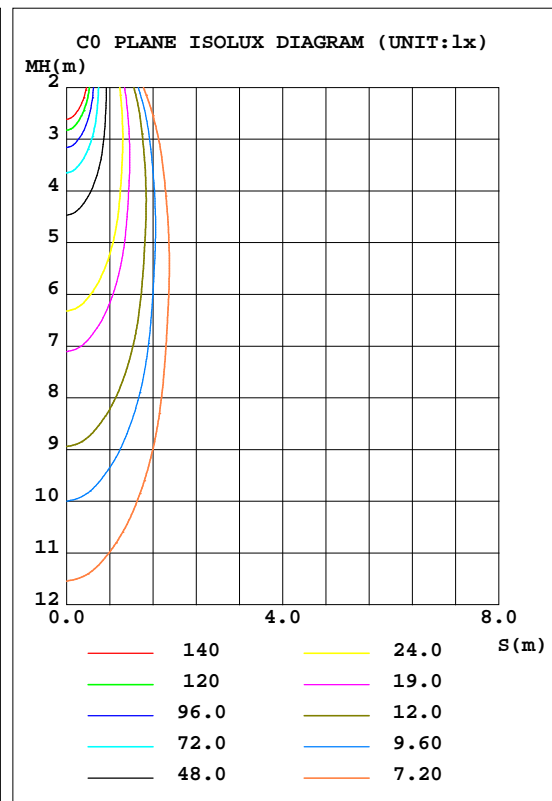
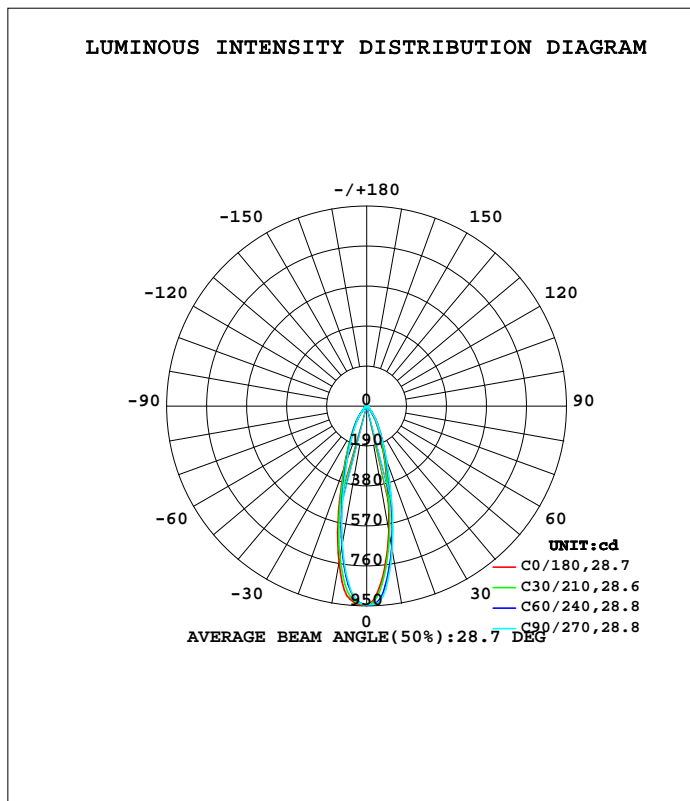


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:11.968V I:0.3964A P:3.2771W PF:0.6908 Freq:60.00Hz Lamp Flux:359.635x1 lm		
NAME: 486734-MR16-3W-2700K-25°	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:35mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 109.74 lm/W			
MODEL		I _{max} (cd)	945.3	S/MH(C0/180)	0.54
NOMINAL POWER(W)	--	LOR(%)	100.0	S/MH(C90/270)	0.48
RATED VOLTAGE(V)	--	TOTAL FLUX(lm)	359.64	η UP, DN(C0-180)	0.0,48.6
NOMINAL FLUX(lm)	359.635	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0,51.4
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	0.50
TEST VOLTAGE(V)	--	η down(%)	100.0	CIBSE SHR MAX	0.50



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2022-04-09

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:

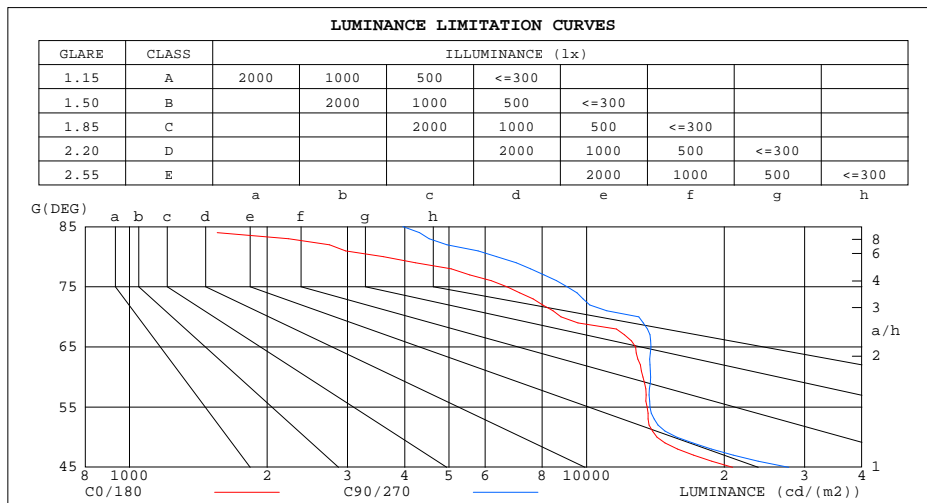
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	\$lum,lamp
10	604.6	669.3	700.3	707.1	757.3	693.6	668.3	669.5	0- 10	77.89	77.89	21.7,21.7
20	233.3	270.9	280.3	288.6	317.0	288.7	275.6	273.7	10- 20	123.9	201.8	56.1,56.1
30	93.56	107.9	111.1	115.0	128.5	119.9	114.3	110.1	20- 30	82.15	283.9	78.9,78.9
40	28.54	36.21	39.15	36.60	47.31	43.24	39.06	35.43	30- 40	44.37	328.3	91.3,91.3
50	9.021	9.202	10.16	10.04	11.55	10.46	10.32	9.978	40- 50	15.57	343.9	95.6,95.6
60	6.533	6.653	6.919	7.031	7.107	6.998	7.142	7.012	50- 60	7.224	351.1	97.6,97.6
70	2.960	3.888	4.461	4.557	5.009	4.716	4.391	3.866	60- 70	5.712	356.8	99.2,99.2
80	0.6140	0.9522	1.107	1.121	1.451	1.196	1.012	0.8899	70- 80	2.464	359.3	99.9,99.9
90	0	0	0	0	0.0015	0.0015	0.0015	0.0053	80- 90	0.3757	359.6	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		

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2022-04-09

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:11.968V I:0.3964A P:3.2771W PF:0.6908 Freq:60.00Hz Lamp Flux:359.635x1 lm		
NAME: 486734-MR16-3W-2700K-25°	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:35mm	Shielding Angle:



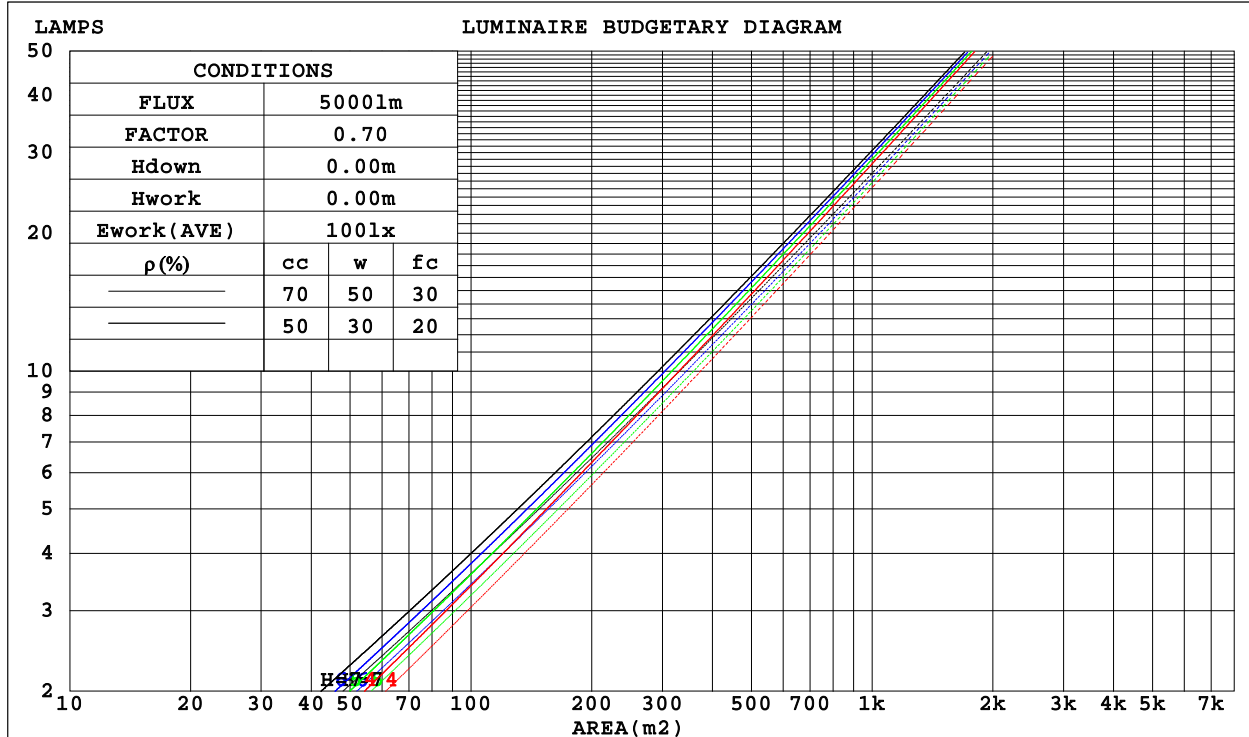
C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2022-04-09

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:11.968V I:0.3964A P:3.2771W PF:0.6908 Freq:60.00Hz Lamp Flux:359.635x1 lm		
NAME: 486734-MR16-3W-2700K-25°	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	1.11	1.09	1.07	1.09	1.07	1.05	1.05	1.03	1.02	1.01	.00	.99	.98	.97	.96	.94
2.0	1.04	1.00	.97	1.02	.99	.96	.99	.96	.94	.96	.94	.92	.94	.92	.90	.88
3.0	.98	.93	.90	.97	.92	.89	.94	.90	.88	.92	.89	.86	.89	.87	.85	.83
4.0	.92	.87	.84	.91	.87	.83	.89	.85	.82	.87	.84	.81	.85	.83	.80	.79
5.0	.88	.82	.78	.87	.82	.78	.85	.81	.77	.83	.80	.77	.82	.79	.76	.75
6.0	.83	.78	.74	.82	.77	.74	.81	.77	.73	.80	.76	.73	.78	.75	.72	.71
7.0	.79	.74	.70	.79	.74	.70	.77	.73	.70	.76	.72	.69	.75	.72	.69	.68
8.0	.76	.70	.67	.75	.70	.67	.74	.70	.66	.73	.69	.66	.72	.69	.66	.65
9.0	.73	.67	.64	.72	.67	.64	.71	.67	.63	.70	.66	.63	.70	.66	.63	.62
10.0	.70	.64	.61	.69	.64	.61	.68	.64	.61	.68	.64	.61	.67	.63	.60	.59



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2022-04-09

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:11.968V I:0.3964A P:3.2771W PF:0.6908 Freq:60.00Hz Lamp Flux:359.635x1 lm		
NAME: 486734-MR16-3W-2700K-25°	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	.169	.096	.031	.163	.093	.029	.150	.086	.028	.139	.080	.026	.128	.074	.024	
2.0	.160	.088	.027	.155	.085	.026	.144	.080	.025	.135	.075	.024	.126	.071	.022	
3.0	.151	.080	.024	.146	.078	.024	.137	.074	.023	.129	.071	.022	.121	.067	.021	
4.0	.142	.074	.022	.138	.072	.021	.131	.069	.021	.124	.066	.020	.117	.064	.019	
5.0	.134	.069	.020	.131	.067	.020	.124	.065	.019	.118	.062	.019	.112	.060	.018	
6.0	.127	.064	.018	.124	.063	.018	.119	.061	.018	.113	.059	.017	.108	.057	.017	
7.0	.121	.060	.017	.118	.059	.017	.113	.057	.017	.109	.056	.016	.104	.054	.016	
8.0	.115	.056	.016	.113	.056	.016	.108	.054	.015	.104	.053	.015	.100	.051	.015	
9.0	.110	.053	.015	.108	.053	.015	.104	.051	.015	.100	.050	.014	.097	.049	.014	
10.0	.105	.050	.014	.103	.050	.014	.100	.049	.014	.096	.048	.014	.093	.047	.013	

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	.171	.157	.145	.146	.135	.125	.100	.093	.087	.057	.054	.050	.018	.017	.016	
2.0	.155	.133	.114	.133	.114	.098	.091	.079	.069	.052	.046	.040	.017	.015	.013	
3.0	.142	.113	.091	.121	.098	.079	.083	.068	.055	.048	.040	.033	.015	.013	.011	
4.0	.131	.099	.074	.112	.085	.064	.077	.059	.045	.045	.035	.027	.014	.011	.009	
5.0	.121	.087	.061	.104	.075	.053	.072	.052	.038	.042	.031	.022	.013	.010	.007	
6.0	.113	.077	.052	.097	.067	.045	.067	.047	.032	.039	.028	.019	.013	.009	.006	
7.0	.106	.069	.044	.091	.060	.038	.063	.042	.027	.037	.025	.016	.012	.008	.005	
8.0	.100	.063	.038	.086	.055	.033	.060	.038	.023	.035	.023	.014	.011	.007	.005	
9.0	.095	.058	.033	.081	.050	.029	.056	.035	.020	.033	.021	.012	.011	.007	.004	
10.0	.090	.053	.029	.077	.046	.025	.054	.032	.018	.031	.019	.011	.010	.006	.004	

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2022-04-09

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:11.968V I:0.3964A P:3.2771W PF:0.6908 Freq:60.00Hz Lamp Flux:359.635x1 lm										
NAME: 486734-MR16-3W-2700K-25°					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	17.8	18.6	18.0	18.8	18.9	18.7	19.6	18.9	19.7	19.9
3H	18.3	19.1	18.5	19.3	19.5	19.3	20.1	19.5	20.3	20.5
4H	18.4	19.1	18.6	19.3	19.6	19.4	20.2	19.7	20.4	20.6
6H	18.4	19.1	18.7	19.3	19.6	19.5	20.2	19.7	20.4	20.6
8H	18.3	19.0	18.6	19.3	19.5	19.4	20.1	19.7	20.4	20.6
12H	18.3	18.9	18.6	19.2	19.5	19.4	20.1	19.7	20.3	20.6
4H 2H	18.0	18.7	18.2	18.9	19.2	18.8	19.6	19.1	19.8	20.0
3H	18.6	19.3	18.9	19.5	19.8	19.5	20.2	19.8	20.5	20.7
4H	18.8	19.4	19.1	19.7	20.0	19.7	20.3	20.1	20.6	20.9
6H	18.8	19.3	19.2	19.6	20.0	19.8	20.3	20.2	20.6	21.0
8H	18.7	19.2	19.1	19.6	20.0	19.8	20.3	20.2	20.6	21.0
12H	18.7	19.1	19.1	19.5	19.9	19.8	20.2	20.2	20.6	21.0
8H 4H	18.8	19.3	19.2	19.6	20.0	19.7	20.2	20.1	20.5	20.9
6H	18.8	19.2	19.3	19.6	20.0	19.8	20.2	20.2	20.6	21.0
8H	18.8	19.2	19.3	19.6	20.0	19.8	20.2	20.3	20.6	21.0
12H	18.8	19.1	19.2	19.5	20.0	19.8	20.1	20.3	20.5	21.0
12H 4H	18.8	19.2	19.2	19.6	20.0	19.6	20.1	20.1	20.5	20.9
6H	18.8	19.2	19.2	19.6	20.0	19.8	20.1	20.2	20.5	21.0
8H	18.8	19.1	19.2	19.5	20.0	19.8	20.1	20.2	20.5	21.0
Variations with the observer position at spacings:										
S = 1.0H	+ 1.3 / - 1.7					+ 1.5 / - 1.7				
1.5H	+ 2.8 / - 1.6					+ 3.1 / - 2.1				
2.0H	+ 1.0 / - 0.9					+ 1.9 / - 1.0				

CIE Pub.117, 359.6 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = -3.6)
Area: 0.001 m2

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2022-04-09

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:11.968V I:0.3964A P:3.2771W PF:0.6908 Freq:60.00Hz Lamp Flux:359.635x1 lm		
NAME: 486734-MR16-3W-2700K-25°	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:35mm	Shielding Angle:

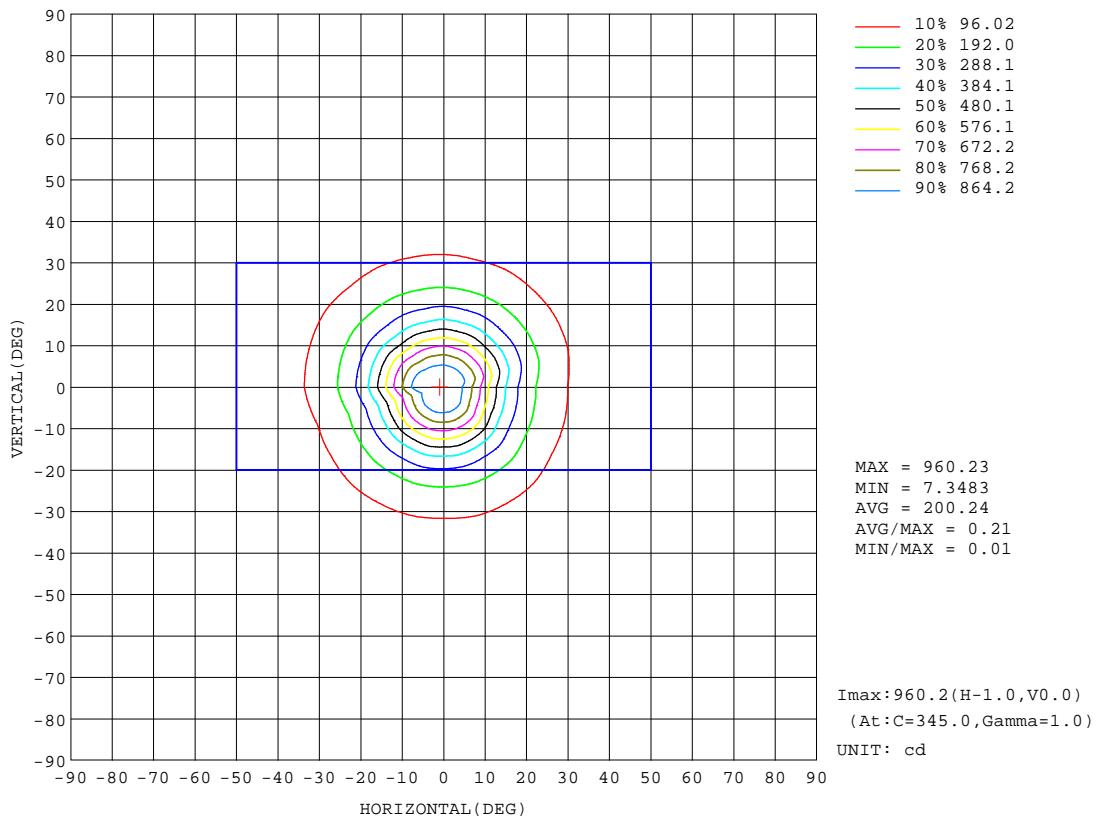
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) k(RI) x RCR = 5									
k = 0.60	86	80	76	86	79	76	85	79	76	72
0.80	94	88	84	93	87	84	92	87	83	79
1.00	98	92	89	97	92	88	96	92	88	84
1.25	102	97	93	101	96	93	99	95	92	88
1.50	105	100	97	104	99	96	102	98	95	90
2.00	108	104	100	106	102	99	104	101	98	93
2.50	110	106	103	108	104	102	105	102	100	94
3.00	111	108	105	110	106	104	106	104	102	95
4.00	113	111	108	111	109	107	108	106	104	97
5.00	115	112	111	113	111	109	109	107	106	98
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:2022-04-09

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:11.968V I:0.3964A P:3.2771W PF:0.6908 Freq:60.00Hz Lamp Flux:359.635x1 lm		
NAME: 486734-MR16-3W-2700K-25°	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:35mm	Shielding Angle:



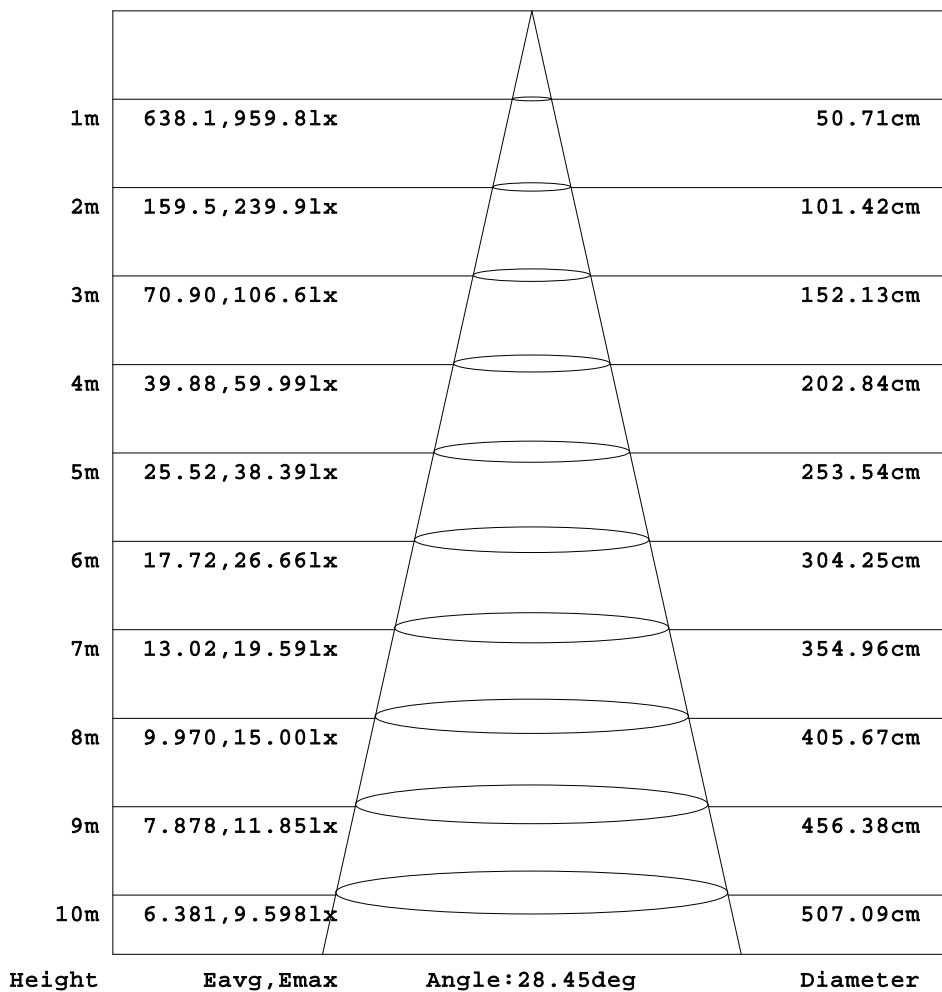
C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2022-04-09

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:11.968V I:0.3964A P:3.2771W PF:0.6908 Freq:60.00Hz Lamp Flux:359.635x1 lm		
NAME: 486734-MR16-3W-2700K-25°	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:35mm	Shielding Angle:

Flux out:143.9 lm



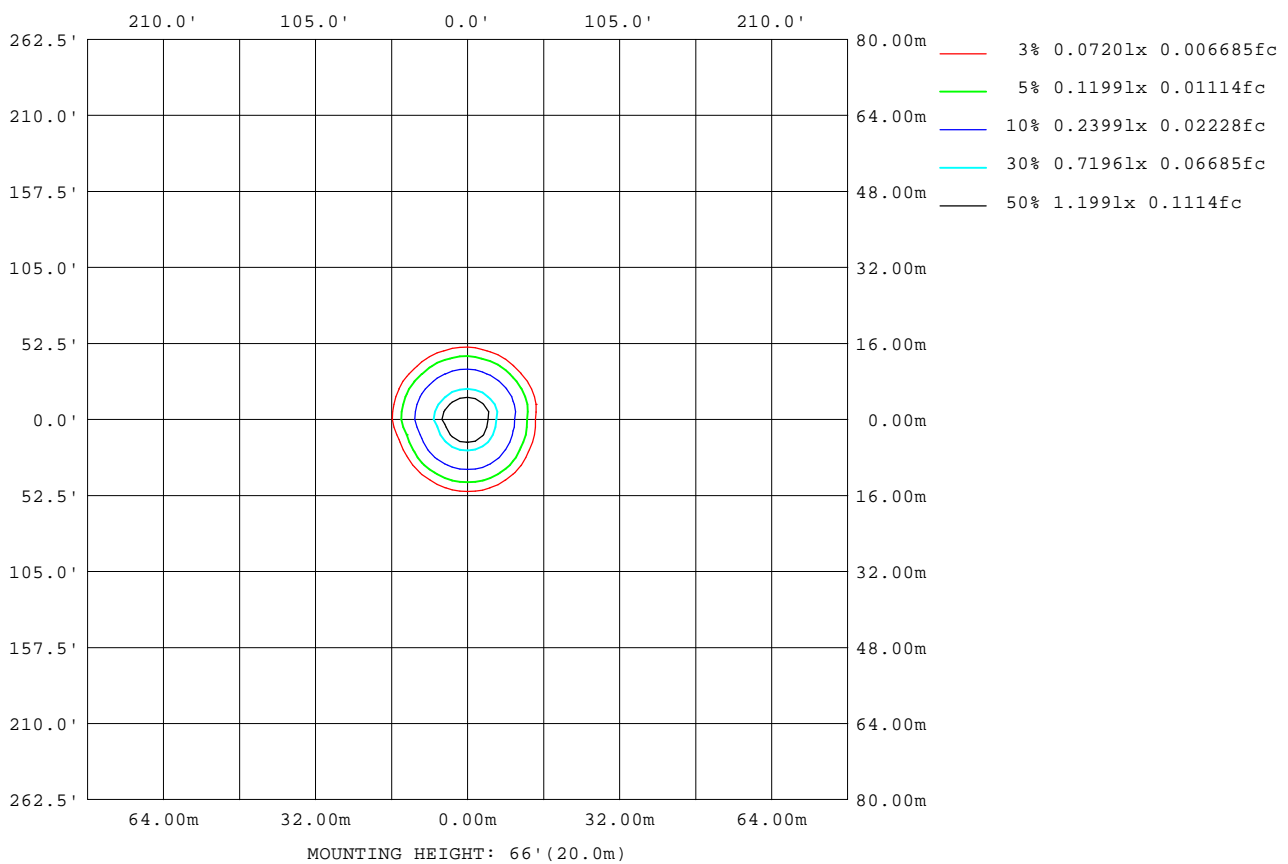
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2022-04-09

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:11.968V I:0.3964A P:3.2771W PF:0.6908 Freq:60.00Hz Lamp Flux:359.635x1 lm		
NAME: 486734-MR16-3W-2700K-25°	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:2022-04-09

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:11.968V I:0.3964A P:3.2771W PF:0.6908 Freq:60.00Hz Lamp Flux:359.635x1 lm		
NAME: 486734-MR16-3W-2700K-25°	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:35mm	Shielding Angle:

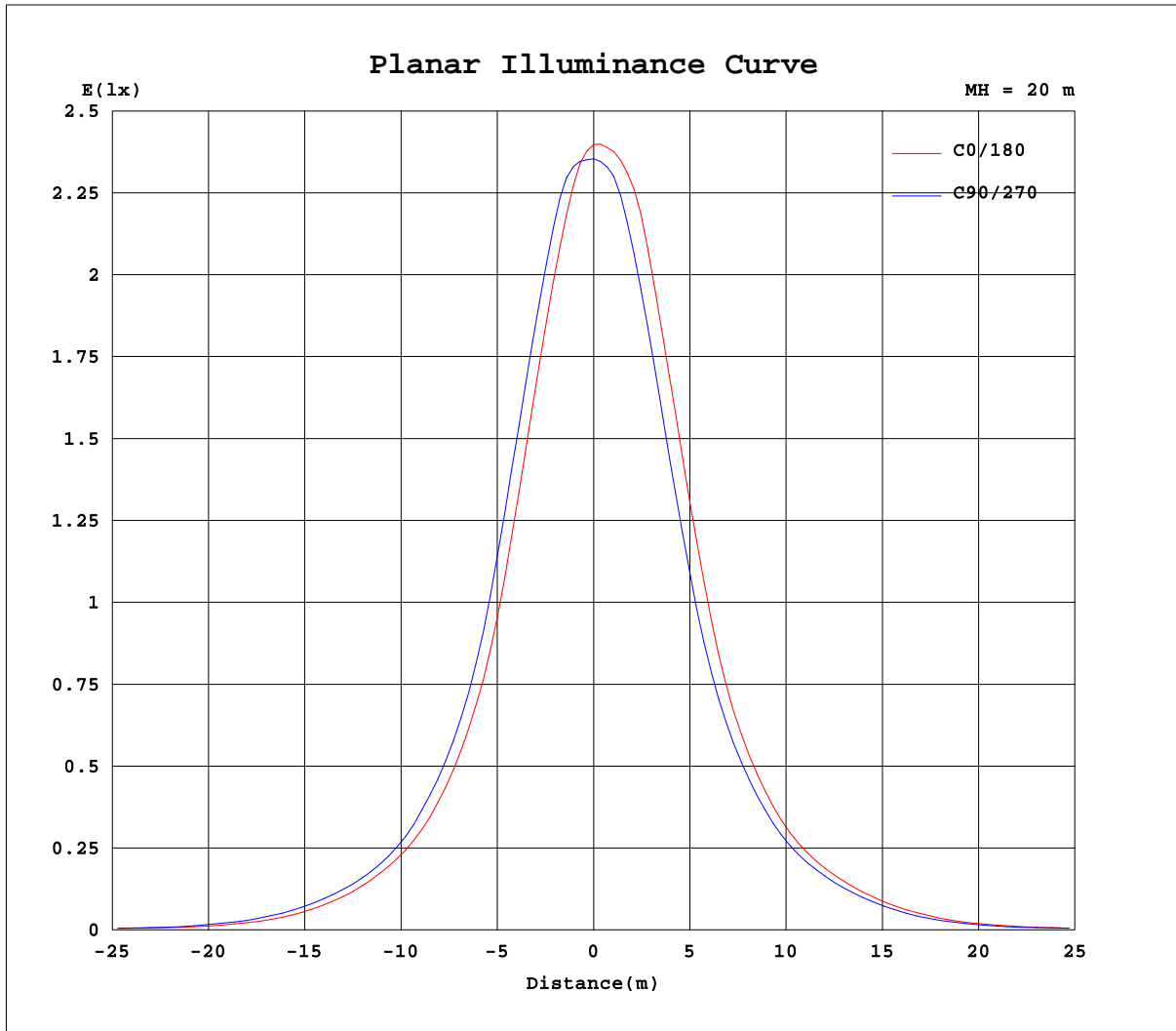
AvgL	cd/m2
L_0~180(65)av	13560
L_0~180(75)av	8578
L_0~180(85)av	3125
L_90~270(65)av	14121
L_90~270(75)av	9012
L_90~270(85)av	3777
L_45(65)av	13882
L_45(75)av	8672
L_45(85)av	3436

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2022-04-09

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: 2022-04-09

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:

