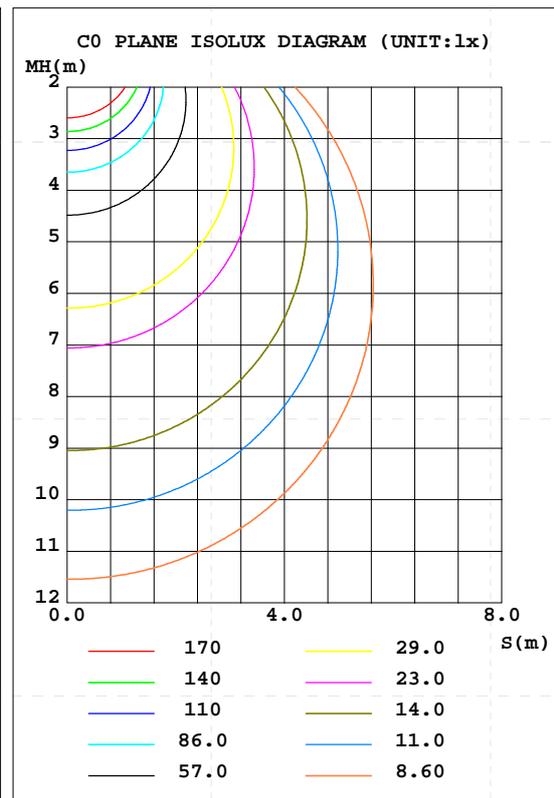
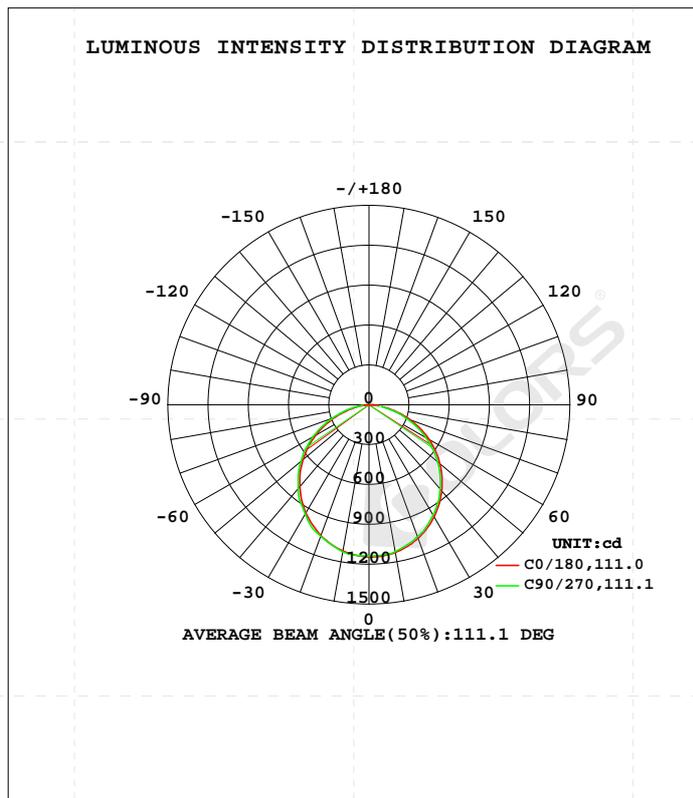


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:220.0V I:0.1540A P:33.80W PF:0.9000 Freq:0Hz Lamp Flux:3184.37x1 lm		
NAME: LLS-LE40DFWS1200(T)-T34WW8N-DC WW	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: COLORS	SUR.:1192*38mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 94.21 lm/W
MODEL		I <sub>max</sub> (cd)	1146	S/MH(C0/180)		1.26
NOMINAL POWER(W)	33.8	LOR(%)	100.0	S/MH(C90/270)		1.24
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	3184.4	h UP, DN(C0-180)		0.0,50.5
NOMINAL FLUX(lm)	3184.37	CIE CLASS	DIRECT	h UP, DN(C180-360)		0.0,49.5
LAMPS INSIDE	1	h up(%)	0.0	CIBSE SHR NOM		1.25
TEST VOLTAGE(V)	220	h down(%)	100.0	CIBSE SHR MAX		1.35



C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:JYH  
 Test Date:2023-05-18

Page Range: 0 - 180DEG  
 Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
 Humidity:65.0%  
 Test Distance:10.950m [K=1.0000]  
 Remarks:

ZONAL FLUX DIAGRAM

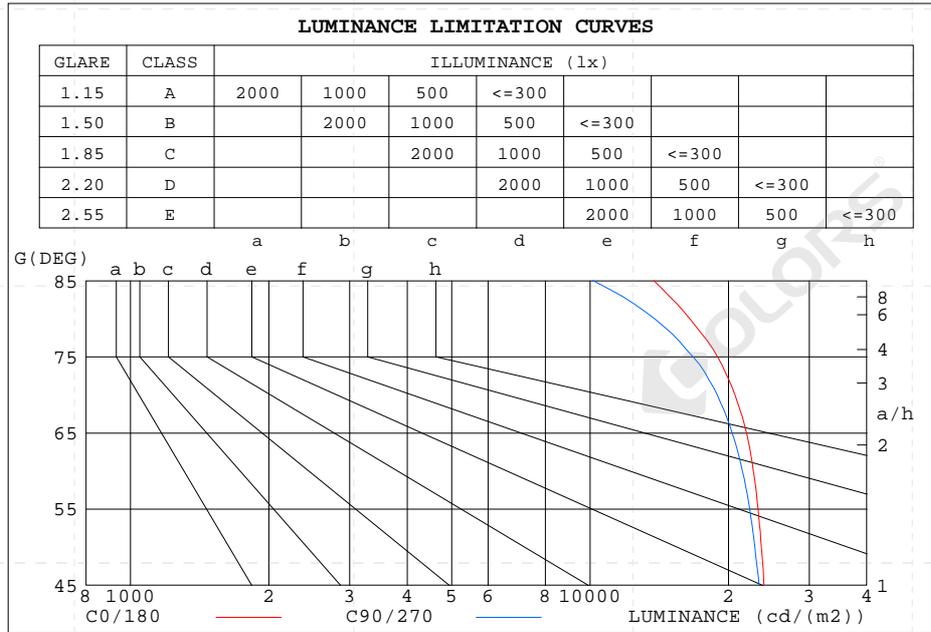
ZONAL FLUX DIAGRAM:

g	C0	C45	C90	C135	C180	C225	C270	C315	g	F zone	F total	%lum,lamp
10	1129	1133	1122	1112	1117	1118	1125	1132	0- 10	108.1	108.1	3.39,3.39
20	1070	1074	1057	1037	1047	1037	1053	1074	10- 20	308.9	417.0	13.1,13.1
30	972.9	982.6	957.9	929.7	941.0	936.7	951.9	979.9	20- 30	465.8	882.8	27.7,27.7
40	845.1	855.7	826.8	791.9	804.7	792.6	821.9	856.2	30- 40	559.5	1442	45.3,45.3
50	691.5	703.3	669.2	629.0	643.8	630.1	662.6	705.0	40- 50	577.4	2020	63.4,63.4
60	516.8	529.0	489.4	446.5	461.6	448.1	486.2	531.0	50- 60	518.2	2538	79.7,79.7
70	322.2	335.1	294.9	249.0	260.8	255.1	287.9	341.3	60- 70	387.2	2925	91.9,91.9
80	130.6	144.4	109.6	72.54	82.07	77.84	107.7	150.7	70- 80	209.2	3134	98.4,98.4
90	0	0	0	0	0	0	0	0	80- 90	50.12	3184	100,100
100	0	0	0	0	0	0	0	0	90-100	0	3184	100,100
110	0	0	0	0	0	0	0	0	100-110	0	3184	100,100
120	0	0	0	0	0	0	0	0	110-120	0	3184	100,100
130	0	0	0	0	0	0	0	0	120-130	0	3184	100,100
140	0	0	0	0	0	0	0	0	130-140	0	3184	100,100
150	0	0	0	0	0	0	0	0	140-150	0	3184	100,100
160	0	0	0	0	0	0	0	0	150-160	0	3184	100,100
170	0	0	0	0	0	0	0	0	160-170	0	3184	100,100
180	0	0	0	0	0	0	0	0	170-180	0	3184	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:JYH  
 Test Date:2023-05-18

g Range: 0 - 180DEG  
 Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
 Humidity:65.0%  
 Test Distance:10.950m [K=1.0000]  
 Remarks:

**LUMINANCE LIMITATION CURVES**



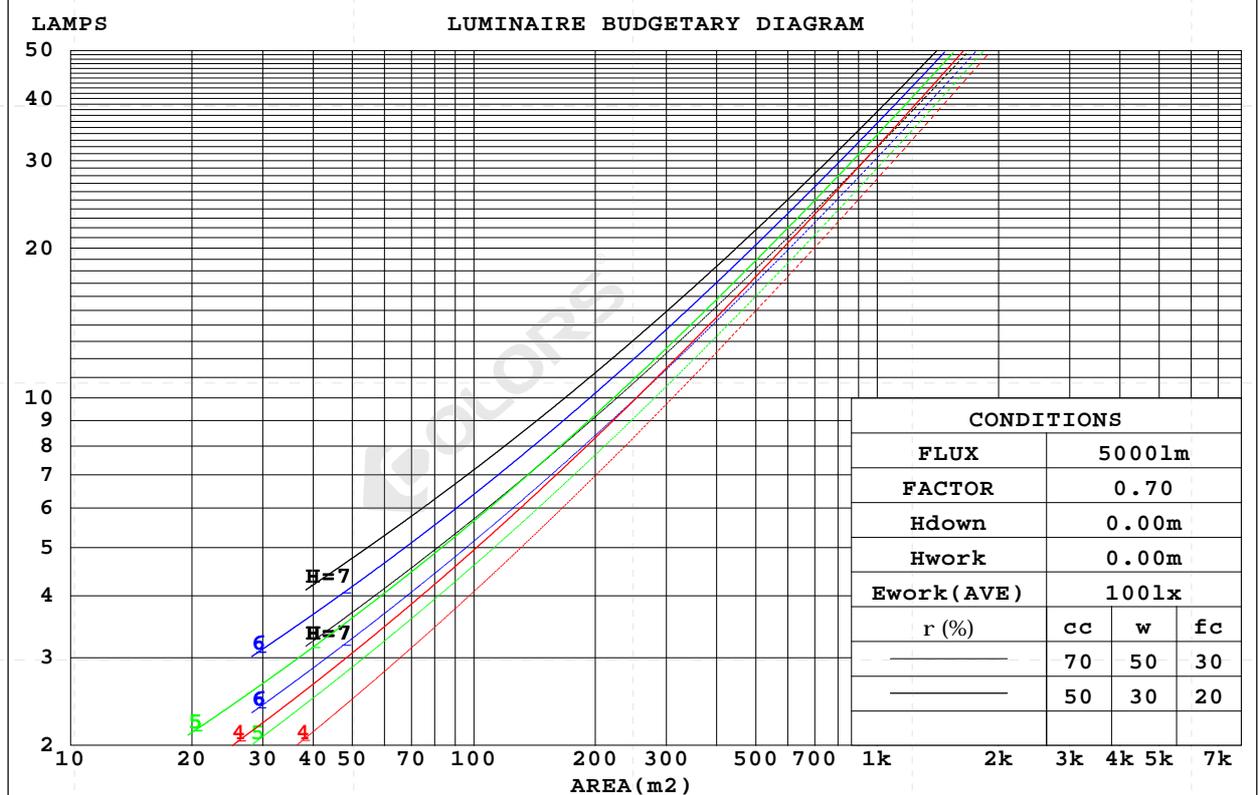
LUMINANCE cd/(m2)		
G( DEG)	C0/180	C90/270
85	13775	10149
80	16496	13838
75	18930	16767
70	20660	18906
65	21902	20385
60	22668	21464
55	23205	22253
50	23592	22832
45	23914	23309

**C Range: 0 - 360DEG**  
**C Interval: 45.0DEG**  
**Test Speed: HIGH**  
**Temperature: 25.3DEG**  
**Operators: JYH**  
**Test Date: 2023-05-18**

**G Range: 0 - 180DEG**  
**G Interval: 1.0DEG**  
**Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.362**  
**Humidity: 65.0%**  
**Test Distance: 10.950m [K=1.0000]**  
**Remarks:**

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

rcc	80%			70%			50%			30%			10%			0
r <sub>w</sub>	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
r <sub>fc</sub>	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	.00	.96	1.02	.98	.95	.98	.94	.92	.94	.91	.89	.90	.88	.86	.84
2.0	.91	.84	.78	.89	.83	.77	.85	.80	.76	.82	.78	.74	.79	.75	.72	.70
3.0	.80	.72	.65	.78	.71	.65	.75	.69	.63	.72	.67	.62	.70	.65	.61	.59
4.0	.71	.62	.55	.69	.61	.55	.67	.60	.54	.65	.58	.53	.62	.57	.53	.50
5.0	.63	.54	.48	.62	.54	.47	.60	.52	.47	.58	.51	.46	.56	.50	.46	.44
6.0	.57	.48	.41	.56	.47	.41	.54	.47	.41	.52	.46	.41	.51	.45	.40	.38
7.0	.52	.43	.37	.51	.42	.36	.49	.42	.36	.48	.41	.36	.46	.40	.36	.34
8.0	.47	.39	.33	.46	.38	.33	.45	.38	.32	.44	.37	.32	.43	.37	.32	.30
9.0	.43	.35	.29	.43	.35	.29	.41	.34	.29	.40	.34	.29	.39	.33	.29	.27
10.0	.40	.32	.27	.39	.32	.27	.38	.31	.26	.37	.31	.26	.36	.31	.26	.24



C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:JYH  
 Test Date:2023-05-18

Range: 0 - 180DEG  
 Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
 Humidity:65.0%  
 Test Distance:10.950m [K=1.0000]  
 Remarks:

WEC AND CCEC

rcc	80%			70%			50%			30%			10%			0
rw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
rfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.304	.173	.055	.297	.169	.054	.284	.163	.052	.271	.157	.050	.260	.151	.049	
2.0	.288	.158	.048	.282	.155	.048	.270	.150	.047	.259	.145	.045	.249	.141	.044	
3.0	.267	.142	.043	.262	.140	.042	.251	.136	.041	.242	.132	.041	.233	.129	.040	
4.0	.247	.128	.038	.242	.127	.037	.233	.124	.037	.225	.121	.036	.217	.118	.036	
5.0	.229	.117	.034	.224	.115	.034	.216	.113	.033	.209	.110	.033	.202	.108	.032	
6.0	.212	.106	.030	.209	.105	.030	.201	.103	.030	.195	.101	.030	.188	.099	.029	
7.0	.198	.098	.028	.194	.097	.028	.188	.095	.027	.182	.093	.027	.176	.092	.027	
8.0	.185	.090	.025	.182	.090	.025	.176	.088	.025	.171	.086	.025	.165	.085	.025	
9.0	.173	.084	.023	.171	.083	.023	.165	.082	.023	.161	.080	.023	.156	.079	.023	
10.0	.163	.078	.022	.161	.078	.022	.156	.076	.022	.151	.075	.021	.147	.074	.021	

rcc	80%			70%			50%			30%			10%			0
rw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
rfc	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	.180	.156	.135	.154	.134	.116	.105	.092	.080	.061	.053	.047	.019	.017	.015	
2.0	.172	.132	.098	.147	.114	.085	.101	.079	.059	.058	.046	.035	.019	.015	.011	
3.0	.164	.114	.075	.141	.099	.065	.096	.068	.045	.056	.040	.027	.018	.013	.009	
4.0	.156	.101	.059	.134	.087	.051	.092	.061	.036	.053	.036	.021	.017	.012	.007	
5.0	.149	.091	.047	.128	.078	.041	.088	.055	.029	.051	.032	.017	.016	.010	.006	
6.0	.142	.082	.039	.122	.071	.034	.084	.050	.024	.049	.029	.014	.016	.010	.005	
7.0	.135	.075	.033	.116	.065	.029	.080	.046	.021	.047	.027	.012	.015	.009	.004	
8.0	.129	.069	.029	.111	.060	.025	.077	.042	.018	.045	.025	.011	.014	.008	.004	
9.0	.123	.064	.025	.106	.056	.022	.073	.039	.016	.043	.023	.009	.014	.008	.003	
10.0	.117	.060	.022	.101	.052	.020	.070	.037	.014	.041	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:JYH  
 Test Date:2023-05-18

Page Range: 0 - 180DEG  
 Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
 Humidity:65.0%  
 Test Distance:10.950m [K=1.0000]  
 Remarks:

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	20.0	21.5	20.3	21.7	21.9	19.8	21.3	20.1	21.5	21.7		
3H	21.6	23.0	21.9	23.2	23.4	21.3	22.7	21.6	22.9	23.1		
4H	22.2	23.5	22.5	23.7	24.0	21.8	23.1	22.1	23.4	23.6		
6H	22.6	23.8	22.9	24.1	24.4	22.1	23.4	22.5	23.7	23.9		
8H	22.7	23.9	23.0	24.2	24.5	22.2	23.4	22.6	23.7	24.0		
12H	22.7	23.9	23.1	24.2	24.5	22.3	23.4	22.6	23.7	24.0		
4H	2H	20.7	22.0	21.0	22.2	22.5	20.5	21.8	20.8	22.1	22.4	
	3H	22.4	23.5	22.7	23.8	24.1	22.2	23.3	22.5	23.6	23.9	
	4H	23.1	24.2	23.5	24.5	24.8	22.8	23.9	23.2	24.2	24.5	
	6H	23.6	24.6	24.0	24.9	25.3	23.3	24.2	23.7	24.6	24.9	
	8H	23.8	24.7	24.2	25.1	25.4	23.4	24.3	23.8	24.6	25.0	
	12H	23.9	24.7	24.4	25.1	25.5	23.5	24.3	23.9	24.7	25.1	
	8H	4H	23.4	24.3	23.8	24.6	25.0	23.1	24.0	23.5	24.4	24.8
		6H	24.1	24.8	24.5	25.2	25.6	23.7	24.5	24.2	24.9	25.3
		8H	24.3	25.0	24.8	25.4	25.9	24.0	24.6	24.4	25.0	25.5
		12H	24.5	25.1	25.0	25.5	26.0	24.1	24.6	24.6	25.1	25.6
	12H	4H	23.4	24.2	23.8	24.6	25.0	23.2	24.0	23.6	24.3	24.7
		6H	24.1	24.8	24.6	25.2	25.7	23.8	24.5	24.3	24.9	25.3
		8H	24.4	25.0	24.9	25.4	25.9	24.1	24.6	24.6	25.1	25.6
Variations with the observer position at spacings:												
S = 1.0H		+ 0.2 / - 0.2				+ 0.2 / - 0.2						
1.5H		+ 0.2 / - 0.3				+ 0.2 / - 0.4						
2.0H		+ 0.2 / - 0.3				+ 0.2 / - 0.4						

CIE Pub.117, 3184 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 4.0)

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: JYH  
 Test Date: 2023-05-18

Range: 0 - 180DEG  
 Interval: 1.0DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
 Humidity: 65.0%  
 Test Distance: 10.950m [K=1.0000]  
 Remarks:

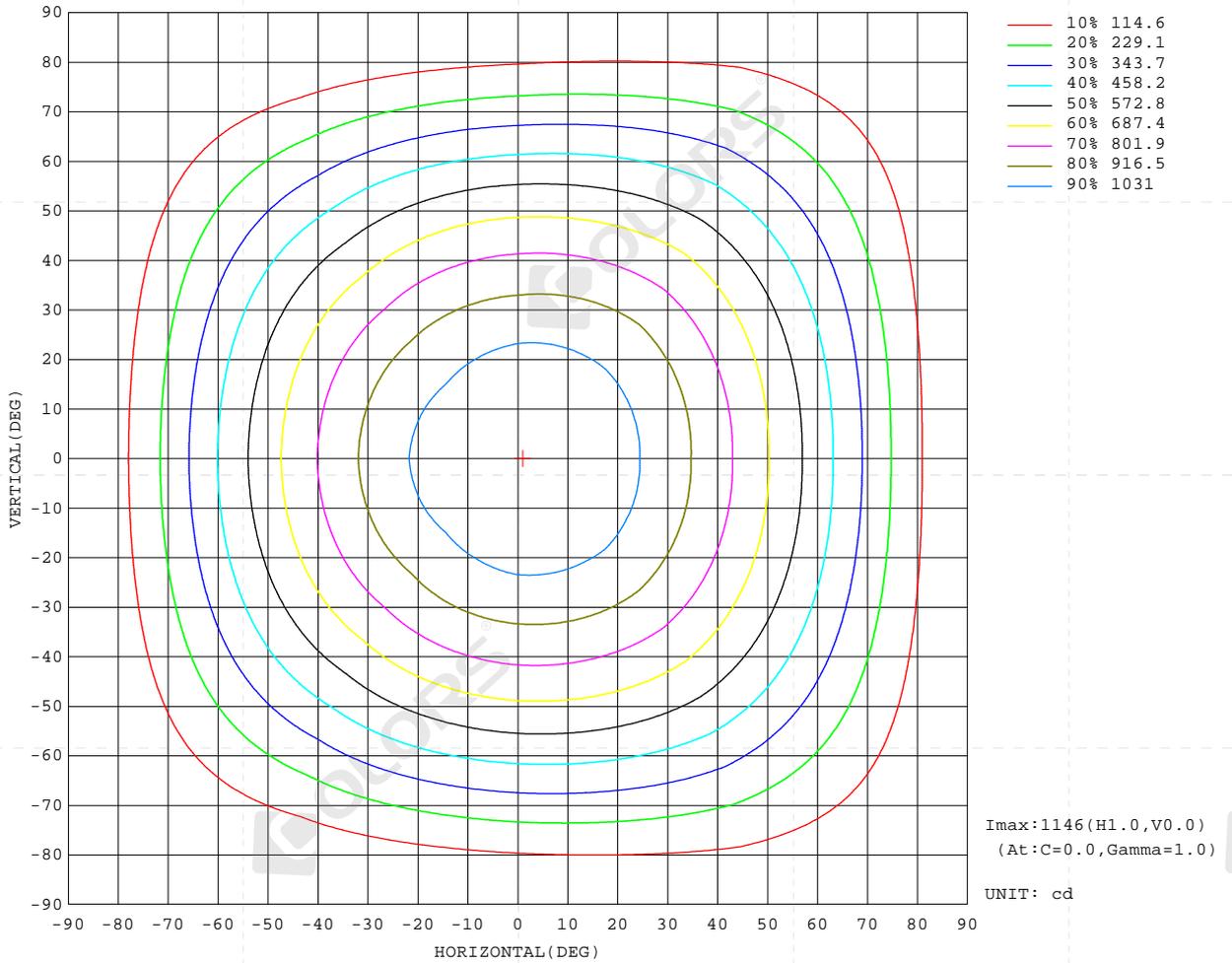
UTILIZATION FACTORS TABLE

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	58	46	39	57	46	39	56	46	39	33
0.80	68	56	49	67	56	49	65	55	49	42
1.00	76	65	58	75	65	58	73	66	57	50
1.25	84	73	66	82	72	66	79	71	65	58
1.50	88	79	72	87	78	71	84	76	70	63
2.00	95	87	81	94	86	80	90	83	78	70
2.50	99	92	86	97	90	85	93	88	83	75
3.00	103	96	90	100	94	89	96	91	87	79
4.00	107	101	96	104	99	95	100	96	92	83
5.00	109	104	100	106	102	99	102	99	96	86
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004	Suspended						SHRNOM = 1.25			

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: JYH  
 Test Date: 2023-05-18

Range: 0 - 180DEG  
 Interval: 1.0DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
 Humidity: 65.0%  
 Test Distance: 10.950m [K=1.0000]  
 Remarks:

ISOCANDELA DIAGRAM

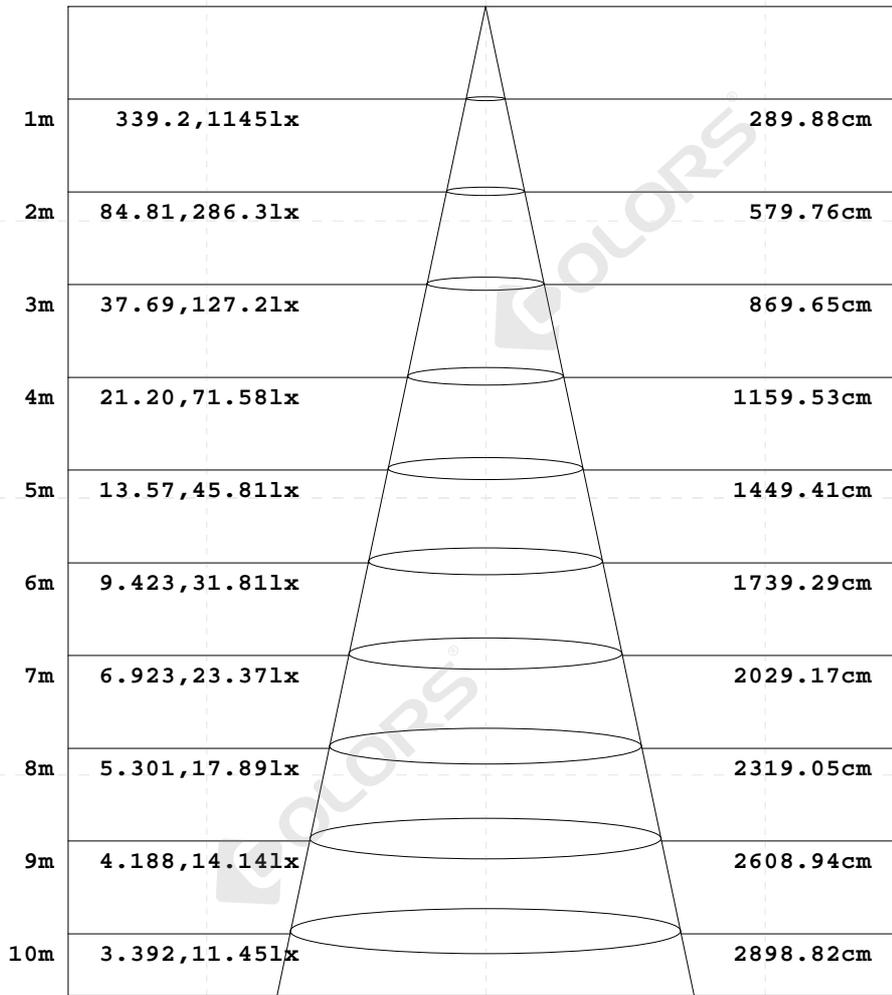


C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:JYH  
 Test Date:2023-05-18

Phi Range: 0 - 180DEG  
 Phi Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
 Humidity:65.0%  
 Test Distance:10.950m [K=1.0000]  
 Remarks:

AAI Figure

Flux out:2343 lm



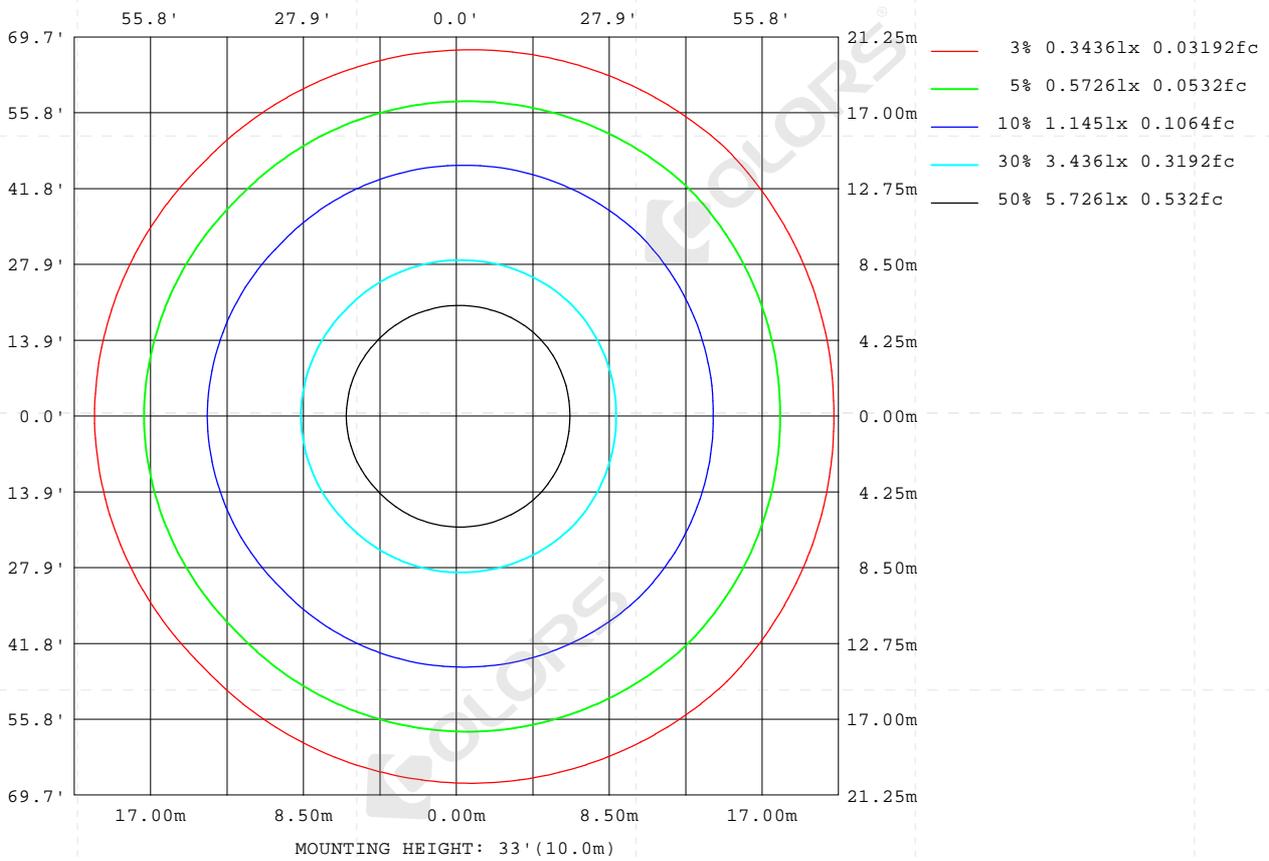
Height Eavg, Emax Angle:110.79deg Diameter

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

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: JYH  
 Test Date: 2023-05-18

Range: 0 - 180DEG  
 Interval: 1.0DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
 Humidity: 65.0%  
 Test Distance: 10.950m [K=1.0000]  
 Remarks:

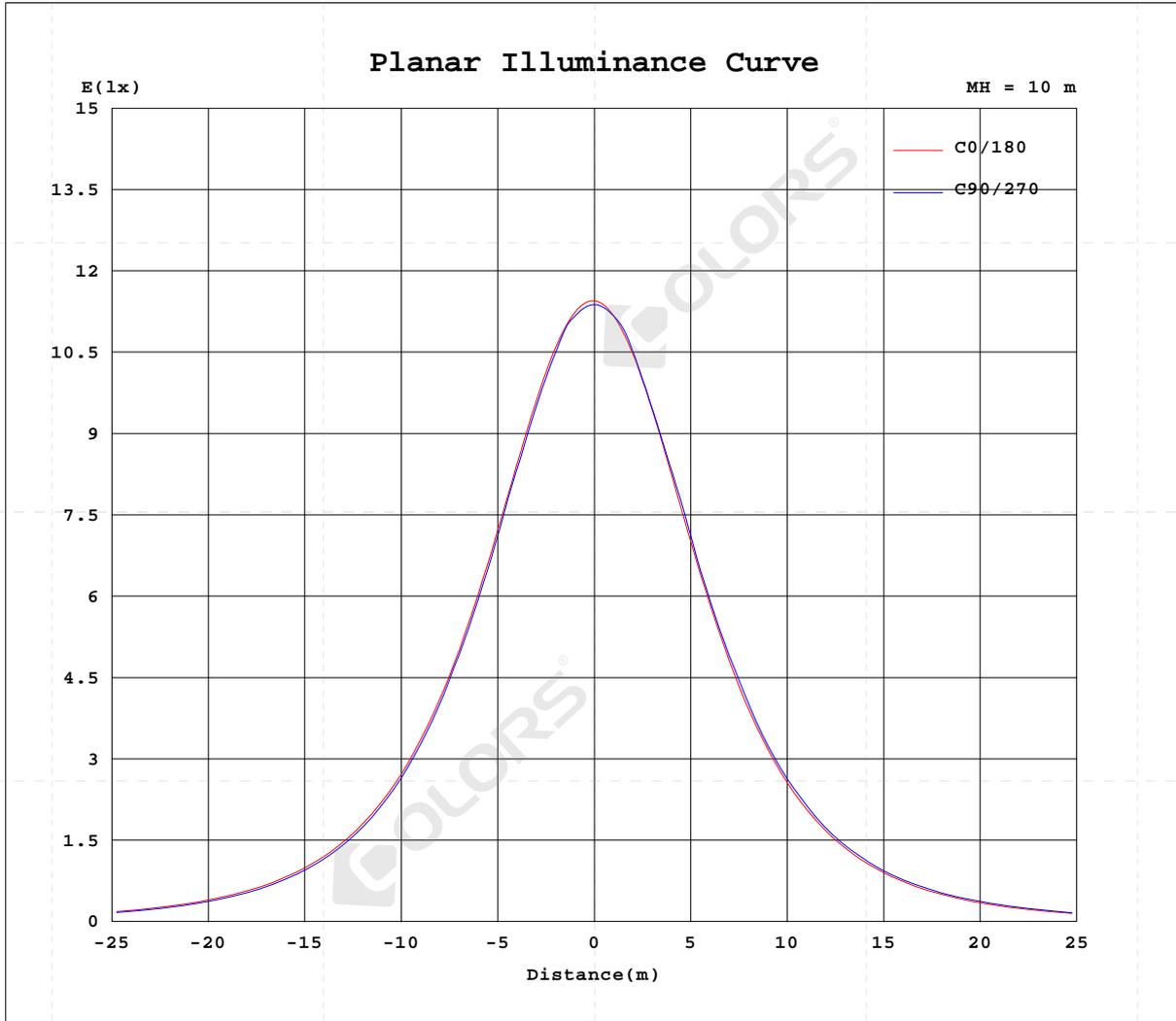
ISOLUX DIAGRAM



C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: JYH  
 Test Date: 2023-05-18

Page Range: 0 - 180DEG  
 Interval: 1.0DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
 Humidity: 65.0%  
 Test Distance: 10.950m [K=1.0000]  
 Remarks:

**Planar Illuminance Curve**



C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: JYH  
 Test Date: 2023-05-18

Page Range: 0 - 180DEG  
 Interval: 1.0DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
 Humidity: 65.0%  
 Test Distance: 10.950m [K=1.0000]  
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Table--1

UNIT: cd

C( DEG) g (DEG)	0	45	90	135	180	225	270	315										
0	1145	1140	1138	1139	1145	1140	1138	1139										
5	1142	1139	1134	1129	1137	1131	1135	1139										
10	1129	1133	1122	1112	1117	1118	1125	1132										
15	1104	1108	1093	1081	1087	1083	1090	1114										
20	1070	1074	1057	1037	1047	1037	1053	1074										
25	1026	1032	1014	987	998	988	1015	1030										
30	973	983	958	930	941	937	952	980										
35	912	922	897	865	876	865	893	925										
40	845	856	827	792	805	793	822	856										
45	771	783	752	714	727	718	747	783										
50	692	703	669	629	644	630	663	705										
55	607	619	582	540	555	541	579	619										
60	517	529	489	446	462	448	486	531										
65	422	435	393	346	361	352	387	438										
70	322	335	295	249	261	255	288	341										
75	223	238	198	154	166	159	194	244										
80	131	144	110	72.5	82.1	77.8	108	151										
85	54.7	65.0	40.3	15.7	21.3	18.9	40.0	70.9										
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00										
95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00										
100	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00										
105	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00										
110	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00										
115	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00										
120	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00										
125	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00										
130	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00										
135	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00										
140	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00										
145	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00										
150	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00										
155	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00										
160	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00										
165	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00										
170	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00										
175	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00										
180	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00										

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:JYH  
 Test Date:2023-05-18

g Range: 0 - 180DEG  
 Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
 Humidity:65.0%  
 Test Distance:10.950m [K=1.0000]  
 Remarks: