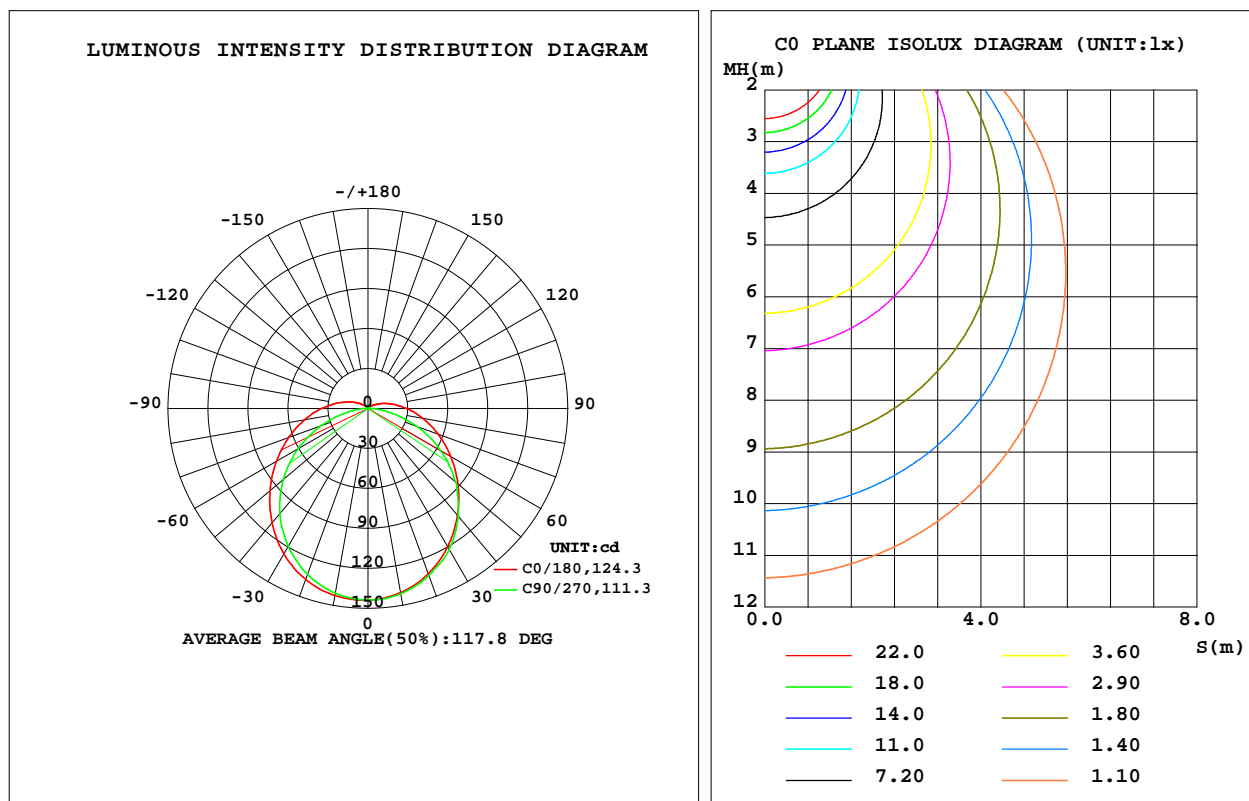


## LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:24.00V I:0.2724A P:6.537W PF:1.000 Freq:0Hz Lamp Flux:492.157x1 lm		
NAME: DLS-LG1616CDXSS1000	TYPE:	WEIGHT:
SPEC.:DLS-LG1616CDXSS1000-F7NW9X-DC	DIM.: 1000*16*16mm	SERIAL No.:
MFR.: COLORS	SUR.:1000*16	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 75.29 lm/W			
MODEL	DLS-LG1616CDXSS1000	I <sub>max</sub> (cd)	143.9	S/MH(C0/180)	1.24
NOMINAL POWER(W)	7	LOR(%)	100.0	S/MH(C90/270)	1.24
RATED VOLTAGE(V)	24	TOTAL FLUX(lm)	492.16	h UP,DN(C0-180)	3.6,46.2
NOMINAL FLUX(lm)	492.157	CIE CLASS	DIRECT	h UP,DN(C180-360)	3.8,46.5
LAMPS INSIDE	1	h up(%)	7.3	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	24	h down(%)	92.7	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JYH  
Test Date:2021-03-28

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:

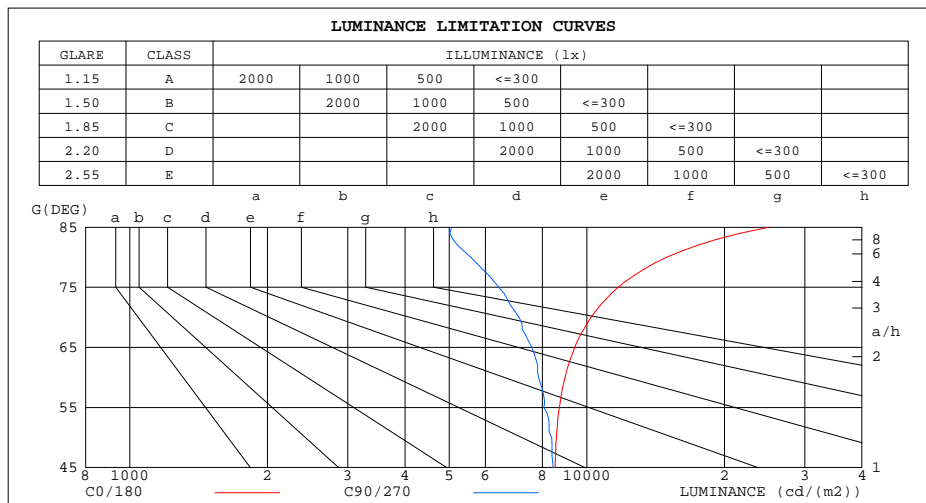
g	C0	C45	C90	C135	C180	C225	C270	C315	g	F zone	F total	%lum,lamp
10	140.3	140.8	141.2	142.3	142.5	141.8	140.7	140.1	0- 10	13.60	13.60	2.76,2.76
20	132.1	132.7	133.4	135.8	136.6	134.9	132.5	131.5	10- 20	38.96	52.57	10.7,10.7
30	119.8	120.1	122.2	124.5	126.2	123.4	119.6	118.5	20- 30	59.11	111.7	22.7,22.7
40	104.5	104.6	105.3	110.3	112.0	108.0	102.8	101.9	30- 40	71.53	183.2	37.2,37.2
50	88.20	86.08	86.17	91.74	95.95	89.66	82.87	83.72	40- 50	75.12	258.3	52.5,52.5
60	71.66	66.77	62.75	71.42	79.34	70.66	60.51	63.83	50- 60	70.00	328.3	66.7,66.7
70	55.91	47.94	38.86	52.64	63.15	52.43	36.85	45.73	60- 70	58.14	386.5	78.5,78.5
80	41.61	32.04	15.47	35.97	48.13	36.37	14.75	30.11	70- 80	42.50	429.0	87.2,87.2
90	29.17	20.00	1.615	22.62	34.89	23.30	1.168	17.94	80- 90	27.11	456.1	92.7,92.7
100	19.06	11.13	0.5613	12.94	23.68	13.65	0.2816	8.136	90-100	16.21	472.3	96,96
110	11.28	5.390	0.6411	6.631	14.73	7.172	0.5816	4.268	100-110	9.085	481.4	97.8,97.8
120	6.028	2.477	0.9812	2.979	8.268	3.396	0.8559	1.897	110-120	4.673	486.0	98.8,98.8
130	3.157	1.450	1.249	1.289	4.127	1.412	1.102	1.162	120-130	2.269	488.3	99.2,99.2
140	1.810	1.617	1.463	1.497	1.549	1.369	1.276	1.362	130-140	1.268	489.6	99.5,99.5
150	1.904	1.717	1.616	1.757	1.630	1.690	1.510	1.456	140-150	0.9810	490.6	99.7,99.7
160	2.104	1.811	1.897	1.998	1.850	1.930	1.864	1.689	150-160	0.8164	491.4	99.8,99.8
170	2.204	2.085	2.204	2.224	1.897	2.184	2.191	2.030	160-170	0.5661	491.9	100,100
180	2.057	2.438	2.431	2.451	2.037	2.431	2.451	2.445	170-180	0.2106	492.2	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:2021-03-28

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:

### LUMINANCE LIMITATION CURVES

Test:U:24.00V I:0.2724A P:6.537W PF:1.000 Freq:0Hz Lamp Flux:492.157x1 lm		
NAME: DLS-LG1616CDXSS1000	TYPE:	WEIGHT:
SPEC.:DLS-LG1616CDXSS1000-F7NW9X-DC	DIM.: 1000*16*16mm	SERIAL No.:
MFR.: COLORS	SUR.:1000*16	Shielding Angle:



LUMINANCE cd/(m2)		
G(180)	C0/180	C90/270
85	25158	5057
80	14976	5568
75	11722	6415
70	10217	7101
65	9409	7578
60	8958	7844
55	8707	8056
50	8576	8378
45	8527	8452

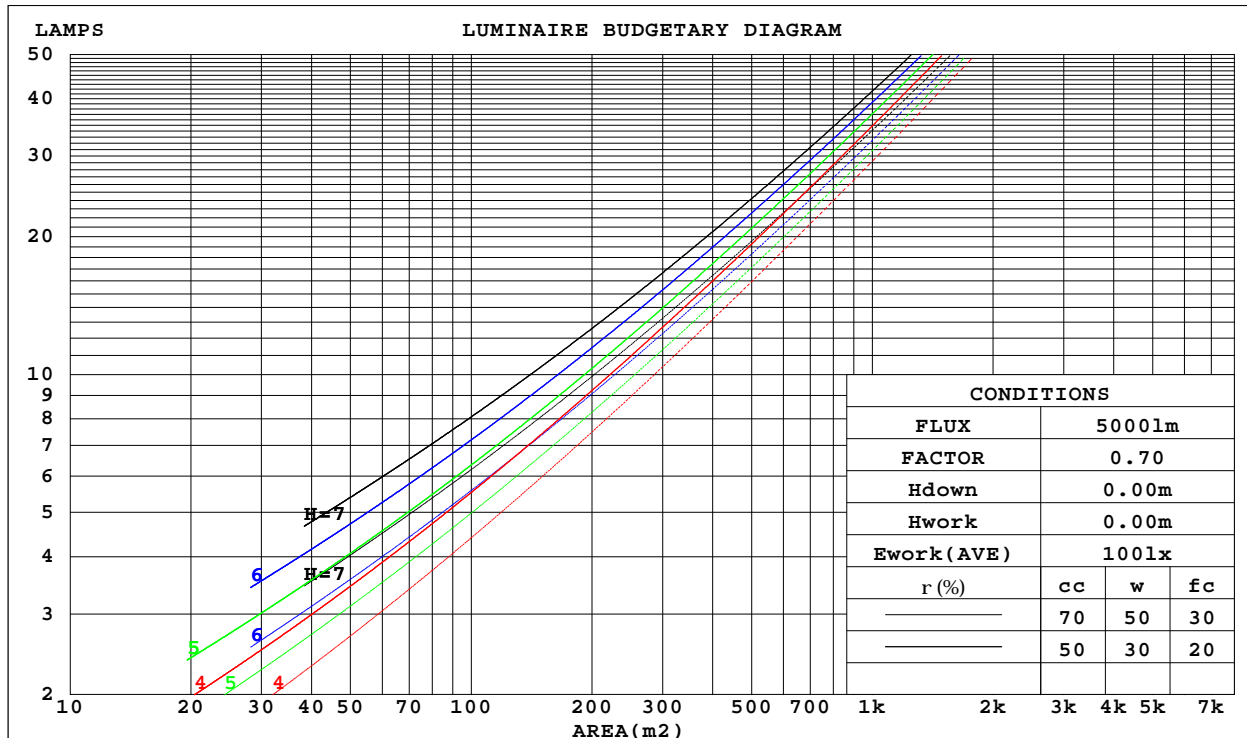
C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:JYH  
 Test Date:2021-03-28

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

Test:U:24.00V I:0.2724A P:6.537W PF:1.000 Freq:0Hz Lamp Flux:492.157x1 lm		
NAME: DLS-LG1616CDXSS1000	TYPE:	WEIGHT:
SPEC.:DLS-LG1616CDXSS1000-F7NW9X-DC	DIM.: 1000*16*16mm	SERIAL No.:
MFR.: COLORS	SUR.:1000*16	Shielding Angle:

r <sub>cc</sub>	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	1.17	1.17	1.17	1.14	1.14	1.14	1.07	1.07	1.07	1.01	1.01	1.01	.95	.95	.95	.93
1.0	.00	.95	.90	.97	.92	.88	.91	.87	.84	.86	.83	.80	.81	.79	.76	.74
2.0	.86	.78	.72	.83	.77	.71	.79	.73	.68	.74	.69	.65	.70	.66	.63	.60
3.0	.75	.66	.59	.73	.65	.58	.69	.62	.56	.65	.59	.54	.61	.57	.53	.50
4.0	.66	.57	.50	.64	.56	.49	.61	.53	.48	.58	.51	.46	.55	.49	.45	.42
5.0	.59	.50	.43	.57	.49	.42	.54	.47	.41	.52	.45	.40	.49	.43	.39	.36
6.0	.53	.44	.37	.52	.43	.37	.49	.41	.36	.47	.40	.35	.44	.39	.34	.32
7.0	.48	.39	.33	.47	.38	.32	.45	.37	.32	.42	.36	.31	.40	.35	.30	.28
8.0	.44	.35	.29	.43	.34	.29	.41	.33	.28	.39	.32	.27	.37	.31	.27	.25
9.0	.40	.32	.26	.39	.31	.26	.37	.30	.25	.36	.29	.25	.34	.28	.24	.22
10.0	.37	.29	.24	.36	.28	.23	.35	.28	.23	.33	.27	.22	.32	.26	.22	.20



C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:JYH  
 Test Date:2021-03-28

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:

WEC AND CCEC

Test:U:24.00V I:0.2724A P:6.537W PF:1.000 Freq:0Hz Lamp Flux:492.157x1 lm		
NAME: DLS-LG1616CDXSS1000	TYPE:	WEIGHT:
SPEC.:DLS-LG1616CDXSS1000-F7NW9X-DC	DIM.: 1000*16*16mm	SERIAL No.:
MFR.: COLORS	SUR.:1000*16	Shielding Angle:

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															

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	.246	.246	.246	.211	.211	.211	.144	.144	.144	.083	.083	.083	.026	.026	.026	
1.0	.240	.212	.187	.205	.182	.161	.140	.125	.111	.081	.072	.065	.026	.023	.021	
2.0	.232	.188	.152	.199	.162	.131	.136	.112	.091	.079	.065	.054	.025	.021	.017	
3.0	.225	.171	.129	.193	.148	.112	.132	.103	.078	.076	.060	.046	.025	.019	.015	
4.0	.217	.158	.114	.186	.137	.099	.128	.095	.070	.074	.056	.041	.024	.018	.014	
5.0	.209	.148	.103	.180	.128	.090	.124	.090	.064	.072	.053	.038	.023	.017	.012	
6.0	.202	.140	.096	.173	.121	.084	.120	.085	.059	.069	.050	.035	.022	.016	.012	
7.0	.195	.133	.090	.167	.116	.079	.116	.081	.056	.067	.048	.033	.022	.016	.011	
8.0	.188	.128	.086	.162	.111	.075	.112	.078	.053	.065	.046	.032	.021	.015	.011	
9.0	.182	.123	.083	.157	.107	.072	.109	.075	.051	.063	.044	.031	.020	.015	.010	
10.0	.176	.119	.080	.152	.103	.070	.105	.072	.050	.061	.043	.030	.020	.014	.010	

C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JYH  
Test Date:2021-03-28

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:

UGR(Unified Glare Rating) Table

Test:U:24.00V I:0.2724A P:6.537W PF:1.000 Freq:0Hz Lamp Flux:492.157x1 lm											
NAME: DLS-LG1616CDXSS1000					TYPE:			WEIGHT:			
SPEC.:DLS-LG1616CDXSS1000-F7NW9X-DC					DIM.: 1000*16*16mm			SERIAL No.:			
MFR.: COLORS					SUR.:1000*16			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	22.3	23.8	22.7	24.1	24.5	21.9	23.4	22.3	23.7	24.1	
	3H	24.4	25.8	24.8	26.2	26.6	23.5	24.8	23.9	25.2	25.6
	4H	25.6	26.9	26.0	27.3	27.7	24.1	25.4	24.5	25.8	26.2
	6H	26.8	28.0	27.3	28.4	28.9	24.5	25.8	25.0	26.2	26.6
	8H	27.5	28.7	27.9	29.1	29.5	24.7	25.8	25.1	26.3	26.7
	12H	28.3	29.4	28.7	29.8	30.3	24.7	25.9	25.2	26.3	26.8
4H	2H	22.9	24.2	23.4	24.6	25.0	22.6	23.9	23.1	24.3	24.7
	3H	25.3	26.4	25.7	26.8	27.3	24.4	25.6	24.9	26.0	26.5
	4H	26.6	27.6	27.0	28.1	28.6	25.2	26.3	25.7	26.7	27.2
	6H	28.0	28.9	28.5	29.4	29.9	25.8	26.8	26.3	27.3	27.8
	8H	28.8	29.7	29.3	30.2	30.7	26.1	26.9	26.6	27.4	28.0
	12H	29.7	30.5	30.2	31.0	31.6	26.2	27.0	26.8	27.5	28.1
8H	4H	26.9	27.8	27.4	28.3	28.8	25.8	26.6	26.3	27.1	27.7
	6H	28.6	29.3	29.1	29.9	30.4	26.7	27.4	27.2	27.9	28.5
	8H	29.6	30.2	30.1	30.8	31.4	27.1	27.7	27.6	28.3	28.9
	12H	30.7	31.3	31.3	31.9	32.5	27.4	28.0	28.0	28.5	29.2
12H	4H	26.9	27.7	27.5	28.3	28.8	25.9	26.7	26.4	27.2	27.8
	6H	28.7	29.4	29.3	29.9	30.5	27.0	27.6	27.5	28.2	28.8
	8H	29.8	30.4	30.4	30.9	31.6	27.5	28.1	28.1	28.6	29.3
Variations with the observer position at spacings:											
S = 1.0H	+ 0.1 / - 0.1				+ 0.1 / - 0.2						
1.5H	+ 0.2 / - 0.3				+ 0.2 / - 0.3						
2.0H	+ 0.2 / - 0.3				+ 0.1 / - 0.4						

CIE Pub.117, 492.2 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -2.5)

C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JYH  
Test Date:2021-03-28

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:

UTILIZATION FACTORS TABLE

Test:U:24.00V I:0.2724A P:6.537W PF:1.000 Freq:0Hz Lamp Flux:492.157x1 lm		
NAME: DLS-LG1616CDXSS1000	TYPE:	WEIGHT:
SPEC.:DLS-LG1616CDXSS1000-F7NW9X-DC	DIM.: 1000*16*16mm	SERIAL No.:
MFR.: COLORS	SUR.:1000*16	Shielding Angle:

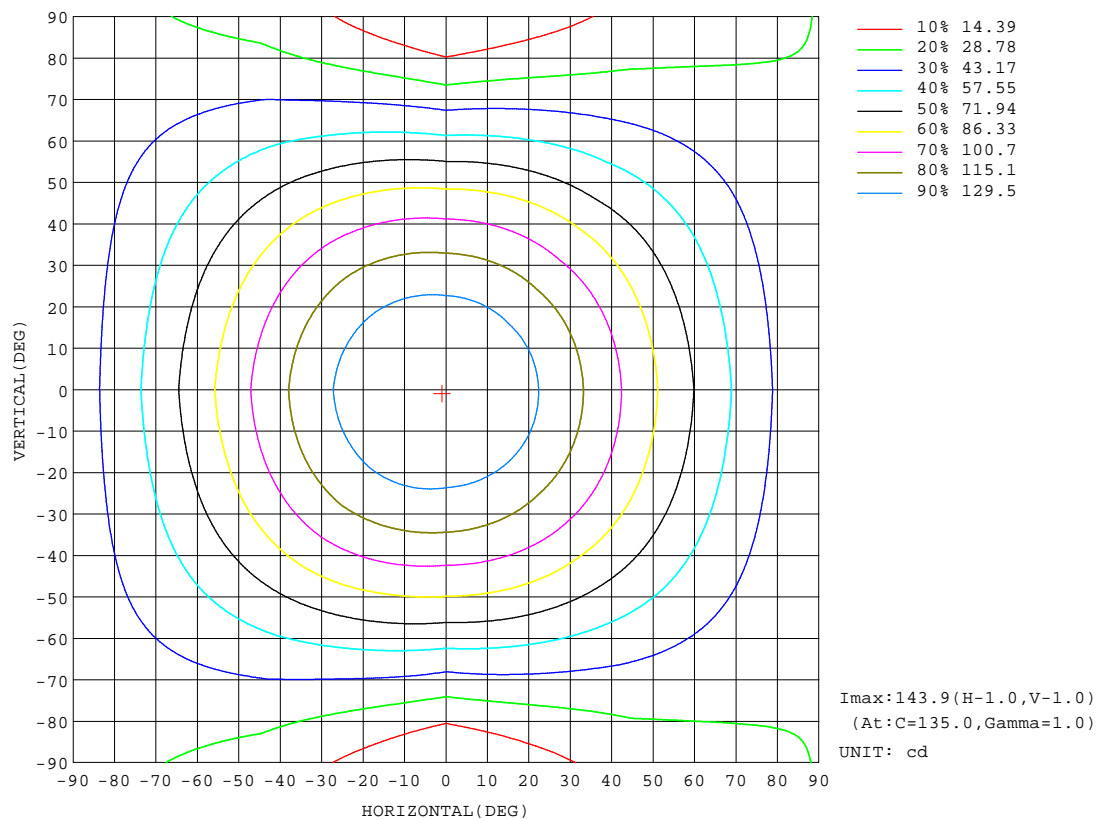
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	53	41	34	52	41	34	51	40	33	27
0.80	63	50	42	61	50	42	59	49	42	34
1.00	71	59	51	69	58	50	66	59	49	42
1.25	78	66	58	76	65	57	72	63	56	48
1.50	83	71	64	80	70	63	77	68	61	53
2.00	90	80	72	87	78	71	83	75	69	60
2.50	94	85	77	91	83	76	86	79	74	64
3.00	97	89	82	95	87	81	89	83	78	68
4.00	102	95	89	99	92	87	93	88	84	73
5.00	104	98	93	101	96	91	96	91	87	76
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:2021-03-28

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:

### ISOCANDELA DIAGRAM

Test:U:24.00V I:0.2724A P:6.537W PF:1.000 Freq:0Hz Lamp Flux:492.157x1 lm		
NAME: DLS-LG1616CDXSS1000	TYPE:	WEIGHT:
SPEC.:DLS-LG1616CDXSS1000-F7NW9X-DC	DIM.: 1000*16*16mm	SERIAL No.:
MFR.: COLORS	SUR.:1000*16	Shielding Angle:



C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JYH  
Test Date:2021-03-28

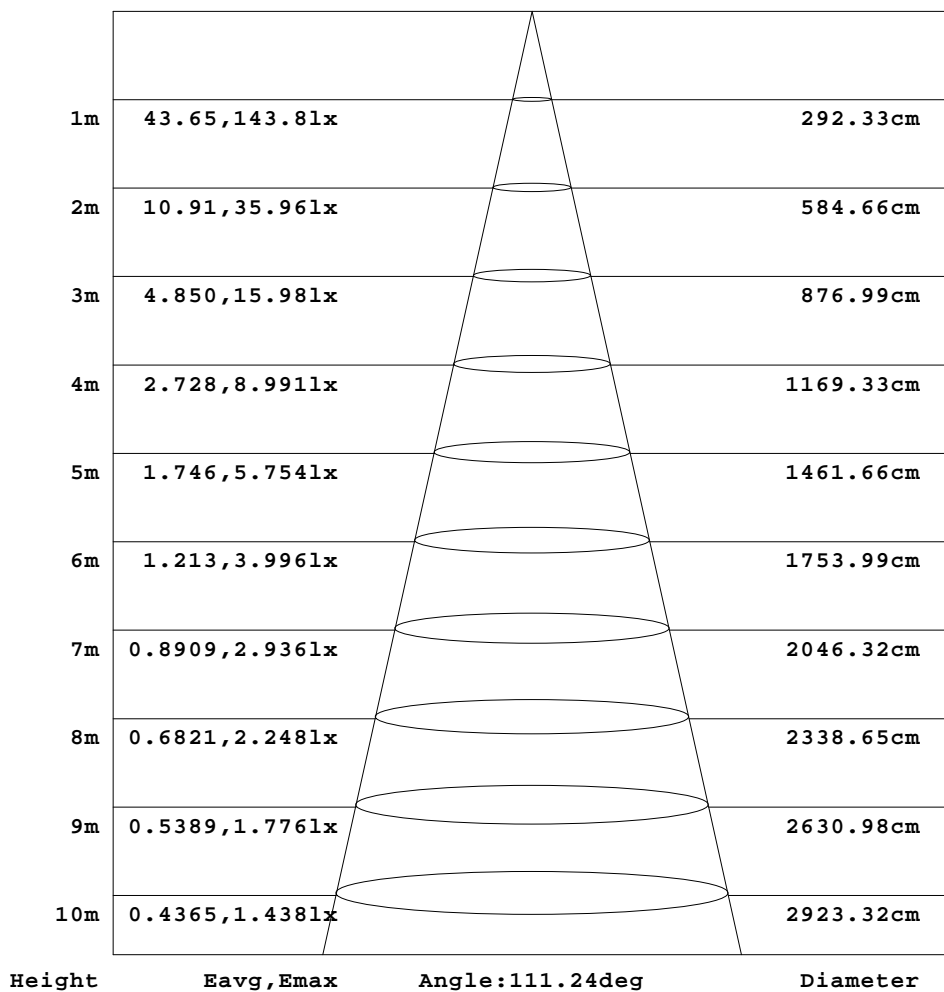
Range: 0 - 180DEG  
Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:10.950m [K=1.0000]  
Remarks:



### AAI Figure

Test:U:24.00V I:0.2724A P:6.537W PF:1.000 Freq:0Hz Lamp Flux:492.157x1 lm		
NAME: DLS-LG1616CDXSS1000	TYPE:	WEIGHT:
SPEC.:DLS-LG1616CDXSS1000-F7NW9X-DC	DIM.: 1000*16*16mm	SERIAL No.:
MFR.: COLORS	SUR.:1000*16	Shielding Angle:

Flux out:301.4 lm



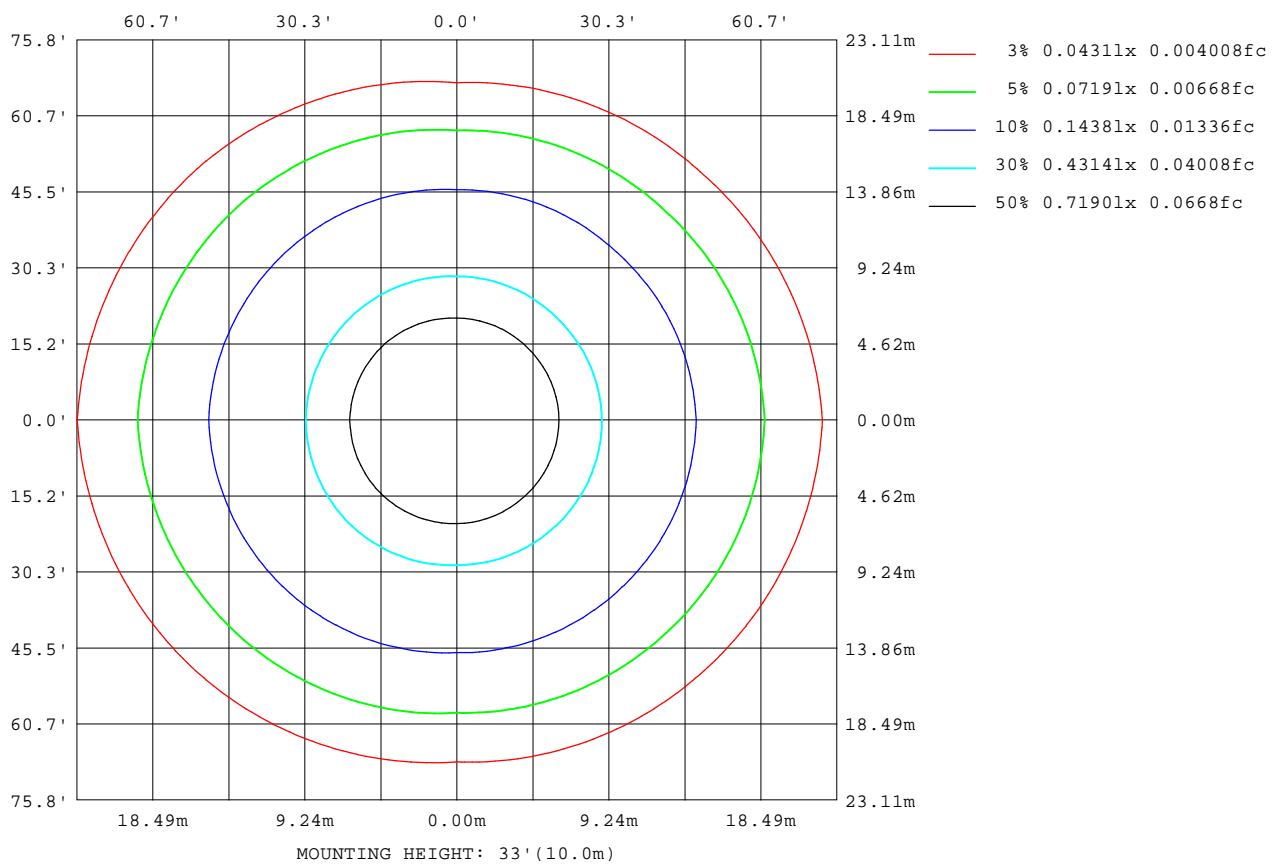
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JYH  
Test Date:2021-03-28

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:

### ISOLUX DIAGRAM

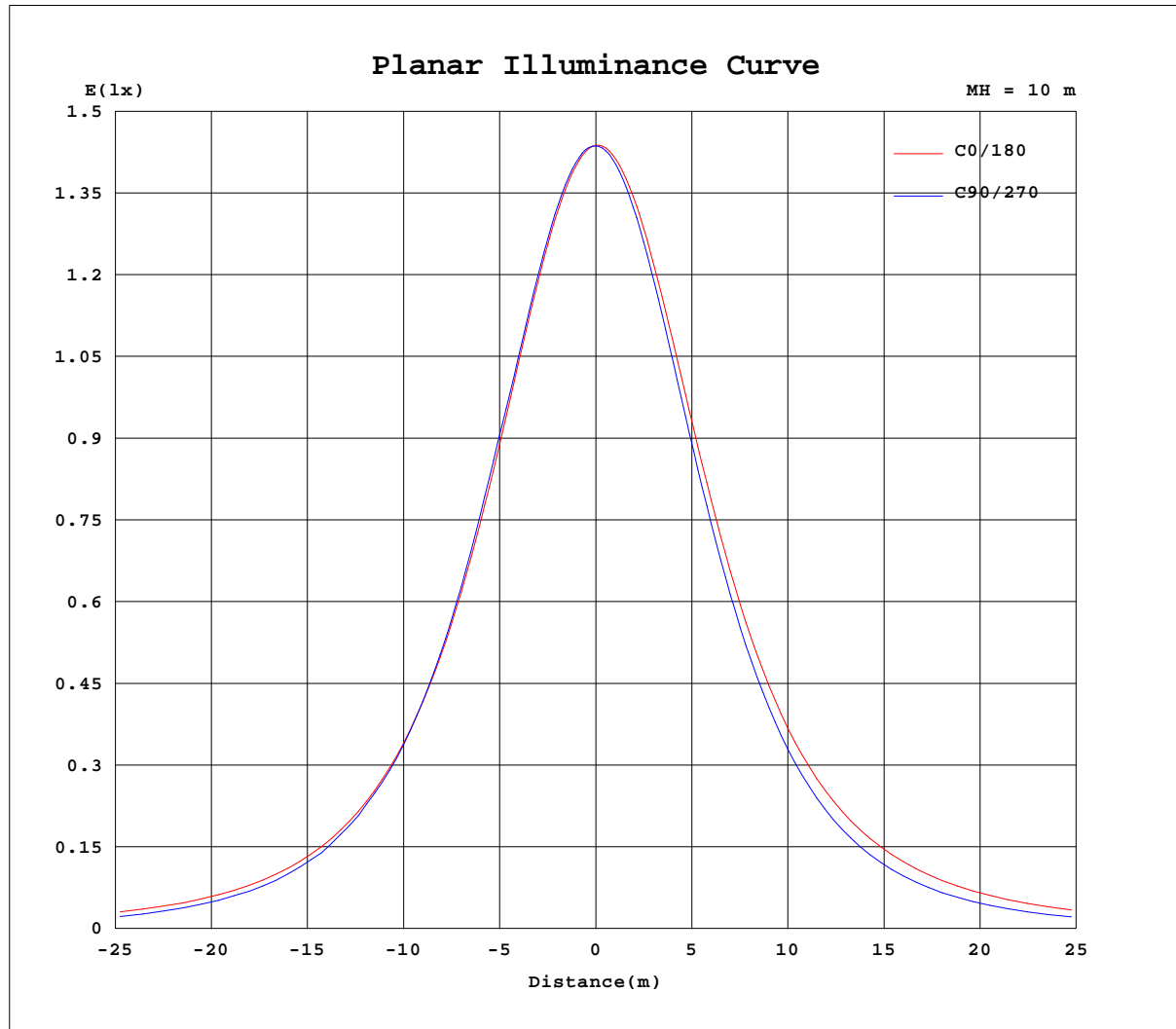
Test:U:24.00V I:0.2724A P:6.537W PF:1.000 Freq:0Hz Lamp Flux:492.157x1 lm		
NAME: DLS-LG1616CDXSS1000	TYPE:	WEIGHT:
SPEC.:DLS-LG1616CDXSS1000-F7NW9X-DC	DIM.: 1000*16*16mm	SERIAL No.:
MFR.: COLORS	SUR.:1000*16	Shielding Angle:



C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JYH  
Test Date:2021-03-28

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:

### Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: JYH  
Test Date: 2021-03-28

deg Range: 0 - 180DEG  
deg 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

Test:U:24.00V I:0.2724A P:6.537W PF:1.000 Freq:0Hz Lamp Flux:492.157x1 lm		
NAME: DLS-LG1616CDXSS1000	TYPE:	WEIGHT:
SPEC.:DLS-LG1616CDXSS1000-F7NW9X-DC	DIM.: 1000*16*16mm	SERIAL No.:
MFR.: COLORS	SUR.:1000*16	Shielding Angle:

Table--1

UNIT: cd

C(DEG) g (DEG)	0	45	90	135	180	225	270	315										
0	144	144	144	144	144	144	144	144										
5	143	143	143	144	144	144	143	143										
10	140	141	141	142	143	142	141	140										
15	137	137	138	140	140	139	137	136										
20	132	133	133	136	137	135	132	132										
25	126	127	128	131	132	130	127	126										
30	120	120	122	125	126	123	120	118										
35	112	112	114	118	119	116	112	111										
40	105	105	105	110	112	108	103	102										
45	96.5	95.6	95.6	101	104	99.1	93.2	93.3										
50	88.2	86.1	86.2	91.7	96.0	89.7	82.9	83.7										
55	79.9	76.4	73.9	81.5	87.6	80.1	72.0	73.4										
60	71.7	66.8	62.8	71.4	79.3	70.7	60.5	63.8										
65	63.6	56.9	51.2	61.8	71.1	61.3	48.7	54.5										
70	55.9	47.9	38.9	52.6	63.1	52.4	36.8	45.7										
75	48.5	39.6	26.6	44.0	55.4	44.0	25.3	37.5										
80	41.6	32.0	15.5	36.0	48.1	36.4	14.8	30.1										
85	35.1	25.6	7.05	28.9	41.3	29.4	6.46	23.5										
90	29.2	20.0	1.61	22.6	34.9	23.3	1.17	17.9										
95	23.8	15.2	1.54	17.3	29.0	18.0	0.58	13.2										
100	19.1	11.1	0.56	12.9	23.7	13.7	0.28	8.14										
105	14.9	7.94	0.52	9.38	18.9	10.1	0.43	5.87										
110	11.3	5.39	0.64	6.63	14.7	7.17	0.58	4.27										
115	8.28	3.62	0.81	4.56	11.2	4.88	0.72	2.80										
120	6.03	2.48	0.98	2.98	8.27	3.40	0.86	1.90										
125	4.33	1.75	1.14	2.02	5.82	2.34	0.98	1.28										
130	3.16	1.45	1.25	1.29	4.13	1.41	1.10	1.16										
135	2.14	1.54	1.37	1.38	2.71	1.26	1.20	1.26										
140	1.81	1.62	1.46	1.50	1.55	1.37	1.28	1.36										
145	1.88	1.68	1.56	1.62	1.54	1.52	1.37	1.37										
150	1.90	1.72	1.62	1.76	1.63	1.69	1.51	1.46										
155	2.00	1.75	1.76	1.89	1.76	1.80	1.69	1.52										
160	2.10	1.81	1.90	2.00	1.85	1.93	1.86	1.69										
165	2.14	1.91	2.04	2.10	1.91	2.03	2.02	1.82										
170	2.20	2.08	2.20	2.22	1.90	2.18	2.19	2.03										
175	2.07	2.27	2.34	2.38	1.91	2.35	2.37	2.26										
180	2.06	2.44	2.43	2.45	2.04	2.43	2.45	2.44										

C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JYH  
Test Date:2021-03-28

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: