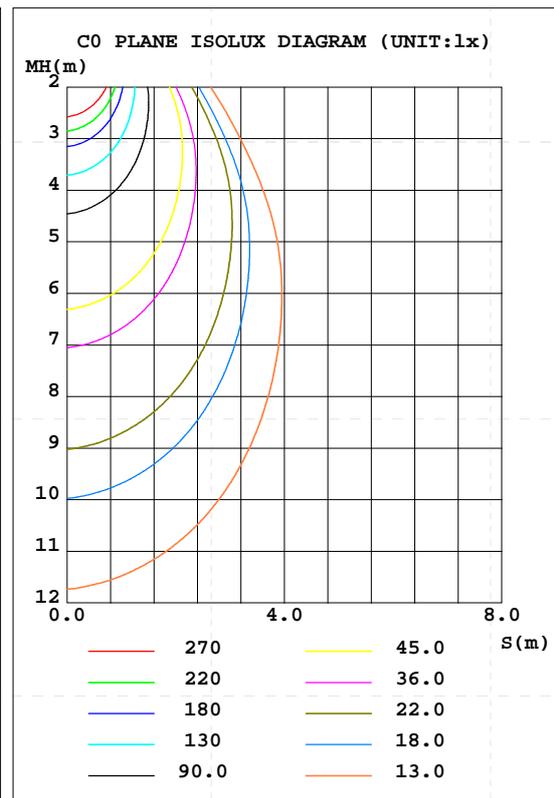
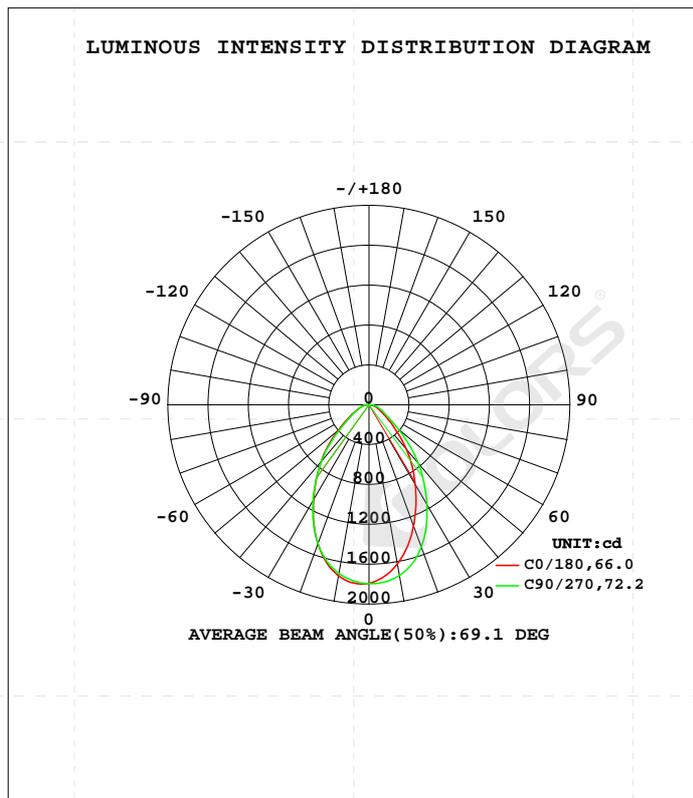


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:220.0V I:0.1280A P:27.50W PF:0.9000 Freq:50.00Hz Lamp Flux:2603.86x1 lm		
NAME: LLS-LE40FPFWS1200(N)-T28NW8N-DC	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: COLORS	SUR.:1192*38mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 94.69 lm/W
MODEL		I _{max} (cd)	1800	S/MH(C0/180)		0.87
NOMINAL POWER(W)	27.5	LOR(%)	100.0	S/MH(C90/270)		1.00
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	2603.9	h UP, DN(C0-180)		0.0,49.0
NOMINAL FLUX(lm)	2603.86	CIE CLASS	DIRECT	h UP, DN(C180-360)		0.0,51.0
LAMPS INSIDE	1	h up(%)	0.0	CIBSE SHR NOM		1.00
TEST VOLTAGE(V)	220	h down(%)	100.0	CIBSE SHR MAX		1.05



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:JYH
 Test Date:2023-03-28

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

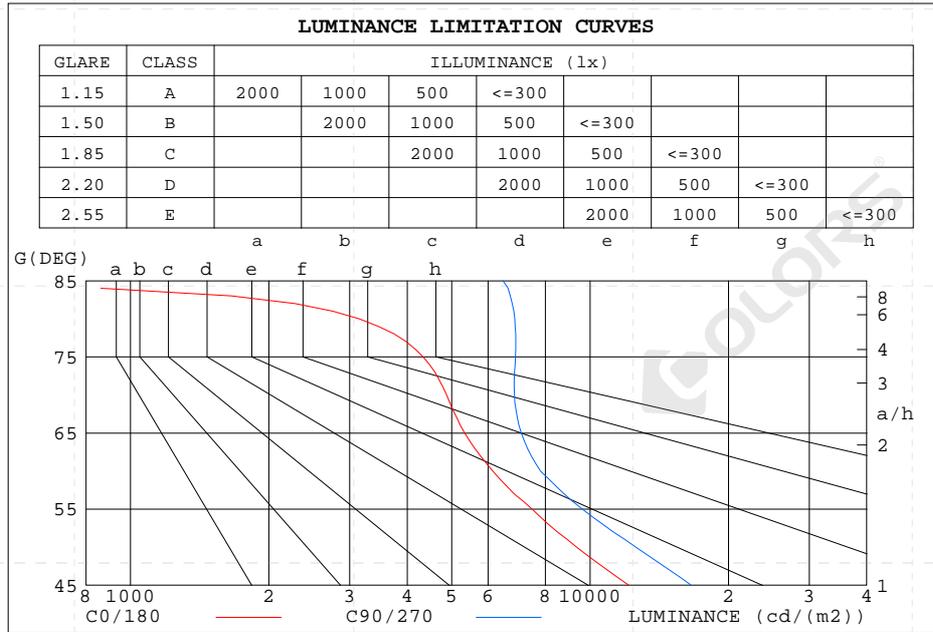
ZONAL FLUX DIAGRAM:

g	C0	C45	C90	C135	C180	C225	C270	C315	g	F zone	F total	%lum,lamp
10	1623	1711	1739	1712	1743	1713	1719	1702	0- 10	167.2	167.2	6.42,6.42
20	1296	1456	1521	1447	1486	1446	1485	1441	10- 20	447.2	614.4	23.6,23.6
30	921.3	1083	1154	1065	1106	1064	1115	1068	20- 30	579.5	1194	45.8,45.8
40	579.2	714.3	764.7	693.3	741.5	699.0	740.8	709.3	30- 40	551.9	1746	67,67
50	288.5	363.7	387.8	347.7	403.5	353.2	369.4	366.9	40- 50	403.0	2149	82.5,82.5
60	147.4	177.8	187.4	171.4	197.1	171.0	179.2	177.0	50- 60	227.5	2376	91.3,91.3
70	79.97	98.78	112.4	96.30	102.4	93.16	105.7	96.76	60- 70	130.8	2507	96.3,96.3
80	26.22	44.96	57.21	42.37	49.82	42.21	53.63	45.70	70- 80	75.85	2583	99.2,99.2
90	0	0	0	0	0	0	0	0	80- 90	20.84	2604	100,100
100	0	0	0	0	0	0	0	0	90-100	0	2604	100,100
110	0	0	0	0	0	0	0	0	100-110	0	2604	100,100
120	0	0	0	0	0	0	0	0	110-120	0	2604	100,100
130	0	0	0	0	0	0	0	0	120-130	0	2604	100,100
140	0	0	0	0	0	0	0	0	130-140	0	2604	100,100
150	0	0	0	0	0	0	0	0	140-150	0	2604	100,100
160	0	0	0	0	0	0	0	0	150-160	0	2604	100,100
170	0	0	0	0	0	0	0	0	160-170	0	2604	100,100
180	0	0	0	0	0	0	0	0	170-180	0	2604	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:2023-03-28

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



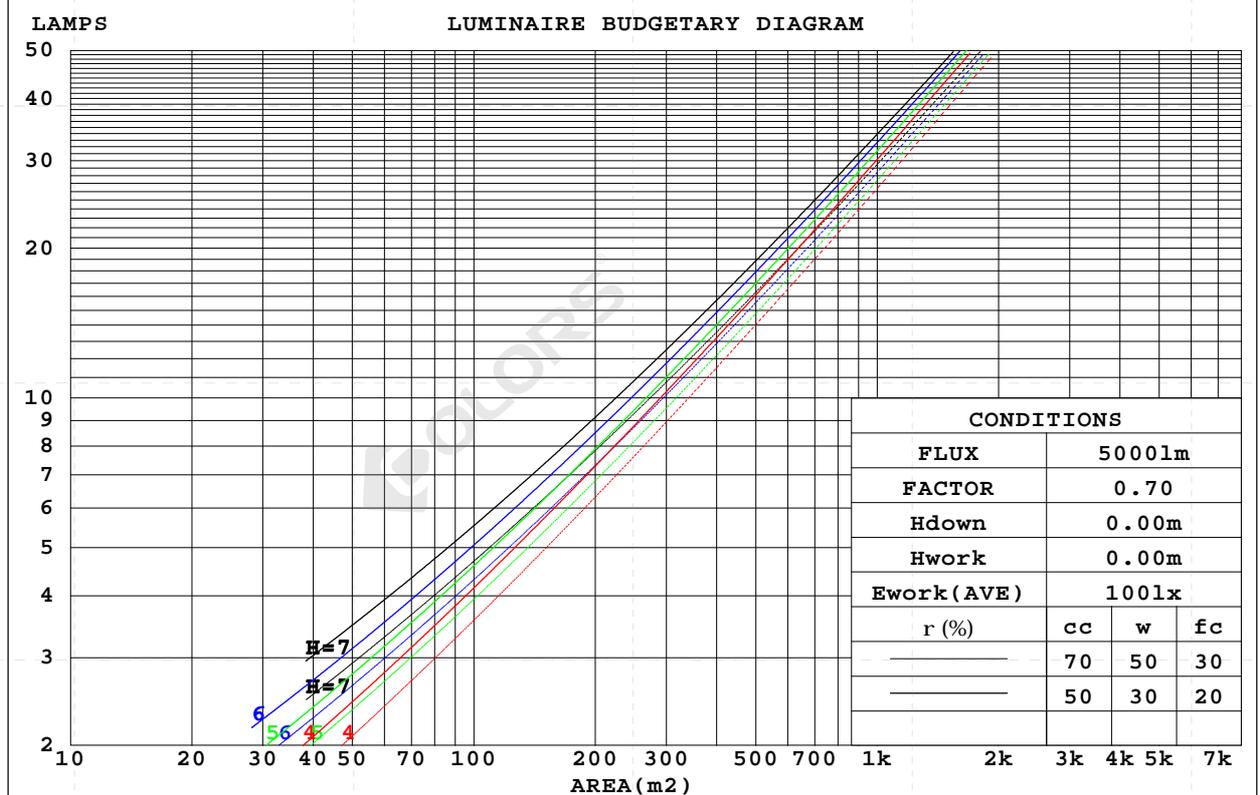
LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	497	6460
80	3146	6864
75	4334	6883
70	4871	6846
65	5336	7085
60	6144	7807
55	7482	9631
50	9351	12571
45	12161	16628

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: JYH
 Test Date: 2023-03-28

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 _w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
r _{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	1.08	1.04	1.01	1.05	1.02	.90	1.01	.99	.96	.97	.95	.94	.94	.92	.91	.89
2.0	.97	.92	.87	.95	.90	.86	.92	.88	.84	.89	.85	.82	.86	.83	.80	.79
3.0	.88	.81	.76	.86	.80	.75	.84	.78	.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	.67	.62	.58	.56
6.0	.67	.60	.54	.66	.59	.54	.65	.58	.54	.63	.58	.53	.62	.57	.53	.51
7.0	.62	.55	.49	.61	.54	.49	.60	.54	.49	.59	.53	.49	.57	.52	.48	.47
8.0	.58	.50	.45	.57	.50	.45	.56	.49	.45	.54	.49	.45	.53	.48	.44	.43
9.0	.53	.46	.41	.53	.46	.41	.52	.46	.41	.51	.45	.41	.50	.45	.41	.39
10.0	.50	.43	.38	.49	.43	.38	.49	.42	.38	.48	.42	.38	.47	.42	.38	.36



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: JYH
 Test Date: 2023-03-28

