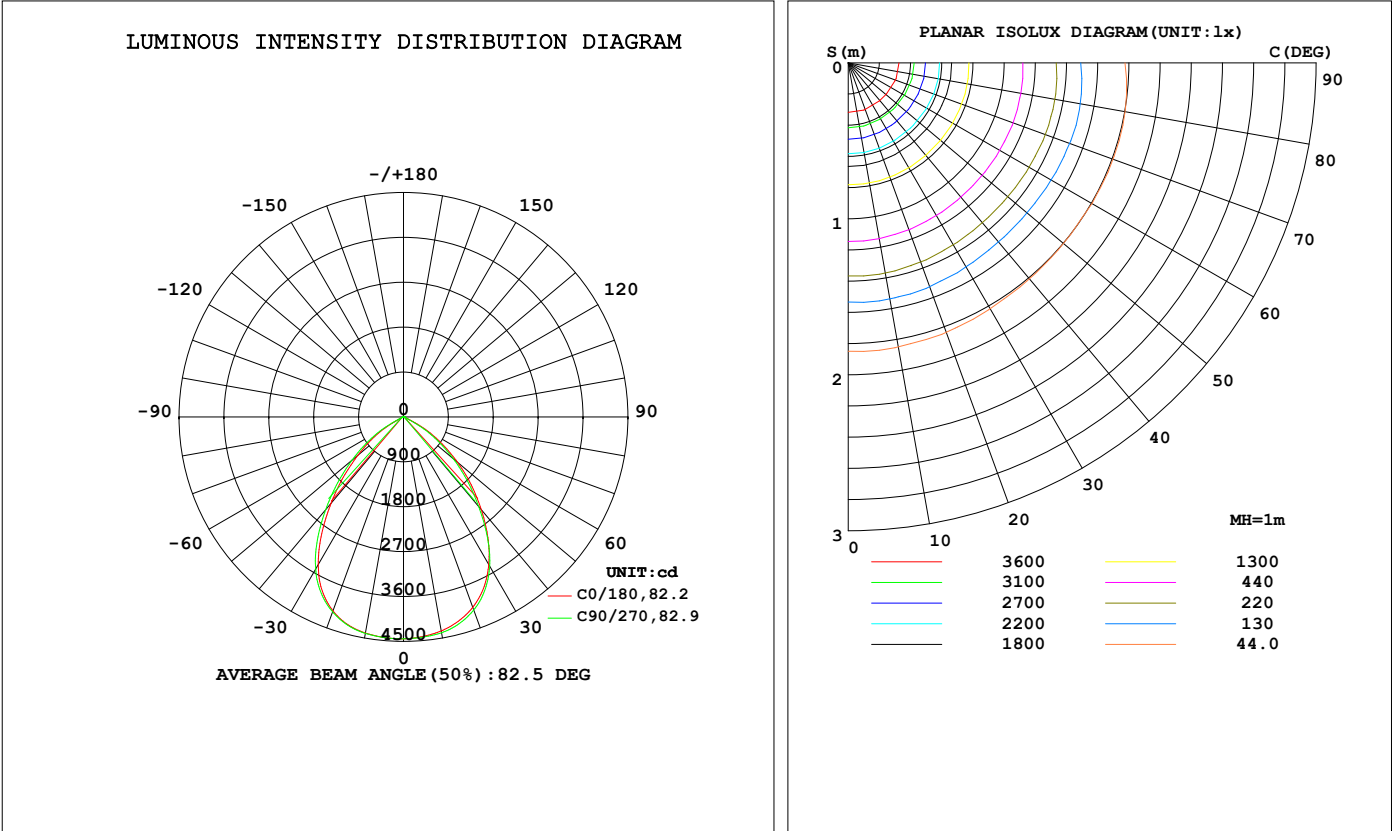


EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:230.0V I:0.304A P:70.0W PF:0.972 Freq:50.01Hz		
UTHDi:0.00% ITHDi:0.00% KDisp:0Lamp Flux:7515.17x1 lm		
NAME: P300-B4K (70W with aluminium reflector)	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 107.36 lm/W
MODEL	/	Imax (cd)	4450	S/MH (C0/180)	1.15	
NOMINAL POWER (W)	/	LOR (%)	100.0	S/MH (C90/270)	1.18	
RATED VOLTAGE (V)	/	TOTAL FLUX (lm)	7515.2	η UP, DN (C0-180)	0.0, 49.8	
NOMINAL FLUX (lm)	7515.17	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 50.2	
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: 22.5DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators: ZZX
Test Date: 2024-06-13

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	4356	4367	4392	4398	4398	4407	4406	4384	0- 10	421.8	421.8	5.61,5.61
20	4061	4063	4118	4132	4136	4164	4156	4112	10- 20	1209	1631	21.7,21.7
30	3419	3394	3456	3436	3419	3456	3520	3495	20- 30	1762	3393	45.1,45.1
40	2430	2369	2349	2258	2261	2295	2428	2459	30- 40	1821	5214	69.4,69.4
50	1413	1323	1306	1177	1189	1199	1348	1390	40- 50	1392	6605	87.9,87.9
60	538.1	463.5	430.3	307.9	348.0	370.5	457.6	488.9	50- 60	758.8	7364	98,98
70	32.35	27.83	22.91	19.59	18.17	19.39	23.59	29.59	60- 70	133.1	7497	99.8,99.8
80	8.356	7.876	7.991	7.317	6.102	6.296	7.769	9.071	70- 80	14.45	7512	100,100
90	0.4655	0.1917	0.0165	0.0165	0.0382	0.0329	0.0384	0.2854	80- 90	3.668	7515	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): 5981.2 lm

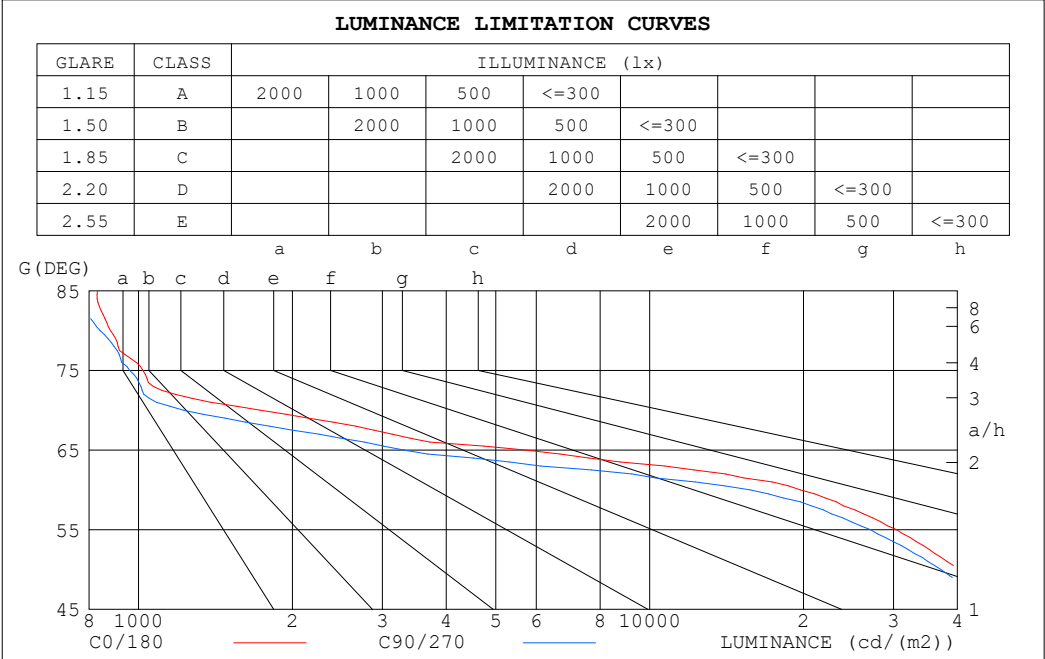
%lum = 79.6%
%lamp = 79.6%

Conical surface Flux(120deg): 7364 lm

%lum = 98.0%
%lamp = 98.0%

C Range: 0 - 360DEG	γ Range: 0 - 90DEG
C Interval: 22.5DEG	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:2024-06-13	Remarks:

LUMINANCE LIMITATION CURVES



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	831	690
80	881	841
75	1020	961
70	1733	1224
65	5727	3308
60	19716	15727
55	30430	27050
50	40272	37144
45	49695	46938

C Range: 0 - 360DEG

C Interval: 22.5DEG

Test Speed: HIGH

Temperature:25.3℃

Operators:ZZX

Test Date:2024-06-13

γ Range: 0 - 90DEG

γ Interval: 0.5DEG

Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.465

Humidity:65.0%

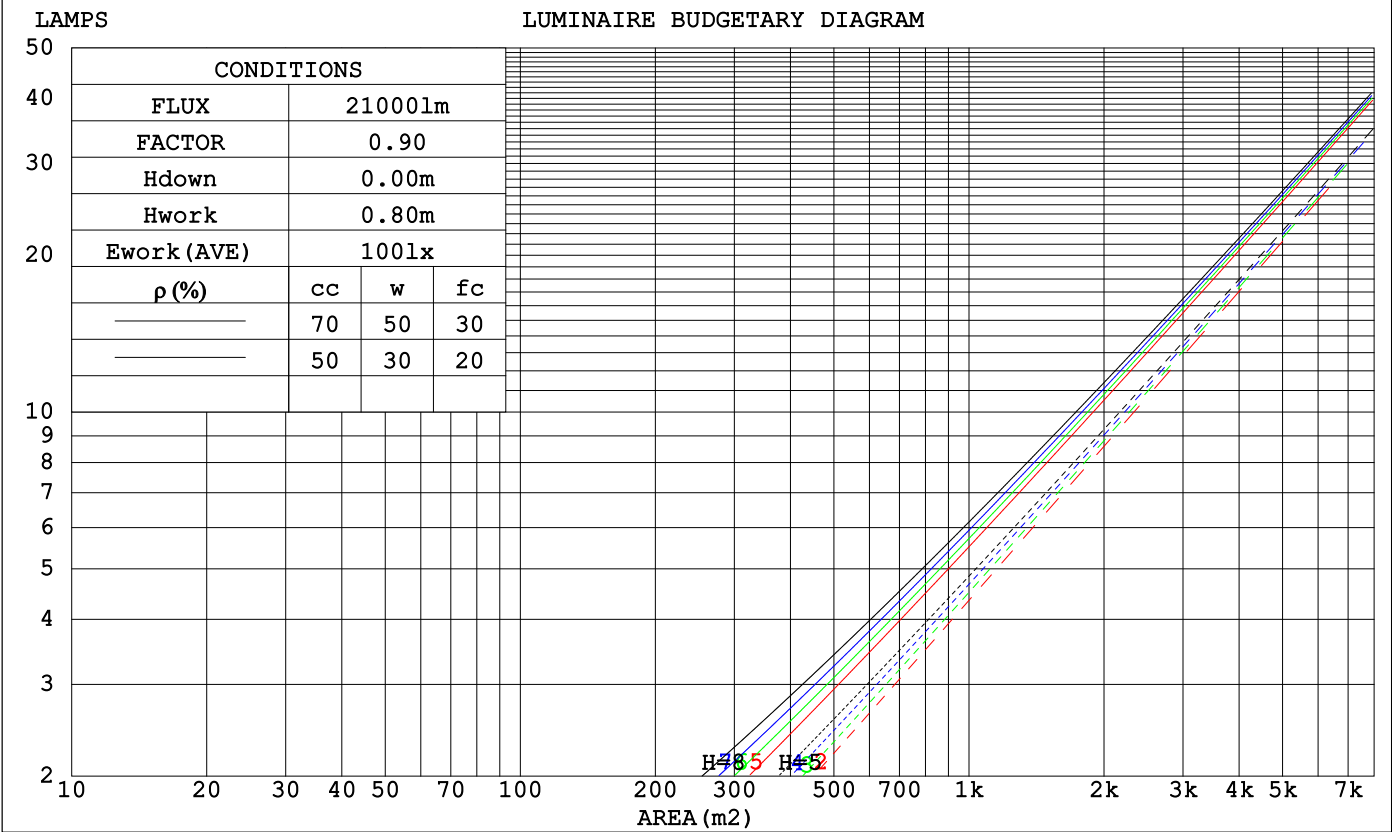
Test Distance:26.000m [K=0.4593]

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	1.09	1.06	1.03	1.07	1.04	1.02	1.03	1.00	.98	.99	.97	.95	.95	.94	.93	.91	
2.0	.99	.94	.90	.97	.93	.89	.94	.90	.87	.91	.88	.85	.88	.85	.83	.81	
3.0	.90	.84	.79	.88	.83	.78	.86	.81	.77	.83	.79	.76	.81	.77	.74	.73	
4.0	.82	.75	.70	.81	.74	.69	.78	.73	.68	.76	.71	.68	.74	.70	.67	.65	
5.0	.75	.68	.62	.74	.67	.62	.72	.66	.61	.70	.65	.61	.68	.64	.60	.58	
6.0	.69	.61	.56	.68	.61	.56	.66	.60	.55	.64	.59	.55	.63	.58	.54	.53	
7.0	.63	.56	.51	.62	.55	.50	.61	.55	.50	.60	.54	.50	.58	.53	.49	.48	
8.0	.58	.51	.46	.58	.51	.46	.56	.50	.46	.55	.50	.45	.54	.49	.45	.44	
9.0	.54	.47	.42	.53	.47	.42	.52	.46	.42	.51	.46	.42	.50	.45	.41	.40	
10.0	.50	.43	.39	.50	.43	.39	.49	.43	.38	.48	.42	.38	.47	.42	.38	.37	



C Range: 0 - 360DEG

C Interval: 22.5DEG

Test Speed: HIGH

Temperature:25.3℃

Operators:ZZX

Test Date:2024-06-13

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	.215	.122	.039	.208	.119	.038	.195	.112	.036	.183	.106	.034	.173	.100	.032	
2.0	.211	.116	.035	.205	.113	.035	.194	.108	.034	.184	.103	.032	.175	.099	.031	
3.0	.203	.108	.032	.198	.106	.032	.188	.102	.031	.179	.098	.030	.171	.095	.029	
4.0	.193	.101	.030	.189	.099	.029	.181	.096	.029	.173	.093	.028	.166	.090	.027	
5.0	.184	.094	.027	.180	.092	.027	.173	.090	.026	.166	.087	.026	.159	.085	.026	
6.0	.175	.088	.025	.171	.087	.025	.165	.084	.025	.159	.082	.024	.153	.080	.024	
7.0	.166	.082	.023	.163	.081	.023	.157	.079	.023	.152	.078	.023	.146	.076	.022	
8.0	.158	.077	.022	.155	.076	.022	.150	.075	.021	.145	.073	.021	.140	.072	.021	
9.0	.150	.073	.020	.148	.072	.020	.143	.071	.020	.138	.069	.020	.134	.068	.020	
10.0	.143	.069	.019	.141	.068	.019	.136	.067	.019	.132	.066	.019	.128	.065	.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	.174	.157	.142	.149	.135	.122	.102	.093	.084	.059	.054	.049	.019	.017	.016	
2.0	.161	.132	.108	.138	.114	.093	.095	.079	.065	.055	.046	.038	.018	.015	.012	
3.0	.152	.114	.084	.130	.098	.073	.089	.068	.051	.052	.040	.030	.017	.013	.010	
4.0	.143	.100	.067	.123	.086	.058	.084	.060	.041	.049	.035	.024	.016	.011	.008	
5.0	.136	.089	.054	.117	.077	.047	.080	.054	.033	.047	.031	.020	.015	.010	.006	
6.0	.129	.080	.045	.111	.069	.039	.077	.048	.028	.044	.029	.016	.014	.009	.005	
7.0	.123	.073	.038	.106	.063	.033	.073	.044	.023	.042	.026	.014	.014	.009	.005	
8.0	.117	.067	.032	.101	.058	.028	.070	.041	.020	.041	.024	.012	.013	.008	.004	
9.0	.112	.062	.028	.097	.054	.024	.067	.038	.017	.039	.022	.010	.013	.007	.003	
10.0	.107	.058	.025	.093	.050	.022	.064	.035	.015	.037	.021	.009	.012	.007	.003	

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:ZZX
 Test Date:2024-06-13

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	21.8	23.1	22.2	23.4	23.7	20.3	21.6	20.7	22.0	22.3
3H	21.7	22.8	22.1	23.1	23.5	20.2	21.4	20.6	21.7	22.1
4H	21.6	22.7	22.0	23.0	23.4	20.2	21.2	20.6	21.6	21.9
6H	21.5	22.5	21.9	22.9	23.2	20.1	21.0	20.5	21.4	21.8
8H	21.5	22.4	21.9	22.8	23.2	20.0	20.9	20.5	21.3	21.7
12H	21.4	22.3	21.9	22.7	23.1	20.0	20.9	20.4	21.2	21.7
4H 2H	21.6	22.7	22.0	23.0	23.4	20.2	21.2	20.6	21.6	21.9
3H	21.5	22.3	21.9	22.8	23.2	20.0	20.9	20.4	21.3	21.7
4H	21.4	22.2	21.9	22.6	23.0	19.9	20.7	20.4	21.1	21.6
6H	21.3	22.0	21.8	22.4	22.9	19.9	20.5	20.3	21.0	21.4
8H	21.3	21.9	21.7	22.3	22.8	19.8	20.4	20.3	20.9	21.3
12H	21.2	21.8	21.7	22.2	22.7	19.8	20.3	20.2	20.8	21.2
8H 4H	21.3	21.9	21.7	22.3	22.8	19.8	20.4	20.3	20.8	21.3
6H	21.2	21.7	21.7	22.2	22.6	19.7	20.2	20.2	20.7	21.2
8H	21.1	21.5	21.6	22.1	22.6	19.6	20.1	20.2	20.6	21.1
12H	21.1	21.4	21.6	21.9	22.5	19.6	20.0	20.1	20.5	21.0
12H 4H	21.2	21.8	21.7	22.2	22.7	19.7	20.3	20.2	20.8	21.2
6H	21.1	21.6	21.6	22.0	22.6	19.6	20.1	20.2	20.6	21.1
8H	21.1	21.4	21.6	21.9	22.5	19.6	20.0	20.1	20.5	21.0
CIE190: 2010										

CIE190: 2010
Area: 0.0547 m2

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:ZZX
Test Date:2024-06-13

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

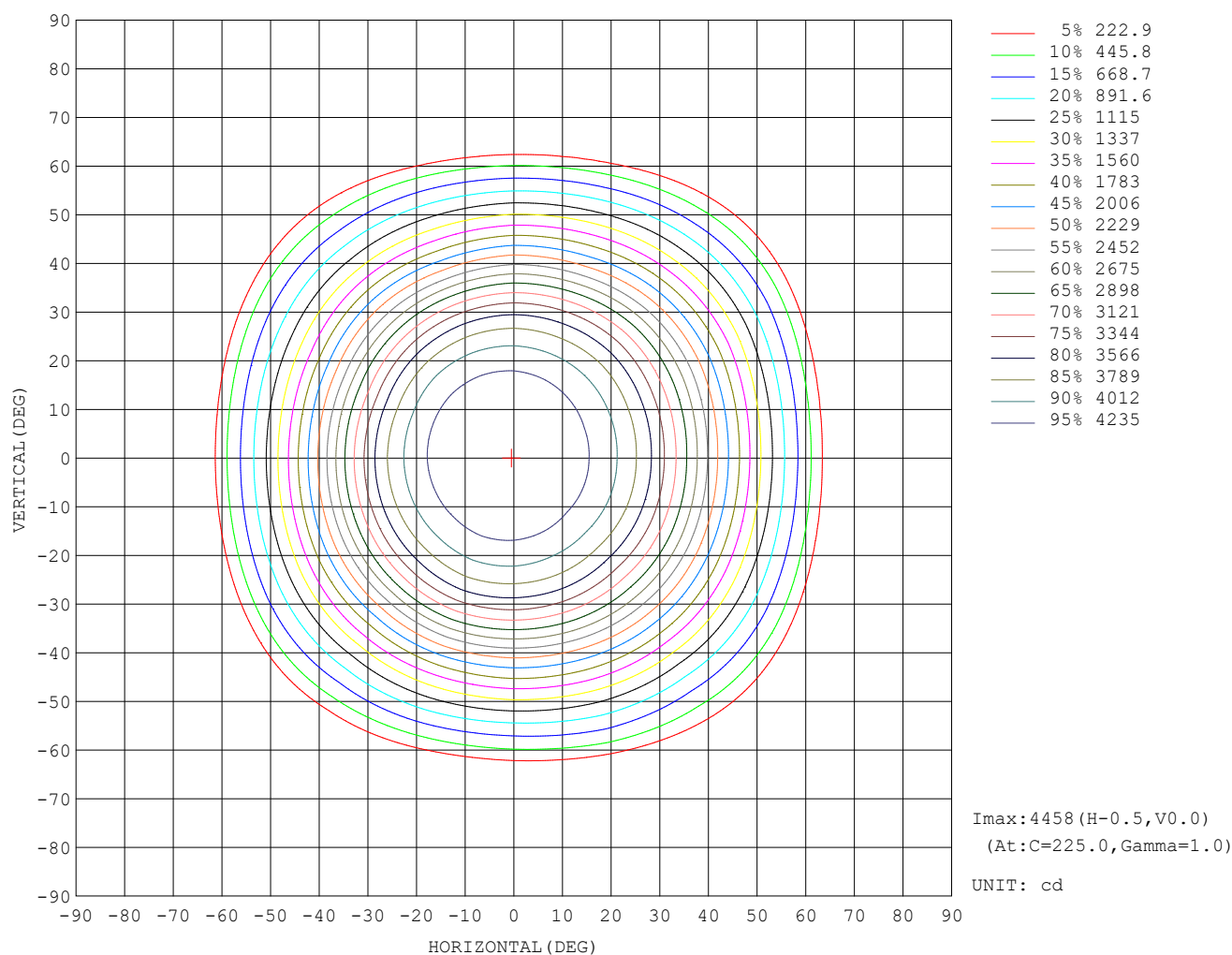
UTILIZATION FACTORS TABLE

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) $k(RI) \times RCR = 5$									
$k = 0.60$	72	62	57	71	62	57	70	62	57	52
0.80	82	73	67	81	72	67	79	72	67	62
1.00	89	81	76	88	81	76	86	81	75	70
1.25	95	88	83	94	87	83	92	86	82	77
1.50	99	93	88	98	92	87	95	90	86	81
2.00	104	98	94	102	97	93	99	95	92	86
2.50	106	101	97	105	100	96	101	97	94	88
3.00	109	104	100	107	103	99	103	100	97	90
4.00	111	107	104	109	106	103	105	102	100	92
5.00	113	109	107	110	107	105	106	104	102	94
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004				Suspended				SHRNOM = 1.25		

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3°C
 Operators: ZZX
 Test Date: 2024-06-13

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:

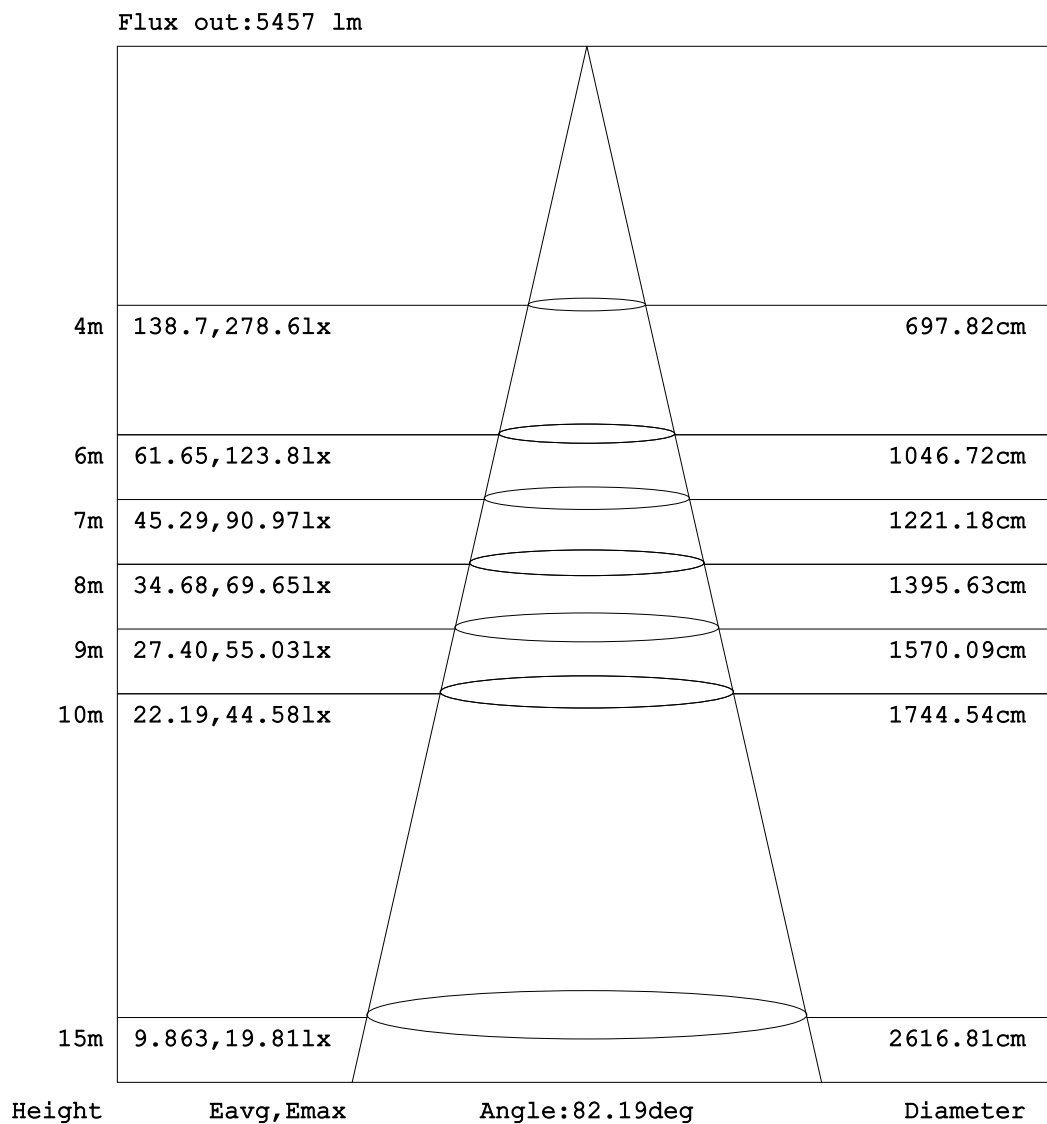
ISOCANDELA DIAGRAM



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:ZZX
Test Date:2024-06-13

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



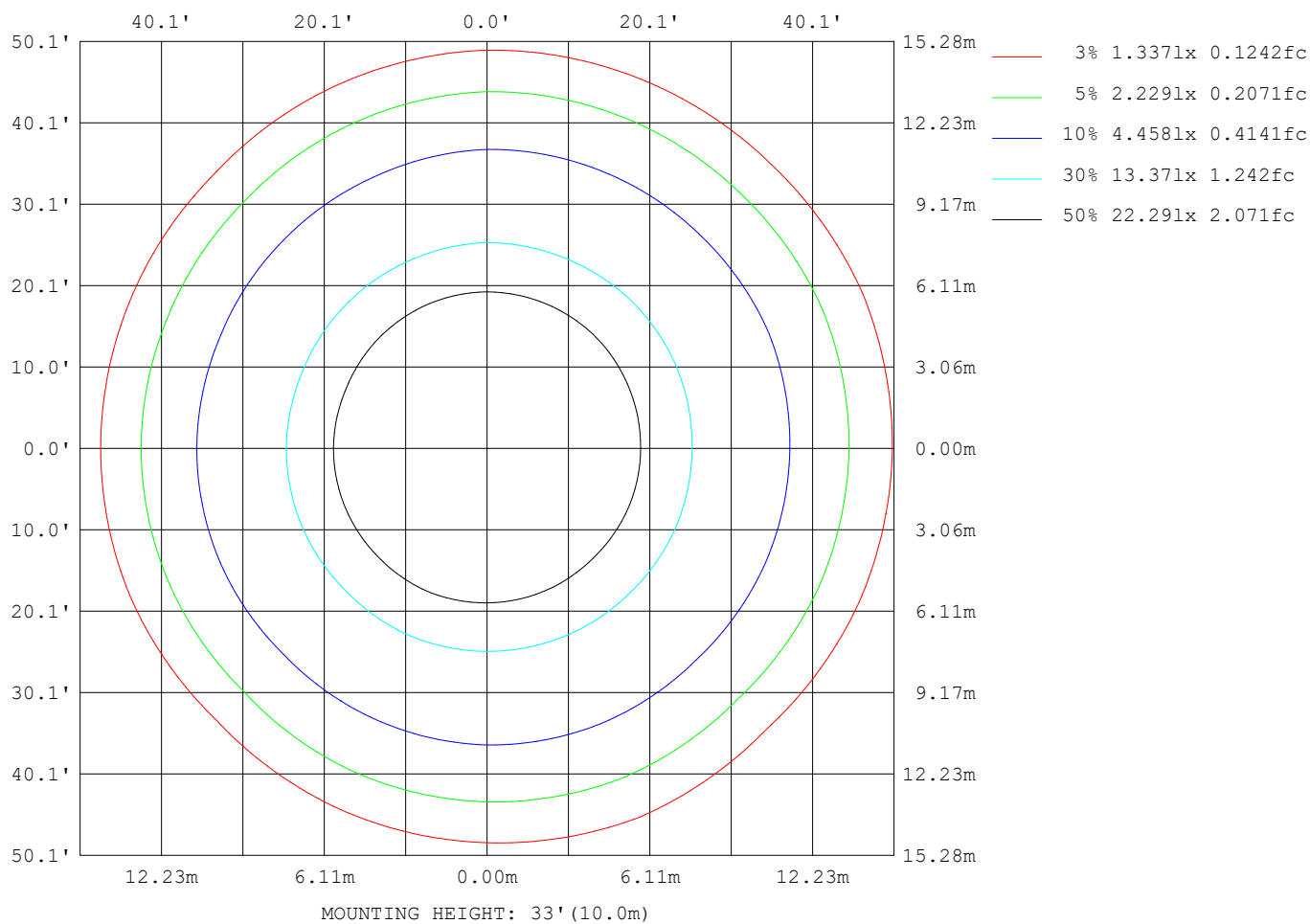
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:ZZX
Test Date:2024-06-13

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

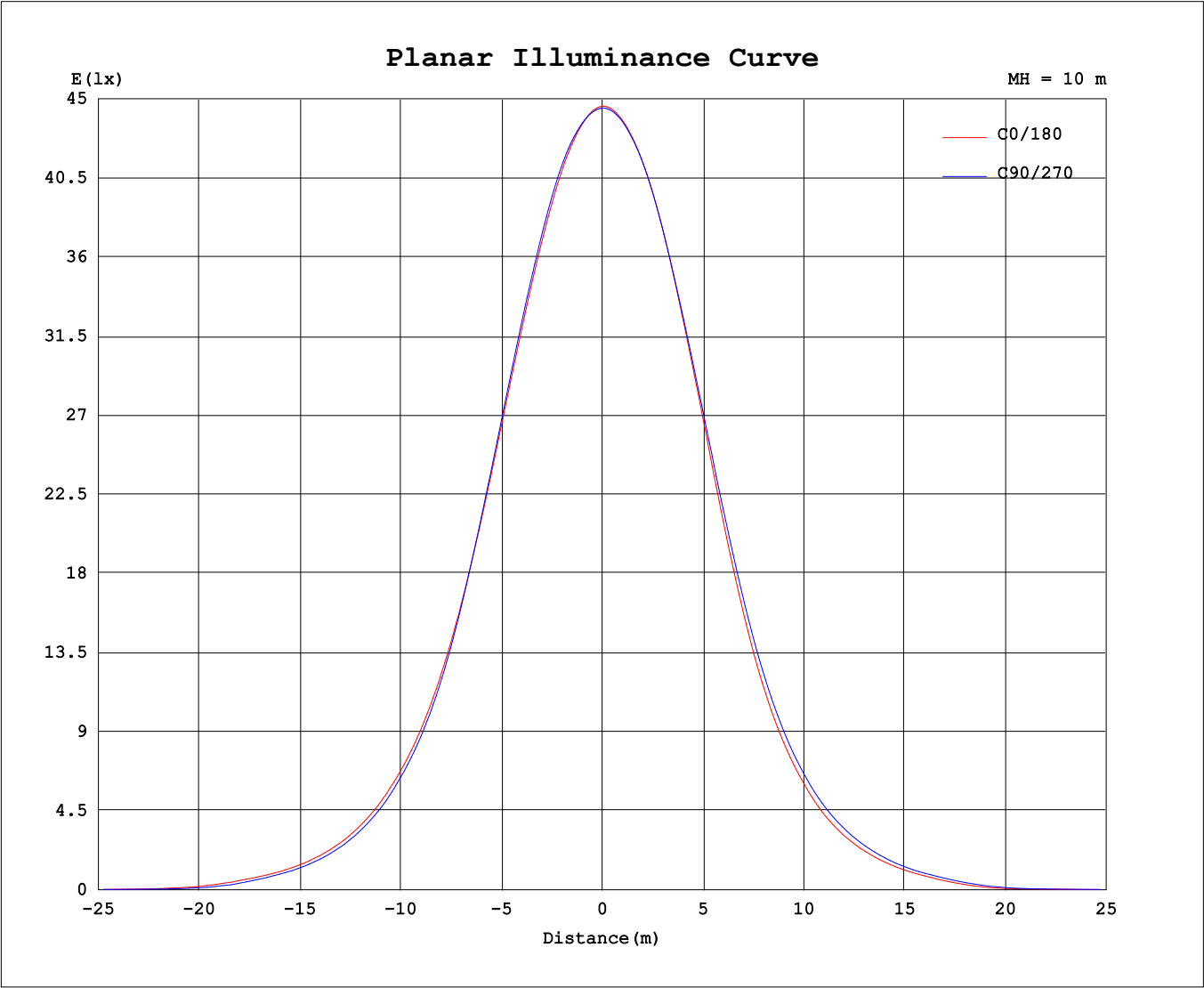
ISOLUX DIAGRAM



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators: ZZK
Test Date: 2024-06-13

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: 22.5DEG	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:2024-06-13	Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Table--1

UNIT: cd

[illegible]

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators: ZZX
Test Date: 2024-06-13

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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:

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