

Indoor Distribution Test Report

Spectrum Lighting Inc.

994 Jefferson Street
Fall River, MA 02721
+1.508.678.2303

Spectrum Lighting Photometric Lab

Luminaire

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

Track light for accent, display and general illumination.

Test Number

STL2-1

Test Date

2/18/25

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

Summary of Results

Power

Input Watts	20.37 W
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Lumen Output

Output Lumens	1542
Efficacy	75.72 lm/W

Luminous Dimensions

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

Spacing Criterion

Two luminaires, plane 0°	1.21
Two luminaires, plane 90°	1.21
Four luminaires	1.33

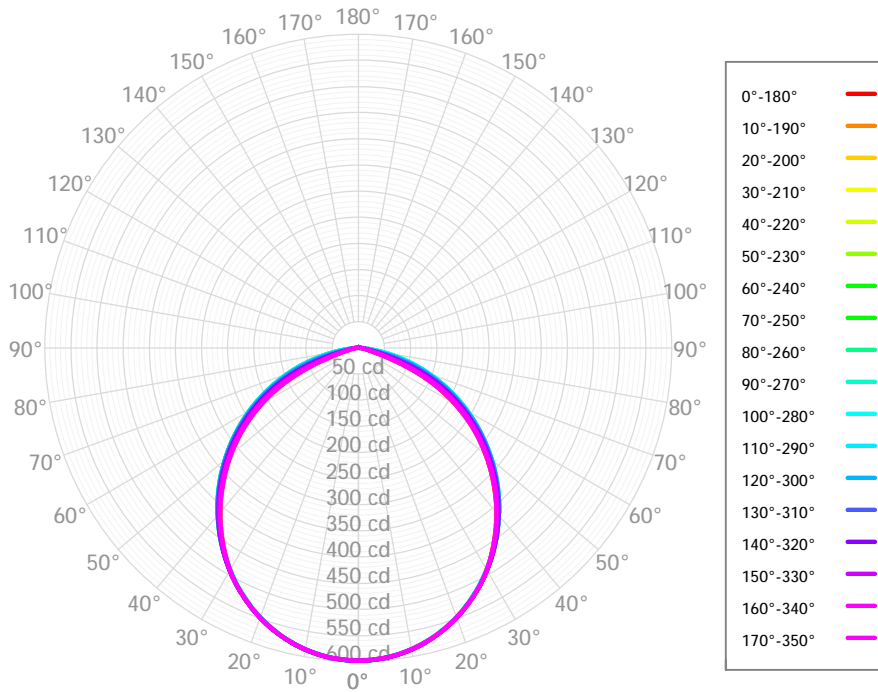
Full Beam Angle

0° - 180°	104°
90° - 270°	107°

IES File Header Contents

Keyword	Value
TEST	STL2-1
TESTLAB	Spectrum Lighting Photometric Lab.
MANUFAC	Spectrum Lighting
TESTDATE	2/18/25
ISSUEDATE	2/18/25
LUMCAT	STL2 - 20L - 30HK - DW - 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°	56.67	3.67%	90.00° - 100.00°	1.14	0.07%
10.00° - 20.00°	160.87	10.43%	100.00° - 110.00°	1.13	0.07%
20.00° - 30.00°	240.78	15.61%	100.00° - 120.00°	2.26	0.15%
30.00° - 40.00°	284.74	18.46%	120.00° - 130.00°	1.11	0.07%
40.00° - 50.00°	287.49	18.64%	130.00° - 140.00°	0.99	0.06%
50.00° - 60.00°	249.60	16.18%	140.00° - 150.00°	0.85	0.06%
60.00° - 70.00°	172.58	11.19%	150.00° - 160.00°	0.67	0.04%
70.00° - 80.00°	69.55	4.51%	160.00° - 170.00°	0.42	0.03%
80.00° - 90.00°	12.62	0.82%	170.00° - 180.00°	0.14	0.01%
0.00° - 90.00°	1534.91	99.51%	0.00° - 180.00°	1542.48	100.00%

Candela Distributi

	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°	190.00°
0.00°	598.63	598.63	598.63	598.63	598.63	598.63	598.63	598.63	598.63	598.63	598.63	598.63	598.63	598.63	598.63	598.63	598.63	598.63	598.63	598.63
1.00°	597.26	598.20	598.25	598.35	598.51	598.35	598.47	598.51	598.32	598.74	598.32	598.51	598.47	598.35	598.51	598.35	598.25	598.20	597.26	598.20
2.00°	597.26	597.65	597.85	597.98	598.34	597.96	598.21	598.31	597.92	598.40	597.92	598.31	598.21	597.96	598.34	597.98	597.85	597.65	597.26	597.65
3.00°	596.83	596.93	597.24	597.31	597.72	597.22	597.64	597.69	597.16	597.82	597.16	597.69	597.64	597.22	597.72	597.31	597.24	596.93	596.83	596.93
4.00°	596.05	596.08	596.46	596.43	596.77	596.21	596.83	596.75	596.12	597.12	596.12	596.75	596.83	596.21	596.77	596.43	596.46	596.08	596.05	596.08
5.00°	595.18	595.16	595.59	595.48	595.76	595.16	595.92	595.73	595.02	596.27	595.02	595.73	595.92	595.16	595.76	595.48	595.59	595.16	595.18	595.16
6.00°	593.63	593.68	594.00	594.07	594.34	593.77	594.26	594.18	593.42	594.36	593.42	594.18	594.26	593.77	594.34	594.07	594.00	593.68	593.63	593.68
7.00°	592.07	592.21	592.41	592.66	592.93	592.38	592.61	592.63	591.82	592.44	591.82	592.63	592.61	592.38	592.93	592.66	592.41	592.21	592.07	592.21
8.00°	590.25	590.20	590.43	590.81	590.91	590.48	590.57	590.79	589.83	590.48	589.83	590.79	590.57	590.48	590.91	590.81	590.43	590.20	590.25	590.20
9.00°	588.32	587.92	588.25	588.76	588.60	588.34	588.34	588.80	587.65	588.51	587.65	588.80	588.34	588.34	588.60	588.76	588.25	587.92	588.32	587.92
10.00°	586.24	585.54	585.97	586.56	586.21	586.01	586.02	586.60	585.32	586.31	585.32	586.60	586.02	586.01	586.21	586.56	585.97	585.54	586.24	585.54
11.00°	583.67	582.82	583.35	583.85	583.59	583.09	583.39	583.71	582.49	583.37	582.49	583.71	583.39	583.09	583.59	583.85	583.35	582.82	583.67	582.82
12.00°	581.10	580.10	580.72	581.14	580.97	580.18	580.76	580.82	579.65	580.43	579.65	580.82	580.76	580.18	580.97	581.14	580.72	580.10	581.10	580.10
13.00°	577.61	577.06	577.55	577.85	577.71	577.08	577.65	577.59	576.52	577.25	576.52	577.59	577.65	577.08	577.71	577.85	577.55	577.06	577.61	577.06
14.00°	573.88	573.92	574.23	574.40	574.29	573.95	574.42	574.28	573.31	574.02	573.31	574.28	574.42	573.95	574.29	574.40	574.23	573.92	573.88	573.92
15.00°	570.23	570.48	570.72	570.86	570.71	570.56	570.95	570.75	569.79	570.53	569.79	570.75	570.95	570.56	570.71	570.86	570.72	570.48	570.23	570.48
16.00°	566.74	566.49	566.85	567.18	566.87	566.70	567.05	566.81	565.71	566.56	565.71	566.81	567.05	566.70	566.87	567.18	566.85	566.49	566.74	566.49
17.00°	563.25	562.49	562.99	563.50	563.02	562.85	563.15	562.87	561.63	562.60	561.63	562.87	563.15	562.85	563.02	563.50	562.99	562.49	563.25	562.49
18.00°	558.81	558.32	558.44	559.07	558.82	558.39	558.78	558.47	557.30	558.38	557.30	558.47	558.78	558.39	558.82	559.07	558.44	558.32	558.81	558.32
19.00°	554.28	554.14	553.84	554.56	554.58	553.87	554.36	554.02	552.96	554.14	552.96	554.02	554.36	553.87	554.58	554.56	553.84	554.14	554.28	554.14
20.00°	549.52	549.54	549.18	549.84	549.92	549.23	549.65	549.39	548.31	549.52	548.31	549.39	549.65	549.23	549.92	549.84	549.18	549.54	549.52	549.54
21.00°	544.50	544.47	544.45	544.88	544.80	544.47	544.61	544.54	543.33	544.45	543.33	544.54	544.61	544.47	544.80	544.88	544.45	544.47	544.50	544.47
22.00°	539.48	539.39	539.71	539.89	539.67	539.69	539.55	539.67	538.32	539.36	538.32	539.67	539.55	539.69	539.67	539.89	539.71	539.39	539.48	539.39
23.00°	534.22	534.02	534.27	534.40	534.32	534.13	533.93	534.14	532.70	533.74	532.70	534.14	533.93	534.13	534.32	534.40	534.27	534.02	534.22	534.02
24.00°	528.97	528.66	528.84	528.91	528.96	528.58	528.30	528.61	527.08	528.11	527.08	528.61	528.30	528.58	528.96	528.91	528.84	528.66	528.97	528.66
25.00°	523.11	523.01	523.02	523.27	523.34	522.99	522.63	522.86	521.41	522.35	521.41	522.86	522.63	522.99	523.34	523.27	523.02	523.01	523.11	523.01
26.00°	516.83	517.15	516.95	517.53	517.54	517.39	516.93	516.97	515.69	516.50	515.69	516.97	516.93	517.39	517.54	517.53	516.95	517.15	516.83	517.15
27.00°	510.52	511.19	510.85	511.72	511.63	511.65	511.13	510.99	509.86	510.57	509.86	510.99	511.13	511.65	511.63	511.72	510.85	511.19	510.52	511.19
28.00°	503.98	504.60	504.63	505.53	505.06	505.15	504.75	504.55	503.32	504.23	503.32	504.55	504.75	505.15	505.06	505.53	504.63	504.60	503.98	504.60
29.00°	497.44	498.01	498.42	499.35	498.50	498.65	498.37	498.10	496.78	497.90	496.78	498.10	498.37	498.65	498.50	499.35	498.42	498.01	497.44	498.01
30.00°	490.53	490.93	491.47	492.51	491.93	492.08	491.80	491.63	490.16	491.37	490.16	491.63	491.80	492.08	491.93	492.51	491.47	490.93	490.53	490.93
31.00°	483.46	483.64	484.20	485.40	485.34	485.49	485.15	485.15	483.50	484.77	483.50	485.15	485.15	485.49	485.34	485.40	484.20	483.64	483.46	483.64
32.00°	476.18	476.27	476.82	478.25	478.55	478.77	478.36	478.52	476.74	478.02	476.74	478.52	478.36	478.77	478.55	478.25	476.82	476.27	476.18	476.27
33.00°	468.32	468.65	469.11	471.01	471.16	471.73	471.20	471.48	469.69	470.87	469.69	471.48	471.20	471.73	471.16	471.01	469.11	468.65	468.32	468.65
34.00°	460.46	461.03	461.39	463.77	463.77	464.69	464.03	464.44	462.64	463.72	462.64	464.44	464.03	464.69	463.77	463.77	461.39	461.03	460.46	461.03
35.00°	452.43	453.06	453.50	455.87	456.33	457.27	456.86	456.99	455.23	456.27	455.23	456.99	456.86	457.27	456.33	455.87	453.50	453.06	452.43	453.06
36.00°	444.37	445.01	445.58	447.83	448.89	449.77	449.69	449.45	447.73	448.77	447.73	449.45	449.69	449.77	448.89	447.83	445.58	445.01	444.37	445.01
37.00°	436.10	436.84	437.49	439.74	441.21	442.10	442.28	441.83	440.20	441.17	440.20	441.83	442.28	442.10	441.21	439.74	437.49	436.84	436.10	436.84
38.00°	427.49	428.50	429.16	431.60	433.14	434.16	434.47	434.10	432.60	433.43	432.60	434.10	434.47	434.16	433.14	431.60	429.16	428.50	427.49	428.50
39.00°	418.88	420.16	420.82	423.45	425.07	426.21	426.67	426.36	425.00	425.70	425.00	426.36	426.67	426.21	425.07	423.45	420.82	420.16	418.88	420.16
40.00°	410.41	411.35	412.31	415.03	416.47	418.36	418.72	418.61	416.94	417.57	416.94	418.61	418.72	418.36	416.47	415.03	412.31	411.35	410.41	411.35
41.00°	401.94	402.52	403.79	406.59	407.84	410.51	410.76	410.85	408.85	409.42	408.85	410.85	410.76	410.51	407.84	406.59	403.79	402.52	401.94	402.52
42.00°	393.06	393.66	395.08	397.87	399.27	402.28	402.56	402.89	400.71	401.26	400.71	402.89	402.56	402.28	399.27	397.87	395.08	393.66	393.06	393.66
43.00°	383.74	384.80	386.16	388.87	390.76	393.66	394.11	394.74	392.52	393.11	392.52	394.74	394.11	393.66	390.76	388.87	386.16	384.80	383.74	384.80

Coefficients of Utilization – Zonal Cavity Method

Values are lumens delivered to the workplane.

RCR	ρ_{fc}	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	0%
	ρ_{cc}	80%	80%	80%	80%	70%	70%	70%	70%	50%	50%	50%	30%	30%	30%	10%	10%	0%
	ρ_w	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	30%
	0	1834	1834	1834	1834	1791	1791	1791	1791	1710	1710	1710	1635	1635	1635	1567	1567	1535
	1	1690	1623	1562	1507	1648	1587	1532	1482	1521	1475	1434	1460	1423	1389	1403	1374	1345
	2	1545	1425	1326	1243	1504	1396	1305	1228	1340	1264	1198	1289	1226	1170	1242	1190	1163
	3	1413	1258	1138	1043	1375	1233	1122	1033	1187	1092	1014	1144	1063	995	1104	1036	1013
	4	1296	1118	988	888	1261	1097	976	882	1058	953	869	1022	930	857	988	909	889
	5	1193	1001	867	768	1161	984	858	764	951	840	755	920	822	746	891	806	788
	6	1103	903	769	673	1074	888	761	669	860	747	663	834	733	656	809	720	705
	7	1024	820	688	595	997	807	682	593	783	670	588	760	659	583	739	648	635
	8	954	749	620	532	929	738	616	530	717	606	527	698	597	523	679	588	576
	9	891	688	564	479	869	679	560	478	661	552	475	644	544	472	628	537	527
	10	836	635	515	435	816	627	512	434	611	505	432	597	499	430	583	493	484

Cone of Light

Mtg Height	Light Level	Beam Diameter
5.5 ft	19.8 fc	14.0 ft
6.5 ft	14.2 fc	16.5 ft
7.5 ft	10.6 fc	19.1 ft
8.0 ft	9.4 fc	20.4 ft
10.0 ft	6.0 fc	25.4 ft
12.0 ft	4.2 fc	30.5 ft
14.0 ft	3.1 fc	35.6 ft
16.0 ft	2.3 fc	40.7 ft
20.0 ft	1.5 fc	50.9 ft
24.0 ft	1.0 fc	61.1 ft
28.0 ft	0.8 fc	71.2 ft

Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
0.00°	29148	29148	29148
45.00°	19890	21519	25476
55.00°	16456	18631	23777
65.00°	10928	14515	21338
75.00°	2690	6780	17124
85.00°	1313	1538	7609

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	21.6	23.2	22.0	23.5	23.9	22.9	24.4	23.2	24.8	25.1
	3H	22.4	23.8	22.8	24.1	24.5	24.5	26.0	24.9	26.3	26.7
	4H	22.4	23.7	22.8	24.1	24.5	25.1	26.4	25.5	26.8	27.2
	6H	22.4	23.6	22.8	24.0	24.4	25.5	26.7	25.9	27.1	27.5
	8H	22.4	23.5	22.8	23.9	24.3	25.6	26.7	26.0	27.1	27.5
	12H	22.3	23.5	22.8	23.9	24.3	25.6	26.7	26.0	27.1	27.5
4H	2H	22.3	23.6	22.7	23.9	24.3	23.3	24.6	23.7	25.0	25.3
	3H	23.1	24.2	23.6	24.6	25.1	25.1	26.2	25.5	26.6	27.0
	4H	23.2	24.2	23.6	24.6	25.0	25.8	26.8	26.2	27.2	27.6
	6H	23.2	24.0	23.6	24.5	25.0	26.2	27.1	26.7	27.5	28.0
	8H	23.2	24.0	23.6	24.4	24.9	26.3	27.1	26.8	27.6	28.0
	12H	23.1	23.9	23.6	24.4	24.8	26.3	27.1	26.8	27.6	28.0
8H	4H	23.4	24.2	23.8	24.6	25.1	25.8	26.6	26.3	27.0	27.5
	6H	23.3	24.0	23.9	24.5	25.0	26.2	26.9	26.7	27.4	27.9
	8H	23.3	23.9	23.9	24.4	24.9	26.4	27.0	26.9	27.5	28.0
	12H	23.3	23.9	23.9	24.4	24.9	26.4	26.9	26.9	27.4	28.0
12H	4H	23.4	24.1	23.8	24.6	25.0	25.8	26.5	26.3	27.0	27.4
	6H	23.4	23.9	23.9	24.4	25.0	26.2	26.8	26.7	27.3	27.8
	8H	23.4	23.9	23.9	24.4	25.0	26.3	26.9	26.9	27.4	27.9

Corrected UGR values based on total output energy
SHR = 1.0

Corrected UGR values based on total output lumens

SHR = 1.0