

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: P511846

Luminaire Tested: **SQW-F-100U-050D-835-1D-UNV-STD-W-4**

Issue Date: 4/9/2021

Test Information

Test Method: LM-79-08
Report Number: P511846
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-18,
Test Lab: INNOVATION CENTER
Issue Date: 4/9/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQW-F-100U-050D-835-1D-UNV-STD-W-4
Description: CORELITE SQW WALL MOUNTED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

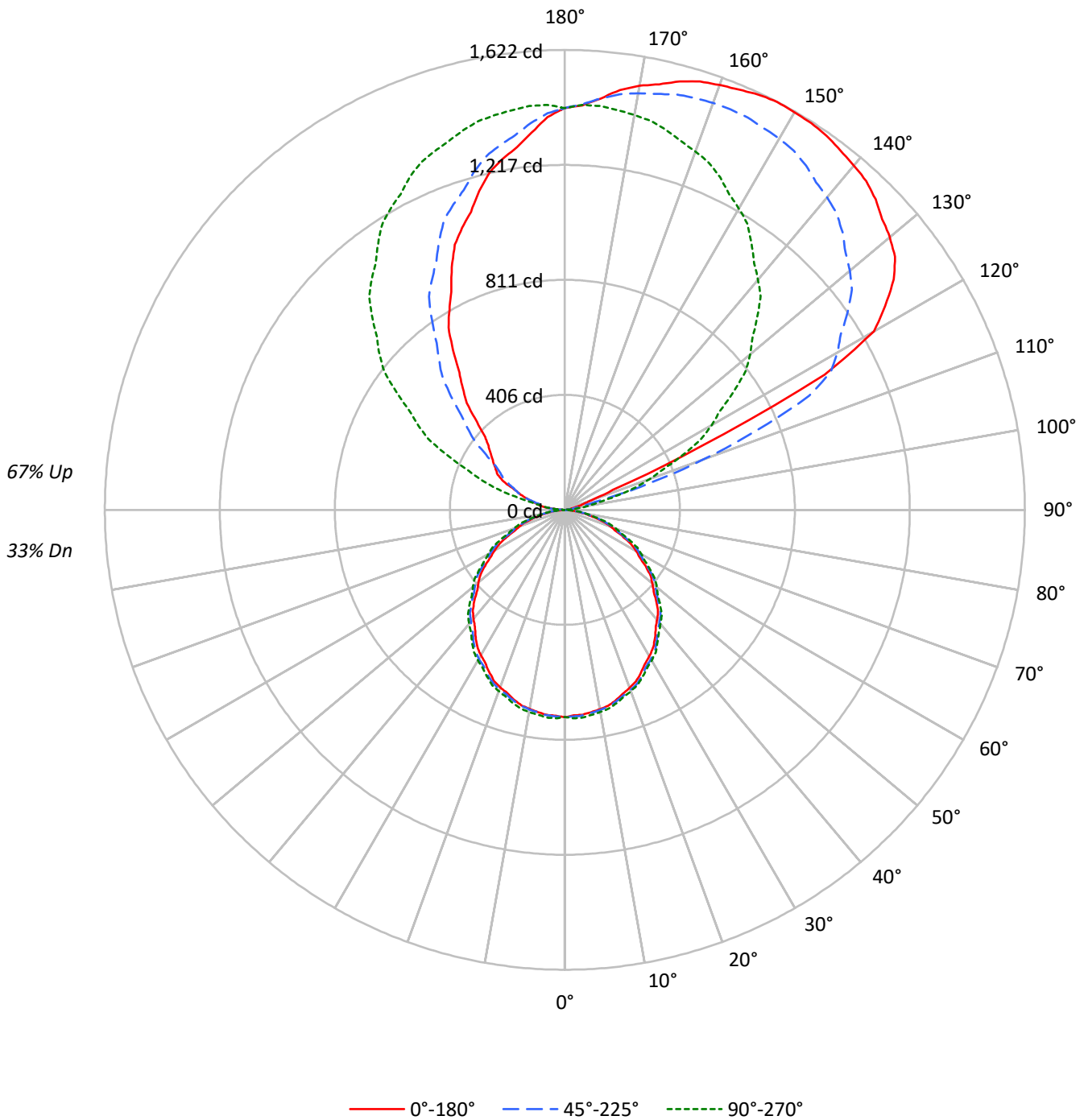
Lumens per Lamp: N/A
Luminaire Lumens: 5955.1 lumens
Efficiency: N/A
Efficacy: 135.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.25 / 1.35
Luminous Opening: Rectangular (W 4' x L: 0.08' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 44
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	103	103	103	103	93	93	93	93	74	74	74	57	57	57	41	41	41	33
1	94	90	86	83	85	81	78	75	65	63	61	50	48	47	36	35	34	28
2	86	78	72	67	77	71	66	61	57	53	50	44	41	39	32	30	29	23
3	78	69	62	56	70	62	56	51	50	46	42	39	36	33	28	26	25	20
4	71	61	53	47	64	55	48	43	44	39	36	34	31	28	25	23	21	17
5	65	54	46	40	59	49	42	37	39	34	31	31	27	24	22	20	18	15
6	60	48	40	35	54	44	37	32	35	30	27	28	24	21	20	18	16	13
7	55	43	36	30	50	39	33	28	32	27	23	25	21	19	18	16	14	11
8	51	39	32	27	46	36	29	25	29	24	21	23	19	17	17	14	13	10
9	48	36	28	24	43	33	26	22	27	22	18	21	17	15	16	13	11	9
10	44	33	26	21	40	30	24	19	24	20	16	19	16	13	14	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	23605	23605	23605
5°	23501	23825	23533
10°	23412	23740	23379
15°	23235	23602	23168
20°	22955	23402	22887
25°	22625	23124	22483
30°	22223	22857	22074
35°	21839	22470	21603
40°	21330	22131	21119
45°	20779	21738	20550
50°	20246	21250	19944
55°	19592	20718	19311
60°	18729	20086	18471
65°	17498	19102	17268
70°	16145	18033	15956
75°	14223	16344	14099
80°	11530	13761	11716
85°	6669	9263	7781



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.0	1.2
10°-20°	196.7	3.3
20°-30°	294.7	4.9
30°-40°	350.3	5.9
40°-50°	358.5	6.0
50°-60°	319.7	5.4
60°-70°	237.2	4.0
70°-80°	129.9	2.2
80°-90°	31.5	0.5
90°-100°	34.8	0.6
100°-110°	164.5	2.8
110°-120°	483.5	8.1
120°-130°	702.9	11.8
130°-140°	752.0	12.6
140°-150°	716.8	12.0
150°-160°	591.4	9.9
160°-170°	387.4	6.5
170°-180°	134.4	2.3
0°-30°	560.4	9.4
0°-40°	910.7	15.3
0°-60°	1588.9	26.7
0°-90°	1987.4	33.4
90°-120°	682.8	11.5
90°-150°	2854.5	47.9
90°-180°	3968.0	66.6
0°-180°	5955.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	731	731	731	731	731	
5°	725	728	735	727	726	69
15°	695	700	706	697	693	196
25°	635	645	649	643	631	292
35°	554	564	570	562	548	346
45°	455	469	476	465	450	351
55°	348	360	368	359	343	310
65°	229	240	250	239	226	227
75°	114	122	131	122	113	121
85°	18	24	25	26	21	25
90°	3	3	2	4	8	2
95°	10	12	27	42	38	11
105°	44	123	182	116	124	54
115°	520	951	461	220	240	590
125°	1416	1218	726	338	312	1254
135°	1549	1384	960	567	438	1196
145°	1610	1482	1148	818	687	1009
155°	1616	1526	1294	1048	943	747
165°	1564	1516	1386	1234	1164	444
175°	1456	1456	1430	1370	1336	141
180°	1417	1417	1417	1417	1417	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	731.0	731.0	731.0	731.0	731.0	731.0	731.0	731.0	731.0
2.5°	725.4	728.5	729.4	728.8	735.8	729.5	729.4	728.6	727.0
5°	725.0	726.0	728.0	726.2	735.0	726.2	727.0	725.0	726.0
7.5°	719.6	720.6	721.8	720.8	728.8	720.8	721.4	719.4	719.4
10°	714.0	715.0	717.0	715.2	724.0	715.2	715.0	713.0	713.0
12.5°	707.6	708.6	710.6	708.8	717.6	708.8	708.6	705.8	706.6
15°	695.0	697.9	700.0	697.2	706.0	697.2	697.0	695.0	693.0
17.5°	680.0	682.9	686.4	683.4	691.4	682.4	683.4	679.0	677.2
20°	668.0	670.9	676.0	672.2	681.0	671.2	673.0	667.0	666.0
22.5°	655.2	657.4	664.8	661.0	669.0	660.0	661.0	653.4	652.4
25°	635.0	637.0	645.0	642.2	649.0	640.2	643.0	632.0	631.0
27.5°	612.0	614.9	622.2	620.4	628.2	618.4	621.2	609.8	608.0
30°	596.0	598.9	607.0	605.2	613.0	603.2	606.0	593.0	592.0
32.5°	578.4	582.9	590.2	589.9	596.2	587.2	588.4	576.2	574.4
35°	554.0	556.9	564.0	564.1	570.0	562.2	562.0	550.0	548.0
37.5°	526.0	529.9	537.4	538.5	544.2	535.6	534.2	523.3	520.2
40°	506.0	509.9	519.0	520.1	525.0	517.2	515.0	504.9	501.0
42.5°	486.8	490.7	499.8	500.9	505.8	498.8	495.0	485.7	480.2
45°	455.0	459.9	469.0	472.1	476.0	469.2	465.0	453.9	450.0
47.5°	424.6	428.5	437.8	442.8	444.6	439.9	434.6	422.7	418.6
50°	403.0	406.9	417.0	422.0	423.0	419.1	413.0	401.9	397.0
52.5°	380.6	384.5	395.4	400.4	401.4	397.5	391.4	380.3	375.4
55°	348.0	351.9	360.0	368.0	368.0	366.0	359.0	346.9	343.0
57.5°	313.2	316.9	327.0	334.0	334.2	331.5	324.2	313.1	309.2
60°	290.0	292.9	303.0	310.0	311.0	309.0	301.0	289.9	286.0
62.5°	264.4	268.1	278.2	286.0	287.8	285.1	276.2	265.9	260.4
65°	229.0	231.0	240.0	248.0	250.0	247.1	239.0	228.9	226.0
67.5°	194.2	195.4	204.0	212.0	214.2	211.1	203.0	196.1	191.4
70°	171.0	173.0	180.0	188.1	191.0	187.1	179.0	172.9	169.0
72.5°	147.8	149.8	156.8	164.1	167.0	163.9	156.6	150.5	146.6
75°	114.0	115.0	122.0	129.0	131.0	128.1	122.0	116.9	113.0
77.5°	82.0	83.0	90.4	94.6	96.4	94.6	89.8	84.9	82.2
80°	62.0	63.0	68.0	73.0	74.0	73.0	69.0	65.0	63.0
82.5°	42.8	43.8	49.6	53.0	53.2	53.8	50.6	47.3	44.6
85°	18.0	19.0	24.0	27.0	25.0	27.9	26.0	23.0	21.0
87.5°	3.0	3.0	5.4	7.6	7.6	8.6	7.2	7.0	5.6
90°	3.0	3.0	3.0	2.0	2.0	2.9	3.9	6.9	7.9
92.5°	5.3	5.3	5.3	6.7	7.5	15.4	10.3	11.6	11.1
95°	9.9	10.8	11.8	30.5	26.6	39.2	42.4	40.4	37.5
97.5°	17.4	18.3	24.7	83.5	59.0	53.2	69.5	73.5	69.7
100°	23.7	24.6	36.5	135.0	85.8	68.5	78.9	91.8	91.8
102.5°	30.8	32.5	57.8	203.7	120.6	86.2	90.8	102.9	106.0
105°	44.4	49.2	123.3	344.6	182.5	115.0	116.4	121.4	124.3
107.5°	69.3	88.9	318.7	477.3	260.3	150.3	153.5	151.7	150.4
110°	97.7	142.1	523.9	558.9	318.7	177.8	175.6	174.6	171.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	182.9	303.7	734.7	630.4	376.3	208.4	193.0	204.5	199.3
115°	520.0	739.9	951.1	729.9	460.8	262.0	220.0	235.9	239.8
117.5°	1032.2	1116.6	1057.9	814.2	543.3	323.7	244.7	259.3	266.8
120°	1258.0	1239.7	1110.0	870.9	596.9	367.3	264.4	273.5	280.2
122.5°	1339.3	1296.3	1153.4	919.9	648.2	414.8	289.7	286.1	294.4
125°	1415.9	1359.9	1218.5	986.7	726.2	490.8	338.4	306.0	311.8
127.5°	1467.4	1408.9	1275.8	1051.3	802.9	568.9	402.2	337.5	331.5
130°	1495.8	1438.9	1311.3	1087.9	853.5	621.0	447.9	365.7	351.3
132.5°	1517.9	1465.6	1342.1	1127.4	896.9	670.5	495.3	402.7	381.2
135°	1549.1	1499.9	1384.3	1180.0	960.0	743.9	567.3	469.0	438.1
137.5°	1572.9	1527.0	1418.0	1225.7	1021.8	815.1	640.7	543.1	511.3
140°	1585.6	1541.2	1438.6	1253.6	1059.7	860.0	689.7	591.3	559.4
142.5°	1596.6	1553.8	1455.9	1280.6	1096.0	904.0	741.8	640.2	610.0
145°	1610.2	1569.7	1482.0	1319.2	1147.5	969.0	817.9	714.7	686.7
147.5°	1616.7	1580.5	1502.1	1353.3	1197.4	1031.1	891.5	792.8	762.7
150°	1619.1	1584.4	1511.6	1374.0	1227.4	1071.1	937.3	844.9	814.0
152.5°	1621.5	1585.2	1517.9	1391.6	1255.0	1108.0	982.3	894.7	866.9
155°	1616.2	1584.3	1526.4	1413.2	1294.5	1160.4	1047.8	967.4	943.2
157.5°	1603.9	1582.5	1528.1	1430.6	1325.9	1208.0	1109.4	1036.4	1012.7
160°	1594.4	1576.1	1527.4	1440.3	1344.8	1237.7	1146.5	1079.9	1057.7
162.5°	1584.2	1565.1	1523.4	1446.9	1363.0	1265.9	1182.8	1118.7	1101.1
165°	1563.9	1546.5	1516.5	1453.8	1386.3	1304.3	1234.3	1178.7	1164.3
167.5°	1537.4	1526.6	1502.1	1455.9	1404.4	1337.8	1278.1	1233.6	1220.9
170°	1518.5	1510.8	1491.8	1455.4	1413.9	1358.9	1307.3	1267.6	1258.0
172.5°	1494.0	1490.9	1478.4	1452.5	1421.8	1376.1	1332.6	1298.4	1289.6
175°	1456.3	1460.2	1456.3	1445.1	1429.7	1398.8	1369.5	1342.7	1335.9
177.5°	1427.9	1429.4	1431.8	1431.8	1429.5	1415.6	1399.5	1385.3	1386.9
180°	1416.8	1416.8	1416.8	1416.8	1416.8	1416.8	1416.8	1416.8	1416.8

(END OF REPORT)