

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: P511769

Luminaire Tested: **SQW-F-050U-100D-840-1D-UNV-STD-W-4**

Issue Date: 4/9/2021

Test Information

Test Method: LM-79-08
Report Number: P511769
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-100D-840-1D-UNV-STD-W-4
Description: CORELITE SQW WALL MOUNTED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

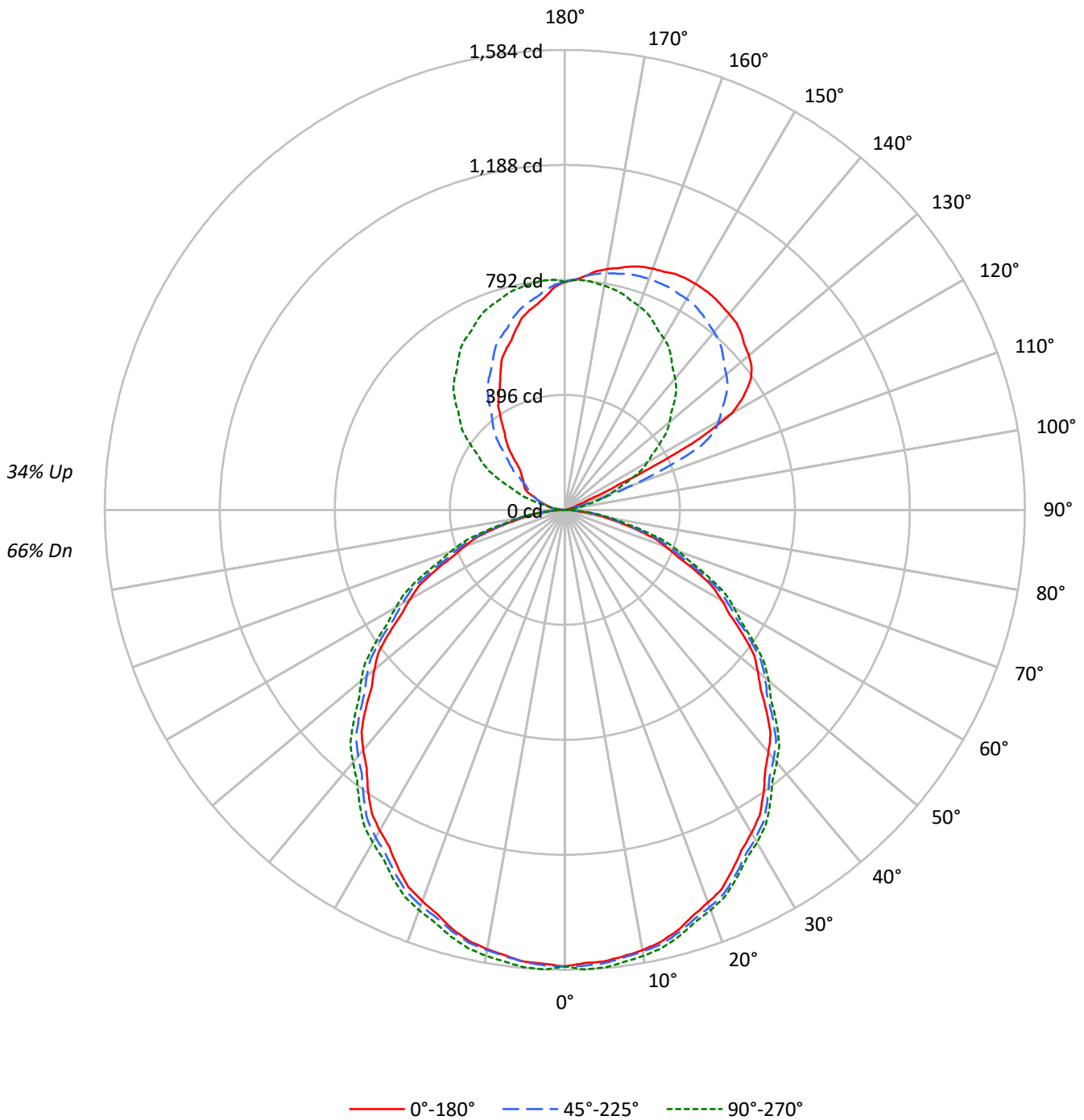
Lumens per Lamp: N/A
Luminaire Lumens: 6475.8 lumens
Efficiency: N/A
Efficacy: 127.5 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.25 / 1.35
Luminous Opening: Rectangular (W 4' x L: 0.08' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 50.8
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	111	111	111	111	104	104	104	104	92	92	92	81	81	81	71	71	71	66
1	101	97	93	89	95	91	88	85	81	78	76	72	70	68	63	61	60	56
2	92	85	78	73	87	80	74	69	71	67	63	63	59	56	55	53	50	47
3	84	74	67	61	79	70	63	58	62	57	53	55	51	48	49	45	43	39
4	77	66	58	51	72	62	55	49	55	50	45	49	45	41	43	40	37	34
5	71	59	50	44	66	56	48	42	50	43	39	44	39	35	39	35	32	29
6	65	53	44	38	61	50	42	37	45	38	34	40	35	31	35	31	28	25
7	60	48	39	34	57	45	38	32	41	34	30	36	31	27	32	28	25	22
8	56	43	35	30	53	41	34	29	37	31	26	33	28	24	30	25	22	20
9	52	40	32	27	49	38	30	26	34	28	24	31	26	22	27	23	20	18
10	49	36	29	24	46	35	28	23	31	26	21	28	23	20	25	21	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	50782	50782	50782
5°	50597	51287	50665
10°	50484	51146	50379
15°	50153	50829	49976
20°	49467	50419	49285
25°	48710	49886	48446
30°	47918	49350	47523
35°	47010	48606	46548
40°	45961	47845	45510
45°	44832	46969	44298
50°	43596	46002	43003
55°	42140	44718	41543
60°	40294	43394	39745
65°	37914	41651	37425
70°	34886	39305	34480
75°	30293	35596	30954
80°	24361	29493	25737
85°	13412	20119	17340



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.7	2.3
10°-20°	423.8	6.5
20°-30°	635.3	9.8
30°-40°	755.4	11.7
40°-50°	773.3	11.9
50°-60°	689.3	10.6
60°-70°	513.9	7.9
70°-80°	280.8	4.3
80°-90°	66.2	1.0
90°-100°	19.3	0.3
100°-110°	88.2	1.4
110°-120°	258.5	4.0
120°-130°	389.1	6.0
130°-140°	417.9	6.5
140°-150°	398.7	6.2
150°-160°	328.1	5.1
160°-170°	214.8	3.3
170°-180°	74.5	1.2
0°-30°	1207.8	18.7
0°-40°	1963.2	30.3
0°-60°	3425.8	52.9
0°-90°	4286.7	66.2
90°-120°	365.9	5.7
90°-150°	1571.6	24.3
90°-180°	2189.0	33.8
0°-180°	6475.8	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1573	1573	1573	1573	1573	
5°	1561	1567	1582	1564	1563	148
15°	1500	1509	1520	1502	1495	422
25°	1367	1390	1400	1382	1360	630
35°	1192	1217	1233	1208	1181	745
45°	982	1012	1028	1000	970	757
55°	748	778	794	771	738	668
65°	496	521	545	516	490	491
75°	243	262	285	264	248	260
85°	36	50	54	55	47	53
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: P511769

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1572.6	1572.6	1572.6	1572.6	1572.6	1572.6	1572.6	1572.6	1572.6
2.5°	1562.4	1569.9	1571.8	1570.4	1584.5	1571.2	1570.9	1569.9	1565.0
5°	1560.9	1563.0	1567.3	1564.5	1582.2	1564.5	1564.1	1562.0	1563.0
7.5°	1550.7	1552.8	1555.2	1552.4	1570.1	1551.9	1551.7	1548.2	1549.2
10°	1539.6	1541.7	1544.9	1542.1	1559.8	1540.1	1540.7	1535.4	1536.4
12.5°	1524.3	1526.4	1532.2	1528.5	1545.4	1526.4	1527.0	1520.9	1521.1
15°	1500.2	1503.3	1508.7	1502.7	1520.4	1501.7	1502.3	1495.9	1494.9
17.5°	1465.9	1472.2	1478.7	1473.5	1489.4	1471.4	1472.3	1462.5	1459.8
20°	1439.5	1445.8	1456.6	1450.6	1467.2	1448.5	1450.2	1435.2	1434.2
22.5°	1413.1	1417.7	1431.0	1425.0	1441.7	1422.9	1423.8	1406.3	1406.1
25°	1367.1	1373.4	1389.5	1384.5	1400.1	1381.4	1382.0	1362.8	1359.7
27.5°	1320.1	1326.5	1342.8	1338.1	1354.1	1335.0	1336.2	1314.8	1308.6
30°	1285.1	1292.4	1309.6	1305.8	1323.5	1302.6	1302.2	1280.7	1274.5
32.5°	1247.7	1256.6	1273.9	1271.7	1287.7	1267.7	1265.5	1244.1	1237.9
35°	1192.5	1201.9	1217.0	1218.4	1233.0	1214.2	1208.5	1188.1	1180.8
37.5°	1132.9	1141.6	1158.0	1160.9	1175.0	1155.5	1147.4	1128.9	1120.5
40°	1090.3	1100.7	1118.0	1122.5	1135.0	1116.3	1107.3	1088.0	1079.6
42.5°	1048.6	1059.0	1077.1	1084.1	1093.3	1075.4	1064.7	1046.2	1036.2
45°	981.7	992.1	1011.5	1021.2	1028.5	1011.9	999.8	980.4	970.0
47.5°	913.8	925.2	944.8	956.9	961.7	946.5	935.3	913.7	902.0
50°	867.8	879.2	899.7	912.6	915.7	902.1	890.1	868.5	856.0
52.5°	820.9	830.7	851.2	865.7	867.1	856.1	843.3	821.7	810.1
55°	748.5	758.9	778.3	795.3	794.3	787.0	770.9	749.3	737.9
57.5°	674.2	682.5	702.7	720.8	721.3	712.9	697.4	676.1	664.8
60°	623.9	632.3	651.6	669.8	671.9	663.5	646.3	625.8	615.4
62.5°	573.7	581.2	599.7	619.5	621.6	613.3	595.2	575.6	565.2
65°	496.2	502.4	520.7	541.0	545.1	535.8	516.4	499.1	489.8
67.5°	419.7	425.8	442.7	462.9	468.3	457.7	440.2	423.8	414.6
70°	369.5	374.7	390.8	410.1	416.3	404.9	390.8	373.5	365.2
72.5°	318.4	323.6	339.7	358.1	363.5	352.9	339.7	324.2	320.9
75°	242.8	248.0	261.9	281.2	285.3	276.0	264.1	250.2	248.1
77.5°	175.3	178.6	191.2	204.5	207.2	201.6	194.4	182.0	181.0
80°	131.0	135.1	146.9	157.6	158.6	155.5	150.1	139.5	138.4
82.5°	91.8	95.1	105.2	115.0	113.5	113.7	110.1	100.3	100.1
85°	36.2	39.3	50.0	58.5	54.3	57.4	55.4	47.9	46.8
87.5°	3.6	4.5	8.7	17.2	15.6	18.1	15.8	11.7	12.0
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)