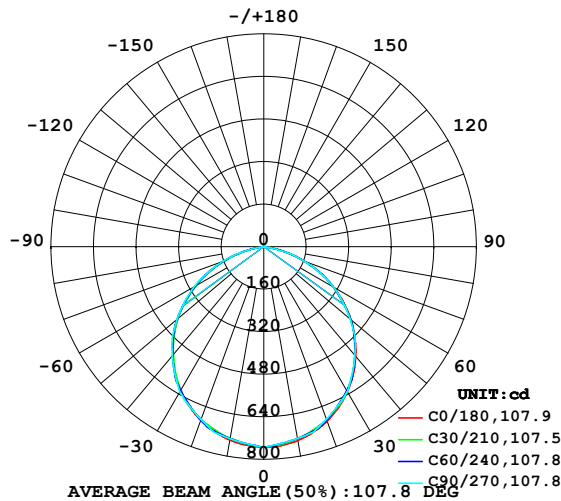


LUMINAIRE PHOTOMETRIC TEST REPORT

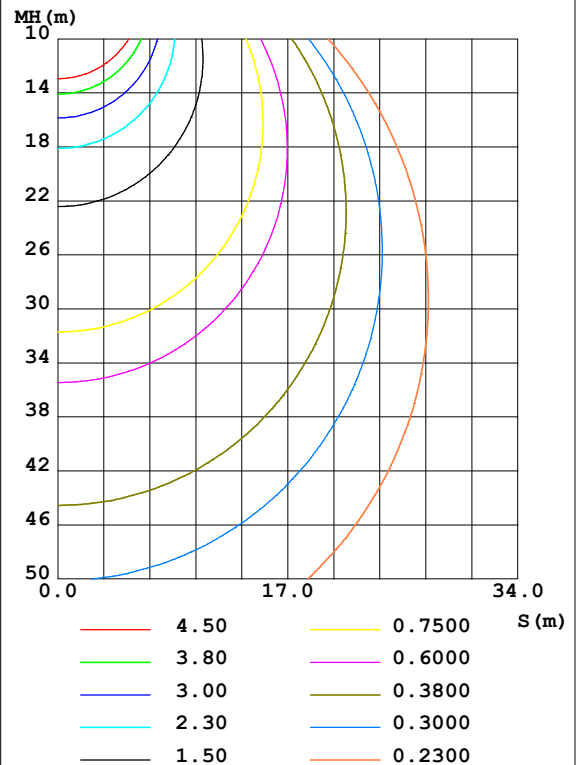
Test:U:220.32V I:0.1113A P:24.189W PF:0.9783 Freq:50.00Hz Lamp Flux:1964.63x1 lm		
NAME: GLM-SPL300R-24W	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 81.22 lm/W			
MODEL		I _{max} (cd)	754.2	S/MH(C0/180)	1.24
NOMINAL POWER(W)		LOR(%)	100.0	S/MH(C90/270)	1.24
RATED VOLTAGE(V)	220.0	TOTAL FLUX(lm)	1964.6	□ UP,DN(C0-180)	0.0,50.1
NOMINAL FLUX(lm)	1964.63	CIE CLASS	DIRECT	□ UP,DN(C180-360)	0.0,49.9
LAMPS INSIDE	1	□ up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	220	□ down(%)	100.0	CIBSE SHR MAX	1.35

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:
Test Date:2021-11-28

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=1.1133]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

°	C0	C45	C90	C135	C180	C225	C270	C315	°	□ zone	□ total	%lum, lamp
10	740.4	731.8	732.5	731.0	738.8	731.5	733.2	732.5	0- 10	70.77	70.77	3.6,3.6
20	698.2	696.5	690.8	695.2	694.7	695.9	692.2	696.9	10- 20	202.3	273.1	13.9,13.9
30	629.7	622.8	629.1	619.8	624.8	621.8	631.2	623.6	20- 30	304.5	577.6	29.4,29.4
40	538.6	537.8	533.4	533.8	533.0	535.4	535.3	537.8	30- 40	363.6	941.2	47.9,47.9
50	428.1	424.5	424.4	420.8	422.3	422.0	425.9	423.4	40- 50	370.8	1312	66.8,66.8
60	302.2	299.9	302.2	296.9	295.7	296.0	303.0	297.1	50- 60	323.8	1636	83.3,83.3
70	162.7	165.3	166.2	164.2	157.3	160.4	164.2	161.3	60- 70	228.6	1864	94.9,94.9
80	27.70	32.65	0	33.25	20.96	25.93	0	27.82	70- 80	97.36	1962	99.9,99.9
90	0	0	0	0	0	0	0	0	80- 90	2.943	1965	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): 1129 lm

%lum = 57.5%

%lamp = 57.5%

Conical surface Flux(120deg): 1635.8 lm

%lum = 83.3%

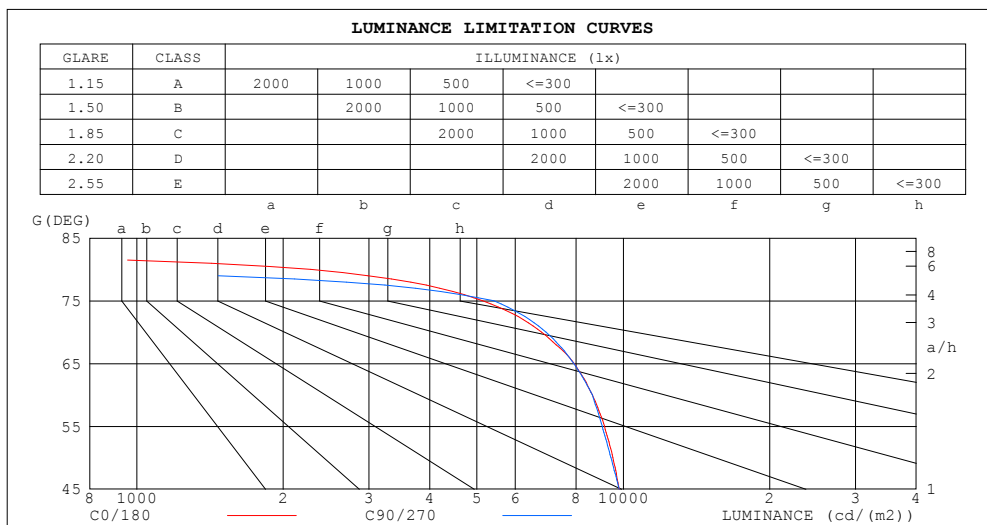
%lamp = 83.3%

H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2021-11-28

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=1.1133]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:220.32V I:0.1113A P:24.189W PF:0.9783 Freq:50.00Hz Lamp Flux:1964.63x1 lm		
NAME: GLM-SPL300R-24W	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	0	0
80	2279	0
75	5139	5417
70	6794	6940
65	7927	7916
60	8634	8634
55	9149	9049
50	9515	9433
45	9806	9809

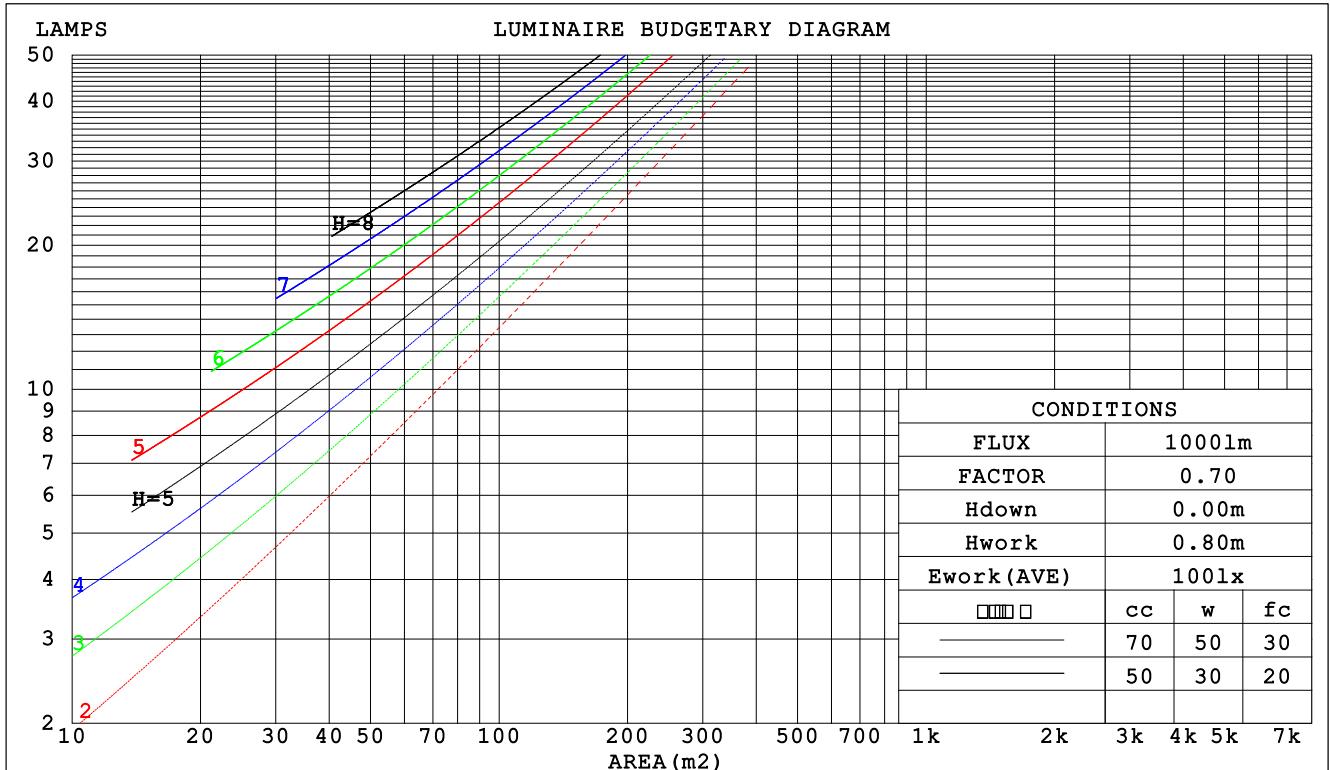
H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2021-11-28

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=1.1133]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:220.32V I:0.1113A P:24.189W PF:0.9783 Freq:50.00Hz Lamp Flux:1964.63x1 lm		
NAME: GLM-SPL300R-24W	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															



H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2021-11-28

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=1.1133]
Remarks:

WEC AND CCEC

Test:U:220.32V I:0.1113A P:24.189W PF:0.9783 Freq:50.00Hz Lamp Flux:1964.63x1 lm					
NAME: GLM-SPL300R-24W			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						Wall Exitance Coefficients(WEC)										
0.0																	
1.0	.279	.159	.050	.272	.155	.049	.259	.149	.047	.247	.142	.046	.236	.137	.044		
2.0	.272	.149	.046	.266	.146	.045	.254	.141	.044	.243	.137	.043	.234	.132	.042		
3.0	.256	.136	.041	.250	.134	.040	.240	.130	.040	.231	.126	.039	.222	.123	.038		
4.0	.239	.124	.036	.234	.122	.036	.225	.119	.036	.217	.116	.035	.209	.113	.035		
5.0	.222	.113	.033	.218	.112	.033	.210	.109	.032	.203	.107	.032	.196	.105	.031		
6.0	.207	.104	.030	.204	.103	.030	.196	.101	.029	.190	.099	.029	.184	.097	.029		
7.0	.194	.096	.027	.190	.095	.027	.184	.093	.027	.178	.091	.027	.172	.090	.026		
8.0	.182	.089	.025	.179	.088	.025	.173	.086	.025	.168	.085	.024	.162	.083	.024		
9.0	.171	.083	.023	.168	.082	.023	.163	.080	.023	.158	.079	.023	.153	.078	.023		
10.0	.161	.077	.021	.158	.076	.021	.154	.075	.021	.149	.074	.021	.145	.073	.021		

☐ 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	.178	.156	.137	.152	.134	.118	.104	.092	.081	.060	.053	.047	.019	.017	.015	
2.0	.170	.132	.100	.145	.114	.087	.100	.079	.061	.057	.046	.035	.018	.015	.012	
3.0	.162	.114	.076	.139	.099	.066	.095	.068	.046	.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	.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	

H(☐) Range:-90 - 90DEG
H(☐) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2021-11-28

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=1.1133]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:220.32V I:0.1113A P:24.189W PF:0.9783 Freq:50.00Hz Lamp Flux:1964.63x1 lm										
NAME: GLM-SPL300R-24W					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	20.6	22.0	20.8	22.2	22.4	20.6	22.1	20.9	22.3	22.5
3H	21.8	23.1	22.1	23.4	23.6	21.8	23.2	22.1	23.4	23.7
4H	22.1	23.4	22.4	23.7	23.9	22.2	23.5	22.5	23.7	24.0
6H	22.2	23.4	22.5	23.7	23.9	22.2	23.4	22.5	23.7	23.9
8H	22.1	23.3	22.5	23.6	23.9	22.1	23.3	22.5	23.6	23.9
12H	22.1	23.2	22.4	23.5	23.8	22.1	23.2	22.4	23.5	23.8
4H 2H	21.1	22.4	21.4	22.6	22.9	21.1	22.4	21.4	22.7	22.9
3H	22.5	23.6	22.8	23.9	24.2	22.5	23.6	22.9	23.9	24.2
4H	22.9	23.9	23.3	24.2	24.6	23.0	24.0	23.3	24.3	24.6
6H	23.0	23.9	23.4	24.3	24.6	23.0	23.9	23.4	24.3	24.6
8H	23.0	23.8	23.4	24.2	24.6	23.0	23.8	23.4	24.2	24.5
12H	22.9	23.7	23.4	24.1	24.5	22.9	23.7	23.3	24.1	24.5
8H 4H	23.0	23.9	23.4	24.2	24.6	23.1	23.9	23.5	24.3	24.7
6H	23.2	23.9	23.6	24.3	24.7	23.2	23.8	23.6	24.2	24.7
8H	23.2	23.8	23.6	24.2	24.6	23.1	23.7	23.6	24.1	24.6
12H	23.1	23.6	23.6	24.1	24.6	23.1	23.6	23.6	24.0	24.5
12H 4H	23.0	23.7	23.4	24.1	24.5	23.1	23.8	23.5	24.2	24.6
6H	23.2	23.8	23.6	24.2	24.6	23.1	23.7	23.6	24.2	24.6
8H	23.1	23.7	23.6	24.1	24.6	23.1	23.6	23.6	24.1	24.5
Variations with the observer position at spacings:										
S = 1.0H	+ 0.2 / - 0.3					+ 0.3 / - 0.3				
1.5H	+ 0.2 / - 0.4					+ 0.2 / - 0.4				
2.0H	+ 0.4 / - 0.3					+ 0.3 / - 0.4				

CIE Pub.117, 1965 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 2.3$)

H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2021-11-28

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=1.1133]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:220.32V I:0.1113A P:24.189W PF:0.9783 Freq:50.00Hz Lamp Flux:1964.63x1 lm		
NAME: GLM-SPL300R-24W	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:	Shielding Angle:

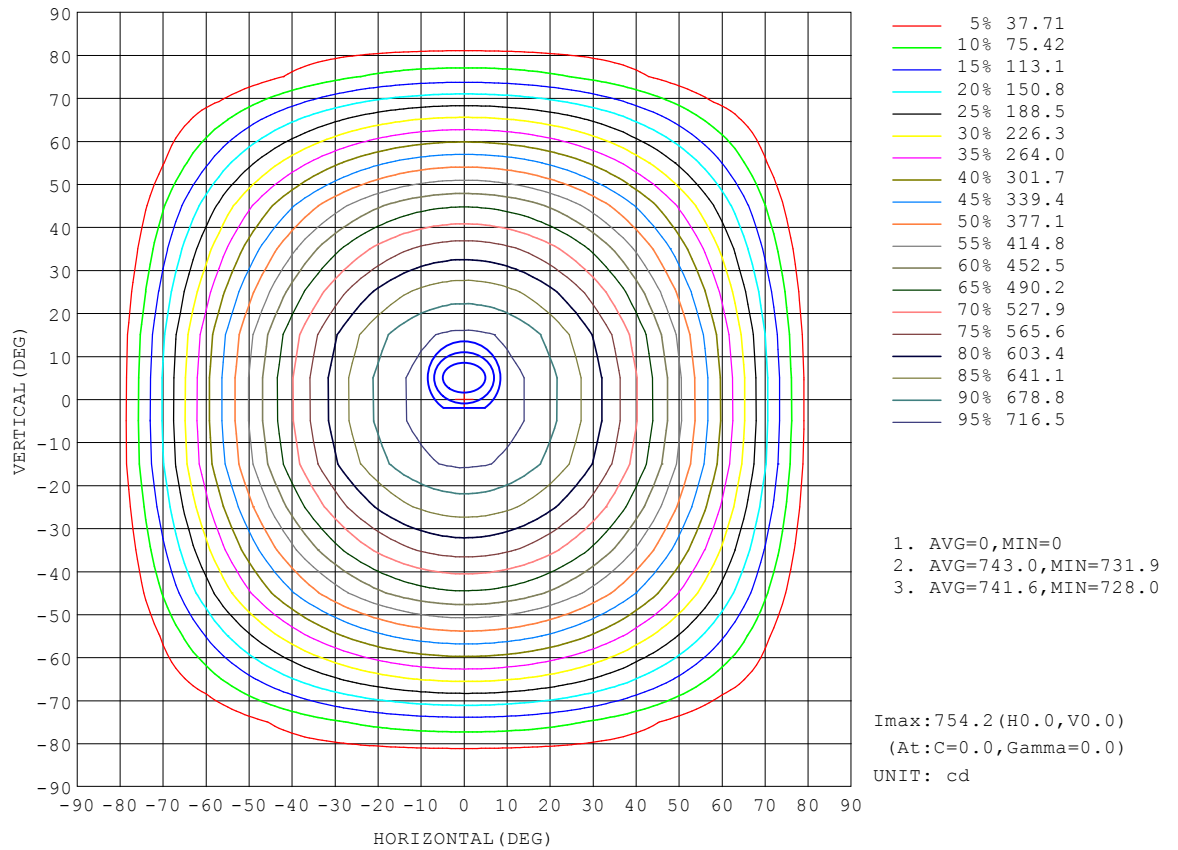
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	59	48	41	58	48	41	57	47	41	35
0.80	69	58	51	68	58	51	67	57	51	44
1.00	78	67	60	77	67	60	75	68	60	53
1.25	85	75	68	84	75	68	81	73	67	60
1.50	90	81	74	89	80	74	86	78	73	66
2.00	97	89	83	95	88	82	92	86	81	73
2.50	101	93	88	99	92	87	95	89	85	77
3.00	104	98	92	102	96	91	98	93	89	81
4.00	108	102	98	105	101	97	101	97	94	86
5.00	110	106	102	107	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:2021-11-28

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=1.1133]
Remarks:

ISOCANDELA DIAGRAM

Test:U:220.32V I:0.1113A P:24.189W PF:0.9783 Freq:50.00Hz Lamp Flux:1964.63x1 lm		
NAME: GLM-SPL300R-24W	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:	Shielding Angle:

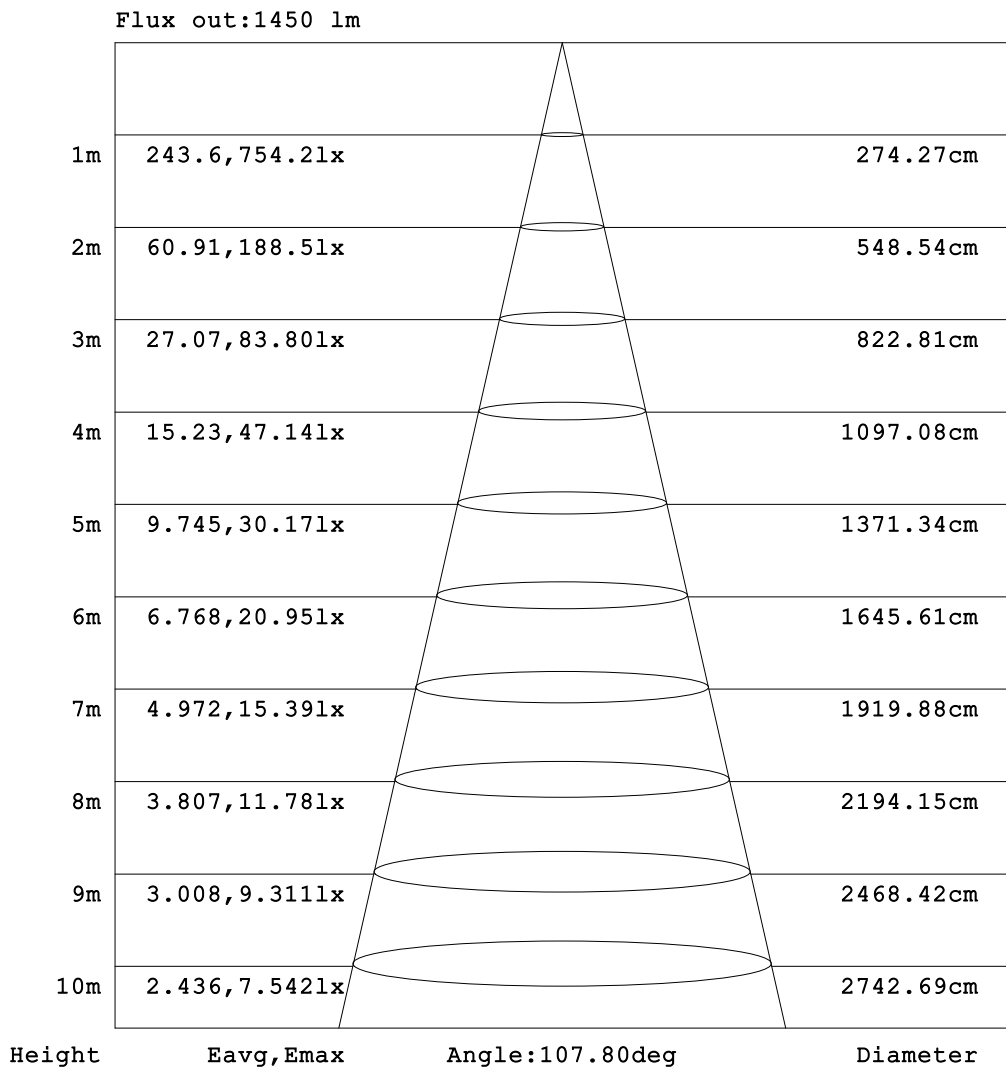


H() Range:-90 - 90DEG
H() Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2021-11-28

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=1.1133]
Remarks:

AAI Figure

Test:U:220.32V I:0.1113A P:24.189W PF:0.9783 Freq:50.00Hz Lamp Flux:1964.63x1 lm		
NAME: GLM-SPL300R-24W	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:	Shielding Angle:



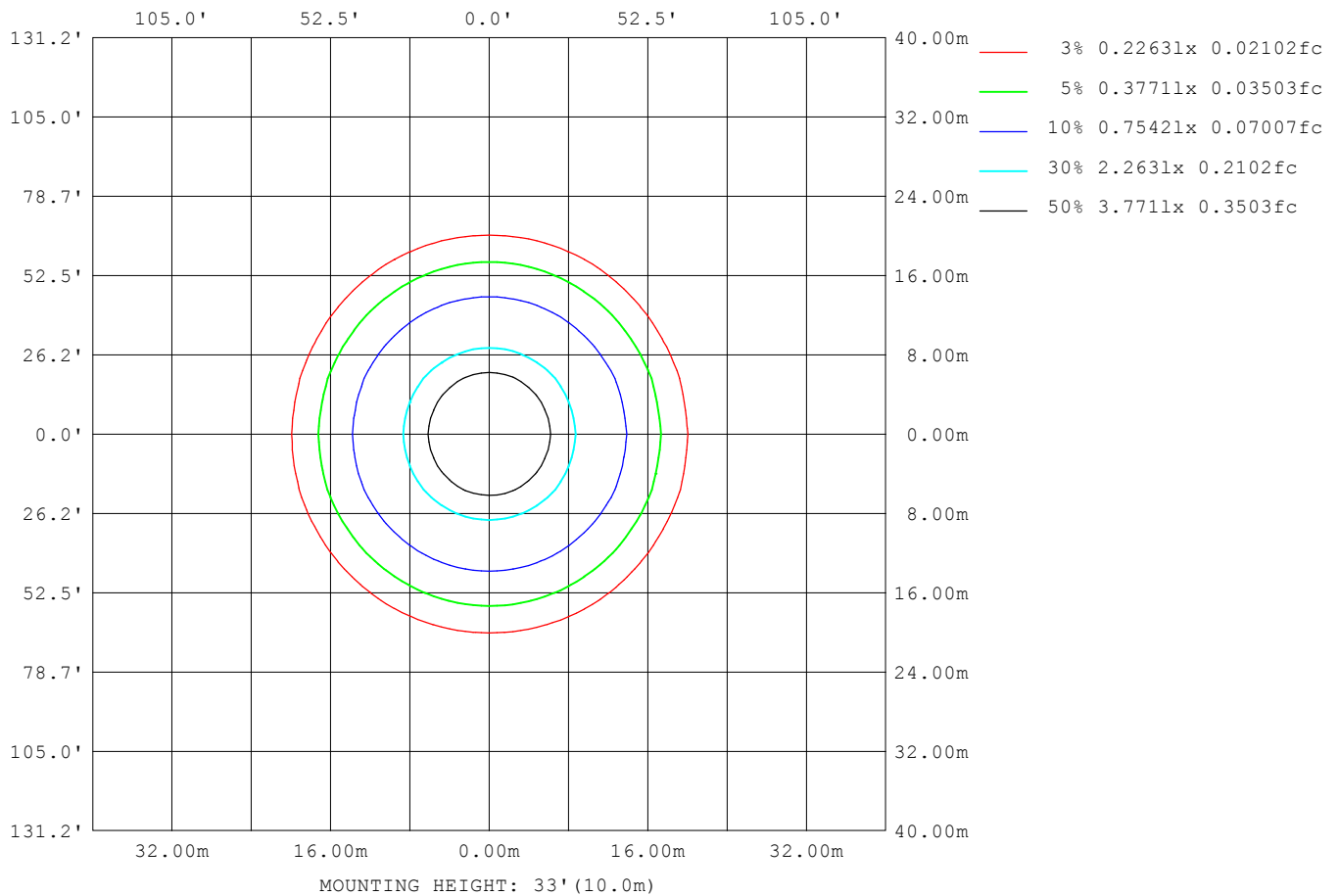
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

H(□) Range:-90 - 90DEG
 H(□) Interval: 1.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2021-11-28

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=1.1133]
 Remarks:

ISOLUX DIAGRAM

Test:U:220.32V I:0.1113A P:24.189W PF:0.9783 Freq:50.00Hz Lamp Flux:1964.63x1 lm		
NAME: GLM-SPL300R-24W	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:2021-11-28

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=1.1133]
Remarks:

LED Avg.L Report

Test:U:220.32V I:0.1113A P:24.189W PF:0.9783 Freq:50.00Hz Lamp Flux:1964.63x1 lm		
NAME: GLM-SPL300R-24W	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.:	SUR.:	Shielding Angle:

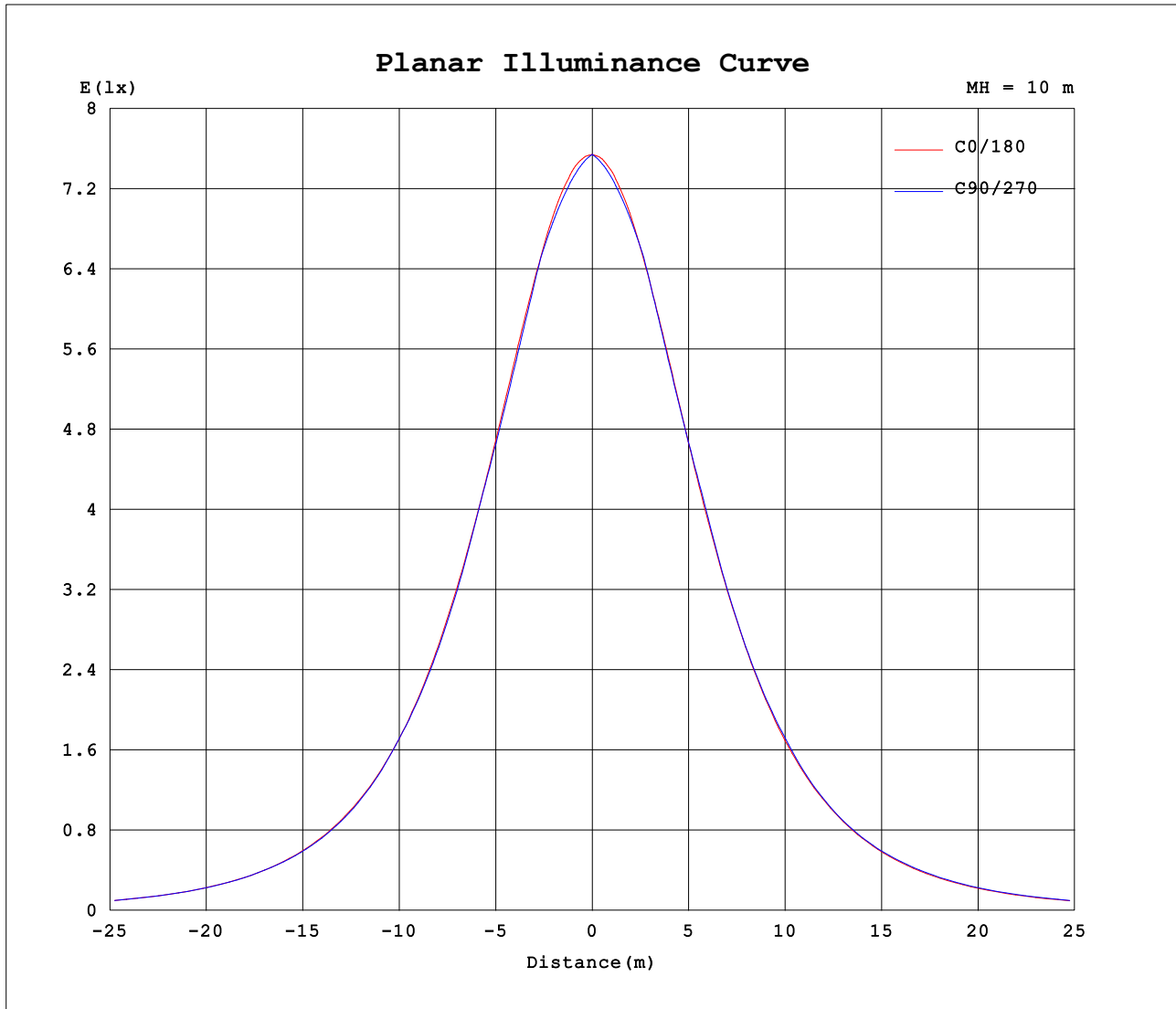
AvgL	cd/m2
L_0~180 (65) av	7816
L_0~180 (75) av	4961
L_0~180 (85) av	0
L_90~270 (65) av	7907
L_90~270 (75) av	5326
L_90~270 (85) av	0
L_45 (65) av	7784
L_45 (75) av	5221
L_45 (85) av	0

Standard: GB/T 29293-2012

H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2021-11-28

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=1.1133]
Remarks:

Planar Illuminance Curve



H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2021-11-28

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=1.1133]
Remarks:

