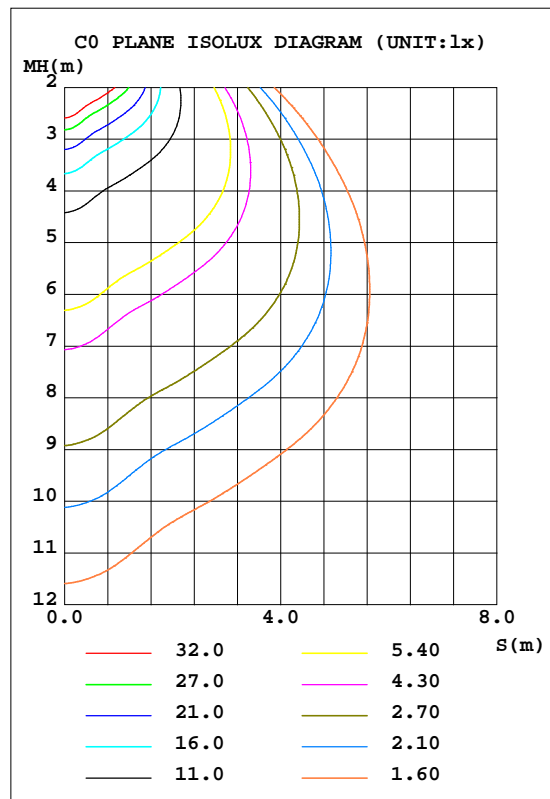
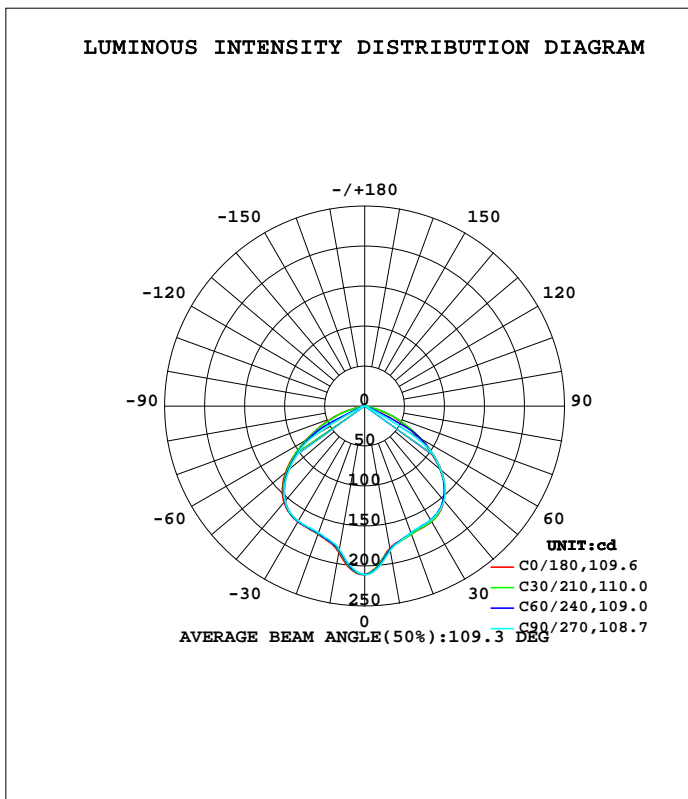


**LUMINAIRE PHOTOMETRIC TEST REPORT**

Test:U:11.830V I:0.6985A P:6.2979W PF:0.7622 Freq:60.00Hz Lamp Flux:503.273x1 lm		
NAME: 486767-MR16-6W-2700K-120°	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:35mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 79.91 lm/W
MODEL		I <sub>max</sub> (cd)	210.8	S/MH(C0/180)	1.20	
NOMINAL POWER(W)	--	LOR(%)	100.0	S/MH(C90/270)	1.19	
RATED VOLTAGE(V)	--	TOTAL FLUX(lm)	503.27	η UP, DN(C0-180)	0.0,49.9	
NOMINAL FLUX(lm)	503.273	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0,50.1	
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.25	
TEST VOLTAGE(V)	--	η down(%)	100.0	CIBSE SHR MAX	1.35	



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2022-06-01

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-3000H\_V1 SYSTEM V2.00.411  
 Humidity:65.0%  
 Test Distance:9.000m [K=1.0000]  
 Remarks:

**ZONAL FLUX DIAGRAM**

**ZONAL FLUX DIAGRAM:**

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum,lamp
10	180.8	183.3	183.7	185.1	186.4	182.9	182.1	180.6	0- 10	18.61	18.61	3.7,3.7
20	170.0	170.0	169.1	170.2	170.7	169.6	168.7	168.8	10- 20	49.34	67.94	13.5,13.5
30	167.0	165.6	165.1	165.9	167.2	166.3	165.9	165.8	20- 30	77.51	145.5	28.9,28.9
40	154.2	153.5	154.5	153.9	157.1	153.8	154.7	153.3	30- 40	101.4	246.8	49,49
50	123.1	125.5	124.6	125.7	129.1	124.6	122.9	123.3	40- 50	109.0	355.8	70.7,70.7
60	77.87	81.84	52.51	82.22	84.64	80.34	65.90	77.68	50- 60	91.88	447.7	89,89
70	36.24	25.93	4.745	22.37	40.89	19.86	4.444	35.70	60- 70	44.92	492.6	97.9,97.9
80	2.347	1.265	0.4394	1.136	3.962	1.204	0.1931	1.488	70- 80	10.21	502.8	99.9,99.9
90	0.0408	0.0207	0	0.0083	0.1013	0.0754	0.0448	0.0820	80- 90	0.4709	503.3	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): 301.77 lm

%lum = 60.0%  
%lamp = 60.0%

Conical surface Flux(120deg): 447.67 lm

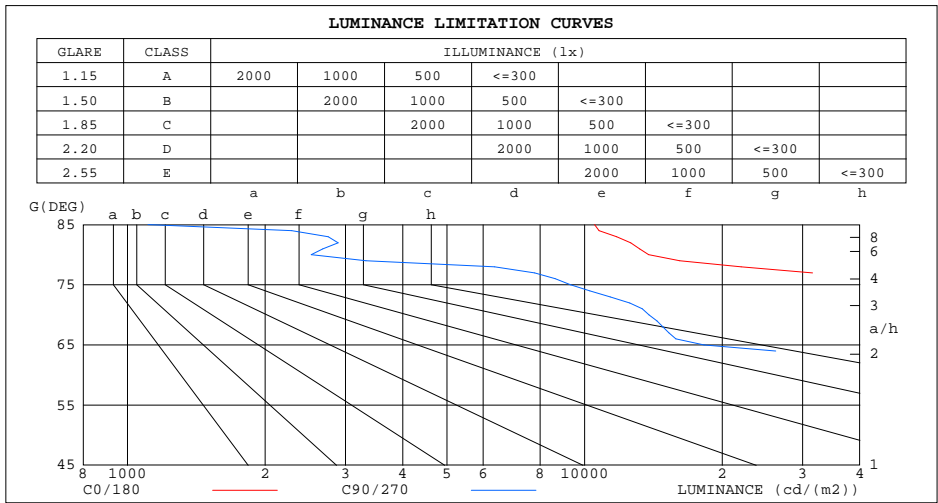
%lum = 89.0%  
%lamp = 89.0%

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2022-06-01

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-3000H\_V1 SYSTEM V2.00.411  
Humidity:65.0%  
Test Distance:9.000m [K=1.0000]  
Remarks:

**LUMINANCE LIMITATION CURVES**

Test:U:11.830V I:0.6985A P:6.2979W PF:0.7622 Freq:60.00Hz Lamp Flux:503.273x1 lm		
NAME: 486767-MR16-6W-2700K-120°	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:35mm	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	10513	1108
80	13806	2523
75	56443	9323
70	108252	13829
65	134996	18242
60	159094	104686
55	179990	179983
50	195601	193218
45	203459	200401

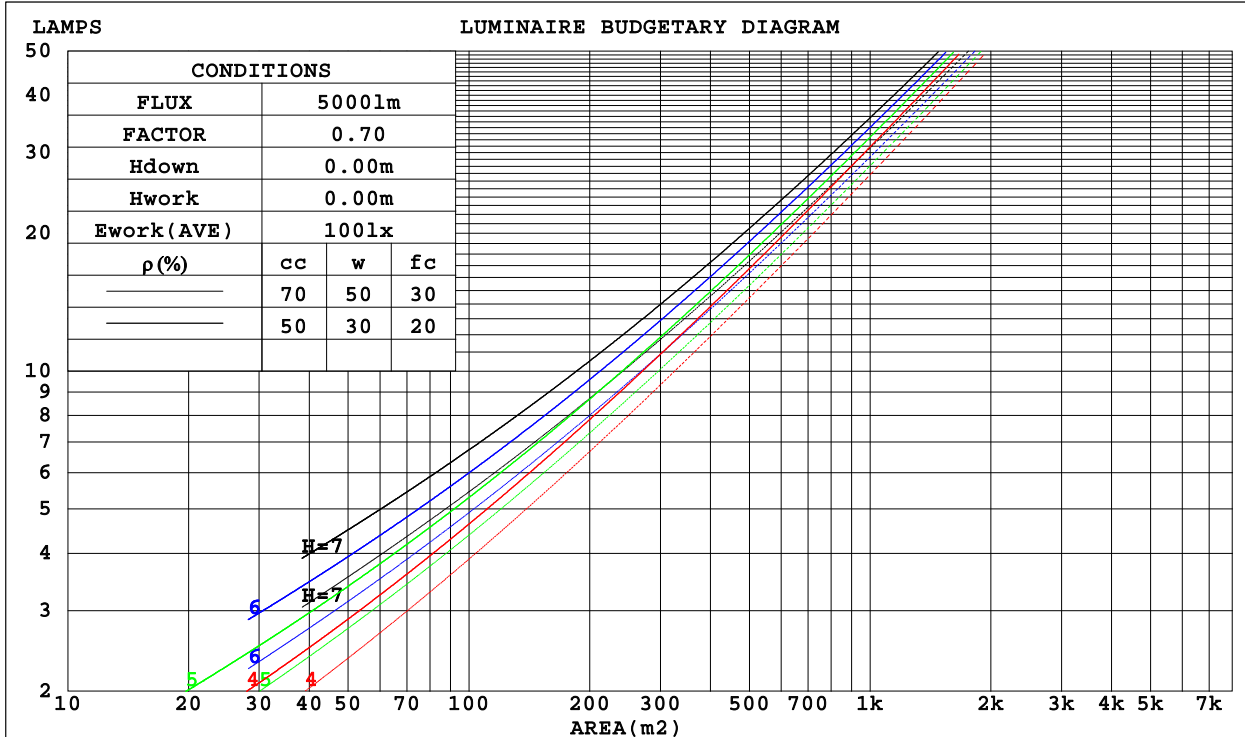
C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2022-06-01

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-3000H\_V1 SYSTEM V2.00.411  
 Humidity:65.0%  
 Test Distance:9.000m [K=1.0000]  
 Remarks:

**CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM**

Test:U:11.830V I:0.6985A P:6.2979W PF:0.7622 Freq:60.00Hz Lamp Flux:503.273x1 lm		
NAME: 486767-MR16-6W-2700K-120°	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:35mm	Shielding Angle:

ρ <sub>cc</sub>	80%			70%			50%			30%			10%			0
ρ <sub>w</sub>	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ <sub>fc</sub>	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	.00
1.0	1.06	1.03	.00	1.04	1.01	.98	1.00	.97	.95	.96	.94	.92	.93	.91	.89	.87
2.0	.94	.88	.83	.92	.87	.82	.89	.84	.80	.86	.82	.78	.83	.79	.77	.75
3.0	.83	.76	.70	.82	.75	.69	.79	.73	.68	.76	.71	.67	.74	.69	.66	.64
4.0	.74	.66	.60	.73	.65	.59	.70	.64	.58	.68	.62	.58	.66	.61	.57	.55
5.0	.66	.58	.51	.65	.57	.51	.63	.56	.51	.61	.55	.50	.59	.54	.50	.48
6.0	.60	.51	.45	.59	.51	.45	.57	.50	.44	.55	.49	.44	.54	.48	.44	.42
7.0	.54	.46	.40	.53	.45	.39	.52	.44	.39	.50	.44	.39	.49	.43	.39	.37
8.0	.49	.41	.35	.49	.41	.35	.47	.40	.35	.46	.39	.35	.45	.39	.34	.33
9.0	.45	.37	.32	.44	.37	.32	.43	.36	.31	.42	.36	.31	.41	.35	.31	.29
10.0	.42	.34	.29	.41	.34	.29	.40	.33	.28	.39	.33	.28	.38	.32	.28	.26



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2022-06-01

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-3000H\_V1 SYSTEM V2.00.411  
 Humidity:65.0%  
 Test Distance:9.000m [K=1.0000]  
 Remarks:

WEC AND CCEC

Test:U:11.830V I:0.6985A P:6.2979W PF:0.7622 Freq:60.00Hz Lamp Flux:503.273x1 lm		
NAME: 486767-MR16-6W-2700K-120°	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:35mm	Shielding Angle:

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.261	.148	.047	.254	.145	.046	.241	.138	.044	.229	.132	.042	.218	.126	.041	
2.0	.257	.141	.043	.251	.138	.043	.240	.133	.041	.229	.128	.040	.219	.124	.039	
3.0	.245	.130	.039	.240	.128	.039	.230	.124	.038	.220	.121	.037	.212	.117	.036	
4.0	.231	.120	.035	.226	.118	.035	.217	.115	.034	.209	.112	.034	.201	.109	.033	
5.0	.217	.111	.032	.213	.109	.032	.205	.107	.031	.197	.104	.031	.190	.102	.031	
6.0	.203	.102	.029	.200	.101	.029	.193	.099	.029	.186	.097	.028	.180	.095	.028	
7.0	.191	.094	.027	.188	.094	.027	.181	.092	.026	.175	.090	.026	.170	.088	.026	
8.0	.180	.088	.025	.177	.087	.025	.171	.085	.024	.166	.084	.024	.161	.082	.024	
9.0	.169	.082	.023	.167	.081	.023	.161	.080	.023	.157	.079	.022	.152	.077	.022	
10.0	.160	.077	.021	.157	.076	.021	.153	.075	.021	.148	.074	.021	.144	.073	.021	

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	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	.157	.138	.151	.134	.119	.104	.092	.082	.060	.053	.048	.019	.017	.015	
2.0	.168	.132	.102	.144	.114	.088	.098	.079	.062	.057	.046	.036	.018	.015	.012	
3.0	.160	.114	.078	.137	.098	.067	.094	.068	.047	.054	.040	.028	.017	.013	.009	
4.0	.152	.101	.061	.131	.087	.053	.090	.061	.037	.052	.035	.022	.017	.012	.007	
5.0	.145	.090	.049	.125	.078	.043	.086	.054	.030	.050	.032	.018	.016	.010	.006	
6.0	.139	.082	.041	.119	.071	.035	.082	.049	.025	.048	.029	.015	.015	.010	.005	
7.0	.132	.075	.034	.114	.065	.030	.079	.045	.021	.046	.027	.013	.015	.009	.004	
8.0	.126	.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	.010	.014	.008	.003	
10.0	.115	.060	.023	.099	.052	.020	.069	.037	.014	.040	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2022-06-01

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-3000H\_V1 SYSTEM V2.00.411  
Humidity:65.0%  
Test Distance:9.000m [K=1.0000]  
Remarks:

**UGR(Unified Glare Rating) Table**

Test:U:11.830V I:0.6985A P:6.2979W PF:0.7622 Freq:60.00Hz Lamp Flux:503.273x1 lm										
NAME: 486767-MR16-6W-2700K-120°					TYPE:			WEIGHT:		
SPEC.:					DIM.:			SERIAL No.:		
MFR.:					SUR.:35mm			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	31.2	32.7	31.5	32.9	33.1	30.6	32.0	30.8	32.2	32.4
3H	32.1	33.4	32.4	33.7	33.9	30.4	31.7	30.7	31.9	32.2
4H	32.2	33.5	32.5	33.7	34.0	30.3	31.5	30.6	31.8	32.0
6H	32.1	33.3	32.5	33.6	33.8	30.2	31.4	30.5	31.6	31.9
8H	32.1	33.2	32.4	33.5	33.8	30.1	31.3	30.5	31.5	31.8
12H	32.0	33.1	32.4	33.4	33.7	30.1	31.2	30.4	31.5	31.8
4H 2H	31.6	32.9	31.9	33.1	33.4	31.0	32.3	31.3	32.5	32.8
3H	32.6	33.7	33.0	34.0	34.3	30.9	31.9	31.2	32.2	32.5
4H	32.8	33.7	33.1	34.0	34.4	30.8	31.7	31.1	32.1	32.4
6H	32.7	33.5	33.1	33.9	34.2	30.7	31.5	31.1	31.9	32.2
8H	32.6	33.4	33.1	33.8	34.2	30.6	31.4	31.1	31.8	32.2
12H	32.6	33.3	33.0	33.7	34.1	30.6	31.3	31.0	31.7	32.1
8H 4H	32.6	33.4	33.0	33.8	34.2	30.7	31.5	31.2	31.9	32.3
6H	32.6	33.2	33.0	33.6	34.1	30.7	31.3	31.1	31.7	32.1
8H	32.5	33.1	33.0	33.5	34.0	30.6	31.2	31.1	31.6	32.1
12H	32.5	33.0	33.0	33.4	33.9	30.6	31.1	31.1	31.5	32.0
12H 4H	32.6	33.3	33.0	33.7	34.1	30.7	31.4	31.1	31.8	32.2
6H	32.5	33.1	33.0	33.5	34.0	30.6	31.2	31.1	31.6	32.1
8H	32.5	33.0	33.0	33.4	33.9	30.6	31.1	31.1	31.5	32.0
Variations with the observer position at spacings:										
S = 1.0H	+ 0.4 / - 0.5					+ 0.2 / - 0.3				
1.5H	+ 0.3 / - 0.7					+ 1.0 / - 1.8				
2.0H	+ 0.6 / - 0.9					+ 1.2 / - 2.9				

CIE Pub.117, 503.3 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = -2.4)  
Area: 0.001 m2

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2022-06-01

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-3000H\_V1 SYSTEM V2.00.411  
Humidity:65.0%  
Test Distance:9.000m [K=1.0000]  
Remarks:

**UTILIZATION FACTORS TABLE**

Test:U:11.830V I:0.6985A P:6.2979W PF:0.7622 Freq:60.00Hz Lamp Flux:503.273x1 lm		
NAME: 486767-MR16-6W-2700K-120°	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:35mm	Shielding Angle:

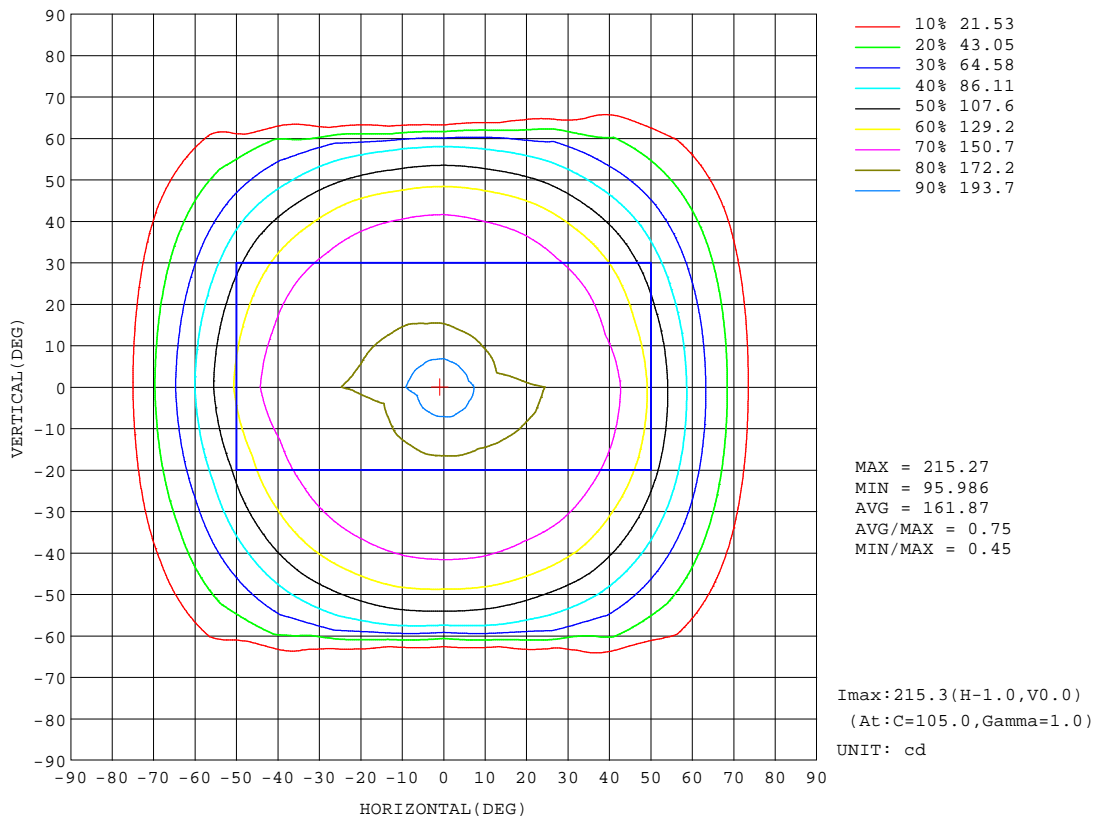
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	59	48	41	58	47	41	57	47	41	34
0.80	70	59	52	69	59	52	67	58	51	45
1.00	79	69	62	78	68	62	76	70	61	55
1.25	87	77	71	85	77	70	83	75	70	63
1.50	92	83	77	90	82	76	87	80	75	68
2.00	98	91	85	97	90	84	93	88	83	76
2.50	102	95	90	100	94	89	96	91	87	79
3.00	105	99	94	103	97	93	99	95	91	83
4.00	108	103	99	106	102	98	102	98	95	87
5.00	110	106	103	108	104	101	104	101	98	89
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2022-06-01

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-3000H\_V1 SYSTEM V2.00.411  
 Humidity:65.0%  
 Test Distance:9.000m [K=1.0000]  
 Remarks:

**ISOCANDELA DIAGRAM**

Test:U:11.830V I:0.6985A P:6.2979W PF:0.7622 Freq:60.00Hz Lamp Flux:503.273x1 lm		
NAME: 486767-MR16-6W-2700K-120°	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:35mm	Shielding Angle:



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2022-06-01

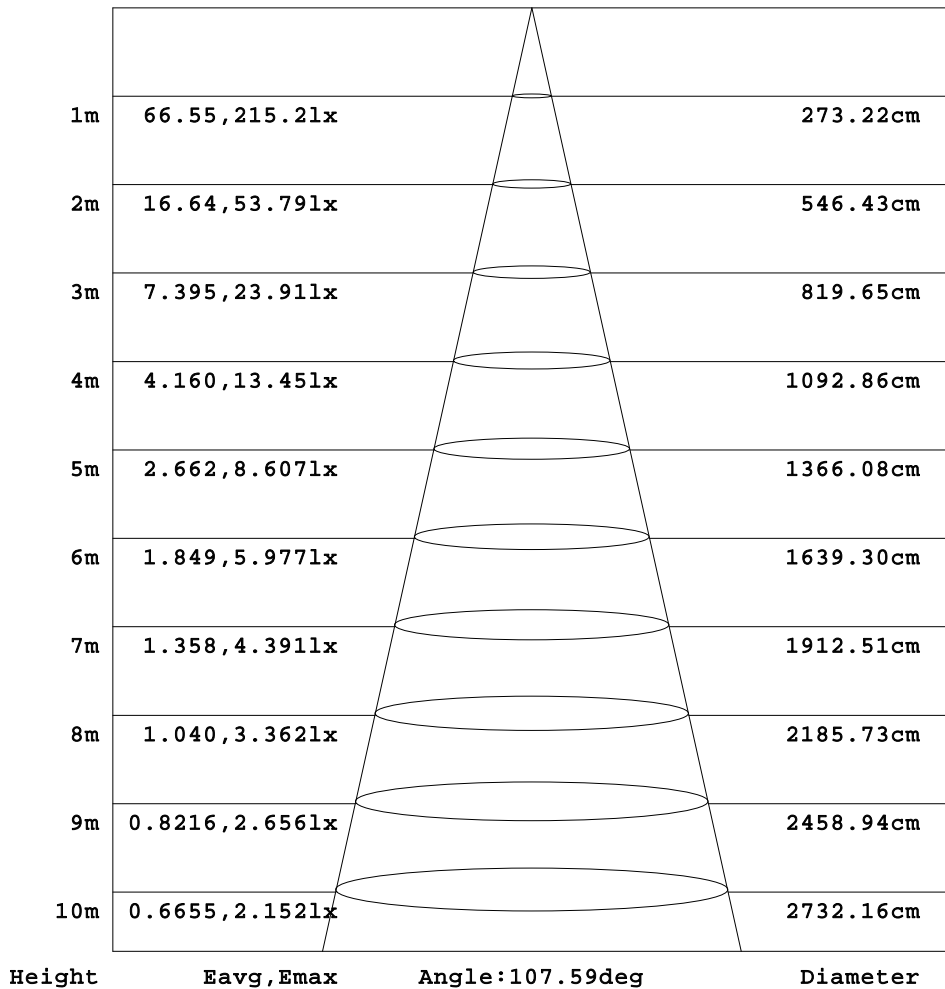
γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-3000H\_V1 SYSTEM V2.00.411  
Humidity:65.0%  
Test Distance:9.000m [K=1.0000]  
Remarks:



**AAI Figure**

Test:U:11.830V I:0.6985A P:6.2979W PF:0.7622 Freq:60.00Hz Lamp Flux:503.273x1 lm		
NAME: 486767-MR16-6W-2700K-120°	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:35mm	Shielding Angle:

Flux out:396.1 lm



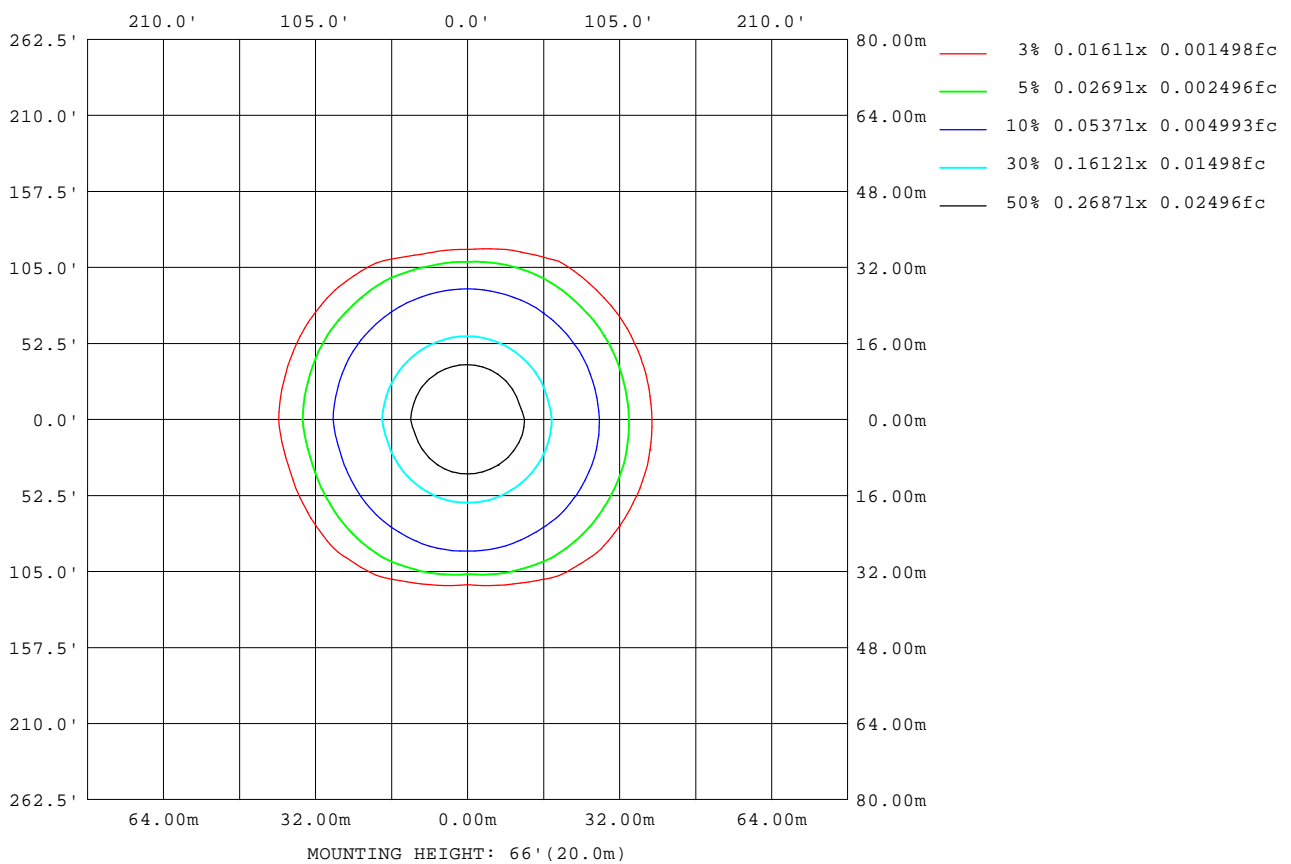
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2022-06-01

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-3000H\_V1 SYSTEM V2.00.411  
Humidity:65.0%  
Test Distance:9.000m [K=1.0000]  
Remarks:

**ISOLUX DIAGRAM**

Test:U:11.830V I:0.6985A P:6.2979W PF:0.7622 Freq:60.00Hz Lamp Flux:503.273x1 lm		
NAME: 486767-MR16-6W-2700K-120°	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:35mm	Shielding Angle:



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2022-06-01

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-3000H\_V1 SYSTEM V2.00.411  
 Humidity:65.0%  
 Test Distance:9.000m [K=1.0000]  
 Remarks:

LED Avg.L Report

Test:U:11.830V I:0.6985A P:6.2979W PF:0.7622 Freq:60.00Hz Lamp Flux:503.273x1 lm		
NAME: 486767-MR16-6W-2700K-120°	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:35mm	Shielding Angle:

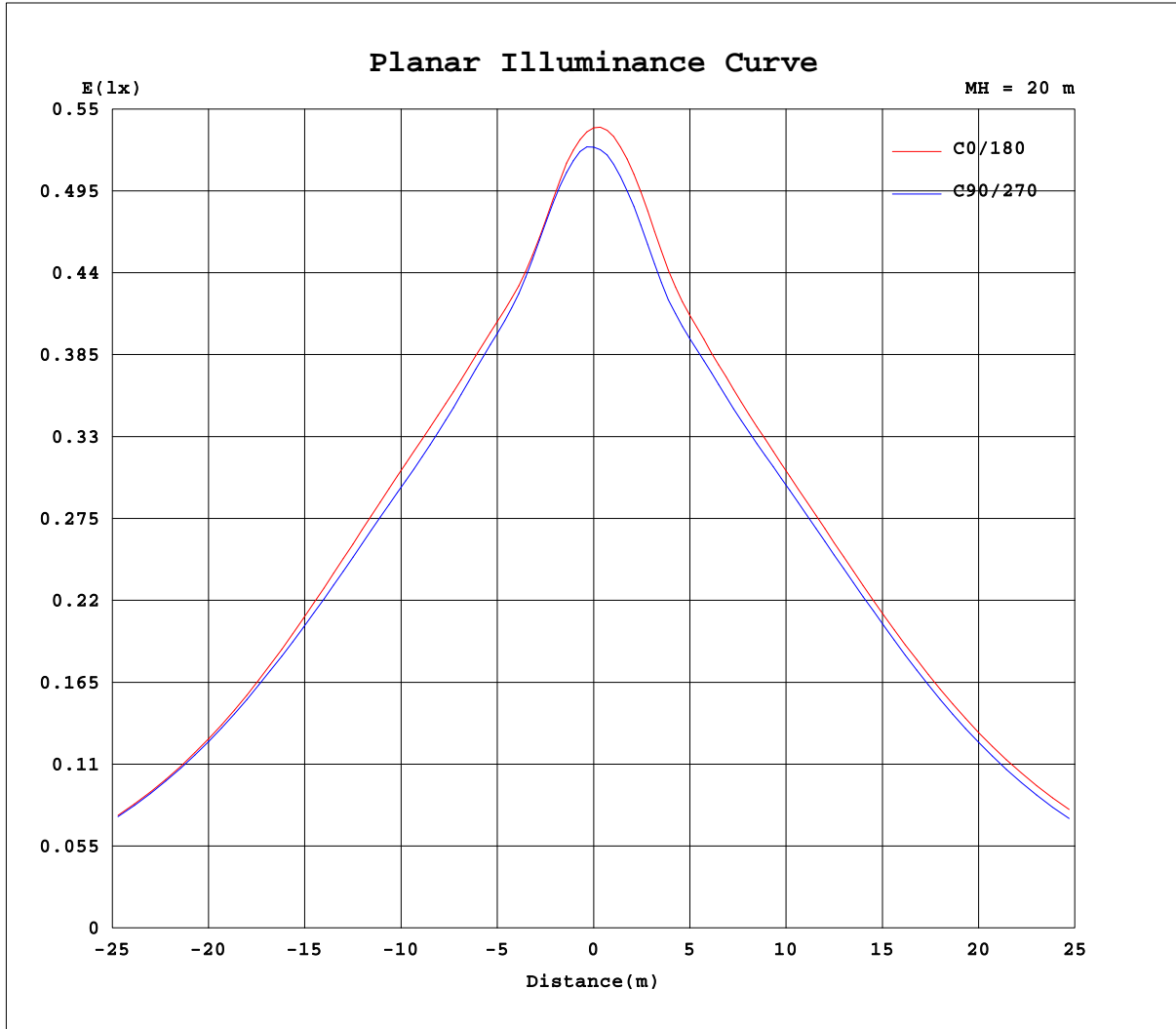
AvgL	cd/m2
L_0~180(65)av	139359
L_0~180(75)av	68377
L_0~180(85)av	13560
L_90~270(65)av	20068
L_90~270(75)av	9265
L_90~270(85)av	676
L_45(65)av	136391
L_45(75)av	12791
L_45(85)av	1403

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2022-06-01

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-3000H\_V1 SYSTEM V2.00.411  
Humidity:65.0%  
Test Distance:9.000m [K=1.0000]  
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: DAMIN  
Test Date: 2022-06-01

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-3000H\_V1 SYSTEM V2.00.411  
Humidity: 65.0%  
Test Distance: 9.000m [K=1.0000]  
Remarks:



**LUMINOUS DISTRIBUTION INTENSITY DATA**

Test:U:11.830V I:0.6985A P:6.2979W PF:0.7622 Freq:60.00Hz Lamp Flux:503.273x1 lm		
NAME: 486767-MR16-6W-2700K-120°	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:35mm	Shielding Angle:

Table--2

UNIT: cd

C(DEC) γ (DEC)	285	300	315	330	345													
0	210	210	210	210	210													
5	200	201	200	201	201													
10	181	181	181	182	182													
15	173	173	173	173	173													
20	169	169	169	169	169													
25	167	167	167	167	167													
30	166	166	166	166	166													
35	163	163	162	163	162													
40	154	154	153	154	154													
45	141	141	140	142	142													
50	123	124	123	125	124													
55	100	102	102	103	103													
60	75.0	78.5	77.7	79.3	79.4													
65	18.2	48.1	55.2	57.0	57.4													
70	4.32	5.45	35.7	36.8	38.1													
75	2.45	2.70	3.60	16.1	16.9													
80	0.19	0.70	1.49	2.18	2.53													
85	0.06	0.09	0.10	0.13	1.00													
90	0.05	0.06	0.08	0.09	0.11													

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DAMIN  
Test Date:2022-06-01

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-3000H\_V1 SYSTEM V2.00.411  
Humidity:65.0%  
Test Distance:9.000m [K=1.0000]  
Remarks: