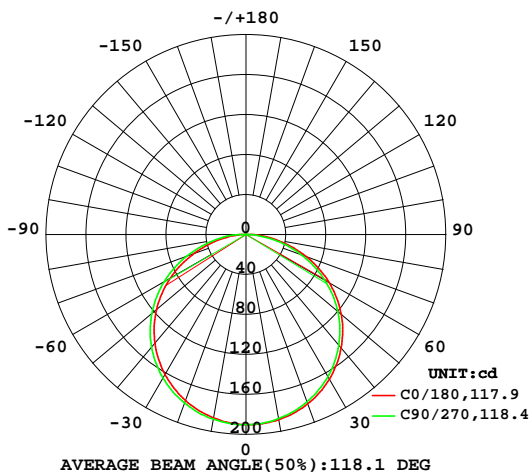


## LUMINAIRE PHOTOMETRIC TEST REPORT

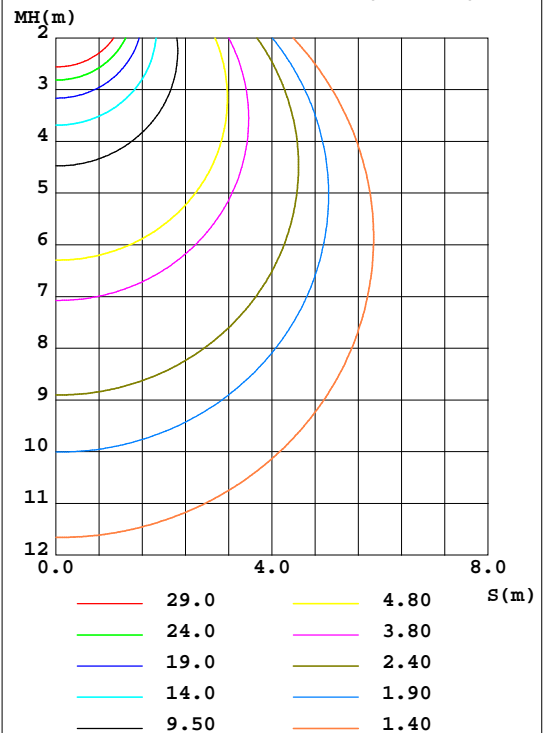
Test:U:24.00V I:0.3300A P:7.900W PF:0 Freq:0Hz Lamp Flux:587.669x1 lm		
NAME: DS62242410NO	TYPE:	WEIGHT:
SPEC.:DS62242410NO-9LWWWNDA012WC0100	DIM.: 1000*10*1.2	SERIAL No.:
MFR.: Colors	SUR.:1000*10	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 74.39 lm/W			
MODEL	DS62242410NO	I <sub>max</sub> (cd)	190.3	S/MH(C0/180)	1.27
NOMINAL POWER(W)	7.9	LOR(%)	100.0	S/MH(C90/270)	1.30
RATED VOLTAGE(V)	24	TOTAL FLUX(lm)	587.67	h UP,DN(C0-180)	0.4,50.0
NOMINAL FLUX(lm)	587.669	CIE CLASS	DIRECT	h UP,DN(C180-360)	0.3,49.2
LAMPS INSIDE	1	h up(%)	0.8	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	24	h down(%)	99.2	CIBSE SHR MAX	1.35

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:2019-04-11

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:

## ZONAL FLUX DIAGRAM

### ZONAL FLUX DIAGRAM:

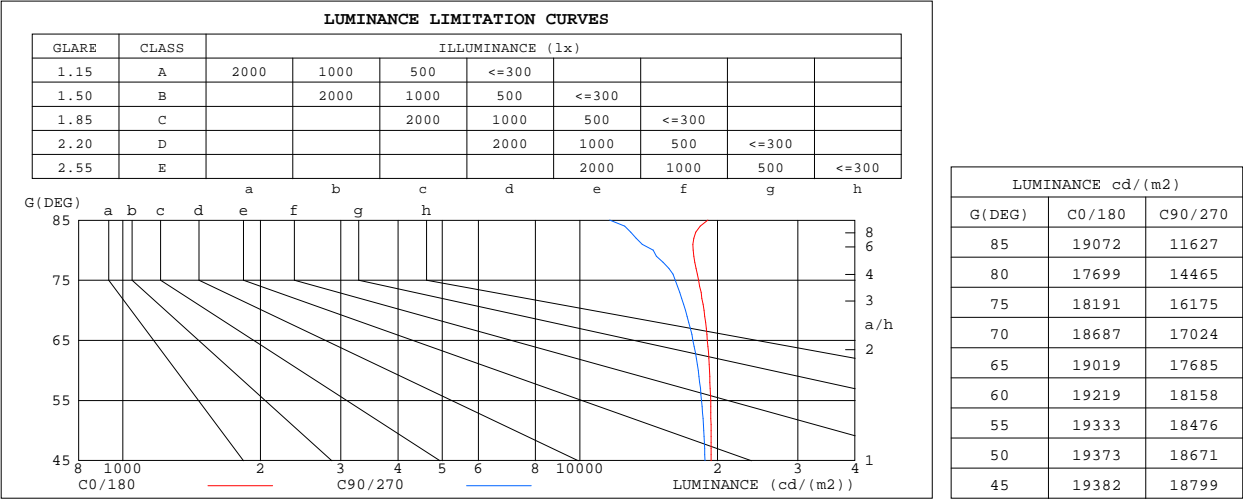
g	C0	C90	C180	C270					g	F zone	F total	%lum,lamp
10	188.2	187.0	186.2	187.7					0~ 10	18.02	18.02	3.07,3.07
20	180.4	178.3	176.8	179.6					10~ 20	51.88	69.91	11.9,11.9
30	167.1	164.1	161.9	166.0					20~ 30	79.51	149.4	25.4,25.4
40	148.2	144.6	141.8	147.0					30~ 40	97.45	246.9	42,42
50	124.5	120.0	116.9	123.1					40~ 50	103.3	350.1	59.6,59.6
60	96.09	90.79	87.54	94.54					50~ 60	95.75	445.9	75.9,75.9
70	63.91	58.22	54.96	62.57					60~ 70	75.50	521.4	88.7,88.7
80	30.73	25.12	23.33	30.95					70~ 80	45.87	567.3	96.5,96.5
90	6.946	1.037	3.682	4.204					80~ 90	15.97	583.2	99.2,99.2
100	0.6756	0.2697	0.2791	0.2413					90~100	1.227	584.4	99.5,99.5
110	0.3382	0.4137	0.4074	0.3916					100~110	0.3570	584.8	99.5,99.5
120	0.4636	0.5516	0.5485	0.5355					110~120	0.4467	585.3	99.6,99.6
130	0.6014	0.6834	0.6801	0.6609					120~130	0.5282	585.8	99.7,99.7
140	0.7363	0.8023	0.8085	0.7896					130~140	0.5573	586.3	99.8,99.8
150	0.8429	0.9025	0.9119	0.8836					140~150	0.5230	586.9	99.9,99.9
160	0.9401	0.9714	0.9997	0.9493					150~160	0.4279	587.3	99.9,99.9
170	1.009	1.022	1.050	1.012					160~170	0.2823	587.6	100,100
180	1.047	1.050	1.050	1.043					170~180	0.0990	587.7	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:2019-04-11

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:0.3300A P:7.900W PF:0 Freq:0Hz Lamp Flux:587.669x1 lm		
NAME: DS62242410NO	TYPE:	WEIGHT:
SPEC.:DS62242410NO-9LWWWNDA012WC0100	DIM.: 1000*10*1.2	SERIAL No.:
MFR.: Colors	SUR.:1000*10	Shielding Angle:



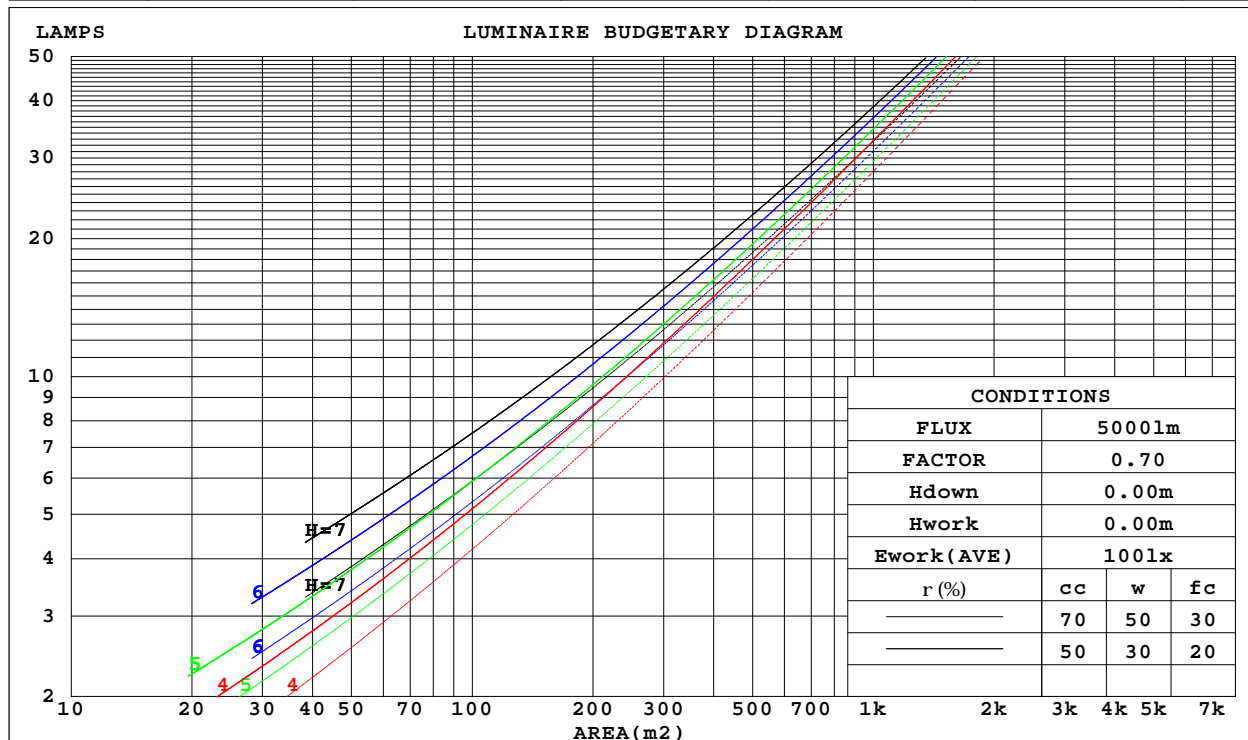
C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:COLORS  
Test Date:2019-04-11

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:0.3300A P:7.900W PF:0 Freq:0Hz Lamp Flux:587.669x1 lm		
NAME: DS62242410NO	TYPE:	WEIGHT:
SPEC.:DS62242410NO-9LWWWNDA012WC0100	DIM.: 1000*10*1.2	SERIAL No.:
MFR.: Colors	SUR.:1000*10	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			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	1.01	1.01	1.01	.99
1.0	1.03	.98	.94	1.01	.96	.93	.96	.93	.90	.92	.89	.87	.88	.86	.84	.82
2.0	.89	.82	.76	.87	.81	.75	.83	.78	.73	.80	.75	.71	.77	.73	.70	.67
3.0	.78	.70	.63	.76	.68	.62	.73	.66	.61	.70	.65	.60	.68	.63	.59	.56
4.0	.69	.60	.53	.67	.59	.52	.65	.57	.52	.62	.56	.51	.60	.55	.50	.48
5.0	.61	.52	.45	.60	.52	.45	.58	.50	.44	.56	.49	.44	.54	.48	.43	.41
6.0	.55	.46	.39	.54	.45	.39	.52	.45	.39	.50	.44	.38	.49	.43	.38	.36
7.0	.50	.41	.35	.49	.41	.35	.47	.40	.34	.46	.39	.34	.44	.38	.34	.32
8.0	.45	.37	.31	.45	.36	.31	.43	.36	.30	.42	.35	.30	.41	.35	.30	.28
9.0	.42	.33	.28	.41	.33	.28	.40	.33	.27	.39	.32	.27	.38	.31	.27	.25
10.0	.38	.30	.25	.38	.30	.25	.37	.30	.25	.36	.29	.25	.35	.29	.24	.23



C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:COLORS  
 Test Date:2019-04-11

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:0.3300A P:7.900W PF:0 Freq:0Hz Lamp Flux:587.669x1 lm		
NAME: DS62242410NO	TYPE:	WEIGHT:
SPEC.:DS62242410NO-9LWWWNDA012WC0100	DIM.: 1000*10*1.2	SERIAL No.:
MFR.: Colors	SUR.:1000*10	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	.325 .185 .059	.318 .181 .058	.304 .174 .056	.291 .168 .054	.280 .162 .052	
2.0	.302 .166 .051	.296 .163 .050	.283 .158 .049	.272 .153 .048	.262 .148 .047	
3.0	.278 .148 .044	.272 .146 .044	.261 .141 .043	.251 .138 .042	.242 .134 .041	
4.0	.255 .133 .039	.250 .131 .039	.240 .127 .038	.231 .124 .037	.223 .121 .037	
5.0	.235 .120 .035	.230 .118 .034	.222 .116 .034	.214 .113 .034	.207 .110 .033	
6.0	.217 .109 .031	.213 .108 .031	.206 .105 .031	.199 .103 .030	.192 .101 .030	
7.0	.202 .100 .028	.198 .099 .028	.191 .097 .028	.185 .095 .028	.179 .093 .027	
8.0	.188 .092 .026	.185 .091 .026	.179 .089 .026	.173 .088 .025	.168 .086 .025	
9.0	.176 .085 .024	.173 .084 .024	.168 .083 .024	.163 .082 .023	.158 .080 .023	
10.0	.165 .079 .022	.163 .079 .022	.158 .077 .022	.153 .076 .022	.149 .075 .021	

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	.196 .196 .196	.168 .168 .168	.114 .114 .114	.066 .066 .066	.021 .021 .021	
1.0	.187 .162 .139	.160 .139 .120	.110 .096 .083	.063 .055 .048	.020 .018 .016	
2.0	.179 .138 .103	.154 .119 .089	.105 .082 .062	.061 .048 .036	.019 .015 .012	
3.0	.172 .120 .079	.147 .104 .069	.101 .072 .048	.058 .042 .028	.019 .014 .009	
4.0	.164 .107 .063	.141 .092 .055	.097 .064 .039	.056 .038 .023	.018 .012 .008	
5.0	.157 .097 .052	.135 .084 .046	.093 .058 .032	.054 .034 .019	.017 .011 .006	
6.0	.149 .088 .045	.128 .077 .039	.089 .054 .027	.051 .032 .016	.017 .010 .005	
7.0	.143 .082 .039	.123 .071 .034	.085 .050 .024	.049 .029 .014	.016 .010 .005	
8.0	.136 .076 .034	.117 .066 .030	.081 .046 .021	.047 .027 .013	.015 .009 .004	
9.0	.130 .071 .031	.112 .061 .027	.077 .043 .019	.045 .026 .011	.015 .008 .004	
10.0	.124 .067 .028	.107 .058 .025	.074 .041 .017	.043 .024 .010	.014 .008 .003	

C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:COLORS  
Test Date:2019-04-11

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:0.3300A P:7.900W PF:0 Freq:0Hz Lamp Flux:587.669x1 lm											
NAME: DS62242410NO					TYPE:			WEIGHT:			
SPEC.:DS62242410NO-9LWWWNDA012WC0100					DIM.: 1000*10*1.2			SERIAL No.:			
MFR.: Colors					SUR.:1000*10			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	25.1	26.6	25.4	26.8	27.1	24.9	26.4	25.2	26.6	26.9	
	3H	26.8	28.2	27.1	28.5	28.7	26.5	27.9	26.8	28.2	28.4
	4H	27.5	28.9	27.9	29.2	29.4	27.2	28.5	27.5	28.8	29.1
	6H	28.1	29.4	28.5	29.7	30.0	27.6	28.9	28.0	29.2	29.5
	8H	28.3	29.6	28.7	29.9	30.2	27.8	29.0	28.1	29.3	29.6
	12H	28.5	29.7	28.9	30.0	30.3	27.8	29.0	28.2	29.4	29.7
4H	2H	25.7	27.1	26.0	27.3	27.6	25.6	26.9	25.9	27.2	27.5
	3H	27.6	28.8	28.0	29.1	29.4	27.4	28.6	27.7	28.9	29.2
	4H	28.5	29.6	28.9	29.9	30.3	28.2	29.3	28.5	29.6	29.9
	6H	29.2	30.2	29.6	30.5	30.9	28.8	29.7	29.2	30.1	30.5
	8H	29.5	30.4	29.9	30.8	31.2	29.0	29.9	29.4	30.2	30.6
	12H	29.7	30.6	30.2	31.0	31.4	29.1	29.9	29.5	30.3	30.7
8H	4H	28.8	29.7	29.2	30.1	30.5	28.5	29.4	28.9	29.8	30.2
	6H	29.7	30.4	30.1	30.8	31.3	29.2	30.0	29.7	30.4	30.9
	8H	30.0	30.7	30.5	31.2	31.6	29.5	30.2	30.0	30.6	31.1
	12H	30.4	31.0	30.9	31.4	31.9	29.7	30.3	30.2	30.8	31.3
12H	4H	28.8	29.6	29.2	30.0	30.4	28.5	29.4	29.0	29.8	30.2
	6H	29.7	30.4	30.2	30.8	31.3	29.3	30.0	29.8	30.4	30.9
	8H	30.2	30.7	30.6	31.2	31.7	29.7	30.2	30.2	30.7	31.2
Variations with the observer position at spacings:											
S = 1.0H	+ 0.1 / - 0.2					+ 0.1 / - 0.2					
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3					
2.0H	+ 0.1 / - 0.3					+ 0.1 / - 0.4					

CIE Pub.117, 587.7 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -1.8)

C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:COLORS  
Test Date:2019-04-11

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:0.3300A P:7.900W PF:0 Freq:0Hz Lamp Flux:587.669x1 lm		
NAME: DS62242410NO	TYPE:	WEIGHT:
SPEC.:DS62242410NO-9LWWWNDA012WC0100	DIM.: 1000*10*1.2	SERIAL No.:
MFR.: Colors	SUR.:1000*10	Shielding Angle:

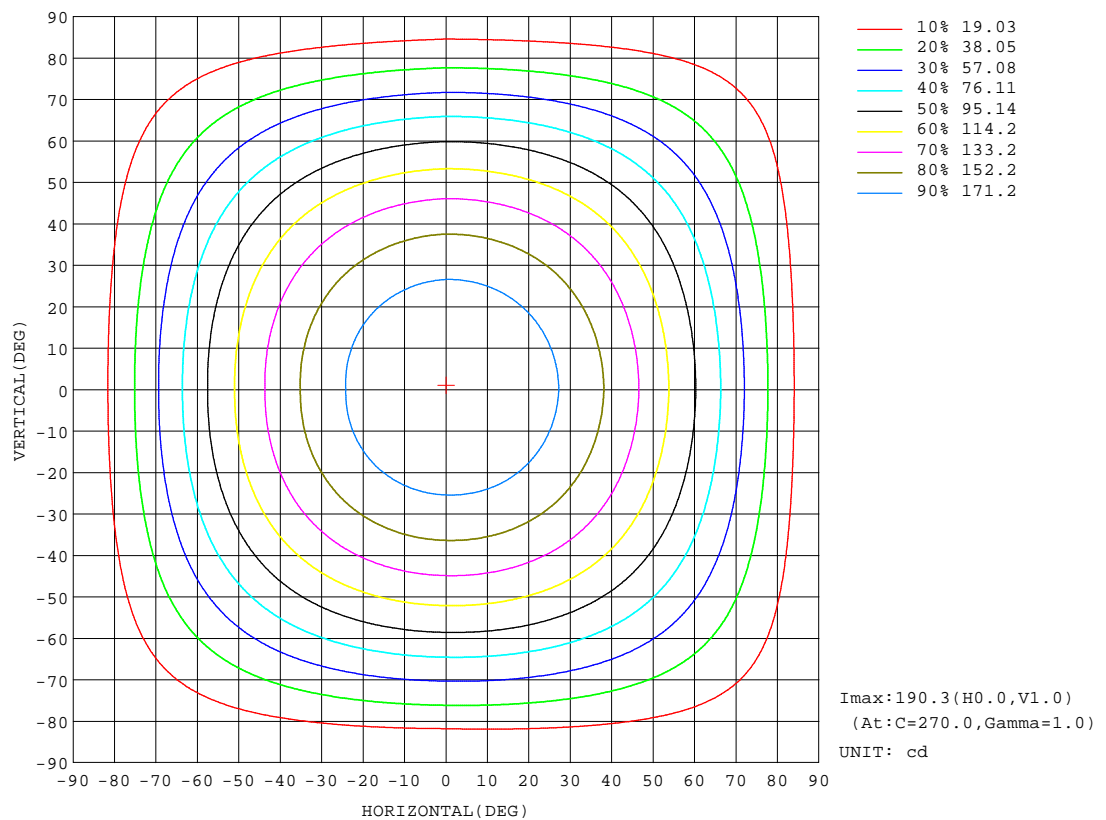
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	56	44	37	55	44	37	54	43	37	30
0.80	66	54	47	65	54	46	63	53	46	39
1.00	74	63	55	73	62	55	71	64	55	47
1.25	82	71	63	80	70	63	77	68	62	54
1.50	87	76	69	85	75	69	82	74	67	60
2.00	94	85	78	92	83	77	88	81	76	67
2.50	98	90	83	96	88	82	92	85	80	72
3.00	101	94	88	99	92	87	95	89	85	76
4.00	105	99	94	103	97	93	98	94	90	81
5.00	108	103	98	105	101	97	101	97	94	84
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:2019-04-11

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:0.3300A P:7.900W PF:0 Freq:0Hz Lamp Flux:587.669x1 lm		
NAME: DS62242410NO	TYPE:	WEIGHT:
SPEC.:DS62242410NO-9LWWWNDA012WC0100	DIM.: 1000*10*1.2	SERIAL No.:
MFR.: Colors	SUR.:1000*10	Shielding Angle:



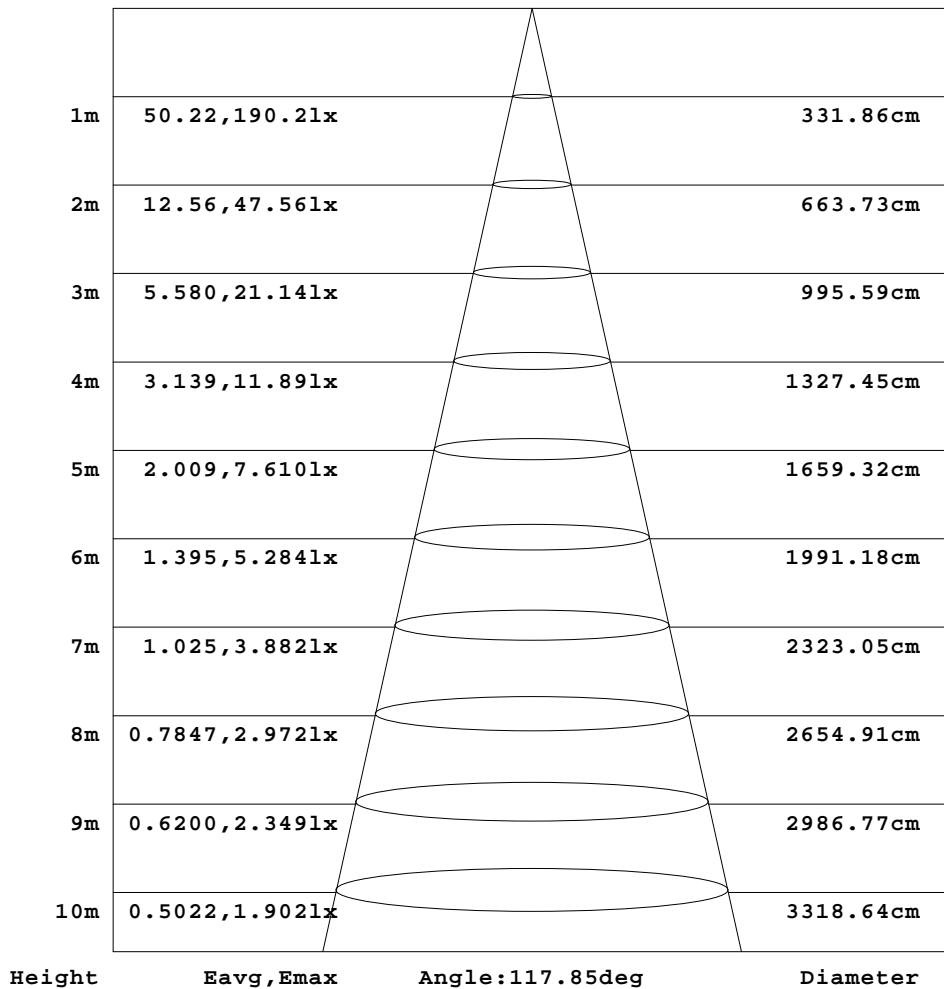
C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:COLORS  
Test Date:2019-04-11

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:0.3300A P:7.900W PF:0 Freq:0Hz Lamp Flux:587.669x1 lm		
NAME: DS62242410NO	TYPE:	WEIGHT:
SPEC.:DS62242410NO-9LWWWNDA012WC0100	DIM.: 1000*10*1.2	SERIAL No.:
MFR.: Colors	SUR.:1000*10	Shielding Angle:

Flux out:437.0 lm



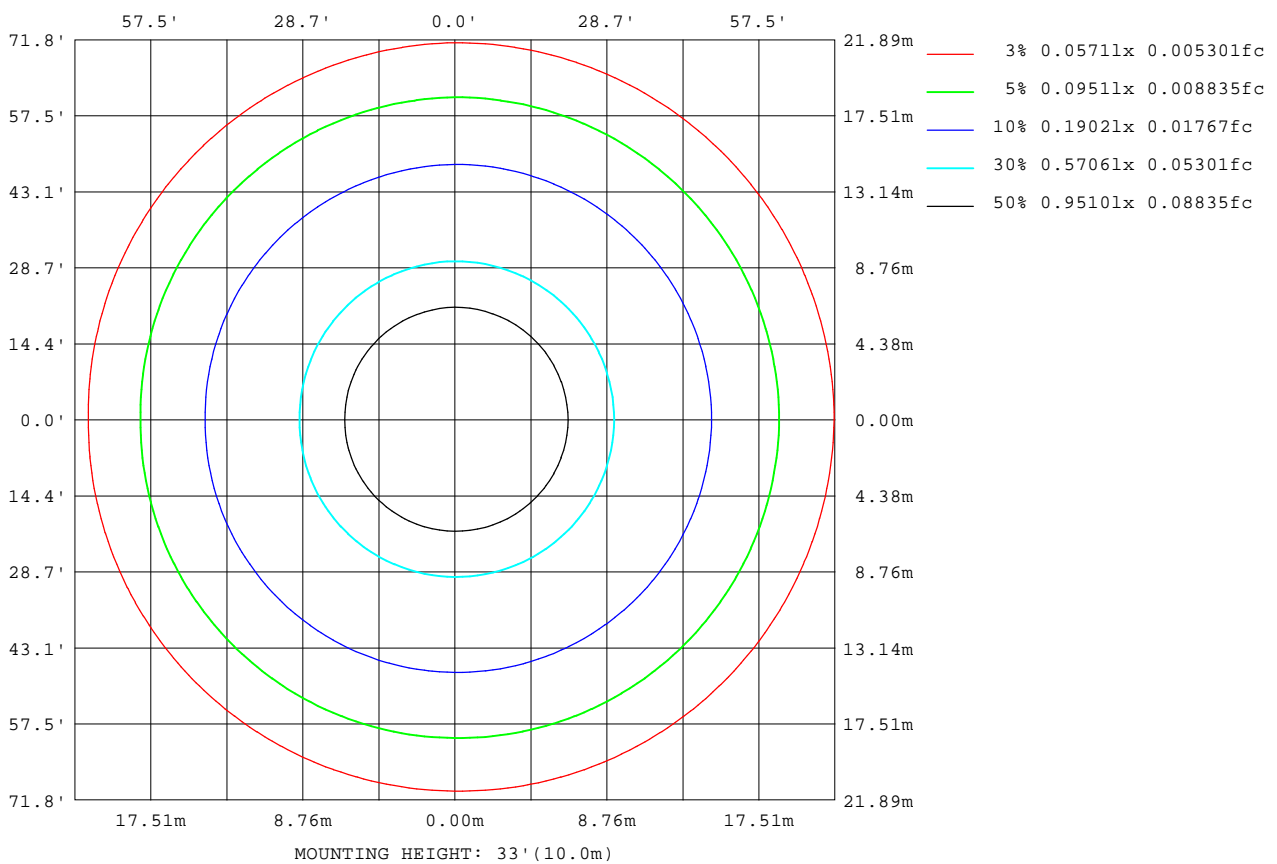
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:COLORS  
Test Date:2019-04-11

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:0.3300A P:7.900W PF:0 Freq:0Hz Lamp Flux:587.669x1 lm		
NAME: DS62242410NO	TYPE:	WEIGHT:
SPEC.:DS62242410NO-9LWWWNDA012WC0100	DIM.: 1000*10*1.2	SERIAL No.:
MFR.: Colors	SUR.:1000*10	Shielding Angle:



C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: COLORS  
Test Date: 2019-04-11

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:

## LED Avg.L Report

Test:U:24.00V I:0.3300A P:7.900W PF:0 Freq:0Hz Lamp Flux:587.669x1 lm		
NAME: DS62242410NO	TYPE:	WEIGHT:
SPEC.:DS62242410NO-9LWWNDA012WC0100	DIM.: 1000*10*1.2	SERIAL No.:
MFR.: Colors	SUR.:1000*10	Shielding Angle:

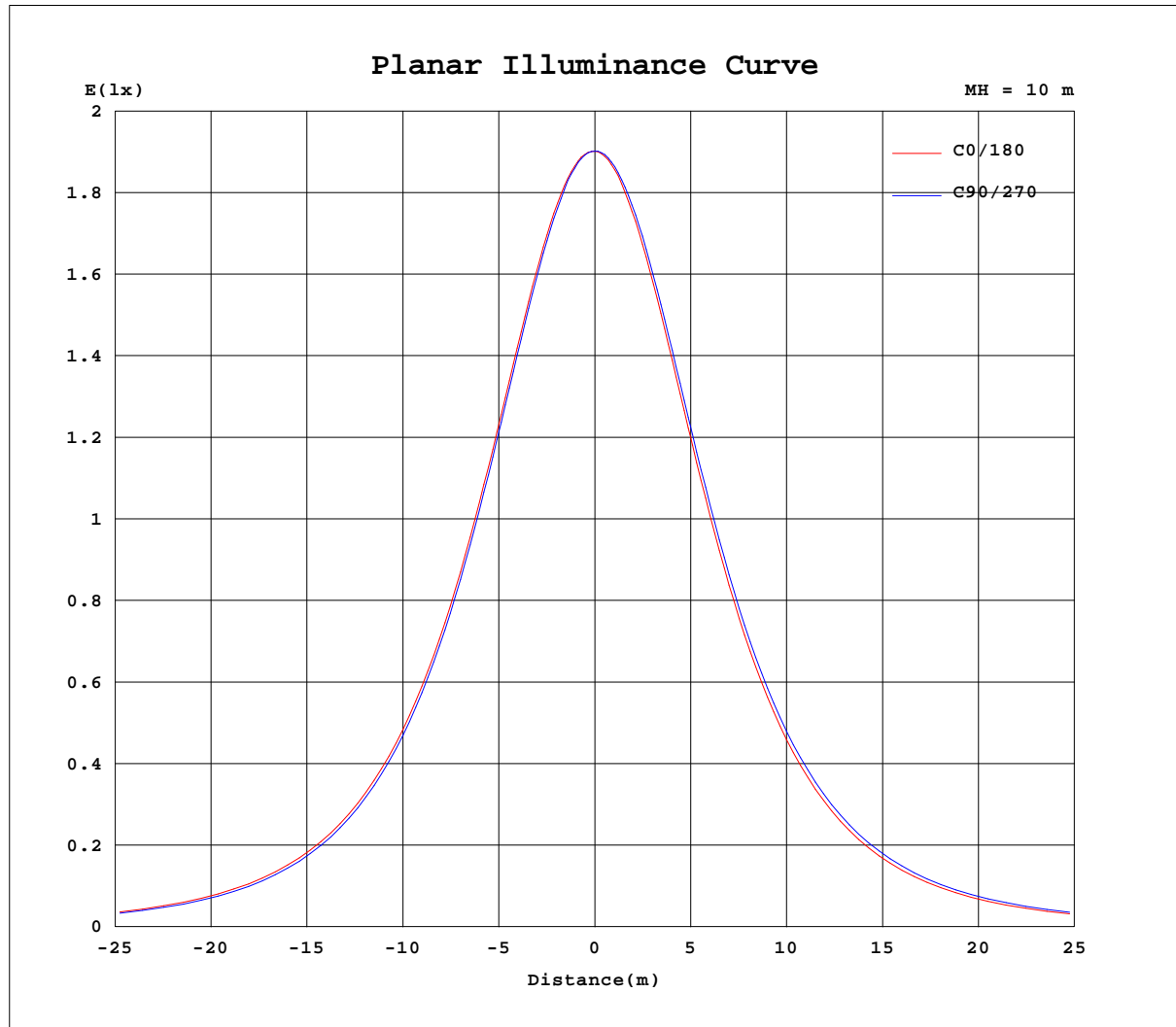
AvgL	cd/m2
L_0~180(65)av	17972
L_0~180(75)av	16529
L_0~180(85)av	15961
L_90~270(65)av	18173
L_90~270(75)av	17010
L_90~270(85)av	16079
L_45(65)av	18032
L_45(75)av	16726
L_45(85)av	15840

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:COLORS  
Test Date:2019-04-11

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: 2019-04-11

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:0.3300A P:7.900W PF:0 Freq:0Hz Lamp Flux:587.669x1 lm		
NAME: DS62242410NO	TYPE:	WEIGHT:
SPEC.:DS62242410NO-9LWWNDA012WC0100	DIM.: 1000*10*1.2	SERIAL No.:
MFR.: Colors	SUR.:1000*10	Shielding Angle:

Table--1

UNIT: cd

C(DEG) g (DEG)	0	90	180	270														
0	190	190	190	190														
5	190	190	189	190														
10	188	187	186	188														
15	185	183	182	184														
20	180	178	177	180														
25	174	172	170	173														
30	167	164	162	166														
35	158	155	153	157														
40	148	145	142	147														
45	137	133	130	136														
50	125	120	117	123														
55	111	106	103	109														
60	96.1	90.8	87.5	94.5														
65	80.4	74.7	71.5	78.9														
70	63.9	58.2	55.0	62.6														
75	47.1	41.9	38.5	46.2														
80	30.7	25.1	23.3	31.0														
85	16.6	10.1	11.2	17.9														
90	6.95	1.04	3.68	4.20														
95	2.01	0.21	0.60	0.19														
100	0.68	0.27	0.28	0.24														
105	0.29	0.34	0.34	0.32														
110	0.34	0.41	0.41	0.39														
115	0.39	0.48	0.47	0.44														
120	0.46	0.55	0.55	0.54														
125	0.54	0.62	0.61	0.59														
130	0.60	0.68	0.68	0.66														
135	0.67	0.75	0.75	0.73														
140	0.74	0.80	0.81	0.79														
145	0.79	0.86	0.86	0.84														
150	0.84	0.90	0.91	0.88														
155	0.89	0.94	0.96	0.93														
160	0.94	0.97	1.00	0.95														
165	0.99	1.01	1.03	0.99														
170	1.01	1.02	1.05	1.01														
175	1.04	1.05	1.05	1.04														
180	1.05	1.05	1.05	1.04														

C Range: 0 - 360DEG  
C Interval: 90.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:COLORS  
Test Date:2019-04-11

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: