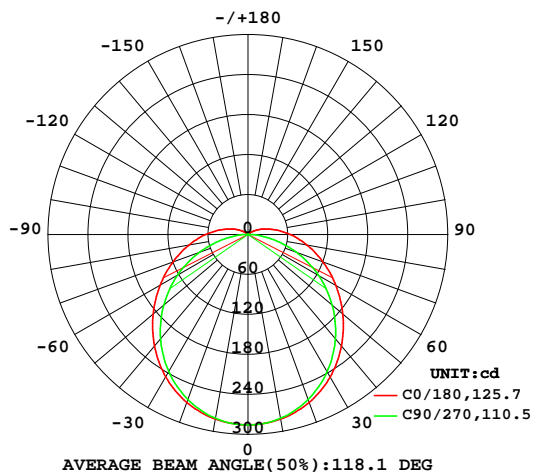


## LUMINAIRE PHOTOMETRIC TEST REPORT

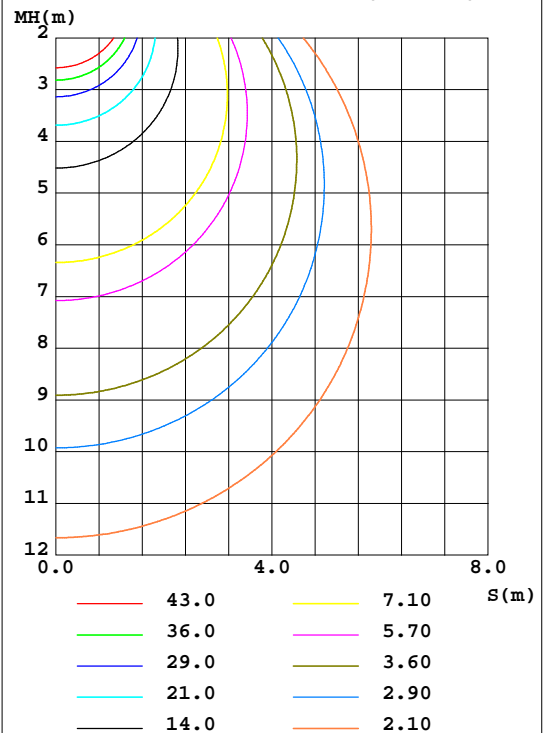
Test:U:24.00V I:0.5650A P:13.57W PF:1.000 Freq:0Hz Lamp Flux:967.308x1 lm		
NAME: DLS-LG3030(B)CDXSS1008	TYPE:	WEIGHT:
SPEC.:DLS-LG3030(B)CDXSS1008-F15NW9X-CC	DIM.: 1008*30*30mm	SERIAL No.:01
MFR.: Colors	SUR.:1008*30	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 71.28 lm/W			
MODEL	DLS-LG3030(B)CDXSS1008	Imax(cd)	285.9	S/MH(C0/180)	1.29
NOMINAL POWER(W)	15	LOR(%)	100.0	S/MH(C90/270)	1.24
RATED VOLTAGE(V)	24	TOTAL FLUX(lm)	967.31	h UP,DN(C0-180)	3.3,46.7
NOMINAL FLUX(lm)	967.308	CIE CLASS	DIRECT	h UP,DN(C180-360)	3.3,46.7
LAMPS INSIDE	1	h up(%)	6.5	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	24	h down(%)	93.5	CIBSE SHR MAX	1.35

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:COLORS  
 Test Date:2018-10-16

Range: 0 - 180DEG  
 Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
 Humidity:65.0%  
 Test Distance:7.500m [K=1.0000]  
 Remarks:

## ZONAL FLUX DIAGRAM

### ZONAL FLUX DIAGRAM:

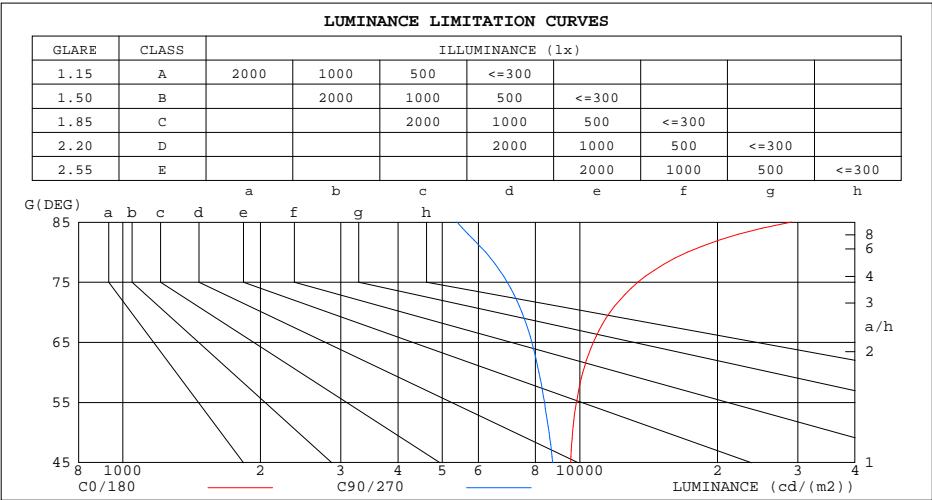
g	C0	C90	C180	C270					g	F zone	F total	%lum,lamp
10	281.3	280.2	281.3	280.2					0~ 10	27.04	27.04	2.8,2.8
20	268.4	263.7	268.4	263.7					10~ 20	77.51	104.6	10.8,10.8
30	246.8	237.7	246.8	237.7					20~ 30	117.6	222.2	23,23
40	218.2	204.3	218.2	204.3					30~ 40	142.4	364.5	37.7,37.7
50	186.0	165.1	186.0	165.1					40~ 50	149.6	514.1	53.1,53.1
60	152.3	122.1	152.3	122.1					50~ 60	140.1	654.2	67.6,67.6
70	119.5	76.66	119.5	76.66					60~ 70	116.5	770.7	79.7,79.7
80	89.54	32.42	89.54	32.42					70~ 80	83.59	854.3	88.3,88.3
90	63.48	2.316	63.48	2.316					80~ 90	49.79	904.0	93.5,93.5
100	41.89	0.4324	41.89	0.4324					90~100	28.89	932.9	96.4,96.4
110	24.76	0.6111	24.76	0.6111					100~110	17.74	950.7	98.3,98.3
120	12.15	0.7991	12.15	0.7991					110~120	9.368	960.0	99.2,99.2
130	4.264	0.9950	4.264	0.9950					120~130	3.940	964.0	99.7,99.7
140	1.238	1.177	1.238	1.177					130~140	1.299	965.3	99.8,99.8
150	1.355	1.354	1.355	1.354					140~150	0.7974	966.1	99.9,99.9
160	1.468	1.462	1.468	1.462					150~160	0.6523	966.7	99.9,99.9
170	1.547	1.548	1.547	1.548					160~170	0.4275	967.2	100,100
180	1.562	1.587	1.562	1.587					170~180	0.1486	967.3	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:COLORS  
Test Date:2018-10-16

g Range: 0 - 180DEG  
g Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:7.500m [K=1.0000]  
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:24.00V I:0.5650A P:13.57W PF:1.000 Freq:0Hz Lamp Flux:967.308x1 lm		
NAME: DLS-LG3030(B)CDXSS1008	TYPE:	WEIGHT:
SPEC.:DLS-LG3030(B)CDXSS1008-F15NW9X-CC	DIM.: 1008*30*30mm	SERIAL No.:01
MFR.: Colors	SUR.:1008*30	Shielding Angle:



LUMINANCE cd/(m2)		
G(180)	C0/180	C90/270
85	29062	5386
80	17188	6223
75	13398	6938
70	11644	7471
65	10703	7850
60	10151	8142
55	9829	8371
50	9644	8562
45	9541	8727

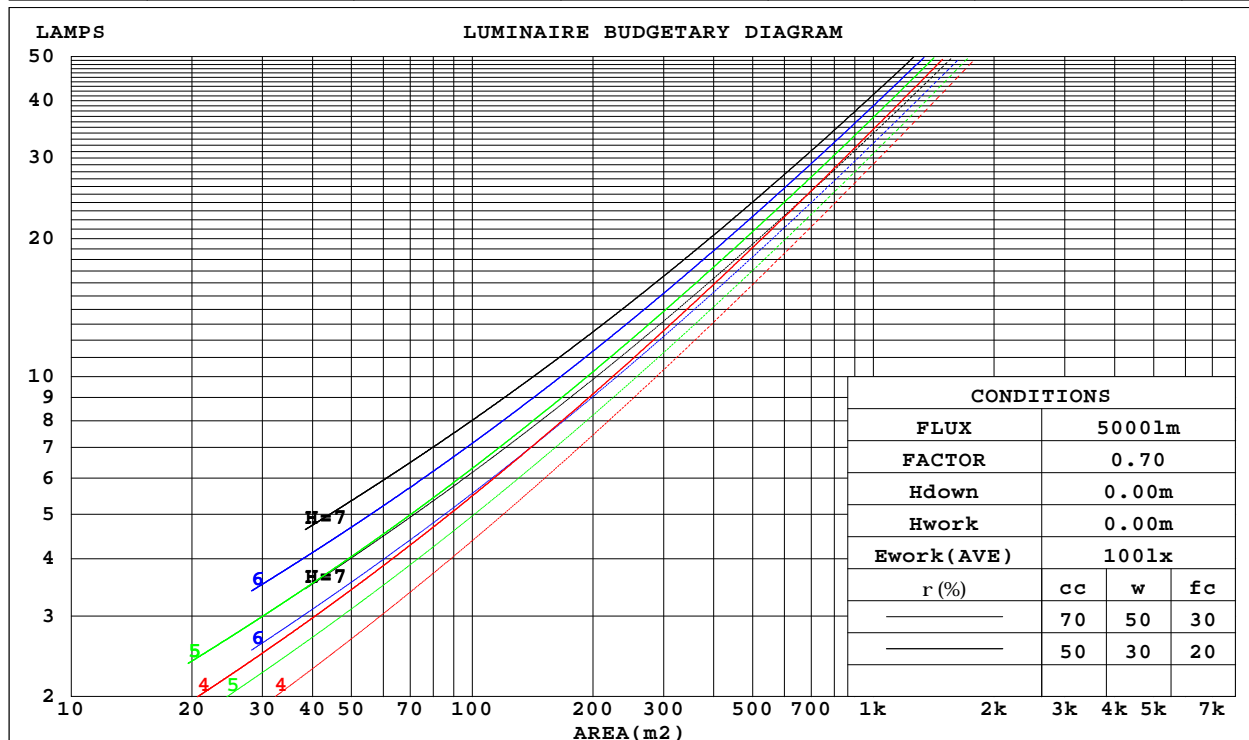
C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:COLORS  
Test Date:2018-10-16

g Range: 0 - 180DEG  
Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:7.500m [K=1.0000]  
Remarks:

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:24.00V I:0.5650A P:13.57W PF:1.000 Freq:0Hz Lamp Flux:967.308x1 lm		
NAME: DLS-LG3030(B)CDXSS1008	TYPE:	WEIGHT:
SPEC.:DLS-LG3030(B)CDXSS1008-F15NW9X-CC	DIM.: 1008*30*30mm	SERIAL No.:01
MFR.: Colors	SUR.:1008*30	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															



C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:COLORS  
Test Date:2018-10-16

g Range: 0 - 180DEG  
Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:7.500m [K=1.0000]  
Remarks:

### WEC AND CCEC

Test:U:24.00V I:0.5650A P:13.57W PF:1.000 Freq:0Hz Lamp Flux:967.308x1 lm		
NAME: DLS-LG3030(B)CDXSS1008	TYPE:	WEIGHT:
SPEC.:DLS-LG3030(B)CDXSS1008-F15NW9X-CC	DIM.: 1008*30*30mm	SERIAL No.:01
MFR.: Colors	SUR.:1008*30	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															Wall Exitance Coefficients(WEC)														
0.0																														
1.0	.354	.201	.064	.344	.196	.062	.327	.188	.060	.311	.180	.058	.297	.172	.055															
2.0	.316	.173	.053	.308	.170	.052	.293	.163	.051	.279	.156	.049	.266	.150	.047															
3.0	.286	.152	.046	.278	.149	.045	.265	.143	.044	.252	.138	.042	.240	.133	.041															
4.0	.260	.135	.040	.253	.133	.039	.241	.128	.038	.230	.123	.037	.219	.119	.036															
5.0	.238	.121	.035	.232	.119	.035	.221	.115	.034	.211	.111	.033	.201	.107	.032															
6.0	.219	.110	.031	.214	.108	.031	.204	.104	.030	.195	.101	.030	.186	.098	.029															
7.0	.203	.100	.028	.198	.099	.028	.189	.096	.028	.181	.093	.027	.173	.090	.026															
8.0	.189	.092	.026	.184	.091	.026	.176	.088	.025	.169	.085	.025	.161	.083	.024															
9.0	.176	.085	.024	.172	.084	.024	.165	.082	.023	.158	.079	.023	.151	.077	.022															
10.0	.165	.079	.022	.162	.078	.022	.155	.076	.021	.149	.074	.021	.142	.072	.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	.240	.240	.240	.205	.205	.205	.140	.140	.140	.081	.081	.081	.026	.026	.026	
1.0	.234	.206	.181	.200	.177	.156	.137	.122	.108	.079	.070	.063	.025	.023	.020	
2.0	.226	.182	.146	.194	.157	.126	.133	.109	.088	.077	.063	.051	.025	.020	.017	
3.0	.218	.165	.123	.187	.143	.107	.129	.099	.075	.074	.058	.044	.024	.019	.014	
4.0	.211	.152	.108	.181	.132	.094	.124	.092	.066	.072	.054	.039	.023	.017	.013	
5.0	.203	.142	.097	.174	.123	.085	.120	.086	.060	.070	.050	.035	.022	.016	.012	
6.0	.196	.134	.090	.168	.116	.078	.116	.081	.055	.067	.048	.033	.022	.016	.011	
7.0	.188	.127	.084	.162	.110	.073	.112	.077	.052	.065	.046	.031	.021	.015	.010	
8.0	.182	.121	.080	.157	.105	.070	.108	.074	.049	.063	.044	.029	.020	.014	.010	
9.0	.176	.117	.077	.151	.101	.067	.105	.071	.047	.061	.042	.028	.020	.014	.009	
10.0	.170	.112	.074	.146	.098	.065	.102	.069	.046	.059	.041	.027	.019	.013	.009	

C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:COLORS  
Test Date:2018-10-16

g Range: 0 - 180DEG  
g Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:7.500m [K=1.0000]  
Remarks:

## UGR(Unified Glare Rating) Table

Test:U:24.00V I:0.5650A P:13.57W PF:1.000 Freq:0Hz Lamp Flux:967.308x1 lm											
NAME: DLS-LG3030(B)CDXSS1008						TYPE:		WEIGHT:			
SPEC.:DLS-LG3030(B)CDXSS1008-F15NW9X-CC						DIM.: 1008*30*30mm		SERIAL No.:01			
MFR.: Colors						SUR.:1008*30		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	20.6	22.1	20.9	22.4	22.7	19.8	21.3	20.2	21.6	22.0	
	22.7	24.1	23.1	24.5	24.9	21.4	22.8	21.8	23.1	23.5	
	23.9	25.2	24.3	25.6	26.0	22.0	23.3	22.4	23.7	24.1	
	25.2	26.4	25.6	26.8	27.2	22.5	23.7	22.9	24.1	24.5	
	25.9	27.0	26.3	27.5	27.9	22.6	23.8	23.1	24.2	24.7	
	26.7	27.8	27.1	28.2	28.7	22.7	23.9	23.2	24.3	24.7	
4H	2H	21.2	22.5	21.6	22.9	23.3	20.6	21.9	21.0	22.3	22.7
	3H	23.5	24.7	24.0	25.1	25.6	22.4	23.6	22.9	24.0	24.4
	4H	24.9	25.9	25.3	26.3	26.8	23.2	24.3	23.7	24.7	25.2
	6H	26.3	27.2	26.8	27.7	28.2	23.8	24.8	24.3	25.2	25.8
	8H	27.1	28.0	27.6	28.5	29.0	24.1	24.9	24.6	25.4	25.9
	12H	28.0	28.8	28.6	29.3	29.9	24.2	25.0	24.7	25.5	26.1
8H	4H	25.2	26.0	25.7	26.5	27.1	23.8	24.6	24.3	25.1	25.7
	6H	26.8	27.6	27.4	28.1	28.7	24.6	25.4	25.2	25.9	26.5
	8H	27.8	28.5	28.4	29.0	29.6	25.0	25.7	25.6	26.2	26.8
	12H	29.0	29.5	29.5	30.1	30.7	25.3	25.9	25.9	26.5	27.1
12H	4H	25.2	26.0	25.7	26.5	27.0	23.9	24.7	24.4	25.2	25.8
	6H	26.9	27.6	27.5	28.1	28.7	24.9	25.6	25.5	26.1	26.7
	8H	28.0	28.6	28.6	29.1	29.7	25.4	26.0	26.0	26.5	27.1
Variations with the observer position at spacings:											
S = 1.0H	+ 0.1 / - 0.1					+ 0.1 / - 0.2					
1.5H	+ 0.2 / - 0.2					+ 0.2 / - 0.3					
2.0H	+ 0.2 / - 0.3					+ 0.1 / - 0.4					

CIE Pub.117, 967.3 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -0.1)

C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:COLORS  
Test Date:2018-10-16

g Range: 0 - 180DEG  
g Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:7.500m [K=1.0000]  
Remarks:

### UTILIZATION FACTORS TABLE

Test:U:24.00V I:0.5650A P:13.57W PF:1.000 Freq:0Hz Lamp Flux:967.308x1 lm		
NAME: DLS-LG3030(B)CDXSS1008	TYPE:	WEIGHT:
SPEC.:DLS-LG3030(B)CDXSS1008-F15NW9X-CC	DIM.: 1008*30*30mm	SERIAL No.:01
MFR.: Colors	SUR.:1008*30	Shielding Angle:

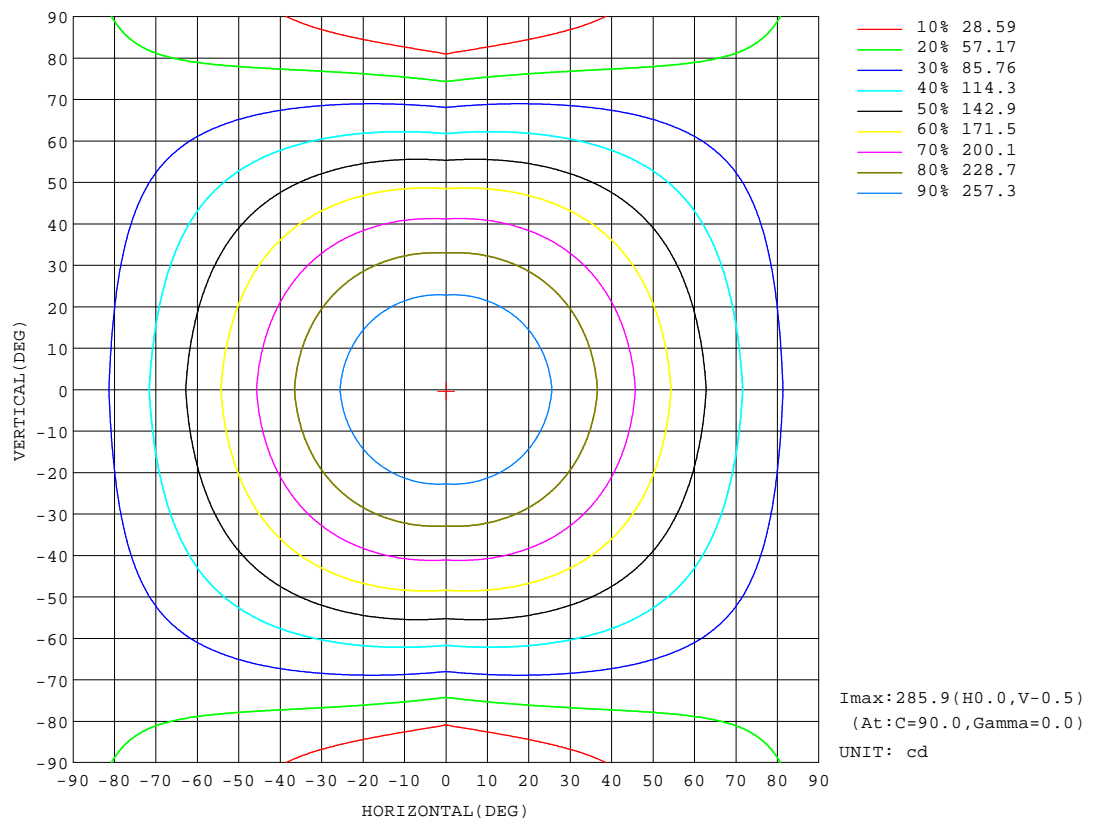
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	53	41	34	52	41	34	51	40	34	27
0.80	63	51	43	62	50	43	60	49	42	35
1.00	71	59	51	70	58	51	67	59	50	42
1.25	78	66	58	76	65	58	73	64	57	49
1.50	83	72	64	81	71	63	77	69	62	53
2.00	90	80	73	88	79	72	83	76	70	61
2.50	94	85	78	92	83	77	87	80	75	65
3.00	98	90	83	95	88	82	90	84	79	69
4.00	102	95	89	99	93	88	94	89	84	74
5.00	105	99	94	102	96	92	96	92	88	77
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:COLORS  
Test Date:2018-10-16

g Range: 0 - 180DEG  
g Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:7.500m [K=1.0000]  
Remarks:

## ISOCANDELA DIAGRAM

Test:U:24.00V I:0.5650A P:13.57W PF:1.000 Freq:0Hz Lamp Flux:967.308x1 lm		
NAME: DLS-LG3030(B)CDXSS1008	TYPE:	WEIGHT:
SPEC.:DLS-LG3030(B)CDXSS1008-F15NW9X-CC	DIM.: 1008*30*30mm	SERIAL No.:01
MFR.: Colors	SUR.:1008*30	Shielding Angle:



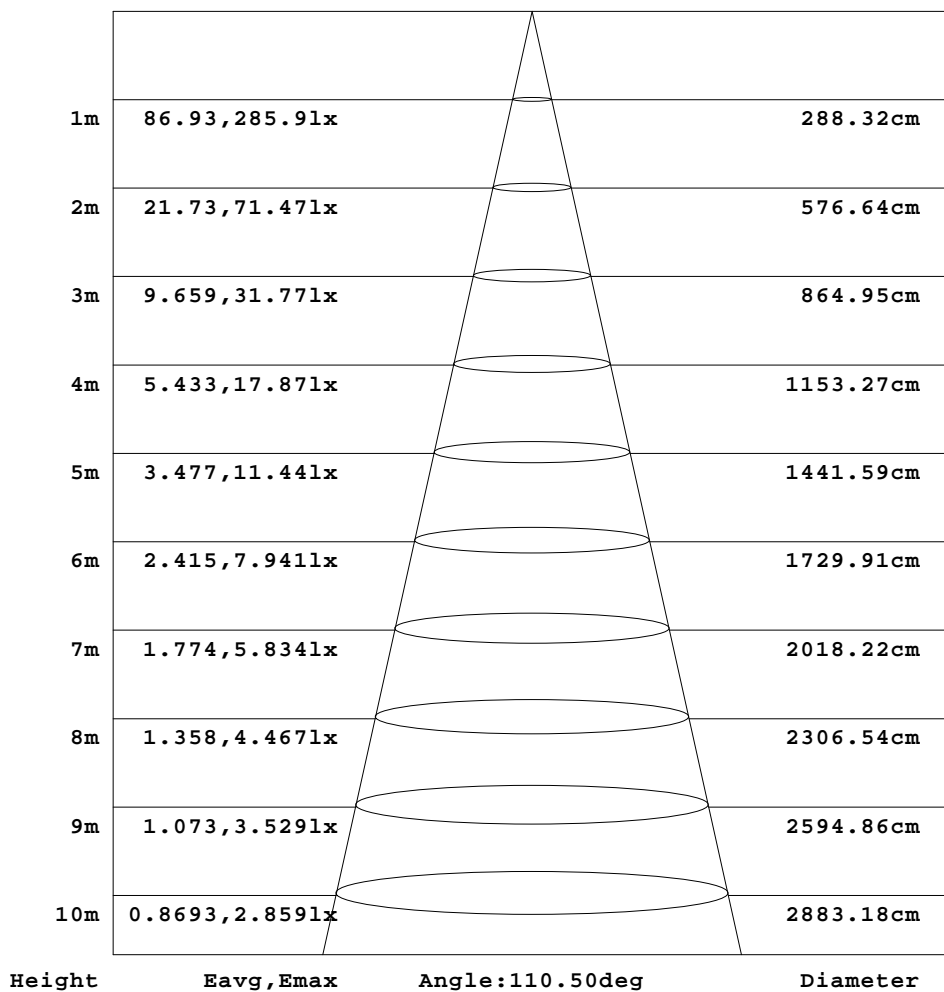
C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:COLORS  
Test Date:2018-10-16

deg Range: 0 - 180DEG  
Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:7.500m [K=1.0000]  
Remarks:

### AAI Figure

Test:U:24.00V I:0.5650A P:13.57W PF:1.000 Freq:0Hz Lamp Flux:967.308x1 lm		
NAME: DLS-LG3030(B)CDXSS1008	TYPE:	WEIGHT:
SPEC.:DLS-LG3030(B)CDXSS1008-F15NW9X-CC	DIM.: 1008*30*30mm	SERIAL No.:01
MFR.: Colors	SUR.:1008*30	Shielding Angle:

Flux out:600.3 lm



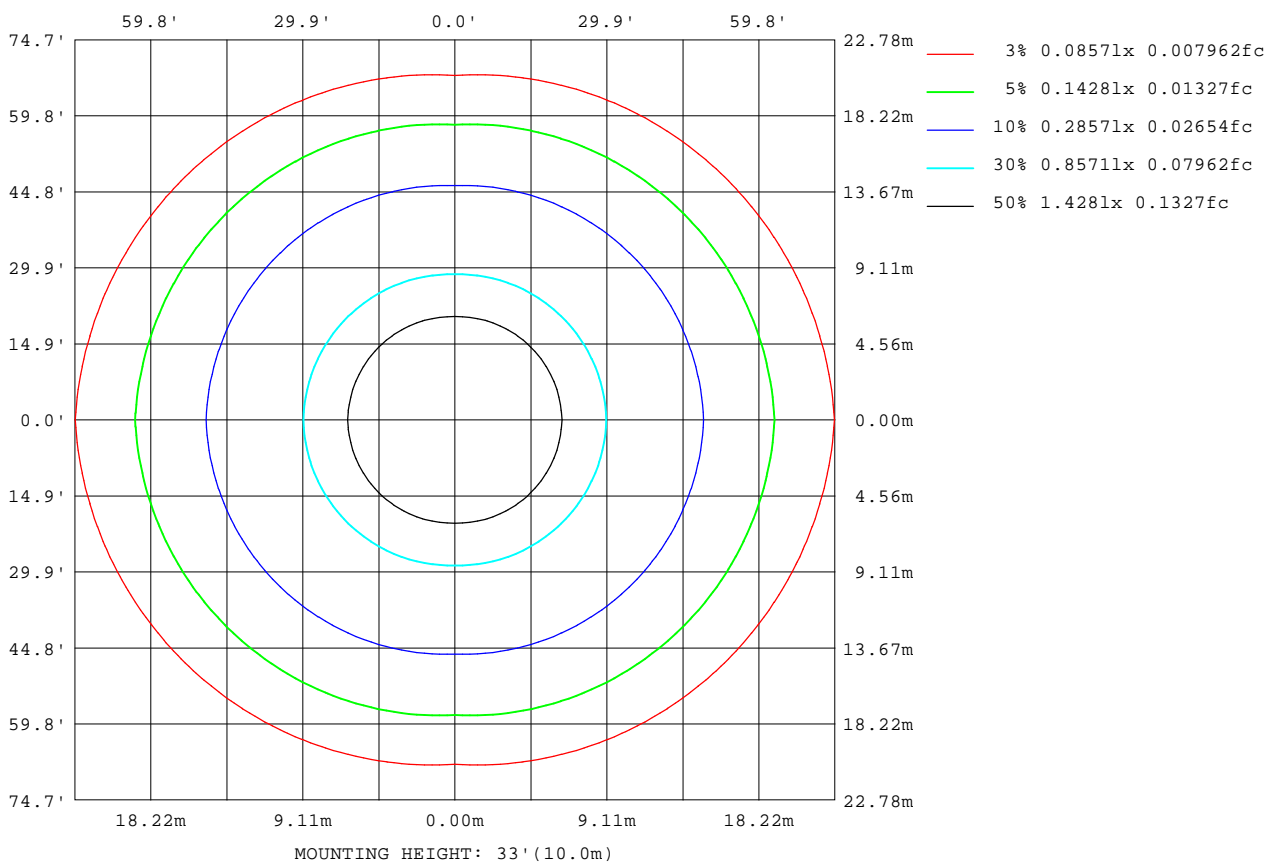
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: COLORS  
Test Date: 2018-10-16

g Range: 0 - 180DEG  
g Interval: 1.0DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity: 65.0%  
Test Distance: 7.500m [K=1.0000]  
Remarks:

### ISOLUX DIAGRAM

Test:U:24.00V I:0.5650A P:13.57W PF:1.000 Freq:0Hz Lamp Flux:967.308x1 lm		
NAME: DLS-LG3030(B)CDXSS1008	TYPE:	WEIGHT:
SPEC.:DLS-LG3030(B)CDXSS1008-F15NW9X-CC	DIM.: 1008*30*30mm	SERIAL No.:01
MFR.: Colors	SUR.:1008*30	Shielding Angle:



C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:COLORS  
Test Date:2018-10-16

g Range: 0 - 180DEG  
g Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:7.500m [K=1.0000]  
Remarks:

## LED Avg.L Report

Test:U:24.00V I:0.5650A P:13.57W PF:1.000 Freq:0Hz Lamp Flux:967.308x1 lm		
NAME: DLS-LG3030(B)CDXSS1008	TYPE:	WEIGHT:
SPEC.:DLS-LG3030(B)CDXSS1008-F15NW9X-CC	DIM.: 1008*30*30mm	SERIAL No.:01
MFR.: Colors	SUR.:1008*30	Shielding Angle:

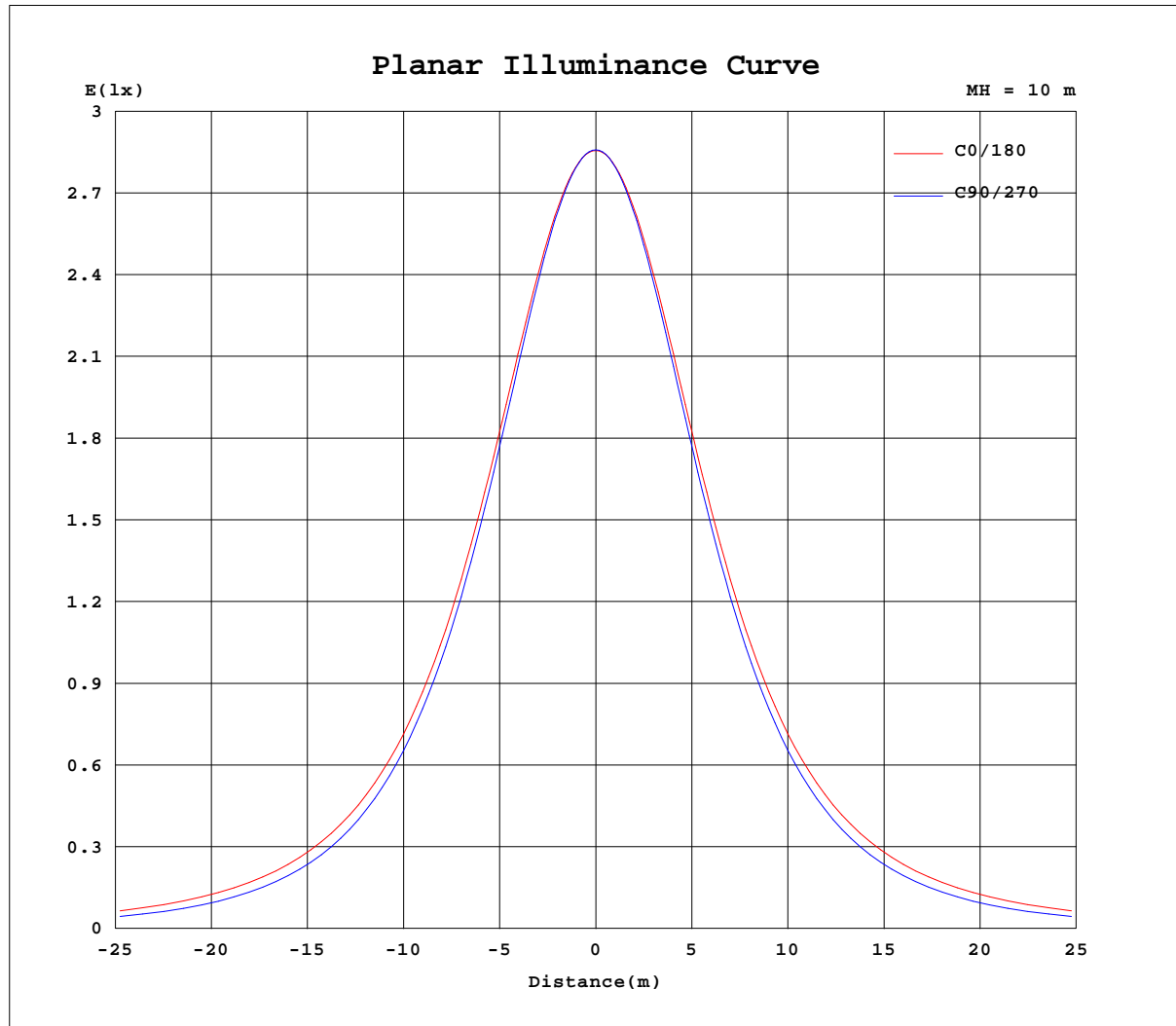
AvgL	cd/m2
L_0~180(65)av	10703
L_0~180(75)av	13398
L_0~180(85)av	29062
L_90~270(65)av	7850
L_90~270(75)av	6938
L_90~270(85)av	5386
L_45(65)av	8920
L_45(75)av	9361
L_45(85)av	14264

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:COLORS  
Test Date:2018-10-16

g Range: 0 - 180DEG  
g Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:7.500m [K=1.0000]  
Remarks:

## Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: COLORS  
Test Date: 2018-10-16

g Range: 0 - 180DEG  
g Interval: 1.0DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity: 65.0%  
Test Distance: 7.500m [K=1.0000]  
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:24.00V I:0.5650A P:13.57W PF:1.000 Freq:0Hz Lamp Flux:967.308x1 lm		
NAME: DLS-LG3030(B)CDXSS1008	TYPE:	WEIGHT:
SPEC.:DLS-LG3030(B)CDXSS1008-F15NW9X-CC	DIM.: 1008*30*30mm	SERIAL No.:01
MFR.: Colors	SUR.:1008*30	Shielding Angle:

Table--1

UNIT: cd

C(DEG) g (DEG)	0	90	180	270															
0	286	286	286	286															
5	285	284	285	284															
10	281	280	281	280															
15	276	273	276	273															
20	268	264	268	264															
25	259	252	259	252															
30	247	238	247	238															
35	233	222	233	222															
40	218	204	218	204															
45	202	185	202	185															
50	186	165	186	165															
55	169	144	169	144															
60	152	122	152	122															
65	136	99.5	136	99.5															
70	119	76.7	119	76.7															
75	104	53.9	104	53.9															
80	89.5	32.4	89.5	32.4															
85	76.0	14.1	76.0	14.1															
90	63.5	2.32	63.5	2.32															
95	52.1	0.40	52.1	0.40															
100	41.9	0.43	41.9	0.43															
105	32.8	0.52	32.8	0.52															
110	24.8	0.61	24.8	0.61															
115	17.9	0.71	17.9	0.71															
120	12.1	0.80	12.1	0.80															
125	7.60	0.90	7.60	0.90															
130	4.26	1.00	4.26	1.00															
135	1.91	1.09	1.91	1.09															
140	1.24	1.18	1.24	1.18															
145	1.29	1.25	1.29	1.25															
150	1.36	1.35	1.36	1.35															
155	1.42	1.41	1.42	1.41															
160	1.47	1.46	1.47	1.46															
165	1.53	1.51	1.53	1.51															
170	1.55	1.55	1.55	1.55															
175	1.55	1.57	1.55	1.57															
180	1.56	1.59	1.56	1.59															

C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:COLORS  
Test Date:2018-10-16

g Range: 0 - 180DEG  
g Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:7.500m [K=1.0000]  
Remarks: