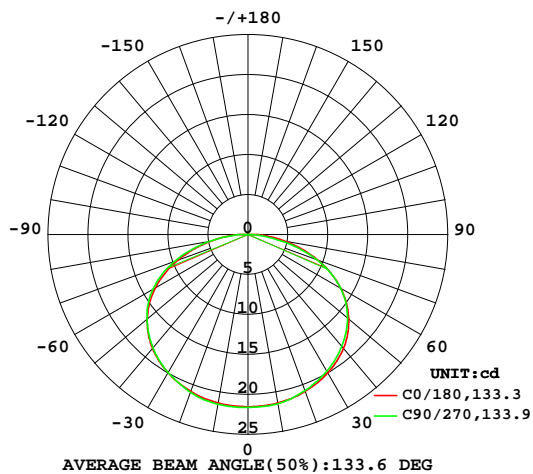


LUMINAIRE PHOTOMETRIC TEST REPORT

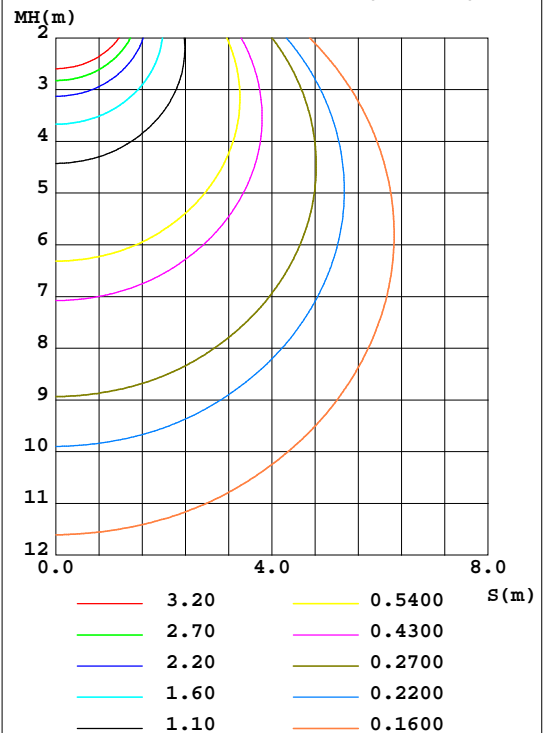
Test:U:24.00V I:0.1680A P:4.030W PF:1.000 Freq:0Hz Lamp Flux:78.0065x1 lm		
NAME: DA1202408N0	TYPE:	WEIGHT:
SPEC.:DA1202408N0-0RGBNDA012XC0500	DIM.: 1000*8*1.5mm	SERIAL No.:01
MFR.: Colors	SUR.:1000*8	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 19.36 lm/W			
MODEL	DA1202408N0	I _{max} (cd)	21.63	S/MH(C0/180)	1.39
NOMINAL POWER(W)	4	LOR(%)	100.0	S/MH(C90/270)	1.38
RATED VOLTAGE(V)	24	TOTAL FLUX(lm)	78.006	h UP,DN(C0-180)	0.2,49.3
NOMINAL FLUX(lm)	78.0065	CIE CLASS	DIRECT	h UP,DN(C180-360)	0.2,50.3
LAMPS INSIDE	1	h up(%)	0.4	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	24	h down(%)	99.6	CIBSE SHR MAX	1.55

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:2018-11-02

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: R

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

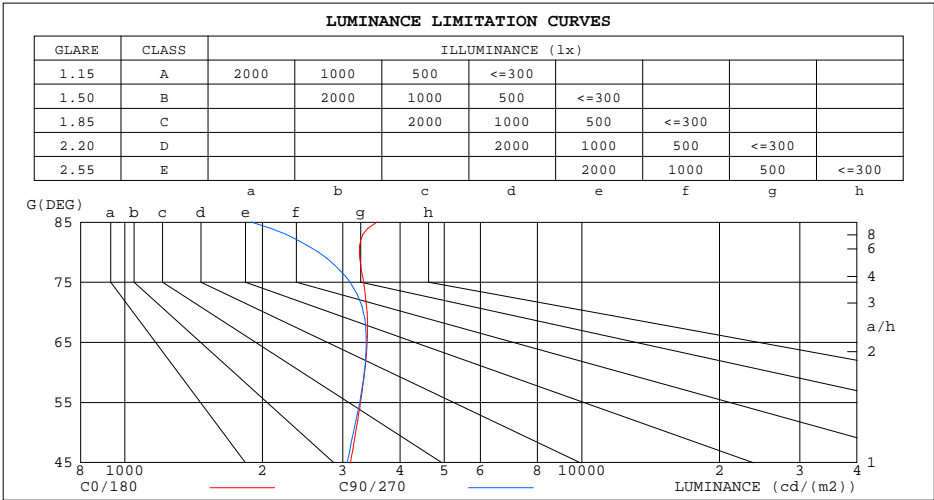
g	C0	C90	C180	C270					g	F zone	F total	%lum,lamp
10	21.40	21.51	21.40	21.54					0~ 10	2.055	2.055	2.63,2.63
20	20.89	20.81	20.89	21.02					10~ 20	6.008	8.063	10.3,10.3
30	19.98	19.73	19.98	19.97					20~ 30	9.444	17.51	22.4,22.4
40	18.60	18.24	18.60	18.50					30~ 40	12.07	29.58	37.9,37.9
50	16.46	16.27	16.46	16.49					40~ 50	13.54	43.12	55.3,55.3
60	13.39	13.37	13.39	13.73					50~ 60	13.46	56.58	72.5,72.5
70	9.272	9.103	9.272	9.701					60~ 70	11.39	67.97	87.1,87.1
80	4.530	3.687	4.530	4.725					70~ 80	7.243	75.22	96.4,96.4
90	1.036	0	1.036	0.4693					80~ 90	2.460	77.68	99.6,99.6
100	0.0302	0	0.0302	0					90~100	0.2241	77.90	99.9,99.9
110	0.0063	0.0031	0.0063	0					100~110	0.0037	77.91	99.9,99.9
120	0.0110	0.0157	0.0110	0					110~120	0.0069	77.91	99.9,99.9
130	0.0204	0.0313	0.0204	0.0031					120~130	0.0125	77.92	99.9,99.9
140	0.0282	0.0377	0.0282	0.0125					130~140	0.0171	77.94	99.9,99.9
150	0.0454	0.0564	0.0454	0.0345					140~150	0.0242	77.97	99.9,99.9
160	0.0470	0.0564	0.0470	0.0376					150~160	0.0216	77.99	100,100
170	0.0517	0.0564	0.0517	0.0439					160~170	0.0138	78.00	100,100
180	0.0517	0.0564	0.0517	0.0470					170~180	0.0049	78.01	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:2018-11-02

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: R

LUMINANCE LIMITATION CURVES

Test:U:24.00V I:0.1680A P:4.030W PF:1.000 Freq:0Hz Lamp Flux:78.0065x1 lm		
NAME: DA1202408N0	TYPE:	WEIGHT:
SPEC.:DA1202408N0-0RGBNDA012XC0500	DIM.: 1000*8*1.5mm	SERIAL No.:01
MFR.: Colors	SUR.:1000*8	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	3562	1890
80	3261	2654
75	3330	3110
70	3389	3327
65	3389	3374
60	3347	3343
55	3279	3264
50	3201	3164
45	3118	3064

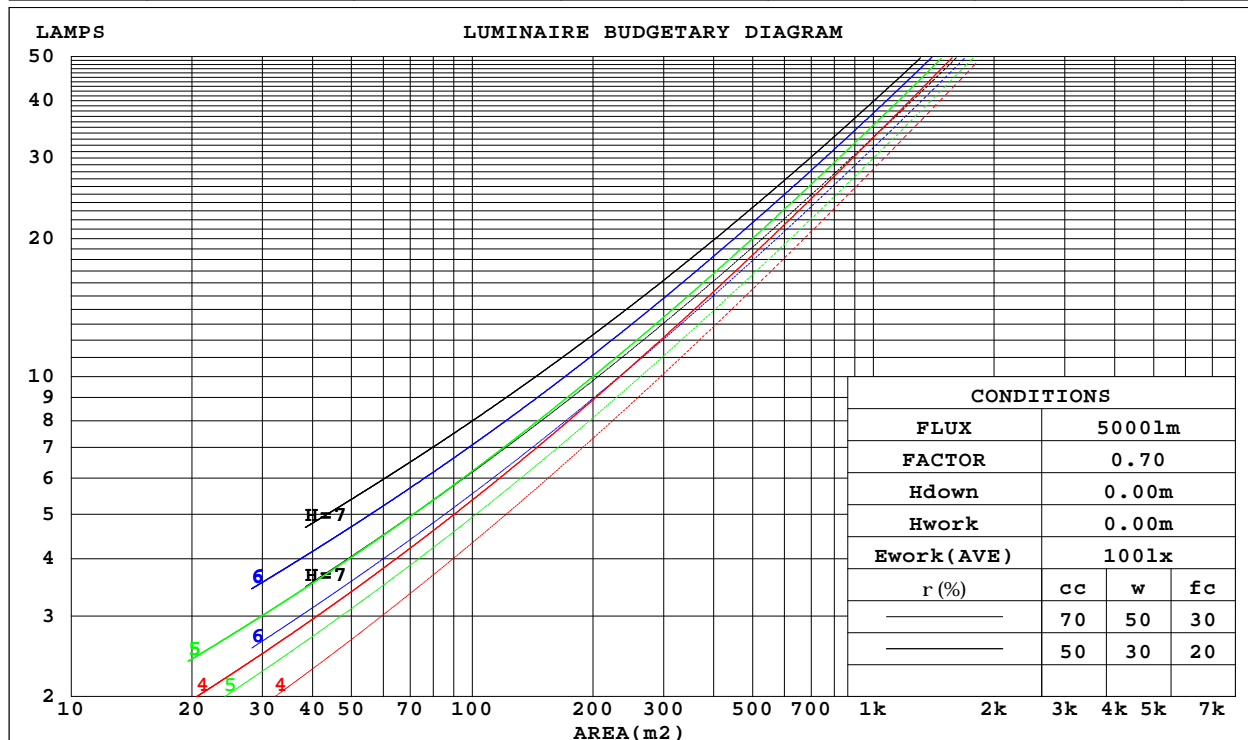
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:COLORS
Test Date:2018-11-02

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: R

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:24.00V I:0.1680A P:4.030W PF:1.000 Freq:0Hz Lamp Flux:78.0065x1 lm		
NAME: DA1202408N0	TYPE:	WEIGHT:
SPEC.:DA1202408N0-0RGBNDA012XC0500	DIM.: 1000*8*1.5mm	SERIAL No.:01
MFR.: Colors	SUR.:1000*8	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:2018-11-02

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: R

WEC AND CCEC

Test:U:24.00V I:0.1680A P:4.030W PF:1.000 Freq:0Hz Lamp Flux:78.0065x1 lm		
NAME: DA1202408N0	TYPE:	WEIGHT:
SPEC.:DA1202408N0-0RGBNDA012XC0500	DIM.: 1000*8*1.5mm	SERIAL No.:01
MFR.: Colors	SUR.:1000*8	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	.344	.196	.062	.337	.192	.061	.323	.185	.059	.310	.179	.057	.299	.173	.056	
2.0	.317	.174	.053	.311	.171	.053	.299	.166	.052	.288	.161	.051	.277	.157	.049	
3.0	.290	.154	.046	.284	.152	.046	.274	.148	.045	.264	.144	.044	.254	.141	.044	
4.0	.265	.138	.041	.260	.136	.040	.251	.133	.040	.242	.130	.039	.233	.127	.039	
5.0	.243	.124	.036	.239	.123	.036	.230	.120	.035	.222	.117	.035	.215	.115	.035	
6.0	.224	.112	.032	.220	.111	.032	.213	.109	.032	.206	.107	.031	.199	.105	.031	
7.0	.208	.103	.029	.204	.102	.029	.197	.100	.029	.191	.098	.029	.185	.096	.028	
8.0	.193	.094	.027	.190	.094	.026	.184	.092	.026	.178	.090	.026	.173	.089	.026	
9.0	.180	.087	.024	.178	.087	.024	.172	.085	.024	.167	.084	.024	.162	.082	.024	
10.0	.169	.081	.023	.167	.080	.022	.162	.079	.022	.157	.078	.022	.153	.077	.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	.194	.194	.194	.166	.166	.166	.113	.113	.113	.065	.065	.065	.021	.021	.021		
1.0	.186	.159	.135	.159	.137	.116	.109	.094	.080	.063	.054	.047	.020	.017	.015		
2.0	.179	.135	.098	.153	.116	.085	.105	.080	.059	.061	.047	.035	.019	.015	.011		
3.0	.172	.118	.075	.147	.102	.065	.101	.071	.045	.058	.041	.027	.019	.013	.009		
4.0	.164	.105	.059	.141	.090	.051	.097	.063	.036	.056	.037	.021	.018	.012	.007		
5.0	.157	.094	.049	.134	.082	.042	.093	.057	.030	.054	.034	.018	.017	.011	.006		
6.0	.149	.086	.041	.128	.075	.036	.088	.052	.025	.051	.031	.015	.017	.010	.005		
7.0	.142	.079	.035	.122	.069	.031	.084	.048	.022	.049	.028	.013	.016	.009	.004		
8.0	.135	.074	.031	.117	.064	.027	.081	.045	.019	.047	.026	.011	.015	.009	.004		
9.0	.129	.069	.028	.111	.060	.024	.077	.042	.017	.045	.025	.010	.015	.008	.003		
10.0	.123	.064	.025	.106	.056	.022	.074	.039	.016	.043	.023	.009	.014	.008	.003		

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:COLORS
Test Date:2018-11-02

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: R

UGR(Unified Glare Rating) Table

Test:U:24.00V I:0.1680A P:4.030W PF:1.000 Freq:0Hz Lamp Flux:78.0065x1 lm											
NAME: DA1202408N0					TYPE:			WEIGHT:			
SPEC.:DA1202408N0-0RGBNDA012XC0500					DIM.: 1000*8*1.5mm			SERIAL No.:01			
MFR.: Colors					SUR.:1000*8			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	26.1	27.7	26.4	27.9	28.1	26.1	27.7	26.4	27.9	28.1	
	3H	28.0	29.5	28.3	29.7	30.0	27.9	29.4	28.3	29.7	29.9
	4H	28.8	30.2	29.1	30.5	30.7	28.7	30.1	29.0	30.4	30.6
	6H	29.4	30.7	29.7	31.0	31.3	29.2	30.5	29.5	30.8	31.1
	8H	29.6	30.9	30.0	31.2	31.5	29.3	30.6	29.6	30.9	31.2
	12H	29.8	31.1	30.2	31.4	31.7	29.3	30.6	29.7	30.9	31.2
4H	2H	26.8	28.2	27.2	28.5	28.8	26.8	28.2	27.1	28.5	28.8
	3H	28.9	30.1	29.2	30.4	30.8	28.8	30.1	29.2	30.4	30.7
	4H	29.8	30.9	30.2	31.3	31.6	29.7	30.8	30.1	31.2	31.5
	6H	30.6	31.6	31.0	31.9	32.3	30.3	31.3	30.7	31.7	32.1
	8H	30.9	31.8	31.3	32.2	32.6	30.5	31.4	30.9	31.8	32.2
	12H	31.1	32.0	31.5	32.4	32.8	30.6	31.5	31.0	31.9	32.3
8H	4H	30.1	31.1	30.5	31.5	31.9	30.0	31.0	30.5	31.4	31.8
	6H	31.0	31.8	31.5	32.3	32.7	30.8	31.6	31.3	32.0	32.5
	8H	31.4	32.2	31.9	32.6	33.1	31.1	31.8	31.5	32.2	32.7
	12H	31.8	32.4	32.3	32.9	33.4	31.2	31.9	31.7	32.3	32.8
12H	4H	30.1	31.0	30.6	31.4	31.8	30.1	30.9	30.5	31.3	31.8
	6H	31.1	31.8	31.6	32.3	32.7	30.9	31.6	31.4	32.0	32.5
	8H	31.6	32.2	32.0	32.6	33.1	31.2	31.8	31.7	32.3	32.8
Variations with the observer position at spacings:											
S = 1.0H	+ 0.1 / - 0.1					+ 0.1 / - 0.1					
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3					
2.0H	+ 0.1 / - 0.4					+ 0.2 / - 0.4					

CIE Pub.117, 78.01 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -8.9)

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:COLORS
Test Date:2018-11-02

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: R

UTILIZATION FACTORS TABLE

Test:U:24.00V I:0.1680A P:4.030W PF:1.000 Freq:0Hz Lamp Flux:78.0065x1 lm		
NAME: DA1202408N0	TYPE:	WEIGHT:
SPEC.:DA1202408N0-0RGBNDA012XC0500	DIM.: 1000*8*1.5mm	SERIAL No.:01
MFR.: Colors	SUR.:1000*8	Shielding Angle:

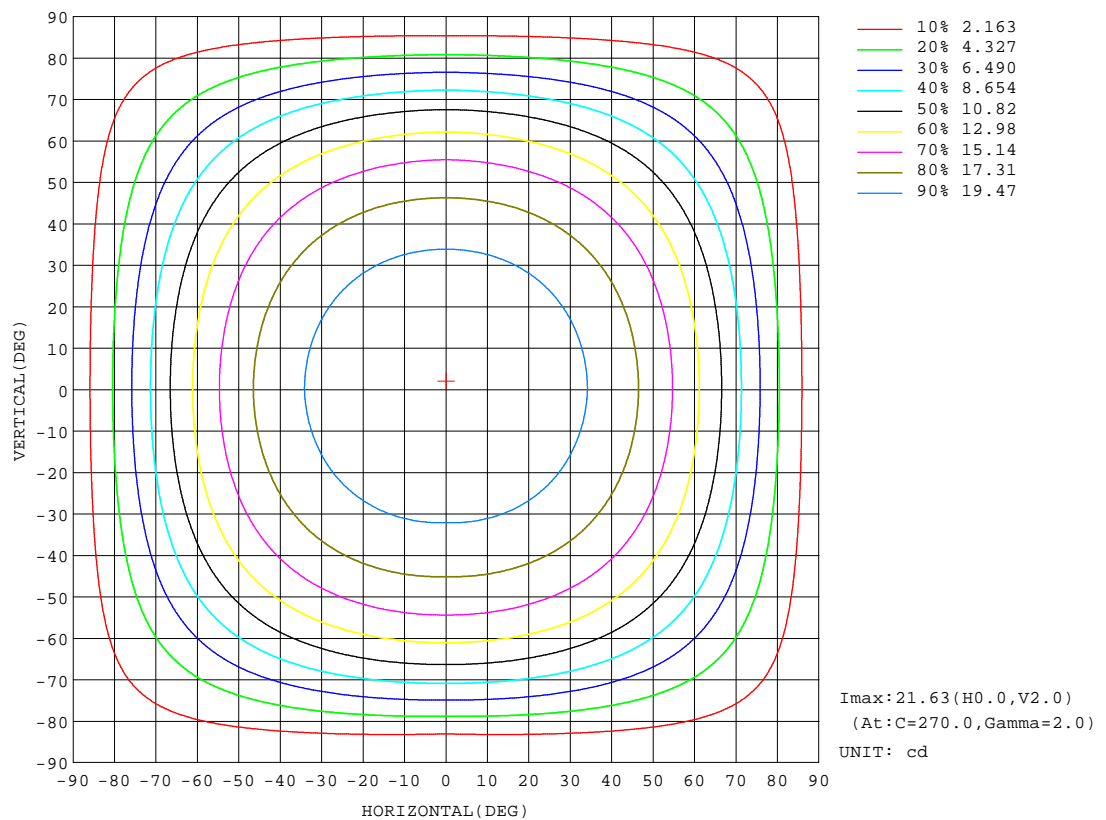
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	54	42	34	53	41	34	52	41	34	27
0.80	64	51	43	63	51	43	61	50	43	35
1.00	72	60	52	71	60	52	69	61	51	44
1.25	79	68	60	78	67	60	75	66	59	51
1.50	85	74	66	83	73	66	80	71	65	56
2.00	92	83	75	90	81	75	86	79	73	65
2.50	96	88	81	94	86	80	90	84	78	69
3.00	100	92	86	98	91	85	94	88	83	74
4.00	104	98	93	102	96	91	98	93	89	79
5.00	107	102	97	105	100	96	100	96	92	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:2018-11-02

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: R

ISOCANDELA DIAGRAM

Test:U:24.00V I:0.1680A P:4.030W PF:1.000 Freq:0Hz Lamp Flux:78.0065x1 lm		
NAME: DA1202408N0	TYPE:	WEIGHT:
SPEC.:DA1202408N0-0RGBNDA012XC0500	DIM.: 1000*8*1.5mm	SERIAL No.:01
MFR.: Colors	SUR.:1000*8	Shielding Angle:



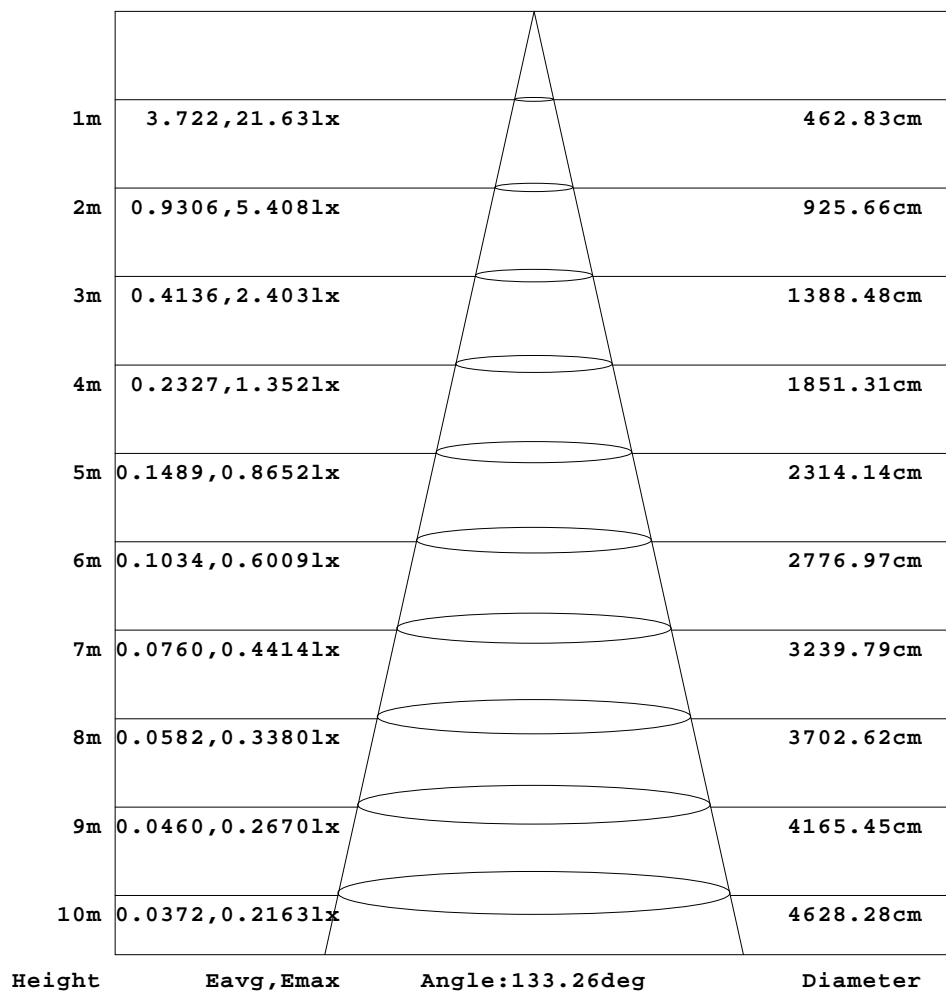
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: COLORS
Test Date: 2018-11-02

deg 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: R

AAI Figure

Test:U:24.00V I:0.1680A P:4.030W PF:1.000 Freq:0Hz Lamp Flux:78.0065x1 lm		
NAME: DA1202408N0	TYPE:	WEIGHT:
SPEC.:DA1202408N0-0RGBNDA012XC0500	DIM.: 1000*8*1.5mm	SERIAL No.:01
MFR.: Colors	SUR.:1000*8	Shielding Angle:

Flux out:64.91 lm



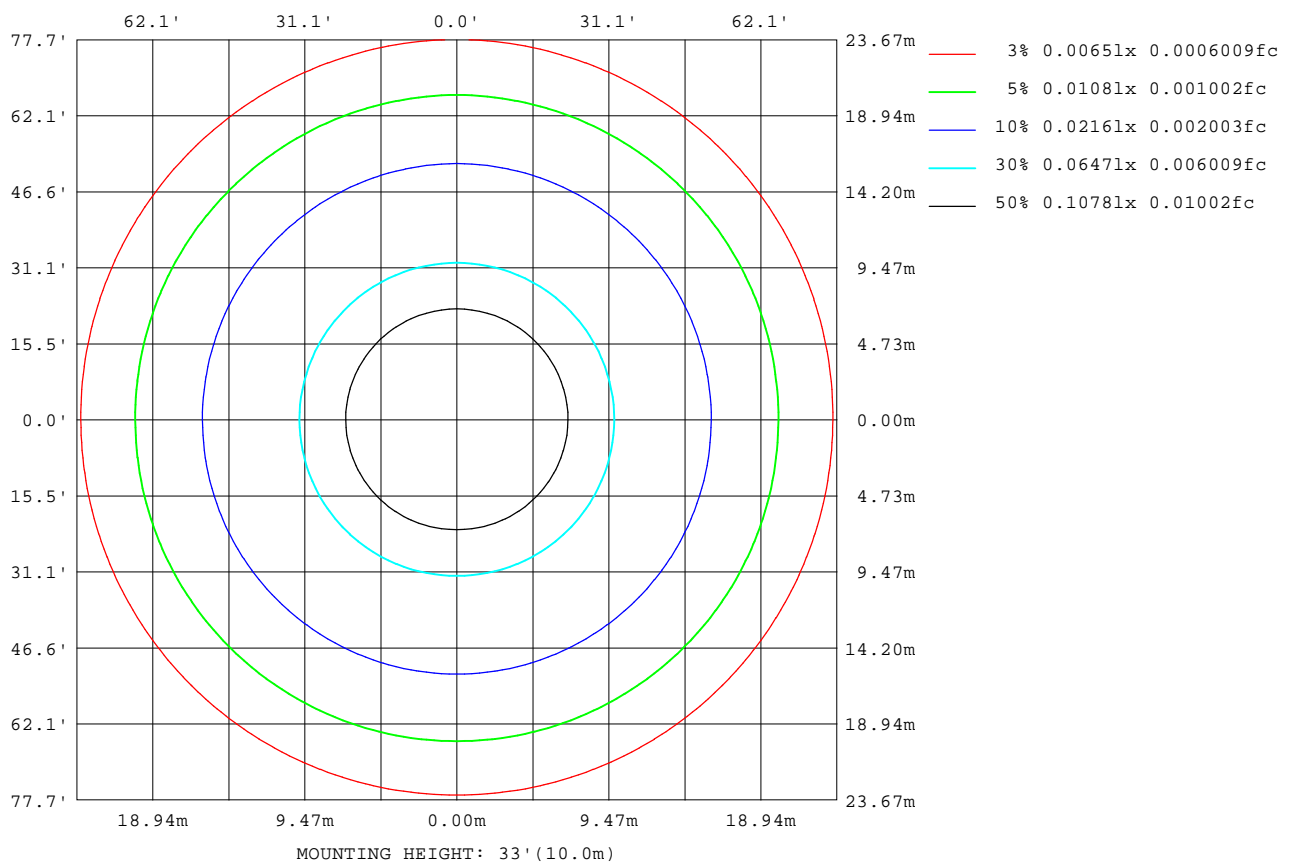
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:COLORS
 Test Date:2018-11-02

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: R

ISOLUX DIAGRAM

Test:U:24.00V I:0.1680A P:4.030W PF:1.000 Freq:0Hz Lamp Flux:78.0065x1 lm		
NAME: DA1202408N0	TYPE:	WEIGHT:
SPEC.:DA1202408N0-0RGBNDA012XC0500	DIM.: 1000*8*1.5mm	SERIAL No.:01
MFR.: Colors	SUR.:1000*8	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:COLORS
Test Date:2018-11-02

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: R

LED Avg.L Report

Test:U:24.00V I:0.1680A P:4.030W PF:1.000 Freq:0Hz Lamp Flux:78.0065x1 lm		
NAME: DA1202408N0	TYPE:	WEIGHT:
SPEC.:DA1202408N0-0RGBNDA012XC0500	DIM.: 1000*8*1.5mm	SERIAL No.:01
MFR.: Colors	SUR.:1000*8	Shielding Angle:

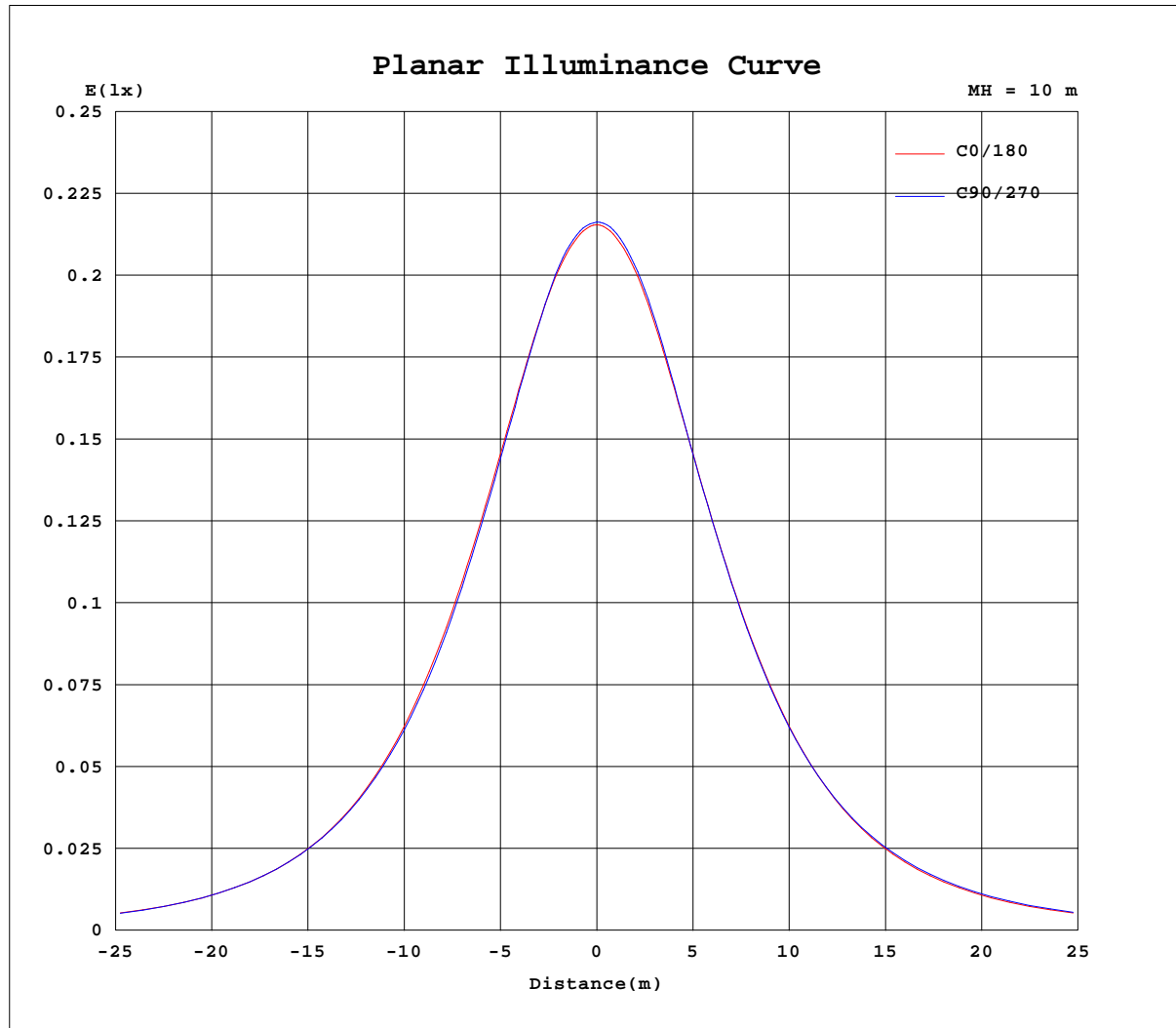
AvgL	cd/m2
L_0~180(65)av	3389
L_0~180(75)av	3330
L_0~180(85)av	3562
L_90~270(65)av	3446
L_90~270(75)av	3312
L_90~270(85)av	2602
L_45(65)av	3425
L_45(75)av	3319
L_45(85)av	2962

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:COLORS
Test Date:2018-11-02

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: R

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: COLORS
Test Date: 2018-11-02

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: R

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:24.00V I:0.1680A P:4.030W PF:1.000 Freq:0Hz Lamp Flux:78.0065x1 lm		
NAME: DA1202408N0	TYPE:	WEIGHT:
SPEC.:DA1202408N0-0RGBNDA012XC0500	DIM.: 1000*8*1.5mm	SERIAL No.:01
MFR.: Colors	SUR.:1000*8	Shielding Angle:

Table--1

UNIT: cd

C(DEG) g (DEG)	0	90	180	270														
0	21.5	21.6	21.5	21.6														
5	21.5	21.6	21.5	21.6														
10	21.4	21.5	21.4	21.5														
15	21.2	21.2	21.2	21.4														
20	20.9	20.8	20.9	21.0														
25	20.5	20.3	20.5	20.5														
30	20.0	19.7	20.0	20.0														
35	19.4	19.1	19.4	19.3														
40	18.6	18.2	18.6	18.5														
45	17.6	17.3	17.6	17.6														
50	16.5	16.3	16.5	16.5														
55	15.0	15.0	15.0	15.3														
60	13.4	13.4	13.4	13.7														
65	11.5	11.4	11.5	11.9														
70	9.27	9.10	9.27	9.70														
75	6.89	6.44	6.89	7.27														
80	4.53	3.69	4.53	4.72														
85	2.48	1.32	2.48	2.31														
90	1.04	0.00	1.04	0.47														
95	0.31	0.00	0.31	0.00														
100	0.03	0.00	0.03	0.00														
105	0.00	0.00	0.00	0.00														
110	0.01	0.00	0.01	0.00														
115	0.01	0.01	0.01	0.00														
120	0.01	0.02	0.01	0.00														
125	0.02	0.02	0.02	0.00														
130	0.02	0.03	0.02	0.00														
135	0.03	0.03	0.03	0.00														
140	0.03	0.04	0.03	0.01														
145	0.04	0.05	0.04	0.03														
150	0.05	0.06	0.05	0.03														
155	0.05	0.06	0.05	0.04														
160	0.05	0.06	0.05	0.04														
165	0.05	0.06	0.05	0.04														
170	0.05	0.06	0.05	0.04														
175	0.05	0.06	0.05	0.04														
180	0.05	0.06	0.05	0.05														

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:COLORS
Test Date:2018-11-02

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: R