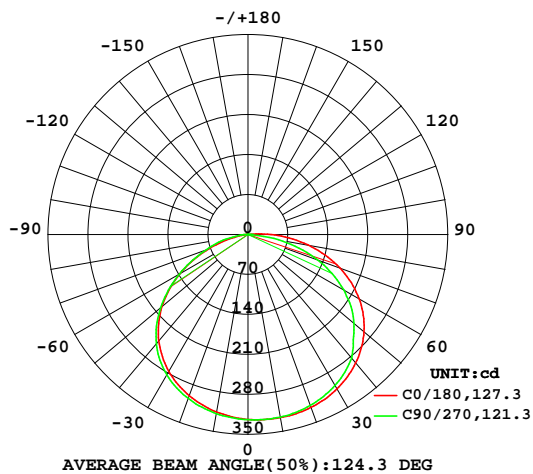


LUMINAIRE PHOTOMETRIC TEST REPORT

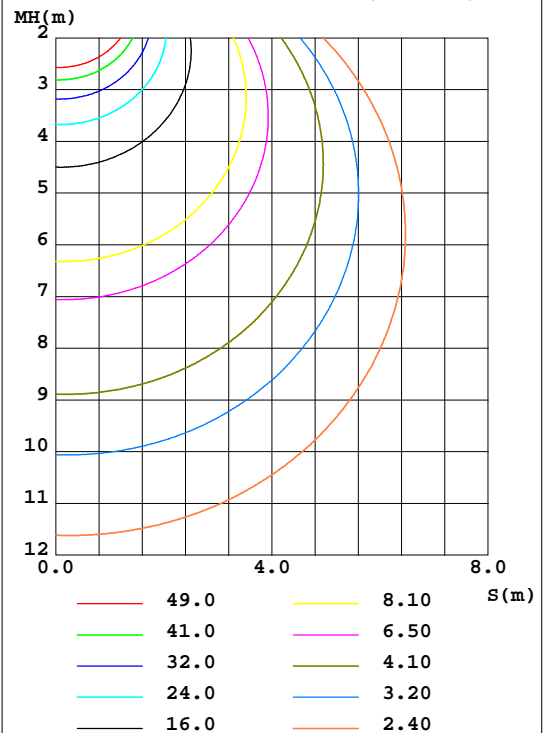
Test:U:24.00V I:0.8210A P:19.70W PF:0.9794 Freq:0Hz Lamp Flux:1077.79x1 lm		
NAME: DA6962412NO	TYPE:	WEIGHT:
SPEC.:DA6962412NO-0RGBSWWDA012WC0500	DIM.: 1000*12*1.5mm	SERIAL No.:01
MFR.: Colors	SUR.:1000*12	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 54.71 lm/W			
MODEL	DA6962412NO	I _{max} (cd)	325.7	S/MH(C0/180)	1.27
NOMINAL POWER(W)	19.2	LOR(%)	100.0	S/MH(C90/270)	1.30
RATED VOLTAGE(V)	24	TOTAL FLUX(lm)	1077.8	h UP,DN(C0-180)	0.7,56.8
NOMINAL FLUX(lm)	1077.79	CIE CLASS	DIRECT	h UP,DN(C180-360)	0.4,42.1
LAMPS INSIDE	1	h up(%)	1.1	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	24	h down(%)	98.9	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:2018-11-30

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:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

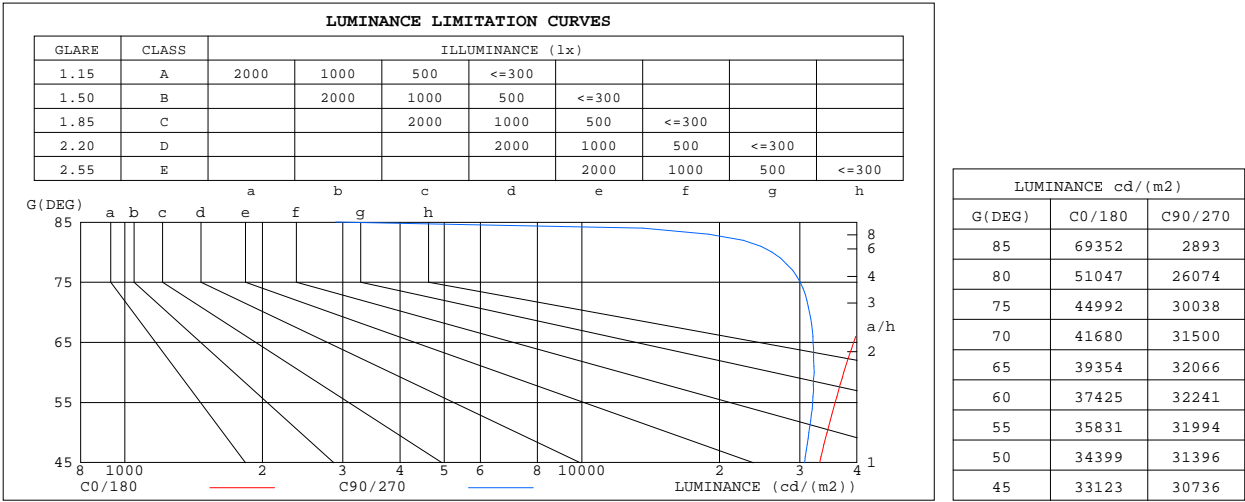
g	C0	C90	C180	C270					g	F zone	F total	%lum,lamp
10	325.6	324.7	315.6	318.5					0~ 10	30.79	30.79	2.86,2.86
20	322.2	318.5	300.5	305.7					10~ 20	89.72	120.5	11.2,11.2
30	311.9	305.1	277.1	284.2					20~ 30	140.4	260.9	24.2,24.2
40	293.6	282.5	243.2	249.6					30~ 40	176.7	437.6	40.6,40.6
50	265.3	242.2	196.7	199.8					40~ 50	191.1	628.7	58.3,58.3
60	224.6	193.4	137.8	138.9					50~ 60	179.7	808.4	75,75
70	171.1	129.3	71.77	77.43					60~ 70	141.9	950.3	88.2,88.2
80	106.4	54.33	15.69	26.99					70~ 80	86.11	1036	96.2,96.2
90	40.55	3.780	1.419	3.292					80~ 90	29.68	1066	98.9,98.9
100	1.470	0.4703	0.8777	0.7300					90~100	5.217	1071	99.4,99.4
110	0.6799	0.7052	1.125	0.9493					100~110	0.8156	1072	99.5,99.5
120	0.9337	0.9464	1.357	1.206					110~120	0.9820	1073	99.6,99.6
130	1.184	1.197	1.545	1.401					120~130	1.098	1074	99.7,99.7
140	1.400	1.394	1.695	1.585					130~140	1.102	1075	99.8,99.8
150	1.542	1.583	1.808	1.752					140~150	1.002	1076	99.9,99.9
160	1.689	1.711	1.902	1.808					150~160	0.7985	1077	99.9,99.9
170	1.805	1.789	1.940	1.843					160~170	0.5145	1078	100,100
180	1.949	1.868	1.952	1.846					170~180	0.1783	1078	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:2018-11-30

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:

LUMINANCE LIMITATION CURVES

Test:U:24.00V I:0.8210A P:19.70W PF:0.9794 Freq:0Hz Lamp Flux:1077.79x1 lm		
NAME: DA6962412NO	TYPE:	WEIGHT:
SPEC.:DA6962412NO-0RGBSWWDA012WC0500	DIM.: 1000*12*1.5mm	SERIAL No.:01
MFR.: Colors	SUR.:1000*12	Shielding Angle:



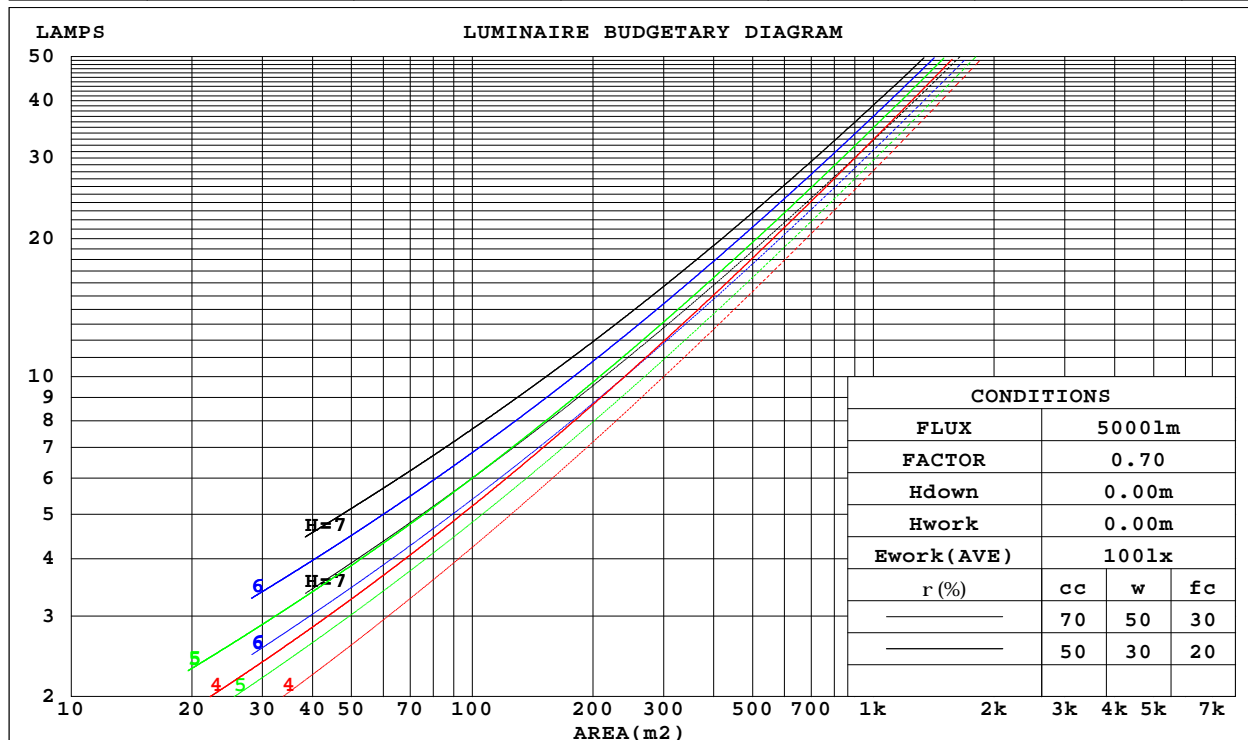
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:COLORS
Test Date:2018-11-30

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:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:24.00V I:0.8210A P:19.70W PF:0.9794 Freq:0Hz Lamp Flux:1077.79x1 lm		
NAME: DA6962412NO	TYPE:	WEIGHT:
SPEC.:DA6962412NO-0RGBSWWDA012WC0500	DIM.: 1000*12*1.5mm	SERIAL No.:01
MFR.: Colors	SUR.:1000*12	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:2018-11-30

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:

WEC AND CCEC

Test:U:24.00V I:0.8210A P:19.70W PF:0.9794 Freq:0Hz Lamp Flux:1077.79x1 lm		
NAME: DA6962412NO	TYPE:	WEIGHT:
SPEC.:DA6962412NO-0RGBSWWDA012WC0500	DIM.: 1000*12*1.5mm	SERIAL No.:01
MFR.: Colors	SUR.:1000*12	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															

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	.199	.199	.199	.170	.170	.170	.116	.116	.116	.067	.067	.067	.021	.021	.021	
1.0	.190	.164	.141	.163	.141	.122	.111	.097	.084	.064	.056	.049	.020	.018	.016	
2.0	.182	.140	.105	.156	.121	.091	.107	.084	.063	.062	.049	.037	.020	.016	.012	
3.0	.175	.123	.081	.150	.106	.070	.103	.074	.049	.059	.043	.029	.019	.014	.010	
4.0	.167	.110	.066	.144	.095	.057	.099	.066	.040	.057	.039	.024	.018	.013	.008	
5.0	.160	.099	.055	.137	.086	.048	.095	.060	.034	.055	.035	.020	.018	.012	.007	
6.0	.153	.091	.047	.131	.079	.041	.091	.055	.029	.053	.032	.017	.017	.011	.006	
7.0	.146	.084	.041	.125	.073	.036	.087	.051	.025	.050	.030	.015	.016	.010	.005	
8.0	.139	.078	.037	.120	.068	.032	.083	.048	.023	.048	.028	.014	.016	.009	.004	
9.0	.133	.074	.033	.115	.064	.029	.079	.045	.021	.046	.026	.012	.015	.009	.004	
10.0	.127	.069	.031	.110	.060	.027	.076	.042	.019	.044	.025	.011	.014	.008	.004	

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:COLORS
Test Date:2018-11-30

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:

UGR(Unified Glare Rating) Table

Test:U:24.00V I:0.8210A P:19.70W PF:0.9794 Freq:0Hz Lamp Flux:1077.79x1 lm											
NAME: DA6962412NO					TYPE:			WEIGHT:			
SPEC.:DA6962412NO-0RGBSWWDA012WC0500					DIM.: 1000*12*1.5mm			SERIAL No.:01			
MFR.: Colors					SUR.:1000*12			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	25.8	27.3	26.1	27.6	27.8	25.2	26.8	25.5	27.0	27.2	
	3H	28.0	29.4	28.3	29.6	29.9	27.0	28.5	27.4	28.7	29.0
	4H	29.0	30.4	29.3	30.6	30.9	27.8	29.2	28.1	29.4	29.7
	6H	30.0	31.3	30.3	31.6	31.9	28.3	29.6	28.6	29.9	30.2
	8H	30.4	31.7	30.8	32.0	32.3	28.4	29.7	28.8	30.0	30.3
	12H	30.9	32.1	31.3	32.4	32.7	28.4	29.6	28.8	29.9	30.3
4H	2H	26.5	27.8	26.8	28.1	28.4	26.1	27.4	26.4	27.7	28.0
	3H	28.8	30.0	29.2	30.3	30.7	28.1	29.3	28.4	29.6	29.9
	4H	30.0	31.1	30.4	31.5	31.8	29.0	30.1	29.4	30.4	30.8
	6H	31.1	32.1	31.6	32.5	32.9	29.6	30.6	30.0	31.0	31.4
	8H	31.7	32.6	32.1	33.0	33.4	29.8	30.7	30.2	31.1	31.5
	12H	32.2	33.1	32.7	33.5	33.9	29.8	30.7	30.3	31.1	31.5
8H	4H	30.3	31.3	30.8	31.7	32.1	29.4	30.4	29.9	30.7	31.2
	6H	31.7	32.4	32.1	32.9	33.3	30.3	31.1	30.8	31.5	31.9
	8H	32.4	33.0	32.8	33.5	34.0	30.6	31.3	31.1	31.7	32.2
	12H	33.0	33.6	33.5	34.1	34.6	30.7	31.3	31.2	31.7	32.2
12H	4H	30.4	31.2	30.8	31.6	32.0	29.5	30.4	30.0	30.8	31.2
	6H	31.8	32.4	32.2	32.9	33.4	30.5	31.1	30.9	31.6	32.1
	8H	32.5	33.1	33.0	33.6	34.1	30.8	31.4	31.3	31.9	32.4
Variations with the observer position at spacings:											
S = 1.0H	+ 0.1 / - 0.1					+ 0.1 / - 0.2					
1.5H	+ 0.2 / - 0.2					+ 0.2 / - 0.3					
2.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.4					

CIE Pub.117, 1078 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = 0.3$)

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:COLORS
Test Date:2018-11-30

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:

UTILIZATION FACTORS TABLE

Test:U:24.00V I:0.8210A P:19.70W PF:0.9794 Freq:0Hz Lamp Flux:1077.79x1 lm		
NAME: DA6962412NO	TYPE:	WEIGHT:
SPEC.:DA6962412NO-0RGBSWWDA012WC0500	DIM.: 1000*12*1.5mm	SERIAL No.:01
MFR.: Colors	SUR.:1000*12	Shielding Angle:

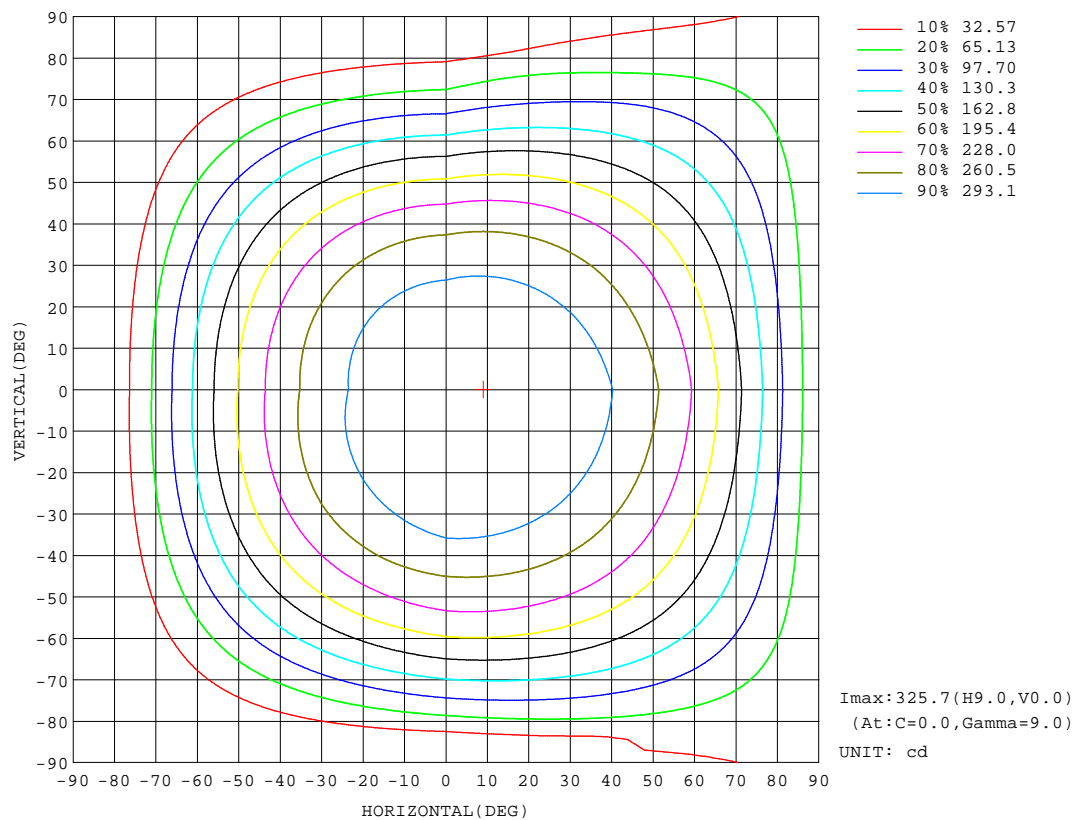
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	55	43	36	54	43	36	53	42	36	29
0.80	65	53	45	64	53	45	62	52	45	38
1.00	74	62	54	72	61	54	70	63	54	46
1.25	81	70	62	79	69	62	76	68	61	53
1.50	86	76	68	84	75	68	81	73	67	59
2.00	93	84	77	91	83	76	87	80	75	67
2.50	97	89	83	95	88	82	91	85	80	71
3.00	101	93	88	98	92	86	94	89	84	75
4.00	105	99	94	102	97	92	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:2018-11-30

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:

ISOCANDELA DIAGRAM

Test:U:24.00V I:0.8210A P:19.70W PF:0.9794 Freq:0Hz Lamp Flux:1077.79x1 lm		
NAME: DA6962412NO	TYPE:	WEIGHT:
SPEC.:DA6962412NO-0RGBSWWDA012WC0500	DIM.: 1000*12*1.5mm	SERIAL No.:01
MFR.: Colors	SUR.:1000*12	Shielding Angle:



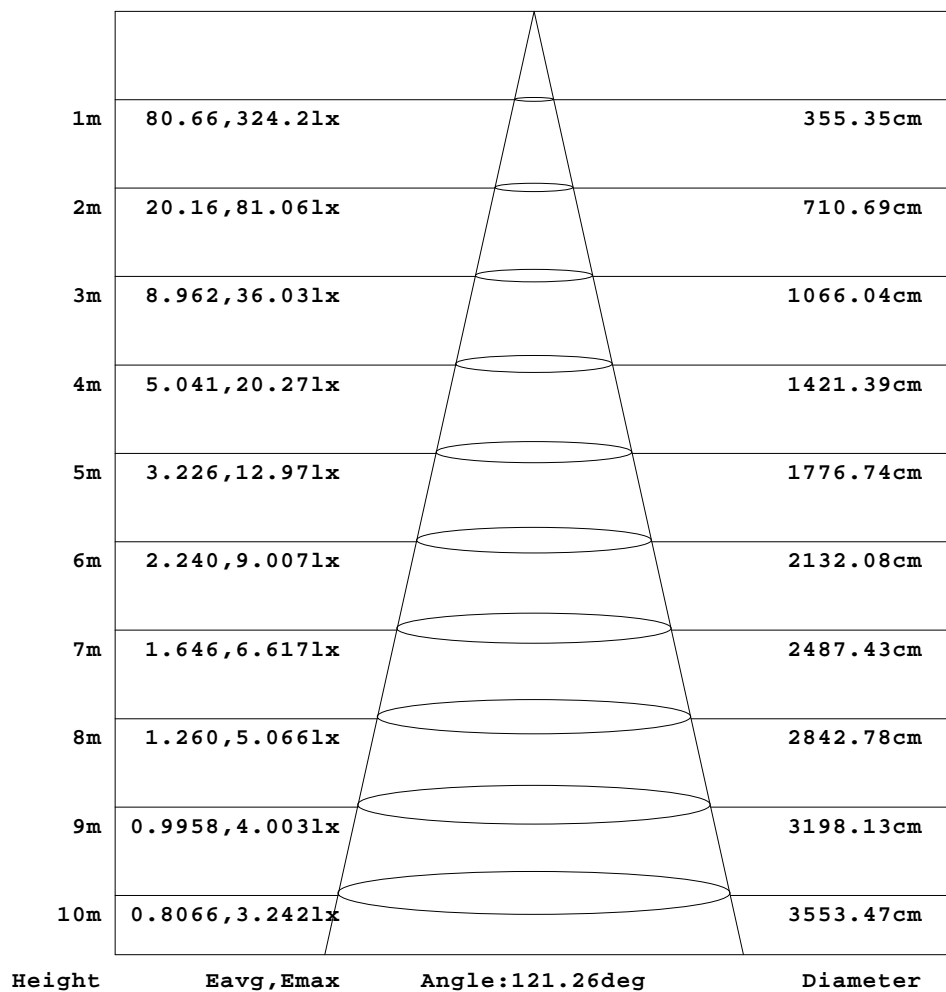
C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: COLORS
Test Date: 2018-11-30

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:

AAI Figure

Test:U:24.00V I:0.8210A P:19.70W PF:0.9794 Freq:0Hz Lamp Flux:1077.79x1 lm		
NAME: DA6962412NO	TYPE:	WEIGHT:
SPEC.:DA6962412NO-0RGBSWWDA012WC0500	DIM.: 1000*12*1.5mm	SERIAL No.:01
MFR.: Colors	SUR.:1000*12	Shielding Angle:

Flux out:824.7 lm



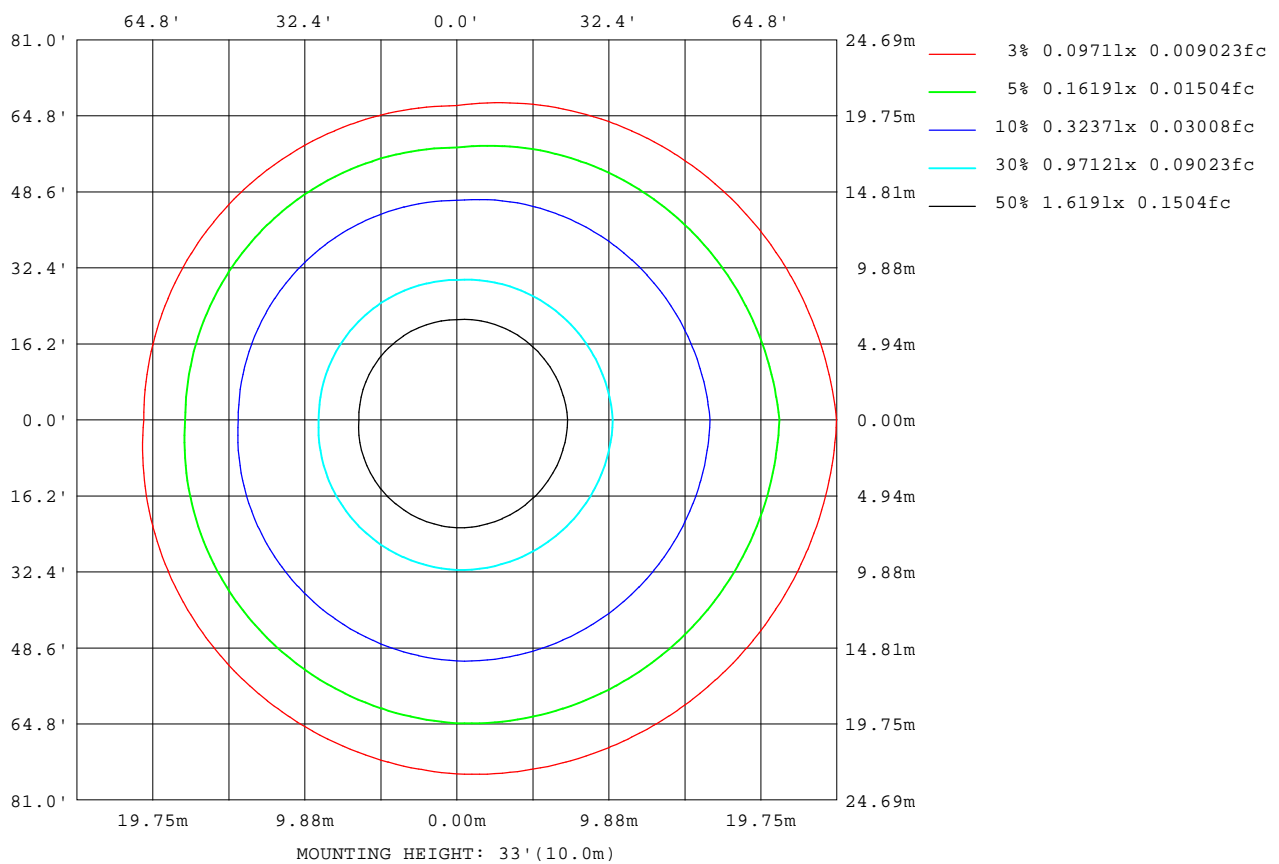
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:COLORS
Test Date:2018-11-30

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:

ISOLUX DIAGRAM

Test:U:24.00V I:0.8210A P:19.70W PF:0.9794 Freq:0Hz Lamp Flux:1077.79x1 lm		
NAME: DA6962412NO	TYPE:	WEIGHT:
SPEC.:DA6962412NO-0RGBSWWDA012WC0500	DIM.: 1000*12*1.5mm	SERIAL No.:01
MFR.: Colors	SUR.:1000*12	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:COLORS
Test Date:2018-11-30

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:

LED Avg.L Report

Test:U:24.00V I:0.8210A P:19.70W PF:0.9794 Freq:0Hz Lamp Flux:1077.79x1 lm		
NAME: DA6962412NO	TYPE:	WEIGHT:
SPEC.:DA6962412NO-0RGBSWWDA012WC0500	DIM.: 1000*12*1.5mm	SERIAL No.:01
MFR.: Colors	SUR.:1000*12	Shielding Angle:

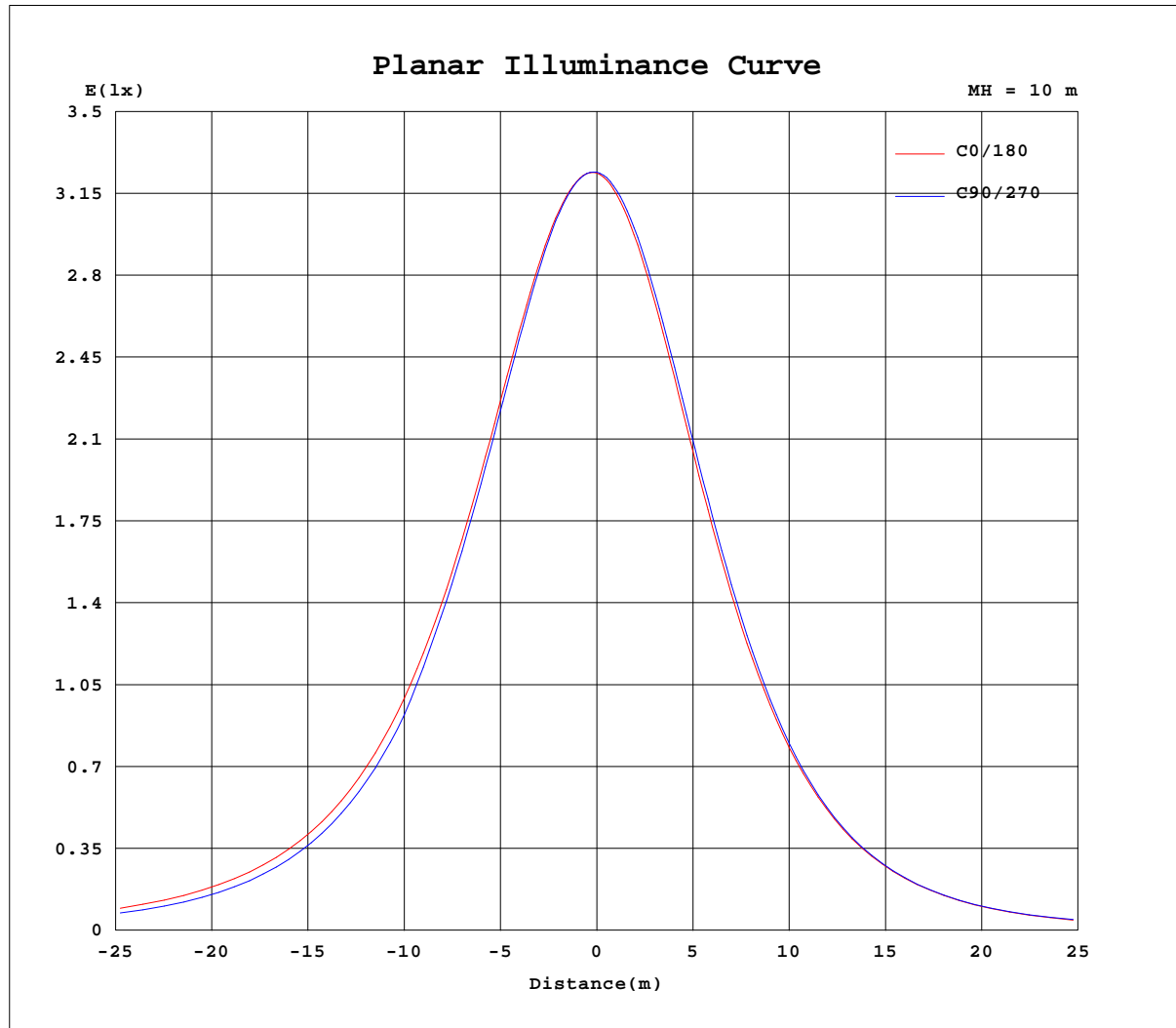
AvgL	cd/m2
L_0~180(65)av	30038
L_0~180(75)av	28959
L_0~180(85)av	36463
L_90~270(65)av	26578
L_90~270(75)av	23638
L_90~270(85)av	6977
L_45(65)av	27293
L_45(75)av	24631
L_45(85)av	16326

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:COLORS
Test Date:2018-11-30

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:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: COLORS
Test Date: 2018-11-30

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:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:24.00V I:0.8210A P:19.70W PF:0.9794 Freq:0Hz Lamp Flux:1077.79x1 lm		
NAME: DA6962412NO	TYPE:	WEIGHT:
SPEC.:DA6962412NO-0RGBSWWDA012WC0500	DIM.: 1000*12*1.5mm	SERIAL No.:01
MFR.: Colors	SUR.:1000*12	Shielding Angle:

Table--1

UNIT: cd

C(DEG) g (DEG)	0	90	180	270														
0	324	324	324	324														
5	325	325	321	322														
10	326	325	316	318														
15	325	323	309	313														
20	322	318	300	306														
25	318	313	290	296														
30	312	305	277	284														
35	304	295	262	269														
40	294	283	243	250														
45	281	261	221	227														
50	265	242	197	200														
55	247	220	168	170														
60	225	193	138	139														
65	200	163	105	107														
70	171	129	71.8	77.4														
75	140	93.3	40.1	53.5														
80	106	54.3	15.7	27.0														
85	72.5	3.03	3.74	11.6														
90	40.6	3.78	1.42	3.29														
95	14.4	0.37	0.86	0.65														
100	1.47	0.47	0.88	0.73														
105	0.56	0.59	0.99	0.85														
110	0.68	0.71	1.13	0.95														
115	0.80	0.83	1.24	1.09														
120	0.93	0.95	1.36	1.21														
125	1.07	1.08	1.46	1.31														
130	1.18	1.20	1.55	1.40														
135	1.29	1.30	1.62	1.49														
140	1.40	1.39	1.70	1.59														
145	1.50	1.49	1.75	1.70														
150	1.54	1.58	1.81	1.75														
155	1.63	1.66	1.86	1.80														
160	1.69	1.71	1.90	1.81														
165	1.75	1.76	1.92	1.84														
170	1.80	1.79	1.94	1.84														
175	1.90	1.84	1.94	1.84														
180	1.95	1.87	1.95	1.85														

C Range: 0 - 360DEG
C Interval: 90.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:COLORS
Test Date:2018-11-30

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: