

Indoor Distribution Test Report

Spectrum Lighting Inc.

994 Jefferson Street
Fall River, MA 02721
+1.508.678.2303

Spectrum Lighting Photometric Lab

Luminaire

AP8XT 13L 35K XX MWI
Nom 8.5" diam x 12" H Aluminum reflector pendant

Test Number

SP-00589_5_M-13L

Test Date

10/15/2019

The results contained in this report pertain only to this IES file.

Summary of Results

Power

Input Watts	11.2 W
-------------	--------

Lumen Output

Output Lumens	585
Efficacy	52.19 lm/W

Luminous Dimensions

0° - 180° Size	-0.67
90° - 270° Size	-0.67
Height	0

Spacing Criterion

Two luminaires, plane 0°	0.81
Two luminaires, plane 90°	0.81
Four luminaires	0.8

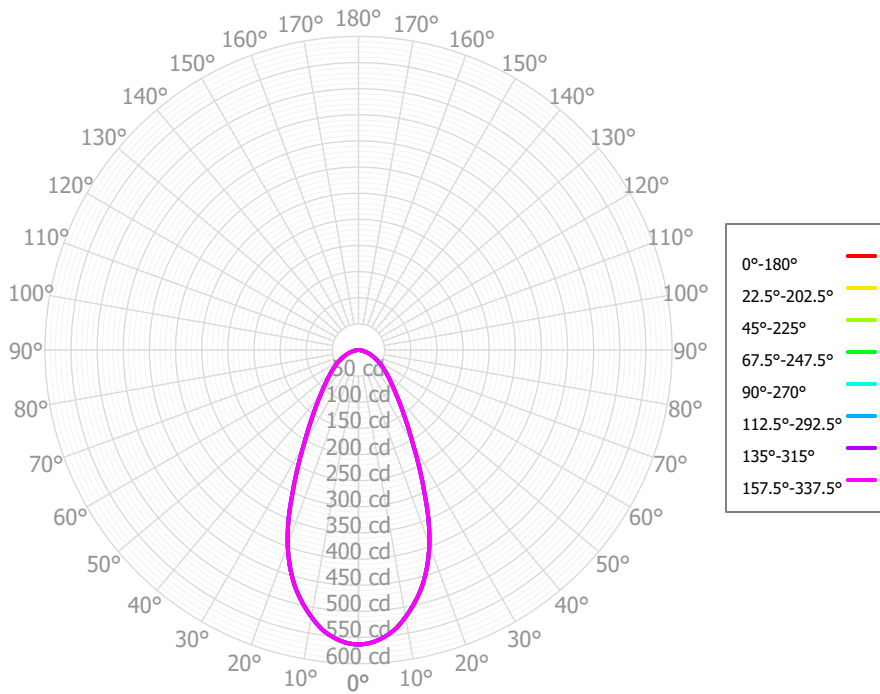
Full Beam Angle

0° - 180°	52°
90° - 270°	52°

IES File Header Contents

Keyword	Value
TEST	SP-00589_5_M-13L
TESTLAB	Spectrum Lighting Photometric Lab, VLS-245-981
MANUFAC	Spectrum Lighting
TESTDATE	10/15/2019
ISSUEDATE	5/15/2020
LUMCAT	AP8XT 13L 35K XX MWI
LUMINAIRE	Nom 8.5" diam x 12" H Aluminum reflector pendant
OTHER	Matte White finish - Interior, Khatod closed sphere optic, Open aperture
OTHER	Beam Angle: 51.6 degrees
LAMPCAT	N/A
LAMP	N/A, 19mm LES
OTHER	LEDXT lumen output is the same for all available CCT's
OTHER	Total luminaire wattage is approximate
OTHER	This report prepared by Spectrum Lighting

Candela Polar Plot



Zonal Lumen Summary

Zone	Lumens	% Fixture	Zone	Lumens	% Fixture
0.00° - 10.00°	52.36	8.96%	90.00° - 100.00°	0.08	0.01%
10.00° - 20.00°	129.54	22.16%	100.00° - 110.00°	0.00	0.00%
20.00° - 30.00°	135.64	23.20%	100.00° - 120.00°	0.00	0.00%
30.00° - 40.00°	96.24	16.46%	120.00° - 130.00°	0.00	0.00%
40.00° - 50.00°	68.88	11.78%	130.00° - 140.00°	0.00	0.00%
50.00° - 60.00°	50.02	8.56%	140.00° - 150.00°	0.00	0.00%
60.00° - 70.00°	32.37	5.54%	150.00° - 160.00°	0.00	0.00%
70.00° - 80.00°	15.87	2.71%	160.00° - 170.00°	0.00	0.00%
80.00° - 90.00°	3.56	0.61%	170.00° - 180.00°	0.00	0.00%
0.00° - 90.00°	584.47	99.99%	0.00° - 180.00°	584.55	100.00%

Coefficients of Utilization – Zonal Cavity Method

Values are lumens delivered to the workplane.

RCR	pfc	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	0%
	pcc	80%	80%	80%	80%	70%	70%	70%	70%	50%	50%	50%	30%	30%	30%	10%	10%	0%
	pw	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	30%
	0	696	696	696	696	680	680	680	680	649	649	649	622	622	622	596	596	584
	1	653	632	613	596	638	619	602	587	595	581	569	573	562	551	552	543	535
	2	610	573	543	518	596	563	535	512	543	520	500	525	506	489	508	493	479
	3	570	523	486	457	557	514	480	453	498	469	446	483	459	438	469	449	431
	4	534	480	440	409	522	472	435	406	459	427	401	446	419	396	435	411	392
	5	502	442	401	370	491	436	397	368	425	391	365	414	385	361	405	379	358
	6	472	410	368	338	462	405	365	337	395	360	334	386	355	332	378	351	329
	7	445	381	340	311	437	377	338	310	369	334	308	362	330	306	354	326	304
	8	421	356	316	288	413	353	314	287	346	311	286	339	308	284	333	305	283
	9	399	334	295	268	392	331	293	267	325	291	266	320	288	265	314	285	264
	10	379	315	276	250	373	312	275	250	307	273	249	302	271	248	297	268	248

Cone of Light

Mtg Height	Light Level	Beam Diameter
5.5 ft	18.6 fc	5.3 ft
6.5 ft	13.3 fc	6.3 ft
7.5 ft	10.0 fc	7.3 ft
8.0 ft	8.8 fc	7.7 ft
10.0 ft	5.6 fc	9.7 ft
12.0 ft	3.9 fc	11.6 ft
14.0 ft	2.9 fc	13.5 ft
16.0 ft	2.2 fc	15.5 ft
20.0 ft	1.4 fc	19.3 ft
24.0 ft	1.0 fc	23.2 ft
28.0 ft	0.7 fc	27.1 ft

Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
0.00°	17,207	17,207	17,207
45.00°	3,803	3,803	3,803
55.00°	2,954	2,954	2,954
65.00°	2,338	2,338	2,338
75.00°	1,758	1,758	1,758
85.00°	979	979	979

UGR CIE 190:2010

Ceiling reflectance		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall reflectance		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Plane reflectance		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				
2H	2H	13.0	14.3	13.4	14.6	14.9	13.0	14.3	13.4	14.6	14.9
	3H	14.3	15.5	14.7	15.8	16.2	14.3	15.5	14.7	15.8	16.2
	4H	14.7	15.8	15.1	16.2	16.6	14.7	15.8	15.1	16.2	16.6
	6H	15.0	16.0	15.4	16.4	16.8	15.0	16.0	15.4	16.4	16.8
	8H	15.0	16.0	15.5	16.4	16.8	15.0	16.0	15.5	16.4	16.8
	12H	15.1	16.0	15.5	16.3	16.8	15.1	16.0	15.5	16.3	16.8
4H	2H	13.4	14.5	13.8	14.9	15.2	13.4	14.5	13.8	14.9	15.2
	3H	14.9	15.8	15.4	16.2	16.6	14.9	15.8	15.4	16.2	16.6
	4H	15.5	16.3	15.9	16.7	17.1	15.5	16.3	15.9	16.7	17.1
	6H	15.8	16.5	16.3	17.0	17.4	15.8	16.5	16.3	17.0	17.4
	8H	15.9	16.5	16.4	17.0	17.4	15.9	16.5	16.4	17.0	17.4
	12H	15.9	16.5	16.4	17.0	17.4	15.9	16.5	16.4	17.0	17.4
8H	4H	15.6	16.3	16.1	16.7	17.2	15.6	16.3	16.1	16.7	17.2
	6H	16.1	16.6	16.6	17.1	17.6	16.1	16.6	16.6	17.1	17.6
	8H	16.2	16.6	16.7	17.1	17.6	16.2	16.6	16.7	17.1	17.6
	12H	16.2	16.7	16.8	17.1	17.7	16.2	16.7	16.8	17.1	17.7
12H	4H	15.6	16.2	16.1	16.7	17.1	15.6	16.2	16.1	16.7	17.1
	6H	16.1	16.5	16.6	17.0	17.5	16.1	16.5	16.6	17.0	17.5
	8H	16.2	16.6	16.7	17.1	17.7	16.2	16.6	16.7	17.1	17.7

Corrected UGR values based on total output lumens

SHR = 1.0