

Indoor Distribution Test Report

Spectrum Lighting Inc.

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Spectrum Lighting Photometric Lab

Luminaire

SN32 MED xx TW FCI G40 Opal
32" x 11" Spin Pendant Medium Base E26 MWI

Test Number

SP-01617

Test Date

11/7/2023

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

Summary of Results

Power

Input Watts	8.7 W
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Lumen Output

Output Lumens	896
Efficacy	102.96 lm/W

Luminous Dimensions

0° - 180° Size	-2.67
90° - 270° Size	-2.67
Height	0

Spacing Criterion

Two luminaires, plane 0°	1.31
Two luminaires, plane 90°	1.4
Four luminaires	1.5

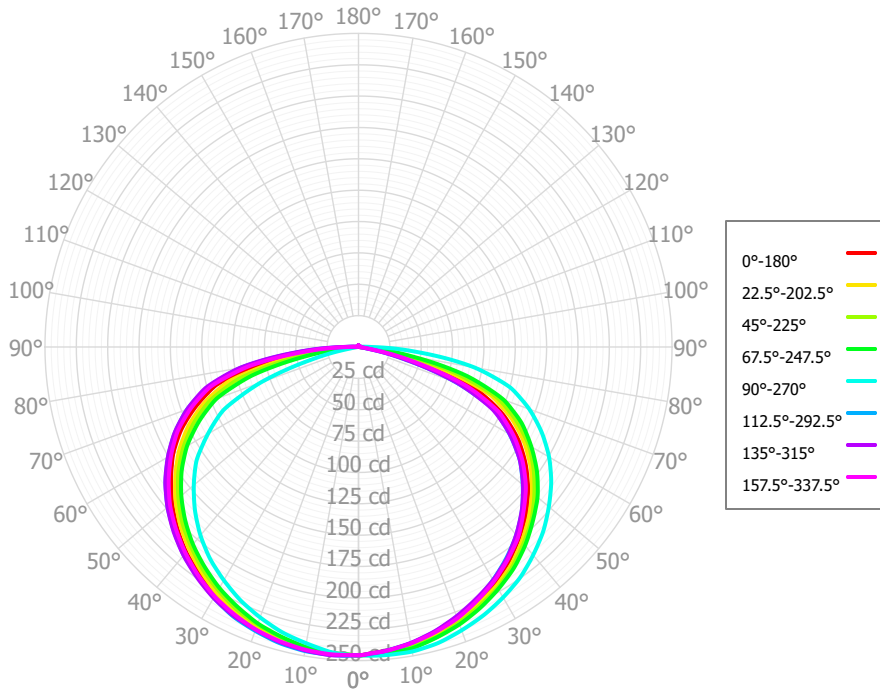
Full Beam Angle

0° - 180°	139°
90° - 270°	139°

IES File Header Contents

Keyword	Value
TEST	SP-01617
TESTLAB	Spectrum Lighting Photometric Lab, VLS-245-981
MANUFAC	Spectrum Lighting
TESTDATE	11/7/2023
ISSUEDATE	11/14/2023
LUMCAT	SN32 MED xx TW FCI G40 Opal
LUMINAIRE	32" x 11" Spin Pendant Medium Base E26 MWI
OTHER	Beam Angle: 133 deg
OTHER	Tested Bulb: CTRLCV Model No: G125/G45 2700K-3000K Part Number: XX/DNTB/E26G125/15W30/1D.
OTHER	Total luminaire wattages are approximate
OTHER	This report prepared by Spectrum Lighting

Candela Polar Plot



Zonal Lumen Summary

Zone	Lumens	% Fixture	Zone	Lumens	% Fixture
0.00° - 10.00°	23.66	2.64%	90.00° - 100.00°	1.83	0.20%
10.00° - 20.00°	67.64	7.55%	100.00° - 110.00°	1.06	0.12%
20.00° - 30.00°	105.80	11.81%	100.00° - 120.00°	2.09	0.23%
30.00° - 40.00°	134.66	15.03%	120.00° - 130.00°	0.94	0.11%
40.00° - 50.00°	151.50	16.91%	130.00° - 140.00°	0.80	0.09%
50.00° - 60.00°	154.15	17.21%	140.00° - 150.00°	0.67	0.07%
60.00° - 70.00°	138.38	15.45%	150.00° - 160.00°	0.49	0.05%
70.00° - 80.00°	88.85	9.92%	160.00° - 170.00°	0.29	0.03%
80.00° - 90.00°	23.85	2.66%	170.00° - 180.00°	0.10	0.01%
0.00° - 90.00°	888.50	99.19%	0.00° - 180.00°	895.72	100.00%

Candela Distribution

	0.00°	22.50°	45.00°	67.50°	90.00°	112.50°	135.00°	157.50°	180.00°	202.50°	225.00°	247.50°	270.00°	292.50°	315.00°	337.50°	360.00°
0.00°	245.85	245.85	245.85	245.85	245.85	245.85	245.85	245.85	245.85	245.85	245.85	245.85	245.85	245.85	245.85	245.85	245.85
2.50°	244.45	244.84	245.82	245.46	246.40	246.46	246.11	245.81	245.57	245.25	245.60	245.37	245.32	244.96	244.43	244.51	244.45
5.00°	243.27	244.07	245.22	245.12	246.64	246.47	246.75	246.04	245.23	244.94	244.75	244.96	244.39	243.33	243.34	243.45	243.27
7.50°	242.27	243.05	243.78	244.61	246.62	246.35	246.24	245.60	244.90	244.41	243.85	243.98	242.14	241.64	241.52	241.78	242.27
10.00°	240.98	242.02	242.34	244.07	246.57	246.16	245.58	245.09	244.57	243.81	242.96	242.92	239.89	239.94	239.63	240.03	240.98
12.50°	238.19	240.19	240.98	242.08	245.57	245.27	244.55	244.01	243.53	242.14	241.23	240.98	237.72	237.52	237.20	237.84	238.19
15.00°	235.52	238.32	239.56	239.95	244.46	244.31	243.46	242.89	242.34	240.47	239.46	239.02	235.46	235.02	234.69	235.59	235.52
17.50°	233.54	235.77	236.79	237.69	242.49	242.60	241.73	241.36	240.57	238.75	237.53	236.86	232.47	232.03	231.62	232.97	233.54
20.00°	231.36	233.19	234.02	235.41	240.42	240.86	239.91	239.74	238.69	237.00	235.60	234.64	229.45	228.99	228.51	230.31	231.36
22.50°	228.04	229.73	230.98	232.53	238.22	238.93	238.08	237.39	236.54	234.68	233.10	231.59	226.16	225.83	225.10	226.87	228.04
25.00°	224.65	226.21	227.95	229.59	236.00	236.91	236.26	235.01	234.34	232.34	230.56	228.52	222.80	222.65	221.68	223.34	224.65
27.50°	220.86	223.05	224.94	226.26	233.33	233.91	233.70	232.33	231.26	229.43	227.21	225.21	218.80	218.62	218.19	219.62	220.86
30.00°	217.04	219.91	221.89	222.91	230.61	230.85	231.04	229.58	228.00	226.48	223.80	221.86	214.77	214.49	214.62	215.87	217.04
32.50°	213.01	216.06	217.92	219.28	227.60	227.22	227.76	226.11	224.61	222.51	220.14	217.91	210.56	210.04	210.43	211.57	213.01
35.00°	208.86	212.15	213.93	215.63	224.55	223.60	224.40	222.61	221.20	218.53	216.47	213.94	206.27	205.54	206.12	207.19	208.86
37.50°	203.98	207.38	209.29	211.18	220.64	220.22	220.70	218.63	217.47	214.31	212.09	209.69	201.20	200.67	200.89	202.60	203.98
40.00°	199.07	202.54	204.65	206.64	216.63	216.77	216.95	214.61	213.68	210.08	207.66	205.39	196.07	195.75	195.61	197.99	199.07
42.50°	193.95	197.30	199.90	201.61	212.43	212.38	212.72	210.20	209.11	205.50	203.09	200.43	190.26	190.05	189.92	192.08	193.95
45.00°	188.71	192.02	195.12	196.54	208.20	207.98	208.41	205.75	204.38	200.88	198.52	195.44	184.39	184.27	184.15	186.00	188.71
47.50°	182.70	186.30	189.10	191.45	203.20	203.36	203.62	201.00	199.20	195.67	193.01	189.96	177.93	177.66	177.76	180.10	182.70
50.00°	176.57	180.54	183.08	186.36	198.10	198.68	198.76	196.16	193.94	190.42	187.44	184.44	171.44	170.96	171.29	174.22	176.57
52.50°	169.69	174.14	176.81	180.13	192.85	193.30	193.43	190.46	188.26	184.30	181.44	178.32	164.63	164.01	164.25	167.13	169.69
55.00°	162.68	167.69	170.53	173.79	187.58	187.84	188.02	184.72	182.50	178.18	175.41	172.13	157.60	157.02	157.02	159.89	162.68
57.50°	154.90	160.25	163.73	166.52	181.57	181.60	181.81	178.63	176.58	171.69	168.46	165.04	148.13	148.20	148.33	151.68	154.90
60.00°	146.84	152.74	156.87	159.15	175.46	175.32	175.47	172.50	170.63	165.17	161.45	157.84	138.64	139.17	139.47	143.34	146.84
62.50°	137.12	143.77	147.86	151.36	168.40	168.46	168.64	165.89	163.43	157.50	153.48	149.11	128.97	129.49	129.17	133.75	137.12
65.00°	126.98	134.68	138.82	143.52	161.21	161.52	161.73	159.13	155.96	149.77	145.45	140.31	118.68	119.74	118.22	123.99	126.98
67.50°	114.20	123.46	128.33	133.47	153.14	153.54	153.65	150.62	147.04	140.47	136.03	130.55	101.18	102.00	101.57	108.69	114.20
70.00°	100.08	112.06	117.62	123.19	144.95	145.40	145.36	142.02	137.79	131.10	126.51	120.41	83.28	83.27	84.28	92.65	100.08
72.50°	77.57	91.53	98.82	106.79	135.34	135.23	135.87	132.27	127.79	119.69	113.03	104.40	60.71	61.01	61.44	70.17	77.57
75.00°	55.29	70.24	79.91	89.70	125.54	124.76	126.18	122.03	117.63	107.94	99.25	87.99	38.59	38.32	39.17	46.81	55.29
77.50°	34.53	48.04	57.07	66.98	110.05	110.21	111.56	105.82	99.93	86.19	77.43	65.29	21.85	22.01	22.11	28.27	34.53
80.00°	15.55	25.75	34.41	43.62	93.77	95.08	96.10	89.06	80.56	64.45	55.00	42.87	6.17	6.51	6.45	10.40	15.55
82.50°	7.85	13.93	18.98	25.61	71.23	72.02	74.01	65.70	58.75	42.95	34.90	25.07	3.54	3.10	3.56	5.13	7.85
85.00°	1.16	3.02	3.85	8.22	47.82	49.16	50.79	42.75	36.40	21.82	14.97	8.06	1.10	1.23	0.96	1.62	1.16
87.50°	1.05	1.62	2.34	3.97	28.74	29.29	31.15	24.80	20.48	11.67	7.83	4.45	1.08	1.07	1.02	1.09	1.05
90.00°	0.96	1.04	0.87	1.26	10.27	10.39	12.13	7.91	6.02	1.82	1.68	1.03	1.06	1.12	1.08	0.99	0.96
92.50°	0.99	0.97	0.97	1.02	4.95	5.65	5.87	4.46	2.37	1.36	1.08	0.99	1.06	1.07	1.08	1.01	0.99
95.00°	1.02	0.95	1.07	1.07	1.53	1.20	1.86	1.24	1.19	0.92	0.92	0.95	1.06	1.01	1.09	1.05	1.02
97.50°	0.95	0.94	1.01	1.04	1.10	1.14	1.11	1.08	0.94	0.94	0.88	0.97	1.04	1.03	1.12	1.04	0.95
100.00°	0.91	0.92	0.94	1.00	1.11	1.08	0.94	0.93	0.90	0.97	0.85	0.98	1.03	1.05	1.14	1.03	0.91
102.50°	0.99	0.97	0.91	0.99	1.08	1.14	0.97	0.97	0.94	0.91	0.92	0.97	1.03	1.07	1.04	1.01	0.99
105.00°	1.06	1.02	0.88	0.98	1.06	1.18	1.04	1.01	1.00	0.85	1.01	0.95	1.03	1.09	0.97	0.99	1.06

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%	10%	0%
	pw	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	30%
	0	1065	1065	1065	1065	1039	1039	1039	1039	991	991	991	948	948	948	907	907	907	889
	1	961	913	870	831	935	891	852	817	851	819	789	815	788	764	781	760	740	742
	2	864	782	715	659	839	765	703	650	731	678	633	700	656	617	671	635	602	620
	3	781	678	598	535	757	663	589	529	634	571	519	608	554	508	583	538	498	525
	4	710	594	509	445	688	582	502	441	557	488	434	535	475	427	514	463	420	451
	5	650	527	441	377	630	516	435	374	495	424	369	476	414	364	458	404	359	394
	6	598	471	386	325	580	462	381	323	444	373	319	428	364	316	413	356	312	348
	7	553	425	342	284	536	417	338	282	402	331	280	388	324	277	375	318	274	311
	8	513	386	306	251	498	379	303	250	366	297	248	354	292	245	343	286	243	280
	9	479	353	276	224	465	347	274	223	336	269	221	326	264	220	316	260	218	254
	10	448	325	251	202	436	320	249	201	310	245	200	301	241	198	292	237	197	232

Cone of Light

Mtg Height	Light Level	Beam Diameter
5.5 ft	8.1 fc	30.9 ft
6.5 ft	5.8 fc	36.5 ft
7.5 ft	4.4 fc	42.1 ft
8.0 ft	3.8 fc	44.9 ft
10.0 ft	2.5 fc	56.1 ft
12.0 ft	1.7 fc	67.3 ft
14.0 ft	1.3 fc	78.5 ft
16.0 ft	1.0 fc	89.8 ft
20.0 ft	0.6 fc	112.2 ft
24.0 ft	0.4 fc	134.6 ft
28.0 ft	0.3 fc	157.1 ft

Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
0.00°	473	473	473
45.00°	513	530	566
55.00°	545	572	629
65.00°	578	631	733
75.00°	411	594	932
85.00°	26	85	1055

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	9.3	11.1	9.7	11.4	11.7	10.0	11.8	10.4	12.1	12.4
	3H	11.5	13.1	11.9	13.4	13.8	12.5	14.1	12.9	14.4	14.8
	4H	12.1	13.6	12.5	13.9	14.3	13.6	15.0	14.0	15.4	15.8
	6H	12.2	13.6	12.7	14.0	14.4	14.4	15.8	14.8	16.2	16.6
	8H	12.2	13.6	12.7	14.0	14.4	14.7	16.1	15.2	16.5	16.9
	12H	12.2	13.5	12.7	13.9	14.3	15.0	16.3	15.4	16.7	17.1
4H	2H	10.1	11.6	10.5	12.0	12.4	11.0	12.5	11.4	12.8	13.2
	3H	12.5	13.8	12.9	14.2	14.6	13.7	15.0	14.2	15.4	15.8
	4H	13.1	14.3	13.6	14.7	15.2	15.0	16.1	15.4	16.5	17.0
	6H	13.4	14.4	13.8	14.8	15.3	16.0	17.0	16.4	17.4	17.9
	8H	13.4	14.3	13.8	14.8	15.2	16.4	17.3	16.8	17.8	18.2
	12H	13.4	14.2	13.8	14.7	15.2	16.7	17.5	17.2	18.0	18.5
8H	4H	13.4	14.4	13.9	14.8	15.3	15.6	16.5	16.0	17.0	17.5
	6H	13.7	14.5	14.2	15.0	15.5	16.8	17.6	17.3	18.1	18.6
	8H	13.7	14.4	14.2	14.9	15.4	17.3	18.0	17.8	18.5	19.0
	12H	13.7	14.3	14.2	14.8	15.4	17.7	18.3	18.2	18.8	19.4
12H	4H	13.4	14.3	13.9	14.8	15.3	15.7	16.5	16.2	17.0	17.5
	6H	13.7	14.4	14.2	14.9	15.4	16.9	17.7	17.5	18.1	18.7
	8H	13.7	14.4	14.3	14.9	15.4	17.5	18.1	18.0	18.6	19.2

Corrected UGR values based on total output energy
 SHR = 1.0

Corrected UGR values based on total output lumens

SHR = 1.0