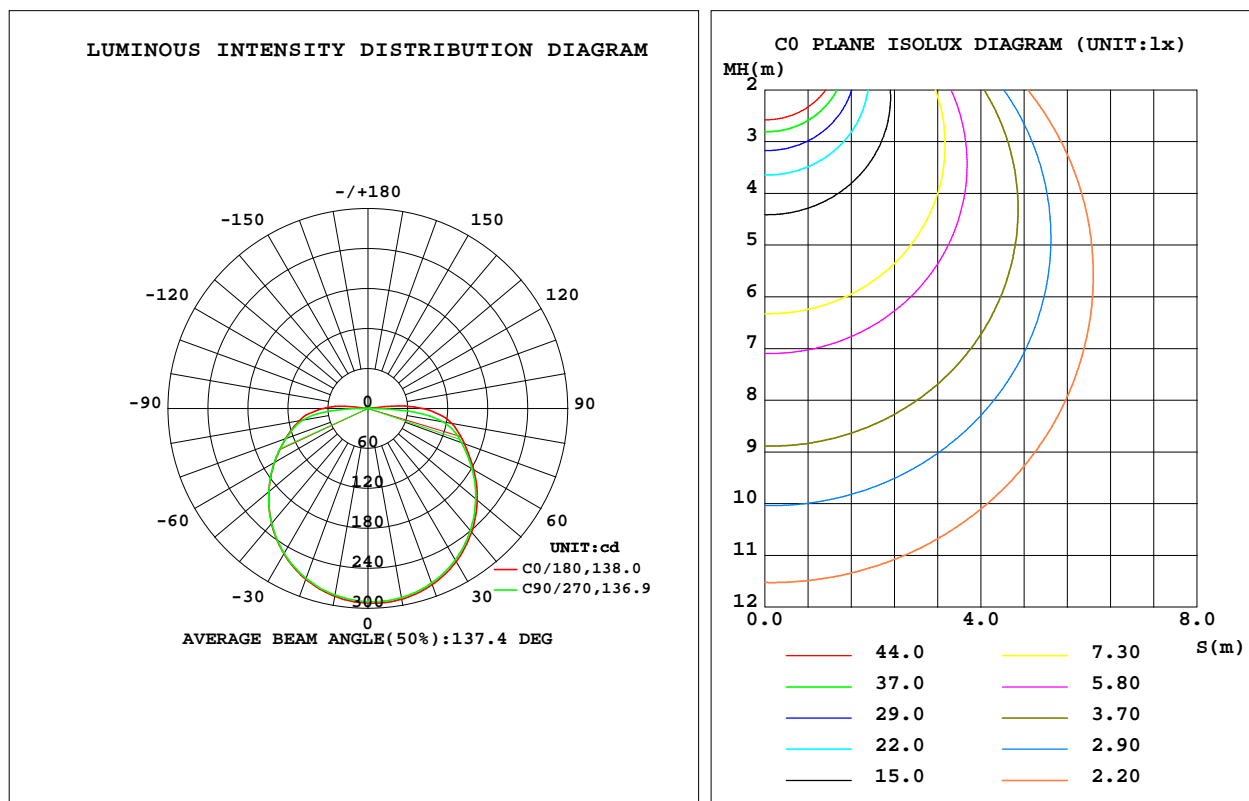


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:24.00V I:0.4000A P:9.600W PF:1.000 Freq:0Hz Lamp Flux:1155.94x1 lm		
NAME: FD1282408NO	TYPE:	WEIGHT:
SPEC.:FD1282408NO-8NWSA012BC0100	DIM.: 1000*8*1.5mm	SERIAL No.:
MFR.: COLORS	SUR.:1000*8mm	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 120.41 lm/W			
MODEL	FD1282408NO	I _{max} (cd)	292.4	S/MH(C0/180)	1.35
NOMINAL POWER(W)	9.6	LOR(%)	100.0	S/MH(C90/270)	1.29
RATED VOLTAGE(V)	24	TOTAL FLUX(lm)	1155.9	h UP,DN(C0-180)	2.1,49.9
NOMINAL FLUX(lm)	1155.94	CIE CLASS	DIRECT	h UP,DN(C180-360)	1.8,46.2
LAMPS INSIDE	1	h up(%)	3.8	CIBSE SHR NOM	1.50
TEST VOLTAGE(V)	24	h down(%)	96.2	CIBSE SHR MAX	1.55



C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2021-01-08

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:

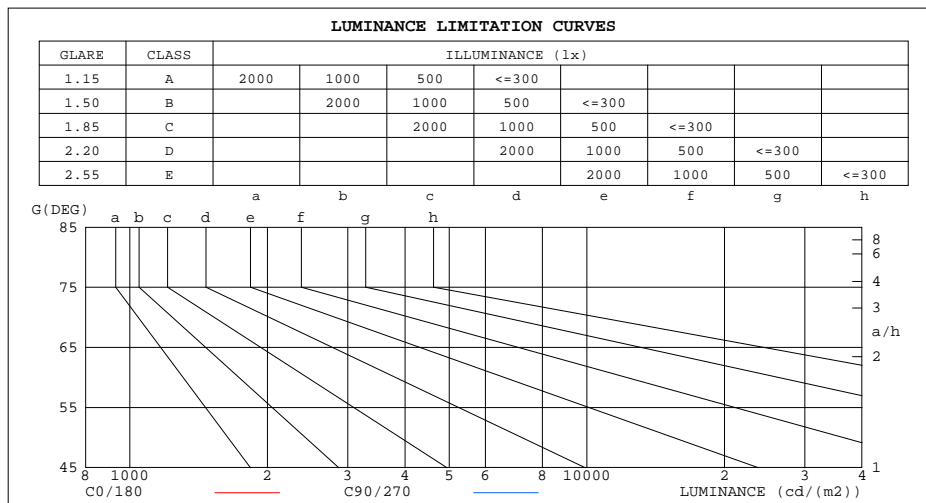
g	C0	C45	C90	C135	C180	C225	C270	C315	g	F zone	F total	%lum,lamp
10	290.5	291.0	288.1	285.3	286.2	284.2	284.3	286.6	0- 10	27.58	27.58	2.39,2.39
20	281.4	283.2	278.7	273.5	272.8	269.8	271.4	276.2	10- 20	79.78	107.4	9.29,9.29
30	265.0	268.2	262.1	254.8	252.2	248.5	251.4	258.5	20- 30	123.5	230.8	20,20
40	242.0	246.5	239.0	229.9	225.2	220.9	225.1	234.4	30- 40	154.0	384.9	33.3,33.3
50	214.0	219.6	211.1	200.1	194.2	189.3	194.5	205.7	40- 50	168.9	553.8	47.9,47.9
60	183.2	189.7	180.2	168.4	162.0	157.1	162.5	175.0	50- 60	168.4	722.2	62.5,62.5
70	153.9	159.1	149.4	137.6	131.4	126.2	130.6	145.1	60- 70	155.3	877.5	75.9,75.9
80	127.1	135.5	112.8	113.5	103.8	101.2	98.22	121.9	70- 80	135.5	1013	87.6,87.6
90	82.90	86.77	4.865	71.38	67.62	63.03	8.932	75.49	80- 90	98.64	1112	96.2,96.2
100	4.623	3.596	3.090	3.420	2.245	2.157	1.864	2.818	90-100	28.05	1140	98.6,98.6
110	3.066	3.005	2.411	3.059	2.538	2.297	2.338	2.097	100-110	2.872	1143	98.8,98.8
120	2.859	2.766	2.818	2.799	2.867	2.610	2.585	2.537	110-120	2.603	1145	99.1,99.1
130	3.280	3.146	3.132	3.120	3.260	2.985	2.806	2.825	120-130	2.601	1148	99.3,99.3
140	3.660	3.454	3.453	3.487	3.614	3.413	3.019	2.979	130-140	2.504	1150	99.5,99.5
150	3.941	3.641	3.647	3.901	3.847	3.874	3.340	3.112	140-150	2.211	1153	99.7,99.7
160	4.288	3.868	4.115	4.289	4.135	4.275	4.035	3.492	150-160	1.778	1154	99.9,99.9
170	4.575	4.402	4.675	4.629	4.132	4.622	4.663	4.374	160-170	1.209	1155	100,100
180	4.482	5.123	5.150	5.163	4.482	5.130	5.203	5.150	170-180	0.4449	1156	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:2021-01-08

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:0.4000A P:9.600W PF:1.000 Freq:0Hz Lamp Flux:1155.94x1 lm		
NAME: FD1282408NO	TYPE:	WEIGHT:
SPEC.:FD1282408NO-8NWNSA012BC0100	DIM.: 1000*8*1.5mm	SERIAL No.:
MFR.: COLORS	SUR.:1000*8mm	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	155094	105770
80	91490	81185
75	68128	64839
70	56248	54608
65	49650	48593
60	45795	45056
55	43345	42714
50	41616	41052
45	40397	39869

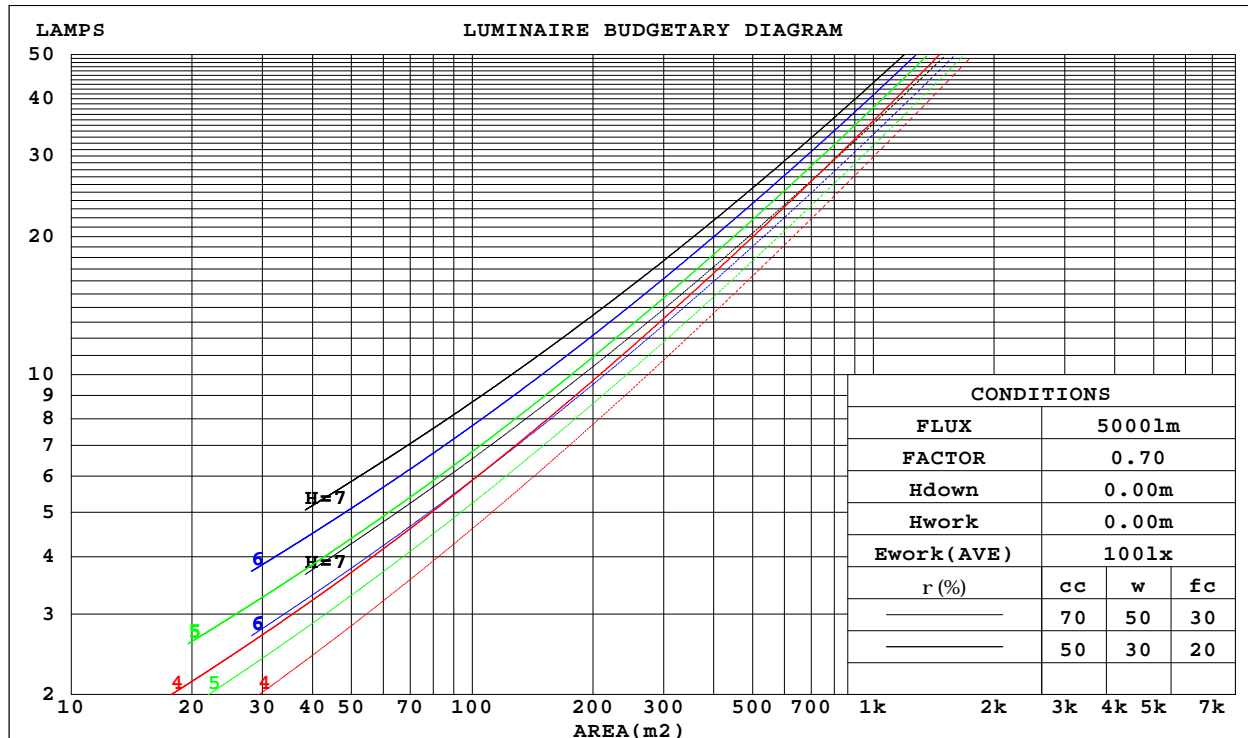
C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:JYH
 Test Date:2021-01-08

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:0.4000A P:9.600W PF:1.000 Freq:0Hz Lamp Flux:1155.94x1 lm		
NAME: FD1282408NO	TYPE:	WEIGHT:
SPEC.:FD1282408NO-8NWNSA012BC0100	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 Coefficients of Utilization(CU)															
0.0	1.18	1.18	1.18	1.15	1.15	1.15	1.09	1.09	1.09	1.04	1.04	1.04	.99	.99	.99	.96
1.0	.98	.92	.87	.95	.90	.85	.90	.86	.82	.85	.82	.79	.81	.78	.75	.73
2.0	.83	.75	.68	.81	.73	.67	.77	.70	.65	.73	.67	.63	.69	.64	.61	.58
3.0	.72	.63	.55	.70	.61	.54	.66	.59	.53	.63	.57	.51	.60	.54	.50	.47
4.0	.63	.53	.46	.62	.52	.45	.58	.50	.44	.56	.49	.43	.53	.47	.42	.39
5.0	.56	.46	.39	.55	.45	.38	.52	.44	.38	.50	.42	.37	.47	.41	.36	.34
6.0	.50	.40	.34	.49	.40	.33	.47	.39	.33	.45	.37	.32	.43	.36	.31	.29
7.0	.45	.36	.29	.44	.35	.29	.42	.34	.29	.41	.33	.28	.39	.32	.28	.25
8.0	.41	.32	.26	.40	.32	.26	.39	.31	.25	.37	.30	.25	.36	.29	.25	.22
9.0	.38	.29	.23	.37	.29	.23	.36	.28	.23	.34	.27	.22	.33	.27	.22	.20
10.0	.35	.26	.21	.34	.26	.21	.33	.26	.21	.32	.25	.20	.30	.24	.20	.18



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:JYH
 Test Date:2021-01-08

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:

WEC AND CCEC

Test:U:24.00V I:0.4000A P:9.600W PF:1.000 Freq:0Hz Lamp Flux:1155.94x1 lm		
NAME: FD1282408NO	TYPE:	WEIGHT:
SPEC.:FD1282408NO-8NWN5A012BC0100	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	.408	.232	.074	.400	.228	.072	.384	.220	.070	.369	.213	.068	.356	.206	.066	
2.0	.352	.193	.059	.344	.189	.058	.330	.183	.057	.317	.178	.056	.304	.172	.054	
3.0	.311	.165	.050	.304	.163	.049	.291	.158	.048	.280	.153	.047	.269	.149	.046	
4.0	.279	.145	.043	.273	.143	.042	.261	.139	.041	.251	.135	.041	.241	.131	.040	
5.0	.253	.129	.037	.247	.127	.037	.237	.123	.036	.228	.120	.036	.219	.117	.035	
6.0	.231	.116	.033	.226	.114	.033	.217	.111	.032	.208	.108	.032	.200	.106	.031	
7.0	.212	.105	.030	.208	.104	.030	.200	.101	.029	.192	.099	.029	.185	.096	.028	
8.0	.197	.096	.027	.193	.095	.027	.185	.093	.026	.178	.090	.026	.172	.088	.026	
9.0	.183	.088	.025	.179	.087	.025	.173	.085	.024	.167	.083	.024	.161	.082	.024	
10.0	.171	.082	.023	.168	.081	.023	.162	.079	.022	.156	.078	.022	.151	.076	.022	

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	.220	.220	.220	.188	.188	.188	.128	.128	.128	.074	.074	.074	.024	.024	.024	
1.0	.217	.185	.156	.185	.159	.134	.127	.109	.093	.073	.063	.054	.023	.020	.017	
2.0	.210	.161	.120	.180	.139	.104	.123	.096	.073	.071	.056	.043	.023	.018	.014	
3.0	.202	.144	.098	.173	.125	.085	.119	.087	.060	.069	.051	.035	.022	.016	.012	
4.0	.194	.132	.084	.167	.114	.073	.115	.079	.051	.066	.046	.030	.021	.015	.010	
5.0	.186	.121	.074	.160	.105	.064	.110	.073	.045	.064	.043	.027	.021	.014	.009	
6.0	.178	.113	.067	.153	.098	.058	.106	.069	.041	.061	.040	.024	.020	.013	.008	
7.0	.171	.107	.062	.147	.092	.054	.101	.065	.038	.059	.038	.023	.019	.012	.007	
8.0	.164	.101	.058	.141	.087	.050	.097	.061	.036	.057	.036	.021	.018	.012	.007	
9.0	.157	.096	.054	.135	.083	.047	.094	.058	.034	.055	.035	.020	.018	.011	.007	
10.0	.151	.092	.052	.130	.079	.045	.090	.056	.032	.053	.033	.019	.017	.011	.006	

C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:JYH
 Test Date:2021-01-08

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:0.4000A P:9.600W PF:1.000 Freq:0Hz Lamp Flux:1155.94x1 lm										
NAME: FD1282408NO					TYPE:			WEIGHT:		
SPEC.:FD1282408NO-8NWSA012BC0100					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	25.5	27.1	25.8	27.4	27.7	25.4	27.0	25.7	27.3	27.6
	27.9	29.4	28.3	29.7	30.0	27.8	29.3	28.2	29.6	29.9
	29.3	30.7	29.6	31.0	31.4	29.1	30.5	29.5	30.9	31.2
	30.8	32.1	31.2	32.5	32.9	30.5	31.8	30.9	32.2	32.6
	31.6	32.9	32.0	33.3	33.6	31.1	32.4	31.5	32.8	33.2
	32.5	33.7	32.9	34.1	34.5	31.7	33.0	32.1	33.4	33.8
4H	26.3	27.8	26.7	28.1	28.5	26.3	27.7	26.7	28.1	28.4
	29.0	30.3	29.4	30.7	31.1	28.9	30.2	29.3	30.6	31.0
	30.5	31.7	31.0	32.1	32.6	30.4	31.6	30.8	32.0	32.4
	32.2	33.3	32.7	33.7	34.2	32.0	33.0	32.4	33.5	33.9
	33.2	34.2	33.6	34.6	35.1	32.7	33.7	33.2	34.2	34.7
	34.2	35.1	34.7	35.6	36.1	33.4	34.4	33.9	34.8	35.3
8H	31.2	32.2	31.7	32.6	33.1	31.1	32.1	31.6	32.5	33.0
	33.2	34.1	33.7	34.5	35.1	33.0	33.8	33.5	34.3	34.8
	34.3	35.1	34.8	35.6	36.1	33.9	34.7	34.4	35.2	35.7
	35.5	36.2	36.1	36.7	37.3	34.8	35.5	35.4	36.0	36.6
12H	31.4	32.3	31.8	32.7	33.2	31.3	32.2	31.8	32.7	33.2
	33.5	34.3	34.0	34.8	35.3	33.3	34.0	33.8	34.5	35.1
	34.7	35.4	35.3	35.9	36.5	34.4	35.0	34.9	35.6	36.1
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.1					+ 0.1 / - 0.1				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.2 / - 0.4					+ 0.2 / - 0.4				

CIE Pub.117, 1156 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:2021-01-08

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:0.4000A P:9.600W PF:1.000 Freq:0Hz Lamp Flux:1155.94x1 lm		
NAME: FD1282408NO	TYPE:	WEIGHT:
SPEC.:FD1282408NO-8NWNSA012BC0100	DIM.: 1000*8*1.5mm	SERIAL No.:
MFR.: COLORS	SUR.:1000*8mm	Shielding Angle:

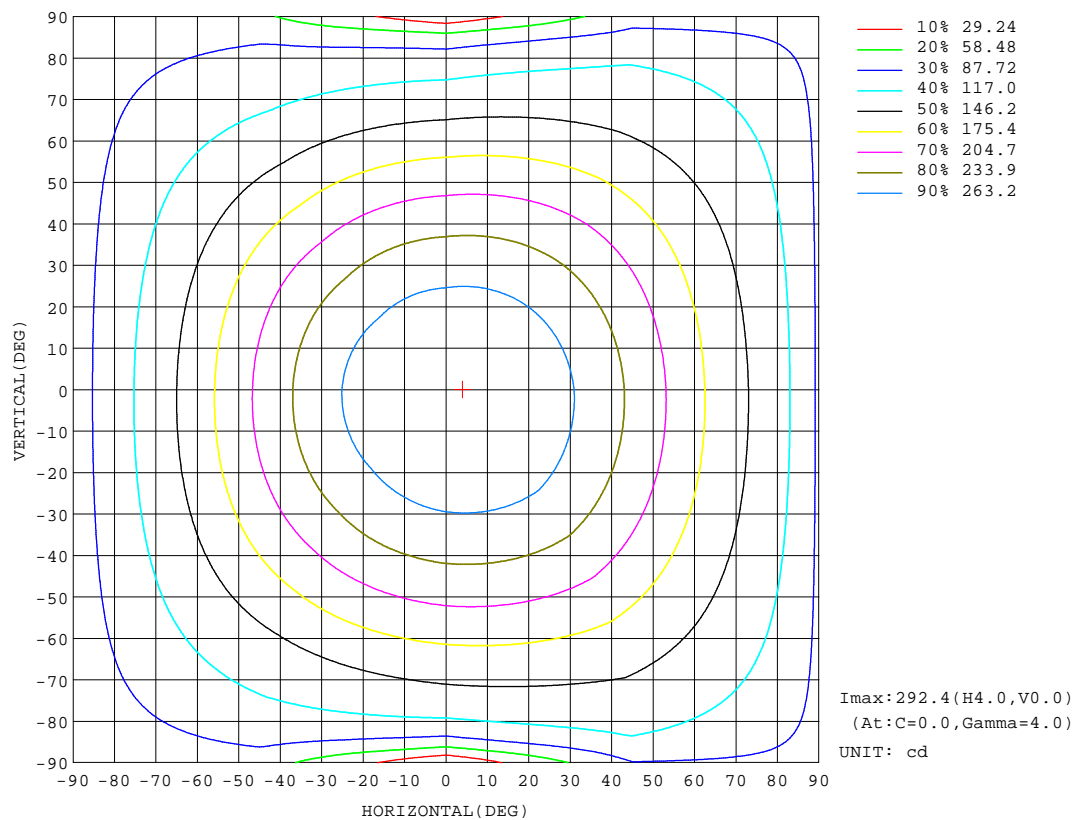
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	51	39	31	50	38	31	49	38	31	24
0.80	61	48	39	59	47	39	57	46	39	31
1.00	68	56	47	67	55	47	64	57	46	38
1.25	75	63	55	74	62	54	70	60	53	45
1.50	80	68	60	78	67	59	75	65	58	49
2.00	88	77	69	85	76	68	81	73	66	57
2.50	92	82	74	90	81	73	85	77	71	61
3.00	96	87	80	93	85	78	88	82	76	66
4.00	100	93	86	98	91	85	93	87	82	71
5.00	103	97	91	101	95	89	95	90	86	75
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:2021-01-08

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:0.4000A P:9.600W PF:1.000 Freq:0Hz Lamp Flux:1155.94x1 lm		
NAME: FD1282408NO	TYPE:	WEIGHT:
SPEC.:FD1282408NO-8NWNSA012BC0100	DIM.: 1000*8*1.5mm	SERIAL No.:
MFR.: COLORS	SUR.:1000*8mm	Shielding Angle:



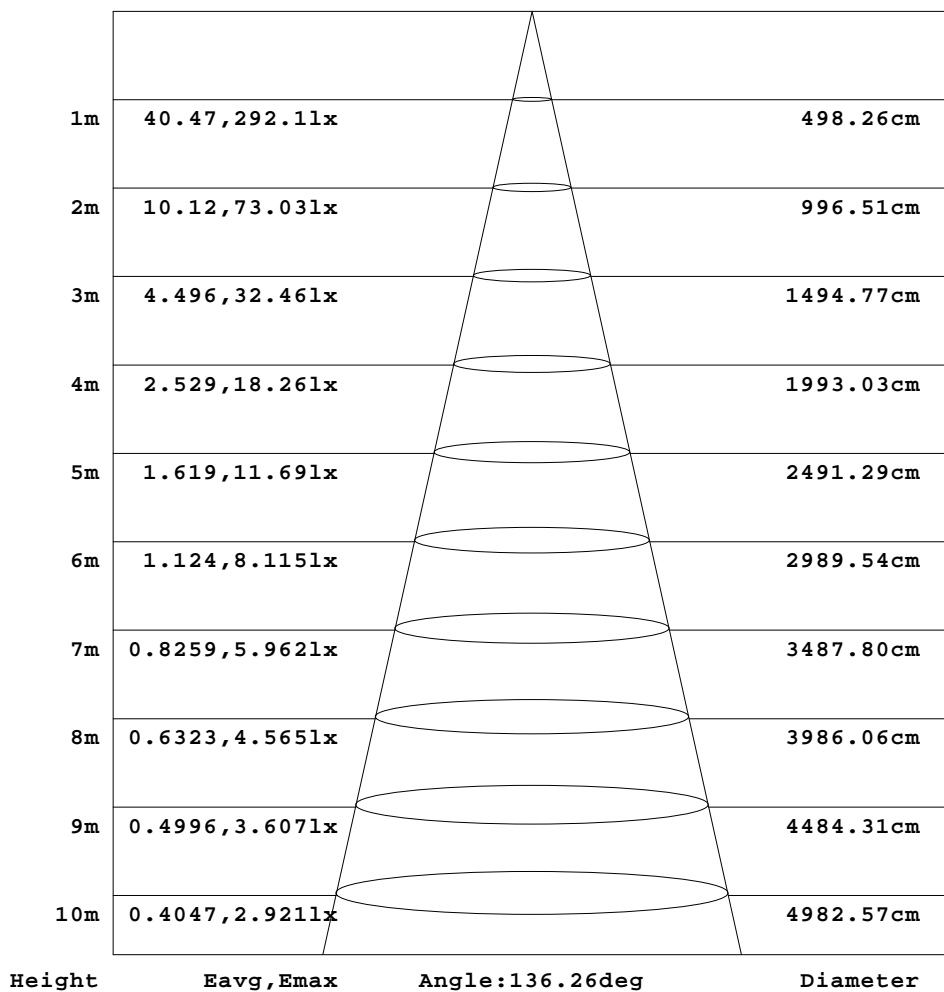
C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2021-01-08

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:0.4000A P:9.600W PF:1.000 Freq:0Hz Lamp Flux:1155.94x1 lm		
NAME: FD1282408NO	TYPE:	WEIGHT:
SPEC.:FD1282408NO-8NWNSA012BC0100	DIM.: 1000*8*1.5mm	SERIAL No.:
MFR.: COLORS	SUR.:1000*8mm	Shielding Angle:

Flux out:862.8 lm



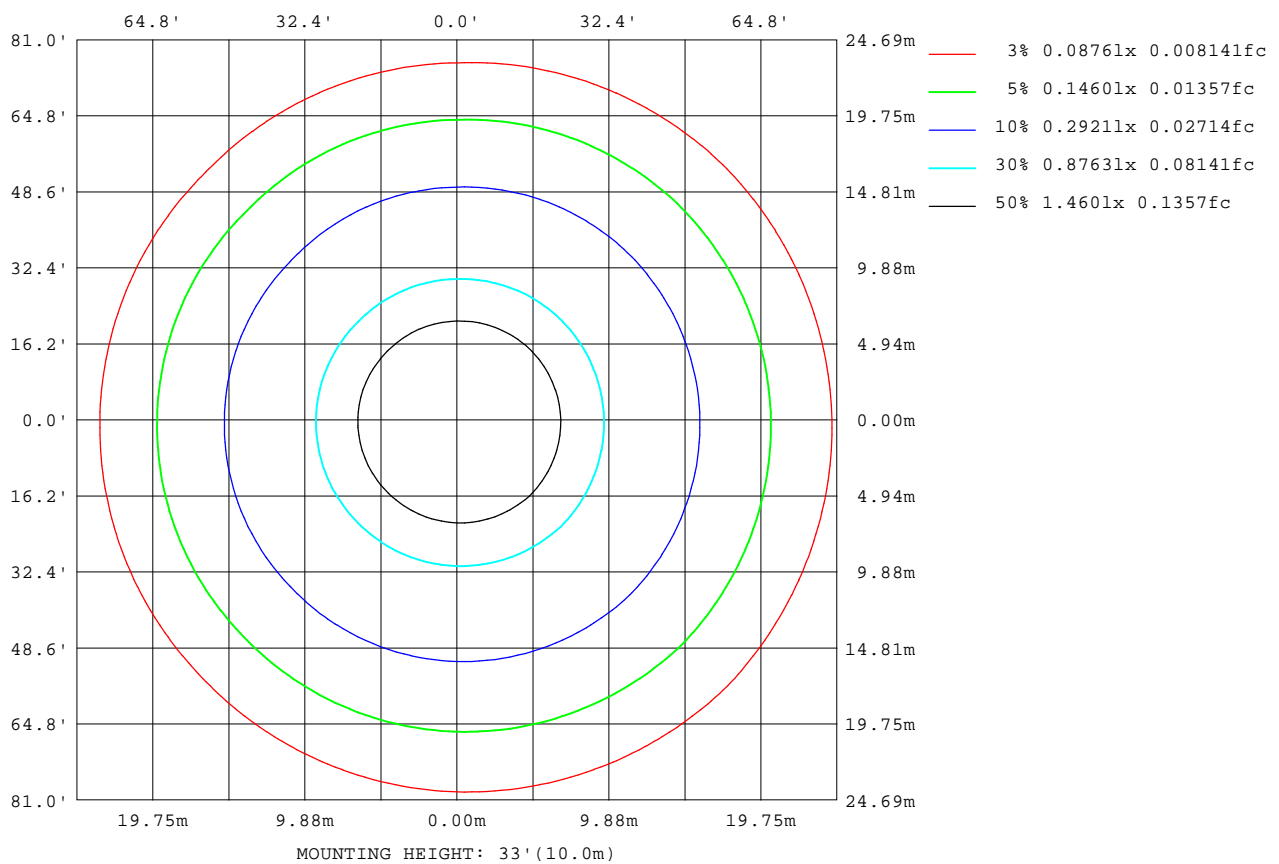
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2021-01-08

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

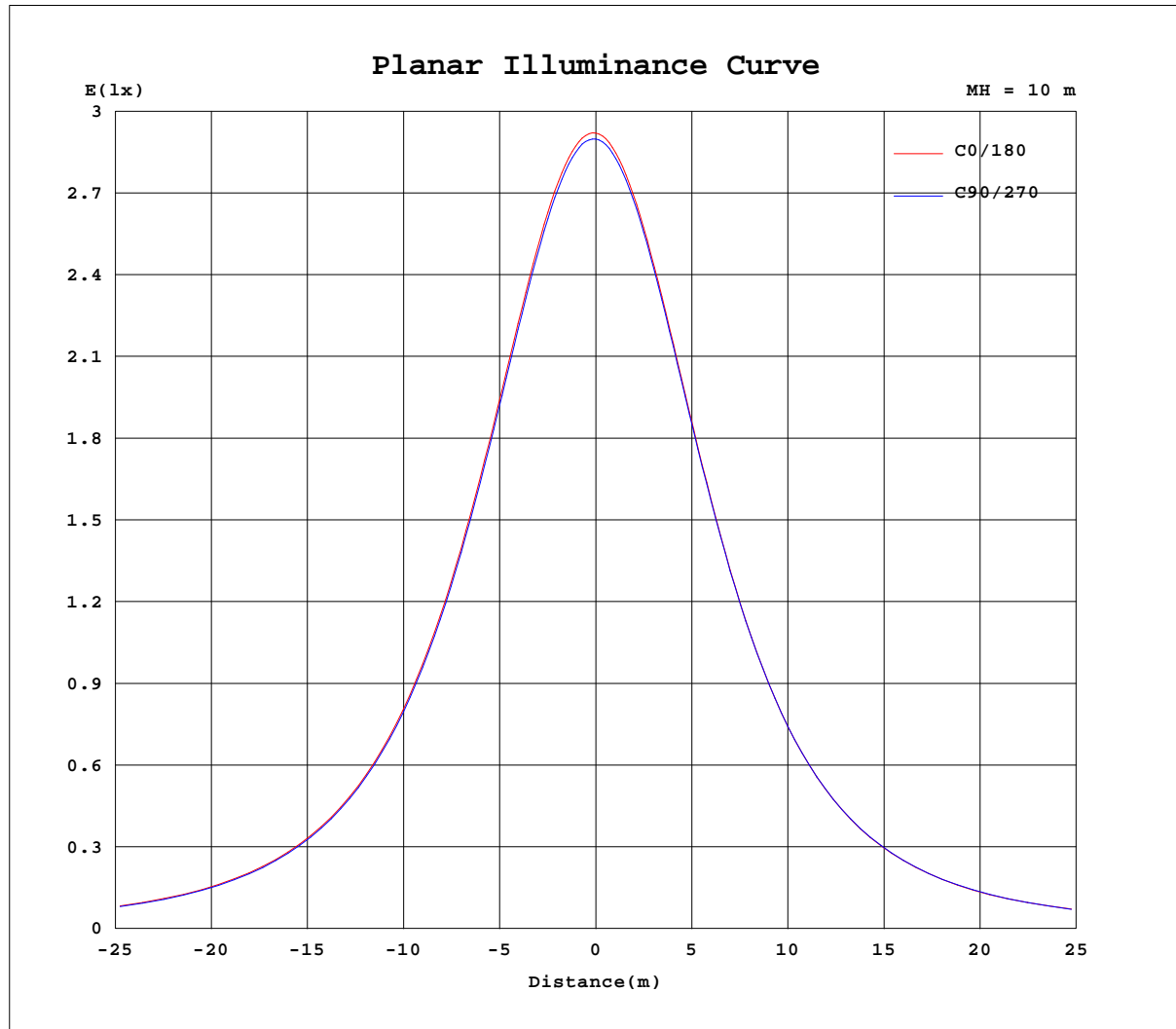
Test:U:24.00V I:0.4000A P:9.600W PF:1.000 Freq:0Hz Lamp Flux:1155.94x1 lm		
NAME: FD1282408NO	TYPE:	WEIGHT:
SPEC.:FD1282408NO-8NWNSA012BC0100	DIM.: 1000*8*1.5mm	SERIAL No.:
MFR.: COLORS	SUR.:1000*8mm	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 45.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:JYH
 Test Date:2021-01-08

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: 2021-01-08

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:0.4000A P:9.600W PF:1.000 Freq:0Hz Lamp Flux:1155.94x1 lm		
NAME: FD1282408NO	TYPE:	WEIGHT:
SPEC.:FD1282408NO-8NWN5A012BC0100	DIM.: 1000*8*1.5mm	SERIAL No.:
MFR.: COLORS	SUR.:1000*8mm	Shielding Angle:

Table--1

UNIT: cd

C(DEC) g (DEC)	0	45	90	135	180	225	270	315										
0	292	291	290	290	292	291	290	290										
5	292	292	290	289	290	289	288	289										
10	291	291	288	285	286	284	284	287										
15	287	288	284	280	280	278	279	282										
20	281	283	279	274	273	270	271	276										
25	274	277	271	265	263	260	262	268										
30	265	268	262	255	252	248	251	259										
35	254	258	251	243	239	235	239	247										
40	242	247	239	230	225	221	225	234										
45	229	234	226	215	210	205	210	220										
50	214	220	211	200	194	189	194	206										
55	199	205	196	184	178	173	179	191										
60	183	190	180	168	162	157	163	175										
65	168	174	164	153	146	141	146	160										
70	154	159	149	138	131	126	131	145										
75	141	147	134	125	118	113	116	133										
80	127	135	113	113	104	101	98.2	122										
85	108	119	73.7	99.6	89.3	89.4	67.5	104										
90	82.9	86.8	4.87	71.4	67.6	63.0	8.93	75.5										
95	46.7	28.9	3.10	21.8	43.5	18.1	1.29	22.3										
100	4.62	3.60	3.09	3.42	2.24	2.16	1.86	2.82										
105	3.15	3.31	2.83	3.29	2.38	2.20	2.16	1.98										
110	3.07	3.01	2.41	3.06	2.54	2.30	2.34	2.10										
115	2.92	2.63	2.62	2.67	2.68	2.43	2.48	2.34										
120	2.86	2.77	2.82	2.80	2.87	2.61	2.59	2.54										
125	3.06	2.96	2.98	2.96	3.07	2.79	2.69	2.68										
130	3.28	3.15	3.13	3.12	3.26	2.99	2.81	2.83										
135	3.49	3.33	3.31	3.29	3.45	3.21	2.91	2.91										
140	3.66	3.45	3.45	3.49	3.61	3.41	3.02	2.98										
145	3.83	3.55	3.57	3.69	3.71	3.67	3.13	3.04										
150	3.94	3.64	3.65	3.90	3.85	3.87	3.34	3.11										
155	4.13	3.75	3.84	4.11	3.99	4.13	3.67	3.21										
160	4.29	3.87	4.11	4.29	4.14	4.27	4.03	3.49										
165	4.49	4.06	4.46	4.44	4.28	4.45	4.36	3.86										
170	4.58	4.40	4.68	4.63	4.13	4.62	4.66	4.37										
175	4.50	4.80	4.96	4.89	4.11	4.80	4.97	4.80										
180	4.48	5.12	5.15	5.16	4.48	5.13	5.20	5.15										

C Range: 0 - 360DEG
C Interval: 45.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JYH
Test Date:2021-01-08

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: