

Indoor Distribution Test Report

Spectrum Lighting Inc.

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Spectrum Lighting Photometric Lab

Luminaire

STT3 PC40L 35K XWE1 XX SO
Nom 3" diam Euro tracklight

Test Number

SP-00596_24

Test Date

7/10/2019

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

Summary of Results

Power

Input Watts	30.4 W
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Lumen Output

Output Lumens	2019
Efficacy	66.42 lm/W

Luminous Dimensions

0° - 180° Size	-0.23
90° - 270° Size	-0.23
Height	0

Spacing Criterion

Two luminaires, plane 0°	0.83
Two luminaires, plane 90°	0.83
Four luminaires	0.81

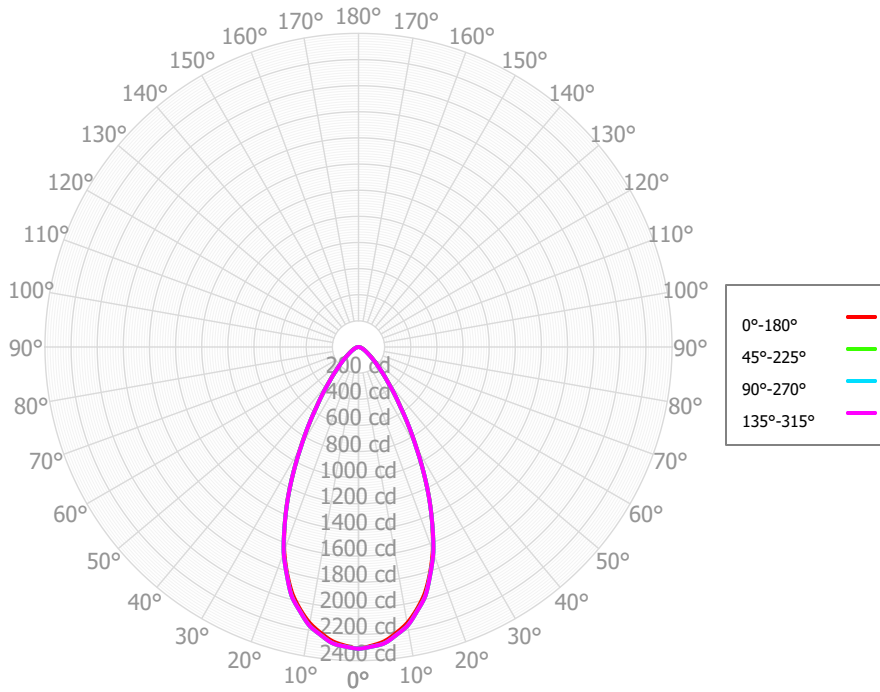
Full Beam Angle

0° - 180°	53°
90° - 270°	53°

IES File Header Contents

Keyword	Value
TEST	SP-00596_24
TESTLAB	Spectrum Lighting Photometric lab, VLS-245-981
MANUFAC	Spectrum Lighting
TESTDATE	7/10/2019
ISSUEDATE	5/28/2020
LUMCAT	STT3 PC40L 35K XWE1 XX SO
LUMINAIRE	Nom 3" diam Euro tracklight
OTHER	Beam Angle: 53.1 degrees
OTHER	Xtra Wide Beam, Solite lens
OTHER	Reference Project SL474.1
LAMPCAT	N/A
LAMP	N/A, 80 CRI
OTHER	CCT Output Multipliers: 27K x 0.96, 30K x 0.99, 40K x 1.04
OTHER	Total luminaire wattage is approximate
OTHER	This report prepared by Spectrum Lighting
_CRI	80+
_CCTMULT	27K x 0.96, 30K x 0.99, 40K x 1.04

Candela Polar Plot



Zonal Lumen Summary

Zone	Lumens	% Fixture	Zone	Lumens	% Fixture
0.00° - 10.00°	216.05	10.70%	90.00° - 100.00°	0.05	0.00%
10.00° - 20.00°	542.72	26.88%	100.00° - 110.00°	0.00	0.00%
20.00° - 30.00°	578.21	28.64%	100.00° - 120.00°	0.00	0.00%
30.00° - 40.00°	358.42	17.75%	120.00° - 130.00°	0.00	0.00%
40.00° - 50.00°	175.33	8.68%	130.00° - 140.00°	0.00	0.00%
50.00° - 60.00°	83.50	4.14%	140.00° - 150.00°	0.00	0.00%
60.00° - 70.00°	41.66	2.06%	150.00° - 160.00°	0.00	0.00%
70.00° - 80.00°	18.58	0.92%	160.00° - 170.00°	0.00	0.00%
80.00° - 90.00°	4.57	0.23%	170.00° - 180.00°	0.00	0.00%
0.00° - 90.00°	2019.05	100.00%	0.00° - 180.00°	2019.10	100.00%

Candela Distribution

	0.00°	45.00°	90.00°
0.00°	2309.17	2309.17	2309.17
2.50°	2288.88	2296.31	2296.31
5.00°	2261.57	2276.74	2276.74
7.50°	2208.29	2223.46	2223.46
10.00°	2145.97	2165.71	2165.71
12.50°	2058.47	2071.87	2071.87
15.00°	1955.17	1975.48	1975.48
17.50°	1817.57	1826.53	1826.53
20.00°	1662.49	1675.01	1675.01
22.50°	1476.27	1477.71	1477.71
25.00°	1281.77	1279.92	1279.92
27.50°	1075.41	1076.60	1076.60
30.00°	883.50	878.12	878.12
32.50°	708.41	713.36	713.36
35.00°	562.86	558.17	558.17
37.50°	446.06	447.53	447.53
40.00°	352.74	346.73	346.73
42.50°	278.02	279.22	279.22
45.00°	222.00	218.61	218.61
47.50°	177.96	176.40	176.40
50.00°	144.24	138.87	138.87
52.50°	115.90	111.10	111.10
55.00°	95.04	87.93	87.93
57.50°	77.32	72.44	72.44
60.00°	65.02	59.03	59.03
62.50°	54.47	48.50	48.50
65.00°	45.56	39.65	39.65
67.50°	37.03	32.62	32.62
70.00°	30.66	26.65	26.65
72.50°	25.06	21.29	21.29
75.00°	21.88	15.93	15.93
77.50°	17.51	11.18	11.18
80.00°	12.88	7.40	7.40
82.50°	9.22	5.11	5.11
85.00°	5.92	3.47	3.47
87.50°	3.35	1.59	1.59
90.00°	1.44	0.00	0.00
92.50°	0.00	0.00	0.00
95.00°	0.00	0.00	0.00
97.50°	0.00	0.00	0.00
100.00°	0.00	0.00	0.00

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	2404	2404	2404	2404	2348	2348	2348	2348	2243	2243	2243	2148	2148	2148	2060	2060	2019
	1	2280	2219	2164	2115	2229	2175	2126	2081	2093	2053	2017	1986	1957	1948	1923	1900	1884
	2	2155	2048	1960	1886	2110	2013	1933	1864	1947	1881	1823	1886	1832	1784	1830	1786	1750
	3	2037	1897	1789	1702	1996	1868	1769	1688	1814	1730	1661	1765	1694	1634	1718	1659	1627
	4	1926	1763	1643	1552	1889	1739	1628	1542	1695	1599	1523	1654	1572	1505	1615	1545	1516
	5	1823	1644	1518	1425	1789	1624	1507	1419	1587	1484	1406	1553	1463	1393	1521	1443	1416
	6	1728	1537	1409	1318	1697	1521	1401	1313	1490	1383	1304	1461	1367	1295	1434	1351	1327
	7	1640	1442	1314	1225	1612	1428	1307	1221	1402	1293	1214	1377	1280	1208	1354	1267	1246
	8	1558	1357	1230	1143	1533	1345	1224	1141	1322	1213	1136	1301	1203	1131	1281	1192	1173
	9	1483	1280	1155	1071	1460	1270	1151	1069	1250	1142	1066	1232	1133	1062	1215	1124	1107
	10	1413	1210	1088	1007	1392	1201	1085	1006	1184	1077	1003	1168	1070	1000	1153	1063	1047

Cone of Light

Mtg Height	Light Level	Beam Diameter
5.5 ft	76.3 fc	5.5 ft
6.5 ft	54.7 fc	6.5 ft
7.5 ft	41.1 fc	7.5 ft
8.0 ft	36.1 fc	8.0 ft
10.0 ft	23.1 fc	10.0 ft
12.0 ft	16.0 fc	12.0 ft
14.0 ft	11.8 fc	14.0 ft
16.0 ft	9.0 fc	16.0 ft
20.0 ft	5.8 fc	20.0 ft
24.0 ft	4.0 fc	24.0 ft
28.0 ft	2.9 fc	28.0 ft

Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
0.00°	598246	598246	598246
45.00°	81336	80096	80096
55.00°	42930	39717	39717
65.00°	27926	24309	24309
75.00°	21903	15943	15943
85.00°	17598	10301	10301

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	19.3	20.4	19.6	20.7	21.0	19.0	20.1	19.4	20.4	20.7
	3H	20.2	21.2	20.6	21.5	21.9	19.8	20.8	20.2	21.1	21.5
	4H	20.6	21.5	21.0	21.8	22.2	20.1	21.0	20.5	21.3	21.7
	6H	20.9	21.7	21.3	22.1	22.5	20.2	21.0	20.6	21.4	21.8
	8H	20.9	21.7	21.4	22.1	22.5	20.2	20.9	20.6	21.3	21.7
	12H	21.0	21.7	21.4	22.1	22.6	20.2	20.9	20.6	21.3	21.7
4H	2H	19.4	20.4	19.9	20.7	21.1	19.2	20.1	19.6	20.5	20.9
	3H	20.6	21.3	21.0	21.7	22.1	20.2	21.0	20.6	21.4	21.8
	4H	21.0	21.7	21.5	22.1	22.6	20.5	21.2	21.0	21.6	22.1
	6H	21.4	22.0	21.9	22.4	22.9	20.7	21.3	21.2	21.7	22.2
	8H	21.5	22.0	22.0	22.5	23.0	20.7	21.2	21.2	21.7	22.2
	12H	21.6	22.1	22.1	22.5	23.0	20.7	21.2	21.2	21.7	22.1
8H	4H	21.1	21.6	21.5	22.0	22.5	20.6	21.1	21.1	21.6	22.0
	6H	21.5	21.9	22.0	22.4	22.9	20.8	21.2	21.3	21.7	22.2
	8H	21.6	22.0	22.2	22.5	23.0	20.8	21.2	21.4	21.7	22.2
	12H	21.8	22.1	22.3	22.6	23.2	20.9	21.2	21.4	21.7	22.3
12H	4H	21.0	21.5	21.5	22.0	22.4	20.6	21.0	21.0	21.5	22.0
	6H	21.4	21.8	22.0	22.3	22.8	20.8	21.1	21.3	21.6	22.2
	8H	21.6	22.0	22.2	22.5	23.0	20.9	21.2	21.4	21.7	22.3

Corrected UGR values based on total output energy
 SHR = 1.0

Corrected UGR values based on total output lumens

SHR = 1.0