

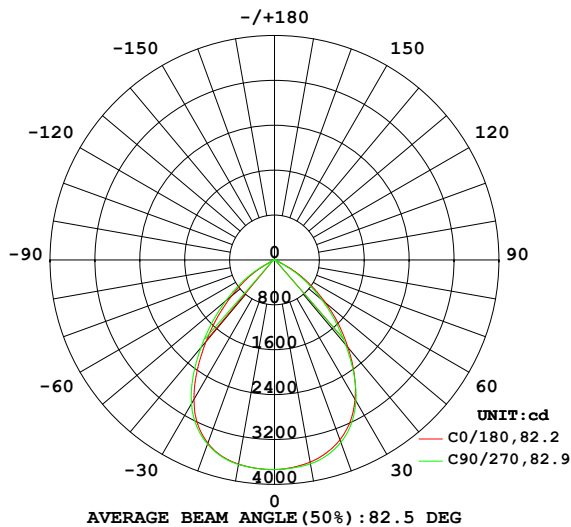
## EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

## LUMINAIRE PHOTOMETRIC TEST REPORT

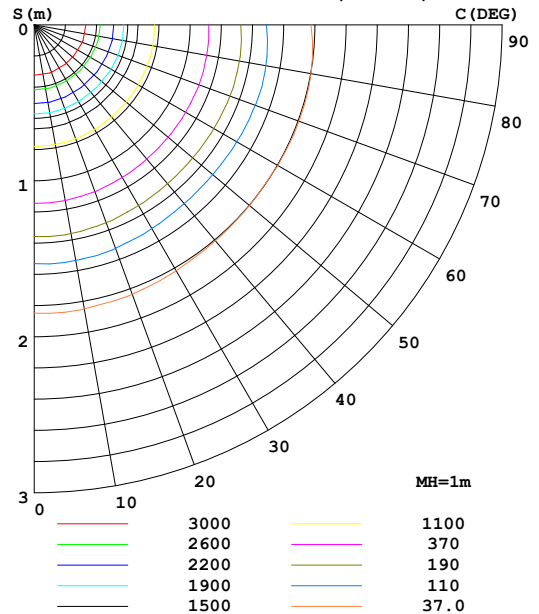
Test:U:230.0V I:0.243A P:56.0W PF:0.972 Freq:50.01Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:6311.17x1 lm		
NAME: P300-B4K (56W with aluminium reflector)	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 112.70 lm/W			
MODEL	/	Imax (cd)	3737	S/MH (C0/180)	1.15
NOMINAL POWER (W)	/	LOR (%)	100.0	S/MH (C90/270)	1.18
RATED VOLTAGE (V)	/	TOTAL FLUX (lm)	6311.2	$\eta$ UP, DN (C0-180)	0.0, 49.8
NOMINAL FLUX (lm)	6311.17	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: 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:

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	3658	3667	3689	3693	3694	3701	3700	3682	0- 10	354.2	354.2	5.61,5.61
20	3410	3412	3458	3470	3473	3497	3491	3453	10- 20	1016	1370	21.7,21.7
30	2871	2850	2903	2885	2872	2902	2956	2935	20- 30	1480	2849	45.1,45.1
40	2041	1990	1973	1896	1898	1928	2039	2065	30- 40	1529	4378	69.4,69.4
50	1187	1111	1097	988.4	998.1	1007	1132	1168	40- 50	1169	5547	87.9,87.9
60	451.9	389.2	361.3	258.6	292.2	311.1	384.3	410.6	50- 60	637.2	6184	98,98
70	27.17	23.37	19.24	16.45	15.26	16.28	19.81	24.85	60- 70	111.8	6296	99.8,99.8
80	7.017	6.614	6.710	6.144	5.124	5.288	6.524	7.617	70- 80	12.13	6308	100,100
90	0.3909	0.1610	0.0138	0.0138	0.0321	0.0276	0.0323	0.2397	80- 90	3.081	6311	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): 5022.9 lm

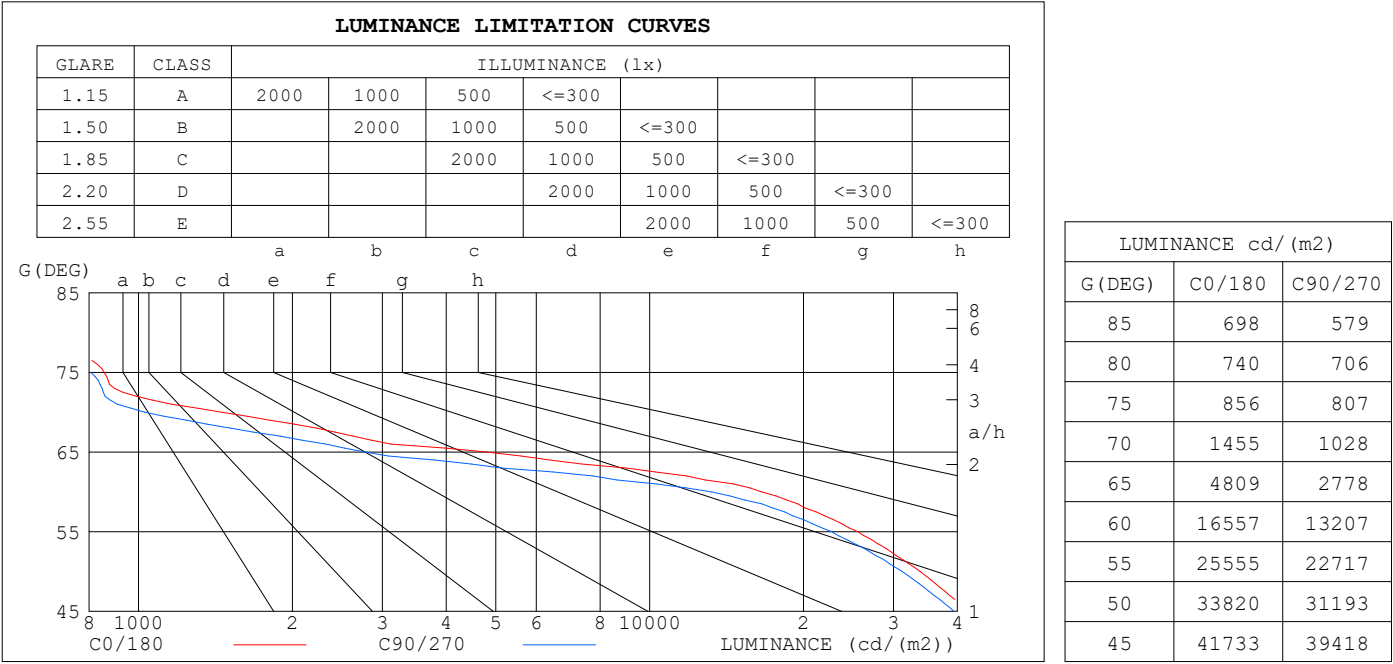
%lum = 79.6%  
%lamp = 79.6%

Conical surface Flux(120deg): 6184.2 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



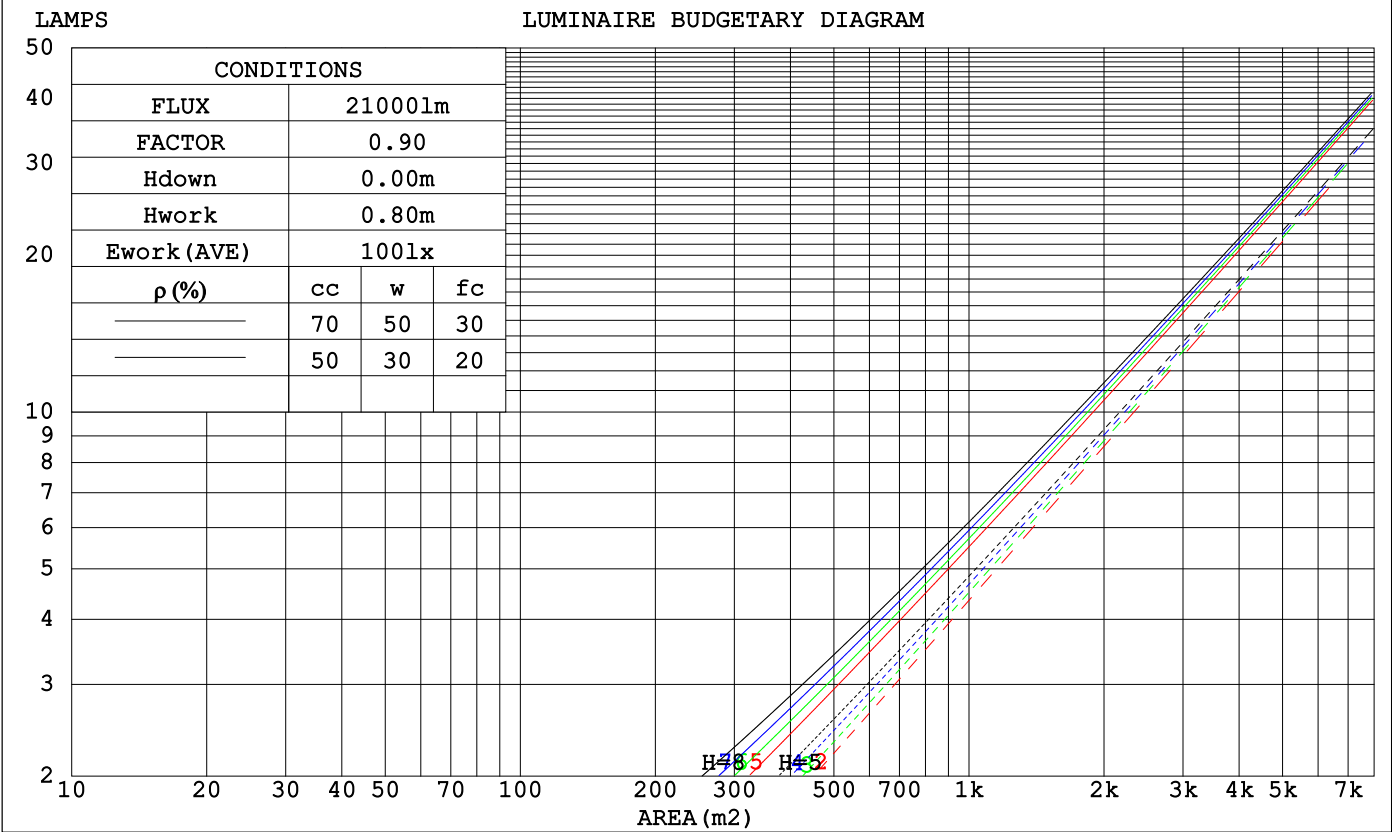
C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3°C  
Operators:ZZX  
Test Date:2024-06-13

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

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°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

## 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	21.2	22.5	21.5	22.8	23.1	19.7	21.0	20.1	21.3	21.7
3H	21.1	22.2	21.4	22.5	22.9	19.6	20.8	20.0	21.1	21.4
4H	21.0	22.0	21.4	22.4	22.8	19.5	20.6	19.9	20.9	21.3
6H	20.9	21.9	21.3	22.2	22.6	19.5	20.4	19.9	20.8	21.2
8H	20.9	21.8	21.3	22.2	22.6	19.4	20.3	19.9	20.7	21.1
12H	20.8	21.7	21.3	22.1	22.5	19.4	20.2	19.8	20.6	21.1
4H 2H	21.0	22.1	21.4	22.4	22.8	19.5	20.6	19.9	20.9	21.3
3H	20.9	21.7	21.3	22.1	22.6	19.4	20.3	19.8	20.7	21.1
4H	20.8	21.6	21.2	22.0	22.4	19.3	20.1	19.8	20.5	21.0
6H	20.7	21.4	21.2	21.8	22.3	19.3	19.9	19.7	20.3	20.8
8H	20.7	21.3	21.1	21.7	22.2	19.2	19.8	19.7	20.2	20.7
12H	20.6	21.1	21.1	21.6	22.1	19.1	19.7	19.6	20.2	20.6
8H 4H	20.7	21.3	21.1	21.7	22.2	19.2	19.8	19.7	20.2	20.7
6H	20.6	21.1	21.1	21.6	22.0	19.1	19.6	19.6	20.1	20.6
8H	20.5	20.9	21.0	21.5	21.9	19.0	19.5	19.6	20.0	20.5
12H	20.4	20.8	21.0	21.3	21.9	19.0	19.4	19.5	19.9	20.4
12H 4H	20.6	21.1	21.1	21.6	22.1	19.1	19.7	19.6	20.2	20.6
6H	20.5	20.9	21.0	21.4	22.0	19.0	19.5	19.6	19.9	20.5
8H	20.4	20.8	21.0	21.3	21.9	19.0	19.4	19.5	19.9	20.4
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

$\gamma$  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

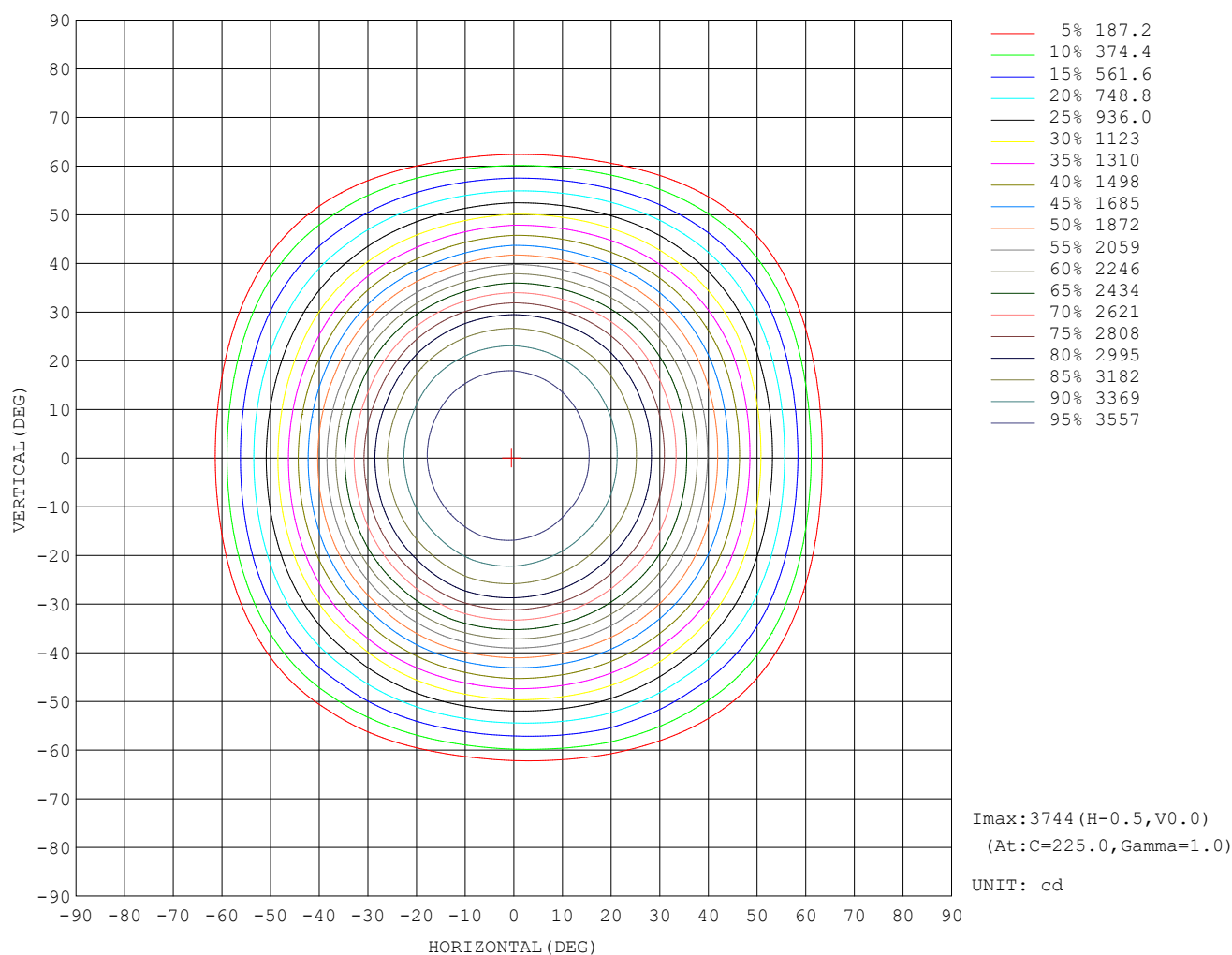
## UTILIZATION FACTORS TABLE

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

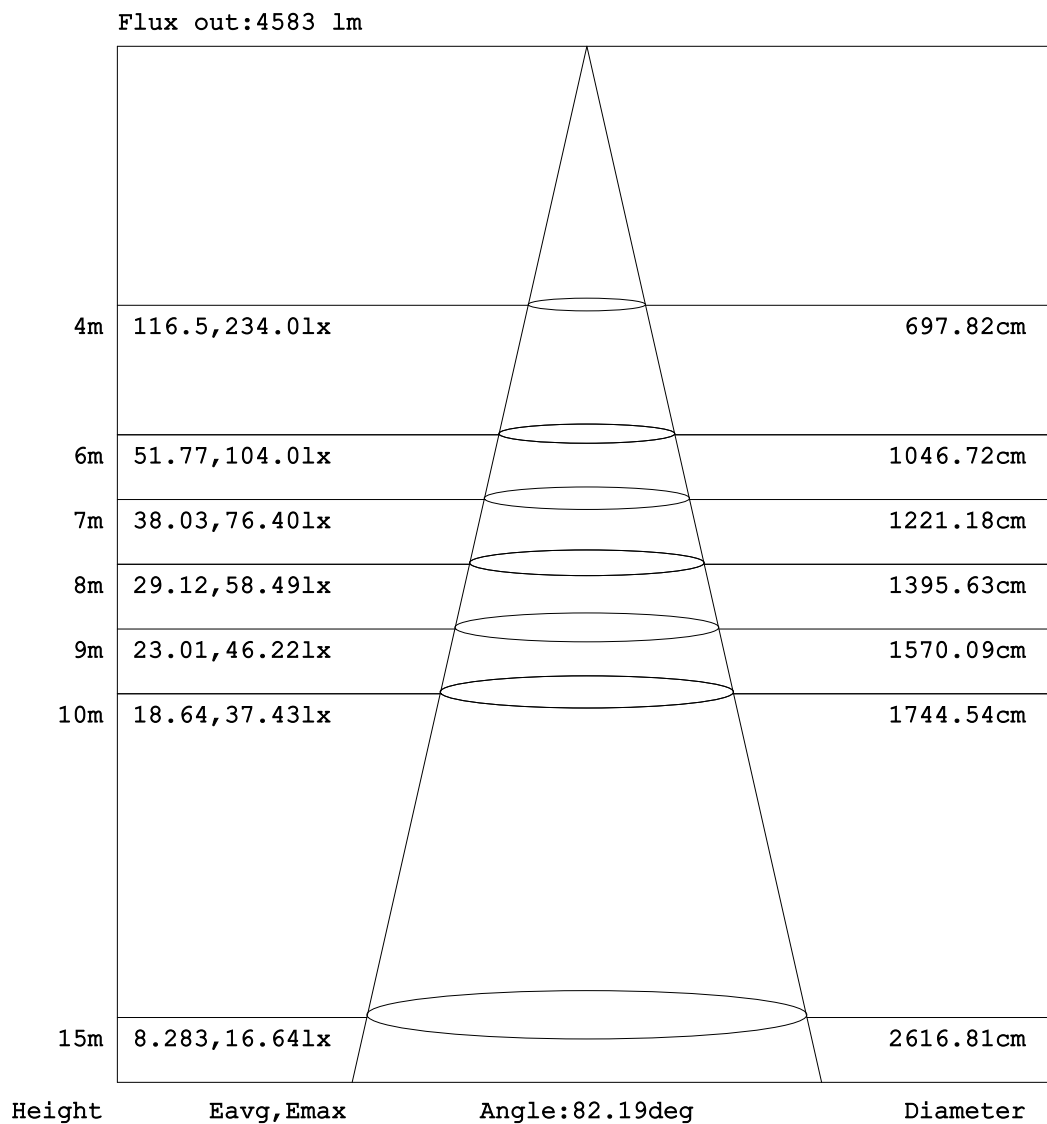


C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature: 25.3°C  
Operators: ZZK  
Test Date: 2024-06-13

$\gamma$  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

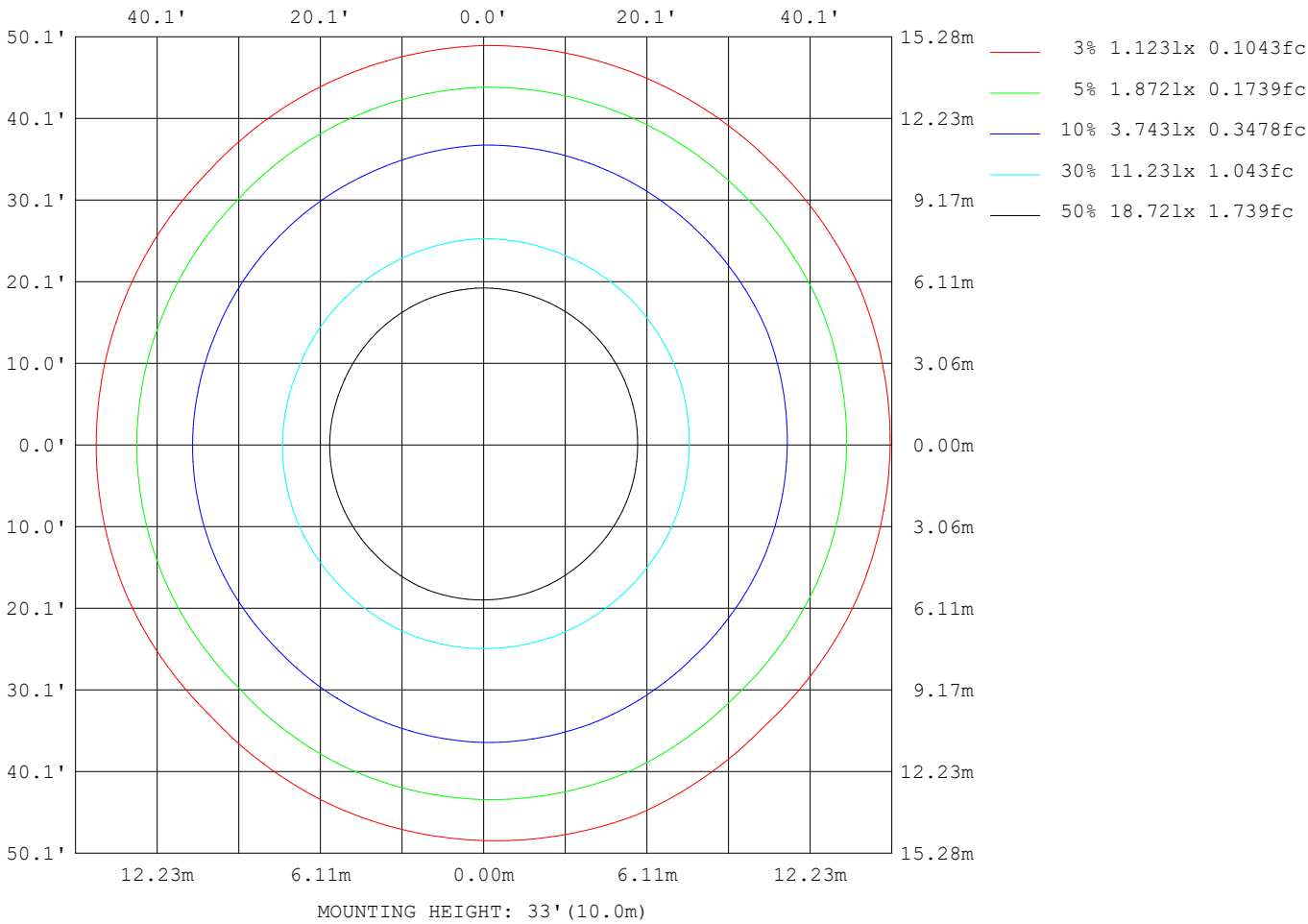


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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

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:

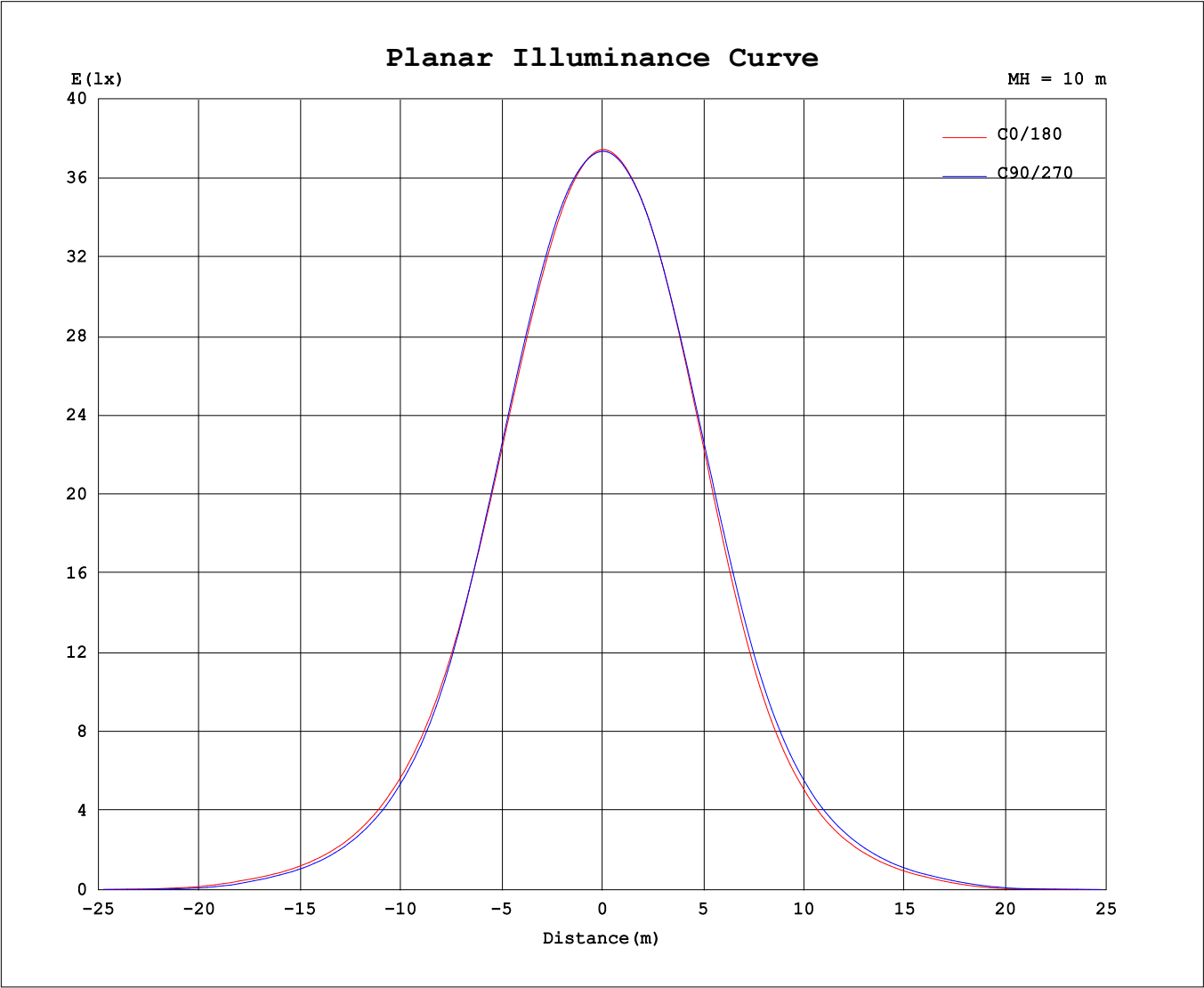
ISOLUX DIAGRAM



C Range: 0 - 360DEG  
C Interval: 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:

Planar Illuminance Curve



C Range: 0 - 360DEG	$\gamma$ Range: 0 - 90DEG
C Interval: 22.5DEG	$\gamma$ 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:

UNIT: cd

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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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