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	.240	.136	.043	.233	.133	.042	.220	.126	.040	.208	.120	.039	.197	.114	.037	
2.0	.229	.125	.038	.223	.123	.038	.212	.118	.037	.202	.113	.035	.192	.109	.034	
3.0	.216	.115	.034	.210	.113	.034	.201	.109	.033	.192	.105	.032	.183	.102	.031	
4.0	.202	.105	.031	.198	.104	.031	.189	.100	.030	.182	.097	.029	.174	.095	.029	
5.0	.190	.097	.028	.186	.096	.028	.179	.093	.027	.172	.091	.027	.165	.088	.027	
6.0	.179	.090	.026	.175	.089	.026	.169	.087	.025	.163	.084	.025	.157	.083	.025	
7.0	.169	.083	.024	.166	.083	.024	.160	.081	.023	.154	.079	.023	.149	.077	.023	
8.0	.160	.078	.022	.157	.077	.022	.151	.076	.022	.146	.074	.021	.142	.073	.021	
9.0	.151	.073	.020	.149	.072	.020	.144	.071	.020	.139	.070	.020	.135	.069	.020	
10.0	.143	.069	.019	.141	.068	.019	.137	.067	.019	.133	.066	.019	.129	.065	.019	

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	.175	.157	.140	.150	.135	.120	.103	.093	.083	.059	.054	.048	.019	.017	.016	
2.0	.164	.132	.106	.140	.114	.091	.096	.079	.064	.055	.046	.037	.018	.015	.012	
3.0	.154	.114	.082	.132	.098	.071	.091	.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	.112	.069	.038	.077	.049	.027	.045	.029	.016	.014	.009	.005	
7.0	.124	.073	.037	.107	.063	.033	.074	.044	.023	.043	.026	.014	.014	.009	.005	
8.0	.118	.067	.032	.102	.058	.028	.070	.041	.020	.041	.024	.012	.013	.008	.004	
9.0	.113	.062	.028	.097	.054	.024	.067	.038	.017	.039	.022	.010	.013	.007	.003	
10.0	.108	.058	.025	.093	.050	.021	.064	.035	.015	.038	.021	.009	.012	.007	.003	

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:JYH
 Test Date:2023-03-28

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	15.4	16.7	15.7	16.9	17.1	16.4	17.7	16.7	17.9	18.1
3H	16.0	17.1	16.3	17.4	17.6	17.1	18.3	17.4	18.5	18.7
4H	16.2	17.3	16.5	17.6	17.8	17.5	18.6	17.8	18.8	19.1
6H	16.4	17.4	16.7	17.7	17.9	17.9	18.9	18.2	19.2	19.4
8H	16.4	17.4	16.7	17.6	17.9	18.0	19.0	18.4	19.3	19.6
12H	16.3	17.3	16.7	17.6	17.9	18.1	19.1	18.5	19.4	19.6
4H 2H	15.7	16.8	16.0	17.0	17.3	16.6	17.7	16.9	17.9	18.1
3H	16.5	17.4	16.8	17.7	18.0	17.5	18.4	17.8	18.7	19.0
4H	16.9	17.7	17.2	18.0	18.4	18.0	18.9	18.4	19.2	19.5
6H	17.1	17.9	17.5	18.2	18.6	18.6	19.3	18.9	19.6	20.0
8H	17.2	17.9	17.6	18.2	18.6	18.8	19.5	19.2	19.8	20.2
12H	17.1	17.8	17.5	18.1	18.5	18.9	19.6	19.3	19.9	20.3
8H 4H	17.1	17.8	17.5	18.2	18.5	18.2	18.9	18.6	19.2	19.6
6H	17.5	18.0	17.9	18.4	18.9	18.8	19.4	19.2	19.8	20.2
8H	17.5	18.1	18.0	18.5	18.9	19.1	19.6	19.6	20.0	20.5
12H	17.5	18.0	18.0	18.4	18.9	19.3	19.8	19.8	20.2	20.7
12H 4H	17.1	17.8	17.5	18.1	18.5	18.1	18.8	18.6	19.2	19.6
6H	17.5	18.0	18.0	18.5	18.9	18.8	19.3	19.3	19.8	20.2
8H	17.6	18.1	18.1	18.5	19.0	19.1	19.6	19.6	20.0	20.5
Variations with the observer position at spacings:										
S = 1.0H	+ 0.8 / - 0.9					+ 0.5 / - 0.7				
1.5H	+ 0.6 / - 0.8					+ 0.6 / - 0.5				
2.0H	+ 1.3 / - 1.1					+ 1.4 / - 0.8				

CIE Pub.117, 2604 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 3.3)

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:JYH
 Test Date:2023-03-28

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:

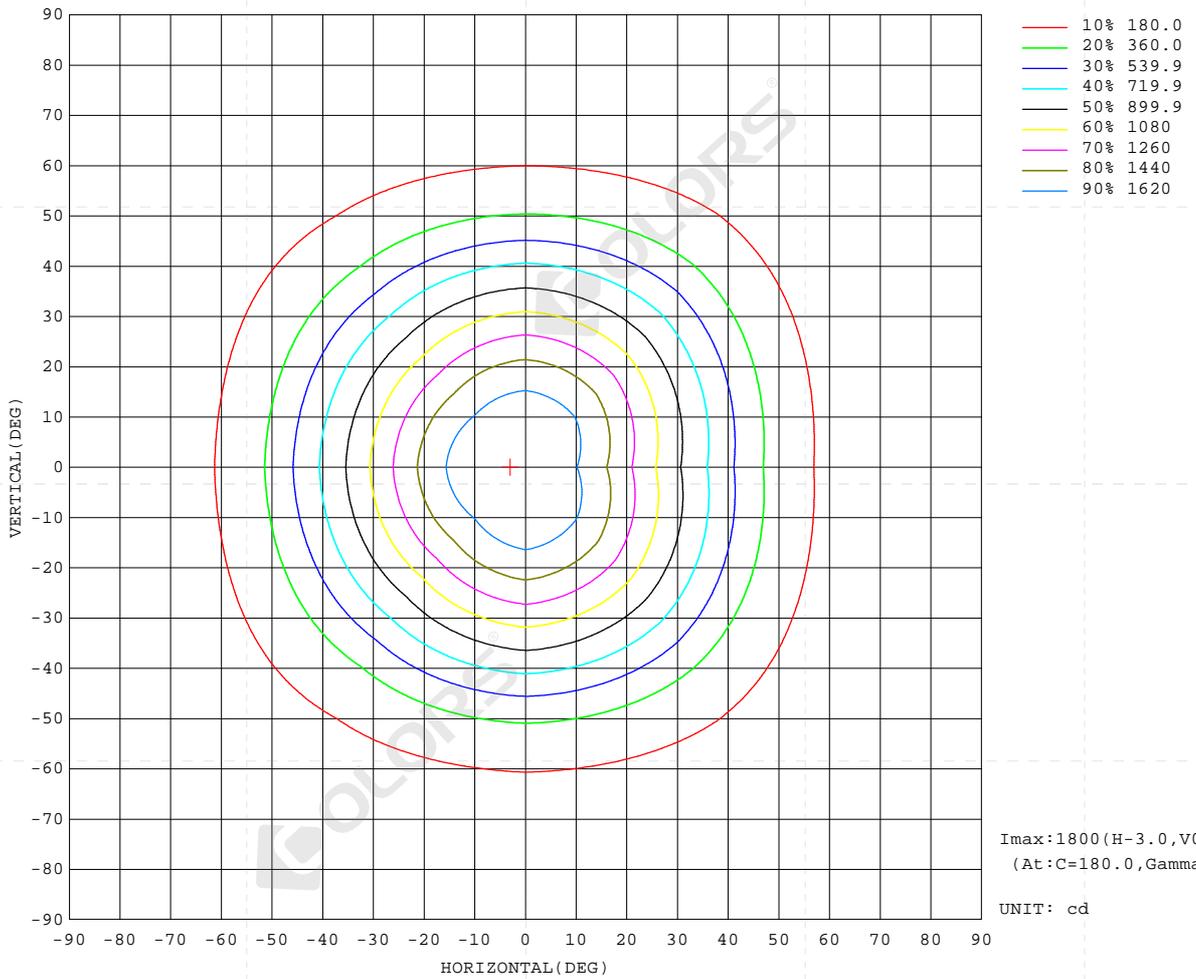
UTILIZATION FACTORS TABLE

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	71	62	56	70	62	56	69	61	56	51
0.80	80	71	66	79	71	65	78	70	65	60
1.00	87	79	73	86	78	73	84	79	73	67
1.25	93	85	80	92	85	80	90	83	79	73
1.50	97	90	85	96	89	84	93	87	83	77
2.00	102	96	91	100	95	90	97	92	89	82
2.50	105	99	94	103	98	94	99	95	92	85
3.00	107	102	98	105	101	97	101	98	95	87
4.00	110	106	102	108	104	101	104	101	98	90
5.00	112	108	105	110	106	104	105	103	101	92
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: 2023-03-28

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:

ISOCANDELA DIAGRAM

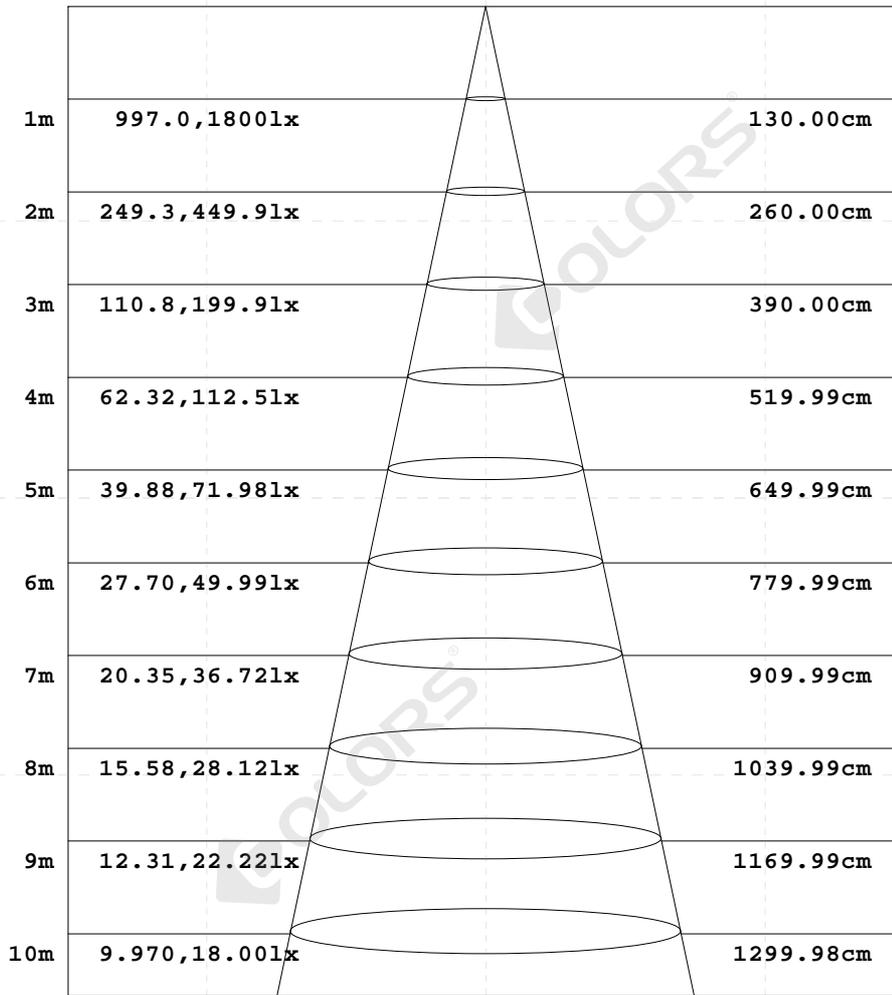


C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:JYH
 Test Date:2023-03-28

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:

AAI Figure

Flux out:1425 lm



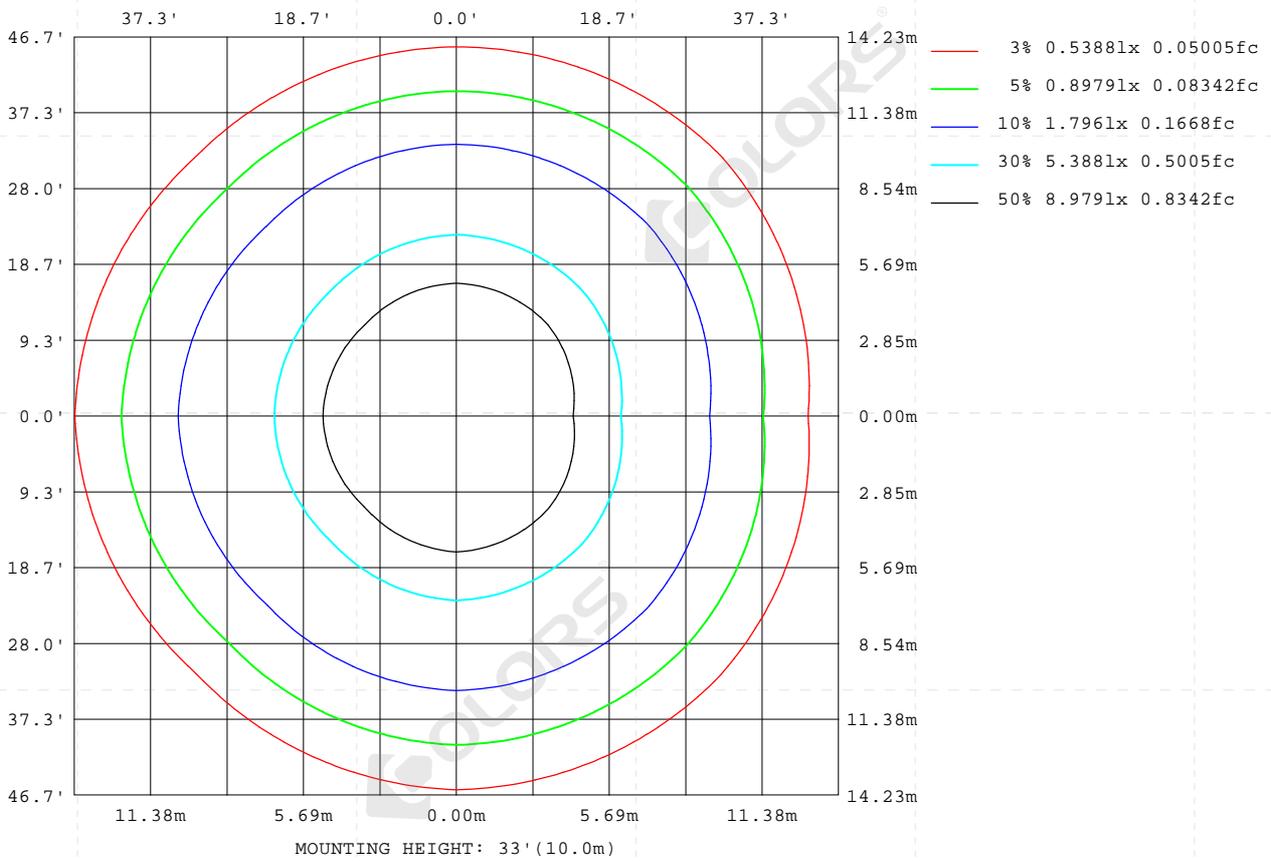
Height Eavg, Emax Angle:66.05deg Diameter

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:2023-03-28

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: 2023-03-28

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:

LED Avg.L Report

Test:U:220.0V I:0.1280A P:27.50W PF:0.9000 Freq:50.00Hz Lamp Flux:2603.86x1 lm		
NAME: LLS-LE40FPFWS1200(N)-T28NW8N-DC	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: COLORS	SUR.:1192*38mm	Shielding Angle:

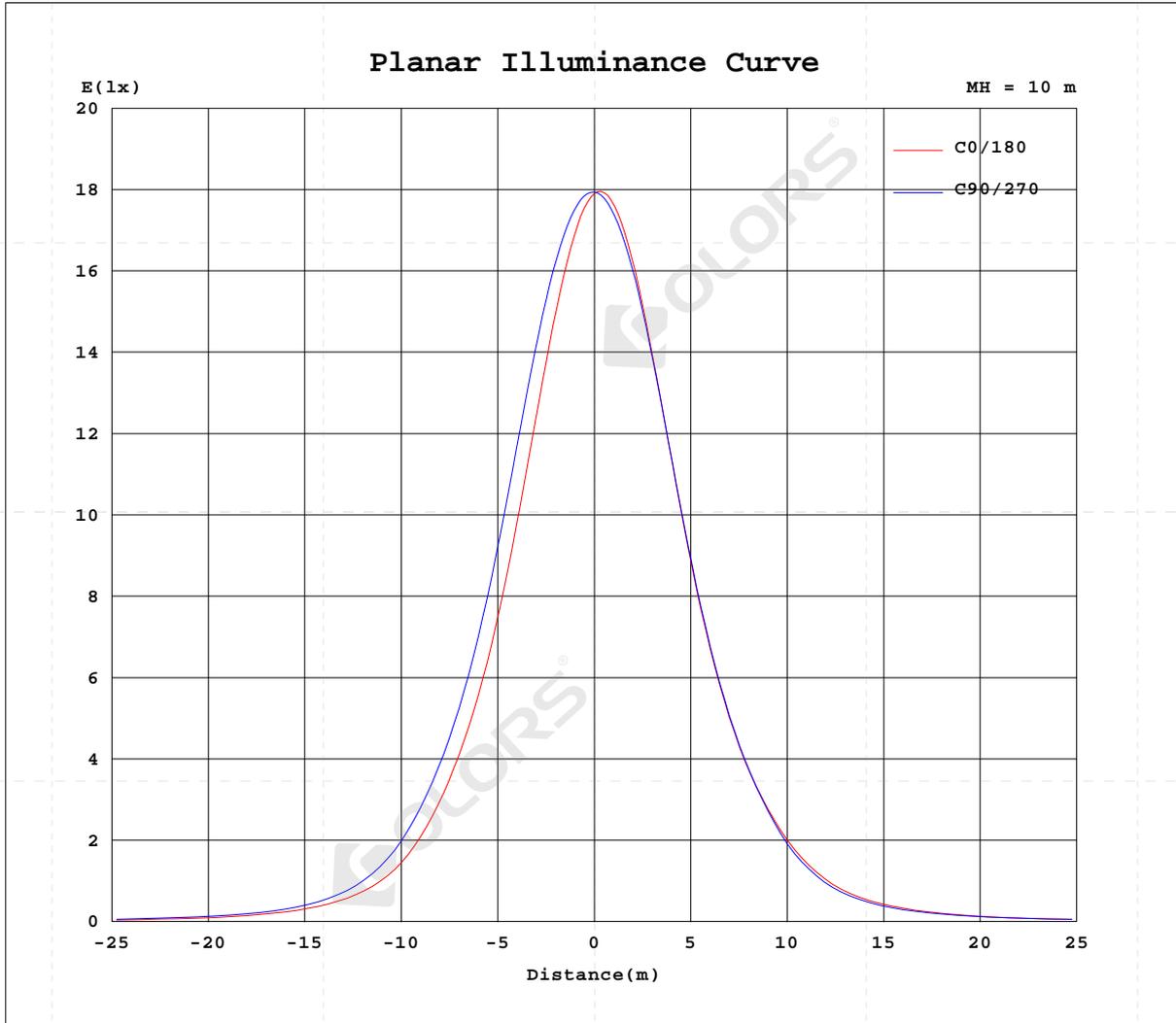
AvgL	cd/m2
L_0~180(65)av	6140
L_0~180(75)av	5175
L_0~180(85)av	3090
L_90~270(65)av	6904
L_90~270(75)av	6671
L_90~270(85)av	6236
L_45(65)av	6282
L_45(75)av	5677
L_45(85)av	3746

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:JYH
 Test Date:2023-03-28

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: 2023-03-28

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	1791	1800	1794	1796	1791	1800	1794	1796											
5	1731	1777	1784	1776	1795	1779	1774	1770											
10	1623	1711	1739	1712	1743	1713	1719	1702											
15	1475	1605	1654	1602	1638	1602	1624	1592											
20	1296	1456	1521	1447	1486	1446	1485	1441											
25	1107	1276	1349	1261	1303	1260	1310	1260											
30	921	1083	1154	1065	1106	1064	1115	1068											
35	749	896	957	876	916	876	923	883											
40	579	714	765	693	742	699	741	709											
45	413	529	564	506	571	514	544	530											
50	289	364	388	348	404	353	369	367											
55	206	251	265	241	279	244	252	254											
60	147	178	187	171	197	171	179	177											
65	108	131	144	127	141	124	136	129											
70	80.0	98.8	112	96.3	102	93.2	106	96.8											
75	53.8	72.4	85.5	70.3	74.7	68.1	80.3	71.3											
80	26.2	45.0	57.2	42.4	49.8	42.2	53.6	45.7											
85	2.08	16.2	27.0	13.6	23.8	14.8	25.2	18.1											
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:2023-03-28

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: