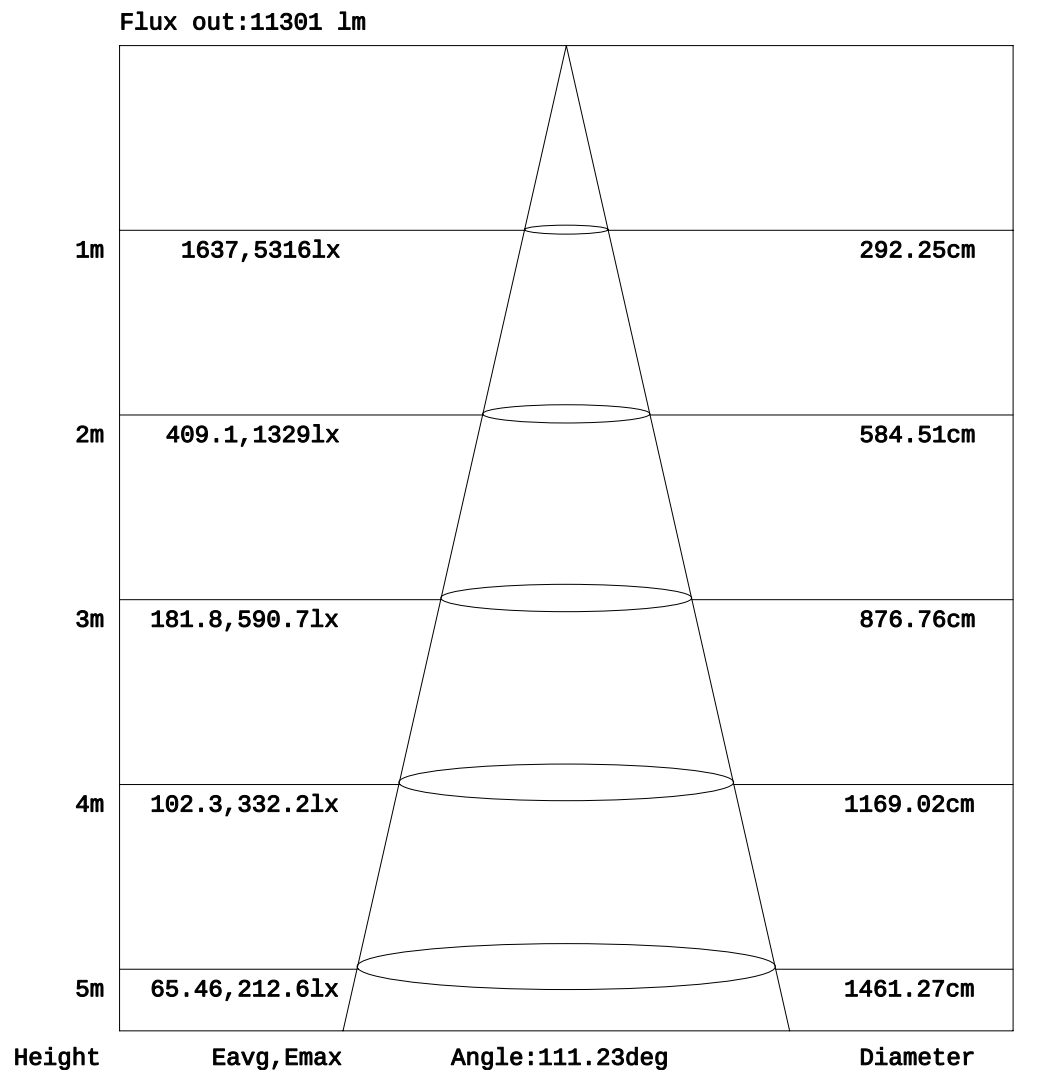


C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2020-03-18

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.290
Humidity:65.0%
Test Distance:7.500m [K=1.1133]
Remarks:

AAI Figure

Test:U:219.9V I:0.4547A P:98.52W PF:0.9852 Lamp Flux:14153x1 lm		
NAME: GLM-MXHB100(AH) 120°	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:	PROTECTION ANGLE:



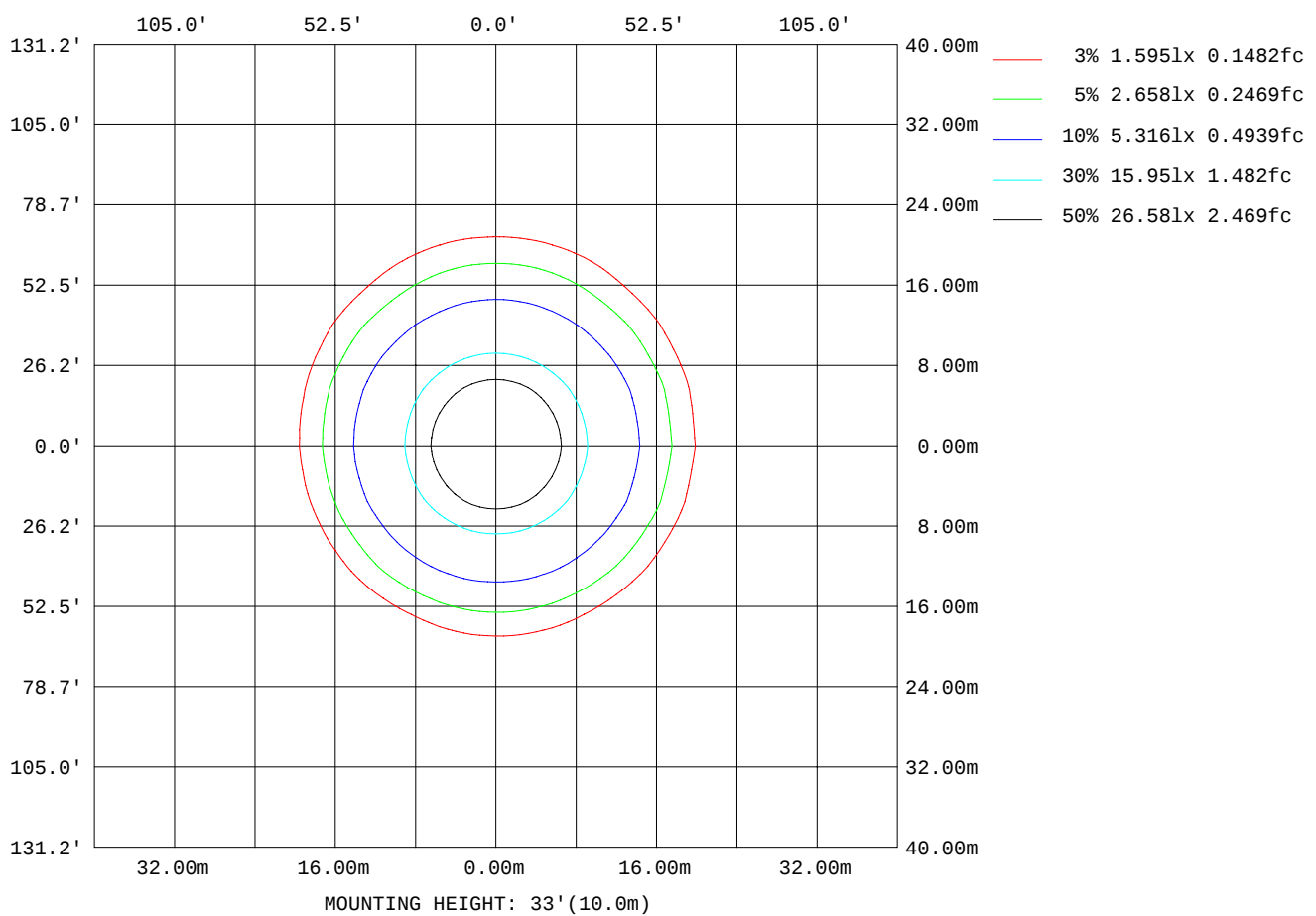
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2020-03-18

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.290
 Humidity:65.0%
 Test Distance:7.500m [K=1.1133]
 Remarks:

ISOLUX DIAGRAM

Test:U:219.9V I:0.4547A P:98.52W PF:0.9852 Lamp Flux:14153x1 lm		
NAME: GLM-MXHB100(AH) 120°	TYPE: LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:	PROTECTION ANGLE:



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2020-03-18

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.290
Humidity:65.0%
Test Distance:7.500m [K=1.1133]
Remarks:

LED Avg.L Report

Test:U:219.9V I:0.4547A P:98.52W PF:0.9852 Lamp Flux:14153x1 lm		
NAME: GLM-MXHB100(AH) 120°	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:	PROTECTION ANGLE:

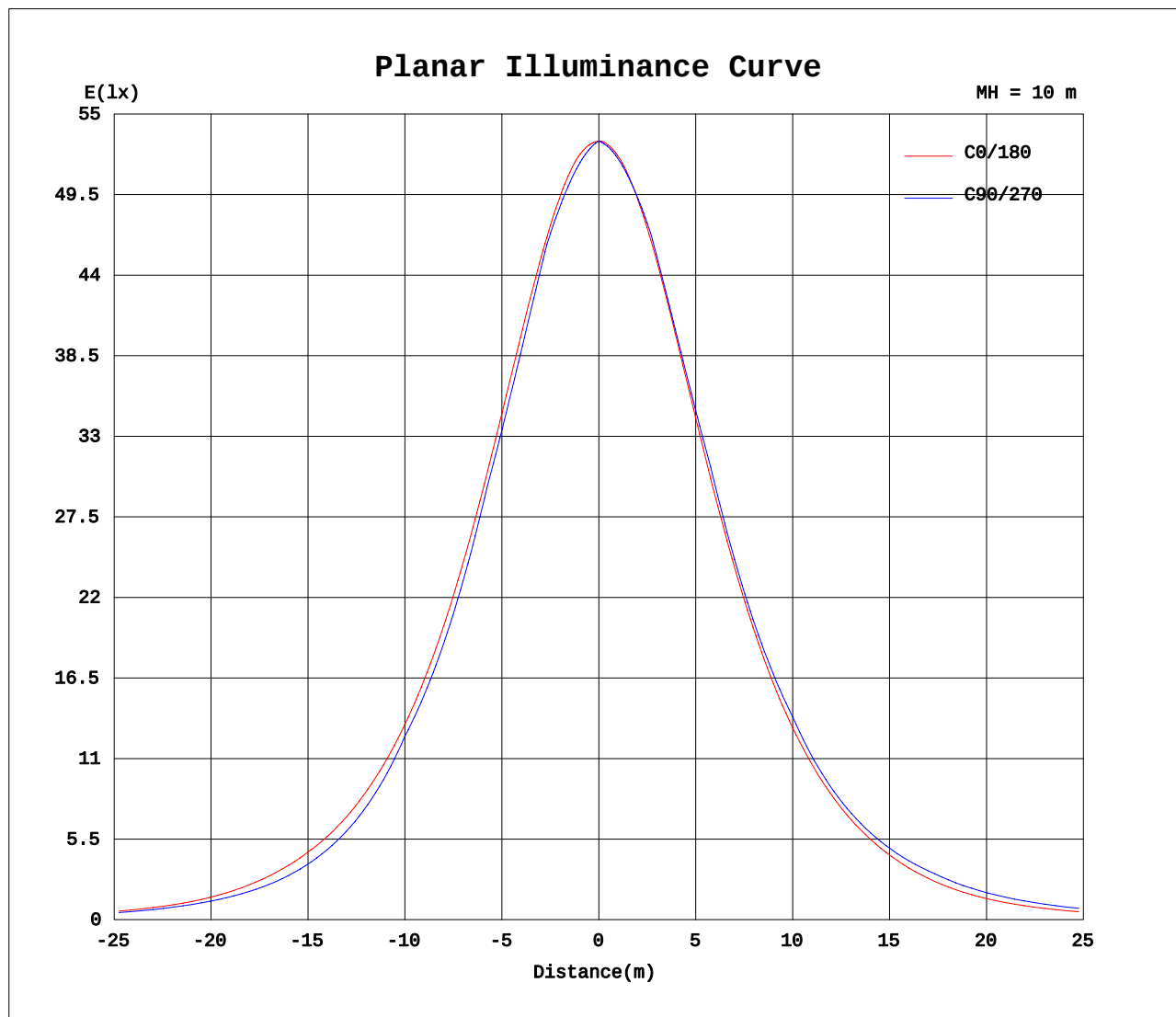
AvgL	cd/m2
L_0~180(65)av	152966
L_0~180(75)av	61562
L_0~180(85)av	0
L_90~270(65)av	163777
L_90~270(75)av	66905
L_90~270(85)av	0
L_45(65)av	153915
L_45(75)av	79962
L_45(85)av	0

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2020-03-18

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.290
Humidity:65.0%
Test Distance:7.500m [K=1.1133]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2020-03-18

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.0.290
Humidity: 65.0%
Test Distance: 7.500m [K=1.1133]
Remarks:

C:\Documents and Settings\Administrator\桌面\GLM-MXHB100(AH) 120°\GLM-MXHB100(AH) 120°.GOS

