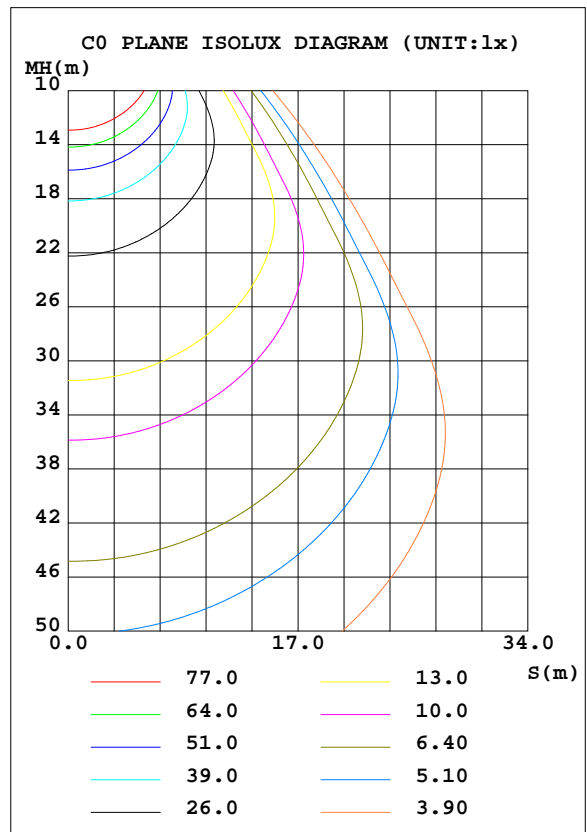
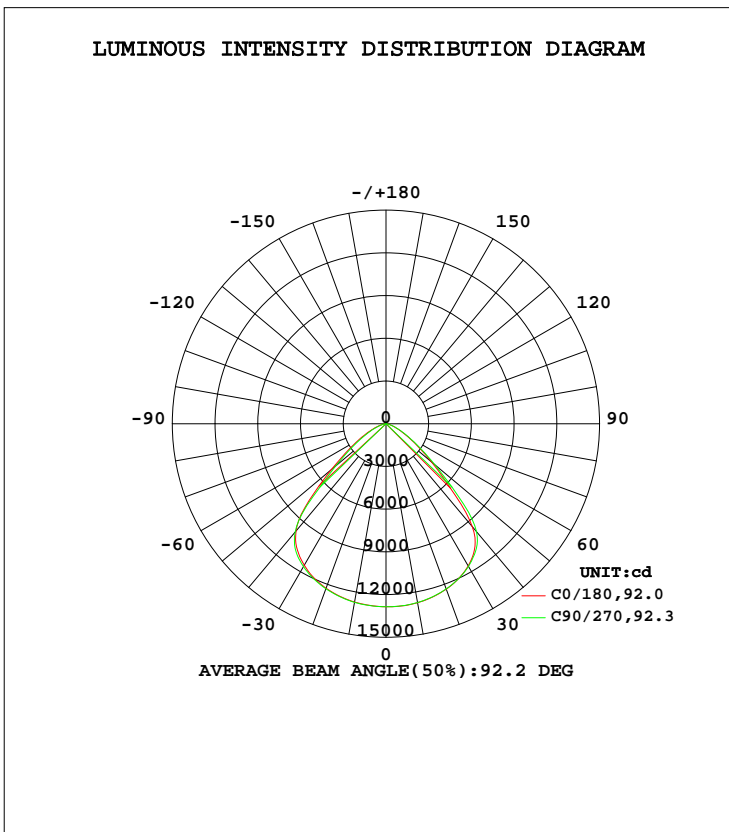


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:220.16V I:0.6905A P:147.21W PF:0.9683 Freq:50.01Hz Lamp Flux:27085.9x1 lm		
NAME: 150W-UFO	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 184.00 lm/W			
MODEL	150W-UFO	Imax(cd)	12856	S/MH(C0/180)	1.32
NOMINAL POWER(W)	150	LOR(%)	100.0	S/MH(C90/270)	1.34
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	27086	η UP, DN(C0-180)	0.4,48.6
NOMINAL FLUX(lm)	27085.9	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	1276	1275	1271	1273				0- 10	1222	1222	4.51,4.51
20	1236	1235	1230	1233				10- 20	3555	4777	17.6,17.6
30	1154	1157	1148	1159				20- 30	5535	10312	38.1,38.1
40	943.7	988.4	982.8	992.7				30- 40	6780	17091	63.1,63.1
50	416.7	447.5	502.6	459.1				40- 50	5489	22581	83.4,83.4
60	166.7	177.4	210.3	189.1				50- 60	2689	25269	93.3,93.3
70	57.93	62.62	78.18	67.20				60- 70	1164	26433	97.6,97.6
80	12.45	10.44	20.98	11.55				70- 80	390.8	26824	99,99
90	0.4240	0.3787	0.3176	0.3093				80- 90	40.99	26865	99.2,99.2
100	1.006	0.9110	0.7092	0.7520				90-100	6.156	26871	99.2,99.2
110	2.047	1.934	1.548	1.643				100-110	13.55	26885	99.3,99.3
120	3.349	3.242	2.716	2.825				110-120	23.72	26908	99.3,99.3
130	4.730	4.595	4.083	4.143				120-130	33.13	26942	99.5,99.5
140	5.974	5.912	5.378	5.461				130-140	38.96	26980	99.6,99.6
150	6.933	7.038	6.445	6.662				140-150	39.09	27020	99.8,99.8
160	8.069	8.092	7.648	7.817				150-160	33.68	27053	99.9,99.9
170	9.185	9.035	8.978	8.869				160-170	23.89	27077	100,100
180	9.626	9.357	9.630	9.345				170-180	8.828	27086	100,100
DEG	LUMINOUS INTENSITY:×10cd								UNIT:lm		

Conical surface Flux(90deg): 20267 lm

%lum = 74.8%
 %lamp = 74.8%

Conical surface Flux(120deg): 25269 lm

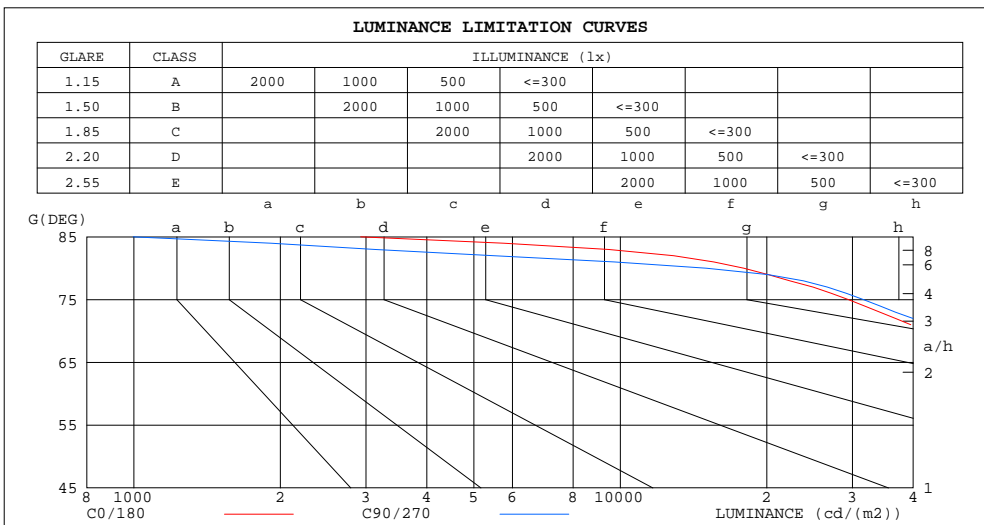
%lum = 93.3%
 %lamp = 93.3%

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:220.16V I:0.6905A P:147.21W PF:0.9683 Freq:50.01Hz Lamp Flux:27085.9x1 lm		
NAME: 150W-UFO	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	2926	997
80	17934	15012
75	29413	31579
70	42377	45740
65	59645	63461
60	83421	88629
55	116586	123169
50	162187	173935
45	226515	252311

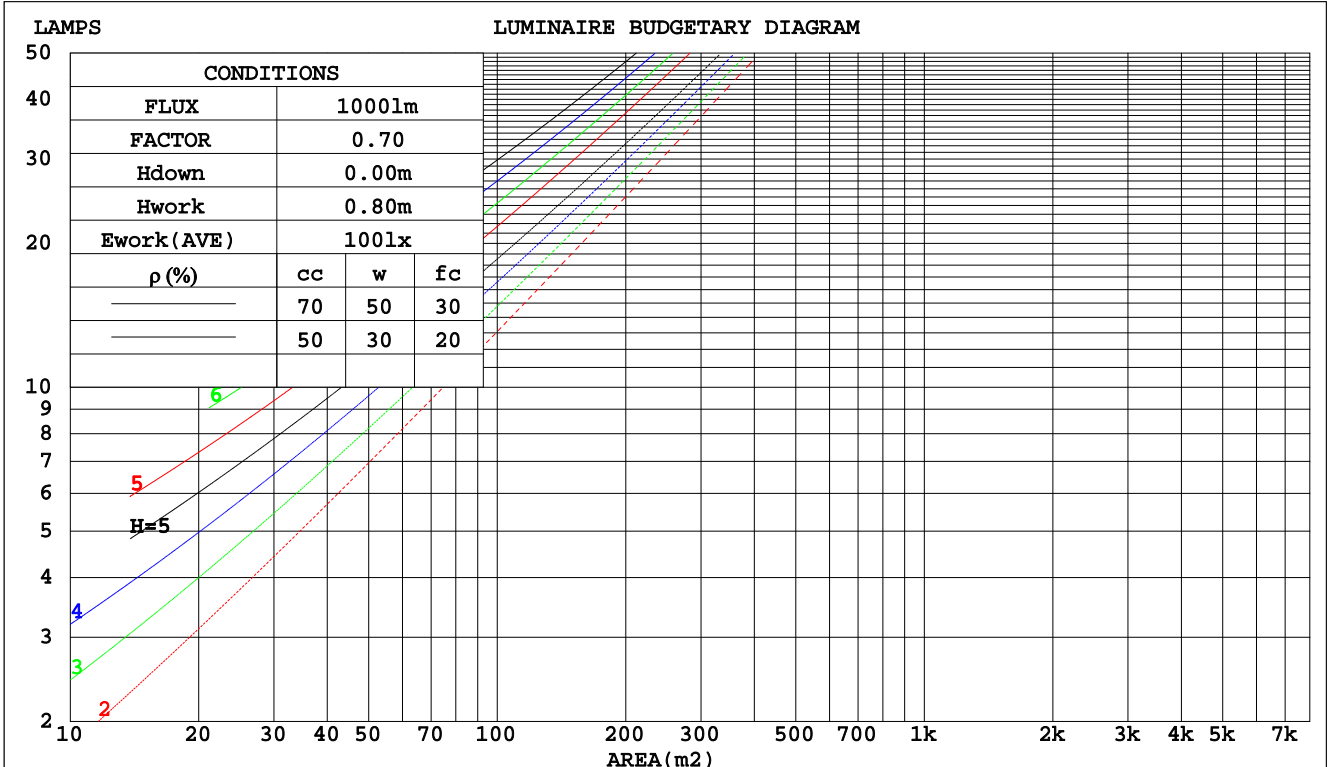
C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:24.5DEG
 Operators:
 Test Date:2023-06-29

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:220.16V I:0.6905A P:147.21W PF:0.9683 Freq:50.01Hz Lamp Flux:27085.9x1 lm		
NAME: 150W-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	.65	.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	.63	.56	.51	.61	.55	.51	.59	.54	.50	.48
7.0	.60	.52	.47	.59	.52	.46	.57	.51	.46	.56	.50	.46	.55	.49	.45	.44
8.0	.55	.47	.42	.54	.47	.42	.53	.46	.42	.52	.46	.41	.50	.45	.41	.39
9.0	.51	.43	.38	.50	.43	.38	.49	.42	.38	.48	.42	.38	.47	.41	.37	.36
10.0	.47	.40	.35	.46	.39	.35	.45	.39	.35	.44	.39	.34	.43	.38	.34	.33



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:220.16V I:0.6905A P:147.21W PF:0.9683 Freq:50.01Hz Lamp Flux:27085.9x1 lm		
NAME: 150W-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	.226	.129	.041	.213	.122	.039	.201	.116	.037	.190	.110	.035	
2.0	.228	.125	.038	.222	.122	.038	.210	.117	.036	.200	.112	.035	.190	.107	.034	
3.0	.218	.116	.035	.213	.114	.034	.202	.110	.033	.193	.106	.032	.184	.102	.032	
4.0	.207	.107	.032	.202	.106	.031	.193	.102	.031	.185	.099	.030	.177	.096	.029	
5.0	.195	.100	.029	.191	.098	.029	.183	.095	.028	.176	.093	.028	.169	.090	.027	
6.0	.185	.093	.027	.181	.091	.026	.174	.089	.026	.167	.087	.026	.161	.085	.025	
7.0	.175	.086	.024	.171	.085	.024	.165	.083	.024	.159	.082	.024	.154	.080	.023	
8.0	.165	.081	.023	.162	.080	.023	.157	.078	.022	.151	.077	.022	.146	.075	.022	
9.0	.157	.076	.021	.154	.075	.021	.149	.074	.021	.144	.072	.021	.140	.071	.020	
10.0	.149	.071	.020	.147	.071	.020	.142	.070	.020	.137	.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	.054	.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	.027	.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:220.16V I:0.6905A P:147.21W PF:0.9683 Freq:50.01Hz Lamp Flux:27085.9x1 lm										
NAME: 150W-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	17.7	19.0	19.2	17.7	19.0	18.0	19.2	19.4
3H	17.6	18.7	17.9	19.0	19.2	17.8	19.0	18.1	19.2	19.4
4H	17.5	18.7	17.9	18.9	19.2	17.8	18.9	18.1	19.1	19.4
6H	17.5	18.5	17.8	18.8	19.1	17.7	18.8	18.1	19.0	19.3
8H	17.4	18.4	17.8	18.7	19.0	17.7	18.7	18.0	19.0	19.3
12H	17.4	18.3	17.7	18.6	19.0	17.6	18.6	18.0	18.9	19.2
4H 2H	17.5	18.6	17.8	18.8	19.1	17.7	18.8	18.0	19.0	19.3
3H	17.6	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	18.8	19.2	17.9	18.7	18.2	19.1	19.4
6H	17.6	18.4	18.0	18.7	19.1	17.8	18.6	18.2	18.9	19.3
8H	17.6	18.3	18.0	18.6	19.0	17.8	18.5	18.2	18.9	19.3
12H	17.5	18.2	18.0	18.6	19.0	17.7	18.4	18.2	18.8	19.2
8H 4H	17.6	18.3	18.0	18.6	19.0	17.8	18.5	18.2	18.9	19.3
6H	17.6	18.1	18.0	18.5	19.0	17.8	18.3	18.2	18.8	19.2
8H	17.5	18.0	18.0	18.5	18.9	17.7	18.2	18.2	18.7	19.1
12H	17.5	17.9	18.0	18.4	18.9	17.7	18.1	18.2	18.6	19.1
12H 4H	17.5	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	17.7	18.2	18.2	18.7	19.1
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	+ 1.6 / - 2.3					+ 1.6 / - 2.3				
1.5H	+ 1.4 / - 1.6					+ 1.3 / - 1.7				
2.0H	+ 2.9 / - 2.8					+ 3.2 / - 2.9				

CIE Pub.117, 27086 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 11.5)

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:220.16V I:0.6905A P:147.21W PF:0.9683 Freq:50.01Hz Lamp Flux:27085.9x1 lm		
NAME: 150W-UFO	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

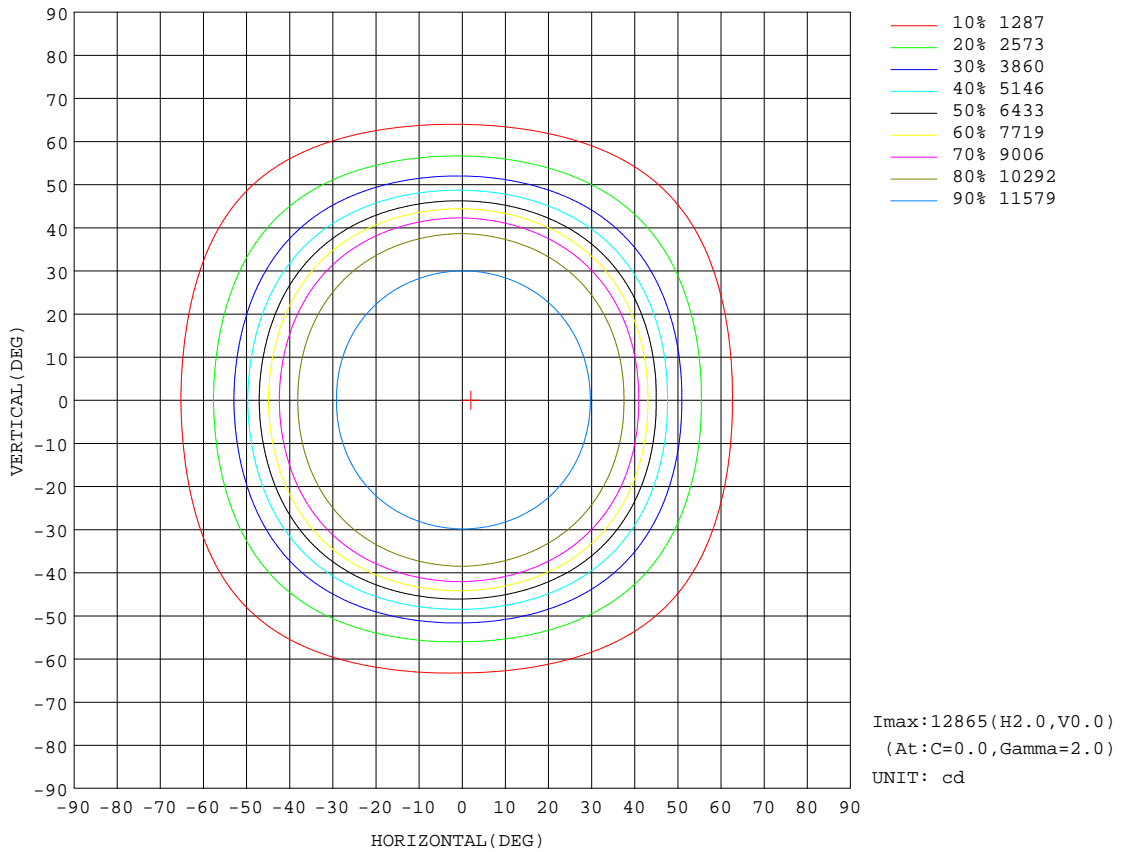
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	68	58	53	67	58	52	66	58	52	47
0.80	78	69	63	77	68	63	76	68	62	57
1.00	86	77	72	85	77	71	83	77	71	65
1.25	92	84	79	91	84	79	89	82	78	72
1.50	97	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	92
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:220.16V I:0.6905A P:147.21W PF:0.9683 Freq:50.01Hz Lamp Flux:27085.9x1 lm		
NAME: 150W-UFO	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



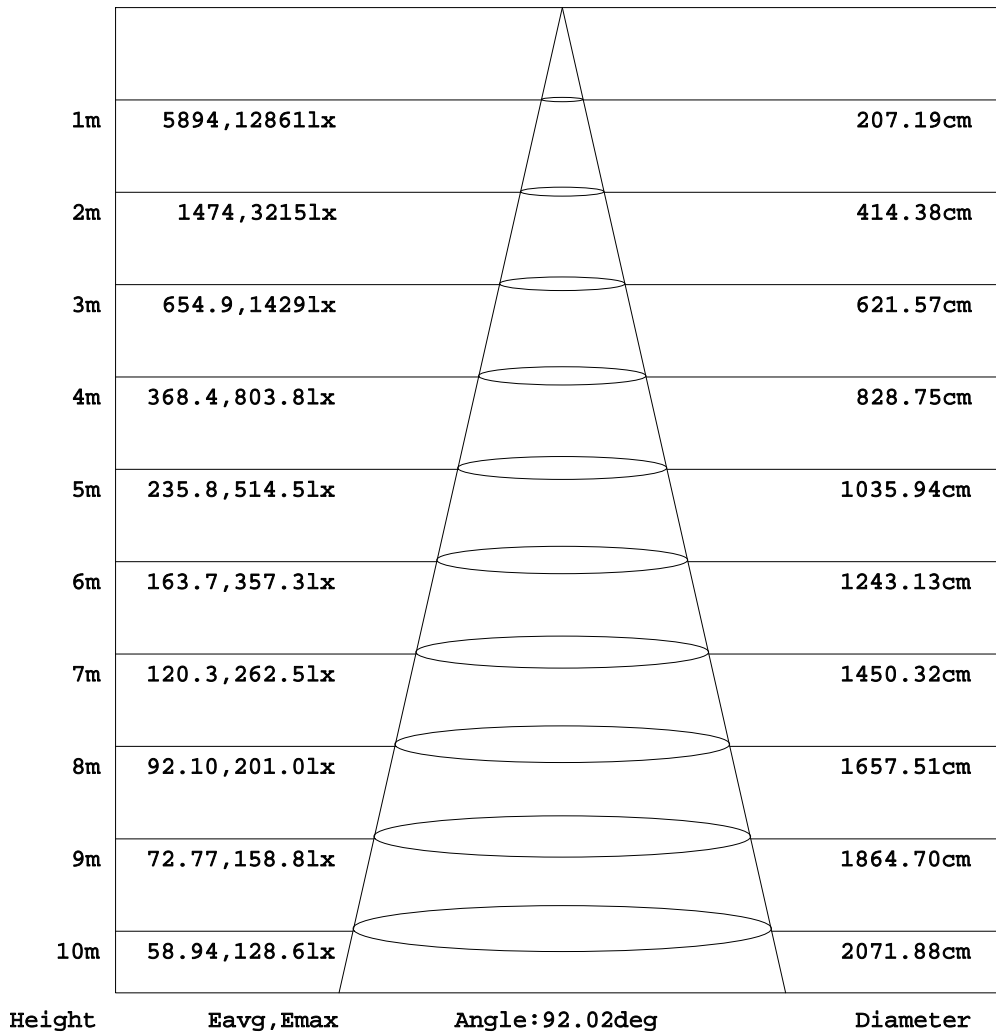
C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:24.5DEG
 Operators:
 Test Date:2023-06-29

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:220.16V I:0.6905A P:147.21W PF:0.9683 Freq:50.01Hz Lamp Flux:27085.9x1 lm		
NAME: 150W-UFO	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Flux out:21294 lm



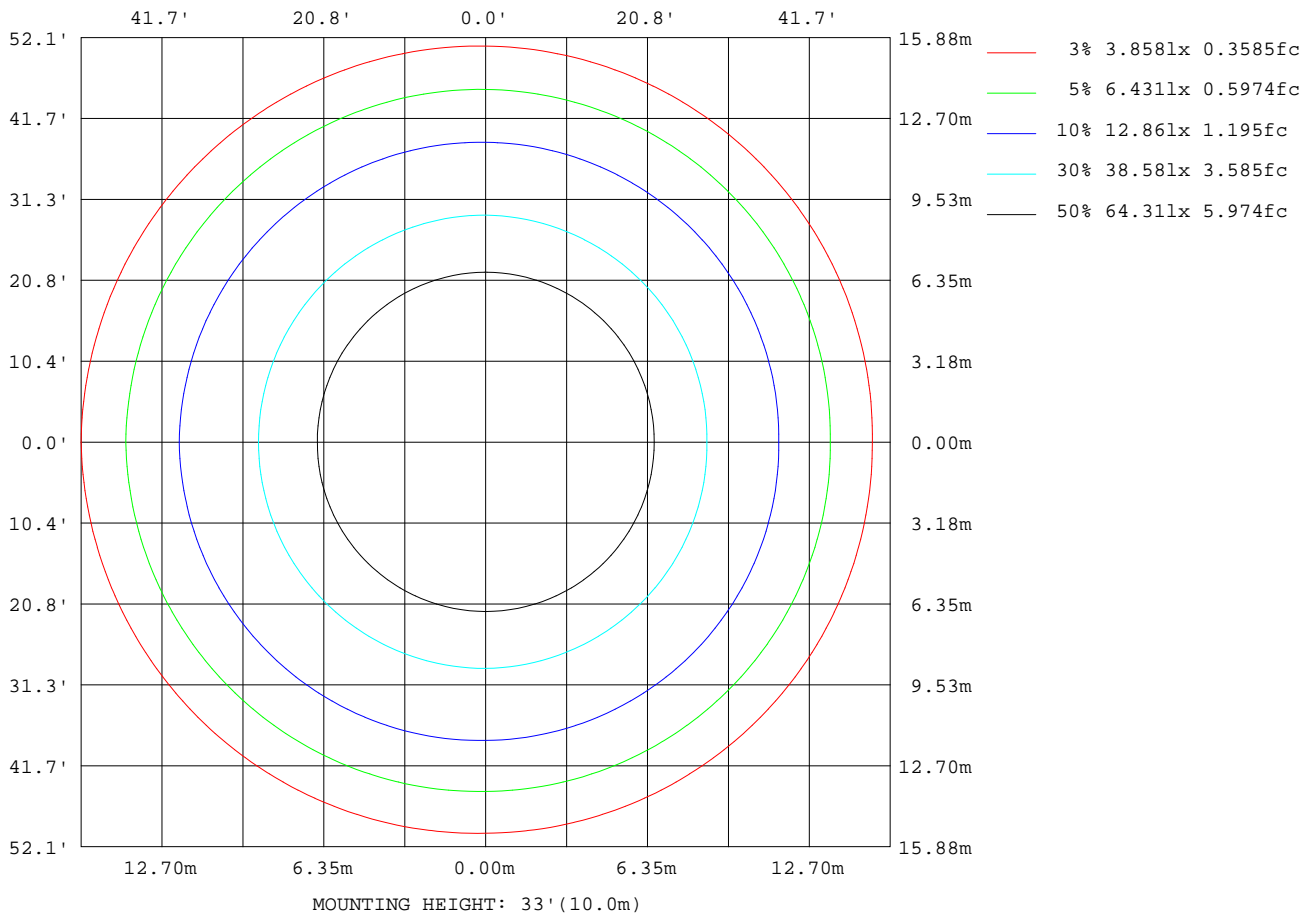
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:220.16V I:0.6905A P:147.21W PF:0.9683 Freq:50.01Hz Lamp Flux:27085.9x1 lm		
NAME: 150W-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:220.16V I:0.6905A P:147.21W PF:0.9683 Freq:50.01Hz Lamp Flux:27085.9x1 lm		
NAME: 150W-UFO	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

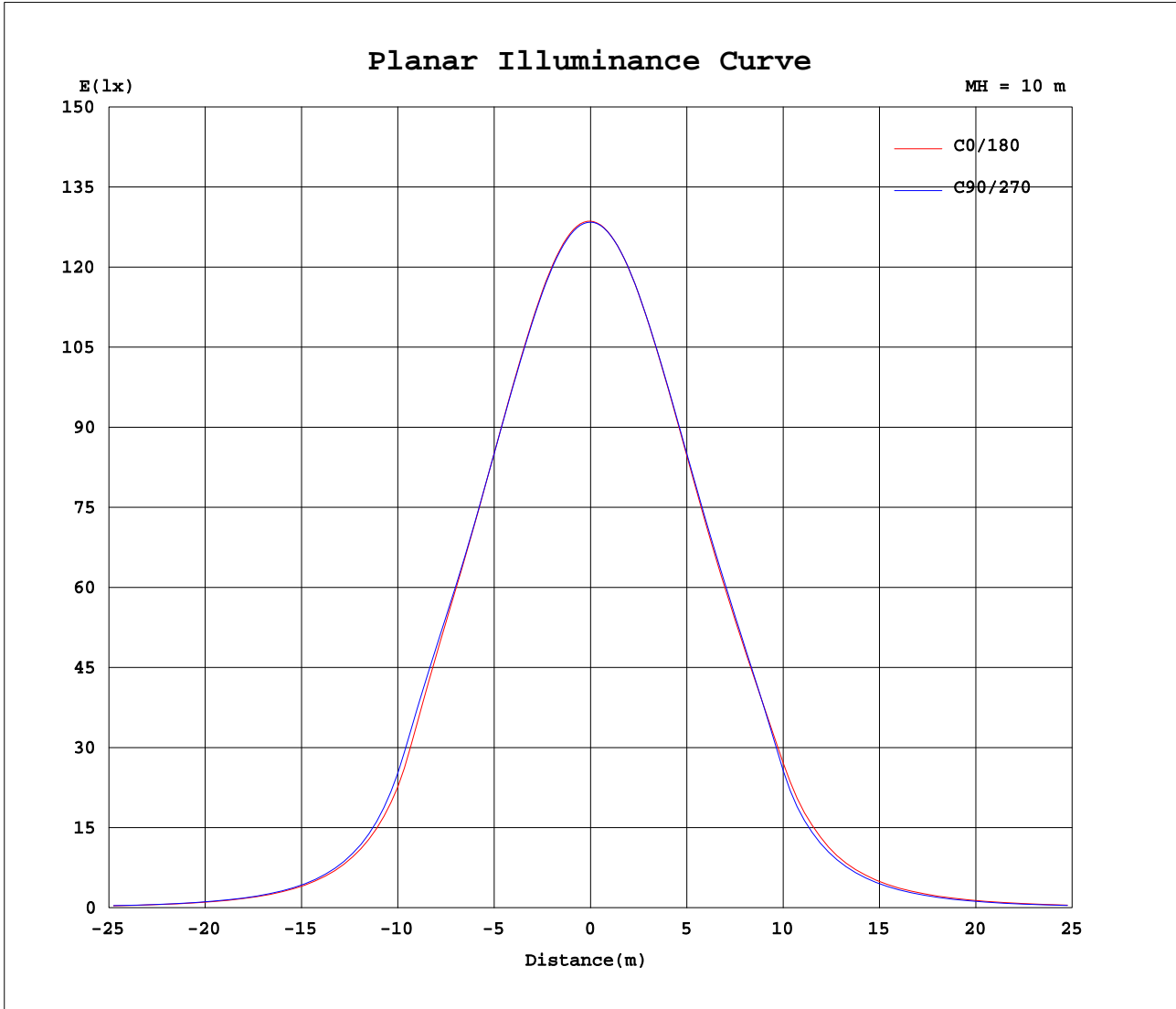
AvgL	cd/m2
L_0~180(65)av	68681
L_0~180(75)av	35375
L_0~180(85)av	10973
L_90~270(65)av	66087
L_90~270(75)av	32961
L_90~270(85)av	1093
L_45(65)av	67628
L_45(75)av	34241
L_45(85)av	5535

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:220.16V I:0.6905A P:147.21W PF:0.9683 Freq:50.01Hz Lamp Flux:27085.9x1 lm		
NAME: 150W-UFO	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

Table--1

UNIT: x10cd

C(DEG) γ (DEG)	0	90	180	270															
0	1285	1285	1285	1285															
5	1284	1283	1281	1282															
10	1276	1275	1271	1273															
15	1260	1259	1254	1257															
20	1236	1235	1230	1233															
25	1202	1203	1195	1201															
30	1154	1157	1148	1159															
35	1083	1095	1085	1101															
40	944	988	983	993															
45	640	714	767	728															
50	417	448	503	459															
55	267	283	324	297															
60	167	177	210	189															
65	101	107	131	116															
70	57.9	62.6	78.2	67.2															
75	30.4	32.7	42.8	35.5															
80	12.4	10.4	21.0	11.5															
85	1.02	0.35	6.63	0.41															
90	0.42	0.38	0.32	0.31															
95	0.66	0.59	0.46	0.48															
100	1.01	0.91	0.71	0.75															
105	1.48	1.37	1.07	1.15															
110	2.05	1.93	1.55	1.64															
115	2.68	2.58	2.10	2.21															
120	3.35	3.24	2.72	2.82															
125	4.04	3.92	3.38	3.48															
130	4.73	4.60	4.08	4.14															
135	5.38	5.26	4.77	4.80															
140	5.97	5.91	5.38	5.46															
145	6.48	6.51	5.94	6.09															
150	6.93	7.04	6.45	6.66															
155	7.45	7.54	6.99	7.21															
160	8.07	8.09	7.65	7.82															
165	8.67	8.61	8.35	8.38															
170	9.18	9.03	8.98	8.87															
175	9.54	9.27	9.46	9.19															
180	9.63	9.36	9.63	9.35															

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: