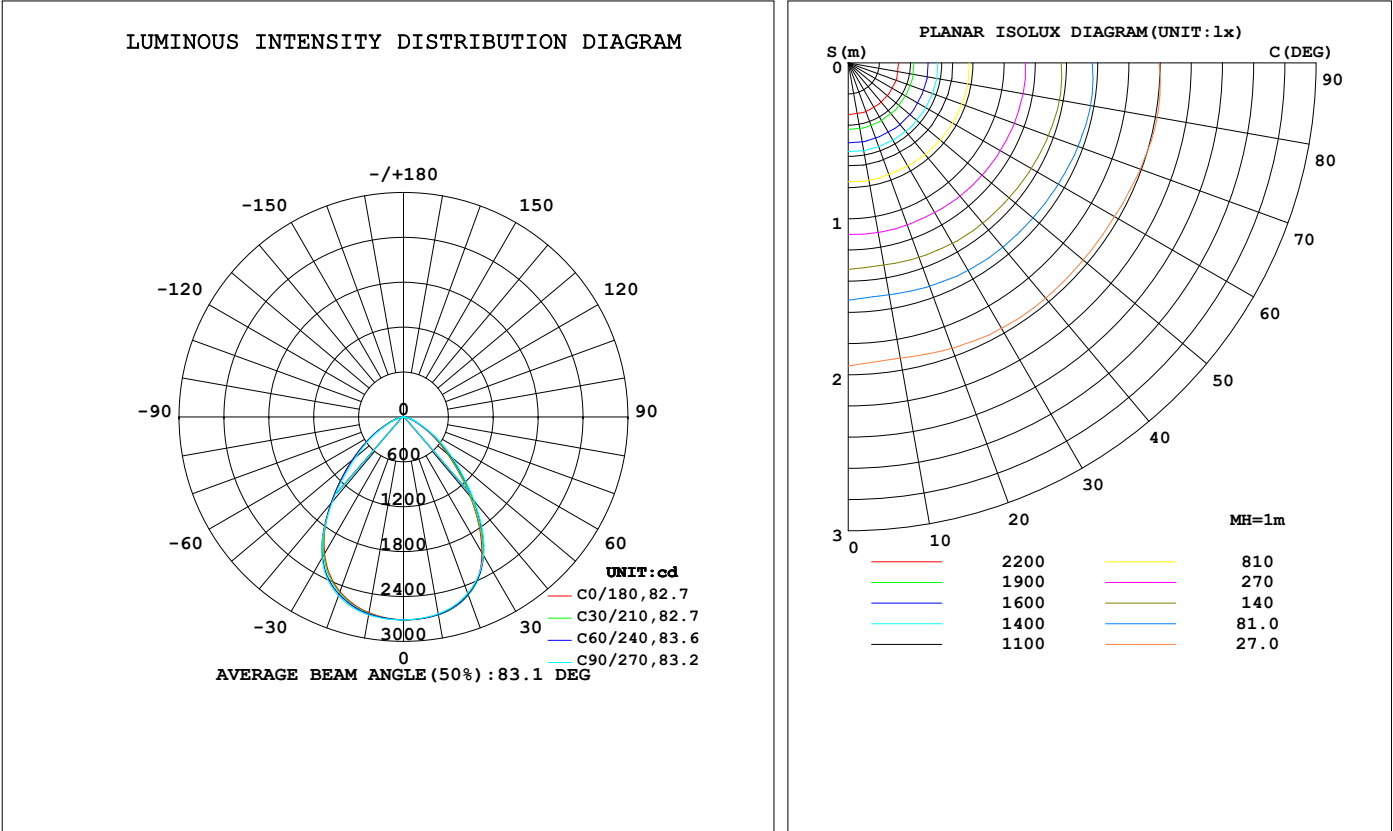


EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:230.0V I:0.182A P:42.0W PF:0.972 Freq:50.01Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:5008.13x1 lm		
NAME: P300-B4K (42W with no reflector)	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 119.24 lm/W			
MODEL	/	Imax (cd)	2713	S/MH (C0/180)	1.16
NOMINAL POWER (W)	/	LOR (%)	100.0	S/MH (C90/270)	1.18
RATED VOLTAGE (V)	/	TOTAL FLUX (lm)	5008.1	η UP, DN (C0-180)	0.0, 49.9
NOMINAL FLUX (lm)	5008.13	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



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	2684	2684	2671	2658	2657	2669	2687	2682	0- 10	257.1	257.1	5.13,5.13
20	2531	2530	2507	2484	2484	2506	2543	2536	10- 20	737.2	994.3	19.9,19.9
30	2096	2147	2137	2120	2110	2143	2176	2132	20- 30	1082	2076	41.5,41.5
40	1389	1437	1472	1529	1505	1492	1477	1427	30- 40	1130	3206	64,64
50	767.9	813.7	859.4	920.6	893.4	881.1	832.2	799.0	40- 50	874.6	4081	81.5,81.5
60	365.9	393.8	414.7	459.2	446.8	444.8	409.2	397.4	50- 60	551.0	4632	92.5,92.5
70	138.8	148.7	156.7	177.2	173.3	171.6	155.1	148.6	60- 70	264.3	4896	97.8,97.8
80	29.57	34.50	41.46	51.29	52.26	48.98	39.73	31.89	70- 80	99.82	4996	99.8,99.8
90	0.1209	0.1251	0.1778	0.4612	0.7183	0.5594	0.2476	0.2551	80- 90	12.03	5008	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): 3684.6 lm

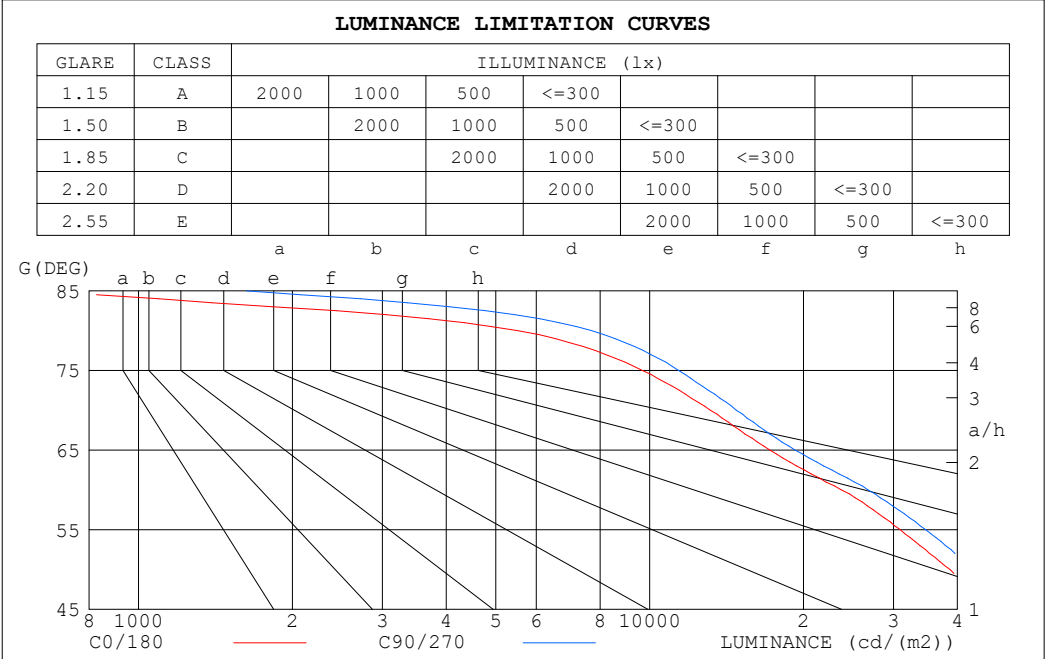
%lum = 73.6%
%lamp = 73.6%

Conical surface Flux(120deg): 4631.9 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	576	1624
80	5516	7697
75	9679	11397
70	13143	14773
65	17191	19256
60	23706	26734
55	30954	34691
50	38696	43099
45	47909	51738

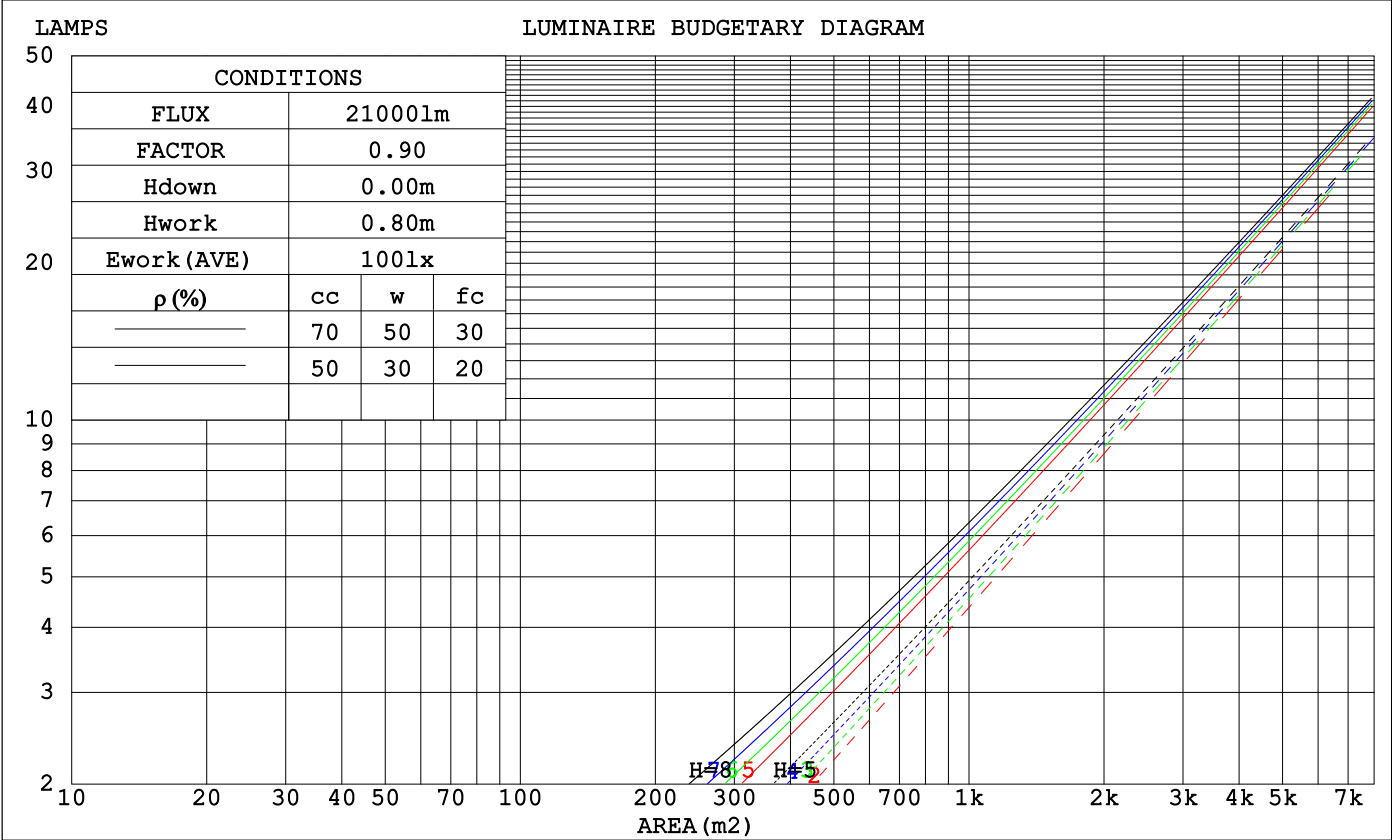
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:ZZX
Test Date:2024-06-14

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

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		21.9	23.2	22.2	23.5	23.9	22.8	24.2	23.1	24.5	24.8
	3H	22.4	23.7	22.8	24.0	24.3	23.4	24.6	23.8	24.9	25.3
	4H	22.6	23.7	23.0	24.1	24.4	23.5	24.7	23.9	25.0	25.4
	6H	22.6	23.7	23.0	24.0	24.4	23.6	24.7	24.0	25.0	25.4
	8H	22.6	23.6	23.0	24.0	24.4	23.6	24.6	24.0	25.0	25.4
	12H	22.5	23.5	23.0	23.9	24.3	23.6	24.5	24.0	24.9	25.3
4H	2H	22.1	23.2	22.5	23.6	24.0	23.1	24.2	23.5	24.5	24.9
	3H	22.9	23.8	23.3	24.2	24.6	23.8	24.8	24.2	25.2	25.6
	4H	23.1	23.9	23.5	24.3	24.7	24.1	24.9	24.5	25.3	25.8
	6H	23.1	23.8	23.6	24.3	24.8	24.2	24.9	24.6	25.3	25.8
	8H	23.1	23.8	23.6	24.2	24.7	24.2	24.8	24.6	25.3	25.8
	12H	23.1	23.6	23.5	24.1	24.6	24.1	24.7	24.6	25.2	25.7
8H	4H	23.1	23.8	23.6	24.2	24.7	24.1	24.8	24.6	25.2	25.7
	6H	23.2	23.7	23.7	24.2	24.7	24.3	24.8	24.8	25.3	25.8
	8H	23.1	23.6	23.7	24.2	24.6	24.3	24.8	24.8	25.3	25.8
	12H	23.1	23.5	23.6	24.0	24.6	24.3	24.7	24.8	25.2	25.8
12H	4H	23.1	23.7	23.6	24.1	24.6	24.1	24.7	24.6	25.2	25.6
	6H	23.2	23.6	23.7	24.1	24.7	24.3	24.8	24.8	25.2	25.8
	8H	23.1	23.6	23.6	24.1	24.6	24.3	24.7	24.8	25.2	25.8
CIE190: 2010											

CIE190: 2010
Area: 0.031 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

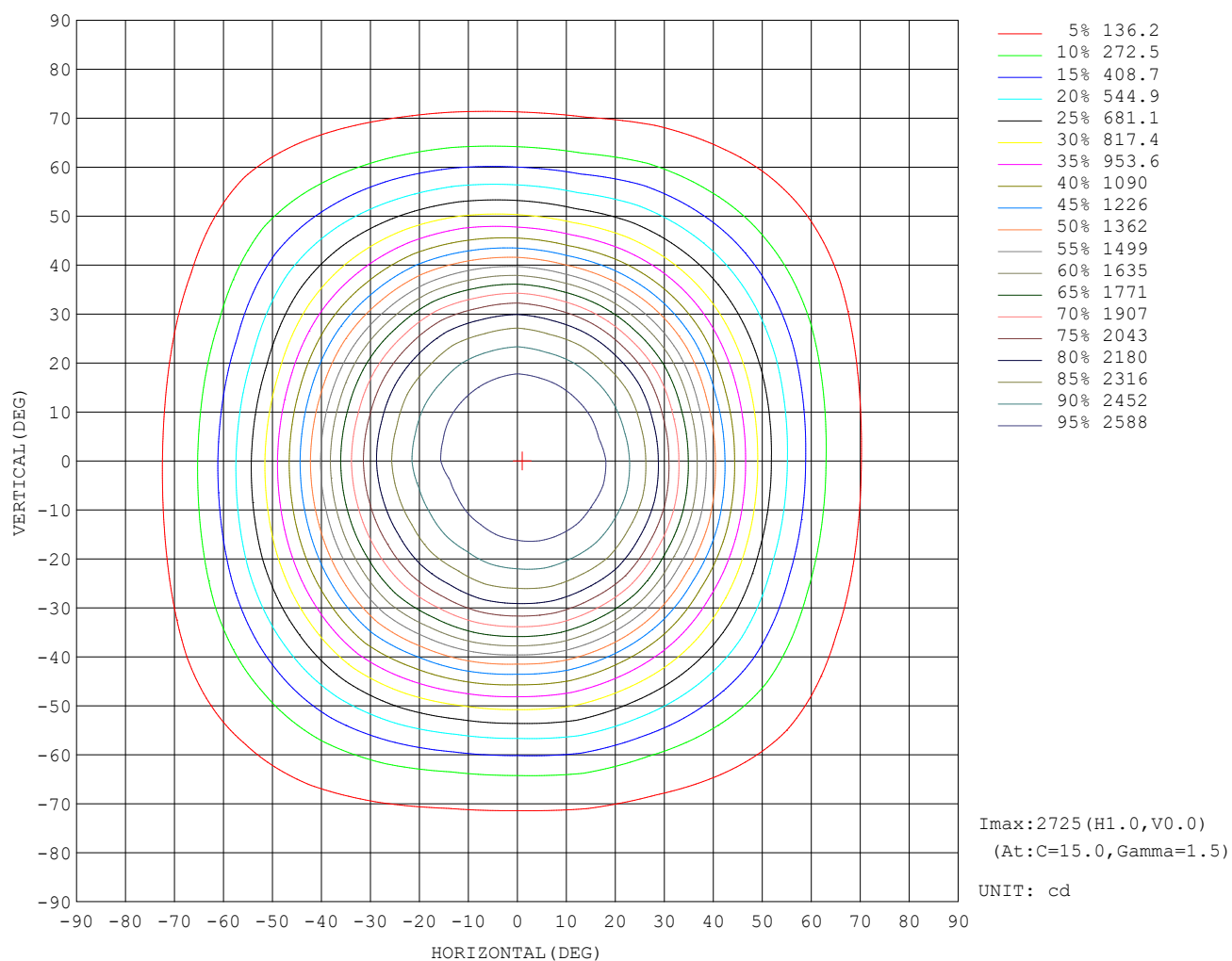
UTILIZATION FACTORS TABLE

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:

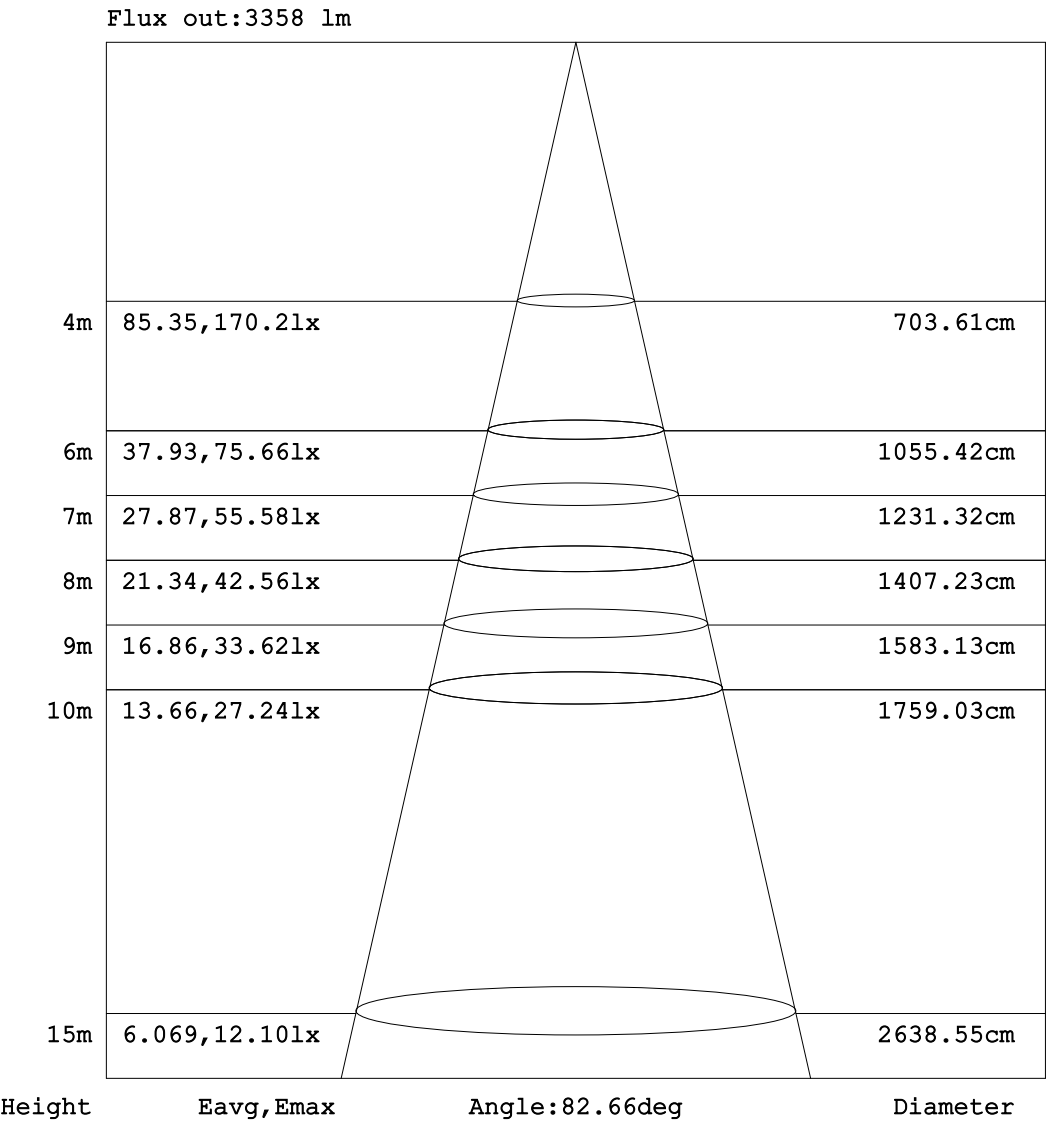
ISOCANDELA DIAGRAM



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

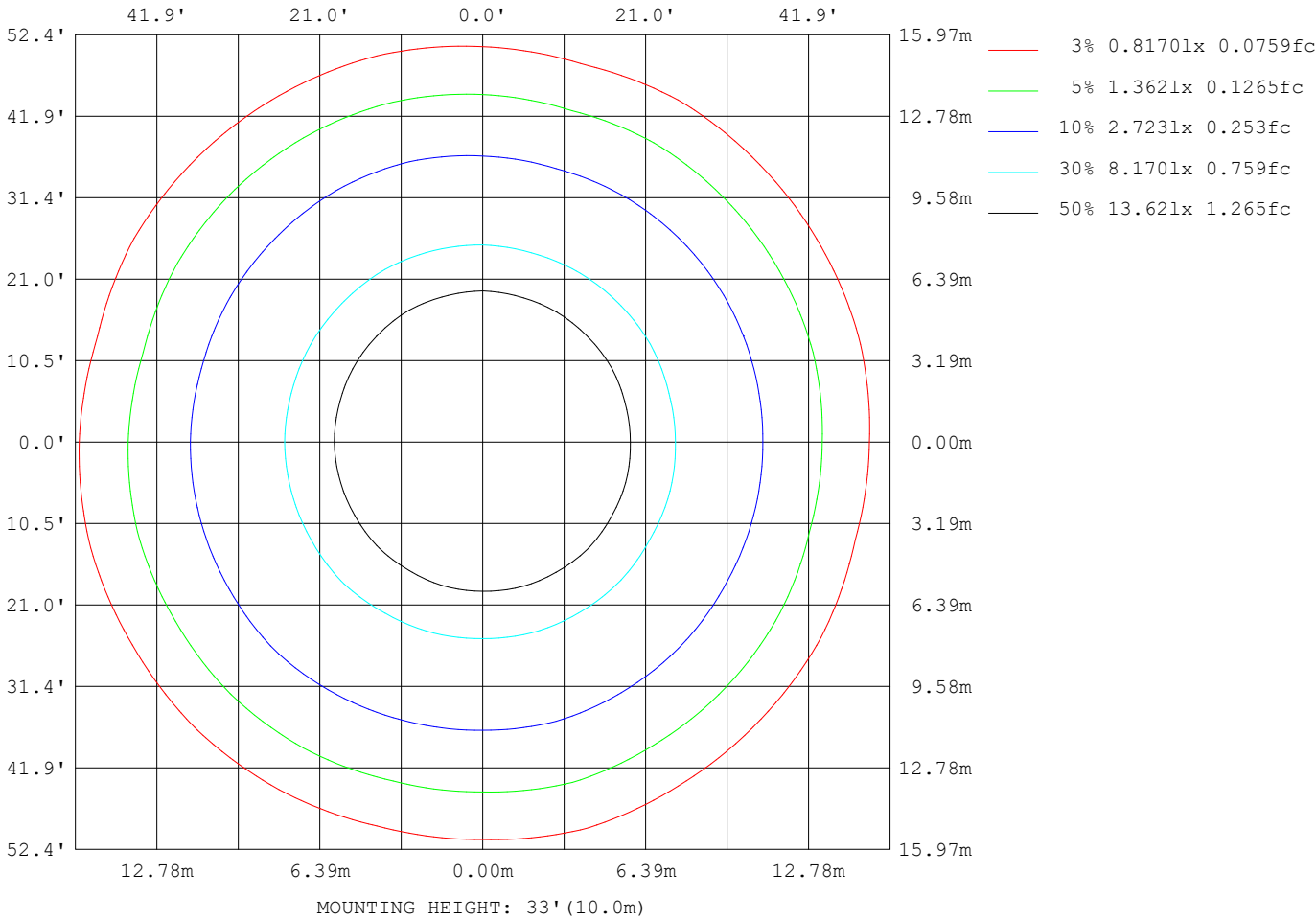
γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.465
Humidity: 65.0%
Test Distance: 26.000m [K=0.4593]
Remarks:

AAI Figure



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

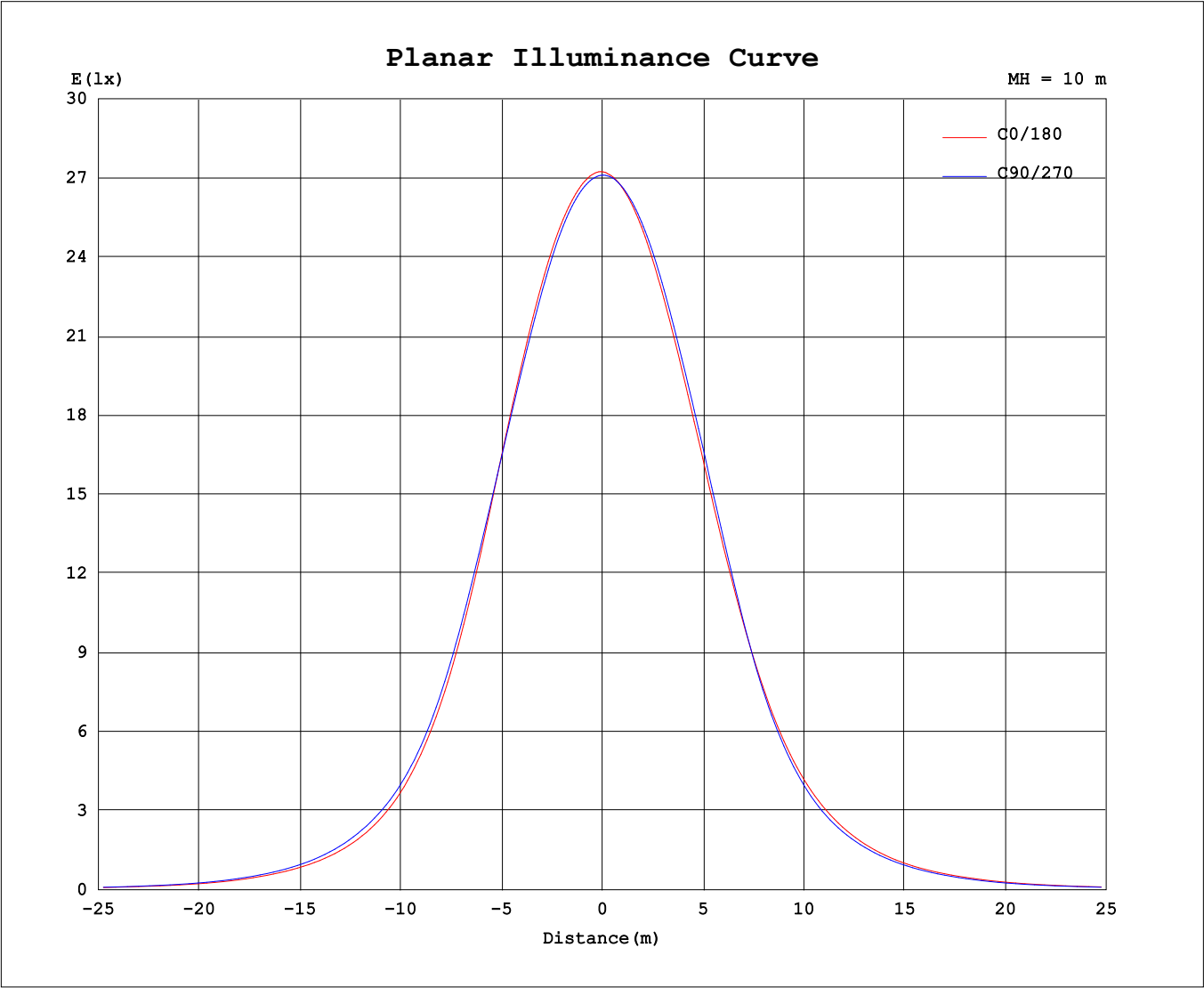
ISOLUX DIAGRAM



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:

```