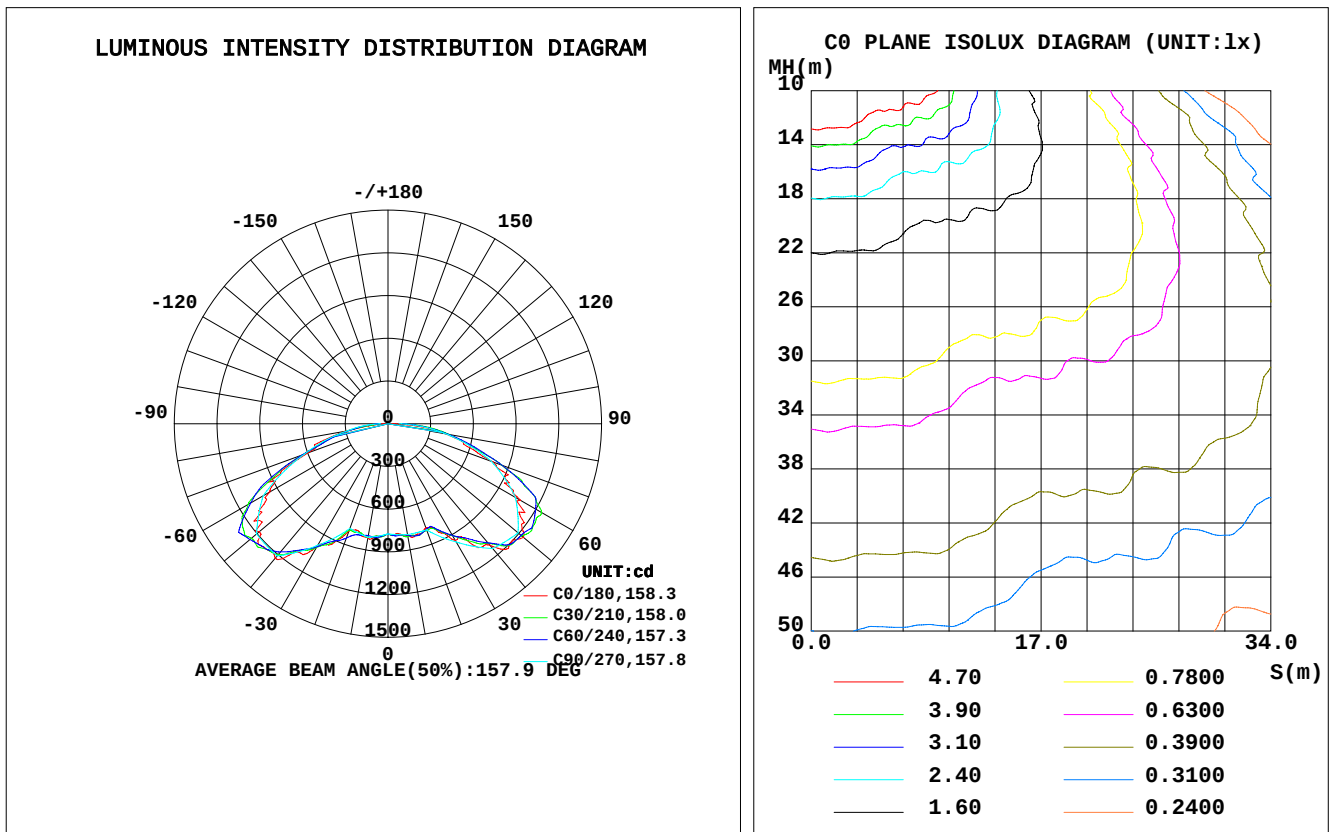


EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:121.2V I:0.3412A P:40.96W PF:0.9904 Lamp Flux:5082.87x1 lm		

DATA OF LAMP		PHOTOMETRIC DATA Eff: 124.10 lm/W			
MODEL	ASD-CAN04-40D40W-PRM	I _{max} (cd)	1340	S/MH(C0/180)	2.09
NOMINAL POWER(W)	40	LOR(%)	100.0	S/MH(C90/270)	2.09
RATED VOLTAGE(V)	120	TOTAL FLUX(lm)	5082.9	η UP, DN(C0-180)	0.0, 50.9
NOMINAL FLUX(lm)	5082.87	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0, 49.1
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	2.00
TEST VOLTAGE(V)	120	η down(%)	100.0	CIBSE SHR MAX	0.00



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2017-11-17

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.350
Humidity:65.0%
Test Distance:7.850m [K=1.0000]
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
5	773.3	783.9	781.7	801.5	792.0	798.9	791.9	790.5	0- 5	18.84	18.84	0.37,0.37
10	795.4	808.6	789.6	800.4	815.3	802.2	810.1	804.4	5- 10	57.13	75.96	1.49,1.49
15	802.2	800.4	791.5	813.3	784.2	801.7	796.3	807.4	10- 15	95.51	171.5	3.37,3.37
20	778.6	808.4	793.4	832.3	801.0	829.1	782.5	838.4	15- 20	132.2	303.6	5.97,5.97
25	841.0	842.1	876.0	880.6	932.6	899.6	883.5	862.9	20- 25	175.7	479.3	9.43,9.43
30	947.8	886.5	958.7	971.3	994.3	991.8	984.5	962.8	25- 30	232.8	712.1	14,14
35	1039	1001	1051	1069	1100	1105	1098	1055	30- 35	297.7	1010	19.9,19.9
40	1113	1085	1144	1159	1234	1158	1212	1180	35- 40	371.5	1381	27.2,27.2
45	1204	1176	1168	1235	1227	1253	1208	1221	40- 45	441.0	1822	35.9,35.9
50	1242	1255	1193	1282	1180	1290	1205	1284	45- 50	495.0	2317	45.6,45.6
55	1135	1280	1113	1287	1082	1316	1108	1305	50- 55	532.0	2849	56.1,56.1
60	1074	1291	1034	1274	957.7	1244	1012	1289	55- 60	539.7	3389	66.7,66.7
65	904.2	1189	902.8	1060	834.2	934.7	818.2	1038	60- 65	507.8	3897	76.7,76.7
70	785.7	947.6	771.6	766.0	601.3	632.7	624.4	749.4	65- 70	424.8	4322	85,85
75	548.1	589.6	592.1	489.7	489.2	441.9	458.5	489.4	70- 75	317.9	4640	91.3,91.3
80	414.3	419.2	412.5	322.3	306.9	270.5	292.6	333.1	75- 80	230.1	4870	95.8,95.8
85	208.3	262.5	244.9	179.4	92.38	142.6	171.7	182.4	80- 85	145.4	5015	98.7,98.7
90	12.07	104.8	77.22	61.81	9.682	52.28	50.74	58.67	85- 90	67.64	5083	100,100
95									90- 95			
100									95-100			
105									100-105			
110									105-110			
115									110-115			
120									115-120			
125									120-125			
130									125-130			
135									130-135			
140									135-140			
145									140-145			
150									145-150			
155									150-155			
160									155-160			
165									160-165			
170									165-170			
175									170-175			
180									175-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 1822.4 lm

%lum = 35.9%
%lamp = 35.9%

Conical surface Flux(120deg): 3389.1 lm

%lum = 66.7%
%lamp = 66.7%

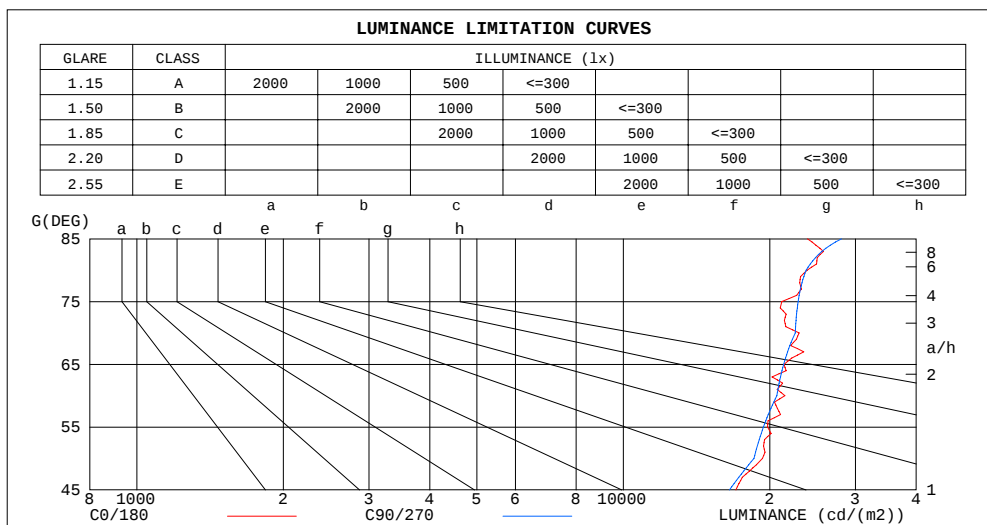
C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2017-11-17

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.350
Humidity:65.0%
Test Distance:7.850m [K=1.0000]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LUMINANCE LIMITATION CURVES

Test:U:121.2V I:0.3412A P:40.96W PF:0.9904 Lamp Flux:5082.87x1 lm		



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	23896	28095
80	23861	23755
75	21175	22875
70	22973	22560
65	21396	21361
60	21488	20678
55	19794	19411
50	19320	18556
45	17030	16523

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:2017-11-17

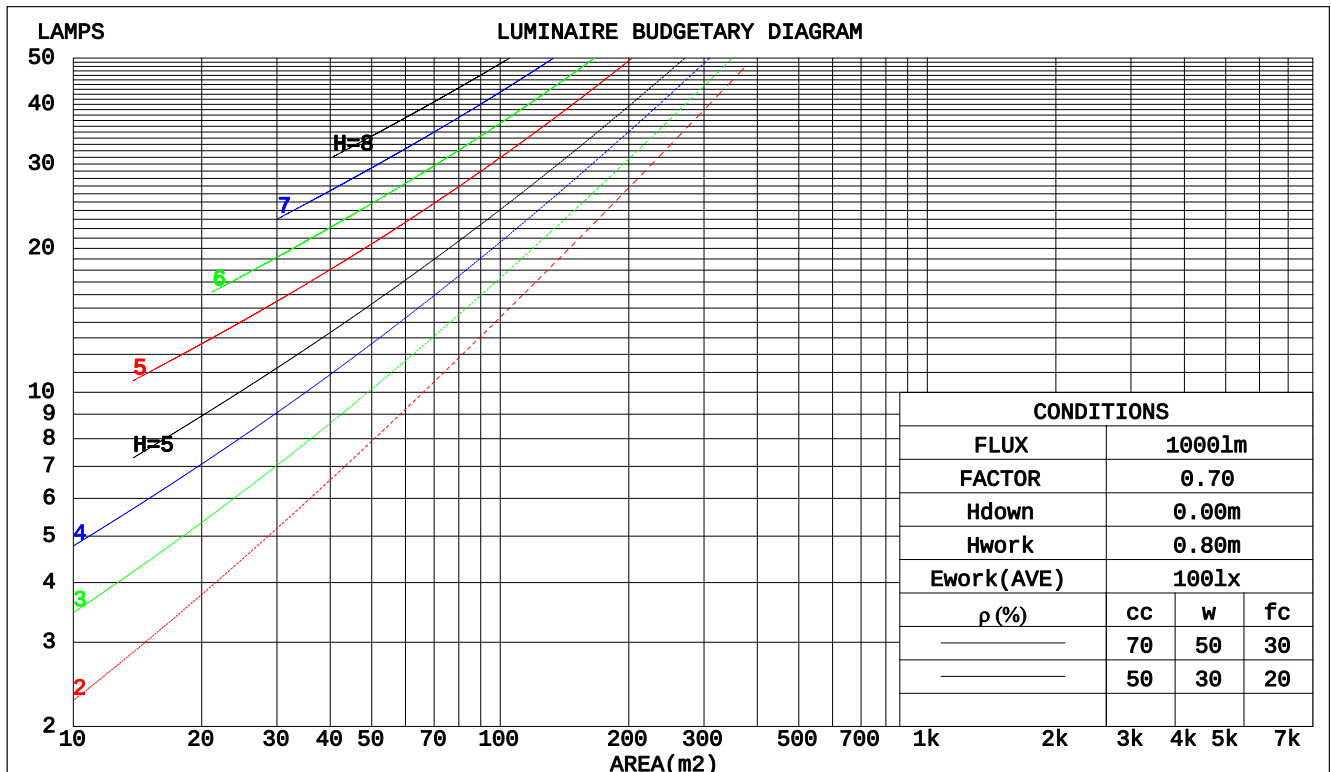
γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.350
 Humidity:65.0%
 Test Distance:7.850m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:121.2V I:0.3412A P:40.96W PF:0.9904 Lamp Flux:5082.87x1 lm																

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	1.00	.95	.90	.98	.93	.89	.93	.89	.86	.89	.86	.83	.86	.83	.81	.78
2.0	.85	.76	.69	.83	.75	.69	.79	.72	.67	.75	.70	.65	.72	.68	.64	.61
3.0	.72	.62	.55	.70	.61	.54	.67	.60	.53	.64	.58	.52	.62	.56	.51	.49
4.0	.62	.52	.44	.61	.51	.44	.58	.50	.43	.56	.48	.43	.53	.47	.42	.39
5.0	.54	.44	.36	.53	.43	.36	.51	.42	.36	.49	.41	.35	.47	.40	.35	.32
6.0	.48	.38	.31	.47	.37	.30	.45	.36	.30	.43	.36	.30	.42	.35	.29	.27
7.0	.43	.33	.26	.42	.33	.26	.40	.32	.26	.39	.31	.25	.37	.30	.25	.23
8.0	.38	.29	.23	.38	.29	.22	.36	.28	.22	.35	.28	.22	.34	.27	.22	.20
9.0	.35	.26	.20	.34	.26	.20	.33	.25	.19	.32	.25	.19	.31	.24	.19	.17
10.0	.32	.23	.17	.31	.23	.17	.30	.23	.17	.29	.22	.17	.28	.22	.17	.15



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:2017-11-17

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.350
 Humidity:65.0%
 Test Distance:7.850m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

WEC AND CCEC

Test:U:121.2V I:0.3412A P:40.96W PF:0.9904 Lamp Flux:5082.87x1 lm														

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	.380	.216	.069	.373	.213	.068	.360	.206	.066	.347	.200	.064	.335	.194	.063		
2.0	.348	.191	.059	.342	.188	.058	.330	.183	.057	.319	.179	.056	.308	.174	.055		
3.0	.317	.168	.050	.311	.166	.050	.300	.163	.049	.290	.159	.049	.280	.155	.048		
4.0	.288	.150	.044	.283	.148	.044	.273	.145	.043	.264	.142	.043	.255	.139	.042		
5.0	.263	.134	.039	.258	.132	.039	.249	.130	.038	.241	.127	.038	.234	.125	.038		
6.0	.241	.121	.035	.237	.120	.034	.229	.117	.034	.222	.115	.034	.215	.113	.034		
7.0	.222	.110	.031	.218	.109	.031	.211	.107	.031	.205	.105	.031	.199	.103	.030		
8.0	.206	.100	.028	.202	.100	.028	.196	.098	.028	.190	.096	.028	.185	.095	.028		
9.0	.191	.092	.026	.188	.092	.026	.183	.090	.026	.178	.089	.025	.173	.088	.025		
10.0	.179	.086	.024	.176	.085	.024	.171	.084	.024	.166	.083	.023	.162	.081	.023		

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	.185	.156	.129	.158	.133	.111	.108	.092	.077	.062	.053	.045	.020	.017	.014		
2.0	.180	.132	.091	.154	.113	.079	.106	.078	.055	.061	.046	.032	.020	.015	.010		
3.0	.173	.115	.068	.149	.099	.059	.102	.069	.041	.059	.040	.024	.019	.013	.008		
4.0	.166	.102	.053	.143	.088	.046	.098	.061	.032	.057	.036	.019	.018	.012	.006		
5.0	.159	.092	.042	.137	.079	.037	.094	.056	.026	.054	.033	.015	.018	.011	.005		
6.0	.151	.084	.035	.130	.073	.031	.090	.051	.022	.052	.030	.013	.017	.010	.004		
7.0	.144	.077	.030	.124	.067	.026	.086	.047	.019	.050	.028	.011	.016	.009	.004		
8.0	.137	.071	.026	.118	.062	.023	.082	.043	.016	.048	.026	.010	.015	.008	.003		
9.0	.130	.066	.023	.112	.058	.020	.078	.041	.014	.045	.024	.009	.015	.008	.003		
10.0	.124	.062	.021	.107	.054	.018	.074	.038	.013	.043	.022	.008	.014	.007	.003		

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:2017-11-17

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.350
 Humidity:65.0%
 Test Distance:7.850m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

UGR(Unified Glare Rating) Table

Test:U:121.2V I:0.3412A P:40.96W PF:0.9904 Lamp Flux:5082.87x1 lm										
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	24.4	26.1	24.7	26.4	26.6	24.3	26.1	24.6	26.3	26.5
3H	26.4	28.1	26.8	28.3	28.6	26.4	28.0	26.7	28.2	28.5
4H	27.2	28.8	27.5	29.0	29.3	27.2	28.8	27.6	29.1	29.3
6H	28.0	29.5	28.3	29.7	30.0	28.0	29.5	28.4	29.8	30.1
8H	28.3	29.8	28.7	30.0	30.4	28.3	29.7	28.7	30.0	30.3
12H	28.6	30.0	28.9	30.3	30.6	28.6	30.0	29.0	30.3	30.6
4H 2H	25.5	27.1	25.9	27.4	27.6	25.5	27.1	25.8	27.3	27.6
3H	27.7	29.0	28.0	29.3	29.7	27.6	29.0	28.0	29.3	29.6
4H	28.5	29.8	28.9	30.1	30.5	28.6	29.9	29.0	30.2	30.5
6H	29.4	30.5	29.8	30.9	31.3	29.5	30.6	29.9	30.9	31.3
8H	29.8	30.9	30.2	31.2	31.6	29.8	30.9	30.3	31.3	31.7
12H	30.1	31.1	30.6	31.5	31.9	30.2	31.2	30.6	31.6	32.0
8H 4H	28.9	30.0	29.3	30.4	30.7	29.0	30.1	29.4	30.4	30.8
6H	30.0	30.9	30.5	31.3	31.8	30.1	31.0	30.5	31.4	31.8
8H	30.6	31.4	31.0	31.8	32.2	30.6	31.4	31.1	31.8	32.3
12H	31.1	31.7	31.5	32.2	32.7	31.1	31.8	31.6	32.2	32.7
12H 4H	29.0	30.0	29.4	30.3	30.8	29.1	30.0	29.5	30.4	30.8
6H	30.2	30.9	30.6	31.4	31.8	30.2	31.0	30.7	31.4	31.9
8H	30.8	31.5	31.3	31.9	32.4	30.8	31.5	31.3	31.9	32.4
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.1					+ 0.1 / - 0.1				
1.5H	+ 0.3 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.4 / - 0.6					+ 0.4 / - 0.6				

CIE Pub.117 Corrected 5083 lm Total Lamp Luminous Flux.(8log(F/F0) = 5.6)

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2017-11-17

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.350
Humidity:65.0%
Test Distance:7.850m [K=1.0000]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

UTILIZATION FACTORS TABLE

Test:U:121.2V I:0.3412A P:40.96W PF:0.9904 Lamp Flux:5082.87x1 lm		

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) $k(RI) \times RCR = 5$									
$k = 0.60$	47	34	26	46	34	26	45	33	26	18
0.80	58	44	35	56	43	35	54	43	35	26
1.00	67	53	45	65	53	44	63	55	44	35
1.25	75	62	53	73	61	53	70	60	52	43
1.50	80	68	60	79	67	59	75	65	58	49
2.00	89	78	70	87	77	69	83	75	68	59
2.50	94	84	77	91	83	76	87	80	74	64
3.00	98	89	82	95	88	81	91	84	79	70
4.00	103	96	90	100	94	88	96	90	86	76
5.00	106	100	95	103	98	93	98	94	90	80
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

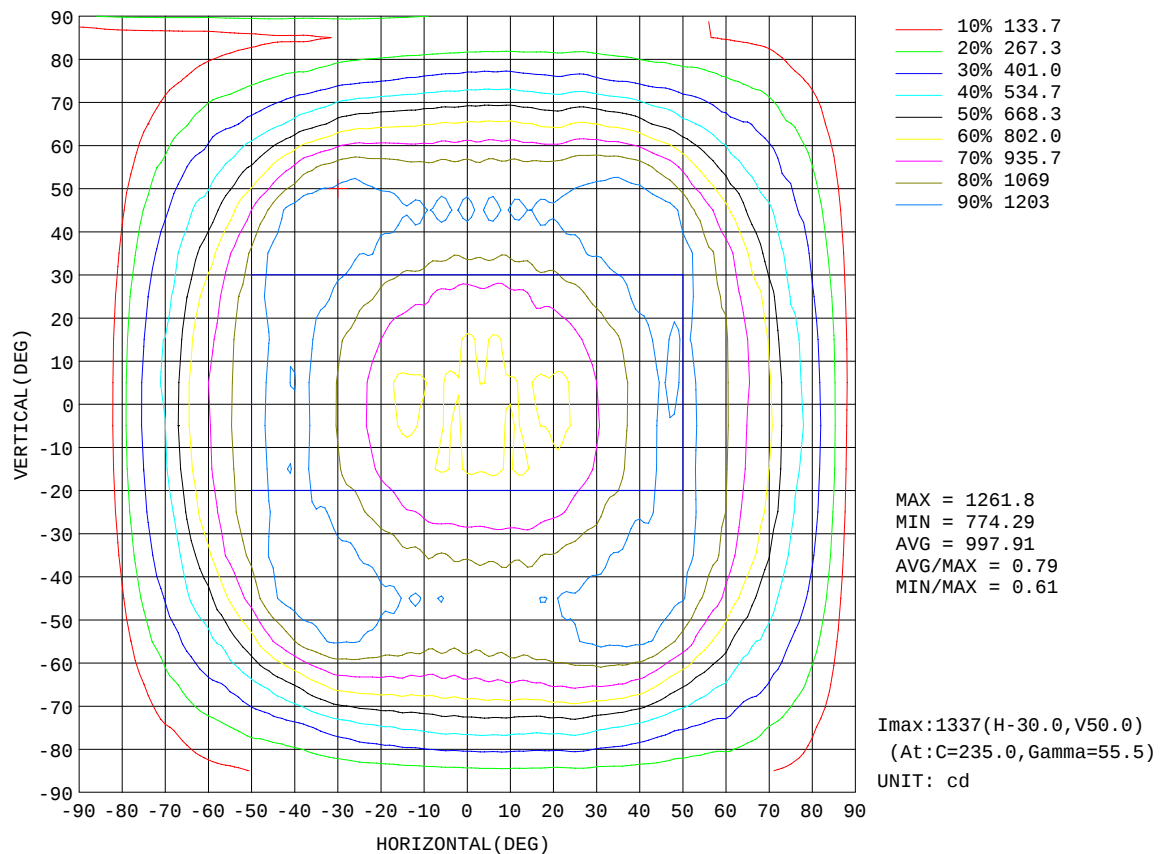
C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:2017-11-17

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.350
 Humidity:65.0%
 Test Distance:7.850m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ISOCANDELA DIAGRAM

Test:U:121.2V I:0.3412A P:40.96W PF:0.9904 Lamp Flux:5082.87x1 lm		



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2017-11-17

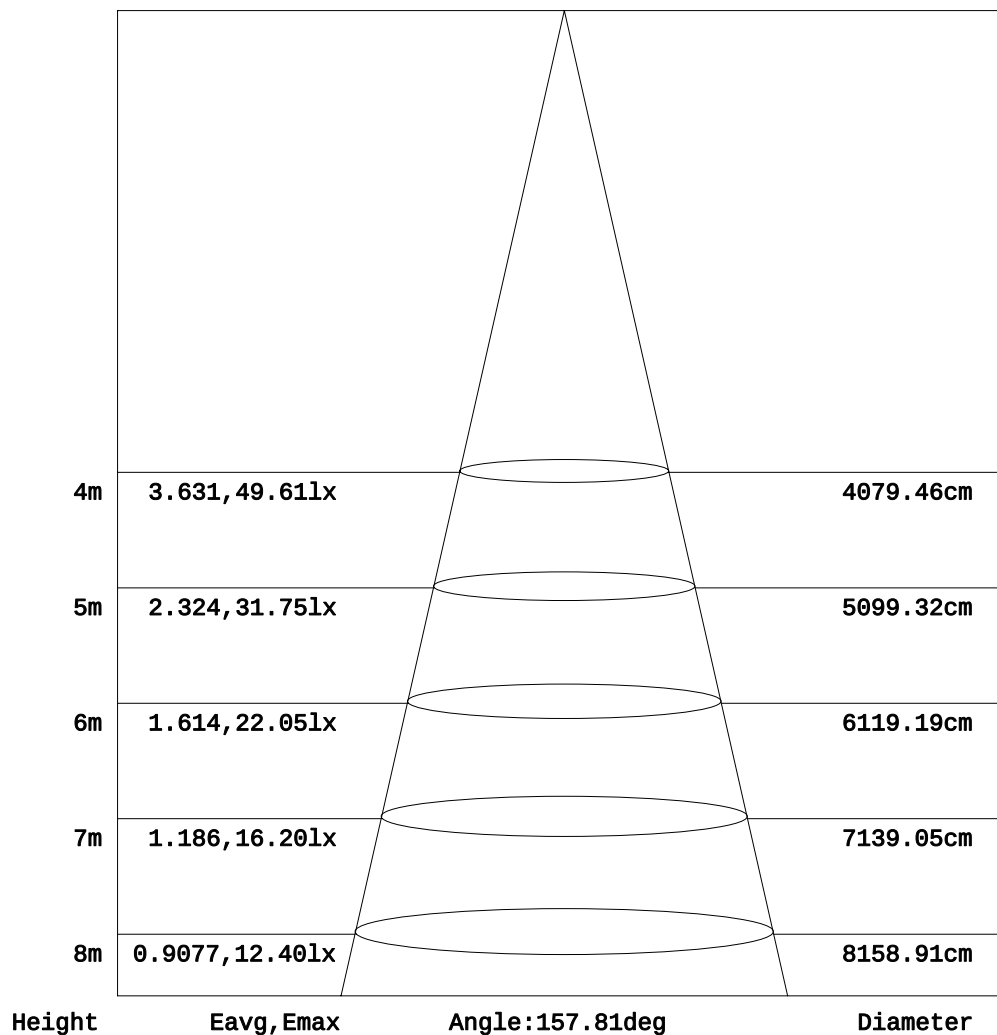
γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.350
Humidity:65.0%
Test Distance:7.850m [K=1.0000]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

AAI Figure

Test:U:121.2V I:0.3412A P:40.96W PF:0.9904 Lamp Flux:5082.87x1 lm		

Flux out:4830 lm



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

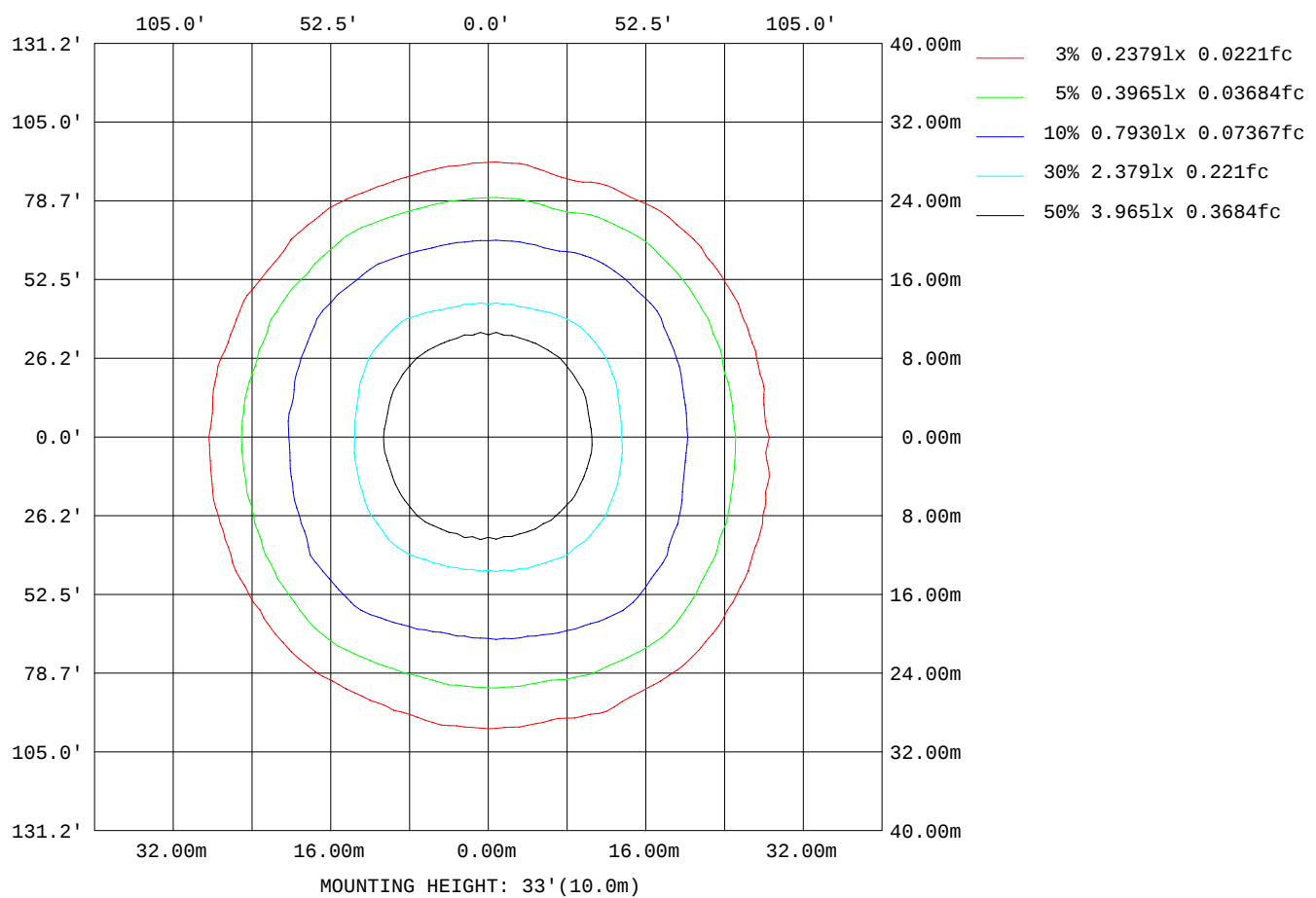
C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25DEG
 Operators:
 Test Date:2017-11-17

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.350
 Humidity:65.0%
 Test Distance:7.850m [K=1.0000]
 Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

ISOLUX DIAGRAM

Test:U:121.2V I:0.3412A P:40.96W PF:0.9904 Lamp Flux:5082.87x1 lm		



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 25DEG
Operators:
Test Date: 2017-11-17

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.0.350
Humidity: 65.0%
Test Distance: 7.850m [K=1.0000]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

LED Avg.L Report

Test:U:121.2V I:0.3412A P:40.96W PF:0.9904 Lamp Flux:5082.87x1 lm		

AvgL	cd/m2
L_0~180(65)av	20567
L_0~180(75)av	20037
L_0~180(85)av	17248
L_90~270(65)av	20360
L_90~270(75)av	20295
L_90~270(85)av	23895
L_45(65)av	24972
L_45(75)av	19420
L_45(85)av	21999

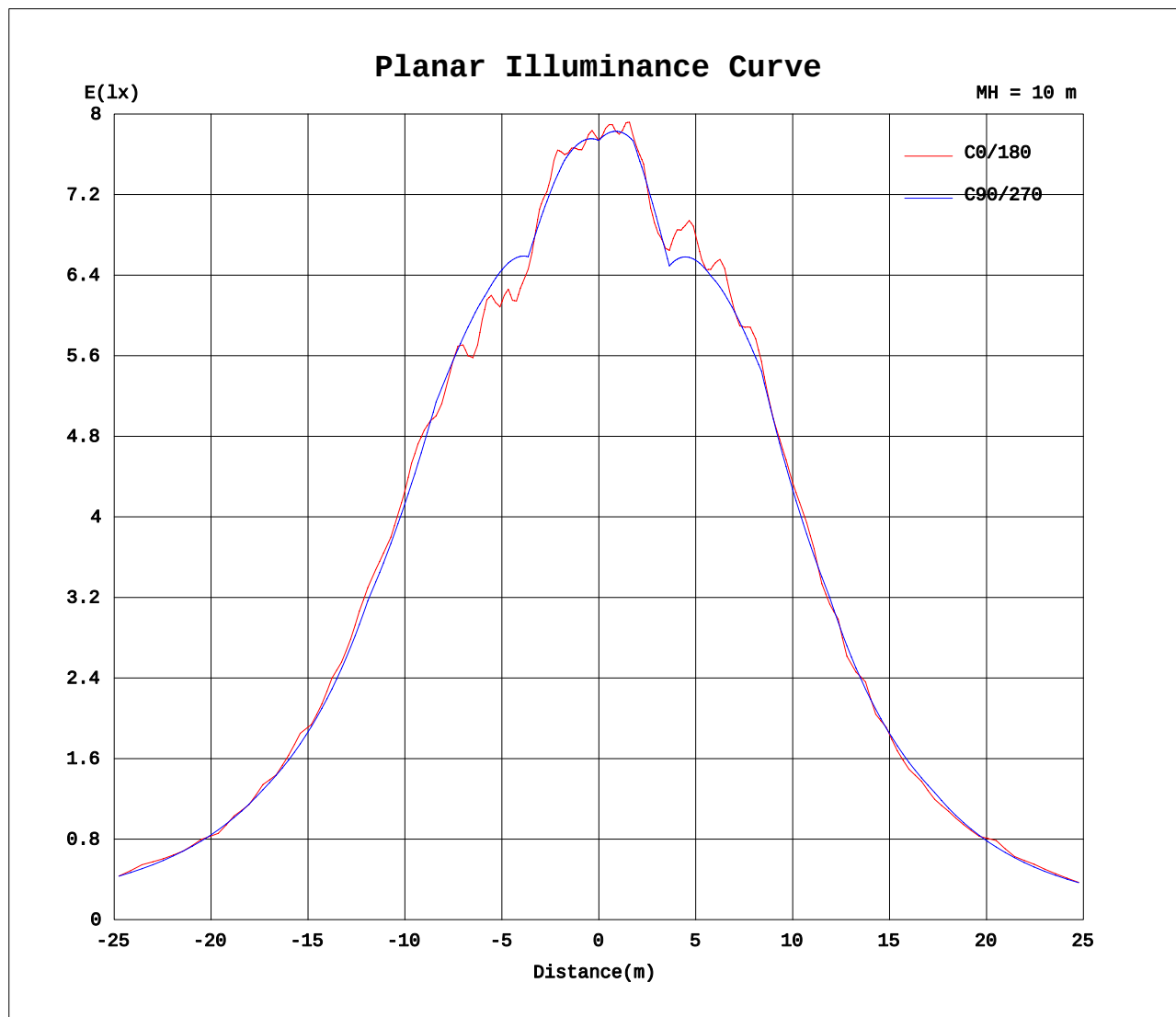
Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25DEG
Operators:
Test Date:2017-11-17

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.0.350
Humidity:65.0%
Test Distance:7.850m [K=1.0000]
Remarks:

EVERFINE GONIOPHOTOMETERS SYSTEM TEST REPORT

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 25DEG
Operators:
Test Date: 2017-11-17

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.0.350
Humidity: 65.0%
Test Distance: 7.850m [K=1.0000]
Remarks:

