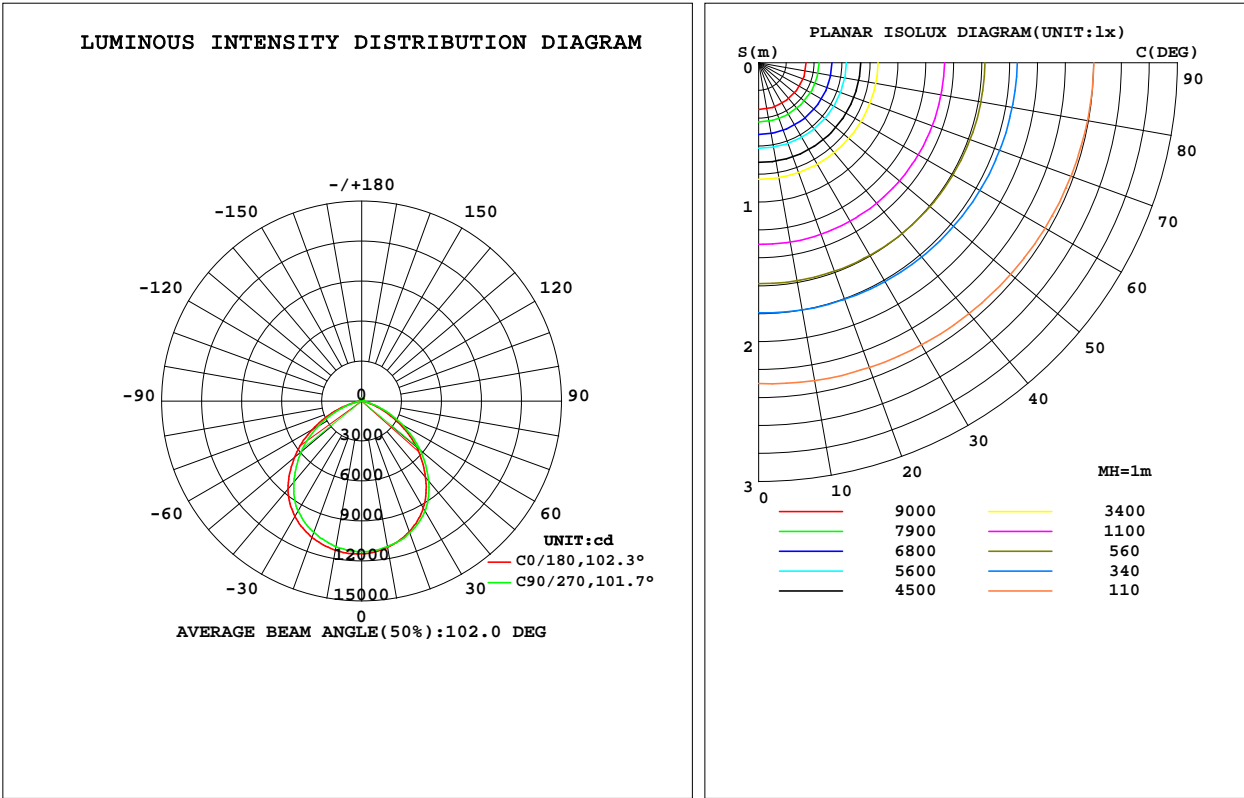


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:220.6V I:0.8720A P:185.9W PF:0.9650 Lamp Flux:28071.8x1 lm		
NAME: UFO	TYPE:EHB3-UFO200W	WEIGHT:
DIM.: 300X110MM	SPEC.:200W	SERIAL No.:001
MFR.: WST	SUR.:0.2X0.2	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 151.00 lm/W			
MODEL	EHB3-UFO200W	I _{max} (cd)	11480	S/MH(C0/180)	1.21
NOMINAL POWER(W)	190	LOR(%)	100.0	S/MH(C90/270)	1.25
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	28072	η UP,DN(C0-180)	1.1,46.4
NOMINAL FLUX(lm)	28071.8	CIE CLASS	DIRECT	η UP,DN(C180-360)	1.1,51.3
LAMPS INSIDE	1	η up(%)	2.3	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	220.7	η down(%)	97.7	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2025-05-27

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.269
Humidity:65.0%
Test Distance:5.700m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C90	C180	C270					γ	Φ zone	Φ total	Φ lum, lamp
10	1115	1109	1137	1109					0- 10	1077	1077	3.84,3.84
20	1044	1053	1089	1049					10- 20	3084	4161	14.8,14.8
30	926.2	951.6	1002	953.8					20- 30	4672	8833	31.5,31.5
40	745.0	781.5	860.4	792.2					30- 40	5520	14353	51.1,51.1
50	539.2	574.1	659.2	592.4					40- 50	5357	19710	70.2,70.2
60	312.0	350.1	427.5	376.5					50- 60	4289	24000	85.5,85.5
70	110.8	143.3	199.0	158.3					60- 70	2530	26530	94.5,94.5
80	10.95	17.32	38.03	25.41					70- 80	820.1	27350	97.4,97.4
90	3.168	2.898	2.880	3.060					80- 90	77.47	27428	97.7,97.7
100	4.858	4.411	4.627	4.938					90-100	41.36	27469	97.9,97.9
110	7.106	6.574	6.992	7.276					100-110	61.39	27530	98.1,98.1
120	9.579	9.035	9.450	9.666					110-120	81.29	27612	98.4,98.4
130	12.25	11.62	11.76	11.88					120-130	95.36	27707	98.7,98.7
140	15.00	14.26	14.25	14.32					130-140	101.7	27809	99.1,99.1
150	17.62	16.95	16.86	16.82					140-150	98.83	27907	99.4,99.4
160	20.14	19.55	18.81	18.56					150-160	83.90	27991	99.7,99.7
170	22.33	21.91	23.25	22.79					160-170	58.33	28050	99.9,99.9
180	23.64	23.41	23.99	23.15					170-180	22.07	28072	100,100
DEG	LUMINOUS INTENSITY:×10cd									UNIT:lm		

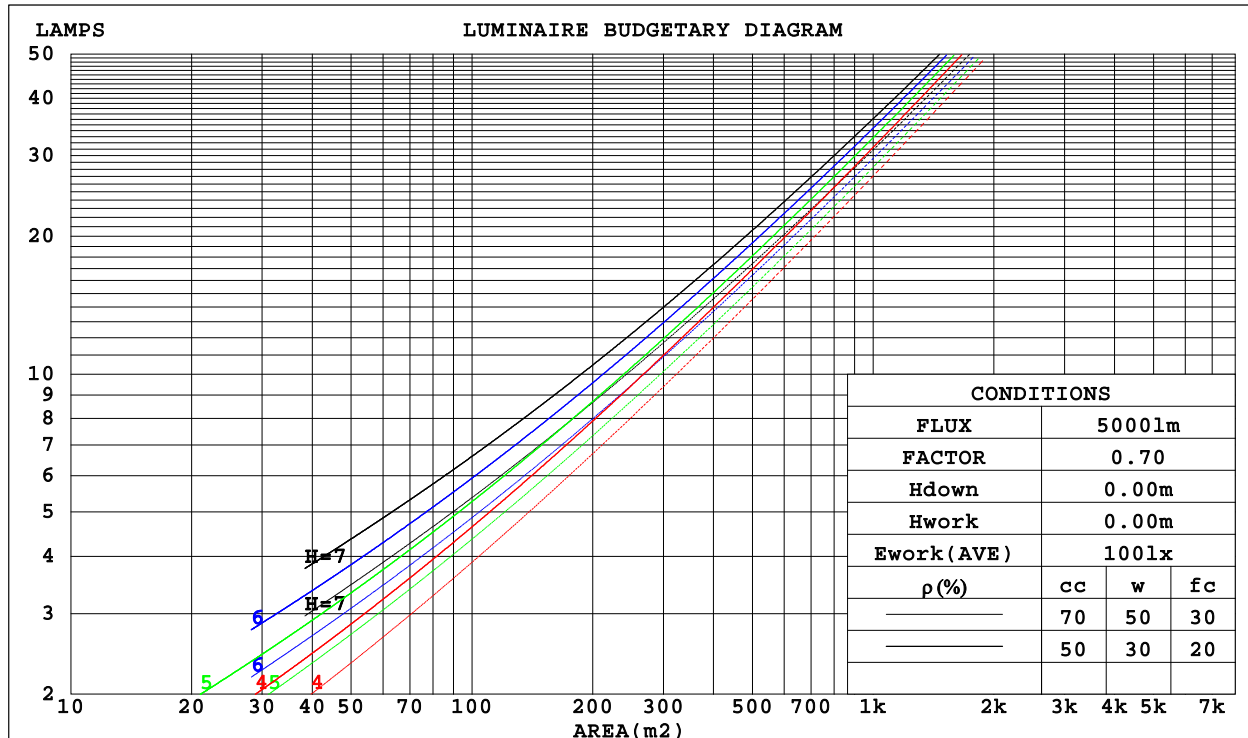
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2025-05-27

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.269
Humidity:65.0%
Test Distance:5.700m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:220.6V I:0.8720A P:185.9W PF:0.9650 Lamp Flux:28071.8x1 lm		
NAME: UFO	TYPE:EHB3-UFO200W	WEIGHT:
DIM.: 300X110MM	SPEC.:200W	SERIAL No.:001
MFR.: WST	SUR.:0.2X0.2	PROTECTION 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	1.15	1.15	1.15	1.10	1.10	1.10	1.05	1.05	1.05	.00	.00	.00	.98
1.0	1.06	1.02	.99	1.03	1.00	.97	.99	.96	.94	.94	.92	.90	.91	.89	.87	.85
2.0	.94	.88	.83	.92	.86	.81	.88	.83	.79	.84	.80	.77	.81	.78	.75	.73
3.0	.83	.76	.70	.81	.75	.69	.78	.72	.68	.75	.70	.66	.72	.68	.65	.63
4.0	.74	.66	.60	.73	.65	.59	.70	.64	.58	.67	.62	.57	.65	.60	.56	.54
5.0	.67	.58	.52	.65	.58	.52	.63	.56	.51	.61	.55	.50	.59	.54	.50	.47
6.0	.60	.52	.46	.59	.51	.46	.57	.50	.45	.55	.49	.44	.54	.48	.44	.42
7.0	.55	.46	.41	.54	.46	.40	.52	.45	.40	.51	.44	.40	.49	.43	.39	.37
8.0	.50	.42	.36	.49	.42	.36	.48	.41	.36	.46	.40	.36	.45	.39	.35	.33
9.0	.46	.38	.33	.45	.38	.33	.44	.37	.32	.43	.37	.32	.42	.36	.32	.30
10.0	.43	.35	.30	.42	.35	.30	.41	.34	.29	.40	.34	.29	.39	.33	.29	.27



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2025-05-27

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.269
Humidity:65.0%
Test Distance:5.700m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:220.6V I:0.8720A P:185.9W PF:0.9650 Lamp Flux:28071.8x1 lm		
NAME: UFO	TYPE:EHB3-UFO200W	WEIGHT:
DIM.: 300X110MM	SPEC.:200W	SERIAL No.:001
MFR.: WST	SUR.:0.2X0.2	PROTECTION 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	.263	.149	.047	.255	.145	.046	.241	.138	.044	.228	.131	.042	.215	.125	.040	
2.0	.256	.140	.043	.249	.137	.042	.237	.132	.041	.225	.126	.040	.214	.121	.038	
3.0	.242	.129	.039	.236	.127	.038	.225	.122	.037	.215	.118	.036	.205	.114	.035	
4.0	.228	.118	.035	.222	.116	.034	.212	.113	.034	.203	.109	.033	.195	.106	.032	
5.0	.213	.109	.031	.208	.107	.031	.200	.104	.031	.191	.101	.030	.184	.098	.029	
6.0	.200	.100	.029	.195	.099	.028	.188	.096	.028	.180	.094	.028	.173	.091	.027	
7.0	.187	.093	.026	.184	.091	.026	.176	.089	.026	.170	.087	.025	.163	.085	.025	
8.0	.176	.086	.024	.173	.085	.024	.166	.083	.024	.160	.081	.023	.155	.079	.023	
9.0	.166	.080	.022	.163	.079	.022	.157	.078	.022	.152	.076	.022	.146	.074	.021	
10.0	.157	.075	.021	.154	.074	.021	.149	.073	.021	.144	.071	.020	.139	.070	.020	

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	.208	.208	.208	.178	.178	.178	.121	.121	.121	.070	.070	.070	.022	.022	.022	
1.0	.195	.174	.156	.167	.149	.134	.114	.103	.093	.066	.060	.054	.021	.019	.017	
2.0	.185	.150	.120	.159	.129	.104	.109	.089	.072	.063	.052	.042	.020	.017	.014	
3.0	.177	.132	.096	.152	.114	.083	.104	.079	.058	.060	.046	.034	.019	.015	.011	
4.0	.169	.118	.079	.145	.102	.069	.100	.071	.049	.058	.042	.029	.019	.014	.009	
5.0	.162	.108	.068	.139	.093	.059	.096	.065	.042	.056	.038	.025	.018	.012	.008	
6.0	.156	.099	.059	.134	.086	.052	.092	.060	.036	.054	.035	.022	.017	.012	.007	
7.0	.149	.093	.053	.128	.080	.046	.089	.056	.033	.052	.033	.019	.017	.011	.006	
8.0	.143	.087	.048	.123	.075	.042	.085	.053	.030	.050	.031	.018	.016	.010	.006	
9.0	.137	.082	.044	.118	.071	.039	.082	.050	.027	.048	.029	.016	.015	.010	.005	
10.0	.132	.078	.041	.114	.067	.036	.079	.047	.026	.046	.028	.015	.015	.009	.005	

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2025-05-27

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.269
Humidity:65.0%
Test Distance:5.700m [K=1.0000]
Remarks:

Uncorrected UGR Table

Test:U:220.6V I:0.8720A P:185.9W PF:0.9650 Lamp Flux:28071.8x1 lm											
NAME: UFO					TYPE:EHB3-UFO200W			WEIGHT:			
DIM.: 300X110MM					SPEC.:200W			SERIAL No.:001			
MFR.: WST					SUR.:0.2X0.2			PROTECTION 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	31.4	32.8	31.7	33.0	33.3	31.7	33.1	32.0	33.4	33.6	
	3H	31.9	33.2	32.2	33.4	33.7	32.4	33.7	32.7	33.9	34.2
	4H	31.9	33.1	32.2	33.4	33.7	32.5	33.7	32.8	33.9	34.2
	6H	31.8	32.9	32.2	33.2	33.6	32.4	33.5	32.8	33.8	34.1
	8H	31.8	32.8	32.1	33.2	33.5	32.3	33.4	32.7	33.7	34.1
	12H	31.7	32.7	32.1	33.1	33.4	32.3	33.3	32.7	33.7	34.0
4H	2H	31.7	32.9	32.1	33.2	33.5	32.0	33.2	32.4	33.5	33.8
	3H	32.3	33.3	32.7	33.7	34.0	32.8	33.8	33.1	34.1	34.5
	4H	32.3	33.3	32.8	33.6	34.0	32.9	33.8	33.3	34.1	34.5
	6H	32.3	33.1	32.7	33.5	33.9	32.8	33.6	33.2	34.0	34.4
	8H	32.2	33.0	32.7	33.4	33.8	32.8	33.5	33.2	33.9	34.4
	12H	32.2	32.9	32.7	33.3	33.8	32.7	33.4	33.2	33.9	34.3
8H	4H	32.3	33.1	32.8	33.5	33.9	32.8	33.6	33.2	34.0	34.4
	6H	32.3	32.9	32.7	33.3	33.8	32.8	33.4	33.3	33.8	34.3
	8H	32.2	32.8	32.7	33.2	33.7	32.7	33.3	33.2	33.8	34.3
	12H	32.2	32.6	32.7	33.1	33.7	32.7	33.2	33.2	33.7	34.2
12H	4H	32.3	33.0	32.7	33.4	33.8	32.8	33.4	33.2	33.9	34.3
	6H	32.2	32.8	32.7	33.2	33.7	32.7	33.3	33.2	33.8	34.2
	8H	32.2	32.7	32.7	33.1	33.7	32.7	33.2	33.2	33.7	34.2
Variations with the observer position at spacings:											
S = 1.0H	+ 0.5 / - 0.6					+ 0.4 / - 0.5					
1.5H	+ 0.2 / - 0.5					+ 0.2 / - 0.4					
2.0H	+ 0.9 / - 1.0					+ 0.9 / - 1.0					

CIE Pub.117 Corrected 28072 lm Total Lamp Luminous Flux.(8log(F/F0) = 11.6)

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2025-05-27

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.269
Humidity:65.0%
Test Distance:5.700m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:220.6V I:0.8720A P:185.9W PF:0.9650 Lamp Flux:28071.8x1 lm		
NAME: UFO	TYPE:EHB3-UFO200W	WEIGHT:
DIM.: 300X110MM	SPEC.:200W	SERIAL No.:001
MFR.: WST	SUR.:0.2X0.2	PROTECTION ANGLE:

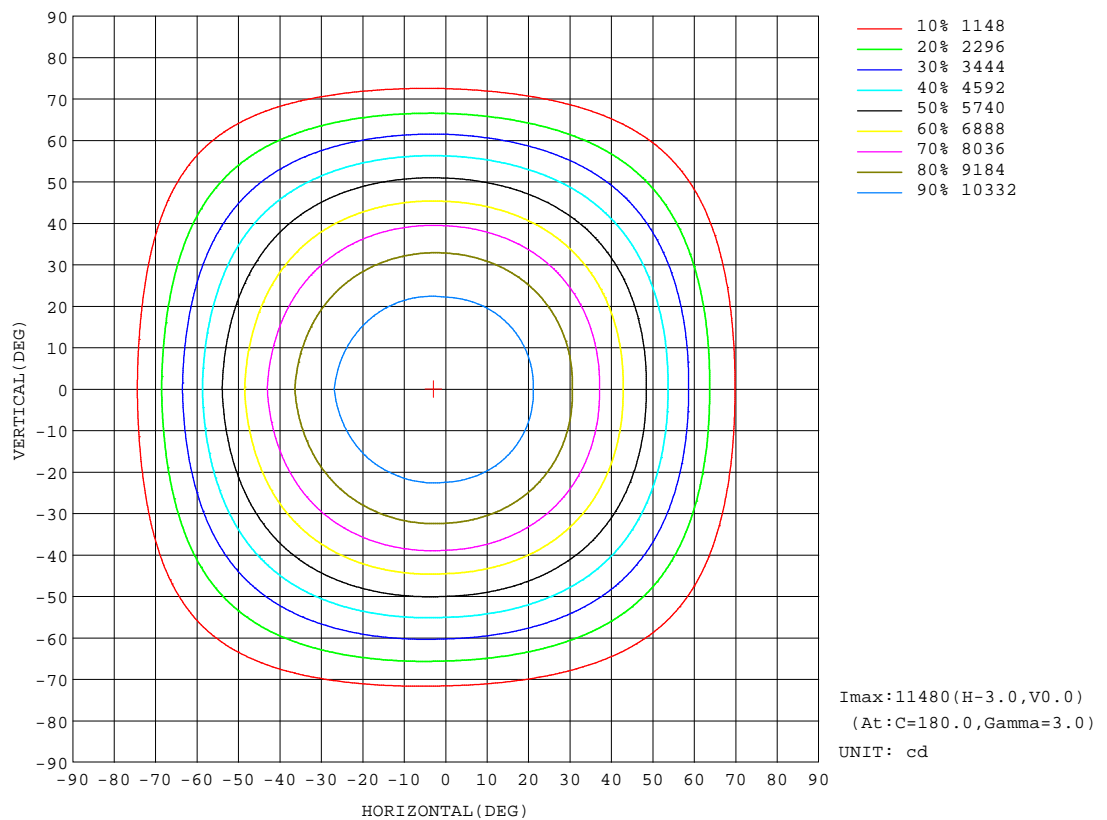
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	61	50	43	60	50	43	59	49	43	37
0.80	71	60	54	70	60	53	68	59	53	46
1.00	80	70	63	78	69	63	76	70	62	55
1.25	87	77	71	85	77	70	82	75	69	63
1.50	91	83	77	90	82	76	87	80	75	67
2.00	98	90	85	96	89	84	92	87	82	75
2.50	101	95	89	99	93	88	95	90	86	78
3.00	104	98	94	102	97	92	98	93	90	81
4.00	108	103	99	105	101	97	101	97	94	85
5.00	110	106	102	107	104	100	102	100	97	88
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:25.3DEG
Operators:DAMIN
Test Date:2025-05-27

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.269
Humidity:65.0%
Test Distance:5.700m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:220.6V I:0.8720A P:185.9W PF:0.9650 Lamp Flux:28071.8x1 lm		
NAME: UFO	TYPE:EHB3-UFO200W	WEIGHT:
DIM.: 300X110MM	SPEC.:200W	SERIAL No.:001
MFR.: WST	SUR.:0.2X0.2	PROTECTION ANGLE:



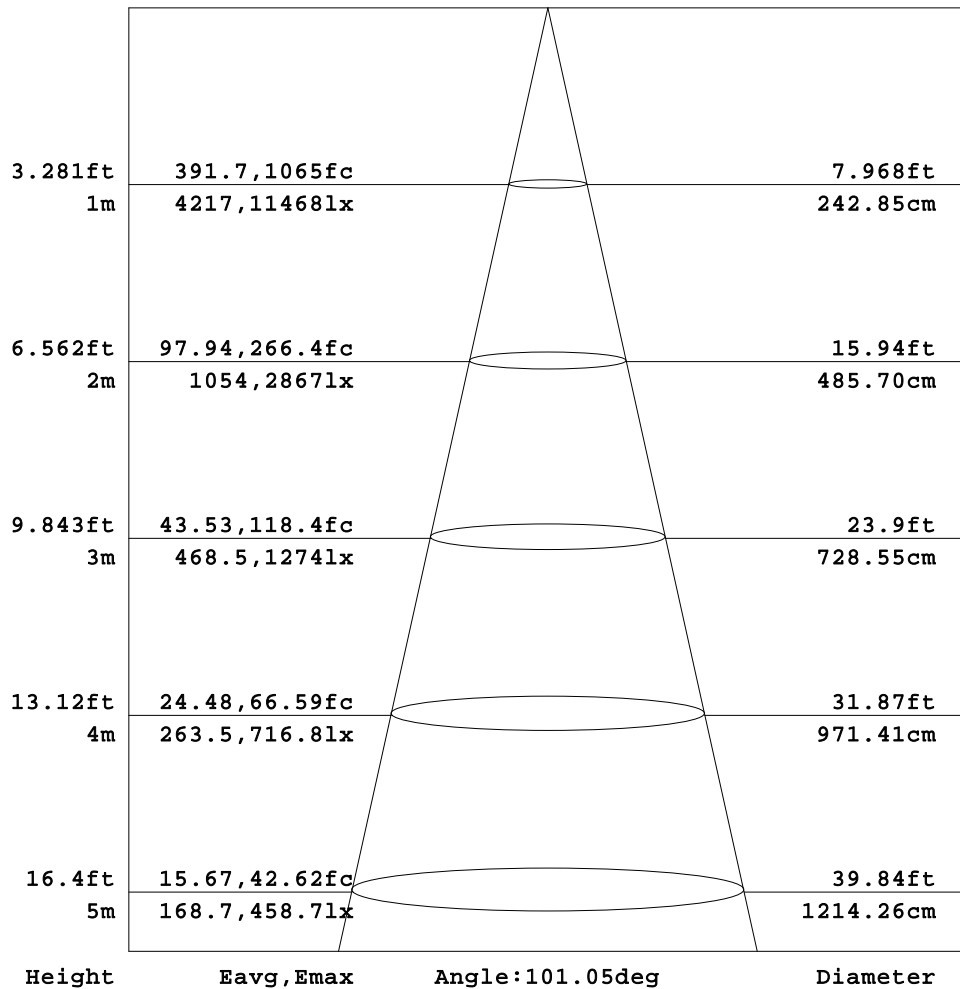
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2025-05-27

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.269
Humidity:65.0%
Test Distance:5.700m [K=1.0000]
Remarks:

AAI Figure

Test:U:220.6V I:0.8720A P:185.9W PF:0.9650 Lamp Flux:28071.8x1 lm		
NAME: UFO	TYPE:EHB3-UFO200W	WEIGHT:
DIM.: 300X110MM	SPEC.:200W	SERIAL No.:001
MFR.: WST	SUR.:0.2X0.2	PROTECTION ANGLE:

Flux out:20202 lm



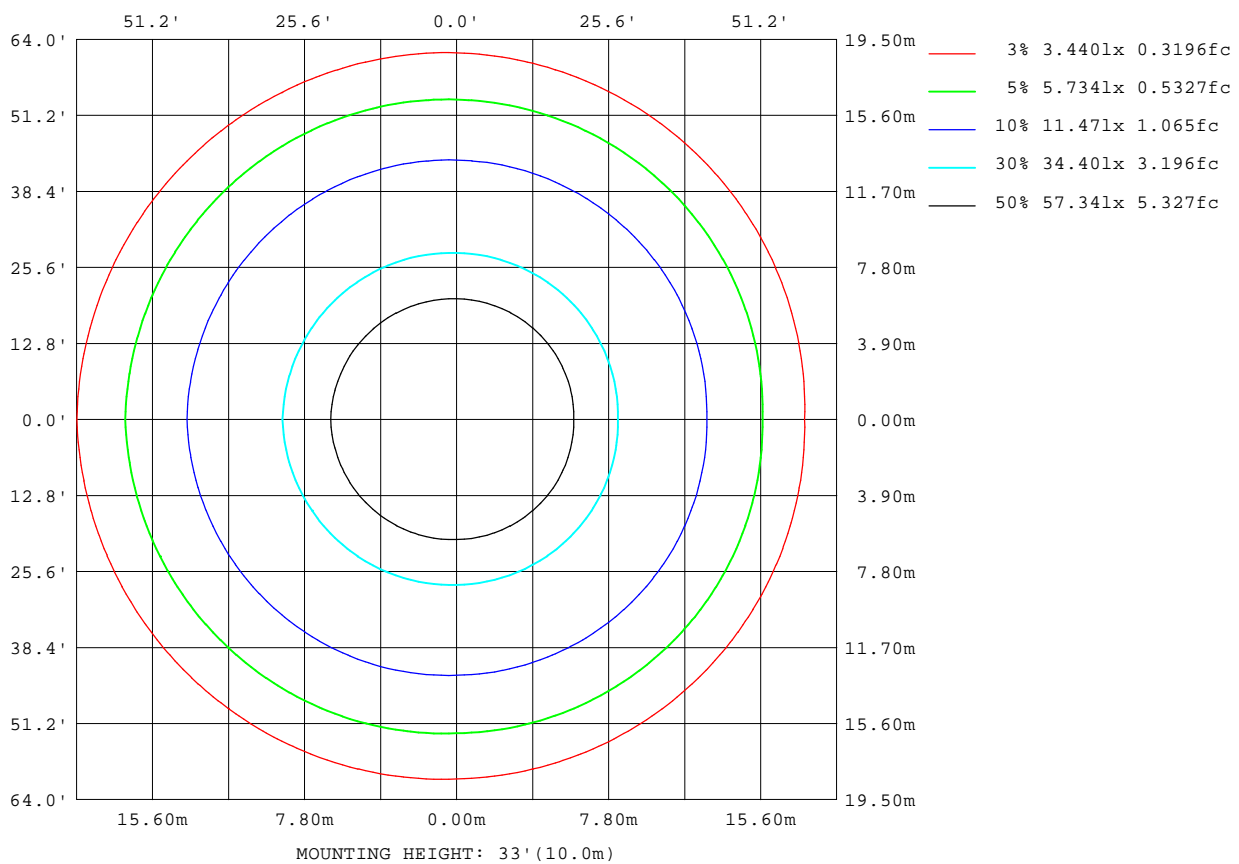
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2025-05-27

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.269
Humidity:65.0%
Test Distance:5.700m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

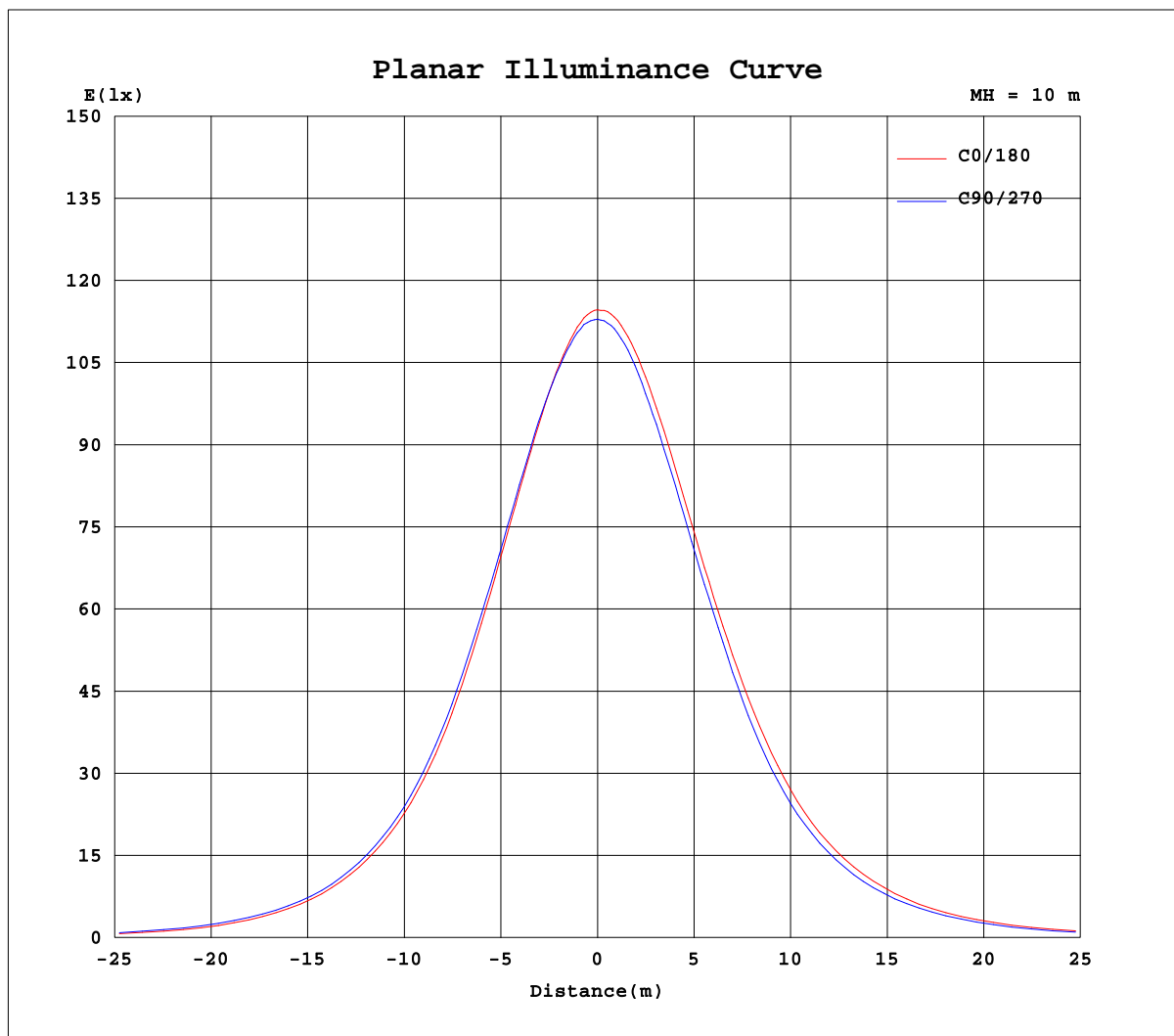
Test:U:220.6V I:0.8720A P:185.9W PF:0.9650 Lamp Flux:28071.8x1 lm		
NAME: UFO	TYPE:EHB3-UFO200W	WEIGHT:
DIM.: 300X110MM	SPEC.:200W	SERIAL No.:001
MFR.: WST	SUR.:0.2X0.2	PROTECTION ANGLE:



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2025-05-27

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.269
Humidity:65.0%
Test Distance:5.700m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 2025-05-27

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.269
Humidity: 65.0%
Test Distance: 5.700m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:220.6V I:0.8720A P:185.9W PF:0.9650 Lamp Flux:28071.8x1 lm		
NAME: UFO	TYPE:EHB3-UFO200W	WEIGHT:
DIM.: 300X110MM	SPEC.:200W	SERIAL No.:001
MFR.: WST	SUR.:0.2X0.2	PROTECTION ANGLE:

Table--1

UNIT: ×10cd

C(DEG) γ (DEG)	0	90	180	270														
0	1147	1130	1147	1130														
5	1137	1125	1147	1125														
10	1115	1109	1137	1109														
15	1085	1087	1116	1082														
20	1044	1053	1089	1049														
25	992	1010	1050	1007														
30	926	952	1002	954														
35	844	875	939	882														
40	745	782	860	792														
45	645	679	766	694														
50	539	574	659	592														
55	427	461	550	487														
60	312	350	428	377														
65	202	242	310	262														
70	111	143	199	158														
75	44.6	64.4	104	77.4														
80	11.0	17.3	38.0	25.4														
85	2.67	2.59	6.20	3.89														
90	3.17	2.90	2.88	3.06														
95	3.92	3.56	3.65	3.92														
100	4.86	4.41	4.63	4.94														
105	5.94	5.43	5.75	6.07														
110	7.11	6.57	6.99	7.28														
115	8.32	7.79	8.23	8.47														
120	9.58	9.03	9.45	9.67														
125	10.9	10.3	10.6	10.8														
130	12.3	11.6	11.8	11.9														
135	13.7	12.9	12.9	13.1														
140	15.0	14.3	14.3	14.3														
145	16.3	15.6	15.6	15.7														
150	17.6	17.0	16.9	16.8														
155	18.9	18.3	17.9	17.7														
160	20.1	19.5	18.8	18.6														
165	21.3	20.8	20.3	20.0														
170	22.3	21.9	23.3	22.8														
175	23.5	23.1	23.8	23.2														
180	23.6	23.4	24.0	23.1														

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2025-05-27

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.269
Humidity:65.0%
Test Distance:5.700m [K=1.0000]
Remarks: