

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: P183602

Luminaire Tested: **LSM55M8027D010TEP**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P183602
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: LSM55M8027D010TEP
Description: PORTFOLIO SURFACE MOUNT LED LUMINAIRE, MEDIUM DISTRIBUTION WITH CLEAR GLASS LENS
Light Source: 80 CRI, 2700K CCT LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5578.8 lumens
Efficiency: N/A
Efficacy: 99.2 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

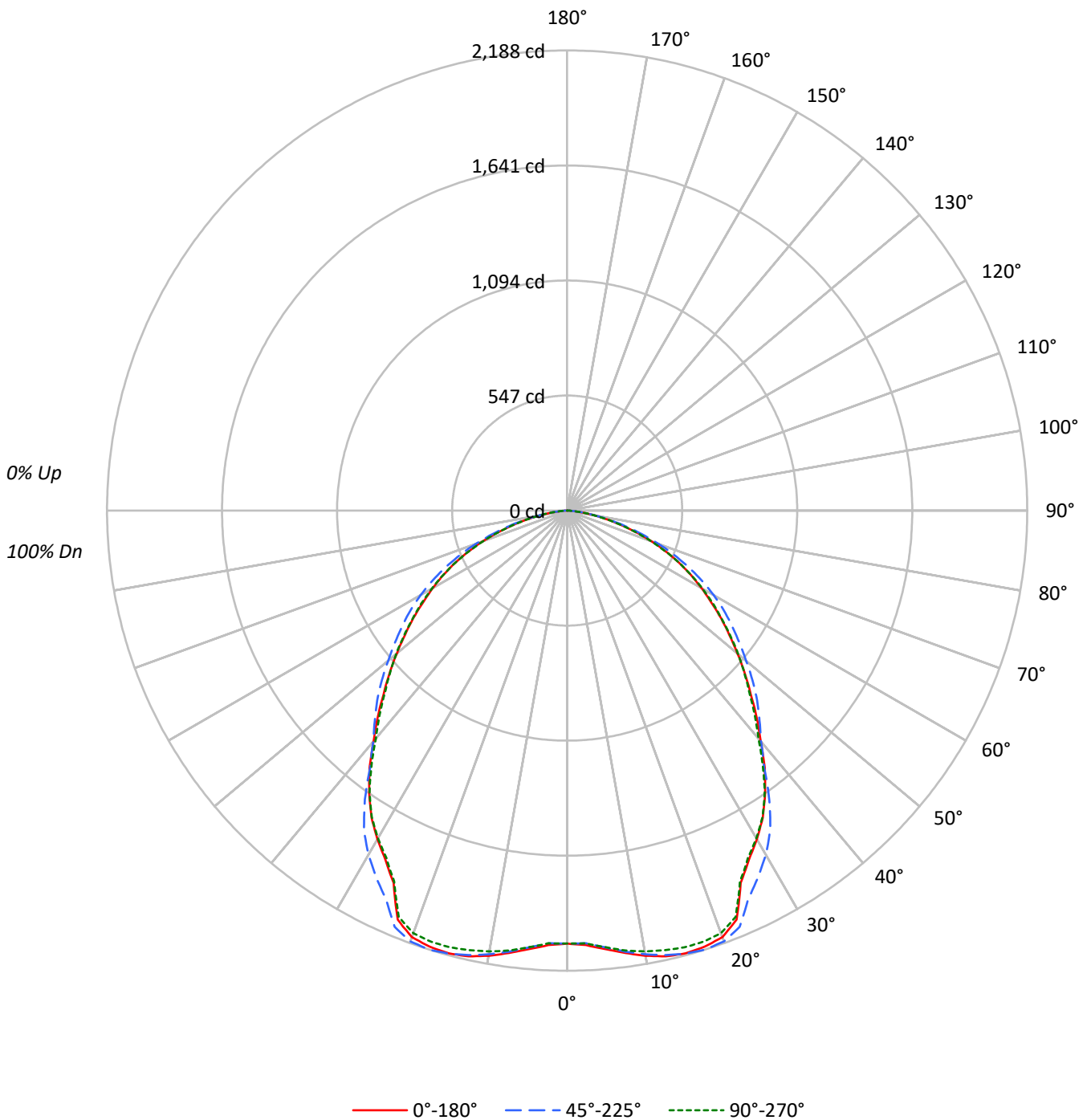
Input Watts (W): 56.22
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	22294	22294	22294
5°	22750	22661	22653
10°	23632	23559	23404
15°	24435	24452	24103
20°	24869	25117	24639
25°	23332	24350	23244
30°	22554	23620	22489
35°	21689	22158	21649
40°	20247	20258	20006
45°	18914	19562	18767
50°	17810	18721	17884
55°	16867	18069	16937
60°	15992	17421	16120
65°	15046	16337	15025
70°	13497	14577	13427
75°	11104	11974	11137
80°	8088	8643	8319
85°	4696	4970	4883



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	201.9	3.6
10°-20°	617.3	11.1
20°-30°	926.9	16.6
30°-40°	1014.6	18.2
40°-50°	992.5	17.8
50°-60°	856.4	15.4
60°-70°	612.2	11.0
70°-80°	300.8	5.4
80°-90°	56.1	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°	1746.1	31.3
0°-40°	2760.8	49.5
0°-60°	4609.7	82.6
0°-90°	5578.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5578.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2059	2059	2059	2059	2059	
5°	2093	2111	2085	2101	2084	202
15°	2180	2209	2181	2183	2150	615
25°	1953	2068	2038	2055	1945	910
35°	1641	1616	1676	1596	1638	1021
45°	1235	1317	1277	1303	1226	956
55°	893	974	957	964	897	799
65°	587	619	638	613	586	579
75°	265	280	286	275	266	285
85°	38	40	40	39	39	53
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°	2058.8	2058.8	2058.8	2058.8	2058.8	2058.8	2058.8	2058.8	2058.8	2058.8	2058.8
2.5°	2068.4	2085.5	2071.4	2068.4	2056.6	2084.7	2074.4	2076.6	2068.4	2069.9	2058.8
5°	2092.9	2110.7	2097.3	2093.6	2081.8	2110.7	2100.3	2101.8	2093.6	2095.9	2084.7
7.5°	2121.8	2140.3	2126.3	2124.0	2112.9	2141.8	2132.2	2133.7	2124.8	2126.3	2115.1
10°	2149.2	2169.3	2155.2	2153.7	2142.6	2173.7	2163.3	2164.8	2154.4	2155.2	2142.6
12.5°	2170.7	2191.5	2177.4	2177.4	2167.0	2196.7	2188.5	2190.0	2179.6	2179.6	2164.8
15°	2179.6	2201.1	2186.3	2188.5	2178.2	2209.3	2201.9	2202.6	2193.7	2195.9	2181.1
17.5°	2174.4	2195.9	2182.6	2184.1	2174.4	2206.3	2198.9	2201.9	2194.5	2200.4	2187.8
20°	2158.1	2177.4	2161.1	2162.6	2155.2	2187.1	2181.9	2187.1	2181.9	2190.8	2179.6
22.5°	2105.5	2123.3	2114.4	2124.0	2122.6	2156.7	2153.7	2158.1	2150.0	2154.4	2142.6
25°	1952.8	1975.8	1972.8	2000.2	2026.2	2068.4	2065.5	2067.0	2049.9	2051.4	2038.0
27.5°	1871.2	1890.5	1879.4	1880.9	1870.5	1894.2	1895.7	1932.8	1955.0	1975.0	1966.1
30°	1803.8	1818.6	1791.9	1773.4	1746.7	1770.4	1768.9	1801.5	1840.8	1887.5	1889.0
32.5°	1731.1	1735.6	1697.7	1672.5	1662.9	1688.1	1686.6	1696.3	1725.9	1776.3	1798.6
35°	1640.7	1644.4	1597.7	1590.2	1590.2	1615.5	1609.5	1612.5	1628.8	1661.4	1676.2
37.5°	1543.5	1538.4	1511.7	1513.1	1519.1	1542.1	1537.6	1537.6	1542.8	1557.6	1539.1
40°	1432.3	1438.3	1430.1	1437.5	1442.7	1465.0	1462.7	1464.2	1462.0	1453.8	1433.1
42.5°	1333.7	1348.6	1357.5	1366.4	1367.1	1388.6	1387.1	1393.0	1381.9	1360.4	1353.7
45°	1235.1	1252.9	1277.4	1295.2	1296.7	1317.4	1317.4	1318.9	1295.9	1280.4	1277.4
47.5°	1146.2	1164.7	1189.9	1216.6	1221.0	1242.5	1242.5	1238.8	1214.4	1204.7	1195.1
50°	1057.2	1080.9	1104.6	1136.5	1138.8	1155.1	1155.8	1152.1	1141.0	1129.1	1111.3
52.5°	972.7	1001.6	1024.6	1050.5	1052.0	1065.4	1062.4	1065.4	1066.8	1053.5	1032.0
55°	893.4	923.0	943.0	961.6	965.3	974.2	968.2	977.9	986.8	974.9	957.1
57.5°	811.8	843.7	860.7	873.3	876.3	883.7	877.8	890.4	902.3	894.8	883.0
60°	738.4	763.6	775.5	787.3	788.1	795.5	790.3	802.9	816.3	812.5	804.4
62.5°	662.8	680.6	689.5	702.1	698.4	705.8	708.0	719.1	728.8	729.5	722.8
65°	587.2	596.8	604.2	611.6	613.1	619.0	621.3	625.7	640.5	642.0	637.6
67.5°	507.1	513.0	519.7	526.4	525.6	531.6	537.5	541.9	551.6	555.3	549.4
70°	426.3	433.7	437.4	440.4	439.6	445.6	450.8	454.5	463.4	465.6	460.4
72.5°	344.7	352.2	355.1	355.9	355.1	361.8	366.2	368.5	375.9	379.6	371.4
75°	265.4	275.0	276.5	275.0	274.3	280.2	282.5	286.2	291.4	292.1	286.2
77.5°	193.5	201.7	203.1	200.9	199.4	203.9	205.4	209.1	212.0	213.5	207.6
80°	129.7	137.9	137.2	136.4	134.2	137.2	139.4	140.9	143.1	143.1	138.6
82.5°	77.8	83.0	82.3	83.0	80.8	81.6	83.0	85.3	84.5	86.0	83.0
85°	37.8	40.0	40.0	40.0	39.3	40.0	40.8	42.3	40.8	42.3	40.0
87.5°	13.3	14.1	13.3	13.3	13.3	13.3	14.1	14.1	13.3	14.1	13.3
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°	2058.8	2058.8	2058.8	2058.8	2058.8	2058.8	2058.8	2058.8	2058.8	2058.8
2.5°	2074.4	2062.5	2074.4	2069.2	2075.8	2073.6	2074.4	2082.5	2064.0	2059.5
5°	2100.3	2087.7	2099.6	2095.9	2101.1	2098.8	2100.3	2108.5	2089.2	2084.0
7.5°	2130.0	2116.6	2128.5	2123.3	2128.5	2126.3	2127.0	2133.7	2113.7	2109.2
10°	2157.4	2143.3	2153.7	2148.5	2151.5	2149.2	2150.7	2155.2	2133.7	2128.5
12.5°	2178.9	2164.8	2175.2	2169.3	2170.7	2167.8	2167.0	2169.3	2147.0	2141.1
15°	2196.7	2182.6	2190.0	2184.1	2183.3	2178.9	2177.4	2178.2	2155.9	2150.0
17.5°	2201.9	2185.6	2190.0	2183.3	2181.1	2177.4	2175.9	2177.4	2155.9	2150.0
20°	2191.5	2172.2	2174.4	2166.3	2163.3	2160.4	2160.4	2162.6	2141.8	2138.1
22.5°	2155.9	2139.6	2144.8	2139.6	2136.6	2133.7	2128.5	2123.3	2096.6	2091.4
25°	2052.1	2041.0	2060.3	2063.2	2055.1	2039.5	2010.6	1988.4	1949.8	1945.4
27.5°	1975.8	1952.8	1929.8	1900.9	1883.8	1877.2	1881.6	1889.8	1869.7	1862.3
30°	1890.5	1840.8	1796.3	1766.7	1755.6	1754.1	1771.9	1793.4	1797.1	1798.6
32.5°	1784.5	1721.5	1687.4	1677.7	1670.3	1668.1	1674.0	1698.5	1714.1	1728.1
35°	1664.4	1620.6	1602.9	1603.6	1596.2	1593.2	1589.5	1604.3	1620.6	1637.7
37.5°	1552.4	1533.2	1528.0	1530.9	1522.8	1518.3	1513.9	1517.6	1522.8	1528.7
40°	1447.2	1451.6	1454.6	1456.8	1446.4	1443.5	1439.7	1438.3	1429.4	1415.3
42.5°	1357.5	1369.3	1382.7	1382.7	1371.5	1370.1	1370.8	1366.4	1339.7	1320.4
45°	1280.4	1284.8	1307.8	1312.2	1302.6	1300.4	1301.1	1287.0	1244.8	1225.5
47.5°	1204.7	1207.0	1227.7	1238.1	1227.7	1225.5	1227.7	1198.1	1152.1	1142.5
50°	1128.4	1134.3	1143.2	1152.8	1143.2	1142.5	1140.2	1112.1	1066.8	1061.6
52.5°	1051.3	1063.1	1058.7	1060.9	1055.0	1055.7	1057.9	1029.0	987.5	978.6
55°	972.7	983.8	972.7	966.8	964.5	966.8	971.2	944.5	911.9	897.1
57.5°	894.8	901.5	889.6	877.8	874.1	879.3	883.0	860.7	832.6	821.4
60°	814.0	812.5	802.9	791.8	784.4	790.3	796.2	776.2	751.0	744.3
62.5°	728.8	727.3	715.4	705.8	698.4	702.8	708.8	689.5	672.4	666.5
65°	641.3	639.8	627.2	619.8	613.1	614.6	621.3	603.5	593.1	586.4
67.5°	556.8	551.6	539.0	534.5	526.4	529.3	533.8	519.7	510.1	504.1
70°	467.8	463.4	452.2	447.8	441.1	442.6	447.0	438.2	427.8	424.1
72.5°	377.4	376.6	366.2	360.3	356.6	357.3	361.0	356.6	347.0	344.0
75°	289.9	292.1	283.9	278.8	275.0	275.0	279.5	280.2	269.9	266.2
77.5°	213.5	213.5	206.8	207.6	201.7	201.7	204.6	207.6	196.5	194.2
80°	143.1	142.3	140.1	137.9	134.9	135.7	137.9	141.6	132.7	133.4
82.5°	84.5	84.5	84.5	83.0	80.8	80.1	83.0	86.0	80.1	80.1
85°	41.5	40.8	40.8	40.8	39.3	38.6	40.8	42.3	38.6	39.3
87.5°	14.1	13.3	13.3	14.1	13.3	13.3	13.3	13.3	12.6	13.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)