

Indoor Distribution Test Report

Spectrum Lighting Inc.

994 Jefferson Street
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Spectrum Lighting Photometric Lab

Luminaire

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

Track light for accent, display and general illumination.

Test Number

STL2-2

Test Date

2/18/25

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

Summary of Results

Power

Input Watts	20.39 W
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Lumen Output

Output Lumens	1632
Efficacy	80.05 lm/W

Luminous Dimensions

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

Spacing Criterion

Two luminaires, plane 0°	2.11
Two luminaires, plane 90°	1.18
Four luminaires	1.73

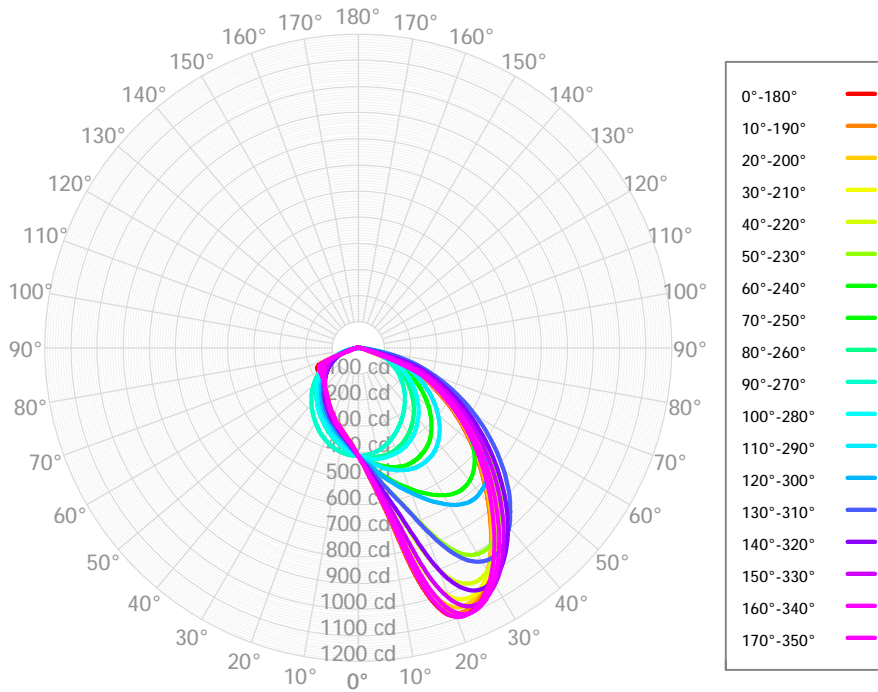
Full Beam Angle

0° - 180°	43°
90° - 270°	N/A°

IES File Header Contents

Keyword	Value
TEST	STL2-2
TESTLAB	Spectrum Lighting Photometric Lab.
MANUFAC	Spectrum Lighting
TESTDATE	2/18/25
ISSUEDATE	2/18/25
LUMCAT	STL2 - 20L - 30HK - LA - 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°	40.93	2.51%	90.00° - 100.00°	1.08	0.07%
10.00° - 20.00°	142.18	8.71%	100.00° - 110.00°	1.09	0.07%
20.00° - 30.00°	251.08	15.38%	100.00° - 120.00°	2.17	0.13%
30.00° - 40.00°	308.30	18.89%	120.00° - 130.00°	1.06	0.07%
40.00° - 50.00°	311.90	19.11%	130.00° - 140.00°	0.96	0.06%
50.00° - 60.00°	274.23	16.80%	140.00° - 150.00°	0.82	0.05%
60.00° - 70.00°	202.26	12.39%	150.00° - 160.00°	0.65	0.04%
70.00° - 80.00°	80.13	4.91%	160.00° - 170.00°	0.40	0.02%
80.00° - 90.00°	13.83	0.85%	170.00° - 180.00°	0.14	0.01%
0.00° - 90.00°	1624.84	99.55%	0.00° - 180.00°	1632.12	100.00%

Candela Distrib

	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°	180.00°	19
0.00°	413.65	413.65	413.65	413.65	413.65	413.65	413.65	413.65	413.65	413.65	413.65	413.65	413.65	413.65	413.65	413.65	413.65	413.65	413.65	41
1.00°	427.55	428.03	426.29	425.73	424.16	422.28	420.15	418.05	415.16	413.32	410.57	408.22	407.00	404.82	403.83	402.60	402.02	401.39	401.09	40
2.00°	441.73	440.94	439.13	437.61	434.62	430.57	426.23	422.10	416.87	412.76	407.07	402.48	400.32	396.54	394.86	392.03	391.61	390.08	389.67	38
3.00°	455.82	456.18	453.94	450.09	445.79	439.04	431.66	425.22	418.85	411.97	403.46	397.13	393.98	389.54	385.20	382.69	381.98	379.46	378.73	37
4.00°	477.03	476.28	472.41	467.36	459.65	449.84	439.09	428.88	420.13	411.19	399.74	392.47	387.68	382.58	377.15	374.07	372.53	370.33	369.23	36
5.00°	499.23	496.95	492.19	485.31	475.14	462.12	447.33	433.37	421.14	410.45	396.77	388.51	380.99	374.24	370.49	365.98	364.18	362.00	360.98	36
6.00°	521.46	519.81	513.92	503.54	490.61	474.22	456.03	437.83	421.49	409.28	393.24	382.92	374.57	368.16	363.22	359.83	357.82	355.67	353.72	35
7.00°	547.27	545.43	537.07	523.72	506.11	486.43	464.59	442.29	422.05	407.89	389.56	378.09	368.99	361.97	356.39	353.96	351.71	348.75	347.39	34
8.00°	577.02	573.75	563.49	546.56	523.33	498.96	472.90	447.16	422.95	406.34	385.81	373.45	363.87	356.08	350.67	347.83	345.04	341.69	341.45	33
9.00°	610.58	605.76	592.35	571.17	542.75	511.70	481.38	451.65	423.37	404.57	382.14	368.18	358.65	351.34	345.50	341.36	338.47	335.23	335.04	33
10.00°	649.79	644.27	625.32	596.71	562.82	525.19	489.93	455.43	423.58	402.29	378.57	363.20	353.36	346.40	339.98	335.34	332.93	329.28	328.42	32
11.00°	697.89	690.71	665.97	626.90	583.83	540.61	497.99	459.09	422.99	399.89	374.75	358.91	348.67	340.92	334.90	329.98	327.87	323.47	322.40	32
12.00°	757.82	750.77	715.97	664.08	607.05	555.68	506.07	462.68	422.80	397.43	370.41	354.34	344.62	336.02	328.95	323.22	321.95	317.89	316.23	31
13.00°	826.02	816.29	775.52	708.37	634.75	570.86	514.20	466.12	423.35	394.18	366.25	348.83	339.75	330.06	323.66	318.83	316.51	313.07	311.23	31
14.00°	891.12	880.20	835.61	759.12	667.58	587.35	522.79	469.25	423.13	391.08	362.12	345.80	335.05	326.58	317.97	314.84	311.74	307.37	306.06	30
15.00°	949.48	937.74	893.36	812.91	703.83	605.68	531.66	471.70	422.53	388.51	358.37	341.22	330.30	321.60	313.20	310.41	306.81	303.76	301.61	30
16.00°	998.31	986.04	943.46	865.49	744.24	625.10	540.23	474.64	421.62	385.31	353.86	336.22	326.42	315.80	309.41	305.45	302.73	298.86	297.20	29
17.00°	1036.74	1023.87	985.11	913.01	787.83	647.06	548.49	477.88	420.59	381.66	349.34	332.22	322.08	311.72	305.36	300.55	298.41	293.51	292.41	29
18.00°	1065.64	1051.60	1017.32	952.92	829.80	671.24	555.94	479.15	419.32	378.14	345.41	328.54	316.62	307.55	300.40	295.87	292.23	288.10	287.20	28
19.00°	1083.81	1070.88	1039.86	985.32	868.21	697.03	564.19	480.50	417.35	374.50	340.44	324.55	312.38	302.60	296.50	290.98	286.95	282.47	281.81	28
20.00°	1091.73	1081.57	1055.96	1009.63	904.17	723.73	573.02	482.44	414.97	370.40	335.80	320.34	307.85	299.09	292.80	285.59	280.40	276.75	276.48	27
21.00°	1096.88	1086.53	1064.80	1026.46	933.43	751.01	582.16	483.98	413.16	366.25	331.95	315.46	303.28	294.40	287.29	279.95	275.65	271.85	270.60	27
22.00°	1096.94	1086.37	1067.47	1037.10	956.41	778.57	591.14	485.23	411.13	362.05	327.52	311.63	298.82	289.62	282.43	274.67	271.43	267.78	267.01	26
23.00°	1092.37	1082.49	1065.99	1043.62	974.39	805.25	599.48	485.08	408.41	357.73	323.65	306.45	295.12	286.12	277.42	270.11	267.35	263.11	262.10	26
24.00°	1084.48	1076.25	1062.29	1046.11	987.15	829.85	607.33	484.72	405.42	353.36	319.12	302.83	291.50	281.56	272.09	266.27	262.60	257.84	256.93	25
25.00°	1074.63	1067.58	1055.66	1043.97	995.24	851.58	614.79	484.24	402.26	348.79	314.28	298.61	287.55	276.23	267.09	261.89	257.59	253.71	252.76	25
26.00°	1063.32	1055.10	1045.82	1038.30	1000.57	870.24	623.02	483.29	398.27	344.16	309.99	294.34	283.35	271.42	262.49	256.75	253.18	249.61	248.93	24
27.00°	1049.41	1041.02	1033.88	1031.45	1001.51	886.16	631.05	481.92	394.20	339.48	305.49	290.16	278.94	267.70	258.31	251.90	248.08	244.77	244.29	24
28.00°	1033.22	1025.03	1021.05	1020.28	998.82	897.44	637.66	480.30	390.13	334.85	301.45	285.17	274.52	263.99	254.20	247.18	244.10	239.75	240.80	23
29.00°	1015.95	1008.21	1006.96	1009.87	994.05	905.84	644.19	478.38	386.18	330.23	297.97	281.09	270.17	258.22	249.28	242.31	239.87	235.08	233.94	23
30.00°	996.73	990.41	988.77	996.75	986.77	911.47	650.65	475.26	382.34	325.70	292.97	277.06	265.94	252.09	245.42	238.19	234.36	230.36	230.36	22
31.00°	975.76	970.85	970.62	981.64	977.74	913.71	656.77	472.57	377.88	321.07	289.04	272.93	261.92	247.51	241.32	233.23	229.77	226.61	226.64	22
32.00°	954.42	950.24	951.67	965.38	966.94	914.59	662.44	470.34	373.19	316.34	284.79	268.04	257.41	244.59	236.78	228.38	225.79	222.11	222.63	22
33.00°	933.44	929.55	932.49	948.18	954.24	912.52	665.70	467.06	367.89	311.33	279.84	263.95	252.88	240.18	232.58	223.85	221.72	218.68	218.46	21
34.00°	912.01	907.92	912.77	930.75	940.29	908.03	668.61	463.47	362.89	306.26	275.26	260.21	248.44	234.89	228.19	219.67	217.69	215.93	215.04	21
35.00°	889.10	886.50	891.73	913.35	925.16	902.06	671.09	459.46	358.16	301.40	271.26	255.86	242.65	230.56	223.34	216.06	213.73	212.75	212.85	21
36.00°	866.32	863.30	870.30	893.87	909.32	894.77	671.51	455.11	352.70	296.54	266.45	250.94	238.68	227.02	218.25	212.57	210.98	208.97	208.87	20
37.00°	842.67	840.57	847.84	873.53	893.75	884.93	671.16	450.36	347.04	291.68	261.88	245.77	233.73	223.73	214.19	208.46	207.06	205.86	206.23	20
38.00°	820.20	817.73	826.86	853.10	875.92	874.74	669.15	444.75	341.12	286.53	257.31	242.63	229.45	217.02	208.77	205.57	203.91	203.67	203.58	20
39.00°	797.81	795.03	804.50	832.58	858.23	862.47	666.58	438.80	335.33	281.31	253.14	238.61	225.80	212.91	203.83	201.35	201.28	201.83	201.48	20
40.00°	774.99	773.09	781.97	811.78	840.40	849.09	663.25	432.03	329.71	276.58	248.98	234.69	221.45	208.73	200.16	196.79	198.29	198.60	198.34	19
41.00°	752.57	751.95	760.15	790.65	821.00	834.57	658.45	425.08	324.10	271.74	244.21	229.59	216.32	204.40	196.58	193.00	194.70	194.89	194.73	19
42.00°	731.28	730.40	738.84	769.28	801.08	818.91	653.03	417.85	318.40	266.69	239.02	224.36	211.52	199.91	192.56	189.96	191.37	191.51	191.61	18
43.00°	708.88	707.54	717.56	748.66	781.62	803.97	645.75	410.50	311.64	261.65	234.65	219.90	207.53	195.26	188.75	186.89	189.37	188.73	188.86	18

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	1941	1941	1941	1941	1895	1895	1895	1895	1809	1809	1809	1731	1731	1731	1659	1659	1625
	1	1783	1710	1643	1584	1739	1672	1612	1557	1602	1552	1507	1537	1497	1460	1477	1445	1414
	2	1624	1493	1386	1295	1581	1462	1363	1279	1403	1320	1248	1349	1280	1219	1299	1242	1214
	3	1480	1311	1181	1076	1439	1285	1164	1066	1235	1132	1046	1190	1101	1027	1147	1073	1048
	4	1353	1160	1018	909	1315	1137	1005	903	1096	980	889	1057	957	876	1021	935	914
	5	1242	1033	887	780	1208	1015	877	775	979	858	766	946	840	757	915	822	804
	6	1145	928	782	677	1113	912	774	674	881	759	667	853	744	660	827	730	714
	7	1060	838	695	594	1031	825	689	592	799	676	587	775	664	582	752	653	639
	8	984	762	623	527	958	751	618	525	729	608	521	708	598	518	688	588	577
	9	918	697	563	471	894	687	558	470	668	550	467	650	542	464	633	534	524
	10	858	641	511	425	837	632	508	424	616	501	421	600	494	419	585	487	478

Cone of Light

Mtg Height	Light Level	Beam Diameter
5.5 ft	13.7 fc	6.7 ft
6.5 ft	9.8 fc	7.9 ft
7.5 ft	7.4 fc	9.1 ft
8.0 ft	6.5 fc	9.7 ft
10.0 ft	4.1 fc	12.1 ft
12.0 ft	2.9 fc	14.6 ft
14.0 ft	2.1 fc	17.0 ft
16.0 ft	1.6 fc	19.4 ft
20.0 ft	1.0 fc	24.3 ft
24.0 ft	0.7 fc	29.1 ft
28.0 ft	0.5 fc	34.0 ft

Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
0.00°	20141	20141	20141
45.00°	36263	43345	17000
55.00°	28514	36786	16233
65.00°	20525	28644	15369
75.00°	3190	15424	13103
85.00°	1517	1498	7270

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	25.5	27.1	25.8	27.4	27.7	18.9	20.5	19.3	20.8	21.1
	3H	26.3	27.8	26.7	28.1	28.5	20.8	22.2	21.2	22.6	22.9
	4H	26.3	27.7	26.7	28.0	28.4	21.4	22.8	21.8	23.1	23.5
	6H	26.3	27.5	26.7	27.9	28.3	21.8	23.1	22.3	23.5	23.9
	8H	26.2	27.4	26.7	27.8	28.2	21.9	23.1	22.4	23.5	23.9
	12H	26.2	27.4	26.6	27.8	28.2	22.0	23.1	22.4	23.5	24.0
4H	2H	26.3	27.7	26.7	28.1	28.4	19.2	20.6	19.6	21.0	21.3
	3H	27.4	28.5	27.8	28.9	29.4	21.3	22.4	21.7	22.8	23.2
	4H	27.4	28.4	27.8	28.8	29.3	22.0	23.0	22.4	23.4	23.9
	6H	27.4	28.2	27.8	28.7	29.2	22.5	23.4	23.0	23.8	24.3
	8H	27.3	28.2	27.8	28.6	29.1	22.6	23.4	23.1	23.9	24.4
	12H	27.3	28.0	27.8	28.5	29.0	22.7	23.4	23.1	23.9	24.4
8H	4H	27.7	28.5	28.1	28.9	29.4	22.1	22.9	22.5	23.3	23.8
	6H	27.6	28.3	28.1	28.8	29.3	22.6	23.3	23.1	23.8	24.2
	8H	27.6	28.2	28.1	28.7	29.2	22.7	23.3	23.2	23.8	24.3
	12H	27.6	28.1	28.1	28.6	29.2	22.8	23.3	23.3	23.8	24.4
12H	4H	27.7	28.4	28.2	28.9	29.4	22.0	22.8	22.5	23.3	23.8
	6H	27.6	28.2	28.1	28.7	29.3	22.6	23.2	23.1	23.6	24.2
	8H	27.6	28.1	28.1	28.6	29.2	22.7	23.2	23.2	23.7	24.3

Corrected UGR values based on total output energy
SHR = 1.0

Corrected UGR values based on total output lumens

SHR = 1.0