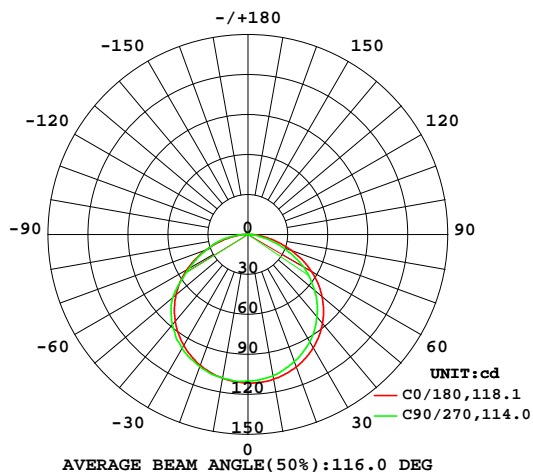


## LUMINAIRE PHOTOMETRIC TEST REPORT

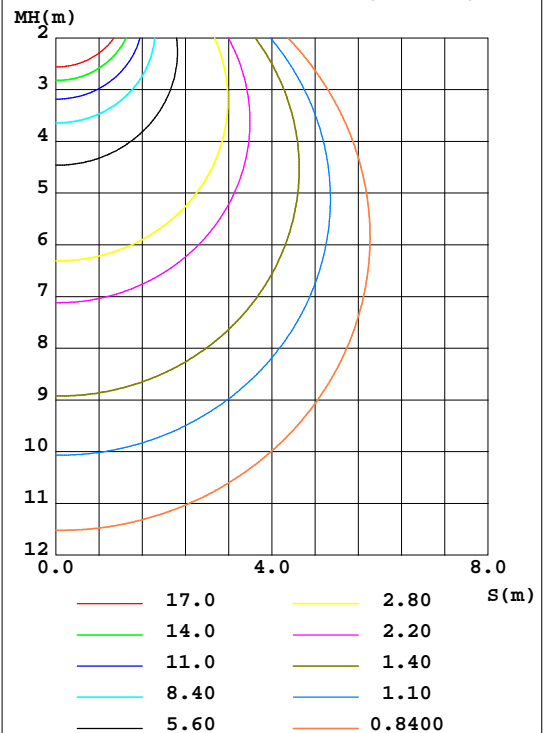
Test:U:24.00V I:0.2460A P:5.900W PF:1.000 Freq:0Hz Lamp Flux:339.298x1 lm		
NAME: DM5602410NO	TYPE:	WEIGHT:1000*10*12
SPEC.:DM5602410NO-0RGBWNSI0200XC0100-W	DIM.:	SERIAL No.:
MFR.: Colors	SUR.:1000*10	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 57.51 lm/W			
MODEL	DM5602410NO	I <sub>max</sub> (cd)	111.5	S/MH(C0/180)	1.29
NOMINAL POWER(W)	5.9	LOR(%)	100.0	S/MH(C90/270)	1.34
RATED VOLTAGE(V)	24	TOTAL FLUX(lm)	339.30	h UP,DN(C0-180)	1.0,48.0
NOMINAL FLUX(lm)	339.298	CIE CLASS	DIRECT	h UP,DN(C180-360)	1.0,50.0
LAMPS INSIDE	1	h up(%)	2.1	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	24	h down(%)	97.9	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:2019-05-22

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:

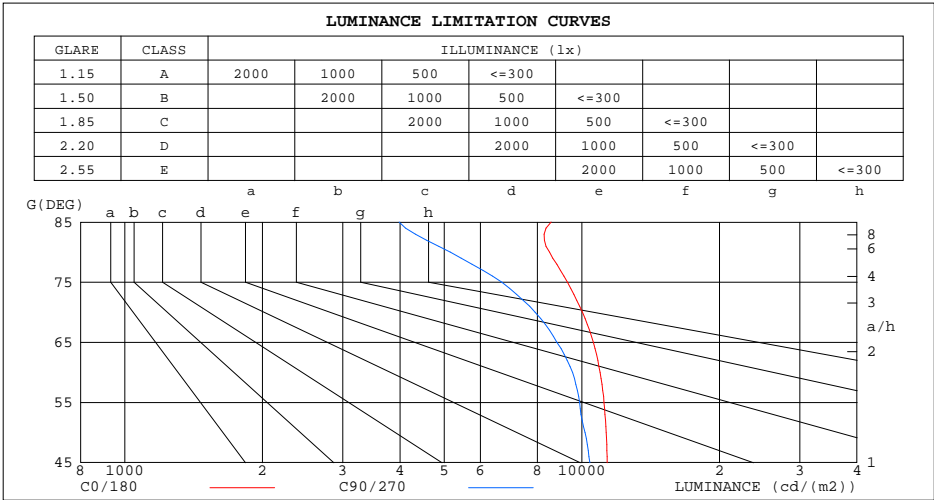
g	C0	C90	C180	C270					g	F zone	F total	%lum,lamp
10	110.3	107.8	109.6	109.3					0~ 10	10.50	10.50	3.1,3.1
20	105.8	101.6	104.5	105.6					10~ 20	30.29	40.79	12,12
30	98.12	92.92	96.35	98.81					20~ 30	46.52	87.30	25.7,25.7
40	87.07	80.63	84.96	88.45					30~ 40	57.14	144.4	42.6,42.6
50	72.68	65.31	70.54	73.93					40~ 50	60.45	204.9	60.4,60.4
60	54.80	47.72	52.99	50.75					50~ 60	54.75	259.6	76.5,76.5
70	34.32	27.03	33.00	32.19					60~ 70	41.29	300.9	88.7,88.7
80	14.75	8.955	13.67	17.12					70~ 80	23.64	324.6	95.7,95.7
90	2.926	1.183	2.265	3.082					80~ 90	7.729	332.3	97.9,97.9
100	0.5988	0.6117	0.4443	0.5407					90~100	1.064	333.4	98.3,98.3
110	0.7017	0.7020	0.8566	0.5278					100~110	0.6414	334.0	98.4,98.4
120	1.011	0.9722	1.256	0.8111					110~120	0.8502	334.9	98.7,98.7
130	1.268	1.262	1.564	1.088					120~130	1.043	335.9	99,99
140	1.416	1.455	1.751	1.197					130~140	1.068	337.0	99.3,99.3
150	1.474	1.590	1.751	1.352					140~150	0.9372	337.9	99.6,99.6
160	1.532	1.758	1.751	1.583					150~160	0.7419	338.6	99.8,99.8
170	1.539	1.912	1.731	1.764					160~170	0.4815	339.1	100,100
180	1.642	2.041	1.654	2.034					170~180	0.1680	339.3	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:2019-05-22

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:0.2460A P:5.900W PF:1.000 Freq:0Hz Lamp Flux:339.298x1 lm		
NAME: DM5602410NO	TYPE:	WEIGHT:1000*10*12
SPEC.:DM5602410NO-0RGBWNSI0200XC0100-W	DIM.:	SERIAL No.:
MFR.: Colors	SUR.:1000*10	Shielding Angle:



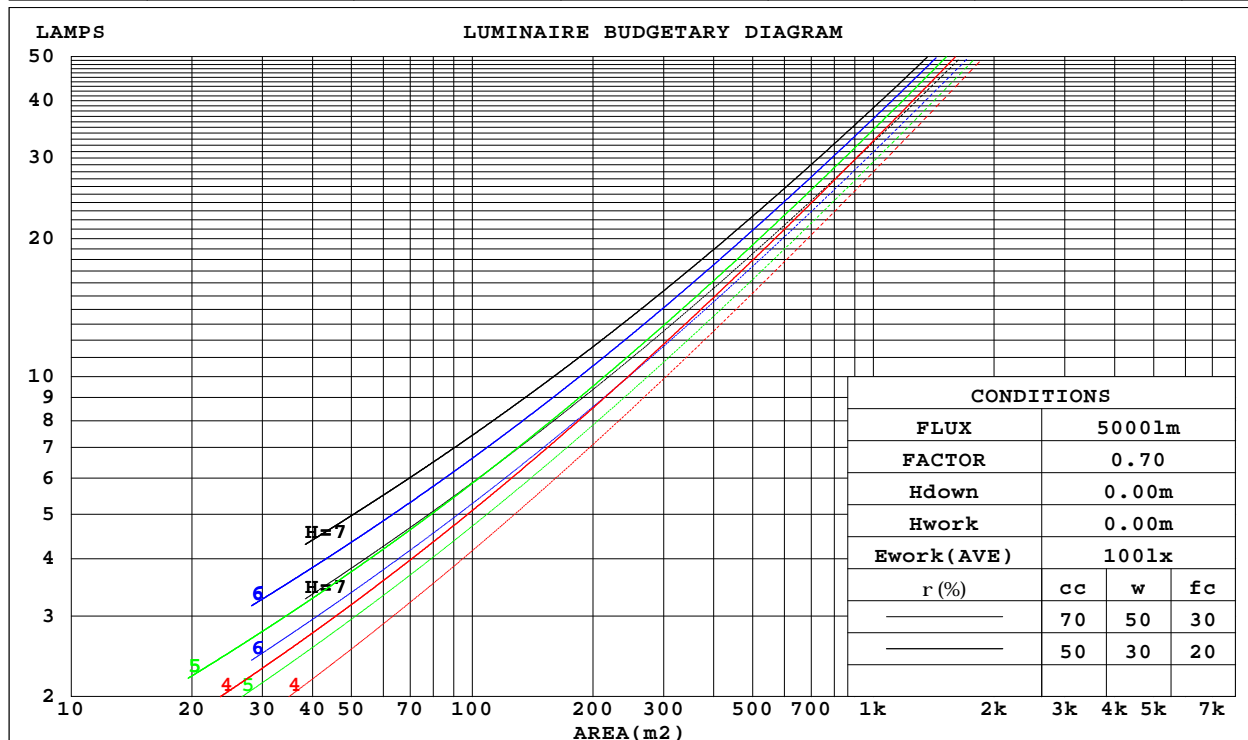
C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:COLORS  
Test Date:2019-05-22

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:0.2460A P:5.900W PF:1.000 Freq:0Hz Lamp Flux:339.298x1 lm		
NAME: DM5602410NO	TYPE:	WEIGHT:1000*10*12
SPEC.:DM5602410NO-0RGBWNSI0200XC0100-W	DIM.:	SERIAL No.:
MFR.: Colors	SUR.:1000*10	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:2019-05-22

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:24.00V I:0.2460A P:5.900W PF:1.000 Freq:0Hz Lamp Flux:339.298x1 lm		
NAME: DM5602410NO	TYPE:	WEIGHT:1000*10*12
SPEC.:DM5602410NO-0RGBWNSI0200XC0100-W	DIM.:	SERIAL No.:
MFR.: Colors	SUR.:1000*10	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	.315	.179	.057	.307	.175	.056	.293	.168	.054	.280	.161	.052	.267	.155	.050															
2.0	.295	.162	.050	.288	.159	.049	.275	.153	.048	.263	.148	.046	.252	.143	.045															
3.0	.272	.145	.043	.266	.142	.043	.255	.138	.042	.244	.134	.041	.234	.130	.040															
4.0	.251	.130	.038	.245	.128	.038	.235	.125	.037	.226	.121	.037	.217	.118	.036															
5.0	.232	.118	.034	.227	.116	.034	.218	.113	.033	.209	.110	.033	.201	.108	.032															
6.0	.215	.108	.031	.210	.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	.175	.091	.027															
8.0	.186	.091	.026	.183	.090	.025	.176	.088	.025	.170	.086	.025	.164	.084	.025															
9.0	.175	.084	.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	.073	.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	.206	.206	.206	.176	.176	.176	.120	.120	.120	.069	.069	.069	.022	.022	.022	
1.0	.197	.172	.150	.168	.148	.129	.115	.102	.089	.066	.059	.052	.021	.019	.017	
2.0	.189	.148	.114	.162	.127	.098	.111	.088	.068	.064	.051	.040	.020	.017	.013	
3.0	.181	.130	.090	.155	.112	.078	.106	.078	.055	.061	.046	.032	.020	.015	.011	
4.0	.173	.117	.074	.149	.101	.064	.102	.071	.045	.059	.041	.027	.019	.013	.009	
5.0	.166	.107	.063	.143	.092	.055	.098	.065	.039	.057	.038	.023	.018	.012	.008	
6.0	.159	.098	.055	.136	.085	.048	.094	.060	.034	.055	.035	.020	.018	.011	.007	
7.0	.152	.092	.049	.131	.079	.043	.090	.056	.030	.052	.033	.018	.017	.011	.006	
8.0	.146	.086	.045	.125	.074	.039	.087	.052	.028	.050	.031	.017	.016	.010	.005	
9.0	.139	.081	.041	.120	.070	.036	.083	.049	.026	.048	.029	.015	.016	.010	.005	
10.0	.134	.077	.039	.115	.067	.034	.080	.047	.024	.047	.028	.014	.015	.009	.005	

C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:COLORS  
Test Date:2019-05-22

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:0.2460A P:5.900W PF:1.000 Freq:0Hz Lamp Flux:339.298x1 lm											
NAME: DM5602410NO					TYPE:			WEIGHT:1000*10*12			
SPEC.:DM5602410NO-0RGBWNSI0200XC0100-W					DIM.:			SERIAL No.:			
MFR.: Colors					SUR.:1000*10			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	24.9	26.4	25.2	26.7	26.9	24.4	25.9	24.7	26.2	26.4	
	3H	26.5	27.9	26.8	28.2	28.4	25.7	27.1	26.1	27.4	27.7
	4H	27.1	28.4	27.5	28.7	29.0	26.2	27.5	26.5	27.8	28.1
	6H	27.5	28.8	27.9	29.1	29.4	26.4	27.7	26.8	28.0	28.3
	8H	27.7	28.9	28.1	29.2	29.6	26.5	27.7	26.8	28.0	28.3
	12H	27.8	29.0	28.2	29.3	29.7	26.5	27.6	26.9	28.0	28.3
4H	2H	25.5	26.8	25.8	27.1	27.4	25.1	26.4	25.4	26.7	27.0
	3H	27.2	28.4	27.6	28.7	29.0	26.6	27.7	27.0	28.1	28.4
	4H	27.9	29.0	28.3	29.3	29.7	27.1	28.2	27.5	28.5	28.9
	6H	28.5	29.4	28.9	29.8	30.2	27.5	28.4	27.9	28.8	29.2
	8H	28.7	29.6	29.1	30.0	30.4	27.5	28.4	28.0	28.8	29.3
	12H	28.9	29.7	29.3	30.1	30.5	27.6	28.4	28.0	28.8	29.3
8H	4H	28.1	29.0	28.5	29.4	29.8	27.4	28.3	27.8	28.7	29.1
	6H	28.8	29.5	29.3	30.0	30.4	27.9	28.6	28.3	29.0	29.5
	8H	29.1	29.7	29.6	30.2	30.7	28.0	28.7	28.5	29.1	29.6
	12H	29.4	29.9	29.9	30.4	30.9	28.1	28.7	28.6	29.2	29.7
12H	4H	28.1	28.9	28.6	29.3	29.8	27.4	28.2	27.9	28.6	29.1
	6H	28.8	29.5	29.3	29.9	30.4	27.9	28.6	28.4	29.0	29.5
	8H	29.2	29.7	29.7	30.2	30.7	28.1	28.7	28.6	29.1	29.7
Variations with the observer position at spacings:											
S = 1.0H	+ 0.1 / - 0.2					+ 0.2 / - 0.2					
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.4					
2.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.4					

CIE Pub.117, 339.3 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -3.8)

C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:COLORS  
Test Date:2019-05-22

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:0.2460A P:5.900W PF:1.000 Freq:0Hz Lamp Flux:339.298x1 lm		
NAME: DM5602410NO	TYPE:	WEIGHT:1000*10*12
SPEC.:DM5602410NO-0RGBWNSI0200XC0100-W	DIM.:	SERIAL No.:
MFR.: Colors	SUR.:1000*10	Shielding Angle:

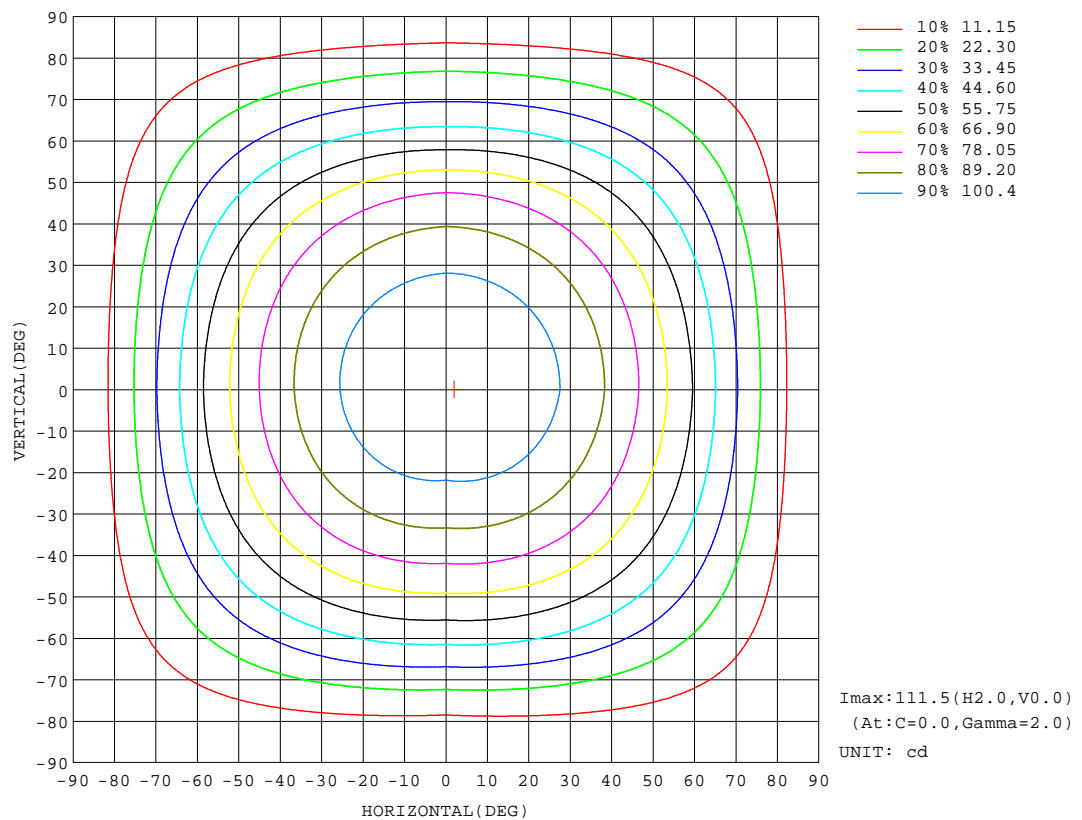
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	56	45	37	55	44	37	54	44	37	31
0.80	66	54	47	65	54	47	63	53	46	39
1.00	75	63	56	73	63	56	71	64	55	48
1.25	82	71	64	80	70	63	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	88	83	91	85	81	72
3.00	101	94	89	99	93	87	95	89	85	76
4.00	105	99	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:2019-05-22

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:0.2460A P:5.900W PF:1.000 Freq:0Hz Lamp Flux:339.298x1 lm		
NAME: DM5602410NO	TYPE:	WEIGHT:1000*10*12
SPEC.:DM5602410NO-0RGBWNSI0200XC0100-W	DIM.:	SERIAL No.:
MFR.: Colors	SUR.:1000*10	Shielding Angle:



C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:COLORS  
Test Date:2019-05-22

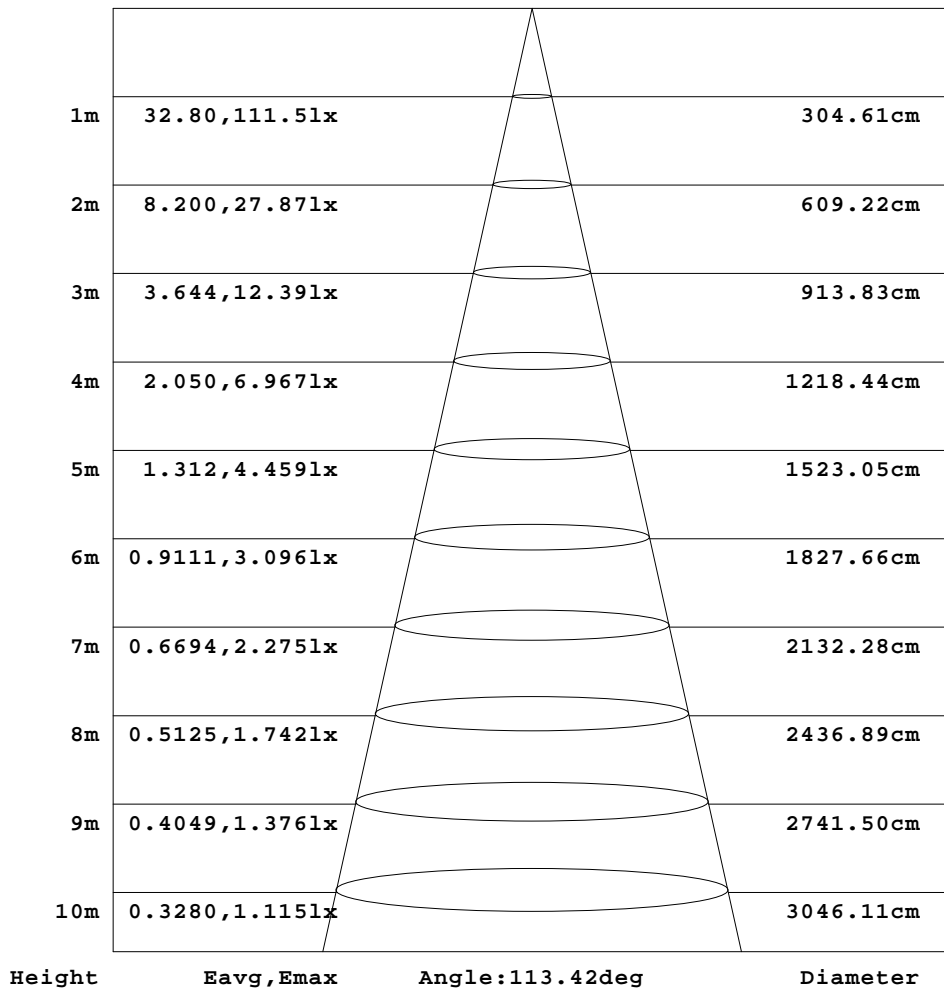
Range: 0 - 180DEG  
Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:10.750m [K=1.0000]  
Remarks:



## AAI Figure

Test:U:24.00V I:0.2460A P:5.900W PF:1.000 Freq:0Hz Lamp Flux:339.298x1 lm		
NAME: DM5602410NO	TYPE:	WEIGHT:1000*10*12
SPEC.:DM5602410NO-0RGBWNSI0200XC0100-W	DIM.:	SERIAL No.:
MFR.: Colors	SUR.:1000*10	Shielding Angle:

Flux out:244.3 lm



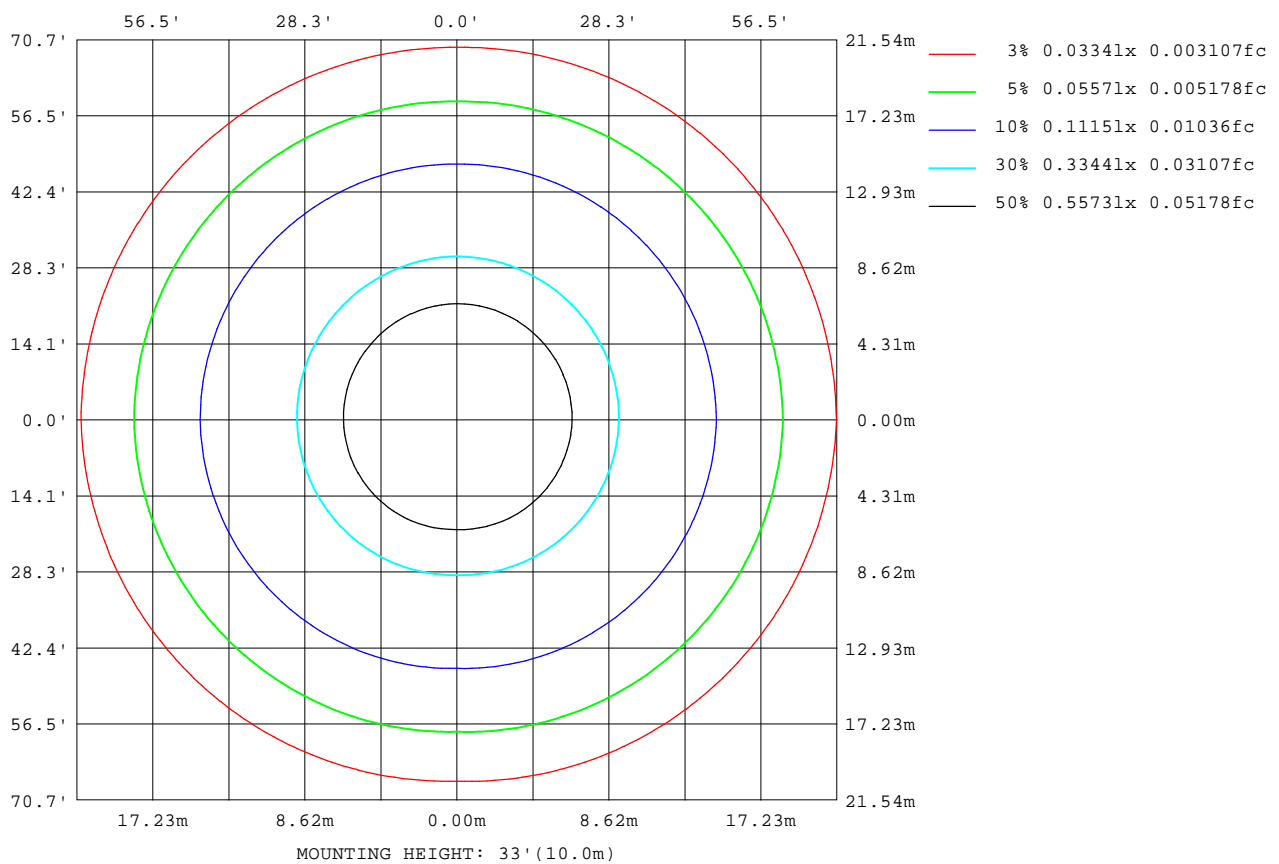
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:COLORS  
 Test Date:2019-05-22

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:24.00V I:0.2460A P:5.900W PF:1.000 Freq:0Hz Lamp Flux:339.298x1 lm		
NAME: DM5602410NO	TYPE:	WEIGHT:1000*10*12
SPEC.:DM5602410NO-0RGBWNSI0200XC0100-W	DIM.:	SERIAL No.:
MFR.: Colors	SUR.:1000*10	Shielding Angle:



C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:COLORS  
 Test Date:2019-05-22

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:24.00V I:0.2460A P:5.900W PF:1.000 Freq:0Hz Lamp Flux:339.298x1 lm		
NAME: DM5602410NO	TYPE:	WEIGHT:1000*10*12
SPEC.:DM5602410NO-0RGBWNSI0200XC0100-W	DIM.:	SERIAL No.:
MFR.: Colors	SUR.:1000*10	Shielding Angle:

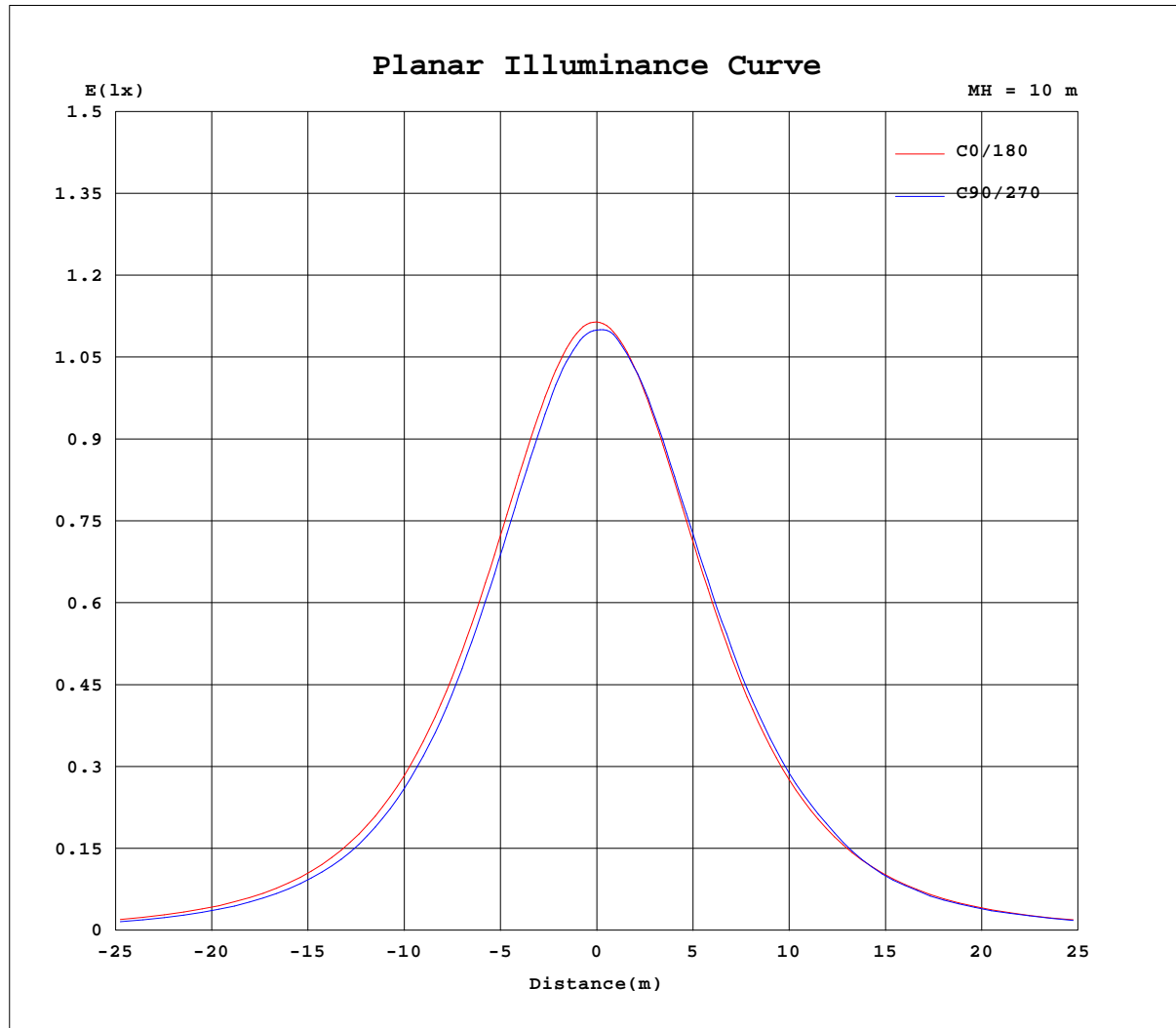
AvgL	cd/m2
L_0~180(65)av	10410
L_0~180(75)av	9070
L_0~180(85)av	8026
L_90~270(65)av	9418
L_90~270(75)av	8223
L_90~270(85)av	7271
L_45(65)av	9779
L_45(75)av	8526
L_45(85)av	7520

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:COLORS  
 Test Date:2019-05-22

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: 2019-05-22

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:0.2460A P:5.900W PF:1.000 Freq:0Hz Lamp Flux:339.298x1 lm		
NAME: DM5602410NO	TYPE:	WEIGHT:1000*10*12
SPEC.:DM5602410NO-0RGBWNSI0200XC0100-W	DIM.:	SERIAL No.:
MFR.: Colors	SUR.:1000*10	Shielding Angle:

Table--1

UNIT: cd

C(DEG) g (DEG)	0	90	180	270														
0	111	110	111	110														
5	111	109	111	110														
10	110	108	110	109														
15	108	105	107	108														
20	106	102	105	106														
25	102	97.6	101	103														
30	98.1	92.9	96.4	98.8														
35	93.0	87.2	91.1	94.3														
40	87.1	80.6	85.0	88.4														
45	80.3	73.6	78.1	81.5														
50	72.7	65.3	70.5	73.9														
55	64.2	56.8	62.1	61.9														
60	54.8	47.7	53.0	50.8														
65	44.8	37.3	43.2	42.3														
70	34.3	27.0	33.0	32.2														
75	24.1	17.3	22.9	25.3														
80	14.7	8.96	13.7	17.1														
85	7.46	3.47	6.53	9.20														
90	2.93	1.18	2.26	3.08														
95	1.04	0.70	0.50	0.62														
100	0.60	0.61	0.44	0.54														
105	0.59	0.64	0.65	0.52														
110	0.70	0.70	0.86	0.53														
115	0.92	0.81	1.06	0.70														
120	1.01	0.97	1.26	0.81														
125	1.15	1.13	1.42	0.95														
130	1.27	1.26	1.56	1.09														
135	1.33	1.37	1.67	1.14														
140	1.42	1.46	1.75	1.20														
145	1.42	1.53	1.75	1.27														
150	1.47	1.59	1.75	1.35														
155	1.53	1.67	1.75	1.52														
160	1.53	1.76	1.75	1.58														
165	1.53	1.83	1.74	1.74														
170	1.54	1.91	1.73	1.76														
175	1.54	2.01	1.65	1.94														
180	1.64	2.04	1.65	2.03														

C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:COLORS  
Test Date:2019-05-22

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: