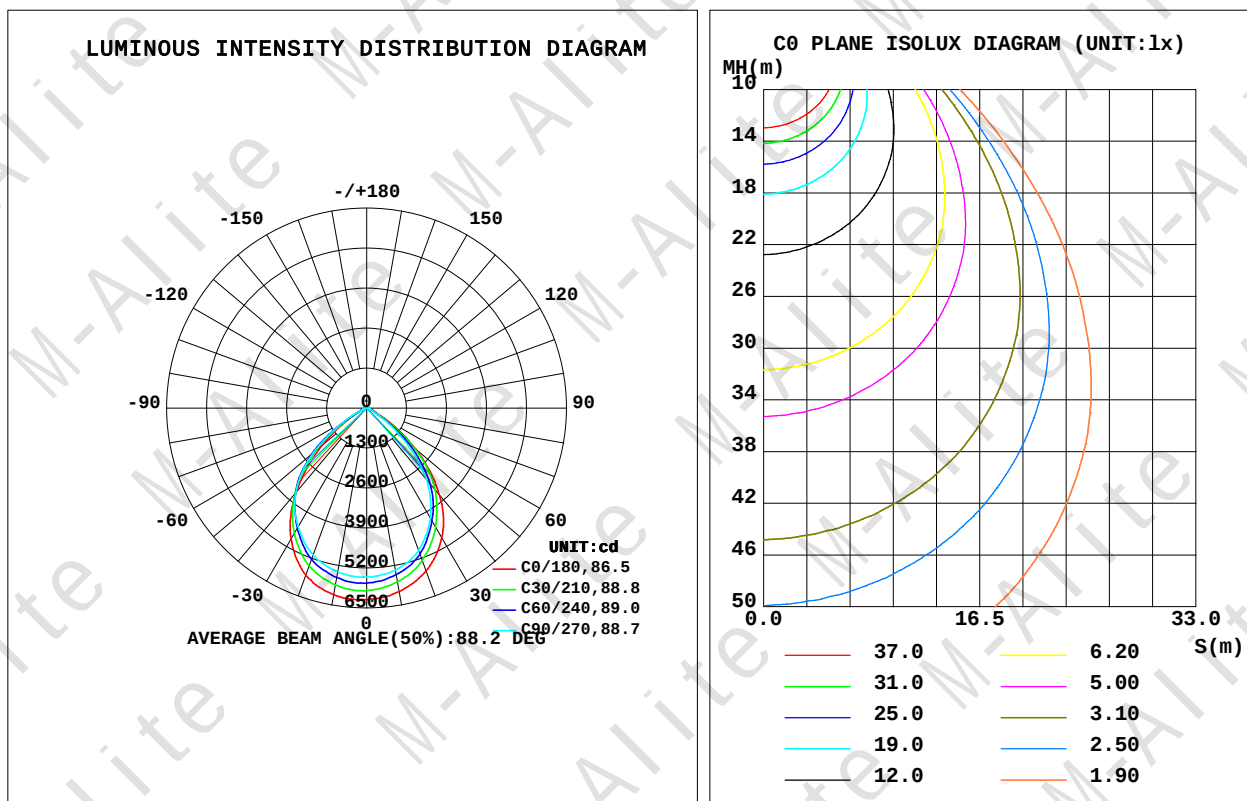


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:223.32V I:0.7054A P:145.78W PF:0.9255 Freq:49.99Hz Lamp Flux:10264.4x1 lm		
NAME: 100W	TYPE:6500k	WEIGHT:/
SPEC.:	DIM.:	SERIAL No.:/
MFR.:	SUR.:	Shielding Angle:/

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 70.41 lm/W
MODEL	ufo	I _{max} (cd)	6240	S/MH(C0/180)	1.18	
NOMINAL POWER(W)	150	LOR(%)	100.0	S/MH(C90/270)	1.21	
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	10264	η UP, DN(C0-180)	0.0,47.4	
NOMINAL FLUX(lm)	10264.4	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0,52.6	
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.00	
TEST VOLTAGE(V)	220	η down(%)	100.0	CIBSE SHR MAX	1.15	



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:MR mark
Test Date:2022-03-25

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000A_V1 SYSTEM V2.00.411
Humidity:65.0%
Test Distance:8.880m [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	6056	5620	5358	5264	6162	5701	5406	5264	0- 10	531.9	531.9	5.18, 5.18
20	5640	5174	4930	4883	5783	5319	5083	4991	10- 20	1513	2045	19.9, 19.9
30	4878	4363	4142	4115	4917	4568	4452	4427	20- 30	2213	4258	41.5, 41.5
40	3688	3369	3029	3010	3569	3595	3587	3555	30- 40	2454	6711	65.4, 65.4
50	2086	1984	1524	1538	1908	2247	2276	2206	40- 50	2070	8781	85.6, 85.6
60	637.3	469.0	388.5	356.8	521.2	601.5	745.2	619.6	50- 60	1056	9838	95.8, 95.8
70	204.8	174.6	120.3	115.6	184.8	184.6	174.5	158.2	60- 70	277.1	10115	98.5, 98.5
80	83.85	67.74	45.34	40.89	77.30	89.73	77.23	75.98	70- 80	123.6	10238	99.7, 99.7
90	1.175	1.330	1.325	1.215	2.014	1.854	1.350	1.824	80- 90	26.09	10264	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): 7839.8 lm

%lum = 76.4%

%lamp = 76.4%

Conical surface Flux(120deg): 9837.6 lm

%lum = 95.8%

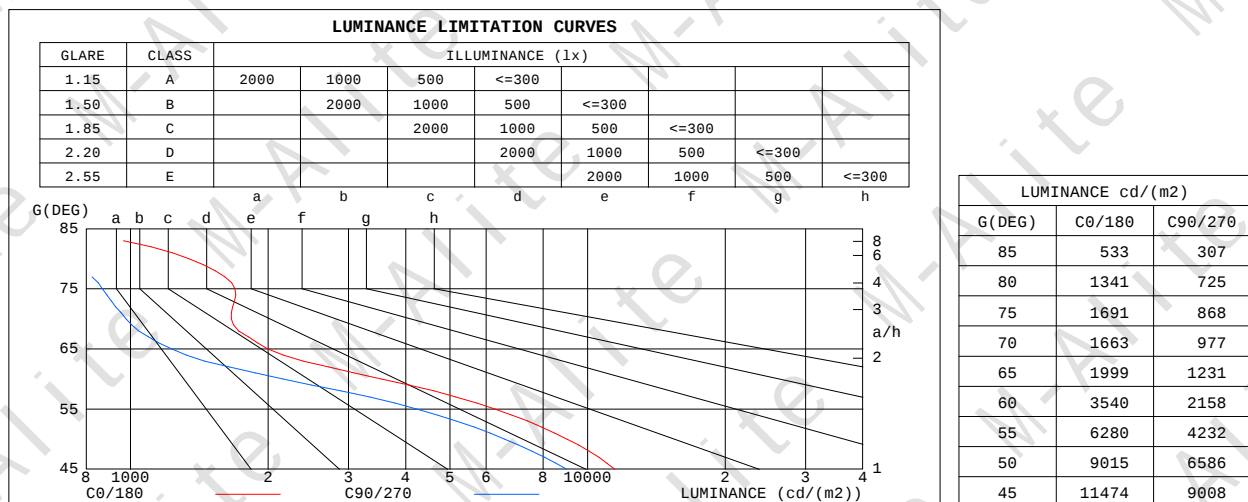
%lamp = 95.8%

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: MR mark
 Test Date: 2022-03-25

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE G0-2000A_V1 SYSTEM V2.00.411
 Humidity: 65.0%
 Test Distance: 8.880m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:223.32V I:0.7054A P:145.78W PF:0.9255 Freq:49.99Hz Lamp Flux:10264.4x1 lm		
NAME: 100W	TYPE:6500k	WEIGHT:/
SPEC.:	DIM.:	SERIAL No.:/
MFR.:	SUR.:	Shielding Angle:/



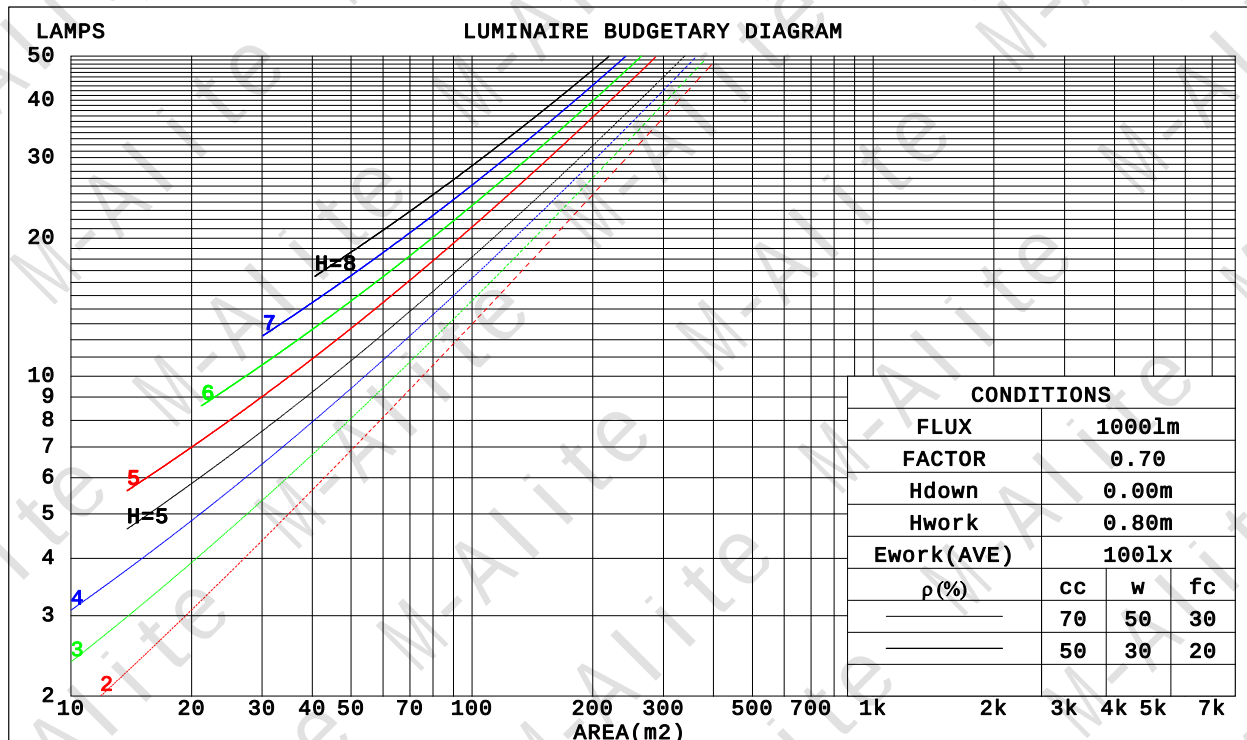
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: MR mark
Test Date: 2022-03-25

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE G0-2000A_V1 SYSTEM V2.00.411
Humidity: 65.0%
Test Distance: 8.880m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:223.32V I:0.7054A P:145.78W PF:0.9255 Freq:49.99Hz Lamp Flux:10264.4x1 lm															
NAME: 100W								TYPE:6500k				WEIGHT:/			
SPEC.:								DIM.:				SERIAL No.:/			
MFR.:								SUR.:				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	.00
1.0	1.08	1.05	1.02	1.06	1.03	1.01	1.02	.99	.97	.98	.96	.94	.95	.93	.92	.90
2.0	.98	.93	.88	.96	.91	.87	.93	.89	.85	.89	.86	.83	.87	.84	.82	.80
3.0	.88	.82	.77	.87	.81	.76	.84	.79	.75	.82	.77	.74	.79	.76	.72	.71
4.0	.80	.73	.68	.79	.72	.67	.77	.71	.66	.74	.70	.65	.72	.68	.65	.63
5.0	.73	.66	.60	.72	.65	.60	.70	.64	.59	.68	.63	.59	.66	.62	.58	.56
6.0	.67	.59	.54	.66	.59	.53	.64	.58	.53	.63	.57	.53	.61	.56	.52	.50
7.0	.61	.54	.48	.60	.53	.48	.59	.53	.48	.58	.52	.48	.56	.51	.47	.46
8.0	.56	.49	.44	.56	.49	.44	.55	.48	.43	.53	.48	.43	.52	.47	.43	.41
9.0	.52	.45	.40	.52	.45	.40	.51	.44	.40	.50	.44	.40	.49	.43	.39	.38
10.0	.48	.41	.37	.48	.41	.37	.47	.41	.36	.46	.40	.36	.45	.40	.36	.35



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: MR mark
 Test Date: 2022-03-25

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.411
 Humidity: 65.0%
 Test Distance: 8.880m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:223.32V I:0.7054A P:145.78W PF:0.9255 Freq:49.99Hz Lamp Flux:10264.4x1 lm					
NAME: 100W			TYPE:6500k		WEIGHT:/
SPEC.:			DIM.:		SERIAL No.:/
MFR.:			SUR.:		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						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.227	.129	.041	.220	.126	.040	.208	.119	.038	.196	.113	.036	.185	.107	.035	
2.0	.222	.121	.037	.216	.119	.037	.205	.114	.035	.194	.109	.034	.185	.105	.033	
3.0	.212	.113	.034	.207	.111	.033	.197	.107	.032	.188	.103	.032	.180	.100	.031	
4.0	.201	.105	.031	.197	.103	.030	.188	.100	.030	.180	.097	.029	.173	.094	.029	
5.0	.191	.097	.028	.187	.096	.028	.179	.093	.027	.172	.091	.027	.166	.089	.027	
6.0	.181	.090	.026	.177	.089	.026	.170	.087	.025	.164	.085	.025	.158	.083	.025	
7.0	.171	.085	.024	.168	.084	.024	.162	.082	.024	.156	.080	.023	.151	.078	.023	
8.0	.162	.079	.022	.159	.078	.022	.154	.077	.022	.149	.075	.022	.144	.074	.022	
9.0	.154	.074	.021	.151	.074	.021	.147	.072	.021	.142	.071	.020	.138	.070	.020	
10.0	.146	.070	.019	.144	.070	.019	.140	.068	.019	.136	.067	.019	.132	.066	.019	

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						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.175	.157	.141	.149	.135	.121	.102	.093	.084	.059	.054	.049	.019	.017	.016	
2.0	.163	.132	.106	.140	.114	.092	.096	.079	.064	.055	.046	.038	.018	.015	.012	
3.0	.153	.114	.083	.131	.098	.072	.090	.068	.050	.052	.040	.030	.017	.013	.010	
4.0	.145	.100	.065	.124	.086	.057	.086	.060	.040	.050	.035	.024	.016	.011	.008	
5.0	.138	.089	.053	.118	.077	.046	.081	.054	.033	.047	.032	.019	.015	.010	.006	
6.0	.131	.080	.044	.113	.070	.038	.078	.049	.027	.045	.029	.016	.015	.009	.005	
7.0	.125	.073	.037	.107	.063	.032	.074	.044	.023	.043	.026	.014	.014	.009	.004	
8.0	.119	.067	.032	.103	.058	.028	.071	.041	.020	.041	.024	.012	.013	.008	.004	
9.0	.114	.062	.028	.098	.054	.024	.068	.038	.017	.040	.022	.010	.013	.007	.003	
10.0	.109	.058	.024	.094	.051	.021	.065	.036	.015	.038	.021	.009	.012	.007	.003	

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:MR mark
 Test Date:2022-03-25

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.411
 Humidity:65.0%
 Test Distance:8.880m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:223.32V I:0.7054A P:145.78W PF:0.9255 Freq:49.99Hz Lamp Flux:10264.4x1 lm											
NAME: 100W					TYPE:6500k			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	2H	10.5	11.7	10.7	11.9	12.1	9.3	10.6	9.6	10.7	10.9
	3H	10.4	11.6	10.7	11.8	12.0	9.2	10.4	9.5	10.6	10.8
	4H	10.4	11.5	10.7	11.7	12.0	9.2	10.2	9.5	10.5	10.7
	6H	10.4	11.4	10.7	11.7	11.9	9.1	10.1	9.4	10.4	10.6
	8H	10.4	11.3	10.7	11.6	11.9	9.1	10.0	9.4	10.3	10.6
	12H	10.3	11.3	10.7	11.5	11.8	9.0	10.0	9.4	10.2	10.5
4H	2H	10.3	11.4	10.6	11.6	11.9	9.2	10.3	9.5	10.5	10.8
	3H	10.3	11.3	10.7	11.5	11.8	9.2	10.1	9.5	10.4	10.7
	4H	10.3	11.2	10.7	11.5	11.8	9.2	10.0	9.6	10.3	10.7
	6H	10.4	11.1	10.7	11.4	11.8	9.2	9.9	9.6	10.2	10.6
	8H	10.3	11.0	10.7	11.4	11.8	9.1	9.8	9.5	10.2	10.6
	12H	10.3	10.9	10.7	11.3	11.7	9.1	9.7	9.5	10.1	10.5
8H	4H	10.3	10.9	10.7	11.3	11.7	9.1	9.8	9.5	10.2	10.5
	6H	10.3	10.9	10.7	11.3	11.7	9.1	9.7	9.6	10.1	10.5
	8H	10.3	10.8	10.8	11.2	11.7	9.1	9.6	9.6	10.0	10.5
	12H	10.3	10.7	10.7	11.1	11.6	9.1	9.5	9.6	10.0	10.4
12H	4H	10.2	10.8	10.6	11.2	11.6	9.1	9.7	9.5	10.1	10.5
	6H	10.3	10.8	10.7	11.2	11.6	9.1	9.6	9.6	10.0	10.5
	8H	10.3	10.7	10.7	11.1	11.6	9.1	9.5	9.6	10.0	10.4
Variations with the observer position at spacings:											
S = 1.0H		+ 1.3 / - 2.1				+ 1.7 / - 3.1					
1.5H		+ 0.9 / - 1.9				+ 0.9 / - 1.8					
2.0H		+ 3.4 / - 5.6				+ 3.4 / - 5.0					

CIE Pub.117, 10264 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 8.1)
Area: 0.36 m2

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:MR mark
Test Date:2022-03-25

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.411
Humidity:65.0%
Test Distance:8.880m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:223.32V I:0.7054A P:145.78W PF:0.9255 Freq:49.99Hz Lamp Flux:10264.4x1 lm		
NAME: 100W	TYPE:6500k	WEIGHT:/
SPEC.:	DIM.:	SERIAL No.:/
MFR.:	SUR.:	Shielding Angle:/

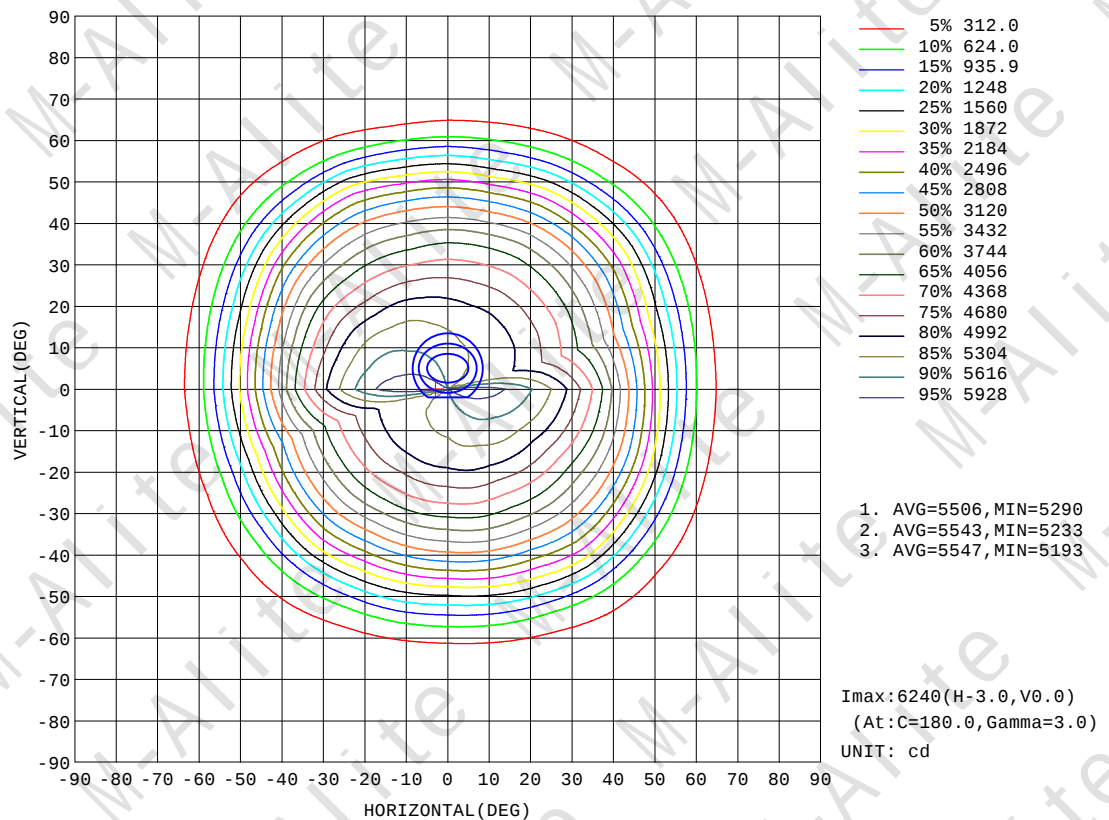
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	69	60	54	69	59	54	68	59	54	48
0.80	79	70	64	78	70	64	77	69	64	58
1.00	87	79	73	86	78	73	84	79	73	67
1.25	94	86	81	92	85	80	90	84	79	74
1.50	98	91	86	96	90	85	94	88	84	78
2.00	103	97	92	101	96	91	98	94	90	84
2.50	105	100	96	104	99	95	100	96	93	86
3.00	108	103	99	106	101	98	102	99	96	88
4.00	110	106	103	108	105	102	104	101	99	91
5.00	112	108	106	110	107	104	105	103	101	93
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: MR mark
 Test Date: 2022-03-25

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE G0-2000A_V1 SYSTEM V2.00.411
 Humidity: 65.0%
 Test Distance: 8.880m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:223.32V I:0.7054A P:145.78W PF:0.9255 Freq:49.99Hz Lamp Flux:10264.4x1 lm		
NAME: 100W	TYPE:6500k	WEIGHT:/
SPEC.:	DIM.:	SERIAL No.:/
MFR.:	SUR.:	Shielding Angle:/



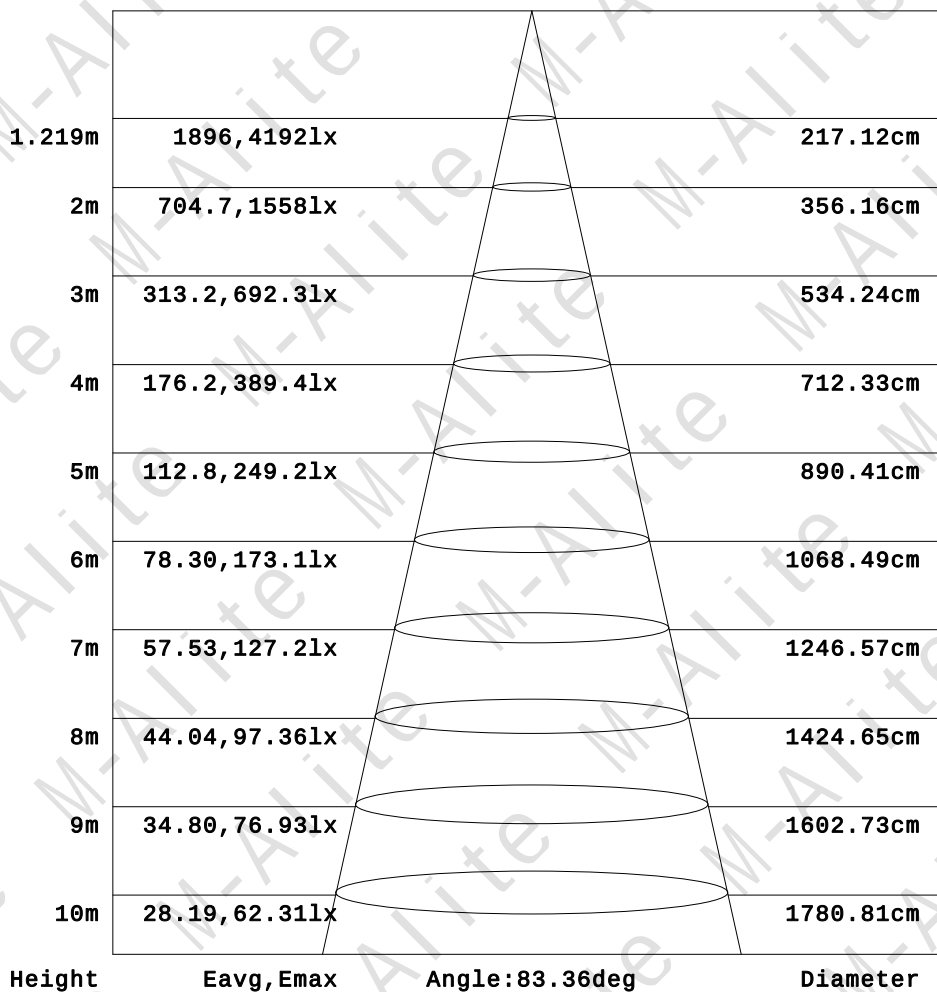
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:MR mark
Test Date:2022-03-25

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE G0-2000A_V1 SYSTEM V2.00.411
Humidity:65.0%
Test Distance:8.880m [K=1.0000]
Remarks:

AAI Figure

Test:U:223.32V I:0.7054A P:145.78W PF:0.9255 Freq:49.99Hz Lamp Flux:10264.4x1 lm		
NAME: 100W	TYPE:6500k	WEIGHT:/
SPEC.:	DIM.:	SERIAL No.:/
MFR.:	SUR.:	Shielding Angle:/

Flux out:7179 lm



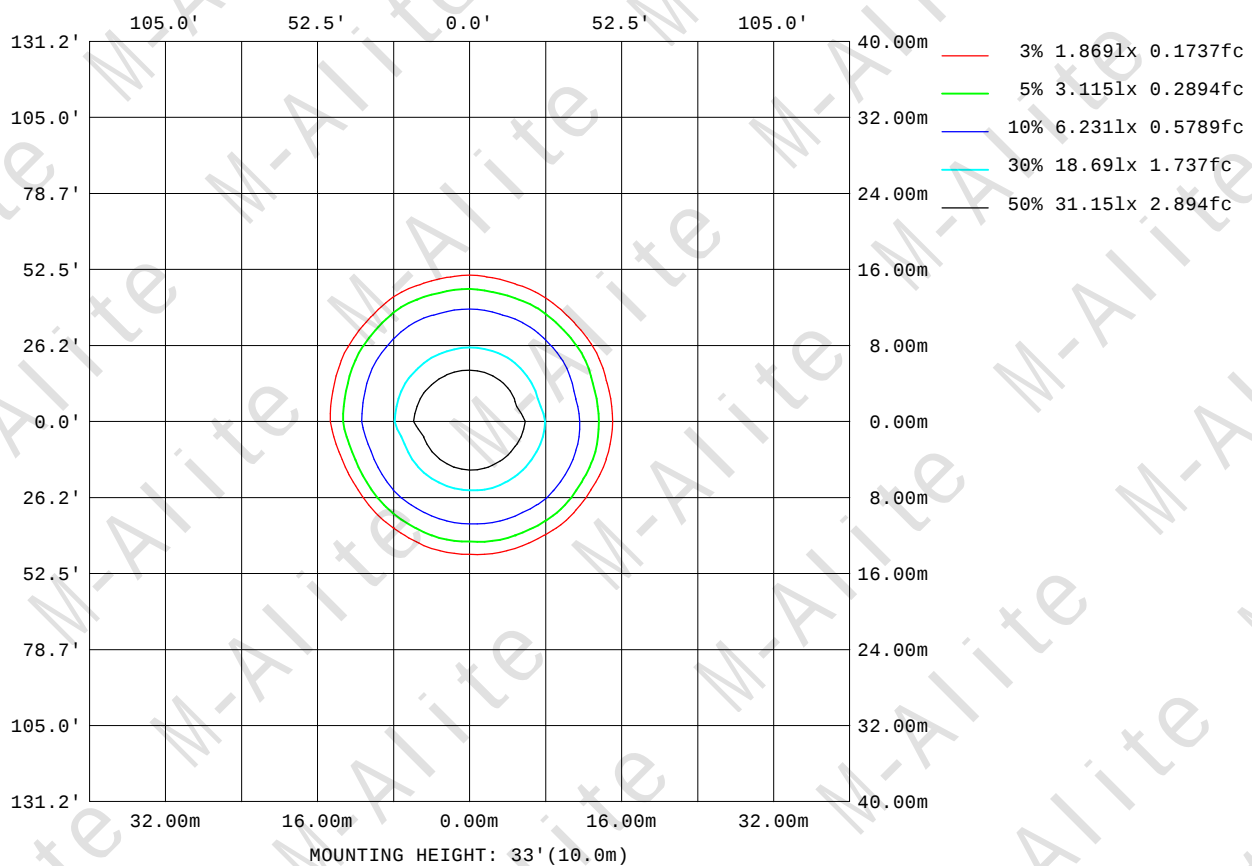
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:MR mark
 Test Date:2022-03-25

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE G0-2000A_V1 SYSTEM V2.00.411
 Humidity:65.0%
 Test Distance:8.880m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:223.32V I:0.7054A P:145.78W PF:0.9255 Freq:49.99Hz Lamp Flux:10264.4x1 lm		
NAME: 100W	TYPE:6500k	WEIGHT:/
SPEC.:	DIM.:	SERIAL No.:/
MFR.:	SUR.:	Shielding Angle:/



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: MR mark
Test Date: 2022-03-25

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE G0-2000A_V1 SYSTEM V2.00.411
Humidity: 65.0%
Test Distance: 8.880m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:223.32V I:0.7054A P:145.78W PF:0.9255 Freq:49.99Hz Lamp Flux:10264.4x1 lm		
NAME: 100W	TYPE:6500k	WEIGHT:/
SPEC.:	DIM.:	SERIAL No.:/
MFR.:	SUR.:	Shielding Angle:/

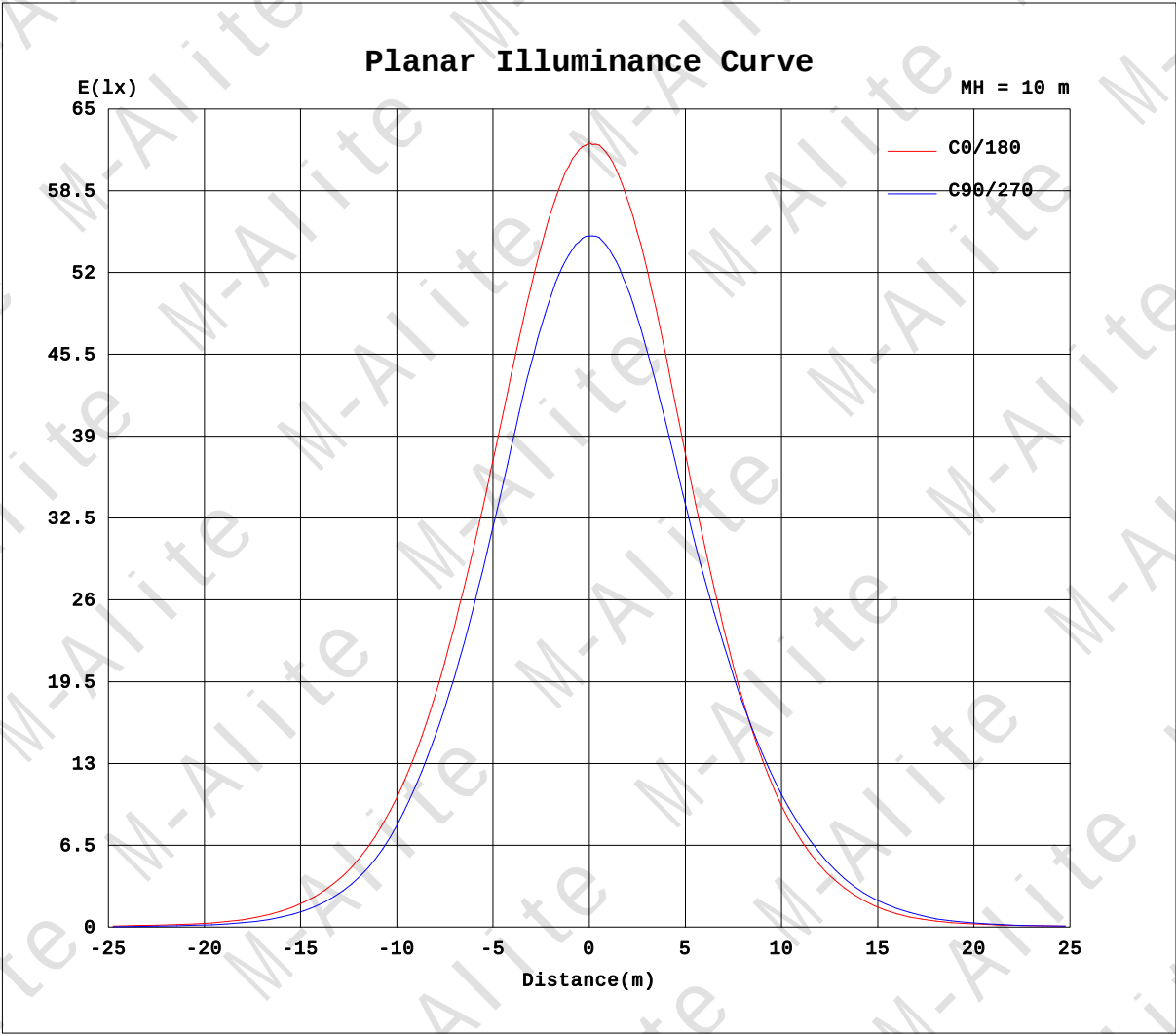
AvgL	cd/m2
L_0~180(65)av	1857
L_0~180(75)av	1629
L_0~180(85)av	574
L_90~270(65)av	1615
L_90~270(75)av	1106
L_90~270(85)av	512
L_45(65)av	1578
L_45(75)av	1267
L_45(85)av	559

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:MR mark
Test Date:2022-03-25

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000A_V1 SYSTEM V2.00.411
Humidity:65.0%
Test Distance:8.880m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: MR mark
Test Date: 2022-03-25

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE G0-2000A_V1 SYSTEM V2.00.411
Humidity: 65.0%
Test Distance: 8.880m [K=1.0000]
Remarks:

Test:U:223.32V I:0.7054A P:145.78W PF:0.9255 Freq:49.99Hz Lamp Flux:10264.4x1 lm		
NAME: 100W	TYPE:6500k	WEIGHT:/
SPEC.:	DIM.:	SERIAL No.:/
MFR.:	SUR.:	Shielding Angle:/

UNIT: cd

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.411
Humidity:65.0%
Test Distance:8.880m [K=1.0000]
Remarks:

```

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.411
 Humidity:65.0%
 Test Distance:8.880m [K=1.0000]
 Remarks: