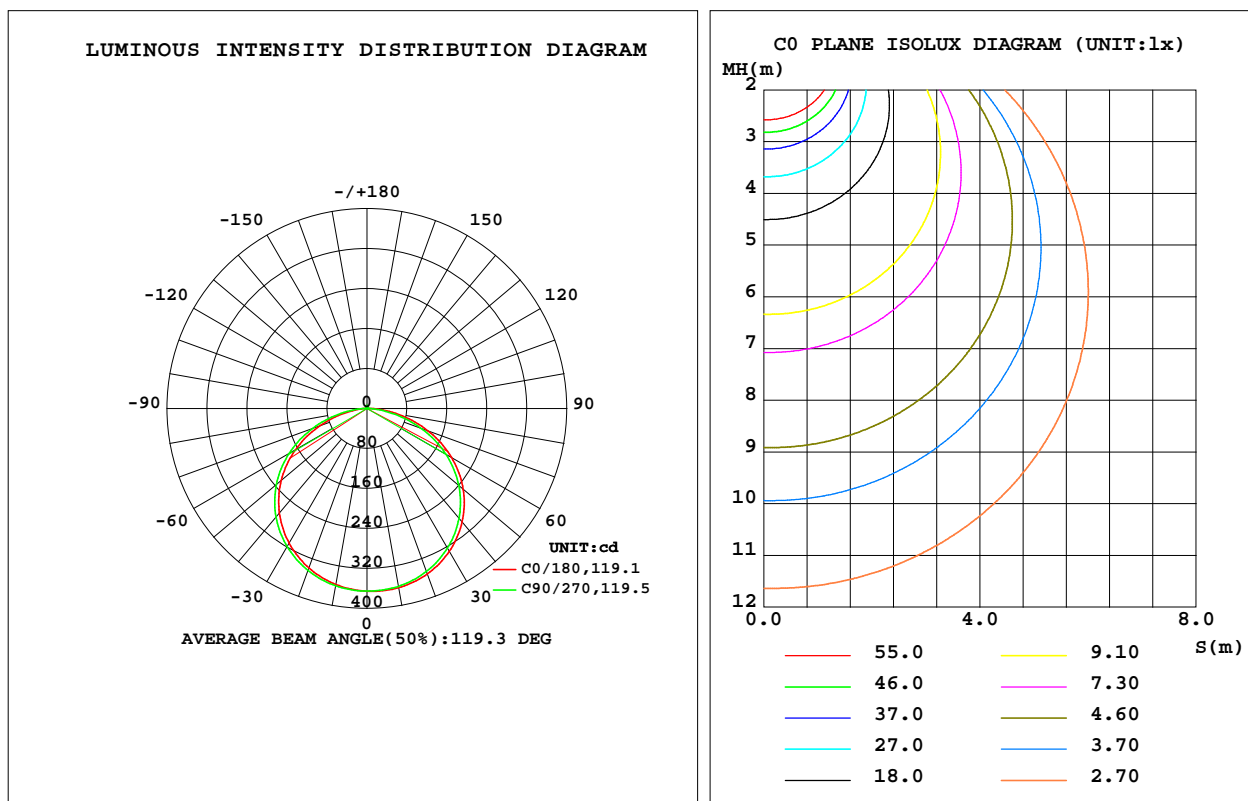


## LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:24.00V I:0.3086A P:7.406W PF:1.000 Freq:0Hz Lamp Flux:1144.34x1 lm		
NAME: D8802408NO	TYPE:	WEIGHT:
SPEC.:D8802408NO-8NWDA012WC0100	DIM.: 1000*8*1.6mm	SERIAL No.:
MFR.: COLORS	SUR.:1000*8	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 154.52 lm/W			
MODEL	D8802408NO	I <sub>max</sub> (cd)	366.1	S/MH(C0/180)	1.34
NOMINAL POWER(W)	6.6	LOR(%)	100.0	S/MH(C90/270)	1.30
RATED VOLTAGE(V)	24	TOTAL FLUX(lm)	1144.3	h UP,DN(C0-180)	0.9,50.1
NOMINAL FLUX(lm)	1144.34	CIE CLASS	DIRECT	h UP,DN(C180-360)	0.8,48.2
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:2020-12-03

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:

## ZONAL FLUX DIAGRAM

### ZONAL FLUX DIAGRAM:

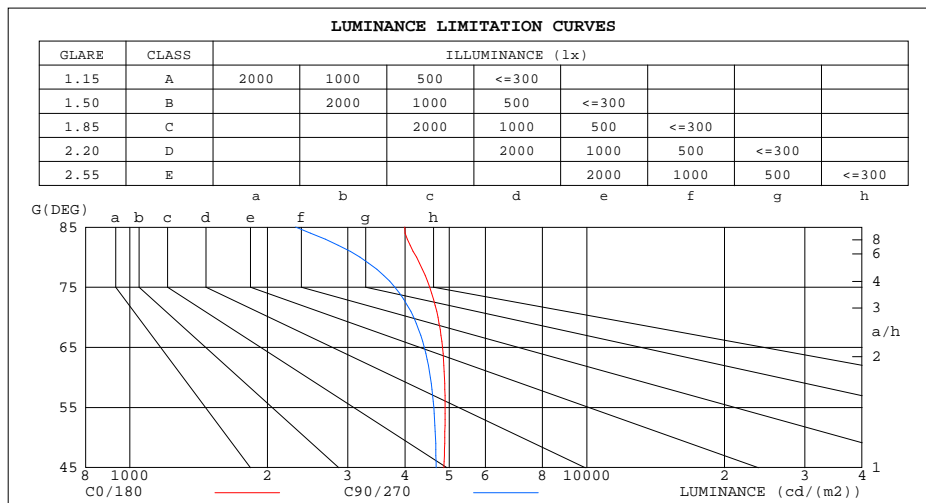
g	C0	C45	C90	C135	C180	C225	C270	C315	g	F zone	F total	%lum,lamp
10	364.1	363.9	361.5	359.7	357.7	358.2	360.3	362.9	0- 10	34.69	34.69	3.03,3.03
20	352.4	351.9	347.2	343.1	339.7	340.6	344.9	349.6	10- 20	100.3	134.9	11.8,11.8
30	330.0	329.3	322.5	316.3	311.5	313.0	319.5	325.9	20- 30	154.4	289.4	25.3,25.3
40	296.4	295.4	286.9	278.8	272.9	275.1	283.5	291.5	30- 40	190.4	479.8	41.9,41.9
50	251.4	250.1	239.9	230.4	224.0	226.8	237.0	246.0	40- 50	202.8	682.6	59.7,59.7
60	195.3	193.5	181.8	171.7	165.4	168.9	180.2	190.0	50- 60	188.2	870.9	76.1,76.1
70	129.3	126.8	114.4	104.7	99.50	103.2	114.7	124.6	60- 70	146.8	1018	88.9,88.9
80	58.96	55.90	44.27	38.14	34.95	37.89	46.96	55.72	70- 80	84.50	1102	96.3,96.3
90	8.044	5.231	2.135	2.446	1.261	1.877	1.507	6.572	80- 90	22.79	1125	98.3,98.3
100	1.613	1.463	1.389	1.638	1.270	1.141	0.9444	0.8332	90-100	1.870	1127	98.5,98.5
110	1.996	2.066	1.996	2.433	2.379	2.017	1.978	1.661	100-110	1.726	1129	98.6,98.6
120	3.052	3.042	3.058	3.334	3.288	2.791	2.772	2.688	110-120	2.524	1131	98.8,98.8
130	3.913	3.789	3.719	3.968	4.069	3.492	3.354	3.373	120-130	3.016	1134	99.1,99.1
140	4.562	4.302	4.268	4.476	4.656	4.188	3.795	3.766	130-140	3.091	1137	99.4,99.4
150	4.962	4.576	4.595	4.970	4.971	4.841	4.243	3.981	140-150	2.791	1140	99.6,99.6
160	5.416	4.843	5.230	5.504	5.297	5.389	5.158	4.361	150-160	2.257	1142	99.8,99.8
170	5.691	5.586	6.025	5.965	5.295	5.877	5.958	5.449	160-170	1.536	1144	100,100
180	5.557	6.512	6.613	6.619	5.544	6.512	6.619	6.626	170-180	0.5634	1144	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:2020-12-03

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:0.3086A P:7.406W PF:1.000 Freq:0Hz Lamp Flux:1144.34x1 lm		
NAME: D8802408NO	TYPE:	WEIGHT:
SPEC.:D8802408NO-8NWDA012WC0100	DIM.: 1000*8*1.6mm	SERIAL No.:
MFR.: COLORS	SUR.:1000*8	Shielding Angle:



LUMINANCE cd/(m2)		
G(180)	C0/180	C90/270
85	3996	2307
80	4244	3187
75	4533	3801
70	4725	4180
65	4831	4409
60	4883	4546
55	4898	4624
50	4890	4665
45	4867	4680

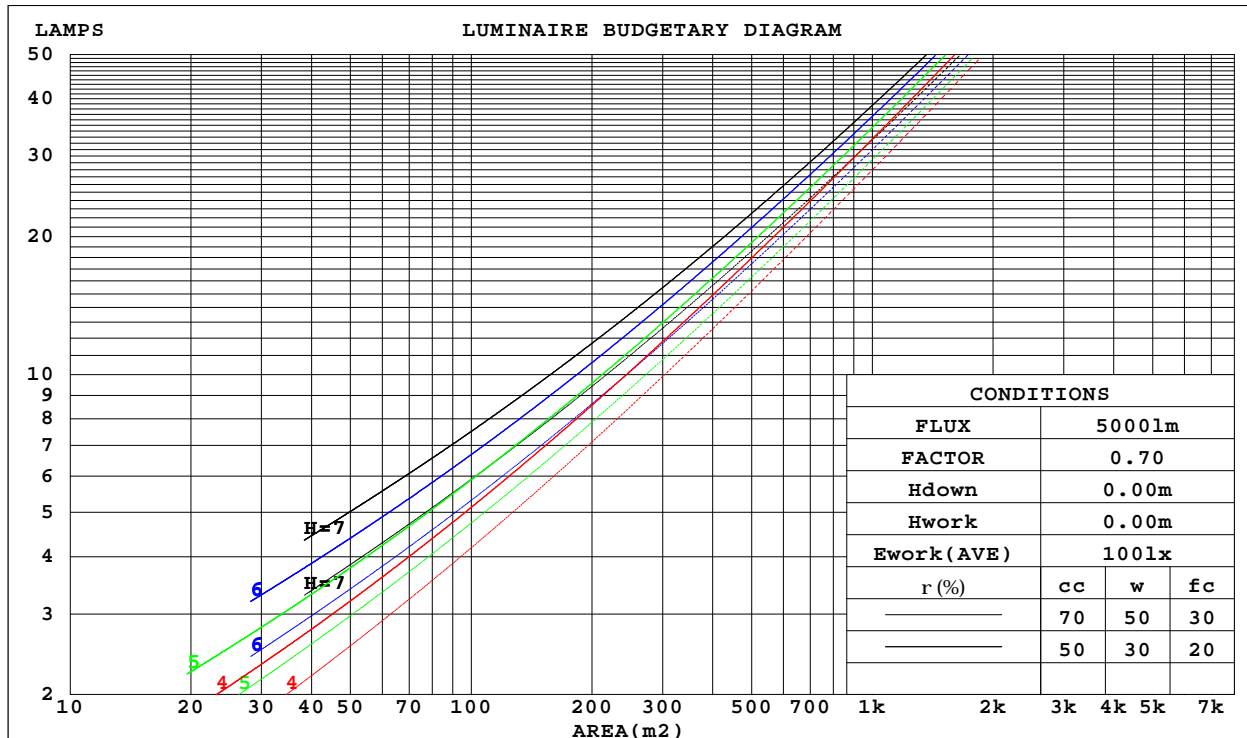
C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JYH  
Test Date:2020-12-03

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:0.3086A P:7.406W PF:1.000 Freq:0Hz Lamp Flux:1144.34x1 lm		
NAME: D8802408NO	TYPE:	WEIGHT:
SPEC.:D8802408NO-8NWDA012WC0100	DIM.: 1000*8*1.6mm	SERIAL No.:
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
r <sub>fc</sub>	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:2020-12-03

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:0.3086A P:7.406W PF:1.000 Freq:0Hz Lamp Flux:1144.34x1 lm		
NAME: D8802408NO	TYPE:	WEIGHT:
SPEC.:D8802408NO-8NWDA012WC0100	DIM.: 1000*8*1.6mm	SERIAL No.:
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	.316	.180	.057	.308	.176	.056	.294	.169	.054	.281	.162	.052	.269	.156	.050	
2.0	.297	.163	.050	.290	.160	.049	.278	.154	.048	.266	.149	.047	.255	.144	.045	
3.0	.274	.146	.044	.268	.144	.043	.257	.139	.042	.247	.135	.041	.237	.131	.041	
4.0	.253	.131	.039	.247	.129	.038	.237	.126	.038	.228	.123	.037	.220	.119	.036	
5.0	.233	.119	.034	.229	.117	.034	.220	.114	.034	.211	.112	.033	.204	.109	.033	
6.0	.216	.108	.031	.212	.107	.031	.204	.105	.030	.196	.102	.030	.189	.100	.030	
7.0	.201	.099	.028	.197	.098	.028	.190	.096	.028	.183	.094	.027	.177	.092	.027	
8.0	.187	.092	.026	.184	.091	.026	.178	.089	.025	.172	.087	.025	.166	.085	.025	
9.0	.176	.085	.024	.172	.084	.024	.167	.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	.119	.119	.119	.068	.068	.068	.022	.022	.022	
1.0	.194	.169	.147	.166	.145	.126	.113	.100	.087	.065	.058	.051	.021	.019	.016	
2.0	.186	.145	.110	.159	.125	.096	.109	.086	.067	.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	.171	.114	.071	.147	.099	.062	.101	.069	.043	.058	.040	.026	.019	.013	.008	
5.0	.164	.104	.060	.140	.090	.052	.097	.063	.037	.056	.037	.022	.018	.012	.007	
6.0	.156	.096	.052	.134	.083	.045	.093	.058	.032	.054	.034	.019	.017	.011	.006	
7.0	.150	.089	.046	.129	.077	.040	.089	.054	.029	.052	.032	.017	.017	.010	.006	
8.0	.143	.083	.042	.123	.072	.036	.085	.051	.026	.050	.030	.015	.016	.010	.005	
9.0	.137	.078	.038	.118	.068	.034	.082	.048	.024	.048	.028	.014	.015	.009	.005	
10.0	.131	.074	.036	.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:2020-12-03

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:0.3086A P:7.406W PF:1.000 Freq:0Hz Lamp Flux:1144.34x1 lm										
NAME: D8802408NO					TYPE:			WEIGHT:		
SPEC.:D8802408NO-8NWDA012WC0100					DIM.: 1000*8*1.6mm			SERIAL No.:		
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	18.2	19.7	18.5	19.9	20.2	17.9	19.4	18.2	19.7	19.9
3H	19.9	21.3	20.2	21.6	21.8	19.5	20.9	19.8	21.2	21.4
4H	20.6	21.9	20.9	22.2	22.5	20.1	21.4	20.4	21.7	22.0
6H	21.1	22.4	21.5	22.7	23.0	20.5	21.7	20.8	22.0	22.4
8H	21.3	22.5	21.7	22.8	23.2	20.6	21.8	21.0	22.1	22.4
12H	21.4	22.6	21.8	22.9	23.3	20.6	21.8	21.0	22.1	22.5
4H 2H	18.8	20.2	19.2	20.4	20.7	18.6	20.0	19.0	20.2	20.5
3H	20.7	21.9	21.1	22.2	22.6	20.4	21.6	20.8	21.9	22.2
4H	21.5	22.6	21.9	23.0	23.3	21.1	22.2	21.5	22.5	22.9
6H	22.2	23.2	22.6	23.5	23.9	21.6	22.6	22.1	23.0	23.4
8H	22.4	23.3	22.9	23.7	24.2	21.8	22.7	22.2	23.1	23.5
12H	22.6	23.4	23.1	23.9	24.3	21.8	22.7	22.3	23.1	23.5
8H 4H	21.8	22.7	22.3	23.1	23.5	21.5	22.3	21.9	22.7	23.2
6H	22.7	23.4	23.1	23.8	24.3	22.1	22.9	22.6	23.3	23.8
8H	23.0	23.6	23.5	24.1	24.6	22.4	23.0	22.8	23.5	23.9
12H	23.2	23.8	23.8	24.3	24.8	22.5	23.1	23.0	23.5	24.0
12H 4H	21.8	22.7	22.3	23.1	23.5	21.5	22.3	21.9	22.7	23.2
6H	22.7	23.4	23.2	23.8	24.3	22.2	22.9	22.7	23.3	23.8
8H	23.1	23.6	23.6	24.1	24.6	22.5	23.0	23.0	23.5	24.0
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					+ 0.2 / - 0.4				

CIE Pub.117, 1144 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 0.5)

C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JYH  
Test Date:2020-12-03

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:0.3086A P:7.406W PF:1.000 Freq:0Hz Lamp Flux:1144.34x1 lm		
NAME: D8802408NO	TYPE:	WEIGHT:
SPEC.:D8802408NO-8NWDA012WC0100	DIM.: 1000*8*1.6mm	SERIAL No.:
MFR.: COLORS	SUR.:1000*8	Shielding Angle:

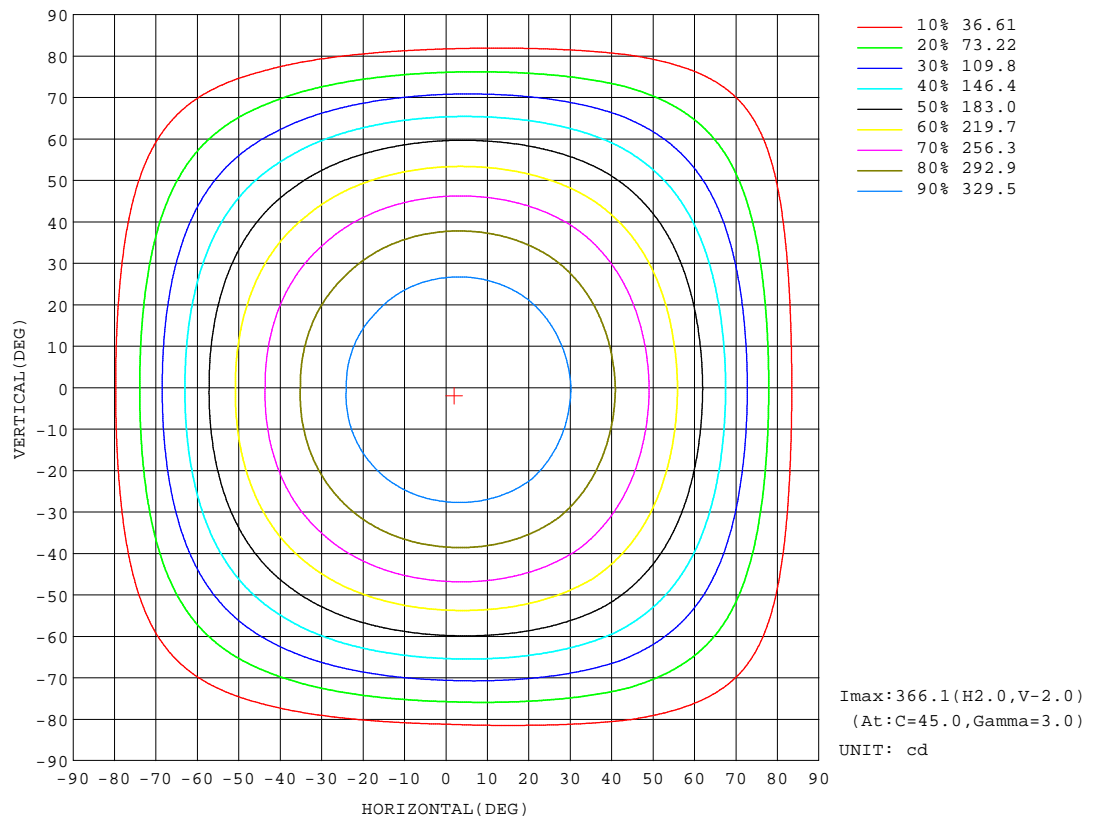
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	56	44	37	55	44	37	54	43	37	30
0.80	66	54	47	65	54	46	63	53	46	39
1.00	74	63	56	73	62	55	71	64	55	47
1.25	82	71	64	80	70	63	77	68	62	54
1.50	87	77	69	85	76	69	82	74	68	60
2.00	94	85	78	92	84	77	88	81	76	67
2.50	98	90	84	96	88	83	91	85	80	72
3.00	101	94	88	99	92	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	100	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:2020-12-03

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:0.3086A P:7.406W PF:1.000 Freq:0Hz Lamp Flux:1144.34x1 lm		
NAME: D8802408NO	TYPE:	WEIGHT:
SPEC.:D8802408NO-8NWDA012WC0100	DIM.: 1000*8*1.6mm	SERIAL No.:
MFR.: COLORS	SUR.:1000*8	Shielding Angle:



C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JYH  
Test Date:2020-12-03

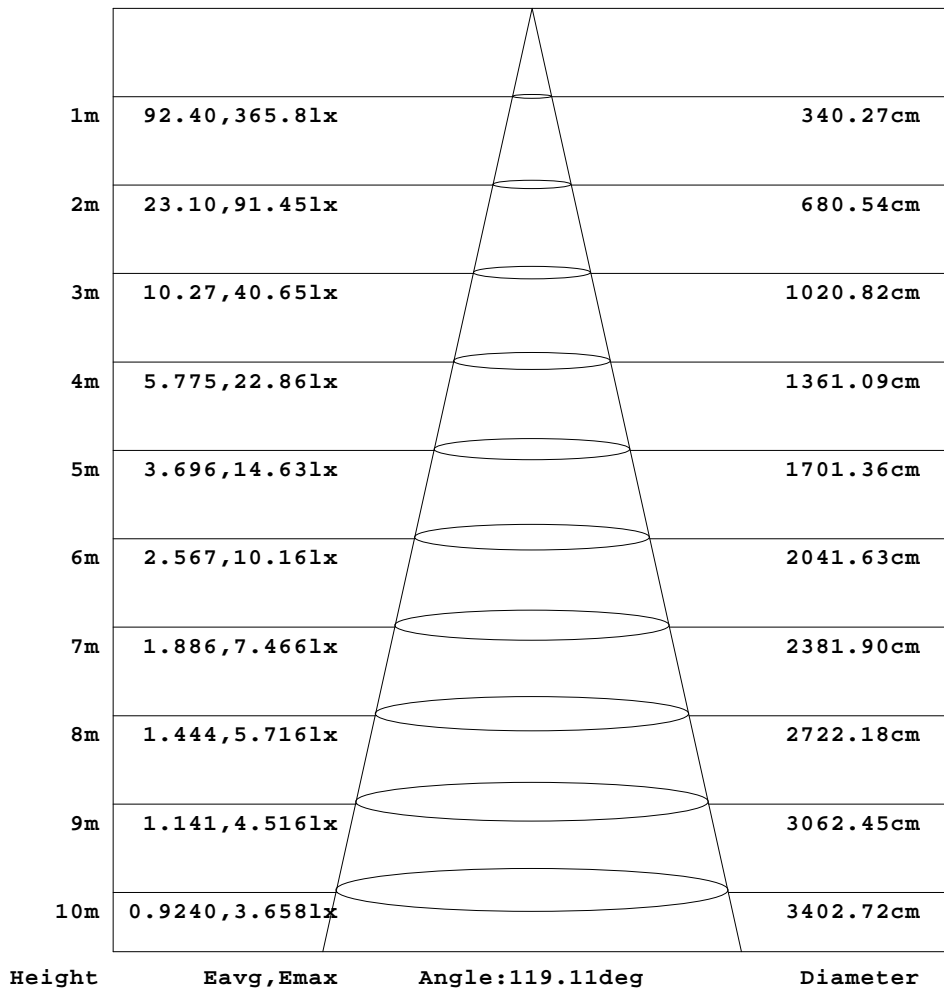
deg Range: 0 - 180DEG  
Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.362  
Humidity:65.0%  
Test Distance:10.950m [K=1.0000]  
Remarks:



### AAI Figure

Test:U:24.00V I:0.3086A P:7.406W PF:1.000 Freq:0Hz Lamp Flux:1144.34x1 lm		
NAME: D8802408NO	TYPE:	WEIGHT:
SPEC.:D8802408NO-8NWDA012WC0100	DIM.: 1000*8*1.6mm	SERIAL No.:
MFR.: COLORS	SUR.:1000*8	Shielding Angle:

Flux out:870.9 lm



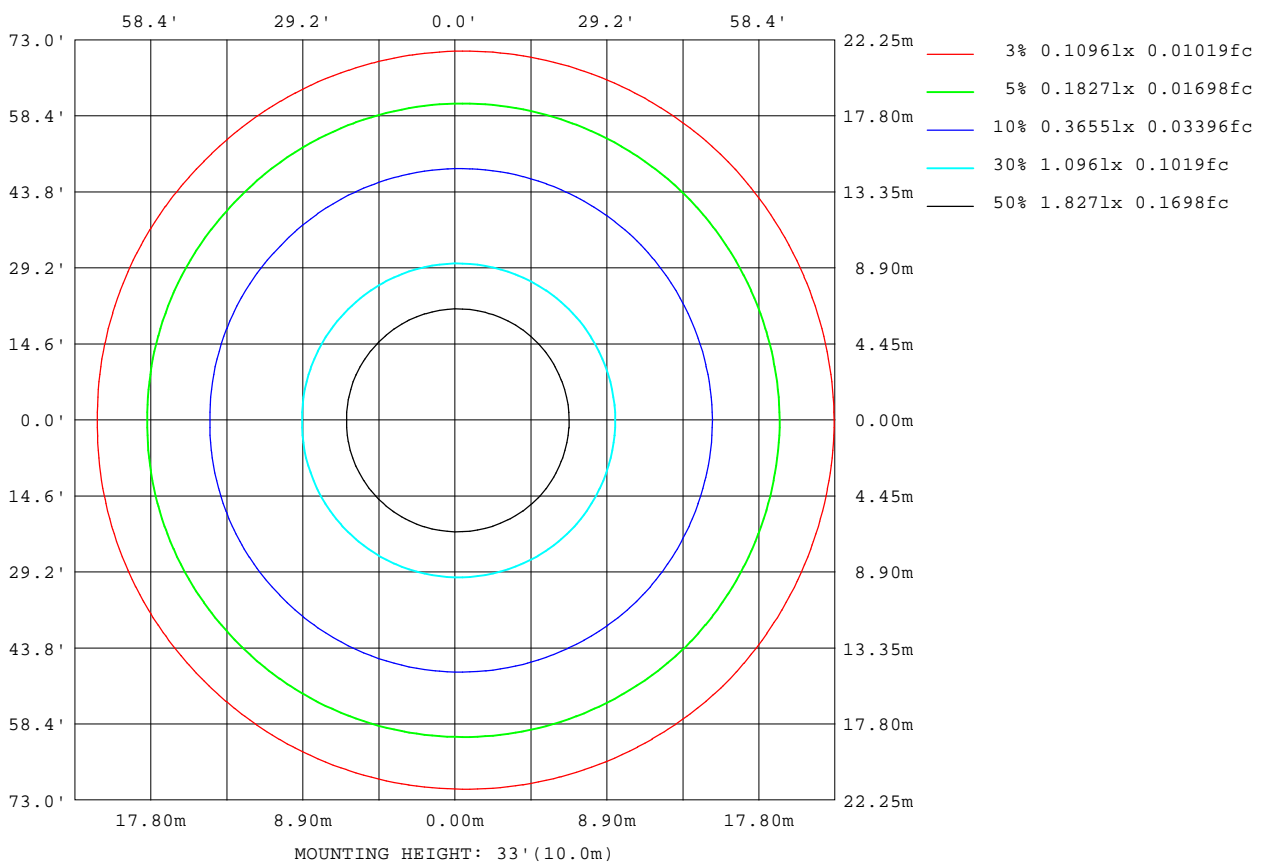
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JYH  
Test Date:2020-12-03

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

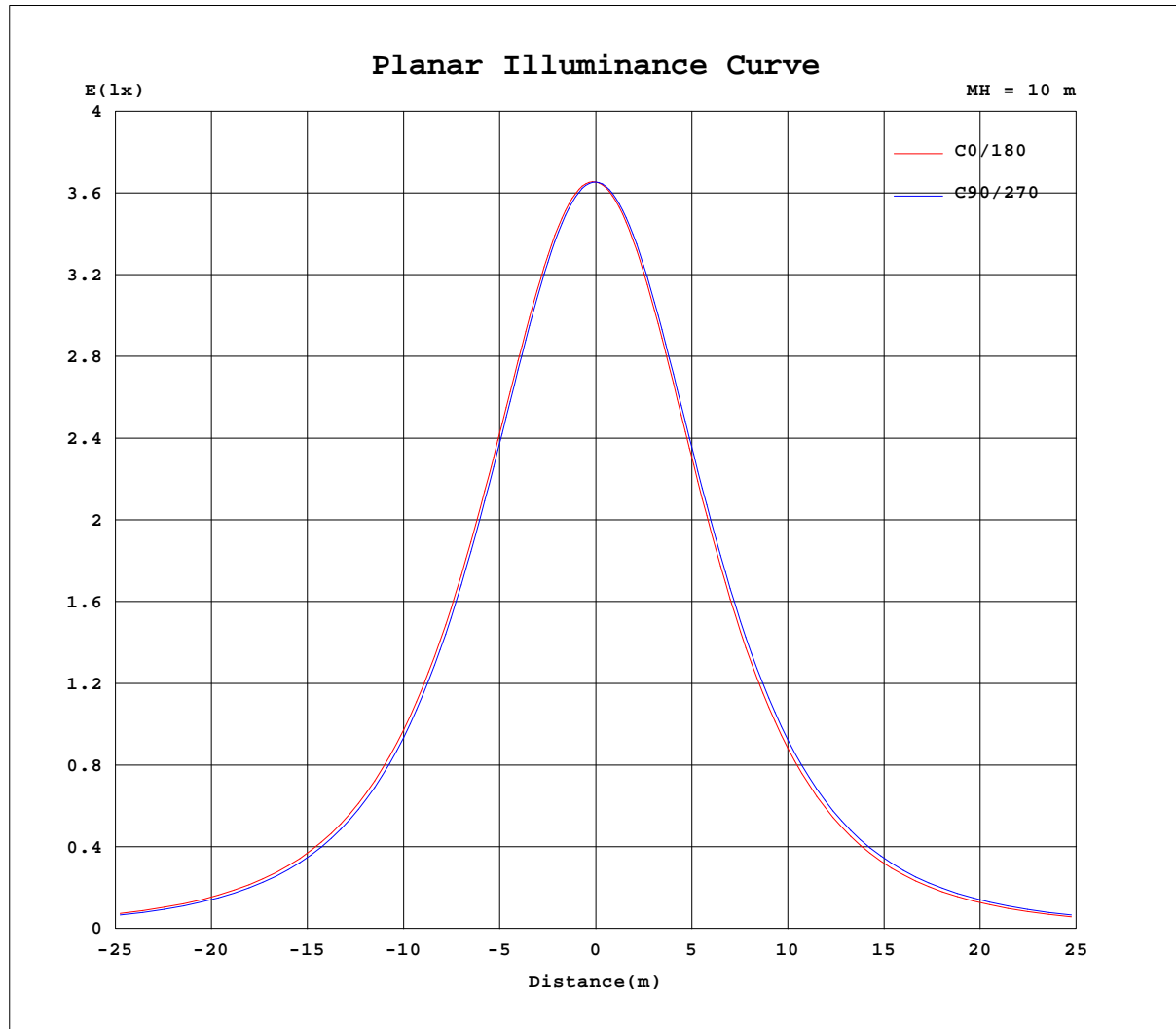
Test:U:24.00V I:0.3086A P:7.406W PF:1.000 Freq:0Hz Lamp Flux:1144.34x1 lm		
NAME: D8802408NO	TYPE:	WEIGHT:
SPEC.:D8802408NO-8NWDA012WC0100	DIM.: 1000*8*1.6mm	SERIAL No.:
MFR.: COLORS	SUR.:1000*8	Shielding Angle:



C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:JYH  
 Test Date:2020-12-03

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: 2020-12-03

deg Range: 0 - 180DEG  
deg 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:0.3086A P:7.406W PF:1.000 Freq:0Hz Lamp Flux:1144.34x1 lm		
NAME: D8802408NO	TYPE:	WEIGHT:
SPEC.:D8802408NO-8NWDA012WC0100	DIM.: 1000*8*1.6mm	SERIAL No.:
MFR.: COLORS	SUR.:1000*8	Shielding Angle:

Table--1

UNIT: cd

C(DEG) g (DEG)	0	45	90	135	180	225	270	315										
0	365	366	365	366	365	366	365	366										
5	366	366	365	364	363	363	364	366										
10	364	364	361	360	358	358	360	363										
15	360	359	356	353	350	351	354	358										
20	352	352	347	343	340	341	345	350										
25	343	342	336	331	327	328	334	339										
30	330	329	322	316	311	313	319	326										
35	315	314	306	299	293	295	303	310										
40	296	295	287	279	273	275	283	292										
45	275	274	265	256	250	252	261	270										
50	251	250	240	230	224	227	237	246										
55	225	223	212	202	196	199	210	219										
60	195	193	182	172	165	169	180	190										
65	163	161	149	139	133	137	148	158										
70	129	127	114	105	99.5	103	115	125										
75	93.9	91.0	78.7	70.3	66.0	69.4	80.3	89.8										
80	59.0	55.9	44.3	38.1	35.0	37.9	47.0	55.7										
85	27.9	24.5	16.1	13.2	11.2	13.2	18.6	25.4										
90	8.04	5.23	2.14	2.45	1.26	1.88	1.51	6.57										
95	2.93	1.69	1.43	1.59	0.97	0.82	0.49	1.67										
100	1.61	1.46	1.39	1.64	1.27	1.14	0.94	0.83										
105	1.55	1.68	1.55	1.97	1.83	1.58	1.53	1.29										
110	2.00	2.07	2.00	2.43	2.38	2.02	1.98	1.66										
115	2.54	2.59	2.54	2.92	2.84	2.42	2.42	2.19										
120	3.05	3.04	3.06	3.33	3.29	2.79	2.77	2.69										
125	3.50	3.46	3.39	3.66	3.70	3.15	3.07	3.06										
130	3.91	3.79	3.72	3.97	4.07	3.49	3.35	3.37										
135	4.27	4.09	4.02	4.24	4.38	3.85	3.60	3.59										
140	4.56	4.30	4.27	4.48	4.66	4.19	3.79	3.77										
145	4.77	4.46	4.47	4.72	4.86	4.59	3.96	3.95										
150	4.96	4.58	4.59	4.97	4.97	4.84	4.24	3.98										
155	5.20	4.70	4.91	5.26	5.16	5.11	4.66	4.17										
160	5.42	4.84	5.23	5.50	5.30	5.39	5.16	4.36										
165	5.65	5.12	5.64	5.72	5.42	5.58	5.57	4.88										
170	5.69	5.59	6.02	5.96	5.29	5.88	5.96	5.45										
175	5.48	6.09	6.34	6.30	5.16	6.13	6.33	6.06										
180	5.56	6.51	6.61	6.62	5.54	6.51	6.62	6.63										

C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JYH  
Test Date:2020-12-03

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: