

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: P127974

Luminaire Tested: **LSM90W9027D010TEP**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P127974
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: LSM90W9027D010TEP
Description: PORTFOLIO SURFACE MOUNT LED LUMINAIRE
Light Source: 90 CRI, 2700K CCT LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6444.9 lumens
Efficiency: N/A
Efficacy: 66.0 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

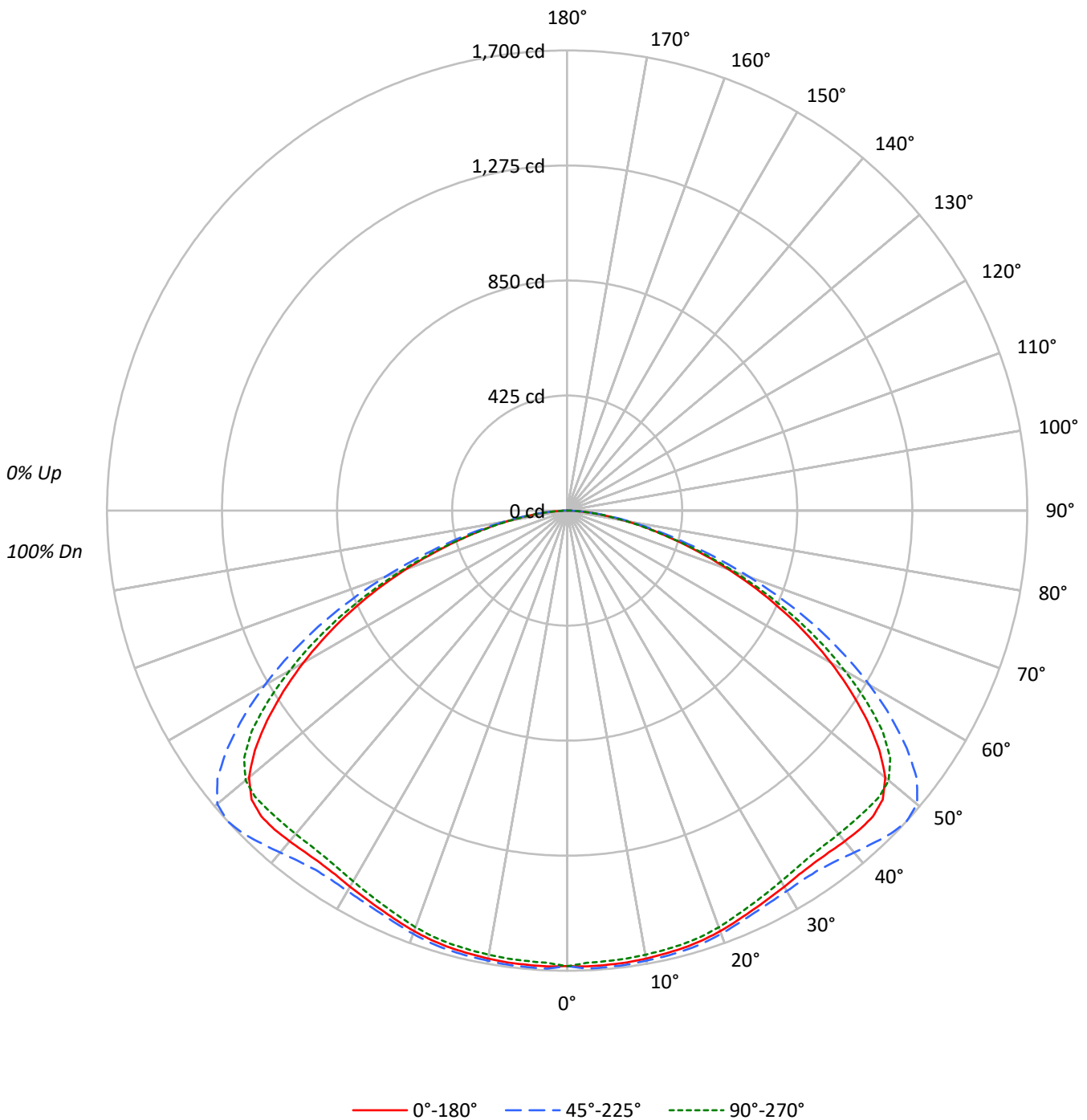
Input Watts (W): 97.58
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	18222	18222	18222
5°	18312	18403	18159
10°	18483	18565	18319
15°	18740	18854	18583
20°	19058	19176	18876
25°	19437	19582	19214
30°	20061	20295	19770
35°	21012	21419	20642
40°	22548	23313	22060
45°	24470	25870	23942
50°	25849	28427	26117
55°	25570	28934	26873
60°	24384	27960	25677
65°	22610	25979	23614
70°	20054	22622	20675
75°	16819	18459	17016
80°	13725	14661	13439
85°	9853	10437	9617



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.3	2.5
10°-20°	472.2	7.3
20°-30°	751.9	11.7
30°-40°	1005.2	15.6
40°-50°	1259.0	19.5
50°-60°	1292.6	20.1
60°-70°	944.7	14.7
70°-80°	458.5	7.1
80°-90°	100.4	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°	1384.4	21.5
0°-40°	2389.6	37.1
0°-60°	4941.3	76.7
0°-90°	6444.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6444.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1683	1683	1683	1683	1683	
5°	1685	1679	1693	1672	1671	161
15°	1672	1668	1682	1662	1658	473
25°	1627	1625	1639	1618	1608	753
35°	1590	1598	1620	1586	1562	1001
45°	1598	1640	1689	1622	1563	1227
55°	1354	1428	1533	1491	1423	1203
65°	882	939	1014	976	922	872
75°	402	424	441	424	407	434
85°	79	82	84	80	77	97
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1682.8	1682.8	1682.8	1682.8	1682.8
2.5°	1685.6	1680.0	1693.9	1673.4	1672.5
5°	1684.6	1679.0	1693.0	1672.5	1670.6
7.5°	1683.7	1679.0	1692.1	1671.6	1669.7
10°	1680.9	1675.3	1688.4	1668.8	1666.0
12.5°	1676.2	1671.6	1685.6	1665.0	1662.2
15°	1671.6	1667.8	1681.8	1662.2	1657.6
17.5°	1664.1	1660.4	1675.3	1654.8	1650.1
20°	1653.8	1650.1	1664.1	1644.5	1638.0
22.5°	1639.8	1636.1	1651.0	1630.5	1622.1
25°	1626.8	1624.9	1638.9	1617.5	1608.1
27.5°	1614.7	1614.7	1629.6	1606.3	1594.1
30°	1604.4	1606.3	1623.1	1596.9	1581.1
32.5°	1594.1	1599.7	1618.4	1588.5	1569.9
35°	1589.5	1597.9	1620.3	1585.7	1561.5
37.5°	1590.4	1605.3	1631.5	1589.5	1558.7
40°	1595.1	1617.5	1649.2	1598.8	1560.6
42.5°	1598.8	1629.6	1668.8	1610.0	1561.5
45°	1597.9	1639.8	1689.3	1622.1	1563.4
47.5°	1581.1	1635.2	1700.5	1631.5	1564.3
50°	1534.4	1599.7	1687.4	1624.0	1550.3
52.5°	1454.2	1527.0	1628.7	1577.3	1504.6
55°	1354.4	1428.1	1532.6	1490.6	1423.4
57.5°	1242.5	1317.1	1417.8	1376.8	1310.6
60°	1125.9	1195.8	1291.0	1249.9	1185.6
62.5°	1005.5	1069.9	1156.7	1117.5	1056.9
65°	882.4	939.3	1013.9	975.7	921.6
67.5°	757.4	805.0	864.7	831.1	785.4
70°	633.4	670.7	714.5	687.5	653.0
72.5°	512.1	546.6	572.7	549.4	525.2
75°	402.0	423.5	441.2	423.5	406.7
77.5°	307.8	319.9	329.3	315.3	302.2
80°	220.1	231.3	235.1	224.8	215.5
82.5°	143.6	151.1	153.9	146.4	140.9
85°	79.3	82.1	84.0	80.2	77.4
87.5°	25.2	26.1	28.0	25.2	23.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)