

Indoor Distribution Test Report

Spectrum Lighting Inc.

994 Jefferson Street
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Spectrum Lighting Photometric Lab

Luminaire

STL2 - 20L - 30HK - NF - xx - xx - MW

Track light for accent, display and general illumination.

Test Number

STL2-4

Test Date

2/18/25

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

Summary of Results

Power

Input Watts	20.32 W
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Lumen Output

Output Lumens	1792
Efficacy	88.21 lm/W

Luminous Dimensions

0° - 180° Size	0.12
90° - 270° Size	1.83
Height	0.03

Spacing Criterion

Two luminaires, plane 0°	0.59
Two luminaires, plane 90°	1.15
Four luminaires	0.82

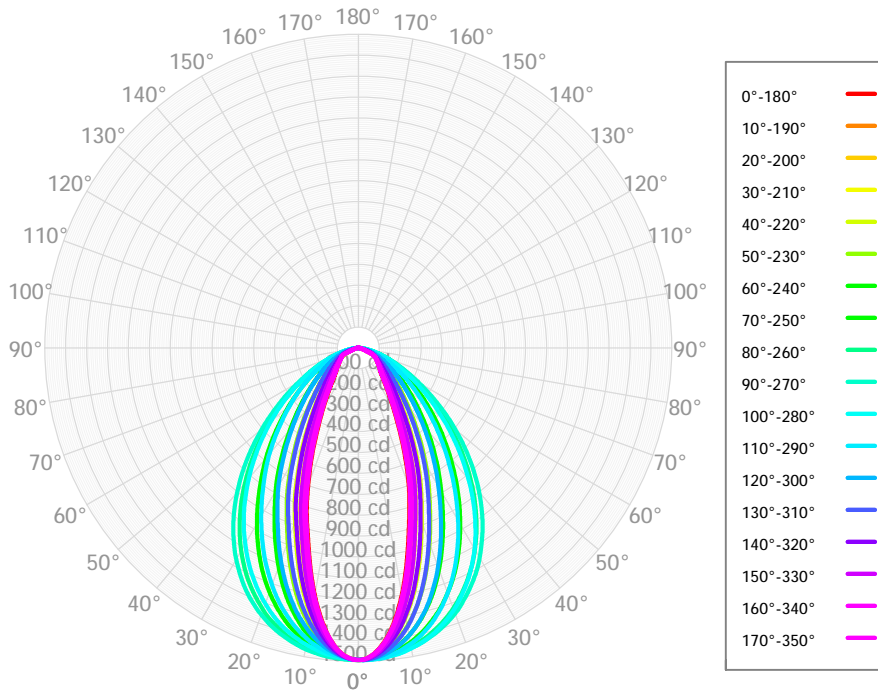
Full Beam Angle

0° - 180°	38°
90° - 270°	90°

IES File Header Contents

Keyword	Value
TEST	STL2-4
TESTLAB	Spectrum Lighting Photometric Lab.
MANUFAC	Spectrum Lighting
TESTDATE	2/18/25
ISSUEDATE	2/18/25
LUMCAT	STL2 - 20L - 30HK - NF - 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°	134.70	7.51%	90.00° - 100.00°	1.26	0.07%
10.00° - 20.00°	322.16	17.97%	100.00° - 110.00°	1.28	0.07%
20.00° - 30.00°	371.89	20.75%	100.00° - 120.00°	2.54	0.14%
30.00° - 40.00°	330.50	18.44%	120.00° - 130.00°	1.25	0.07%
40.00° - 50.00°	260.76	14.55%	130.00° - 140.00°	1.15	0.06%
50.00° - 60.00°	188.66	10.52%	140.00° - 150.00°	1.04	0.06%
60.00° - 70.00°	118.72	6.62%	150.00° - 160.00°	0.84	0.05%
70.00° - 80.00°	47.72	2.66%	160.00° - 170.00°	0.55	0.03%
80.00° - 90.00°	8.54	0.48%	170.00° - 180.00°	0.20	0.01%
0.00° - 90.00°	1783.64	99.51%	0.00° - 180.00°	1792.47	100.00%

Candela Dist

	0.00°	10.00°	20.00°	30.00°	40.00°	50.00°	60.00°	70.00°	80.00°	90.00°	100.00°	110.00°	120.00°	130.00°	140.00°	150.00°	160.00°	170.00°	180°
0.00°	1492.78	1492.78	1492.78	1492.78	1492.78	1492.78	1492.78	1492.78	1492.78	1492.78	1492.78	1492.78	1492.78	1492.78	1492.78	1492.78	1492.78	1492.78	1492.78
1.00°	1490.57	1490.12	1490.24	1490.31	1491.75	1491.36	1492.31	1492.56	1492.92	1492.53	1491.12	1491.64	1489.89	1491.33	1490.51	1491.40	1489.71	1490.83	1491.12
2.00°	1480.95	1480.71	1480.31	1483.02	1485.25	1486.71	1490.73	1491.32	1492.85	1491.53	1488.59	1488.28	1485.55	1485.40	1483.86	1483.91	1482.53	1480.75	1480.95
3.00°	1463.42	1465.03	1465.51	1470.45	1475.17	1479.49	1484.79	1487.11	1489.49	1489.60	1485.49	1483.19	1478.26	1477.38	1473.18	1471.01	1469.04	1466.66	1463.42
4.00°	1441.37	1443.56	1445.70	1453.39	1461.77	1469.93	1477.67	1482.62	1486.31	1486.51	1481.81	1476.78	1469.34	1465.98	1458.88	1453.80	1448.51	1445.06	1441.37
5.00°	1412.81	1415.58	1421.96	1433.42	1445.06	1457.30	1468.66	1477.91	1483.40	1483.23	1477.30	1470.11	1459.05	1451.63	1440.10	1431.39	1422.04	1416.68	1412.81
6.00°	1379.42	1383.17	1390.84	1405.08	1424.74	1440.11	1458.44	1470.07	1478.47	1480.27	1472.88	1461.24	1446.57	1433.51	1416.90	1404.08	1391.04	1383.35	1379.42
7.00°	1340.73	1345.19	1356.10	1374.35	1400.01	1420.98	1447.51	1461.68	1472.74	1476.54	1465.82	1450.93	1430.85	1412.74	1390.77	1372.24	1355.48	1346.20	1340.73
8.00°	1296.28	1304.78	1317.19	1341.15	1372.24	1400.63	1431.36	1452.67	1465.84	1472.20	1457.26	1439.64	1413.43	1388.94	1360.65	1337.94	1315.08	1304.57	1296.28
9.00°	1248.72	1259.66	1274.73	1304.17	1341.25	1377.40	1414.62	1442.27	1459.12	1464.55	1449.74	1428.67	1394.78	1363.58	1328.49	1298.29	1271.82	1255.96	1248.72
10.00°	1198.80	1208.98	1227.91	1262.99	1307.27	1350.78	1396.88	1431.07	1452.57	1457.28	1441.40	1413.23	1374.24	1335.26	1291.65	1256.05	1225.48	1207.61	1198.80
11.00°	1145.69	1158.50	1179.89	1219.67	1270.92	1322.31	1376.30	1417.42	1443.31	1451.64	1431.83	1397.92	1350.72	1304.26	1253.51	1211.24	1174.86	1153.98	1145.69
12.00°	1091.37	1105.02	1129.52	1173.14	1232.70	1292.10	1354.63	1403.26	1433.74	1444.10	1419.65	1381.26	1326.73	1271.32	1211.74	1164.40	1121.92	1100.06	1091.37
13.00°	1035.22	1050.20	1077.52	1125.03	1192.54	1259.88	1332.16	1388.27	1424.37	1435.54	1409.02	1363.79	1301.03	1237.09	1168.75	1115.85	1070.31	1046.17	1035.22
14.00°	980.49	996.31	1024.67	1076.31	1149.64	1225.15	1307.68	1371.24	1412.92	1425.80	1397.09	1344.16	1273.21	1201.18	1125.66	1066.39	1018.67	992.99	980.49
15.00°	927.85	944.49	972.31	1027.51	1106.43	1188.92	1281.03	1353.45	1400.16	1415.57	1383.71	1323.85	1244.60	1163.63	1080.74	1017.04	966.61	943.22	927.85
16.00°	878.91	894.28	922.56	979.10	1062.61	1151.40	1253.05	1335.14	1387.44	1404.61	1369.68	1302.72	1213.88	1125.24	1034.93	969.51	920.04	896.06	878.91
17.00°	834.23	847.51	876.43	931.62	1017.83	1112.20	1224.17	1315.36	1373.96	1392.75	1354.58	1280.72	1182.97	1085.25	990.25	924.73	877.71	852.99	834.23
18.00°	791.19	804.42	832.29	886.11	972.78	1073.77	1192.85	1294.05	1359.06	1380.47	1337.59	1257.63	1150.37	1045.34	947.53	884.17	835.93	809.53	791.19
19.00°	749.18	763.35	791.59	844.34	929.46	1034.38	1160.82	1271.52	1343.21	1367.29	1320.54	1233.21	1117.67	1006.67	907.51	844.82	791.06	761.73	749.18
20.00°	707.11	721.69	751.22	804.54	887.97	995.43	1128.28	1248.55	1326.84	1353.08	1302.10	1206.97	1083.41	967.85	869.96	803.46	744.78	714.17	707.11
21.00°	663.59	680.17	710.81	766.14	848.24	956.19	1095.20	1224.78	1308.92	1337.85	1282.94	1180.74	1049.21	929.22	834.30	761.05	700.59	668.21	663.59
22.00°	619.91	636.50	669.83	728.68	809.91	917.12	1061.61	1200.16	1290.34	1320.22	1263.50	1154.30	1015.25	893.19	797.81	717.52	656.72	626.09	619.91
23.00°	576.20	593.25	627.91	691.30	773.05	879.37	1027.02	1174.97	1270.97	1302.30	1243.29	1127.87	980.36	859.75	757.80	675.19	615.67	584.30	576.20
24.00°	536.48	553.22	587.95	651.82	737.64	842.04	993.07	1148.00	1250.86	1284.60	1221.77	1101.44	945.73	827.82	716.90	636.15	576.23	544.04	536.48
25.00°	497.37	513.85	549.23	612.47	703.27	807.25	959.37	1120.51	1230.29	1265.78	1200.72	1072.31	914.40	792.99	679.04	598.14	536.87	505.01	497.37
26.00°	459.33	475.77	511.71	574.73	667.64	774.70	924.89	1092.14	1208.45	1246.24	1178.27	1044.13	882.41	759.69	641.59	562.04	499.70	467.75	459.33
27.00°	425.22	440.74	474.20	538.73	632.55	742.07	891.08	1063.11	1186.38	1226.87	1155.41	1014.95	850.84	723.60	606.81	526.56	464.08	434.35	425.22
28.00°	393.12	407.74	441.39	504.37	598.01	709.23	858.18	1033.82	1164.14	1206.50	1131.88	985.96	822.77	690.05	573.07	491.32	432.19	403.15	393.12
29.00°	364.42	377.46	409.89	471.64	564.22	677.39	825.89	1004.63	1139.73	1184.23	1106.99	957.57	794.26	655.62	540.08	459.26	402.50	375.67	364.42
30.00°	338.46	350.25	380.89	440.35	531.46	646.57	793.91	975.08	1114.87	1160.53	1082.17	928.62	765.18	622.61	508.57	429.29	375.27	349.57	338.46
31.00°	313.54	325.00	354.02	410.26	500.07	614.46	762.64	945.07	1089.33	1136.23	1057.38	900.61	734.37	591.30	477.51	401.06	349.80	326.35	313.54
32.00°	292.03	302.42	330.52	382.80	470.79	584.57	732.76	915.79	1064.04	1111.54	1032.69	872.13	703.86	562.35	447.57	375.34	326.47	304.85	292.03
33.00°	272.28	281.31	307.26	357.59	441.90	555.25	704.07	886.49	1038.77	1086.89	1005.62	844.87	673.87	533.05	421.23	351.39	304.79	284.34	272.28
34.00°	254.54	262.81	287.52	334.23	414.53	526.17	675.21	856.20	1010.81	1062.28	978.49	816.32	644.21	506.34	395.26	329.10	285.75	265.41	254.54
35.00°	238.17	245.86	268.38	312.55	388.82	497.87	646.47	826.85	982.98	1036.47	953.45	789.94	615.72	478.57	372.21	308.64	267.82	248.58	238.17
36.00°	223.89	231.27	251.68	292.76	364.98	470.79	618.09	798.28	955.34	1010.09	926.47	763.80	588.28	453.01	350.37	290.47	251.19	233.61	223.89
37.00°	209.44	216.88	236.73	274.39	342.98	446.22	591.65	768.72	927.35	982.35	897.73	738.26	561.35	428.69	330.58	272.84	236.16	220.81	209.44
38.00°	196.50	203.75	222.22	258.71	321.33	421.59	566.29	739.56	899.18	954.66	870.24	713.01	535.47	405.06	311.17	257.82	222.75	208.23	196.50
39.00°	186.58	193.29	209.63	243.58	302.42	397.47	539.23	711.68	870.53	927.01	843.22	687.55	510.69	383.81	293.60	243.04	209.39	196.48	186.58
40.00°	177.30	183.05	198.10	228.66	284.53	375.36	513.56	684.70	841.50	898.95	815.07	661.56	486.72	362.08	277.21	228.03	198.28	186.05	177.30
41.00°	169.10	174.24	187.35	214.90	268.35	355.57	490.17	658.16	812.10	870.43	787.38	634.53	464.43	342.55	260.90	215.63	188.34	176.94	169.10
42.00°	161.89	166.34	177.81	202.67	253.00	335.56	467.06	630.50	783.90	840.86	759.60	610.91	441.86	323.98	246.24	204.58	179.05	168.94	161.89
43.00°	154.87	159.15	168.44	193.95	237.77	317.40	444.22	604.22	755.39	811.65	731.87	584.74	420.27	306.88	233.38	194.23	170.74	162.25	154.87

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	2132	2132	2132	2132	2081	2081	2081	2081	1987	1987	1987	1900	1900	1900	1821	1821	1784
	1	1993	1926	1866	1813	1945	1885	1831	1783	1809	1766	1725	1740	1704	1672	1675	1647	1613
	2	1852	1734	1637	1556	1807	1701	1612	1537	1639	1565	1501	1581	1520	1466	1528	1478	1447
	3	1721	1568	1450	1356	1680	1541	1431	1343	1489	1396	1320	1442	1363	1297	1397	1331	1303
	4	1604	1426	1297	1198	1566	1404	1283	1190	1360	1256	1173	1320	1231	1158	1283	1206	1181
	5	1497	1305	1170	1071	1463	1286	1159	1065	1249	1139	1054	1216	1119	1043	1184	1100	1078
	6	1402	1200	1064	967	1371	1184	1056	963	1153	1039	955	1124	1024	947	1097	1008	989
	7	1316	1109	975	880	1288	1095	968	877	1069	955	871	1044	942	865	1021	930	912
	8	1239	1030	898	807	1213	1018	892	805	995	882	800	974	871	796	954	861	846
	9	1169	960	832	745	1146	950	827	743	930	818	740	912	810	736	895	801	788
	10	1106	899	774	691	1085	890	770	690	873	763	687	857	756	684	842	749	737

Cone of Light

Mtg Height	Light Level	Beam Diameter
5.5 ft	49.3 fc	3.8 ft
6.5 ft	35.3 fc	4.5 ft
7.5 ft	26.5 fc	5.2 ft
8.0 ft	23.3 fc	5.5 ft
10.0 ft	14.9 fc	6.9 ft
12.0 ft	10.4 fc	8.3 ft
14.0 ft	7.6 fc	9.7 ft
16.0 ft	5.8 fc	11.1 ft
20.0 ft	3.7 fc	13.8 ft
24.0 ft	2.6 fc	16.6 ft
28.0 ft	1.9 fc	19.3 ft

Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
0.00°	72685	72685	72685
45.00°	7933	14288	50881
55.00°	6765	9880	38269
65.00°	5562	7356	26078
75.00°	1441	3855	16497
85.00°	688	967	6304

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	15.3	16.7	15.7	17.0	17.3	23.5	24.9	23.9	25.2	25.5
	3H	16.0	17.2	16.4	17.6	17.9	24.9	26.1	25.3	26.5	26.9
	4H	16.0	17.2	16.5	17.5	17.9	25.3	26.5	25.8	26.8	27.2
	6H	16.0	17.1	16.5	17.5	17.9	25.6	26.6	26.0	27.0	27.4
	8H	16.0	17.0	16.5	17.4	17.8	25.6	26.6	26.0	27.0	27.4
	12H	16.0	17.0	16.4	17.3	17.8	25.6	26.5	26.0	26.9	27.4
4H	2H	16.2	17.3	16.6	17.7	18.1	23.4	24.5	23.8	24.9	25.3
	3H	17.0	17.9	17.4	18.3	18.7	24.9	25.9	25.3	26.3	26.7
	4H	17.0	17.9	17.5	18.3	18.7	25.4	26.3	25.9	26.7	27.1
	6H	17.0	17.8	17.5	18.2	18.7	25.7	26.5	26.2	26.9	27.4
	8H	17.0	17.7	17.5	18.2	18.6	25.8	26.5	26.3	26.9	27.4
	12H	17.0	17.6	17.5	18.1	18.6	25.8	26.4	26.3	26.9	27.4
8H	4H	17.4	18.1	17.9	18.6	19.0	25.3	26.0	25.8	26.5	26.9
	6H	17.4	18.0	17.9	18.5	19.0	25.7	26.2	26.2	26.7	27.2
	8H	17.4	17.9	18.0	18.4	18.9	25.7	26.2	26.3	26.7	27.2
	12H	17.4	17.9	18.0	18.4	18.9	25.8	26.2	26.3	26.7	27.3
12H	4H	17.5	18.1	18.0	18.6	19.0	25.3	25.9	25.8	26.4	26.9
	6H	17.5	18.0	18.0	18.4	19.0	25.6	26.1	26.1	26.6	27.1
	8H	17.5	17.9	18.0	18.4	19.0	25.7	26.1	26.2	26.6	27.2

Corrected UGR values based on total output energy
SHR = 1.0

Corrected UGR values based on total output lumens

SHR = 1.0