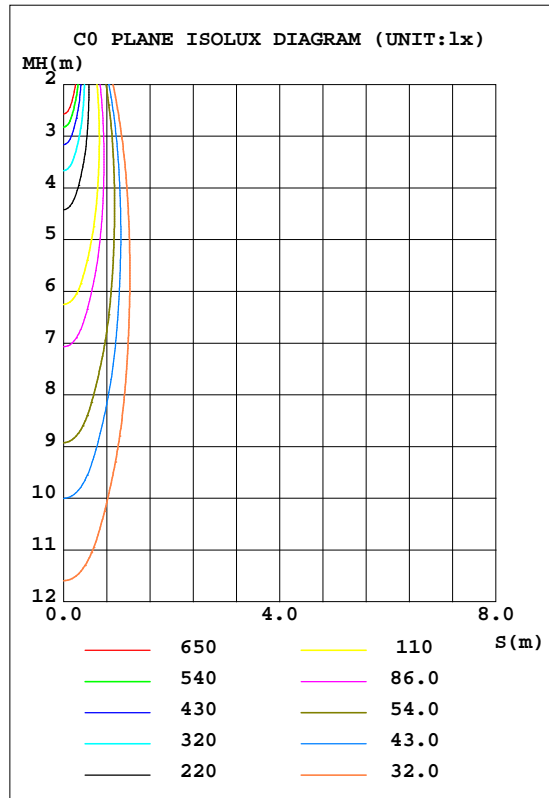
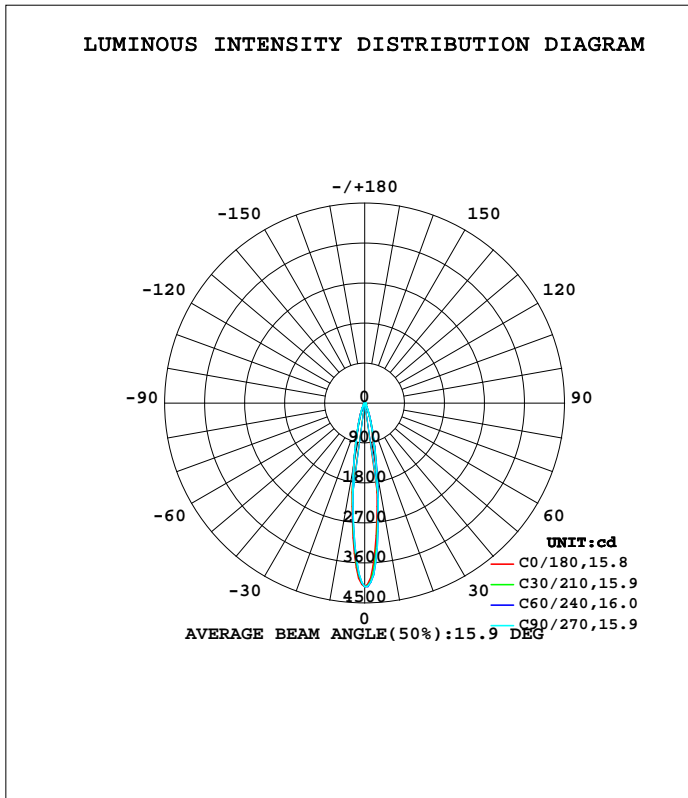


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:11.801V I:0.7123A P:6.4274W PF:0.7646 Freq:60.00Hz Lamp Flux:580.005x1 lm		
NAME: 486768-MR16-6W-3000K-15°	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:35mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 90.24 lm/W
MODEL		I _{max} (cd)	4131	S/MH(C0/180)		0.27
NOMINAL POWER(W)	--	LOR(%)	100.0	S/MH(C90/270)		0.26
RATED VOLTAGE(V)	--	TOTAL FLUX(lm)	580.00	η UP,DN(C0-180)		0.0,51.2
NOMINAL FLUX(lm)	580.005	CIE CLASS	DIRECT	η UP,DN(C180-360)		0.0,48.8
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM		0.00
TEST VOLTAGE(V)	--	η down(%)	100.0	CIBSE SHR MAX		1.00



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:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	1497	1610	1589	1466	1462	1416	1427	1515	0- 10	238.8	238.8	41.2,41.2
20	318.9	348.8	342.8	326.0	304.1	283.8	313.1	323.3	10- 20	197.9	436.6	75.3,75.3
30	78.91	86.70	90.50	86.61	76.18	72.62	78.90	79.68	20- 30	76.98	513.6	88.6,88.6
40	26.64	28.04	30.64	29.81	26.18	26.88	26.27	26.70	30- 40	29.99	543.6	93.7,93.7
50	15.27	15.46	16.44	16.73	14.97	15.65	15.07	15.60	40- 50	15.96	559.6	96.5,96.5
60	9.331	9.378	9.376	9.790	9.141	9.242	8.523	9.469	50- 60	10.98	570.5	98.4,98.4
70	5.394	4.897	3.075	5.042	5.352	4.673	3.173	5.267	60- 70	6.802	577.3	99.5,99.5
80	1.941	0.2428	0.0292	0.2003	2.009	0.1665	0.0291	0.3671	70- 80	2.468	579.8	100,100
90	0	0	0	0	0	0	0	0.0015	80- 90	0.1995	580.0	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): 552.34 lm

%lum = 95.2%
%lamp = 95.2%

Conical surface Flux(120deg): 570.53 lm

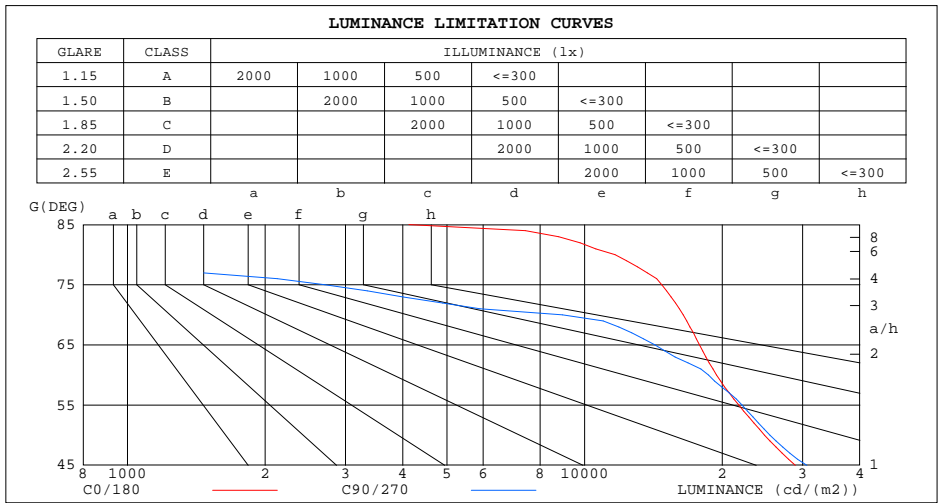
%lum = 98.4%
%lamp = 98.4%

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:

LUMINANCE LIMITATION CURVES

Test:U:11.801V I:0.7123A P:6.4274W PF:0.7646 Freq:60.00Hz Lamp Flux:580.005x1 lm		
NAME: 486768-MR16-6W-3000K-15°	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:35mm	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	4126	0
80	11654	167
75	14751	2703
70	16440	8945
65	17846	14259
60	19452	18656
55	21756	22110
50	24762	25447
45	28904	30653

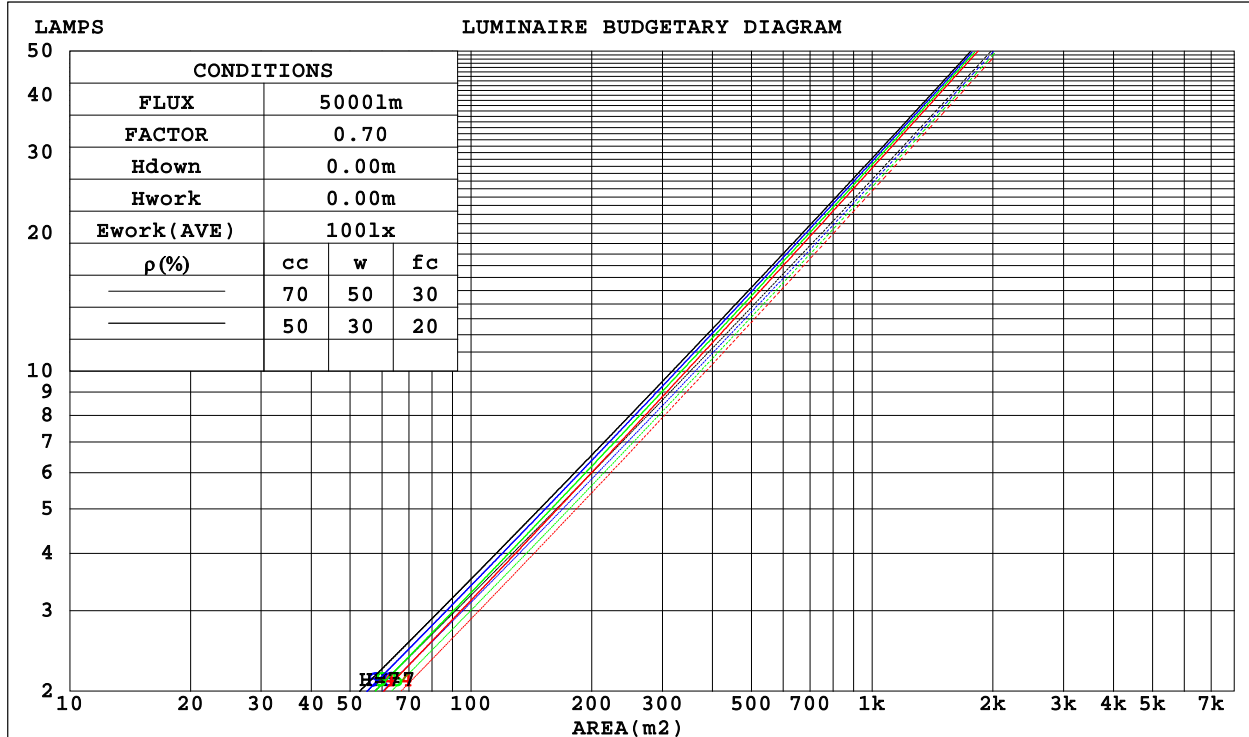
C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2022-06-01

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:11.801V I:0.7123A P:6.4274W PF:0.7646 Freq:60.00Hz Lamp Flux:580.005x1 lm		
NAME: 486768-MR16-6W-3000K-15°	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:35mm	Shielding 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	1.12	1.10	1.09	1.10	1.09	1.07	1.06	1.05	1.04	1.03	1.02	1.01	.99	.98	.98	.96
2.0	1.07	1.04	1.01	1.05	1.02	.90	1.02	.90	.98	.99	.97	.96	.96	.95	.94	.92
3.0	1.02	.98	.95	1.01	.97	.94	.98	.95	.93	.96	.93	.91	.94	.92	.90	.89
4.0	.98	.93	.90	.97	.93	.90	.95	.91	.89	.93	.90	.88	.91	.89	.87	.86
5.0	.94	.90	.86	.93	.89	.86	.91	.88	.85	.90	.87	.85	.89	.86	.84	.83
6.0	.91	.86	.83	.90	.86	.83	.89	.85	.82	.87	.84	.82	.86	.83	.81	.80
7.0	.88	.83	.80	.87	.83	.80	.86	.82	.80	.85	.82	.79	.84	.81	.79	.78
8.0	.85	.81	.78	.85	.81	.78	.84	.80	.77	.83	.79	.77	.82	.79	.77	.76
9.0	.83	.78	.76	.82	.78	.76	.81	.78	.75	.81	.77	.75	.80	.77	.75	.74
10.0	.80	.76	.74	.80	.76	.74	.79	.76	.73	.79	.76	.73	.78	.75	.73	.72



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:11.801V I:0.7123A P:6.4274W PF:0.7646 Freq:60.00Hz Lamp Flux:580.005x1 lm		
NAME: 486768-MR16-6W-3000K-15°	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	.145	.082	.026	.138	.079	.025	.126	.072	.023	.114	.066	.021	.104	.060	.019	
2.0	.135	.074	.023	.129	.071	.022	.119	.066	.021	.110	.062	.019	.101	.057	.018	
3.0	.126	.067	.020	.121	.065	.020	.112	.061	.019	.105	.057	.018	.097	.054	.017	
4.0	.117	.061	.018	.114	.059	.018	.106	.056	.017	.100	.053	.016	.093	.051	.015	
5.0	.110	.056	.016	.107	.055	.016	.101	.052	.015	.095	.050	.015	.089	.048	.014	
6.0	.104	.052	.015	.101	.051	.015	.095	.049	.014	.090	.047	.014	.086	.045	.013	
7.0	.098	.048	.014	.095	.048	.014	.091	.046	.013	.086	.044	.013	.082	.043	.013	
8.0	.093	.045	.013	.091	.045	.013	.087	.043	.012	.083	.042	.012	.079	.041	.012	
9.0	.088	.043	.012	.086	.042	.012	.083	.041	.012	.079	.040	.011	.076	.039	.011	
10.0	.084	.040	.011	.082	.040	.011	.079	.039	.011	.076	.038	.011	.073	.037	.011	

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	.169	.158	.147	.145	.135	.127	.099	.093	.088	.057	.054	.051	.018	.017	.017	
2.0	.151	.133	.117	.130	.114	.101	.089	.079	.071	.051	.046	.041	.016	.015	.013	
3.0	.137	.113	.095	.117	.098	.082	.080	.068	.058	.046	.040	.034	.015	.013	.011	
4.0	.124	.098	.078	.107	.085	.068	.073	.059	.048	.042	.035	.028	.014	.011	.009	
5.0	.114	.086	.065	.098	.074	.057	.067	.052	.040	.039	.030	.024	.013	.010	.008	
6.0	.105	.076	.055	.090	.066	.048	.062	.046	.034	.036	.027	.020	.012	.009	.007	
7.0	.097	.068	.047	.084	.059	.041	.058	.041	.029	.034	.024	.017	.011	.008	.006	
8.0	.091	.061	.041	.078	.053	.035	.054	.037	.025	.031	.022	.015	.010	.007	.005	
9.0	.085	.055	.035	.073	.048	.031	.051	.034	.022	.030	.020	.013	.010	.007	.004	
10.0	.080	.051	.031	.069	.044	.027	.048	.031	.019	.028	.018	.011	.009	.006	.004	

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:11.801V I:0.7123A P:6.4274W PF:0.7646 Freq:60.00Hz Lamp Flux:580.005x1 lm										
NAME: 486768-MR16-6W-3000K-15°					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	17.1	17.8	17.3	18.0	18.1	17.4	18.1	17.6	18.2	18.4
3H	18.1	18.7	18.3	18.9	19.1	17.8	18.4	18.0	18.6	18.8
4H	18.5	19.1	18.8	19.3	19.5	17.7	18.3	18.0	18.5	18.7
6H	18.8	19.3	19.0	19.6	19.8	17.6	18.2	17.9	18.4	18.7
8H	18.8	19.4	19.1	19.6	19.9	17.6	18.1	17.9	18.4	18.6
12H	18.8	19.3	19.1	19.6	19.9	17.5	18.1	17.8	18.3	18.6
4H 2H	17.5	18.1	17.8	18.3	18.5	17.7	18.3	17.9	18.5	18.7
3H	18.6	19.2	19.0	19.4	19.7	18.2	18.7	18.5	19.0	19.2
4H	19.2	19.6	19.5	19.9	20.2	18.1	18.6	18.4	18.9	19.2
6H	19.5	19.9	19.8	20.2	20.6	18.0	18.4	18.4	18.8	19.1
8H	19.5	20.0	19.9	20.3	20.7	17.9	18.4	18.3	18.7	19.1
12H	19.5	19.9	19.9	20.3	20.7	17.9	18.3	18.3	18.6	19.0
8H 4H	19.1	19.5	19.5	19.9	20.2	18.1	18.5	18.5	18.9	19.2
6H	19.5	19.8	19.9	20.2	20.6	18.0	18.3	18.4	18.7	19.1
8H	19.5	19.8	20.0	20.3	20.7	17.9	18.2	18.4	18.7	19.1
12H	19.5	19.8	20.0	20.2	20.7	17.9	18.1	18.3	18.6	19.0
12H 4H	19.1	19.4	19.5	19.8	20.2	18.1	18.4	18.5	18.8	19.2
6H	19.4	19.7	19.8	20.1	20.6	18.0	18.3	18.4	18.7	19.1
8H	19.5	19.7	19.9	20.2	20.6	17.9	18.2	18.4	18.6	19.1
Variations with the observer position at spacings:										
S = 1.0H	+ 0.4 / - 0.6					+ 0.8 / - 1.0				
1.5H	+ 0.6 / - 0.4					+ 1.4 / - 0.8				
2.0H	+ 0.6 / - 0.5					+ 1.1 / - 1.1				

CIE Pub.117, 580.0 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = -1.9)
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:11.801V I:0.7123A P:6.4274W PF:0.7646 Freq:60.00Hz Lamp Flux:580.005x1 lm		
NAME: 486768-MR16-6W-3000K-15°	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:35mm	Shielding Angle:

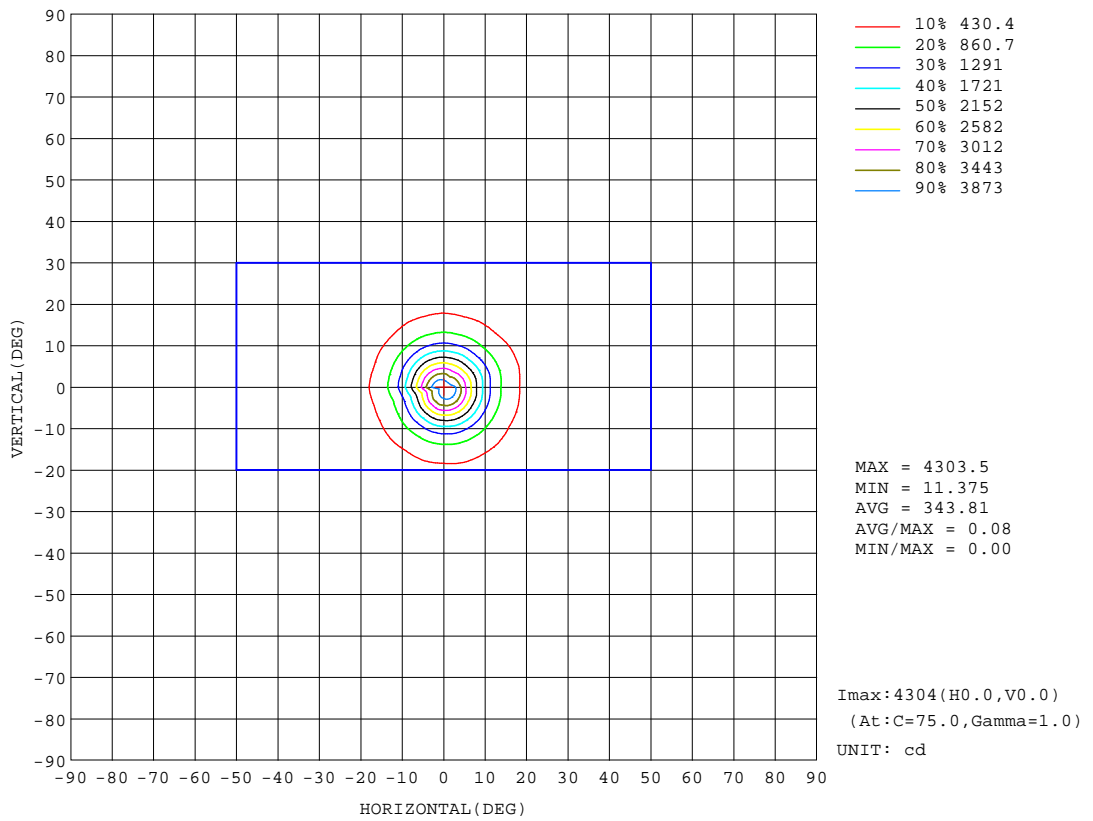
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) k(RI) x RCR = 5									
k = 0.60	88	81	78	87	81	78	86	81	77	74
0.80	95	89	85	94	89	85	93	88	85	81
1.00	99	94	90	98	93	90	97	93	89	85
1.25	103	98	95	102	97	94	100	96	93	89
1.50	106	101	98	105	100	97	102	99	96	92
2.00	109	104	101	107	103	100	104	101	99	94
2.50	110	106	103	109	105	103	106	103	101	95
3.00	112	108	106	110	107	105	107	104	102	96
4.00	114	111	109	112	109	107	108	106	105	98
5.00	115	113	111	113	111	109	109	108	106	99
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

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:

ISOCANDELA DIAGRAM

Test:U:11.801V I:0.7123A P:6.4274W PF:0.7646 Freq:60.00Hz Lamp Flux:580.005x1 lm		
NAME: 486768-MR16-6W-3000K-15°	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:35mm	Shielding Angle:



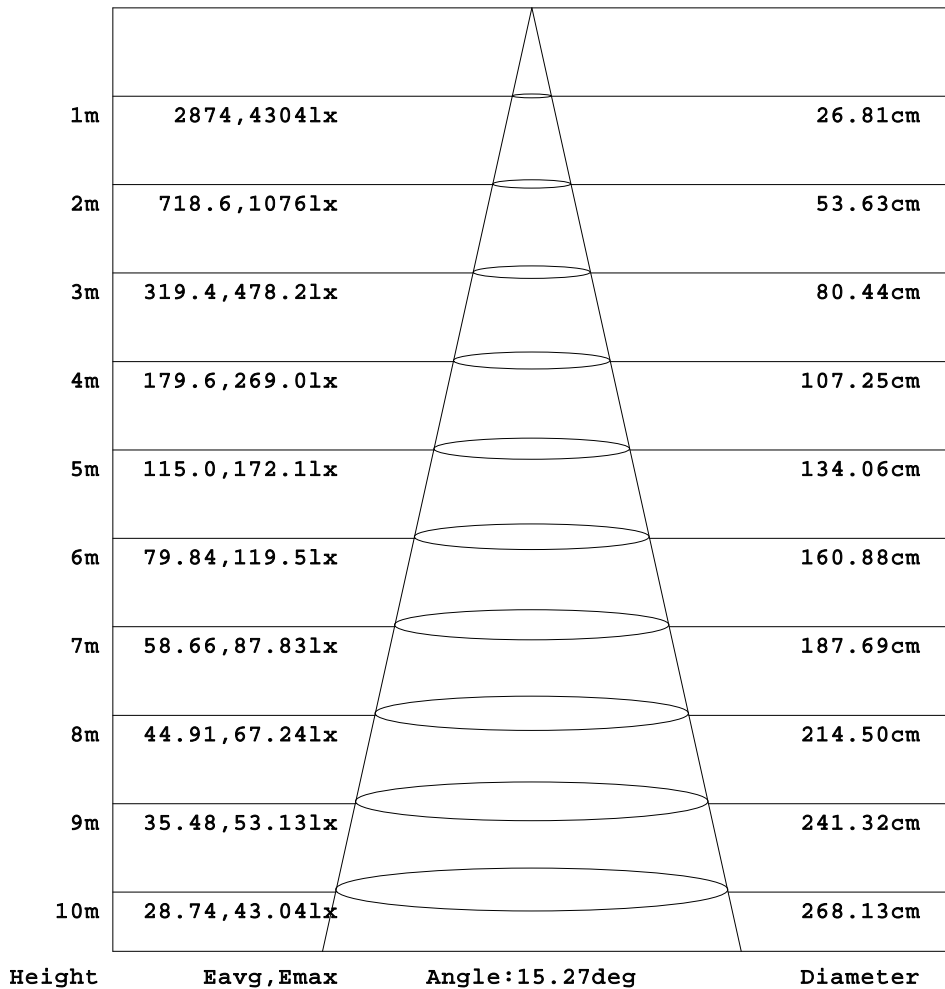
C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2022-06-01

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:11.801V I:0.7123A P:6.4274W PF:0.7646 Freq:60.00Hz Lamp Flux:580.005x1 lm		
NAME: 486768-MR16-6W-3000K-15°	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:35mm	Shielding Angle:

Flux out:178.4 lm



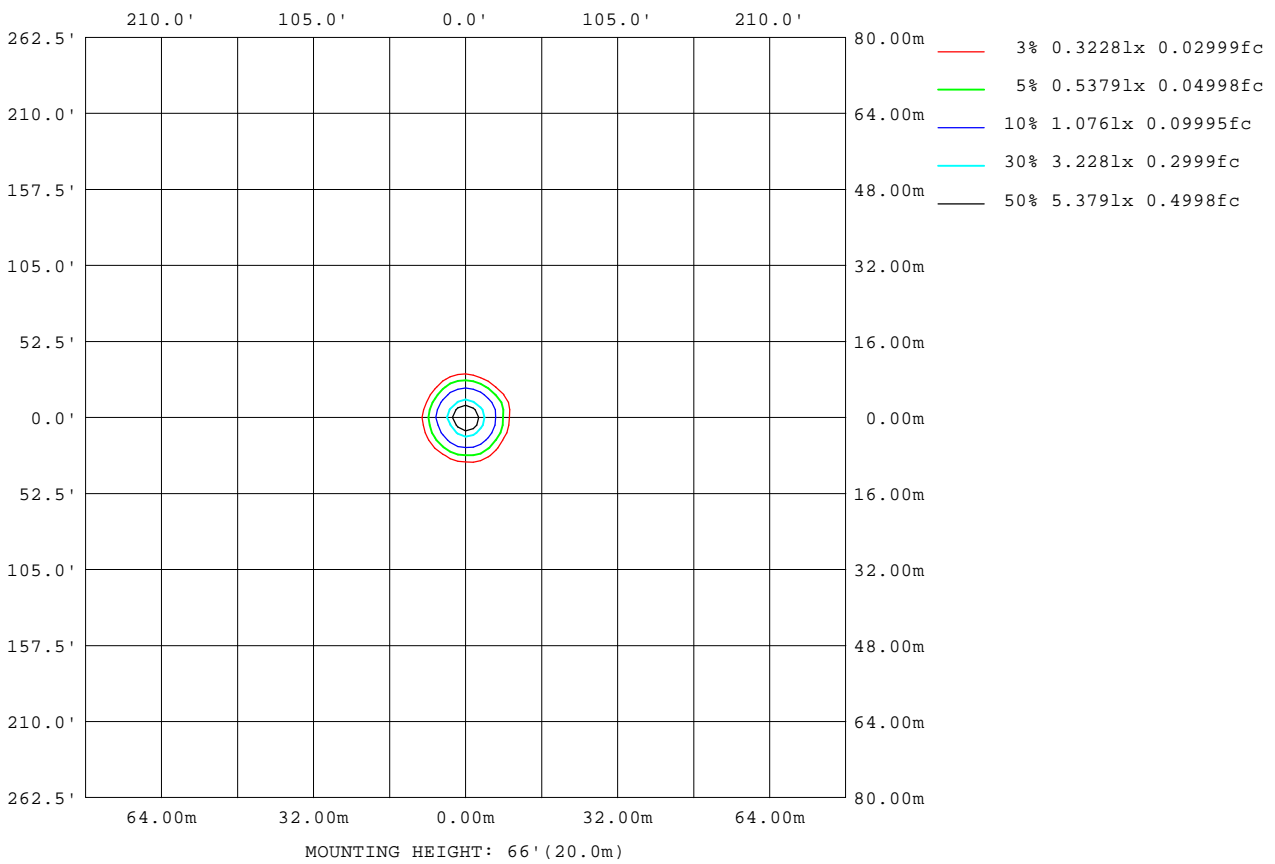
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:11.801V I:0.7123A P:6.4274W PF:0.7646 Freq:60.00Hz Lamp Flux:580.005x1 lm		
NAME: 486768-MR16-6W-3000K-15°	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:11.801V I:0.7123A P:6.4274W PF:0.7646 Freq:60.00Hz Lamp Flux:580.005x1 lm		
NAME: 486768-MR16-6W-3000K-15°	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:35mm	Shielding Angle:

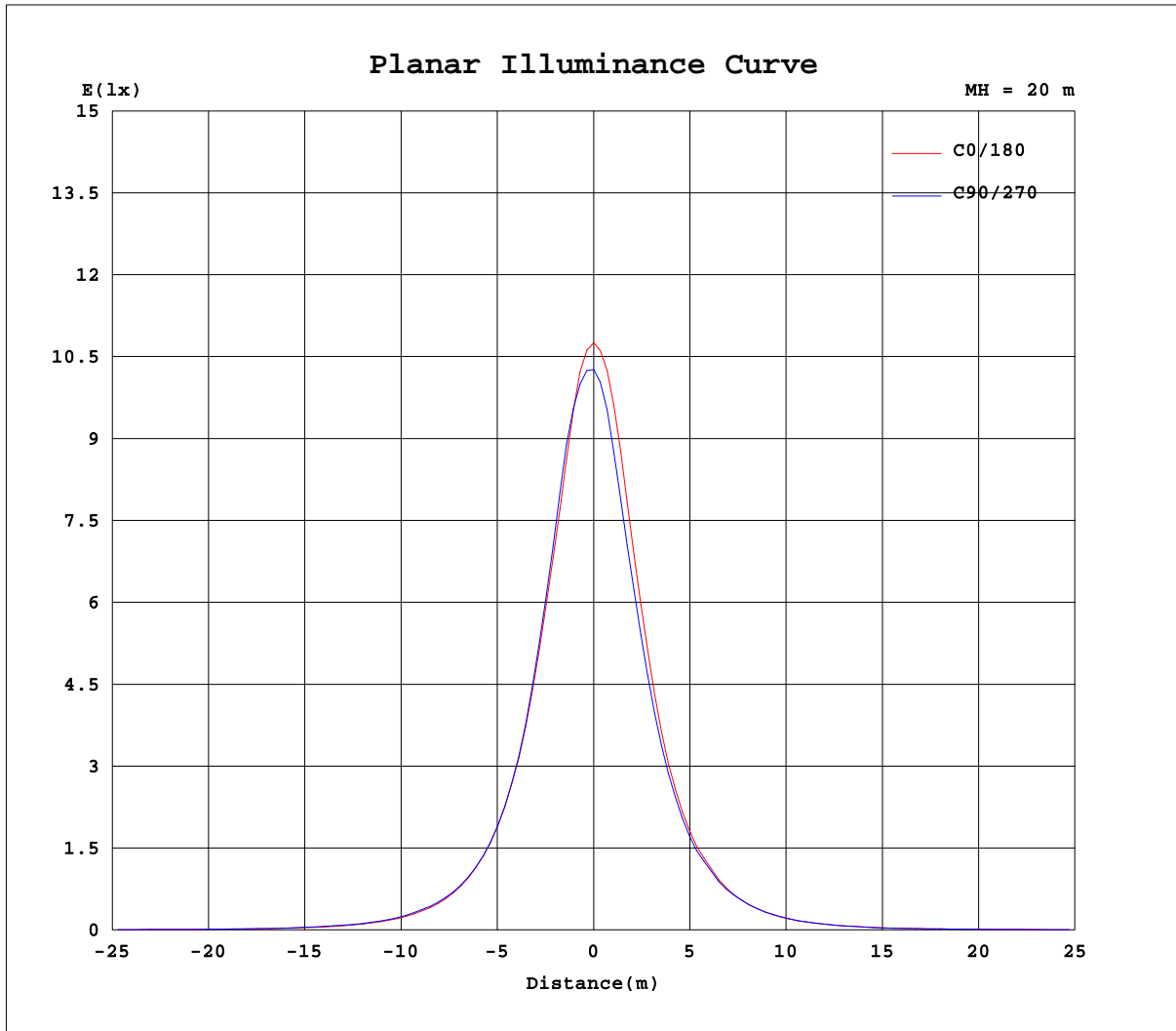
AvgL	cd/m2
L_0~180(65)av	16985
L_0~180(75)av	14175
L_0~180(85)av	4434
L_90~270(65)av	13814
L_90~270(75)av	2464
L_90~270(85)av	0
L_45(65)av	17028
L_45(75)av	8612
L_45(85)av	68

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

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:

