

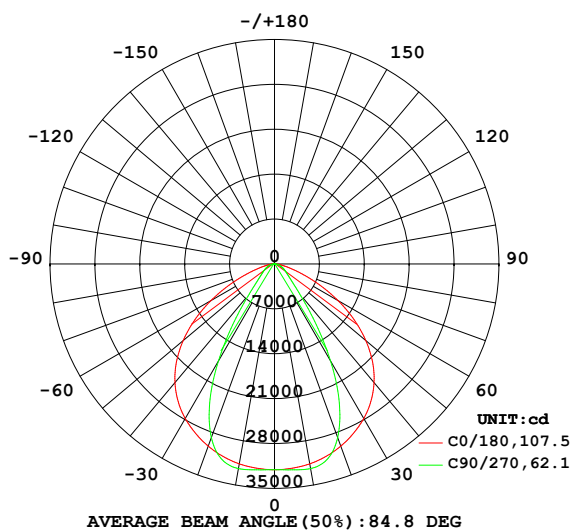
EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

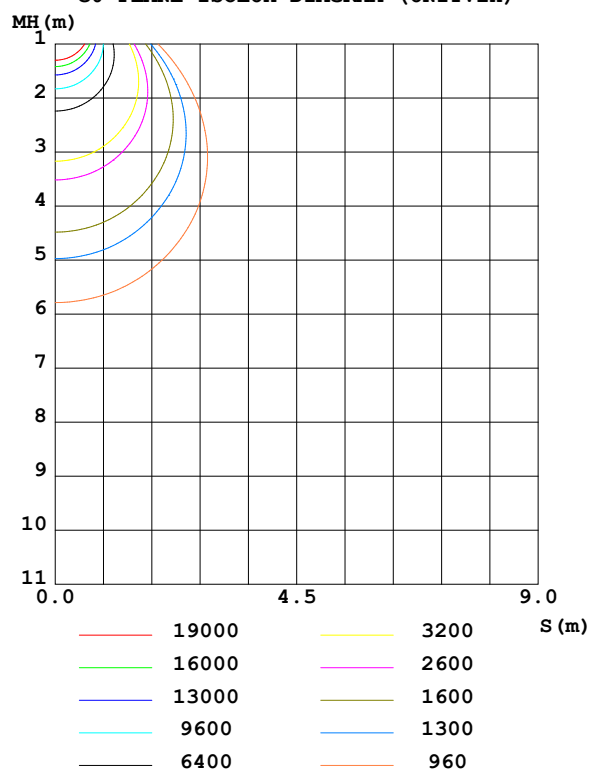
Test:U:229.9V I:1.322A P:300.9W PF:0.990 Freq:50.01Hz UTHDi:0.00% ITHDi:0.00% KDisp:0 Lamp Flux:54620.1x1 lm		
NAME: LHB09-300H-5070-L00402	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 181.50 lm/W			
MODEL	/	I _{max} (cd)	32402	S/MH (C0/180)	1.29
NOMINAL POWER (W)	/	LOR (%)	100.0	S/MH (C90/270)	0.92
RATED VOLTAGE (V)	/	TOTAL FLUX (lm)	54620	η UP,DN (C0-180)	0.0,50.0
NOMINAL FLUX (lm)	54620.1	CIE CLASS	DIRECT	η UP,DN (C180-360)	0.0,50.0
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.00
TEST VOLTAGE (V)	/	η down (%)	100.0	CIBSE SHR MAX	1.05

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators: LYJ
Test Date: 2022-08-02

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.446
Humidity: 65.0%
Test Distance: 26.000m [K=0.4548]
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	3165	3211	3240	3211	3165	3211	3240	3211	0- 10	3065	3065	5.61,5.61
20	3022	3051	2880	3051	3022	3051	2880	3051	10- 20	8865	11930	21.8,21.8
30	2784	2369	1752	2369	2784	2369	1752	2369	20- 30	12423	24353	44.6,44.6
40	2415	1337	615.3	1337	2415	1337	615.3	1337	30- 40	11661	36014	65.9,65.9
50	1859	697.3	278.7	697.3	1859	697.3	278.7	697.3	40- 50	8409	44423	81.3,81.3
60	1147	364.8	176.1	364.8	1147	364.8	176.1	364.8	50- 60	5375	49798	91.2,91.2
70	461.1	190.5	103.9	190.5	461.1	190.5	103.9	190.5	60- 70	3061	52859	96.8,96.8
80	120.3	72.62	37.93	72.62	120.3	72.62	37.93	72.62	70- 80	1444	54303	99.4,99.4
90	1.056	0.6905	1.213	0.6905	1.056	0.6905	1.213	0.6905	80- 90	317.3	54620	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:X10cd									UNIT:lm		

Conical surface Flux(90deg): 40637 lm

%lum = 74.4%

%lamp = 74.4%

Conical surface Flux(120deg): 49798 lm

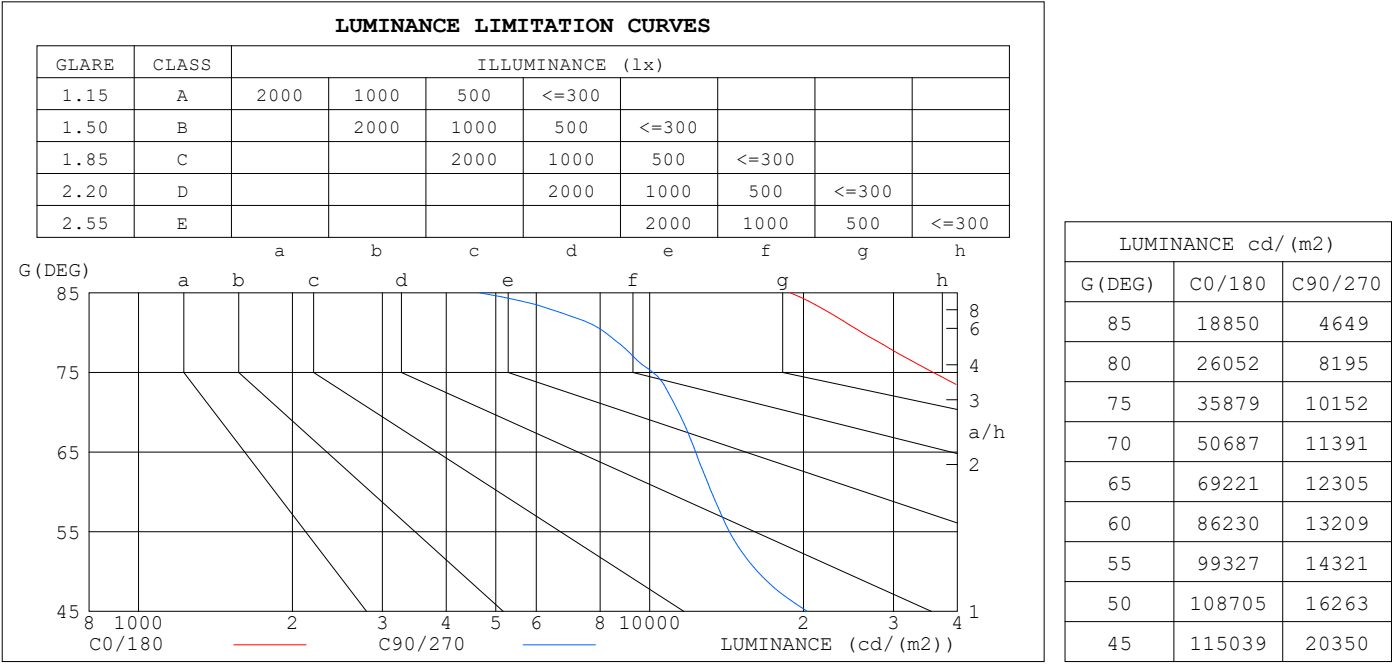
%lum = 91.2%

%lamp = 91.2%

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:LYJ
Test Date:2022-08-02

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.446
Humidity:65.0%
Test Distance:26.000m [K=0.4548]
Remarks:

LUMINANCE LIMITATION CURVES



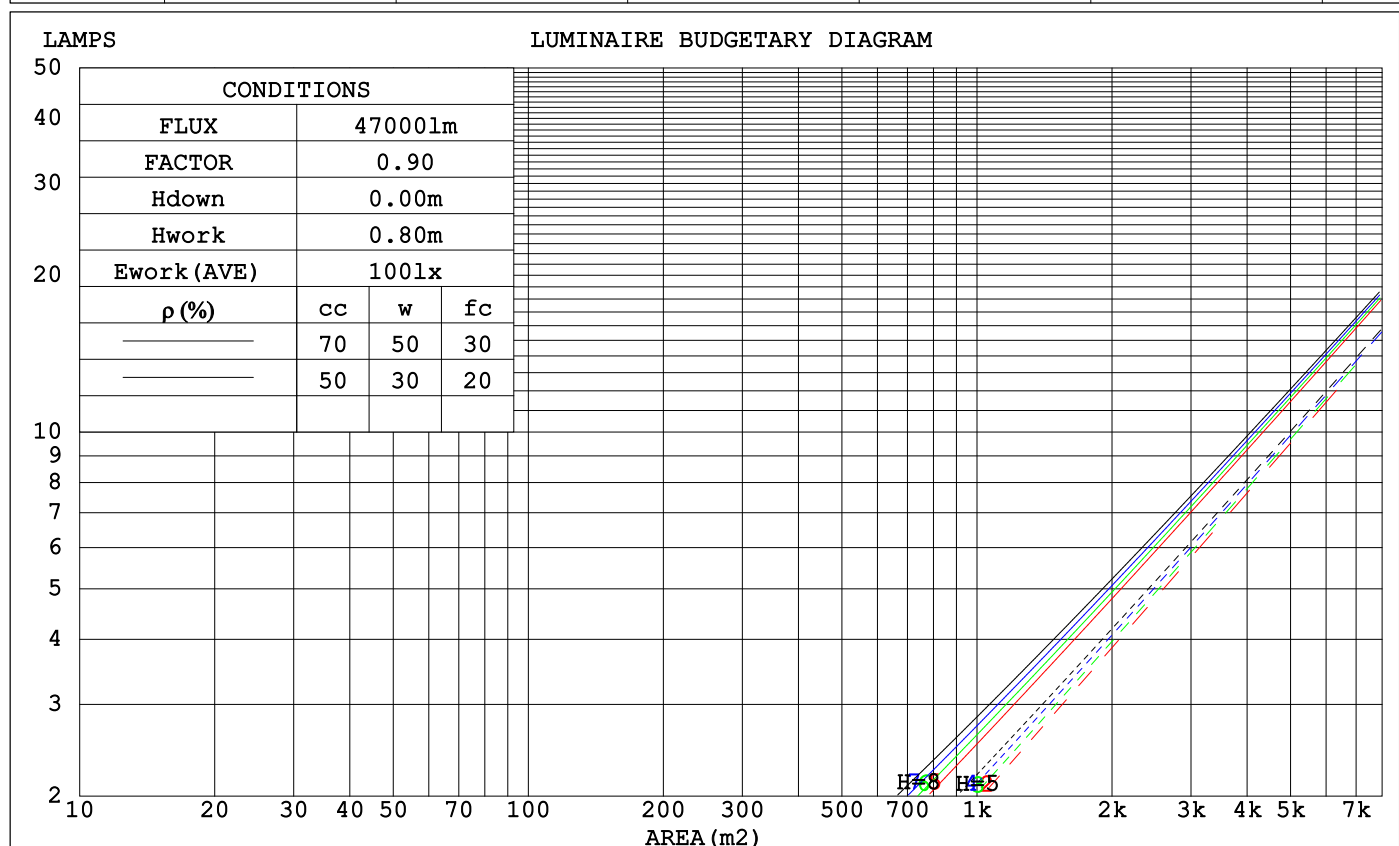
C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:LYJ
Test Date:2022-08-02

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.446
Humidity:65.0%
Test Distance:26.000m [K=0.4548]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

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			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	.96	.97	.95	.94	.94	.92	.91	.89
2.0	.97	.91	.87	.95	.90	.86	.92	.87	.84	.88	.85	.82	.86	.83	.80	.78
3.0	.87	.81	.76	.86	.80	.75	.83	.78	.74	.81	.76	.72	.78	.74	.71	.69
4.0	.79	.72	.67	.78	.71	.66	.76	.70	.65	.74	.69	.64	.72	.67	.64	.62
5.0	.72	.65	.59	.71	.64	.59	.69	.63	.58	.68	.62	.58	.66	.61	.57	.55
6.0	.66	.59	.53	.66	.58	.53	.64	.57	.53	.62	.57	.52	.61	.56	.52	.50
7.0	.61	.54	.48	.60	.53	.48	.59	.53	.48	.58	.52	.48	.56	.51	.47	.45
8.0	.57	.49	.44	.56	.49	.44	.55	.48	.44	.54	.48	.43	.52	.47	.43	.42
9.0	.53	.45	.40	.52	.45	.40	.51	.45	.40	.50	.44	.40	.49	.44	.40	.38
10.0	.49	.42	.37	.48	.42	.37	.48	.41	.37	.47	.41	.37	.46	.41	.37	.35



C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3℃
 Operators:LYJ
 Test Date:2022-08-02

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.446
 Humidity:65.0%
 Test Distance:26.000m [K=0.4548]
 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	.240	.137	.043	.233	.133	.042	.220	.126	.040	.208	.120	.039	.198	.114	.037	
2.0	.231	.127	.039	.225	.124	.038	.214	.119	.037	.204	.114	.036	.194	.110	.035	
3.0	.218	.116	.035	.213	.114	.034	.203	.110	.033	.194	.106	.033	.186	.103	.032	
4.0	.205	.107	.031	.201	.105	.031	.192	.102	.030	.184	.099	.030	.177	.096	.029	
5.0	.193	.098	.028	.189	.097	.028	.181	.094	.028	.174	.092	.027	.168	.090	.027	
6.0	.182	.091	.026	.178	.090	.026	.171	.088	.026	.165	.086	.025	.159	.084	.025	
7.0	.171	.085	.024	.168	.084	.024	.162	.082	.024	.156	.080	.023	.151	.079	.023	
8.0	.162	.079	.022	.159	.078	.022	.154	.077	.022	.149	.075	.022	.144	.074	.022	
9.0	.153	.074	.021	.151	.073	.021	.146	.072	.020	.141	.071	.020	.137	.070	.020	
10.0	.145	.070	.019	.143	.069	.019	.139	.068	.019	.135	.067	.019	.131	.066	.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	.120	.103	.093	.083	.059	.054	.048	.019	.017	.016	
2.0	.164	.132	.105	.141	.114	.091	.096	.079	.064	.056	.046	.037	.018	.015	.012	
3.0	.154	.114	.082	.132	.098	.071	.091	.068	.050	.053	.040	.029	.017	.013	.010	
4.0	.146	.100	.065	.125	.086	.056	.086	.060	.040	.050	.035	.023	.016	.011	.008	
5.0	.138	.089	.053	.119	.077	.046	.082	.054	.032	.047	.032	.019	.015	.010	.006	
6.0	.131	.080	.044	.113	.070	.038	.078	.049	.027	.045	.029	.016	.015	.009	.005	
7.0	.125	.073	.037	.108	.063	.032	.074	.045	.023	.043	.026	.014	.014	.009	.004	
8.0	.119	.067	.032	.103	.058	.028	.071	.041	.020	.041	.024	.012	.013	.008	.004	
9.0	.114	.062	.028	.098	.054	.024	.068	.038	.017	.040	.022	.010	.013	.007	.003	
10.0	.109	.058	.024	.094	.050	.021	.065	.035	.015	.038	.021	.009	.012	.007	.003	

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:LYJ
 Test Date:2022-08-02

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.446
 Humidity:65.0%
 Test Distance:26.000m [K=0.4548]
 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	25.2	26.5	25.5	26.9	27.2	16.9	18.3	17.3	18.6	18.9
3H	26.5	27.7	26.8	28.0	28.4	18.4	19.6	18.8	19.9	20.3
4H	26.9	28.0	27.3	28.4	28.7	18.9	20.0	19.3	20.4	20.8
6H	27.2	28.2	27.6	28.6	29.0	19.2	20.2	19.6	20.6	21.0
8H	27.2	28.2	27.6	28.6	29.0	19.3	20.3	19.7	20.7	21.1
12H	27.2	28.2	27.7	28.6	29.0	19.3	20.2	19.7	20.6	21.0
4H 2H	25.2	26.3	25.6	26.7	27.0	18.6	19.8	19.0	20.1	20.5
3H	26.7	27.6	27.1	28.0	28.4	20.0	21.0	20.4	21.4	21.8
4H	27.2	28.1	27.7	28.5	28.9	20.5	21.4	21.0	21.8	22.2
6H	27.6	28.3	28.1	28.8	29.2	20.9	21.6	21.3	22.0	22.5
8H	27.7	28.4	28.2	28.8	29.3	21.0	21.6	21.4	22.1	22.5
12H	27.8	28.4	28.3	28.9	29.3	21.0	21.6	21.5	22.0	22.5
8H 4H	27.2	27.9	27.7	28.4	28.8	21.3	22.0	21.8	22.4	22.9
6H	27.7	28.2	28.2	28.7	29.2	21.7	22.3	22.2	22.8	23.3
8H	27.9	28.3	28.4	28.9	29.4	21.8	22.3	22.3	22.8	23.3
12H	28.0	28.4	28.5	28.9	29.5	21.9	22.3	22.4	22.8	23.4
12H 4H	27.2	27.8	27.7	28.3	28.8	21.5	22.0	21.9	22.5	23.0
6H	27.7	28.2	28.2	28.6	29.2	21.9	22.4	22.4	22.9	23.4
8H	27.9	28.3	28.4	28.8	29.4	22.0	22.5	22.5	23.0	23.5
CIE190: 2010										

CIE190: 2010
Area: 0.26645 m2

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3℃
Operators:LYJ
Test Date:2022-08-02

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.446
Humidity:65.0%
Test Distance:26.000m [K=0.4548]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

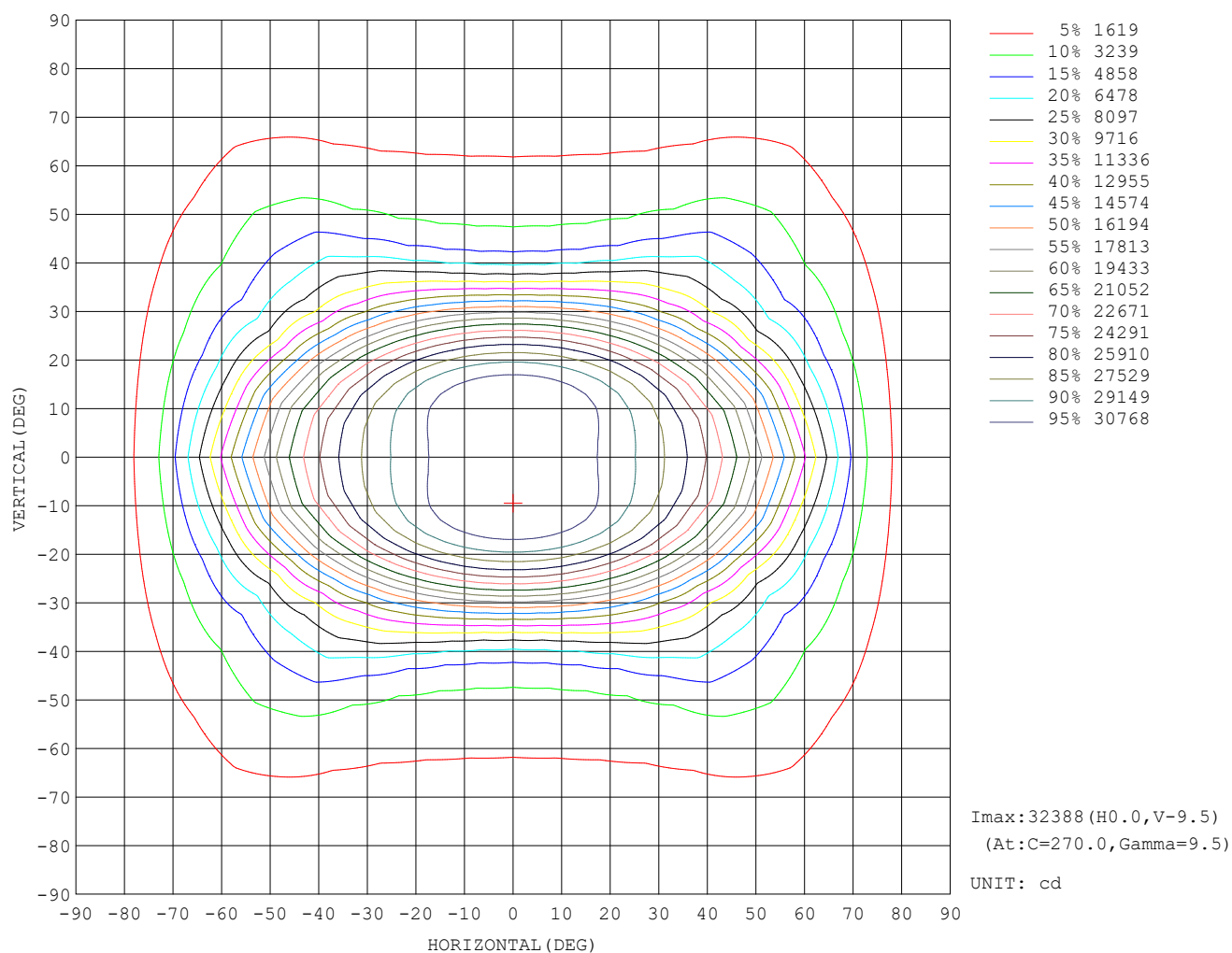
UTILIZATION FACTORS TABLE

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) $k(RI) \times RCR = 5$									
$k = 0.60$	70	61	55	70	61	55	69	60	55	50
0.80	80	70	65	79	70	65	77	69	64	59
1.00	87	78	73	86	78	72	84	78	72	66
1.25	93	85	79	91	84	79	89	83	78	72
1.50	97	89	84	95	89	84	93	87	83	77
2.00	102	95	91	100	94	90	97	92	88	82
2.50	105	99	94	103	97	93	99	95	92	84
3.00	107	102	98	105	100	97	101	98	95	87
4.00	110	106	102	108	104	101	104	101	98	90
5.00	112	108	105	110	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: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3°C
 Operators: LYJ
 Test Date: 2022-08-02

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.446
 Humidity: 65.0%
 Test Distance: 26.000m [K=0.4548]
 Remarks:

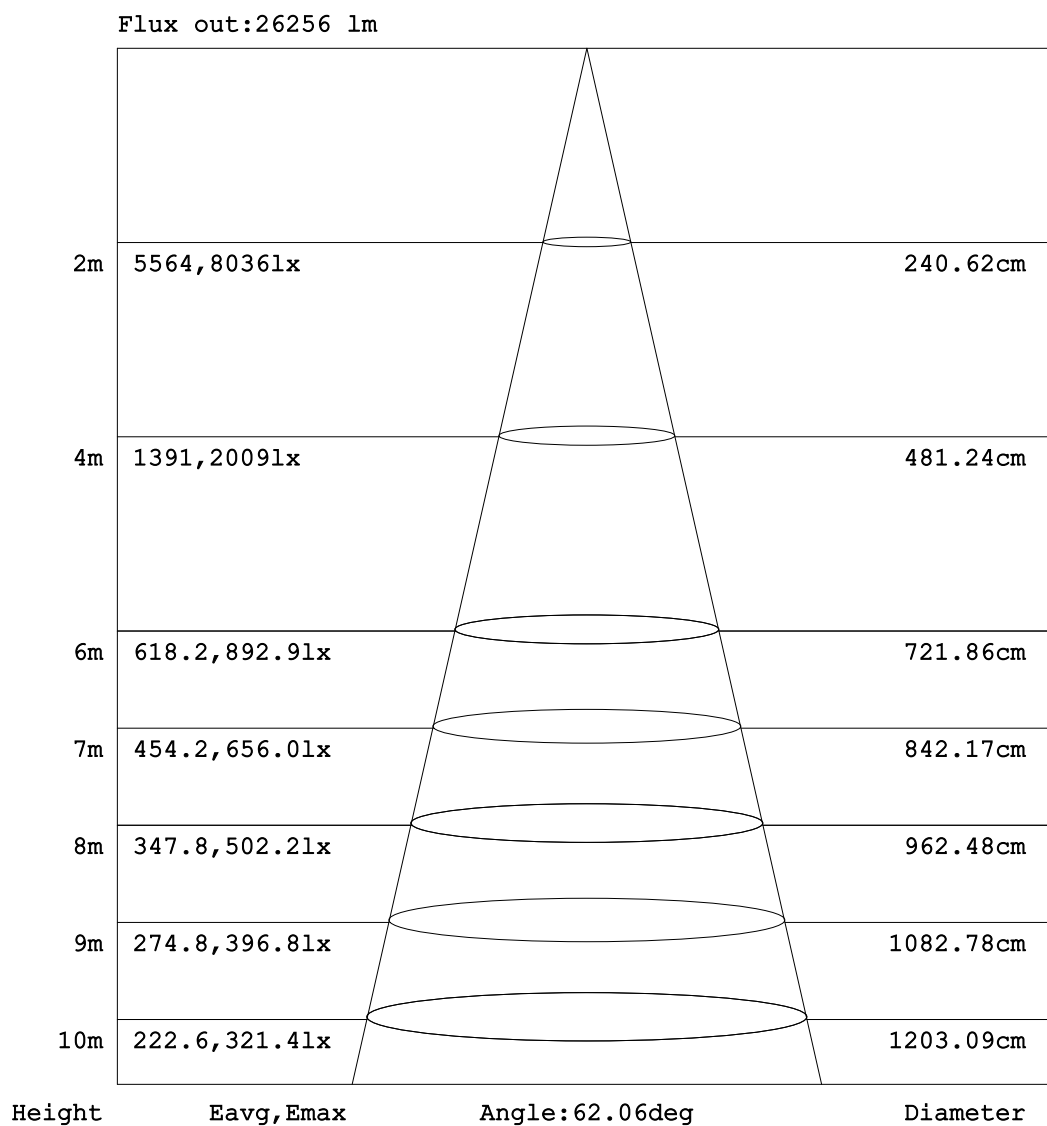
ISOCANDELA DIAGRAM



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:LYJ
Test Date:2022-08-02

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.446
Humidity:65.0%
Test Distance:26.000m [K=0.4548]
Remarks:

