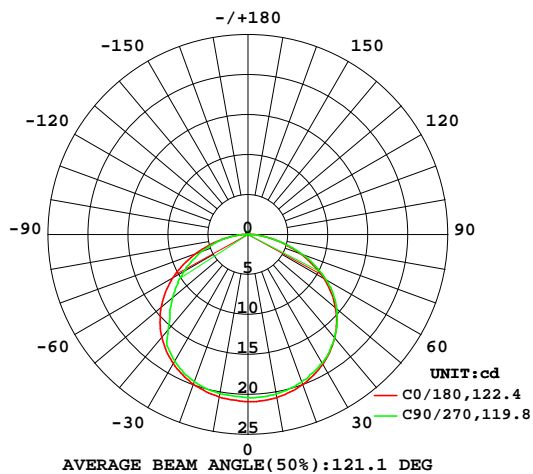


## LUMINAIRE PHOTOMETRIC TEST REPORT

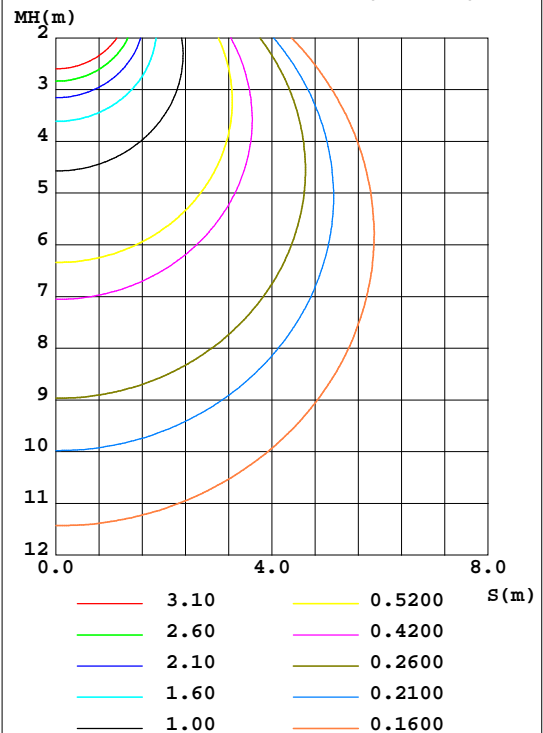
Test:U:24.00V I:0.2460A P:5.900W PF:1.000 Freq:0Hz Lamp Flux:67.0278x1 lm		
NAME: DM5602410NO	TYPE:	WEIGHT:1000*10*12
SPEC.:DM5602410NO-0RGBWNSI0200XC0100-B	DIM.:	SERIAL No.:
MFR.: Colors	SUR.:1000*10	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 11.36 lm/W			
MODEL	DM5602410NO	I <sub>max</sub> (cd)	20.91	S/MH(C0/180)	1.33
NOMINAL POWER(W)	5.9	LOR(%)	100.0	S/MH(C90/270)	1.33
RATED VOLTAGE(V)	24	TOTAL FLUX(lm)	67.028	h UP,DN(C0-180)	1.1,50.2
NOMINAL FLUX(lm)	67.0278	CIE CLASS	DIRECT	h UP,DN(C180-360)	1.0,47.7
LAMPS INSIDE	1	h up(%)	2.1	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	24	h down(%)	97.9	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: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:

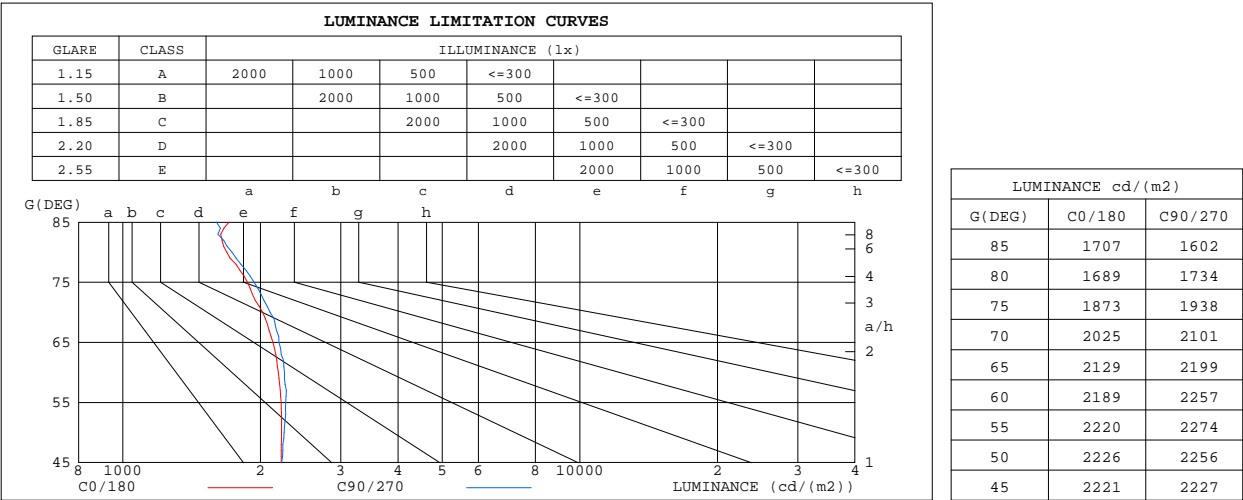
g	C0	C90	C180	C270					g	F zone	F total	%lum,lamp
10	20.72	20.28	20.64	20.21					0~ 10	1.961	1.961	2.93,2.93
20	19.97	19.66	19.94	19.62					10~ 20	5.704	7.665	11.4,11.4
30	18.72	18.59	18.65	18.32					20~ 30	8.879	16.54	24.7,24.7
40	16.87	16.90	16.79	15.55					30~ 40	11.06	27.61	41.2,41.2
50	14.31	14.50	14.19	12.34					40~ 50	11.73	39.34	58.7,58.7
60	10.95	11.28	10.86	9.225					50~ 60	10.97	50.31	75.1,75.1
70	6.926	7.186	6.889	6.131					60~ 70	8.622	58.93	87.9,87.9
80	2.934	3.012	2.943	2.817					70~ 80	5.049	63.98	95.5,95.5
90	0.6134	0.4244	0.4618	0.3294					80~ 90	1.638	65.62	97.9,97.9
100	0.1288	0.1416	0.0967	0.0966					90~100	0.2152	65.84	98.2,98.2
110	0.1352	0.1546	0.1739	0.0966					100~110	0.1352	65.97	98.4,98.4
120	0.1867	0.1996	0.2513	0.1803					110~120	0.1744	66.15	98.7,98.7
130	0.2703	0.2446	0.3154	0.2059					120~130	0.2077	66.35	99,99
140	0.3025	0.3026	0.3219	0.2639					130~140	0.2173	66.57	99.3,99.3
150	0.2961	0.3348	0.3219	0.2768					140~150	0.1897	66.76	99.6,99.6
160	0.3026	0.3541	0.3154	0.3026					150~160	0.1448	66.91	99.8,99.8
170	0.3026	0.3734	0.3154	0.3026					160~170	0.0911	67.00	100,100
180	0.3026	0.3927	0.3154	0.3798					170~180	0.0314	67.03	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:2019-05-22

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:67.0278x1 lm		
NAME: DM5602410NO	TYPE:	WEIGHT:1000*10*12
SPEC.:DM5602410NO-0RGBWNSI0200XC0100-B	DIM.:	SERIAL No.:
MFR.: Colors	SUR.:1000*10	Shielding Angle:



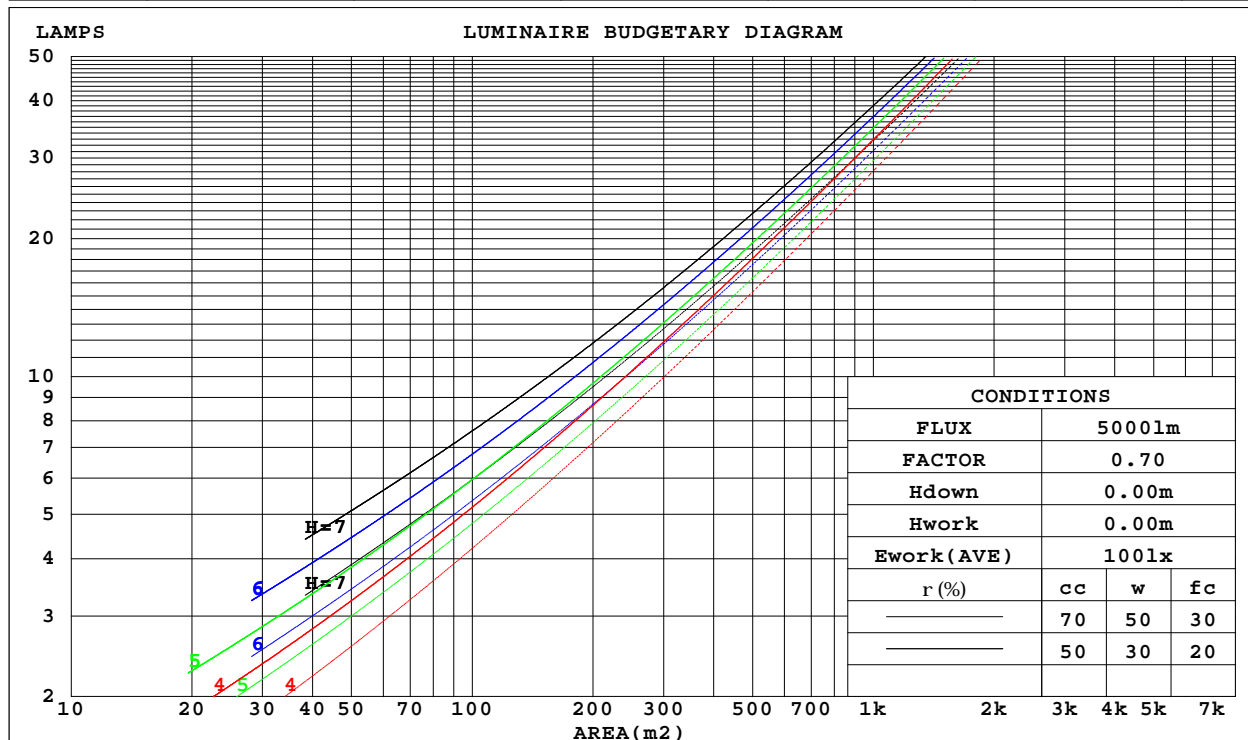
C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:COLORS  
Test Date:2019-05-22

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:67.0278x1 lm		
NAME: DM5602410NO	TYPE:	WEIGHT:1000*10*12
SPEC.:DM5602410NO-0RGBWNSI0200XC0100-B	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:67.0278x1 lm		
NAME: DM5602410NO	TYPE:	WEIGHT:1000*10*12
SPEC.:DM5602410NO-0RGBWNSI0200XC0100-B	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	.322	.183	.058	.314	.179	.057	.300	.172	.055	.286	.165	.053	.274	.159	.051	
2.0	.300	.165	.051	.294	.162	.050	.281	.156	.048	.269	.151	.047	.258	.146	.046	
3.0	.277	.147	.044	.271	.145	.044	.259	.140	.043	.248	.136	.042	.239	.132	.041	
4.0	.254	.132	.039	.249	.130	.039	.239	.127	.038	.229	.123	.037	.221	.120	.036	
5.0	.235	.120	.035	.230	.118	.034	.221	.115	.034	.212	.112	.033	.204	.109	.033	
6.0	.217	.109	.031	.213	.107	.031	.205	.105	.031	.197	.102	.030	.190	.100	.030	
7.0	.202	.100	.028	.198	.099	.028	.191	.096	.028	.184	.094	.027	.177	.092	.027	
8.0	.188	.092	.026	.185	.091	.026	.178	.089	.025	.172	.087	.025	.166	.085	.025	
9.0	.176	.085	.024	.173	.084	.024	.167	.083	.023	.161	.081	.023	.156	.079	.023	
10.0	.165	.079	.022	.163	.079	.022	.157	.077	.022	.152	.076	.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	.206	.206	.206	.176	.176	.176	.120	.120	.120	.069	.069	.069	.022	.022	.022	
1.0	.197	.172	.150	.169	.148	.129	.115	.102	.089	.066	.059	.052	.021	.019	.017	
2.0	.190	.148	.113	.162	.127	.098	.111	.088	.068	.064	.051	.040	.021	.017	.013	
3.0	.182	.131	.090	.156	.113	.078	.107	.078	.055	.062	.046	.032	.020	.015	.011	
4.0	.175	.117	.074	.150	.102	.064	.103	.071	.045	.060	.041	.027	.019	.013	.009	
5.0	.167	.107	.063	.144	.093	.055	.099	.065	.039	.057	.038	.023	.018	.012	.008	
6.0	.160	.099	.055	.137	.086	.048	.095	.060	.034	.055	.035	.020	.018	.012	.007	
7.0	.153	.092	.049	.132	.080	.043	.091	.056	.030	.053	.033	.018	.017	.011	.006	
8.0	.147	.086	.045	.126	.075	.039	.087	.053	.028	.051	.031	.017	.016	.010	.005	
9.0	.140	.081	.042	.121	.071	.036	.084	.050	.026	.049	.029	.015	.016	.010	.005	
10.0	.135	.077	.039	.116	.067	.034	.081	.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:67.0278x1 lm											
NAME: DM5602410NO					TYPE:			WEIGHT:1000*10*12			
SPEC.:DM5602410NO-0RGBWNSI0200XC0100-B					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	25.2	26.7	25.5	26.9	27.2	25.3	26.8	25.6	27.0	27.3	
	3H	26.8	28.2	27.1	28.4	28.7	26.9	28.3	27.2	28.6	28.9
	4H	27.4	28.7	27.7	29.0	29.3	27.5	28.9	27.9	29.2	29.5
	6H	27.8	29.1	28.2	29.4	29.7	28.0	29.2	28.3	29.5	29.9
	8H	28.0	29.2	28.3	29.5	29.8	28.1	29.3	28.5	29.7	30.0
	12H	28.1	29.2	28.5	29.6	29.9	28.2	29.4	28.6	29.7	30.1
4H	2H	25.8	27.2	26.2	27.5	27.8	25.9	27.2	26.2	27.5	27.8
	3H	27.6	28.8	28.0	29.1	29.4	27.7	28.9	28.1	29.2	29.6
	4H	28.3	29.4	28.7	29.8	30.1	28.5	29.5	28.9	29.9	30.3
	6H	28.9	29.8	29.3	30.2	30.6	29.0	30.0	29.4	30.4	30.8
	8H	29.1	30.0	29.5	30.4	30.8	29.2	30.1	29.7	30.5	30.9
	12H	29.3	30.1	29.7	30.5	30.9	29.4	30.2	29.8	30.6	31.1
8H	4H	28.6	29.5	29.0	29.9	30.3	28.7	29.6	29.2	30.0	30.4
	6H	29.3	30.1	29.8	30.5	31.0	29.4	30.2	29.9	30.6	31.1
	8H	29.6	30.3	30.1	30.7	31.2	29.7	30.4	30.2	30.8	31.3
	12H	29.9	30.4	30.4	30.9	31.4	29.9	30.5	30.5	31.0	31.5
12H	4H	28.6	29.4	29.1	29.9	30.3	28.7	29.5	29.2	30.0	30.4
	6H	29.4	30.0	29.9	30.5	31.0	29.5	30.1	30.0	30.6	31.1
	8H	29.7	30.3	30.2	30.8	31.3	29.8	30.4	30.3	30.9	31.4
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	+ 0.2 / - 0.4					+ 0.2 / - 0.4					

CIE Pub.117, 67.03 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -9.4)

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:67.0278x1 lm		
NAME: DM5602410NO	TYPE:	WEIGHT:1000*10*12
SPEC.:DM5602410NO-0RGBWNSI0200XC0100-B	DIM.:	SERIAL No.:
MFR.: Colors	SUR.:1000*10	Shielding Angle:

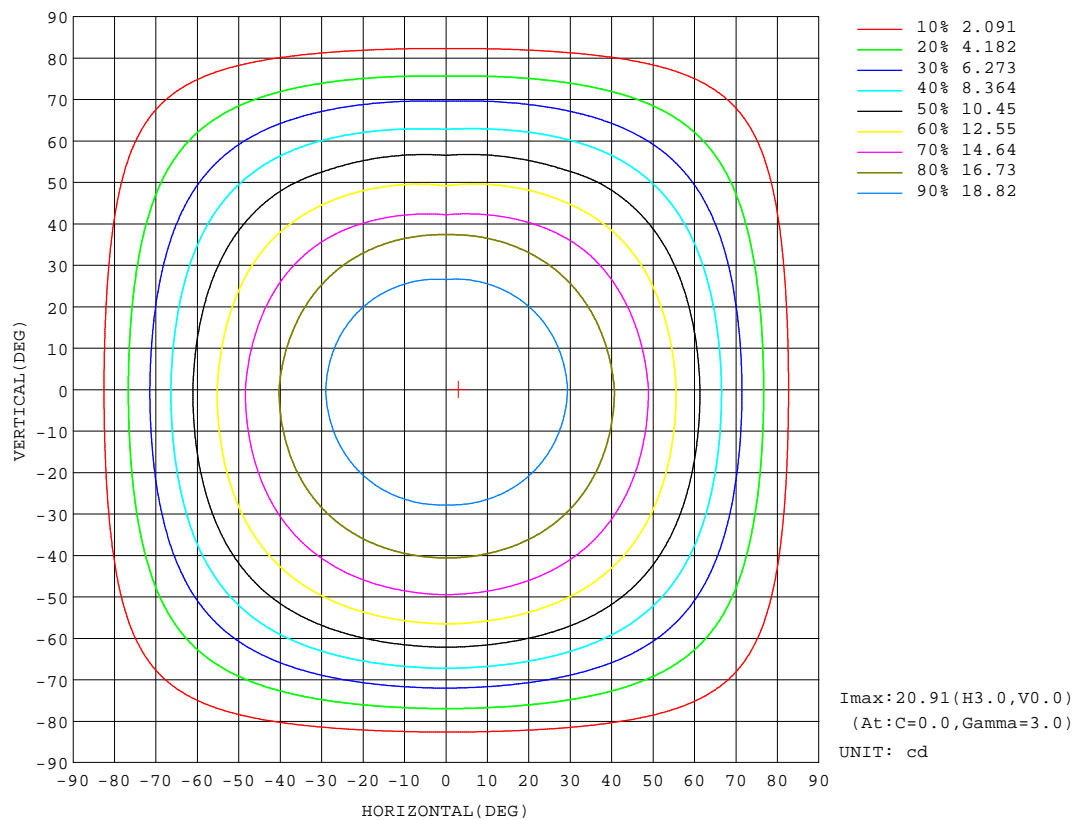
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	55	44	37	55	43	36	53	43	36	30
0.80	65	54	46	64	53	46	62	52	45	38
1.00	74	62	55	73	62	55	70	63	54	46
1.25	81	70	63	80	69	62	77	68	61	54
1.50	86	76	69	84	75	68	81	73	67	59
2.00	93	84	78	91	83	77	87	81	75	67
2.50	97	89	83	95	88	82	91	85	80	71
3.00	101	94	88	98	92	87	94	89	84	75
4.00	105	99	94	102	97	93	98	93	90	80
5.00	108	102	98	105	100	96	100	96	93	83
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:67.0278x1 lm		
NAME: DM5602410NO	TYPE:	WEIGHT:1000*10*12
SPEC.:DM5602410NO-0RGBWNSI0200XC0100-B	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

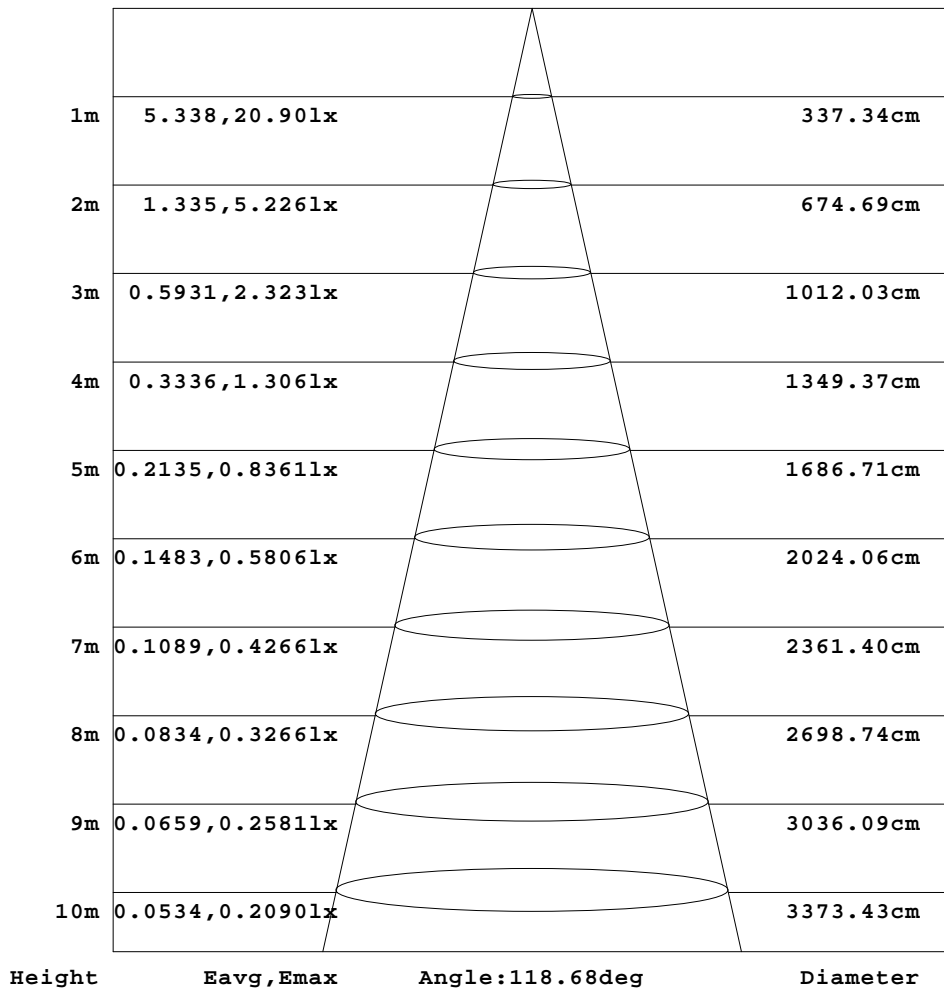
Range: 0 - 180DEG  
Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:10.750m [K=1.0000]  
Remarks:



### AAI Figure

Test:U:24.00V I:0.2460A P:5.900W PF:1.000 Freq:0Hz Lamp Flux:67.0278x1 lm		
NAME: DM5602410NO	TYPE:	WEIGHT:1000*10*12
SPEC.:DM5602410NO-0RGBWNSI0200XC0100-B	DIM.:	SERIAL No.:
MFR.: Colors	SUR.:1000*10	Shielding Angle:

Flux out:50.31 lm



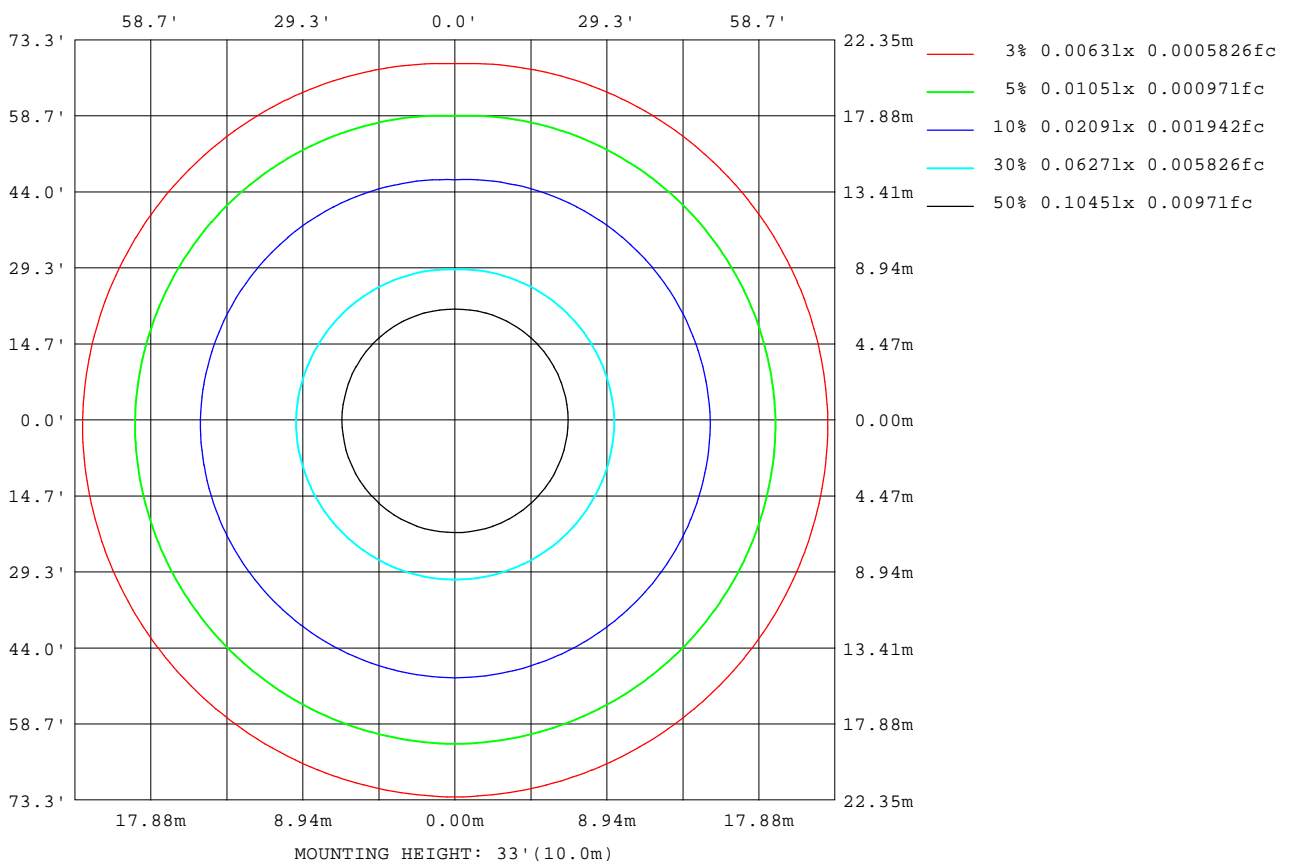
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:67.0278x1 lm		
NAME: DM5602410NO	TYPE:	WEIGHT:1000*10*12
SPEC.:DM5602410NO-0RGBWNSI0200XC0100-B	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:67.0278x1 lm		
NAME: DM5602410NO	TYPE:	WEIGHT:1000*10*12
SPEC.:DM5602410NO-0RGBWNSI0200XC0100-B	DIM.:	SERIAL No.:
MFR.: Colors	SUR.:1000*10	Shielding Angle:

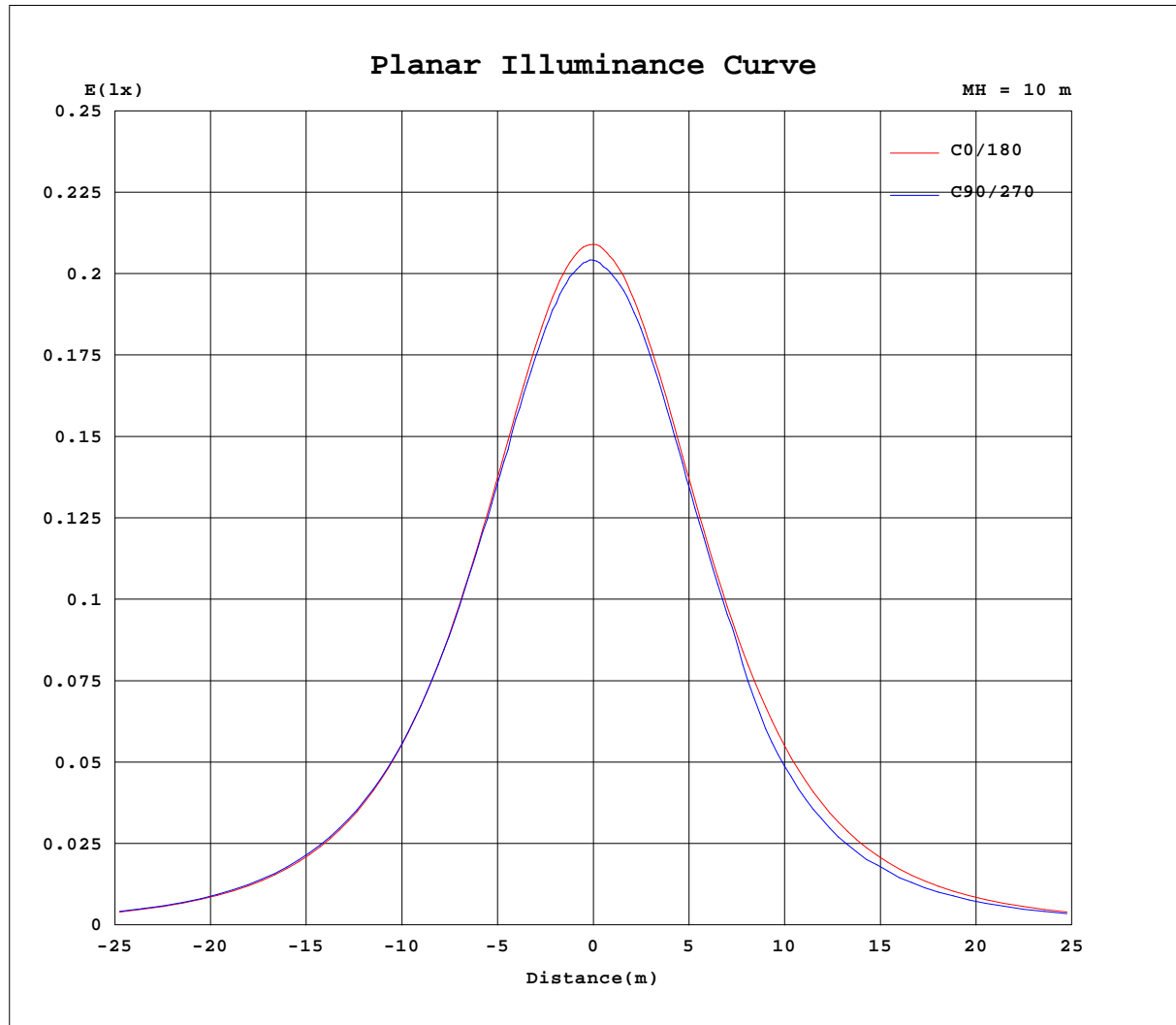
AvgL	cd/m2
L_0~180(65)av	2122
L_0~180(75)av	1873
L_0~180(85)av	1649
L_90~270(65)av	2011
L_90~270(75)av	1800
L_90~270(85)av	1566
L_45(65)av	2052
L_45(75)av	1827
L_45(85)av	1594

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

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:

## LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:24.00V I:0.2460A P:5.900W PF:1.000 Freq:0Hz Lamp Flux:67.0278x1 lm		
NAME: DM5602410NO	TYPE:	WEIGHT:1000*10*12
SPEC.:DM5602410NO-0RGBWNSI0200XC0100-B	DIM.:	SERIAL No.:
MFR.: Colors	SUR.:1000*10	Shielding Angle:

Table--1

UNIT: cd

C(DEC) g (DEC)	0	90	180	270															
0	20.9	20.4	20.9	20.4															
5	20.9	20.4	20.8	20.3															
10	20.7	20.3	20.6	20.2															
15	20.4	20.0	20.3	20.0															
20	20.0	19.7	19.9	19.6															
25	19.4	19.1	19.4	19.1															
30	18.7	18.6	18.7	18.3															
35	17.9	17.8	17.8	17.4															
40	16.9	16.9	16.8	15.5															
45	15.7	15.7	15.6	13.8															
50	14.3	14.5	14.2	12.3															
55	12.7	13.0	12.6	10.7															
60	10.9	11.3	10.9	9.22															
65	9.00	9.29	8.94	7.70															
70	6.93	7.19	6.89	6.13															
75	4.85	5.02	4.85	4.30															
80	2.93	3.01	2.94	2.82															
85	1.49	1.40	1.39	1.33															
90	0.61	0.42	0.46	0.33															
95	0.22	0.15	0.10	0.10															
100	0.13	0.14	0.10	0.10															
105	0.13	0.15	0.14	0.10															
110	0.14	0.15	0.17	0.10															
115	0.18	0.18	0.22	0.14															
120	0.19	0.20	0.25	0.18															
125	0.23	0.23	0.30	0.19															
130	0.27	0.24	0.32	0.21															
135	0.29	0.28	0.32	0.25															
140	0.30	0.30	0.32	0.26															
145	0.30	0.33	0.32	0.26															
150	0.30	0.33	0.32	0.28															
155	0.30	0.34	0.32	0.29															
160	0.30	0.35	0.32	0.30															
165	0.30	0.37	0.32	0.30															
170	0.30	0.37	0.32	0.30															
175	0.30	0.39	0.32	0.32															
180	0.30	0.39	0.32	0.38															

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: