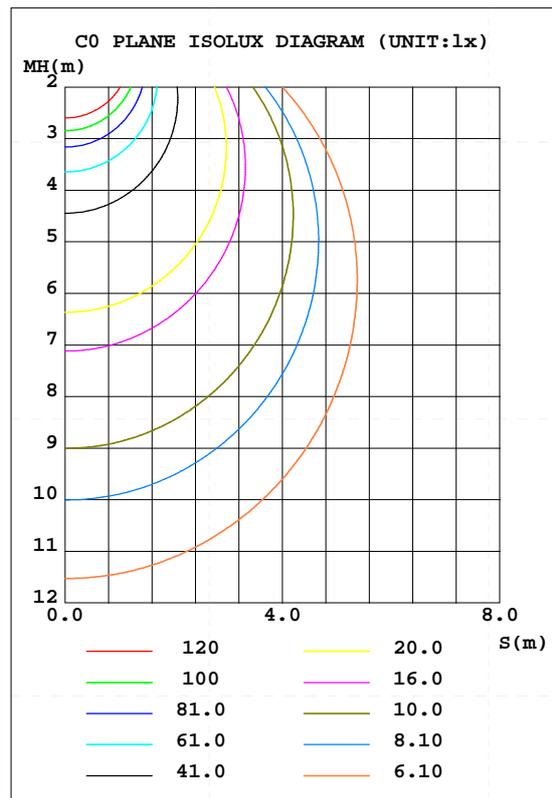
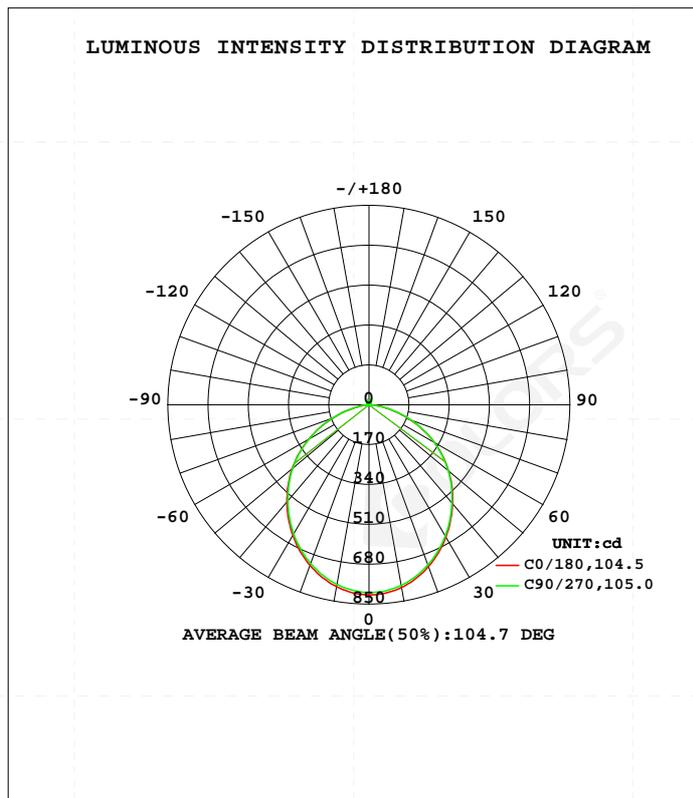


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:48.00V I:0.5000A P:24.00W PF:1.000 Freq:0Hz Lamp Flux:2123.01x1 lm		
NAME: LLS-MS25FDXWS1200-F20NW8X-DC	TYPE:	WEIGHT:
SPEC.:	DIM.: 1200*20*23mm	SERIAL No.:
MFR.: COLORS	SUR.:1200*20mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 88.46 lm/W			
MODEL		I _{max} (cd)	810.3	S/MH(C0/180)	1.20
NOMINAL POWER(W)	24	LOR(%)	100.0	S/MH(C90/270)	1.19
RATED VOLTAGE(V)	48	TOTAL FLUX(lm)	2123.0	h UP, DN(C0-180)	1.6,49.6
NOMINAL FLUX(lm)	2123.01	CIE CLASS	DIRECT	h UP, DN(C180-360)	1.5,47.3
LAMPS INSIDE	1	h up(%)	3.1	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	48	h down(%)	96.9	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:JYH
 Test Date:2024-05-06

Range: 0 - 180DEG
 Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity:65.0%
 Test Distance:10.375m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

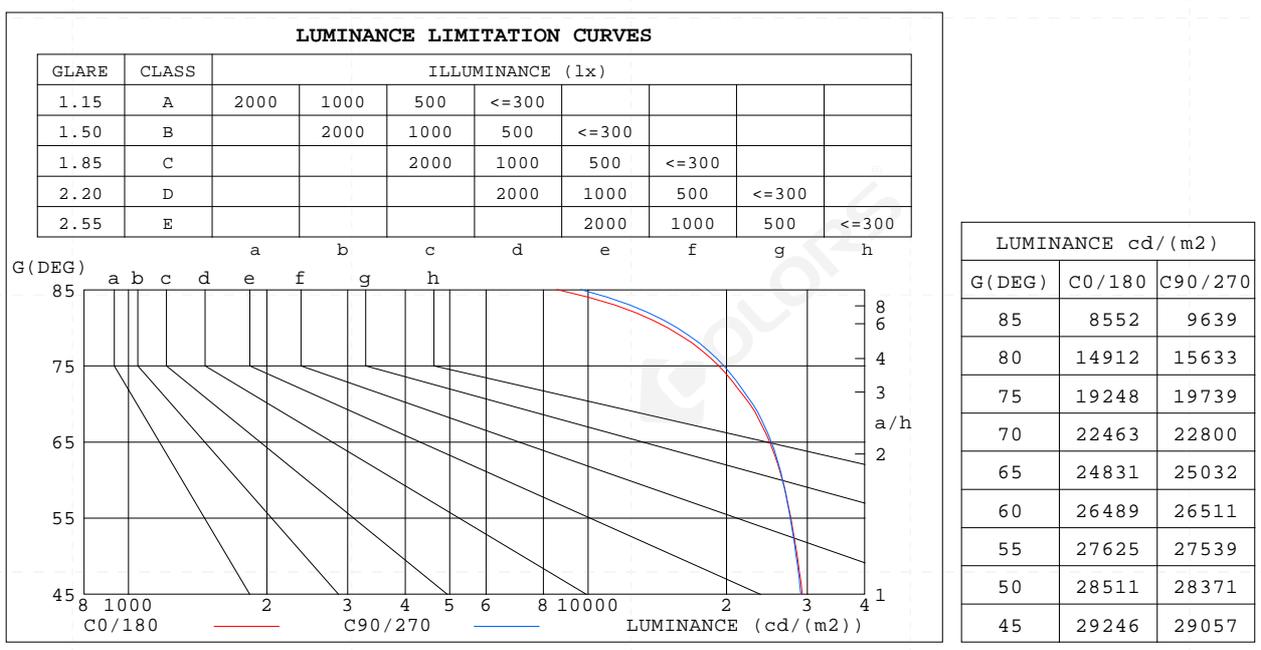
ZONAL FLUX DIAGRAM:

g	C0	C45	C90	C135	C180	C225	C270	C315	g	F zone	F total	%lum,lamp
10	791.1	786.5	782.1	778.9	787.7	782.3	778.1	774.3	0- 10	75.68	75.68	3.56,3.56
20	734.4	731.2	727.2	724.2	729.2	724.5	720.8	717.1	10- 20	213.7	289.4	13.6,13.6
30	651.1	649.1	645.6	643.0	643.7	640.2	636.7	633.6	20- 30	316.4	605.8	28.5,28.5
40	550.5	549.5	546.5	544.5	540.3	537.9	534.9	532.4	30- 40	371.5	977.3	46,46
50	439.8	440.1	437.7	436.1	424.6	423.3	421.0	419.0	40- 50	375.9	1353	63.7,63.7
60	317.9	317.3	318.1	314.6	295.1	297.8	294.2	294.7	50- 60	330.1	1683	79.3,79.3
70	184.4	186.7	187.2	185.5	159.6	161.6	160.4	159.7	60- 70	237.4	1921	90.5,90.5
80	62.15	64.99	65.15	64.83	42.16	44.08	43.46	43.38	70- 80	116.8	2038	96,96
90	2.972	3.142	3.175	3.122	2.359	2.452	2.478	2.404	80- 90	20.12	2058	96.9,96.9
100	4.626	4.733	4.671	4.684	4.159	4.188	4.212	4.140	90-100	3.780	2061	97.1,97.1
110	7.074	7.152	7.052	7.066	6.419	6.420	6.454	6.376	100-110	5.875	2067	97.4,97.4
120	9.837	9.835	9.708	9.727	8.998	9.021	9.052	8.964	110-120	7.966	2075	97.8,97.8
130	12.80	12.78	12.62	12.64	11.91	11.94	11.96	11.86	120-130	9.693	2085	98.2,98.2
140	15.72	15.74	15.54	15.57	14.93	14.92	14.94	14.80	130-140	10.65	2096	98.7,98.7
150	18.20	18.36	18.15	18.16	17.80	17.69	17.70	17.53	140-150	10.41	2106	99.2,99.2
160	20.54	20.64	20.39	20.39	20.38	20.03	20.04	19.85	150-160	8.831	2115	99.6,99.6
170	22.43	22.30	22.03	22.06	22.39	21.83	21.86	21.64	160-170	5.993	2121	99.9,99.9
180	23.33	23.10	22.82	22.82	23.51	22.94	22.94	22.73	170-180	2.145	2123	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:2024-05-06

g Range: 0 - 180DEG
 Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity:65.0%
 Test Distance:10.375m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

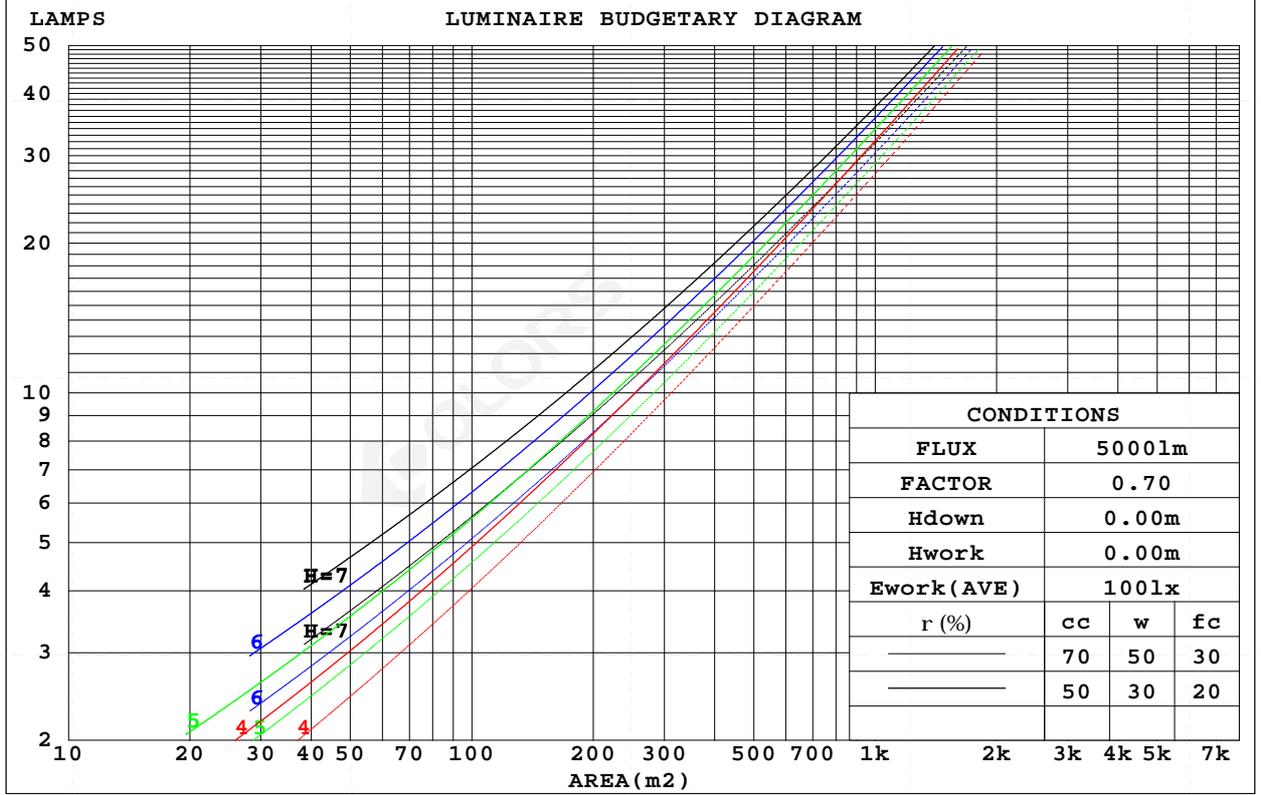


C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: JYH
 Test Date: 2024-05-06

G Range: 0 - 180DEG
 G Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity: 65.0%
 Test Distance: 10.375m [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	1.18	1.18	1.18	1.15	1.15	1.15	1.09	1.09	1.09	1.04	1.04	1.04	.99	.99	.99	.97
1.0	1.04	1.00	.97	1.02	.98	.95	.97	.94	.91	.92	.90	.88	.88	.86	.85	.82
2.0	.91	.85	.79	.89	.83	.78	.85	.80	.76	.81	.77	.74	.78	.75	.72	.69
3.0	.80	.73	.66	.79	.71	.65	.75	.69	.64	.72	.67	.62	.69	.65	.61	.59
4.0	.71	.63	.56	.70	.62	.56	.67	.60	.55	.64	.58	.54	.62	.57	.53	.50
5.0	.64	.55	.49	.63	.54	.48	.60	.53	.47	.58	.52	.47	.56	.50	.46	.44
6.0	.58	.49	.43	.57	.48	.42	.54	.47	.42	.52	.46	.41	.51	.45	.40	.38
7.0	.52	.44	.38	.51	.43	.37	.50	.42	.37	.48	.41	.37	.46	.40	.36	.34
8.0	.48	.39	.34	.47	.39	.33	.45	.38	.33	.44	.37	.33	.43	.37	.32	.30
9.0	.44	.36	.30	.43	.35	.30	.42	.35	.30	.41	.34	.30	.39	.34	.29	.27
10.0	.41	.33	.28	.40	.32	.27	.39	.32	.27	.38	.31	.27	.36	.31	.27	.25



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: JYH
 Test Date: 2024-05-06

Range: 0 - 180DEG
 Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity: 65.0%
 Test Distance: 10.375m [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	.289	.165	.052	.281	.161	.051	.266	.153	.049	.253	.146	.047	.240	.139	.045		
2.0	.277	.152	.047	.270	.149	.046	.256	.143	.044	.244	.137	.043	.233	.132	.042		
3.0	.258	.138	.041	.252	.135	.041	.240	.130	.040	.230	.126	.039	.220	.122	.038		
4.0	.240	.125	.037	.234	.123	.036	.224	.119	.035	.214	.115	.035	.205	.112	.034		
5.0	.223	.114	.033	.218	.112	.033	.209	.109	.032	.200	.105	.031	.192	.102	.031		
6.0	.207	.104	.030	.203	.103	.030	.195	.100	.029	.187	.097	.029	.179	.094	.028		
7.0	.194	.096	.027	.190	.094	.027	.182	.092	.027	.175	.090	.026	.168	.087	.026		
8.0	.181	.089	.025	.178	.087	.025	.171	.085	.024	.164	.083	.024	.158	.081	.024		
9.0	.170	.082	.023	.167	.081	.023	.161	.079	.023	.155	.078	.022	.149	.076	.022		
10.0	.160	.077	.021	.157	.076	.021	.152	.074	.021	.146	.073	.021	.141	.071	.020		

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	.214	.214	.214	.183	.183	.183	.125	.125	.125	.072	.072	.072	.023	.023	.023	
1.0	.203	.180	.160	.173	.154	.137	.119	.106	.095	.068	.061	.055	.022	.020	.018	
2.0	.194	.156	.124	.166	.134	.107	.114	.093	.075	.066	.054	.044	.021	.017	.014	
3.0	.186	.138	.100	.160	.119	.087	.110	.083	.061	.063	.048	.036	.020	.016	.012	
4.0	.179	.125	.084	.153	.108	.073	.105	.075	.051	.061	.044	.030	.020	.014	.010	
5.0	.171	.114	.072	.147	.099	.063	.101	.069	.044	.059	.041	.026	.019	.013	.009	
6.0	.164	.106	.064	.141	.092	.056	.097	.064	.040	.057	.038	.024	.018	.012	.008	
7.0	.158	.099	.058	.136	.086	.051	.094	.060	.036	.054	.036	.021	.018	.012	.007	
8.0	.151	.093	.054	.130	.081	.047	.090	.057	.033	.052	.034	.020	.017	.011	.007	
9.0	.146	.088	.050	.125	.077	.044	.087	.054	.031	.051	.032	.018	.016	.010	.006	
10.0	.140	.084	.047	.121	.073	.041	.084	.051	.029	.049	.030	.017	.016	.010	.006	

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:JYH
 Test Date:2024-05-06

Range: 0 - 180DEG
 Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity:65.0%
 Test Distance:10.375m [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	21.7	23.1	22.0	23.4	23.6	21.7	23.1	22.0	23.4	23.6
3H	23.0	24.3	23.4	24.6	24.9	23.0	24.4	23.4	24.7	25.0
4H	23.5	24.7	23.8	25.0	25.4	23.5	24.8	23.9	25.1	25.4
6H	23.8	24.9	24.1	25.3	25.6	23.8	25.0	24.2	25.3	25.7
8H	23.8	24.9	24.2	25.3	25.6	23.9	25.0	24.2	25.3	25.7
12H	23.8	24.9	24.2	25.2	25.6	23.9	25.0	24.3	25.3	25.7
4H 2H	22.2	23.5	22.6	23.8	24.1	22.2	23.5	22.6	23.8	24.1
3H	23.8	24.8	24.2	25.2	25.6	23.8	24.9	24.2	25.2	25.6
4H	24.3	25.3	24.7	25.7	26.1	24.4	25.4	24.8	25.7	26.1
6H	24.7	25.6	25.1	26.0	26.4	24.7	25.6	25.2	26.0	26.5
8H	24.8	25.6	25.2	26.0	26.4	24.8	25.6	25.3	26.1	26.5
12H	24.8	25.5	25.3	26.0	26.4	24.9	25.6	25.3	26.0	26.5
8H 4H	24.5	25.3	25.0	25.8	26.2	24.6	25.4	25.0	25.8	26.2
6H	25.0	25.7	25.5	26.1	26.6	25.0	25.7	25.5	26.2	26.7
8H	25.1	25.7	25.6	26.2	26.7	25.2	25.8	25.7	26.3	26.8
12H	25.2	25.7	25.7	26.2	26.7	25.2	25.8	25.8	26.3	26.8
12H 4H	24.5	25.3	25.0	25.7	26.2	24.5	25.3	25.0	25.7	26.2
6H	25.0	25.6	25.5	26.1	26.6	25.1	25.7	25.6	26.1	26.6
8H	25.2	25.7	25.7	26.2	26.7	25.2	25.7	25.7	26.2	26.8
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 / - 0.3				
2.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				

CIE Pub.117, 2123 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 2.6)

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: JYH
 Test Date: 2024-05-06

g Range: 0 - 180DEG
 Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity: 65.0%
 Test Distance: 10.375m [K=1.0000]
 Remarks:

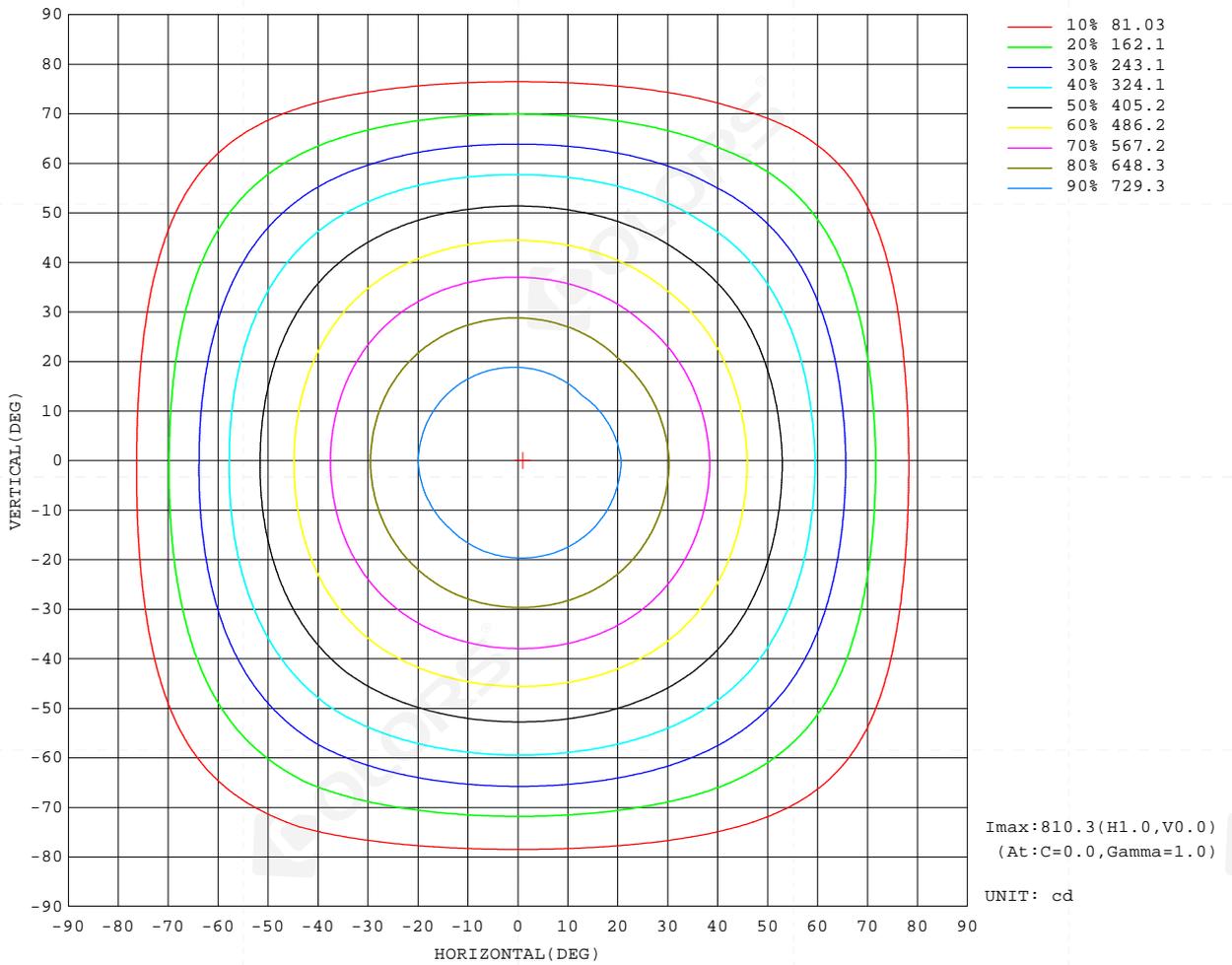
UTILIZATION FACTORS TABLE

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	47	40	57	47	40	56	46	40	33
0.80	68	57	50	67	56	50	65	55	49	42
1.00	77	66	59	75	65	58	73	66	58	51
1.25	84	74	67	82	73	66	79	71	65	58
1.50	89	79	72	87	78	72	83	76	70	63
2.00	95	87	81	93	86	80	89	83	78	70
2.50	99	92	86	97	90	85	93	87	83	74
3.00	102	96	91	100	94	89	96	91	87	78
4.00	106	101	96	104	99	95	99	95	92	82
5.00	109	104	100	106	102	98	101	98	95	85
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: 2024-05-06

g Range: 0 - 180DEG
 Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity: 65.0%
 Test Distance: 10.375m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

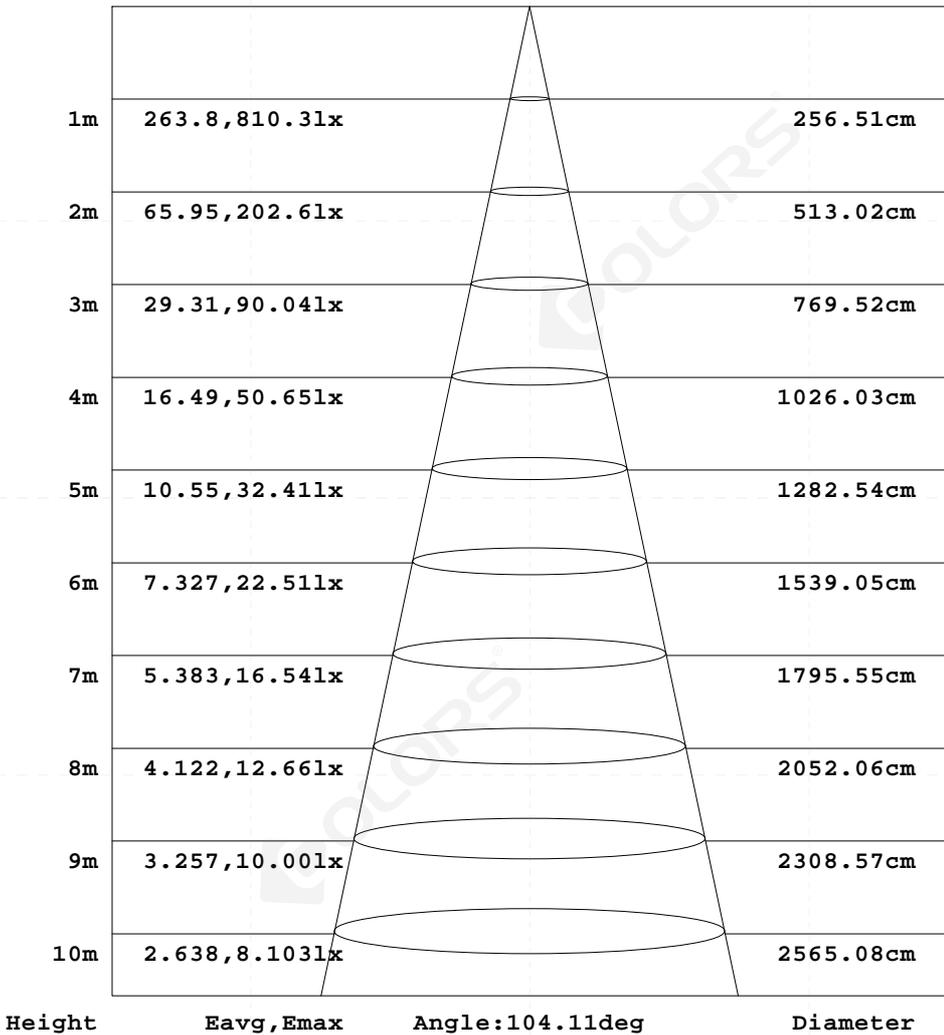


C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: JYH
 Test Date: 2024-05-06

Range: 0 - 180DEG
 Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity: 65.0%
 Test Distance: 10.375m [K=1.0000]
 Remarks:

AAI Figure

Flux out:1459 lm

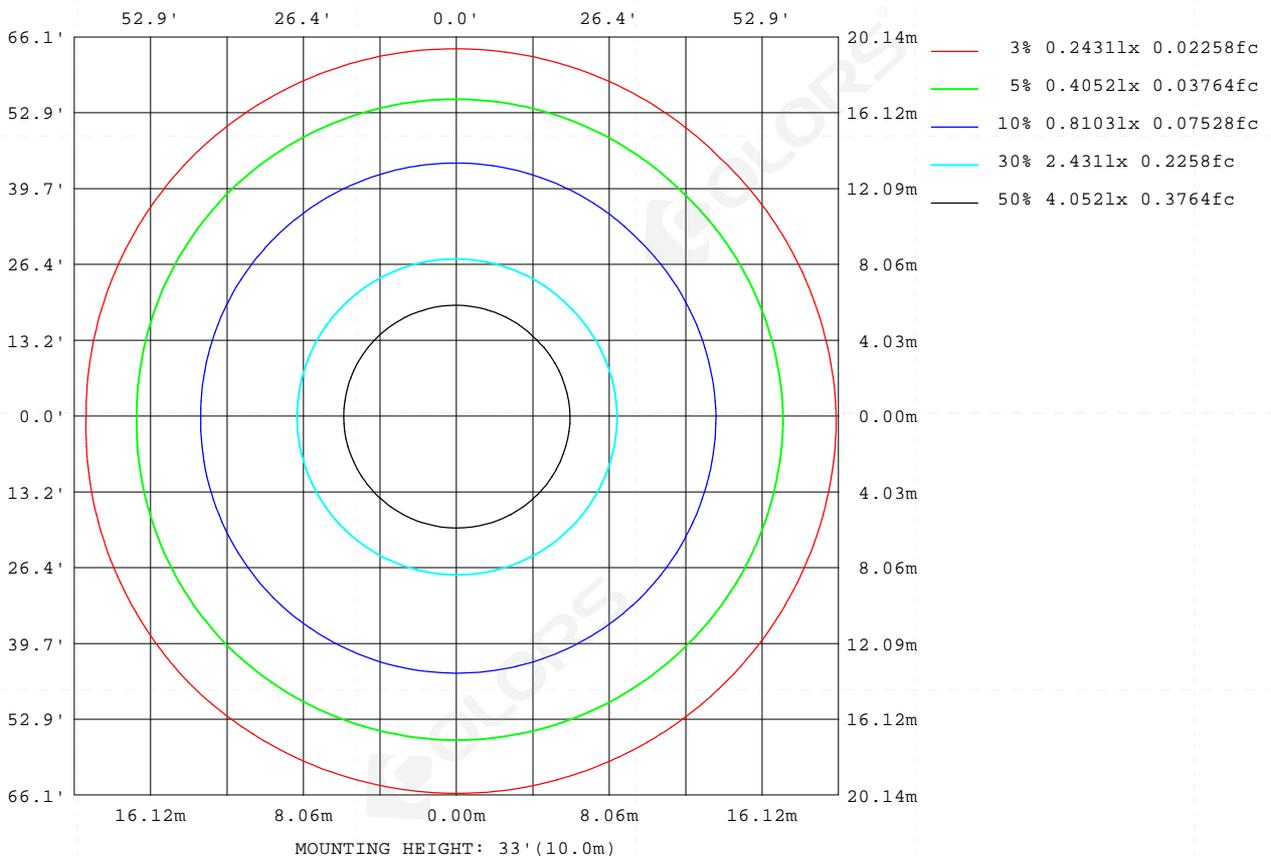


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:JYH
 Test Date:2024-05-06

Range: 0 - 180DEG
 Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity:65.0%
 Test Distance:10.375m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: JYH
 Test Date: 2024-05-06

Page Range: 0 - 180DEG
 Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity: 65.0%
 Test Distance: 10.375m [K=1.0000]
 Remarks:

LED Avg.L Report

Test:U:48.00V I:0.5000A P:24.00W PF:1.000 Freq:0Hz Lamp Flux:2123.01x1 lm		
NAME: LLS-MS25FDXWS1200-F20NW8X-DC	TYPE:	WEIGHT:
SPEC.:	DIM.: 1200*20*23mm	SERIAL No.:
MFR.: COLORS	SUR.:1200*20mm	Shielding Angle:

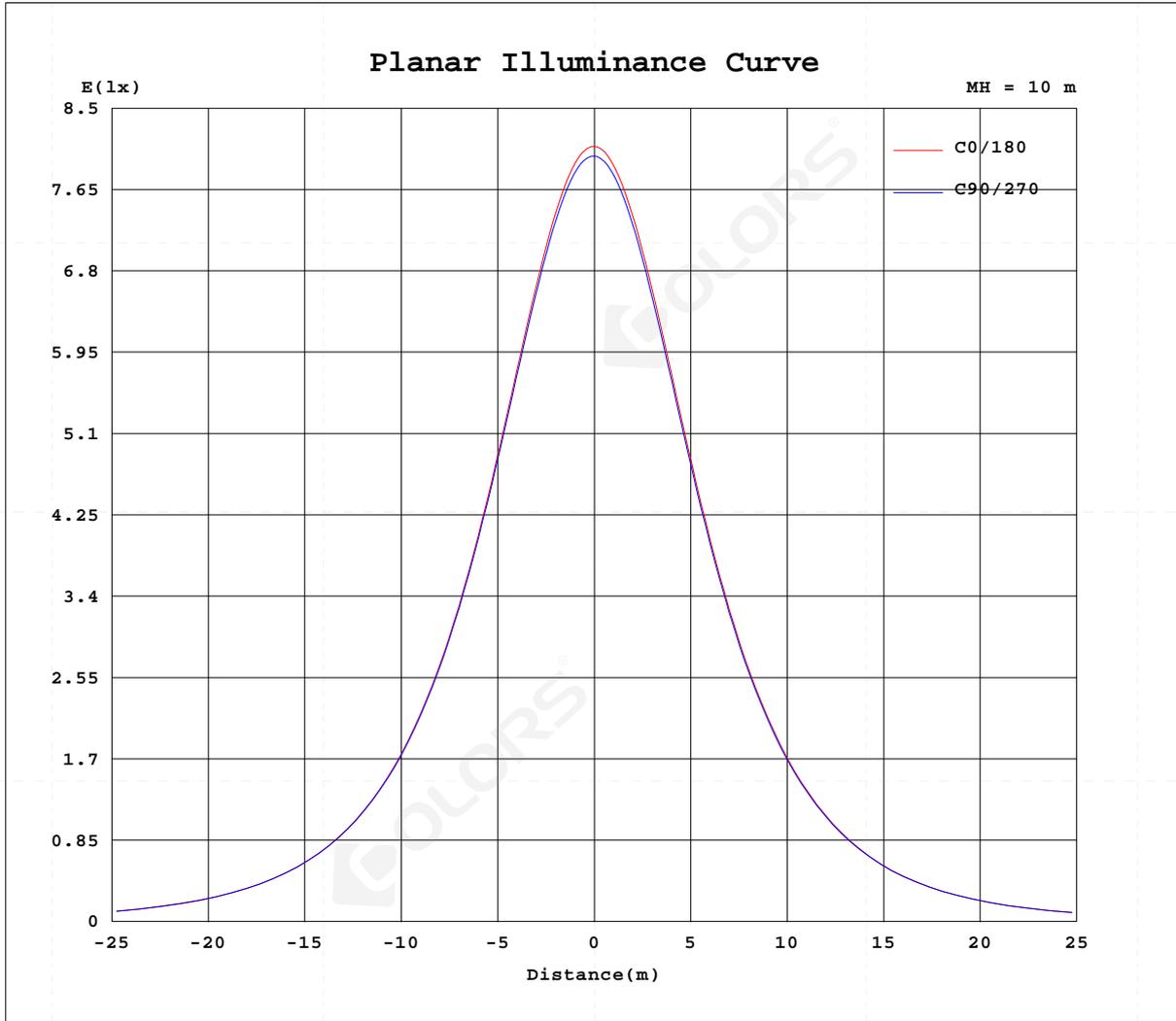
AvgL	cd/m2
L_0~180(65)av	23600
L_0~180(75)av	17381
L_0~180(85)av	5592
L_90~270(65)av	23713
L_90~270(75)av	17720
L_90~270(85)av	6317
L_45(65)av	23705
L_45(75)av	17727
L_45(85)av	6322

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:JYH
 Test Date:2024-05-06

g Range: 0 - 180DEG
 Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity:65.0%
 Test Distance:10.375m [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: 2024-05-06

Page Range: 0 - 180DEG
 Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity: 65.0%
 Test Distance: 10.375m [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	810	805	800	797	810	805	800	797											
5	806	801	796	793	804	798	794	791											
10	791	787	782	779	788	782	778	774											
15	766	763	759	755	762	757	753	749											
20	734	731	727	724	729	724	721	717											
25	695	693	689	686	689	685	681	678											
30	651	649	646	643	644	640	637	634											
35	602	601	598	595	594	591	587	585											
40	550	549	546	544	540	538	535	532											
45	496	496	493	491	484	482	479	477											
50	440	440	438	436	425	423	421	419											
55	380	381	379	378	361	362	359	358											
60	318	317	318	315	295	298	294	295											
65	252	253	254	251	227	230	227	228											
70	184	187	187	185	160	162	160	160											
75	120	123	123	122	96.4	98.5	97.5	97.2											
80	62.1	65.0	65.2	64.8	42.2	44.1	43.5	43.4											
85	17.9	19.9	20.2	20.1	5.51	6.54	6.26	6.37											
90	2.97	3.14	3.17	3.12	2.36	2.45	2.48	2.40											
95	3.60	3.70	3.62	3.66	3.19	3.21	3.24	3.17											
100	4.63	4.73	4.67	4.68	4.16	4.19	4.21	4.14											
105	5.81	5.91	5.81	5.84	5.24	5.25	5.30	5.24											
110	7.07	7.15	7.05	7.07	6.42	6.42	6.45	6.38											
115	8.42	8.47	8.34	8.37	7.64	7.65	7.70	7.61											
120	9.84	9.84	9.71	9.73	9.00	9.02	9.05	8.96											
125	11.3	11.3	11.1	11.2	10.4	10.4	10.5	10.4											
130	12.8	12.8	12.6	12.6	11.9	11.9	12.0	11.9											
135	14.3	14.3	14.1	14.1	13.4	13.4	13.4	13.3											
140	15.7	15.7	15.5	15.6	14.9	14.9	14.9	14.8											
145	17.0	17.1	16.9	16.9	16.4	16.4	16.4	16.2											
150	18.2	18.4	18.2	18.2	17.8	17.7	17.7	17.5											
155	19.4	19.6	19.3	19.3	19.1	18.9	18.9	18.8											
160	20.5	20.6	20.4	20.4	20.4	20.0	20.0	19.8											
165	21.6	21.6	21.3	21.3	21.5	21.0	21.0	20.8											
170	22.4	22.3	22.0	22.1	22.4	21.8	21.9	21.6											
175	23.0	22.8	22.5	22.6	23.1	22.5	22.5	22.3											
180	23.3	23.1	22.8	22.8	23.5	22.9	22.9	22.7											

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:JYH
 Test Date:2024-05-06

g Range: 0 - 180DEG
 g Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity:65.0%
 Test Distance:10.375m [K=1.0000]
 Remarks: