

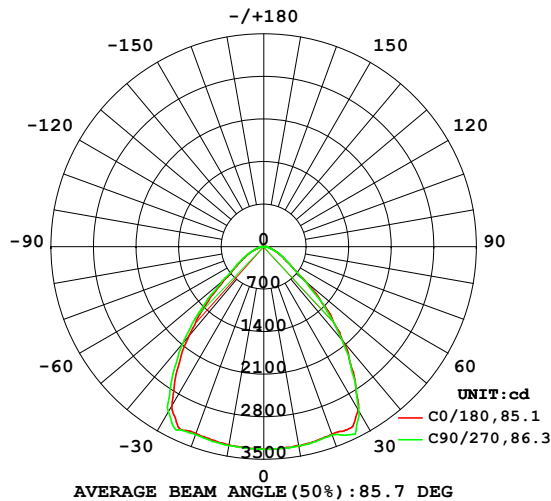
EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

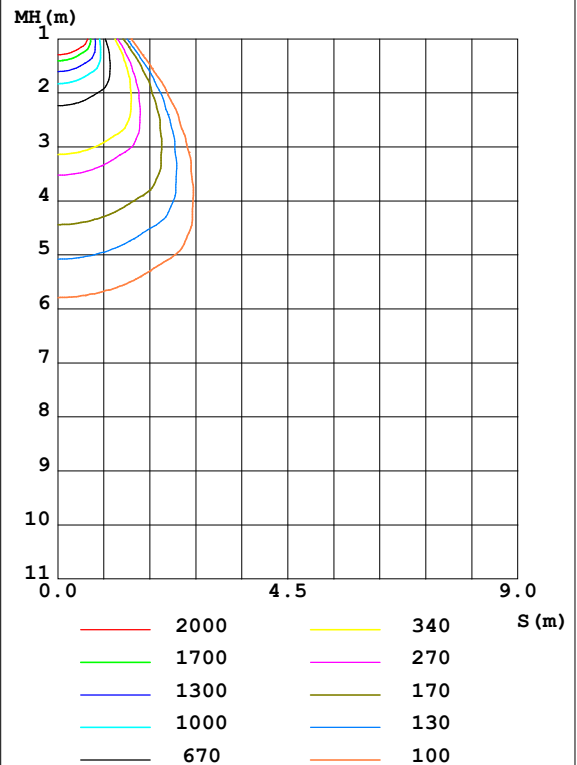
Test:U:230.2V I:0.2242A P:49.7W PF:0.9636 Freq:49.99Hz Lamp Flux:6418.48x1 lm		
NAME: 950-024	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: EVERFINE	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 129.10 lm/W			
MODEL	/	I _{max} (cd)	3433	S/MH (C0/180)	1.20
NOMINAL POWER (W)	/	LOR (%)	100.0	S/MH (C90/270)	1.23
RATED VOLTAGE (V)	/	TOTAL FLUX (lm)	6418.5	η UP, DN (C0-180)	0.0, 49.9
NOMINAL FLUX (lm)	6418.48	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 50.1
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	230	η down (%)	100.0	CIBSE SHR MAX	1.30

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT: lx)



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: WJH
 Test Date: 2021-06-12

Checker: LI

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.426
 Humidity: 65.0%
 Test Distance: 9.350m [K=1.0000]
 Remarks:

Assessor:

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	3326	3337	3329	3321	3313	3316	3325	3320	0- 10	317.7	317.7	4.95,4.95
20	3279	3306	3299	3295	3274	3273	3293	3301	10- 20	937.4	1255	19.6,19.6
30	3105	3089	3136	3143	3024	3047	3140	3227	20- 30	1515	2770	43.2,43.2
40	2029	1988	1999	2045	1921	1992	2057	2160	30- 40	1599	4369	68.1,68.1
50	894.3	865.4	904.7	791.9	831.4	846.0	913.8	937.4	40- 50	1106	5475	85.3,85.3
60	379.1	394.6	387.2	373.0	368.4	387.5	405.3	398.8	50- 60	508.0	5983	93.2,93.2
70	174.6	197.5	172.0	166.1	164.8	165.5	175.3	180.3	60- 70	270.5	6253	97.4,97.4
80	72.20	68.79	66.05	66.80	67.56	65.58	67.33	71.22	70- 80	119.5	6373	99.3,99.3
90	23.66	24.00	21.68	21.87	21.97	22.64	23.19	23.21	80- 90	45.65	6418	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): 5011.2 lm

%lum = 78.1%

%lamp = 78.1%

Conical surface Flux(120deg): 5982.8 lm

%lum = 93.2%

%lamp = 93.2%

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 Operators:WJH
 Test Date:2021-06-12

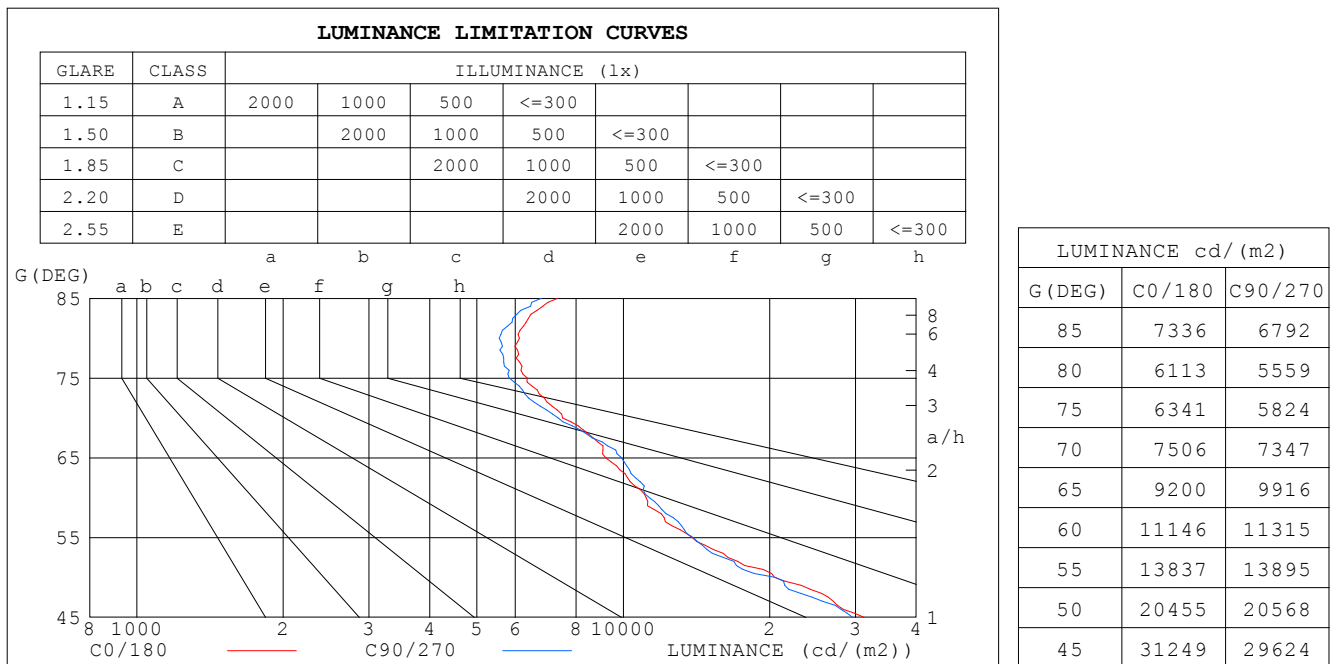
Checker: LI

γ Range: 0 - 90DEG
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 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.426
 Humidity:65.0%
 Test Distance:9.350m [K=1.0000]
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EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINANCE LIMITATION CURVES



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Checker: LI

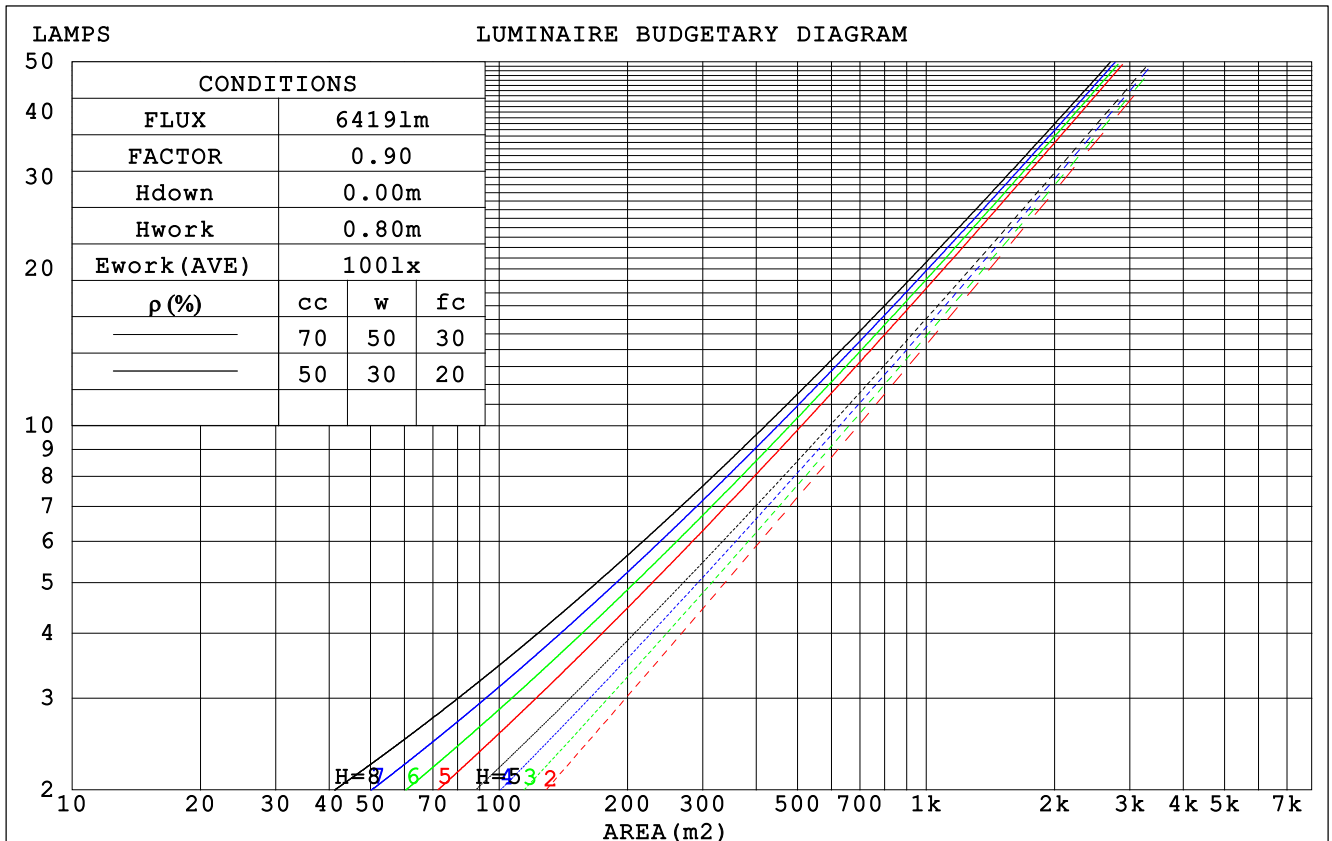
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Humidity: 65.0%
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EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

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	.00
1.0	1.08	1.05	1.02	1.06	1.03	.00	1.01	.99	.97	.98	.96	.94	.94	.93	.91	.89
2.0	.97	.92	.88	.96	.91	.87	.92	.88	.85	.89	.86	.83	.86	.83	.81	.79
3.0	.88	.82	.76	.87	.81	.76	.84	.79	.74	.81	.77	.73	.79	.75	.72	.70
4.0	.80	.73	.67	.79	.72	.67	.76	.71	.66	.74	.69	.65	.72	.68	.64	.63
5.0	.73	.66	.60	.72	.65	.60	.70	.64	.59	.68	.63	.59	.66	.62	.58	.56
6.0	.67	.59	.54	.66	.59	.54	.64	.58	.53	.63	.57	.53	.61	.56	.52	.51
7.0	.61	.54	.49	.61	.54	.48	.59	.53	.48	.58	.52	.48	.57	.51	.48	.46
8.0	.57	.49	.44	.56	.49	.44	.55	.48	.44	.54	.48	.44	.53	.47	.43	.42
9.0	.52	.45	.40	.52	.45	.40	.51	.45	.40	.50	.44	.40	.49	.44	.40	.38
10.0	.49	.42	.37	.48	.41	.37	.47	.41	.37	.46	.41	.37	.46	.40	.37	.35



C Range: 0 - 360DEG
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Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.426
Humidity: 65.0%
Test Distance: 9.350m [K=1.0000]
Remarks:

Checker: LI

Assessor:

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	.235	.134	.042	.228	.130	.041	.215	.123	.039	.203	.117	.038	.192	.111	.036		
2.0	.226	.124	.038	.220	.121	.037	.209	.116	.036	.198	.111	.035	.189	.107	.034		
3.0	.214	.114	.034	.209	.112	.034	.199	.108	.033	.190	.104	.032	.182	.101	.031		
4.0	.202	.105	.031	.198	.103	.031	.189	.100	.030	.181	.097	.029	.174	.094	.029		
5.0	.191	.097	.028	.187	.096	.028	.179	.093	.027	.172	.091	.027	.166	.089	.027		
6.0	.180	.090	.026	.177	.089	.026	.170	.087	.025	.164	.085	.025	.158	.083	.025		
7.0	.170	.084	.024	.167	.083	.024	.161	.082	.023	.156	.080	.023	.151	.078	.023		
8.0	.161	.079	.022	.159	.078	.022	.153	.077	.022	.148	.075	.022	.144	.074	.021		
9.0	.153	.074	.021	.151	.073	.021	.146	.072	.020	.141	.071	.020	.137	.070	.020		
10.0	.146	.070	.019	.143	.069	.019	.139	.068	.019	.135	.067	.019	.131	.066	.019		

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	.175	.157	.140	.150	.135	.121	.102	.093	.084	.059	.054	.049	.019	.017	.016	
2.0	.163	.132	.106	.140	.114	.092	.096	.079	.064	.055	.046	.037	.018	.015	.012	
3.0	.154	.114	.082	.132	.098	.071	.090	.068	.050	.052	.040	.029	.017	.013	.010	
4.0	.145	.100	.065	.125	.086	.057	.086	.060	.040	.050	.035	.024	.016	.011	.008	
5.0	.138	.089	.053	.118	.077	.046	.081	.054	.033	.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	.107	.063	.032	.074	.044	.023	.043	.026	.014	.014	.009	.005	
8.0	.119	.067	.032	.102	.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: 22.5DEG
 Test Speed: HIGH
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 Operators:WJH
 Test Date:2021-06-12

Checker: LI

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.426
 Humidity:65.0%
 Test Distance:9.350m [K=1.0000]
 Remarks:

Assessor:

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	15.1	16.4	15.4	16.6	16.8	15.0	16.3	15.3	16.5	16.6
3H	15.5	16.6	15.7	16.8	17.0	15.3	16.5	15.6	16.7	16.9
4H	15.6	16.6	15.8	16.9	17.1	15.4	16.5	15.7	16.7	17.0
6H	15.6	16.6	15.9	16.9	17.2	15.5	16.5	15.8	16.7	17.0
8H	15.6	16.6	16.0	16.9	17.2	15.5	16.5	15.8	16.7	17.0
12H	15.7	16.6	16.0	16.9	17.2	15.5	16.5	15.9	16.7	17.0
4H 2H	15.2	16.3	15.5	16.5	16.8	15.1	16.2	15.4	16.4	16.6
3H	15.7	16.6	16.0	16.9	17.2	15.5	16.5	15.9	16.8	17.1
4H	15.8	16.7	16.2	17.0	17.3	15.7	16.6	16.1	16.9	17.2
6H	16.0	16.7	16.4	17.1	17.4	15.8	16.6	16.2	16.9	17.3
8H	16.1	16.8	16.5	17.1	17.5	15.9	16.6	16.3	17.0	17.3
12H	16.1	16.8	16.6	17.1	17.5	16.0	16.6	16.4	17.0	17.4
8H 4H	15.9	16.5	16.3	16.9	17.3	15.7	16.4	16.1	16.8	17.1
6H	16.1	16.7	16.5	17.1	17.5	16.0	16.5	16.4	16.9	17.3
8H	16.2	16.7	16.7	17.1	17.6	16.1	16.6	16.5	17.0	17.4
12H	16.4	16.8	16.8	17.2	17.7	16.2	16.7	16.7	17.1	17.6
12H 4H	15.8	16.5	16.2	16.8	17.2	15.7	16.3	16.1	16.7	17.1
6H	16.1	16.6	16.5	17.0	17.5	16.0	16.5	16.4	16.9	17.3
8H	16.2	16.7	16.7	17.1	17.6	16.1	16.5	16.6	17.0	17.5
Variations with the observer position at spacings(CIE Pub.117):										
S = 1.0H	+ 1.0 / - 1.5					+ 1.1 / - 1.5				
1.5H	+ 1.2 / - 1.3					+ 1.3 / - 1.4				
2.0H	+ 2.7 / - 1.6					+ 2.7 / - 1.6				

CIE Pub.117, 6418 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = 6.5$)
Area: 0.0684 m²

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γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.426
Humidity:65.0%
Test Distance:9.350m [K=1.0000]
Remarks:

Checker: LI

Assessor:

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) $k(RI) \times RCR = 5$									
$k = 0.60$	71	62	57	71	62	57	70	62	57	51
0.80	81	72	67	80	72	66	79	71	66	61
1.00	88	80	74	87	79	74	85	80	74	68
1.25	94	86	81	93	86	81	90	84	80	74
1.50	98	91	86	96	90	85	94	88	84	78
2.00	103	97	92	101	95	91	98	93	90	83
2.50	105	100	95	103	98	94	100	96	93	86
3.00	108	103	99	106	101	98	102	98	96	88
4.00	110	106	103	108	105	102	104	101	99	91
5.00	112	109	106	110	107	104	106	103	101	93
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

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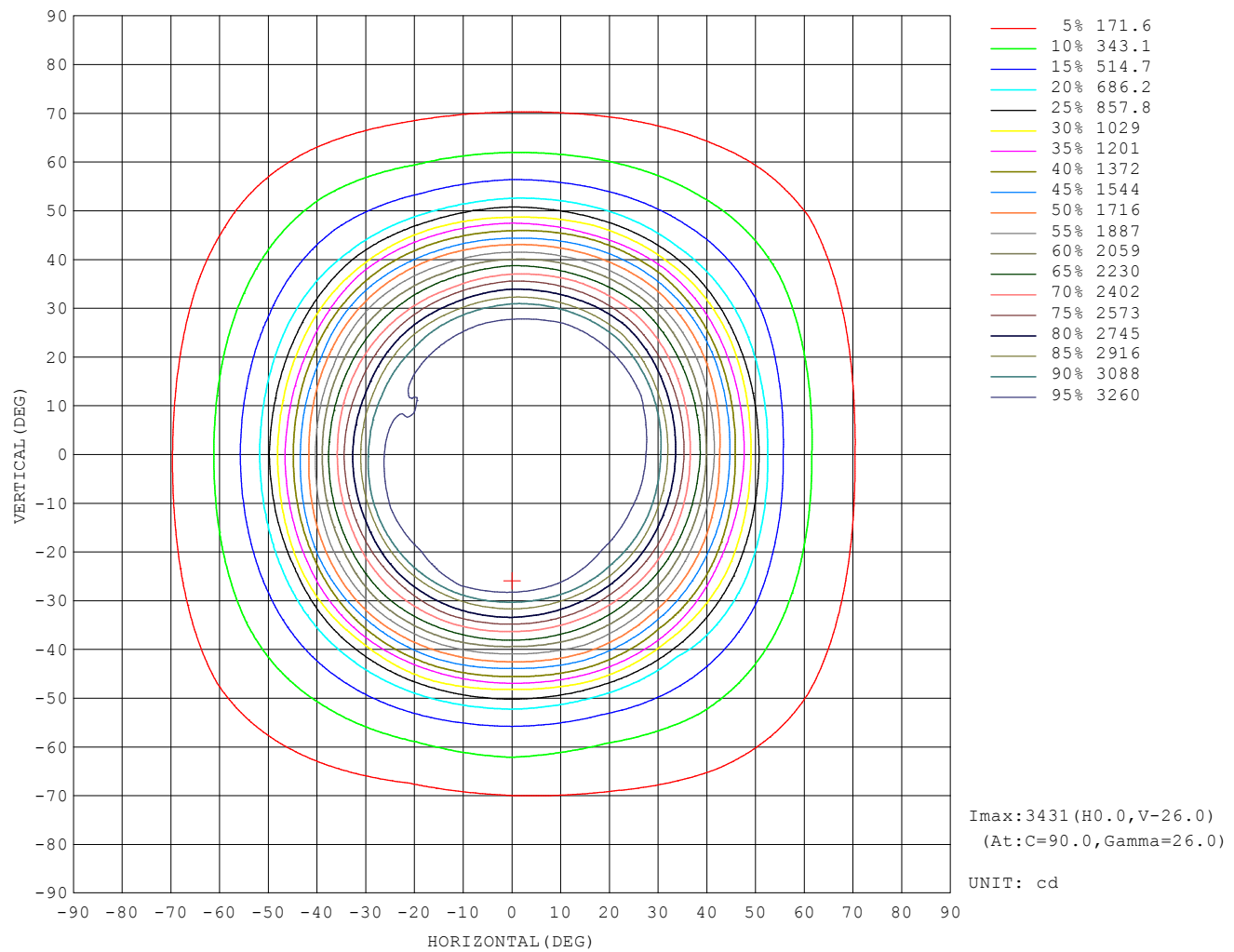
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 Test Distance: 9.350m [K=1.0000]
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EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ISOCANDELA DIAGRAM



C Range: 0 - 360DEG
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Test Speed: HIGH
Temperature: 25.3DEG
Operators: WJH
Test Date: 2021-06-12

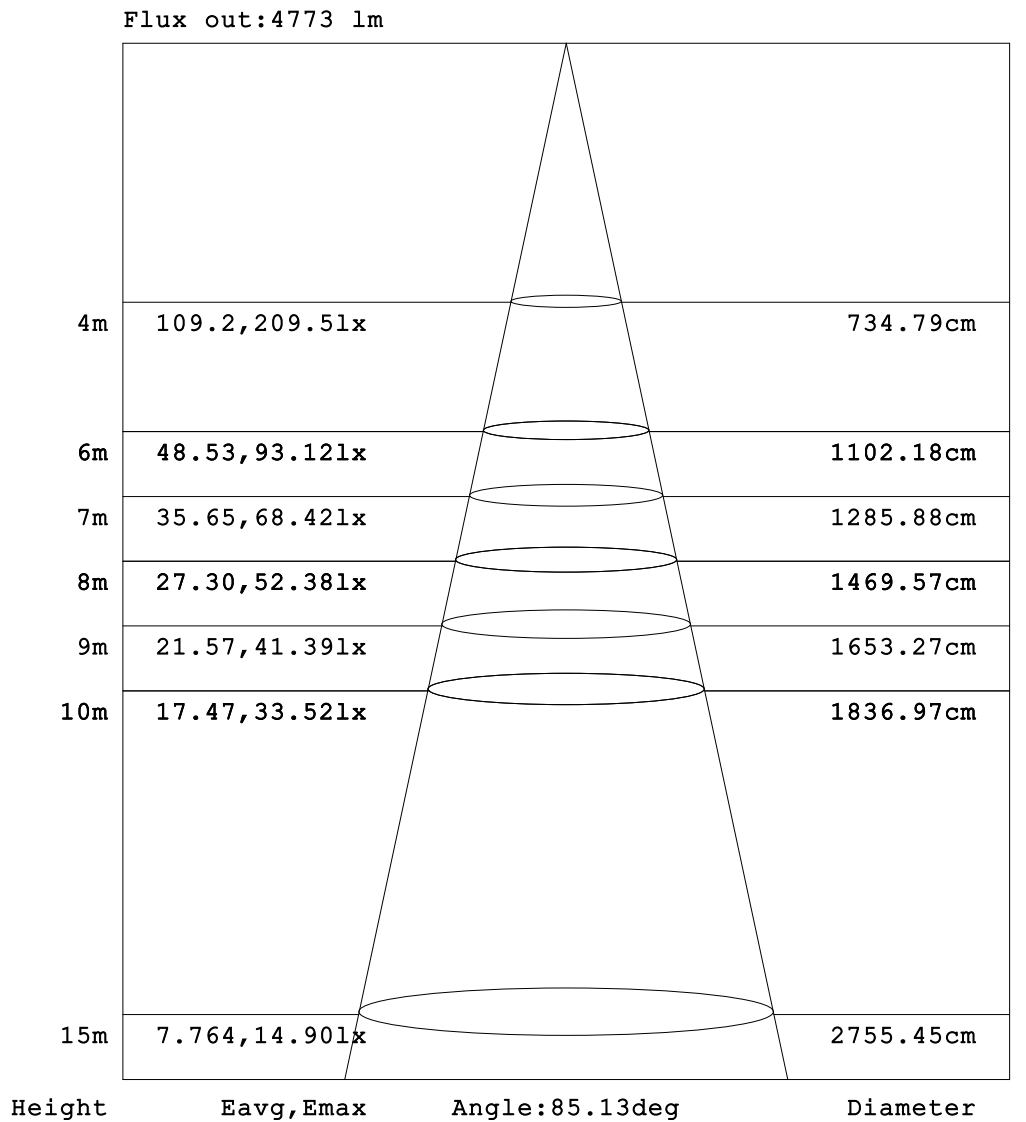
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 γ Interval: 0.5DEG
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Humidity: 65.0%
Test Distance: 9.350m [K=1.0000]
Remarks:

Checker: LI

Assessor:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

AAI Figure



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

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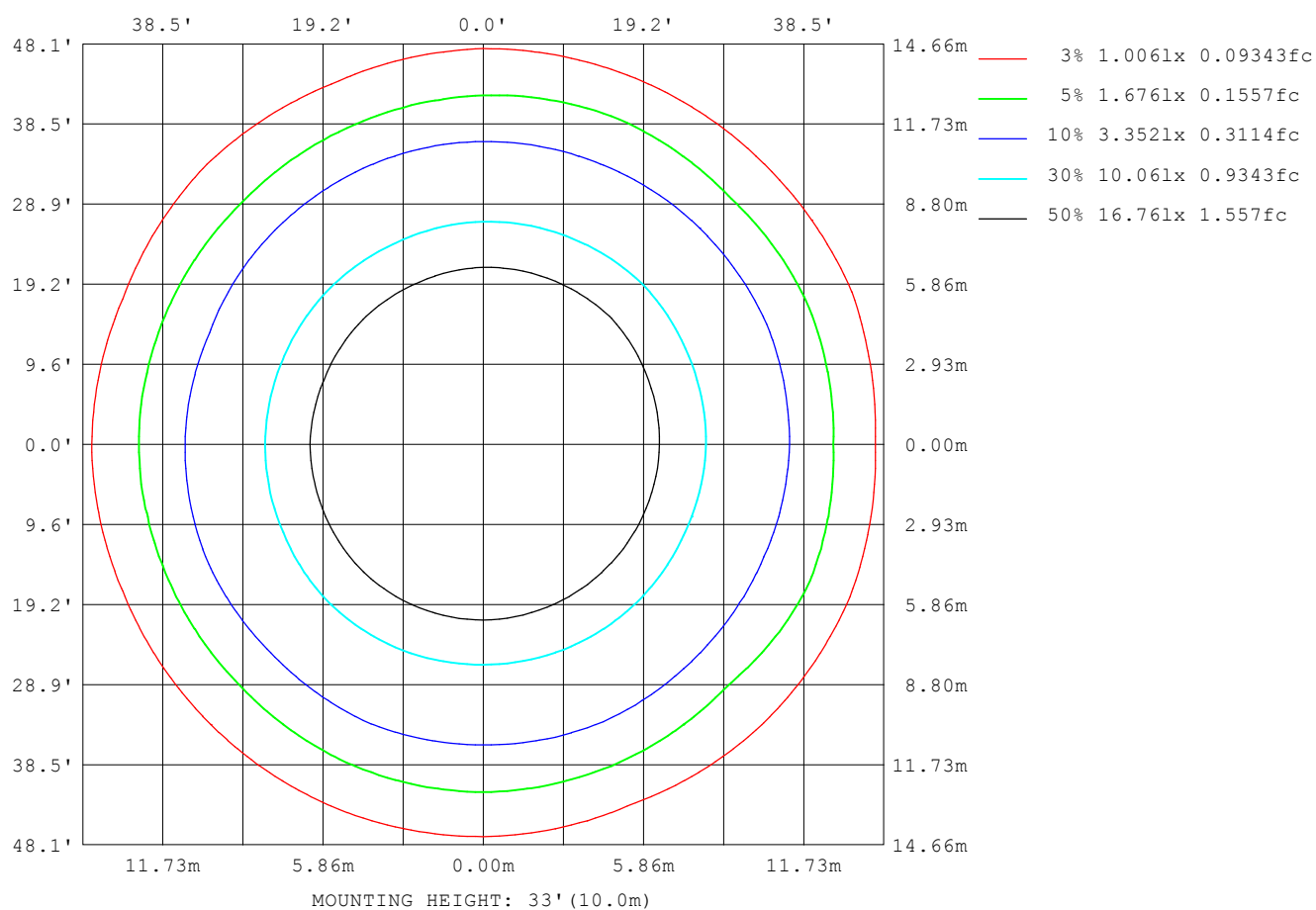
γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.426
 Humidity: 65.0%
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 Remarks:

Checker: LI

Assessor:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ISOLUX DIAGRAM



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Temperature: 25.3DEG
Operators: WJH
Test Date: 2021-06-12

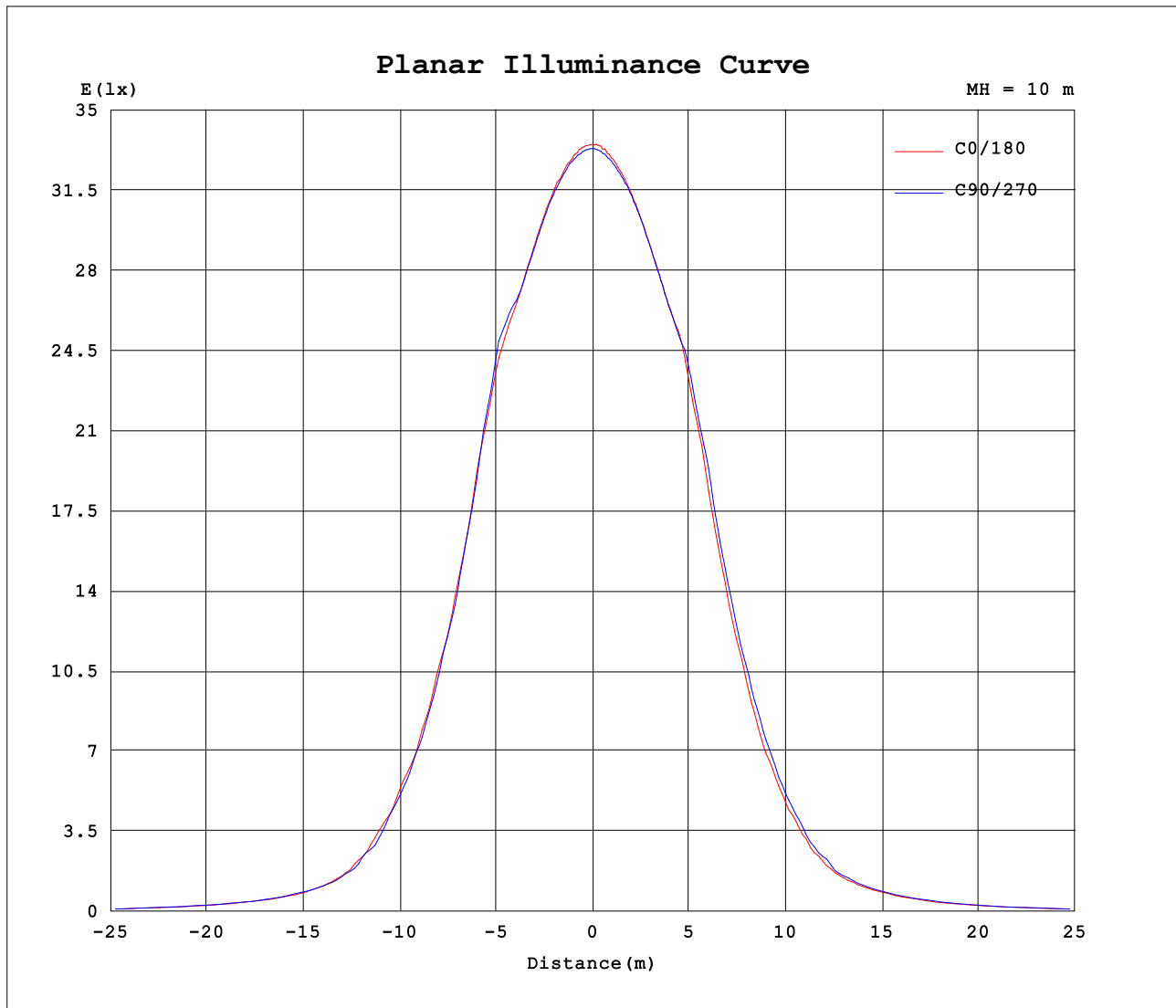
Checker: LI

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.426
Humidity: 65.0%
Test Distance: 9.350m [K=1.0000]
Remarks:

Assessor:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: WJH
Test Date: 2021-06-12

Checker: LI

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.426
Humidity: 65.0%
Test Distance: 9.350m [K=1.0000]
Remarks:

Assessor: