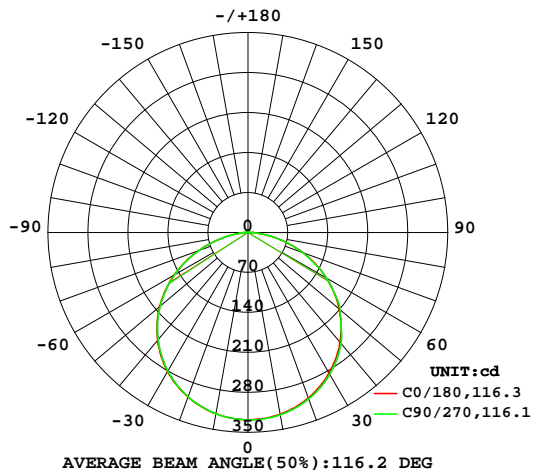


LUMINAIRE PHOTOMETRIC TEST REPORT

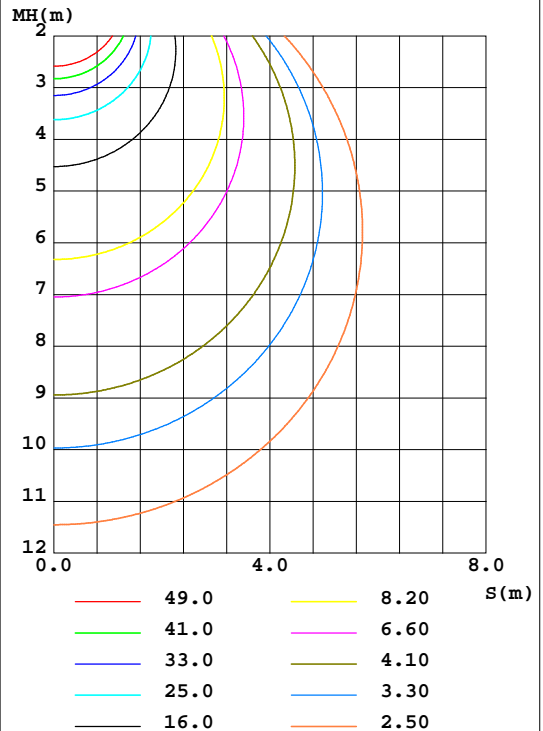
Test:U:24.00V I:0.2845A P:6.827W PF:1.000 Freq:0Hz Lamp Flux:990.149x1 lm		
NAME: DR8802408NO	TYPE:	WEIGHT:
SPEC.:DR8802408NO-8SWNDA012WC0100	DIM.: 1000*8*1.5mm	SERIAL No.:
MFR.: COLORS	SUR.:1000*8mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 145.03 lm/W			
MODEL	DR8802408NO	I _{max} (cd)	328.2	S/MH(C0/180)	1.29
NOMINAL POWER(W)	6.4	LOR(%)	100.0	S/MH(C90/270)	1.27
RATED VOLTAGE(V)	24	TOTAL FLUX(lm)	990.15	h UP,DN(C0-180)	0.9,50.5
NOMINAL FLUX(lm)	990.149	CIE CLASS	DIRECT	h UP,DN(C180-360)	0.7,47.8
LAMPS INSIDE	1	h up(%)	1.6	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	24	h down(%)	98.4	CIBSE SHR MAX	1.35

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2021-11-02

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:

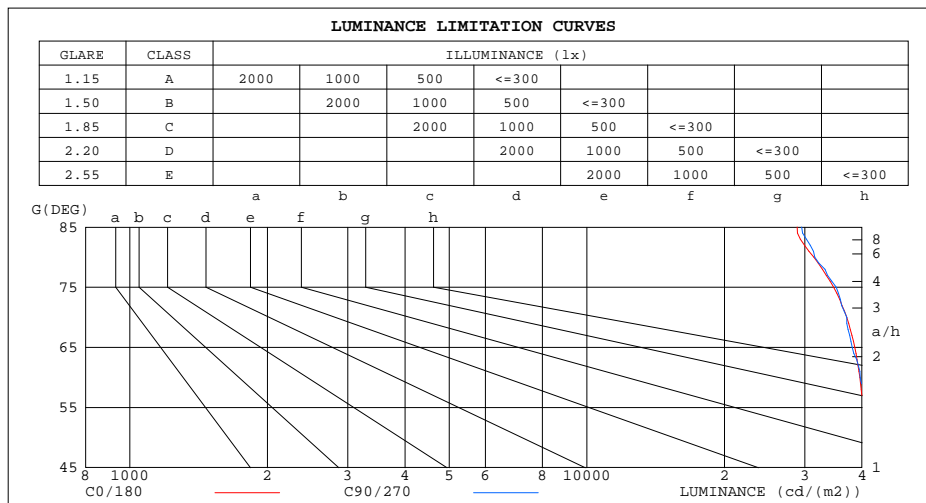
g	C0	C45	C90	C135	C180	C225	C270	C315	g	F zone	F total	%lum,lamp
10	323.2	324.2	324.4	324.3	322.3	322.1	322.1	321.3	0- 10	31.07	31.07	3.14,3.14
20	308.6	310.3	310.5	310.8	306.8	306.1	305.9	305.1	10- 20	89.44	120.5	12.2,12.2
30	284.4	286.6	286.9	287.5	281.3	280.2	280.0	279.3	20- 30	136.9	257.4	26.26
40	250.9	253.3	253.7	254.6	246.2	244.9	244.6	244.2	30- 40	167.2	424.6	42.9,42.9
50	208.6	211.2	211.3	212.3	201.9	200.5	200.2	200.1	40- 50	175.9	600.5	60.7,60.7
60	158.2	156.7	158.7	161.5	149.6	148.1	147.7	148.1	50- 60	161.3	761.9	76.9,76.9
70	101.3	100.5	101.4	101.8	91.11	89.75	89.44	89.94	60- 70	123.5	885.4	89.4,89.4
80	43.61	44.49	43.81	40.36	34.04	32.89	32.54	32.62	70- 80	69.87	955.2	96.5,96.5
90	5.917	5.585	5.655	3.331	3.068	2.414	2.309	0.7181	80- 90	19.00	974.2	98.4,98.4
100	1.263	1.183	1.162	1.149	1.025	0.9187	0.9560	0.5740	90-100	1.610	975.8	98.6,98.6
110	1.803	1.770	1.702	1.652	1.805	1.508	1.570	1.240	100-110	1.375	977.2	98.7,98.7
120	2.650	2.653	2.576	2.540	2.452	2.096	2.164	1.890	110-120	1.989	979.2	98.9,98.9
130	3.392	3.301	3.205	3.160	3.013	2.717	2.760	2.504	120-130	2.422	981.6	99.1,99.1
140	3.954	3.714	3.627	3.647	3.540	3.266	3.327	2.952	130-140	2.525	984.2	99.4,99.4
150	4.366	3.908	3.827	3.968	3.881	3.827	3.889	3.426	140-150	2.320	986.5	99.6,99.6
160	4.695	4.115	4.048	4.563	4.309	4.401	4.463	4.234	150-160	1.899	988.4	99.8,99.8
170	4.950	4.590	4.561	5.244	4.435	4.889	4.950	4.975	160-170	1.294	989.7	100,100
180	4.863	5.557	5.544	5.664	4.856	5.551	5.557	5.644	170-180	0.4767	990.1	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:2021-11-02

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:0.2845A P:6.827W PF:1.000 Freq:0Hz Lamp Flux:990.149x1 lm		
NAME: DR8802408NO	TYPE:	WEIGHT:
SPEC.:DR8802408NO-8SWNDA012WC0100	DIM.: 1000*8*1.5mm	SERIAL No.:
MFR.: COLORS	SUR.:1000*8mm	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	28877	29538
80	31390	31539
75	34669	35112
70	37029	37075
65	38562	38053
60	39552	39668
55	40173	40431
50	40558	41095
45	40805	40746

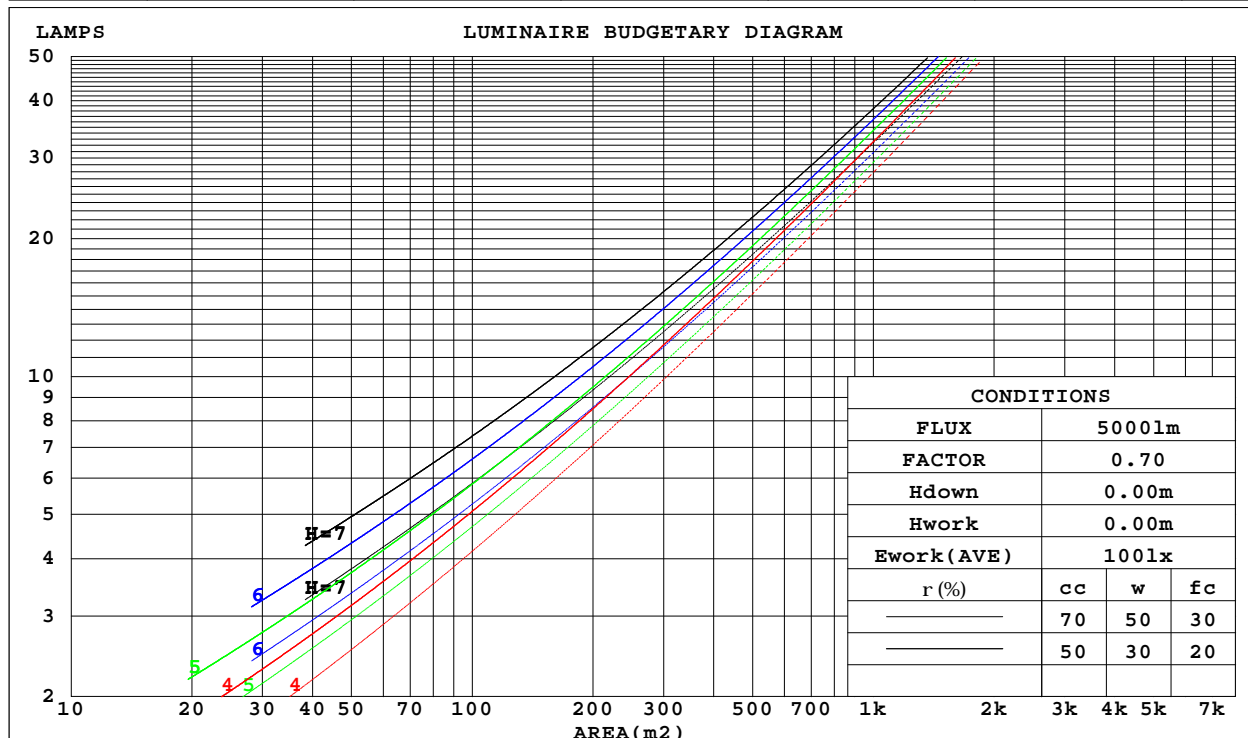
C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:JYH
 Test Date:2021-11-02

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:0.2845A P:6.827W PF:1.000 Freq:0Hz Lamp Flux:990.149x1 lm		
NAME: DR8802408NO	TYPE:	WEIGHT:
SPEC.:DR8802408NO-8SWNDA012WC0100	DIM.: 1000*8*1.5mm	SERIAL No.:
MFR.: COLORS	SUR.:1000*8mm	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:2021-11-02

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:0.2845A P:6.827W PF:1.000 Freq:0Hz Lamp Flux:990.149x1 lm		
NAME: DR8802408NO	TYPE:	WEIGHT:
SPEC.:DR8802408NO-8SWNDA012WC0100	DIM.: 1000*8*1.5mm	SERIAL No.:
MFR.: COLORS	SUR.:1000*8mm	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	.312	.178	.056	.305	.174	.055	.290	.167	.053	.277	.160	.051	.265	.154	.050	
2.0	.294	.161	.049	.287	.158	.049	.274	.153	.047	.263	.147	.046	.252	.143	.045	
3.0	.272	.145	.043	.266	.142	.043	.255	.138	.042	.244	.134	.041	.235	.130	.040	
4.0	.251	.130	.038	.245	.128	.038	.235	.125	.037	.226	.121	.037	.218	.118	.036	
5.0	.232	.118	.034	.227	.116	.034	.218	.114	.033	.210	.111	.033	.202	.108	.032	
6.0	.215	.108	.031	.210	.106	.031	.203	.104	.030	.195	.101	.030	.188	.099	.029	
7.0	.200	.099	.028	.196	.098	.028	.189	.095	.027	.182	.093	.027	.176	.091	.027	
8.0	.186	.091	.026	.183	.090	.025	.177	.088	.025	.171	.086	.025	.165	.085	.025	
9.0	.175	.084	.024	.172	.084	.023	.166	.082	.023	.160	.080	.023	.155	.079	.023	
10.0	.164	.079	.022	.161	.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	.173	.173	.173	.118	.118	.118	.068	.068	.068	.022	.022	.022	
1.0	.193	.168	.147	.165	.145	.126	.113	.099	.087	.065	.058	.051	.021	.019	.016	
2.0	.185	.144	.110	.158	.124	.095	.109	.086	.066	.063	.050	.039	.020	.016	.013	
3.0	.177	.127	.087	.152	.109	.075	.104	.076	.053	.060	.044	.031	.019	.014	.010	
4.0	.170	.114	.071	.146	.098	.061	.100	.068	.043	.058	.040	.026	.019	.013	.008	
5.0	.162	.103	.060	.139	.089	.052	.096	.062	.037	.056	.037	.022	.018	.012	.007	
6.0	.155	.095	.052	.133	.082	.045	.092	.058	.032	.053	.034	.019	.017	.011	.006	
7.0	.148	.088	.046	.128	.076	.040	.088	.054	.028	.051	.032	.017	.017	.010	.006	
8.0	.142	.082	.041	.122	.071	.036	.085	.050	.026	.049	.030	.015	.016	.010	.005	
9.0	.136	.077	.038	.117	.067	.033	.081	.047	.023	.047	.028	.014	.015	.009	.005	
10.0	.130	.073	.035	.112	.063	.031	.078	.045	.022	.045	.026	.013	.015	.009	.004	

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2021-11-02

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:0.2845A P:6.827W PF:1.000 Freq:0Hz Lamp Flux:990.149x1 lm											
NAME: DR8802408NO					TYPE:			WEIGHT:			
SPEC.:DR8802408NO-8SWNDA012WC0100					DIM.: 1000*8*1.5mm			SERIAL No.:			
MFR.: COLORS					SUR.:1000*8mm			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	27.5	27.8	25.8	27.3	26.1	27.6	27.8	
	3H	27.4	28.8	27.7	29.1	29.3	27.4	28.8	27.7	29.1	29.3
	4H	28.1	29.4	28.4	29.7	30.0	28.1	29.4	28.4	29.7	30.0
	6H	28.5	29.8	28.9	30.1	30.4	28.5	29.8	28.9	30.1	30.4
	8H	28.7	29.9	29.0	30.2	30.5	28.7	29.9	29.1	30.2	30.5
	12H	28.8	29.9	29.1	30.3	30.6	28.8	30.0	29.2	30.3	30.6
4H	2H	26.4	27.8	26.8	28.0	28.3	26.4	27.8	26.8	28.0	28.3
	3H	28.2	29.4	28.6	29.7	30.0	28.2	29.4	28.6	29.7	30.0
	4H	29.0	30.0	29.4	30.4	30.8	29.0	30.1	29.4	30.4	30.8
	6H	29.6	30.5	30.0	30.9	31.3	29.6	30.5	30.0	30.9	31.3
	8H	29.8	30.7	30.2	31.1	31.5	29.8	30.7	30.3	31.1	31.5
	12H	29.9	30.7	30.4	31.2	31.6	30.0	30.8	30.4	31.2	31.6
8H	4H	29.3	30.1	29.7	30.5	31.0	29.3	30.2	29.7	30.5	31.0
	6H	30.0	30.8	30.5	31.2	31.6	30.0	30.8	30.5	31.2	31.7
	8H	30.3	31.0	30.8	31.4	31.9	30.3	31.0	30.8	31.4	31.9
	12H	30.6	31.1	31.1	31.6	32.1	30.6	31.1	31.1	31.6	32.1
12H	4H	29.3	30.1	29.7	30.5	30.9	29.3	30.1	29.7	30.5	30.9
	6H	30.1	30.7	30.6	31.2	31.7	30.1	30.7	30.6	31.2	31.7
	8H	30.4	31.0	30.9	31.5	32.0	30.4	31.0	31.0	31.5	32.0
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				+ 0.1 / - 0.3						

CIE Pub.117, 990.1 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -0.0)

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2021-11-02

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:0.2845A P:6.827W PF:1.000 Freq:0Hz Lamp Flux:990.149x1 lm		
NAME: DR8802408NO	TYPE:	WEIGHT:
SPEC.:DR8802408NO-8SWNDA012WC0100	DIM.: 1000*8*1.5mm	SERIAL No.:
MFR.: COLORS	SUR.:1000*8mm	Shielding Angle:

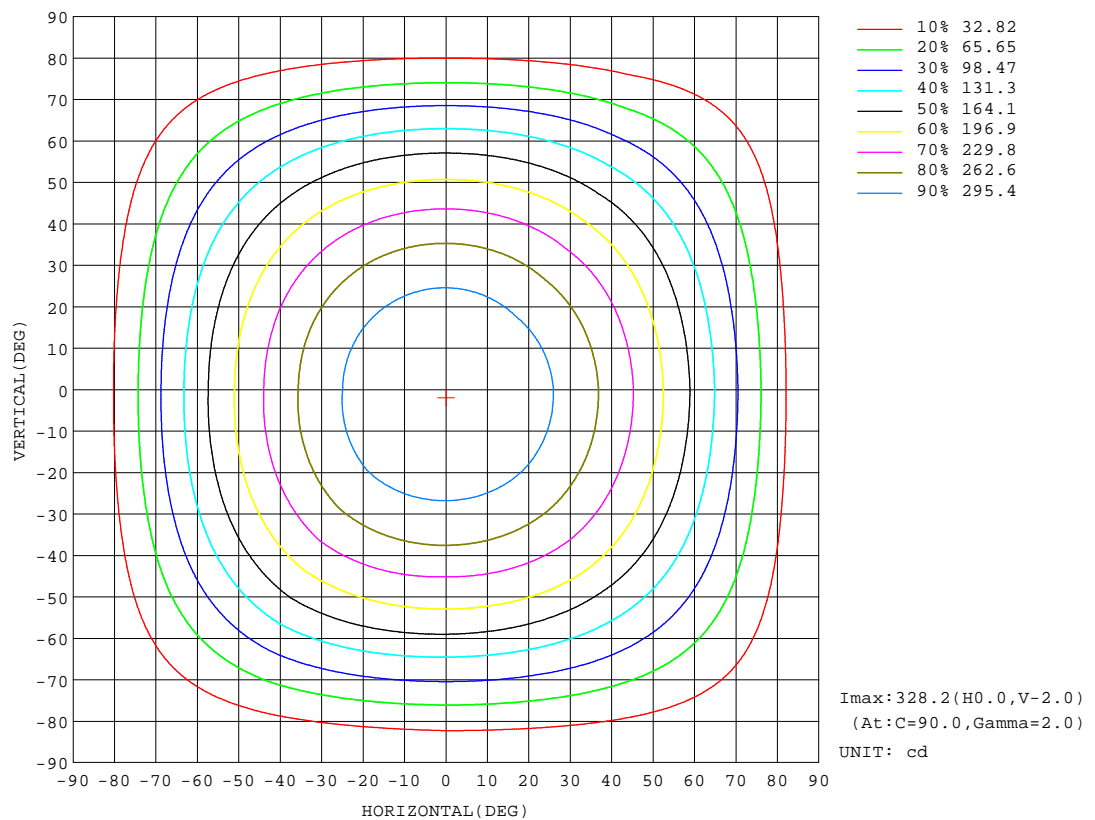
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	56	45	38	56	44	38	54	44	37	31
0.80	67	55	47	65	54	47	63	53	47	40
1.00	75	64	56	74	63	56	71	64	55	48
1.25	82	71	64	81	71	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	102	95	89	99	93	88	95	90	85	76
4.00	106	100	95	103	98	94	99	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:2021-11-02

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:0.2845A P:6.827W PF:1.000 Freq:0Hz Lamp Flux:990.149x1 lm		
NAME: DR8802408NO	TYPE:	WEIGHT:
SPEC.:DR8802408NO-8SWNDA012WC0100	DIM.: 1000*8*1.5mm	SERIAL No.:
MFR.: COLORS	SUR.:1000*8mm	Shielding Angle:



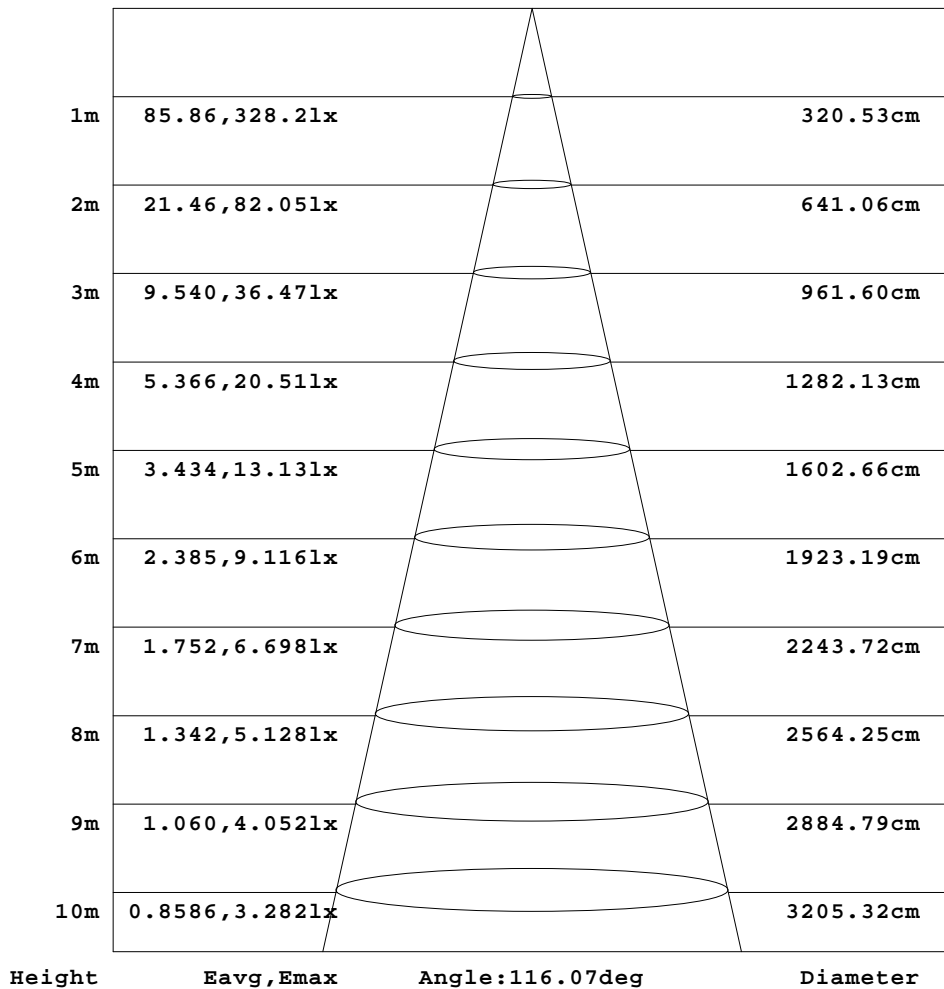
C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2021-11-02

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:0.2845A P:6.827W PF:1.000 Freq:0Hz Lamp Flux:990.149x1 lm		
NAME: DR8802408NO	TYPE:	WEIGHT:
SPEC.:DR8802408NO-8SWNDA012WC0100	DIM.: 1000*8*1.5mm	SERIAL No.:
MFR.: COLORS	SUR.:1000*8mm	Shielding Angle:

Flux out:747.1 lm



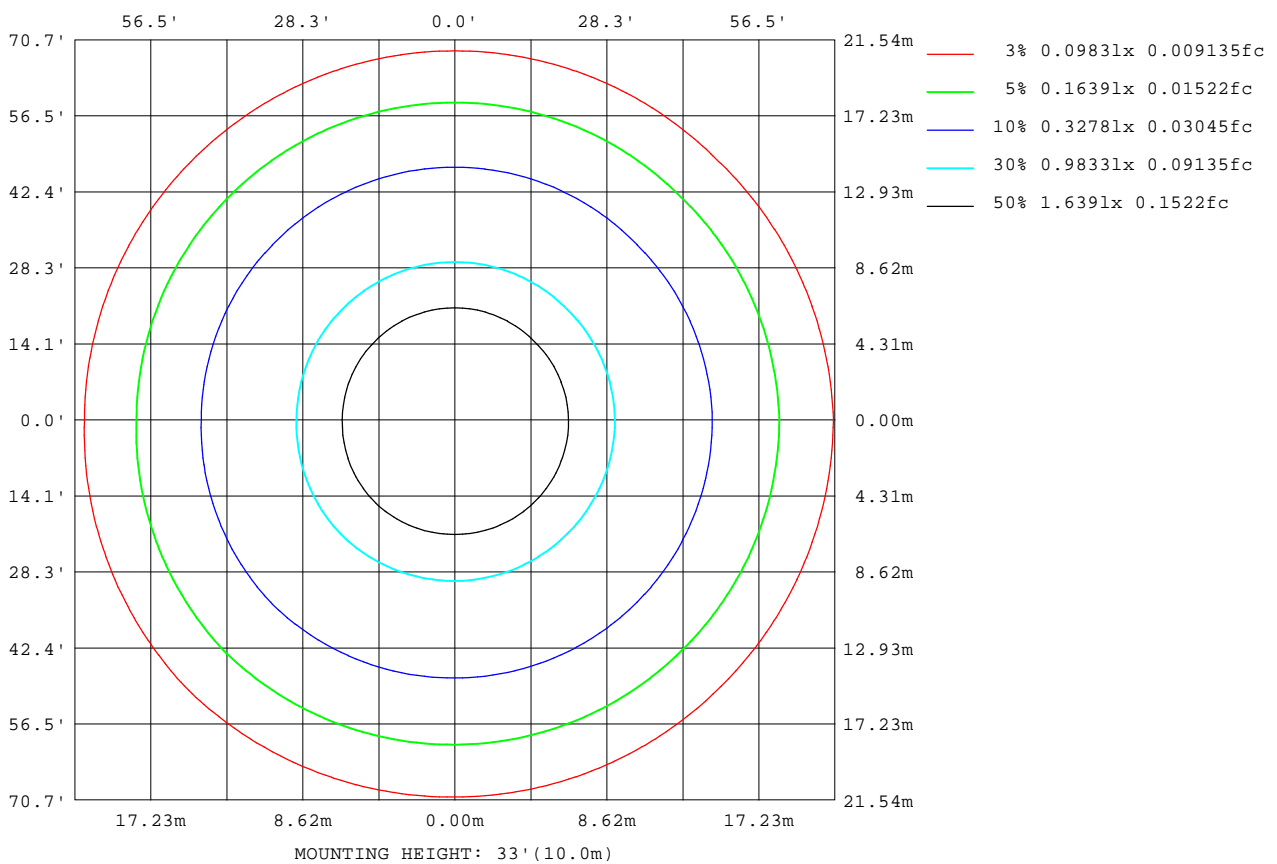
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: JYH
 Test Date: 2021-11-02

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

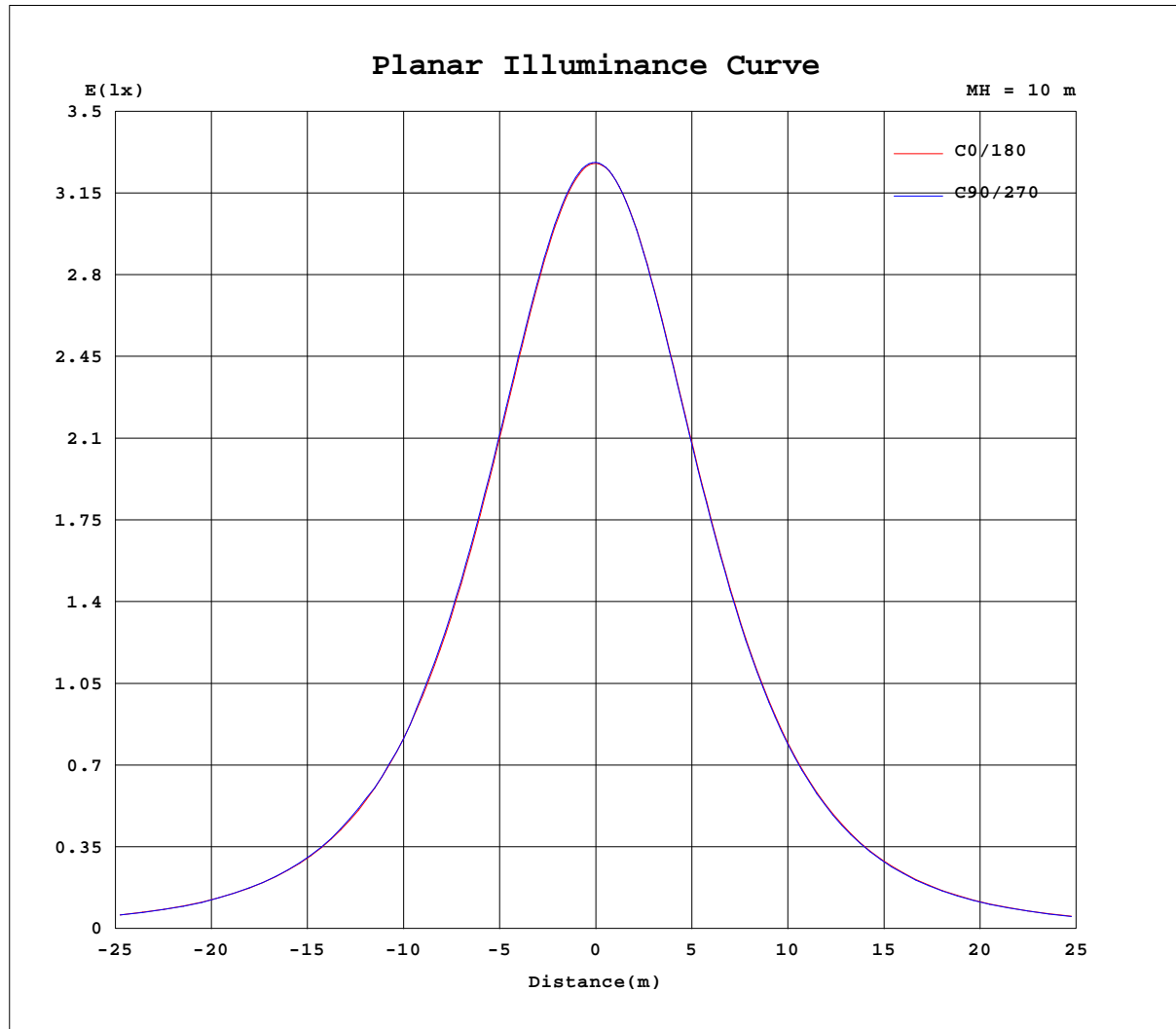
Test:U:24.00V I:0.2845A P:6.827W PF:1.000 Freq:0Hz Lamp Flux:990.149x1 lm		
NAME: DR8802408NO	TYPE:	WEIGHT:
SPEC.:DR8802408NO-8SWNDA012WC0100	DIM.: 1000*8*1.5mm	SERIAL No.:
MFR.: COLORS	SUR.:1000*8mm	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:JYH
 Test Date:2021-11-02

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: 2021-11-02

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:0.2845A P:6.827W PF:1.000 Freq:0Hz Lamp Flux:990.149x1 lm		
NAME: DR8802408NO	TYPE:	WEIGHT:
SPEC.:DR8802408NO-8SWNDA012WC0100	DIM.: 1000*8*1.5mm	SERIAL No.:
MFR.: COLORS	SUR.:1000*8mm	Shielding Angle:

Table--1

UNIT: cd

C(DEG) g (DEG)	0	45	90	135	180	225	270	315										
0	328	328	328	328	328	328	328	328										
5	327	327	328	327	326	326	326	326										
10	323	324	324	324	322	322	322	321										
15	317	318	319	319	316	315	315	314										
20	309	310	310	311	307	306	306	305										
25	298	300	300	300	295	294	294	293										
30	284	287	287	288	281	280	280	279										
35	269	271	271	272	265	264	263	263										
40	251	253	254	255	246	245	245	244										
45	231	233	230	235	225	224	224	223										
50	209	211	211	212	202	201	200	200										
55	184	186	186	188	177	175	175	175										
60	158	157	159	161	150	148	148	148										
65	130	128	129	132	121	119	119	120										
70	101	101	101	102	91.1	89.8	89.4	89.9										
75	71.8	71.2	72.7	70.5	61.4	60.2	59.8	60.2										
80	43.6	44.5	43.8	40.4	34.0	32.9	32.5	32.6										
85	20.1	20.2	20.6	17.2	13.1	12.2	12.0	10.9										
90	5.92	5.59	5.66	3.33	3.07	2.41	2.31	0.72										
95	1.83	1.57	1.63	1.14	0.91	0.82	0.77	0.35										
100	1.26	1.18	1.16	1.15	1.02	0.92	0.96	0.57										
105	1.46	1.42	1.35	1.30	1.42	1.24	1.30	0.85										
110	1.80	1.77	1.70	1.65	1.81	1.51	1.57	1.24										
115	2.24	2.20	2.13	2.11	2.13	1.80	1.86	1.57										
120	2.65	2.65	2.58	2.54	2.45	2.10	2.16	1.89										
125	3.06	3.01	2.95	2.87	2.73	2.41	2.48	2.18										
130	3.39	3.30	3.20	3.16	3.01	2.72	2.76	2.50										
135	3.70	3.53	3.45	3.43	3.29	2.97	3.05	2.74										
140	3.95	3.71	3.63	3.65	3.54	3.27	3.33	2.95										
145	4.15	3.82	3.73	3.82	3.73	3.57	3.63	3.17										
150	4.37	3.91	3.83	3.97	3.88	3.83	3.89	3.43										
155	4.50	4.01	3.92	4.21	4.10	4.11	4.18	3.83										
160	4.70	4.11	4.05	4.56	4.31	4.40	4.46	4.23										
165	4.89	4.27	4.23	4.92	4.49	4.64	4.70	4.59										
170	4.95	4.59	4.56	5.24	4.44	4.89	4.95	4.98										
175	4.74	5.09	5.07	5.51	4.45	5.24	5.26	5.32										
180	4.86	5.56	5.54	5.66	4.86	5.55	5.56	5.64										

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2021-11-02

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: