

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: P183617

Luminaire Tested: **LSM55M8040D010TEP**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P183617
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: LSM55M8040D010TEP
Description: PORTFOLIO SURFACE MOUNT LED LUMINAIRE, MEDIUM DISTRIBUTION WITH CLEAR GLASS LENS
Light Source: 80 CRI, 4000K CCT LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6347.6 lumens
Efficiency: N/A
Efficacy: 112.9 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

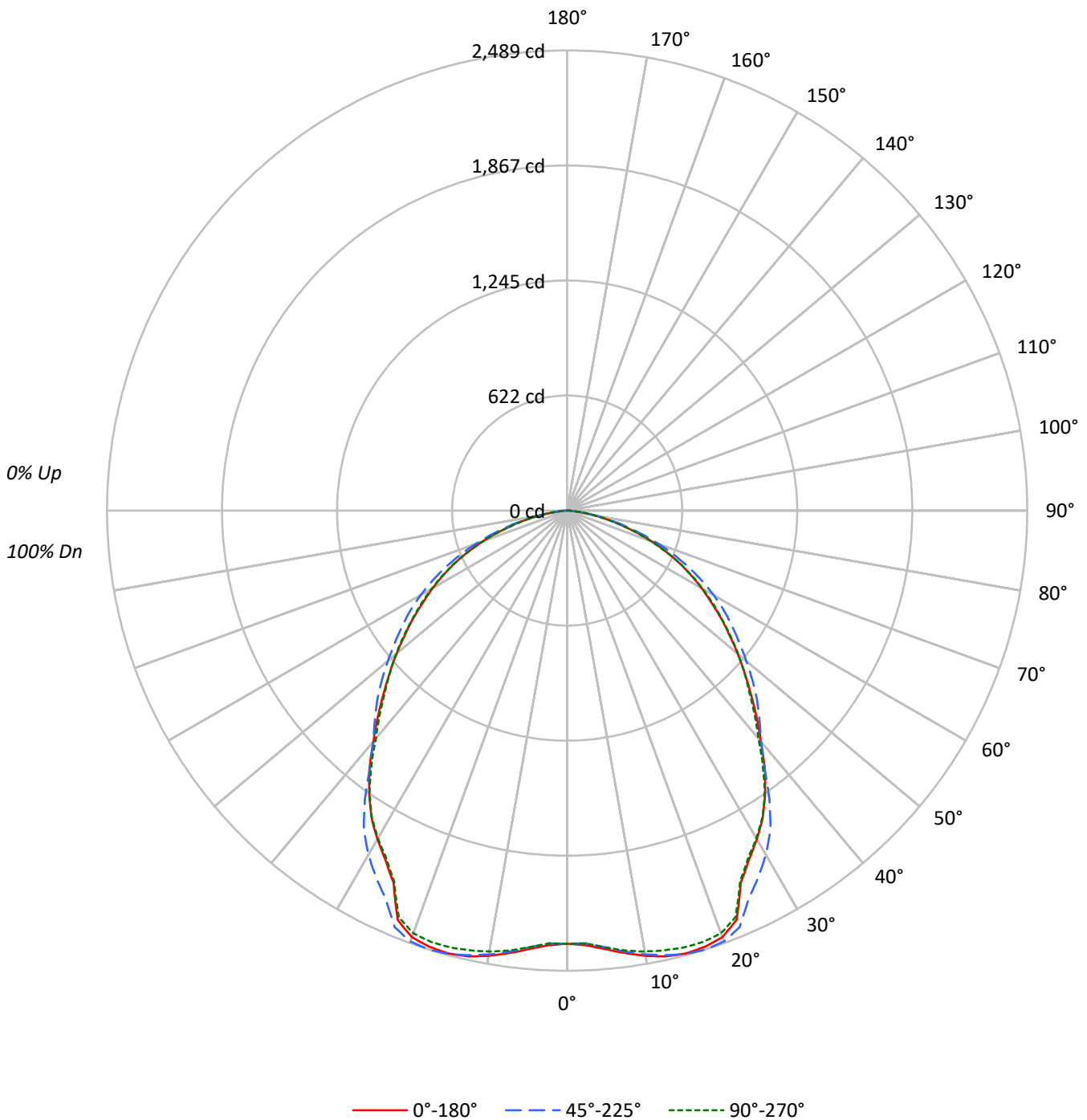
Input Watts (W): 56.22
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P183617

CATALOG NUMBER: LSM55M8040D010TEP

Luminous Intensity Polar Plot





TEST NUMBER: P183617

CATALOG NUMBER: LSM55M8040D010TEP

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°	25366	25366	25366
5°	25885	25784	25775
10°	26889	26805	26629
15°	27802	27822	27425
20°	28296	28579	28035
25°	26548	27706	26446
30°	25662	26875	25588
35°	24677	25212	24633
40°	23037	23050	22763
45°	21521	22257	21354
50°	20265	21302	20349
55°	19191	20559	19270
60°	18197	19821	18342
65°	17119	18587	17096
70°	15356	16584	15276
75°	12635	13623	12669
80°	9204	9834	9466
85°	5343	5666	5554



TEST NUMBER: P183617

CATALOG NUMBER: LSM55M8040D010TEP

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	229.7	3.6
10°-20°	702.4	11.1
20°-30°	1054.6	16.6
30°-40°	1154.5	18.2
40°-50°	1129.3	17.8
50°-60°	974.4	15.4
60°-70°	696.6	11.0
70°-80°	342.2	5.4
80°-90°	63.8	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°	1986.7	31.3
0°-40°	3141.2	49.5
0°-60°	5244.9	82.6
0°-90°	6347.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6347.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2342	2342	2342	2342	2342	
5°	2381	2402	2372	2391	2371	229
15°	2480	2514	2482	2484	2446	700
25°	2222	2354	2319	2338	2213	1035
35°	1867	1838	1907	1816	1863	1162
45°	1405	1499	1453	1482	1394	1088
55°	1016	1108	1089	1097	1021	909
65°	668	704	725	698	667	658
75°	302	319	326	313	303	324
85°	43	46	46	45	45	60
90°	0	0	0	0	0	



TEST NUMBER: P183617

CATALOG NUMBER: LSM55M8040D010TEP

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2342.5	2342.5	2342.5	2342.5	2342.5	2342.5	2342.5	2342.5	2342.5	2342.5	2342.5
2.5°	2353.5	2372.9	2356.8	2353.5	2340.0	2372.0	2360.2	2362.7	2353.5	2355.1	2342.5
5°	2381.3	2401.5	2386.4	2382.1	2368.6	2401.5	2389.7	2391.4	2382.1	2384.7	2372.0
7.5°	2414.2	2435.3	2419.3	2416.7	2404.1	2437.0	2426.0	2427.7	2417.6	2419.3	2406.6
10°	2445.4	2468.2	2452.2	2450.5	2437.8	2473.2	2461.4	2463.1	2451.3	2452.2	2437.8
12.5°	2469.9	2493.5	2477.5	2477.5	2465.7	2499.4	2490.1	2491.8	2480.0	2480.0	2463.1
15°	2480.0	2504.5	2487.6	2490.1	2478.3	2513.7	2505.3	2506.1	2496.0	2498.6	2481.7
17.5°	2474.1	2498.6	2483.4	2485.1	2474.1	2510.4	2501.9	2505.3	2496.9	2503.6	2489.3
20°	2455.5	2477.5	2458.9	2460.6	2452.2	2488.4	2482.5	2488.4	2482.5	2492.6	2480.0
22.5°	2395.6	2415.9	2405.8	2416.7	2415.0	2453.8	2450.5	2455.5	2446.3	2451.3	2437.8
25°	2221.9	2248.0	2244.6	2275.9	2305.4	2353.5	2350.1	2351.8	2332.4	2334.1	2318.9
27.5°	2129.1	2151.0	2138.4	2140.0	2128.2	2155.2	2156.9	2199.1	2224.4	2247.2	2237.1
30°	2052.3	2069.2	2038.8	2017.7	1987.4	2014.4	2012.7	2049.8	2094.5	2147.6	2149.3
32.5°	1969.7	1974.7	1931.7	1903.0	1892.0	1920.7	1919.0	1930.0	1963.7	2021.1	2046.4
35°	1866.7	1871.0	1817.8	1809.4	1809.4	1838.1	1831.3	1834.7	1853.2	1890.4	1907.2
37.5°	1756.2	1750.3	1720.0	1721.7	1728.4	1754.6	1749.5	1749.5	1755.4	1772.3	1751.2
40°	1629.7	1636.5	1627.2	1635.6	1641.5	1666.8	1664.3	1666.0	1663.5	1654.2	1630.6
42.5°	1517.5	1534.4	1544.5	1554.6	1555.5	1579.9	1578.3	1585.0	1572.3	1547.9	1540.3
45°	1405.3	1425.6	1453.4	1473.7	1475.3	1499.0	1499.0	1500.6	1474.5	1456.8	1453.4
47.5°	1304.1	1325.2	1353.9	1384.2	1389.3	1413.8	1413.8	1409.5	1381.7	1370.7	1359.8
50°	1202.9	1229.9	1256.9	1293.1	1295.7	1314.2	1315.1	1310.9	1298.2	1284.7	1264.5
52.5°	1106.7	1139.6	1165.8	1195.3	1197.0	1212.2	1208.8	1212.2	1213.8	1198.7	1174.2
55°	1016.5	1050.2	1073.0	1094.1	1098.3	1108.4	1101.7	1112.6	1122.7	1109.2	1089.0
57.5°	923.7	959.9	979.3	993.7	997.1	1005.5	998.7	1013.1	1026.6	1018.1	1004.7
60°	840.2	868.8	882.3	895.8	896.7	905.1	899.2	913.5	928.7	924.5	915.2
62.5°	754.1	774.4	784.5	798.8	794.6	803.0	805.6	818.2	829.2	830.0	822.4
65°	668.1	679.0	687.5	695.9	697.6	704.4	706.9	711.9	728.8	730.5	725.4
67.5°	577.0	583.7	591.3	598.9	598.1	604.8	611.6	616.6	627.6	631.8	625.1
70°	485.0	493.5	497.7	501.1	500.2	507.0	512.9	517.1	527.2	529.7	523.8
72.5°	392.2	400.7	404.1	404.9	404.1	411.6	416.7	419.2	427.7	431.9	422.6
75°	302.0	313.0	314.6	313.0	312.1	318.9	321.4	325.6	331.5	332.4	325.6
77.5°	220.2	229.4	231.1	228.6	226.9	232.0	233.7	237.9	241.3	242.9	236.2
80°	147.6	156.9	156.1	155.2	152.7	156.1	158.6	160.3	162.8	162.8	157.7
82.5°	88.6	94.5	93.6	94.5	91.9	92.8	94.5	97.0	96.2	97.9	94.5
85°	43.0	45.6	45.6	45.6	44.7	45.6	46.4	48.1	46.4	48.1	45.6
87.5°	15.2	16.0	15.2	15.2	15.2	15.2	16.0	16.0	15.2	16.0	15.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P183617

CATALOG NUMBER: LSM55M8040D010TEP

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	2342.5	2342.5	2342.5	2342.5	2342.5	2342.5	2342.5	2342.5	2342.5	2342.5
2.5°	2360.2	2346.7	2360.2	2354.3	2361.9	2359.4	2360.2	2369.5	2348.4	2343.3
5°	2389.7	2375.4	2388.9	2384.7	2390.6	2388.0	2389.7	2399.0	2377.1	2371.2
7.5°	2423.5	2408.3	2421.8	2415.9	2421.8	2419.3	2420.1	2427.7	2404.9	2399.9
10°	2454.7	2438.7	2450.5	2444.6	2447.9	2445.4	2447.1	2452.2	2427.7	2421.8
12.5°	2479.1	2463.1	2474.9	2468.2	2469.9	2466.5	2465.7	2468.2	2442.9	2436.1
15°	2499.4	2483.4	2491.8	2485.1	2484.2	2479.1	2477.5	2478.3	2453.0	2446.3
17.5°	2505.3	2486.7	2491.8	2484.2	2481.7	2477.5	2475.8	2477.5	2453.0	2446.3
20°	2493.5	2471.6	2474.1	2464.8	2461.4	2458.1	2458.1	2460.6	2437.0	2432.8
22.5°	2453.0	2434.4	2440.3	2434.4	2431.1	2427.7	2421.8	2415.9	2385.5	2379.6
25°	2334.9	2322.3	2344.2	2347.6	2338.3	2320.6	2287.7	2262.4	2218.5	2213.4
27.5°	2248.0	2221.9	2195.7	2162.8	2143.4	2135.8	2140.9	2150.2	2127.4	2119.0
30°	2151.0	2094.5	2043.9	2010.1	1997.5	1995.8	2016.0	2040.5	2044.7	2046.4
32.5°	2030.4	1958.7	1919.9	1908.9	1900.5	1898.0	1904.7	1932.5	1950.3	1966.3
35°	1893.7	1844.0	1823.7	1824.6	1816.1	1812.8	1808.5	1825.4	1844.0	1863.4
37.5°	1766.4	1744.4	1738.5	1741.9	1732.6	1727.6	1722.5	1726.7	1732.6	1739.4
40°	1646.6	1651.6	1655.0	1657.5	1645.7	1642.4	1638.1	1636.5	1626.3	1610.3
42.5°	1544.5	1558.0	1573.2	1573.2	1560.5	1558.9	1559.7	1554.6	1524.3	1502.3
45°	1456.8	1461.8	1488.0	1493.1	1482.1	1479.6	1480.4	1464.4	1416.3	1394.4
47.5°	1370.7	1373.3	1396.9	1408.7	1396.9	1394.4	1396.9	1363.2	1310.9	1299.9
50°	1283.9	1290.6	1300.7	1311.7	1300.7	1299.9	1297.4	1265.3	1213.8	1207.9
52.5°	1196.1	1209.6	1204.6	1207.1	1200.4	1201.2	1203.7	1170.8	1123.6	1113.5
55°	1106.7	1119.4	1106.7	1100.0	1097.4	1100.0	1105.0	1074.7	1037.5	1020.7
57.5°	1018.1	1025.7	1012.2	998.7	994.5	1000.4	1004.7	979.3	947.3	934.6
60°	926.2	924.5	913.5	900.9	892.5	899.2	906.0	883.2	854.5	846.9
62.5°	829.2	827.5	814.0	803.0	794.6	799.7	806.4	784.5	765.1	758.3
65°	729.7	728.0	713.6	705.2	697.6	699.3	706.9	686.6	674.8	667.2
67.5°	633.5	627.6	613.2	608.2	598.9	602.3	607.3	591.3	580.4	573.6
70°	532.3	527.2	514.6	509.5	501.9	503.6	508.7	498.5	486.7	482.5
72.5°	429.4	428.5	416.7	410.0	405.7	406.6	410.8	405.7	394.8	391.4
75°	329.8	332.4	323.1	317.2	313.0	313.0	318.0	318.9	307.0	302.8
77.5°	242.9	242.9	235.3	236.2	229.4	229.4	232.8	236.2	223.5	221.0
80°	162.8	162.0	159.4	156.9	153.5	154.4	156.9	161.1	151.0	151.8
82.5°	96.2	96.2	96.2	94.5	91.9	91.1	94.5	97.9	91.1	91.1
85°	47.2	46.4	46.4	46.4	44.7	43.9	46.4	48.1	43.9	44.7
87.5°	16.0	15.2	15.2	16.0	15.2	15.2	15.2	15.2	14.3	15.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)