

Indoor Distribution Test Report

Spectrum Lighting Inc.

994 Jefferson Street
Fall River, MA 02721
+1.508.678.2303

Spectrum Lighting Photometric Lab

Luminaire

STL4 - 40L - 40HK - LW - xx - xx - MW

Track light for accent, display and general illumination.

Test Number

STL4-13

Test Date

2/18/25

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

Summary of Results

Power

Input Watts	39.95 W
-------------	---------

Lumen Output

Output Lumens	3289
Efficacy	82.33 lm/W

Luminous Dimensions

0° - 180° Size	0.1
90° - 270° Size	3.7
Height	0.1

Spacing Criterion

Two luminaires, plane 0°	1.82
Two luminaires, plane 90°	1.13
Four luminaires	1.91

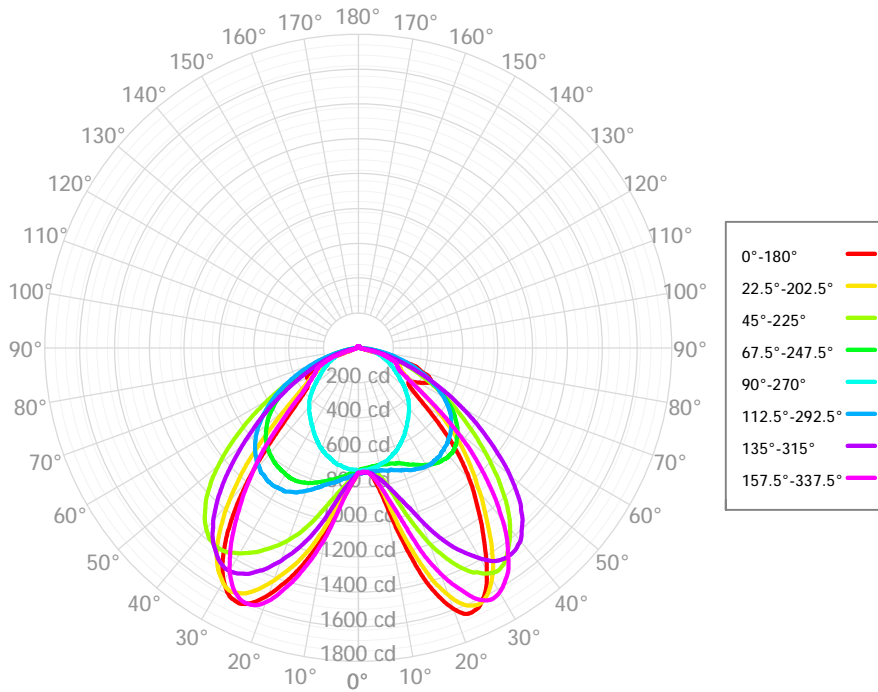
Full Beam Angle

0° - 180°	85°
90° - 270°	N/A°

IES File Header Contents

Keyword	Value
TEST	STL4-13
TESTLAB	Spectrum Lighting Photometric Lab.
MANUFAC	Spectrum Lighting
TESTDATE	2/18/25
ISSUEDATE	2/18/25
LUMCAT	STL4 - 40L - 40HK - LW - xx - xx - MW
LUMINAIRE	Track light for accent, display and general illumination.

Candela Polar Plot



Zonal Lumen Summary

Zone	Lumens	% Fixture	Zone	Lumens	% Fixture
0.00° - 10.00°	74.58	2.27%	90.00° - 100.00°	7.54	0.23%
10.00° - 20.00°	285.22	8.67%	100.00° - 110.00°	7.35	0.22%
20.00° - 30.00°	555.32	16.88%	100.00° - 120.00°	14.47	0.44%
30.00° - 40.00°	702.57	21.36%	120.00° - 130.00°	6.58	0.20%
40.00° - 50.00°	648.26	19.71%	130.00° - 140.00°	5.80	0.18%
50.00° - 60.00°	483.95	14.71%	140.00° - 150.00°	4.91	0.15%
60.00° - 70.00°	333.30	10.13%	150.00° - 160.00°	3.69	0.11%
70.00° - 80.00°	138.02	4.20%	160.00° - 170.00°	2.27	0.07%
80.00° - 90.00°	21.76	0.66%	170.00° - 180.00°	0.77	0.02%
0.00° - 90.00°	3242.98	98.60%	0.00° - 180.00°	3289.00	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°	716.55	716.55	716.55	716.55	716.55	716.55	716.55	716.55	716.55	716.55	716.55	716.55	716.55	716.55	716.55	716.55	716.55
1.00°	712.84	704.34	699.93	697.22	703.29	729.67	734.50	739.37	739.02	734.51	723.54	707.72	700.05	722.39	720.84	718.50	712.84
2.00°	703.90	696.93	695.61	695.94	703.57	732.52	747.87	760.52	763.97	753.61	734.61	714.17	700.38	718.29	716.61	711.15	703.90
3.00°	703.88	698.16	692.51	694.82	700.23	735.38	763.67	785.06	787.11	776.11	750.76	717.21	698.06	716.14	718.06	712.64	703.88
4.00°	708.04	699.54	693.02	690.45	699.59	741.28	780.52	816.77	815.13	796.68	767.63	726.62	699.83	716.62	718.35	713.65	708.04
5.00°	721.02	708.12	698.23	689.63	701.00	750.07	800.17	850.48	849.52	827.06	783.72	731.16	697.08	713.30	719.85	724.65	721.02
6.00°	736.25	721.96	696.47	686.58	696.18	754.50	823.41	892.61	880.23	856.47	803.31	740.16	691.29	712.03	725.87	737.42	736.25
7.00°	765.92	741.81	707.11	684.33	695.20	759.56	850.80	943.50	920.76	893.52	821.98	745.42	690.89	716.05	738.03	756.23	765.92
8.00°	801.10	770.80	721.79	685.90	691.95	769.79	883.73	998.70	965.90	930.24	840.49	751.63	684.34	713.94	748.68	777.39	801.10
9.00°	848.26	809.12	736.45	682.01	690.22	775.65	919.02	1057.49	1017.57	973.27	867.18	757.57	680.97	715.91	760.22	802.91	848.26
10.00°	909.93	856.33	754.69	684.59	685.86	784.73	956.56	1114.78	1070.99	1021.86	888.64	766.04	682.05	713.85	772.96	835.64	909.93
11.00°	982.37	919.36	779.01	682.92	677.98	789.93	996.13	1163.36	1126.69	1070.80	916.14	768.95	674.24	716.47	790.53	872.07	982.37
12.00°	1065.76	987.26	808.99	684.52	675.14	797.16	1035.11	1217.74	1175.90	1113.36	944.83	772.54	669.78	719.94	810.11	913.53	1065.76
13.00°	1143.64	1064.85	848.45	686.22	672.14	805.03	1072.40	1266.03	1222.65	1162.75	975.71	783.26	660.85	722.78	832.85	958.80	1143.64
14.00°	1225.41	1140.62	891.84	688.40	669.61	811.99	1110.97	1312.47	1269.82	1204.71	1007.61	789.42	655.40	727.42	856.96	1011.44	1225.41
15.00°	1308.19	1209.28	939.27	686.95	663.69	824.18	1143.92	1362.13	1314.65	1243.99	1039.17	794.55	648.36	723.16	884.92	1071.87	1308.19
16.00°	1386.08	1281.71	992.46	689.63	654.81	833.48	1178.75	1405.87	1356.55	1285.17	1067.44	801.23	644.49	730.88	910.82	1137.52	1386.08
17.00°	1448.17	1349.38	1040.98	693.65	651.24	842.19	1210.75	1444.63	1398.42	1318.37	1098.07	807.90	639.12	733.75	944.24	1208.66	1448.17
18.00°	1502.64	1415.40	1092.22	699.12	641.39	854.52	1243.08	1486.61	1434.72	1353.34	1126.23	814.06	631.04	737.65	973.78	1271.94	1502.64
19.00°	1552.77	1464.19	1144.23	698.28	637.52	863.66	1268.76	1524.90	1473.66	1386.88	1148.20	820.37	624.67	744.25	1013.20	1325.54	1552.77
20.00°	1592.70	1510.59	1195.18	706.59	630.80	872.42	1302.70	1553.52	1510.06	1423.09	1176.38	825.89	615.54	746.43	1053.96	1377.94	1592.70
21.00°	1625.82	1553.35	1241.59	710.68	624.94	883.41	1328.02	1578.40	1541.59	1454.41	1198.68	830.23	611.05	750.86	1096.66	1427.47	1625.82
22.00°	1647.89	1584.36	1278.48	720.16	613.54	889.70	1355.44	1593.07	1571.78	1485.26	1221.13	833.34	601.27	755.96	1136.99	1470.74	1647.89
23.00°	1652.85	1607.13	1321.21	726.12	607.06	901.91	1383.35	1599.79	1592.97	1512.96	1240.43	838.60	591.01	763.54	1175.17	1509.05	1652.85
24.00°	1647.97	1619.07	1357.31	735.17	597.85	907.06	1401.34	1601.04	1608.97	1536.08	1261.17	840.57	582.48	766.43	1213.49	1550.08	1647.97
25.00°	1640.99	1626.53	1391.02	737.71	589.64	911.75	1422.83	1596.34	1618.73	1556.08	1279.49	842.88	572.97	769.79	1248.89	1587.26	1640.99
26.00°	1617.59	1622.45	1419.20	746.41	580.09	917.97	1444.06	1583.19	1614.64	1565.54	1300.86	842.78	565.42	772.32	1282.29	1610.39	1617.59
27.00°	1593.93	1609.73	1446.93	753.93	571.85	926.44	1455.04	1566.82	1610.52	1575.28	1317.23	843.55	554.56	778.25	1310.46	1626.92	1593.93
28.00°	1562.97	1590.16	1459.34	761.22	564.88	924.18	1467.39	1541.89	1596.01	1578.29	1332.47	842.27	546.55	780.15	1339.95	1634.38	1562.97
29.00°	1522.72	1563.03	1481.63	769.51	550.92	925.44	1474.95	1512.06	1571.36	1570.06	1347.56	839.05	535.59	783.97	1367.16	1631.03	1522.72
30.00°	1473.34	1533.63	1494.46	775.52	544.95	926.44	1479.30	1478.02	1545.91	1554.49	1362.73	838.05	523.78	783.99	1395.34	1620.49	1473.34
31.00°	1429.22	1499.94	1504.99	782.50	533.15	928.66	1479.36	1433.40	1512.08	1534.50	1373.26	832.12	518.60	786.00	1419.71	1606.26	1429.22
32.00°	1376.56	1459.81	1510.48	788.40	526.46	929.56	1471.83	1388.34	1472.83	1513.65	1386.94	831.55	508.96	785.85	1443.09	1585.40	1376.56
33.00°	1327.31	1412.28	1503.96	793.89	514.55	925.64	1461.82	1342.08	1425.37	1485.77	1395.72	826.58	498.86	784.84	1457.91	1564.68	1327.31
34.00°	1278.22	1368.96	1495.06	798.84	505.79	924.81	1446.58	1287.72	1371.55	1453.66	1400.82	823.84	492.04	781.13	1466.92	1539.65	1278.22
35.00°	1233.01	1318.97	1474.89	803.70	498.58	920.78	1426.40	1233.97	1316.79	1416.01	1402.36	820.49	481.89	778.90	1473.56	1503.34	1233.01
36.00°	1182.48	1268.20	1457.24	805.16	488.38	913.78	1408.35	1177.06	1252.93	1372.62	1402.02	815.60	474.54	777.64	1474.21	1462.20	1182.48
37.00°	1134.73	1219.96	1432.67	805.82	479.41	908.50	1386.61	1122.12	1186.94	1323.54	1394.82	811.10	466.02	778.58	1473.37	1424.85	1134.73
38.00°	1089.14	1174.98	1409.59	808.64	470.93	907.58	1359.86	1069.54	1118.58	1268.20	1388.90	803.36	460.01	769.84	1468.00	1385.46	1089.14
39.00°	1046.97	1132.54	1383.93	811.17	462.62	896.24	1325.20	1012.54	1043.99	1218.73	1374.06	797.82	447.43	764.79	1457.20	1338.37	1046.97
40.00°	998.81	1087.28	1355.97	809.13	453.34	887.51	1296.52	954.67	971.44	1156.66	1357.67	792.72	437.16	762.83	1447.85	1287.42	998.81
41.00°	951.88	1038.42	1326.39	807.42	444.36	880.66	1258.90	903.70	893.07	1098.31	1339.43	783.40	431.43	755.65	1427.95	1234.26	951.88
42.00°	901.78	1000.97	1291.95	807.83	432.64	872.87	1220.13	848.59	813.26	1034.19	1318.56	776.62	421.86	753.84	1402.36	1185.05	901.78
43.00°	852.63	957.19	1256.32	801.93	424.70	859.92	1182.10	795.75	737.96	976.24	1290.06	767.00	411.15	748.55	1380.67	1128.60	852.63

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	3905	3905	3905	3905	3808	3808	3808	3808	3629	3629	3629	3465	3465	3465	3314	3314	3243
	1	3601	3459	3331	3216	3509	3380	3265	3160	3234	3139	3052	3099	3022	2951	2974	2913	2848
	2	3293	3041	2833	2657	3204	2976	2785	2622	2853	2693	2555	2740	2607	2490	2635	2526	2468
	3	3012	2684	2430	2228	2929	2629	2395	2206	2526	2326	2161	2431	2261	2118	2342	2199	2149
	4	2762	2384	2107	1896	2684	2338	2080	1881	2250	2027	1850	2170	1977	1820	2094	1929	1884
	5	2540	2131	1845	1634	2469	2092	1824	1623	2018	1782	1601	1949	1742	1580	1884	1704	1666
	6	2344	1917	1630	1424	2279	1883	1613	1416	1820	1580	1400	1761	1547	1384	1706	1517	1484
	7	2170	1734	1452	1253	2111	1706	1438	1247	1651	1411	1235	1600	1384	1223	1553	1359	1330
	8	2016	1578	1302	1113	1962	1553	1291	1108	1506	1268	1098	1462	1247	1089	1421	1226	1201
	9	1879	1443	1176	995	1830	1421	1166	991	1381	1147	984	1342	1129	976	1306	1112	1090
	10	1757	1326	1068	896	1713	1307	1060	893	1272	1044	887	1238	1029	881	1206	1014	995

Cone of Light

Mtg Height	Light Level	Beam Diameter
5.5 ft	23.7 fc	10.1 ft
6.5 ft	17.0 fc	12.0 ft
7.5 ft	12.7 fc	13.8 ft
8.0 ft	11.2 fc	14.7 ft
10.0 ft	7.2 fc	18.4 ft
12.0 ft	5.0 fc	22.1 ft
14.0 ft	3.7 fc	25.8 ft
16.0 ft	2.8 fc	29.5 ft
20.0 ft	1.8 fc	36.9 ft
24.0 ft	1.2 fc	44.2 ft
28.0 ft	0.9 fc	51.6 ft

Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
0.00°	21271	21271	21271
45.00°	15555	28577	16451
55.00°	7470	19425	13999
65.00°	10171	11891	12733
75.00°	1586	5533	10979
85.00°	362	416	5986

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		Viewing C0-180					Viewing C90-270				
2H	2H	17.9	19.4	18.3	19.8	20.1	22.2	23.7	22.6	24.1	24.4
	3H	20.5	21.8	20.9	22.2	22.6	23.2	24.6	23.6	25.0	25.3
	4H	20.8	22.1	21.2	22.5	22.9	23.5	24.8	23.9	25.2	25.6
	6H	20.8	21.9	21.2	22.3	22.8	23.6	24.8	24.1	25.2	25.6
	8H	20.7	21.9	21.2	22.3	22.7	23.6	24.8	24.1	25.2	25.6
	12H	20.7	21.8	21.1	22.2	22.7	23.6	24.7	24.1	25.1	25.6
4H	2H	19.8	21.1	20.2	21.4	21.9	22.5	23.8	22.9	24.2	24.6
	3H	21.8	22.9	22.2	23.3	23.7	23.7	24.8	24.1	25.2	25.6
	4H	22.1	23.1	22.6	23.5	24.0	24.1	25.0	24.5	25.5	25.9
	6H	22.1	22.9	22.5	23.4	23.9	24.3	25.1	24.7	25.6	26.1
	8H	22.0	22.8	22.5	23.3	23.8	24.3	25.1	24.8	25.5	26.0
	12H	22.0	22.7	22.5	23.2	23.7	24.3	25.0	24.8	25.5	26.0
8H	4H	22.4	23.2	22.9	23.6	24.1	24.0	24.8	24.5	25.3	25.8
	6H	22.4	23.0	22.9	23.5	24.0	24.2	24.9	24.8	25.4	25.9
	8H	22.3	22.9	22.8	23.4	23.9	24.2	24.8	24.8	25.4	25.9
	12H	22.3	22.8	22.8	23.3	23.9	24.2	24.7	24.8	25.3	25.9
12H	4H	22.4	23.1	22.9	23.6	24.1	24.0	24.7	24.5	25.2	25.7
	6H	22.4	23.0	22.9	23.4	24.0	24.2	24.8	24.7	25.3	25.8
	8H	22.3	22.9	22.9	23.4	24.0	24.2	24.7	24.7	25.2	25.8

Corrected UGR values based on total output energy
 SHR = 1.0

Corrected UGR values based on total output lumens

SHR = 1.0