

Indoor Distribution Test Report

Spectrum Lighting Inc.

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Spectrum Lighting Photometric Lab

Luminaire

AP8XT 10L 35K XX MWI
Nom 8.5" diam x 12" H Aluminum reflector pendant

Test Number

SP-00589_5_M-10L

Test Date

10/15/2019

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

Summary of Results

Power

Input Watts	7.8 W
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Lumen Output

Output Lumens	435
Efficacy	55.77 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

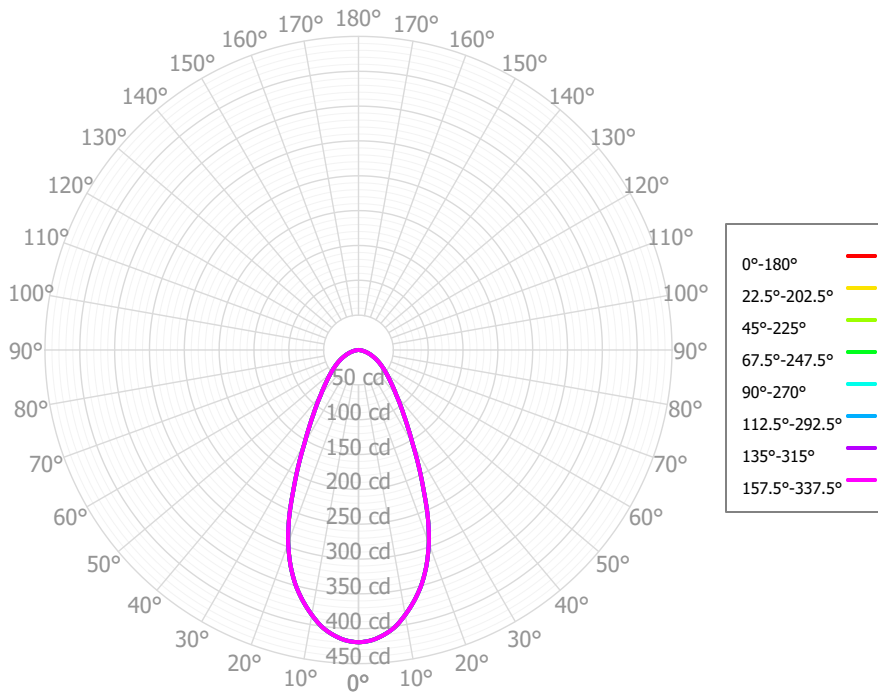
Full Beam Angle

0° - 180°	52°
90° - 270°	52°

IES File Header Contents

Keyword	Value
TEST	SP-00589_5_M-10L
TESTLAB	Spectrum Lighting Photometric Lab, VLS-245-981
MANUFAC	Spectrum Lighting
TESTDATE	10/15/2019
ISSUEDATE	5/15/2020
LUMCAT	AP8XT 10L 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°	38.97	8.96%	90.00° - 100.00°	0.06	0.01%
10.00° - 20.00°	96.40	22.16%	100.00° - 110.00°	0.00	0.00%
20.00° - 30.00°	100.94	23.20%	100.00° - 120.00°	0.00	0.00%
30.00° - 40.00°	71.62	16.46%	120.00° - 130.00°	0.00	0.00%
40.00° - 50.00°	51.26	11.78%	130.00° - 140.00°	0.00	0.00%
50.00° - 60.00°	37.22	8.56%	140.00° - 150.00°	0.00	0.00%
60.00° - 70.00°	24.09	5.54%	150.00° - 160.00°	0.00	0.00%
70.00° - 80.00°	11.81	2.71%	160.00° - 170.00°	0.00	0.00%
80.00° - 90.00°	2.65	0.61%	170.00° - 180.00°	0.00	0.00%
0.00° - 90.00°	434.95	99.99%	0.00° - 180.00°	435.01	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	518	518	518	518	506	506	506	506	483	483	483	463	463	463	444	444	435
	1	486	470	456	444	474	461	448	437	443	432	423	426	418	410	411	404	396
	2	454	427	404	385	443	419	398	381	404	387	372	391	377	364	378	367	359
	3	424	389	362	340	415	383	358	337	371	349	332	359	341	326	349	334	327
	4	397	357	327	304	389	352	324	302	342	318	299	332	312	295	324	306	300
	5	373	329	298	275	365	325	296	274	316	291	271	308	286	269	301	282	276
	6	351	305	274	251	344	301	272	251	294	268	249	288	264	247	281	261	256
	7	331	284	253	231	325	281	251	231	275	248	229	269	245	228	264	243	238
	8	313	265	235	214	308	263	234	214	257	231	213	253	229	212	248	227	223
	9	297	249	219	199	292	247	218	199	242	216	198	238	214	197	234	212	209
	10	282	234	205	186	277	232	205	186	228	203	185	225	201	185	221	200	197

Cone of Light

Mtg Height	Light Level	Beam Diameter
5.5 ft	13.9 fc	5.3 ft
6.5 ft	9.9 fc	6.3 ft
7.5 ft	7.5 fc	7.3 ft
8.0 ft	6.6 fc	7.7 ft
10.0 ft	4.2 fc	9.7 ft
12.0 ft	2.9 fc	11.6 ft
14.0 ft	2.1 fc	13.5 ft
16.0 ft	1.6 fc	15.5 ft
20.0 ft	1.0 fc	19.3 ft
24.0 ft	0.7 fc	23.2 ft
28.0 ft	0.5 fc	27.1 ft

Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
0.00°	12,805	12,805	12,805
45.00°	2,830	2,830	2,830
55.00°	2,198	2,198	2,198
65.00°	1,740	1,740	1,740
75.00°	1,308	1,308	1,308
85.00°	729	729	729

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	12.0	13.3	12.3	13.6	13.9	12.0	13.3	12.3	13.6	13.9
	3H	13.3	14.4	13.7	14.8	15.1	13.3	14.4	13.7	14.8	15.1
	4H	13.7	14.8	14.1	15.2	15.5	13.7	14.8	14.1	15.2	15.5
	6H	14.0	15.0	14.4	15.3	15.7	14.0	15.0	14.4	15.3	15.7
	8H	14.0	15.0	14.4	15.4	15.8	14.0	15.0	14.4	15.4	15.8
	12H	14.0	14.9	14.5	15.3	15.7	14.0	14.9	14.5	15.3	15.7
4H	2H	12.4	13.5	12.8	13.8	14.2	12.4	13.5	12.8	13.8	14.2
	3H	13.9	14.8	14.3	15.2	15.6	13.9	14.8	14.3	15.2	15.6
	4H	14.4	15.2	14.9	15.7	16.1	14.4	15.2	14.9	15.7	16.1
	6H	14.8	15.5	15.3	15.9	16.4	14.8	15.5	15.3	15.9	16.4
	8H	14.9	15.5	15.3	15.9	16.4	14.9	15.5	15.3	15.9	16.4
	12H	14.9	15.5	15.4	15.9	16.4	14.9	15.5	15.4	15.9	16.4
8H	4H	14.6	15.2	15.1	15.7	16.2	14.6	15.2	15.1	15.7	16.2
	6H	15.0	15.5	15.5	16.0	16.5	15.0	15.5	15.5	16.0	16.5
	8H	15.1	15.6	15.7	16.1	16.6	15.1	15.6	15.7	16.1	16.6
	12H	15.2	15.6	15.7	16.1	16.7	15.2	15.6	15.7	16.1	16.7
12H	4H	14.6	15.2	15.1	15.6	16.1	14.6	15.2	15.1	15.6	16.1
	6H	15.0	15.5	15.6	16.0	16.5	15.0	15.5	15.6	16.0	16.5
	8H	15.2	15.6	15.7	16.1	16.7	15.2	15.6	15.7	16.1	16.7

Corrected UGR values based on total output lumens

SHR = 1.0