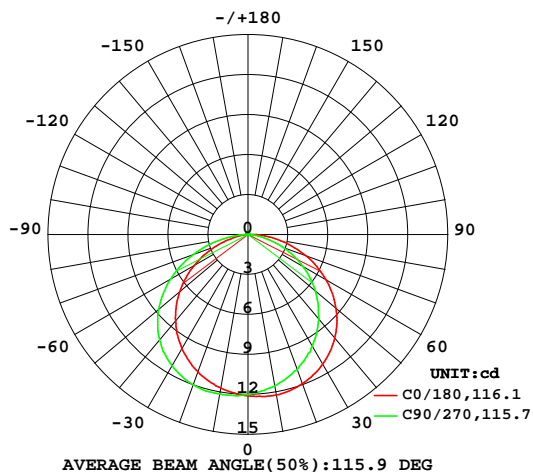


LUMINAIRE PHOTOMETRIC TEST REPORT

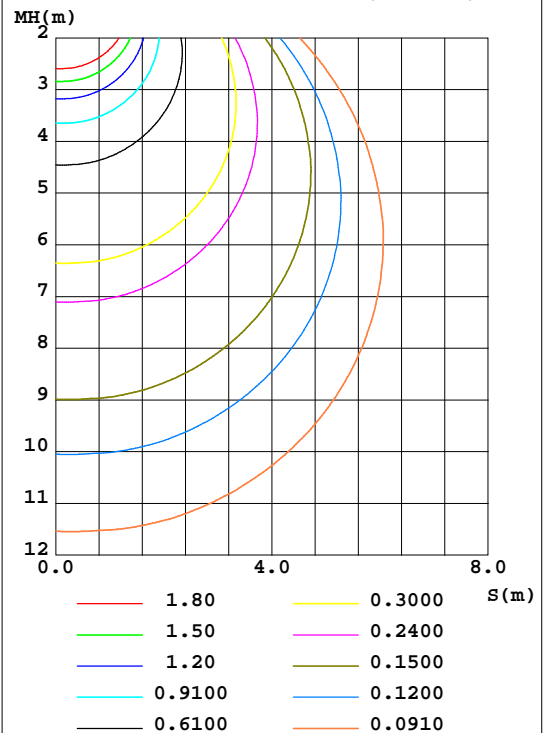
Test:U:48.00V I:0.0700A P:3.360W PF:1.000 Freq:0Hz Lamp Flux:37.0349x1 lm		
NAME: DS55448120NO	TYPE:	WEIGHT:
SPEC.:DS55448120NO-ORGBNWA012WC4000-B	DIM.: 1000*12*1.5mm	SERIAL No.:
MFR.: Colors	SUR.:1000*12	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 11.02 lm/W			
MODEL	DS55448120NO	I _{max} (cd)	12.23	S/MH(C0/180)	1.22
NOMINAL POWER(W)	4	LOR(%)	100.0	S/MH(C90/270)	1.40
RATED VOLTAGE(V)	48	TOTAL FLUX(lm)	37.035	h UP,DN(C0-180)	1.0,49.3
NOMINAL FLUX(lm)	37.0349	CIE CLASS	DIRECT	h UP,DN(C180-360)	0.9,48.8
LAMPS INSIDE	1	h up(%)	1.9	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	48	h down(%)	98.1	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: 2019-07-17

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:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

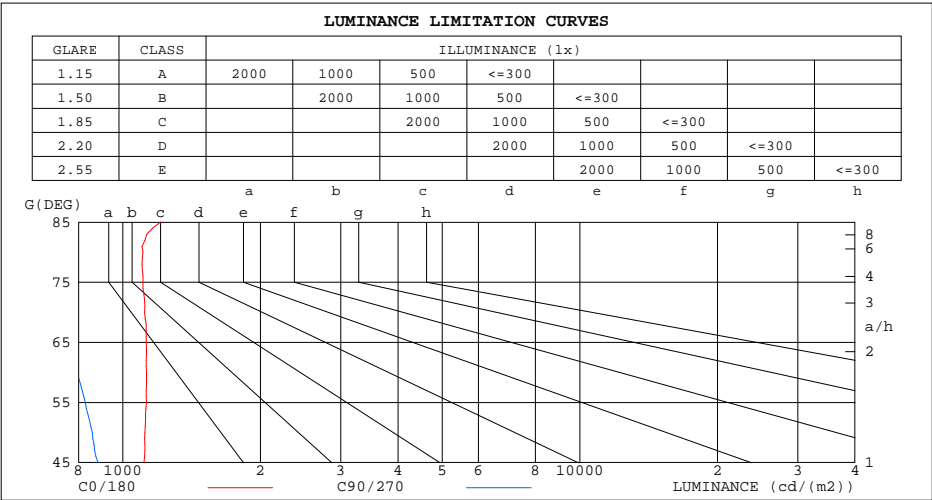
g	C0	C90	C180	C270					g	F zone	F total	%lum,lamp
10	12.23	11.53	11.71	12.15					0~ 10	1.144	1.144	3.09,3.09
20	11.92	10.81	10.97	12.01					10~ 20	3.308	4.452	12,12
30	11.23	9.663	9.930	11.38					20~ 30	5.086	9.537	25.8,25.8
40	10.14	8.294	8.445	10.32					30~ 40	6.236	15.77	42.6,42.6
50	8.629	6.615	6.682	8.743					40~ 50	6.574	22.35	60.3,60.3
60	6.762	4.763	4.677	6.721					50~ 60	6.014	28.36	76.6,76.6
70	4.584	2.781	2.531	4.317					60~ 70	4.608	32.97	89,89
80	2.307	0.9254	0.6733	1.848					70~ 80	2.597	35.57	96,96
90	0.5297	0.0322	0.0384	0.0415					80~ 90	0.7565	36.32	98.1,98.1
100	0.0578	0.0580	0.0645	0.0193					90~100	0.0837	36.41	98.3,98.3
110	0.0899	0.1030	0.1030	0.0771					100~110	0.0706	36.48	98.5,98.5
120	0.0966	0.1350	0.1414	0.0966					110~120	0.1065	36.58	98.8,98.8
130	0.0966	0.1483	0.1609	0.0966					120~130	0.1078	36.69	99.1,99.1
140	0.0966	0.1674	0.1738	0.0966					130~140	0.1011	36.79	99.3,99.3
150	0.1352	0.1866	0.1868	0.0966					140~150	0.0882	36.88	99.6,99.6
160	0.1996	0.1996	0.1997	0.1922					150~160	0.0781	36.96	99.8,99.8
170	0.1996	0.1996	0.1867	0.1996					160~170	0.0566	37.02	99.9,99.9
180	0.1996	0.1996	0.1996	0.1996					170~180	0.0189	37.03	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:2019-07-17

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:48.00V I:0.0700A P:3.360W PF:1.000 Freq:0Hz Lamp Flux:37.0349x1 lm		
NAME: DS55448120NO	TYPE:	WEIGHT:
SPEC.:DS55448120NO-0RGBNWA012WC4000-B	DIM.: 1000*12*1.5mm	SERIAL No.:
MFR.: Colors	SUR.:1000*12	Shielding Angle:



LUMINANCE cd/(m2)		
G(°)	C0/180	C90/270
85	1211	277
80	1107	444
75	1107	574
70	1117	678
65	1126	746
60	1127	794
55	1127	828
50	1119	858
45	1113	883

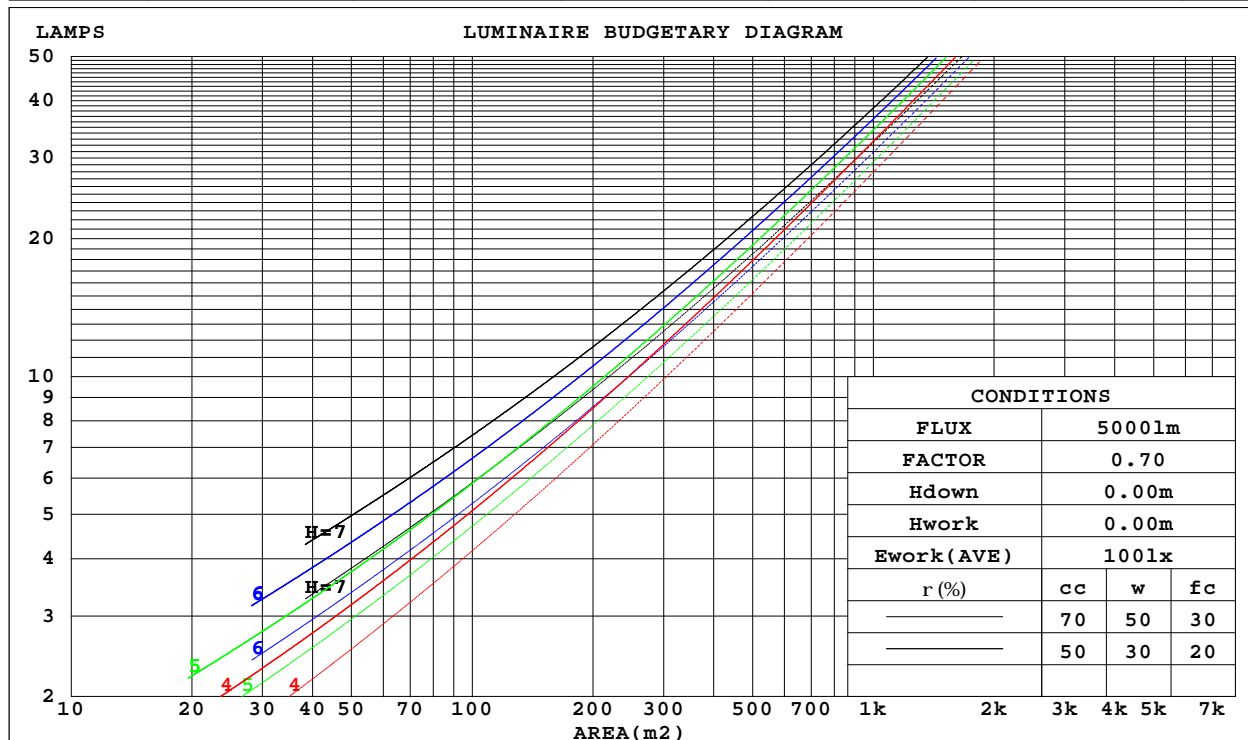
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:COLORS
Test Date:2019-07-17

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:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:48.00V I:0.0700A P:3.360W PF:1.000 Freq:0Hz Lamp Flux:37.0349x1 lm		
NAME: DS55448120NO	TYPE:	WEIGHT:
SPEC.:DS55448120NO-0RGBNWA012WC4000-B	DIM.: 1000*12*1.5mm	SERIAL No.:
MFR.: Colors	SUR.:1000*12	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															



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:COLORS
 Test Date:2019-07-17

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:

WEC AND CCEC

Test:U:48.00V I:0.0700A P:3.360W PF:1.000 Freq:0Hz Lamp Flux:37.0349x1 lm		
NAME: DS55448120NO	TYPE:	WEIGHT:
SPEC.:DS55448120NO-0RGBNWA012WC4000-B	DIM.: 1000*12*1.5mm	SERIAL No.:
MFR.: Colors	SUR.:1000*12	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	.291	.167	.053	.278	.160	.051	.266	.154	.050															
2.0	.294	.161	.049	.288	.158	.049	.275	.153	.047	.263	.148	.046	.252	.143	.045															
3.0	.272	.145	.043	.266	.142	.043	.255	.138	.042	.244	.134	.041	.235	.130	.040															
4.0	.251	.130	.038	.246	.128	.038	.235	.125	.037	.226	.121	.037	.217	.118	.036															
5.0	.232	.118	.034	.227	.117	.034	.218	.113	.033	.210	.111	.033	.202	.108	.032															
6.0	.215	.108	.031	.211	.106	.031	.202	.104	.030	.195	.101	.030	.188	.099	.029															
7.0	.200	.099	.028	.196	.098	.028	.189	.095	.027	.182	.093	.027	.176	.091	.027															
8.0	.187	.091	.026	.183	.090	.025	.177	.088	.025	.170	.086	.025	.165	.085	.025															
9.0	.175	.085	.024	.172	.084	.023	.166	.082	.023	.160	.080	.023	.155	.079	.023															
10.0	.164	.079	.022	.161	.078	.022	.156	.076	.022	.151	.075	.021	.146	.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	.205	.205	.205	.175	.175	.175	.120	.120	.120	.069	.069	.069	.022	.022	.022	
1.0	.195	.171	.149	.167	.147	.128	.114	.101	.089	.066	.058	.052	.021	.019	.017	
2.0	.187	.147	.113	.161	.126	.097	.110	.087	.068	.063	.051	.040	.020	.016	.013	
3.0	.180	.129	.089	.154	.111	.077	.106	.077	.054	.061	.045	.032	.020	.015	.010	
4.0	.172	.116	.073	.148	.100	.063	.102	.070	.045	.059	.041	.026	.019	.013	.009	
5.0	.165	.106	.062	.142	.091	.054	.098	.064	.038	.057	.038	.023	.018	.012	.007	
6.0	.158	.097	.054	.136	.084	.047	.094	.059	.033	.054	.035	.020	.018	.011	.007	
7.0	.151	.091	.048	.130	.078	.042	.090	.055	.030	.052	.032	.018	.017	.011	.006	
8.0	.144	.085	.044	.124	.074	.038	.086	.052	.027	.050	.030	.016	.016	.010	.005	
9.0	.138	.080	.040	.119	.069	.035	.083	.049	.025	.048	.029	.015	.016	.009	.005	
10.0	.133	.076	.038	.114	.066	.033	.079	.046	.023	.046	.027	.014	.015	.009	.005	

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:COLORS
Test Date:2019-07-17

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:48.00V I:0.0700A P:3.360W PF:1.000 Freq:0Hz Lamp Flux:37.0349x1 lm											
NAME: DS55448120NO					TYPE:			WEIGHT:			
SPEC.:DS55448120NO-0RGBNWA012WC4000-B					DIM.: 1000*12*1.5mm			SERIAL No.:			
MFR.: Colors					SUR.:1000*12			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	24.8	26.3	25.1	26.6	26.8	23.6	25.1	23.9	25.3	25.5	
	3H	26.6	28.0	27.0	28.3	28.6	24.9	26.3	25.2	26.6	26.8
	4H	27.4	28.8	27.8	29.1	29.3	25.4	26.7	25.7	27.0	27.3
	6H	28.1	29.3	28.5	29.6	30.0	25.6	26.9	26.0	27.2	27.5
	8H	28.3	29.6	28.7	29.9	30.2	25.7	26.9	26.0	27.2	27.5
	12H	28.6	29.7	28.9	30.1	30.4	25.6	26.8	26.0	27.1	27.5
4H	2H	25.3	26.7	25.7	26.9	27.2	24.4	25.7	24.7	26.0	26.3
	3H	27.3	28.5	27.7	28.8	29.2	25.9	27.1	26.3	27.4	27.7
	4H	28.3	29.3	28.7	29.7	30.0	26.5	27.5	26.9	27.9	28.3
	6H	29.0	30.0	29.5	30.4	30.8	26.8	27.8	27.3	28.2	28.6
	8H	29.4	30.3	29.8	30.7	31.1	26.9	27.8	27.4	28.2	28.6
	12H	29.7	30.5	30.1	30.9	31.3	27.0	27.8	27.4	28.2	28.6
8H	4H	28.4	29.3	28.9	29.7	30.1	26.9	27.8	27.3	28.2	28.6
	6H	29.4	30.1	29.9	30.6	31.0	27.4	28.1	27.9	28.6	29.0
	8H	29.8	30.5	30.3	30.9	31.4	27.6	28.2	28.1	28.7	29.2
	12H	30.2	30.8	30.7	31.3	31.8	27.7	28.2	28.2	28.7	29.2
12H	4H	28.4	29.2	28.9	29.7	30.1	26.9	27.7	27.4	28.2	28.6
	6H	29.4	30.1	29.9	30.5	31.0	27.5	28.2	28.0	28.6	29.1
	8H	29.9	30.5	30.4	30.9	31.5	27.7	28.3	28.2	28.8	29.3
Variations with the observer position at spacings:											
S = 1.0H	+ 0.1 / - 0.1					+ 0.2 / - 0.2					
1.5H	+ 0.1 / - 0.2					+ 0.2 / - 0.4					
2.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.5					

CIE Pub.117, 37.03 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -11.5)

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:COLORS
Test Date:2019-07-17

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:48.00V I:0.0700A P:3.360W PF:1.000 Freq:0Hz Lamp Flux:37.0349x1 lm		
NAME: DS55448120NO	TYPE:	WEIGHT:
SPEC.:DS55448120NO-ORGBNWA012WC4000-B	DIM.: 1000*12*1.5mm	SERIAL No.:
MFR.: Colors	SUR.:1000*12	Shielding Angle:

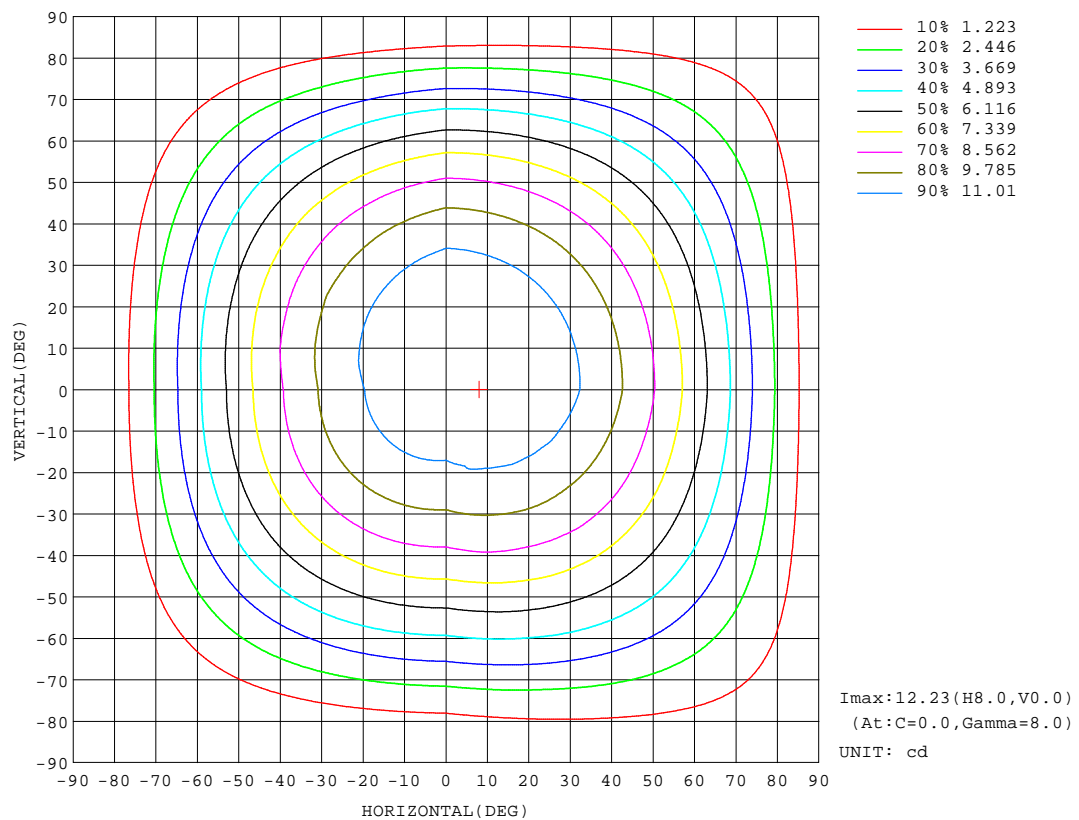
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	56	45	37	55	44	37	54	44	37	31
0.80	66	55	47	65	54	47	63	53	46	39
1.00	75	63	56	73	63	56	71	64	55	48
1.25	82	71	64	80	70	64	77	69	63	55
1.50	87	77	70	85	76	69	82	74	68	60
2.00	94	85	79	92	84	78	88	81	76	68
2.50	98	90	84	96	89	83	92	86	81	72
3.00	101	94	89	99	93	88	95	89	85	76
4.00	105	100	95	103	98	93	98	94	90	81
5.00	108	103	99	105	101	97	100	97	94	84
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:2019-07-17

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:48.00V I:0.0700A P:3.360W PF:1.000 Freq:0Hz Lamp Flux:37.0349x1 lm		
NAME: DS55448120NO	TYPE:	WEIGHT:
SPEC.:DS55448120NO-0RGBNWA012WC4000-B	DIM.: 1000*12*1.5mm	SERIAL No.:
MFR.: Colors	SUR.:1000*12	Shielding Angle:



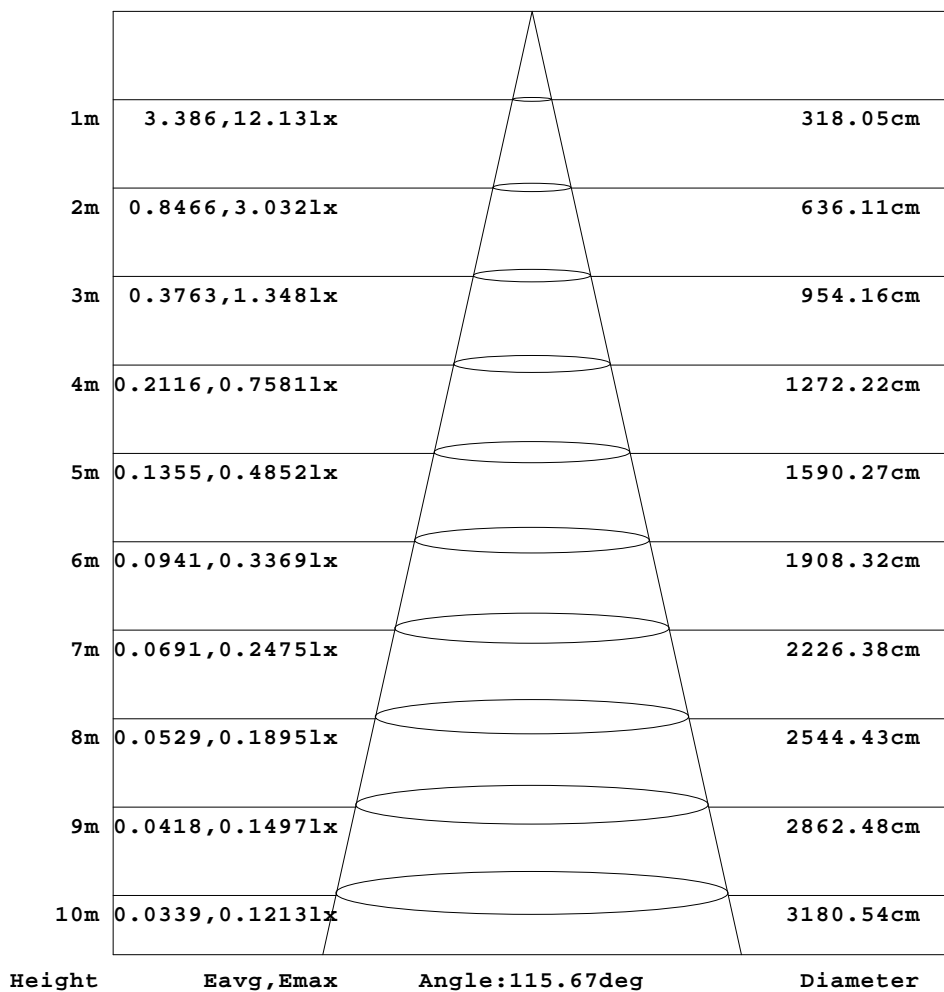
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:COLORS
Test Date:2019-07-17

deg 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:48.00V I:0.0700A P:3.360W PF:1.000 Freq:0Hz Lamp Flux:37.0349x1 lm		
NAME: DS55448120NO	TYPE:	WEIGHT:
SPEC.:DS55448120NO-ORGBNWA012WC4000-B	DIM.: 1000*12*1.5mm	SERIAL No.:
MFR.: Colors	SUR.:1000*12	Shielding Angle:

Flux out:27.25 lm



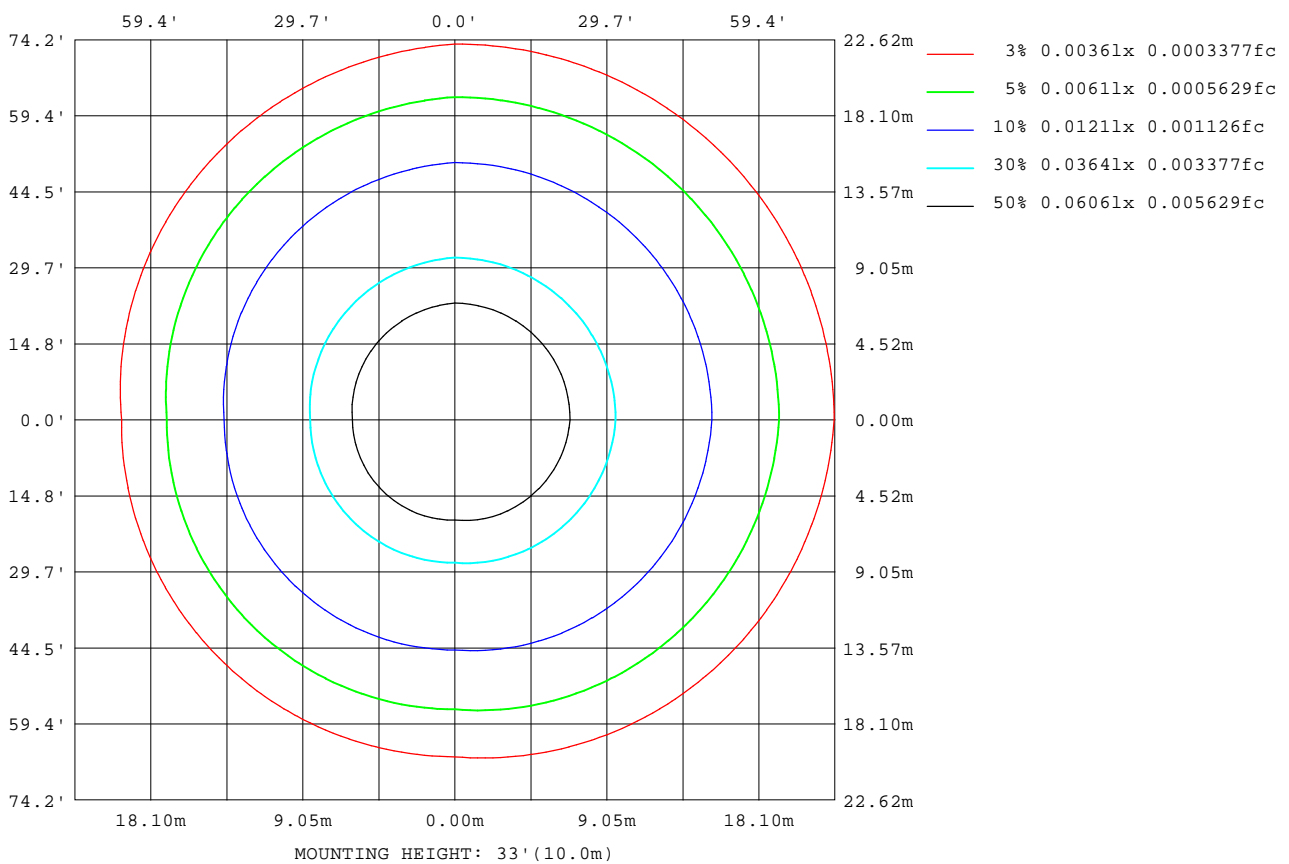
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:COLORS
Test Date:2019-07-17

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:

ISOLUX DIAGRAM

Test:U:48.00V I:0.0700A P:3.360W PF:1.000 Freq:0Hz Lamp Flux:37.0349x1 lm		
NAME: DS55448120NO	TYPE:	WEIGHT:
SPEC.:DS55448120NO-0RGBNWA012WC4000-B	DIM.: 1000*12*1.5mm	SERIAL No.:
MFR.: Colors	SUR.:1000*12	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:COLORS
 Test Date:2019-07-17

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:

LED Avg.L Report

Test:U:48.00V I:0.0700A P:3.360W PF:1.000 Freq:0Hz Lamp Flux:37.0349x1 lm		
NAME: DS55448120NO	TYPE:	WEIGHT:
SPEC.:DS55448120NO-0RGBNWA012WC4000-B	DIM.: 1000*12*1.5mm	SERIAL No.:
MFR.: Colors	SUR.:1000*12	Shielding Angle:

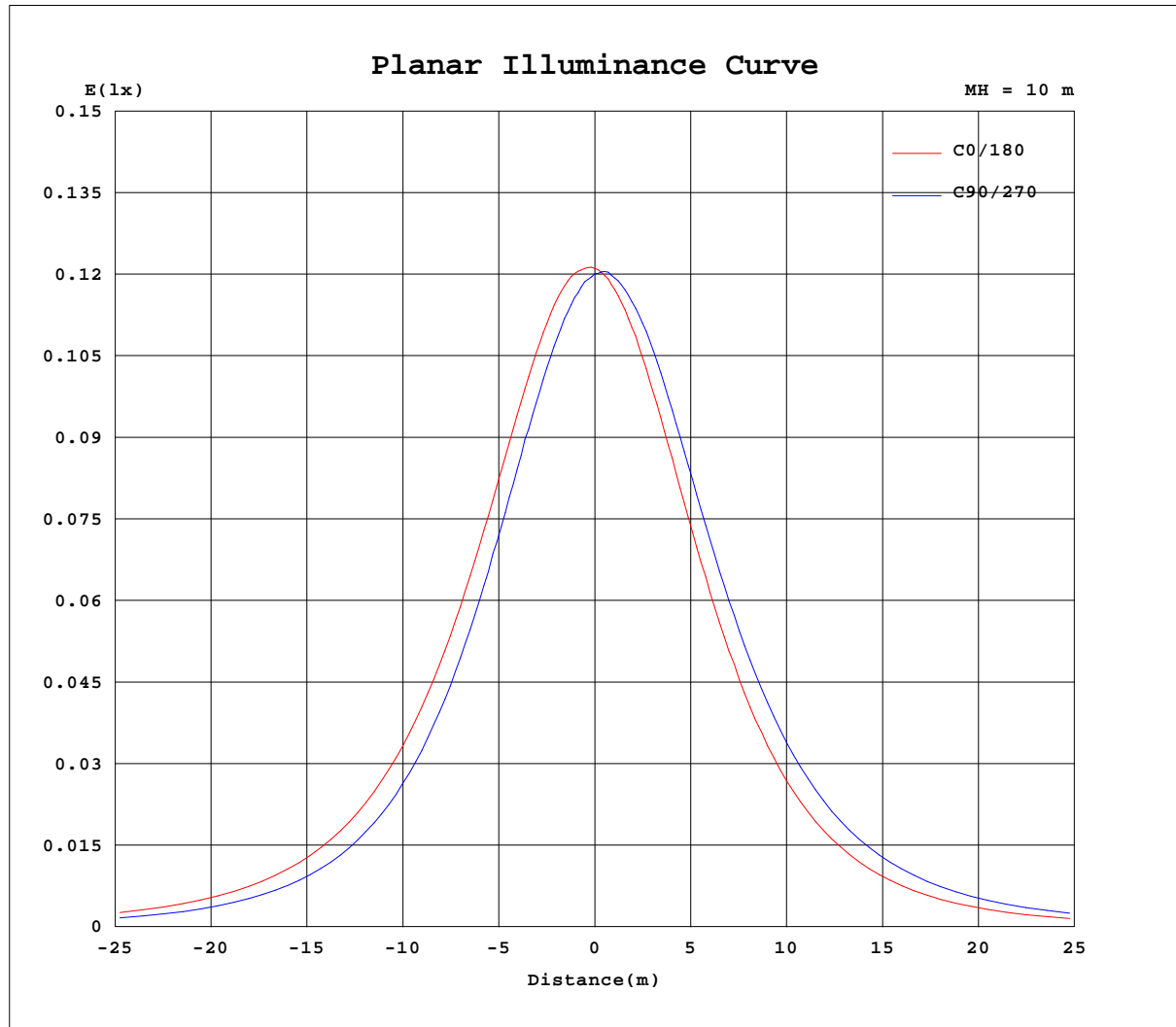
AvgL	cd/m2
L_0~180(65)av	918
L_0~180(75)av	795
L_0~180(85)av	690
L_90~270(65)av	921
L_90~270(75)av	778
L_90~270(85)av	534
L_45(65)av	907
L_45(75)av	765
L_45(85)av	560

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:COLORS
Test Date:2019-07-17

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: 2019-07-17

deg Range: 0 - 180DEG
deg 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:48.00V I:0.0700A P:3.360W PF:1.000 Freq:0Hz Lamp Flux:37.0349x1 lm		
NAME: DS55448120NO	TYPE:	WEIGHT:
SPEC.:DS55448120NO-ORGBNWA012WC4000-B	DIM.: 1000*12*1.5mm	SERIAL No.:
MFR.: Colors	SUR.:1000*12	Shielding Angle:

Table--1

UNIT: cd

C(DEC) g (DEC)	0	90	180	270															
0	12.1	12.0	12.1	12.0															
5	12.2	11.8	11.9	12.1															
10	12.2	11.5	11.7	12.2															
15	12.1	11.2	11.4	12.2															
20	11.9	10.8	11.0	12.0															
25	11.6	10.2	10.5	11.8															
30	11.2	9.66	9.93	11.4															
35	10.7	9.02	9.22	10.9															
40	10.1	8.29	8.44	10.3															
45	9.44	7.50	7.61	9.60															
50	8.63	6.61	6.68	8.74															
55	7.76	5.70	5.71	7.79															
60	6.76	4.76	4.68	6.72															
65	5.71	3.78	3.61	5.56															
70	4.58	2.78	2.53	4.32															
75	3.44	1.78	1.50	3.05															
80	2.31	0.93	0.67	1.85															
85	1.27	0.29	0.18	0.83															
90	0.53	0.03	0.04	0.04															
95	0.14	0.04	0.05	0.02															
100	0.06	0.06	0.06	0.02															
105	0.05	0.10	0.10	0.02															
110	0.09	0.10	0.10	0.08															
115	0.10	0.12	0.12	0.10															
120	0.10	0.13	0.14	0.10															
125	0.10	0.15	0.15	0.10															
130	0.10	0.15	0.16	0.10															
135	0.10	0.16	0.17	0.10															
140	0.10	0.17	0.17	0.10															
145	0.12	0.17	0.19	0.10															
150	0.14	0.19	0.19	0.10															
155	0.18	0.20	0.20	0.11															
160	0.20	0.20	0.20	0.19															
165	0.20	0.20	0.20	0.20															
170	0.20	0.20	0.19	0.20															
175	0.20	0.20	0.20	0.20															
180	0.20	0.20	0.20	0.20															

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:COLORS
Test Date:2019-07-17

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: