

Indoor Distribution Test Report

Spectrum Lighting Inc.

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Spectrum Lighting Photometric Lab

Luminaire

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

Test Number

SP-00589_3_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	10.8 W
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Lumen Output

Output Lumens	452
Efficacy	41.81 lm/W

Luminous Dimensions

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

Spacing Criterion

Two luminaires, plane 0°	0.82
Two luminaires, plane 90°	0.82
Four luminaires	0.81

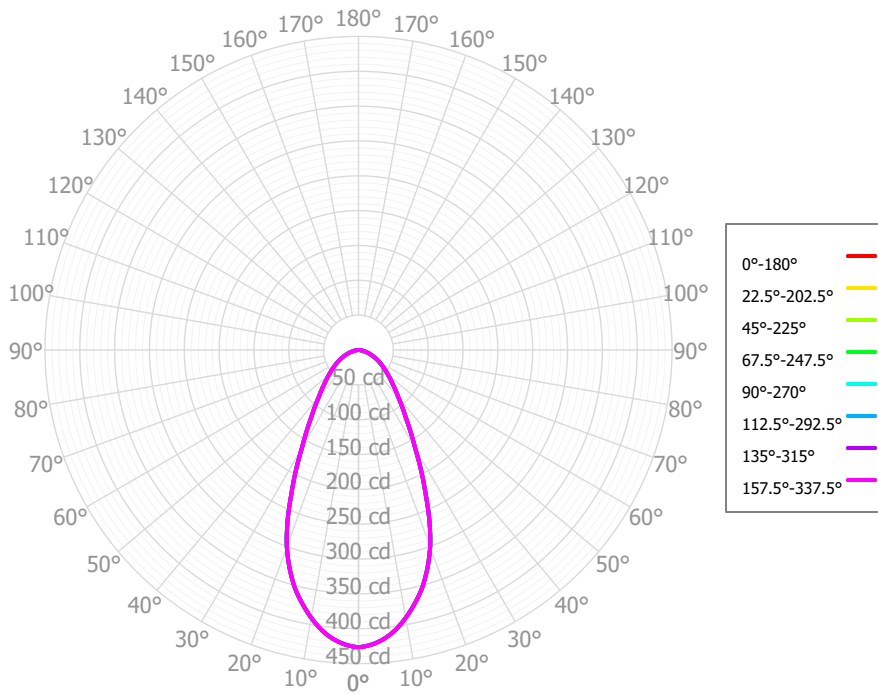
Full Beam Angle

0° - 180°	52°
90° - 270°	52°

IES File Header Contents

Keyword	Value
TEST	SP-00589_3_M-10L
TESTLAB	Spectrum Lighting Photometric Lab, VLS-245-981
MANUFAC	Spectrum Lighting
TESTDATE	10/15/2019
ISSUEDATE	5/15/2020
LUMCAT	AP8XT 10L 35HK 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: 52.2 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, scaled from 30L

Candela Polar Plot



Zonal Lumen Summary

Zone	Lumens	% Fixture	Zone	Lumens	% Fixture
0.00° - 10.00°	39.45	8.73%	90.00° - 100.00°	0.05	0.01%
10.00° - 20.00°	97.68	21.63%	100.00° - 110.00°	0.00	0.00%
20.00° - 30.00°	104.18	23.07%	100.00° - 120.00°	0.00	0.00%
30.00° - 40.00°	75.28	16.67%	120.00° - 130.00°	0.00	0.00%
40.00° - 50.00°	54.40	12.05%	130.00° - 140.00°	0.00	0.00%
50.00° - 60.00°	39.62	8.77%	140.00° - 150.00°	0.00	0.00%
60.00° - 70.00°	25.77	5.71%	150.00° - 160.00°	0.00	0.00%
70.00° - 80.00°	12.45	2.76%	160.00° - 170.00°	0.00	0.00%
80.00° - 90.00°	2.71	0.60%	170.00° - 180.00°	0.00	0.00%
0.00° - 90.00°	451.55	99.99%	0.00° - 180.00°	451.60	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	538	538	538	538	525	525	525	525	502	502	502	480	480	480	461	461	452
	1	504	488	473	460	492	478	465	453	459	448	439	442	433	425	426	419	411
	2	470	442	419	399	460	434	413	394	419	401	386	405	390	377	392	380	372
	3	440	403	374	352	430	396	370	349	384	361	343	372	353	337	361	345	338
	4	412	369	338	314	402	364	335	312	353	328	308	343	322	304	334	316	310
	5	386	340	308	284	378	335	305	282	327	300	280	319	295	277	311	291	285
	6	363	315	282	259	356	311	280	258	304	276	256	297	272	254	290	269	264
	7	343	293	260	238	336	289	259	237	283	256	236	277	253	234	272	250	245
	8	324	273	242	220	318	271	240	219	265	238	218	260	235	217	255	233	229
	9	307	256	225	204	301	254	224	204	249	222	203	245	220	202	241	218	215
	10	291	241	211	191	286	239	210	191	235	208	190	231	207	189	228	205	202

Cone of Light

Mtg Height	Light Level	Beam Diameter
5.5 ft	14.1 fc	5.4 ft
6.5 ft	10.1 fc	6.4 ft
7.5 ft	7.6 fc	7.3 ft
8.0 ft	6.7 fc	7.8 ft
10.0 ft	4.3 fc	9.8 ft
12.0 ft	3.0 fc	11.8 ft
14.0 ft	2.2 fc	13.7 ft
16.0 ft	1.7 fc	15.7 ft
20.0 ft	1.1 fc	19.6 ft
24.0 ft	0.7 fc	23.5 ft
28.0 ft	0.5 fc	27.4 ft

Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
0.00°	13,018	13,018	13,018
45.00°	3,005	3,005	3,005
55.00°	2,340	2,340	2,340
65.00°	1,868	1,868	1,868
75.00°	1,373	1,373	1,373
85.00°	726	726	726

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	12.3	13.6	12.6	13.9	14.2	12.3	13.6	12.6	13.9	14.2
	3H	13.6	14.8	14.0	15.1	15.5	13.6	14.8	14.0	15.1	15.5
	4H	14.0	15.1	14.4	15.5	15.8	14.0	15.1	14.4	15.5	15.8
	6H	14.3	15.3	14.7	15.6	16.0	14.3	15.3	14.7	15.6	16.0
	8H	14.3	15.3	14.7	15.6	16.0	14.3	15.3	14.7	15.6	16.0
	12H	14.3	15.2	14.7	15.6	16.0	14.3	15.2	14.7	15.6	16.0
4H	2H	12.7	13.8	13.1	14.2	14.5	12.7	13.8	13.1	14.2	14.5
	3H	14.2	15.1	14.6	15.5	15.9	14.2	15.1	14.6	15.5	15.9
	4H	14.7	15.6	15.2	16.0	16.4	14.7	15.6	15.2	16.0	16.4
	6H	15.1	15.8	15.5	16.2	16.7	15.1	15.8	15.5	16.2	16.7
	8H	15.1	15.8	15.6	16.2	16.7	15.1	15.8	15.6	16.2	16.7
	12H	15.2	15.7	15.7	16.2	16.7	15.2	15.7	15.7	16.2	16.7
8H	4H	14.9	15.5	15.4	16.0	16.5	14.9	15.5	15.4	16.0	16.5
	6H	15.3	15.8	15.8	16.3	16.8	15.3	15.8	15.8	16.3	16.8
	8H	15.4	15.9	15.9	16.4	16.9	15.4	15.9	15.9	16.4	16.9
	12H	15.5	15.9	16.0	16.4	17.0	15.5	15.9	16.0	16.4	17.0
12H	4H	14.9	15.5	15.4	15.9	16.4	14.9	15.5	15.4	15.9	16.4
	6H	15.3	15.8	15.8	16.2	16.8	15.3	15.8	15.8	16.2	16.8
	8H	15.4	15.9	16.0	16.4	16.9	15.4	15.9	16.0	16.4	16.9

Corrected UGR values based on total output lumens

SHR = 1.0