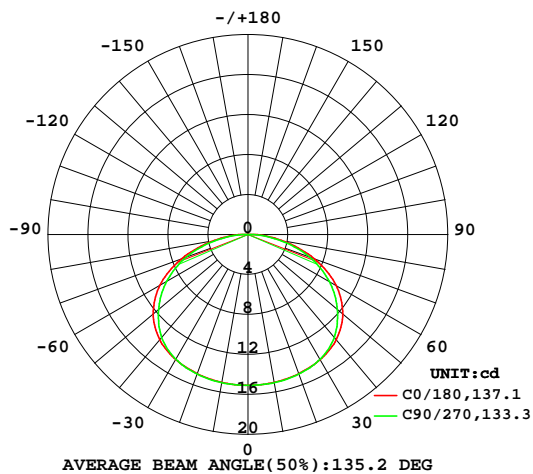


LUMINAIRE PHOTOMETRIC TEST REPORT

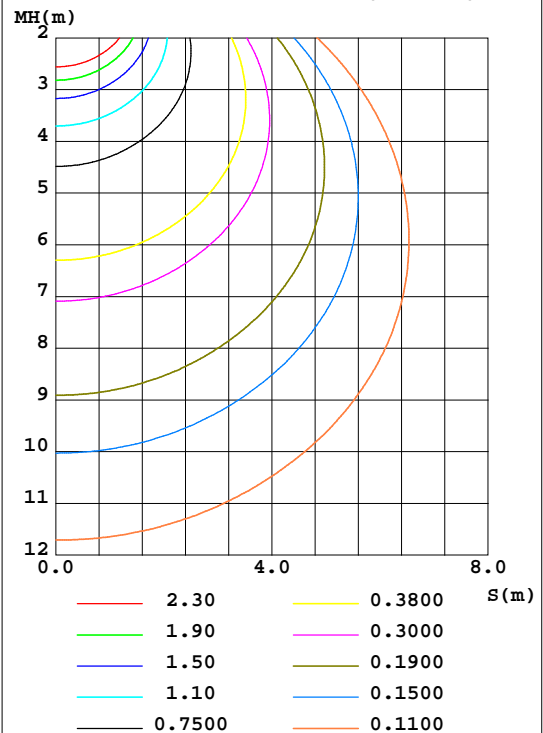
Test:U:24.00V I:0.1390A P:3.160W PF:1.000 Freq:0Hz Lamp Flux:56.6539x1 lm		
NAME: DA1202408N0	TYPE:	WEIGHT:
SPEC.:DA1202408N0-0RGBNDA012XC0500	DIM.: 1000*8*1.5mm	SERIAL No.:01
MFR.: Colors	SUR.:1000*8	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 17.93 lm/W			
MODEL	DA1202408N0	I _{max} (cd)	15.08	S/MH(C0/180)	1.44
NOMINAL POWER(W)	4	LOR(%)	100.0	S/MH(C90/270)	1.43
RATED VOLTAGE(V)	24	TOTAL FLUX(lm)	56.654	h UP,DN(C0-180)	0.2,49.8
NOMINAL FLUX(lm)	56.6539	CIE CLASS	DIRECT	h UP,DN(C180-360)	0.2,49.8
LAMPS INSIDE	1	h up(%)	0.3	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	24	h down(%)	99.7	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: B

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

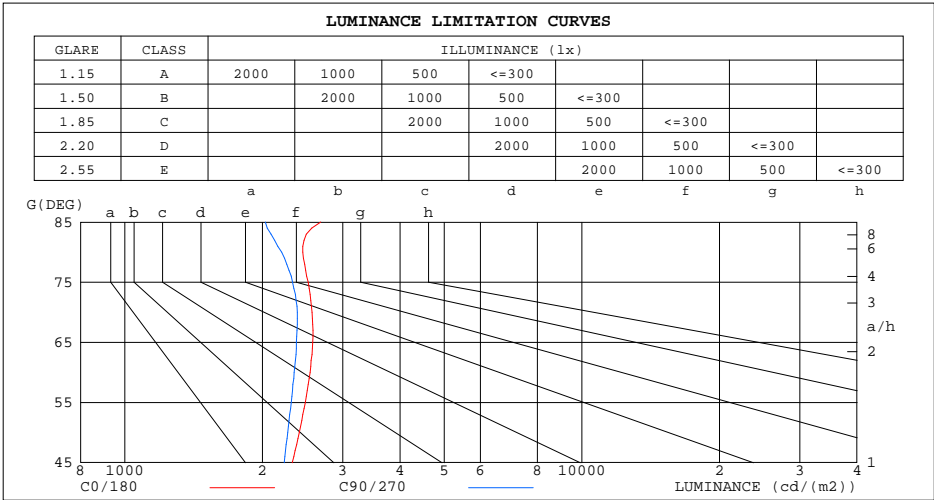
g	C0	C90	C180	C270					g	F zone	F total	%lum,lamp
10	15.03	15.07	15.03	15.07					0~ 10	1.438	1.438	2.54,2.54
20	14.83	14.86	14.83	14.86					10~ 20	4.239	5.677	10,10
30	14.46	14.42	14.46	14.42					20~ 30	6.784	12.46	22,22
40	13.74	13.44	13.74	13.44					30~ 40	8.828	21.29	37.6,37.6
50	12.38	11.68	12.38	11.68					40~ 50	9.948	31.24	55.1,55.1
60	10.17	9.394	10.17	9.394					50~ 60	9.821	41.06	72.5,72.5
70	7.034	6.524	7.034	6.524					60~ 70	8.259	49.32	87.1,87.1
80	3.408	3.062	3.408	3.062					70~ 80	5.289	54.61	96.4,96.4
90	0.7697	0.2362	0.7697	0.2362					80~ 90	1.866	56.47	99.7,99.7
100	0.0036	0	0.0036	0					90~100	0.1614	56.63	100,100
110	0	0	0	0					100~110	0.0001	56.63	100,100
120	0	0.0016	0	0.0016					110~120	0.0001	56.64	100,100
130	0.0031	0.0047	0.0031	0.0047					120~130	0.0020	56.64	100,100
140	0.0063	0.0063	0.0063	0.0063					130~140	0.0041	56.64	100,100
150	0.0078	0.0094	0.0078	0.0094					140~150	0.0048	56.65	100,100
160	0.0078	0.0094	0.0078	0.0094					150~160	0.0040	56.65	100,100
170	0.0078	0.0125	0.0078	0.0125					160~170	0.0027	56.65	100,100
180	0.0141	0.0251	0.0141	0.0251					170~180	0.0012	56.65	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: B

LUMINANCE LIMITATION CURVES

Test:U:24.00V I:0.1390A P:3.160W PF:1.000 Freq:0Hz Lamp Flux:56.6539x1 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	2681	2029
80	2453	2204
75	2519	2330
70	2571	2384
65	2576	2375
60	2543	2348
55	2483	2313
50	2407	2271
45	2326	2232

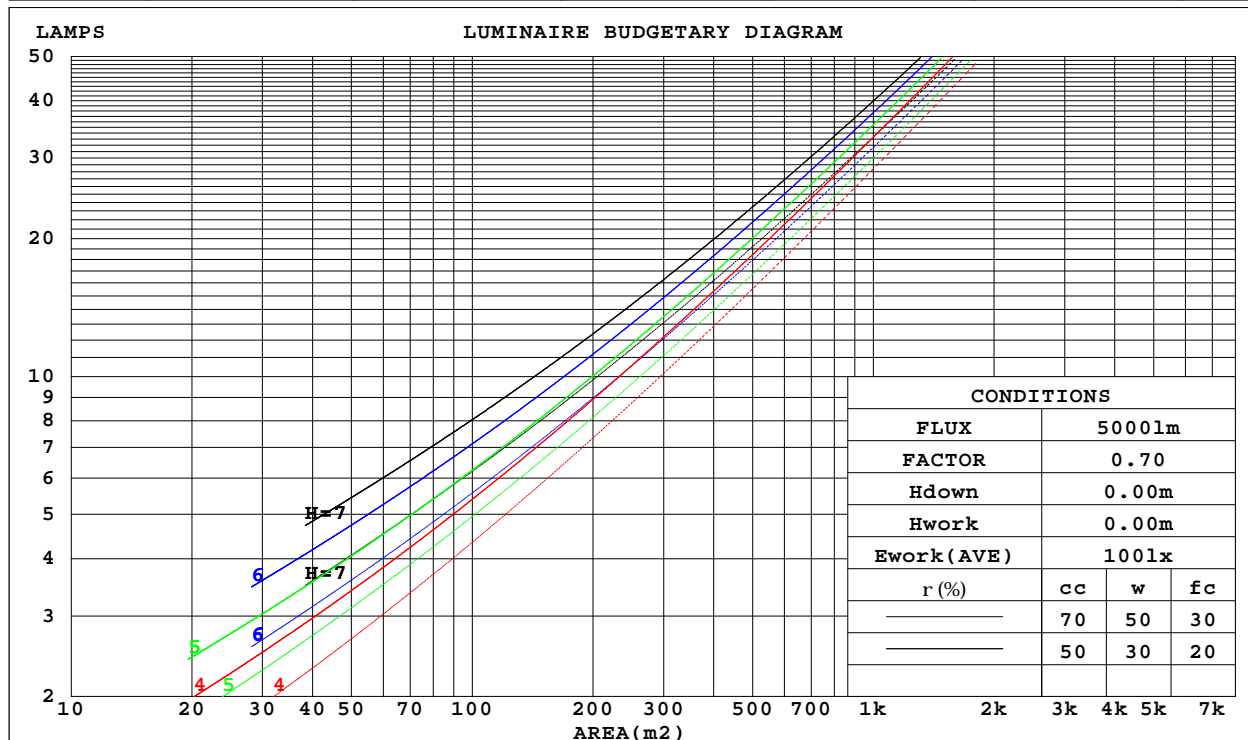
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:COLORS
Test Date:2018-11-02

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: B

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:24.00V I:0.1390A P:3.160W PF:1.000 Freq:0Hz Lamp Flux:56.6539x1 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			Coefficients of Utilization(CU)												
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	.00
1.0	1.02	.97	.93	.90	.95	.91	.95	.92	.88	.91	.88	.85	.87	.85	.83	.81
2.0	.88	.80	.74	.86	.79	.73	.82	.76	.71	.78	.74	.69	.75	.71	.68	.65
3.0	.76	.67	.60	.74	.66	.59	.71	.64	.58	.68	.62	.57	.66	.61	.56	.54
4.0	.67	.57	.50	.65	.56	.50	.63	.55	.49	.60	.53	.48	.58	.52	.47	.45
5.0	.59	.49	.42	.58	.49	.42	.56	.48	.42	.54	.47	.41	.52	.45	.41	.38
6.0	.53	.43	.37	.52	.43	.36	.50	.42	.36	.48	.41	.36	.46	.40	.35	.33
7.0	.48	.38	.32	.47	.38	.32	.45	.37	.31	.44	.37	.31	.42	.36	.31	.29
8.0	.43	.34	.28	.43	.34	.28	.41	.33	.28	.40	.33	.28	.39	.32	.27	.25
9.0	.40	.31	.25	.39	.31	.25	.38	.30	.25	.37	.30	.25	.35	.29	.25	.23
10.0	.36	.28	.23	.36	.28	.23	.35	.27	.22	.34	.27	.22	.33	.27	.22	.20



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: B

WEC AND CCEC

Test:U:24.00V I:0.1390A P:3.160W PF:1.000 Freq:0Hz Lamp Flux:56.6539x1 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	.346	.197	.062	.339	.193	.061	.325	.186	.060	.313	.180	.058	.301	.174	.056	
2.0	.319	.175	.054	.312	.172	.053	.300	.167	.052	.289	.162	.051	.279	.158	.050	
3.0	.291	.155	.046	.286	.153	.046	.275	.149	.045	.265	.145	.045	.256	.142	.044	
4.0	.266	.138	.041	.261	.137	.040	.252	.133	.040	.243	.130	.039	.234	.127	.039	
5.0	.244	.124	.036	.240	.123	.036	.231	.120	.035	.223	.118	.035	.216	.115	.035	
6.0	.225	.113	.032	.221	.112	.032	.214	.109	.032	.206	.107	.032	.200	.105	.031	
7.0	.208	.103	.029	.205	.102	.029	.198	.100	.029	.192	.098	.029	.186	.097	.028	
8.0	.194	.095	.027	.191	.094	.027	.185	.092	.026	.179	.091	.026	.174	.089	.026	
9.0	.181	.088	.024	.178	.087	.024	.173	.085	.024	.168	.084	.024	.163	.083	.024	
10.0	.170	.081	.023	.167	.081	.023	.162	.079	.022	.158	.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	.193	.193	.193	.165	.165	.165	.113	.113	.113	.065	.065	.065	.021	.021	.021	
1.0	.185	.158	.134	.159	.136	.115	.108	.093	.080	.062	.054	.046	.020	.017	.015	
2.0	.178	.134	.097	.153	.116	.084	.105	.080	.059	.060	.047	.034	.019	.015	.011	
3.0	.171	.117	.074	.147	.101	.064	.101	.070	.045	.058	.041	.026	.019	.013	.009	
4.0	.164	.104	.058	.140	.090	.051	.097	.063	.036	.056	.037	.021	.018	.012	.007	
5.0	.156	.094	.048	.134	.081	.041	.092	.057	.029	.053	.033	.017	.017	.011	.006	
6.0	.149	.085	.040	.128	.074	.035	.088	.052	.025	.051	.030	.015	.017	.010	.005	
7.0	.142	.079	.034	.122	.068	.030	.084	.048	.021	.049	.028	.013	.016	.009	.004	
8.0	.135	.073	.030	.116	.063	.026	.080	.044	.019	.047	.026	.011	.015	.009	.004	
9.0	.128	.068	.027	.111	.059	.023	.077	.041	.017	.045	.024	.010	.014	.008	.003	
10.0	.123	.064	.024	.106	.055	.021	.073	.039	.015	.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: B

UGR(Unified Glare Rating) Table

Test:U:24.00V I:0.1390A P:3.160W PF:1.000 Freq:0Hz Lamp Flux:56.6539x1 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	26.3	27.9	26.6	28.1	28.3	26.0	27.6	26.3	27.8	28.0
3H	28.2	29.7	28.5	29.9	30.2	27.9	29.4	28.2	29.6	29.9
4H	29.0	30.4	29.3	30.7	31.0	28.6	30.1	29.0	30.3	30.6
6H	29.6	31.0	30.0	31.3	31.6	29.2	30.6	29.6	30.9	31.2
8H	29.9	31.2	30.2	31.5	31.8	29.4	30.7	29.8	31.0	31.3
12H	30.1	31.3	30.4	31.6	32.0	29.6	30.8	29.9	31.1	31.5
4H 2H	27.0	28.4	27.3	28.7	28.9	26.8	28.2	27.1	28.5	28.7
3H	29.1	30.3	29.4	30.6	31.0	28.8	30.1	29.2	30.4	30.7
4H	30.0	31.2	30.4	31.5	31.8	29.7	30.9	30.1	31.2	31.6
6H	30.8	31.8	31.2	32.2	32.6	30.4	31.5	30.9	31.8	32.2
8H	31.1	32.1	31.5	32.4	32.8	30.7	31.7	31.1	32.1	32.4
12H	31.4	32.2	31.8	32.6	33.1	30.9	31.8	31.3	32.2	32.6
8H 4H	30.3	31.3	30.8	31.7	32.1	30.1	31.1	30.5	31.4	31.8
6H	31.3	32.1	31.7	32.5	32.9	31.0	31.8	31.4	32.2	32.7
8H	31.7	32.4	32.2	32.9	33.3	31.4	32.1	31.8	32.5	33.0
12H	32.1	32.7	32.6	33.2	33.7	31.7	32.3	32.1	32.7	33.2
12H 4H	30.4	31.3	30.8	31.7	32.1	30.1	31.0	30.6	31.4	31.8
6H	31.4	32.1	31.8	32.5	33.0	31.1	31.8	31.6	32.2	32.7
8H	31.8	32.5	32.3	32.9	33.4	31.5	32.1	32.0	32.6	33.1
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, 56.65 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -10.0)

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: B

UTILIZATION FACTORS TABLE

Test:U:24.00V I:0.1390A P:3.160W PF:1.000 Freq:0Hz Lamp Flux:56.6539x1 lm		
NAME: DA1202408N0	TYPE:	WEIGHT:
SPEC.:DA1202408N0-0RGBNDA012XC0500	DIM.: 1000*8*1.5mm	SERIAL No.:01
MFR.: Colors	SUR.:1000*8	Shielding Angle:

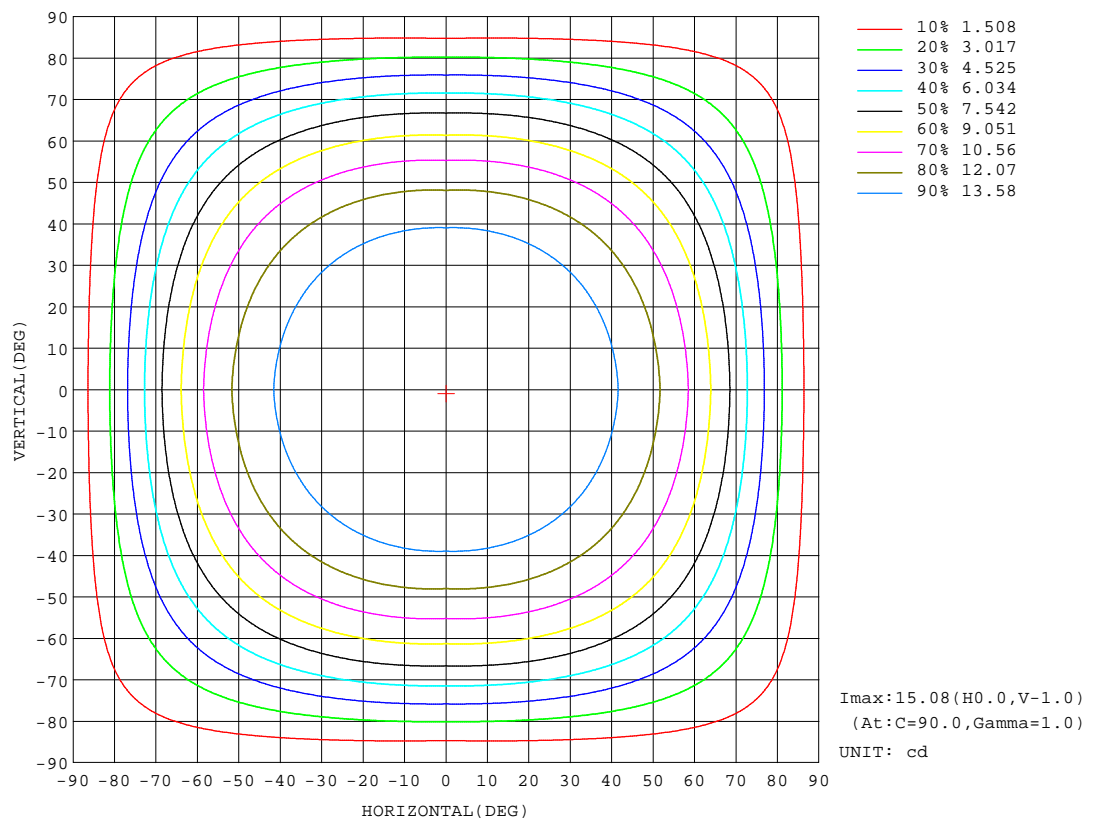
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	54	41	34	53	41	34	52	40	34	27
0.80	64	51	43	62	51	43	61	50	43	35
1.00	72	60	52	71	59	52	68	61	51	44
1.25	79	68	60	78	67	60	75	66	59	51
1.50	85	74	66	83	73	65	80	71	64	56
2.00	92	82	75	90	81	75	86	79	73	65
2.50	96	88	81	94	86	80	90	83	78	69
3.00	100	92	86	98	91	85	93	88	83	74
4.00	104	98	93	102	96	91	97	93	89	79
5.00	107	102	97	105	100	95	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: B

ISOCANDELA DIAGRAM

Test:U:24.00V I:0.1390A P:3.160W PF:1.000 Freq:0Hz Lamp Flux:56.6539x1 lm		
NAME: DA1202408N0	TYPE:	WEIGHT:
SPEC.:DA1202408N0-0RGBNDA012XC0500	DIM.: 1000*8*1.5mm	SERIAL No.:01
MFR.: Colors	SUR.:1000*8	Shielding Angle:



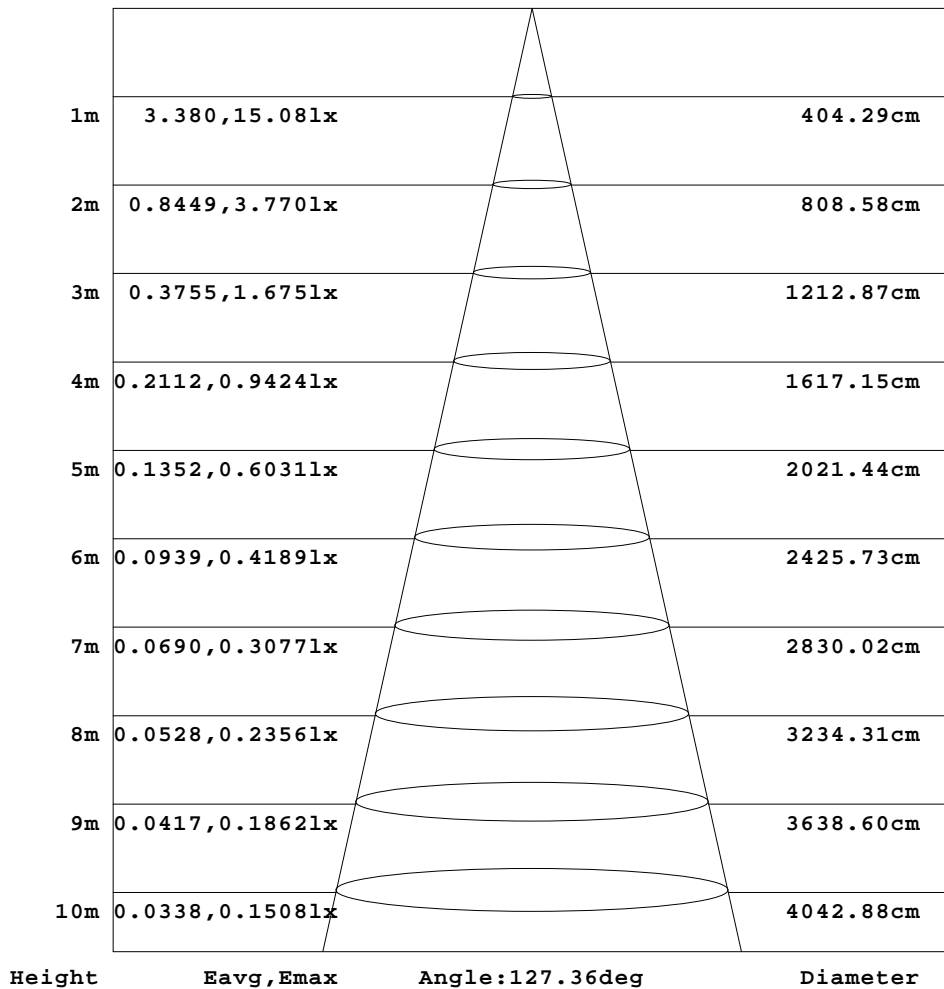
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:COLORS
Test Date:2018-11-02

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: B

AAI Figure

Test:U:24.00V I:0.1390A P:3.160W PF:1.000 Freq:0Hz Lamp Flux:56.6539x1 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:44.63 lm



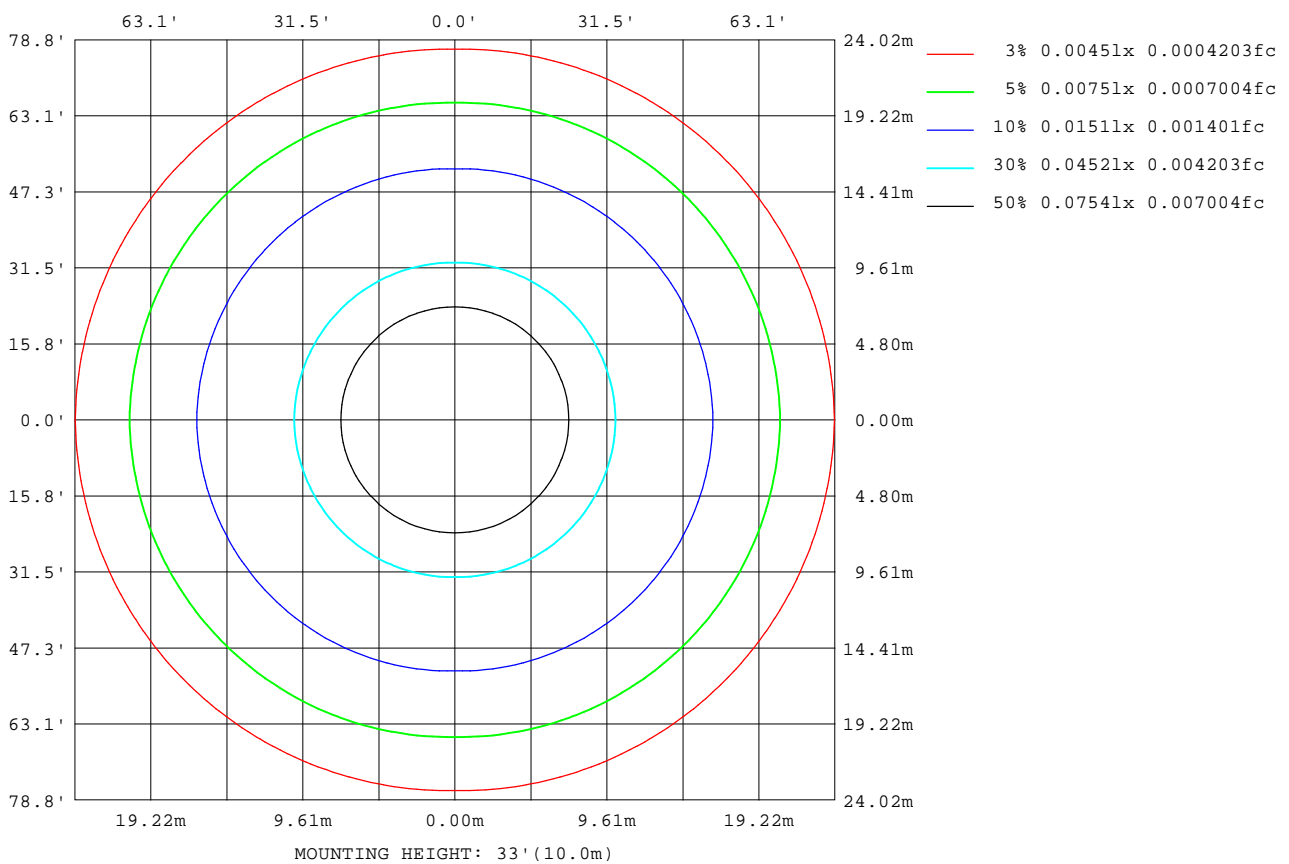
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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: B

ISOLUX DIAGRAM

Test:U:24.00V I:0.1390A P:3.160W PF:1.000 Freq:0Hz Lamp Flux:56.6539x1 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: B

LED Avg.L Report

Test:U:24.00V I:0.1390A P:3.160W PF:1.000 Freq:0Hz Lamp Flux:56.6539x1 lm		
NAME: DA1202408N0	TYPE:	WEIGHT:
SPEC.:DA1202408N0-0RGBNDA012XC0500	DIM.: 1000*8*1.5mm	SERIAL No.:01
MFR.: Colors	SUR.:1000*8	Shielding Angle:

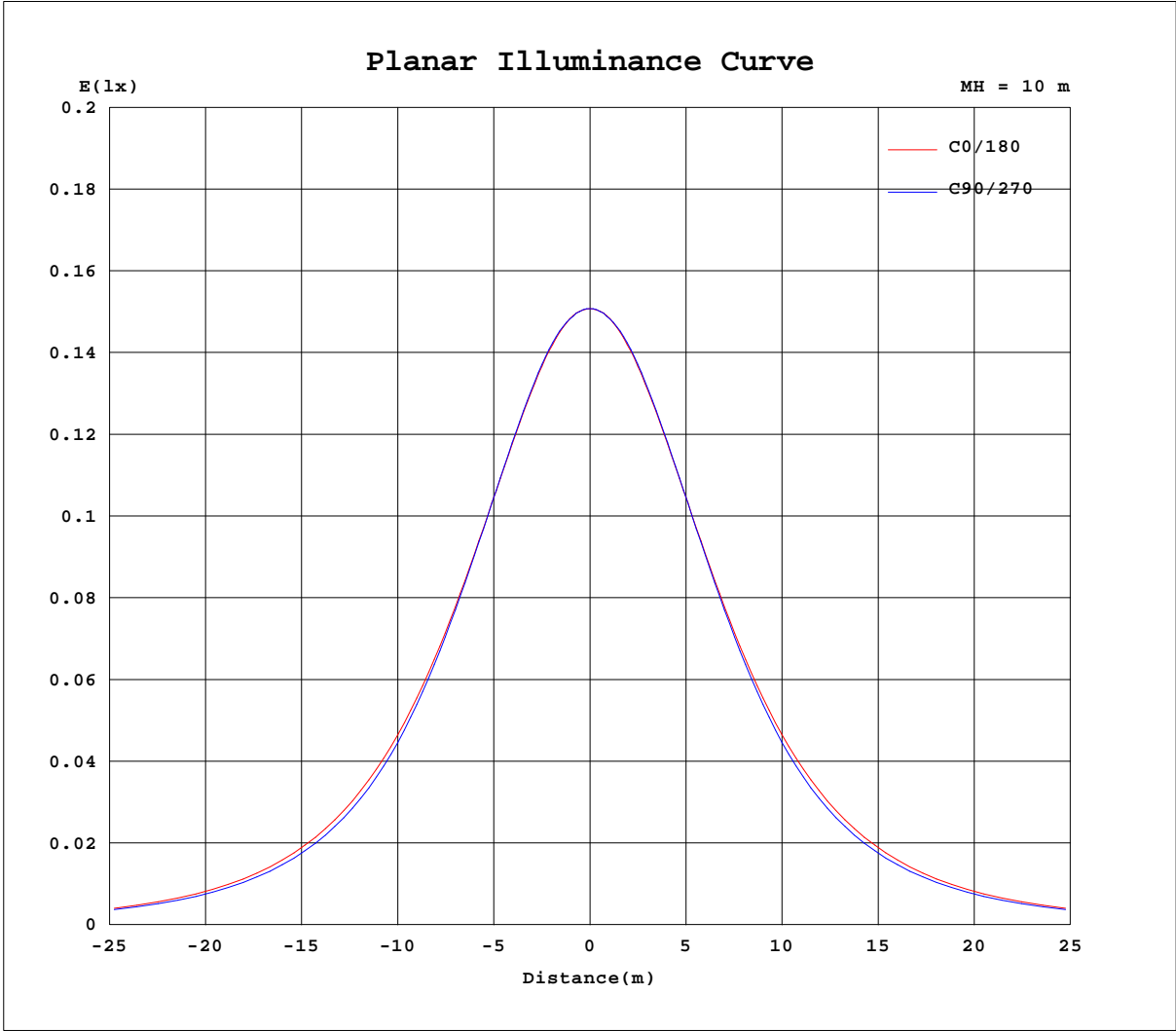
AvgL	cd/m2
L_0~180(65)av	2576
L_0~180(75)av	2519
L_0~180(85)av	2681
L_90~270(65)av	2375
L_90~270(75)av	2330
L_90~270(85)av	2029
L_45(65)av	2450
L_45(75)av	2401
L_45(85)av	2274

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: B

Planar Illuminance Curve



C Range: 0 - 360DEG	C Range: 0 - 180DEG
C Interval: 90.0DEG	C Interval: 1.0DEG
Test Speed: HIGH	Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Temperature:25.3DEG	Humidity:65.0%
Operators:COLORS	Test Distance:7.500m [K=1.0000]
Test Date:2018-11-02	Remarks: B

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:24.00V I:0.1390A P:3.160W PF:1.000 Freq:0Hz Lamp Flux:56.6539x1 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	15.1	15.1	15.1	15.1														
5	15.1	15.1	15.1	15.1														
10	15.0	15.1	15.0	15.1														
15	15.0	15.0	15.0	15.0														
20	14.8	14.9	14.8	14.9														
25	14.7	14.7	14.7	14.7														
30	14.5	14.4	14.5	14.4														
35	14.2	14.0	14.2	14.0														
40	13.7	13.4	13.7	13.4														
45	13.2	12.6	13.2	12.6														
50	12.4	11.7	12.4	11.7														
55	11.4	10.6	11.4	10.6														
60	10.2	9.39	10.2	9.39														
65	8.71	8.03	8.71	8.03														
70	7.03	6.52	7.03	6.52														
75	5.21	4.82	5.21	4.82														
80	3.41	3.06	3.41	3.06														
85	1.87	1.41	1.87	1.41														
90	0.77	0.24	0.77	0.24														
95	0.22	0.00	0.22	0.00														
100	0.00	0.00	0.00	0.00														
105	0.00	0.00	0.00	0.00														
110	0.00	0.00	0.00	0.00														
115	0.00	0.00	0.00	0.00														
120	0.00	0.00	0.00	0.00														
125	0.00	0.00	0.00	0.00														
130	0.00	0.00	0.00	0.00														
135	0.00	0.00	0.00	0.00														
140	0.01	0.01	0.01	0.01														
145	0.01	0.01	0.01	0.01														
150	0.01	0.01	0.01	0.01														
155	0.01	0.01	0.01	0.01														
160	0.01	0.01	0.01	0.01														
165	0.01	0.01	0.01	0.01														
170	0.01	0.01	0.01	0.01														
175	0.01	0.02	0.01	0.02														
180	0.01	0.03	0.01	0.03														

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: B