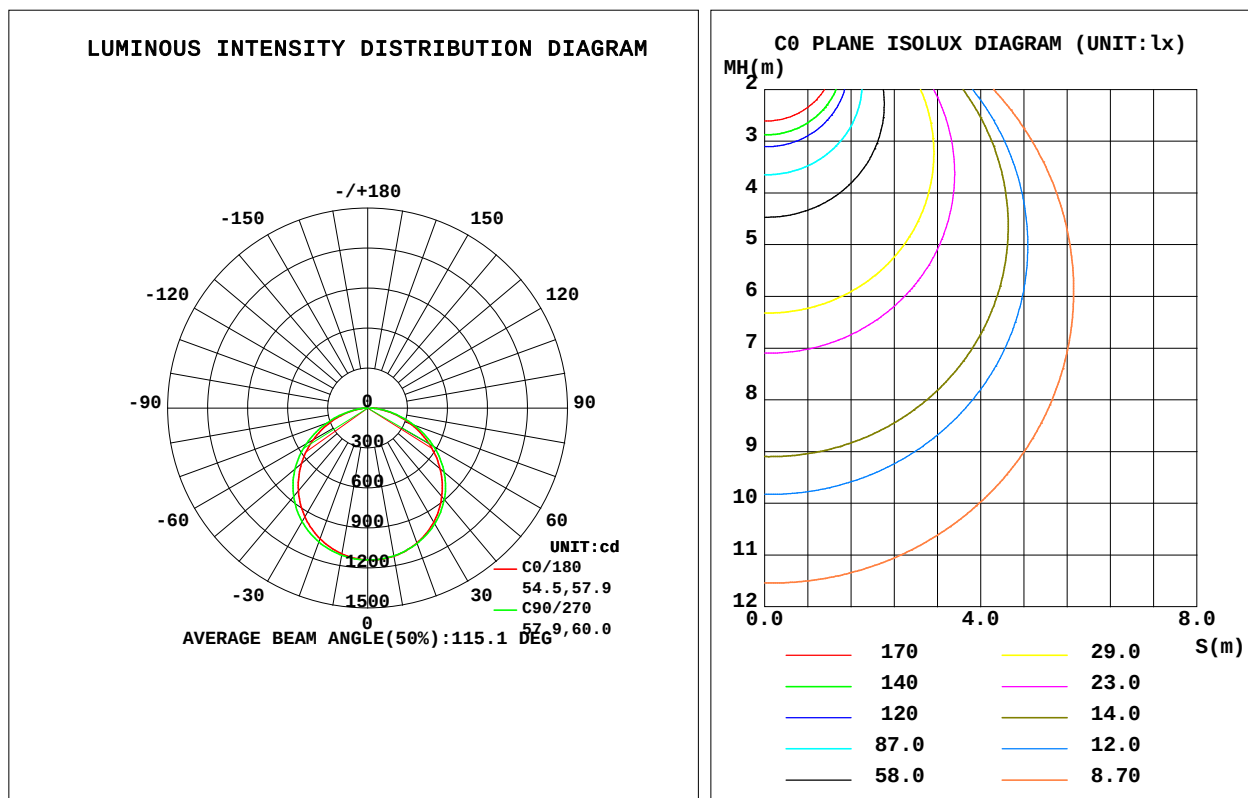


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:221.41V I:0.1739A P:37.758W PF:0.9809 Freq:49.89Hz Lamp Flux:3366.63x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:LPB3012-WHTC40-5700K	DIM.: 1195*295mm	SERIAL No.:
MFR.: EVERFINE	SUR.:1155*255mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 89.17 lm/W			
MODEL	--	I _{max} (cd)	1141	S/MH(C0/180)	1.24
NOMINAL POWER(W)	--	LOR(%)	100.0	S/MH(C90/270)	1.28
RATED VOLTAGE(V)	--	TOTAL FLUX(lm)	3366.7	η UP, DN(C0-180)	0.0,51.9
NOMINAL FLUX(lm)	3366.63	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0,48.1
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	--	η down(%)	100.0	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:1
Test Date:2023-08-30

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.00.411
Humidity:65.0%
Test Distance:6.790m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C90	C180	C270					γ	ϕ zone	ϕ total	%lum, lamp
10	1129	1127	1111	1121					0- 10	108.0	108.0	3.21, 3.21
20	1079	1082	1045	1070					10- 20	310.5	418.4	12.4, 12.4
30	990.2	1005	943.6	984.6					20- 30	474.3	892.7	26.5, 26.5
40	865.5	894.8	809.3	865.8					30- 40	577.7	1470	43.7, 43.7
50	710.3	749.9	649.4	712.8					40- 50	605.7	2076	61.7, 61.7
60	530.6	570.4	470.6	528.7					50- 60	551.8	2628	78.1, 78.1
70	338.2	365.5	283.7	323.7					60- 70	422.3	3050	90.6, 90.6
80	156.7	165.3	108.7	127.7					70- 80	244.1	3294	97.8, 97.8
90	29.23	22.88	4.241	1.168					80- 90	72.50	3367	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): 1774.8 lm

%lum = 52.7%

%lamp = 52.7%

Conical surface Flux(120deg): 2627.9 lm

%lum = 78.1%

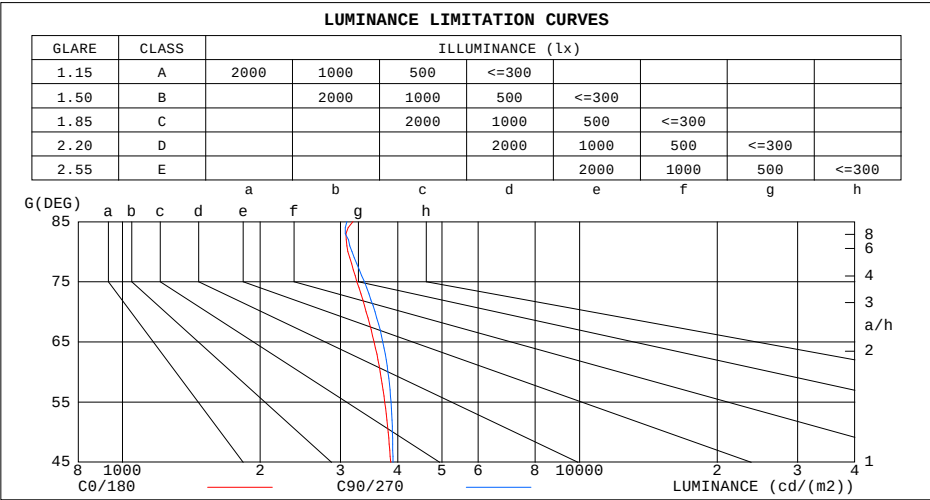
%lamp = 78.1%

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: 1
 Test Date: 2023-08-30

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE G0-2000B_V1 SYSTEM V2.00.411
 Humidity: 65.0%
 Test Distance: 6.790m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:221.41V I:0.1739A P:37.758W PF:0.9809 Freq:49.89Hz Lamp Flux:3366.63x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:LPB3012-WHTC40-5700K	DIM.: 1195*295m	SERIAL No.:
MFR.: EVERFINE	SUR.:1155*255m	Shielding Angle:



LUMINANCE cd/(m2)		
G(180)	G(270)	LUMINANCE (cd/(m2))
85	3195	3096
80	3115	3180
75	3258	3382
70	3413	3569
65	3553	3713
60	3662	3810
55	3747	3867
50	3813	3896
45	3862	3907

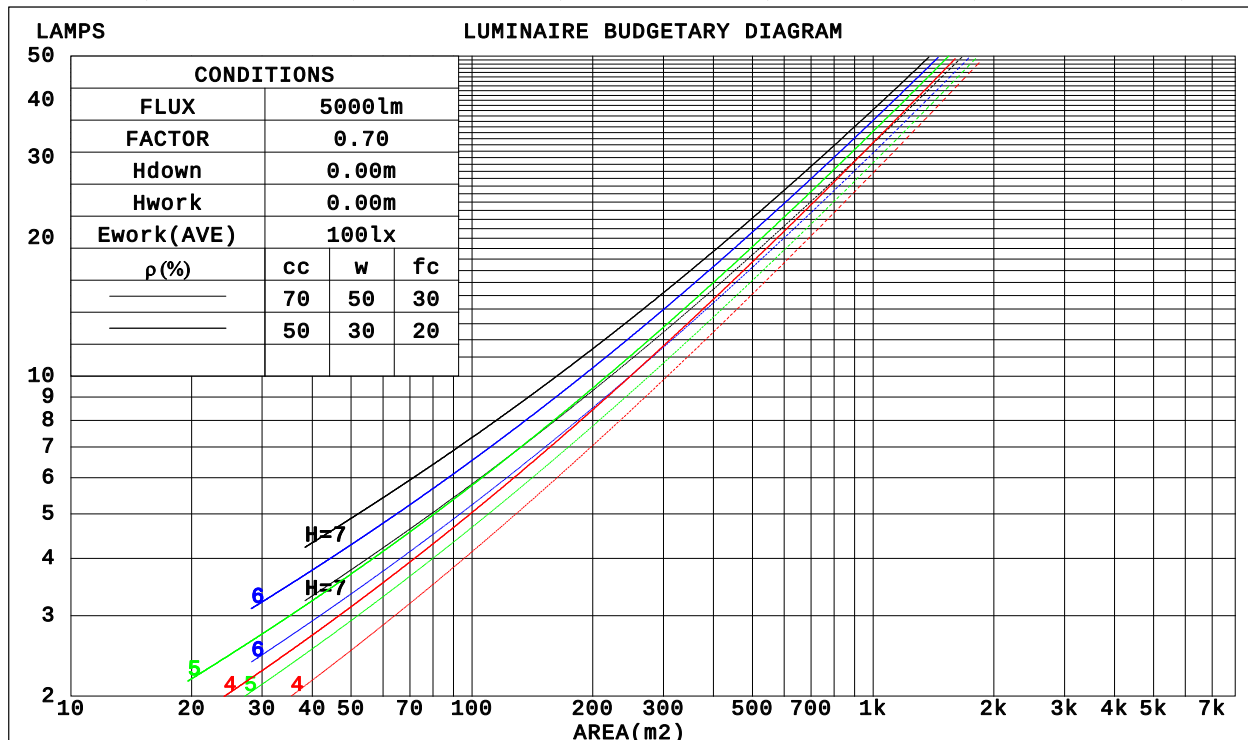
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:1
Test Date:2023-08-30

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.00.411
Humidity:65.0%
Test Distance:6.790m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:221.41V I:0.1739A P:37.758W PF:0.9809 Freq:49.89Hz Lamp Flux:3366.63x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:LPB3012-WHTC40-5700K	DIM.: 1195*295mm	SERIAL No.:
MFR.: EVERFINE	SUR.:1155*255mm	Shielding Angle:

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	1.04	.99	.95	1.01	.97	.94	.97	.94	.91	.93	.90	.88	.90	.87	.85	.83
2.0	.90	.83	.77	.88	.82	.76	.85	.79	.75	.81	.77	.73	.78	.75	.71	.69
3.0	.79	.71	.64	.77	.70	.63	.74	.68	.62	.72	.66	.61	.69	.64	.60	.58
4.0	.70	.61	.54	.68	.60	.54	.66	.59	.53	.64	.57	.52	.61	.56	.51	.49
5.0	.62	.53	.46	.61	.53	.46	.59	.51	.46	.57	.50	.45	.55	.49	.45	.42
6.0	.56	.47	.40	.55	.46	.40	.53	.46	.40	.51	.45	.39	.50	.44	.39	.37
7.0	.51	.42	.36	.50	.41	.35	.48	.41	.35	.47	.40	.35	.45	.39	.35	.33
8.0	.46	.38	.32	.46	.37	.32	.44	.37	.31	.43	.36	.31	.42	.36	.31	.29
9.0	.42	.34	.28	.42	.34	.28	.41	.33	.28	.40	.33	.28	.39	.32	.28	.26
10.0	.39	.31	.26	.39	.31	.26	.38	.30	.26	.37	.30	.25	.36	.30	.25	.24



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: 1
 Test Date: 2023-08-30

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.411
 Humidity: 65.0%
 Test Distance: 6.790m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:221.41V I:0.1739A P:37.758W PF:0.9809 Freq:49.89Hz Lamp Flux:3366.63x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:LPB3012-WHTC40-5700K	DIM.: 1195*295mm	SERIAL No.:
MFR.: EVERFINE	SUR.:1155*255mm	Shielding Angle:

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	.315	.179	.057	.308	.176	.056	.295	.169	.054	.282	.163	.052	.271	.157	.051		
2.0	.295	.162	.050	.289	.159	.049	.277	.154	.048	.267	.150	.047	.257	.145	.046		
3.0	.273	.145	.043	.267	.143	.043	.257	.139	.042	.247	.136	.042	.238	.132	.041		
4.0	.252	.131	.038	.247	.129	.038	.237	.126	.038	.229	.123	.037	.221	.120	.037		
5.0	.232	.118	.034	.228	.117	.034	.220	.114	.034	.212	.112	.033	.205	.110	.033		
6.0	.215	.108	.031	.211	.107	.031	.204	.105	.030	.197	.103	.030	.191	.101	.030		
7.0	.200	.099	.028	.197	.098	.028	.190	.096	.028	.184	.094	.027	.178	.093	.027		
8.0	.187	.091	.026	.184	.090	.026	.178	.089	.025	.173	.087	.025	.167	.086	.025		
9.0	.175	.085	.024	.172	.084	.024	.167	.083	.023	.162	.081	.023	.158	.080	.023		
10.0	.165	.079	.022	.162	.078	.022	.157	.077	.022	.153	.076	.022	.149	.075	.021		

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	.181	.156	.134	.155	.134	.115	.106	.092	.080	.061	.053	.046	.019	.017	.015	
2.0	.173	.132	.098	.148	.114	.084	.101	.079	.059	.058	.046	.034	.019	.015	.011	
3.0	.165	.114	.074	.141	.099	.064	.097	.069	.045	.056	.040	.026	.018	.013	.009	
4.0	.157	.101	.058	.135	.087	.050	.093	.061	.035	.054	.036	.021	.017	.012	.007	
5.0	.150	.091	.047	.129	.078	.041	.089	.055	.029	.051	.032	.017	.017	.010	.006	
6.0	.143	.082	.039	.123	.071	.034	.085	.050	.024	.049	.029	.014	.016	.010	.005	
7.0	.136	.075	.033	.117	.065	.029	.081	.046	.020	.047	.027	.012	.015	.009	.004	
8.0	.129	.070	.029	.111	.060	.025	.077	.042	.018	.045	.025	.011	.015	.008	.003	
9.0	.123	.065	.025	.106	.056	.022	.074	.039	.016	.043	.023	.009	.014	.008	.003	
10.0	.118	.060	.022	.101	.052	.019	.070	.037	.014	.041	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:1
 Test Date:2023-08-30

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.411
 Humidity:65.0%
 Test Distance:6.790m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:221.41V I:0.1739A P:37.758W PF:0.9809 Freq:49.89Hz Lamp Flux:3366.63x1 lm											
NAME:					TYPE:			WEIGHT:			
SPEC.:LPB3012-WHTC40-5700K					DIM.: 1195*295m			SERIAL No.:			
MFR.: EVERFINE					SUR.:1155*255m			Shielding Angle:			
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	13.4	15.0	13.7	15.2	15.4	13.5	15.1	13.8	15.3	15.5	
	3H	15.0	16.4	15.3	16.7	16.9	15.2	16.6	15.5	16.8	17.1
	4H	15.7	17.0	16.0	17.3	17.5	15.8	17.2	16.1	17.4	17.7
	6H	16.2	17.4	16.5	17.7	18.0	16.3	17.6	16.7	17.9	18.2
	8H	16.4	17.6	16.7	17.9	18.2	16.5	17.8	16.9	18.0	18.3
	12H	16.5	17.7	16.8	18.0	18.3	16.6	17.8	17.0	18.1	18.4
4H	2H	14.1	15.4	14.4	15.7	15.9	14.2	15.5	14.5	15.8	16.0
	3H	15.8	17.0	16.2	17.3	17.6	16.0	17.2	16.3	17.5	17.8
	4H	16.6	17.7	17.0	18.0	18.4	16.8	17.9	17.1	18.2	18.5
	6H	17.3	18.2	17.7	18.6	19.0	17.4	18.4	17.8	18.7	19.1
	8H	17.5	18.4	17.9	18.8	19.2	17.7	18.6	18.1	18.9	19.3
	12H	17.7	18.6	18.2	18.9	19.3	17.8	18.7	18.3	19.1	19.5
8H	4H	16.9	17.8	17.3	18.2	18.6	17.1	18.0	17.5	18.3	18.7
	6H	17.7	18.5	18.2	18.9	19.3	17.9	18.6	18.3	19.0	19.5
	8H	18.1	18.8	18.6	19.2	19.6	18.2	18.9	18.7	19.3	19.8
	12H	18.4	19.0	18.9	19.4	19.9	18.5	19.1	19.0	19.5	20.0
12H	4H	17.0	17.8	17.4	18.2	18.6	17.1	17.9	17.5	18.3	18.7
	6H	17.8	18.5	18.3	18.9	19.4	17.9	18.6	18.4	19.0	19.5
	8H	18.2	18.8	18.7	19.2	19.7	18.3	18.9	18.8	19.4	19.8
Variations with the observer position at spacings:											
S = 1.0H	+ 0.1 / - 0.2					+ 0.1 / - 0.2					
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3					
2.0H	+ 0.1 / - 0.3					+ 0.1 / - 0.3					

CIE Pub.117, 3367 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 4.2)
Area: 0.294525 m2

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:1
Test Date:2023-08-30

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.411
Humidity:65.0%
Test Distance:6.790m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:221.41V I:0.1739A P:37.758W PF:0.9809 Freq:49.89Hz Lamp Flux:3366.63x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:LPB3012-WHTC40-5700K	DIM.: 1195*295m	SERIAL No.:
MFR.: EVERFINE	SUR.:1155*255m	Shielding Angle:

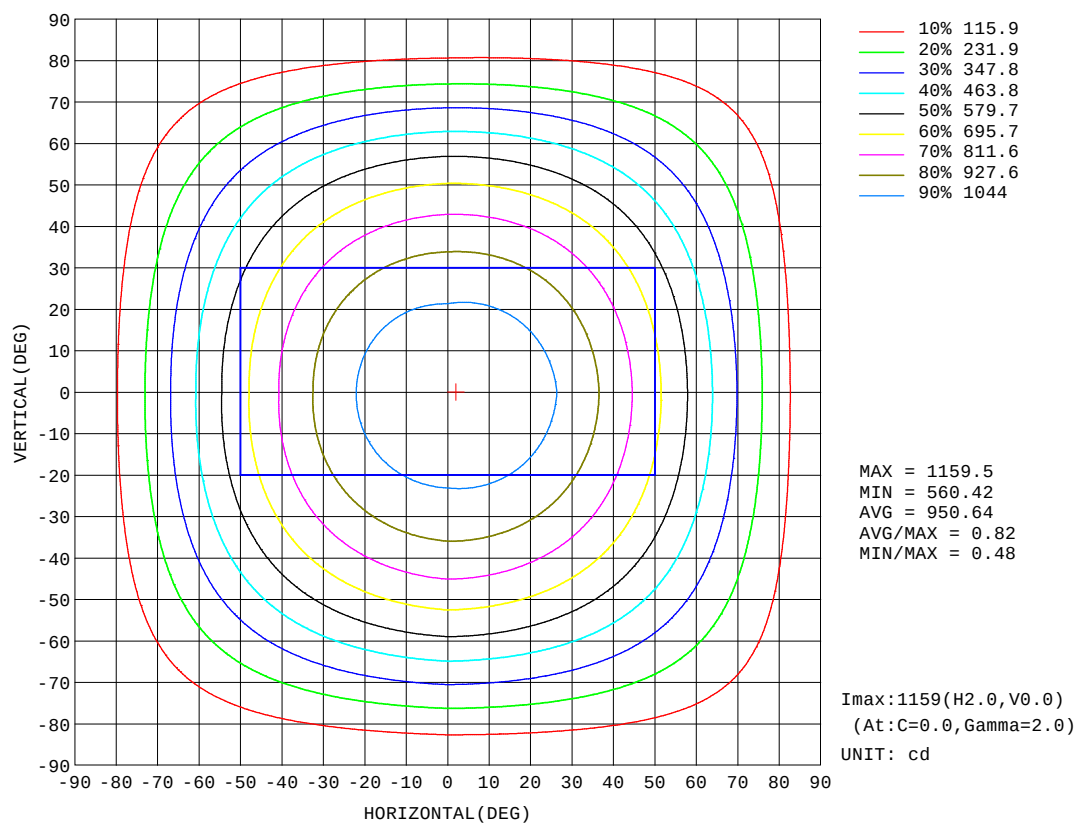
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	57	45	38	56	45	38	55	45	38	31
0.80	67	55	48	66	55	48	64	54	47	40
1.00	75	64	57	74	64	57	72	65	56	49
1.25	83	72	65	81	71	64	78	70	64	56
1.50	88	78	71	86	77	70	83	75	69	61
2.00	95	86	79	93	85	79	89	82	77	69
2.50	99	91	84	96	89	84	93	87	82	73
3.00	102	95	89	100	93	88	96	90	86	78
4.00	106	100	95	104	98	94	99	95	91	82
5.00	108	104	99	106	102	98	101	98	95	86
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:1
 Test Date:2023-08-30

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE G0-2000B_V1 SYSTEM V2.00.411
 Humidity:65.0%
 Test Distance:6.790m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:221.41V I:0.1739A P:37.758W PF:0.9809 Freq:49.89Hz Lamp Flux:3366.63x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:LPB3012-WHTC40-5700K	DIM.: 1195*295mm	SERIAL No.:
MFR.: EVERFINE	SUR.:1155*255mm	Shielding Angle:



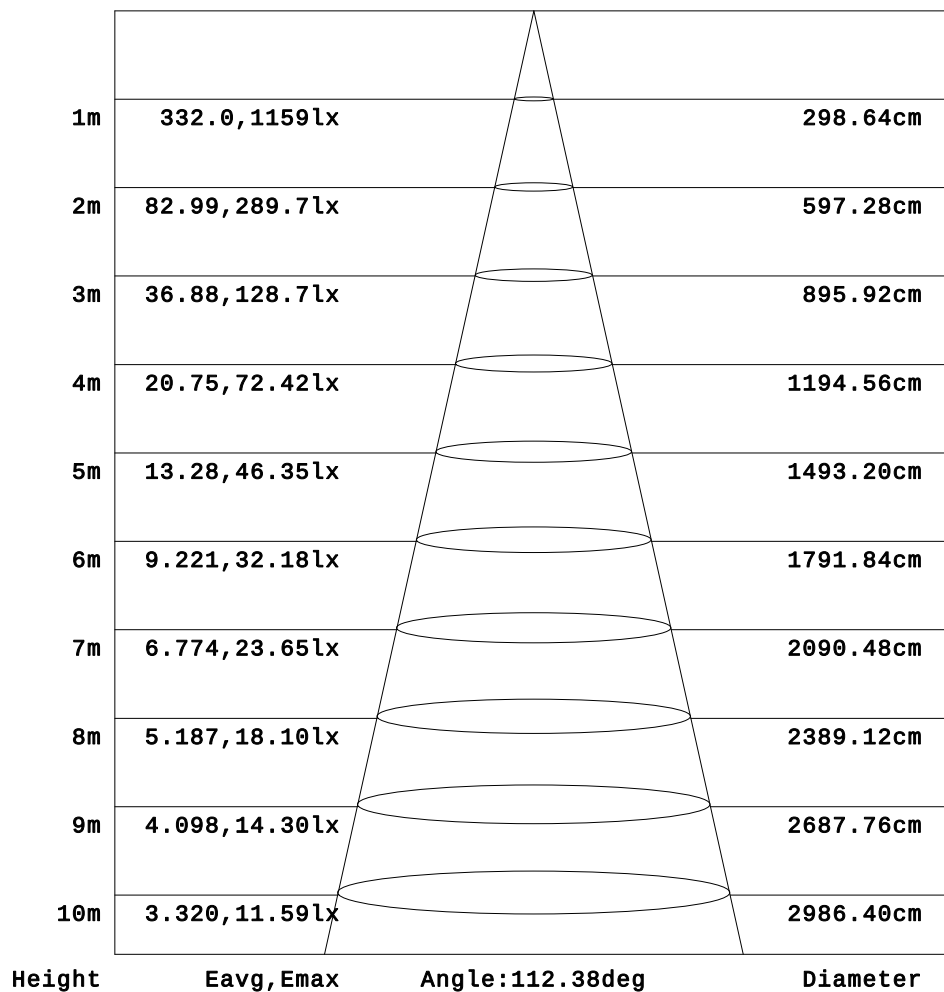
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:1
Test Date:2023-08-30

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.00.411
Humidity:65.0%
Test Distance:6.790m [K=1.0000]
Remarks:

AAI Figure

Test:U:221.41V I:0.1739A P:37.758W PF:0.9809 Freq:49.89Hz Lamp Flux:3366.63x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:LPB3012-WHTC40-5700K	DIM.: 1195*295mm	SERIAL No.:
MFR.: EVERFINE	SUR.:1155*255mm	Shielding Angle:

Flux out:2473 lm



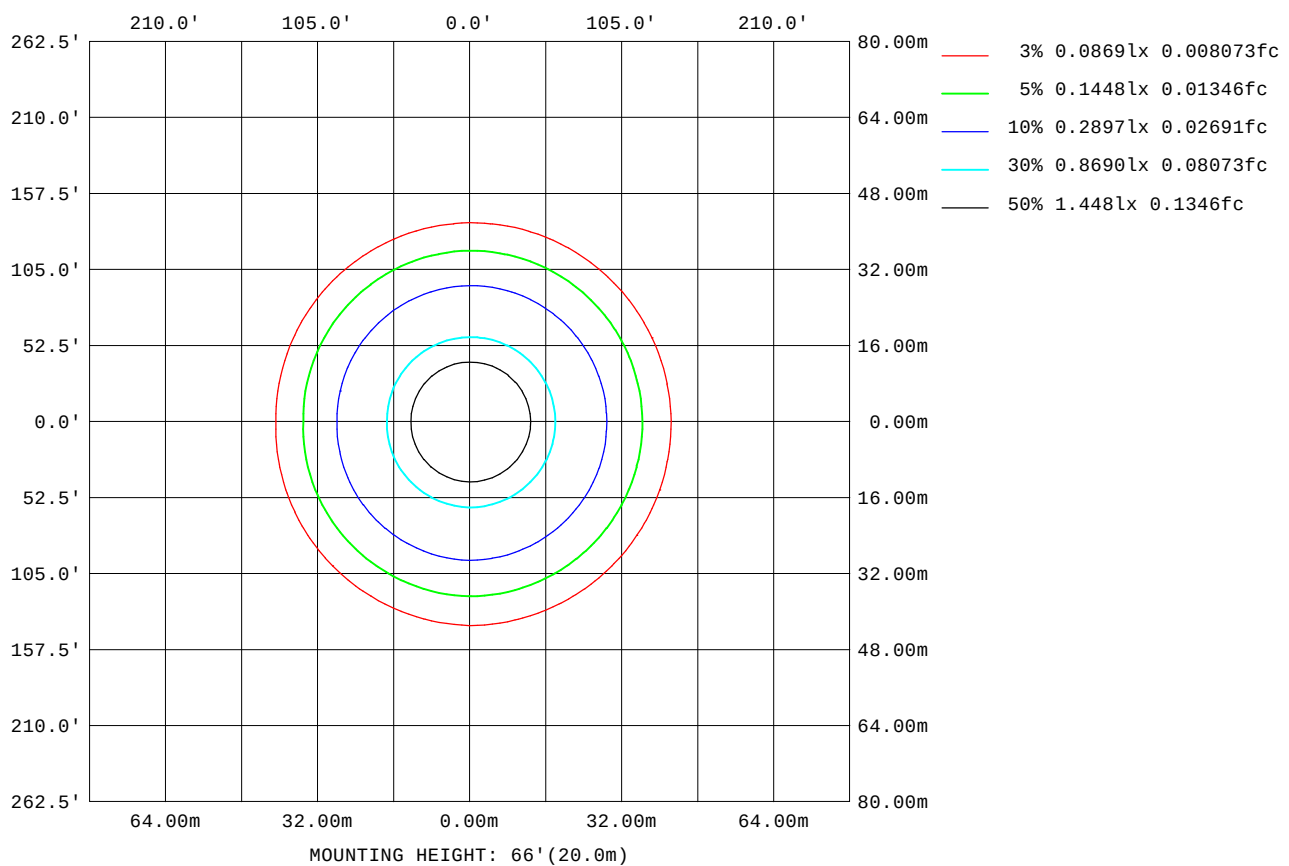
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:1
 Test Date:2023-08-30

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.411
 Humidity:65.0%
 Test Distance:6.790m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:221.41V I:0.1739A P:37.758W PF:0.9809 Freq:49.89Hz Lamp Flux:3366.63x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:LPB3012-WHTC40-5700K	DIM.: 1195*295mm	SERIAL No.:
MFR.: EVERFINE	SUR.:1155*255mm	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:1
Test Date:2023-08-30

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.00.411
Humidity:65.0%
Test Distance:6.790m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:221.41V I:0.1739A P:37.758W PF:0.9809 Freq:49.89Hz Lamp Flux:3366.63x1 lm		
NAME:	TYPE:	WEIGHT:
SPEC.:LPB3012-WHTC40-5700K	DIM.: 1195*295mm	SERIAL No.:
MFR.: EVERFINE	SUR.:1155*255mm	Shielding Angle:

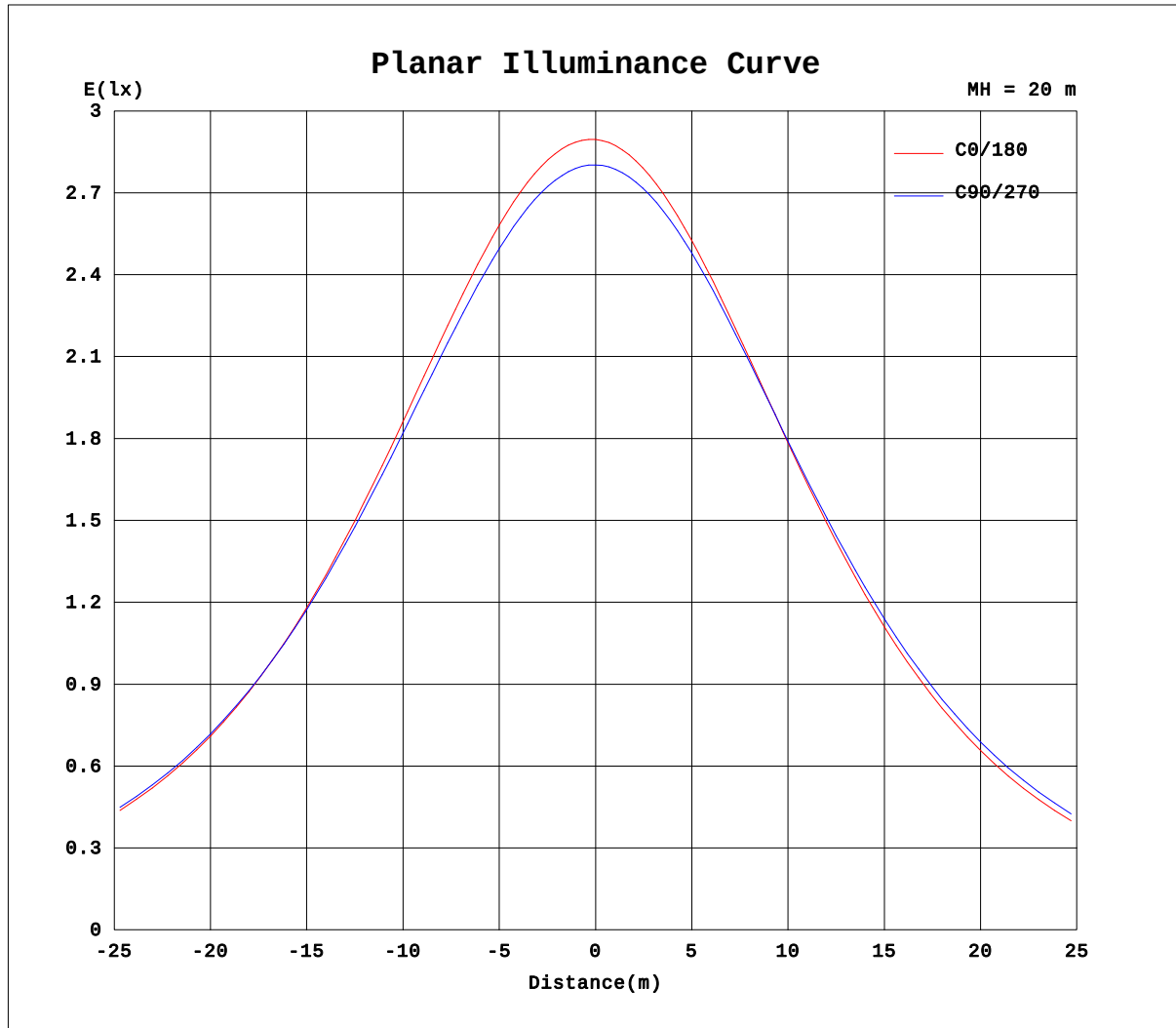
AvgL	cd/m2
L_0~180(65)av	3262
L_0~180(75)av	2872
L_0~180(85)av	2341
L_90~270(65)av	3605
L_90~270(75)av	3176
L_90~270(85)av	2473
L_45(65)av	3459
L_45(75)av	3039
L_45(85)av	2374

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:1
Test Date:2023-08-30

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE G0-2000B_V1 SYSTEM V2.00.411
Humidity:65.0%
Test Distance:6.790m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: 1
Test Date: 2023-08-30

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.00.411
Humidity: 65.0%
Test Distance: 6.790m [K=1.0000]
Remarks:

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.411
Humidity:65.0%
Test Distance:6.790m [K=1.0000]
Remarks:

```

Photometric Data Table [cd]

G/C	0.0	90.0	180.0	270.0
0.0	1140	1140	1140	1140
3.0	1141	1139	1135	1138
6.0	1138	1136	1127	1133
9.0	1132	1129	1116	1125
12.0	1122	1120	1101	1114
15.0	1109	1108	1083	1100
18.0	1092	1093	1061	1083
21.0	1071	1075	1036	1063
24.0	1048	1055	1008	1040
27.0	1020	1031	977.3	1014
30.0	990.2	1005	943.6	984.6
33.0	956.3	975.3	906.4	952.5
36.0	919.2	942.8	866.5	917.5
39.0	879.5	907.3	823.9	878.8
42.0	836.8	869.0	779.3	837.1
45.0	791.4	827.2	732.3	793.2
48.0	743.5	781.7	683.2	745.9
51.0	693.3	733.4	632.5	695.7
54.0	640.9	681.9	579.7	642.6
57.0	586.4	627.7	525.5	586.7
60.0	530.6	570.4	470.6	528.7
63.0	473.9	510.6	414.3	468.6
66.0	415.5	449.3	358.1	406.9
69.0	357.7	386.2	302.3	344.4
72.0	300.6	323.6	246.8	282.9
75.0	244.4	262.1	193.5	222.0
78.0	191.0	202.8	142.5	164.1
81.0	140.4	147.3	93.32	110.5
84.0	94.49	96.18	51.67	61.56
87.0	54.79	52.91	20.53	18.97
90.0	29.23	22.88	4.241	1.168

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: 1
Test Date: 2023-08-30

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE G0-2000B_V1 SYSTEM V2.00.411
Humidity: 65.0%
Test Distance: 6.790m [K=1.0000]
Remarks: