

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: CORELITE

Report Number: P511775

Luminaire Tested: **SQW-F-050U-125D-840-1D-UNV-STD-W-4**

Issue Date: 4/9/2021

Test Information

Test Method: LM-79-08
Report Number: P511775
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-16,
Test Lab: INNOVATION CENTER
Issue Date: 4/9/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQW-F-050U-125D-840-1D-UNV-STD-W-4
Description: CORELITE SQW WALL MOUNTED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

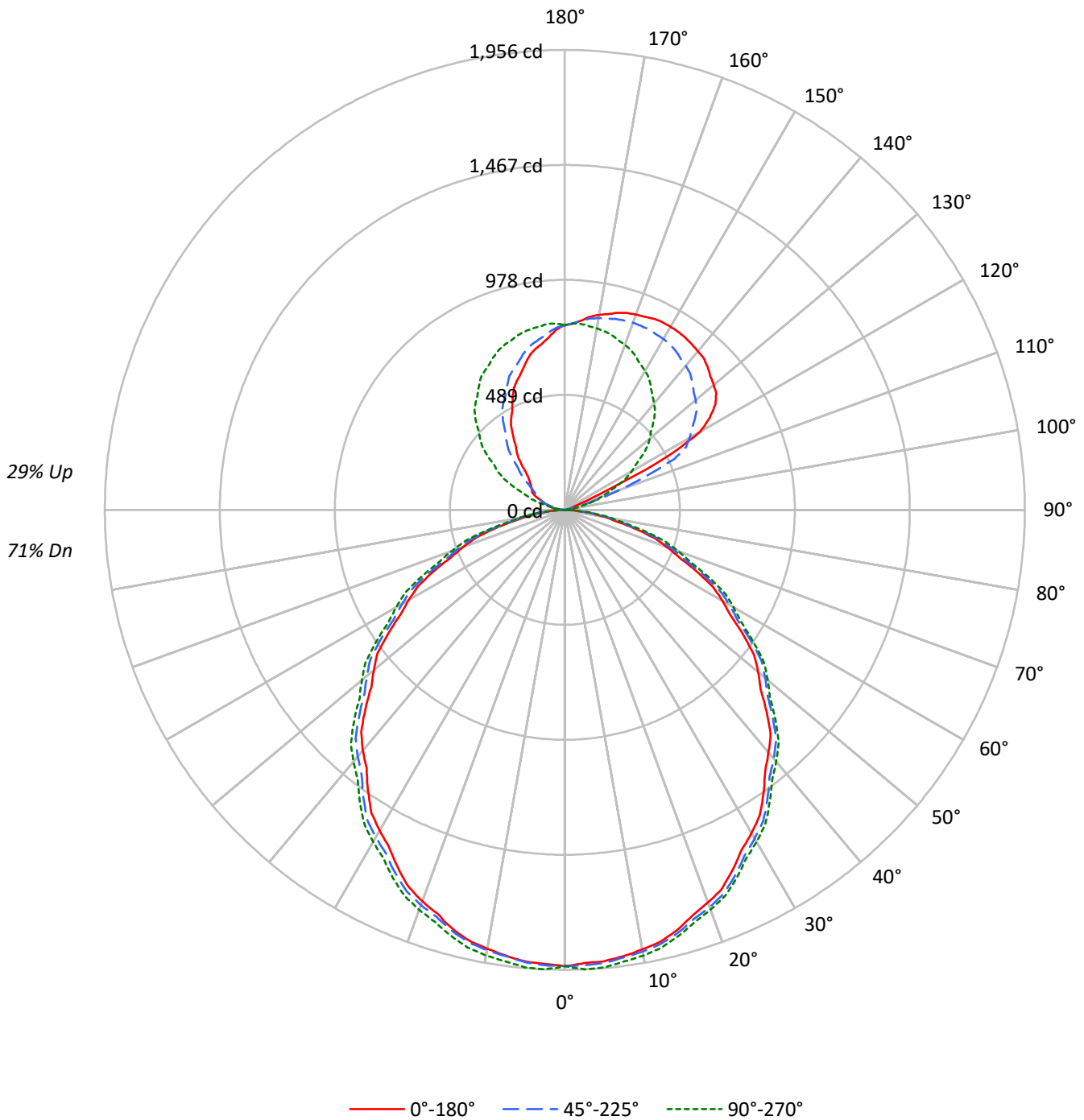
Lumens per Lamp: N/A
Luminaire Lumens: 7482.3 lumens
Efficiency: N/A
Efficacy: 122.3 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.25 / 1.35
Luminous Opening: Rectangular (W 4' x L: 0.08' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 61.2
Input Voltage (V): 120
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: 24 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	112	112	112	112	106	106	106	106	95	95	95	85	85	85	75	75	75	71
1	102	98	94	90	97	93	89	86	83	81	78	75	72	71	66	65	63	60
2	93	85	79	74	88	81	75	71	73	68	64	65	62	59	58	56	53	50
3	85	75	67	61	80	71	64	59	64	59	54	58	53	50	52	48	45	42
4	78	66	58	52	73	63	56	50	57	51	46	51	46	42	46	42	39	36
5	71	59	51	44	67	56	49	43	51	45	40	46	41	37	41	37	34	31
6	66	53	45	39	62	51	43	37	46	40	35	42	36	32	38	33	30	27
7	61	48	40	34	57	46	38	33	42	35	31	38	33	29	34	30	26	24
8	57	44	36	30	53	42	34	29	38	32	27	35	29	25	31	27	24	21
9	53	40	32	27	50	38	31	26	35	29	25	32	27	23	29	25	21	19
10	49	37	29	24	47	35	28	24	32	26	22	30	24	21	27	23	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	62679	62679	62679
5°	62471	63297	62503
10°	62249	63121	62144
15°	61827	62683	61687
20°	61103	62203	60883
25°	60169	61572	59827
30°	59194	60782	58717
35°	58048	59853	57504
40°	56777	58931	56284
45°	55381	57861	54801
50°	53920	56592	53277
55°	52150	55089	51609
60°	49923	53430	49439
65°	47106	51332	46778
70°	43525	48350	43223
75°	38253	43706	38391
80°	30888	36225	31688
85°	17747	24861	21304



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	183.5	2.5
10°-20°	522.9	7.0
20°-30°	783.7	10.5
30°-40°	932.0	12.5
40°-50°	954.4	12.8
50°-60°	850.9	11.4
60°-70°	635.7	8.5
70°-80°	348.3	4.7
80°-90°	81.9	1.1
90°-100°	19.3	0.3
100°-110°	88.2	1.2
110°-120°	258.5	3.5
120°-130°	389.1	5.2
130°-140°	417.9	5.6
140°-150°	398.7	5.3
150°-160°	328.1	4.4
160°-170°	214.8	2.9
170°-180°	74.5	1.0
0°-30°	1490.0	19.9
0°-40°	2422.1	32.4
0°-60°	4227.4	56.5
0°-90°	5293.2	70.7
90°-120°	365.9	4.9
90°-150°	1571.6	21.0
90°-180°	2189.0	29.3
0°-180°	7482.3	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1941	1941	1941	1941	1941	
5°	1927	1934	1953	1931	1928	183
15°	1849	1862	1875	1854	1845	521
25°	1689	1714	1728	1706	1679	778
35°	1472	1502	1518	1493	1459	920
45°	1213	1251	1267	1236	1200	935
55°	926	962	978	952	917	827
65°	616	646	672	641	612	610
75°	307	330	350	327	308	327
85°	48	64	67	66	58	68
90°	1	1	1	2	4	1
95°	6	7	14	24	23	6
105°	24	57	101	67	71	28
115°	207	514	251	126	139	277
125°	782	676	400	189	174	687
135°	859	768	535	318	244	663
145°	894	824	638	456	384	560
155°	897	847	717	582	524	414
165°	867	840	770	685	646	246
175°	808	808	794	759	740	78
180°	785	785	785	785	785	



TEST NUMBER: P511775

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1941.0	1941.0	1941.0	1941.0	1941.0	1941.0	1941.0	1941.0	1941.0
2.5°	1929.1	1938.3	1939.3	1938.0	1956.3	1938.9	1939.3	1937.5	1932.5
5°	1927.2	1929.3	1933.6	1930.9	1952.7	1929.8	1931.4	1927.2	1928.2
7.5°	1913.8	1915.2	1919.9	1914.9	1937.0	1914.7	1915.3	1910.8	1913.1
10°	1898.4	1901.6	1908.0	1902.1	1925.0	1901.1	1901.6	1896.3	1895.2
12.5°	1881.4	1882.8	1891.0	1885.1	1906.3	1883.2	1884.6	1876.7	1877.3
15°	1849.4	1854.7	1862.2	1853.1	1875.0	1852.1	1853.7	1846.2	1845.2
17.5°	1807.9	1817.1	1824.7	1815.7	1837.3	1813.8	1815.2	1804.9	1801.5
20°	1778.1	1786.4	1798.3	1789.2	1810.1	1784.0	1788.8	1771.7	1771.7
22.5°	1744.9	1749.9	1766.8	1756.9	1778.5	1752.5	1756.4	1735.1	1735.9
25°	1688.7	1696.0	1714.2	1706.2	1728.1	1701.0	1705.7	1681.2	1679.1
27.5°	1629.3	1637.8	1656.7	1649.3	1671.0	1644.1	1647.6	1620.7	1617.3
30°	1587.5	1596.9	1614.1	1609.3	1630.1	1604.1	1606.7	1578.9	1574.7
32.5°	1541.5	1552.6	1569.8	1569.2	1586.7	1563.1	1563.2	1534.6	1529.6
35°	1472.5	1482.9	1502.3	1502.7	1518.3	1494.4	1492.8	1464.9	1458.7
37.5°	1398.9	1410.7	1430.6	1433.2	1447.4	1425.1	1418.7	1390.9	1385.4
40°	1346.9	1360.4	1382.0	1385.5	1398.0	1374.1	1369.3	1341.4	1335.2
42.5°	1294.9	1308.5	1330.1	1335.2	1346.0	1326.3	1316.4	1288.6	1281.5
45°	1212.7	1227.3	1251.1	1258.7	1267.0	1249.3	1236.2	1208.3	1200.0
47.5°	1129.5	1143.0	1167.8	1178.4	1183.6	1168.6	1154.8	1125.9	1116.7
50°	1073.3	1086.8	1111.6	1121.3	1126.5	1114.0	1097.7	1068.8	1060.5
52.5°	1014.5	1028.0	1052.8	1064.2	1068.6	1057.7	1041.5	1012.6	1004.3
55°	926.3	937.8	962.5	976.4	978.5	971.2	951.9	924.0	916.7
57.5°	834.3	845.6	870.1	885.1	888.6	881.3	860.7	833.1	826.9
60°	773.0	783.4	807.1	822.1	827.3	820.0	798.6	771.8	765.5
62.5°	710.8	720.4	743.2	759.1	766.0	757.9	735.5	709.6	703.4
65°	616.5	624.8	646.3	667.7	671.8	662.5	641.0	616.4	612.2
67.5°	523.2	529.5	549.6	570.6	576.0	566.4	544.3	523.3	518.3
70°	461.0	467.3	486.6	505.9	512.1	501.7	481.3	462.0	457.8
72.5°	398.9	404.3	423.6	441.2	447.4	438.7	418.2	400.7	396.5
75°	306.6	312.9	330.1	346.1	350.3	344.1	326.9	311.9	307.7
77.5°	220.6	224.6	239.4	251.8	255.3	250.7	237.6	224.4	222.3
80°	166.1	169.2	183.1	193.8	194.8	192.8	183.1	172.4	170.4
82.5°	115.8	119.8	132.9	141.8	139.5	140.7	133.7	123.9	122.7
85°	47.9	50.0	63.9	72.3	67.1	72.3	66.0	58.5	57.5
87.5°	5.3	6.2	11.3	20.6	18.1	22.3	18.3	13.4	13.7
90°	1.1	1.1	1.1	1.1	1.1	1.1	2.2	3.3	4.4
92.5°	2.9	2.9	2.9	3.7	3.7	8.9	6.6	5.9	7.0
95°	5.5	5.5	6.6	16.4	14.3	21.8	24.1	23.0	23.0
97.5°	9.7	9.7	12.5	43.6	32.2	29.7	40.6	41.9	41.5
100°	13.2	13.2	18.6	69.7	47.2	38.6	45.0	51.6	53.7
102.5°	16.7	17.5	28.3	107.8	66.5	49.3	51.1	57.7	59.9
105°	24.1	26.3	57.0	181.3	100.9	65.5	66.9	68.1	71.3
107.5°	35.8	43.7	144.5	258.8	142.3	85.9	88.8	85.3	85.5
110°	47.2	65.4	244.5	308.3	172.2	100.3	102.0	97.6	98.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	77.0	129.5	371.8	347.7	203.8	117.3	111.6	116.0	113.6
115°	207.3	338.1	514.3	404.5	251.1	146.0	126.1	136.1	139.3
117.5°	495.2	583.6	581.4	452.5	298.3	180.8	139.5	148.8	154.2
120°	664.6	677.4	613.0	482.3	329.0	204.6	149.1	155.8	161.2
122.5°	730.4	714.9	639.3	509.6	357.9	230.1	162.3	161.1	167.3
125°	781.9	754.0	675.5	547.2	400.3	272.7	188.6	171.1	174.4
127.5°	811.1	780.2	706.7	582.4	443.3	315.2	223.5	187.7	185.8
130°	826.9	796.8	726.0	604.5	470.5	345.0	248.9	201.7	196.3
132.5°	840.0	812.6	743.5	625.7	496.8	373.9	276.1	222.6	213.0
135°	858.7	832.9	767.6	654.2	535.2	415.1	318.0	258.5	244.5
137.5°	874.5	848.3	788.0	681.3	568.3	455.3	358.8	302.3	286.0
140°	880.6	857.0	799.4	697.2	591.1	480.6	386.0	328.7	315.8
142.5°	886.7	864.0	810.0	713.1	610.4	505.1	414.1	356.8	343.0
145°	893.8	871.2	823.6	733.7	638.2	540.7	456.2	397.8	383.8
147.5°	897.5	877.3	833.7	751.0	665.4	573.4	497.7	438.8	426.2
150°	899.2	879.9	838.9	762.5	682.1	595.3	523.1	466.9	455.1
152.5°	899.2	879.1	841.6	771.4	696.1	615.3	547.7	494.1	483.2
155°	897.0	877.7	846.6	782.6	717.2	644.3	582.3	536.0	524.2
157.5°	888.3	876.7	846.6	792.9	735.4	671.3	616.1	574.8	564.3
160°	883.9	873.2	846.6	798.3	746.8	687.8	637.1	598.5	588.9
162.5°	877.7	867.0	844.8	801.9	756.5	702.6	657.3	619.7	612.6
165°	867.4	856.7	840.0	805.2	769.8	723.7	685.4	653.4	645.9
167.5°	852.7	846.7	833.2	806.3	778.0	742.6	709.1	683.5	677.5
170°	842.2	837.9	828.0	805.5	784.1	753.0	724.9	702.8	698.6
172.5°	829.1	826.5	820.1	804.8	788.5	763.4	739.8	718.7	715.2
175°	808.2	810.4	808.2	801.5	794.0	776.8	758.9	743.4	740.2
177.5°	792.2	792.2	794.0	793.9	793.1	784.5	776.4	767.7	769.4
180°	785.2	785.2	785.2	785.2	785.2	785.2	785.2	785.2	785.2

(END OF REPORT)