

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: P183604

Luminaire Tested: **LSM80M8027D010TEP**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P183604
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: LSM80M8027D010TEP
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: 7739.4 lumens
Efficiency: N/A
Efficacy: 87.9 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

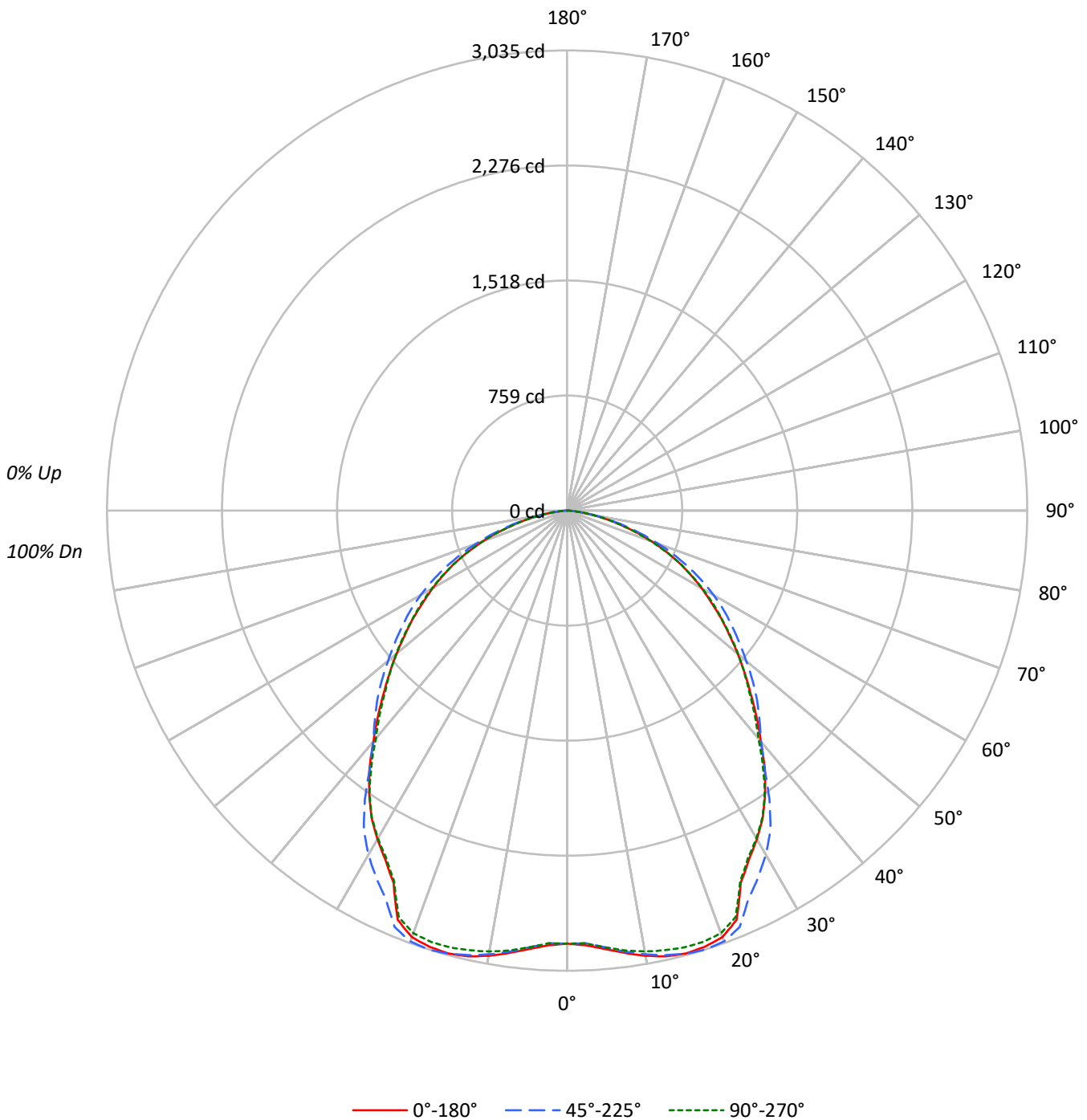
Input Watts (W): 88.06
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	30929	30929	30929
5°	31561	31438	31426
10°	32785	32684	32468
15°	33899	33922	33438
20°	34502	34845	34181
25°	32369	33782	32246
30°	31290	32768	31200
35°	30089	30742	30034
40°	28089	28103	27754
45°	26241	27138	26035
50°	24709	25972	24811
55°	23399	25068	23495
60°	22186	24167	22363
65°	20872	22663	20844
70°	18724	20222	18626
75°	15405	16610	15447
80°	11225	11992	11543
85°	6523	6896	6771



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	280.1	3.6
10°-20°	856.4	11.1
20°-30°	1285.9	16.6
30°-40°	1407.6	18.2
40°-50°	1376.9	17.8
50°-60°	1188.1	15.4
60°-70°	849.4	11.0
70°-80°	417.3	5.4
80°-90°	77.8	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°	2422.4	31.3
0°-40°	3830.0	49.5
0°-60°	6395.0	82.6
0°-90°	7739.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7739.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2856	2856	2856	2856	2856	
5°	2904	2928	2892	2915	2891	280
15°	3024	3065	3026	3029	2983	853
25°	2709	2870	2827	2851	2699	1262
35°	2276	2241	2326	2214	2272	1417
45°	1714	1828	1772	1807	1700	1327
55°	1239	1352	1328	1338	1244	1109
65°	815	859	884	851	814	803
75°	368	389	397	382	369	395
85°	52	56	56	54	54	73
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°	2856.2	2856.2	2856.2	2856.2	2856.2	2856.2	2856.2	2856.2	2856.2	2856.2	2856.2
2.5°	2869.5	2893.2	2873.6	2869.5	2853.1	2892.2	2877.8	2880.8	2869.5	2871.6	2856.2
5°	2903.5	2928.2	2909.6	2904.5	2888.0	2928.2	2913.8	2915.8	2904.5	2907.6	2892.2
7.5°	2943.6	2969.3	2949.8	2946.7	2931.2	2971.4	2958.0	2960.0	2947.7	2949.8	2934.3
10°	2981.6	3009.4	2989.9	2987.8	2972.4	3015.6	3001.2	3003.2	2988.8	2989.9	2972.4
12.5°	3011.5	3040.3	3020.7	3020.7	3006.3	3047.5	3036.2	3038.2	3023.8	3023.8	3003.2
15°	3023.8	3053.6	3033.1	3036.2	3021.8	3065.0	3054.7	3055.7	3043.4	3046.4	3025.9
17.5°	3016.6	3046.4	3027.9	3030.0	3016.6	3060.8	3050.6	3054.7	3044.4	3052.6	3035.1
20°	2994.0	3020.7	2998.1	3000.2	2989.9	3034.1	3026.9	3034.1	3026.9	3039.2	3023.8
22.5°	2921.0	2945.6	2933.3	2946.7	2944.6	2991.9	2987.8	2994.0	2982.7	2988.8	2972.4
25°	2709.1	2741.0	2736.9	2774.9	2810.9	2869.5	2865.4	2867.5	2843.8	2845.9	2827.4
27.5°	2596.0	2622.7	2607.3	2609.3	2594.9	2627.8	2629.9	2681.3	2712.2	2739.9	2727.6
30°	2502.4	2522.9	2485.9	2460.2	2423.2	2456.1	2454.0	2499.3	2553.8	2618.6	2620.6
32.5°	2401.6	2407.7	2355.3	2320.3	2306.9	2341.9	2339.9	2353.2	2394.4	2464.3	2495.2
35°	2276.1	2281.2	2216.4	2206.1	2206.1	2241.1	2232.9	2237.0	2259.6	2304.9	2325.5
37.5°	2141.4	2134.2	2097.1	2099.2	2107.4	2139.3	2133.1	2133.1	2140.3	2160.9	2135.2
40°	1987.1	1995.3	1984.0	1994.3	2001.5	2032.3	2029.2	2031.3	2028.2	2016.9	1988.1
42.5°	1850.3	1870.9	1883.2	1895.5	1896.6	1926.4	1924.3	1932.6	1917.1	1887.3	1878.1
45°	1713.5	1738.2	1772.1	1796.8	1798.9	1827.7	1827.7	1829.7	1797.8	1776.2	1772.1
47.5°	1590.1	1615.8	1650.8	1687.8	1694.0	1723.8	1723.8	1718.6	1684.7	1671.3	1658.0
50°	1466.7	1499.6	1532.5	1576.7	1579.8	1602.4	1603.4	1598.3	1582.9	1566.4	1541.7
52.5°	1349.4	1389.5	1421.4	1457.4	1459.5	1478.0	1473.9	1478.0	1480.0	1461.5	1431.7
55°	1239.4	1280.5	1308.3	1334.0	1339.1	1351.5	1343.2	1356.6	1368.9	1352.5	1327.8
57.5°	1126.2	1170.4	1194.1	1211.6	1215.7	1226.0	1217.8	1235.2	1251.7	1241.4	1225.0
60°	1024.4	1059.4	1075.8	1092.3	1093.3	1103.6	1096.4	1113.9	1132.4	1127.2	1115.9
62.5°	919.5	944.2	956.5	974.0	968.9	979.1	982.2	997.7	1011.0	1012.1	1002.8
65°	814.6	827.9	838.2	848.5	850.6	858.8	861.9	868.1	888.6	890.7	884.5
67.5°	703.5	711.7	721.0	730.2	729.2	737.4	745.7	751.8	765.2	770.4	762.1
70°	591.4	601.7	606.8	610.9	609.9	618.1	625.3	630.5	642.8	645.9	638.7
72.5°	478.3	488.5	492.7	493.7	492.7	501.9	508.1	511.2	521.5	526.6	515.3
75°	368.2	381.6	383.6	381.6	380.5	388.8	391.9	397.0	404.2	405.2	397.0
77.5°	268.4	279.8	281.8	278.7	276.7	282.8	284.9	290.0	294.2	296.2	288.0
80°	180.0	191.3	190.3	189.2	186.2	190.3	193.4	195.4	198.5	198.5	192.3
82.5°	108.0	115.2	114.2	115.2	112.1	113.1	115.2	118.3	117.2	119.3	115.2
85°	52.5	55.5	55.5	55.5	54.5	55.5	56.6	58.6	56.6	58.6	55.5
87.5°	18.5	19.5	18.5	18.5	18.5	18.5	19.5	19.5	18.5	19.5	18.5
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°	2856.2	2856.2	2856.2	2856.2	2856.2	2856.2	2856.2	2856.2	2856.2	2856.2
2.5°	2877.8	2861.3	2877.8	2870.6	2879.8	2876.7	2877.8	2889.1	2863.4	2857.2
5°	2913.8	2896.3	2912.7	2907.6	2914.8	2911.7	2913.8	2925.1	2898.3	2891.1
7.5°	2954.9	2936.4	2952.8	2945.6	2952.8	2949.8	2950.8	2960.0	2932.3	2926.1
10°	2993.0	2973.4	2987.8	2980.6	2984.7	2981.6	2983.7	2989.9	2960.0	2952.8
12.5°	3022.8	3003.2	3017.6	3009.4	3011.5	3007.4	3006.3	3009.4	2978.6	2970.3
15°	3047.5	3027.9	3038.2	3030.0	3029.0	3022.8	3020.7	3021.8	2990.9	2982.7
17.5°	3054.7	3032.0	3038.2	3029.0	3025.9	3020.7	3018.7	3020.7	2990.9	2982.7
20°	3040.3	3013.5	3016.6	3005.3	3001.2	2997.1	2997.1	3000.2	2971.4	2966.2
22.5°	2990.9	2968.3	2975.5	2968.3	2964.2	2960.0	2952.8	2945.6	2908.6	2901.4
25°	2846.9	2831.5	2858.2	2862.3	2851.0	2829.4	2789.3	2758.5	2705.0	2698.8
27.5°	2741.0	2709.1	2677.2	2637.1	2613.4	2604.2	2610.4	2621.7	2593.9	2583.6
30°	2622.7	2553.8	2492.1	2450.9	2435.5	2433.4	2458.1	2488.0	2493.1	2495.2
32.5°	2475.6	2388.2	2340.9	2327.5	2317.2	2314.1	2322.4	2356.3	2377.9	2397.4
35°	2309.0	2248.3	2223.6	2224.7	2214.4	2210.3	2205.1	2225.7	2248.3	2272.0
37.5°	2153.7	2127.0	2119.8	2123.9	2112.6	2106.4	2100.2	2105.4	2112.6	2120.8
40°	2007.6	2013.8	2017.9	2021.0	2006.6	2002.5	1997.4	1995.3	1983.0	1963.4
42.5°	1883.2	1899.7	1918.2	1918.2	1902.7	1900.7	1901.7	1895.5	1858.5	1831.8
45°	1776.2	1782.4	1814.3	1820.5	1807.1	1804.0	1805.0	1785.5	1726.9	1700.1
47.5°	1671.3	1674.4	1703.2	1717.6	1703.2	1700.1	1703.2	1662.1	1598.3	1584.9
50°	1565.4	1573.6	1586.0	1599.3	1586.0	1584.9	1581.8	1542.8	1480.0	1472.8
52.5°	1458.4	1474.9	1468.7	1471.8	1463.6	1464.6	1467.7	1427.6	1370.0	1357.6
55°	1349.4	1364.8	1349.4	1341.2	1338.1	1341.2	1347.3	1310.3	1265.1	1244.5
57.5°	1241.4	1250.7	1234.2	1217.8	1212.6	1219.8	1225.0	1194.1	1155.0	1139.6
60°	1129.3	1127.2	1113.9	1098.4	1088.2	1096.4	1104.6	1076.8	1041.9	1032.6
62.5°	1011.0	1009.0	992.5	979.1	968.9	975.0	983.3	956.5	932.9	924.6
65°	889.7	887.6	870.1	859.8	850.6	852.6	861.9	837.2	822.8	813.5
67.5°	772.4	765.2	747.7	741.6	730.2	734.4	740.5	721.0	707.6	699.4
70°	649.0	642.8	627.4	621.2	612.0	614.0	620.2	607.8	593.4	588.3
72.5°	523.5	522.5	508.1	499.9	494.7	495.7	500.9	494.7	481.3	477.2
75°	402.1	405.2	393.9	386.7	381.6	381.6	387.7	388.8	374.4	369.2
77.5°	296.2	296.2	287.0	288.0	279.8	279.8	283.9	288.0	272.6	269.5
80°	198.5	197.5	194.4	191.3	187.2	188.2	191.3	196.4	184.1	185.1
82.5°	117.2	117.2	117.2	115.2	112.1	111.1	115.2	119.3	111.1	111.1
85°	57.6	56.6	56.6	56.6	54.5	53.5	56.6	58.6	53.5	54.5
87.5°	19.5	18.5	18.5	19.5	18.5	18.5	18.5	18.5	17.5	18.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)