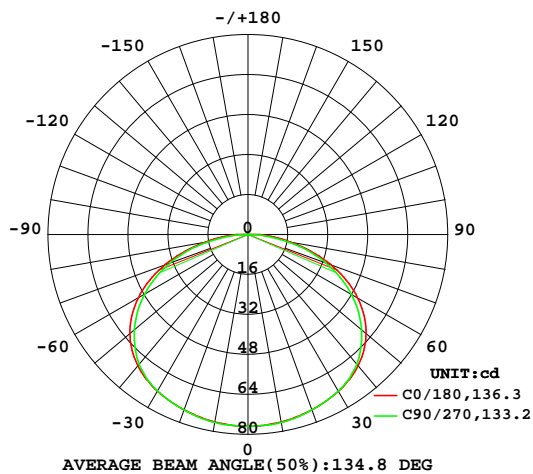


## LUMINAIRE PHOTOMETRIC TEST REPORT

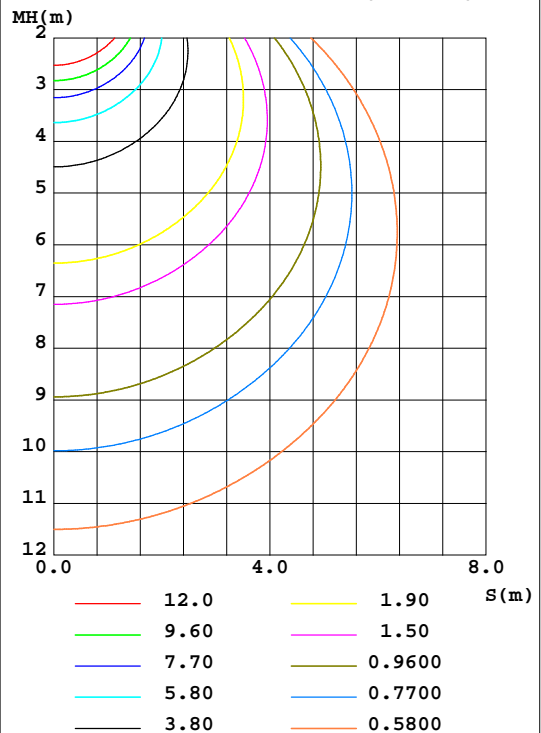
Test:U:24.00V I:0.1390A P:3.330W PF:1.000 Freq:0Hz Lamp Flux:286.094x1 lm		
NAME: DA1202408N0	TYPE:	WEIGHT:
SPEC.:DA1202408N0-0RGBNDA012XC0500	DIM.: 1000*8*1.5mm	SERIAL No.:01
MFR.: Colors	SUR.:1000*8	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 85.91 lm/W			
MODEL	DA1202408N0	I <sub>max</sub> (cd)	76.76	S/MH(C0/180)	1.42
NOMINAL POWER(W)	4	LOR(%)	100.0	S/MH(C90/270)	1.42
RATED VOLTAGE(V)	24	TOTAL FLUX(lm)	286.09	h UP,DN(C0-180)	0.4,49.6
NOMINAL FLUX(lm)	286.094	CIE CLASS	DIRECT	h UP,DN(C180-360)	0.4,49.6
LAMPS INSIDE	1	h up(%)	0.8	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	24	h down(%)	99.2	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: G

## ZONAL FLUX DIAGRAM

### ZONAL FLUX DIAGRAM:

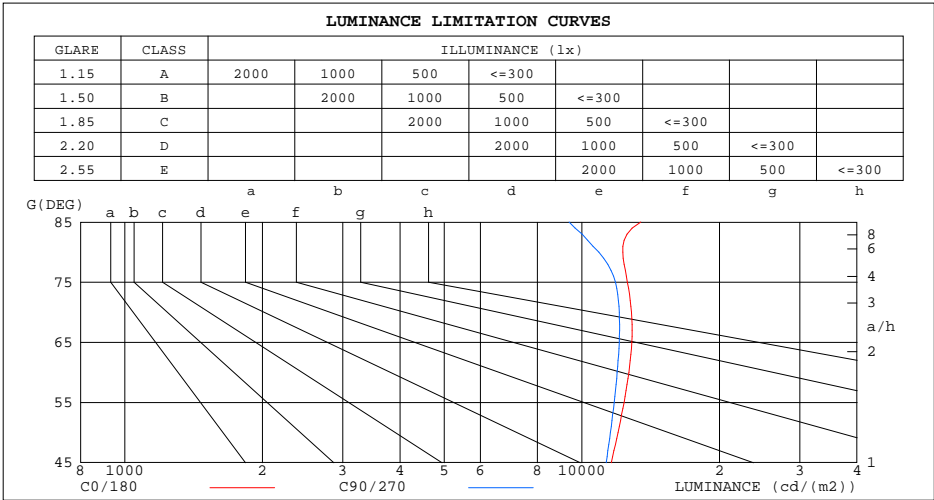
g	C0	C90	C180	C270					g	F zone	F total	%lum,lamp
10	76.20	76.40	76.20	76.40					0~ 10	7.305	7.305	2.55,2.55
20	74.69	74.74	74.69	74.74					10~ 20	21.40	28.70	10,10
30	72.45	72.34	72.45	72.34					20~ 30	34.04	62.75	21.9,21.9
40	68.59	67.79	68.59	67.79					30~ 40	44.26	107.0	37.4,37.4
50	61.70	59.39	61.70	59.39					40~ 50	49.99	157.0	54.9,54.9
60	50.69	47.80	50.69	47.80					50~ 60	49.43	206.4	72.2,72.2
70	35.16	33.05	35.16	33.05					60~ 70	41.58	248.0	86.7,86.7
80	17.08	15.14	17.08	15.14					70~ 80	26.60	274.6	96,96
90	3.979	0.8645	3.979	0.8645					80~ 90	9.139	283.7	99.2,99.2
100	0.2509	0.1379	0.2509	0.1379					90~100	0.9484	284.7	99.5,99.5
110	0.1990	0.1630	0.1990	0.1630					100~110	0.1756	284.9	99.6,99.6
120	0.2429	0.2225	0.2429	0.2225					110~120	0.2062	285.1	99.6,99.6
130	0.2758	0.2773	0.2758	0.2773					120~130	0.2274	285.3	99.7,99.7
140	0.3165	0.3165	0.3165	0.3165					130~140	0.2308	285.5	99.8,99.8
150	0.3588	0.4011	0.3588	0.4011					140~150	0.2219	285.8	99.9,99.9
160	0.3948	0.4183	0.3948	0.4183					150~160	0.1831	285.9	99.9,99.9
170	0.4042	0.4371	0.4042	0.4371					160~170	0.1170	286.1	100,100
180	0.4105	0.4418	0.4105	0.4418					170~180	0.0404	286.1	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: G

LUMINANCE LIMITATION CURVES

Test:U:24.00V I:0.1390A P:3.330W PF:1.000 Freq:0Hz Lamp Flux:286.094x1 lm		
NAME: DA1202408N0	TYPE:	WEIGHT:
SPEC.:DA1202408N0-0RGBNDA012XC0500	DIM.: 1000*8*1.5mm	SERIAL No.:01
MFR.: Colors	SUR.:1000*8	Shielding Angle:



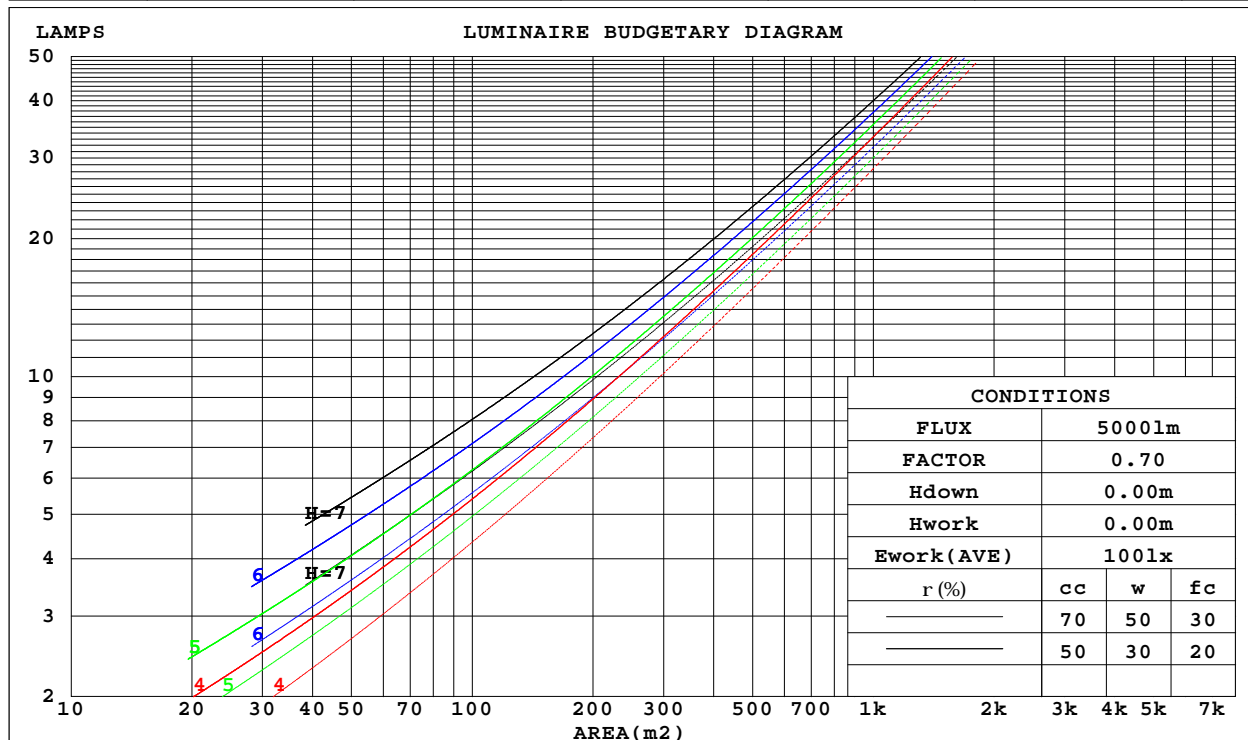
C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:COLORS  
Test Date:2018-11-02

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: G

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:24.00V I:0.1390A P:3.330W PF:1.000 Freq:0Hz Lamp Flux:286.094x1 lm		
NAME: DA1202408N0	TYPE:	WEIGHT:
SPEC.:DA1202408N0-0RGBNDA012XC0500	DIM.: 1000*8*1.5mm	SERIAL No.:01
MFR.: Colors	SUR.:1000*8	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: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: G

## WEC AND CCEC

Test:U:24.00V I:0.1390A P:3.330W PF:1.000 Freq:0Hz Lamp Flux:286.094x1 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	.345	.196	.062	.337	.192	.061	.323	.186	.059	.311	.179	.057	.299	.173	.056	
2.0	.318	.174	.053	.312	.172	.053	.299	.166	.052	.288	.161	.051	.277	.157	.049	
3.0	.291	.155	.046	.285	.153	.046	.274	.148	.045	.264	.144	.044	.254	.141	.044	
4.0	.266	.138	.041	.261	.136	.040	.251	.133	.040	.242	.130	.039	.233	.127	.039	
5.0	.244	.124	.036	.239	.123	.036	.231	.120	.035	.222	.117	.035	.215	.115	.034	
6.0	.225	.113	.032	.221	.111	.032	.213	.109	.032	.206	.107	.031	.199	.105	.031	
7.0	.208	.103	.029	.204	.102	.029	.198	.100	.029	.191	.098	.028	.185	.096	.028	
8.0	.194	.095	.027	.190	.094	.026	.184	.092	.026	.178	.090	.026	.173	.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	.081	.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	.168	.168	.168	.115	.115	.115	.066	.066	.066	.021	.021	.021		
1.0	.189	.162	.138	.162	.139	.119	.111	.096	.082	.064	.055	.048	.020	.018	.015		
2.0	.182	.138	.101	.156	.119	.087	.107	.082	.061	.062	.048	.036	.020	.015	.012		
3.0	.175	.121	.078	.150	.104	.067	.103	.072	.047	.059	.042	.028	.019	.014	.009		
4.0	.167	.108	.062	.144	.093	.054	.099	.065	.038	.057	.038	.023	.018	.012	.007		
5.0	.160	.098	.052	.137	.084	.045	.095	.059	.032	.055	.035	.019	.018	.011	.006		
6.0	.152	.089	.044	.131	.077	.038	.090	.054	.027	.052	.032	.016	.017	.010	.005		
7.0	.145	.082	.038	.125	.072	.033	.086	.050	.024	.050	.030	.014	.016	.010	.005		
8.0	.139	.077	.034	.119	.067	.030	.083	.047	.021	.048	.028	.013	.016	.009	.004		
9.0	.132	.072	.031	.114	.062	.027	.079	.044	.019	.046	.026	.011	.015	.008	.004		
10.0	.126	.068	.028	.109	.059	.025	.076	.041	.018	.044	.024	.010	.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: G

UGR(Unified Glare Rating) Table

Test:U:24.00V I:0.1390A P:3.330W PF:1.000 Freq:0Hz Lamp Flux:286.094x1 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	29.4	28.2	29.6	29.9
	4H	28.9	30.4	29.3	30.6	30.9	28.7	30.1	29.0	30.3	30.6
	6H	29.6	30.9	29.9	31.2	31.5	29.2	30.6	29.6	30.9	31.2
	8H	29.8	31.1	30.2	31.4	31.7	29.4	30.7	29.8	31.0	31.3
	12H	30.0	31.3	30.4	31.6	31.9	29.5	30.8	29.9	31.1	31.4
4H	2H	26.9	28.3	27.3	28.6	28.9	26.8	28.2	27.1	28.5	28.7
	3H	29.0	30.3	29.4	30.6	30.9	28.8	30.1	29.2	30.4	30.7
	4H	29.9	31.1	30.3	31.4	31.8	29.7	30.9	30.1	31.2	31.6
	6H	30.7	31.7	31.1	32.1	32.5	30.4	31.5	30.8	31.8	32.2
	8H	31.0	32.0	31.5	32.4	32.8	30.7	31.6	31.1	32.0	32.4
	12H	31.3	32.2	31.7	32.6	33.0	30.8	31.7	31.3	32.1	32.5
8H	4H	30.3	31.2	30.7	31.6	32.0	30.1	31.0	30.5	31.4	31.8
	6H	31.2	32.0	31.7	32.4	32.9	31.0	31.8	31.4	32.2	32.6
	8H	31.6	32.3	32.1	32.8	33.3	31.3	32.0	31.8	32.5	32.9
	12H	32.0	32.6	32.5	33.1	33.6	31.6	32.2	32.1	32.6	33.1
12H	4H	30.3	31.2	30.7	31.6	32.0	30.1	31.0	30.6	31.4	31.8
	6H	31.3	32.0	31.8	32.5	32.9	31.1	31.8	31.5	32.2	32.7
	8H	31.8	32.4	32.3	32.8	33.3	31.5	32.1	31.9	32.5	33.0
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	+ 0.2 / - 0.4					+ 0.1 / - 0.4					

CIE Pub.117, 286.1 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -4.3)

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: G

### UTILIZATION FACTORS TABLE

Test:U:24.00V I:0.1390A P:3.330W PF:1.000 Freq:0Hz Lamp Flux:286.094x1 lm		
NAME: DA1202408N0	TYPE:	WEIGHT:
SPEC.:DA1202408N0-0RGBNDA012XC0500	DIM.: 1000*8*1.5mm	SERIAL No.:01
MFR.: Colors	SUR.:1000*8	Shielding Angle:

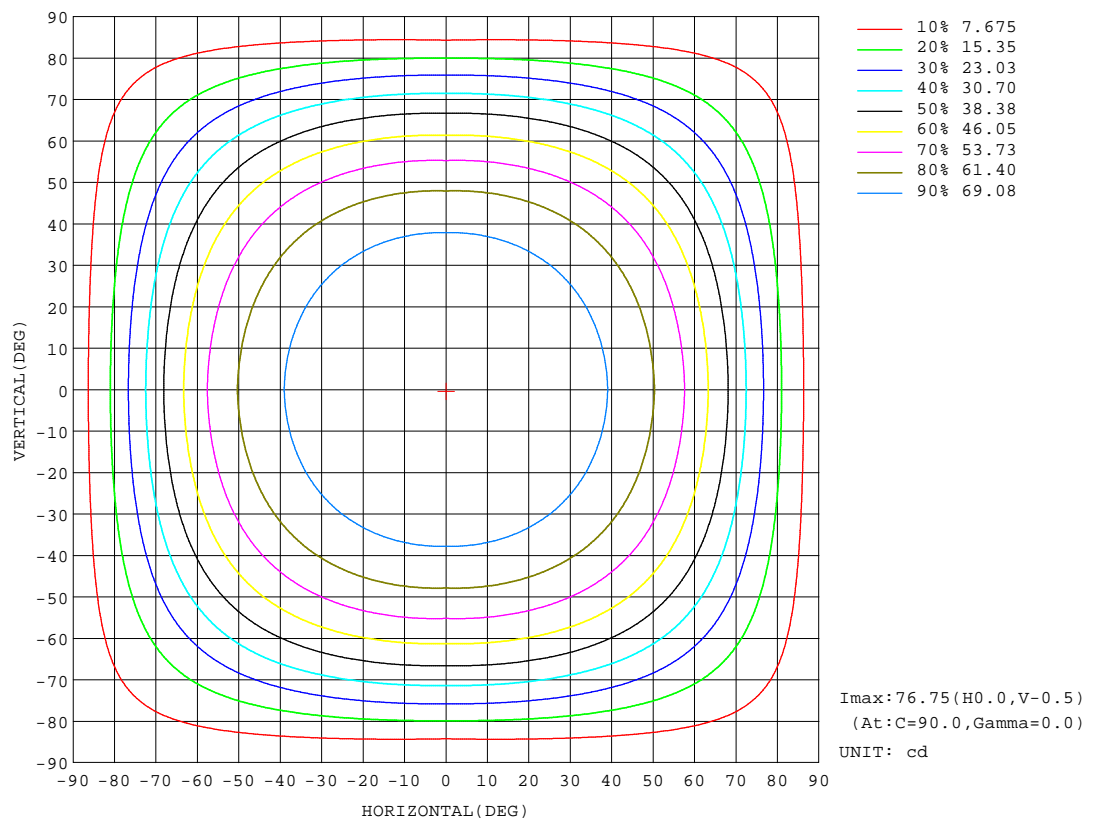
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	53	41	34	53	41	34	51	40	33	27
0.80	63	51	43	62	50	43	60	50	42	35
1.00	72	60	52	71	59	52	68	61	51	43
1.25	79	68	60	78	67	59	75	65	59	51
1.50	84	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	73
4.00	104	98	93	102	96	91	97	92	88	79
5.00	107	102	97	104	99	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: G

## ISOCANDELA DIAGRAM

Test:U:24.00V I:0.1390A P:3.330W PF:1.000 Freq:0Hz Lamp Flux:286.094x1 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

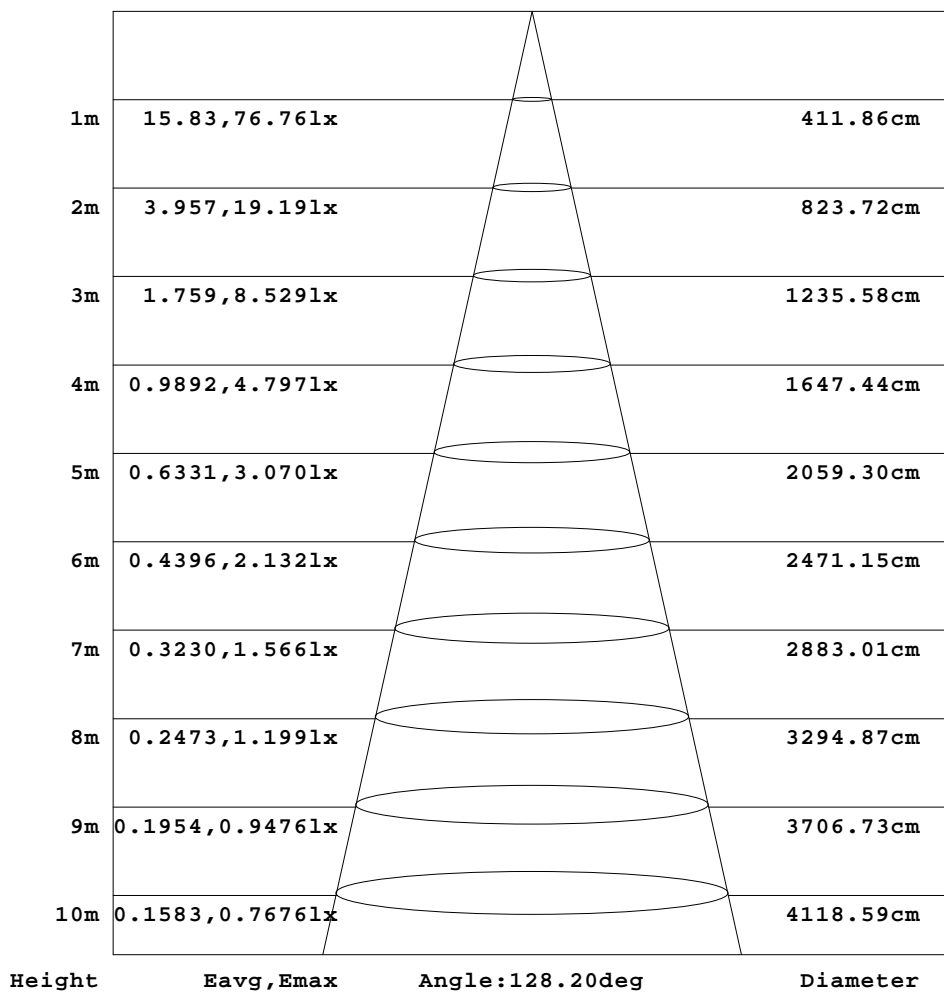
deg Range: 0 - 180DEG  
Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:7.500m [K=1.0000]  
Remarks: G



### AAI Figure

Test:U:24.00V I:0.1390A P:3.330W PF:1.000 Freq:0Hz Lamp Flux:286.094x1 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:228.7 lm



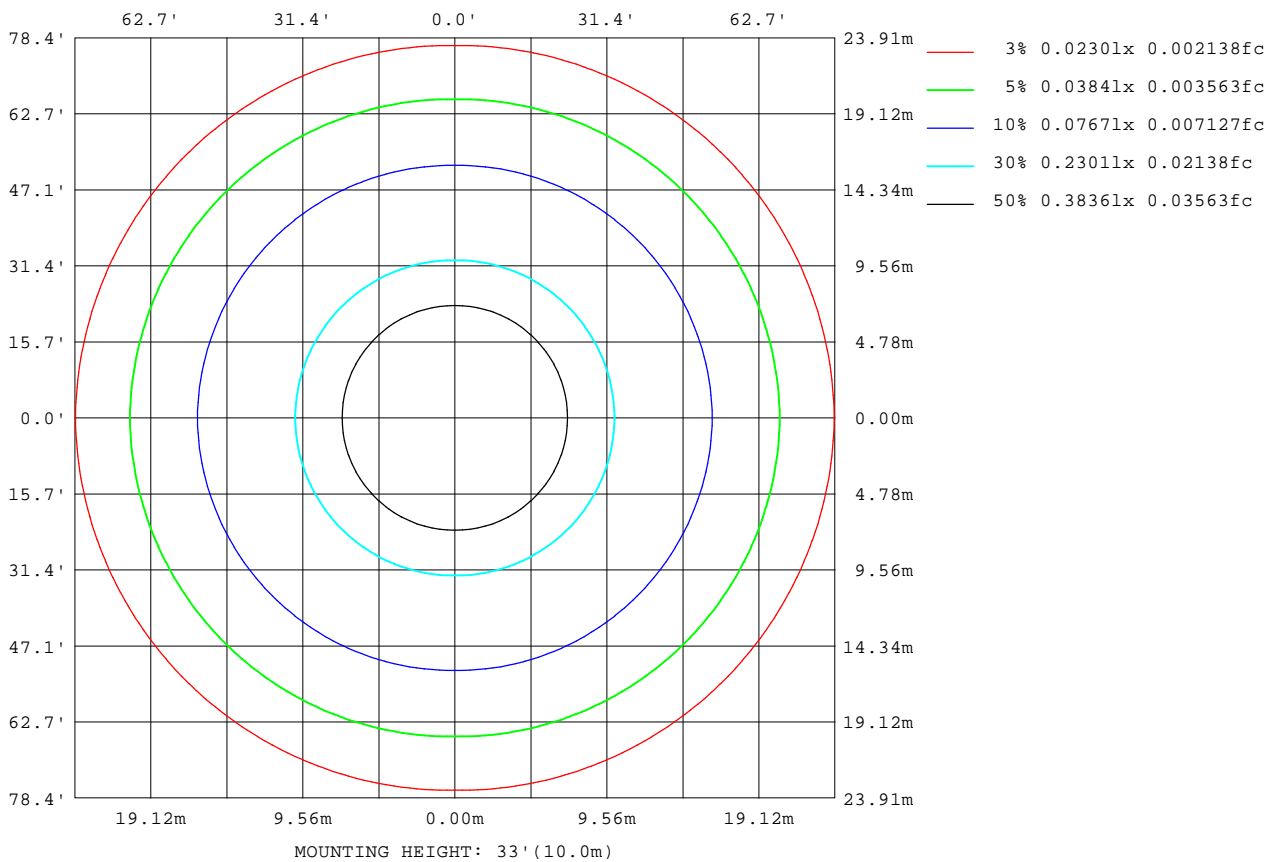
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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: G

# ISOLUX DIAGRAM

Test:U:24.00V I:0.1390A P:3.330W PF:1.000 Freq:0Hz Lamp Flux:286.094x1 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: G

## LED Avg.L Report

Test:U:24.00V I:0.1390A P:3.330W PF:1.000 Freq:0Hz Lamp Flux:286.094x1 lm		
NAME: DA1202408N0	TYPE:	WEIGHT:
SPEC.:DA1202408N0-0RGBNDA012XC0500	DIM.: 1000*8*1.5mm	SERIAL No.:01
MFR.: Colors	SUR.:1000*8	Shielding Angle:

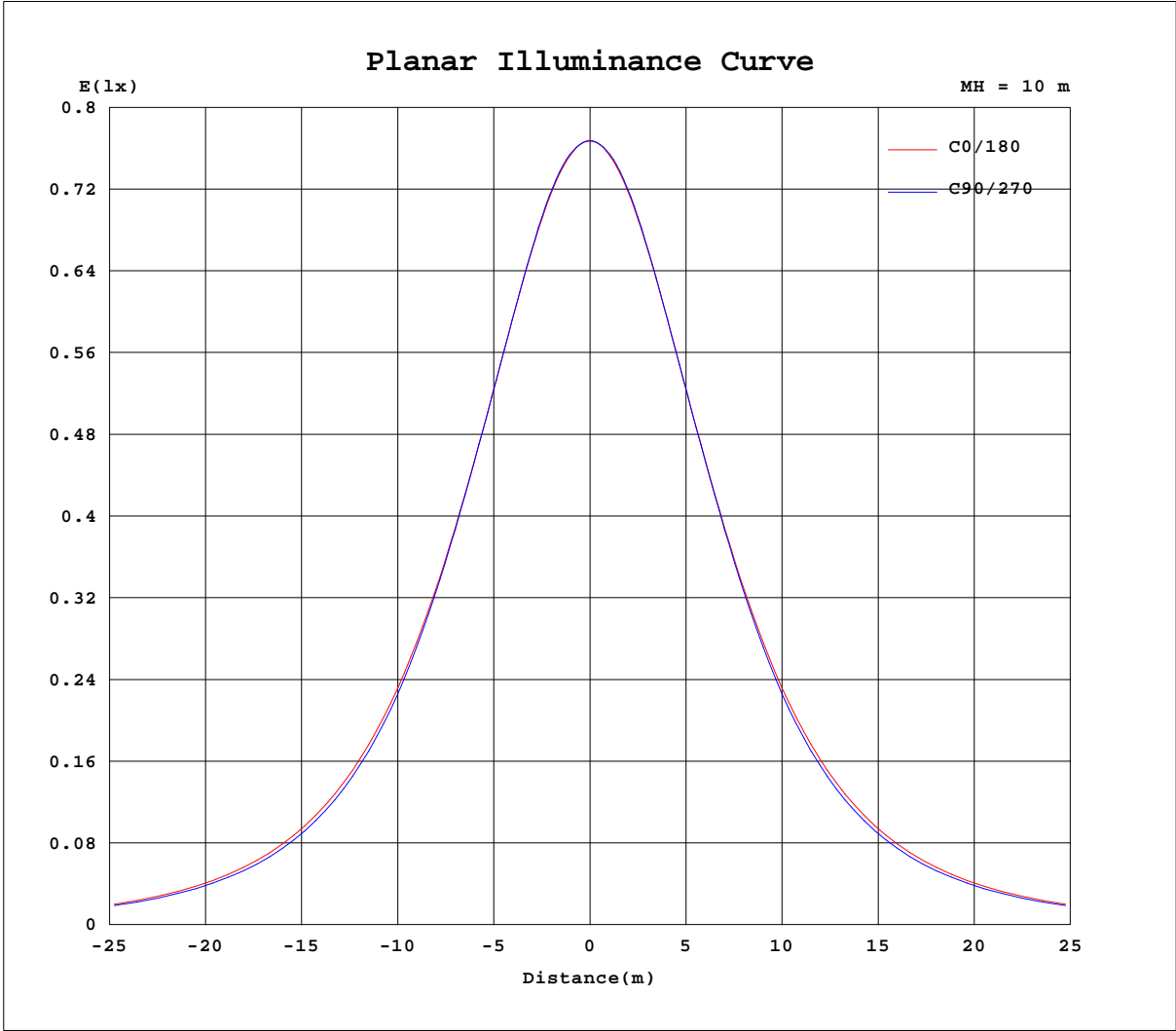
AvgL	cd/m2
L_0~180(65)av	12860
L_0~180(75)av	12585
L_0~180(85)av	13461
L_90~270(65)av	12072
L_90~270(75)av	11844
L_90~270(85)av	9373
L_45(65)av	12367
L_45(75)av	12122
L_45(85)av	10906

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: G

Planar Illuminance Curve



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: G

## LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:24.00V I:0.1390A P:3.330W PF:1.000 Freq:0Hz Lamp Flux:286.094x1 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	76.7	76.8	76.7	76.8															
5	76.6	76.7	76.6	76.7															
10	76.2	76.4	76.2	76.4															
15	75.5	75.7	75.5	75.7															
20	74.7	74.7	74.7	74.7															
25	73.7	73.6	73.7	73.6															
30	72.4	72.3	72.4	72.3															
35	70.8	70.5	70.8	70.5															
40	68.6	67.8	68.6	67.8															
45	65.6	64.0	65.6	64.0															
50	61.7	59.4	61.7	59.4															
55	56.8	54.0	56.8	54.0															
60	50.7	47.8	50.7	47.8															
65	43.5	40.8	43.5	40.8															
70	35.2	33.1	35.2	33.1															
75	26.1	24.5	26.1	24.5															
80	17.1	15.1	17.1	15.1															
85	9.39	6.53	9.39	6.53															
90	3.98	0.86	3.98	0.86															
95	1.26	0.10	1.26	0.10															
100	0.25	0.14	0.25	0.14															
105	0.18	0.14	0.18	0.14															
110	0.20	0.16	0.20	0.16															
115	0.22	0.20	0.22	0.20															
120	0.24	0.22	0.24	0.22															
125	0.26	0.24	0.26	0.24															
130	0.28	0.28	0.28	0.28															
135	0.30	0.30	0.30	0.30															
140	0.32	0.32	0.32	0.32															
145	0.34	0.39	0.34	0.39															
150	0.36	0.40	0.36	0.40															
155	0.39	0.41	0.39	0.41															
160	0.39	0.42	0.39	0.42															
165	0.40	0.43	0.40	0.43															
170	0.40	0.44	0.40	0.44															
175	0.41	0.44	0.41	0.44															
180	0.41	0.44	0.41	0.44															

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: G