

Indoor Distribution Test Report

Spectrum Lighting Inc.

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Spectrum Lighting Photometric Lab

Luminaire

CW06XXPC 30L 35K XW XX CL XX

Nom 6" diam Gamma Cylinder (wet location), clear glass lens

Test Number

SP-01078_M-30L

Test Date

2/3/2020

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

Summary of Results

Power

Input Watts	19.9 W
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Lumen Output

Output Lumens	2064
Efficacy	103.7 lm/W

Luminous Dimensions

0° - 180° Size	-0.5
90° - 270° Size	-0.5
Height	0

Spacing Criterion

Two luminaires, plane 0°	1.14
Two luminaires, plane 90°	1.14
Four luminaires	1.09

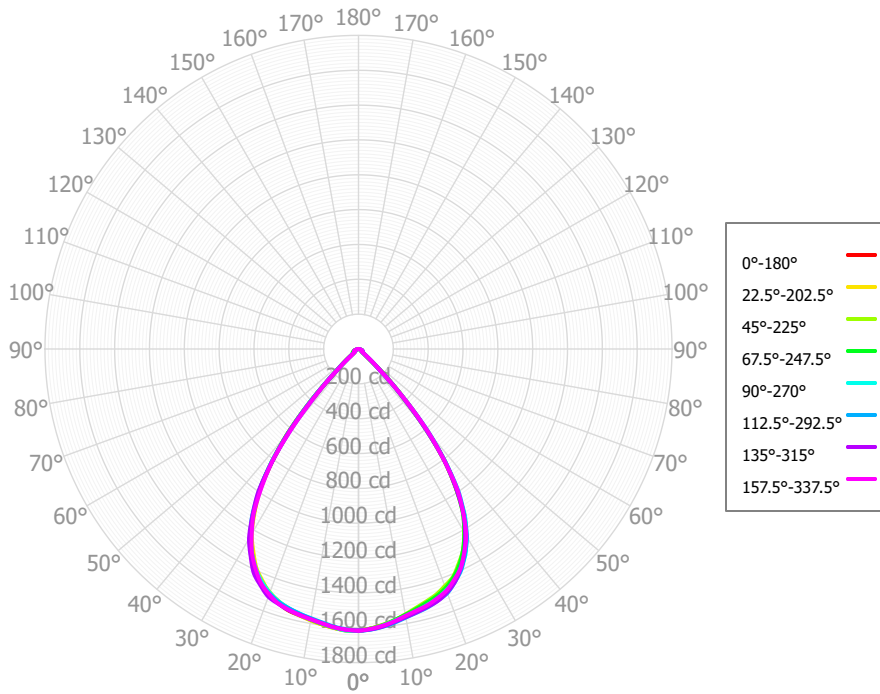
Full Beam Angle

0° - 180°	75°
90° - 270°	75°

IES File Header Contents

Keyword	Value
TEST	SP-01078_M-30L
TESTLAB	Spectrum Lighting Photometric Lab, VLS-245-981
MANUFAC	Spectrum Lighting
TESTDATE	2/3/2020
ISSUEDATE	5/31/2022
LUMCAT	CW06XXPC 30L 35K XW XX CL XX
LUMINAIRE	Nom 6" diam Gamma Cylinder (wet location), clear glass lens
OTHER	Beam angle: 75.1 deg
OTHER	Xtra Wide optic
LAMPCAT	N/A
LAMP	N/A
OTHER	CCT Output Multipliers: 27K x 0.97, 30K x 0.98, 40K x 1.04, 27HK x 0.78, 30HK x 0.82
OTHER	Total luminaire wattage is approximate
OTHER	This report prepared by Spectrum Lighting, scaled from 40L

Candela Polar Plot



Zonal Lumen Summary

Zone	Lumens	% Fixture	Zone	Lumens	% Fixture
0.00° - 10.00°	153.85	7.46%	90.00° - 100.00°	0.06	0.00%
10.00° - 20.00°	432.28	20.95%	100.00° - 110.00°	0.00	0.00%
20.00° - 30.00°	633.88	30.72%	100.00° - 120.00°	0.00	0.00%
30.00° - 40.00°	595.65	28.86%	120.00° - 130.00°	0.00	0.00%
40.00° - 50.00°	185.92	9.01%	130.00° - 140.00°	0.00	0.00%
50.00° - 60.00°	23.87	1.16%	140.00° - 150.00°	0.00	0.00%
60.00° - 70.00°	25.08	1.22%	150.00° - 160.00°	0.00	0.00%
70.00° - 80.00°	11.64	0.56%	160.00° - 170.00°	0.00	0.00%
80.00° - 90.00°	1.42	0.07%	170.00° - 180.00°	0.00	0.00%
0.00° - 90.00°	2063.58	100.00%	0.00° - 180.00°	2063.64	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°	1616.80	1616.80	1616.80	1616.80	1616.80	1616.80	1616.80	1616.80	1616.80	1616.80	1616.80	1616.80	1616.80	1616.80	1616.80	1616.80	1616.80
2.50°	1606.81	1606.35	1606.80	1606.99	1611.69	1610.94	1613.82	1612.69	1616.69	1615.43	1618.66	1614.10	1617.65	1612.11	1611.23	1608.16	1606.81
5.00°	1592.46	1592.37	1589.87	1592.67	1595.27	1600.48	1603.26	1604.25	1606.96	1608.14	1606.33	1605.18	1604.72	1601.00	1599.41	1594.83	1592.46
7.50°	1574.50	1573.00	1571.45	1571.06	1575.59	1584.30	1589.73	1589.43	1594.52	1595.65	1593.26	1591.68	1590.38	1584.76	1580.25	1576.83	1574.50
10.00°	1555.24	1552.91	1547.51	1549.71	1558.01	1569.89	1574.91	1576.36	1579.69	1582.02	1577.88	1577.35	1573.13	1565.54	1562.96	1555.55	1555.24
12.50°	1535.19	1531.35	1522.97	1529.00	1540.90	1557.13	1562.89	1564.67	1566.34	1565.85	1561.62	1563.57	1556.85	1549.69	1547.95	1538.38	1535.19
15.00°	1515.68	1511.17	1501.17	1508.58	1522.18	1541.50	1551.80	1549.47	1554.05	1549.31	1543.17	1549.86	1542.17	1535.44	1532.39	1523.53	1515.68
17.50°	1496.45	1493.25	1479.46	1488.72	1503.23	1523.68	1533.53	1531.99	1529.71	1521.38	1519.97	1526.09	1520.84	1514.59	1516.27	1501.44	1496.45
20.00°	1467.67	1467.60	1448.73	1460.99	1473.95	1495.21	1513.37	1499.19	1498.18	1492.38	1487.56	1501.77	1490.37	1491.27	1487.06	1476.09	1467.67
22.50°	1435.16	1431.48	1416.73	1421.31	1443.74	1460.14	1469.51	1458.35	1452.05	1440.67	1446.49	1452.96	1448.54	1447.26	1446.94	1434.89	1435.16
25.00°	1381.75	1381.01	1360.35	1368.76	1387.62	1403.50	1421.26	1395.89	1398.96	1387.70	1391.95	1402.67	1394.02	1397.38	1387.90	1387.96	1381.75
27.50°	1321.86	1314.72	1300.88	1300.42	1329.93	1336.18	1341.09	1324.46	1322.38	1308.70	1321.90	1323.86	1324.40	1324.12	1316.09	1316.37	1321.86
30.00°	1230.21	1228.77	1213.92	1215.83	1235.90	1242.00	1257.19	1226.43	1237.06	1227.37	1231.75	1241.15	1241.08	1245.84	1224.51	1238.05	1230.21
32.50°	1131.34	1125.21	1118.26	1114.78	1138.04	1137.02	1132.06	1119.58	1118.87	1109.99	1120.49	1121.23	1129.46	1127.34	1122.21	1120.19	1131.34
35.00°	977.03	983.67	974.24	979.52	983.86	985.12	1004.28	970.93	991.02	986.40	986.98	993.34	996.35	1003.09	977.31	994.63	977.03
37.50°	814.18	813.66	817.77	815.66	822.12	818.76	814.05	811.99	814.69	813.71	817.52	816.07	821.14	819.98	813.52	812.80	814.18
40.00°	600.21	608.47	610.41	612.80	602.34	603.50	621.68	594.33	628.01	631.44	617.22	629.06	620.10	632.19	604.63	623.88	600.21
42.50°	381.23	381.98	406.02	383.47	388.59	377.19	394.15	366.62	406.57	400.16	409.29	400.57	409.67	401.87	380.22	403.05	381.23
45.00°	215.39	215.51	210.61	213.41	205.10	213.38	179.34	206.63	180.19	197.91	195.97	204.28	194.65	173.64	216.70	179.91	215.39
47.50°	53.59	78.05	64.67	75.65	56.27	59.73	99.03	54.32	99.63	106.48	88.12	108.98	94.78	97.90	68.83	101.91	53.59
50.00°	35.93	31.07	34.45	27.62	34.52	34.78	29.42	35.81	31.78	37.99	41.22	41.00	40.74	27.55	35.45	28.83	35.93
52.50°	19.39	19.53	15.37	19.64	18.99	22.33	26.81	24.44	30.12	35.16	26.15	41.19	28.26	25.64	23.92	24.90	19.39
55.00°	21.34	18.52	17.53	18.71	20.97	23.72	24.98	26.73	30.43	32.79	25.72	40.99	28.44	24.15	23.64	21.40	21.34
57.50°	23.17	20.66	19.40	20.23	22.85	25.63	26.47	28.89	30.97	31.46	25.34	40.01	28.37	25.93	24.73	22.90	23.17
60.00°	24.07	22.41	20.81	22.04	24.50	26.70	27.61	28.45	31.44	30.45	24.97	38.51	28.26	27.35	25.53	24.20	24.07
62.50°	24.73	24.07	21.80	23.92	25.29	27.60	27.62	27.93	30.87	29.98	24.46	36.20	27.93	27.00	26.31	24.25	24.73
65.00°	24.09	23.28	22.27	24.07	24.58	25.72	27.34	26.76	30.09	28.82	23.91	33.16	27.57	26.22	25.10	24.18	24.09
67.50°	22.88	22.08	21.55	23.91	23.57	23.73	26.42	25.10	27.82	26.64	20.62	29.16	24.55	23.97	23.61	23.70	22.88
70.00°	20.07	18.93	19.84	21.28	22.23	21.19	23.57	21.48	24.69	23.11	16.81	23.85	21.06	20.50	19.49	21.33	20.07
72.50°	15.61	15.11	15.59	17.21	16.71	16.99	18.55	17.06	19.40	18.37	11.29	17.44	14.76	14.96	14.93	15.57	15.61
75.00°	9.71	9.98	10.56	10.26	10.15	10.71	11.61	11.65	13.75	13.03	6.48	12.33	9.24	9.68	9.51	10.01	9.71
77.50°	5.82	5.03	5.03	5.69	5.44	5.77	5.66	6.17	8.04	7.61	2.99	7.52	4.86	5.05	5.41	5.12	5.82
80.00°	2.98	2.14	2.62	2.49	2.61	2.72	2.56	2.66	3.52	2.37	1.87	2.76	2.37	2.52	2.53	2.11	2.98
82.50°	1.59	1.37	1.22	1.14	1.41	1.48	1.37	1.52	1.79	1.70	1.49	2.18	1.28	1.40	1.17	1.53	1.59
85.00°	1.28	1.25	1.15	1.32	1.02	1.17	0.91	1.32	1.25	1.14	1.20	1.68	1.03	1.31	0.90	1.08	1.28
87.50°	1.04	1.29	0.90	1.00	0.82	1.10	1.20	0.94	0.78	0.69	1.18	1.22	0.92	1.29	1.04	1.31	1.04
90.00°	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.71	0.86	0.99	0.69	0.99	0.83	0.92	1.29	0.05	0.00
92.50°	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95.00°	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
97.50°	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00°	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

CW06XXPC 30L 35K XW XX CL XX

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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%	20%	0%
	pcc	80%	80%	80%	80%	70%	70%	70%	70%	50%	50%	50%	30%	30%	30%	10%	10%	10%	0%
	pw	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	30%
	0	2457	2457	2457	2457	2400	2400	2400	2400	2293	2293	2293	2195	2195	2195	2106	2106	2106	2064
	1	2331	2269	2213	2163	2279	2224	2174	2128	2140	2099	2063	2062	2031	2001	1991	1966	1943	1927
	2	2202	2092	2001	1925	2155	2056	1973	1903	1988	1920	1861	1926	1870	1821	1868	1823	1782	1786
	3	2077	1932	1820	1731	2034	1903	1800	1716	1848	1760	1689	1797	1723	1662	1749	1688	1636	1655
	4	1959	1788	1664	1569	1920	1764	1648	1559	1719	1619	1540	1676	1591	1522	1637	1564	1504	1534
	5	1847	1659	1527	1430	1812	1639	1516	1424	1601	1493	1410	1565	1471	1398	1532	1450	1385	1424
	6	1743	1542	1407	1311	1711	1525	1398	1306	1493	1380	1297	1463	1363	1287	1435	1347	1278	1323
	7	1646	1437	1301	1206	1616	1422	1294	1203	1395	1280	1196	1369	1266	1189	1345	1253	1183	1231
	8	1555	1341	1207	1114	1529	1329	1201	1112	1305	1190	1107	1283	1179	1102	1263	1168	1097	1149
	9	1472	1255	1123	1033	1447	1245	1118	1031	1224	1108	1027	1205	1099	1024	1187	1091	1020	1073
	10	1394	1177	1047	961	1372	1168	1043	959	1150	1035	956	1133	1028	953	1118	1021	950	1005

Cone of Light

Mtg Height	Light Level	Beam Diameter
5.5 ft	53.4 fc	8.5 ft
6.5 ft	38.3 fc	10.0 ft
7.5 ft	28.7 fc	11.5 ft
8.0 ft	25.3 fc	12.3 ft
10.0 ft	16.2 fc	15.4 ft
12.0 ft	11.2 fc	18.5 ft
14.0 ft	8.2 fc	21.5 ft
16.0 ft	6.3 fc	24.6 ft
20.0 ft	4.0 fc	30.8 ft
24.0 ft	2.8 fc	36.9 ft
28.0 ft	2.1 fc	43.1 ft

Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
0.00°	88633	88633	88633
45.00°	16698	16328	15901
55.00°	2039	1676	2004
65.00°	3125	2889	3188
75.00°	2057	2237	2150
85.00°	804	721	644

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	5.5	6.5	5.8	6.8	7.1	8.0	9.1	8.4	9.4	9.7
	3H	8.9	9.8	9.3	10.2	10.5	10.4	11.3	10.8	11.6	12.0
	4H	9.5	10.3	9.9	10.7	11.1	10.8	11.6	11.2	12.0	12.4
	6H	9.6	10.3	10.0	10.7	11.1	10.8	11.6	11.2	12.0	12.4
	8H	9.5	10.3	10.0	10.7	11.1	10.8	11.5	11.2	11.9	12.3
	12H	9.5	10.2	9.9	10.6	11.0	10.7	11.4	11.2	11.8	12.2
4H	2H	6.7	7.5	7.1	7.9	8.3	8.7	9.5	9.1	9.9	10.3
	3H	9.9	10.6	10.3	11.0	11.4	11.1	11.8	11.5	12.2	12.6
	4H	10.5	11.1	10.9	11.5	12.0	11.6	12.2	12.0	12.6	13.1
	6H	10.6	11.1	11.1	11.6	12.0	11.7	12.2	12.1	12.6	13.1
	8H	10.6	11.0	11.0	11.5	12.0	11.6	12.1	12.1	12.5	13.0
	12H	10.5	10.9	11.0	11.4	11.9	11.6	12.0	12.1	12.5	13.0
8H	4H	10.6	11.1	11.1	11.6	12.0	11.7	12.1	12.1	12.6	13.1
	6H	10.7	11.1	11.2	11.6	12.1	11.7	12.1	12.2	12.6	13.1
	8H	10.7	11.0	11.2	11.6	12.0	11.7	12.0	12.2	12.5	13.0
	12H	10.7	11.0	11.2	11.5	12.1	11.7	12.0	12.2	12.5	13.0
12H	4H	10.6	11.0	11.1	11.5	12.0	11.6	12.0	12.1	12.5	13.0
	6H	10.7	11.0	11.2	11.5	12.0	11.7	12.0	12.2	12.5	13.0
	8H	10.6	11.0	11.2	11.4	12.0	11.6	11.9	12.2	12.4	13.0

Corrected UGR values based on total output energy
 SHR = 1.0

Corrected UGR values based on total output lumens

SHR = 1.0