AAI Figure

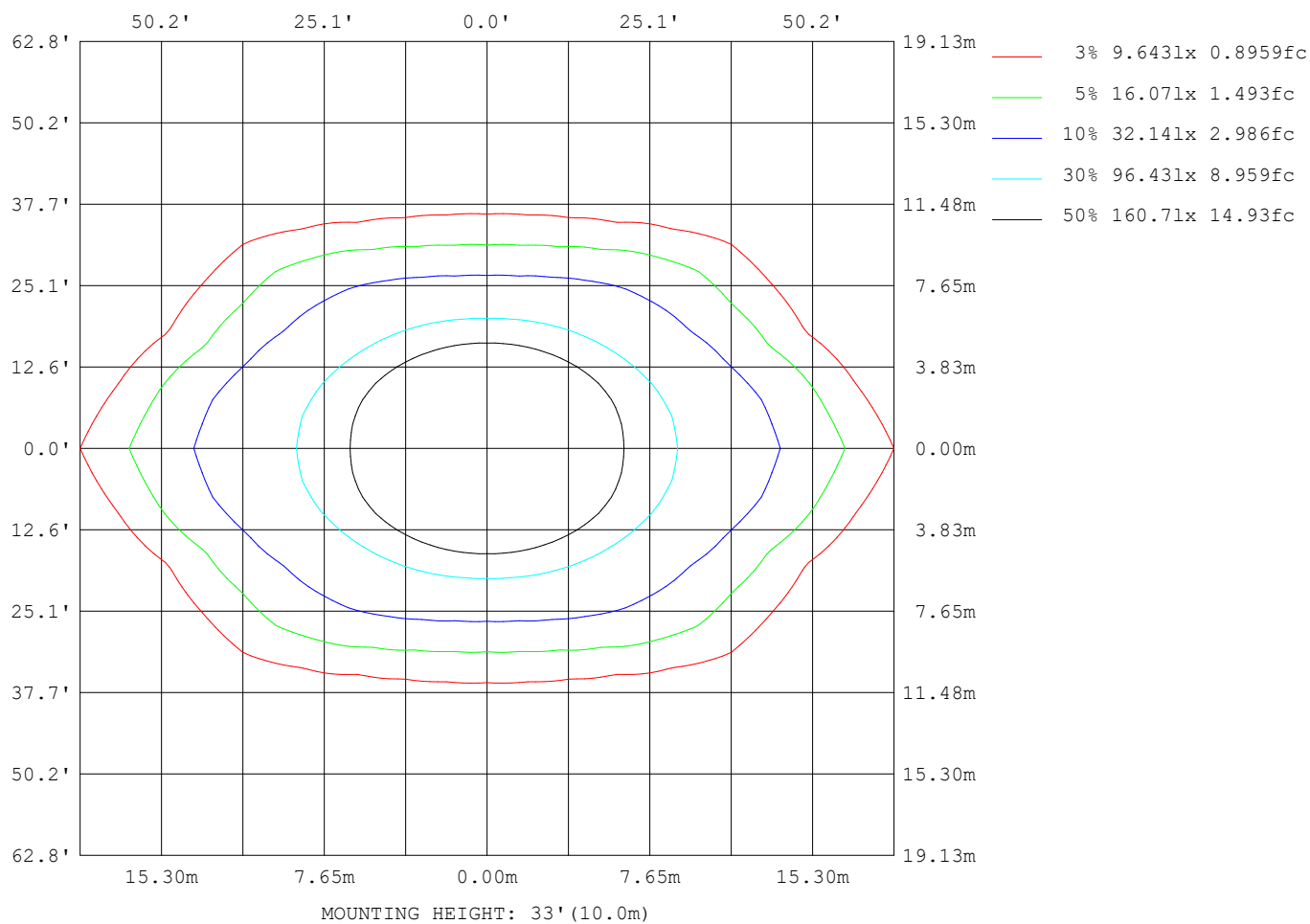


Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators: LYJ
Test Date: 2022-08-02

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.446
Humidity: 65.0%
Test Distance: 26.000m [K=0.4548]
Remarks:

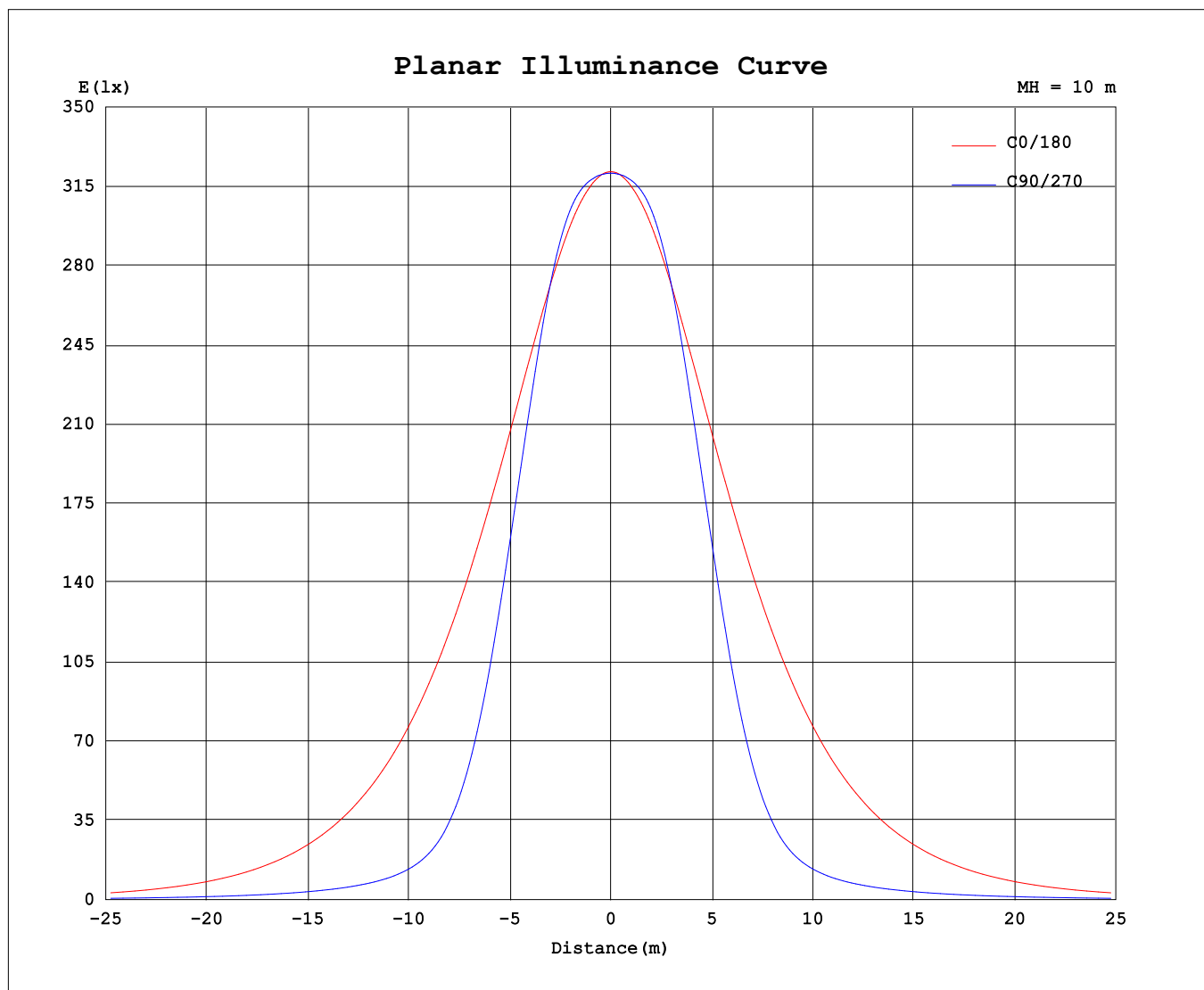
ISOLUX DIAGRAM



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators: LYJ
Test Date: 2022-08-02

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.446
Humidity: 65.0%
Test Distance: 26.000m [K=0.4548]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators: LYJ
Test Date: 2022-08-02

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.446
Humidity: 65.0%
Test Distance: 26.000m [K=0.4548]
Remarks:

UNIT: X10cd

C Range: 0 - 360DEG	γ Range: 0 - 90DEG
C Interval: 10.0DEG	γ Interval: 0.5DEG
Test Speed: HIGH	Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.446
Temperature: 25.3°C	Humidity: 65.0%
Operators: LYJ	Test Distance: 26.000m [K=0.4548]
Test Date: 2022-08-02	Remarks:

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γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.446
Humidity:65.0%
Test Distance:26.000m [K=0.4548]
Remarks:

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LUMINOUS DISTRIBUTION INTENSITY DATA

Table--2

UNIT: X10cd

[illegible]

C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3°C
Operators: LYJ
Test Date: 2022-08-02

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γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.446
Humidity:65.0%
Test Distance:26.000m [K=0.4548]
Remarks:

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