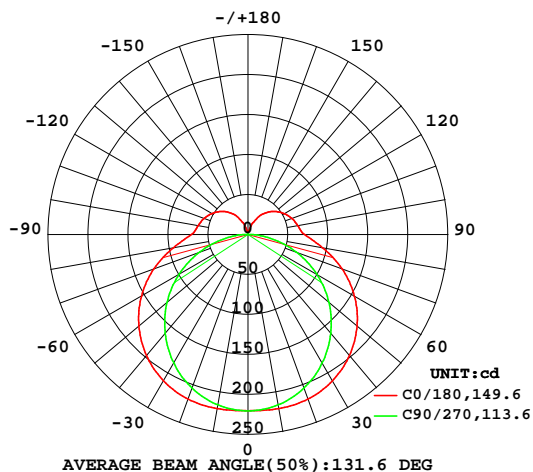


LUMINAIRE PHOTOMETRIC TEST REPORT

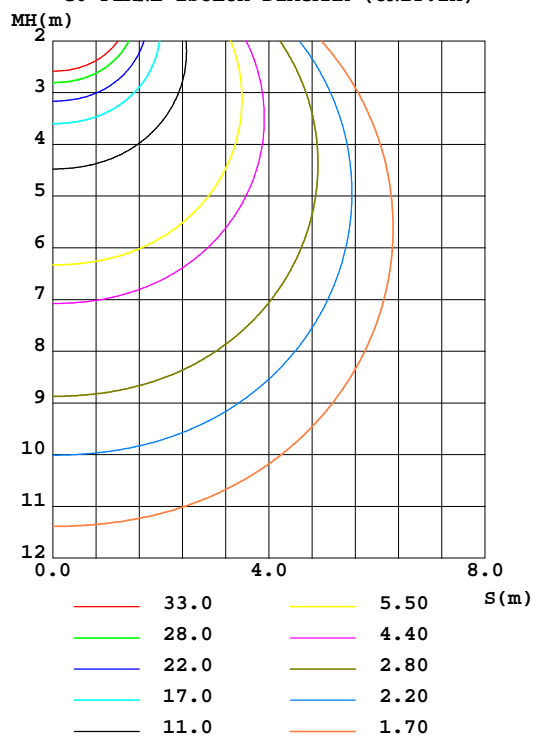
Test:U:24.00V I:0.5940A P:14.27W PF:1.000 Freq:0Hz Lamp Flux:947.9x1 lm		
NAME: DLS-LS1911(B)KDXSS1008	TYPE:	WEIGHT:
SPEC.:DLS-LS1911(B)KDXSS1008-F15NW9X-CC	DIM.: 1008*19*11mm	SERIAL No.:01
MFR.: Colors	SUR.:1008*19	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 66.43 lm/W			
MODEL	DLS-LS1911(B)KDXSS1008	I _{max} (cd)	221.1	S/MH(C0/180)	1.43
NOMINAL POWER(W)	15	LOR(%)	100.0	S/MH(C90/270)	1.25
RATED VOLTAGE(V)	24	TOTAL FLUX(lm)	947.90	h UP,DN(C0-180)	8.0,42.0
NOMINAL FLUX(lm)	947.9	CIE CLASS	SEMI-D.	h UP,DN(C180-360)	8.0,42.0
LAMPS INSIDE	1	h up(%)	16.0	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	24	h down(%)	84.0	CIBSE SHR MAX	1.50

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

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:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

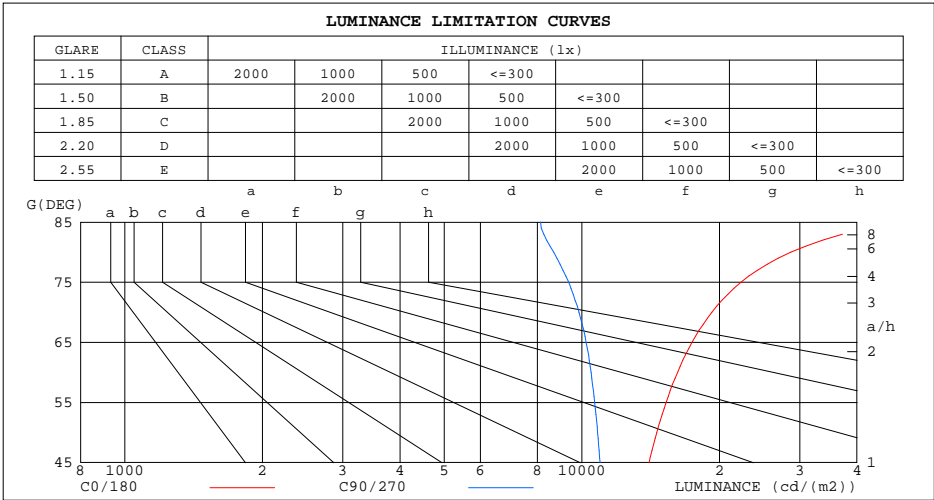
g	C0	C90	C180	C270					g	F zone	F total	%lum,lamp
10	221.1	216.5	221.1	216.5					0~ 10	20.97	20.97	2.21,2.21
20	219.2	204.5	219.2	204.5					10~ 20	61.08	82.04	8.66,8.66
30	211.4	185.6	211.4	185.6					20~ 30	95.03	177.1	18.7,18.7
40	197.6	161.2	197.6	161.2					30~ 40	118.7	295.8	31.2,31.2
50	178.1	132.2	178.1	132.2					40~ 50	129.6	425.4	44.9,44.9
60	153.8	99.55	153.8	99.55					50~ 60	126.5	551.9	58.2,58.2
70	125.0	64.11	125.0	64.11					60~ 70	109.9	661.7	69.8,69.8
80	94.57	28.63	94.57	28.63					70~ 80	82.28	744.0	78.5,78.5
90	70.84	2.903	70.84	2.903					80~ 90	52.24	796.2	84.84
100	63.56	0.4497	63.56	0.4497					90~100	36.62	832.8	87.9,87.9
110	58.73	0.5987	58.73	0.5987					100~110	32.68	865.5	91.3,91.3
120	52.57	0.7505	52.57	0.7505					110~120	28.03	893.6	94.3,94.3
130	45.14	0.8930	45.14	0.8930					120~130	22.36	915.9	96.6,96.6
140	36.00	1.006	36.00	1.006					130~140	16.21	932.1	98.3,98.3
150	24.77	1.111	24.77	1.111					140~150	10.09	942.2	99.4,99.4
160	12.92	1.186	12.92	1.186					150~160	4.595	946.8	99.9,99.9
170	1.305	1.231	1.305	1.231					160~170	0.9757	947.8	100,100
180	1.249	1.244	1.249	1.244					170~180	0.1202	947.9	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:0.5940A P:14.27W PF:1.000 Freq:0Hz Lamp Flux:947.9x1 lm		
NAME: DLS-LS1911(B)KDXSS1008	TYPE:	WEIGHT:
SPEC.:DLS-LS1911(B)KDXSS1008-F15NW9X-CC	DIM.: 1008*19*11mm	SERIAL No.:01
MFR.: Colors	SUR.:1008*19	Shielding Angle:



LUMINANCE cd/(m2)		
G(180)	C0/180	C90/270
85	48902	8130
80	28664	8677
75	22299	9357
70	19240	9865
65	17430	10223
60	16189	10479
55	15289	10668
50	14585	10828
45	14035	10958

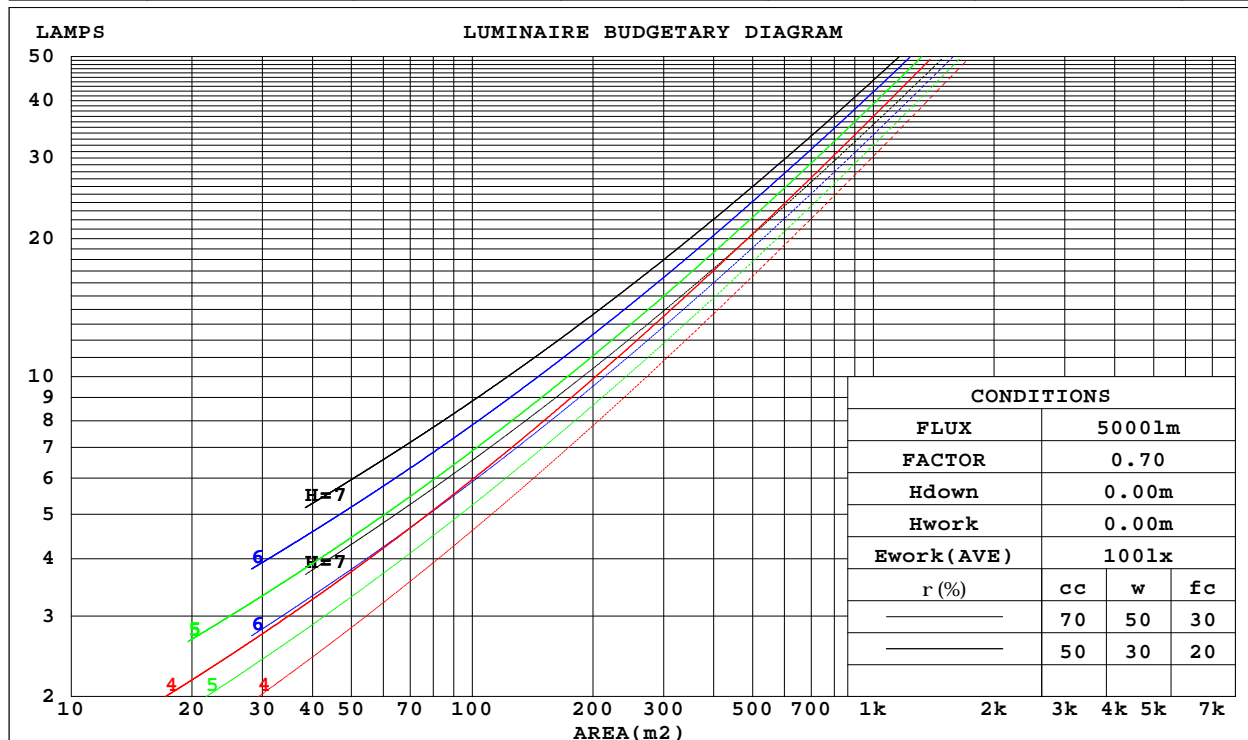
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:COLORS
Test Date:2018-10-16

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:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:24.00V I:0.5940A P:14.27W PF:1.000 Freq:0Hz Lamp Flux:947.9x1 lm		
NAME: DLS-LS1911(B)KDXSS1008	TYPE:	WEIGHT:
SPEC.:DLS-LS1911(B)KDXSS1008-F15NW9X-CC	DIM.: 1008*19*11mm	SERIAL No.:01
MFR.: Colors	SUR.:1008*19	Shielding Angle:

r _{cc}	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	1.15	1.15	1.15	1.11	1.11	1.11	1.02	1.02	1.02	.94	.94	.94	.87	.87	.87	.84
1.0	.97	.92	.88	.93	.89	.85	.86	.83	.79	.80	.77	.74	.73	.71	.69	.66
2.0	.84	.76	.70	.80	.73	.68	.74	.68	.64	.68	.64	.60	.63	.59	.56	.53
3.0	.73	.64	.57	.70	.62	.55	.65	.58	.52	.60	.54	.49	.55	.50	.47	.44
4.0	.64	.55	.48	.61	.53	.46	.57	.50	.44	.53	.47	.42	.49	.44	.39	.37
5.0	.57	.47	.40	.55	.46	.39	.51	.43	.38	.47	.41	.36	.44	.38	.34	.31
6.0	.51	.42	.35	.49	.40	.34	.46	.38	.33	.42	.36	.31	.39	.34	.30	.27
7.0	.46	.37	.31	.44	.36	.30	.41	.34	.29	.38	.32	.27	.36	.30	.26	.24
8.0	.42	.33	.27	.40	.32	.26	.38	.30	.25	.35	.29	.24	.33	.27	.23	.21
9.0	.38	.30	.24	.37	.29	.24	.34	.28	.23	.32	.26	.22	.30	.25	.21	.19
10.0	.35	.27	.22	.34	.26	.21	.32	.25	.20	.30	.24	.20	.28	.23	.19	.17



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:

WEC AND CCEC

Test:U:24.00V I:0.5940A P:14.27W PF:1.000 Freq:0Hz Lamp Flux:947.9x1 lm		
NAME: DLS-LS1911(B)KDXSS1008	TYPE:	WEIGHT:
SPEC.:DLS-LS1911(B)KDXSS1008-F15NW9X-CC	DIM.: 1008*19*11mm	SERIAL No.:01
MFR.: Colors	SUR.:1008*19	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	.312	.312	.312	.267	.267	.267	.182	.182	.182	.105	.105	.105	.033	.033	.033	
1.0	.307	.279	.253	.262	.239	.218	.180	.165	.151	.103	.095	.088	.033	.031	.028	
2.0	.300	.256	.218	.257	.220	.189	.176	.152	.132	.101	.089	.077	.033	.029	.025	
3.0	.292	.239	.196	.251	.206	.170	.172	.143	.119	.099	.084	.070	.032	.027	.023	
4.0	.285	.226	.181	.244	.195	.158	.168	.136	.111	.097	.080	.066	.031	.026	.022	
5.0	.277	.216	.171	.238	.187	.149	.164	.131	.105	.095	.077	.062	.031	.025	.021	
6.0	.270	.208	.164	.232	.180	.143	.160	.126	.101	.093	.074	.060	.030	.024	.020	
7.0	.263	.202	.159	.226	.175	.138	.156	.123	.098	.091	.072	.058	.029	.024	.019	
8.0	.256	.196	.155	.221	.170	.135	.153	.119	.096	.089	.070	.057	.029	.023	.019	
9.0	.250	.191	.152	.216	.166	.132	.149	.117	.094	.087	.069	.056	.028	.023	.019	
10.0	.244	.187	.149	.211	.163	.130	.146	.114	.092	.085	.068	.055	.028	.022	.018	

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:0.5940A P:14.27W PF:1.000 Freq:0Hz Lamp Flux:947.9x1 lm										
NAME: DLS-LS1911(B)KDXSS1008					TYPE:			WEIGHT:		
SPEC.:DLS-LS1911(B)KDXSS1008-F15NW9X-CC					DIM.: 1008*19*11mm			SERIAL No.:01		
MFR.: Colors					SUR.:1008*19			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	21.8	23.2	22.3	23.7	24.2	20.3	21.6	20.8	22.1	22.6
	24.2	25.5	24.7	26.0	26.6	21.9	23.1	22.4	23.6	24.2
	25.5	26.7	26.0	27.2	27.8	22.5	23.7	23.1	24.2	24.8
	26.8	27.9	27.4	28.5	29.1	23.0	24.1	23.6	24.7	25.3
	27.5	28.6	28.1	29.2	29.8	23.2	24.3	23.7	24.8	25.4
	28.4	29.4	28.9	30.0	30.6	23.3	24.3	23.9	24.9	25.5
4H	22.4	23.6	22.9	24.1	24.7	21.2	22.4	21.7	22.9	23.5
	24.9	26.0	25.5	26.5	27.2	23.0	24.1	23.6	24.6	25.3
	26.3	27.3	26.9	27.9	28.6	23.8	24.8	24.4	25.4	26.1
	27.9	28.7	28.5	29.3	30.0	24.5	25.4	25.1	26.0	26.7
	28.7	29.5	29.3	30.1	30.9	24.7	25.5	25.4	26.2	26.9
	29.7	30.4	30.3	31.1	31.8	24.9	25.7	25.6	26.3	27.0
8H	26.6	27.4	27.2	28.0	28.8	24.5	25.3	25.2	26.0	26.7
	28.4	29.0	29.0	29.7	30.5	25.5	26.1	26.1	26.8	27.6
	29.4	30.0	30.1	30.7	31.5	25.9	26.5	26.6	27.2	27.9
	30.6	31.1	31.3	31.8	32.6	26.2	26.7	26.9	27.4	28.2
12H	26.6	27.4	27.3	28.0	28.7	24.7	25.4	25.4	26.1	26.8
	28.4	29.1	29.1	29.7	30.5	25.8	26.4	26.5	27.1	27.9
	29.6	30.1	30.3	30.8	31.6	26.3	26.8	27.0	27.5	28.3
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				+ 0.2 / - 0.5					

CIE Pub.117, 947.9 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -0.2)

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:0.5940A P:14.27W PF:1.000 Freq:0Hz Lamp Flux:947.9x1 lm		
NAME: DLS-LS1911(B)KDXSS1008	TYPE:	WEIGHT:
SPEC.:DLS-LS1911(B)KDXSS1008-F15NW9X-CC	DIM.: 1008*19*11mm	SERIAL No.:01
MFR.: Colors	SUR.:1008*19	Shielding Angle:

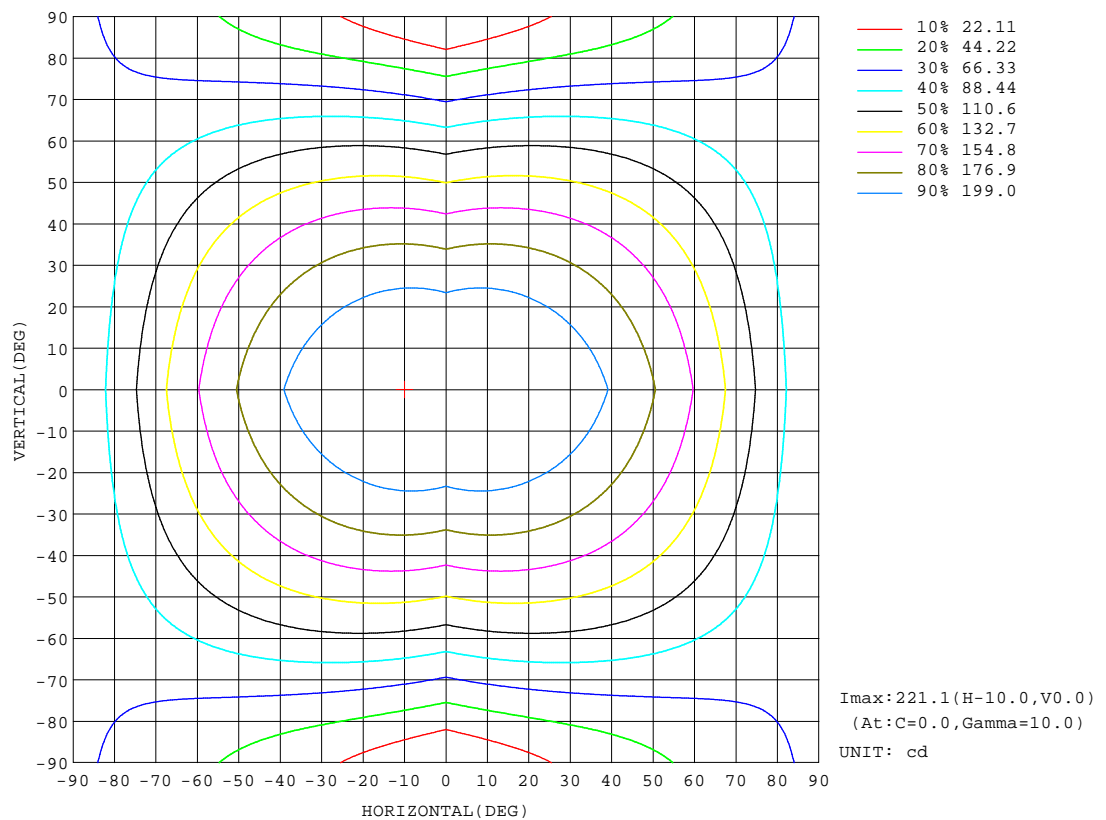
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	49	37	30	48	37	30	46	36	29	22
0.80	59	46	38	57	45	38	54	44	37	29
1.00	67	54	46	65	53	45	61	54	44	36
1.25	74	62	53	71	60	53	67	58	51	41
1.50	79	67	59	76	66	58	71	63	56	46
2.00	86	76	68	83	74	66	78	70	64	52
2.50	90	81	73	87	79	72	81	74	68	56
3.00	94	86	79	91	83	77	84	78	73	60
4.00	99	91	85	95	88	83	88	83	78	65
5.00	102	95	90	98	92	87	90	86	82	68
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:0.5940A P:14.27W PF:1.000 Freq:0Hz Lamp Flux:947.9x1 lm		
NAME: DLS-LS1911(B)KDXSS1008	TYPE:	WEIGHT:
SPEC.:DLS-LS1911(B)KDXSS1008-F15NW9X-CC	DIM.: 1008*19*11mm	SERIAL No.:01
MFR.: Colors	SUR.:1008*19	Shielding Angle:



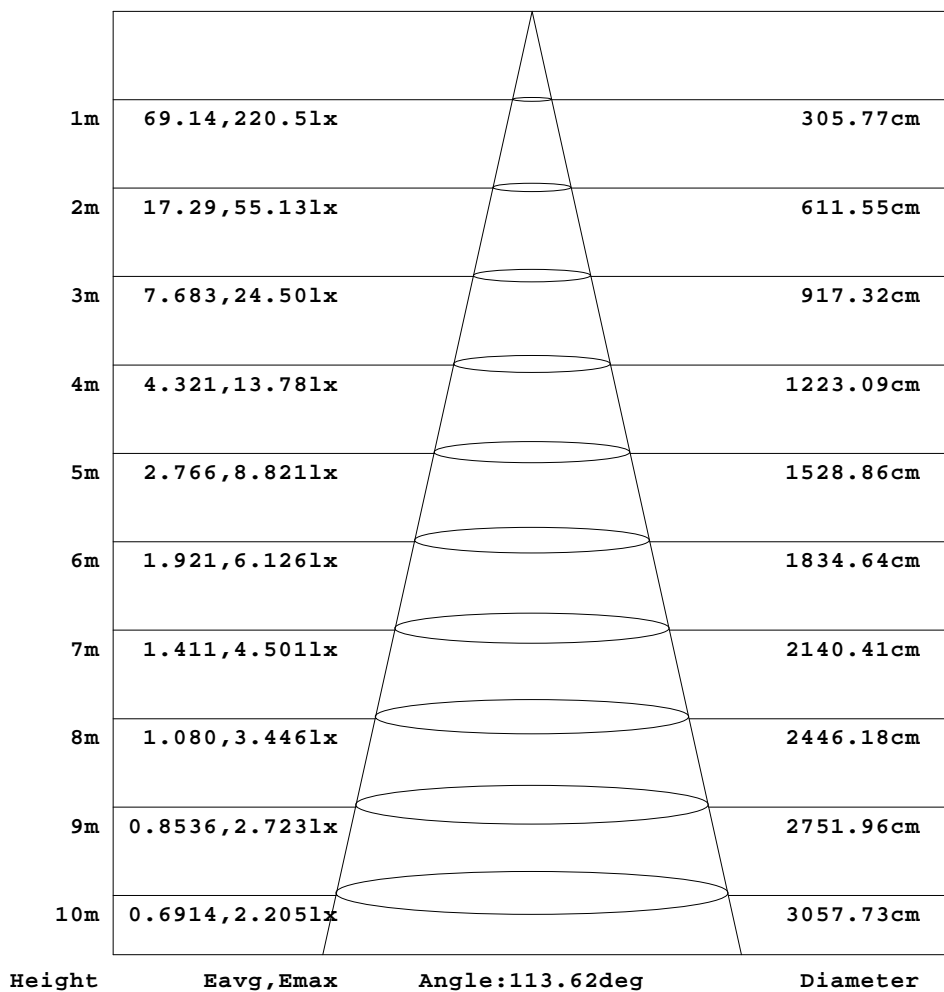
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:COLORS
Test Date:2018-10-16

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:0.5940A P:14.27W PF:1.000 Freq:0Hz Lamp Flux:947.9x1 lm		
NAME: DLS-LS1911(B)KDXSS1008	TYPE:	WEIGHT:
SPEC.:DLS-LS1911(B)KDXSS1008-F15NW9X-CC	DIM.: 1008*19*11mm	SERIAL No.:01
MFR.: Colors	SUR.:1008*19	Shielding Angle:

Flux out:515.1 lm



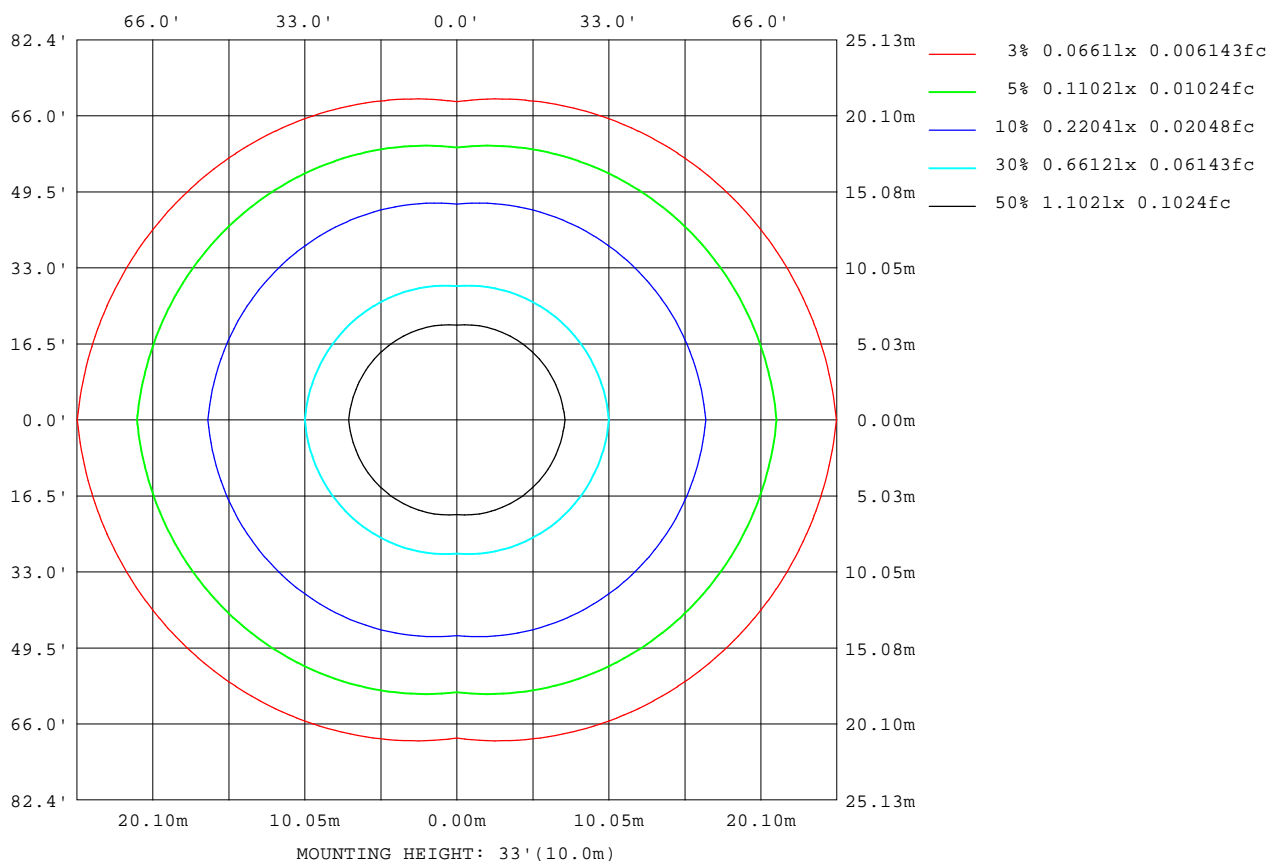
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:0.5940A P:14.27W PF:1.000 Freq:0Hz Lamp Flux:947.9x1 lm		
NAME: DLS-LS1911(B)KDXSS1008	TYPE:	WEIGHT:
SPEC.:DLS-LS1911(B)KDXSS1008-F15NW9X-CC	DIM.: 1008*19*11mm	SERIAL No.:01
MFR.: Colors	SUR.:1008*19	Shielding Angle:



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:

LED Avg.L Report

Test:U:24.00V I:0.5940A P:14.27W PF:1.000 Freq:0Hz Lamp Flux:947.9x1 lm		
NAME: DLS-LS1911(B)KDXSS1008	TYPE:	WEIGHT:
SPEC.:DLS-LS1911(B)KDXSS1008-F15NW9X-CC	DIM.: 1008*19*11mm	SERIAL No.:01
MFR.: Colors	SUR.:1008*19	Shielding Angle:

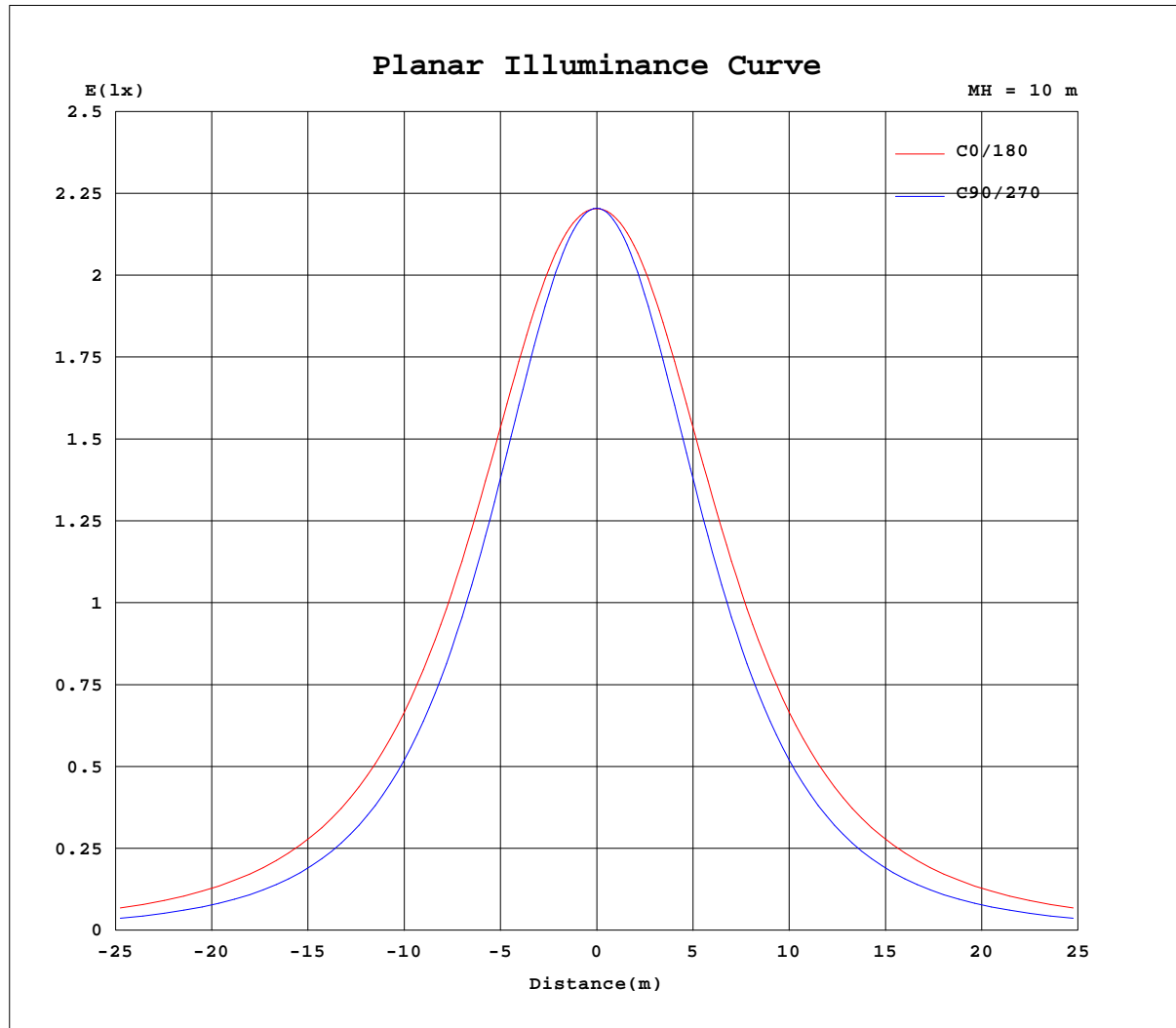
AvgL	cd/m2
L_0~180(65)av	17430
L_0~180(75)av	22299
L_0~180(85)av	48902
L_90~270(65)av	10223
L_90~270(75)av	9357
L_90~270(85)av	8130
L_45(65)av	12926
L_45(75)av	14210
L_45(85)av	23419

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
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:0.5940A P:14.27W PF:1.000 Freq:0Hz Lamp Flux:947.9x1 lm		
NAME: DLS-LS1911(B)KDXSS1008	TYPE:	WEIGHT:
SPEC.:DLS-LS1911(B)KDXSS1008-F15NW9X-CC	DIM.: 1008*19*11mm	SERIAL No.:01
MFR.: Colors	SUR.:1008*19	Shielding Angle:

Table--1

UNIT: cd

C(DEG) g (DEG)	0	90	180	270															
0	220	221	220	221															
5	221	220	221	220															
10	221	216	221	216															
15	221	211	221	211															
20	219	205	219	205															
25	216	196	216	196															
30	211	186	211	186															
35	205	174	205	174															
40	198	161	198	161															
45	189	147	189	147															
50	178	132	178	132															
55	167	116	167	116															
60	154	99.5	154	99.5															
65	140	82.1	140	82.1															
70	125	64.1	125	64.1															
75	110	46.0	110	46.0															
80	94.6	28.6	94.6	28.6															
85	81.0	13.5	81.0	13.5															
90	70.8	2.90	70.8	2.90															
95	66.0	0.48	66.0	0.48															
100	63.6	0.45	63.6	0.45															
105	61.3	0.53	61.3	0.53															
110	58.7	0.60	58.7	0.60															
115	55.8	0.67	55.8	0.67															
120	52.6	0.75	52.6	0.75															
125	49.0	0.83	49.0	0.83															
130	45.1	0.89	45.1	0.89															
135	40.9	0.95	40.9	0.95															
140	36.0	1.01	36.0	1.01															
145	31.0	1.06	31.0	1.06															
150	24.8	1.11	24.8	1.11															
155	18.1	1.16	18.1	1.16															
160	12.9	1.19	12.9	1.19															
165	3.50	1.21	3.50	1.21															
170	1.30	1.23	1.30	1.23															
175	1.26	1.24	1.26	1.24															
180	1.25	1.24	1.25	1.24															

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: