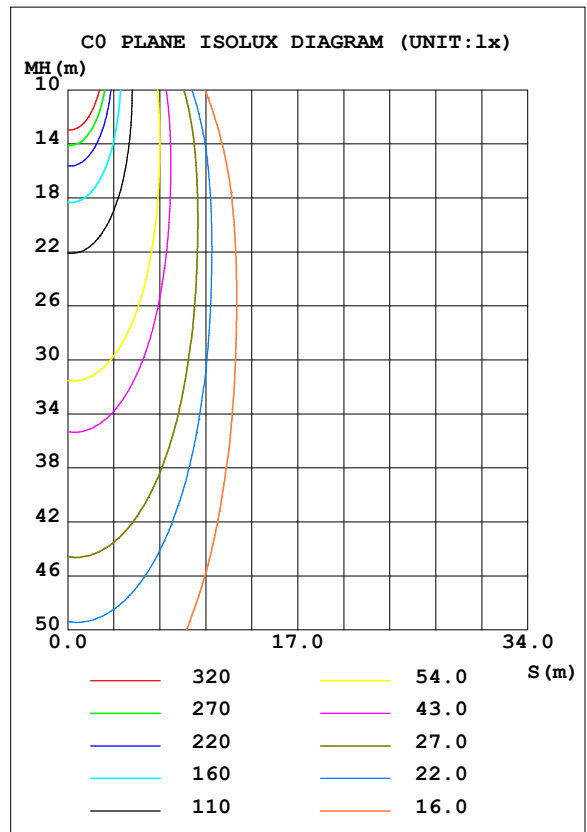
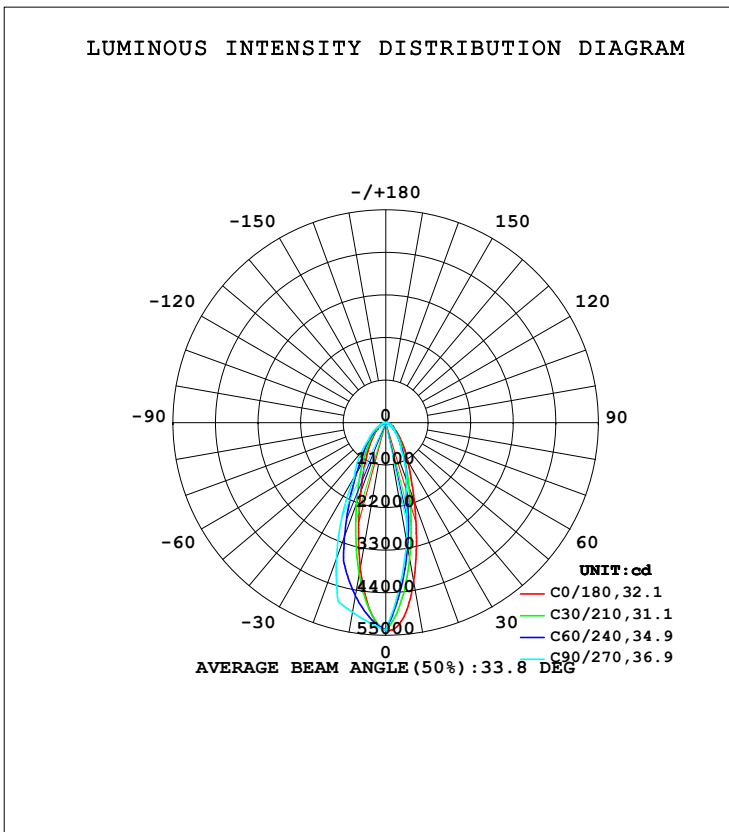


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:220.21V I:1.1039A P:238.27W PF:0.9802 Freq:50.00Hz Lamp Flux:33667.5x1 lm		
NAME: GLM-FLA240	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 141.30 lm/W			
MODEL		I _{max} (cd)	53801	S/MH (C0/180)	0.50
NOMINAL POWER (W)		LOR (%)	100.0	S/MH (C90/270)	0.76
RATED VOLTAGE (V)	220.0	TOTAL FLUX (lm)	33668	<input type="checkbox"/> UP, DN (C0-180)	0.0, 39.7
NOMINAL FLUX (lm)	33667.5	CIE CLASS	DIRECT	<input type="checkbox"/> UP, DN (C180-360)	0.0, 60.3
LAMPS INSIDE	1	<input type="checkbox"/> up (%)	0.0	CIBSE SHR NOM	0.50
TEST VOLTAGE (V)	220.0	<input type="checkbox"/> down (%)	100.0	CIBSE SHR MAX	0.60



H Range: -90 - 90DEG
H Interval: 1.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2022-05-12

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=1.0667]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

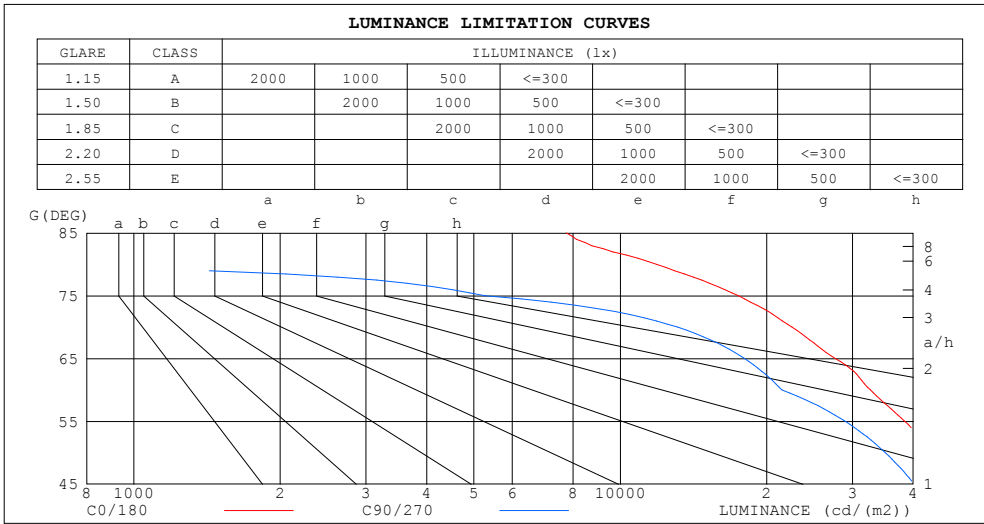
mm	C0	C45	C90	C135	C180	C225	C270	C315	mm	□ zone	□ total	%lum, lamp
10	4175	3387	3110	3195	3812	4231	4978	4549	0- 10	4263	4263	12.7,12.7
20	2162	1593	1586	1502	1907	2694	3733	3052	10- 20	8364	12627	37.5,37.5
30	1133	909.4	797.8	847.9	993.6	1342	1636	1528	20- 30	7505	20132	59.8,59.8
40	640.5	499.0	493.4	474.2	558.9	722.1	972.1	828.7	30- 40	5402	25535	75.8,75.8
50	352.7	290.0	270.4	289.9	326.6	416.8	509.2	463.9	40- 50	3746	29281	87,87
60	196.0	155.1	128.8	163.4	187.1	236.2	247.1	248.5	50- 60	2440	31721	94.2,94.2
70	92.59	63.87	53.86	67.29	85.14	114.6	132.3	117.6	60- 70	1384	33105	98.3,98.3
80	24.76	6.940	0	7.332	16.70	25.88	0	28.37	70- 80	532.4	33638	99.9,99.9
90	5.858	0	0	0	2.231	0	0	0	80- 90	29.95	33668	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		

H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2022-05-12

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=1.0667]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:220.21V I:1.1039A P:238.27W PF:0.9802 Freq:50.00Hz Lamp Flux:33667.5x1 lm		
NAME: GLM-FLA240	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	7746	0
80	11880	0
75	17496	5272
70	22560	13124
65	27675	18013
60	32675	21474
55	38445	29001
50	45730	35053
45	55803	40204

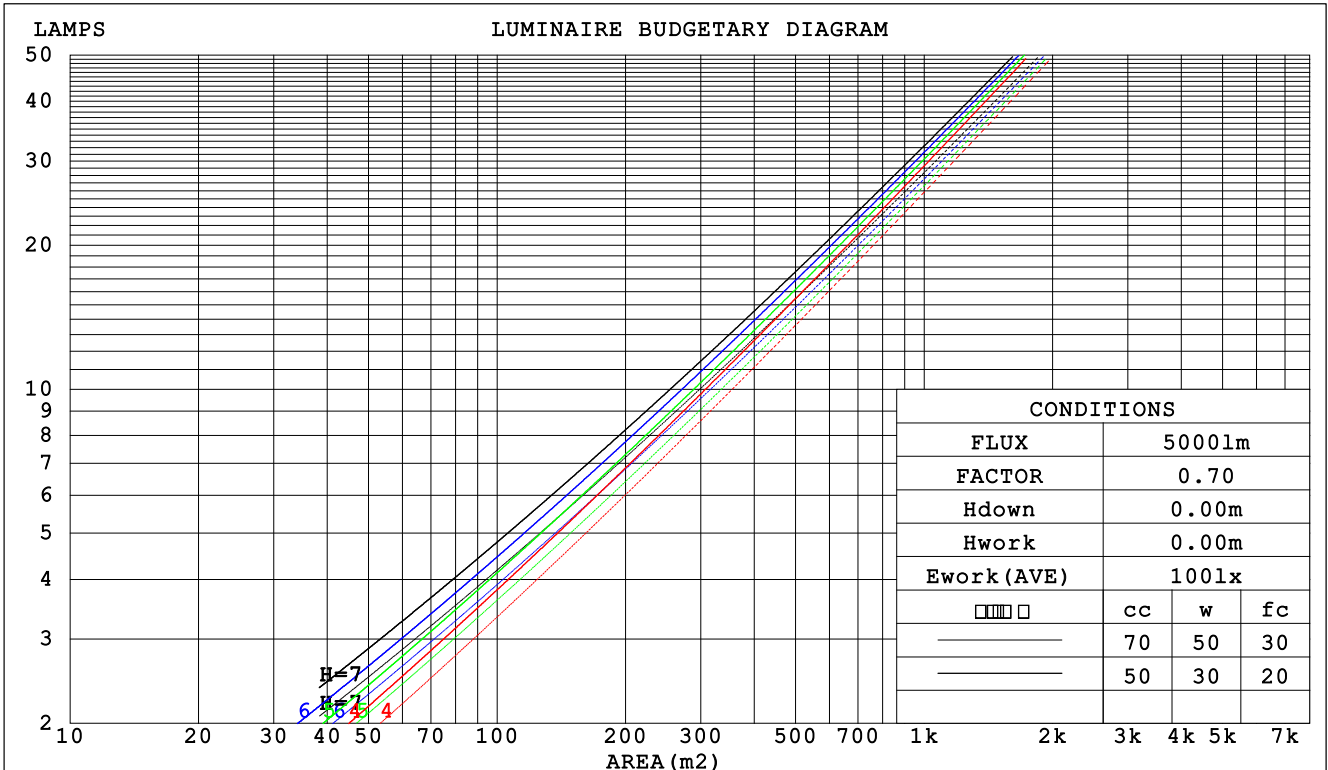
H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2022-05-12

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=1.0667]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:220.21V I:1.1039A P:238.27W PF:0.9802 Freq:50.00Hz Lamp Flux:33667.5x1 lm		
NAME: GLM-FLA240	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
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	1.09	1.06	1.04	1.07	1.04	1.02	1.03	1.01	.99	.99	.98	.96	.96	.94	.93	.91
2.0	1.00	.95	.91	.98	.94	.90	.95	.91	.88	.92	.89	.86	.89	.87	.85	.83
3.0	.92	.86	.82	.91	.85	.81	.88	.83	.80	.85	.82	.78	.83	.80	.77	.76
4.0	.85	.79	.74	.84	.78	.74	.82	.77	.73	.80	.75	.72	.78	.74	.71	.69
5.0	.79	.72	.68	.78	.72	.67	.76	.71	.67	.74	.70	.66	.73	.69	.65	.64
6.0	.74	.67	.62	.73	.67	.62	.71	.66	.62	.70	.65	.61	.68	.64	.61	.59
7.0	.69	.62	.58	.68	.62	.58	.67	.61	.57	.66	.61	.57	.65	.60	.57	.55
8.0	.65	.58	.54	.64	.58	.54	.63	.58	.54	.62	.57	.53	.61	.56	.53	.52
9.0	.61	.55	.51	.61	.55	.50	.60	.54	.50	.59	.54	.50	.58	.53	.50	.48
10.0	.58	.52	.48	.58	.52	.48	.57	.51	.47	.56	.51	.47	.55	.50	.47	.46



H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2022-05-12

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=1.0667]
Remarks:

WEC AND CCEC

Test:U:220.21V I:1.1039A P:238.27W PF:0.9802 Freq:50.00Hz Lamp Flux:33667.5x1 lm		
NAME: GLM-FLA240	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
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	.207 .117 .037	.200 .114 .036	.187 .107 .034	.175 .101 .032	.165 .095 .031	
2.0	.199 .109 .033	.193 .106 .033	.182 .101 .032	.172 .097 .030	.163 .092 .029	
3.0	.189 .100 .030	.184 .098 .030	.174 .094 .029	.166 .091 .028	.157 .087 .027	
4.0	.178 .092 .027	.173 .091 .027	.165 .088 .026	.158 .085 .026	.151 .082 .025	
5.0	.168 .085 .025	.164 .084 .024	.157 .082 .024	.150 .079 .024	.144 .077 .023	
6.0	.158 .079 .023	.155 .078 .022	.148 .076 .022	.143 .074 .022	.137 .072 .021	
7.0	.149 .074 .021	.146 .073 .021	.141 .071 .021	.136 .070 .020	.131 .068 .020	
8.0	.142 .069 .019	.139 .068 .019	.134 .067 .019	.129 .065 .019	.125 .064 .019	
9.0	.134 .065 .018	.132 .064 .018	.128 .063 .018	.123 .062 .018	.119 .061 .018	
10.0	.128 .061 .017	.126 .061 .017	.122 .060 .017	.118 .059 .017	.114 .058 .017	

<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	.173 .157 .143	.148 .135 .123	.101 .093 .085	.058 .054 .049	.019 .017 .016	
2.0	.160 .132 .109	.137 .114 .094	.094 .079 .066	.054 .046 .039	.017 .015 .013	
3.0	.149 .114 .086	.128 .098 .074	.088 .068 .052	.051 .040 .031	.016 .013 .010	
4.0	.139 .099 .069	.119 .086 .060	.082 .060 .042	.048 .035 .025	.015 .011 .008	
5.0	.131 .088 .057	.112 .076 .049	.077 .053 .035	.045 .031 .021	.014 .010 .007	
6.0	.123 .079 .047	.106 .068 .041	.073 .048 .029	.042 .028 .017	.014 .009 .006	
7.0	.117 .072 .040	.100 .062 .035	.069 .044 .025	.040 .026 .015	.013 .008 .005	
8.0	.111 .065 .034	.095 .057 .030	.066 .040 .021	.038 .024 .013	.012 .008 .004	
9.0	.105 .060 .030	.091 .052 .026	.063 .037 .019	.037 .022 .011	.012 .007 .004	
10.0	.100 .056 .026	.086 .049 .023	.060 .034 .016	.035 .020 .010	.011 .007 .003	

H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2022-05-12

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=1.0667]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:220.21V I:1.1039A P:238.27W PF:0.9802 Freq:50.00Hz Lamp Flux:33667.5x1 lm										
NAME: GLM-FLA240					TYPE:			WEIGHT:		
SPEC.:					DIM.:			SERIAL No.:		
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	22.6	23.7	22.8	23.8	24.0	21.4	22.5	21.7	22.7	22.9
3H	23.2	24.2	23.5	24.4	24.6	21.8	22.8	22.1	23.0	23.3
4H	23.4	24.3	23.7	24.6	24.8	21.8	22.8	22.1	23.0	23.2
6H	23.4	24.3	23.7	24.6	24.8	21.8	22.6	22.1	22.9	23.1
8H	23.4	24.3	23.7	24.5	24.8	21.7	22.6	22.0	22.8	23.1
12H	23.4	24.2	23.7	24.5	24.8	21.7	22.5	22.0	22.8	23.0
4H 2H	22.7	23.7	23.0	23.9	24.1	21.7	22.7	22.0	22.9	23.1
3H	23.5	24.3	23.8	24.6	24.8	22.2	23.1	22.6	23.3	23.6
4H	23.7	24.4	24.0	24.7	25.0	22.2	23.0	22.6	23.3	23.6
6H	23.8	24.4	24.1	24.8	25.1	22.2	22.8	22.6	23.2	23.5
8H	23.8	24.4	24.1	24.7	25.1	22.1	22.7	22.5	23.1	23.5
12H	23.7	24.3	24.1	24.7	25.1	22.1	22.6	22.5	23.0	23.4
8H 4H	23.6	24.2	24.0	24.6	25.0	22.2	22.9	22.6	23.2	23.6
6H	23.7	24.2	24.2	24.6	25.0	22.2	22.7	22.6	23.1	23.5
8H	23.7	24.2	24.2	24.6	25.0	22.1	22.6	22.6	23.0	23.4
12H	23.7	24.1	24.2	24.5	25.0	22.1	22.4	22.5	22.9	23.4
12H 4H	23.6	24.1	24.0	24.5	24.9	22.2	22.8	22.6	23.1	23.5
6H	23.7	24.1	24.1	24.5	25.0	22.1	22.6	22.6	23.0	23.4
8H	23.7	24.1	24.2	24.5	25.0	22.1	22.5	22.5	22.9	23.4
Variations with the observer position at spacings:										
S = 1.0H	+ 0.8 / - 0.7					+ 0.8 / - 1.1				
1.5H	+ 1.2 / - 0.7					+ 0.8 / - 0.5				
2.0H	+ 1.8 / - 1.4					+ 1.3 / - 1.7				

CIE Pub.117, 33668 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 12.2)

H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2022-05-12

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=1.0667]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:220.21V I:1.1039A P:238.27W PF:0.9802 Freq:50.00Hz Lamp Flux:33667.5x1 lm		
NAME: GLM-FLA240	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

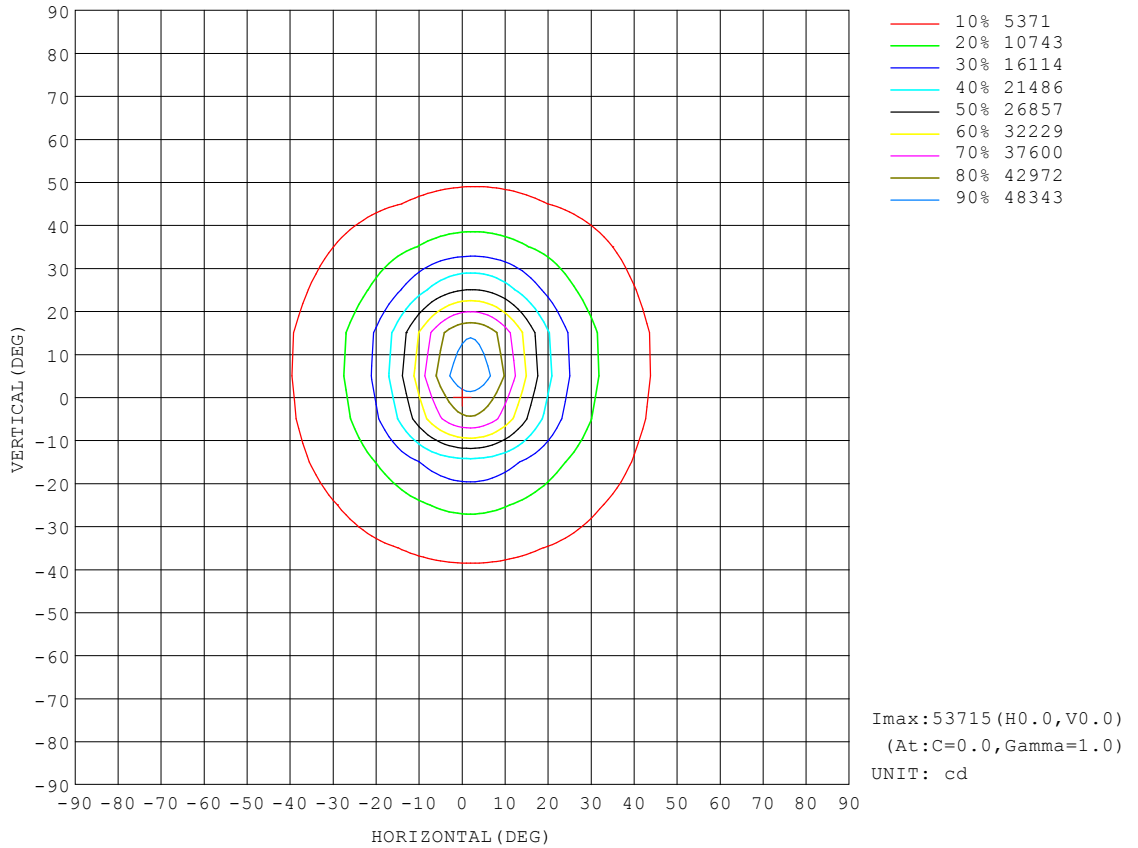
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	76	68	63	76	68	63	75	67	63	58
0.80	85	77	72	84	77	72	83	76	72	67
1.00	91	84	79	90	83	79	89	84	78	73
1.25	97	90	85	95	89	85	93	88	84	79
1.50	100	94	89	99	93	89	96	91	88	82
2.00	104	99	95	103	98	94	100	96	92	86
2.50	107	102	98	105	100	97	102	98	95	88
3.00	109	104	101	107	103	100	103	100	98	91
4.00	112	108	105	109	106	104	106	103	101	93
5.00	113	110	108	111	108	106	107	105	103	95
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:2022-05-12

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=1.0667]
Remarks:

ISOCANDELA DIAGRAM

Test:U:220.21V I:1.1039A P:238.27W PF:0.9802 Freq:50.00Hz Lamp Flux:33667.5x1 lm		
NAME: GLM-FLA240	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

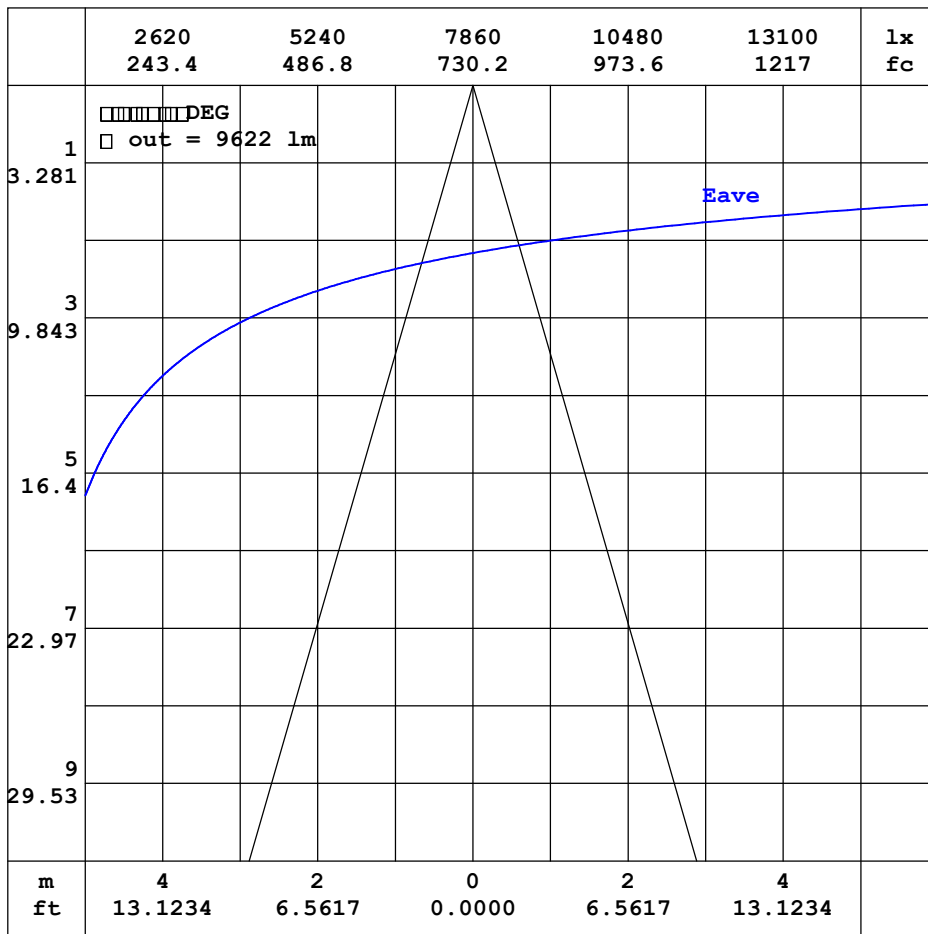


H(□) Range:-90 - 90DEG
 H(□) Interval: 1.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2022-05-12

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=1.0667]
 Remarks:

AAI CURVES

Test:U:220.21V I:1.1039A P:238.27W PF:0.9802 Freq:50.00Hz Lamp Flux:33667.5x1 lm		
NAME: GLM-FLA240	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



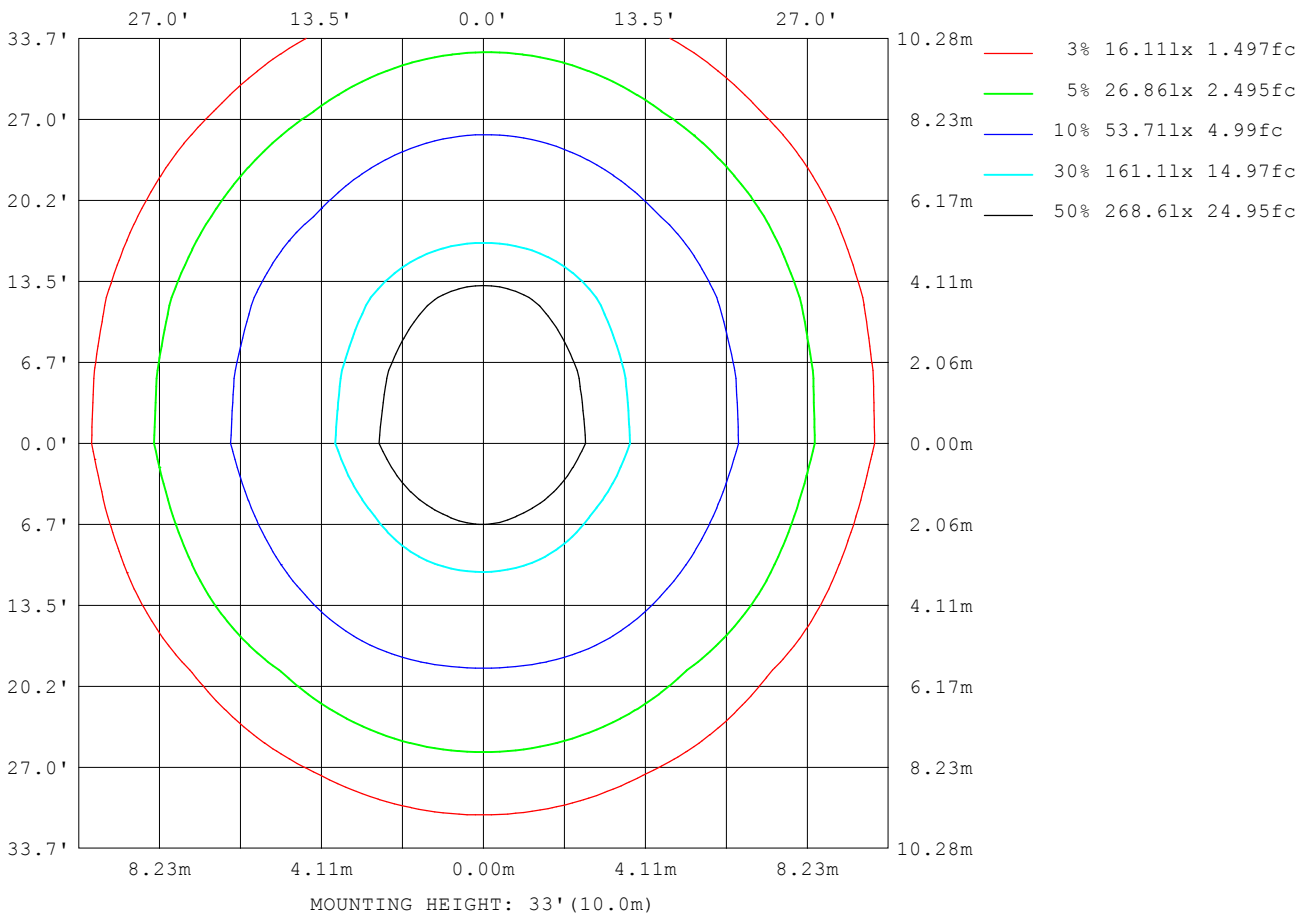
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

H(□) Range:-90 - 90DEG
 H(□) Interval: 1.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2022-05-12

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=1.0667]
 Remarks:

ISOLUX DIAGRAM

Test:U:220.21V I:1.1039A P:238.27W PF:0.9802 Freq:50.00Hz Lamp Flux:33667.5x1 lm		
NAME: GLM-FLA240	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2022-05-12

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=1.0667]
Remarks:

LED Avg.L Report

Test:U:220.21V I:1.1039A P:238.27W PF:0.9802 Freq:50.00Hz Lamp Flux:33667.5x1 lm		
NAME: GLM-FLA240	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

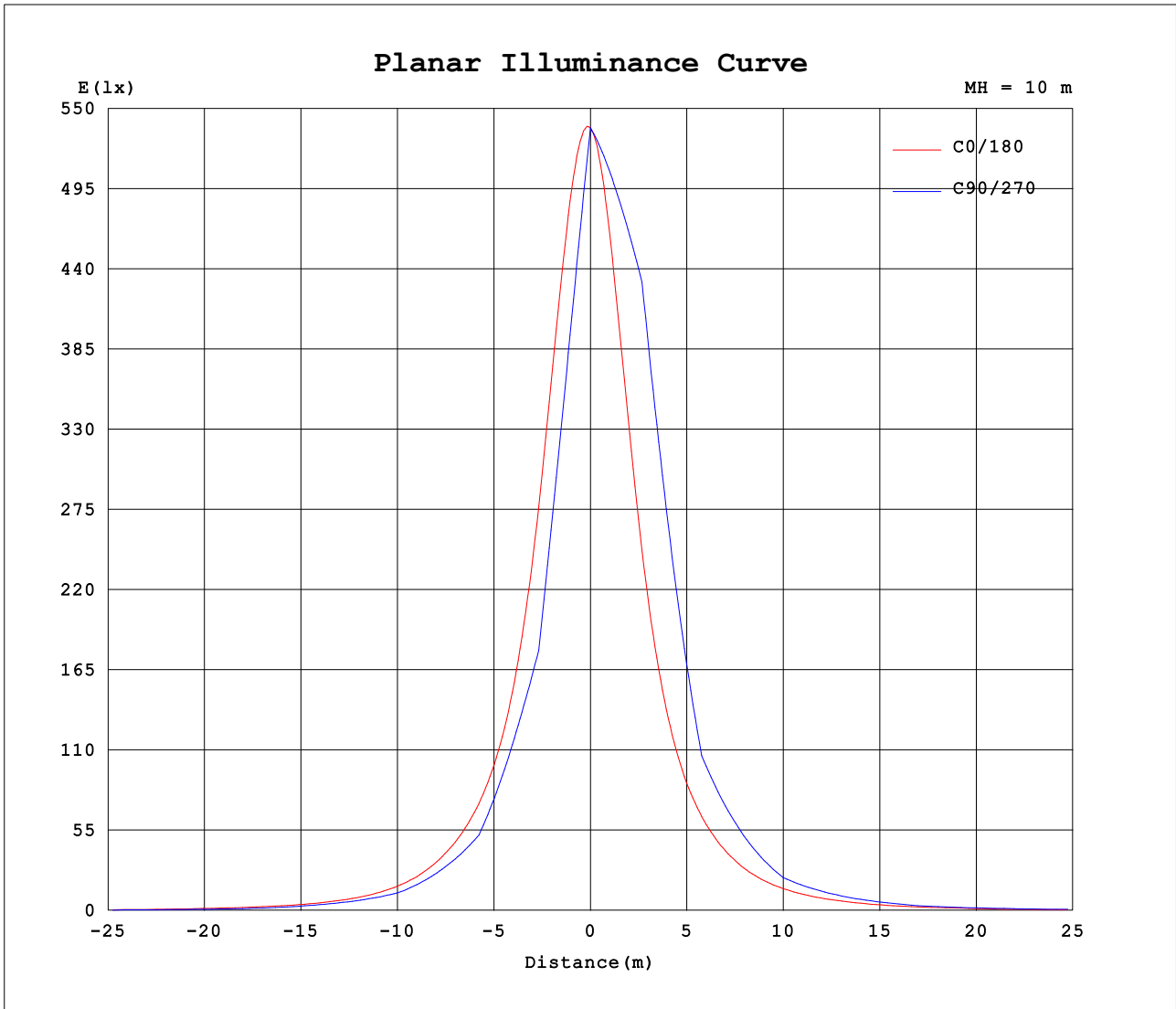
AvgL	cd/m2
L_0~180 (65) av	26901
L_0~180 (75) av	16242
L_0~180 (85) av	4217
L_90~270 (65) av	27712
L_90~270 (75) av	14692
L_90~270 (85) av	0
L_45 (65) av	27647
L_45 (75) av	16912
L_45 (85) av	0

Standard: GB/T 29293-2012

H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2022-05-12

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=1.0667]
Remarks:

Planar Illuminance Curve



H(□) Range:-90 - 90DEG
 H(□) Interval: 1.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2022-05-12

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=1.0667]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.21V I:1.1039A P:238.27W PF:0.9802 Freq:50.00Hz Lamp Flux:33667.5x1 lm		
NAME: GLM-FLA240	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Table--4

UNIT: x10cd

C (DEG) □ (DEG)	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355				
0	5369	5369	5369	5369	5369	5369	5369	5369	5369	5369	5369	5369	5369	5369	5369				
5	5186	5182	5177	5164	5154	5138	5122	5108	5096	5082	5073	5068	5068	5071	5080				
10	4958	4916	4861	4794	4714	4631	4549	4466	4390	4319	4261	4214	4181	4163	4161				
15	4697	4594	4458	4305	4137	3969	3803	3645	3503	3376	3270	3184	3122	3082	3065				
20	3703	3636	3545	3444	3331	3215	3052	2845	2667	2514	2394	2298	2228	2183	2160				
25	2670	2620	2551	2465	2368	2268	2170	2081	2007	1863	1749	1662	1599	1558	1538				
30	1710	1726	1721	1695	1649	1590	1528	1470	1418	1377	1315	1240	1189	1154	1135				
35	1282	1253	1218	1180	1146	1135	1107	1073	1038	1013	992	956	908	876	859				
40	968	952	931	907	880	853	829	808	783	759	740	727	692	661	644				
45	668	674	675	669	658	644	629	611	591	567	547	532	521	492	477				
50	507	500	490	477	469	469	464	452	438	424	407	393	384	369	356				
55	381	378	374	366	355	344	333	329	322	313	305	294	285	279	267				
60	257	261	264	264	260	255	249	241	234	229	224	221	212	206	198				
65	189	187	185	181	176	176	175	173	168	163	159	157	156	150	144				
70	134	132	131	129	125	121	118	114	111	109	106	104	102	98.9	95.7				
75	78.1	78.3	78.3	77.9	76.9	74.5	72.4	70.0	66.7	63.4	61.3	60.5	59.8	59.0	56.6				
80	5.01	8.63	12.9	17.5	22.1	25.6	28.4	29.6	29.4	28.7	27.6	25.9	25.1	25.4	25.9				
85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.52	2.65	3.30	3.52	5.19				
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				

H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2022-05-12

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=1.0667]
Remarks: