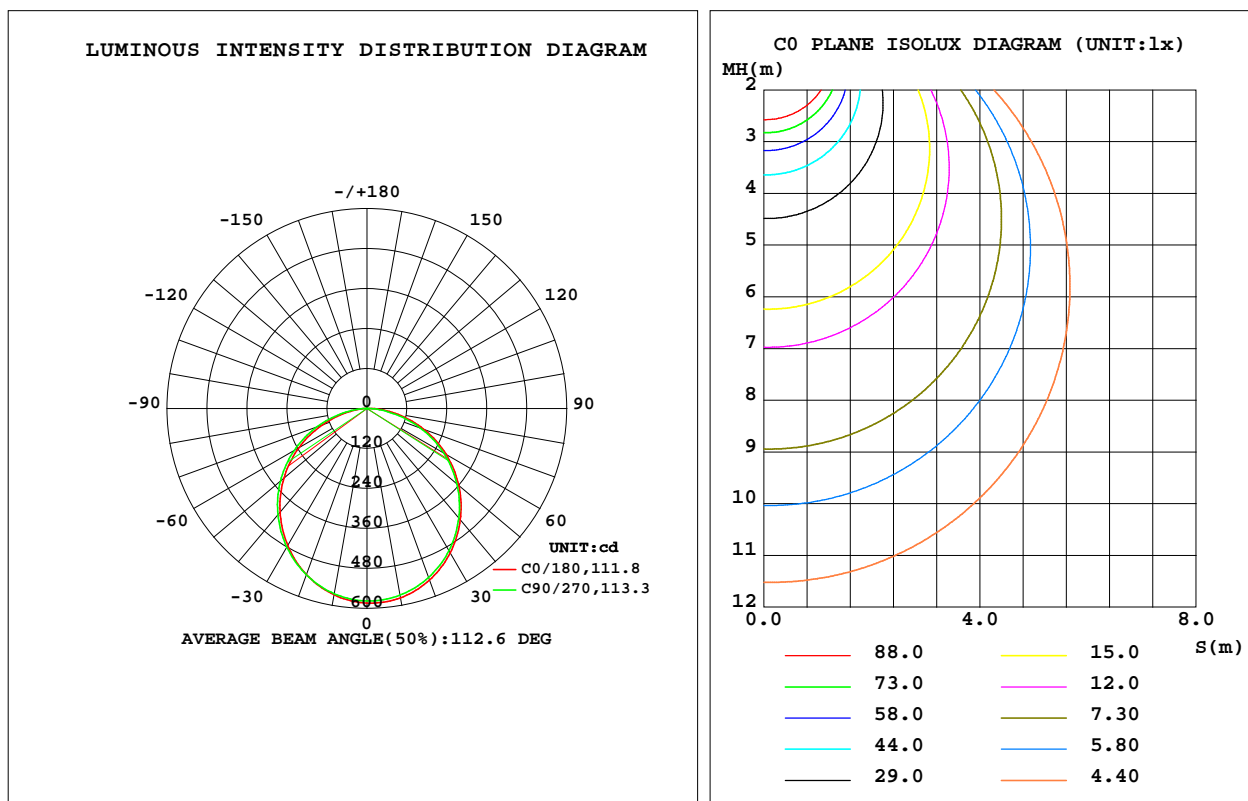


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:24.00V I:0.8070A P:19.36W PF:0 Freq:0Hz Lamp Flux:1674.78x1 lm		
NAME: ALS-LR3924FDXSS1000	TYPE:	WEIGHT:
SPEC.:ALS-LR3924FDXSS1000-F20NW9X-BC	DIM.: 1000*39*24	SERIAL No.:
MFR.: Colors	SUR.:1000*39	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 86.51 lm/W			
MODEL	ALS-LR3924FDXSS1000	I _{max} (cd)	584.3	S/MH(C0/180)	1.27
NOMINAL POWER(W)	20	LOR(%)	100.0	S/MH(C90/270)	1.24
RATED VOLTAGE(V)	24	TOTAL FLUX(lm)	1674.8	h UP,DN(C0-180)	0.3,51.6
NOMINAL FLUX(lm)	1674.78	CIE CLASS	DIRECT	h UP,DN(C180-360)	0.3,47.7
LAMPS INSIDE	1	h up(%)	0.7	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	24	h down(%)	99.3	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:COLORS
Test Date:2019-05-07

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:

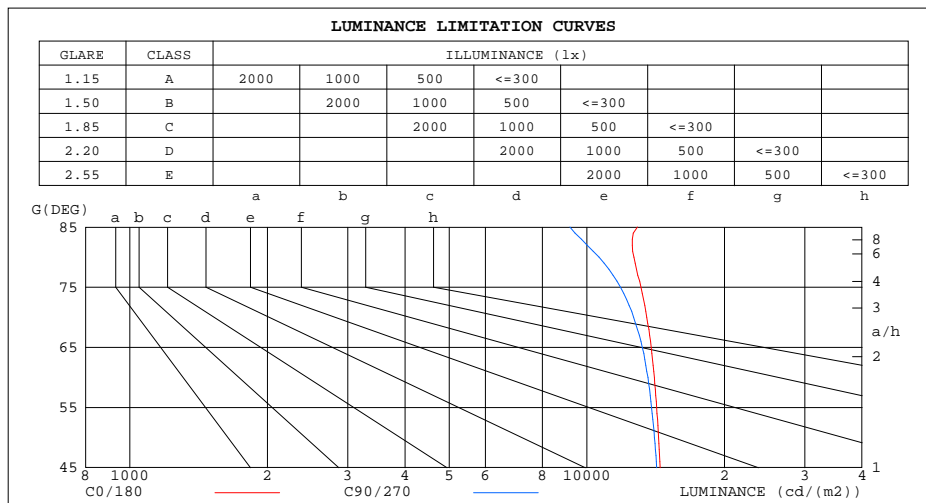
g	C0	C90	C180	C270					g	F zone	F total	%lum,lamp
10	577.2	568.9	568.1	564.5					0- 10	54.91	54.91	3.28,3.28
20	548.4	540.2	530.9	531.6					10- 20	157.0	211.9	12.6,12.6
30	500.0	492.4	475.7	481.2					20- 30	237.2	449.0	26.8,26.8
40	436.0	429.0	406.2	416.1					30- 40	285.4	734.4	43.8,43.8
50	359.9	352.6	325.6	339.3					40- 50	296.5	1031	61.6,61.6
60	274.0	265.3	236.4	252.6					50- 60	269.6	1301	77.7,77.7
70	180.5	168.9	141.0	158.4					60- 70	207.9	1508	90.1,90.1
80	85.90	72.02	50.21	64.60					70- 80	120.6	1629	97.3,97.3
90	12.57	3.888	0.6358	1.872					80- 90	34.50	1664	99.3,99.3
100	0.6455	0.7840	0.8525	0.8798					90-100	1.384	1665	99.4,99.4
110	1.037	1.172	1.254	1.272					100-110	1.039	1666	99.5,99.5
120	1.438	1.586	1.674	1.686					110-120	1.376	1667	99.6,99.6
130	1.892	1.999	2.094	2.106					120-130	1.623	1669	99.7,99.7
140	2.256	2.372	2.473	2.478					130-140	1.708	1671	99.8,99.8
150	2.644	2.698	2.801	2.751					140-150	1.608	1672	99.9,99.9
160	2.908	2.939	3.061	2.980					150-160	1.319	1674	99.9,99.9
170	3.137	3.118	3.240	3.133					160-170	0.8670	1674	100,100
180	3.300	3.215	3.303	3.196					170-180	0.3050	1675	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:2019-05-07

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:0.8070A P:19.36W PF:0 Freq:0Hz Lamp Flux:1674.78x1 lm		
NAME: ALS-LR3924FDXSS1000	TYPE:	WEIGHT:
SPEC.:ALS-LR3924FDXSS1000-F20NW9X-BC	DIM.: 1000*39*24	SERIAL No.:
MFR.: Colors	SUR.:1000*39	Shielding Angle:



LUMINANCE cd/(m2)		
G(180)	C0/180	C90/270
85	12896	9178
80	12685	10634
75	13137	11852
70	13531	12663
65	13835	13228
60	14051	13604
55	14217	13862
50	14358	14067
45	14481	14221

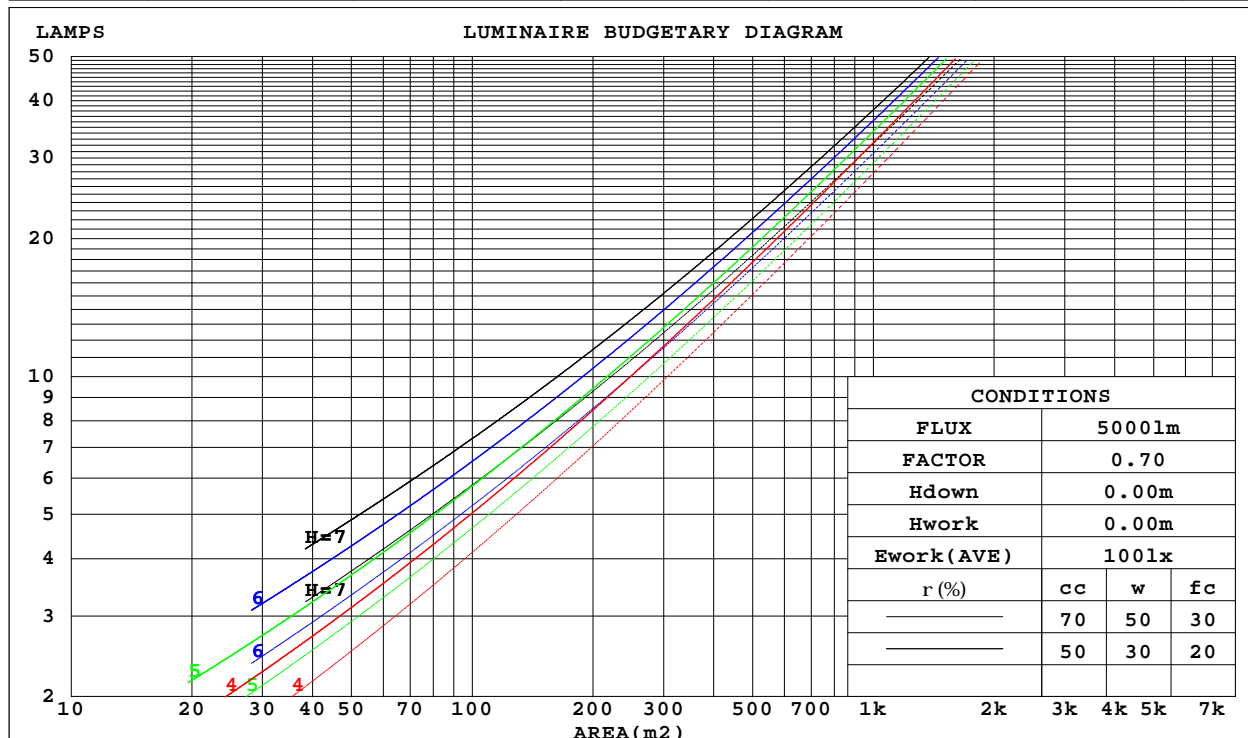
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:COLORS
Test Date:2019-05-07

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:0.8070A P:19.36W PF:0 Freq:0Hz Lamp Flux:1674.78x1 lm		
NAME: ALS-LR3924FDXSS1000	TYPE:	WEIGHT:
SPEC.:ALS-LR3924FDXSS1000-F20NW9X-BC	DIM.: 1000*39*24	SERIAL No.:
MFR.: Colors	SUR.:1000*39	Shielding Angle:

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															



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:COLORS
Test Date:2019-05-07

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:0.8070A P:19.36W PF:0 Freq:0Hz Lamp Flux:1674.78x1 lm		
NAME: ALS-LR3924FDXSS1000	TYPE:	WEIGHT:
SPEC.:ALS-LR3924FDXSS1000-F20NW9X-BC	DIM.: 1000*39*24	SERIAL No.:
MFR.: Colors	SUR.:1000*39	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	.313	.178	.056	.306	.174	.055	.292	.168	.054	.280	.161	.052	.268	.155	.050	
2.0	.294	.161	.049	.287	.158	.049	.275	.153	.048	.264	.148	.046	.254	.144	.045	
3.0	.271	.144	.043	.266	.142	.043	.255	.138	.042	.245	.134	.041	.236	.131	.040	
4.0	.250	.130	.038	.245	.128	.038	.236	.125	.037	.227	.122	.037	.219	.119	.036	
5.0	.231	.118	.034	.227	.116	.034	.218	.114	.033	.210	.111	.033	.203	.108	.033	
6.0	.214	.107	.031	.210	.106	.031	.203	.104	.030	.196	.102	.030	.189	.100	.030	
7.0	.199	.099	.028	.196	.098	.028	.189	.096	.028	.183	.094	.027	.177	.092	.027	
8.0	.186	.091	.026	.183	.090	.025	.177	.088	.025	.171	.087	.025	.166	.085	.025	
9.0	.174	.084	.024	.171	.084	.023	.166	.082	.023	.161	.081	.023	.156	.079	.023	
10.0	.164	.079	.022	.161	.078	.022	.156	.077	.022	.152	.075	.021	.147	.074	.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	.196	.196	.196	.167	.167	.167	.114	.114	.114	.066	.066	.066	.021	.021	.021	
1.0	.186	.161	.139	.159	.138	.120	.109	.095	.083	.063	.055	.048	.020	.018	.016	
2.0	.178	.137	.103	.152	.118	.089	.104	.082	.062	.060	.047	.036	.019	.015	.012	
3.0	.170	.120	.079	.146	.103	.069	.100	.072	.048	.058	.042	.028	.019	.014	.009	
4.0	.162	.106	.063	.139	.092	.055	.096	.064	.039	.055	.037	.023	.018	.012	.008	
5.0	.155	.096	.052	.133	.083	.045	.092	.058	.032	.053	.034	.019	.017	.011	.006	
6.0	.148	.088	.044	.127	.076	.039	.088	.053	.027	.051	.031	.016	.016	.010	.005	
7.0	.141	.081	.038	.121	.070	.033	.084	.049	.024	.049	.029	.014	.016	.009	.005	
8.0	.134	.075	.034	.116	.065	.030	.080	.046	.021	.047	.027	.013	.015	.009	.004	
9.0	.128	.070	.030	.111	.061	.027	.077	.043	.019	.045	.025	.011	.014	.008	.004	
10.0	.123	.066	.028	.106	.057	.024	.073	.040	.017	.043	.024	.010	.014	.008	.003	

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:COLORS
 Test Date:2019-05-07

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:0.8070A P:19.36W PF:0 Freq:0Hz Lamp Flux:1674.78x1 lm											
NAME: ALS-LR3924FDXSS1000						TYPE:		WEIGHT:			
SPEC.:ALS-LR3924FDXSS1000-F20NW9X-BC						DIM.: 1000*39*24		SERIAL No.:			
MFR.: Colors						SUR.:1000*39		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	20.4	22.0	20.7	22.2	22.4	20.3	21.8	20.6	22.1	22.3	
	3H	22.1	23.5	22.4	23.8	24.0	21.9	23.3	22.2	23.6	23.8
	4H	22.8	24.2	23.2	24.4	24.7	22.6	23.9	22.9	24.2	24.4
	6H	23.4	24.6	23.7	24.9	25.2	23.0	24.3	23.4	24.6	24.9
	8H	23.6	24.8	23.9	25.1	25.4	23.2	24.4	23.5	24.7	25.0
	12H	23.8	24.9	24.1	25.2	25.5	23.2	24.4	23.6	24.7	25.0
4H	2H	21.1	22.4	21.4	22.7	23.0	21.0	22.3	21.3	22.6	22.9
	3H	22.9	24.1	23.3	24.4	24.7	22.8	23.9	23.1	24.2	24.6
	4H	23.8	24.8	24.2	25.2	25.5	23.5	24.6	23.9	24.9	25.3
	6H	24.5	25.4	24.9	25.8	26.2	24.1	25.1	24.5	25.4	25.8
	8H	24.7	25.6	25.2	26.0	26.4	24.3	25.2	24.8	25.6	26.0
	12H	25.0	25.8	25.4	26.2	26.6	24.5	25.3	24.9	25.7	26.1
8H	4H	24.1	24.9	24.5	25.3	25.7	23.9	24.7	24.3	25.1	25.5
	6H	24.9	25.7	25.4	26.1	26.5	24.6	25.3	25.1	25.8	26.2
	8H	25.3	25.9	25.8	26.4	26.8	24.9	25.5	25.4	26.0	26.5
	12H	25.6	26.2	26.1	26.6	27.1	25.1	25.7	25.6	26.1	26.6
12H	4H	24.1	24.9	24.5	25.3	25.7	23.9	24.7	24.3	25.1	25.5
	6H	25.0	25.6	25.5	26.1	26.5	24.7	25.3	25.2	25.8	26.2
	8H	25.4	26.0	25.9	26.4	26.9	25.0	25.6	25.5	26.0	26.5
Variations with the observer position at spacings:											
S = 1.0H	+ 0.1 / - 0.2					+ 0.1 / - 0.2					
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3					
2.0H	+ 0.1 / - 0.3					+ 0.1 / - 0.3					

CIE Pub.117, 1675 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 1.8)

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:COLORS
Test Date:2019-05-07

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:0.8070A P:19.36W PF:0 Freq:0Hz Lamp Flux:1674.78x1 lm		
NAME: ALS-LR3924FDXSS1000	TYPE:	WEIGHT:
SPEC.:ALS-LR3924FDXSS1000-F20NW9X-BC	DIM.: 1000*39*24	SERIAL No.:
MFR.: Colors	SUR.:1000*39	Shielding Angle:

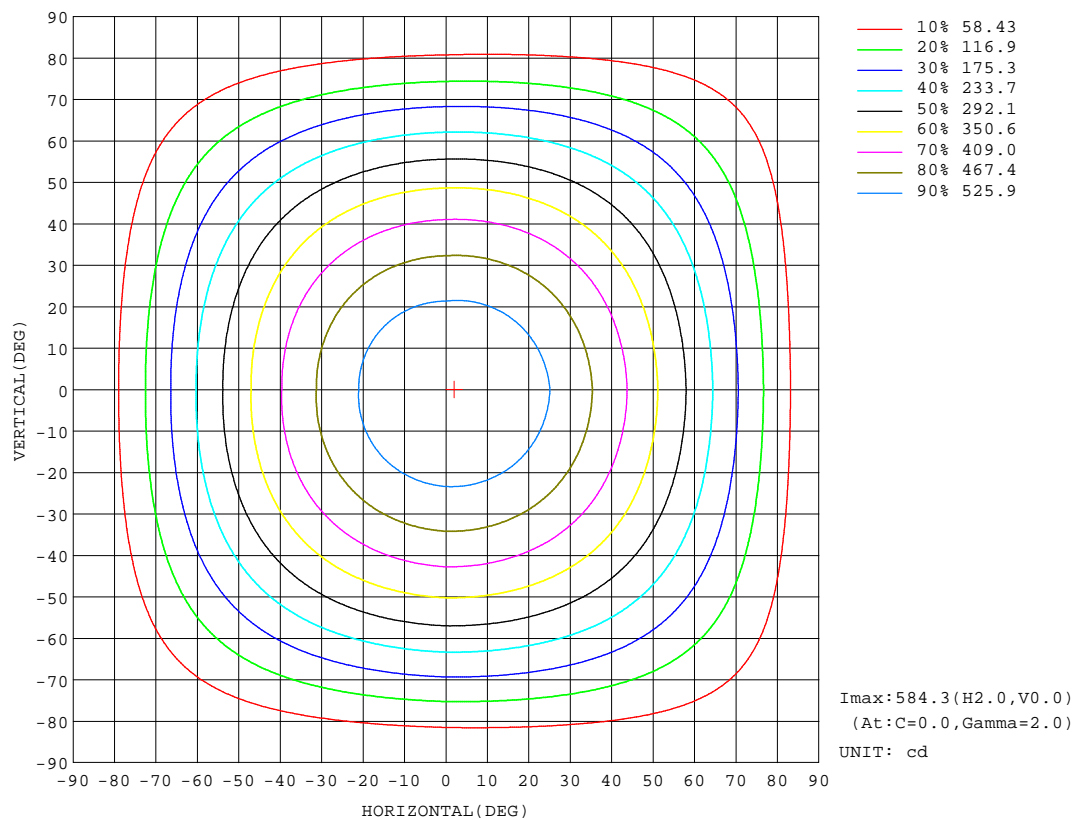
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	57	45	38	56	45	38	55	45	38	32
0.80	67	55	48	66	55	48	64	54	47	40
1.00	75	64	57	74	64	57	72	65	56	49
1.25	83	72	65	81	71	64	78	70	63	56
1.50	88	78	71	86	77	70	83	75	69	61
2.00	94	86	79	93	85	78	89	82	77	69
2.50	98	91	84	96	89	84	92	86	82	73
3.00	102	95	89	100	93	88	95	90	86	77
4.00	106	100	95	103	98	94	99	95	91	82
5.00	108	103	99	106	101	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: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:COLORS
 Test Date:2019-05-07

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:0.8070A P:19.36W PF:0 Freq:0Hz Lamp Flux:1674.78x1 lm		
NAME: ALS-LR3924FDXSS1000	TYPE:	WEIGHT:
SPEC.:ALS-LR3924FDXSS1000-F20NW9X-BC	DIM.: 1000*39*24	SERIAL No.:
MFR.: Colors	SUR.:1000*39	Shielding Angle:



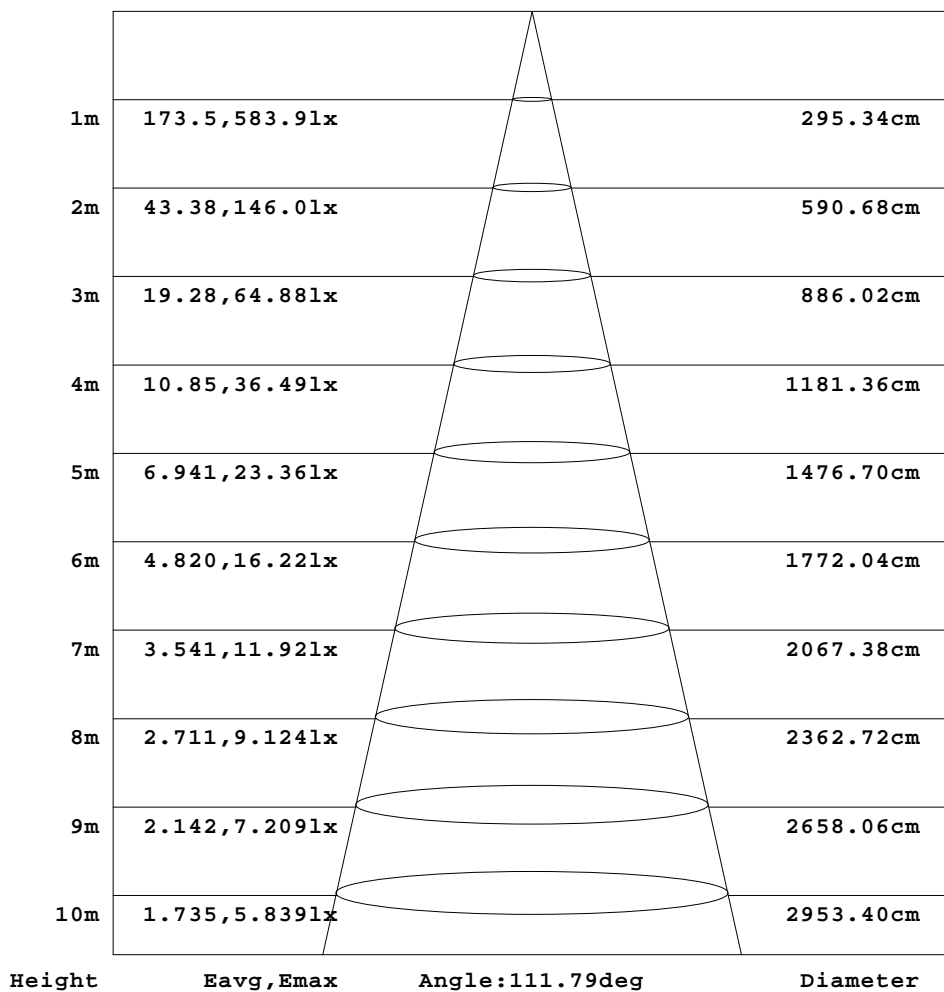
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:COLORS
Test Date:2019-05-07

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:0.8070A P:19.36W PF:0 Freq:0Hz Lamp Flux:1674.78x1 lm		
NAME: ALS-LR3924FDXSS1000	TYPE:	WEIGHT:
SPEC.:ALS-LR3924FDXSS1000-F20NW9X-BC	DIM.: 1000*39*24	SERIAL No.:
MFR.: Colors	SUR.:1000*39	Shielding Angle:

Flux out:1198 lm



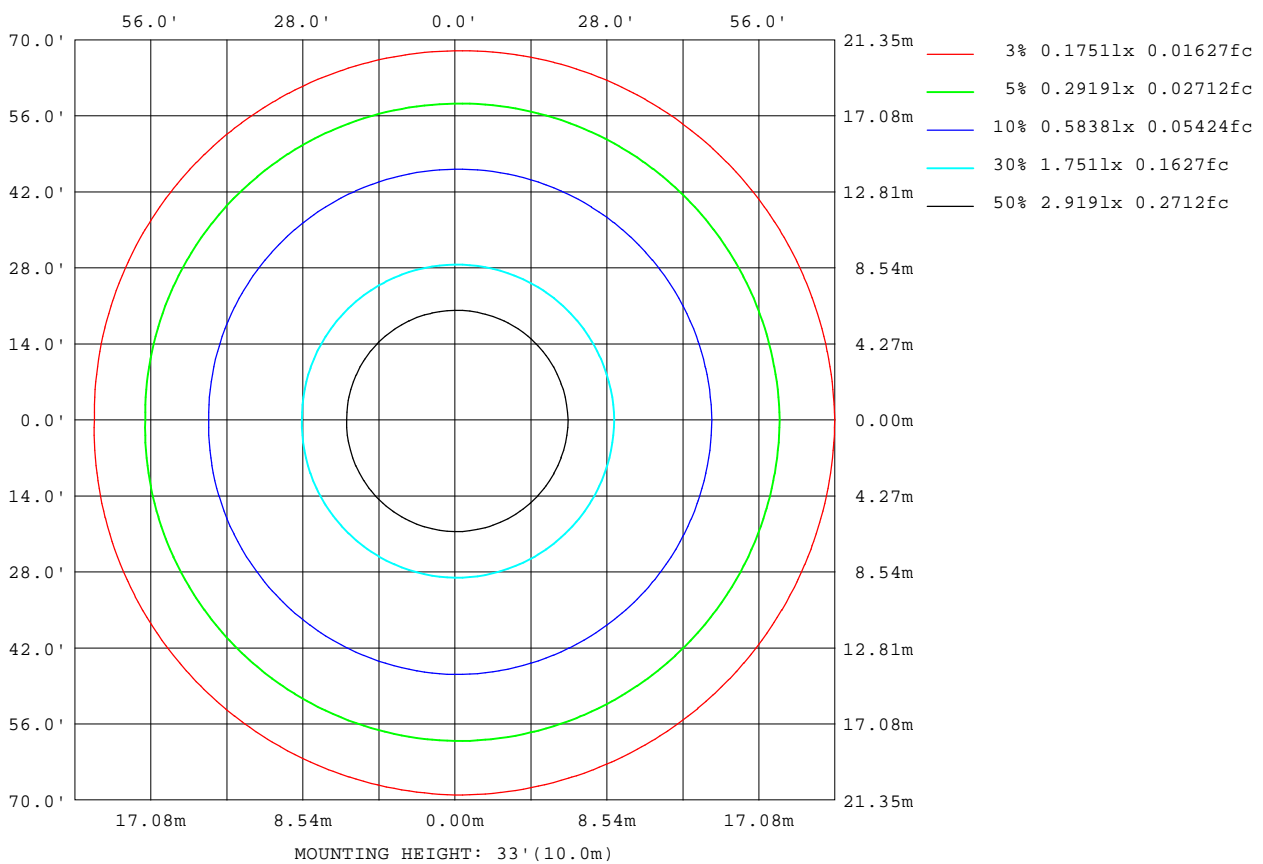
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:COLORS
Test Date:2019-05-07

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:0.8070A P:19.36W PF:0 Freq:0Hz Lamp Flux:1674.78x1 lm		
NAME: ALS-LR3924FDXSS1000	TYPE:	WEIGHT:
SPEC.:ALS-LR3924FDXSS1000-F20NW9X-BC	DIM.: 1000*39*24	SERIAL No.:
MFR.: Colors	SUR.:1000*39	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:COLORS
 Test Date:2019-05-07

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:0.8070A P:19.36W PF:0 Freq:0Hz Lamp Flux:1674.78x1 lm		
NAME: ALS-LR3924FDXSS1000	TYPE:	WEIGHT:
SPEC.:ALS-LR3924FDXSS1000-F20NW9X-BC	DIM.: 1000*39*24	SERIAL No.:
MFR.: Colors	SUR.:1000*39	Shielding Angle:

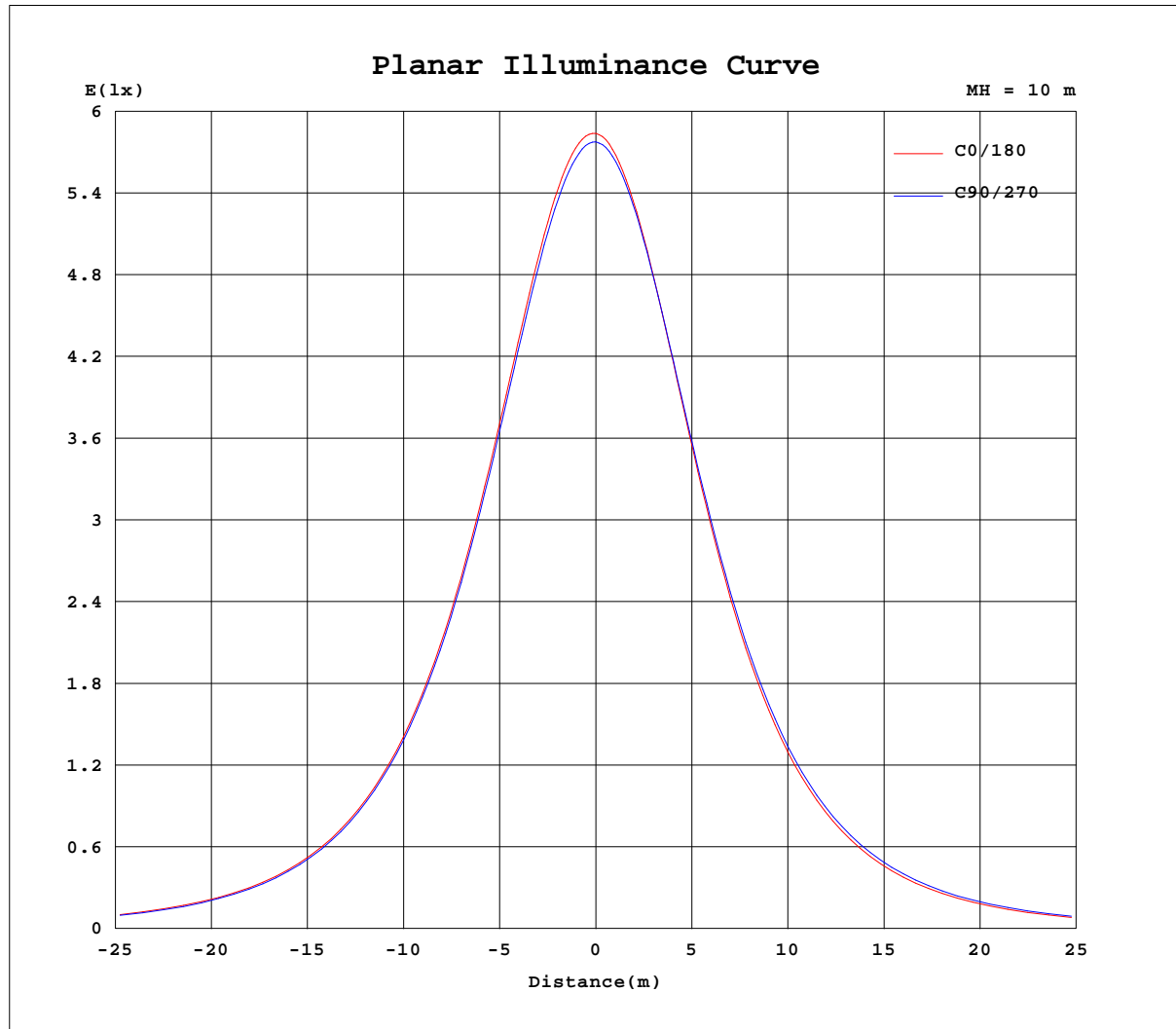
AvgL	cd/m2
L_0~180(65)av	12653
L_0~180(75)av	11209
L_0~180(85)av	8833
L_90~270(65)av	12870
L_90~270(75)av	11389
L_90~270(85)av	8397
L_45(65)av	12715
L_45(75)av	11201
L_45(85)av	8307

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:COLORS
Test Date:2019-05-07

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: 2019-05-07

deg Range: 0 - 180DEG
deg 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:0.8070A P:19.36W PF:0 Freq:0Hz Lamp Flux:1674.78x1 lm		
NAME: ALS-LR3924FDXSS1000	TYPE:	WEIGHT:
SPEC.:ALS-LR3924FDXSS1000-F20NW9X-BC	DIM.: 1000*39*24	SERIAL No.:
MFR.: Colors	SUR.:1000*39	Shielding Angle:

Table--1

UNIT: cd

C(DEG) g (DEG)	0	90	180	270															
0	584	578	584	578															
5	583	576	579	574															
10	577	569	568	565															
15	565	557	552	551															
20	548	540	531	532															
25	526	519	505	508															
30	500	492	476	481															
35	470	462	442	450															
40	436	429	406	416															
45	399	392	367	379															
50	360	353	326	339															
55	318	310	282	297															
60	274	265	236	253															
65	228	218	189	206															
70	180	169	141	158															
75	133	120	93.7	110															
80	85.9	72.0	50.2	64.6															
85	43.8	31.2	16.2	25.9															
90	12.6	3.89	0.64	1.87															
95	1.33	0.62	0.67	0.69															
100	0.65	0.78	0.85	0.88															
105	0.84	0.97	1.05	1.08															
110	1.04	1.17	1.25	1.27															
115	1.23	1.38	1.46	1.48															
120	1.44	1.59	1.67	1.69															
125	1.65	1.80	1.89	1.90															
130	1.89	2.00	2.09	2.11															
135	2.10	2.19	2.29	2.29															
140	2.26	2.37	2.47	2.48															
145	2.45	2.56	2.64	2.65															
150	2.64	2.70	2.80	2.75															
155	2.79	2.83	2.95	2.89															
160	2.91	2.94	3.06	2.98															
165	3.03	3.04	3.16	3.05															
170	3.14	3.12	3.24	3.13															
175	3.24	3.18	3.30	3.15															
180	3.30	3.22	3.30	3.20															

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:COLORS
Test Date:2019-05-07

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: