

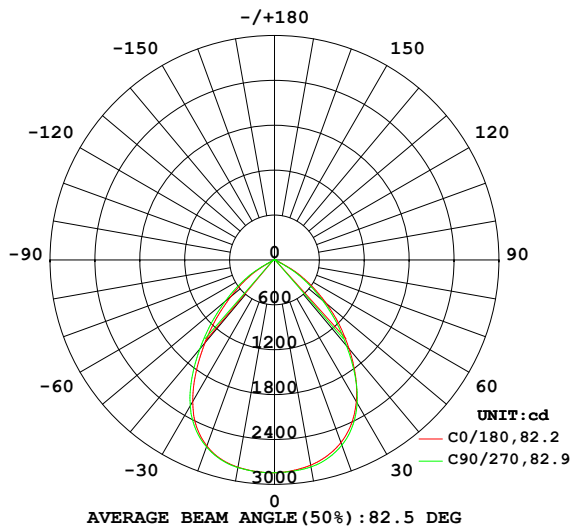
## EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

## LUMINAIRE PHOTOMETRIC TEST REPORT

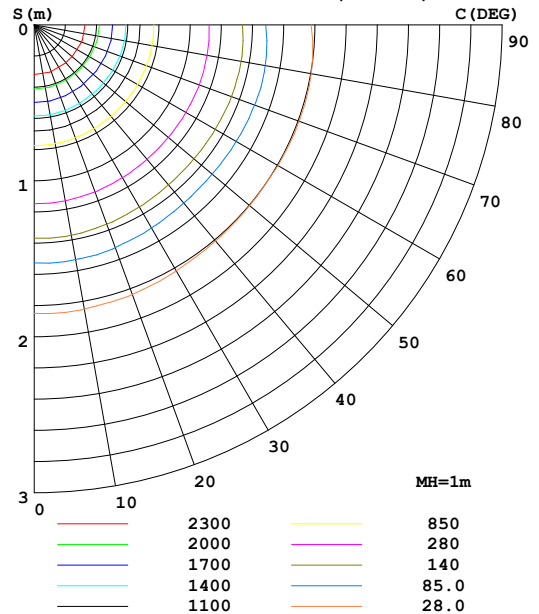
Test:U:230.0V I:0.182A P:42.0W PF:0.972 Freq:50.01Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:4805.63x1 lm		
NAME: P300-B4K (42W with aluminium reflector)	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 114.42 lm/W			
MODEL	/	Imax (cd)	2845	S/MH (C0/180)	1.15
NOMINAL POWER (W)	/	LOR (%)	100.0	S/MH (C90/270)	1.18
RATED VOLTAGE (V)	/	TOTAL FLUX (lm)	4805.6	$\eta$ UP, DN (C0-180)	0.0, 49.8
NOMINAL FLUX (lm)	4805.63	CIE CLASS	DIRECT	$\eta$ UP, DN (C180-360)	0.0, 50.2
LAMPS INSIDE	1	$\eta$ up (%)	0.0	CIBSE SHR NOM	1.00
TEST VOLTAGE (V)	/	$\eta$ down (%)	100.0	CIBSE SHR MAX	1.15

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



PLANAR ISOLUX DIAGRAM (UNIT: lx)



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

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  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	2785	2793	2809	2812	2813	2818	2817	2803	0- 10	269.7	269.7	5.61,5.61
20	2597	2598	2633	2642	2645	2663	2658	2629	10- 20	773.3	1043	21.7,21.7
30	2186	2170	2210	2197	2187	2210	2251	2235	20- 30	1127	2170	45.1,45.1
40	1554	1515	1502	1444	1446	1468	1553	1572	30- 40	1164	3334	69.4,69.4
50	903.6	845.8	835.4	752.6	760.0	766.7	861.8	889.1	40- 50	889.9	4224	87.9,87.9
60	344.1	296.4	275.1	196.9	222.5	236.9	292.6	312.6	50- 60	485.2	4709	98,98
70	20.69	17.79	14.65	12.53	11.62	12.40	15.09	18.92	60- 70	85.10	4794	99.8,99.8
80	5.343	5.036	5.110	4.679	3.902	4.026	4.968	5.800	70- 80	9.239	4803	100,100
90	0.2977	0.1226	0.0105	0.0105	0.0244	0.0210	0.0246	0.1825	80- 90	2.346	4806	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): 3824.7 lm

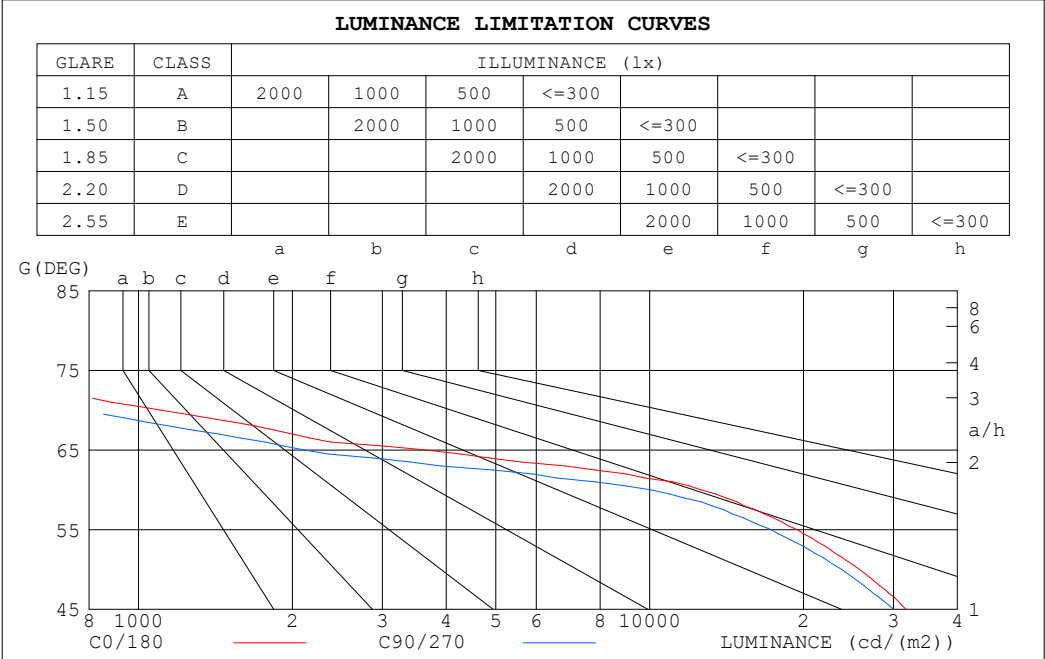
%lum = 79.6%  
%lamp = 79.6%

Conical surface Flux(120deg): 4708.9 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	531	441
80	564	538
75	652	614
70	1108	783
65	3662	2115
60	12607	10056
55	19459	17298
50	25752	23752
45	31778	30015

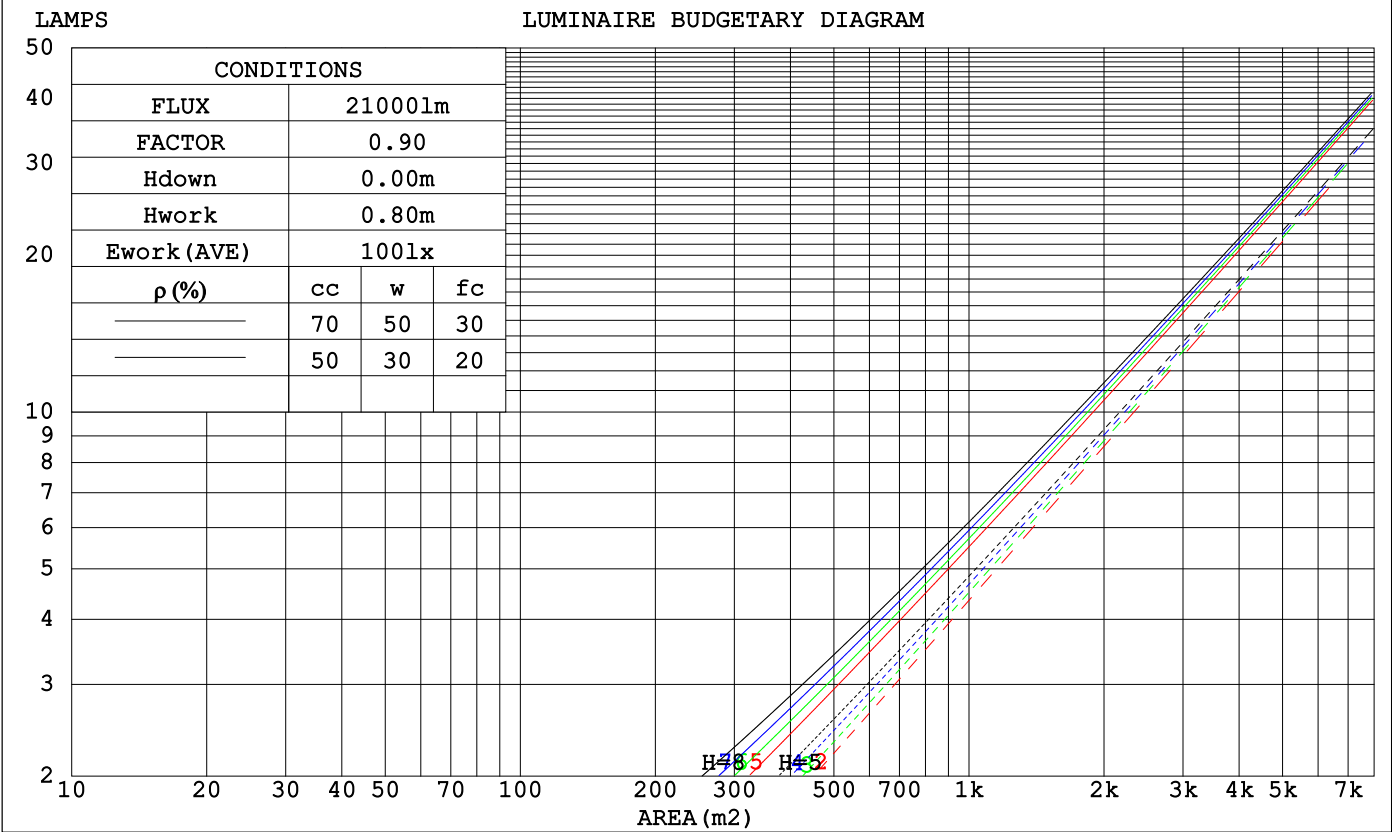
C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3℃  
Operators:ZZX  
Test Date:2024-06-13

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

$\rho_{cc}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	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	

$\rho_{cc}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	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

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  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	20.2	21.5	20.6	21.8	22.2	18.8	20.1	19.2	20.4	20.7
3H	20.1	21.3	20.5	21.6	22.0	18.7	19.8	19.1	20.1	20.5
4H	20.0	21.1	20.5	21.5	21.8	18.6	19.6	19.0	20.0	20.4
6H	20.0	20.9	20.4	21.3	21.7	18.5	19.5	18.9	19.9	20.2
8H	19.9	20.8	20.4	21.2	21.6	18.5	19.4	18.9	19.8	20.2
12H	19.9	20.7	20.3	21.1	21.6	18.4	19.3	18.9	19.7	20.1
4H 2H	20.1	21.1	20.5	21.5	21.8	18.6	19.6	19.0	20.0	20.4
3H	20.0	20.8	20.4	21.2	21.6	18.5	19.3	18.9	19.7	20.1
4H	19.9	20.6	20.3	21.0	21.5	18.4	19.1	18.8	19.6	20.0
6H	19.8	20.4	20.2	20.9	21.3	18.3	19.0	18.8	19.4	19.9
8H	19.7	20.3	20.2	20.8	21.2	18.3	18.9	18.7	19.3	19.8
12H	19.7	20.2	20.2	20.7	21.2	18.2	18.7	18.7	19.2	19.7
8H 4H	19.7	20.3	20.2	20.8	21.2	18.2	18.8	18.7	19.3	19.8
6H	19.6	20.1	20.1	20.6	21.1	18.1	18.6	18.6	19.1	19.6
8H	19.5	20.0	20.1	20.5	21.0	18.1	18.5	18.6	19.0	19.5
12H	19.5	19.9	20.0	20.4	21.0	18.0	18.4	18.5	18.9	19.5
12H 4H	19.7	20.2	20.2	20.7	21.2	18.2	18.7	18.7	19.2	19.7
6H	19.6	20.0	20.1	20.5	21.0	18.1	18.5	18.6	19.0	19.5
8H	19.5	19.9	20.0	20.4	21.0	18.0	18.4	18.5	18.9	19.5
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

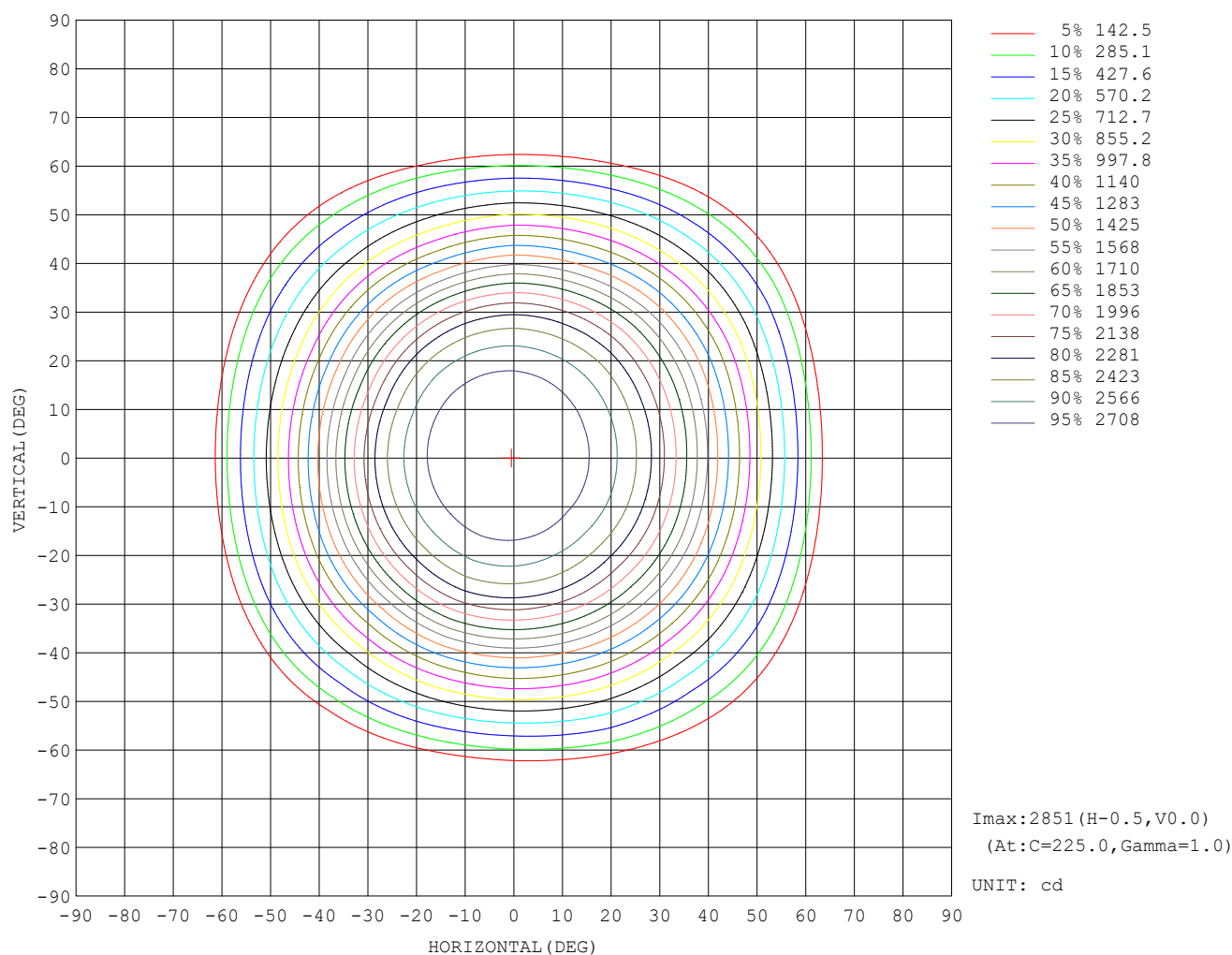
## UTILIZATION FACTORS TABLE

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

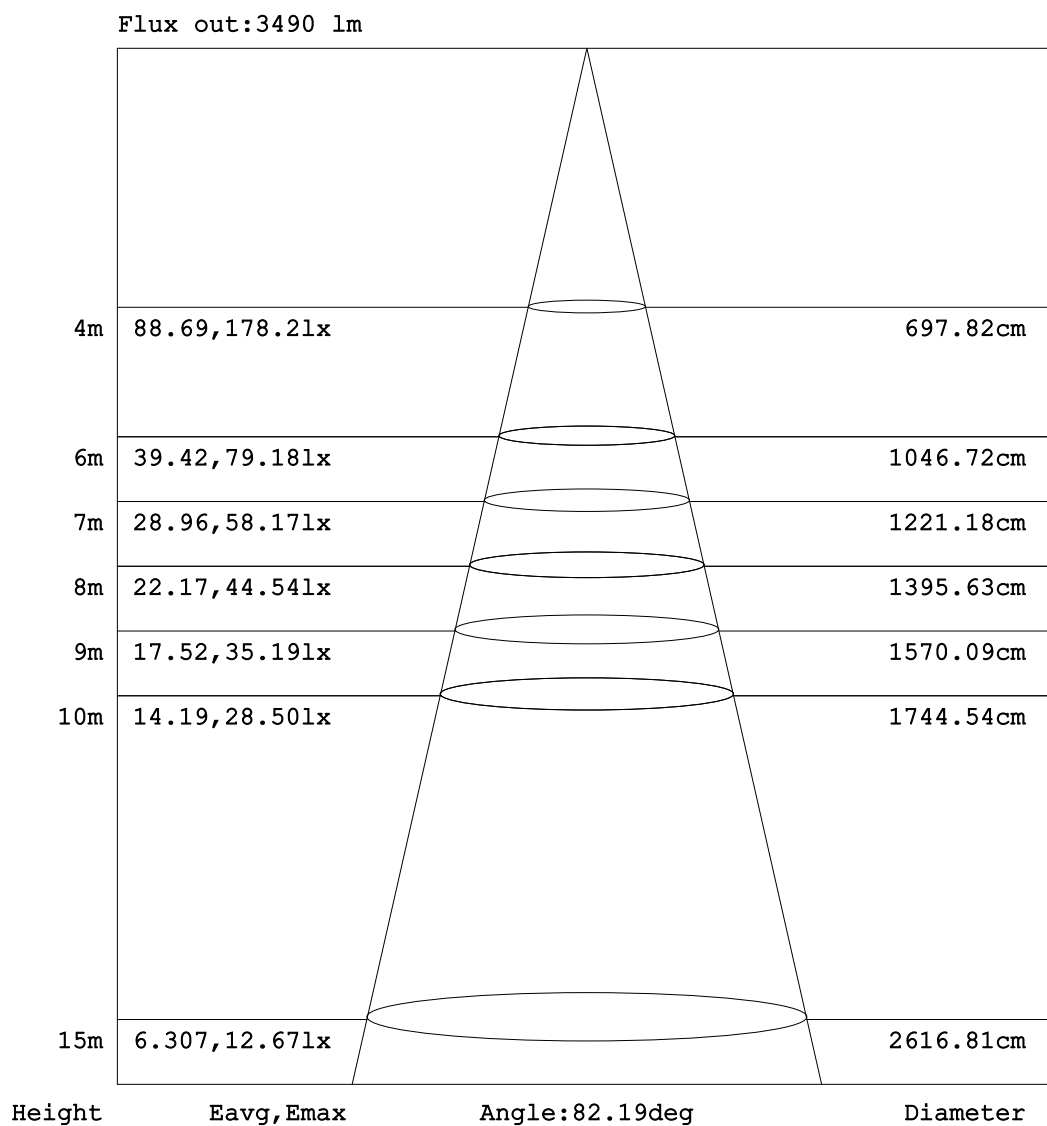


C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature: 25.3°C  
Operators: ZZK  
Test Date: 2024-06-13

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  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



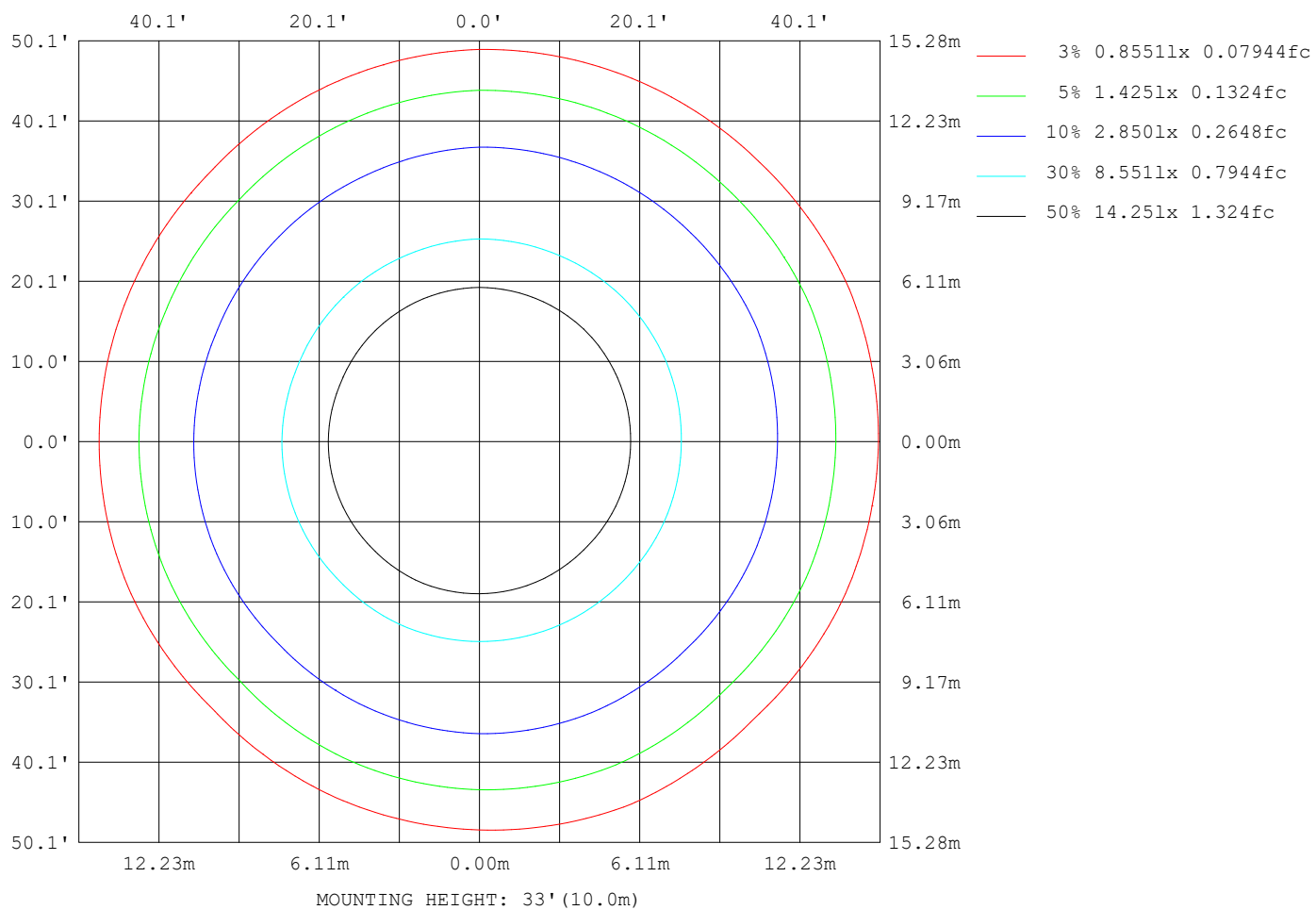
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  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

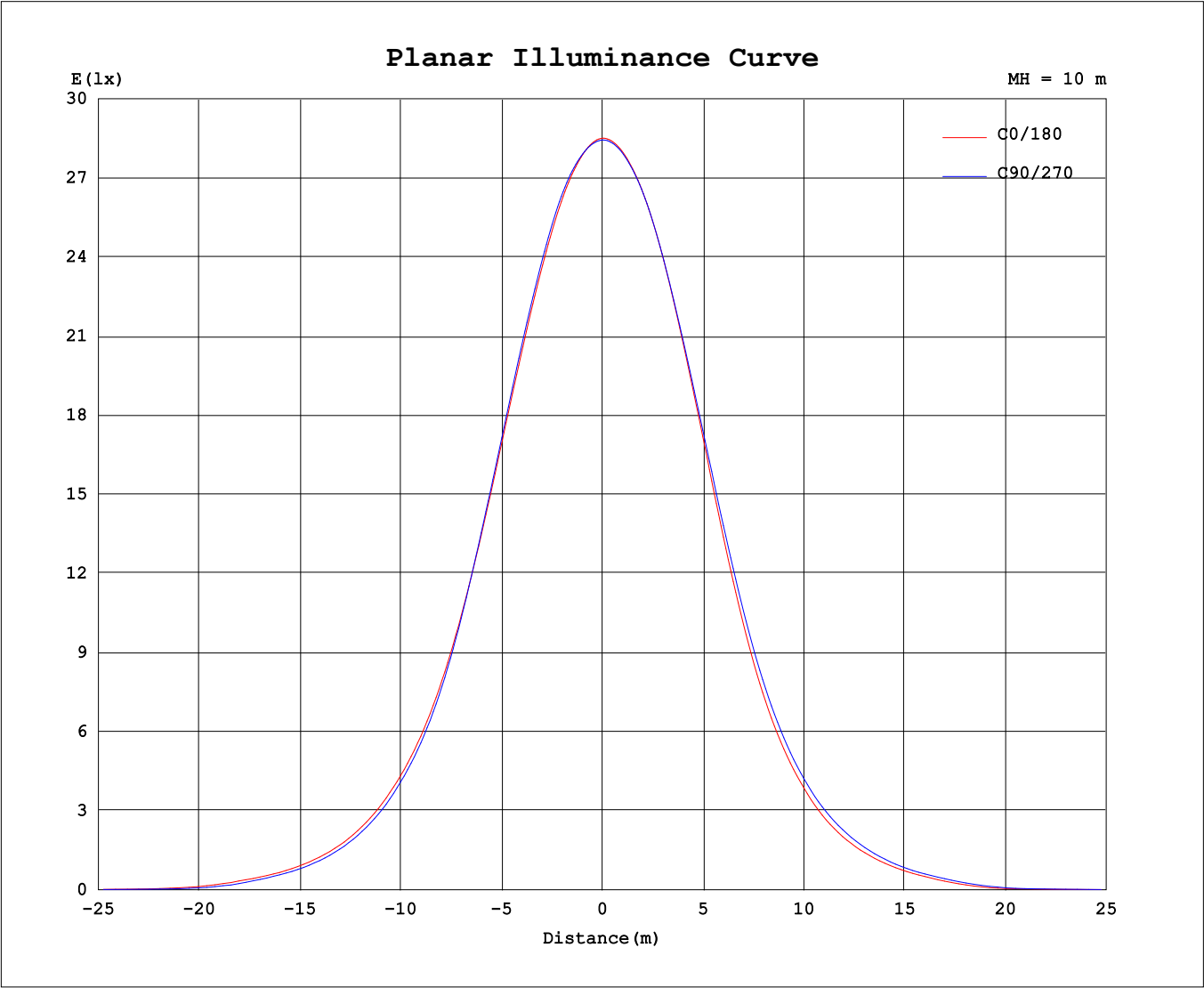
## ISOLUX DIAGRAM



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

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  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℃	Humidity:65.0%
Operators:ZZX	Test Distance:26.000m [K=0.4593]
Test Date:2024-06-13	Remarks:

UNIT: cd

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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