

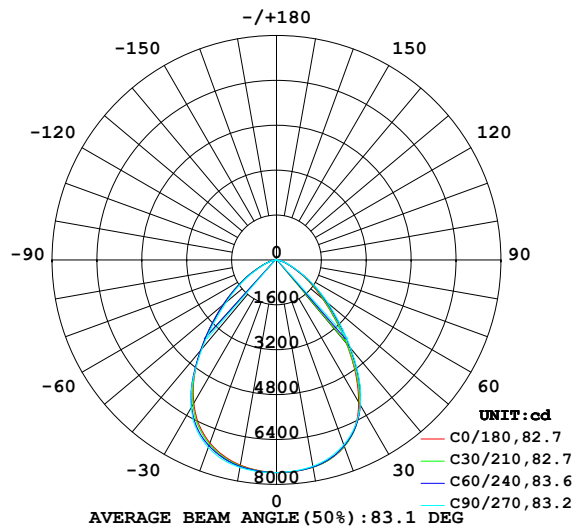
EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

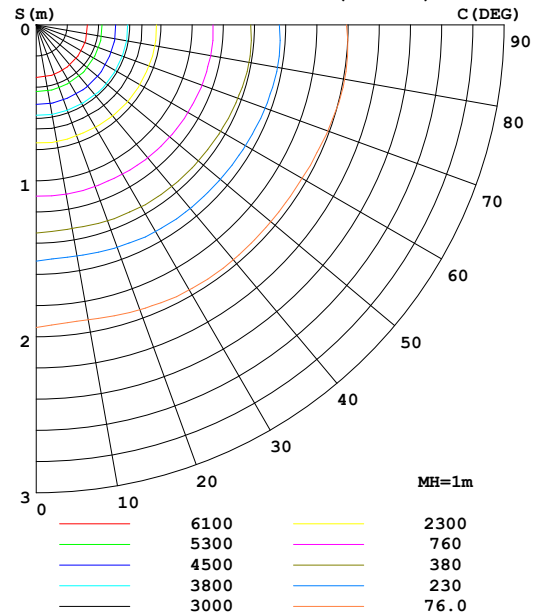
Test:U:230.0V I:0.520A P:120.5W PF:0.972 Freq:50.01Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:13993.9x1 lm		
NAME: P301-B4K (120W with no reflector)	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 116.10 lm/W			
MODEL	/	Imax (cd)	7582	S/MH (C0/180)	1.16
NOMINAL POWER (W)	/	LOR (%)	100.0	S/MH (C90/270)	1.18
RATED VOLTAGE (V)	/	TOTAL FLUX (lm)	13994	η UP,DN (C0-180)	0.0,49.9
NOMINAL FLUX (lm)	13993.9	CIE CLASS	DIRECT	η UP,DN (C180-360)	0.0,50.1
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.00
TEST VOLTAGE (V)	/	η down (%)	100.0	CIBSE SHR MAX	1.15

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



PLANAR ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators: ZZX
Test Date: 2024-06-14

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.465
Humidity: 65.0%
Test Distance: 26.000m [K=0.4593]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	7499	7501	7465	7427	7425	7458	7508	7495	0- 10	718.3	718.3	5.13,5.13
20	7071	7070	7005	6940	6940	7003	7105	7086	10- 20	2060	2778	19.9,19.9
30	5858	6000	5971	5923	5895	5989	6081	5957	20- 30	3023	5801	41.5,41.5
40	3880	4017	4113	4271	4204	4168	4127	3989	30- 40	3158	8959	64,64
50	2146	2274	2401	2572	2496	2462	2325	2233	40- 50	2444	11403	81.5,81.5
60	1023	1100	1159	1283	1249	1243	1143	1110	50- 60	1540	12943	92.5,92.5
70	387.8	415.4	438.0	495.2	484.1	479.4	433.5	415.2	60- 70	738.6	13681	97.8,97.8
80	82.62	96.41	115.9	143.3	146.0	136.9	111.0	89.10	70- 80	278.9	13960	99.8,99.8
90	0.3378	0.3495	0.4969	1.289	2.007	1.563	0.6918	0.7127	80- 90	33.61	13994	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): 10296 lm

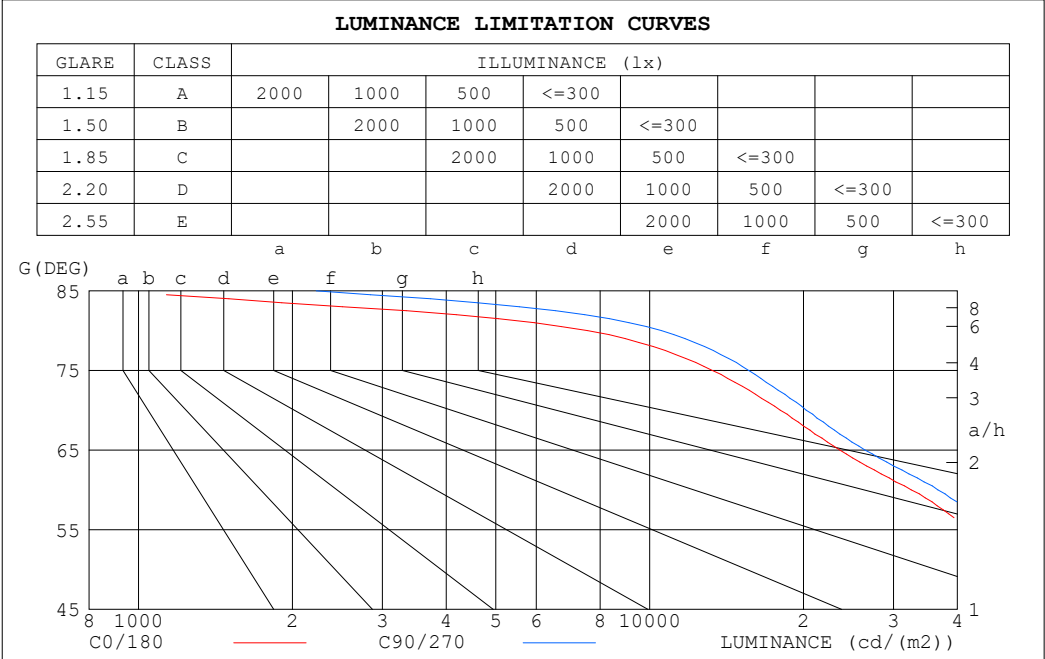
%lum = 73.6%
%lamp = 73.6%

Conical surface Flux(120deg): 12943 lm

%lum = 92.5%
%lamp = 92.5%

C Range: 0 - 360DEG	γ Range: 0 - 90DEG
C Interval: 15.0DEG	γ Interval: 0.5DEG
Test Speed: HIGH	Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.465
Temperature:25.3℃	Humidity:65.0%
Operators:ZZX	Test Distance:26.000m [K=0.4593]
Test Date:2024-06-14	Remarks:

LUMINANCE LIMITATION CURVES



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	789	2226
80	7560	10549
75	13265	15621
70	18013	20247
65	23562	26393
60	32492	36642
55	42425	47547
50	53037	59071
45	65664	70912

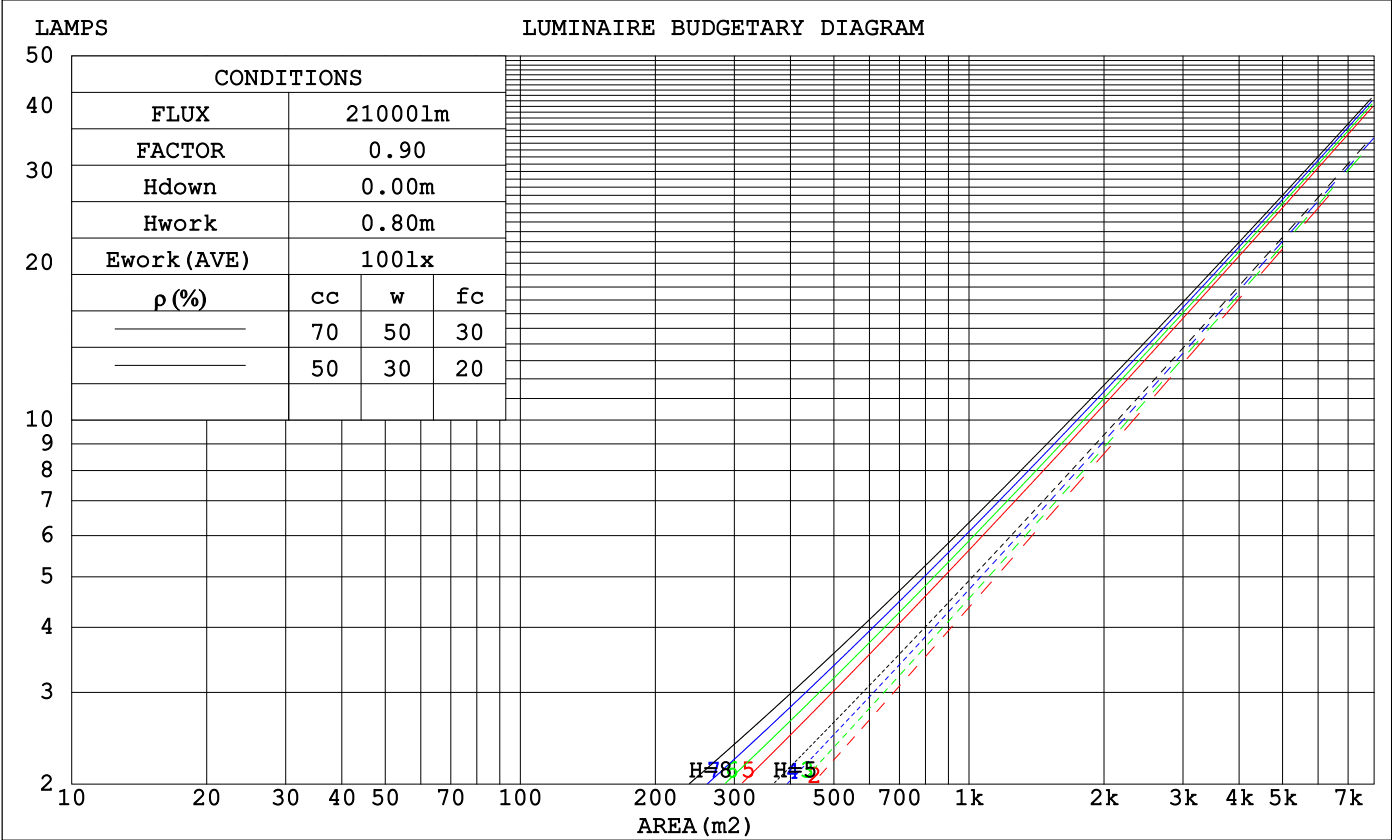
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:ZZX
Test Date:2024-06-14

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.465
Humidity:65.0%
Test Distance:26.000m [K=0.4593]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

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						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	1.08	1.04	1.01	1.05	1.02	.00	1.01	.99	.97	.98	.96	.94	.94	.92	.91	.89	
2.0	.97	.91	.87	.95	.90	.86	.92	.87	.84	.89	.85	.82	.86	.83	.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	.66	.75	.70	.65	.73	.68	.64	.71	.67	.63	.61	
5.0	.72	.64	.59	.71	.64	.58	.69	.63	.58	.67	.61	.57	.65	.60	.57	.55	
6.0	.66	.58	.52	.65	.57	.52	.63	.57	.52	.62	.56	.51	.60	.55	.51	.49	
7.0	.60	.53	.47	.60	.52	.47	.58	.52	.47	.57	.51	.46	.55	.50	.46	.44	
8.0	.56	.48	.43	.55	.48	.43	.54	.47	.42	.53	.47	.42	.51	.46	.42	.40	
9.0	.51	.44	.39	.51	.44	.39	.50	.43	.39	.49	.43	.39	.48	.42	.38	.37	
10.0	.48	.41	.36	.47	.40	.36	.46	.40	.36	.45	.40	.36	.45	.39	.35	.34	



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:ZZX
Test Date:2024-06-14

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.465
Humidity:65.0%
Test Distance:26.000m [K=0.4593]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

WEC AND CCEC

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	.237	.135	.043	.230	.131	.042	.217	.124	.040	.205	.118	.038	.194	.113	.036	
2.0	.230	.126	.039	.224	.124	.038	.213	.119	.037	.203	.114	.036	.193	.109	.034	
3.0	.219	.117	.035	.214	.115	.034	.204	.111	.034	.195	.107	.033	.187	.103	.032	
4.0	.207	.108	.032	.202	.106	.031	.194	.103	.031	.186	.100	.030	.178	.097	.030	
5.0	.195	.099	.029	.191	.098	.029	.183	.096	.028	.176	.093	.028	.170	.091	.027	
6.0	.184	.092	.026	.180	.091	.026	.174	.089	.026	.167	.087	.026	.161	.085	.025	
7.0	.174	.086	.024	.170	.085	.024	.164	.083	.024	.159	.081	.024	.154	.080	.023	
8.0	.164	.080	.023	.161	.079	.022	.156	.078	.022	.151	.076	.022	.146	.075	.022	
9.0	.156	.075	.021	.153	.075	.021	.148	.073	.021	.144	.072	.021	.139	.071	.020	
10.0	.148	.071	.020	.145	.070	.020	.141	.069	.019	.137	.068	.019	.133	.067	.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	.140	.150	.135	.121	.103	.093	.083	.059	.054	.049	.019	.017	.016	
2.0	.164	.132	.105	.141	.114	.091	.096	.079	.064	.056	.046	.037	.018	.015	.012	
3.0	.155	.114	.082	.133	.098	.071	.091	.068	.050	.053	.040	.029	.017	.013	.010	
4.0	.146	.100	.065	.126	.086	.056	.086	.060	.040	.050	.035	.023	.016	.011	.008	
5.0	.139	.089	.052	.119	.077	.046	.082	.054	.032	.048	.032	.019	.015	.010	.006	
6.0	.132	.081	.043	.114	.070	.038	.078	.049	.027	.045	.029	.016	.015	.009	.005	
7.0	.126	.073	.037	.108	.064	.032	.075	.045	.023	.043	.026	.013	.014	.009	.004	
8.0	.120	.068	.031	.103	.059	.027	.072	.041	.019	.042	.024	.012	.013	.008	.004	
9.0	.115	.063	.027	.099	.054	.024	.068	.038	.017	.040	.023	.010	.013	.007	.003	
10.0	.110	.058	.024	.094	.051	.021	.066	.036	.015	.038	.021	.009	.012	.007	.003	

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:ZZX
 Test Date:2024-06-14

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.465
 Humidity:65.0%
 Test Distance:26.000m [K=0.4593]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

UGR(Unified Glare Rating) Table

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	23.0	24.3	23.3	24.6	25.0	23.9	25.3	24.2	25.6	25.9
3H	23.5	24.8	23.9	25.1	25.4	24.5	25.7	24.9	26.0	26.4
4H	23.7	24.8	24.1	25.2	25.5	24.6	25.8	25.0	26.1	26.5
6H	23.7	24.8	24.1	25.1	25.5	24.7	25.7	25.1	26.1	26.5
8H	23.7	24.7	24.1	25.1	25.5	24.7	25.7	25.1	26.1	26.5
12H	23.6	24.6	24.1	25.0	25.4	24.7	25.6	25.1	26.0	26.4
4H 2H	23.2	24.3	23.6	24.7	25.1	24.2	25.3	24.6	25.6	26.0
3H	23.9	24.9	24.4	25.3	25.7	24.9	25.8	25.3	26.3	26.7
4H	24.2	25.0	24.6	25.4	25.8	25.2	26.0	25.6	26.4	26.8
6H	24.2	24.9	24.7	25.4	25.8	25.3	26.0	25.7	26.4	26.9
8H	24.2	24.9	24.7	25.3	25.8	25.3	25.9	25.7	26.4	26.8
12H	24.1	24.7	24.6	25.2	25.7	25.2	25.8	25.7	26.3	26.8
8H 4H	24.2	24.9	24.7	25.3	25.8	25.2	25.9	25.7	26.3	26.8
6H	24.3	24.8	24.8	25.3	25.8	25.4	25.9	25.9	26.4	26.9
8H	24.2	24.7	24.8	25.2	25.7	25.4	25.9	25.9	26.4	26.9
12H	24.2	24.6	24.7	25.1	25.7	25.4	25.8	25.9	26.3	26.8
12H 4H	24.2	24.8	24.6	25.2	25.7	25.2	25.8	25.7	26.3	26.7
6H	24.2	24.7	24.8	25.2	25.7	25.4	25.9	25.9	26.3	26.9
8H	24.2	24.7	24.7	25.1	25.7	25.4	25.8	25.9	26.3	26.9
CIE190: 2010										

CIE190: 2010
Area: 0.0632 m2

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:ZZX
Test Date:2024-06-14

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.465
Humidity:65.0%
Test Distance:26.000m [K=0.4593]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

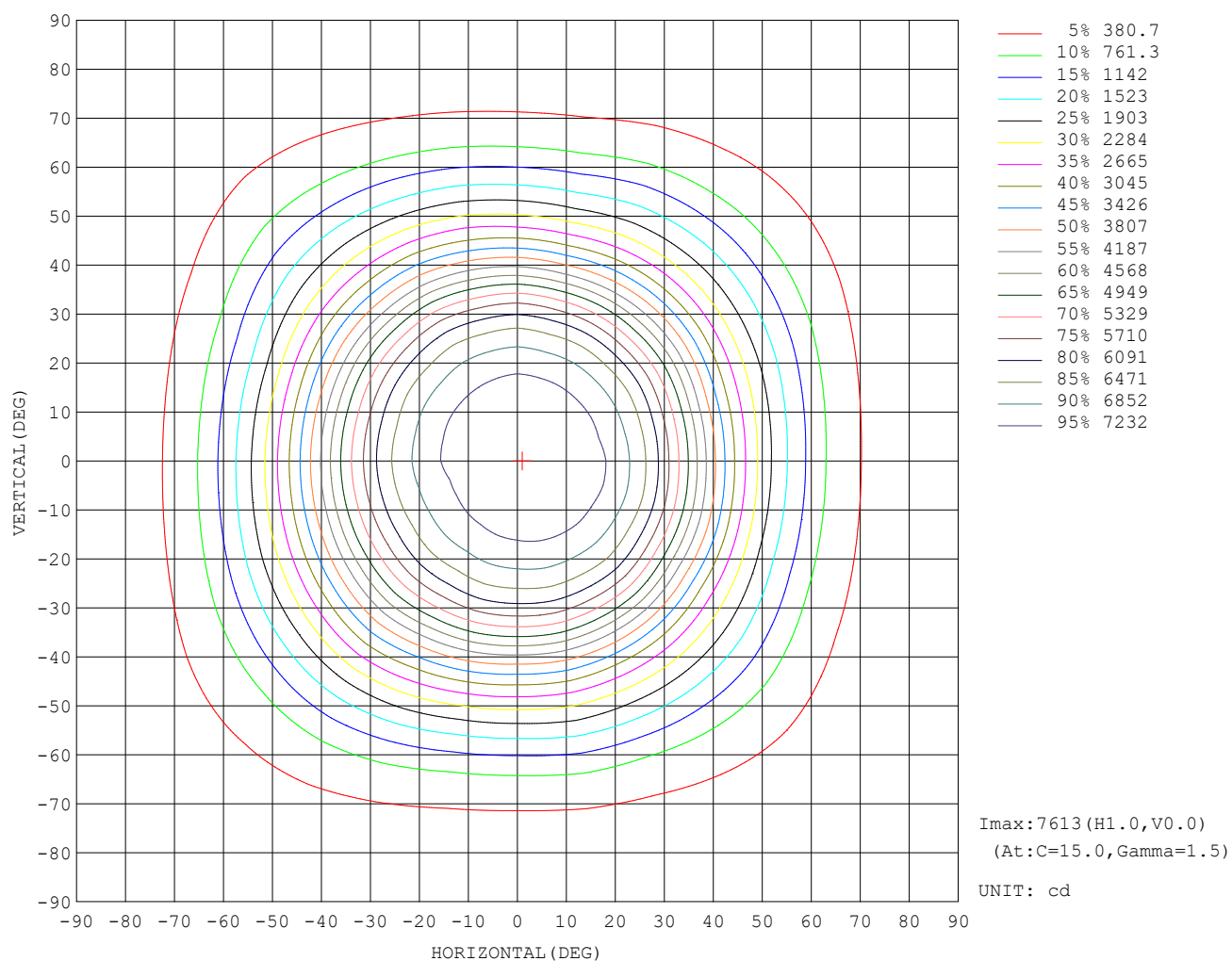
UTILIZATION FACTORS TABLE

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	59	53	68	59	53	67	58	53	48
0.80	79	69	63	78	69	63	76	68	63	57
1.00	86	78	72	85	77	72	83	78	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	95	91	100	94	90	97	92	88	82
2.50	105	99	94	103	98	93	99	95	92	84
3.00	107	102	98	105	101	97	101	98	95	87
4.00	110	106	102	108	104	101	104	101	98	90
5.00	112	108	105	109	106	104	105	103	101	92
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: 25.3°C
 Operators: ZZX
 Test Date: 2024-06-14

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.465
 Humidity: 65.0%
 Test Distance: 26.000m [K=0.4593]
 Remarks:

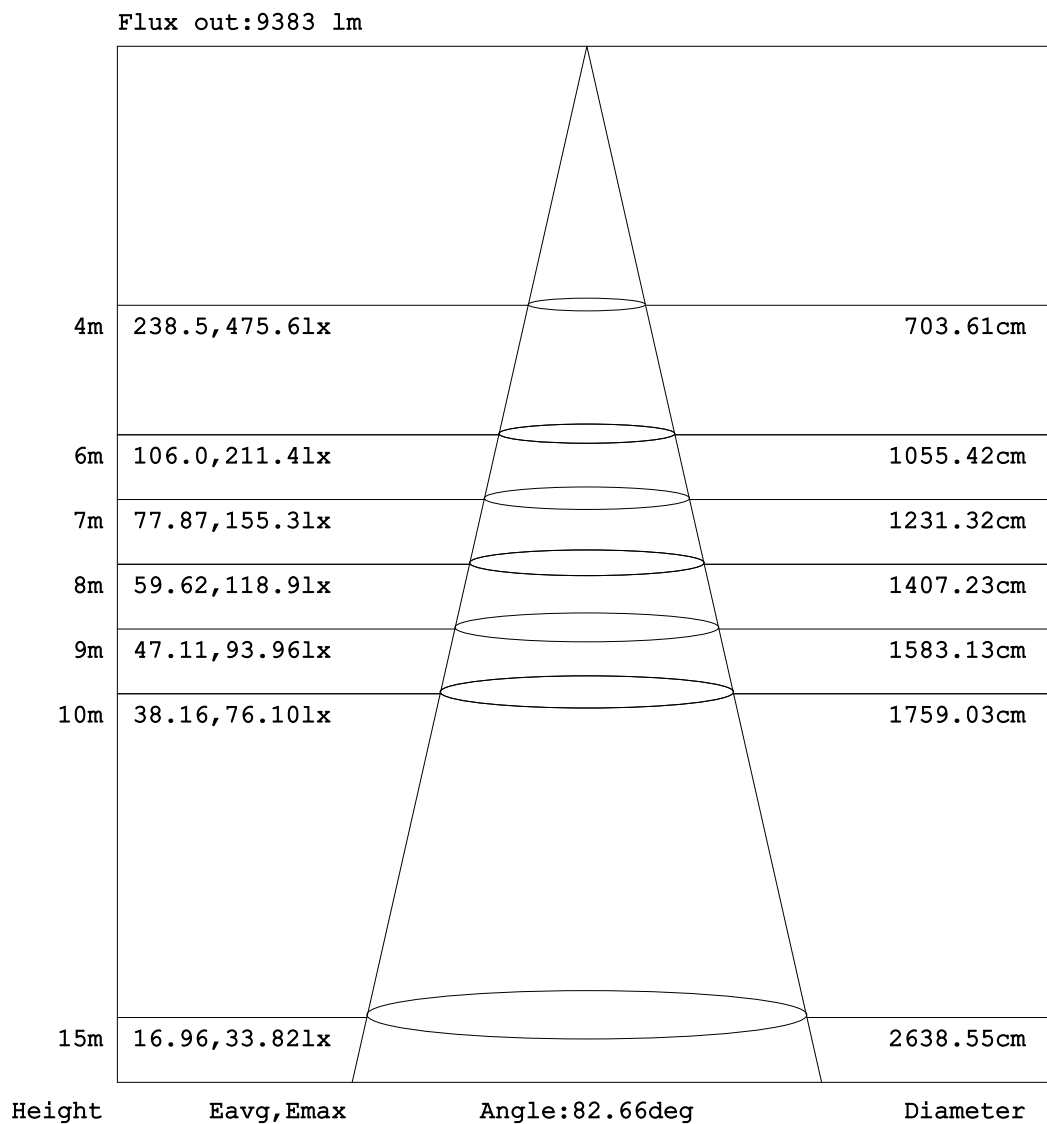
ISOCANDELA DIAGRAM



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators: ZZX
Test Date: 2024-06-14

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.465
Humidity: 65.0%
Test Distance: 26.000m [K=0.4593]
Remarks:

AAI Figure

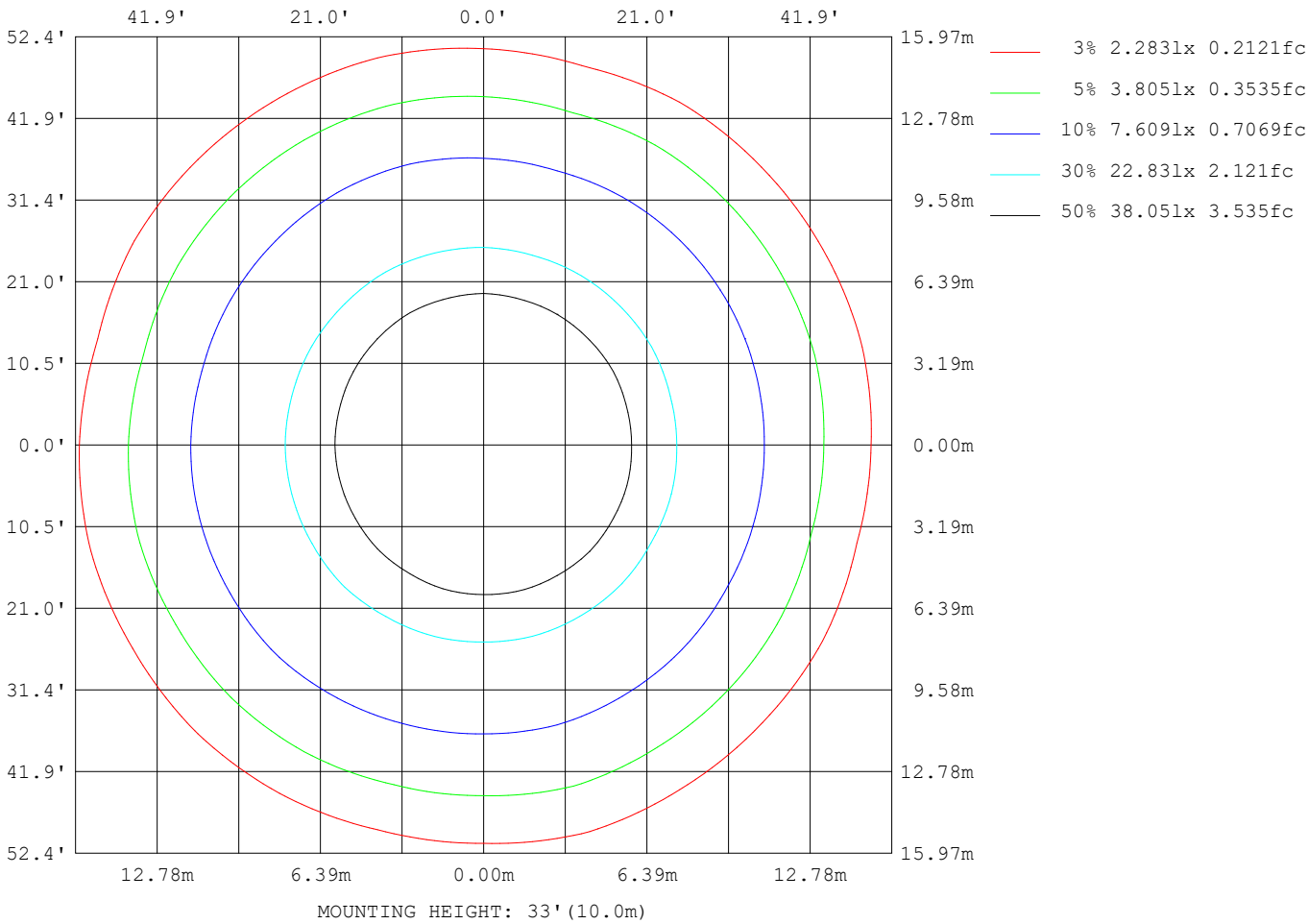


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:ZZX
Test Date:2024-06-14

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.465
Humidity:65.0%
Test Distance:26.000m [K=0.4593]
Remarks:

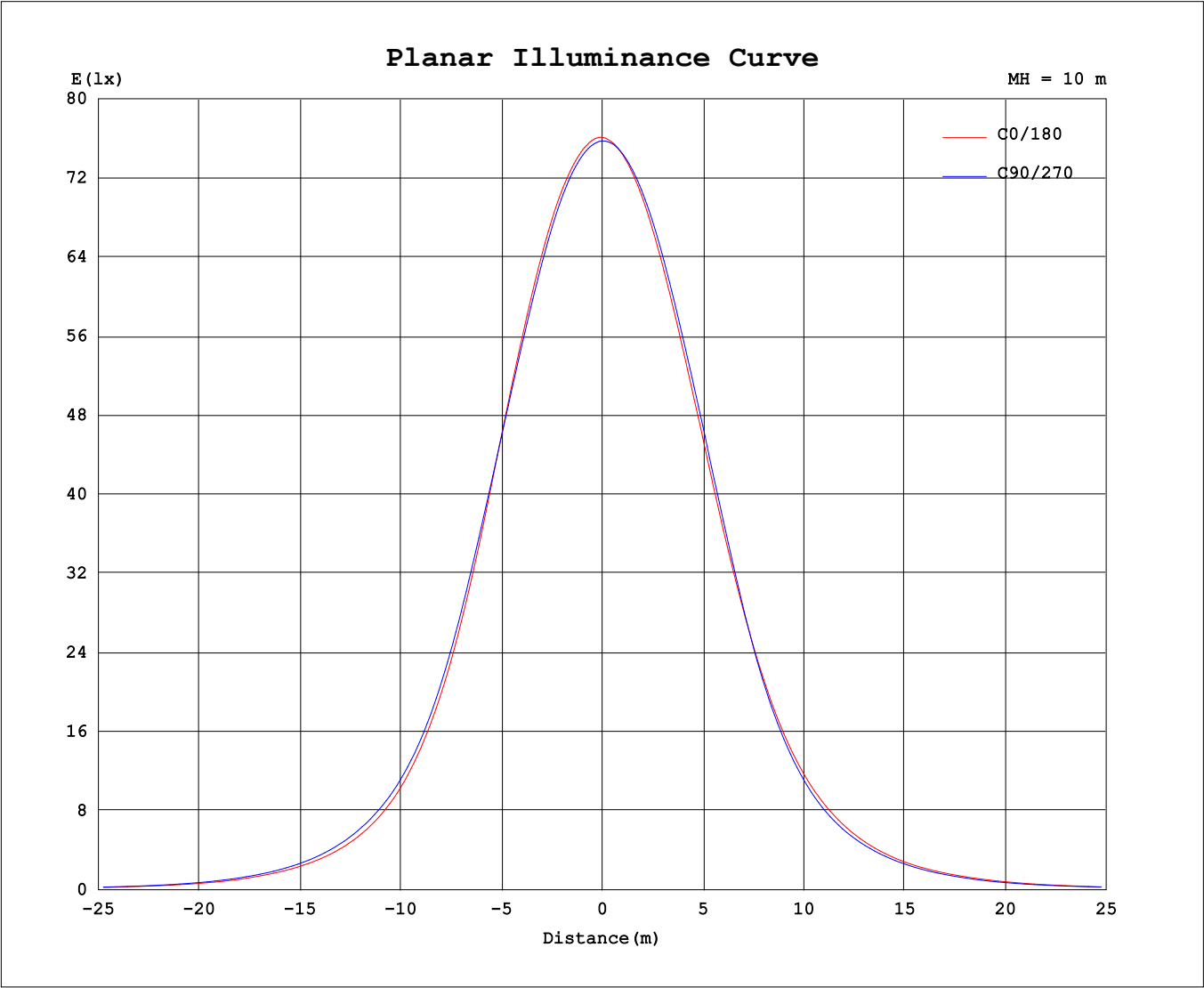
ISOLUX DIAGRAM



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:ZZX
Test Date:2024-06-14

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.465
Humidity:65.0%
Test Distance:26.000m [K=0.4593]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG	γ Range: 0 - 90DEG
C Interval: 15.0DEG	γ Interval: 0.5DEG
Test Speed: HIGH	Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.465
Temperature:25.3°C	Humidity:65.0%
Operators:ZZX	Test Distance:26.000m [K=0.4593]
Test Date:2024-06-14	Remarks:

UNIT: cd

C Range: 0 - 360DEG	γ Range: 0 - 90DEG
C Interval: 15.0DEG	γ Interval: 0.5DEG
Test Speed: HIGH	Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.465
Temperature: 25.3°C	Humidity: 65.0%
Operators: ZZX	Test Distance: 26.000m [K=0.4593]
Test Date: 2024-06-14	Remarks:

```

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.465
Humidity:65.0%
Test Distance:26.000m [K=0.4593]
Remarks:

```

LUMINOUS DISTRIBUTION INTENSITY DATA

Table--2

UNIT: cd

[illegible]

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators: ZZX
Test Date: 2024-06-14

```

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.465
Humidity:65.0%
Test Distance:26.000m [K=0.4593]
Remarks:

```