

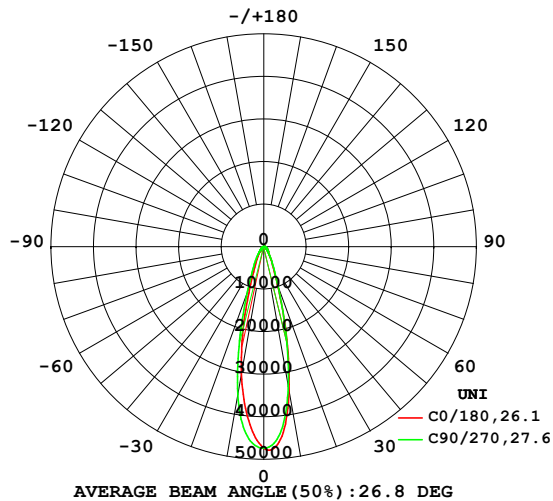
EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

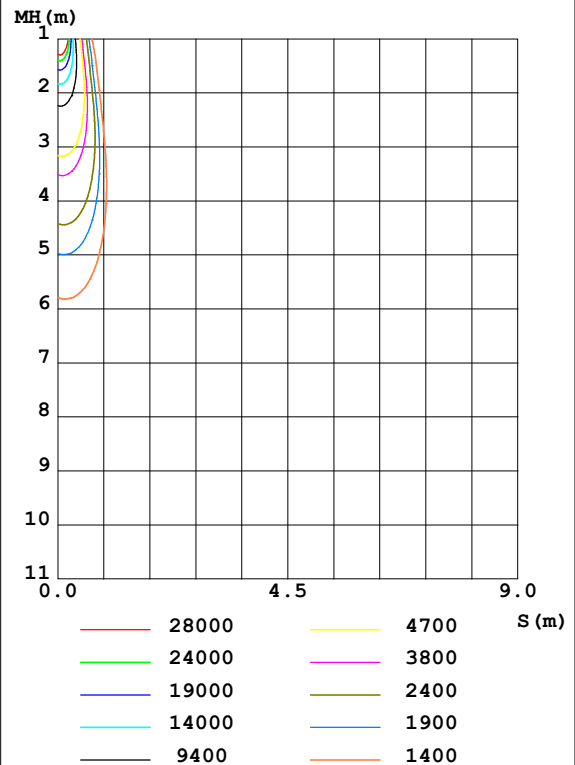
Test:U:229.8V I:0.4501A P:102.0W PF:0.9867 Freq:50.01Hz UTHDi:0% ITHDi:0% Lamp Flux:15408.4x1 lm					
NAME: FL23-100-5070-F12804		TYPE:		WEIGHT:	
SPEC.:		DIM.:		SERIAL No.:	
MFR.:		SUR.:		Shielding Angle:	

DATA OF LAMP		PHOTOMETRIC DATA Eff: 151.01 lm/W			
MODEL	-	I _{max} (cd)	47942	S/MH (C0/180)	0.43
NOMINAL POWER(W)	100	LOR(%)	100.0	S/MH (C90/270)	0.47
RATED VOLTAGE(V)	230	TOTAL FLUX (lm)	15408	η UP,DN (C0-180)	0.0,48.9
NOMINAL FLUX (lm)	15408.4	CIE CLASS	DIRECT	η UP,DN (C180-360)	0.0,51.1
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.00
TEST VOLTAGE (V)	230	η down (%)	100.0	CIBSE SHR MAX	1.00

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: LYJ
Test Date: 2020-07-03

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.426
Humidity: 65.0%
Test Distance: 26.000m [K=0.4589]
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	3434	3502	3330	3120	3033	3228	3527	3523	0- 10	3842	3842	24.9,24.9
20	942.9	1017	969.0	883.9	864.4	962.4	1125	1029	10- 20	5386	9228	59.9,59.9
30	335.2	351.3	352.8	310.6	313.2	348.4	416.0	366.0	20- 30	2604	11832	76.8,76.8
40	150.9	155.2	152.1	144.2	145.2	158.8	180.3	162.5	30- 40	1450	13282	86.2,86.2
50	84.70	87.27	81.93	84.09	84.07	89.95	93.52	89.83	40- 50	889.2	14171	92,92
60	54.45	53.40	50.08	52.00	54.62	55.37	56.94	54.86	50- 60	611.8	14783	95.9,95.9
70	31.31	28.20	25.82	27.39	31.62	30.80	31.99	30.27	60- 70	410.1	15193	98.6,98.6
80	8.847	6.434	4.601	6.265	9.185	9.093	9.582	8.756	70- 80	190.9	15384	99.8,99.8
90	0.0270	0.0241	0.0254	0.0225	0.0270	0.0241	0.0155	0.0211	80- 90	24.51	15408	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:×10cd									UNIT:lm		

Conical surface Flux(90deg): 13772 lm

%lum = 89.4%

%lamp = 89.4%

Conical surface Flux(120deg): 14783 lm

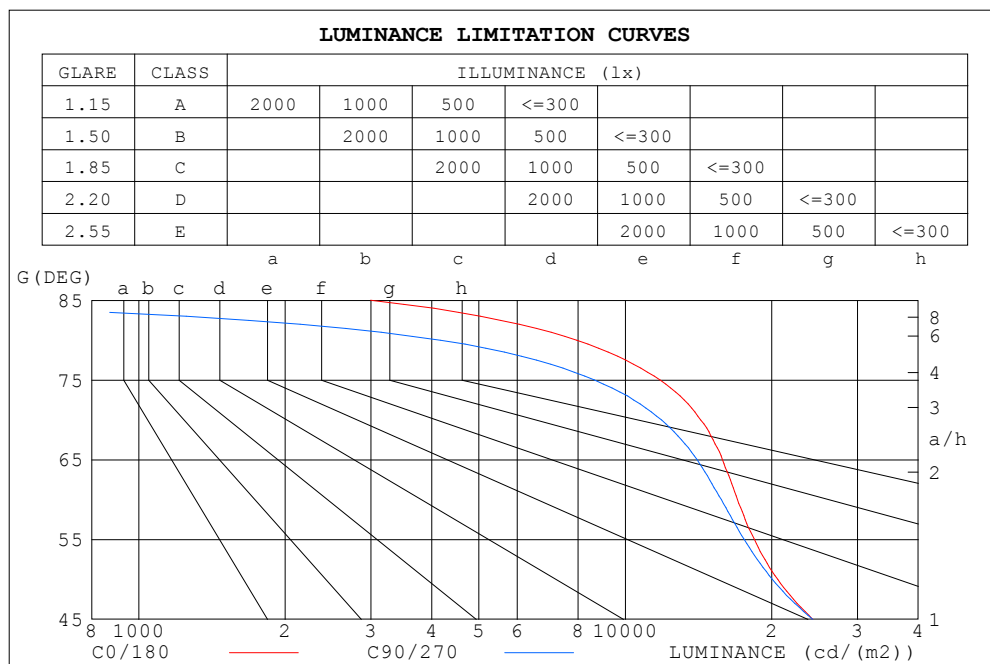
%lum = 95.9%

%lamp = 95.9%

C Range: 0 - 360DEG
C Interval: 15.0DEG
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Temperature:25.3DEG
Operators:LYJ
Test Date:2020-07-03

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.426
Humidity:65.0%
Test Distance:26.000m [K=0.4589]
Remarks:

LUMINANCE LIMITATION CURVES



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	2997	169
80	7954	4170
75	11781	8634
70	14291	11878
65	15843	14042
60	17003	15762
55	18429	17557
50	20573	20058
45	24297	24273

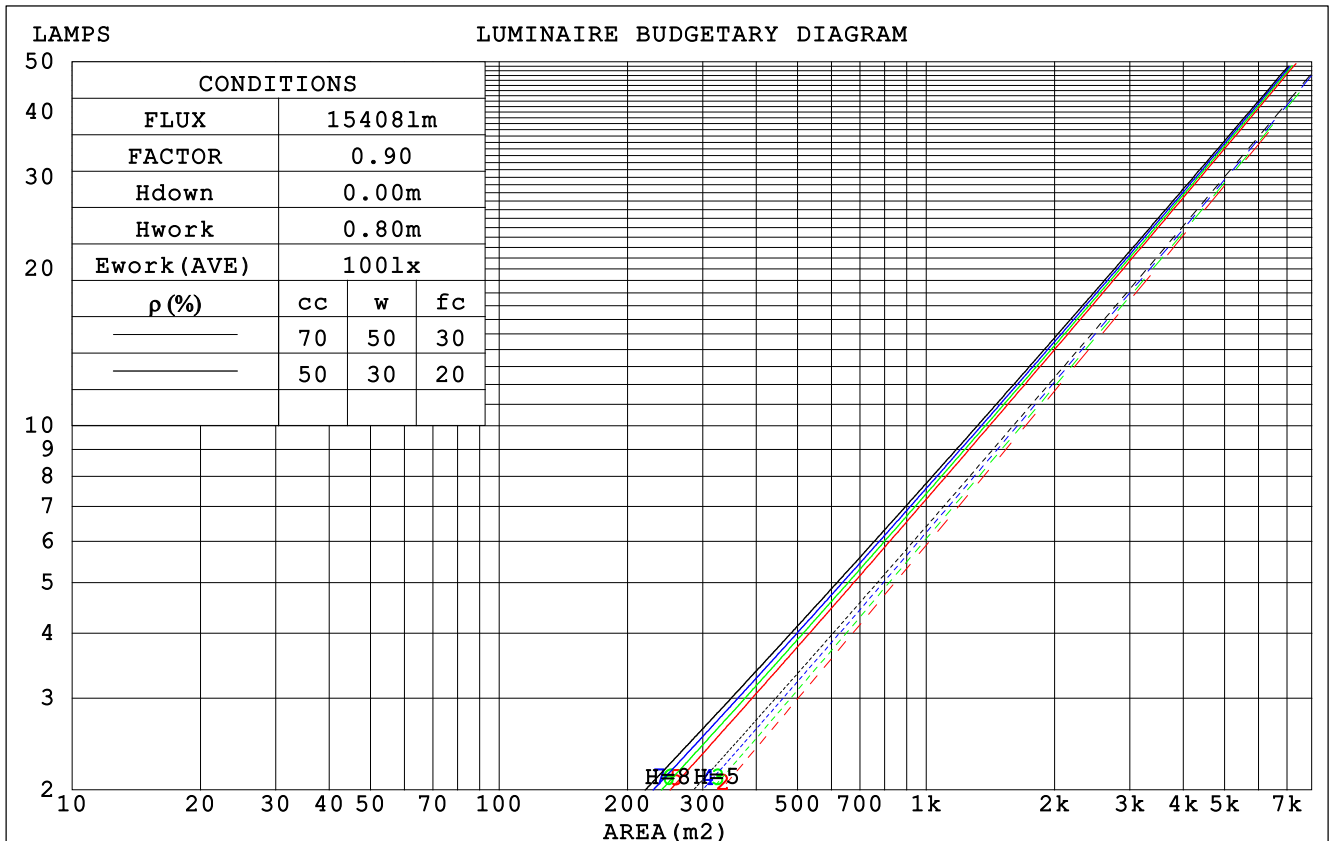
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Operators: LYJ
Test Date: 2020-07-03

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Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.426
Humidity: 65.0%
Test Distance: 26.000m [K=0.4589]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

pcc	80%			70%			50%			30%			10%			0
p _w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
p _{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	.00
1.0	1.11	1.08	1.06	1.09	1.07	1.05	1.05	1.03	1.01	1.01	.00	.98	.98	.96	.95	.94
2.0	1.04	.00	.96	1.02	.98	.95	.99	.96	.93	.96	.93	.91	.93	.91	.89	.88
3.0	.97	.92	.89	.96	.92	.88	.93	.90	.87	.91	.88	.85	.89	.86	.84	.82
4.0	.92	.87	.83	.91	.86	.82	.89	.84	.81	.87	.83	.80	.85	.82	.79	.78
5.0	.87	.82	.78	.86	.81	.77	.84	.80	.77	.83	.79	.76	.81	.78	.75	.74
6.0	.83	.77	.73	.82	.77	.73	.81	.76	.73	.79	.75	.72	.78	.74	.72	.70
7.0	.79	.74	.70	.78	.73	.70	.77	.73	.69	.76	.72	.69	.75	.71	.69	.67
8.0	.76	.70	.67	.75	.70	.67	.74	.70	.66	.73	.69	.66	.72	.69	.66	.65
9.0	.73	.67	.64	.72	.67	.64	.71	.67	.64	.70	.66	.63	.70	.66	.63	.62
10.0	.70	.65	.61	.69	.65	.61	.69	.64	.61	.68	.64	.61	.67	.64	.61	.60



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γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.426
 Humidity:65.0%
 Test Distance:26.000m [K=0.4589]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

WEC AND CCEC

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															Wall Exitance Coefficients (WEC)														
0.0																														
1.0	.176	.100	.032	.169	.096	.031	.156	.090	.029	.145	.083	.027	.134	.078	.025															
2.0	.166	.091	.028	.160	.088	.027	.150	.083	.026	.140	.079	.025	.131	.074	.023															
3.0	.155	.083	.025	.151	.081	.024	.142	.077	.023	.133	.073	.022	.126	.070	.022															
4.0	.146	.076	.022	.142	.074	.022	.134	.071	.021	.127	.068	.021	.120	.065	.020															
5.0	.137	.070	.020	.133	.068	.020	.127	.066	.019	.121	.064	.019	.115	.061	.018															
6.0	.129	.065	.019	.126	.064	.018	.120	.062	.018	.115	.060	.018	.110	.058	.017															
7.0	.122	.060	.017	.119	.059	.017	.114	.058	.017	.109	.056	.016	.105	.054	.016															
8.0	.116	.056	.016	.113	.056	.016	.109	.054	.016	.104	.053	.015	.100	.052	.015															
9.0	.110	.053	.015	.108	.052	.015	.104	.051	.015	.100	.050	.014	.096	.049	.014															
10.0	.105	.050	.014	.103	.050	.014	.099	.049	.014	.096	.048	.014	.093	.047	.013															

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						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.171	.157	.145	.146	.135	.125	.100	.093	.086	.058	.054	.050	.018	.017	.016	
2.0	.155	.133	.113	.133	.114	.098	.091	.079	.068	.053	.046	.040	.017	.015	.013	
3.0	.142	.114	.090	.122	.098	.078	.084	.068	.055	.048	.040	.032	.016	.013	.011	
4.0	.131	.099	.074	.113	.085	.064	.078	.059	.045	.045	.035	.027	.014	.011	.009	
5.0	.122	.087	.061	.105	.075	.053	.072	.053	.038	.042	.031	.022	.013	.010	.007	
6.0	.114	.077	.051	.098	.067	.045	.067	.047	.032	.039	.028	.019	.013	.009	.006	
7.0	.106	.070	.044	.092	.060	.038	.063	.042	.027	.037	.025	.016	.012	.008	.005	
8.0	.100	.063	.038	.086	.055	.033	.060	.038	.023	.035	.023	.014	.011	.007	.005	
9.0	.094	.058	.033	.081	.050	.029	.056	.035	.020	.033	.021	.012	.011	.007	.004	
10.0	.089	.053	.029	.077	.046	.025	.053	.032	.018	.031	.019	.011	.010	.006	.004	

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:LYJ
 Test Date:2020-07-03

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.426
 Humidity:65.0%
 Test Distance:26.000m [K=0.4589]
 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	17.9	18.9	18.2	19.3	19.6	17.4	18.5	17.8	18.8	19.2
3H	19.4	20.3	19.7	20.6	21.0	18.7	19.6	19.1	20.0	20.3
4H	19.8	20.7	20.2	21.1	21.4	19.0	19.9	19.4	20.2	20.6
6H	20.0	20.8	20.4	21.2	21.6	19.0	19.8	19.4	20.2	20.6
8H	20.0	20.8	20.4	21.2	21.6	19.0	19.8	19.4	20.1	20.6
12H	20.0	20.7	20.4	21.1	21.5	18.9	19.7	19.4	20.0	20.5
4H 2H	18.3	19.2	18.7	19.5	19.9	17.9	18.8	18.3	19.1	19.5
3H	19.9	20.6	20.3	21.1	21.5	19.3	20.0	19.7	20.4	20.8
4H	20.5	21.1	20.9	21.5	22.0	19.6	20.3	20.1	20.7	21.2
6H	20.7	21.3	21.2	21.7	22.2	19.7	20.3	20.2	20.7	21.2
8H	20.7	21.3	21.2	21.7	22.2	19.7	20.2	20.2	20.6	21.1
12H	20.7	21.2	21.2	21.6	22.1	19.6	20.1	20.1	20.6	21.0
8H 4H	20.5	21.0	21.0	21.5	21.9	19.7	20.3	20.2	20.7	21.2
6H	20.8	21.2	21.3	21.7	22.2	19.8	20.3	20.4	20.8	21.2
8H	20.8	21.2	21.4	21.7	22.2	19.8	20.2	20.3	20.7	21.2
12H	20.8	21.1	21.3	21.6	22.2	19.8	20.1	20.3	20.6	21.1
12H 4H	20.5	20.9	20.9	21.4	21.9	19.7	20.2	20.2	20.6	21.1
6H	20.8	21.1	21.3	21.6	22.1	19.8	20.2	20.4	20.7	21.2
8H	20.8	21.1	21.3	21.6	22.2	19.8	20.1	20.3	20.6	21.2
CIE190: 2010										

CIE190: 2010
Area: 0.0635 m2

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γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.426
Humidity:65.0%
Test Distance:26.000m [K=0.4589]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

UTILIZATION FACTORS TABLE

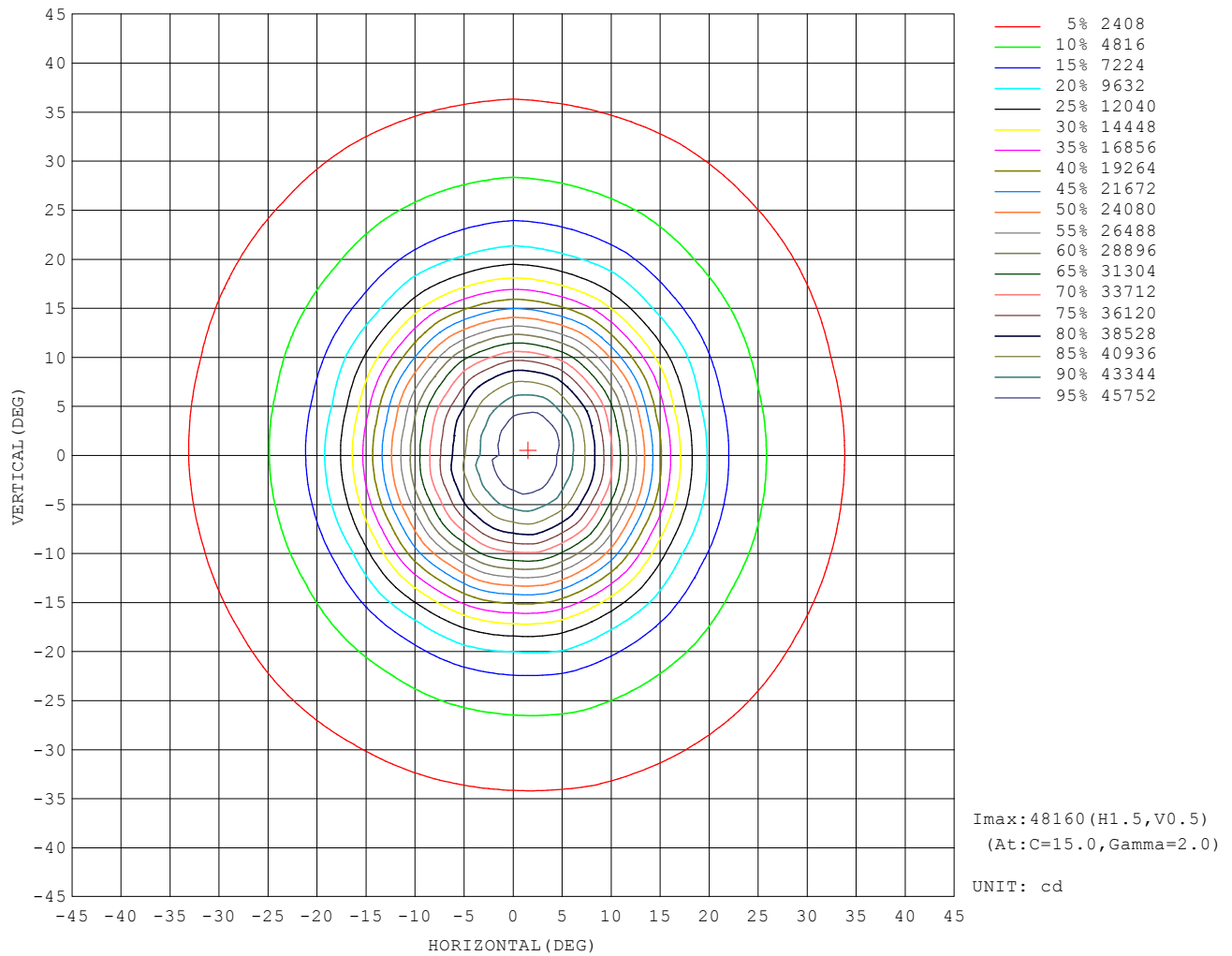
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	83	76	72	82	76	72	82	75	71	67
0.80	91	84	80	90	84	80	89	83	79	75
1.00	96	89	85	95	89	85	93	89	84	80
1.25	100	94	90	99	94	90	97	92	89	84
1.50	103	98	94	102	97	93	100	96	92	87
2.00	107	102	98	105	101	97	102	99	96	90
2.50	109	104	101	107	103	100	104	101	98	92
3.00	110	107	103	109	105	102	105	102	100	93
4.00	113	110	107	111	108	106	107	105	103	96
5.00	114	112	109	112	110	108	108	106	105	97
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

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 Humidity: 65.0%
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EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

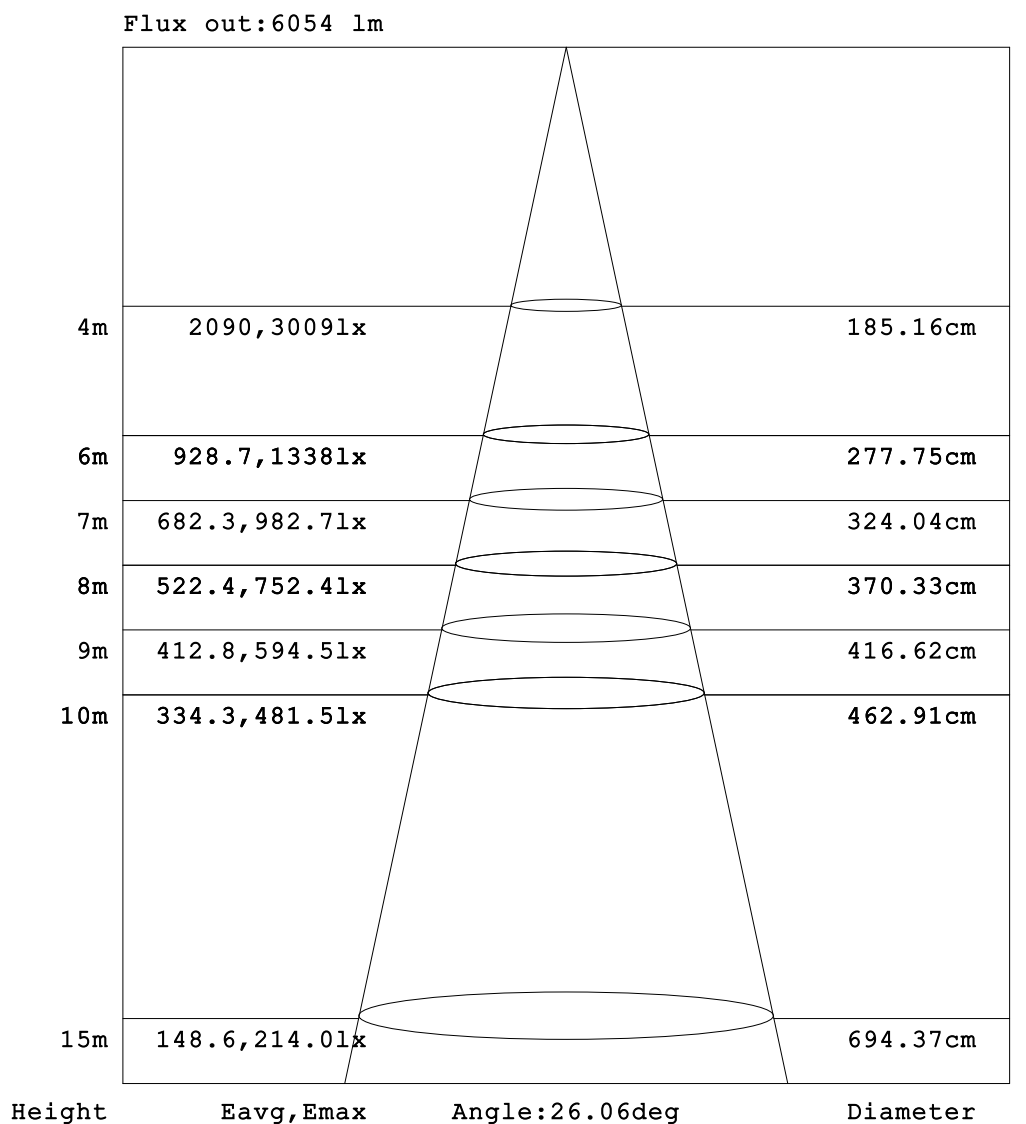
ISOCANDELA DIAGRAM



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: LYJ
Test Date: 2020-07-03

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Humidity: 65.0%
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Remarks:

AAI Figure



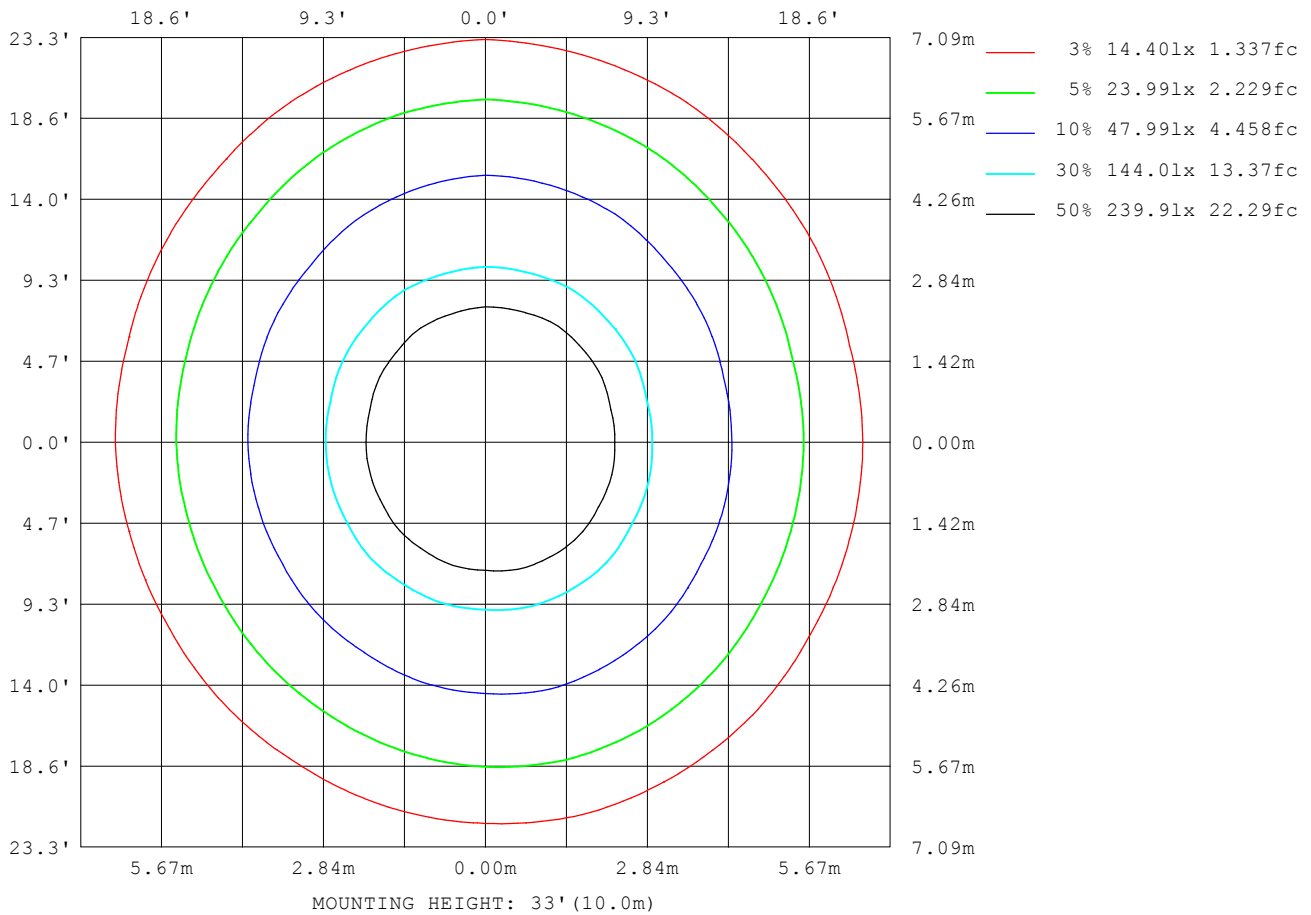
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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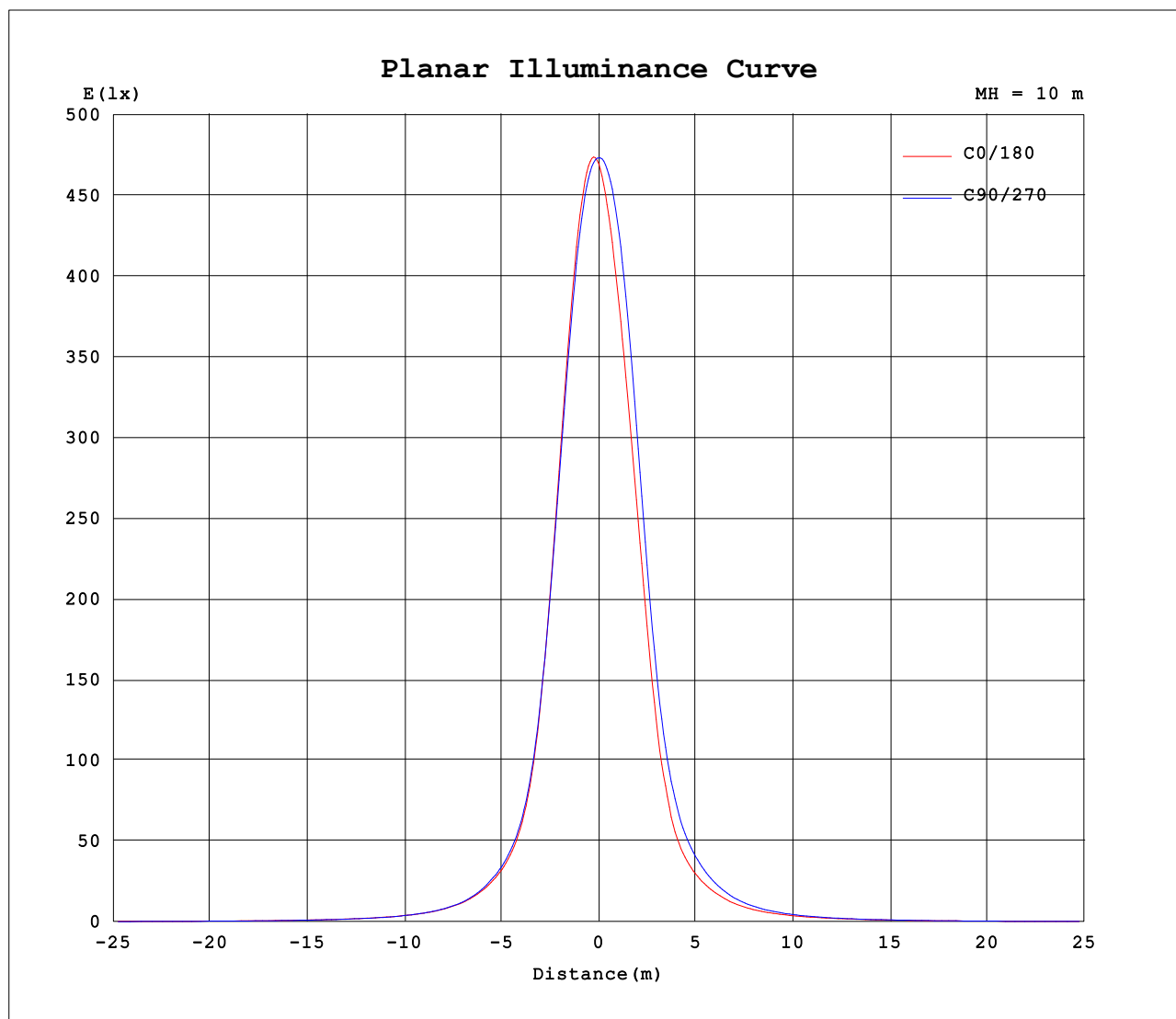
ISOLUX DIAGRAM



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: LYJ
Test Date: 2020-07-03

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.426
Humidity: 65.0%
Test Distance: 26.000m [K=0.4589]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: LYJ
Test Date: 2020-07-03

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.426
Humidity: 65.0%
Test Distance: 26.000m [K=0.4589]
Remarks: