

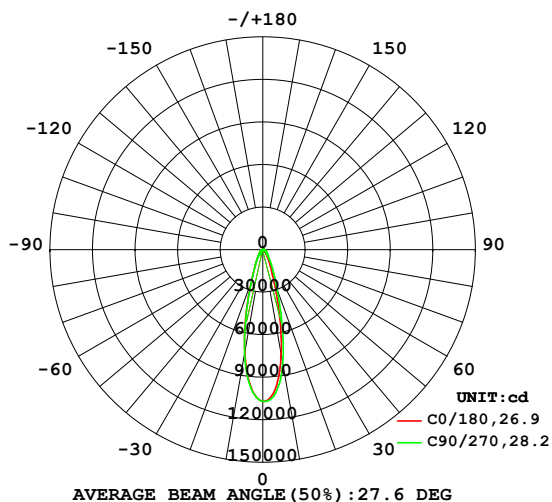
EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

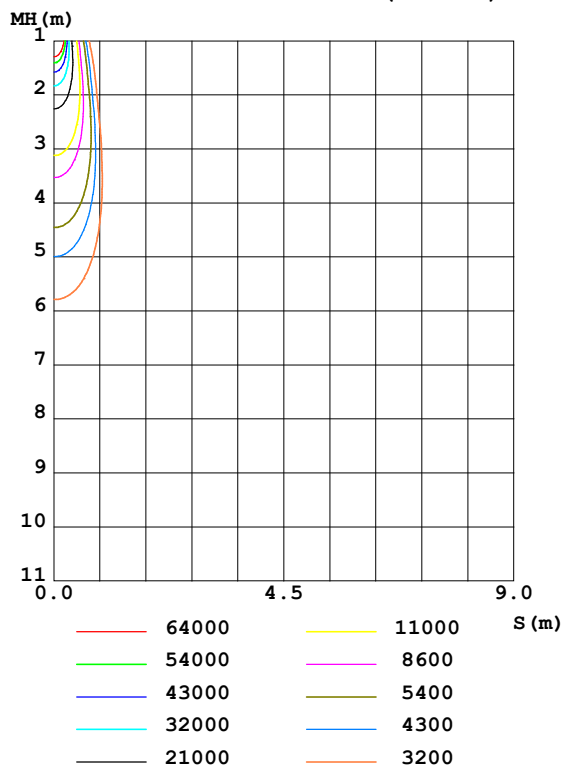
Test:U:229.4V I:1.340A P:301.9W PF:0.9819 Freq:50.01Hz UTHDi:0% ITHDi:0% Lamp Flux:38452.6x1 lm		
NAME: FL23-300-5070-F38404	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 127.39 lm/W			
MODEL	RF303	I _{max} (cd)	107189	S/MH(C0/180)	0.45
NOMINAL POWER(W)	300	LOR(%)	100.0	S/MH(C90/270)	0.45
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	38453	η UP,DN(C0-180)	0.0,52.8
NOMINAL FLUX(lm)	38452.6	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,47.2
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	748.8	799.4	816.7	780.4	736.1	730.5	740.5	732.0	0- 10	8708	8708	22.6,22.6
20	227.6	270.5	299.6	264.1	233.8	228.1	231.3	216.1	10- 20	12746	21454	55.8,55.8
30	83.60	102.6	120.6	101.1	87.23	84.42	86.22	79.77	20- 30	6852	28306	73.6,73.6
40	39.09	47.06	55.53	47.65	41.31	39.92	40.14	37.93	30- 40	3968	32275	83.9,83.9
50	23.15	26.19	29.35	26.74	24.18	23.79	23.69	22.92	40- 50	2529	34804	90.5,90.5
60	15.20	16.18	17.11	16.41	15.66	15.45	15.52	15.02	50- 60	1787	36591	95.2,95.2
70	8.702	8.716	8.849	8.795	8.982	8.672	8.908	8.427	60- 70	1205	37796	98.3,98.3
80	2.559	2.345	2.174	2.350	2.679	2.632	2.653	2.519	70- 80	574.0	38370	99.8,99.8
90	0.0089	0.0086	0.0087	0.0084	0.0097	0.0091	0.0083	0.0085	80- 90	82.88	38453	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:×100cd									UNIT:lm		

Conical surface Flux(90deg): 33659 lm

%lum = 87.5%

%lamp = 87.5%

Conical surface Flux(120deg): 36591 lm

%lum = 95.2%

%lamp = 95.2%

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:

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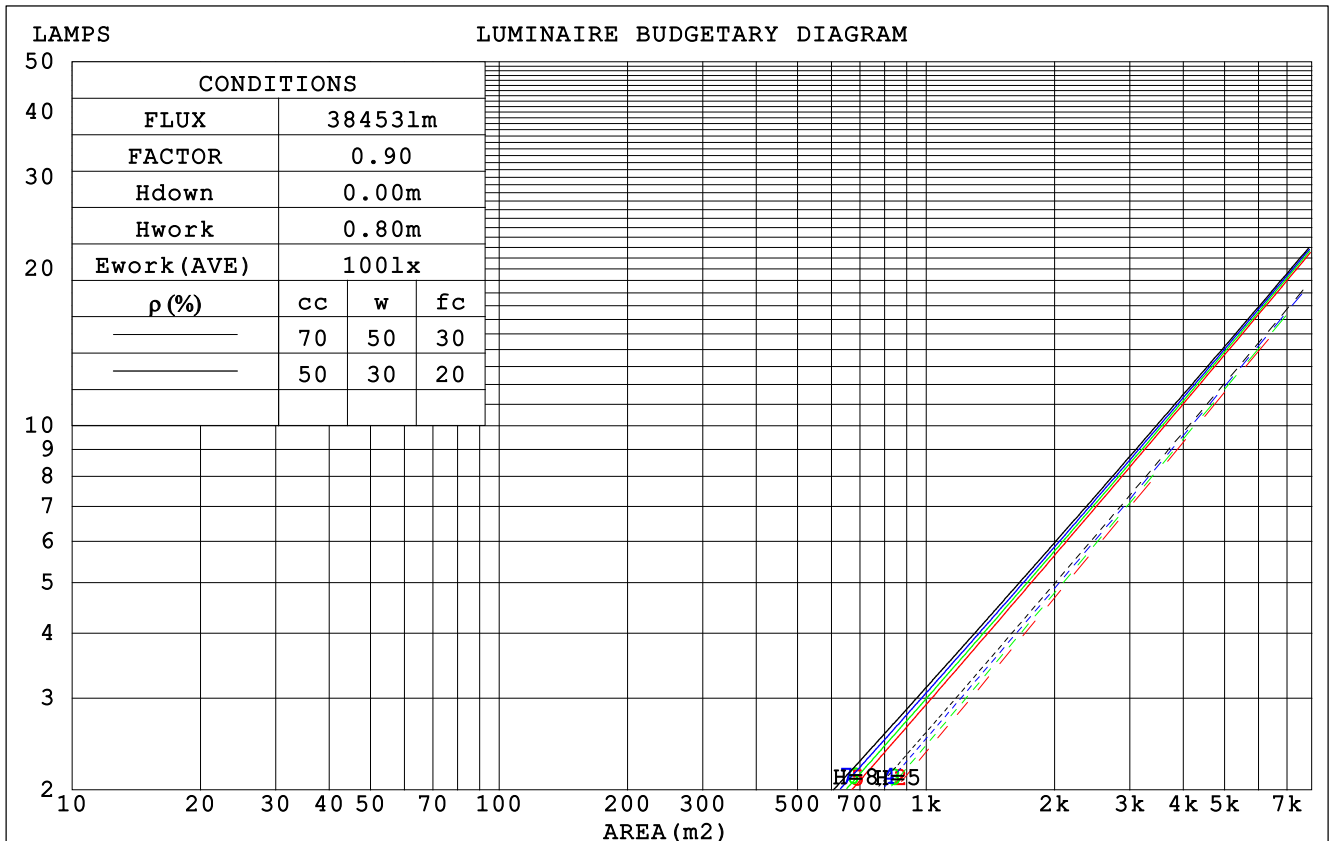
γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.426
Humidity:65.0%
Test Distance:26.000m [K=0.4589]
Remarks:

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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	1.10	1.08	1.06	1.08	1.06	1.04	1.04	1.02	1.01	1.01	.99	.98	.97	.96	.95	.93
2.0	1.03	.99	.95	1.01	.97	.94	.98	.95	.92	.95	.92	.90	.92	.90	.88	.87
3.0	.96	.91	.87	.95	.90	.86	.92	.88	.85	.90	.86	.84	.87	.85	.82	.81
4.0	.90	.85	.81	.89	.84	.80	.87	.83	.79	.85	.81	.78	.83	.80	.78	.76
5.0	.85	.80	.76	.84	.79	.75	.83	.78	.75	.81	.77	.74	.79	.76	.73	.72
6.0	.81	.75	.71	.80	.75	.71	.79	.74	.70	.77	.73	.70	.76	.72	.69	.68
7.0	.77	.71	.67	.76	.71	.67	.75	.70	.67	.74	.70	.67	.73	.69	.66	.65
8.0	.74	.68	.64	.73	.68	.64	.72	.67	.64	.71	.67	.63	.70	.66	.63	.62
9.0	.70	.65	.61	.70	.65	.61	.69	.64	.61	.68	.64	.61	.67	.63	.61	.59
10.0	.68	.62	.59	.67	.62	.59	.66	.62	.59	.66	.61	.58	.65	.61	.58	.57



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

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	.184	.104	.033	.177	.101	.032	.164	.094	.030	.153	.088	.028	.142	.082	.027															
2.0	.174	.095	.029	.168	.093	.029	.157	.088	.027	.148	.083	.026	.139	.078	.025															
3.0	.163	.087	.026	.158	.085	.025	.149	.081	.025	.141	.077	.024	.133	.074	.023															
4.0	.153	.079	.023	.148	.078	.023	.141	.075	.022	.133	.072	.022	.127	.069	.021															
5.0	.143	.073	.021	.140	.072	.021	.133	.069	.020	.127	.067	.020	.121	.065	.019															
6.0	.135	.068	.019	.132	.067	.019	.126	.065	.019	.120	.063	.018	.115	.061	.018															
7.0	.127	.063	.018	.125	.062	.018	.119	.060	.017	.115	.059	.017	.110	.057	.017															
8.0	.121	.059	.017	.118	.058	.016	.114	.057	.016	.109	.055	.016	.105	.054	.016															
9.0	.115	.055	.015	.112	.055	.015	.108	.054	.015	.105	.052	.015	.101	.051	.015															
10.0	.109	.052	.015	.107	.052	.014	.104	.051	.014	.100	.050	.014	.097	.049	.014															

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	.172	.157	.144	.147	.135	.124	.100	.093	.086	.058	.054	.050	.019	.017	.016	
2.0	.156	.132	.112	.134	.114	.097	.092	.079	.068	.053	.046	.040	.017	.015	.013	
3.0	.144	.114	.089	.123	.098	.078	.085	.068	.054	.049	.040	.032	.016	.013	.011	
4.0	.133	.099	.073	.114	.085	.063	.079	.060	.044	.045	.035	.026	.015	.011	.009	
5.0	.124	.087	.060	.106	.075	.052	.073	.053	.037	.042	.031	.022	.014	.010	.007	
6.0	.116	.078	.050	.099	.067	.044	.069	.047	.031	.040	.028	.018	.013	.009	.006	
7.0	.108	.070	.043	.093	.061	.037	.064	.043	.027	.037	.025	.016	.012	.008	.005	
8.0	.102	.064	.037	.088	.055	.032	.061	.039	.023	.035	.023	.014	.011	.007	.005	
9.0	.097	.058	.032	.083	.050	.028	.058	.035	.020	.034	.021	.012	.011	.007	.004	
10.0	.092	.054	.028	.079	.047	.025	.055	.033	.018	.032	.019	.010	.010	.006	.003	

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	18.9	20.0	19.3	20.3	20.7	19.7	20.8	20.0	21.1	21.4
3H	20.4	21.4	20.8	21.7	22.1	20.9	21.9	21.3	22.2	22.6
4H	20.8	21.8	21.2	22.1	22.5	21.3	22.2	21.7	22.5	22.9
6H	21.0	21.9	21.5	22.3	22.7	21.4	22.2	21.8	22.6	23.0
8H	21.1	21.9	21.5	22.2	22.7	21.4	22.2	21.8	22.6	23.0
12H	21.0	21.8	21.5	22.2	22.6	21.3	22.1	21.8	22.5	22.9
4H 2H	19.4	20.3	19.8	20.7	21.1	20.1	21.0	20.5	21.3	21.7
3H	21.0	21.8	21.5	22.2	22.6	21.5	22.2	21.9	22.6	23.0
4H	21.6	22.2	22.0	22.7	23.1	21.9	22.6	22.3	23.0	23.4
6H	21.9	22.4	22.3	22.9	23.3	22.1	22.6	22.5	23.1	23.6
8H	21.9	22.4	22.3	22.9	23.3	22.0	22.6	22.5	23.0	23.5
12H	21.9	22.3	22.3	22.8	23.3	22.0	22.5	22.5	23.0	23.4
8H 4H	21.7	22.2	22.2	22.7	23.1	22.0	22.5	22.4	23.0	23.4
6H	22.0	22.4	22.5	22.9	23.4	22.2	22.6	22.7	23.1	23.6
8H	22.1	22.4	22.6	23.0	23.5	22.2	22.6	22.7	23.1	23.6
12H	22.1	22.4	22.6	22.9	23.5	22.2	22.5	22.7	23.0	23.6
12H 4H	21.6	22.1	22.1	22.6	23.1	21.9	22.4	22.4	22.9	23.4
6H	22.0	22.4	22.5	22.8	23.4	22.2	22.6	22.7	23.0	23.6
8H	22.1	22.4	22.6	22.9	23.5	22.2	22.5	22.7	23.0	23.6
CIE190: 2010										

CIE190: 2010
Area: 0.1521 m2

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

UTILIZATION FACTORS TABLE

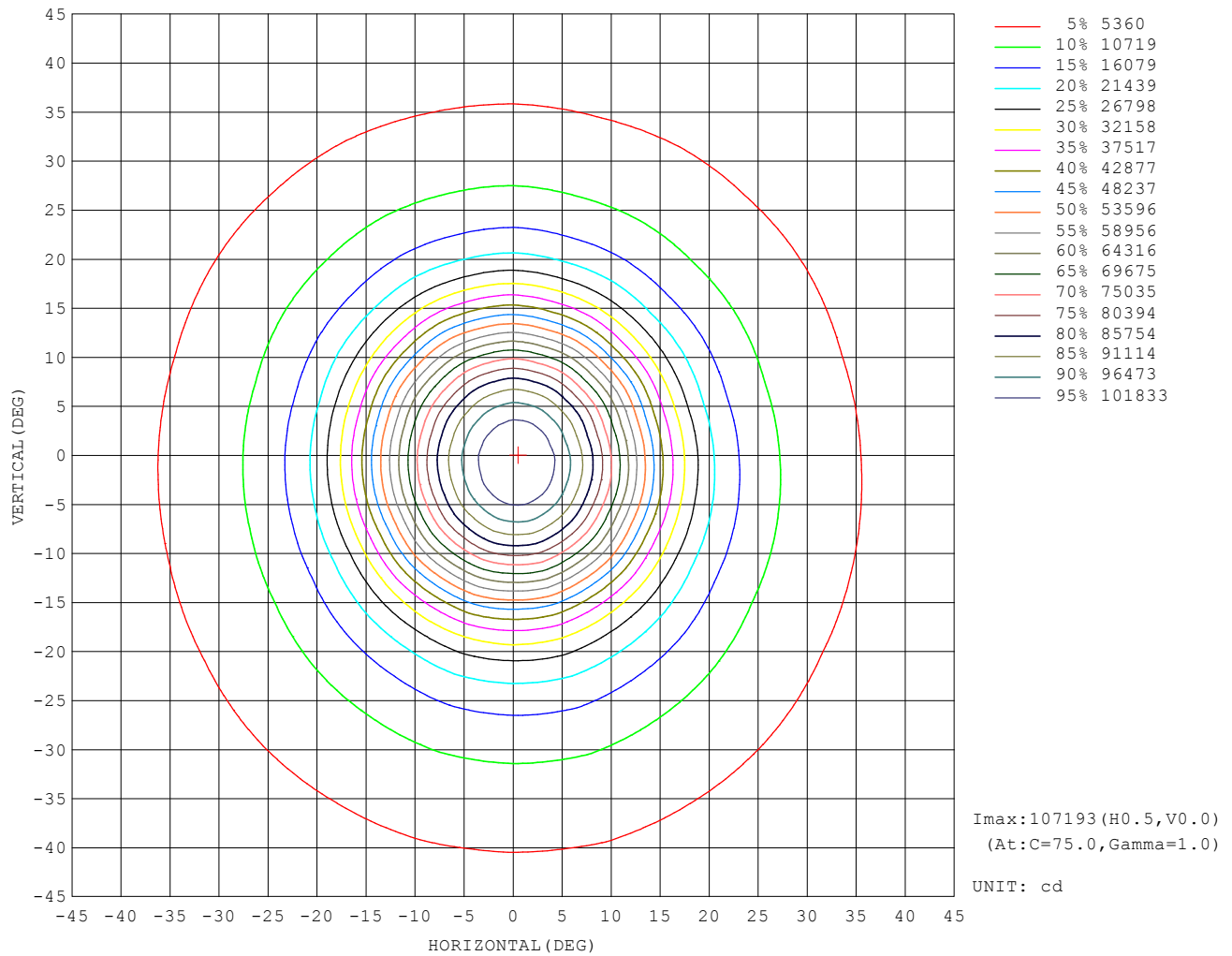
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	82	74	70	81	74	70	80	74	70	65
0.80	90	83	78	89	82	78	87	82	78	73
1.00	95	88	84	94	88	83	92	88	83	78
1.25	99	93	89	98	93	89	96	91	88	83
1.50	103	97	93	101	96	92	99	94	91	86
2.00	106	101	97	104	100	96	102	98	95	89
2.50	108	104	100	106	102	99	103	100	97	91
3.00	110	106	103	108	105	102	105	102	99	93
4.00	112	109	106	110	107	105	107	104	102	95
5.00	114	111	109	112	109	107	108	106	104	96
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

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

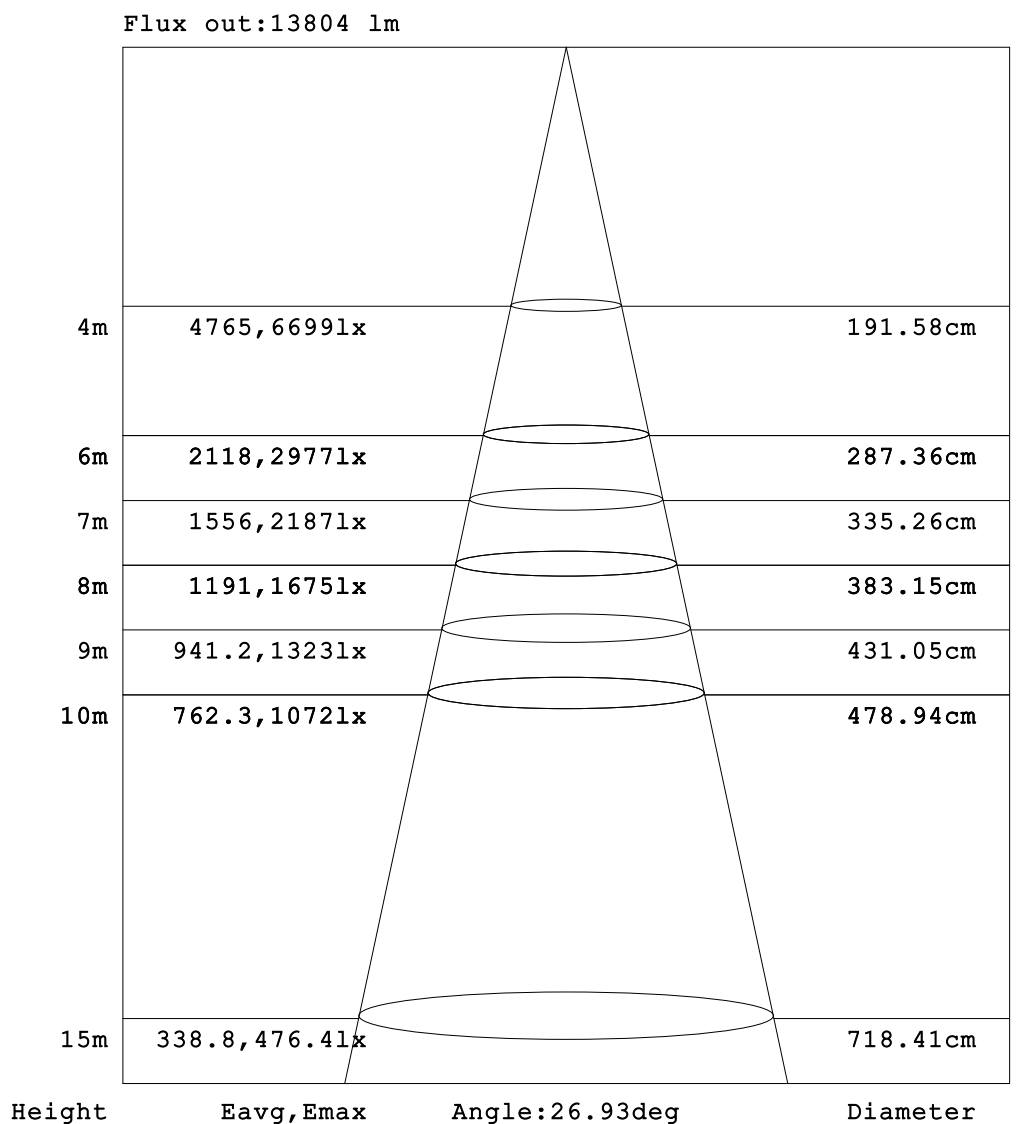
ISOCANDELA DIAGRAM



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:

AAI Figure



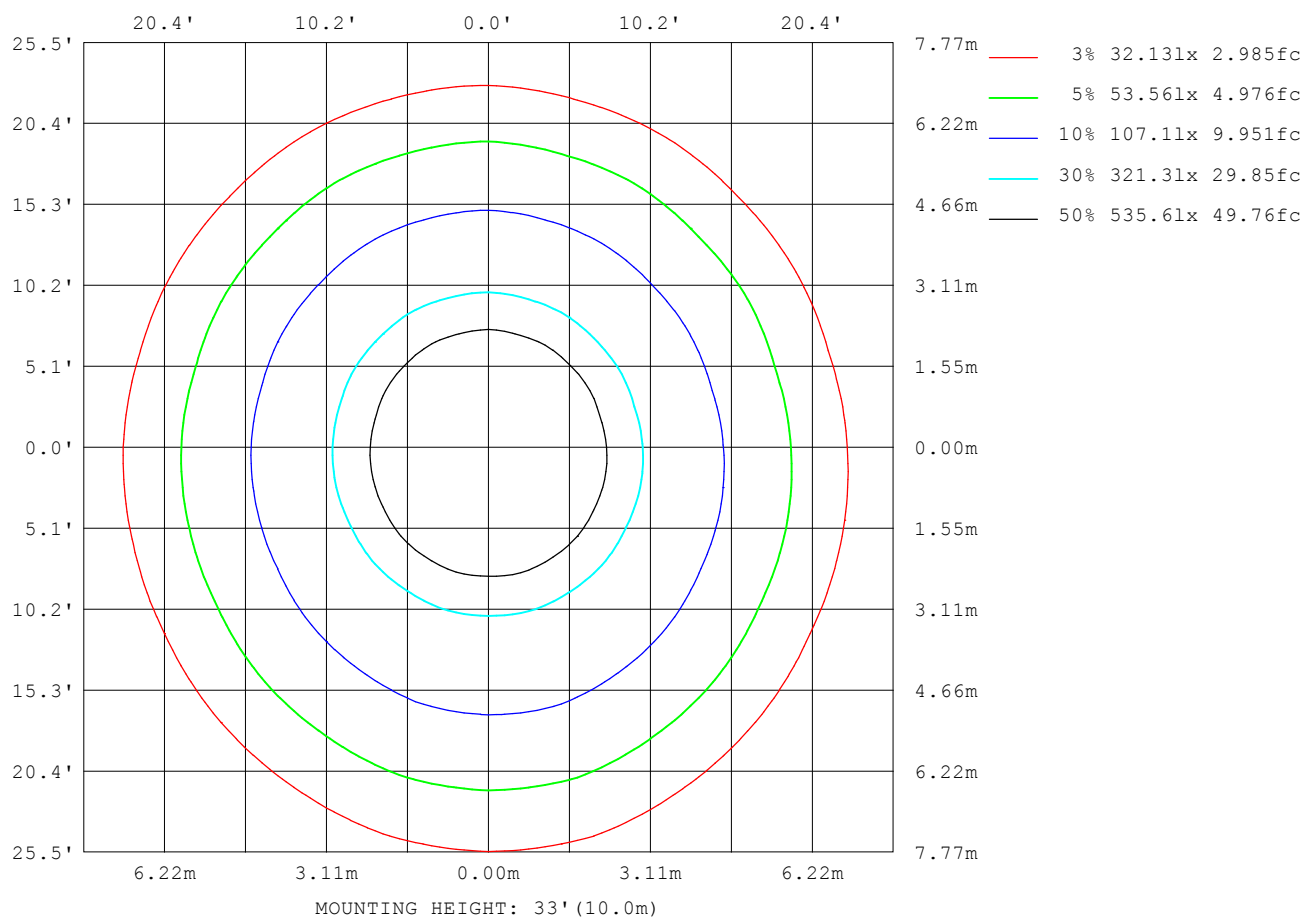
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 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%
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Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

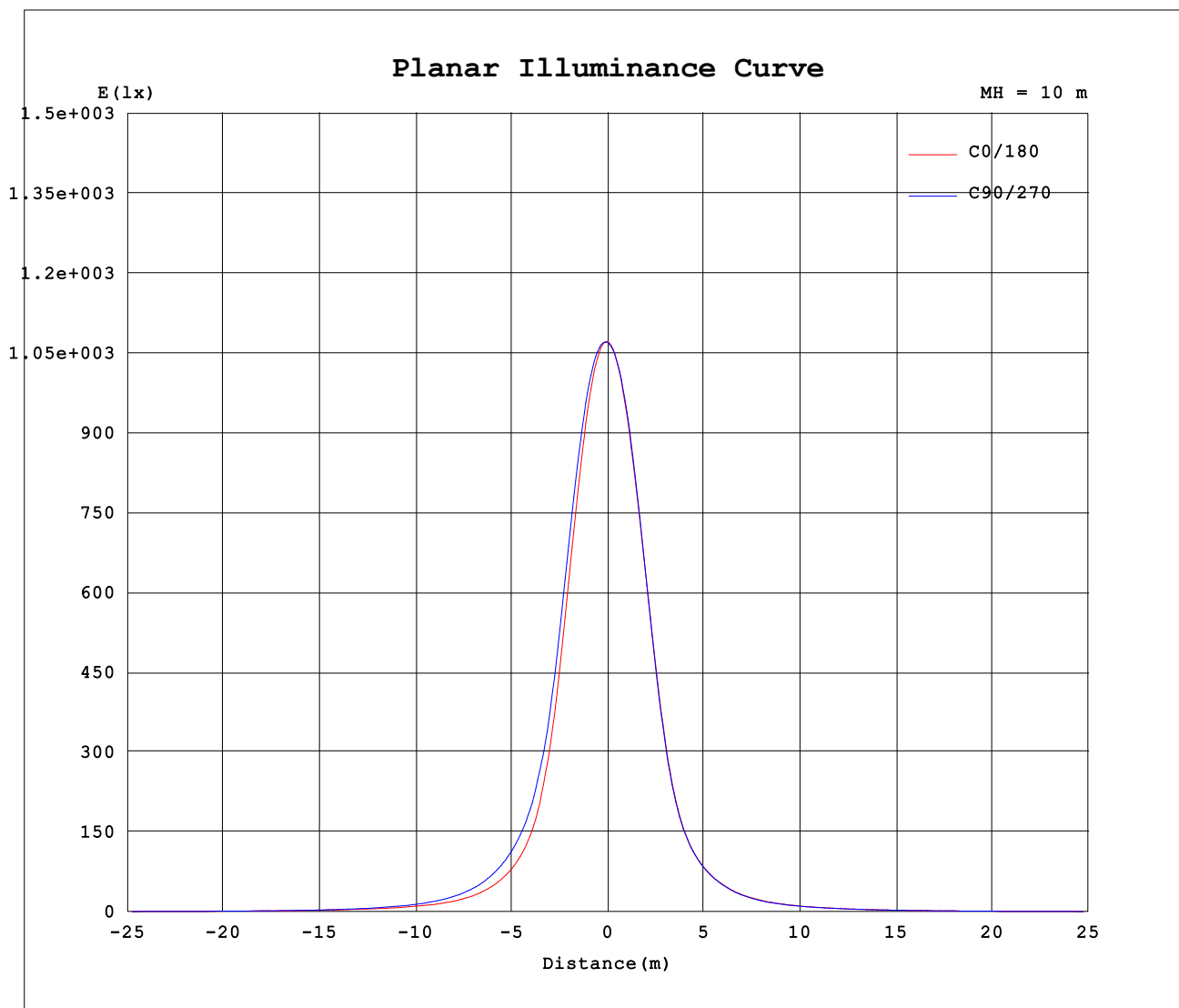
ISOLUX DIAGRAM



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: