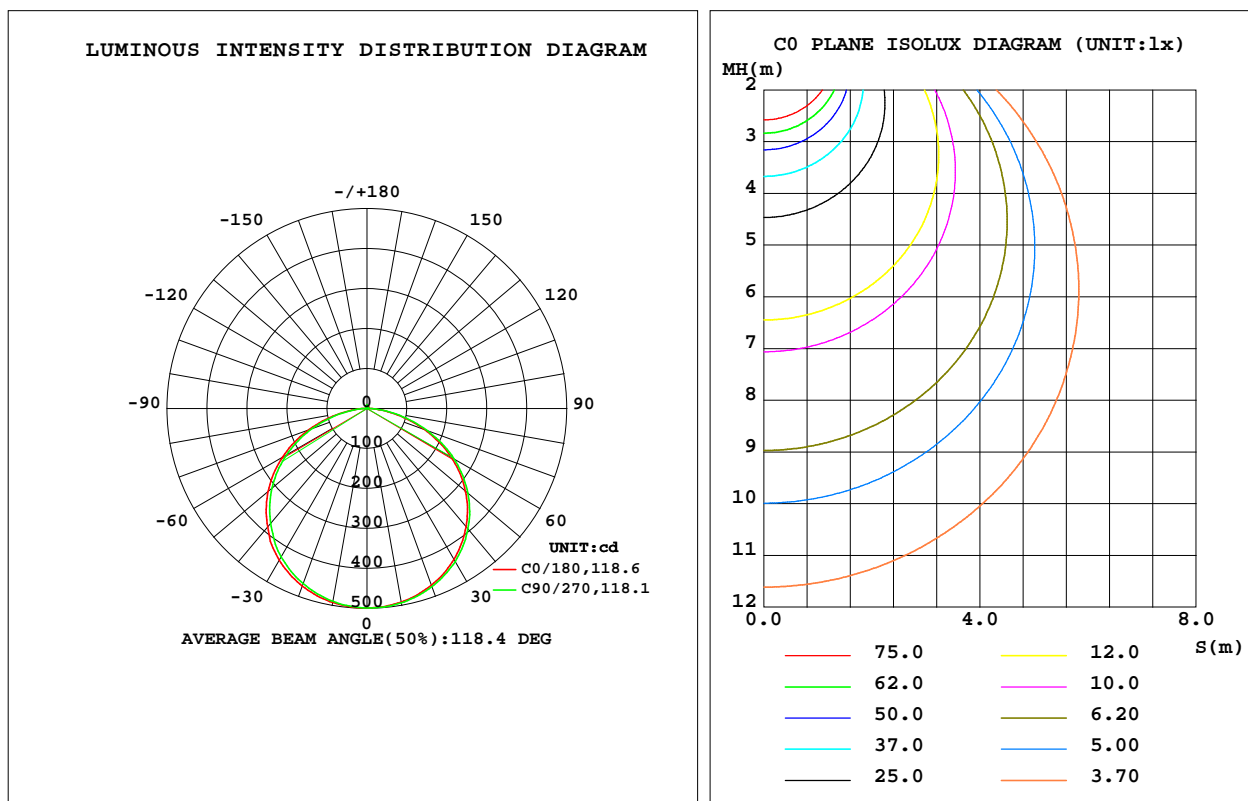


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:24.00V I:0.3030A P:7.270W PF:1.000 Freq:0Hz Lamp Flux:1543.03x1 lm		
NAME: D81442410NO	TYPE:	WEIGHT:
SPEC.:D81442410NO-8WNSA012WC0100	DIM.: 1000*10*1.5mm	SERIAL No.:01
MFR.: COLORS	SUR.:1000*10	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 212.25 lm/W			
MODEL	D81442410NO	I _{max} (cd)	499.6	S/MH(C0/180)	1.30
NOMINAL POWER(W)	7.2	LOR(%)	100.0	S/MH(C90/270)	1.28
RATED VOLTAGE(V)	24	TOTAL FLUX(lm)	1543.0	h UP,DN(C0-180)	0.9,50.0
NOMINAL FLUX(lm)	1543.03	CIE CLASS	DIRECT	h UP,DN(C180-360)	0.8,48.3
LAMPS INSIDE	1	h up(%)	1.7	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	24	h down(%)	98.3	CIBSE SHR MAX	1.50



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2021-01-29

Range: 0 - 180DEG
Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.950m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

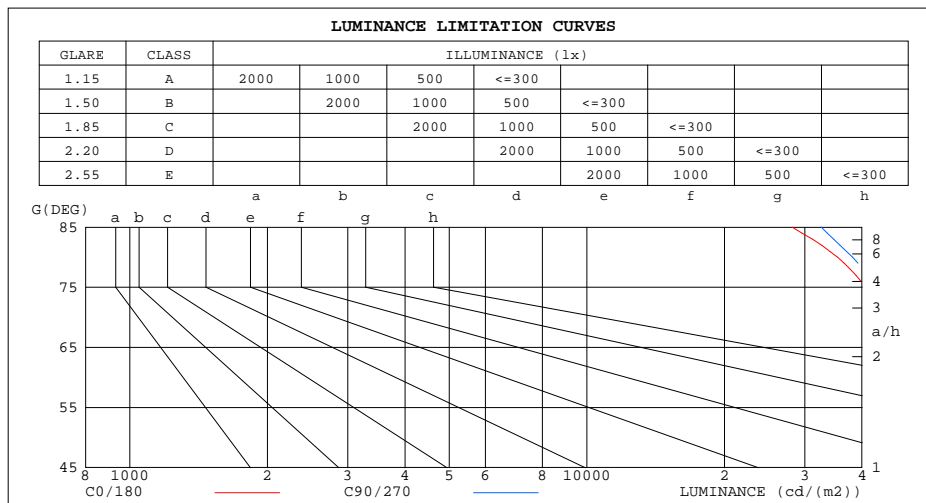
g	C0	C45	C90	C135	C180	C225	C270	C315	g	F zone	F total	%lum,lamp
10	491.8	493.6	493.6	494.6	492.8	491.2	489.8	490.3	0- 10	47.32	47.32	3.07,3.07
20	470.5	473.8	474.5	475.6	472.7	468.6	466.3	466.8	10- 20	136.5	183.9	11.9,11.9
30	435.4	440.1	441.7	442.7	438.5	431.8	429.0	429.3	20- 30	210.0	393.9	25.5,25.5
40	385.9	389.4	393.3	392.3	386.7	380.7	375.1	378.0	30- 40	258.3	652.1	42.3,42.3
50	321.6	326.3	329.5	329.1	322.9	315.4	310.5	312.6	40- 50	273.7	925.8	60,60
60	243.2	248.7	251.1	250.8	244.3	236.9	232.7	234.5	50- 60	253.2	1179	76.4,76.4
70	152.0	158.8	159.0	159.6	153.6	146.1	144.3	144.1	60- 70	196.0	1375	89.1,89.1
80	61.44	67.15	66.25	66.26	62.09	57.80	56.69	56.27	70- 80	111.8	1487	96.4,96.4
90	4.987	6.644	3.777	6.035	4.554	4.301	1.712	3.310	80- 90	30.67	1518	98.3,98.3
100	1.917	2.031	1.817	1.958	1.390	1.372	1.396	1.366	90-100	2.091	1520	98.5,98.5
110	3.052	2.909	2.516	2.861	2.786	2.524	2.756	2.630	100-110	2.284	1522	98.6,98.6
120	4.393	4.203	3.946	4.108	4.023	3.572	3.736	3.913	110-120	3.352	1525	98.8,98.8
130	5.516	5.265	5.007	5.064	5.112	4.540	4.437	4.769	120-130	4.022	1529	99.1,99.1
140	6.270	5.959	5.764	5.825	5.998	5.555	4.956	5.210	130-140	4.130	1533	99.4,99.4
150	6.818	6.339	6.292	6.579	6.526	6.339	5.579	5.437	140-150	3.738	1537	99.6,99.6
160	7.341	6.733	7.080	7.347	7.095	7.113	6.814	5.965	150-160	3.031	1540	99.8,99.8
170	7.508	7.623	8.002	7.956	7.460	7.794	7.896	7.412	160-170	2.066	1542	100,100
180	7.708	8.770	8.877	8.850	7.701	8.757	8.850	8.844	170-180	0.7598	1543	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:JYH
 Test Date:2021-01-29

g Range: 0 - 180DEG
 g Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity:65.0%
 Test Distance:10.950m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:24.00V I:0.3030A P:7.270W PF:1.000 Freq:0Hz Lamp Flux:1543.03x1 lm		
NAME: D81442410NO	TYPE:	WEIGHT:
SPEC.:D81442410NO-8WNSA012WC0100	DIM.: 1000*10*1.5mm	SERIAL No.:01
MFR.: COLORS	SUR.:1000*10	Shielding Angle:



LUMINANCE cd/(m2)		
G(180)	C0/180	C90/270
85	28130	32579
80	35381	38150
75	40717	43066
70	44439	46482
65	46950	48779
60	48641	50217
55	49568	50973
50	50028	51256
45	50307	51387

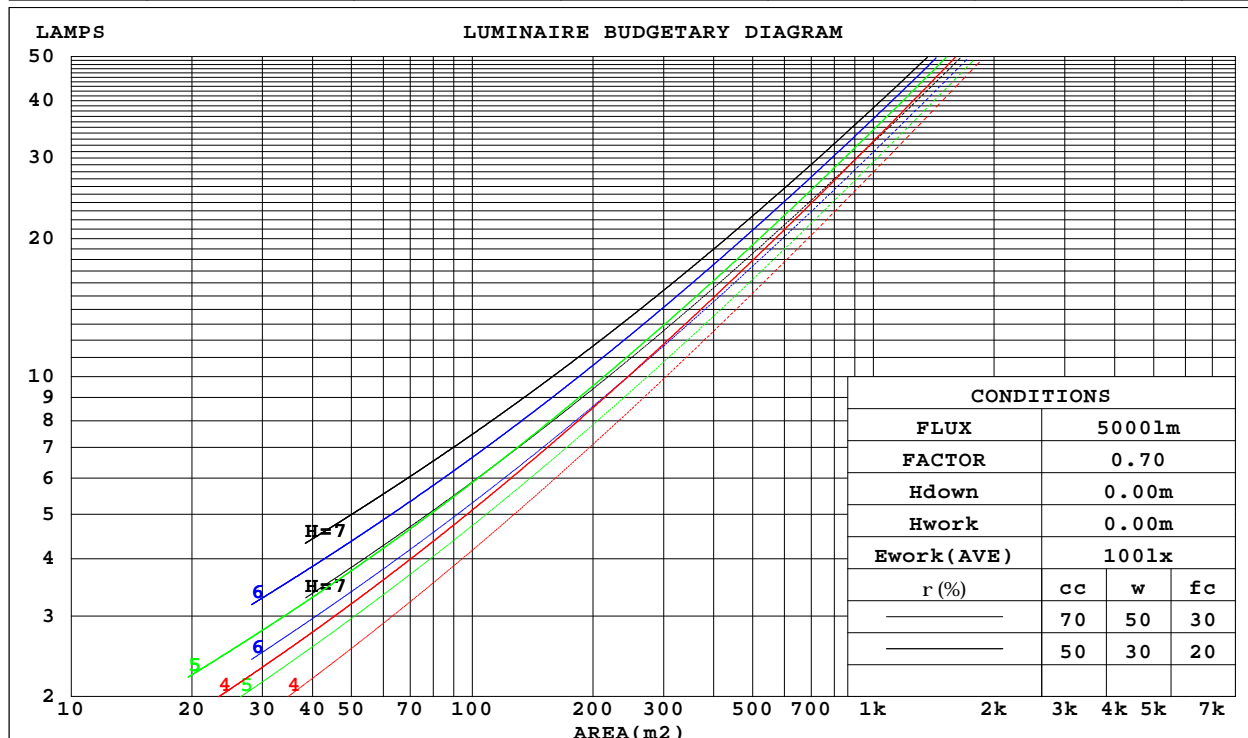
C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:JYH
 Test Date:2021-01-29

g Range: 0 - 180DEG
 g Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity:65.0%
 Test Distance:10.950m [K=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:24.00V I:0.3030A P:7.270W PF:1.000 Freq:0Hz Lamp Flux:1543.03x1 lm		
NAME: D81442410NO	TYPE:	WEIGHT:
SPEC.:D81442410NO-8WNSA012WC0100	DIM.: 1000*10*1.5mm	SERIAL No.:01
MFR.: COLORS	SUR.:1000*10	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: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2021-01-29

g Range: 0 - 180DEG
Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.950m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:24.00V I:0.3030A P:7.270W PF:1.000 Freq:0Hz Lamp Flux:1543.03x1 lm		
NAME: D81442410NO	TYPE:	WEIGHT:
SPEC.:D81442410NO-8WNSA012WC0100	DIM.: 1000*10*1.5mm	SERIAL No.:01
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	.315	.179	.057	.307	.175	.056	.293	.168	.054	.280	.161	.052	.268	.155	.050	
2.0	.296	.162	.050	.289	.159	.049	.277	.154	.048	.265	.149	.047	.254	.144	.045	
3.0	.273	.146	.044	.267	.143	.043	.256	.139	.042	.246	.135	.041	.236	.131	.040	
4.0	.252	.131	.038	.247	.129	.038	.237	.126	.037	.227	.122	.037	.219	.119	.036	
5.0	.233	.119	.034	.228	.117	.034	.219	.114	.034	.211	.111	.033	.203	.109	.033	
6.0	.216	.108	.031	.211	.107	.031	.203	.104	.030	.196	.102	.030	.189	.100	.030	
7.0	.200	.099	.028	.197	.098	.028	.190	.096	.028	.183	.094	.027	.177	.092	.027	
8.0	.187	.091	.026	.184	.090	.026	.177	.089	.025	.171	.087	.025	.166	.085	.025	
9.0	.175	.085	.024	.172	.084	.024	.166	.082	.023	.161	.081	.023	.156	.079	.023	
10.0	.165	.079	.022	.162	.078	.022	.157	.077	.022	.152	.075	.021	.147	.074	.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	.203	.203	.203	.174	.174	.174	.118	.118	.118	.068	.068	.068	.022	.022	.022	
1.0	.193	.169	.147	.165	.145	.126	.113	.100	.087	.065	.058	.051	.021	.019	.016	
2.0	.186	.145	.110	.159	.125	.095	.109	.086	.066	.063	.050	.039	.020	.016	.013	
3.0	.178	.127	.087	.153	.110	.075	.105	.076	.053	.061	.045	.031	.019	.014	.010	
4.0	.170	.114	.071	.146	.098	.061	.101	.069	.043	.058	.040	.026	.019	.013	.008	
5.0	.163	.104	.060	.140	.090	.052	.096	.063	.037	.056	.037	.022	.018	.012	.007	
6.0	.156	.095	.052	.134	.083	.045	.092	.058	.032	.054	.034	.019	.017	.011	.006	
7.0	.149	.088	.046	.128	.077	.040	.089	.054	.028	.051	.032	.017	.017	.010	.006	
8.0	.143	.083	.042	.123	.072	.036	.085	.050	.026	.049	.030	.015	.016	.010	.005	
9.0	.136	.078	.038	.118	.067	.033	.081	.047	.024	.047	.028	.014	.015	.009	.005	
10.0	.131	.073	.035	.113	.064	.031	.078	.045	.022	.046	.027	.013	.015	.009	.004	

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2021-01-29

g Range: 0 - 180DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.950m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:24.00V I:0.3030A P:7.270W PF:1.000 Freq:0Hz Lamp Flux:1543.03x1 lm											
NAME: D81442410NO					TYPE:			WEIGHT:			
SPEC.:D81442410NO-8WNSA012WC0100					DIM.: 1000*10*1.5mm			SERIAL No.:01			
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	25.0	26.5	25.3	26.7	27.0	25.1	26.6	25.4	26.9	27.1	
	3H	26.6	28.0	26.9	28.2	28.5	26.7	28.1	27.0	28.4	28.7
	4H	27.2	28.5	27.5	28.8	29.1	27.3	28.7	27.7	29.0	29.2
	6H	27.6	28.8	27.9	29.1	29.4	27.8	29.0	28.1	29.3	29.7
	8H	27.7	28.9	28.0	29.2	29.5	27.9	29.1	28.3	29.4	29.8
	12H	27.7	28.9	28.1	29.2	29.6	28.0	29.2	28.4	29.5	29.8
4H	2H	25.7	27.0	26.0	27.3	27.6	25.7	27.1	26.1	27.4	27.7
	3H	27.4	28.6	27.8	28.9	29.2	27.5	28.7	27.9	29.0	29.4
	4H	28.1	29.2	28.5	29.5	29.9	28.3	29.3	28.7	29.7	30.1
	6H	28.6	29.6	29.1	30.0	30.4	28.8	29.8	29.3	30.2	30.6
	8H	28.8	29.7	29.2	30.1	30.5	29.0	29.9	29.5	30.3	30.7
	12H	28.9	29.7	29.4	30.1	30.6	29.1	29.9	29.6	30.4	30.8
8H	4H	28.4	29.3	28.8	29.7	30.1	28.5	29.4	29.0	29.8	30.2
	6H	29.1	29.8	29.5	30.2	30.7	29.2	30.0	29.7	30.4	30.9
	8H	29.3	30.0	29.8	30.4	30.9	29.5	30.2	30.0	30.6	31.1
	12H	29.5	30.1	30.0	30.5	31.0	29.7	30.3	30.2	30.8	31.3
12H	4H	28.4	29.2	28.9	29.6	30.1	28.5	29.4	29.0	29.8	30.2
	6H	29.1	29.8	29.6	30.2	30.7	29.3	30.0	29.8	30.4	30.9
	8H	29.4	30.0	29.9	30.5	31.0	29.6	30.2	30.1	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	+ 0.2 / - 0.4					+ 0.2 / - 0.3					

CIE Pub.117, 1543 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 1.5)

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2021-01-29

g Range: 0 - 180DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.950m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:24.00V I:0.3030A P:7.270W PF:1.000 Freq:0Hz Lamp Flux:1543.03x1 lm		
NAME: D81442410NO	TYPE:	WEIGHT:
SPEC.:D81442410NO-8WNSA012WC0100	DIM.: 1000*10*1.5mm	SERIAL No.:01
MFR.: COLORS	SUR.:1000*10	Shielding Angle:

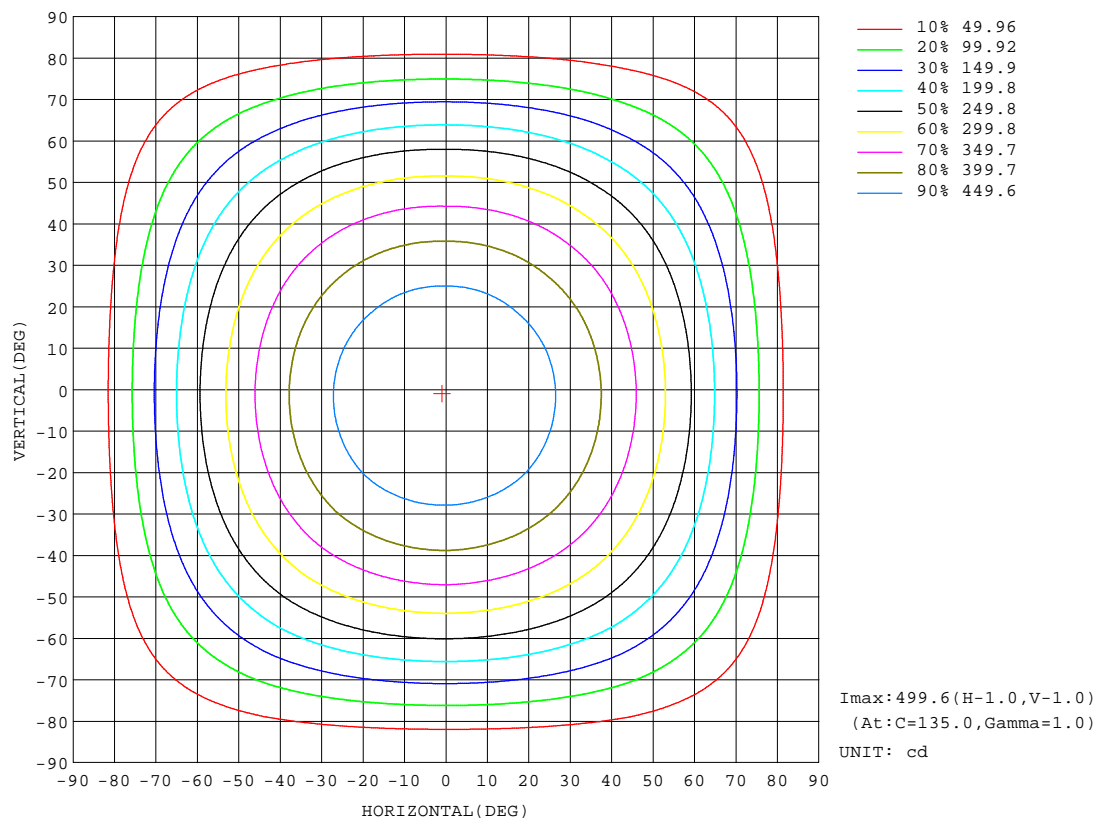
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	56	44	37	55	44	37	54	43	37	30
0.80	66	54	47	65	54	47	63	53	46	39
1.00	75	63	56	73	63	56	71	64	55	47
1.25	82	71	64	80	70	63	77	69	62	55
1.50	87	77	70	85	76	69	82	74	68	60
2.00	94	85	79	92	84	78	88	81	76	68
2.50	98	90	84	96	88	83	92	86	81	72
3.00	101	94	89	99	93	87	95	89	85	76
4.00	105	100	95	103	98	93	98	94	90	81
5.00	108	103	99	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: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2021-01-29

g Range: 0 - 180DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.950m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:24.00V I:0.3030A P:7.270W PF:1.000 Freq:0Hz Lamp Flux:1543.03x1 lm		
NAME: D81442410NO	TYPE:	WEIGHT:
SPEC.:D81442410NO-8WNSA012WC0100	DIM.: 1000*10*1.5mm	SERIAL No.:01
MFR.: COLORS	SUR.:1000*10	Shielding Angle:



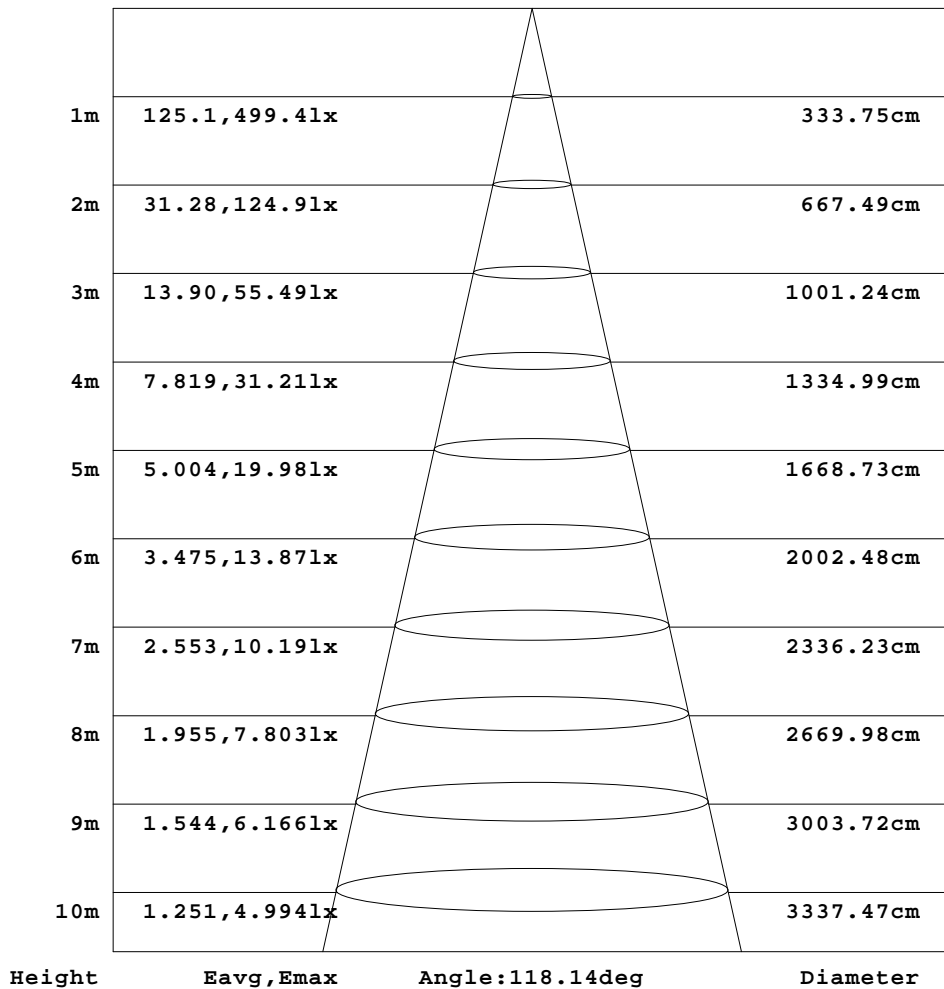
C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:JYH
 Test Date:2021-01-29

Range: 0 - 180DEG
 Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity:65.0%
 Test Distance:10.950m [K=1.0000]
 Remarks:

AAI Figure

Test:U:24.00V I:0.3030A P:7.270W PF:1.000 Freq:0Hz Lamp Flux:1543.03x1 lm		
NAME: D81442410NO	TYPE:	WEIGHT:
SPEC.:D81442410NO-8WNSA012WC0100	DIM.: 1000*10*1.5mm	SERIAL No.:01
MFR.: COLORS	SUR.:1000*10	Shielding Angle:

Flux out:1179 lm



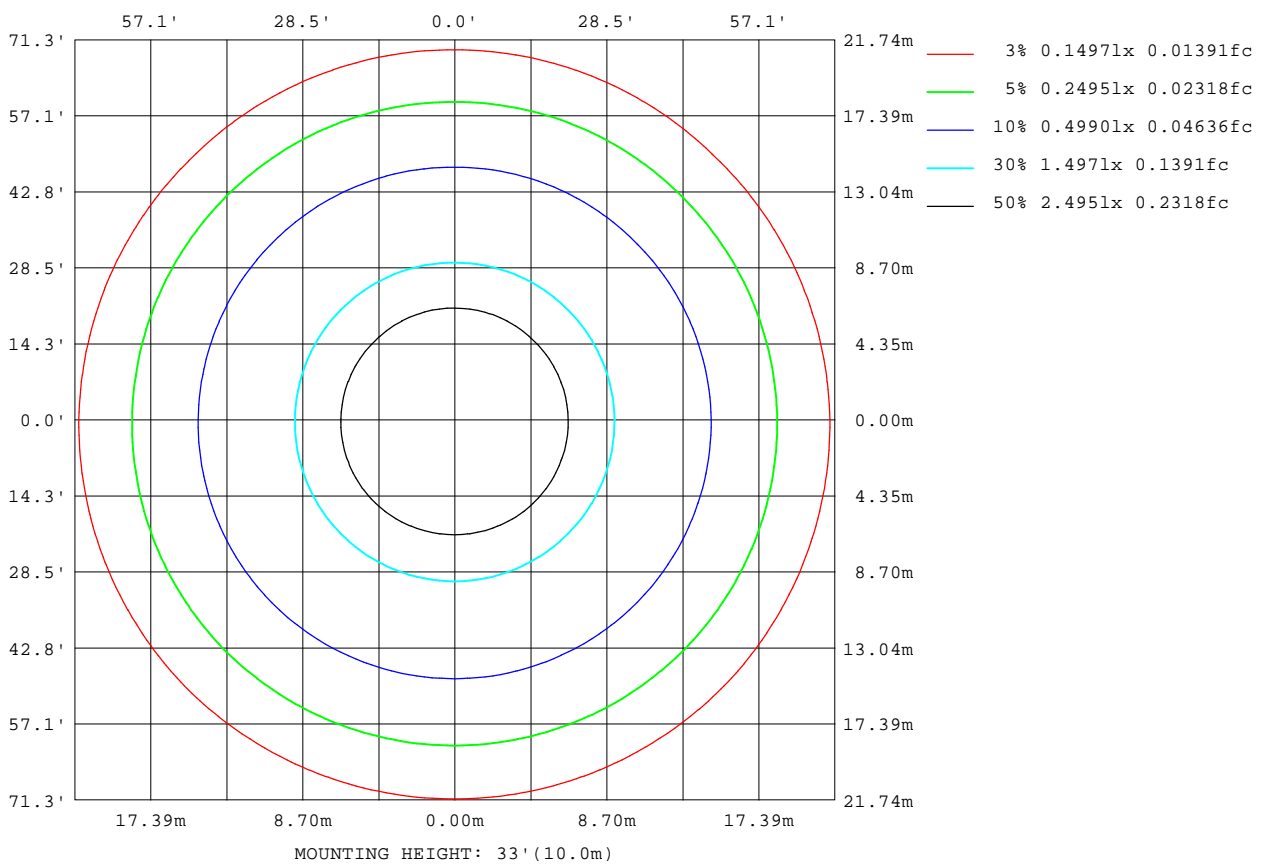
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2021-01-29

g Range: 0 - 180DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.950m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

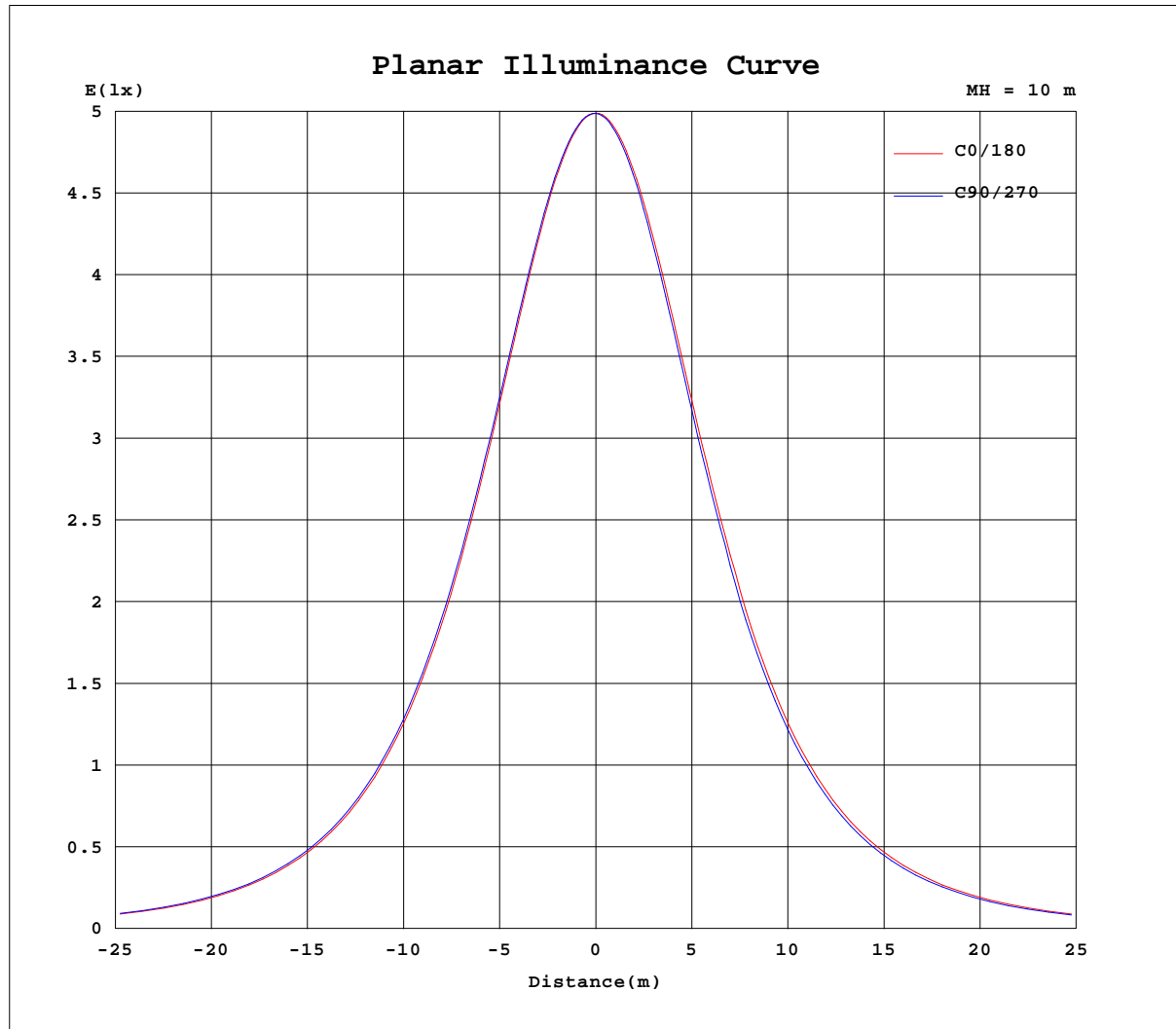
Test:U:24.00V I:0.3030A P:7.270W PF:1.000 Freq:0Hz Lamp Flux:1543.03x1 lm		
NAME: D81442410NO	TYPE:	WEIGHT:
SPEC.:D81442410NO-8WNSA012WC0100	DIM.: 1000*10*1.5mm	SERIAL No.:01
MFR.: COLORS	SUR.:1000*10	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:JYH
 Test Date:2021-01-29

g Range: 0 - 180DEG
 g Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
 Humidity:65.0%
 Test Distance:10.950m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: JYH
Test Date: 2021-01-29

Range: 0 - 180DEG
Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity: 65.0%
Test Distance: 10.950m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:24.00V I:0.3030A P:7.270W PF:1.000 Freq:0Hz Lamp Flux:1543.03x1 lm		
NAME: D81442410NO	TYPE:	WEIGHT:
SPEC.:D81442410NO-8WNSA012WC0100	DIM.: 1000*10*1.5mm	SERIAL No.:01
MFR.: COLORS	SUR.:1000*10	Shielding Angle:

Table--1

UNIT: cd

C(DEG) g (DEG)	0	45	90	135	180	225	270	315										
0	499	499	499	499	499	499	499	499										
5	497	498	498	499	498	497	496	497										
10	492	494	494	495	493	491	490	490										
15	483	486	486	487	485	482	480	480										
20	471	474	474	476	473	469	466	467										
25	455	459	460	461	457	452	449	450										
30	435	440	442	443	438	432	429	429										
35	413	418	420	421	416	408	404	405										
40	386	389	393	392	387	381	375	378										
45	356	360	363	363	357	350	345	347										
50	322	326	329	329	323	315	311	313										
55	284	289	292	292	285	278	273	275										
60	243	249	251	251	244	237	233	234										
65	198	205	206	207	200	192	189	189										
70	152	159	159	160	154	146	144	144										
75	105	112	111	112	107	100	98.9	98.6										
80	61.4	67.1	66.2	66.3	62.1	57.8	56.7	56.3										
85	24.5	29.8	28.4	29.1	25.7	23.9	22.7	21.9										
90	4.99	6.64	3.78	6.03	4.55	4.30	1.71	3.31										
95	2.16	2.45	1.93	1.96	0.95	1.04	0.78	1.17										
100	1.92	2.03	1.82	1.96	1.39	1.37	1.40	1.37										
105	2.39	2.38	2.00	2.35	2.07	1.95	2.11	1.93										
110	3.05	2.91	2.52	2.86	2.79	2.52	2.76	2.63										
115	3.73	3.59	3.28	3.51	3.40	3.06	3.30	3.30										
120	4.39	4.20	3.95	4.11	4.02	3.57	3.74	3.91										
125	5.00	4.76	4.45	4.62	4.60	4.05	4.11	4.41										
130	5.52	5.26	5.01	5.06	5.11	4.54	4.44	4.77										
135	5.95	5.66	5.42	5.45	5.58	5.02	4.73	5.05										
140	6.27	5.96	5.76	5.82	6.00	5.56	4.96	5.21										
145	6.51	6.17	6.06	6.19	6.29	5.94	5.17	5.32										
150	6.82	6.34	6.29	6.58	6.53	6.34	5.58	5.44										
155	7.05	6.53	6.59	6.97	6.81	6.75	6.16	5.62										
160	7.34	6.73	7.08	7.35	7.10	7.11	6.81	5.96										
165	7.65	7.08	7.55	7.63	7.40	7.44	7.36	6.59										
170	7.51	7.62	8.00	7.96	7.46	7.79	7.90	7.41										
175	7.37	8.27	8.45	8.37	7.33	8.22	8.43	8.19										
180	7.71	8.77	8.88	8.85	7.70	8.76	8.85	8.84										

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2021-01-29

g Range: 0 - 180DEG
g Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.362
Humidity:65.0%
Test Distance:10.950m [K=1.0000]
Remarks: