

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: P183619

Luminaire Tested: **LSM80M8040D010TEP**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P183619
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: LSM80M8040D010TEP
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: 8805.9 lumens
Efficiency: N/A
Efficacy: 100.0 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

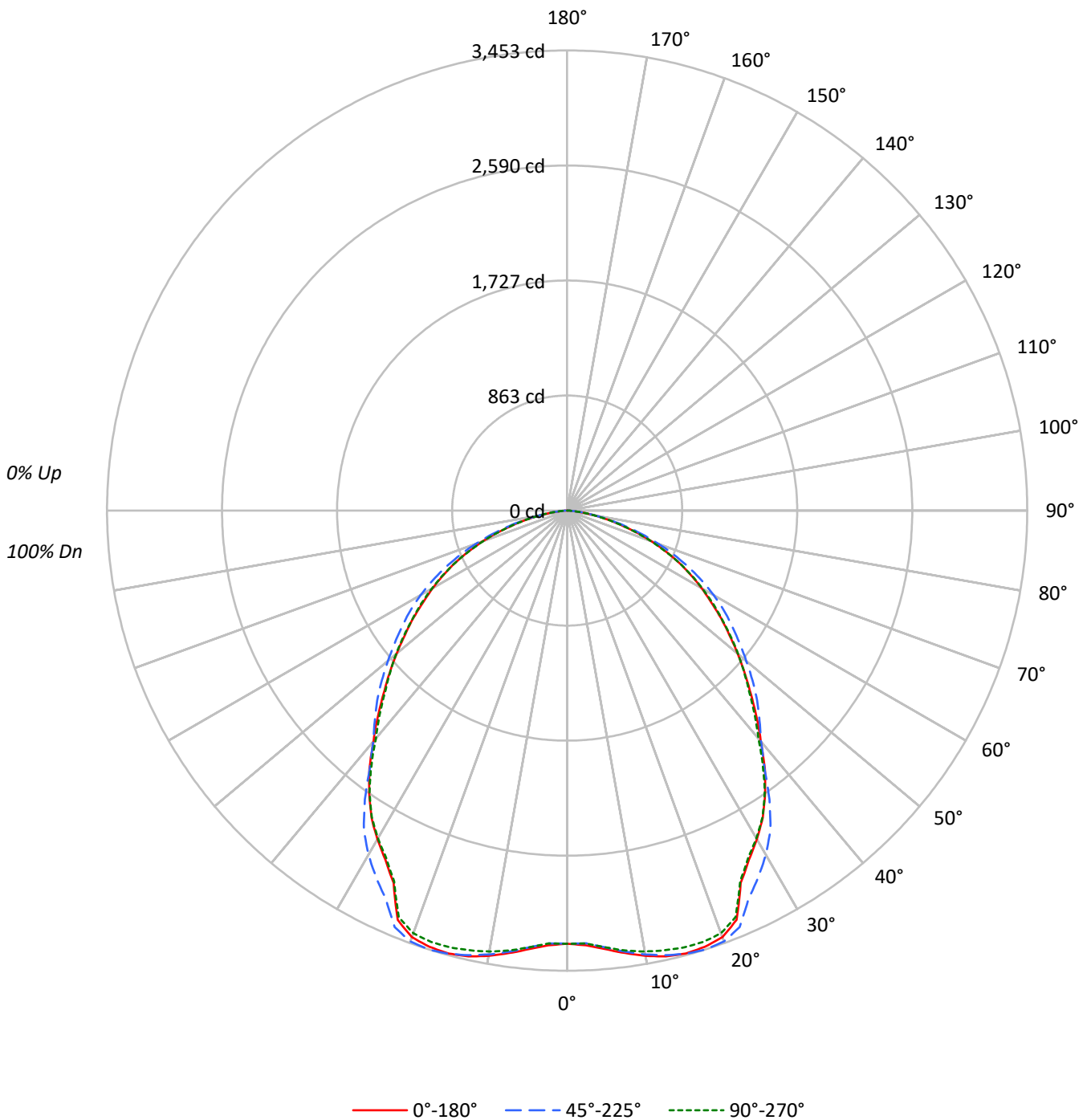
Input Watts (W): 88.06
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	35190	35190	35190
5°	35910	35770	35757
10°	37303	37188	36942
15°	38570	38596	38046
20°	39256	39647	38892
25°	36829	38437	36689
30°	35601	37284	35499
35°	34234	34977	34172
40°	31960	31977	31579
45°	29856	30878	29624
50°	28113	29552	28231
55°	26622	28523	26733
60°	25244	27498	25445
65°	23747	25787	23719
70°	21305	23008	21194
75°	17526	18899	17576
80°	12771	13644	13133
85°	7417	7852	7703



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	318.7	3.6
10°-20°	974.4	11.1
20°-30°	1463.1	16.6
30°-40°	1601.6	18.2
40°-50°	1566.6	17.8
50°-60°	1351.8	15.4
60°-70°	966.4	11.0
70°-80°	474.8	5.4
80°-90°	88.5	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°	2756.2	31.3
0°-40°	4357.8	49.5
0°-60°	7276.3	82.6
0°-90°	8805.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8805.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3250	3250	3250	3250	3250	
5°	3304	3332	3291	3316	3290	318
15°	3440	3487	3443	3446	3394	971
25°	3082	3265	3217	3244	3071	1436
35°	2590	2550	2646	2520	2585	1612
45°	1950	2080	2016	2056	1934	1510
55°	1410	1538	1511	1522	1416	1262
65°	927	977	1006	968	926	913
75°	419	442	452	434	420	450
85°	60	63	63	62	62	83
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°	3249.7	3249.7	3249.7	3249.7	3249.7	3249.7	3249.7	3249.7	3249.7	3249.7	3249.7
2.5°	3265.0	3291.9	3269.6	3265.0	3246.2	3290.7	3274.3	3277.8	3265.0	3267.3	3249.7
5°	3303.6	3331.7	3310.6	3304.7	3286.0	3331.7	3315.3	3317.6	3304.7	3308.3	3290.7
7.5°	3349.2	3378.5	3356.2	3352.7	3335.2	3380.8	3365.6	3367.9	3353.9	3356.2	3338.7
10°	3392.5	3424.1	3401.9	3399.5	3382.0	3431.1	3414.7	3417.1	3400.7	3401.9	3382.0
12.5°	3426.4	3459.2	3437.0	3437.0	3420.6	3467.4	3454.5	3456.9	3440.5	3440.5	3417.1
15°	3440.5	3474.4	3451.0	3454.5	3438.1	3487.3	3475.6	3476.8	3462.7	3466.2	3442.8
17.5°	3432.3	3466.2	3445.2	3447.5	3432.3	3482.6	3470.9	3475.6	3463.9	3473.3	3453.4
20°	3406.6	3437.0	3411.2	3413.6	3401.9	3452.2	3444.0	3452.2	3444.0	3458.0	3440.5
22.5°	3323.5	3351.6	3337.5	3352.7	3350.4	3404.2	3399.5	3406.6	3393.7	3400.7	3382.0
25°	3082.4	3118.7	3114.0	3157.3	3198.3	3265.0	3260.3	3262.6	3235.7	3238.0	3217.0
27.5°	2953.7	2984.1	2966.5	2968.9	2952.5	2989.9	2992.3	3050.8	3085.9	3117.5	3103.5
30°	2847.2	2870.6	2828.5	2799.2	2757.1	2794.5	2792.2	2843.7	2905.7	2979.4	2981.8
32.5°	2732.5	2739.5	2679.8	2640.0	2624.8	2664.6	2662.3	2677.5	2724.3	2803.9	2839.0
35°	2589.7	2595.6	2521.9	2510.2	2510.2	2549.9	2540.6	2545.3	2571.0	2622.5	2645.9
37.5°	2436.4	2428.2	2386.1	2388.4	2397.8	2434.1	2427.1	2427.1	2435.3	2458.7	2429.4
40°	2260.9	2270.3	2257.4	2269.1	2277.3	2312.4	2308.9	2311.2	2307.7	2294.8	2262.1
42.5°	2105.3	2128.7	2142.7	2156.7	2157.9	2191.8	2189.5	2198.9	2181.3	2147.4	2136.8
45°	1949.6	1977.7	2016.3	2044.4	2046.7	2079.5	2079.5	2081.8	2045.6	2021.0	2016.3
47.5°	1809.2	1838.4	1878.2	1920.4	1927.4	1961.3	1961.3	1955.5	1916.8	1901.6	1886.4
50°	1668.8	1706.2	1743.6	1794.0	1797.5	1823.2	1824.4	1818.5	1801.0	1782.3	1754.2
52.5°	1535.3	1581.0	1617.3	1658.2	1660.6	1681.6	1676.9	1681.6	1684.0	1662.9	1629.0
55°	1410.1	1456.9	1488.5	1517.8	1523.6	1537.7	1528.3	1543.5	1557.6	1538.9	1510.8
57.5°	1281.4	1331.7	1358.6	1378.5	1383.2	1394.9	1385.6	1405.5	1424.2	1412.5	1393.7
60°	1165.6	1205.3	1224.1	1242.8	1244.0	1255.7	1247.5	1267.4	1288.4	1282.6	1269.7
62.5°	1046.2	1074.3	1088.3	1108.2	1102.4	1114.1	1117.6	1135.1	1150.3	1151.5	1141.0
65°	926.8	942.0	953.7	965.4	967.8	977.1	980.7	987.7	1011.1	1013.4	1006.4
67.5°	800.4	809.8	820.3	830.9	829.7	839.1	848.4	855.4	870.7	876.5	867.1
70°	672.9	684.6	690.4	695.1	693.9	703.3	711.5	717.4	731.4	734.9	726.7
72.5°	544.2	555.9	560.5	561.7	560.5	571.1	578.1	581.6	593.3	599.2	586.3
75°	418.9	434.2	436.5	434.2	433.0	442.3	445.9	451.7	459.9	461.1	451.7
77.5°	305.4	318.3	320.6	317.1	314.8	321.8	324.2	330.0	334.7	337.0	327.7
80°	204.8	217.7	216.5	215.3	211.8	216.5	220.0	222.3	225.9	225.9	218.8
82.5°	122.9	131.1	129.9	131.1	127.6	128.7	131.1	134.6	133.4	135.7	131.1
85°	59.7	63.2	63.2	63.2	62.0	63.2	64.4	66.7	64.4	66.7	63.2
87.5°	21.1	22.2	21.1	21.1	21.1	21.1	22.2	22.2	21.1	22.2	21.1
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: P183619

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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	3249.7	3249.7	3249.7	3249.7	3249.7	3249.7	3249.7	3249.7	3249.7	3249.7
2.5°	3274.3	3255.6	3274.3	3266.1	3276.7	3273.1	3274.3	3287.2	3257.9	3250.9
5°	3315.3	3295.4	3314.1	3308.3	3316.4	3312.9	3315.3	3328.1	3297.7	3289.5
7.5°	3362.1	3341.0	3359.7	3351.6	3359.7	3356.2	3357.4	3367.9	3336.3	3329.3
10°	3405.4	3383.1	3399.5	3391.3	3396.0	3392.5	3394.9	3401.9	3367.9	3359.7
12.5°	3439.3	3417.1	3433.5	3424.1	3426.4	3421.8	3420.6	3424.1	3389.0	3379.6
15°	3467.4	3445.2	3456.9	3447.5	3446.3	3439.3	3437.0	3438.1	3403.0	3393.7
17.5°	3475.6	3449.9	3456.9	3446.3	3442.8	3437.0	3434.6	3437.0	3403.0	3393.7
20°	3459.2	3428.8	3432.3	3419.4	3414.7	3410.1	3410.1	3413.6	3380.8	3375.0
22.5°	3403.0	3377.3	3385.5	3377.3	3372.6	3367.9	3359.7	3351.6	3309.4	3301.2
25°	3239.2	3221.7	3252.1	3256.8	3243.9	3219.3	3173.7	3138.6	3077.7	3070.7
27.5°	3118.7	3082.4	3046.1	3000.5	2973.6	2963.0	2970.1	2982.9	2951.3	2939.6
30°	2984.1	2905.7	2835.5	2788.7	2771.1	2768.8	2796.9	2830.8	2836.6	2839.0
32.5°	2816.8	2717.3	2663.5	2648.2	2636.5	2633.0	2642.4	2681.0	2705.6	2727.8
35°	2627.2	2558.1	2530.0	2531.2	2519.5	2514.8	2509.0	2532.4	2558.1	2585.0
37.5°	2450.5	2420.0	2411.9	2416.5	2403.7	2396.6	2389.6	2395.5	2403.7	2413.0
40°	2284.3	2291.3	2296.0	2299.5	2283.1	2278.4	2272.6	2270.3	2256.2	2234.0
42.5°	2142.7	2161.4	2182.5	2182.5	2164.9	2162.6	2163.8	2156.7	2114.6	2084.2
45°	2021.0	2028.0	2064.3	2071.3	2056.1	2052.6	2053.8	2031.5	1964.8	1934.4
47.5°	1901.6	1905.1	1937.9	1954.3	1937.9	1934.4	1937.9	1891.1	1818.5	1803.3
50°	1781.1	1790.5	1804.5	1819.7	1804.5	1803.3	1799.8	1755.4	1684.0	1675.8
52.5°	1659.4	1678.1	1671.1	1674.6	1665.2	1666.4	1669.9	1624.3	1558.8	1544.7
55°	1535.3	1552.9	1535.3	1526.0	1522.5	1526.0	1533.0	1490.9	1439.4	1416.0
57.5°	1412.5	1423.0	1404.3	1385.6	1379.7	1387.9	1393.7	1358.6	1314.2	1296.6
60°	1284.9	1282.6	1267.4	1249.8	1238.1	1247.5	1256.8	1225.2	1185.4	1174.9
62.5°	1150.3	1148.0	1129.3	1114.1	1102.4	1109.4	1118.7	1088.3	1061.4	1052.0
65°	1012.3	1009.9	990.0	978.3	967.8	970.1	980.7	952.6	936.2	925.7
67.5°	878.8	870.7	850.8	843.7	830.9	835.5	842.6	820.3	805.1	795.8
70°	738.4	731.4	713.8	706.8	696.3	698.6	705.7	691.6	675.2	669.4
72.5°	595.6	594.5	578.1	568.7	562.9	564.1	569.9	562.9	547.7	543.0
75°	457.6	461.1	448.2	440.0	434.2	434.2	441.2	442.3	426.0	420.1
77.5°	337.0	337.0	326.5	327.7	318.3	318.3	323.0	327.7	310.1	306.6
80°	225.9	224.7	221.2	217.7	213.0	214.2	217.7	223.5	209.5	210.6
82.5°	133.4	133.4	133.4	131.1	127.6	126.4	131.1	135.7	126.4	126.4
85°	65.5	64.4	64.4	64.4	62.0	60.9	64.4	66.7	60.9	62.0
87.5°	22.2	21.1	21.1	22.2	21.1	21.1	21.1	21.1	19.9	21.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)