

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: PORTFOLIO

Report Number: P183632

Luminaire Tested: **LSM55M9035D010TEP**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P183632
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P27020)
Test Lab: INNOVATION CENTER-P2
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSM55M9035D010TEP
Description: PORTFOLIO SURFACE MOUNT LED LUMINAIRE, MEDIUM DISTRIBUTION WITH CLEAR GLASS LENS
Light Source: 90 CRI, 3500K CCT LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

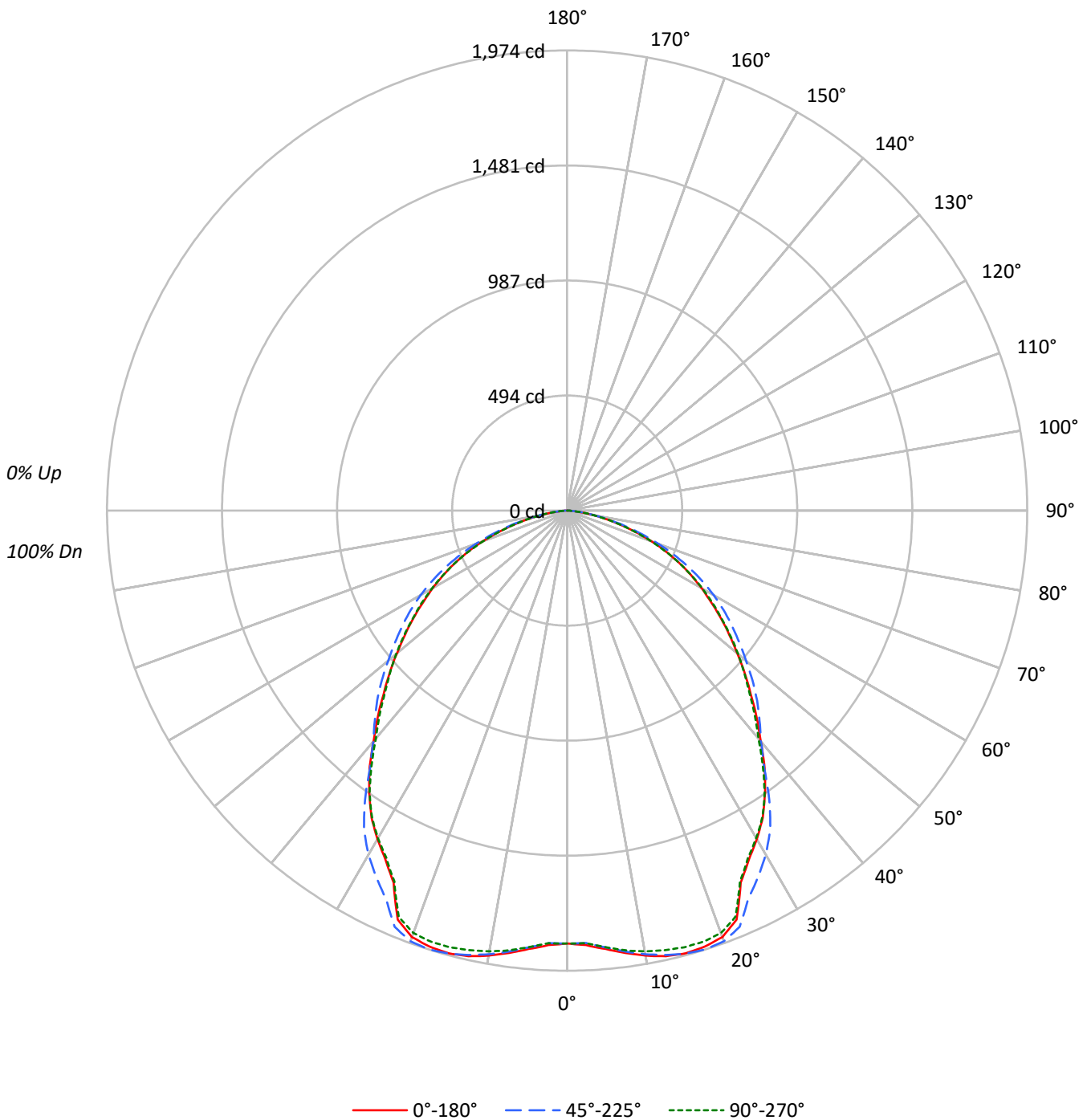
Lumens per Lamp: N/A
Luminaire Lumens: 5032.2 lumens
Efficiency: N/A
Efficacy: 89.5 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.28 / 1.33
Luminous Opening: Circular (Dia: 1.12' x H: 0')
CIE Type: Direct

Input Watts (W): 56.22
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20			
RC	80				70				50				30				10	0		
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50	30	10	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	110	105	101	98	107	103	99	96	99	96	93		95	92	90		91	89	87	85
2	100	92	86	80	98	90	85	79	87	82	78		84	80	76		81	77	74	72
3	92	82	74	68	89	80	73	67	77	71	66		74	69	65		72	67	64	61
4	84	73	64	58	82	71	63	57	69	62	57		67	61	56		64	59	55	53
5	78	65	56	50	76	64	56	50	62	55	49		60	54	49		58	53	48	46
6	72	59	50	44	70	58	50	44	56	49	43		54	48	43		53	47	43	41
7	67	54	45	39	65	53	45	39	51	44	39		50	43	38		48	43	38	36
8	62	49	41	35	61	48	40	35	47	40	35		46	39	34		45	39	34	32
9	58	45	37	32	57	44	37	32	43	36	31		42	36	31		41	35	31	29
10	55	42	34	29	53	41	34	29	40	33	29		39	33	28		38	33	28	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20110	20110	20110
5°	20522	20441	20433
10°	21317	21251	21112
15°	22041	22056	21742
20°	22433	22657	22226
25°	21047	21965	20967
30°	20345	21307	20286
35°	19563	19988	19529
40°	18263	18273	18046
45°	17061	17645	16928
50°	16065	16887	16132
55°	15213	16300	15277
60°	14426	15715	14541
65°	13570	14736	13554
70°	12174	13149	12110
75°	10016	10799	10045
80°	7296	7801	7508
85°	4237	4485	4398



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	182.1	3.6
10°-20°	556.8	11.1
20°-30°	836.1	16.6
30°-40°	915.2	18.2
40°-50°	895.3	17.8
50°-60°	772.5	15.4
60°-70°	552.3	11.0
70°-80°	271.3	5.4
80°-90°	50.6	1.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1575.1	31.3
0°-40°	2490.3	49.5
0°-60°	4158.1	82.6
0°-90°	5032.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5032.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1857	1857	1857	1857	1857	
5°	1888	1904	1880	1895	1880	182
15°	1966	1993	1967	1970	1939	555
25°	1762	1866	1838	1854	1755	821
35°	1480	1457	1512	1440	1477	921
45°	1114	1188	1152	1175	1105	863
55°	806	879	863	870	809	721
65°	530	558	575	553	529	522
75°	239	253	258	248	240	257
85°	34	36	36	35	35	48
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1857.1	1857.1	1857.1	1857.1	1857.1	1857.1	1857.1	1857.1	1857.1	1857.1	1857.1
2.5°	1865.8	1881.2	1868.5	1865.8	1855.1	1880.5	1871.2	1873.2	1865.8	1867.1	1857.1
5°	1887.9	1903.9	1891.9	1888.5	1877.8	1903.9	1894.6	1895.9	1888.5	1890.5	1880.5
7.5°	1914.0	1930.7	1918.0	1916.0	1905.9	1932.0	1923.3	1924.7	1916.6	1918.0	1907.9
10°	1938.7	1956.8	1944.0	1942.7	1932.7	1960.8	1951.4	1952.7	1943.4	1944.0	1932.7
12.5°	1958.1	1976.8	1964.1	1964.1	1954.7	1981.5	1974.1	1975.5	1966.1	1966.1	1952.7
15°	1966.1	1985.5	1972.1	1974.1	1964.8	1992.9	1986.2	1986.8	1978.8	1980.8	1967.4
17.5°	1961.4	1980.8	1968.8	1970.1	1961.4	1990.2	1983.5	1986.2	1979.5	1984.8	1973.5
20°	1946.7	1964.1	1949.4	1950.7	1944.0	1972.8	1968.1	1972.8	1968.1	1976.1	1966.1
22.5°	1899.2	1915.3	1907.3	1916.0	1914.6	1945.4	1942.7	1946.7	1939.4	1943.4	1932.7
25°	1761.5	1782.2	1779.5	1804.3	1827.7	1865.8	1863.1	1864.5	1849.1	1850.4	1838.4
27.5°	1687.9	1705.3	1695.3	1696.6	1687.2	1708.6	1710.0	1743.4	1763.5	1781.5	1773.5
30°	1627.1	1640.4	1616.4	1599.6	1575.6	1597.0	1595.6	1625.1	1660.5	1702.6	1704.0
32.5°	1561.5	1565.5	1531.4	1508.7	1500.0	1522.7	1521.4	1530.1	1556.8	1602.3	1622.4
35°	1479.9	1483.3	1441.1	1434.5	1434.5	1457.2	1451.8	1454.5	1469.2	1498.7	1512.0
37.5°	1392.3	1387.6	1363.6	1364.9	1370.3	1391.0	1387.0	1387.0	1391.7	1405.0	1388.3
40°	1292.0	1297.4	1290.0	1296.7	1301.4	1321.4	1319.4	1320.8	1318.8	1311.4	1292.7
42.5°	1203.1	1216.4	1224.5	1232.5	1233.2	1252.6	1251.2	1256.6	1246.5	1227.1	1221.1
45°	1114.1	1130.2	1152.2	1168.3	1169.6	1188.4	1188.4	1189.7	1169.0	1154.9	1152.2
47.5°	1033.9	1050.6	1073.3	1097.4	1101.4	1120.8	1120.8	1117.5	1095.4	1086.7	1078.0
50°	953.6	975.0	996.4	1025.2	1027.2	1041.9	1042.6	1039.2	1029.2	1018.5	1002.4
52.5°	877.4	903.5	924.2	947.6	949.0	961.0	958.3	961.0	962.3	950.3	930.9
55°	805.8	832.6	850.6	867.4	870.7	878.7	873.4	882.1	890.1	879.4	863.4
57.5°	732.3	761.0	776.4	787.8	790.5	797.1	791.8	803.2	813.9	807.2	796.5
60°	666.1	688.8	699.5	710.2	710.9	717.6	712.9	724.3	736.3	732.9	725.6
62.5°	597.9	613.9	621.9	633.3	630.0	636.6	638.7	648.7	657.4	658.0	652.0
65°	529.6	538.3	545.0	551.7	553.1	558.4	560.4	564.4	577.8	579.1	575.1
67.5°	457.4	462.8	468.8	474.8	474.1	479.5	484.8	488.9	497.5	500.9	495.5
70°	384.5	391.2	394.6	397.2	396.6	401.9	406.6	409.9	418.0	420.0	415.3
72.5°	311.0	317.7	320.3	321.0	320.3	326.3	330.4	332.4	339.1	342.4	335.0
75°	239.4	248.1	249.4	248.1	247.4	252.8	254.8	258.1	262.8	263.5	258.1
77.5°	174.5	181.9	183.2	181.2	179.9	183.9	185.2	188.6	191.3	192.6	187.2
80°	117.0	124.4	123.7	123.0	121.0	123.7	125.7	127.1	129.1	129.1	125.1
82.5°	70.2	74.9	74.2	74.9	72.9	73.6	74.9	76.9	76.2	77.6	74.9
85°	34.1	36.1	36.1	36.1	35.4	36.1	36.8	38.1	36.8	38.1	36.1
87.5°	12.0	12.7	12.0	12.0	12.0	12.0	12.7	12.7	12.0	12.7	12.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	1857.1	1857.1	1857.1	1857.1	1857.1	1857.1	1857.1	1857.1	1857.1	1857.1
2.5°	1871.2	1860.5	1871.2	1866.5	1872.5	1870.5	1871.2	1878.5	1861.8	1857.8
5°	1894.6	1883.2	1893.9	1890.5	1895.2	1893.2	1894.6	1901.9	1884.5	1879.8
7.5°	1921.3	1909.3	1920.0	1915.3	1920.0	1918.0	1918.6	1924.7	1906.6	1902.6
10°	1946.1	1933.3	1942.7	1938.0	1940.7	1938.7	1940.0	1944.0	1924.7	1920.0
12.5°	1965.4	1952.7	1962.1	1956.8	1958.1	1955.4	1954.7	1956.8	1936.7	1931.3
15°	1981.5	1968.8	1975.5	1970.1	1969.5	1965.4	1964.1	1964.8	1944.7	1939.4
17.5°	1986.2	1971.5	1975.5	1969.5	1967.4	1964.1	1962.8	1964.1	1944.7	1939.4
20°	1976.8	1959.4	1961.4	1954.1	1951.4	1948.7	1948.7	1950.7	1932.0	1928.7
22.5°	1944.7	1930.0	1934.7	1930.0	1927.3	1924.7	1920.0	1915.3	1891.2	1886.5
25°	1851.1	1841.1	1858.4	1861.1	1853.8	1839.7	1813.6	1793.6	1758.8	1754.8
27.5°	1782.2	1761.5	1740.7	1714.7	1699.3	1693.3	1697.3	1704.6	1686.6	1679.9
30°	1705.3	1660.5	1620.4	1593.6	1583.6	1582.3	1598.3	1617.7	1621.0	1622.4
32.5°	1609.7	1552.8	1522.1	1513.4	1506.7	1504.7	1510.0	1532.1	1546.1	1558.8
35°	1501.3	1461.9	1445.8	1446.5	1439.8	1437.1	1433.8	1447.2	1461.9	1477.3
37.5°	1400.4	1383.0	1378.3	1381.0	1373.6	1369.6	1365.6	1368.9	1373.6	1379.0
40°	1305.4	1309.4	1312.1	1314.1	1304.7	1302.0	1298.7	1297.4	1289.3	1276.6
42.5°	1224.5	1235.2	1247.2	1247.2	1237.2	1235.8	1236.5	1232.5	1208.4	1191.0
45°	1154.9	1158.9	1179.7	1183.7	1175.0	1173.0	1173.6	1160.9	1122.8	1105.4
47.5°	1086.7	1088.7	1107.4	1116.8	1107.4	1105.4	1107.4	1080.7	1039.2	1030.5
50°	1017.8	1023.2	1031.2	1039.9	1031.2	1030.5	1028.5	1003.1	962.3	957.6
52.5°	948.3	959.0	955.0	957.0	951.6	952.3	954.3	928.2	890.8	882.7
55°	877.4	887.4	877.4	872.0	870.0	872.0	876.1	852.0	822.6	809.2
57.5°	807.2	813.2	802.5	791.8	788.5	793.1	796.5	776.4	751.0	741.0
60°	734.3	732.9	724.3	714.2	707.5	712.9	718.2	700.2	677.4	671.4
62.5°	657.4	656.0	645.3	636.6	630.0	634.0	639.3	621.9	606.6	601.2
65°	578.5	577.1	565.8	559.1	553.1	554.4	560.4	544.4	535.0	529.0
67.5°	502.2	497.5	486.2	482.2	474.8	477.5	481.5	468.8	460.1	454.7
70°	422.0	418.0	407.9	403.9	397.9	399.2	403.3	395.2	385.9	382.5
72.5°	340.4	339.7	330.4	325.0	321.7	322.3	325.7	321.7	313.0	310.3
75°	261.5	263.5	256.1	251.4	248.1	248.1	252.1	252.8	243.4	240.1
77.5°	192.6	192.6	186.6	187.2	181.9	181.9	184.6	187.2	177.2	175.2
80°	129.1	128.4	126.4	124.4	121.7	122.4	124.4	127.7	119.7	120.4
82.5°	76.2	76.2	76.2	74.9	72.9	72.2	74.9	77.6	72.2	72.2
85°	37.4	36.8	36.8	36.8	35.4	34.8	36.8	38.1	34.8	35.4
87.5°	12.7	12.0	12.0	12.7	12.0	12.0	12.0	12.0	11.4	12.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)