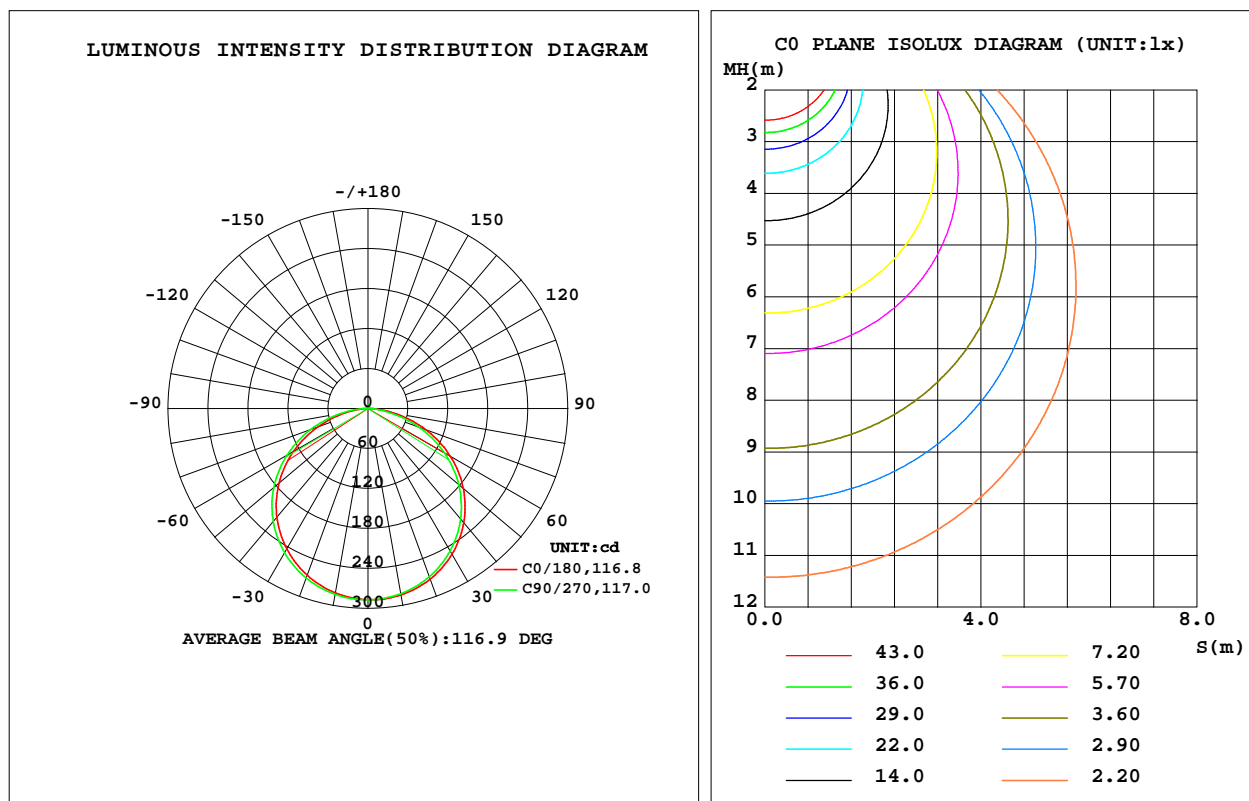


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:24.00V I:0.2987A P:7.168W PF:1.000 Freq:0Hz Lamp Flux:873.899x1 lm		
NAME: D8802408NO	TYPE:	WEIGHT:
SPEC.:D8802408NO-HNWNDA012WC0100	DIM.: 1000*8*1.6mm	SERIAL No.:
MFR.: COLORS	SUR.:1000*8	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 121.91 lm/W			
MODEL	D8802408NO	I _{max} (cd)	287.5	S/MH(C0/180)	1.31
NOMINAL POWER(W)	6.6	LOR(%)	100.0	S/MH(C90/270)	1.30
RATED VOLTAGE(V)	24	TOTAL FLUX(lm)	873.90	h UP,DN(C0-180)	0.9,49.0
NOMINAL FLUX(lm)	873.899	CIE CLASS	DIRECT	h UP,DN(C180-360)	0.8,49.4
LAMPS INSIDE	1	h up(%)	1.7	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	24	h down(%)	98.3	CIBSE SHR MAX	1.35



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

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:

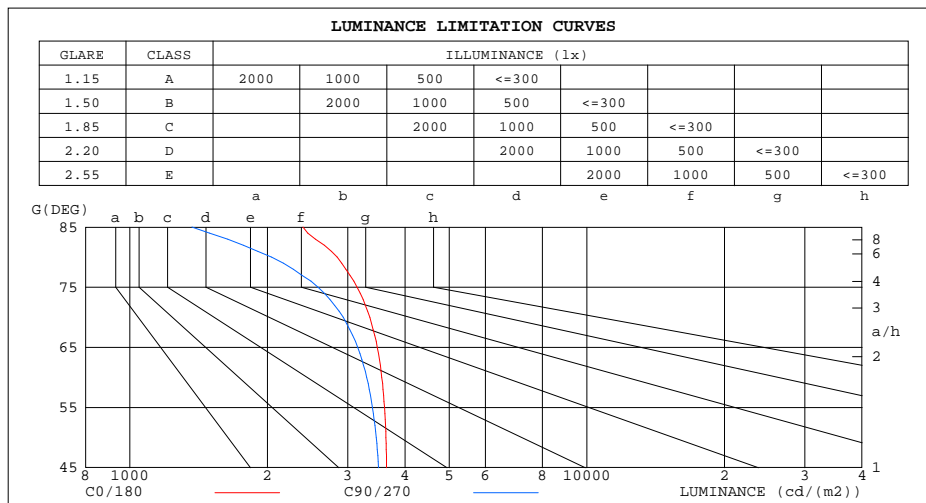
g	C0	C45	C90	C135	C180	C225	C270	C315	g	F zone	F total	%lum,lamp
10	284.2	283.8	282.3	281.8	281.0	282.1	283.3	284.3	0- 10	27.21	27.21	3.11,3.11
20	272.7	271.7	268.8	267.5	266.5	268.3	271.0	272.5	10- 20	78.35	105.6	12.1,12.1
30	252.5	250.9	246.7	244.8	243.7	246.2	250.2	252.2	20- 30	120.0	225.5	25.8,25.8
40	223.7	221.6	216.4	214.0	212.8	216.3	221.3	223.6	30- 40	146.8	372.3	42.6,42.6
50	186.9	184.0	178.0	175.1	174.5	178.6	184.5	186.8	40- 50	154.9	527.1	60.3,60.3
60	142.4	138.8	131.9	129.2	129.2	134.0	140.5	142.9	50- 60	142.4	669.6	76.6,76.6
70	91.69	87.42	80.18	77.92	78.93	84.04	90.68	92.83	60- 70	110.0	779.6	89.2,89.2
80	39.48	35.24	28.38	28.23	29.80	34.01	39.28	41.24	70- 80	62.73	842.3	96.4,96.4
90	4.286	2.843	1.546	2.348	1.837	2.666	1.470	5.676	80- 90	17.03	859.3	98.3,98.3
100	1.062	1.142	1.071	1.204	0.8627	0.6987	0.6102	0.6135	90-100	1.305	860.6	98.5,98.5
110	1.560	1.651	1.561	1.805	1.677	1.355	1.384	1.227	100-110	1.262	861.9	98.6,98.6
120	2.318	2.393	2.344	2.518	2.413	1.983	1.965	1.956	110-120	1.870	863.8	98.8,98.8
130	2.999	2.980	2.878	3.040	3.047	2.558	2.445	2.524	120-130	2.270	866.0	99.1,99.1
140	3.487	3.373	3.299	3.461	3.541	3.157	2.812	2.812	130-140	2.350	868.4	99.4,99.4
150	3.841	3.607	3.605	3.881	3.841	3.673	3.194	2.999	140-150	2.143	870.5	99.6,99.6
160	4.174	3.821	4.061	4.315	4.175	4.120	3.948	3.385	150-160	1.745	872.3	99.8,99.8
170	4.422	4.369	4.695	4.689	4.141	4.535	4.623	4.235	160-170	1.195	873.5	99.9,99.9
180	4.368	5.056	5.143	5.170	4.382	5.036	5.157	5.210	170-180	0.4399	873.9	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
 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:0.2987A P:7.168W PF:1.000 Freq:0Hz Lamp Flux:873.899x1 lm		
NAME: D8802408NO	TYPE:	WEIGHT:
SPEC.:D8802408NO-HNWDA012WC0100	DIM.: 1000*8*1.6mm	SERIAL No.:
MFR.: COLORS	SUR.:1000*8	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	2393	1369
80	2842	2043
75	3145	2582
70	3351	2930
65	3480	3152
60	3561	3299
55	3608	3396
50	3635	3462
45	3646	3502

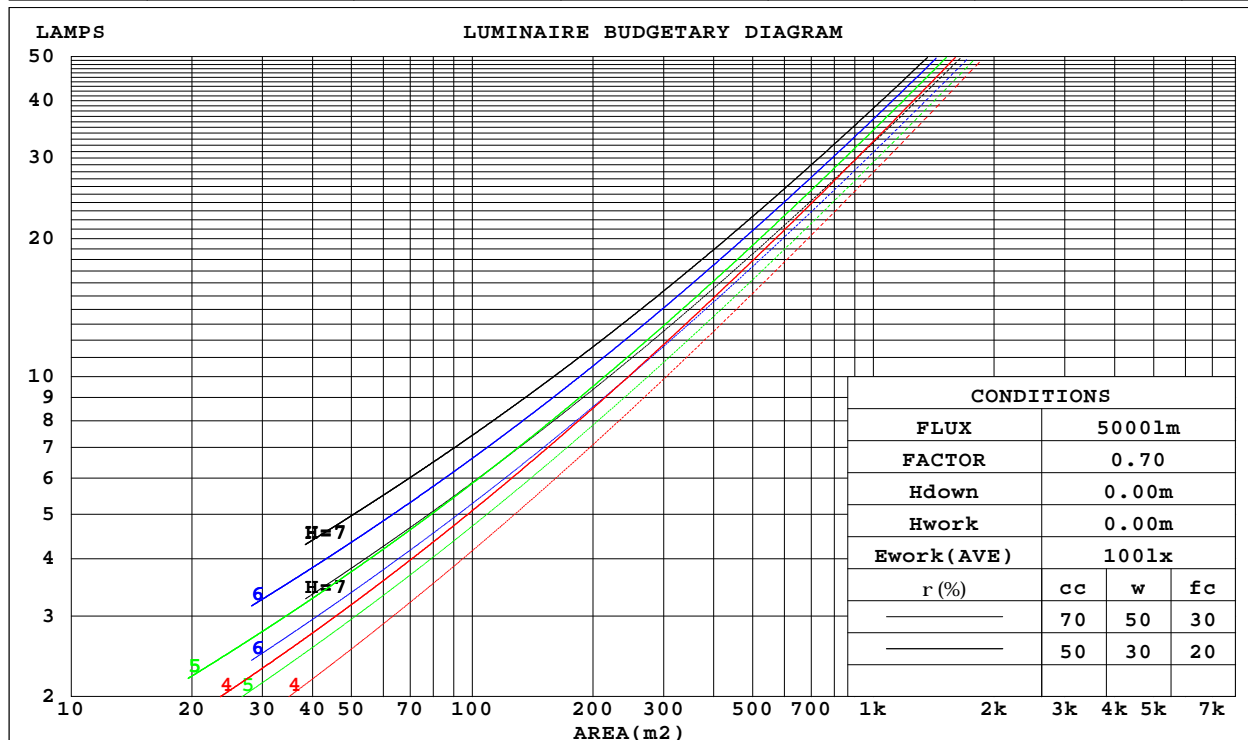
C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:JYH
 Test Date:2020-12-03

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:0.2987A P:7.168W PF:1.000 Freq:0Hz Lamp Flux:873.899x1 lm		
NAME: D8802408NO	TYPE:	WEIGHT:
SPEC.:D8802408NO-HNWNDA012WC0100	DIM.: 1000*8*1.6mm	SERIAL No.:
MFR.: COLORS	SUR.:1000*8	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: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:0.2987A P:7.168W PF:1.000 Freq:0Hz Lamp Flux:873.899x1 lm		
NAME: D8802408NO	TYPE:	WEIGHT:
SPEC.:D8802408NO-HNWNDA012WC0100	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	.314	.178	.056	.306	.174	.055	.292	.167	.053	.279	.161	.052	.267	.155	.050	
2.0	.295	.162	.050	.288	.159	.049	.275	.153	.048	.264	.148	.046	.253	.143	.045	
3.0	.272	.145	.043	.267	.143	.043	.255	.138	.042	.245	.134	.041	.235	.130	.040	
4.0	.251	.131	.038	.246	.129	.038	.236	.125	.037	.227	.122	.037	.218	.119	.036	
5.0	.232	.118	.034	.227	.117	.034	.218	.114	.033	.210	.111	.033	.202	.108	.033	
6.0	.215	.108	.031	.211	.107	.031	.203	.104	.030	.195	.102	.030	.189	.099	.029	
7.0	.200	.099	.028	.196	.098	.028	.189	.096	.028	.182	.094	.027	.176	.092	.027	
8.0	.187	.091	.026	.183	.090	.026	.177	.088	.025	.171	.087	.025	.165	.085	.025	
9.0	.175	.085	.024	.172	.084	.023	.166	.082	.023	.161	.080	.023	.155	.079	.023	
10.0	.164	.079	.022	.162	.078	.022	.156	.077	.022	.151	.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	.193	.169	.147	.165	.145	.126	.113	.100	.087	.065	.058	.051	.021	.019	.016	
2.0	.186	.145	.111	.159	.125	.096	.109	.086	.067	.063	.050	.039	.020	.016	.013	
3.0	.178	.127	.087	.153	.110	.075	.105	.076	.053	.060	.045	.031	.019	.014	.010	
4.0	.170	.114	.071	.146	.099	.062	.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	.089	.046	.128	.077	.040	.089	.054	.029	.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	.068	.033	.081	.047	.024	.047	.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:0.2987A P:7.168W PF:1.000 Freq:0Hz Lamp Flux:873.899x1 lm											
NAME: D8802408NO						TYPE:		WEIGHT:			
SPEC.:D8802408NO-HNWNDA012WC0100						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	17.9	19.4	18.2	19.6	19.9	17.6	19.1	17.9	19.3	19.6	
	3H	19.5	20.9	19.8	21.2	21.4	19.1	20.5	19.4	20.7	21.0
	4H	20.1	21.5	20.5	21.8	22.0	19.6	20.9	20.0	21.2	21.5
	6H	20.6	21.9	21.0	22.2	22.5	19.9	21.2	20.3	21.5	21.8
	8H	20.8	22.0	21.1	22.3	22.6	20.0	21.2	20.4	21.5	21.8
	12H	20.8	22.0	21.2	22.3	22.7	20.0	21.2	20.4	21.5	21.8
4H	2H	18.5	19.8	18.8	20.1	20.4	18.3	19.6	18.6	19.9	20.2
	3H	20.3	21.4	20.6	21.8	22.1	19.9	21.1	20.3	21.4	21.8
	4H	21.0	22.1	21.4	22.5	22.8	20.6	21.6	21.0	22.0	22.4
	6H	21.6	22.6	22.1	23.0	23.4	21.0	21.9	21.4	22.3	22.7
	8H	21.8	22.7	22.3	23.1	23.5	21.1	22.0	21.5	22.4	22.8
	12H	21.9	22.8	22.4	23.2	23.6	21.1	22.0	21.6	22.4	22.8
8H	4H	21.3	22.2	21.7	22.6	23.0	20.9	21.7	21.3	22.1	22.6
	6H	22.0	22.7	22.5	23.2	23.6	21.4	22.2	21.9	22.6	23.1
	8H	22.3	22.9	22.8	23.4	23.9	21.6	22.2	22.1	22.7	23.2
	12H	22.5	23.0	23.0	23.5	24.0	21.7	22.3	22.2	22.7	23.2
12H	4H	21.3	22.1	21.7	22.5	22.9	20.9	21.7	21.3	22.1	22.5
	6H	22.0	22.7	22.5	23.1	23.6	21.5	22.1	22.0	22.6	23.1
	8H	22.3	22.9	22.8	23.4	23.9	21.7	22.2	22.2	22.7	23.2
Variations with the observer position at spacings:											
S = 1.0H	+ 0.1 / - 0.2					+ 0.2 / - 0.2					
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.4					
2.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.4					

CIE Pub.117, 873.9 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:0.2987A P:7.168W PF:1.000 Freq:0Hz Lamp Flux:873.899x1 lm		
NAME: D8802408NO	TYPE:	WEIGHT:
SPEC.:D8802408NO-HNWNDA012WC0100	DIM.: 1000*8*1.6mm	SERIAL No.:
MFR.: COLORS	SUR.:1000*8	Shielding Angle:

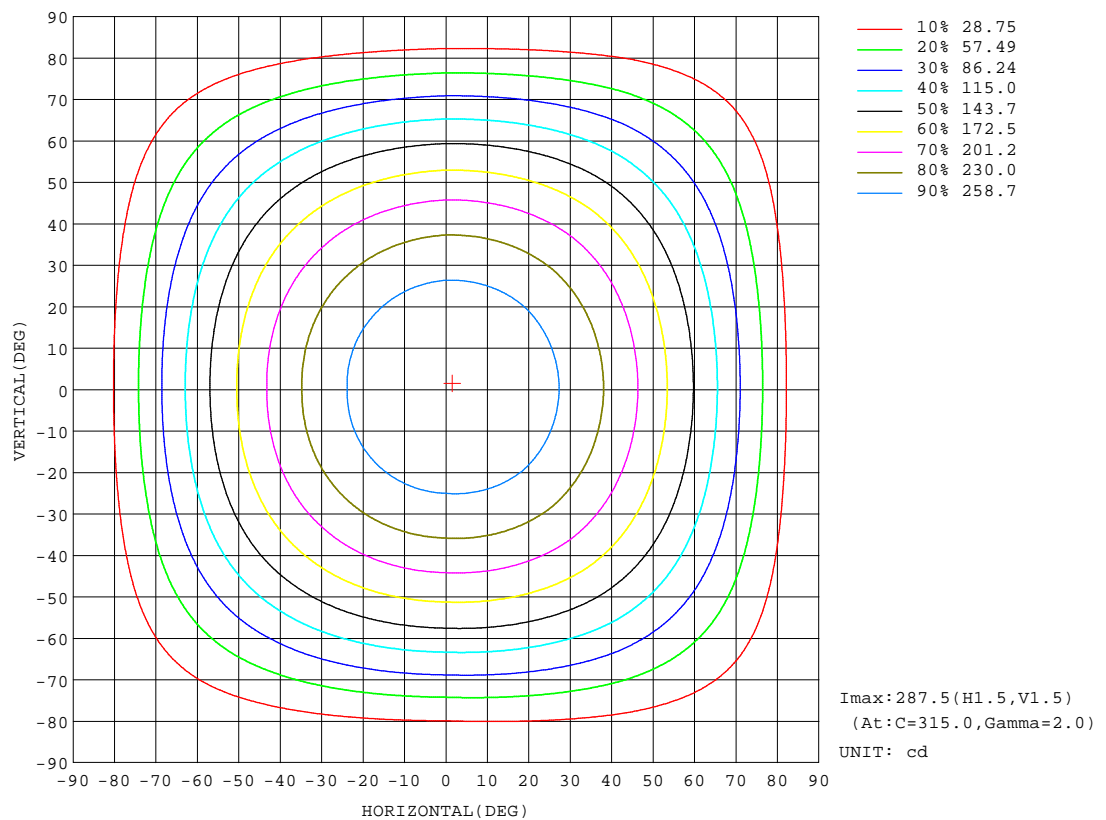
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	56	45	38	55	44	37	54	44	37	31
0.80	66	55	47	65	54	47	63	53	46	39
1.00	75	64	56	74	63	56	71	64	55	48
1.25	82	71	64	80	70	64	78	69	63	55
1.50	87	77	70	85	76	69	82	74	68	60
2.00	94	85	79	92	84	78	88	82	76	68
2.50	98	90	84	96	89	83	92	86	81	72
3.00	101	94	89	99	93	88	95	90	85	76
4.00	106	100	95	103	98	93	98	94	91	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: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:0.2987A P:7.168W PF:1.000 Freq:0Hz Lamp Flux:873.899x1 lm		
NAME: D8802408NO	TYPE:	WEIGHT:
SPEC.:D8802408NO-HNWDA012WC0100	DIM.: 1000*8*1.6mm	SERIAL No.:
MFR.: COLORS	SUR.:1000*8	Shielding Angle:



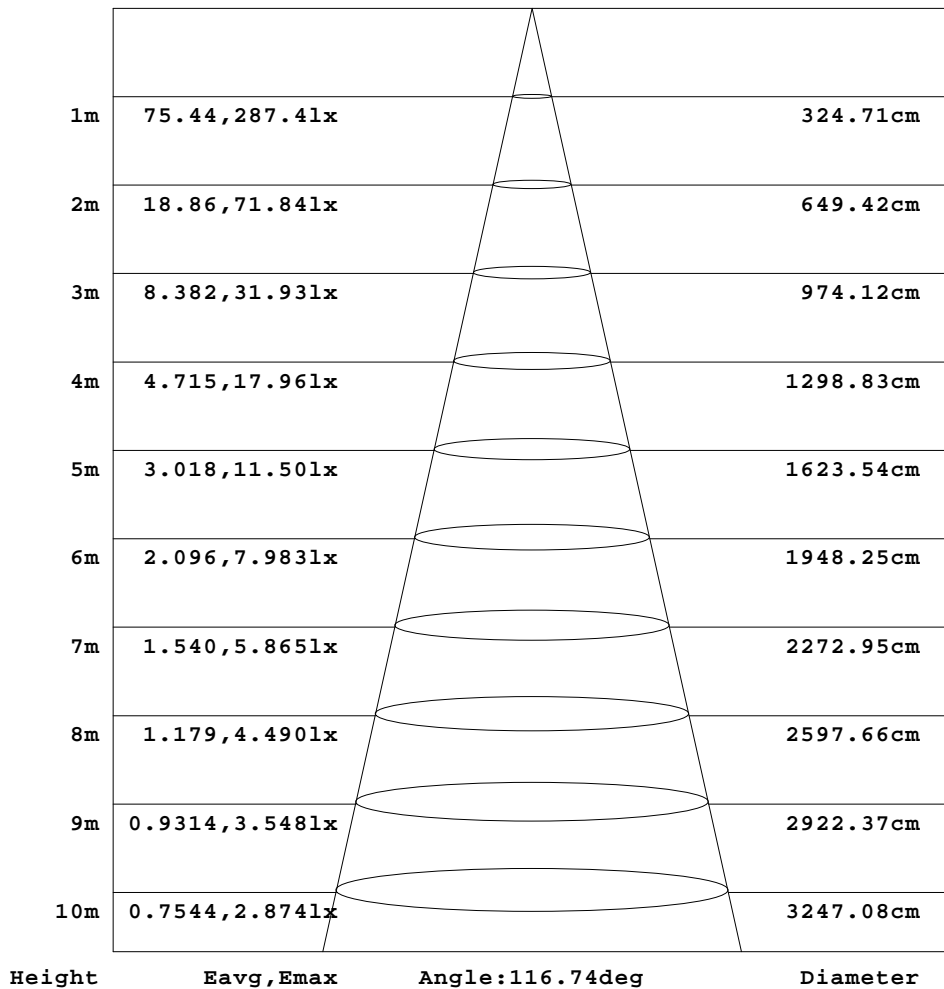
C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2020-12-03

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:0.2987A P:7.168W PF:1.000 Freq:0Hz Lamp Flux:873.899x1 lm		
NAME: D8802408NO	TYPE:	WEIGHT:
SPEC.:D8802408NO-HNWDA012WC0100	DIM.: 1000*8*1.6mm	SERIAL No.:
MFR.: COLORS	SUR.:1000*8	Shielding Angle:

Flux out:656.5 lm



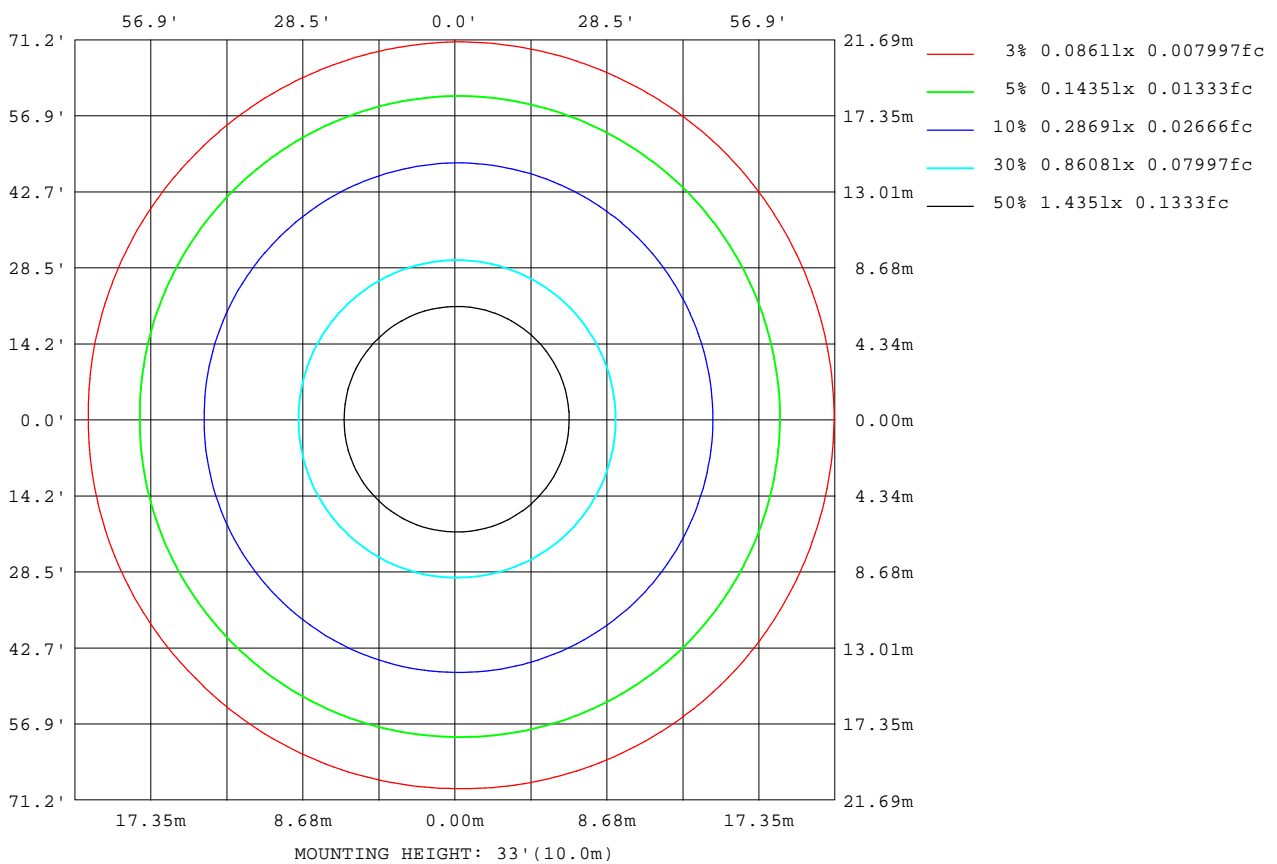
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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

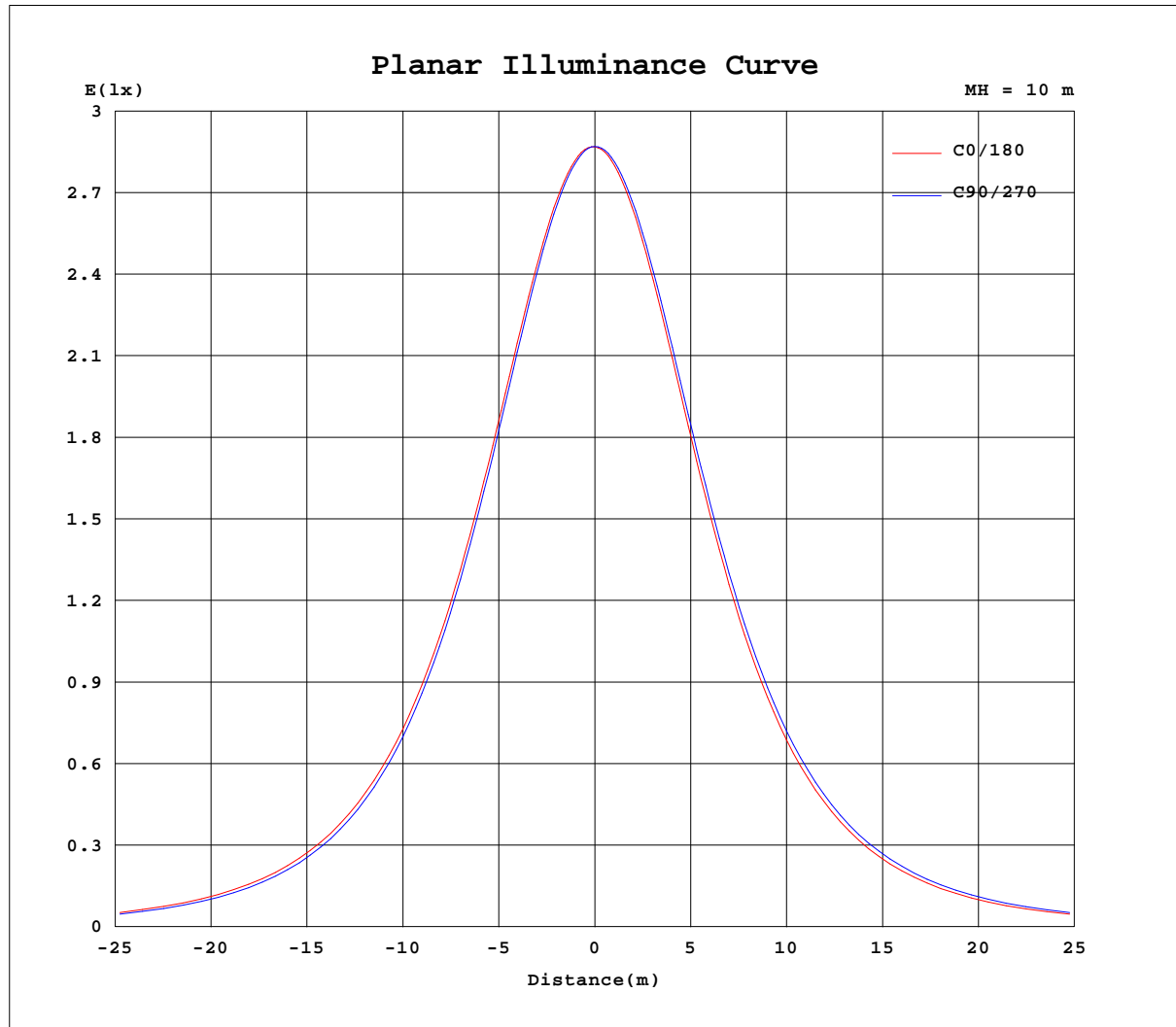
Test:U:24.00V I:0.2987A P:7.168W PF:1.000 Freq:0Hz Lamp Flux:873.899x1 lm		
NAME: D8802408NO	TYPE:	WEIGHT:
SPEC.:D8802408NO-HNWDA012WC0100	DIM.: 1000*8*1.6mm	SERIAL No.:
MFR.: COLORS	SUR.:1000*8	Shielding Angle:



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

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:

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:0.2987A P:7.168W PF:1.000 Freq:0Hz Lamp Flux:873.899x1 lm		
NAME: D8802408NO	TYPE:	WEIGHT:
SPEC.:D8802408NO-HNWNDA012WC0100	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	287	287	287	287	287	287	287	287										
5	287	287	286	286	285	286	286	287										
10	284	284	282	282	281	282	283	284										
15	280	279	277	276	275	276	278	279										
20	273	272	269	268	267	268	271	273										
25	264	262	259	257	256	258	262	263										
30	252	251	247	245	244	246	250	252										
35	239	237	233	230	229	232	237	239										
40	224	222	216	214	213	216	221	224										
45	206	204	198	195	195	198	204	206										
50	187	184	178	175	174	179	185	187										
55	166	162	156	153	153	157	163	166										
60	142	139	132	129	129	134	141	143										
65	118	114	107	104	105	110	116	118										
70	91.7	87.4	80.2	77.9	78.9	84.0	90.7	92.8										
75	65.1	60.7	53.5	52.0	53.5	58.3	64.6	66.6										
80	39.5	35.2	28.4	28.2	29.8	34.0	39.3	41.2										
85	16.7	14.4	9.54	10.5	11.1	13.9	17.5	19.3										
90	4.29	2.84	1.55	2.35	1.84	2.67	1.47	5.68										
95	1.44	1.14	1.06	1.16	0.64	0.60	0.31	1.26										
100	1.06	1.14	1.07	1.20	0.86	0.70	0.61	0.61										
105	1.23	1.34	1.16	1.47	1.28	1.04	1.03	0.96										
110	1.56	1.65	1.56	1.81	1.68	1.36	1.38	1.23										
115	1.93	2.03	1.96	2.17	2.04	1.68	1.70	1.60										
120	2.32	2.39	2.34	2.52	2.41	1.98	1.96	1.96										
125	2.68	2.71	2.64	2.81	2.74	2.30	2.21	2.30										
130	3.00	2.98	2.88	3.04	3.05	2.56	2.44	2.52										
135	3.27	3.20	3.10	3.26	3.31	2.84	2.65	2.70										
140	3.49	3.37	3.30	3.46	3.54	3.16	2.81	2.81										
145	3.67	3.52	3.48	3.66	3.73	3.41	2.96	2.96										
150	3.84	3.61	3.60	3.88	3.84	3.67	3.19	3.00										
155	4.05	3.71	3.85	4.11	4.01	3.91	3.54	3.12										
160	4.17	3.82	4.06	4.32	4.17	4.12	3.95	3.39										
165	4.35	4.02	4.38	4.49	4.23	4.38	4.30	3.74										
170	4.42	4.37	4.70	4.69	4.14	4.54	4.62	4.23										
175	4.29	4.74	4.93	4.94	4.09	4.78	4.92	4.70										
180	4.37	5.06	5.14	5.17	4.38	5.04	5.16	5.21										

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: