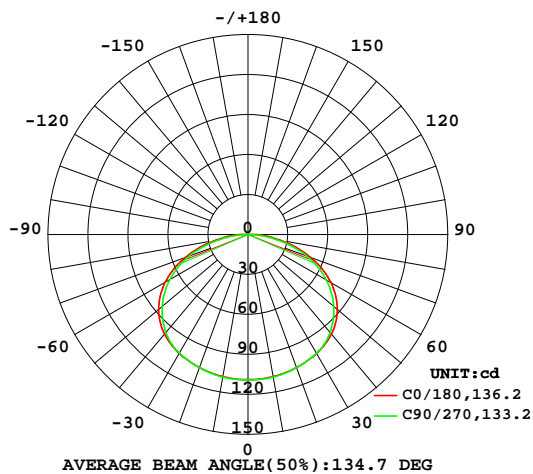


LUMINAIRE PHOTOMETRIC TEST REPORT

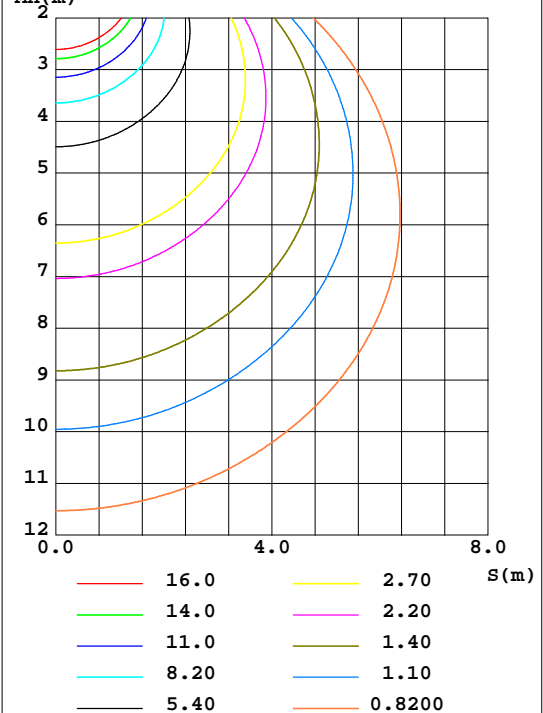
Test:U:24.00V I:0.4380A P:10.51W PF:1.000 Freq:0Hz Lamp Flux:405.896x1 lm		
NAME: DA1202408N0	TYPE:	WEIGHT:
SPEC.:DA1202408N0-0RGBNDA012XC0500	DIM.: 1000*8*1.5mm	SERIAL No.:01
MFR.: Colors	SUR.:1000*8	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 38.62 lm/W			
MODEL	DA1202408N0	I _{max} (cd)	109.1	S/MH(C0/180)	1.42
NOMINAL POWER(W)	10	LOR(%)	100.0	S/MH(C90/270)	1.41
RATED VOLTAGE(V)	24	TOTAL FLUX(lm)	405.90	h UP,DN(C0-180)	0.4,49.6
NOMINAL FLUX(lm)	405.896	CIE CLASS	DIRECT	h UP,DN(C180-360)	0.4,49.6
LAMPS INSIDE	1	h up(%)	0.9	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	24	h down(%)	99.1	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: RGB

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

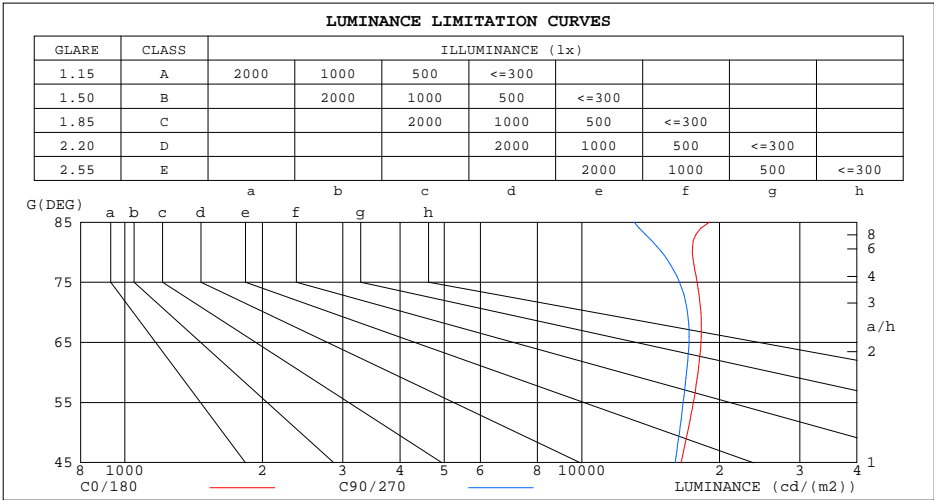
g	C0	C90	C180	C270					g	F zone	F total	%lum,lamp
10	108.3	108.7	108.3	108.7					0~ 10	10.38	10.38	2.56,2.56
20	106.2	106.5	106.2	106.5					10~ 20	30.45	40.84	10.1,10.1
30	103.1	102.9	103.1	102.9					20~ 30	48.45	89.29	22,22
40	97.62	96.01	97.62	96.01					30~ 40	62.90	152.2	37.5,37.5
50	87.60	84.05	87.60	84.05					40~ 50	70.91	223.1	55,55
60	71.83	67.79	71.83	67.79					50~ 60	70.06	293.2	72.2,72.2
70	49.85	46.61	49.85	46.61					60~ 70	58.96	352.1	86.7,86.7
80	24.25	20.81	24.25	20.81					70~ 80	37.37	389.5	96,96
90	5.581	1.348	5.581	1.348					80~ 90	12.82	402.3	99.1,99.1
100	0.3770	0.2083	0.3770	0.2083					90~100	1.372	403.7	99.5,99.5
110	0.3243	0.2664	0.3243	0.2664					100~110	0.2859	404.0	99.5,99.5
120	0.4199	0.3509	0.4199	0.3509					110~120	0.3369	404.3	99.6,99.6
130	0.4842	0.4168	0.4842	0.4168					120~130	0.3760	404.7	99.7,99.7
140	0.5186	0.4732	0.5186	0.4732					130~140	0.3682	405.0	99.8,99.8
150	0.5546	0.5923	0.5546	0.5923					140~150	0.3366	405.4	99.9,99.9
160	0.6235	0.6205	0.6235	0.6205					150~160	0.2753	405.7	99.9,99.9
170	0.6612	0.6393	0.6612	0.6393					160~170	0.1805	405.8	100,100
180	0.6878	0.6549	0.6878	0.6549					170~180	0.0628	405.9	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: RGB

LUMINANCE LIMITATION CURVES

Test:U:24.00V I:0.4380A P:10.51W PF:1.000 Freq:0Hz Lamp Flux:405.896x1 lm		
NAME: DA1202408N0	TYPE:	WEIGHT:
SPEC.:DA1202408N0-0RGBNDA012XC0500	DIM.: 1000*8*1.5mm	SERIAL No.:01
MFR.: Colors	SUR.:1000*8	Shielding Angle:



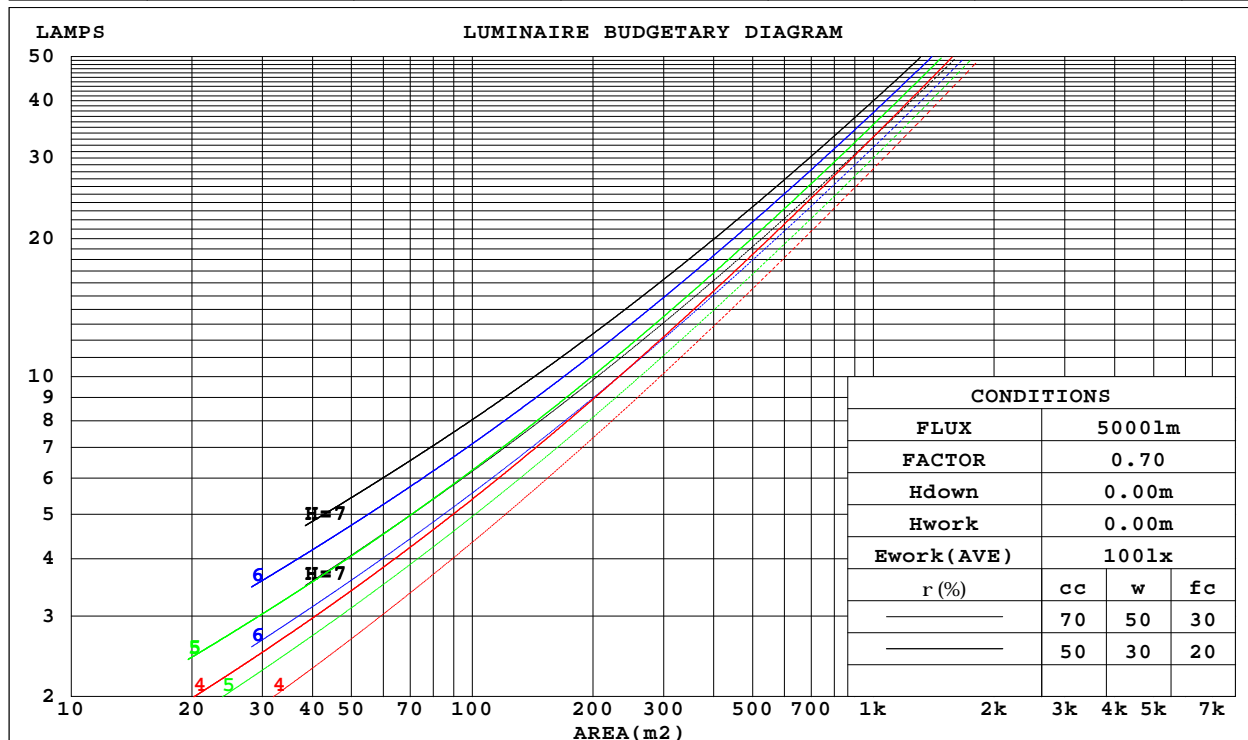
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:COLORS
Test Date:2018-11-02

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: RGB

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:24.00V I:0.4380A P:10.51W PF:1.000 Freq:0Hz Lamp Flux:405.896x1 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
Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:7.500m [K=1.0000]
Remarks: RGB

WEC AND CCEC

Test:U:24.00V I:0.4380A P:10.51W PF:1.000 Freq:0Hz Lamp Flux:405.896x1 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	.336	.192	.061	.322	.185	.059	.310	.179	.057	.298	.173	.056															
2.0	.317	.174	.053	.311	.171	.053	.298	.166	.052	.287	.161	.050	.276	.156	.049															
3.0	.290	.154	.046	.284	.152	.046	.273	.148	.045	.263	.144	.044	.254	.140	.043															
4.0	.265	.138	.041	.260	.136	.040	.250	.133	.040	.241	.130	.039	.233	.126	.039															
5.0	.244	.124	.036	.239	.123	.036	.230	.120	.035	.222	.117	.035	.214	.115	.034															
6.0	.225	.113	.032	.220	.111	.032	.213	.109	.032	.205	.107	.031	.199	.105	.031															
7.0	.208	.103	.029	.204	.102	.029	.197	.100	.029	.191	.098	.028	.185	.096	.028															
8.0	.193	.095	.027	.190	.094	.026	.184	.092	.026	.178	.090	.026	.172	.089	.026															
9.0	.181	.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	.152	.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	.197	.197	.197	.169	.169	.169	.115	.115	.115	.066	.066	.066	.021	.021	.021	
1.0	.189	.163	.138	.162	.140	.119	.111	.096	.082	.064	.056	.048	.020	.018	.015	
2.0	.183	.139	.102	.156	.119	.088	.107	.083	.061	.062	.048	.036	.020	.016	.012	
3.0	.175	.121	.078	.150	.105	.068	.103	.073	.048	.060	.042	.028	.019	.014	.009	
4.0	.168	.108	.063	.144	.094	.055	.099	.065	.038	.057	.038	.023	.018	.012	.007	
5.0	.160	.098	.052	.138	.085	.045	.095	.059	.032	.055	.035	.019	.018	.011	.006	
6.0	.153	.090	.045	.131	.078	.039	.091	.054	.027	.053	.032	.016	.017	.010	.005	
7.0	.146	.083	.039	.125	.072	.034	.087	.050	.024	.050	.030	.014	.016	.010	.005	
8.0	.139	.077	.035	.120	.067	.030	.083	.047	.021	.048	.028	.013	.016	.009	.004	
9.0	.133	.072	.031	.114	.063	.027	.079	.044	.019	.046	.026	.012	.015	.009	.004	
10.0	.127	.068	.029	.109	.059	.025	.076	.042	.018	.044	.025	.011	.014	.008	.004	

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: RGB

UGR(Unified Glare Rating) Table

Test:U:24.00V I:0.4380A P:10.51W PF:1.000 Freq:0Hz Lamp Flux:405.896x1 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	26.2	27.8	26.5	28.0	28.3	26.0	27.6	26.3	27.8	28.1	
	3H	28.1	29.6	28.4	29.9	30.1	27.9	29.3	28.2	29.6	29.9
	4H	28.9	30.3	29.3	30.6	30.9	28.6	30.0	29.0	30.3	30.6
	6H	29.6	30.9	29.9	31.2	31.5	29.2	30.5	29.5	30.8	31.1
	8H	29.8	31.1	30.2	31.4	31.7	29.3	30.6	29.7	30.9	31.3
	12H	30.0	31.2	30.4	31.6	31.9	29.4	30.7	29.8	31.0	31.3
4H	2H	26.9	28.3	27.2	28.6	28.9	26.8	28.2	27.1	28.4	28.7
	3H	29.0	30.2	29.4	30.6	30.9	28.8	30.0	29.2	30.4	30.7
	4H	29.9	31.1	30.3	31.4	31.8	29.7	30.8	30.1	31.2	31.5
	6H	30.7	31.7	31.1	32.1	32.5	30.4	31.4	30.8	31.7	32.1
	8H	31.0	32.0	31.4	32.3	32.8	30.6	31.5	31.0	31.9	32.3
	12H	31.3	32.1	31.7	32.6	33.0	30.7	31.6	31.2	32.0	32.5
8H	4H	30.3	31.2	30.7	31.6	32.0	30.0	31.0	30.5	31.4	31.8
	6H	31.2	32.0	31.7	32.4	32.9	30.9	31.7	31.3	32.1	32.6
	8H	31.6	32.3	32.1	32.8	33.2	31.2	31.9	31.7	32.4	32.8
	12H	32.0	32.6	32.5	33.1	33.6	31.5	32.1	32.0	32.5	33.0
12H	4H	30.3	31.2	30.7	31.6	32.0	30.1	30.9	30.5	31.3	31.8
	6H	31.3	32.0	31.8	32.4	32.9	31.0	31.7	31.5	32.1	32.6
	8H	31.7	32.4	32.2	32.8	33.3	31.4	32.0	31.9	32.4	32.9
Variations with the observer position at spacings:											
S = 1.0H	+ 0.1 / - 0.1				+ 0.1 / - 0.2						
1.5H	+ 0.2 / - 0.3				+ 0.2 / - 0.3						
2.0H	+ 0.1 / - 0.4				+ 0.1 / - 0.4						

CIE Pub.117, 405.9 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -3.1)

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: RGB

UTILIZATION FACTORS TABLE

Test:U:24.00V I:0.4380A P:10.51W PF:1.000 Freq:0Hz Lamp Flux:405.896x1 lm		
NAME: DA1202408N0	TYPE:	WEIGHT:
SPEC.:DA1202408N0-0RGBNDA012XC0500	DIM.: 1000*8*1.5mm	SERIAL No.:01
MFR.: Colors	SUR.:1000*8	Shielding Angle:

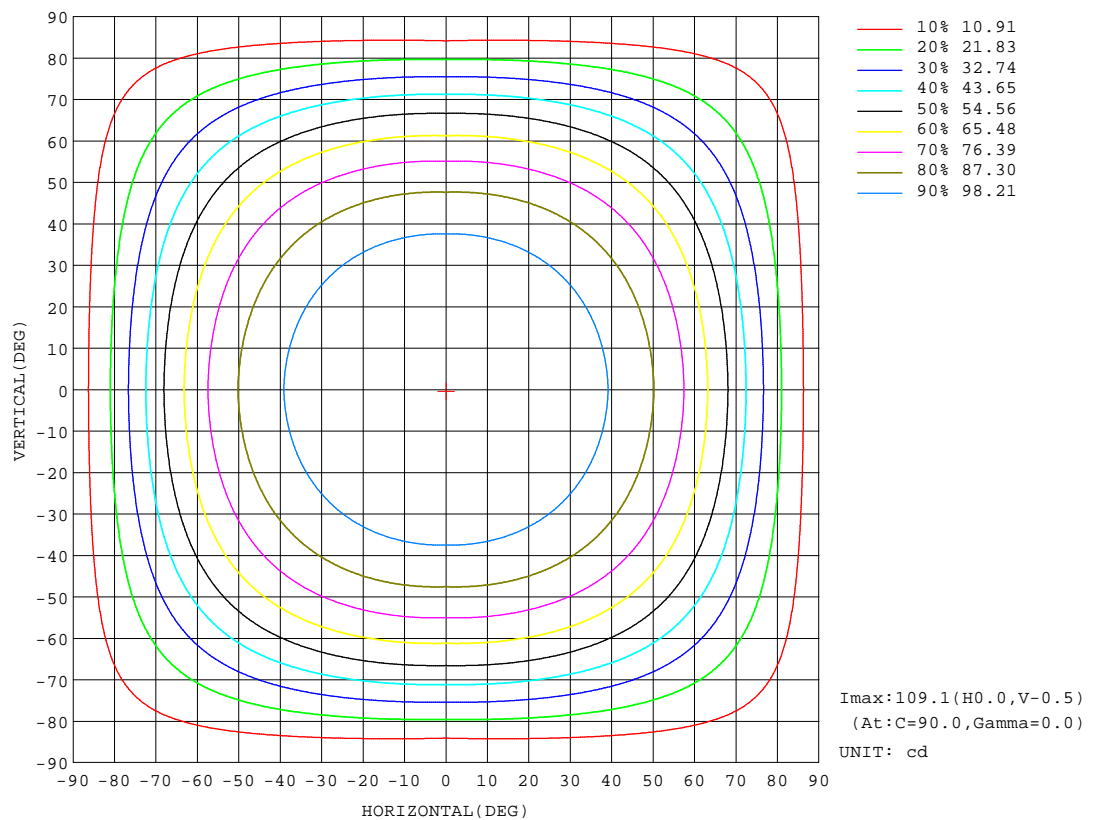
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	53	41	34	53	41	34	51	40	34	27
0.80	63	51	43	62	51	43	60	50	42	35
1.00	72	60	52	71	59	52	68	61	51	43
1.25	79	68	60	78	67	60	75	65	59	51
1.50	85	74	66	83	73	65	79	71	64	56
2.00	92	82	75	90	81	74	86	79	73	64
2.50	96	88	81	94	86	80	90	83	78	69
3.00	100	92	86	98	91	85	93	87	83	74
4.00	104	98	93	102	96	91	97	93	88	79
5.00	107	102	97	104	100	95	100	96	92	82
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: RGB

ISOCANDELA DIAGRAM

Test:U:24.00V I:0.4380A P:10.51W PF:1.000 Freq:0Hz Lamp Flux:405.896x1 lm		
NAME: DA1202408N0	TYPE:	WEIGHT:
SPEC.:DA1202408N0-0RGBNDA012XC0500	DIM.: 1000*8*1.5mm	SERIAL No.:01
MFR.: Colors	SUR.:1000*8	Shielding Angle:



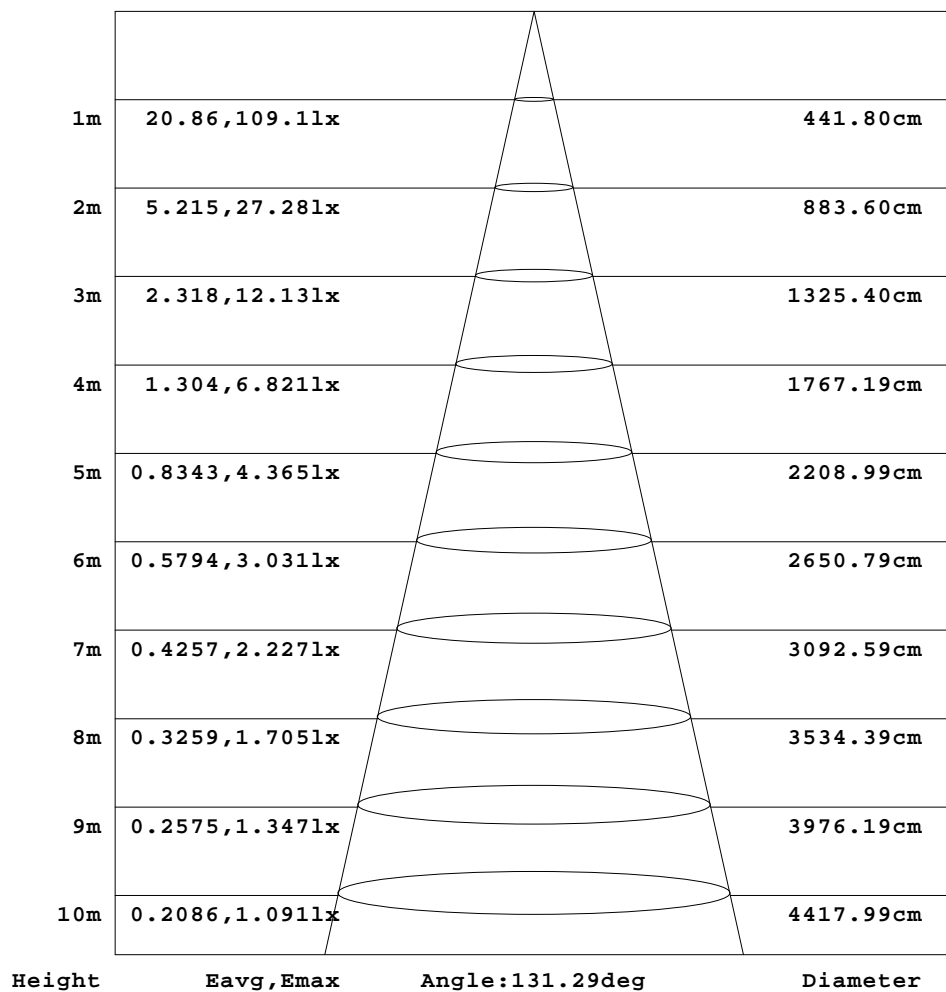
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:COLORS
Test Date:2018-11-02

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: RGB

AAI Figure

Test:U:24.00V I:0.4380A P:10.51W PF:1.000 Freq:0Hz Lamp Flux:405.896x1 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:330.6 lm



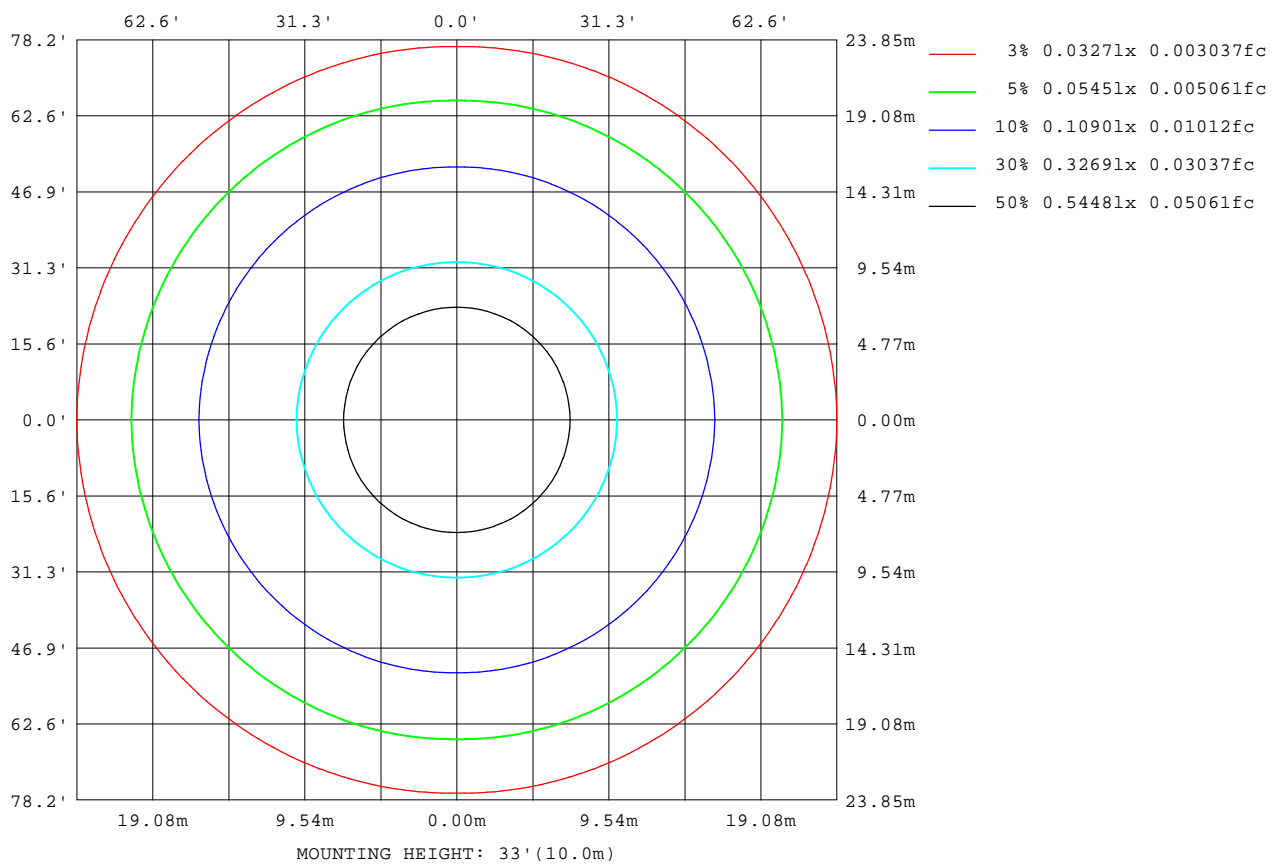
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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: RGB

ISOLUX DIAGRAM

Test:U:24.00V I:0.4380A P:10.51W PF:1.000 Freq:0Hz Lamp Flux:405.896x1 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

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: RGB

LED Avg.L Report

Test:U:24.00V I:0.4380A P:10.51W PF:1.000 Freq:0Hz Lamp Flux:405.896x1 lm		
NAME: DA1202408N0	TYPE:	WEIGHT:
SPEC.:DA1202408N0-0RGBNDA012XC0500	DIM.: 1000*8*1.5mm	SERIAL No.:01
MFR.: Colors	SUR.:1000*8	Shielding Angle:

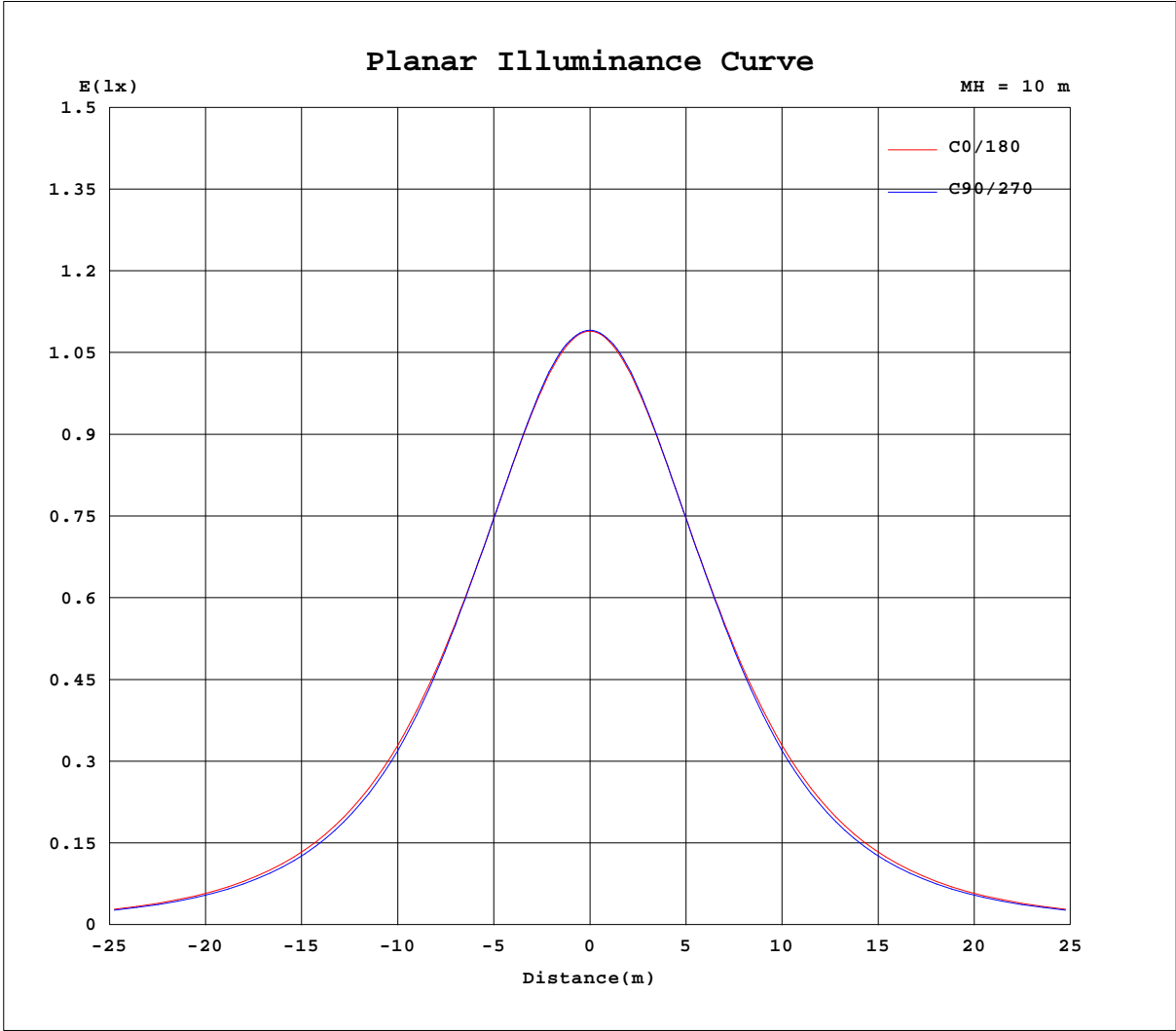
AvgL	cd/m2
L_0~180(65)av	18227
L_0~180(75)av	17883
L_0~180(85)av	19026
L_90~270(65)av	17157
L_90~270(75)av	16366
L_90~270(85)av	13004
L_45(65)av	17558
L_45(75)av	16935
L_45(85)av	15262

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: RGB

Planar Illuminance Curve



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: RGB

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:24.00V I:0.4380A P:10.51W PF:1.000 Freq:0Hz Lamp Flux:405.896x1 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	109	109	109	109														
5	109	109	109	109														
10	108	109	108	109														
15	107	108	107	108														
20	106	106	106	106														
25	105	105	105	105														
30	103	103	103	103														
35	101	100	101	100														
40	97.6	96.0	97.6	96.0														
45	93.3	90.6	93.3	90.6														
50	87.6	84.1	87.6	84.1														
55	80.5	76.5	80.5	76.5														
60	71.8	67.8	71.8	67.8														
65	61.6	58.0	61.6	58.0														
70	49.9	46.6	49.9	46.6														
75	37.0	33.9	37.0	33.9														
80	24.3	20.8	24.3	20.8														
85	13.3	9.07	13.3	9.07														
90	5.58	1.35	5.58	1.35														
95	1.80	0.18	1.80	0.18														
100	0.38	0.21	0.38	0.21														
105	0.29	0.23	0.29	0.23														
110	0.32	0.27	0.32	0.27														
115	0.37	0.31	0.37	0.31														
120	0.42	0.35	0.42	0.35														
125	0.46	0.40	0.46	0.40														
130	0.48	0.42	0.48	0.42														
135	0.50	0.46	0.50	0.46														
140	0.52	0.47	0.52	0.47														
145	0.53	0.54	0.53	0.54														
150	0.55	0.59	0.55	0.59														
155	0.58	0.61	0.58	0.61														
160	0.62	0.62	0.62	0.62														
165	0.65	0.63	0.65	0.63														
170	0.66	0.64	0.66	0.64														
175	0.68	0.65	0.68	0.65														
180	0.69	0.65	0.69	0.65														

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: RGB