

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: P127961

Luminaire Tested: **LSM70W9040D010TEP**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P127961  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24508)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LSM70W9040D010TEP  
Description: PORTFOLIO SURFACE MOUNT LED LUMINAIRE  
Light Source: 90 CRI, 4000K CCT LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5812.1 lumens  
Efficiency: N/A  
Efficacy: 77.8 lumens/watt  
Spacing Criteria (0/90/45): 1.45 / 1.43 / 1.73  
Luminous Opening: Circular (Dia: 1.12' x H: 0')  
CIE Type: Direct

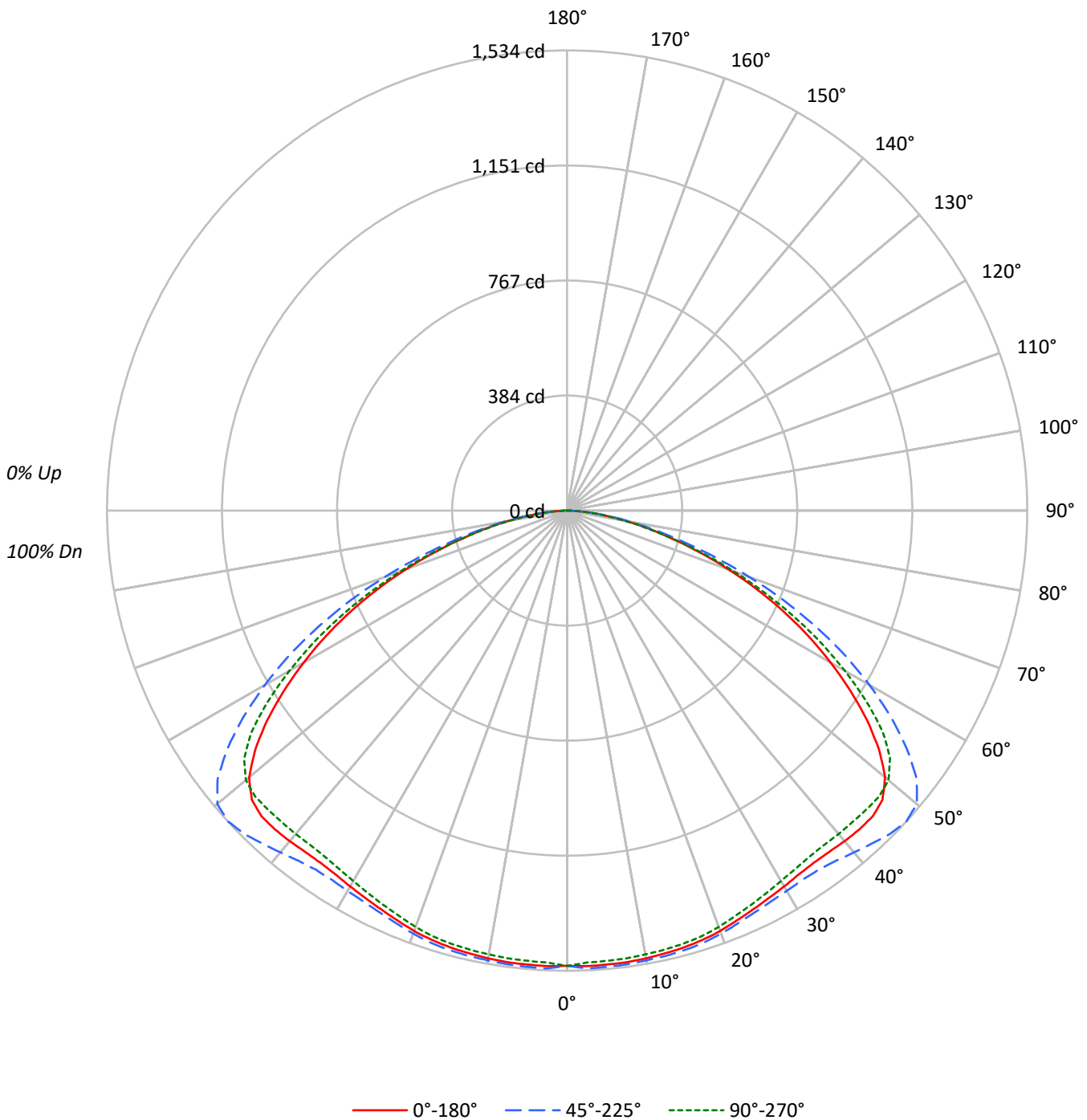
Input Watts (W): 74.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	108	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68
3	88	77	69	62	86	76	68	61	73	66	60	70	64	59	67	62	58	56
4	80	68	58	51	78	66	58	51	64	56	50	61	55	49	59	53	49	47
5	73	60	50	43	71	59	50	43	57	49	43	54	48	42	53	47	42	39
6	67	53	44	37	65	52	43	37	51	43	37	49	42	36	47	41	36	34
7	62	48	39	32	60	47	38	32	46	38	32	44	37	32	43	36	31	29
8	58	43	35	28	56	43	34	28	41	34	28	40	33	28	39	33	28	26
9	54	40	31	25	52	39	31	25	38	30	25	37	30	25	36	29	25	23
10	50	36	28	23	49	36	28	23	35	28	22	34	27	22	33	27	22	20

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	16433	16433	16433
5°	16514	16596	16377
10°	16668	16742	16520
15°	16899	17003	16758
20°	17188	17294	17023
25°	17529	17659	17327
30°	18092	18302	17828
35°	18949	19316	18616
40°	20334	21024	19893
45°	22068	23329	21591
50°	23312	25635	23553
55°	23059	26093	24235
60°	21989	25213	23156
65°	20391	23430	21295
70°	18085	20402	18642
75°	15171	16648	15346
80°	12378	13220	12117
85°	8884	9405	8672



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	144.6	2.5
10°-20°	425.8	7.3
20°-30°	678.1	11.7
30°-40°	906.5	15.6
40°-50°	1135.4	19.5
50°-60°	1165.7	20.1
60°-70°	851.9	14.7
70°-80°	413.5	7.1
80°-90°	90.5	1.6
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°	1248.5	21.5
0°-40°	2155.0	37.1
0°-60°	4456.1	76.7
0°-90°	5812.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5812.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1518	1518	1518	1518	1518	
5°	1519	1514	1527	1508	1507	145
15°	1507	1504	1517	1499	1495	427
25°	1467	1465	1478	1459	1450	679
35°	1433	1441	1461	1430	1408	903
45°	1441	1479	1523	1463	1410	1107
55°	1221	1288	1382	1344	1284	1085
65°	796	847	914	880	831	786
75°	363	382	398	382	367	392
85°	72	74	76	72	70	88
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1517.5	1517.5	1517.5	1517.5	1517.5
2.5°	1520.1	1515.0	1527.6	1509.1	1508.3
5°	1519.2	1514.2	1526.8	1508.3	1506.6
7.5°	1518.4	1514.2	1525.9	1507.4	1505.8
10°	1515.9	1510.8	1522.6	1504.9	1502.4
12.5°	1511.6	1507.4	1520.1	1501.6	1499.0
15°	1507.4	1504.1	1516.7	1499.0	1494.8
17.5°	1500.7	1497.3	1510.8	1492.3	1488.1
20°	1491.5	1488.1	1500.7	1483.0	1477.2
22.5°	1478.8	1475.5	1488.9	1470.4	1462.9
25°	1467.1	1465.4	1478.0	1458.7	1450.2
27.5°	1456.1	1456.1	1469.6	1448.6	1437.6
30°	1446.9	1448.6	1463.7	1440.1	1425.8
32.5°	1437.6	1442.7	1459.5	1432.6	1415.8
35°	1433.4	1441.0	1461.2	1430.1	1408.2
37.5°	1434.3	1447.7	1471.3	1433.4	1405.7
40°	1438.5	1458.7	1487.3	1441.8	1407.3
42.5°	1441.8	1469.6	1504.9	1451.9	1408.2
45°	1441.0	1478.8	1523.4	1462.9	1409.9
47.5°	1425.8	1474.6	1533.5	1471.3	1410.7
50°	1383.8	1442.7	1521.7	1464.5	1398.1
52.5°	1311.4	1377.1	1468.7	1422.5	1356.9
55°	1221.4	1287.9	1382.1	1344.2	1283.7
57.5°	1120.5	1187.8	1278.6	1241.6	1181.9
60°	1015.3	1078.4	1164.2	1127.2	1069.2
62.5°	906.8	964.9	1043.1	1007.8	953.1
65°	795.8	847.1	914.4	879.9	831.1
67.5°	683.1	726.0	779.8	749.5	708.3
70°	571.2	604.8	644.4	620.0	588.8
72.5°	461.8	492.9	516.5	495.5	473.6
75°	362.6	381.9	397.9	381.9	366.8
77.5°	277.6	288.5	296.9	284.3	272.6
80°	198.5	208.6	212.0	202.7	194.3
82.5°	129.5	136.3	138.8	132.1	127.0
85°	71.5	74.0	75.7	72.3	69.8
87.5°	22.7	23.6	25.2	22.7	21.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)