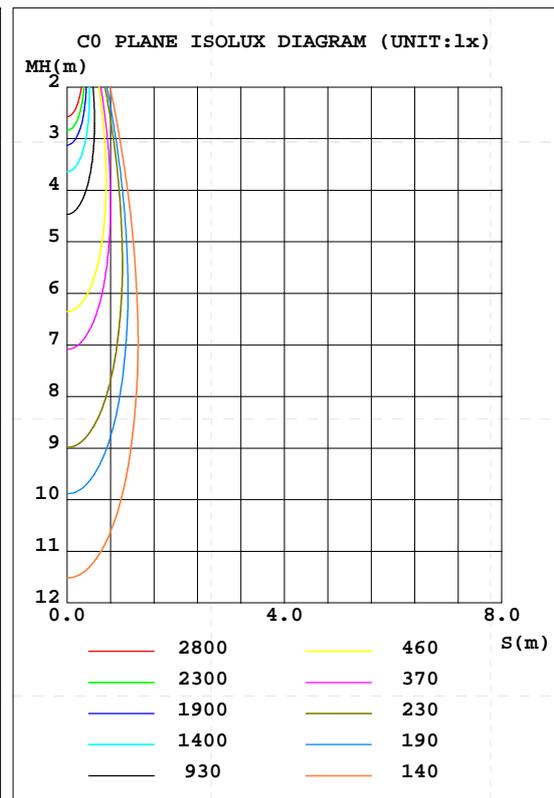
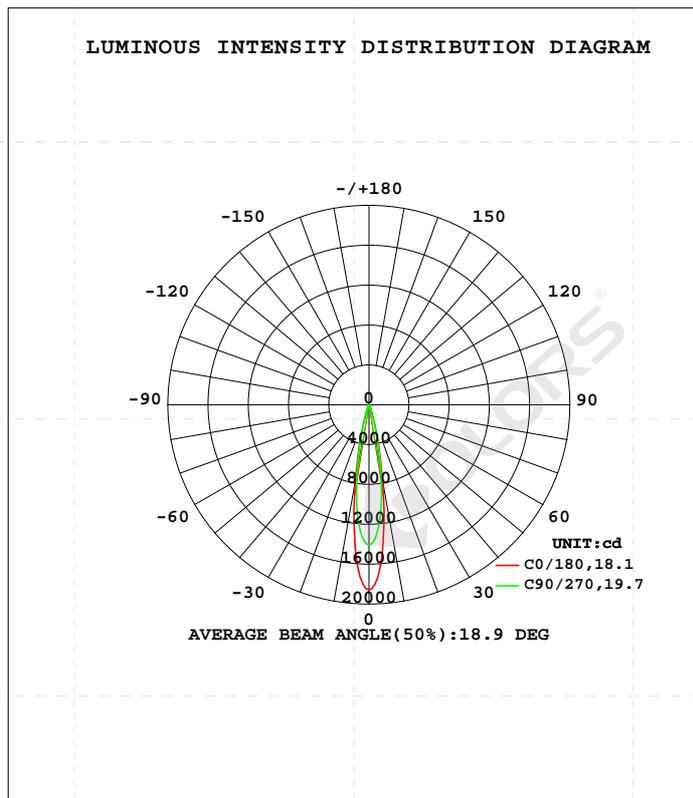


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:220.0V I:0.1480A P:30.90W PF:0.9000 Freq:50.00Hz Lamp Flux:2503.58x1 lm		
NAME: LLS-LE40GEFWS1200(N)-T30NW8N-DC	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: COLORS	SUR.:1140*38mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 81.02 lm/W
MODEL		I _{max} (cd)	18571	S/MH(C0/180)		0.31
NOMINAL POWER(W)	30.9	LOR(%)	100.0	S/MH(C90/270)		0.33
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	2503.6	h UP, DN(C0-180)		0.0,50.0
NOMINAL FLUX(lm)	2503.58	CIE CLASS	DIRECT	h UP, DN(C180-360)		0.0,50.0
LAMPS INSIDE	1	h up(%)	0.0	CIBSE SHR NOM		0.00
TEST VOLTAGE(V)	220	h down(%)	100.0	CIBSE SHR MAX		1.00



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:JYH
 Test Date:2023-03-22

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

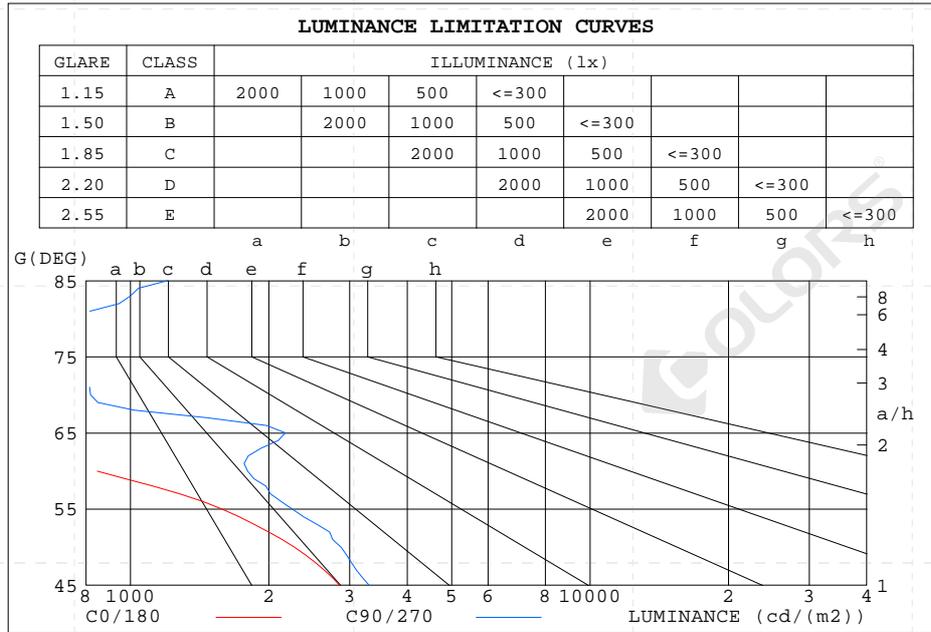
ZONAL FLUX DIAGRAM:

g	C0	C45	C90	C135	C180	C225	C270	C315	g	F zone	F total	%lum,lamp
10	800.0	850.9	688.7	850.9	800.0	850.9	688.7	850.9	0- 10	1105	1105	44.1,44.1
20	93.89	116.9	90.70	116.9	93.89	116.9	90.70	116.9	10- 20	922.7	2027	81,81
30	23.85	27.21	25.98	27.21	23.85	27.21	25.98	27.21	20- 30	227.9	2255	90.1,90.1
40	11.00	12.71	12.78	12.71	11.00	12.71	12.78	12.71	30- 40	109.0	2364	94.4,94.4
50	6.322	7.173	7.994	7.173	6.322	7.173	7.994	7.173	40- 50	74.15	2438	97.4,97.4
60	1.834	2.787	3.894	2.787	1.834	2.787	3.894	2.787	50- 60	42.83	2481	99.1,99.1
70	0.1825	0.4864	1.212	0.4864	0.1825	0.4864	1.212	0.4864	60- 70	16.70	2498	99.8,99.8
80	0.0949	0.1561	0.5643	0.1561	0.0949	0.1561	0.5643	0.1561	70- 80	3.847	2502	99.9,99.9
90	0	0	0	0	0	0	0	0	80- 90	1.982	2504	100,100
100	0	0	0	0	0	0	0	0	90-100	0	2504	100,100
110	0	0	0	0	0	0	0	0	100-110	0	2504	100,100
120	0	0	0	0	0	0	0	0	110-120	0	2504	100,100
130	0	0	0	0	0	0	0	0	120-130	0	2504	100,100
140	0	0	0	0	0	0	0	0	130-140	0	2504	100,100
150	0	0	0	0	0	0	0	0	140-150	0	2504	100,100
160	0	0	0	0	0	0	0	0	150-160	0	2504	100,100
170	0	0	0	0	0	0	0	0	160-170	0	2504	100,100
180	0	0	0	0	0	0	0	0	170-180	0	2504	100,100
DEG	LUMINOUS INTENSITY:×10cd									UNIT:lm		

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:JYH
 Test Date:2023-03-22

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



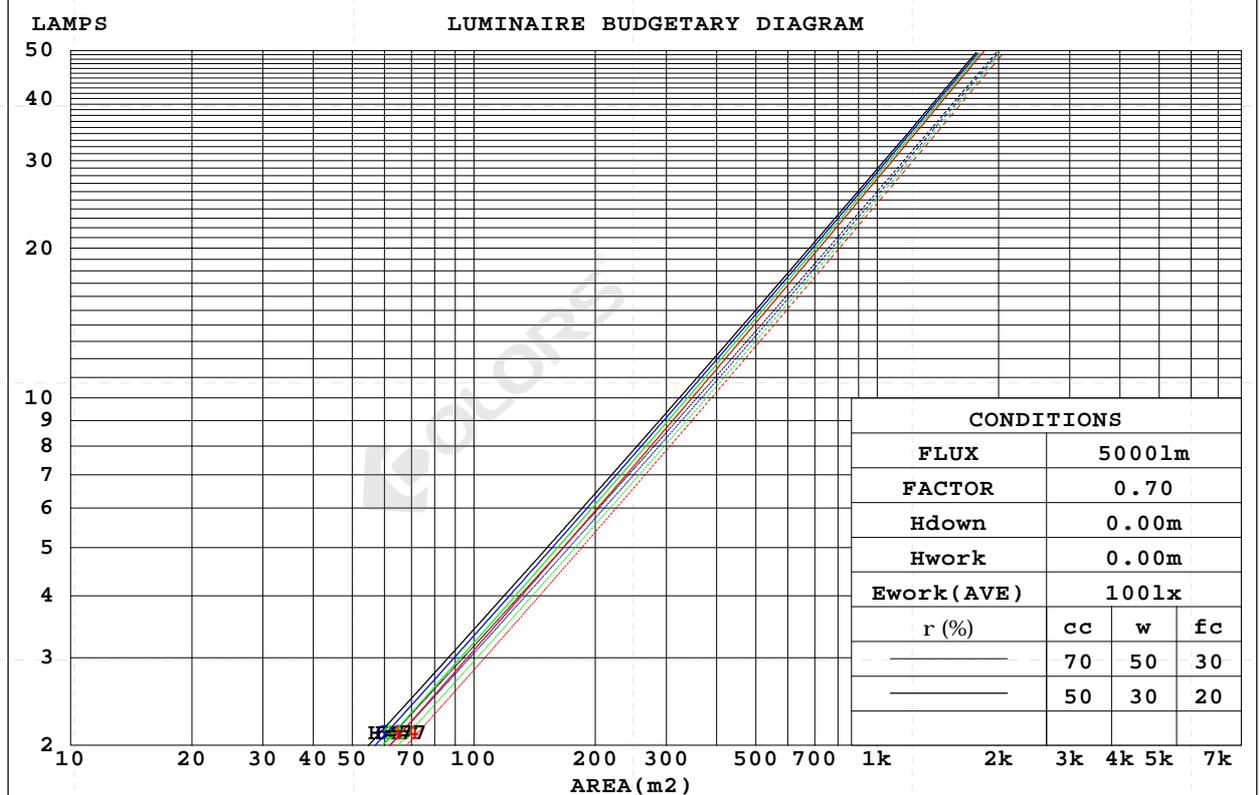
LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	183	1205
80	126	751
75	114	704
70	123	818
65	405	2172
60	847	1798
55	1583	2249
50	2271	2872
45	2853	3308

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: JYH
 Test Date: 2023-03-22

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	1.13	1.11	1.09	1.11	1.09	1.07	1.07	1.05	1.04	1.03	1.02	1.01	.00	.99	.98	.96
2.0	1.07	1.04	1.02	1.06	1.03	1.01	1.03	1.01	.99	.00	.98	.97	.97	.96	.95	.93
3.0	1.03	.99	.96	1.02	.98	.96	.99	.96	.94	.97	.95	.93	.95	.93	.91	.90
4.0	.99	.95	.92	.98	.94	.91	.96	.93	.90	.94	.91	.89	.92	.90	.88	.87
5.0	.95	.91	.88	.95	.91	.88	.93	.90	.87	.91	.89	.86	.90	.88	.86	.85
6.0	.92	.88	.85	.92	.88	.85	.90	.87	.84	.89	.86	.84	.88	.85	.83	.82
7.0	.90	.85	.83	.89	.85	.82	.88	.84	.82	.87	.84	.82	.86	.83	.81	.80
8.0	.87	.83	.80	.87	.83	.80	.86	.82	.80	.85	.82	.80	.84	.81	.79	.78
9.0	.85	.81	.78	.84	.81	.78	.84	.80	.78	.83	.80	.78	.82	.79	.77	.76
10.0	.83	.79	.76	.82	.79	.76	.82	.78	.76	.81	.78	.76	.81	.78	.76	.75



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: JYH
 Test Date: 2023-03-22

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	.138	.079	.025	.132	.075	.024	.119	.068	.022	.108	.062	.020	.097	.056	.018	
2.0	.128	.070	.022	.123	.068	.021	.113	.063	.019	.103	.058	.018	.095	.053	.017	
3.0	.119	.063	.019	.115	.061	.018	.106	.058	.017	.098	.054	.017	.091	.050	.016	
4.0	.111	.058	.017	.108	.056	.017	.100	.053	.016	.094	.050	.015	.087	.048	.014	
5.0	.104	.053	.015	.101	.052	.015	.095	.049	.015	.089	.047	.014	.084	.045	.013	
6.0	.098	.049	.014	.095	.048	.014	.090	.046	.013	.085	.044	.013	.081	.042	.013	
7.0	.093	.046	.013	.090	.045	.013	.086	.043	.012	.082	.042	.012	.077	.040	.012	
8.0	.088	.043	.012	.086	.042	.012	.082	.041	.012	.078	.040	.011	.075	.038	.011	
9.0	.084	.040	.011	.082	.040	.011	.078	.039	.011	.075	.038	.011	.072	.036	.011	
10.0	.080	.038	.011	.078	.038	.011	.075	.037	.010	.072	.036	.010	.069	.035	.010	

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	.168	.158	.148	.144	.135	.127	.099	.093	.088	.057	.054	.051	.018	.017	.017	
2.0	.150	.133	.118	.129	.114	.102	.088	.079	.071	.051	.046	.042	.016	.015	.014	
3.0	.135	.113	.096	.116	.098	.083	.080	.068	.058	.046	.040	.034	.015	.013	.011	
4.0	.123	.098	.079	.105	.085	.068	.073	.059	.048	.042	.035	.029	.013	.011	.009	
5.0	.112	.086	.066	.096	.074	.057	.066	.052	.040	.038	.030	.024	.012	.010	.008	
6.0	.103	.076	.056	.089	.065	.049	.061	.046	.034	.035	.027	.020	.011	.009	.007	
7.0	.095	.067	.048	.082	.058	.042	.057	.041	.029	.033	.024	.018	.011	.008	.006	
8.0	.089	.060	.041	.076	.052	.036	.053	.037	.025	.031	.022	.015	.010	.007	.005	
9.0	.083	.055	.036	.071	.048	.031	.049	.033	.022	.029	.020	.013	.009	.006	.004	
10.0	.078	.050	.032	.067	.043	.028	.046	.031	.020	.027	.018	.012	.009	.006	.004	

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:JYH
 Test Date:2023-03-22

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	4.4	5.1	4.6	5.2	5.4	5.7	6.4	5.9	6.5	6.7
3H	4.3	4.9	4.6	5.1	5.3	6.2	6.8	6.4	7.0	7.2
4H	4.3	4.9	4.5	5.1	5.3	6.2	6.8	6.5	7.0	7.2
6H	4.2	4.7	4.5	5.0	5.2	6.2	6.8	6.5	7.0	7.3
8H	4.2	4.7	4.4	4.9	5.2	6.3	6.8	6.6	7.1	7.3
12H	4.1	4.6	4.4	4.9	5.2	6.4	6.9	6.7	7.1	7.4
4H 2H	4.5	5.1	4.8	5.3	5.5	5.7	6.3	6.0	6.5	6.7
3H	4.4	5.0	4.8	5.2	5.5	6.2	6.7	6.5	7.0	7.2
4H	4.4	4.8	4.7	5.1	5.4	6.2	6.7	6.6	7.0	7.3
6H	4.3	4.7	4.6	5.0	5.4	6.3	6.7	6.7	7.0	7.4
8H	4.2	4.6	4.6	5.0	5.3	6.4	6.8	6.8	7.1	7.5
12H	4.2	4.5	4.6	4.9	5.3	6.5	6.9	6.9	7.2	7.6
8H 4H	4.2	4.6	4.6	5.0	5.3	6.1	6.5	6.5	6.8	7.2
6H	4.2	4.5	4.6	4.9	5.3	6.2	6.5	6.6	6.9	7.3
8H	4.1	4.4	4.6	4.8	5.3	6.3	6.6	6.7	7.0	7.4
12H	4.1	4.3	4.5	4.8	5.2	6.5	6.7	6.9	7.2	7.6
12H 4H	4.2	4.6	4.6	4.9	5.3	6.0	6.4	6.4	6.8	7.1
6H	4.1	4.4	4.6	4.8	5.3	6.1	6.4	6.6	6.8	7.3
8H	4.1	4.3	4.5	4.8	5.2	6.2	6.5	6.7	6.9	7.4
Variations with the observer position at spacings:										
S = 1.0H	+ 1.4 / - 2.5					+ 0.9 / - 1.3				
1.5H	+ 0.7 / - 1.0					+ 1.0 / - 1.0				
2.0H	+ 2.8 / - 4.5					+ 1.8 / - 1.7				

CIE Pub.117, 2504 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 3.2)

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:JYH
 Test Date:2023-03-22

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:

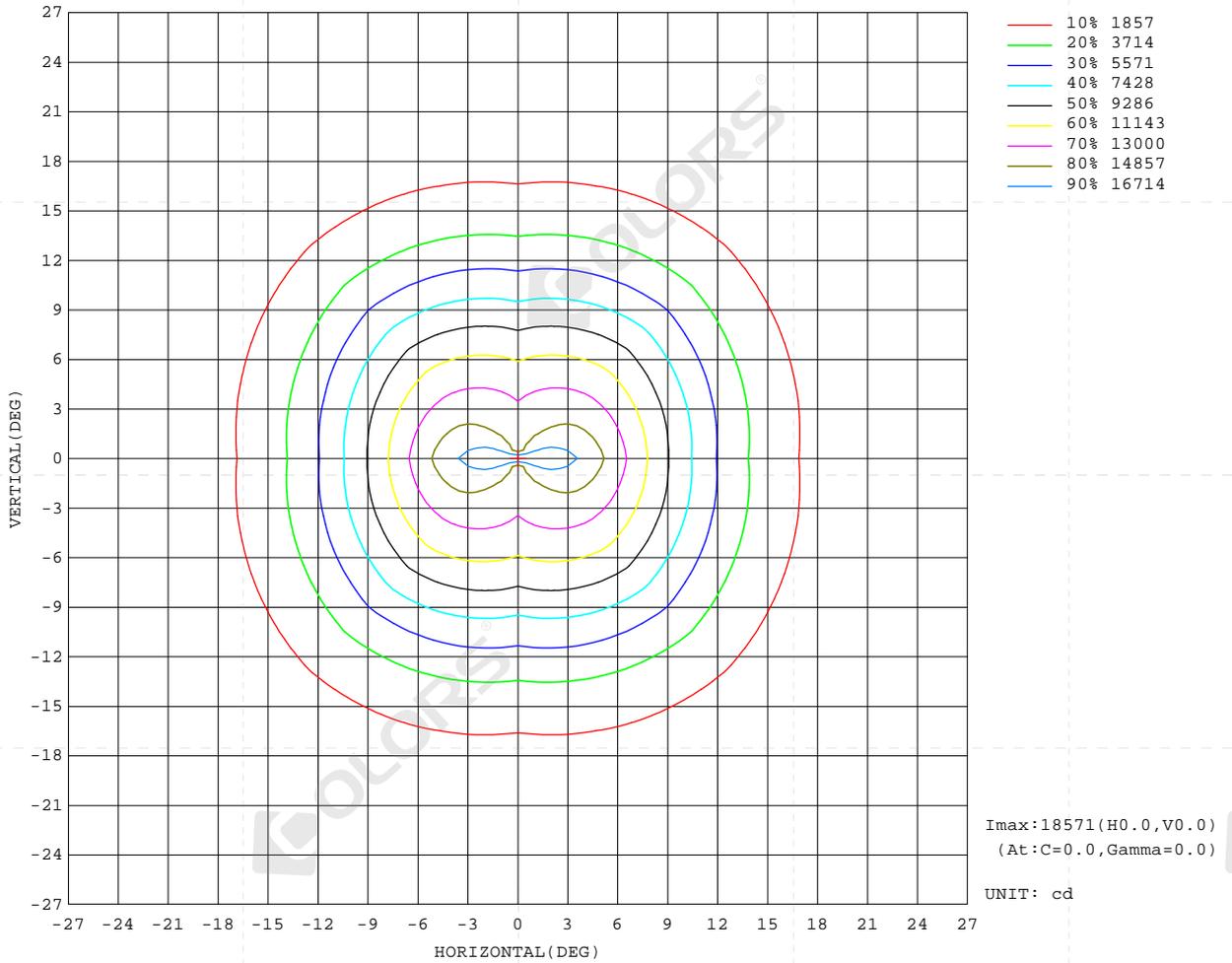
UTILIZATION FACTORS TABLE

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	88	82	78	88	82	78	87	81	78	74
0.80	95	90	86	95	89	86	94	89	85	82
1.00	100	94	91	99	94	90	97	94	90	86
1.25	104	98	95	103	98	95	101	97	94	90
1.50	106	102	98	105	101	98	103	99	97	92
2.00	109	105	102	107	104	101	105	102	99	94
2.50	110	107	104	109	105	103	106	103	101	95
3.00	112	109	106	110	107	105	107	105	103	96
4.00	114	111	109	112	110	108	108	106	105	98
5.00	115	113	111	113	111	110	109	108	106	99
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: 2023-03-22

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

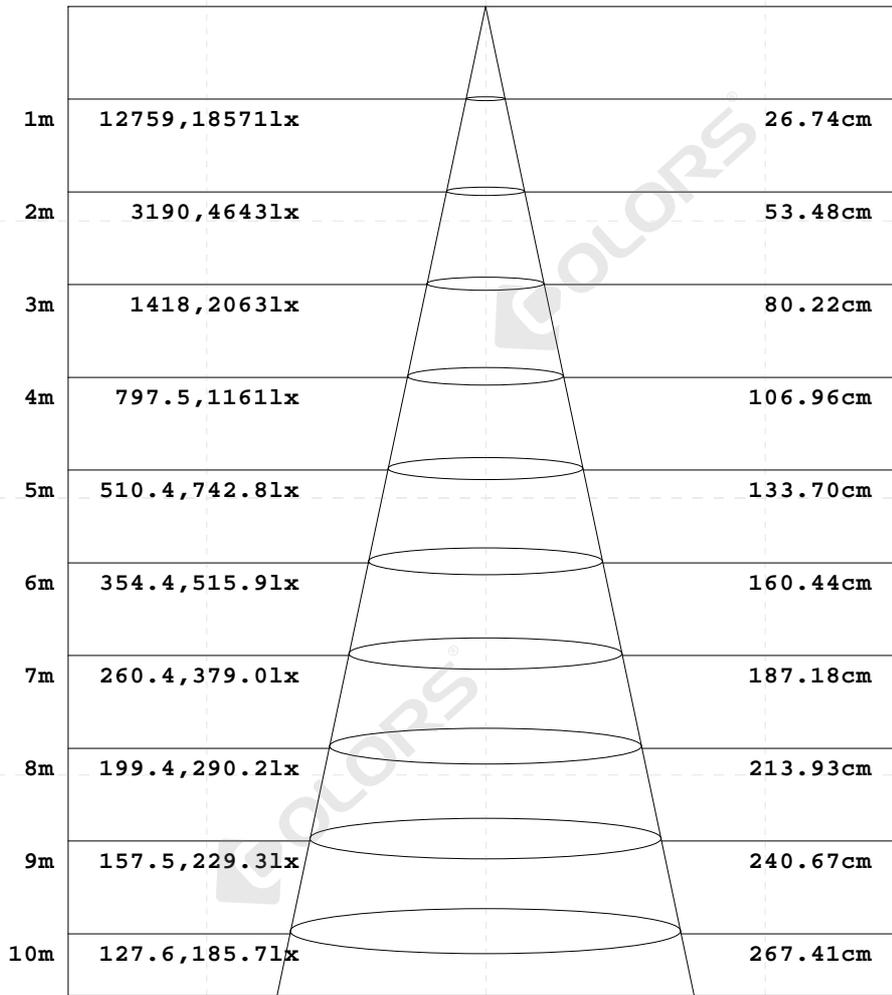


C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: JYH
 Test Date: 2023-03-22

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:791.7 lm



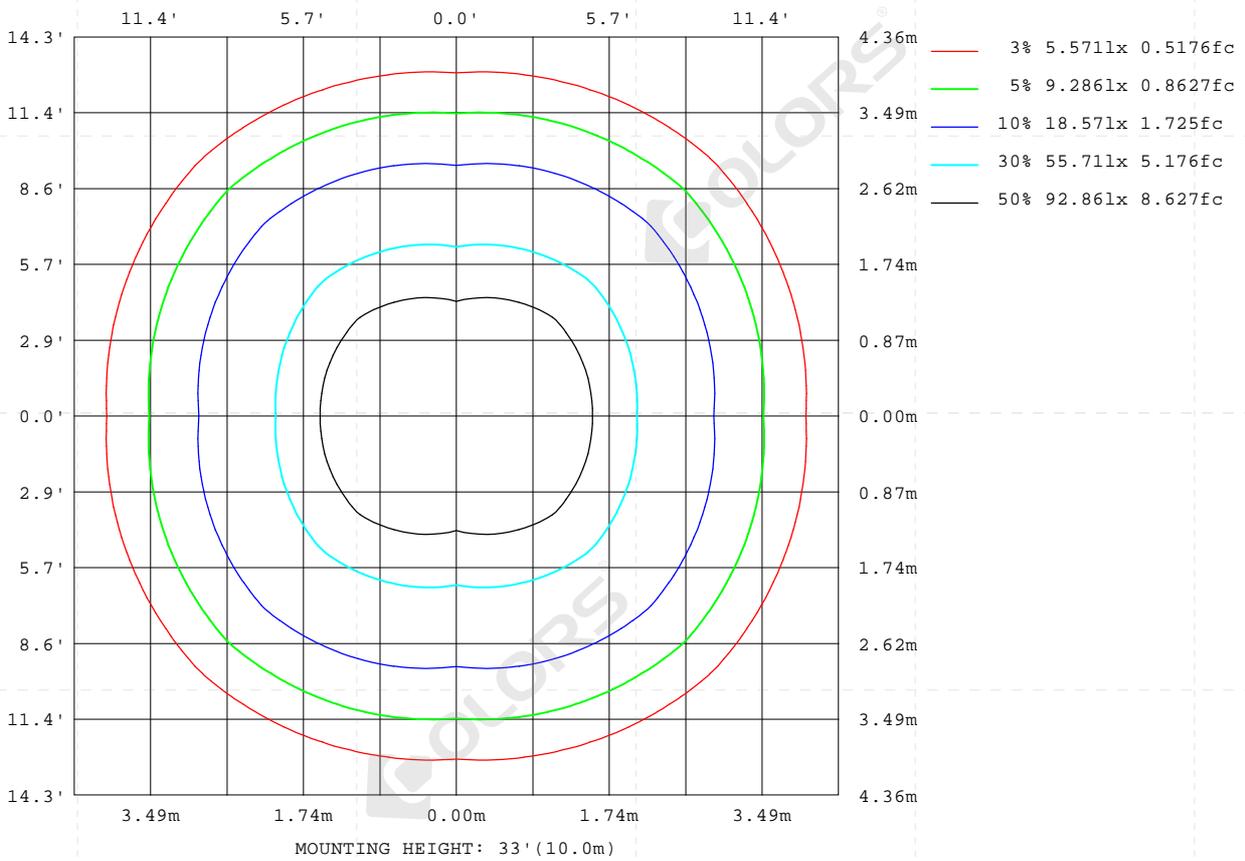
Height Eavg, Emax Angle:15.23deg Diameter

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:2023-03-22

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:

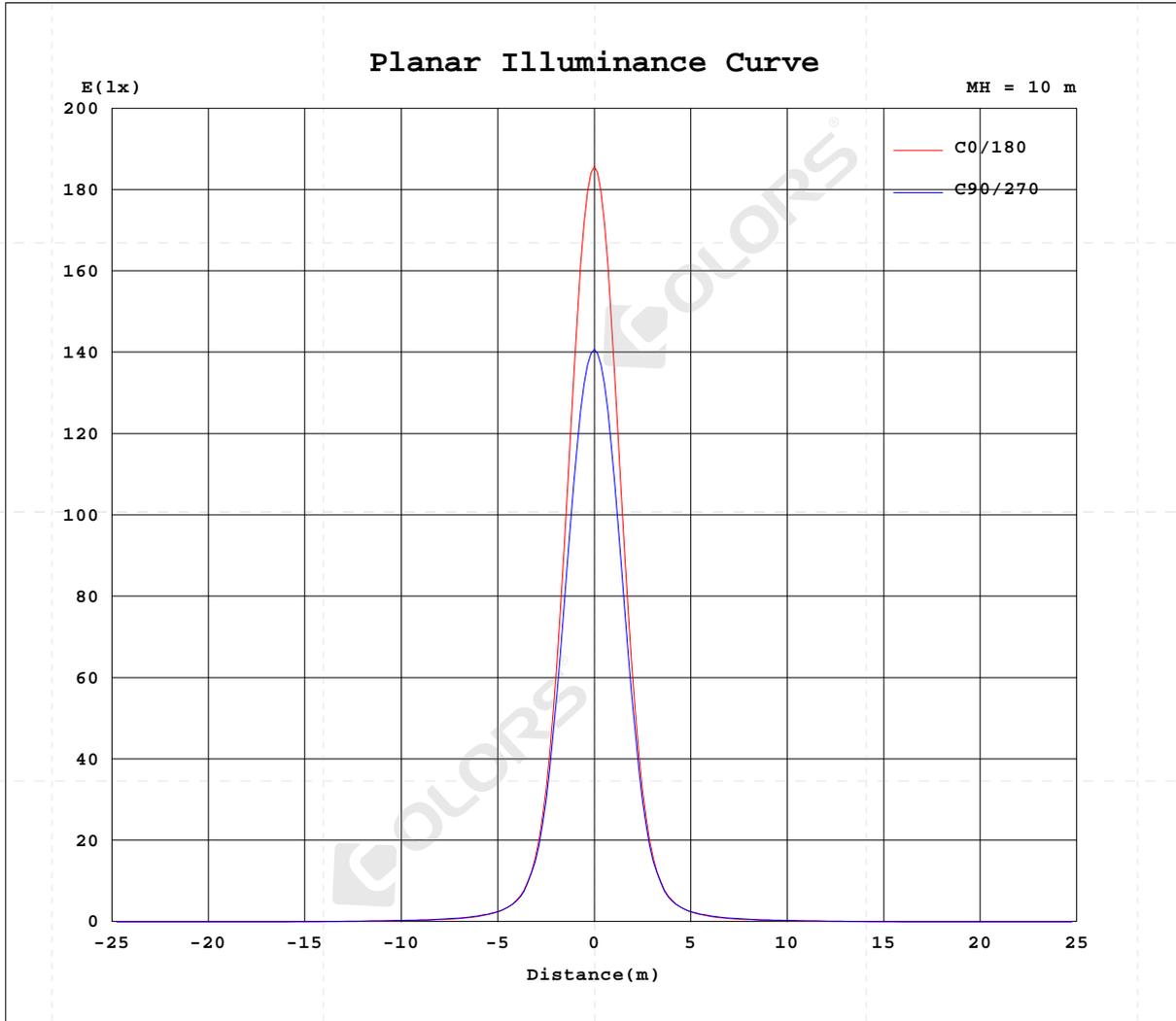
ISOLUX DIAGRAM



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: JYH
 Test Date: 2023-03-22

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: 2023-03-22

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: ×10cd

C(DEG) g (DEG)	0	45	90	135	180	225	270	315											
0	1857	1534	1408	1534	1857	1534	1408	1534											
5	1510	1347	1191	1347	1510	1347	1191	1347											
10	800	851	689	851	800	851	689	851											
15	286	351	265	351	286	351	265	351											
20	93.9	117	90.7	117	93.9	117	90.7	117											
25	42.4	47.7	42.2	47.7	42.4	47.7	42.2	47.7											
30	23.9	27.2	26.0	27.2	23.9	27.2	26.0	27.2											
35	14.8	17.6	17.4	17.6	14.8	17.6	17.4	17.6											
40	11.0	12.7	12.8	12.7	11.0	12.7	12.8	12.7											
45	8.73	9.81	10.1	9.81	8.73	9.81	10.1	9.81											
50	6.32	7.17	7.99	7.17	6.32	7.17	7.99	7.17											
55	3.93	4.66	5.59	4.66	3.93	4.66	5.59	4.66											
60	1.83	2.79	3.89	2.79	1.83	2.79	3.89	2.79											
65	0.74	1.36	3.97	1.36	0.74	1.36	3.97	1.36											
70	0.18	0.49	1.21	0.49	0.18	0.49	1.21	0.49											
75	0.13	0.22	0.79	0.22	0.13	0.22	0.79	0.22											
80	0.09	0.16	0.56	0.16	0.09	0.16	0.56	0.16											
85	0.07	0.11	0.45	0.11	0.07	0.11	0.45	0.11											
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:2023-03-22

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: