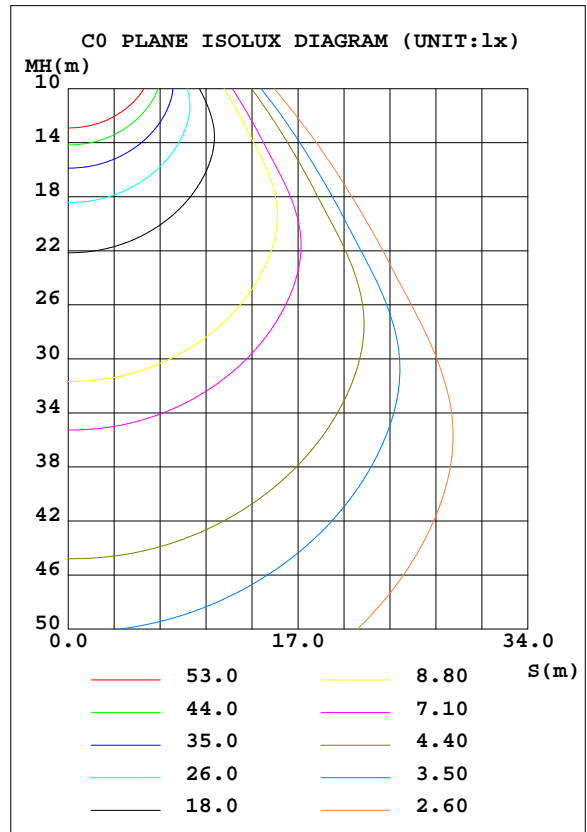
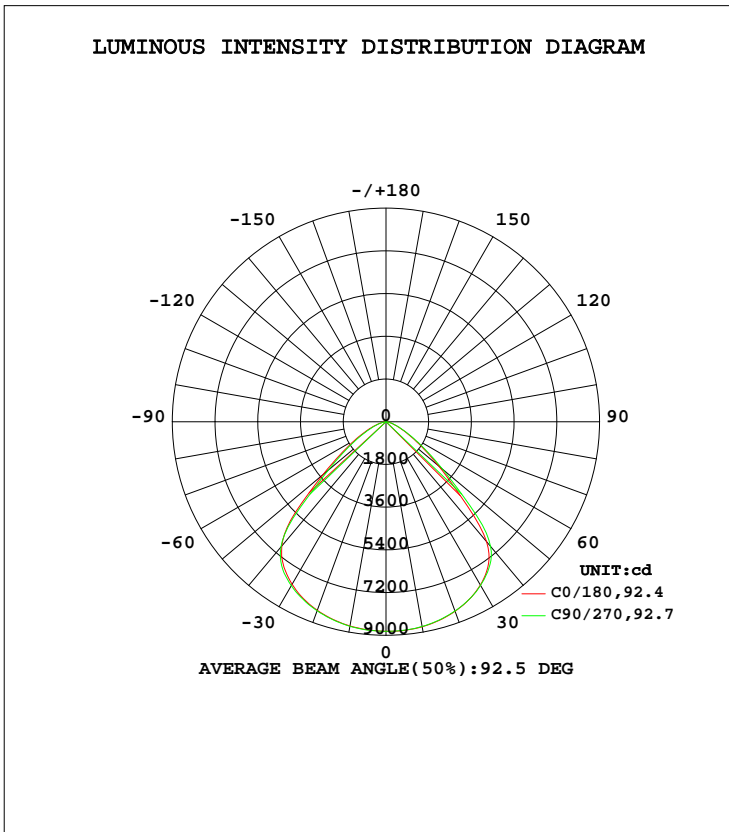


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:220.29V I:0.4735A P:98.069W PF:0.9402 Freq:50.01Hz Lamp Flux:18725.4x1 lm		
NAME: 100W-UFO	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 190.94 lm/W			
MODEL	100W-UFO	Imax(cd)	8833	S/MH(C0/180)	1.33
NOMINAL POWER(W)	100	LOR(%)	100.0	S/MH(C90/270)	1.34
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	18725	η UP, DN(C0-180)	0.4,48.6
NOMINAL FLUX(lm)	18725.4	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.4,50.6
LAMPS INSIDE	1	η up(%)	0.8	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	220	η down(%)	99.2	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:24.5DEG
 Operators:
 Test Date:2023-06-29

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.402
 Humidity:47.5%
 Test Distance:10.680m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C90	C180	C270				γ	Φ zone	Φ total	%lum, lamp
10	8772	8761	8737	8751				0- 10	839.5	839.5	4.48,4.48
20	8500	8489	8457	8478				10- 20	2444	3283	17.5,17.5
30	7948	7967	7909	7976				20- 30	3808	7091	37.9,37.9
40	6590	6858	6828	6887				30- 40	4683	11775	62.9,62.9
50	2891	3121	3476	3190				40- 50	3834	15609	83.4,83.4
60	1151	1232	1453	1309				50- 60	1864	17473	93.3,93.3
70	399.1	426.9	538.5	464.5				60- 70	803.8	18276	97.6,97.6
80	85.21	71.56	143.9	79.39				70- 80	268.4	18545	99,99
90	2.889	2.611	2.179	2.105				80- 90	27.90	18573	99.2,99.2
100	6.952	6.320	4.900	5.192				90-100	4.237	18577	99.2,99.2
110	14.21	13.44	10.75	11.37				100-110	9.396	18586	99.3,99.3
120	23.21	22.45	18.83	19.57				110-120	16.45	18603	99.3,99.3
130	32.76	31.77	28.27	28.68				120-130	22.95	18626	99.5,99.5
140	41.28	40.83	37.16	37.74				130-140	26.94	18653	99.6,99.6
150	47.82	48.55	44.45	46.01				140-150	26.99	18680	99.8,99.8
160	55.68	55.79	52.76	53.98				150-160	23.24	18703	99.9,99.9
170	63.33	62.22	61.86	61.19				160-170	16.48	18719	100,100
180	66.32	64.35	66.23	64.37				170-180	6.081	18725	100,100
DEG	LUMINOUS INTENSITY:cd								UNIT:lm		

Conical surface Flux(90deg): 13995 lm

%lum = 74.7%
 %lamp = 74.7%

Conical surface Flux(120deg): 17473 lm

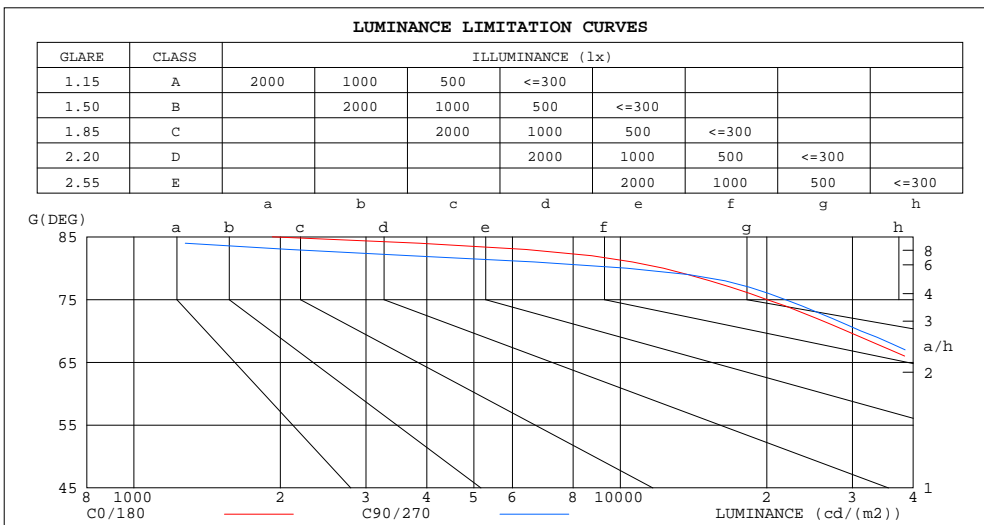
%lum = 93.3%
 %lamp = 93.3%

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:24.5DEG
 Operators:
 Test Date:2023-06-29

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.402
 Humidity:47.5%
 Test Distance:10.680m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:220.29V I:0.4735A P:98.069W PF:0.9402 Freq:50.01Hz Lamp Flux:18725.4x1 lm		
NAME: 100W-UFO	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	1925	673
80	12262	10306
75	20005	21827
70	29158	31217
65	41044	43900
60	57541	61638
55	80356	85778
50	112407	121423
45	158365	177303

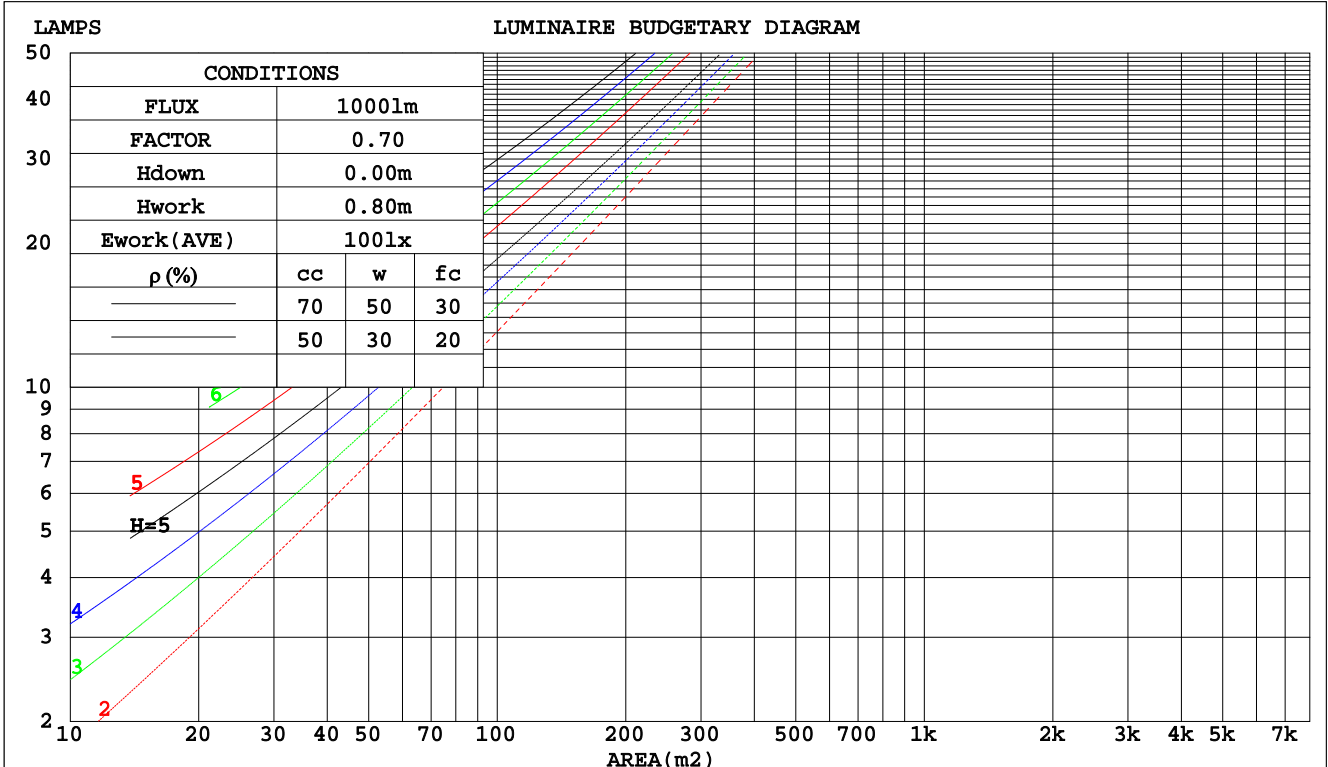
C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:24.5DEG
 Operators:
 Test Date:2023-06-29

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.402
 Humidity:47.5%
 Test Distance:10.680m [K=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:220.29V I:0.4735A P:98.069W PF:0.9402 Freq:50.01Hz Lamp Flux:18725.4x1 lm		
NAME: 100W-UFO	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

pcc	80%			70%			50%			30%			10%			0
	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pw																
pfc	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	1.01	1.01	1.01	.99
1.0	1.08	1.04	1.01	1.05	1.02	.90	1.01	.99	.97	.97	.95	.93	.94	.92	.91	.89
2.0	.97	.91	.87	.95	.90	.86	.91	.87	.84	.88	.85	.82	.85	.82	.80	.78
3.0	.87	.81	.75	.86	.80	.75	.83	.78	.73	.80	.76	.72	.78	.74	.71	.69
4.0	.79	.72	.66	.78	.71	.65	.75	.69	.64	.73	.68	.64	.71	.66	.63	.61
5.0	.72	.64	.58	.70	.63	.58	.68	.62	.57	.66	.61	.57	.65	.60	.56	.54
6.0	.65	.57	.52	.64	.57	.52	.62	.56	.51	.61	.55	.51	.59	.54	.50	.48
7.0	.60	.52	.46	.59	.51	.46	.57	.51	.46	.56	.50	.46	.55	.49	.45	.43
8.0	.55	.47	.42	.54	.47	.42	.53	.46	.41	.52	.46	.41	.50	.45	.41	.39
9.0	.51	.43	.38	.50	.43	.38	.49	.42	.38	.48	.42	.37	.47	.41	.37	.36
10.0	.47	.40	.35	.46	.39	.35	.45	.39	.34	.44	.38	.34	.43	.38	.34	.32



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:24.5DEG
 Operators:
 Test Date:2023-06-29

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.402
 Humidity:47.5%
 Test Distance:10.680m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:220.29V I:0.4735A P:98.069W PF:0.9402 Freq:50.01Hz Lamp Flux:18725.4x1 lm		
NAME: 100W-UFO	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.234	.133	.042	.227	.129	.041	.213	.122	.039	.201	.116	.037	.190	.110	.035	
2.0	.228	.125	.038	.222	.122	.038	.211	.117	.036	.200	.112	.035	.190	.108	.034	
3.0	.218	.116	.035	.213	.114	.034	.203	.110	.033	.193	.106	.032	.185	.102	.032	
4.0	.207	.108	.032	.202	.106	.031	.193	.102	.031	.185	.099	.030	.177	.096	.029	
5.0	.196	.100	.029	.191	.098	.029	.184	.096	.028	.176	.093	.028	.169	.090	.027	
6.0	.185	.093	.027	.181	.092	.026	.174	.089	.026	.168	.087	.026	.161	.085	.025	
7.0	.175	.086	.025	.172	.085	.024	.165	.084	.024	.159	.082	.024	.154	.080	.023	
8.0	.166	.081	.023	.163	.080	.023	.157	.078	.022	.152	.077	.022	.147	.075	.022	
9.0	.157	.076	.021	.154	.075	.021	.149	.074	.021	.144	.072	.021	.140	.071	.021	
10.0	.149	.072	.020	.147	.071	.020	.142	.070	.020	.138	.068	.019	.133	.067	.019	

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.197	.197	.197	.168	.168	.168	.115	.115	.115	.066	.066	.066	.021	.021	.021	
1.0	.181	.163	.147	.155	.140	.126	.106	.096	.087	.061	.056	.051	.020	.018	.016	
2.0	.170	.139	.112	.146	.119	.097	.100	.082	.068	.058	.048	.040	.018	.016	.013	
3.0	.161	.120	.088	.138	.104	.076	.095	.072	.053	.055	.042	.032	.018	.014	.010	
4.0	.153	.106	.071	.131	.092	.062	.090	.064	.043	.052	.038	.026	.017	.012	.008	
5.0	.146	.096	.059	.125	.083	.051	.086	.058	.036	.050	.034	.021	.016	.011	.007	
6.0	.139	.087	.050	.119	.075	.043	.082	.053	.031	.048	.031	.018	.015	.010	.006	
7.0	.133	.080	.043	.114	.069	.037	.079	.049	.026	.046	.029	.016	.015	.009	.005	
8.0	.127	.074	.038	.109	.064	.033	.076	.045	.023	.044	.027	.014	.014	.009	.005	
9.0	.122	.069	.034	.105	.060	.029	.073	.042	.021	.042	.025	.012	.014	.008	.004	
10.0	.117	.065	.030	.101	.056	.027	.070	.040	.019	.041	.023	.011	.013	.008	.004	

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:24.5DEG
 Operators:
 Test Date:2023-06-29

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.402
 Humidity:47.5%
 Test Distance:10.680m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:220.29V I:0.4735A P:98.069W PF:0.9402 Freq:50.01Hz Lamp Flux:18725.4x1 lm										
NAME: 100W-UFO					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	17.5	18.8	17.8	19.0	19.2	17.7	19.0	18.0	19.2	19.4
3H	17.6	18.8	17.9	19.0	19.2	17.8	19.0	18.1	19.2	19.5
4H	17.6	18.7	17.9	18.9	19.2	17.8	18.9	18.1	19.2	19.4
6H	17.5	18.5	17.8	18.8	19.1	17.8	18.8	18.1	19.1	19.4
8H	17.5	18.5	17.8	18.7	19.0	17.7	18.7	18.1	19.0	19.3
12H	17.4	18.4	17.8	18.7	19.0	17.7	18.6	18.0	18.9	19.2
4H 2H	17.5	18.6	17.8	18.9	19.1	17.7	18.8	18.0	19.1	19.3
3H	17.7	18.6	18.0	18.9	19.2	17.9	18.8	18.2	19.1	19.4
4H	17.7	18.5	18.0	18.9	19.2	17.9	18.8	18.3	19.1	19.4
6H	17.6	18.4	18.0	18.7	19.1	17.9	18.6	18.3	19.0	19.3
8H	17.6	18.3	18.0	18.7	19.1	17.8	18.5	18.2	18.9	19.3
12H	17.6	18.2	18.0	18.6	19.0	17.8	18.4	18.2	18.8	19.2
8H 4H	17.6	18.3	18.0	18.7	19.1	17.8	18.5	18.2	18.9	19.3
6H	17.6	18.1	18.0	18.6	19.0	17.8	18.4	18.2	18.8	19.2
8H	17.5	18.0	18.0	18.5	18.9	17.8	18.3	18.2	18.7	19.2
12H	17.5	17.9	18.0	18.4	18.9	17.7	18.1	18.2	18.6	19.1
12H 4H	17.6	18.2	18.0	18.6	19.0	17.8	18.4	18.2	18.8	19.2
6H	17.5	18.0	18.0	18.5	18.9	17.8	18.3	18.2	18.7	19.2
8H	17.5	17.9	18.0	18.4	18.9	17.7	18.1	18.2	18.6	19.1
Variations with the observer position at spacings:										
S = 1.0H	+ 1.7 / - 2.4					+ 1.7 / - 2.3				
1.5H	+ 1.4 / - 1.6					+ 1.3 / - 1.7				
2.0H	+ 2.9 / - 2.8					+ 3.3 / - 3.0				

CIE Pub.117, 18725 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 10.2)

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:24.5DEG
 Operators:
 Test Date:2023-06-29

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.402
 Humidity:47.5%
 Test Distance:10.680m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:220.29V I:0.4735A P:98.069W PF:0.9402 Freq:50.01Hz Lamp Flux:18725.4x1 lm		
NAME: 100W-UFO	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

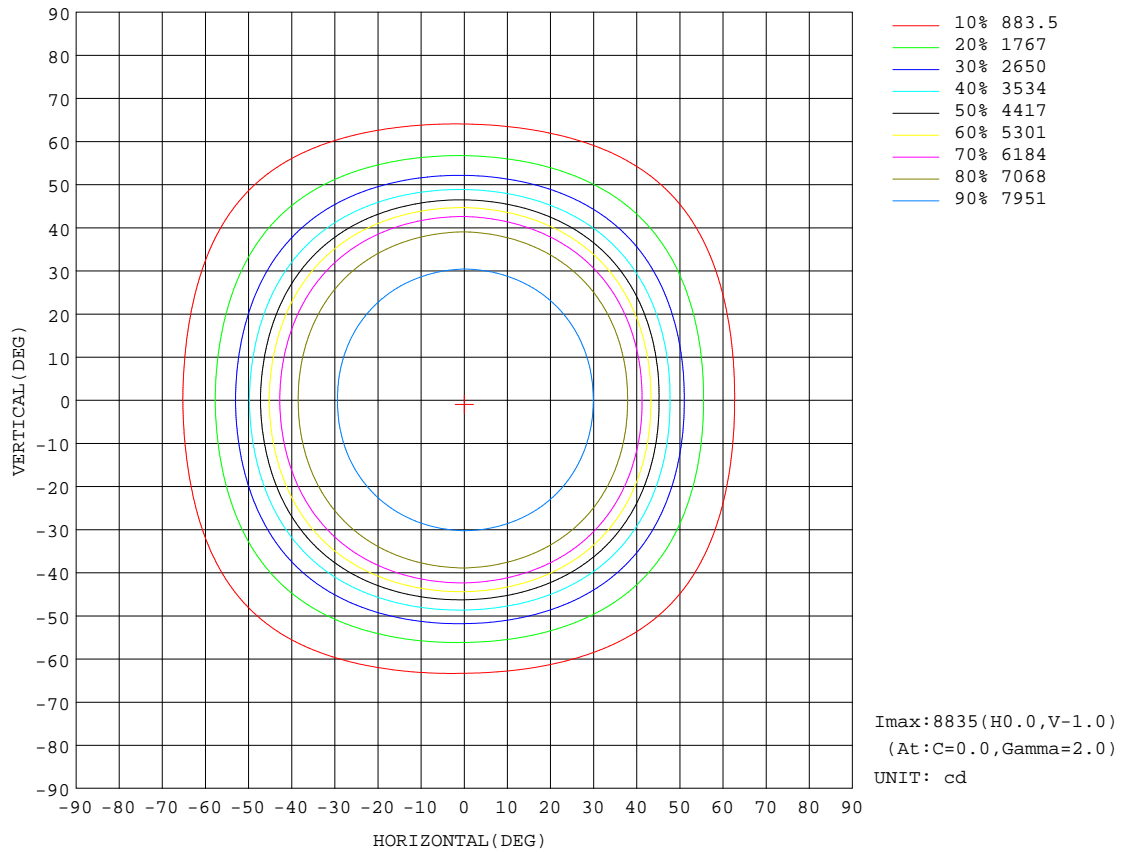
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	68	58	52	67	58	52	66	57	52	47
0.80	78	69	63	77	68	63	75	67	62	56
1.00	86	77	72	85	77	71	83	77	71	65
1.25	92	84	79	91	84	78	89	82	78	72
1.50	96	89	84	95	88	83	92	87	82	76
2.00	102	96	91	100	94	90	97	92	88	82
2.50	105	99	94	103	97	93	99	95	91	84
3.00	107	102	98	105	100	97	101	98	95	87
4.00	110	106	102	108	104	101	104	101	98	90
5.00	112	108	105	109	106	103	105	102	100	91
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:24.5DEG
 Operators:
 Test Date:2023-06-29

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.402
 Humidity:47.5%
 Test Distance:10.680m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:220.29V I:0.4735A P:98.069W PF:0.9402 Freq:50.01Hz Lamp Flux:18725.4x1 lm		
NAME: 100W-UFO	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



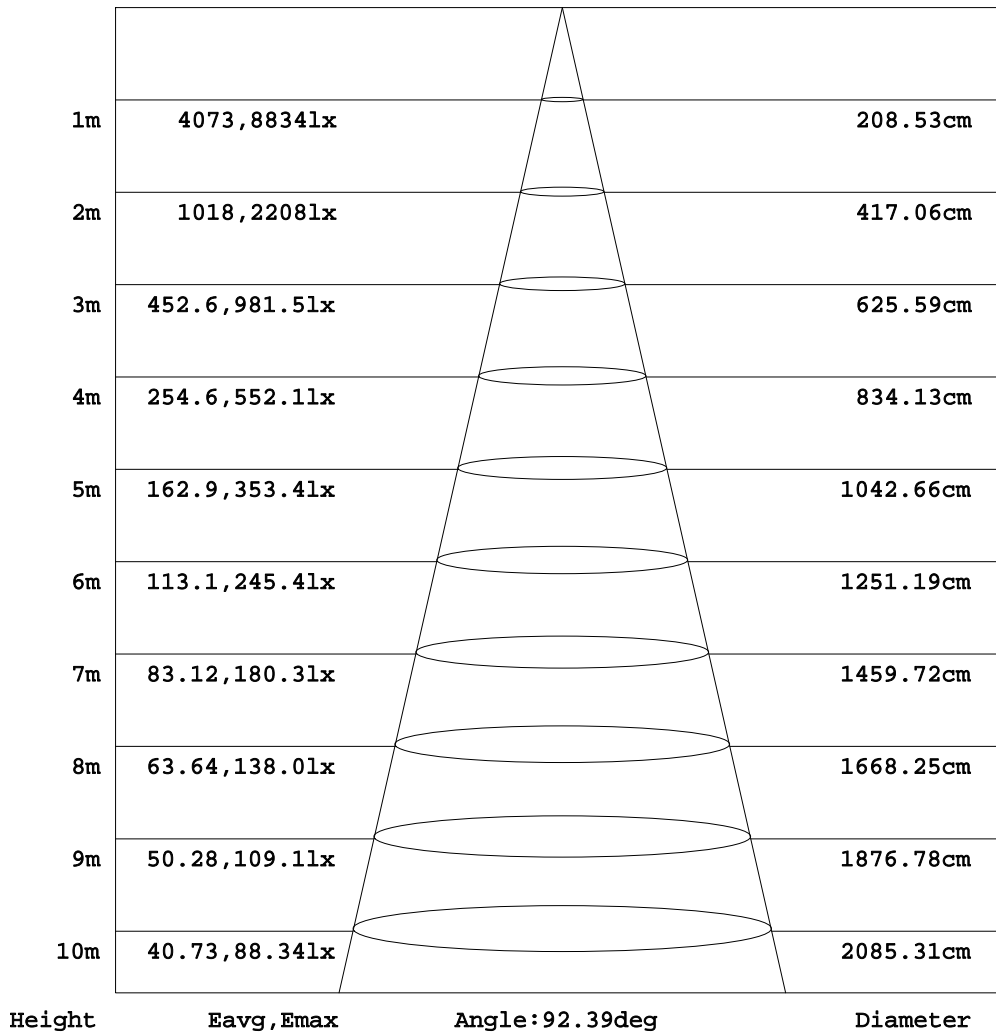
C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:24.5DEG
 Operators:
 Test Date:2023-06-29

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.402
 Humidity:47.5%
 Test Distance:10.680m [K=1.0000]
 Remarks:

AAI Figure

Test:U:220.29V I:0.4735A P:98.069W PF:0.9402 Freq:50.01Hz Lamp Flux:18725.4x1 lm		
NAME: 100W-UFO	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Flux out:14715 lm



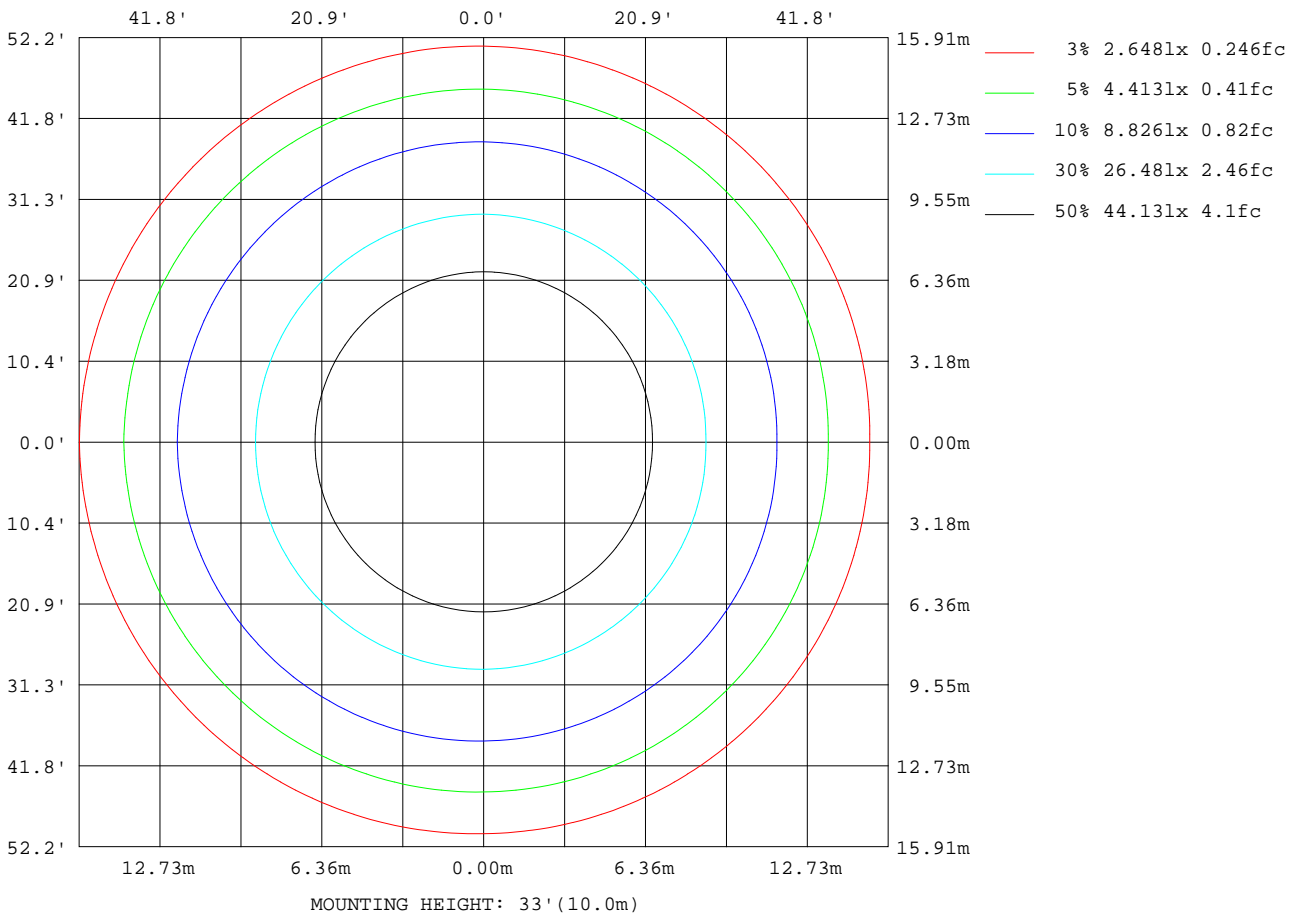
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:24.5DEG
 Operators:
 Test Date:2023-06-29

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.402
 Humidity:47.5%
 Test Distance:10.680m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:220.29V I:0.4735A P:98.069W PF:0.9402 Freq:50.01Hz Lamp Flux:18725.4x1 lm		
NAME: 100W-UFO	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 24.5DEG
 Operators:
 Test Date: 2023-06-29

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.402
 Humidity: 47.5%
 Test Distance: 10.680m [K=1.0000]
 Remarks:

LED Avg.L Report

Test:U:220.29V I:0.4735A P:98.069W PF:0.9402 Freq:50.01Hz Lamp Flux:18725.4x1 lm		
NAME: 100W-UFO	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

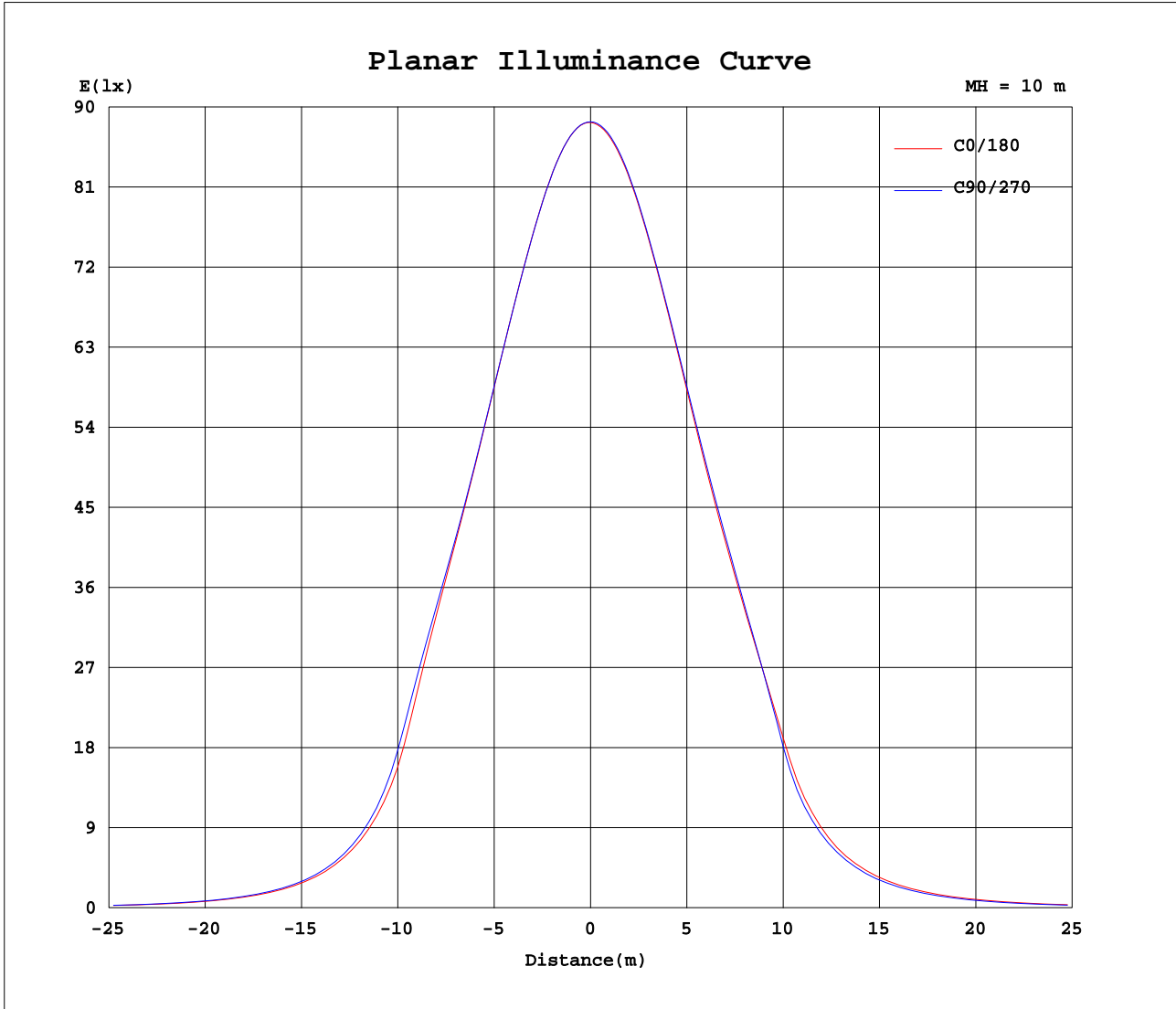
AvgL	cd/m2
L_0~180(65)av	47312
L_0~180(75)av	24233
L_0~180(85)av	7422
L_90~270(65)av	45663
L_90~270(75)av	22772
L_90~270(85)av	736
L_45(65)av	46671
L_45(75)av	23584
L_45(85)av	3755

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:24.5DEG
 Operators:
 Test Date:2023-06-29

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.402
 Humidity:47.5%
 Test Distance:10.680m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 24.5DEG
 Operators:
 Test Date: 2023-06-29

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.402
 Humidity: 47.5%
 Test Distance: 10.680m [K=1.0000]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.29V I:0.4735A P:98.069W PF:0.9402 Freq:50.01Hz Lamp Flux:18725.4x1 lm		
NAME: 100W-UFO	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Table--1

UNIT: cd

C(DEG) γ (DEG)	0	90	180	270															
0	8830	8830	8830	8830															
5	8825	8818	8802	8812															
10	8772	8761	8737	8751															
15	8662	8650	8623	8639															
20	8500	8489	8457	8478															
25	8271	8270	8227	8263															
30	7948	7967	7909	7976															
35	7484	7552	7490	7590															
40	6590	6858	6828	6887															
45	4481	5013	5403	5121															
50	2891	3121	3476	3190															
55	1844	1967	2242	2052															
60	1151	1232	1453	1309															
65	694	742	905	802															
70	399	427	538	464															
75	207	226	295	246															
80	85.2	71.6	144	79.4															
85	6.72	2.35	45.0	2.79															
90	2.89	2.61	2.18	2.11															
95	4.50	4.05	3.19	3.30															
100	6.95	6.32	4.90	5.19															
105	10.2	9.50	7.46	7.94															
110	14.2	13.4	10.8	11.4															
115	18.6	17.9	14.6	15.3															
120	23.2	22.5	18.8	19.6															
125	28.0	27.1	23.5	24.1															
130	32.8	31.8	28.3	28.7															
135	37.2	36.3	33.0	33.2															
140	41.3	40.8	37.2	37.7															
145	44.7	44.9	41.0	42.1															
150	47.8	48.5	44.4	46.0															
155	51.4	52.0	48.2	49.8															
160	55.7	55.8	52.8	54.0															
165	59.8	59.4	57.6	57.8															
170	63.3	62.2	61.9	61.2															
175	65.7	63.8	65.1	63.3															
180	66.3	64.3	66.2	64.4															

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:24.5DEG
 Operators:
 Test Date:2023-06-29

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.402
 Humidity:47.5%
 Test Distance:10.680m [K=1.0000]
 Remarks: