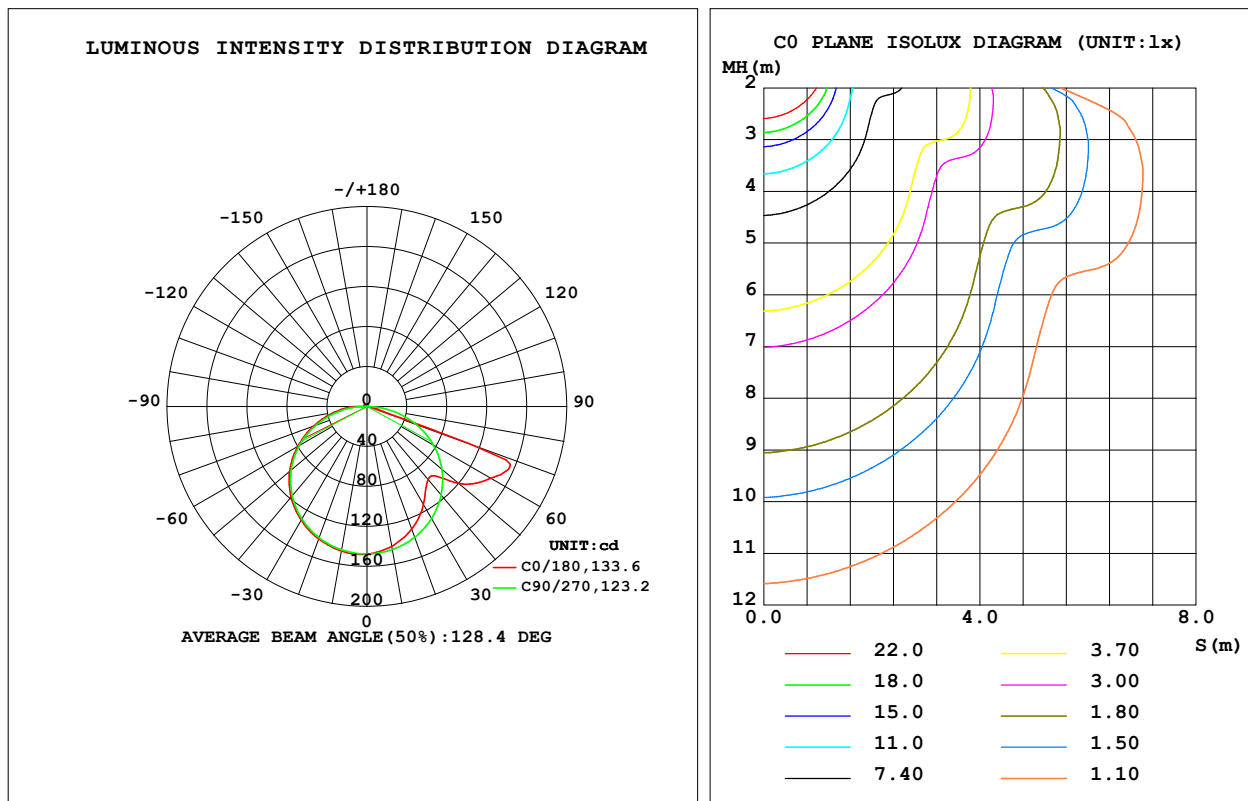


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:24.00V I:0.3800A P:9.100W PF:1.000 Freq:0Hz Lamp Flux:510.252x1 lm		
NAME: ALS-LR3735FDXSS1000	TYPE:	WEIGHT:1000*37*35
SPEC.:ALS-LR3735FDXSS1000-F16NW9X-BC	DIM.:	SERIAL No.:
MFR.: Colors	SUR.:1000*37	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 56.07 lm/W			
MODEL	ALS-LR3735FDXSS1000	I _{max} (cd)	155.4	S/MH (C0/180)	1.15
NOMINAL POWER (W)	9.1	LOR (%)	100.0	S/MH (C90/270)	1.31
RATED VOLTAGE (V)	24	TOTAL FLUX (lm)	510.25	h UP,DN (C0-180)	0.8,49.8
NOMINAL FLUX (lm)	510.252	CIE CLASS	DIRECT	h UP,DN (C180-360)	1.1,48.2
LAMPS INSIDE	1	h up (%)	2.0	CIBSE SHR NOM	1.50
TEST VOLTAGE (V)	24	h down (%)	98.0	CIBSE SHR MAX	1.50



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: COLORS
Test Date: 2019-05-16

Range: 0 - 180DEG
Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity: 65.0%
Test Distance: 10.750m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

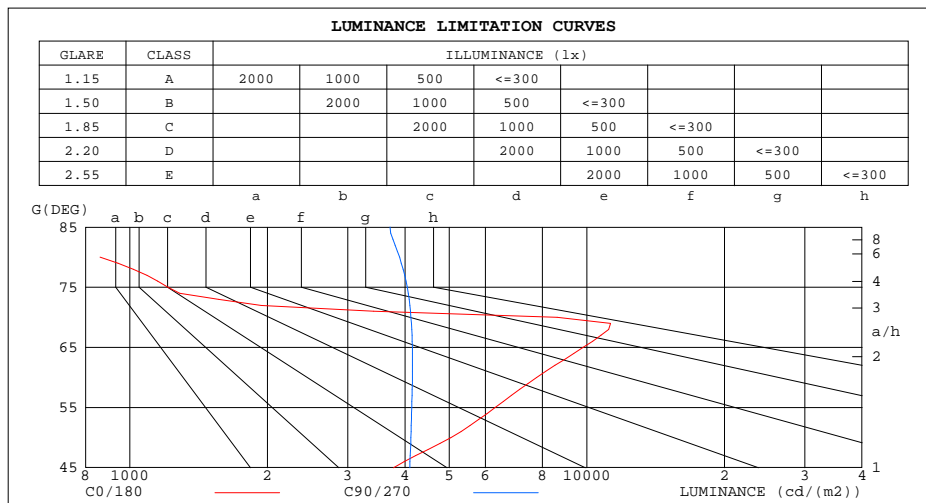
g	C0	C90	C180	C270					g	F zone	F total	%lum,lamp
10	142.1	145.4	146.9	145.7					0~ 10	13.97	13.97	2.74,2.74
20	130.7	139.3	141.1	139.8					10~ 20	40.06	54.03	10.6,10.6
30	113.2	129.4	131.5	130.1					20~ 30	61.06	115.1	22.6,22.6
40	95.58	115.6	118.2	116.5					30~ 40	74.37	189.5	37.1,37.1
50	119.9	98.04	101.2	99.10					40~ 50	82.71	272.2	53.3,53.3
60	143.6	76.84	79.94	78.08					50~ 60	89.76	361.9	70.9,70.9
70	109.0	52.16	56.54	53.91					60~ 70	86.30	448.2	87.8,87.8
80	5.535	25.02	32.98	27.92					70~ 80	37.93	486.2	95.3,95.3
90	0.4951	1.855	11.49	2.833					80~ 90	14.02	500.2	98.98
100	0.8880	0.6247	0.5474	0.5789					90~100	1.561	501.7	98.3,98.3
110	1.320	0.9339	2.655	0.8687					100~110	0.9945	502.7	98.5,98.5
120	1.667	1.210	3.018	1.127					110~120	1.671	504.4	98.9,98.9
130	1.938	1.436	2.336	1.339					120~130	1.593	506.0	99.2,99.2
140	2.124	1.597	1.994	1.532					130~140	1.372	507.4	99.4,99.4
150	2.125	1.725	2.060	1.719					140~150	1.166	508.5	99.7,99.7
160	2.091	1.944	2.182	1.936					150~160	0.9101	509.4	99.8,99.8
170	2.161	2.176	2.218	2.118					160~170	0.5937	510.0	100,100
180	2.376	2.343	2.382	2.330					170~180	0.2115	510.3	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:2019-05-16

g Range: 0 - 180DEG
 g Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity:65.0%
 Test Distance:10.750m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:24.00V I:0.3800A P:9.100W PF:1.000 Freq:0Hz Lamp Flux:510.252x1 lm		
NAME: ALS-LR3735FDXSS1000	TYPE:	WEIGHT:1000*37*35
SPEC.:ALS-LR3735FDXSS1000-F16NW9X-BC	DIM.:	SERIAL No.:
MFR.: Colors	SUR.:1000*37	Shielding Angle:



LUMINANCE cd/(m2)		
G(180)	C0/180	C90/270
85	193	3710
80	862	3894
75	1212	4047
70	8613	4121
65	9813	4151
60	7760	4154
55	6301	4141
50	5043	4122
45	3778	4099

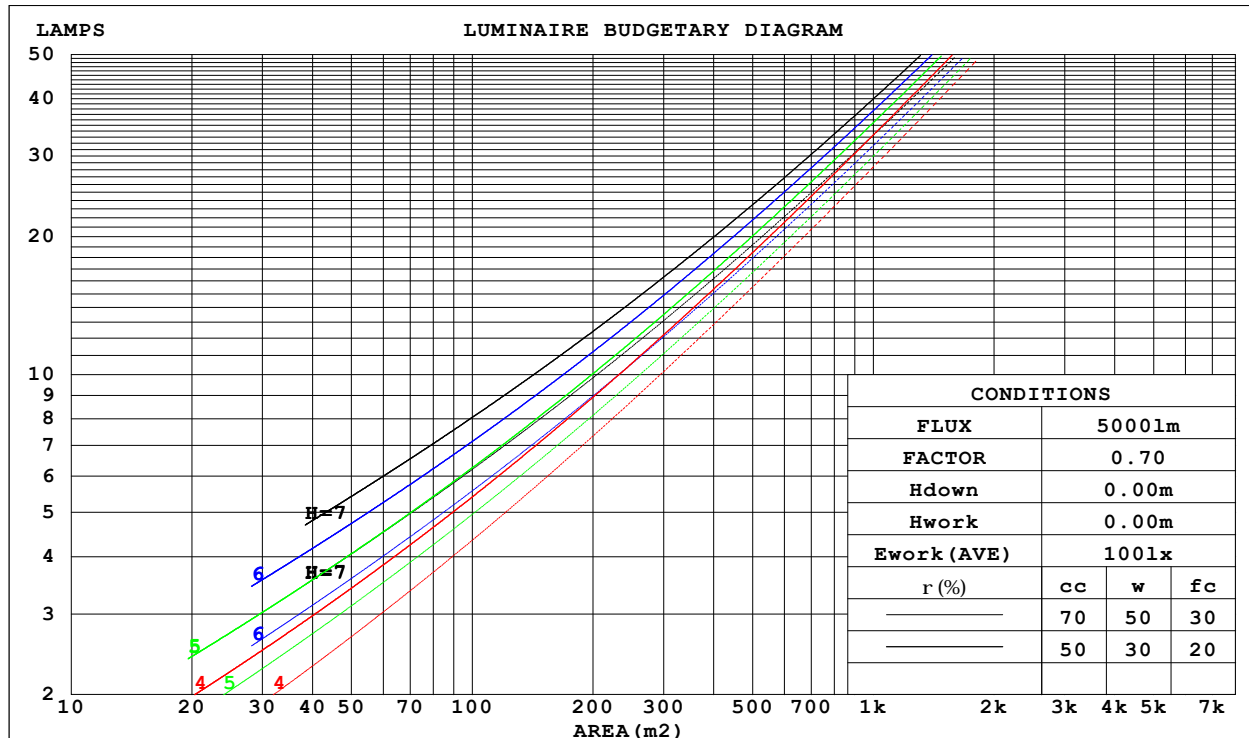
C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:COLORS
 Test Date:2019-05-16

g Range: 0 - 180DEG
 g Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity:65.0%
 Test Distance:10.750m [K=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:24.00V I:0.3800A P:9.100W PF:1.000 Freq:0Hz Lamp Flux:510.252x1 lm		
NAME: ALS-LR3735FDXSS1000	TYPE:	WEIGHT:1000*37*35
SPEC.:ALS-LR3735FDXSS1000-F16NW9X-BC	DIM.:	SERIAL No.:
MFR.: Colors	SUR.:1000*37	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	1.19	1.19	1.19	1.16	1.16	1.16	1.10	1.10	1.10	1.05	1.05	1.05	1.00	1.00	1.00	.98
1.0	1.02	.97	.93	.90	.95	.91	.95	.91	.88	.91	.88	.85	.87	.84	.82	.80
2.0	.88	.80	.74	.86	.79	.73	.82	.76	.71	.78	.73	.69	.75	.71	.67	.65
3.0	.76	.67	.60	.74	.66	.60	.71	.64	.58	.68	.62	.57	.65	.60	.56	.53
4.0	.67	.57	.50	.65	.56	.50	.62	.55	.49	.60	.53	.48	.57	.52	.47	.45
5.0	.59	.50	.43	.58	.49	.42	.55	.48	.42	.53	.46	.41	.51	.45	.40	.38
6.0	.53	.43	.37	.52	.43	.36	.50	.42	.36	.48	.41	.35	.46	.40	.35	.33
7.0	.48	.39	.32	.47	.38	.32	.45	.37	.31	.43	.36	.31	.42	.36	.31	.29
8.0	.43	.34	.28	.43	.34	.28	.41	.33	.28	.40	.33	.28	.38	.32	.27	.25
9.0	.40	.31	.25	.39	.31	.25	.38	.30	.25	.36	.30	.25	.35	.29	.24	.23
10.0	.37	.28	.23	.36	.28	.23	.35	.28	.23	.34	.27	.22	.33	.27	.22	.20



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:COLORS
 Test Date:2019-05-16

g Range: 0 - 180DEG
 Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity:65.0%
 Test Distance:10.750m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:24.00V I:0.3800A P:9.100W PF:1.000 Freq:0Hz Lamp Flux:510.252x1 lm		
NAME: ALS-LR3735FDXSS1000	TYPE:	WEIGHT:1000*37*35
SPEC.:ALS-LR3735FDXSS1000-F16NW9X-BC	DIM.:	SERIAL No.:
MFR.: Colors	SUR.:1000*37	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	.336	.191	.061	.328	.187	.059	.314	.180	.057	.300	.173	.056	.288	.167	.054		
2.0	.313	.172	.053	.306	.169	.052	.293	.163	.051	.281	.158	.049	.270	.153	.048		
3.0	.288	.153	.046	.282	.151	.045	.270	.146	.044	.259	.142	.044	.249	.138	.043		
4.0	.264	.137	.040	.258	.135	.040	.248	.132	.039	.239	.128	.039	.230	.125	.038		
5.0	.242	.124	.036	.238	.122	.036	.228	.119	.035	.220	.116	.035	.212	.113	.034		
6.0	.224	.112	.032	.219	.111	.032	.211	.108	.031	.203	.106	.031	.196	.103	.031		
7.0	.207	.102	.029	.203	.101	.029	.196	.099	.029	.189	.097	.028	.182	.095	.028		
8.0	.193	.094	.026	.189	.093	.026	.183	.091	.026	.176	.089	.026	.170	.087	.025		
9.0	.180	.087	.024	.177	.086	.024	.171	.084	.024	.165	.083	.024	.160	.081	.023		
10.0	.169	.081	.022	.166	.080	.022	.160	.079	.022	.155	.077	.022	.150	.076	.022		

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	.206	.206	.206	.176	.176	.176	.120	.120	.120	.069	.069	.069	.022	.022	.022	
1.0	.197	.171	.147	.169	.147	.127	.115	.101	.088	.066	.058	.051	.021	.019	.017	
2.0	.190	.147	.111	.163	.127	.096	.112	.088	.067	.064	.051	.039	.021	.016	.013	
3.0	.183	.130	.087	.157	.112	.076	.108	.078	.053	.062	.045	.031	.020	.015	.010	
4.0	.176	.117	.072	.151	.101	.062	.104	.070	.044	.060	.041	.026	.019	.013	.009	
5.0	.168	.107	.061	.145	.092	.053	.100	.064	.037	.058	.038	.022	.019	.012	.007	
6.0	.161	.098	.053	.139	.085	.046	.096	.060	.033	.055	.035	.019	.018	.011	.006	
7.0	.154	.091	.048	.133	.079	.042	.092	.056	.029	.053	.033	.018	.017	.011	.006	
8.0	.147	.086	.043	.127	.074	.038	.088	.052	.027	.051	.031	.016	.017	.010	.005	
9.0	.141	.081	.040	.122	.070	.035	.084	.049	.025	.049	.029	.015	.016	.010	.005	
10.0	.135	.077	.038	.116	.066	.033	.081	.047	.023	.047	.028	.014	.015	.009	.005	

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:COLORS
Test Date:2019-05-16

g Range: 0 - 180DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.750m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:24.00V I:0.3800A P:9.100W PF:1.000 Freq:0Hz Lamp Flux:510.252x1 lm											
NAME: ALS-LR3735FDXSS1000						TYPE:			WEIGHT:1000*37*35		
SPEC.:ALS-LR3735FDXSS1000-F16NW9X-BC						DIM.:			SERIAL No.:		
MFR.: Colors						SUR.:1000*37			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	22.9	24.5	23.2	24.8	25.0	20.8	22.3	21.1	22.6	22.8	
	3H	25.9	27.4	26.3	27.7	28.0	22.6	24.1	22.9	24.4	24.6
	4H	25.9	27.3	26.2	27.5	27.9	23.1	24.5	23.5	24.8	25.1
	6H	25.8	27.1	26.1	27.4	27.7	23.6	24.9	23.9	25.2	25.5
	8H	25.7	27.0	26.1	27.3	27.7	23.7	25.0	24.1	25.3	25.7
	12H	25.7	26.9	26.1	27.2	27.6	23.8	25.1	24.2	25.4	25.7
4H	2H	23.8	25.2	24.2	25.5	25.8	22.3	23.7	22.7	24.0	24.3
	3H	26.5	27.7	26.9	28.1	28.4	24.0	25.2	24.4	25.6	25.9
	4H	26.5	27.6	26.9	28.0	28.3	24.5	25.6	24.9	25.9	26.3
	6H	26.4	27.4	26.8	27.8	28.2	24.9	25.9	25.4	26.3	26.7
	8H	26.4	27.3	26.8	27.7	28.1	25.1	26.0	25.5	26.4	26.9
	12H	26.3	27.2	26.8	27.6	28.1	25.2	26.1	25.7	26.5	27.0
8H	4H	26.4	27.4	26.9	27.8	28.2	24.6	25.5	25.0	25.9	26.4
	6H	26.4	27.2	26.9	27.7	28.1	25.1	25.9	25.6	26.4	26.8
	8H	26.4	27.1	26.9	27.6	28.1	25.4	26.1	25.9	26.5	27.0
	12H	26.4	27.0	26.9	27.5	28.0	25.6	26.2	26.1	26.7	27.2
12H	4H	26.4	27.3	26.9	27.7	28.1	24.6	25.4	25.0	25.8	26.3
	6H	26.4	27.1	26.9	27.6	28.1	25.1	25.8	25.6	26.3	26.8
	8H	26.4	27.0	26.9	27.5	28.0	25.4	26.0	25.9	26.5	27.0
Variations with the observer position at spacings:											
S = 1.0H	+ 0.9 / - 1.2					+ 0.1 / - 0.1					
1.5H	+ 1.8 / - 2.5					+ 0.7 / - 0.7					
2.0H	+ 1.6 / - 3.0					+ 0.5 / - 0.7					

CIE Pub.117, 510.3 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -2.3)

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:COLORS
Test Date:2019-05-16

g Range: 0 - 180DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.750m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:24.00V I:0.3800A P:9.100W PF:1.000 Freq:0Hz Lamp Flux:510.252x1 lm		
NAME: ALS-LR3735FDXSS1000	TYPE:	WEIGHT:1000*37*35
SPEC.:ALS-LR3735FDXSS1000-F16NW9X-BC	DIM.:	SERIAL No.:
MFR.: Colors	SUR.:1000*37	Shielding Angle:

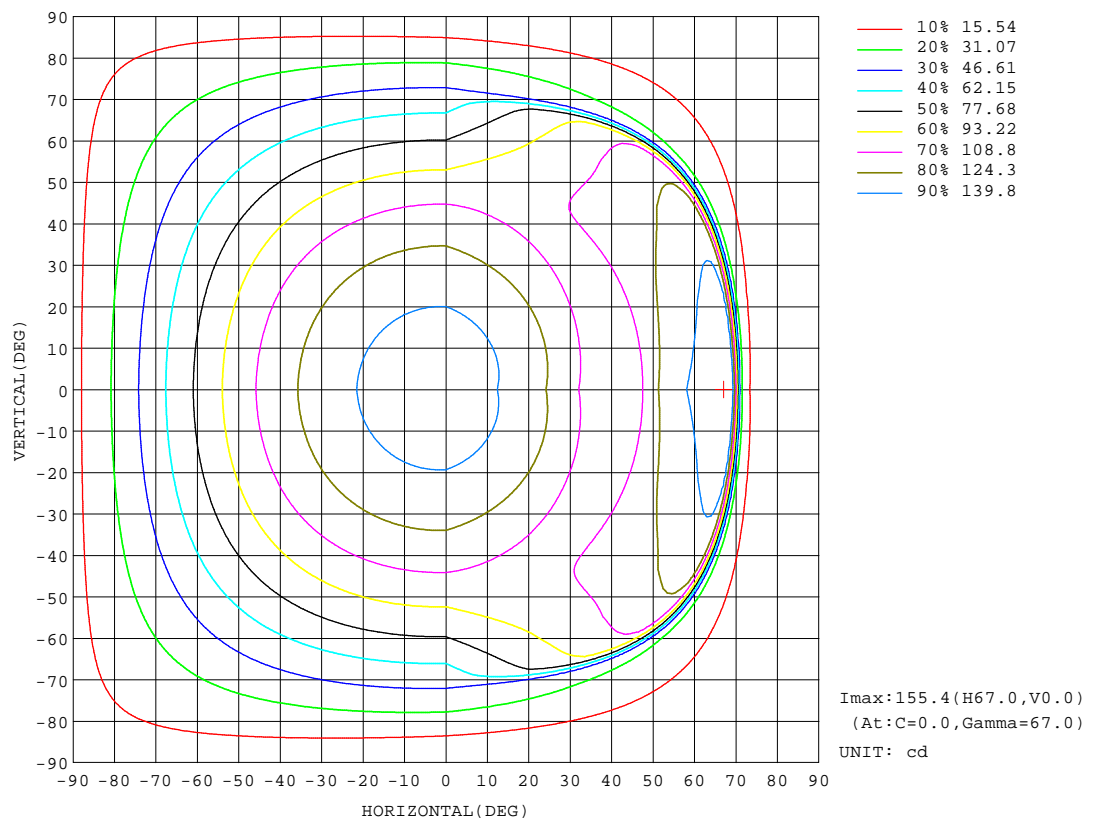
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	53	41	34	53	41	34	51	40	33	27
0.80	63	51	43	62	50	43	60	49	42	35
1.00	72	60	52	70	59	51	68	60	51	43
1.25	79	67	60	77	67	59	74	65	58	50
1.50	84	73	66	82	72	65	79	70	64	56
2.00	92	82	75	90	81	74	86	78	73	64
2.50	96	88	81	94	86	80	90	83	78	69
3.00	100	92	86	97	91	85	93	87	83	73
4.00	104	98	93	102	96	92	97	93	89	79
5.00	107	102	97	104	100	96	100	96	92	82
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:2019-05-16

g Range: 0 - 180DEG
 g Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity:65.0%
 Test Distance:10.750m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:24.00V I:0.3800A P:9.100W PF:1.000 Freq:0Hz Lamp Flux:510.252x1 lm		
NAME: ALS-LR3735FDXSS1000	TYPE:	WEIGHT:1000*37*35
SPEC.:ALS-LR3735FDXSS1000-F16NW9X-BC	DIM.:	SERIAL No.:
MFR.: Colors	SUR.:1000*37	Shielding Angle:



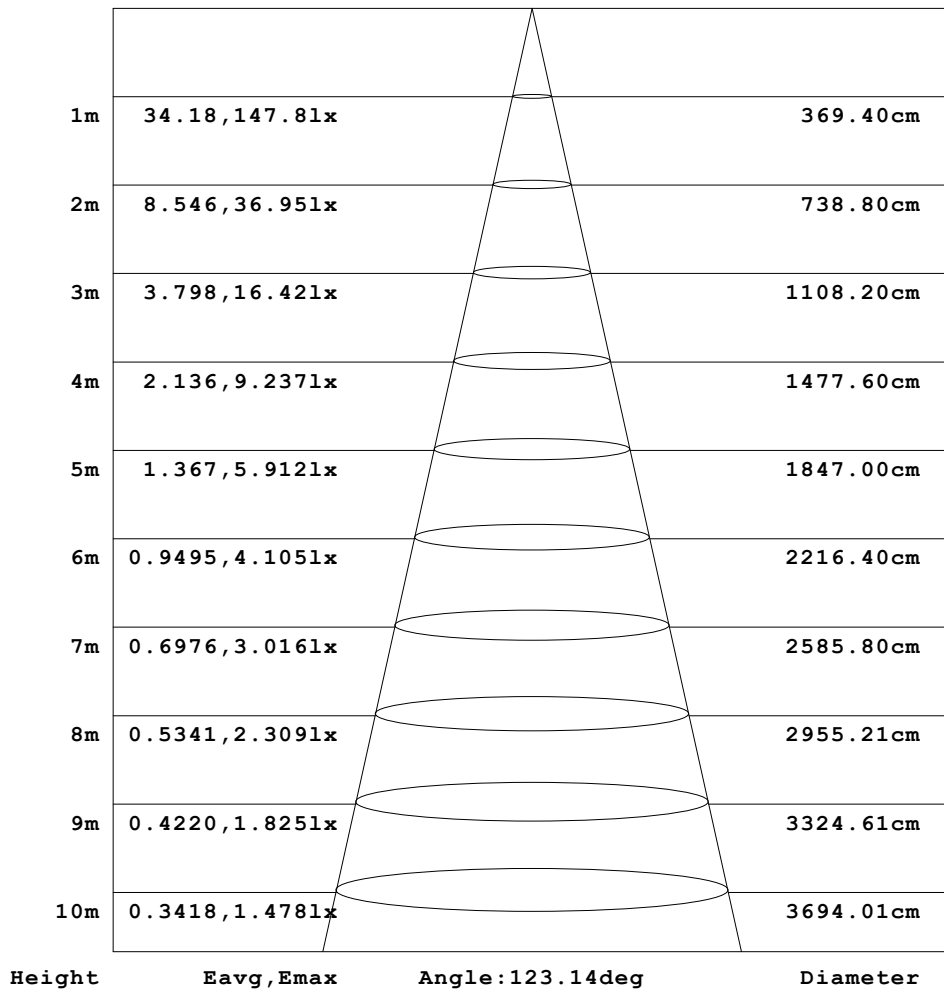
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:COLORS
Test Date:2019-05-16

Range: 0 - 180DEG
Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.750m [K=1.0000]
Remarks:

AAI Figure

Test:U:24.00V I:0.3800A P:9.100W PF:1.000 Freq:0Hz Lamp Flux:510.252x1 lm		
NAME: ALS-LR3735FDXSS1000	TYPE:	WEIGHT:1000*37*35
SPEC.:ALS-LR3735FDXSS1000-F16NW9X-BC	DIM.:	SERIAL No.:
MFR.: Colors	SUR.:1000*37	Shielding Angle:

Flux out:379.8 lm



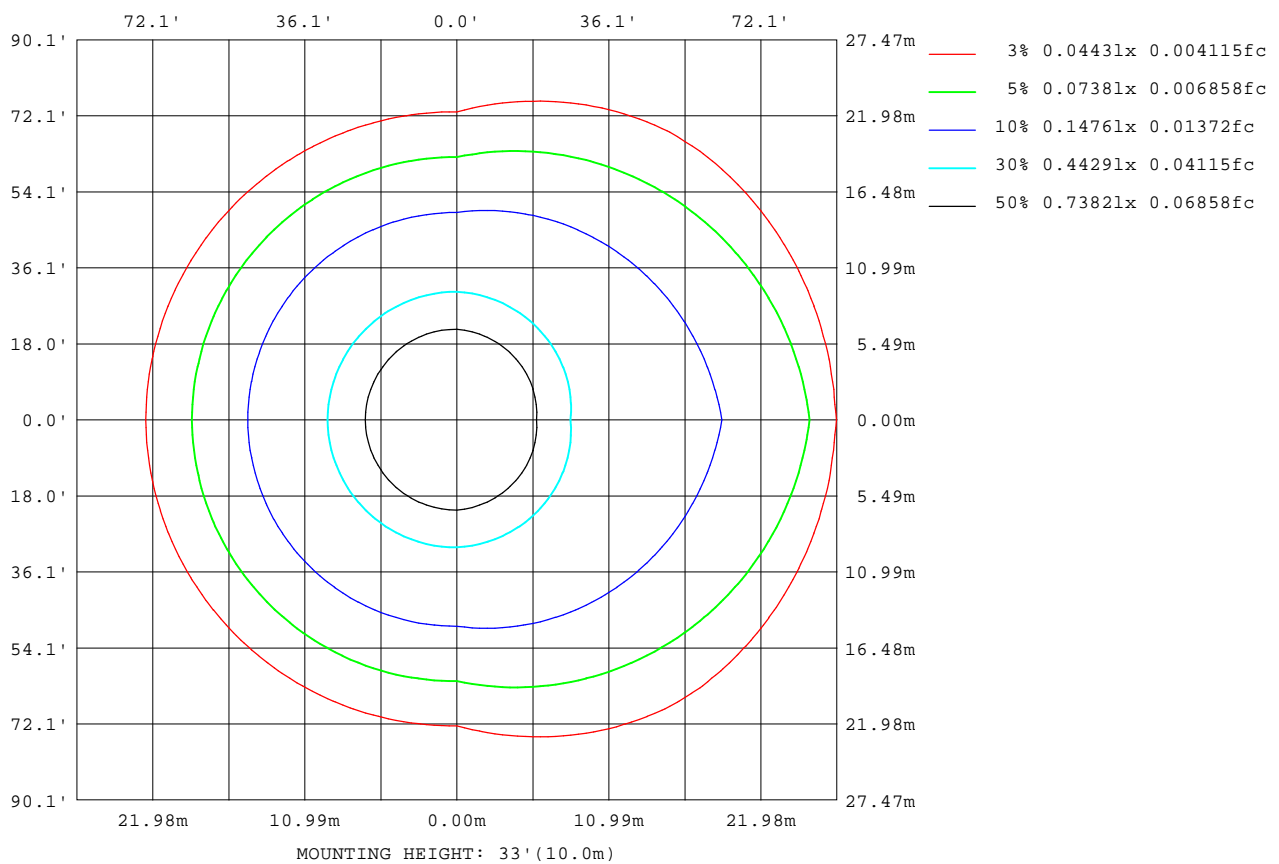
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:COLORS
Test Date:2019-05-16

g Range: 0 - 180DEG
Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.750m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

Test:U:24.00V I:0.3800A P:9.100W PF:1.000 Freq:0Hz Lamp Flux:510.252x1 lm		
NAME: ALS-LR3735FDXSS1000	TYPE:	WEIGHT:1000*37*35
SPEC.:ALS-LR3735FDXSS1000-F16NW9X-BC	DIM.:	SERIAL No.:
MFR.: Colors	SUR.:1000*37	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: COLORS
 Test Date: 2019-05-16

Range: 0 - 180DEG
 Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity: 65.0%
 Test Distance: 10.750m [K=1.0000]
 Remarks:

LED Avg.L Report

Test:U:24.00V I:0.3800A P:9.100W PF:1.000 Freq:0Hz Lamp Flux:510.252x1 lm		
NAME: ALS-LR3735FDXSS1000	TYPE:	WEIGHT:1000*37*35
SPEC.:ALS-LR3735FDXSS1000-F16NW9X-BC	DIM.:	SERIAL No.:
MFR.: Colors	SUR.:1000*37	Shielding Angle:

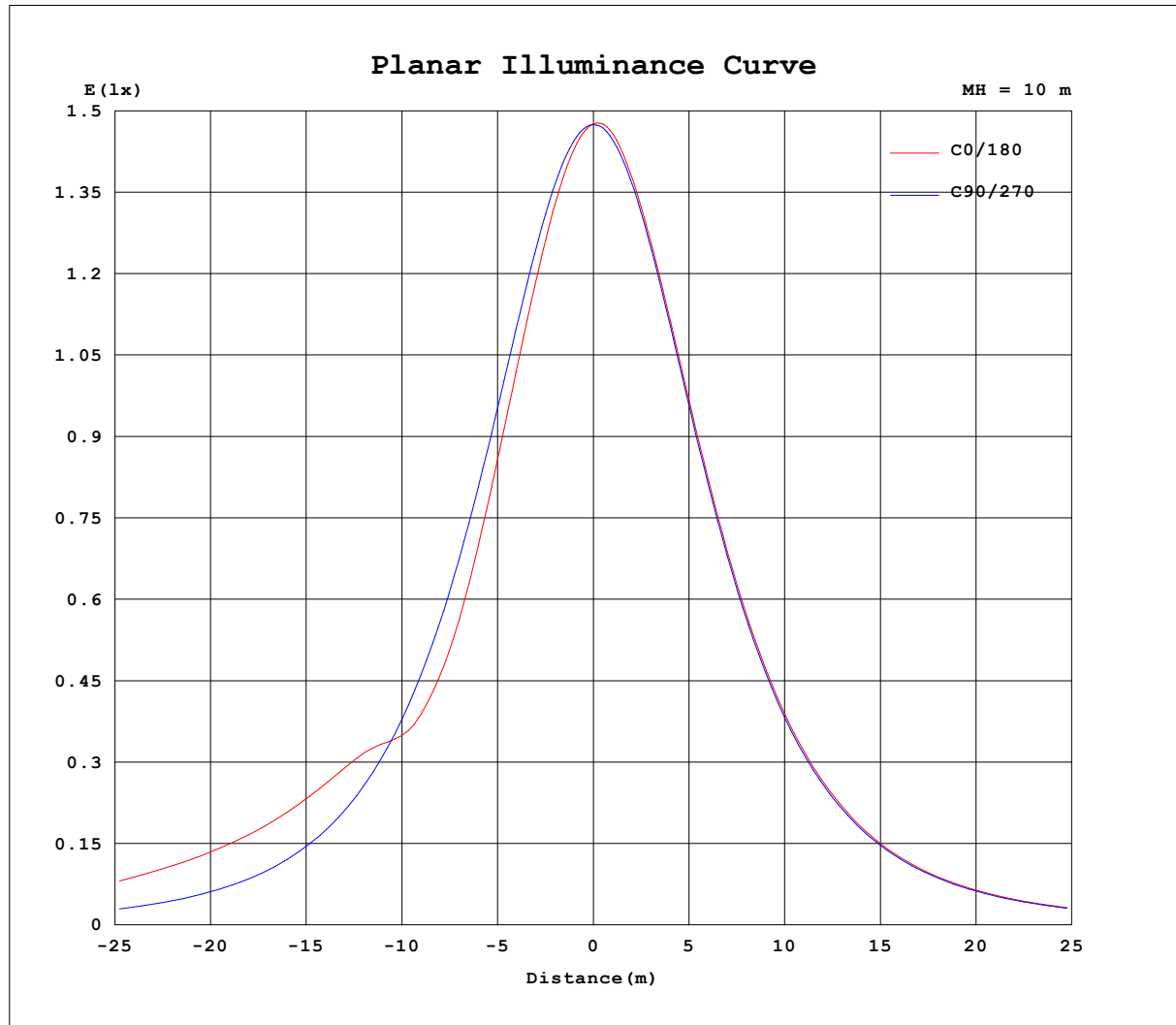
AvgL	cd/m2
L_0~180 (65) av	7093
L_0~180 (75) av	2938
L_0~180 (85) av	3474
L_90~270 (65) av	4196
L_90~270 (75) av	4161
L_90~270 (85) av	4219
L_45 (65) av	5113
L_45 (75) av	3810
L_45 (85) av	4145

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:COLORS
Test Date:2019-05-16

g Range: 0 - 180DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.750m [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: 2019-05-16

Range: 0 - 180DEG
Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity: 65.0%
Test Distance: 10.750m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:24.00V I:0.3800A P:9.100W PF:1.000 Freq:0Hz Lamp Flux:510.252x1 lm		
NAME: ALS-LR3735FDXSS1000	TYPE:	WEIGHT:1000*37*35
SPEC.:ALS-LR3735FDXSS1000-F16NW9X-BC	DIM.:	SERIAL No.:
MFR.: Colors	SUR.:1000*37	Shielding Angle:

Table--1

UNIT: cd

C (DEG) g (DEG)	0	90	180	270															
0	148	147	148	147															
5	146	147	148	147															
10	142	145	147	146															
15	137	143	144	143															
20	131	139	141	140															
25	123	135	137	135															
30	113	129	132	130															
35	103	123	125	124															
40	95.6	116	118	117															
45	98.9	107	110	108															
50	120	98.0	101	99.1															
55	134	87.9	91.1	89.0															
60	144	76.8	79.9	78.1															
65	153	64.9	68.4	66.3															
70	109	52.2	56.5	53.9															
75	11.6	38.8	44.7	40.9															
80	5.54	25.0	33.0	27.9															
85	0.62	12.0	21.8	15.2															
90	0.50	1.85	11.5	2.83															
95	0.67	0.50	2.51	0.49															
100	0.89	0.62	0.55	0.58															
105	1.11	0.77	0.98	0.71															
110	1.32	0.93	2.65	0.87															
115	1.53	1.08	3.21	1.00															
120	1.67	1.21	3.02	1.13															
125	1.82	1.33	2.74	1.24															
130	1.94	1.44	2.34	1.34															
135	2.04	1.52	2.02	1.42															
140	2.12	1.60	1.99	1.53															
145	2.12	1.65	2.02	1.62															
150	2.12	1.73	2.06	1.72															
155	2.08	1.83	2.14	1.82															
160	2.09	1.94	2.18	1.94															
165	2.11	2.06	2.21	2.03															
170	2.16	2.18	2.22	2.12															
175	2.24	2.29	2.23	2.21															
180	2.38	2.34	2.38	2.33															

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