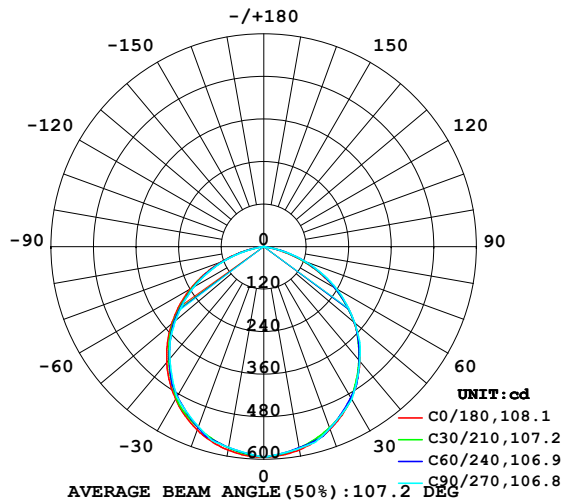


LUMINAIRE PHOTOMETRIC TEST REPORT

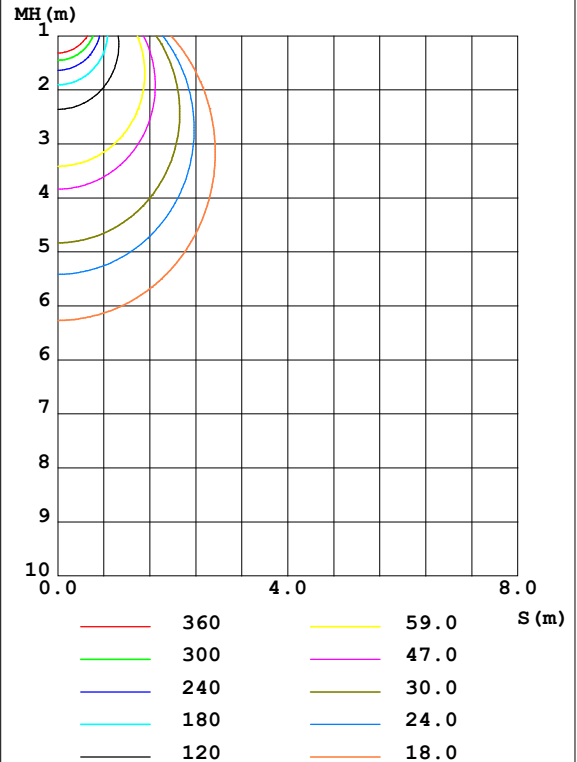
Test:U:220.01V I:0.0988A P:19.062W PF:0.9734 Freq:50.00Hz Lamp Flux:1532.25x1 lm		
NAME: GLM-SPL300R-20W	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 80.38 lm/W			
MODEL		I _{max} (cd)	593.6	S/MH (C0/180)	1.24
NOMINAL POWER (W)		LOR (%)	100.0	S/MH (C90/270)	1.23
RATED VOLTAGE (V)	220	TOTAL FLUX (lm)	1532.2	□ UP, DN (C0-180)	0.0, 50.5
NOMINAL FLUX (lm)	1532.25	CIE CLASS	DIRECT	□ UP, DN (C180-360)	0.0, 49.5
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:2021-11-04

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	581.8	576.0	577.6	576.7	582.3	574.8	574.8	574.3	0- 10	55.67	55.67	3.63,3.63
20	548.0	547.8	545.2	550.8	549.8	546.6	540.2	544.5	10- 20	159.1	214.8	14,14
30	493.8	489.5	496.6	493.3	497.0	487.4	489.8	485.2	20- 30	239.4	454.2	29.6,29.6
40	421.6	422.1	421.2	426.8	426.2	419.2	412.4	416.9	30- 40	285.8	739.9	48.3,48.3
50	332.9	331.1	334.6	338.3	339.3	329.6	325.1	324.9	40- 50	290.8	1031	67.3,67.3
60	230.0	230.2	237.0	239.5	239.4	230.6	227.8	223.8	50- 60	252.7	1283	83.8,83.8
70	116.0	122.0	127.4	133.1	128.9	124.1	118.9	115.5	60- 70	175.6	1459	95.2,95.2
80	7.623	17.33	0	26.90	20.33	19.65	0	12.17	70- 80	71.36	1530	99.9,99.9
90	0	0	0	0	0	0	0	0	80- 90	1.822	1532	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): 887.33 lm

%lum = 57.9%

%lamp = 57.9%

Conical surface Flux(120deg): 1283.5 lm

%lum = 83.8%

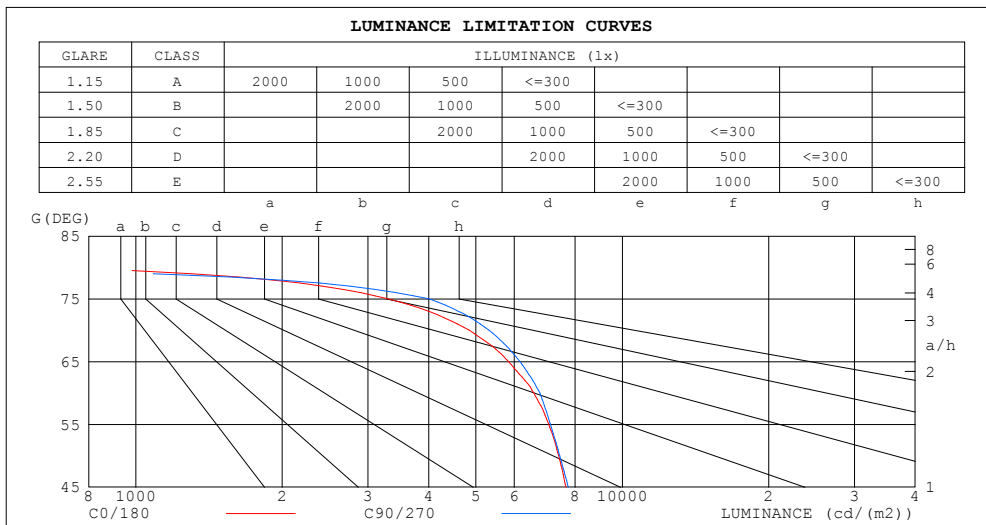
%lamp = 83.8%

H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2021-11-04

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:220.01V I:0.0988A P:19.062W PF:0.9734 Freq:50.00Hz Lamp Flux:1532.25x1 lm		
NAME: GLM-SPL300R-20W	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	0	0
80	627	0
75	3293	4004
70	4843	5320
65	5840	6158
60	6573	6771
55	7058	7118
50	7398	7437
45	7662	7747

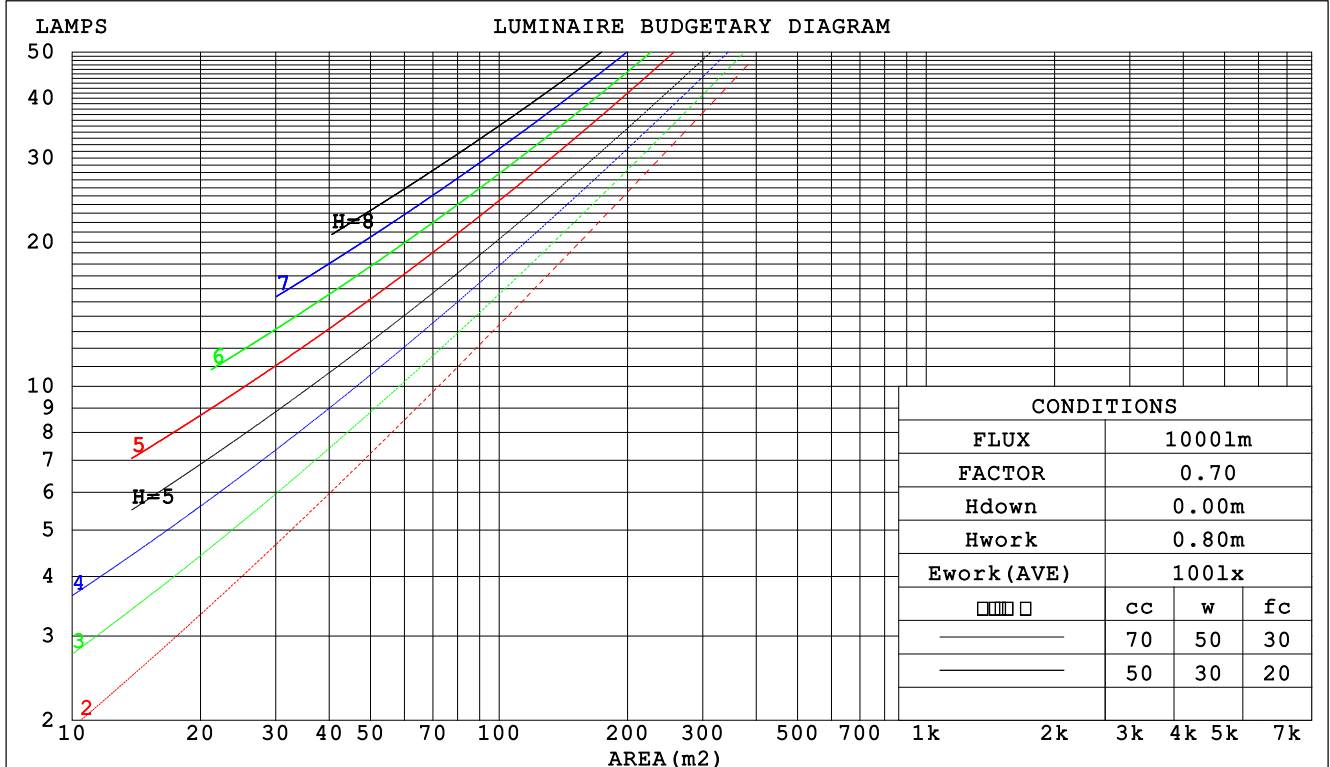
H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2021-11-04

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:220.01V I:0.0988A P:19.062W PF:0.9734 Freq:50.00Hz Lamp Flux:1532.25x1 lm		
NAME: GLM-SPL300R-20W	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															



H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2021-11-04

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:220.01V I:0.0988A P:19.062W PF:0.9734 Freq:50.00Hz Lamp Flux:1532.25x1 lm					
NAME: GLM-SPL300R-20W			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															Wall Exitance Coefficients(WEC)														
0.0																														
1.0	.277	.157	.050	.270	.154	.049	.257	.147	.047	.245	.141	.045	.234	.135	.044															
2.0	.270	.148	.045	.264	.145	.045	.252	.140	.044	.242	.136	.042	.232	.131	.041															
3.0	.254	.135	.041	.249	.133	.040	.239	.129	.039	.229	.126	.039	.221	.122	.038															
4.0	.238	.123	.036	.233	.122	.036	.224	.119	.035	.215	.116	.035	.208	.113	.034															
5.0	.221	.113	.033	.217	.112	.032	.209	.109	.032	.202	.106	.032	.195	.104	.031															
6.0	.207	.104	.030	.203	.102	.030	.196	.100	.029	.189	.098	.029	.183	.096	.029															
7.0	.193	.096	.027	.190	.095	.027	.184	.093	.027	.178	.091	.026	.172	.089	.026															
8.0	.181	.089	.025	.178	.088	.025	.172	.086	.025	.167	.085	.024	.162	.083	.024															
9.0	.170	.082	.023	.168	.082	.023	.162	.080	.023	.158	.079	.023	.153	.078	.022															
10.0	.160	.077	.021	.158	.076	.021	.153	.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	.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	.077	.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	.133	.075	.034	.115	.065	.030	.079	.046	.021	.046	.027	.012	.015	.009	.004	
8.0	.127	.069	.029	.109	.060	.026	.076	.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	

H(☐) Range:-90 - 90DEG
H(☐) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2021-11-04

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:220.01V I:0.0988A P:19.062W PF:0.9734 Freq:50.00Hz Lamp Flux:1532.25x1 lm										
NAME: GLM-SPL300R-20W					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	19.6	21.1	19.9	21.3	21.5	19.7	21.2	20.0	21.4	21.6
3H	20.7	22.0	21.0	22.3	22.5	20.9	22.3	21.2	22.5	22.7
4H	20.9	22.2	21.2	22.5	22.7	21.2	22.5	21.6	22.8	23.0
6H	20.9	22.1	21.2	22.4	22.7	21.2	22.4	21.6	22.7	23.0
8H	20.9	22.0	21.2	22.3	22.6	21.2	22.3	21.5	22.6	22.9
12H	20.8	21.9	21.2	22.2	22.5	21.1	22.2	21.5	22.5	22.8
4H 2H	20.1	21.4	20.4	21.7	21.9	20.2	21.5	20.5	21.8	22.0
3H	21.4	22.5	21.7	22.8	23.1	21.6	22.7	21.9	23.0	23.3
4H	21.7	22.7	22.0	23.0	23.3	22.0	23.0	22.3	23.3	23.6
6H	21.7	22.6	22.1	22.9	23.3	22.0	22.9	22.4	23.2	23.6
8H	21.6	22.5	22.0	22.8	23.2	21.9	22.8	22.3	23.1	23.5
12H	21.6	22.3	22.0	22.7	23.1	21.9	22.6	22.3	23.0	23.4
8H 4H	21.8	22.6	22.2	22.9	23.3	22.0	22.9	22.4	23.2	23.6
6H	21.8	22.5	22.2	22.9	23.3	22.1	22.8	22.5	23.2	23.6
8H	21.8	22.4	22.2	22.8	23.2	22.0	22.6	22.5	23.1	23.5
12H	21.7	22.2	22.2	22.7	23.2	22.0	22.5	22.5	23.0	23.4
12H 4H	21.7	22.5	22.1	22.9	23.3	22.0	22.8	22.4	23.1	23.5
6H	21.8	22.4	22.2	22.8	23.2	22.0	22.6	22.5	23.1	23.5
8H	21.7	22.2	22.2	22.7	23.2	22.0	22.5	22.5	23.0	23.4
Variations with the observer position at spacings:										
S = 1.0H	+ 0.2 / - 0.3					+ 0.3 / - 0.3				
1.5H	+ 0.3 / - 0.4					+ 0.2 / - 0.4				
2.0H	+ 0.4 / - 0.4					+ 0.4 / - 0.4				

CIE Pub.117, 1532 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 1.5$)

H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2021-11-04

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:220.01V I:0.0988A P:19.062W PF:0.9734 Freq:50.00Hz Lamp Flux:1532.25x1 lm		
NAME: GLM-SPL300R-20W	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

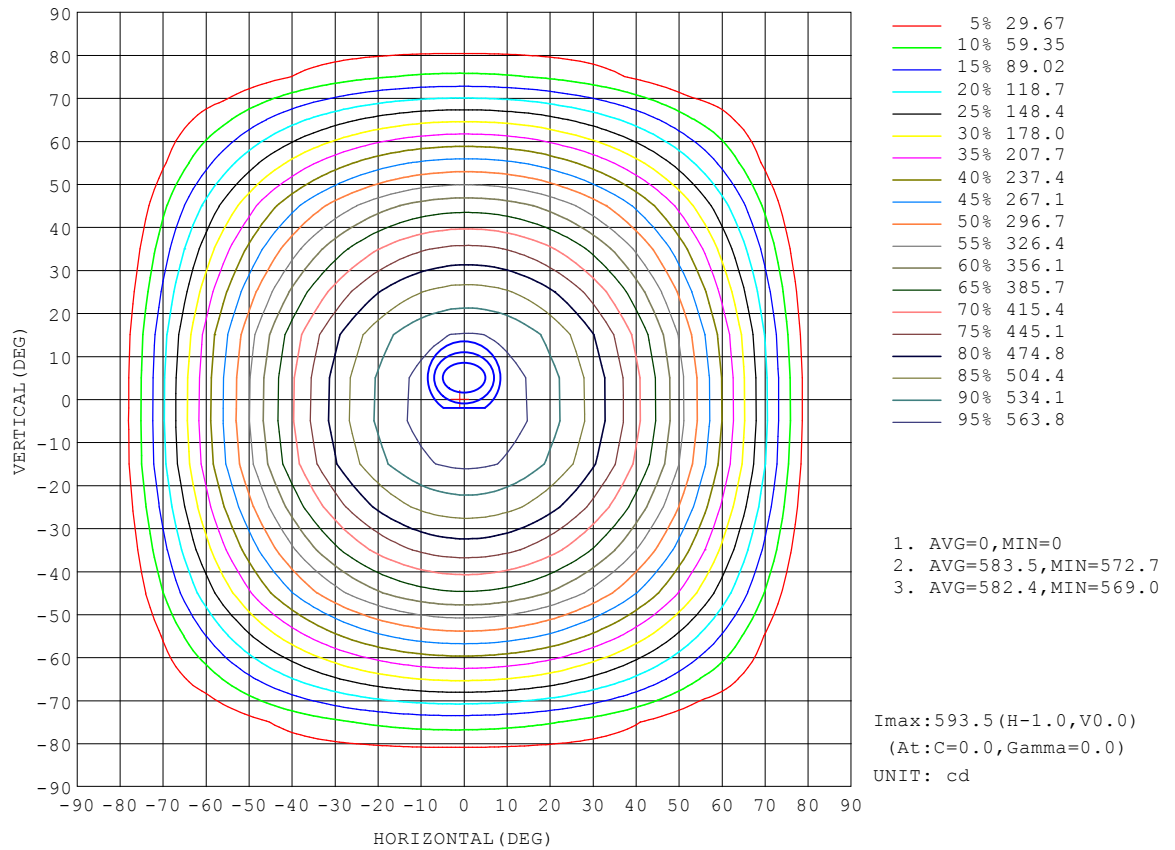
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	59	48	41	59	48	41	58	47	41	35
0.80	70	59	51	69	58	51	67	57	51	44
1.00	78	68	61	77	67	61	75	68	60	53
1.25	85	76	69	84	75	68	81	73	68	61
1.50	90	81	75	89	80	74	86	79	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	89
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:2021-11-04

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:220.01V I:0.0988A P:19.062W PF:0.9734 Freq:50.00Hz Lamp Flux:1532.25x1 lm		
NAME: GLM-SPL300R-20W	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

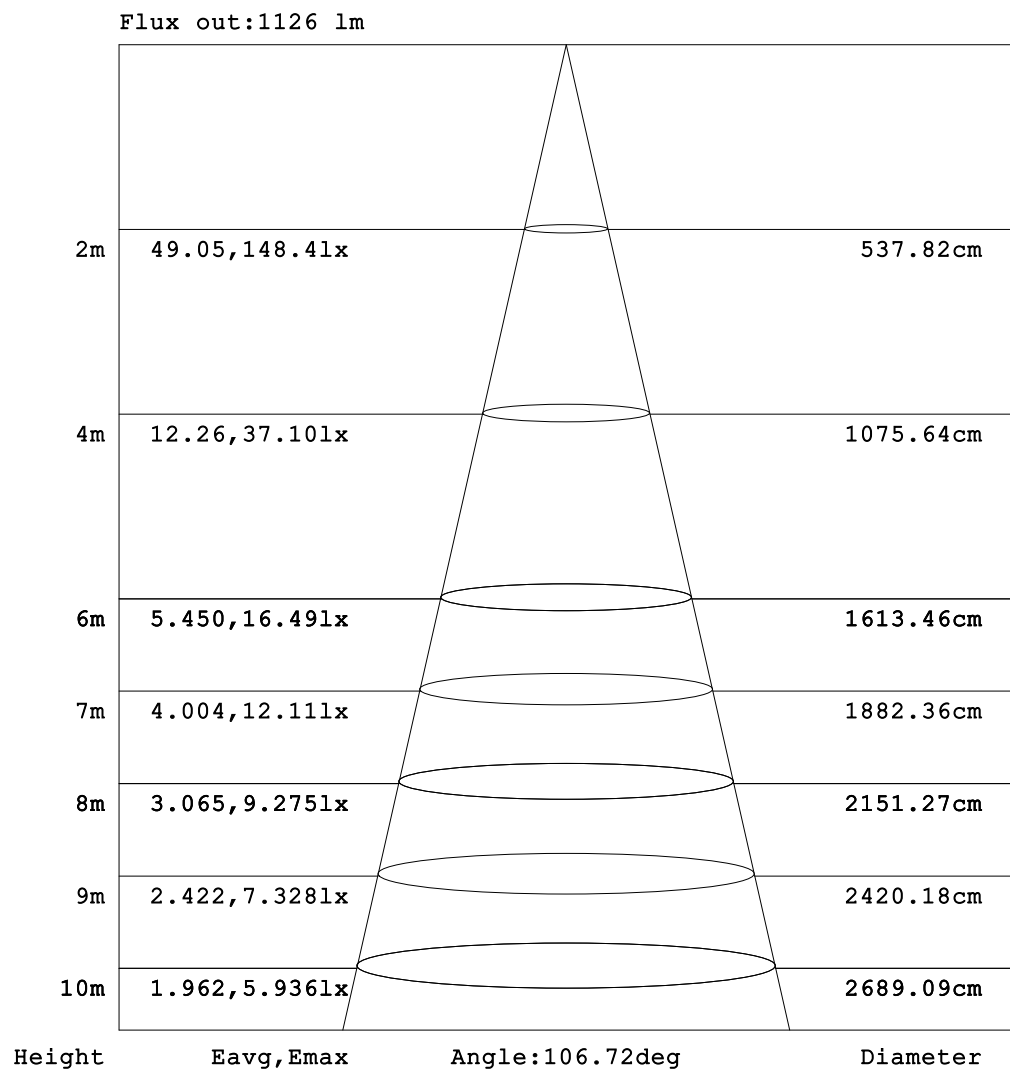


H(□) Range:-90 - 90DEG
 H(□) Interval: 1.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:
 Test Date:2021-11-04

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:220.01V I:0.0988A P:19.062W PF:0.9734 Freq:50.00Hz Lamp Flux:1532.25x1 lm		
NAME: GLM-SPL300R-20W	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



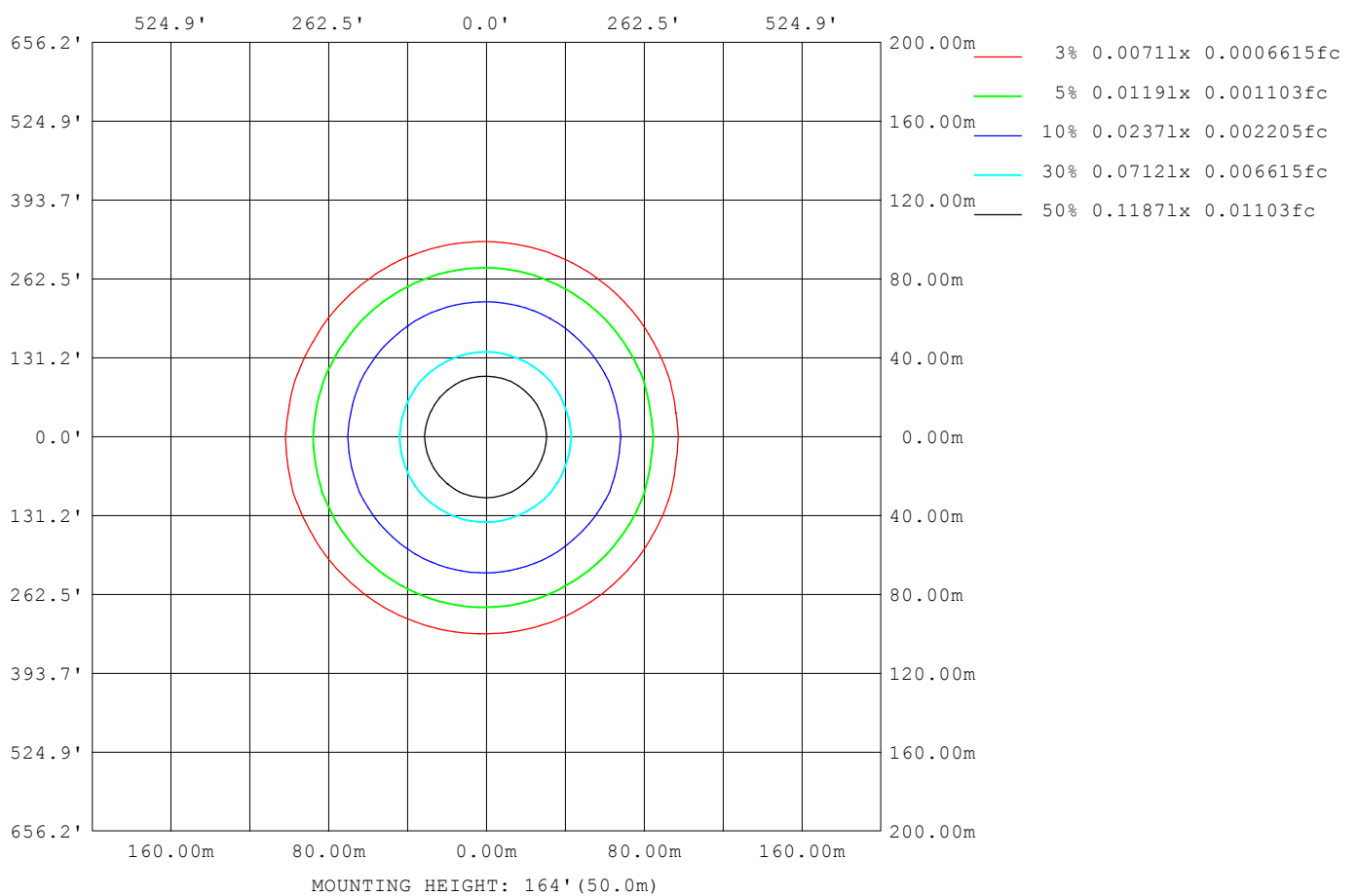
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2021-11-04

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:220.01V I:0.0988A P:19.062W PF:0.9734 Freq:50.00Hz Lamp Flux:1532.25x1 lm		
NAME: GLM-SPL300R-20W	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:2021-11-04

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:220.01V I:0.0988A P:19.062W PF:0.9734 Freq:50.00Hz Lamp Flux:1532.25x1 lm		
NAME: GLM-SPL300R-20W	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

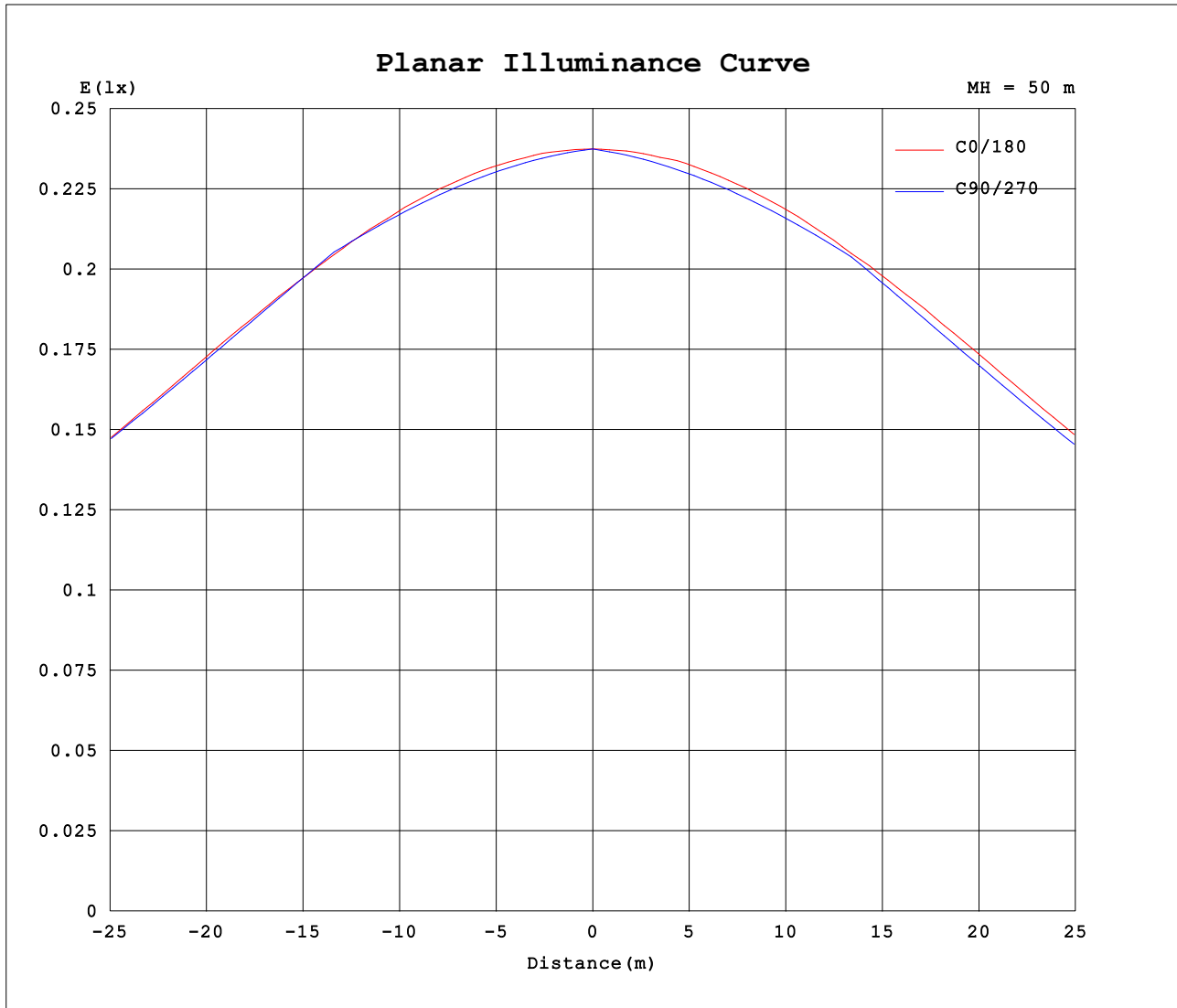
AvgL	cd/m2
L_0~180 (65) av	6047
L_0~180 (75) av	3648
L_0~180 (85) av	0
L_90~270 (65) av	6009
L_90~270 (75) av	3779
L_90~270 (85) av	0
L_45 (65) av	6001
L_45 (75) av	3824
L_45 (85) av	0

Standard: GB/T 29293-2012

H(□) Range:-90 - 90DEG
H(□) Interval: 1.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2021-11-04

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:2021-11-04

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:

