

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: P127977

Luminaire Tested: **LSM90W9040D010TEP**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P127977
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: LSM90W9040D010TEP
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: 7134.1 lumens
Efficiency: N/A
Efficacy: 73.1 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

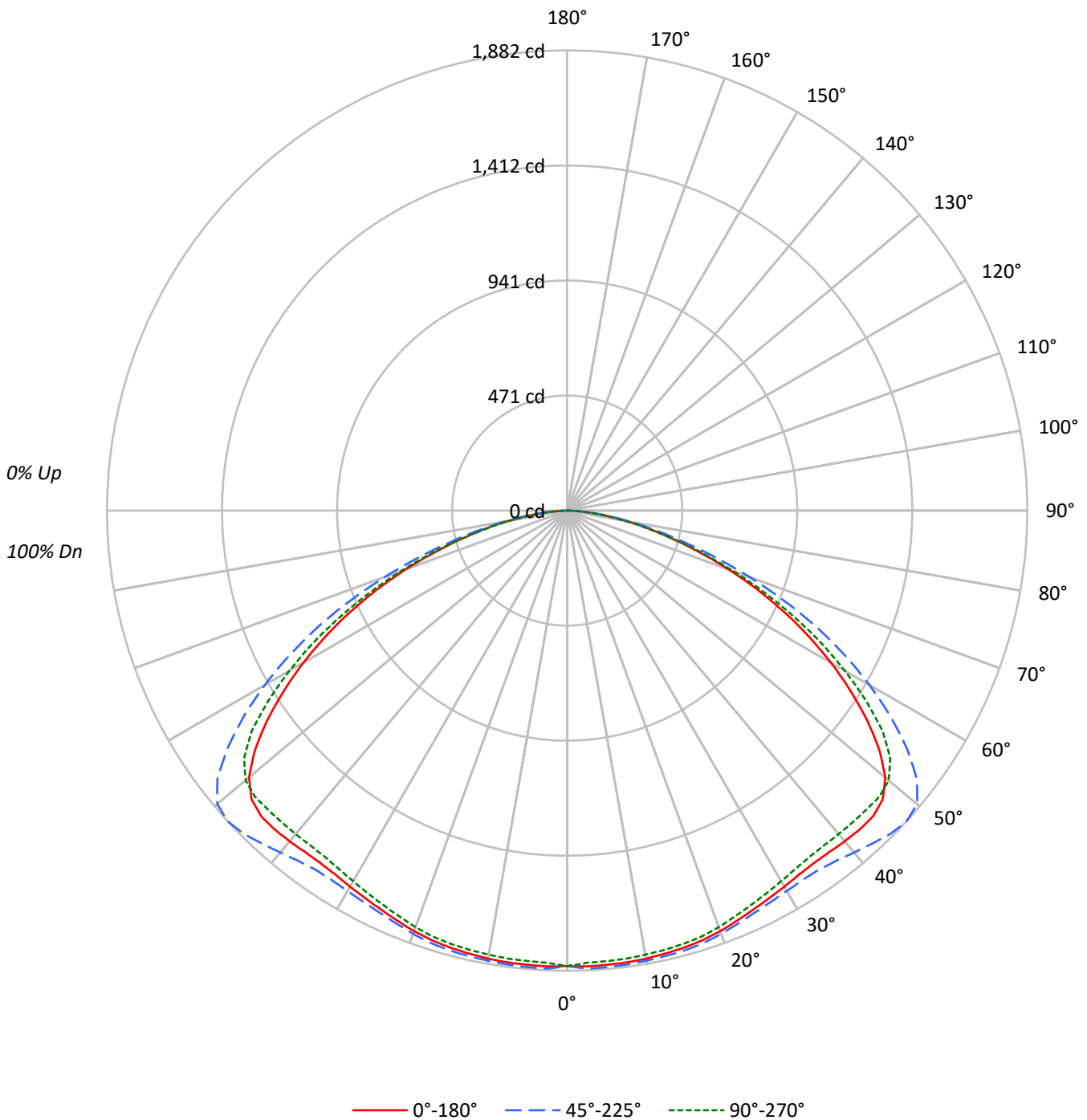
Input Watts (W): 97.58
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	20171	20171	20171
5°	20270	20372	20102
10°	20460	20550	20277
15°	20743	20871	20569
20°	21096	21228	20895
25°	21516	21676	21269
30°	22207	22464	21884
35°	23259	23709	22850
40°	24960	25805	24420
45°	27088	28636	26501
50°	28614	31467	28910
55°	28306	32029	29748
60°	26992	30948	28423
65°	25028	28759	26140
70°	22197	25041	22885
75°	18618	20434	18836
80°	15197	16226	14873
85°	10909	11542	10648



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	177.5	2.5
10°-20°	522.7	7.3
20°-30°	832.3	11.7
30°-40°	1112.7	15.6
40°-50°	1393.7	19.5
50°-60°	1430.9	20.1
60°-70°	1045.7	14.7
70°-80°	507.6	7.1
80°-90°	111.1	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°	1532.5	21.5
0°-40°	2645.2	37.1
0°-60°	5469.7	76.7
0°-90°	7134.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7134.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1863	1863	1863	1863	1863	
5°	1865	1859	1874	1851	1849	178
15°	1850	1846	1862	1840	1835	524
25°	1801	1799	1814	1790	1780	833
35°	1760	1769	1794	1755	1728	1108
45°	1769	1815	1870	1796	1730	1359
55°	1499	1581	1696	1650	1576	1332
65°	977	1040	1122	1080	1020	965
75°	445	469	488	469	450	481
85°	88	91	93	89	86	108
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1862.7	1862.7	1862.7	1862.7	1862.7
2.5°	1865.8	1859.6	1875.1	1852.4	1851.4
5°	1864.8	1858.6	1874.1	1851.4	1849.3
7.5°	1863.7	1858.6	1873.0	1850.3	1848.3
10°	1860.7	1854.5	1868.9	1847.2	1844.1
12.5°	1855.5	1850.3	1865.8	1843.1	1840.0
15°	1850.3	1846.2	1861.7	1840.0	1834.8
17.5°	1842.1	1837.9	1854.5	1831.7	1826.6
20°	1830.7	1826.6	1842.1	1820.4	1813.2
22.5°	1815.2	1811.1	1827.6	1804.9	1795.6
25°	1800.8	1798.7	1814.2	1790.4	1780.1
27.5°	1787.3	1787.3	1803.9	1778.0	1764.6
30°	1776.0	1778.0	1796.6	1767.7	1750.2
32.5°	1764.6	1770.8	1791.5	1758.4	1737.8
35°	1759.5	1768.8	1793.5	1755.3	1728.5
37.5°	1760.5	1777.0	1805.9	1759.5	1725.4
40°	1765.7	1790.4	1825.5	1769.8	1727.5
42.5°	1769.8	1803.9	1847.2	1782.2	1728.5
45°	1768.8	1815.2	1869.9	1795.6	1730.5
47.5°	1750.2	1810.1	1882.3	1805.9	1731.6
50°	1698.5	1770.8	1867.9	1797.7	1716.1
52.5°	1609.7	1690.3	1802.8	1746.0	1665.5
55°	1499.3	1580.8	1696.5	1650.0	1575.7
57.5°	1375.4	1458.0	1569.5	1524.0	1450.7
60°	1246.3	1323.7	1429.0	1383.6	1312.4
62.5°	1113.1	1184.3	1280.4	1237.0	1169.9
65°	976.8	1039.8	1122.4	1080.0	1020.2
67.5°	838.4	891.1	957.2	920.0	869.4
70°	701.1	742.4	790.9	761.0	722.8
72.5°	566.9	605.1	634.0	608.2	581.3
75°	445.0	468.8	488.4	468.8	450.2
77.5°	340.7	354.2	364.5	349.0	334.5
80°	243.7	256.1	260.2	248.8	238.5
82.5°	159.0	167.3	170.4	162.1	155.9
85°	87.8	90.9	92.9	88.8	85.7
87.5°	27.9	28.9	31.0	27.9	25.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)