

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: P511739

Luminaire Tested: **SQW-F-025U-100D-840-1D-UNV-STD-W-4**

Issue Date: 4/9/2021

Test Information

Test Method: LM-79-08
Report Number: P511739
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-15,
Test Lab: INNOVATION CENTER
Issue Date: 4/9/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQW-F-025U-100D-840-1D-UNV-STD-W-4
Description: CORELITE SQW WALL MOUNTED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

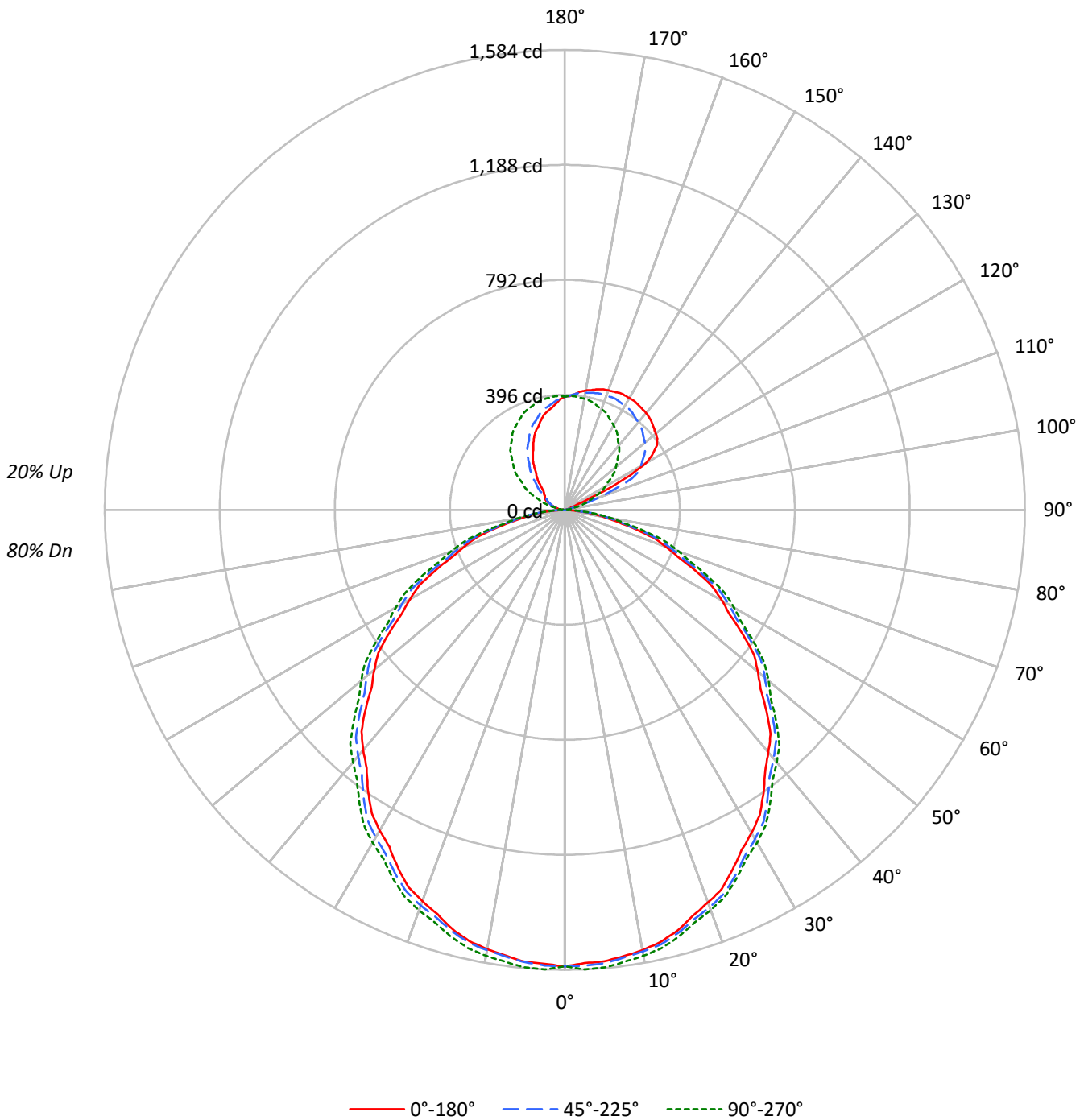
Lumens per Lamp: N/A
Luminaire Lumens: 5363.5 lumens
Efficiency: N/A
Efficacy: 121.9 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.25 / 1.35
Luminous Opening: Rectangular (W 4' x L: 0.08' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 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



TEST NUMBER: P511739
CATALOG NUMBER: SQW-F-025U-100D-840-1D-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P511739

CATALOG NUMBER: SQW-F-025U-100D-840-1D-UNV-STD-W-4

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	114	114	114	114	109	109	109	109	100	100	100	91	91	91	84	84	84	80
1	104	100	96	92	100	96	92	89	88	85	82	81	78	76	74	72	71	67
2	95	87	81	75	91	84	78	73	77	72	68	71	67	64	65	62	59	56
3	87	77	69	63	83	74	66	61	68	62	57	62	58	54	57	54	50	47
4	79	68	59	53	76	65	57	52	60	54	49	56	50	46	51	47	43	41
5	73	61	52	46	69	58	50	44	54	47	42	50	44	40	46	41	38	35
6	67	54	46	40	64	52	44	39	49	42	37	45	39	35	42	37	33	31
7	62	49	41	35	59	48	40	34	44	37	33	41	35	31	38	33	29	27
8	58	45	37	31	55	43	36	30	40	34	29	38	32	28	35	30	26	24
9	54	41	33	28	52	40	32	27	37	31	26	35	29	25	32	27	24	22
10	51	38	30	25	48	37	29	25	34	28	24	32	27	23	30	25	22	20

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



TEST NUMBER: P511739

CATALOG NUMBER: SQW-F-025U-100D-840-1D-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.7	2.8
10°-20°	423.8	7.9
20°-30°	635.3	11.8
30°-40°	755.4	14.1
40°-50°	773.3	14.4
50°-60°	689.3	12.9
60°-70°	513.9	9.6
70°-80°	280.8	5.2
80°-90°	66.0	1.2
90°-100°	9.5	0.2
100°-110°	43.7	0.8
110°-120°	126.7	2.4
120°-130°	191.3	3.6
130°-140°	204.8	3.8
140°-150°	195.7	3.6
150°-160°	162.0	3.0
160°-170°	106.4	2.0
170°-180°	36.9	0.7
0°-30°	1207.8	22.5
0°-40°	1963.2	36.6
0°-60°	3425.8	63.9
0°-90°	4286.5	79.9
90°-120°	180.0	3.4
90°-150°	771.7	14.4
90°-180°	1077.0	20.1
0°-180°	5363.5	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	0	1	2	1
95°	3	3	8	13	11	3
105°	12	29	50	33	35	14
115°	100	253	124	62	68	134
125°	388	335	196	92	85	339
135°	424	379	260	154	117	328
145°	441	407	316	222	185	277
155°	444	420	354	288	256	205
165°	429	416	381	339	319	122
175°	400	400	393	376	366	39
180°	390	390	390	390	390	



TEST NUMBER: P511739

CATALOG NUMBER: SQW-F-025U-100D-840-1D-UNV-STD-W-4

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	17.0	15.3	17.8	15.5	11.3	11.5
90°	1.1	1.1	1.1	0.0	0.0	0.0	1.1	1.1	2.1
92.5°	1.1	1.9	1.1	1.7	1.7	4.2	3.6	2.8	3.0
95°	3.2	3.2	3.2	7.5	7.5	10.7	12.9	11.8	10.7
97.5°	4.7	4.7	6.2	21.2	16.7	14.2	20.0	20.6	20.6
100°	6.4	6.4	9.7	33.1	23.6	19.4	22.5	25.8	25.8
102.5°	8.2	9.0	14.8	51.7	33.1	23.8	26.0	28.4	29.2
105°	11.8	12.9	29.0	88.2	50.5	32.6	33.3	34.4	35.4
107.5°	17.6	21.8	72.8	126.1	71.5	42.1	44.4	42.5	42.5
110°	23.6	32.0	123.5	149.9	87.0	49.2	50.5	49.4	49.4



TEST NUMBER: P511739

CATALOG NUMBER: SQW-F-025U-100D-840-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	37.4	62.5	184.4	169.6	102.4	57.9	55.6	57.9	56.3
115°	99.8	162.8	253.3	196.9	124.5	72.0	62.3	66.6	67.6
117.5°	237.9	284.7	287.3	219.9	147.3	87.9	67.6	72.6	74.7
120°	326.3	333.7	302.7	234.5	161.0	99.1	71.9	75.2	77.3
122.5°	359.8	352.9	316.5	248.2	174.8	112.0	78.8	78.6	80.7
125°	387.5	372.8	334.9	268.9	196.4	132.4	92.3	83.8	84.8
127.5°	401.3	386.6	350.2	285.9	216.8	154.1	109.3	91.0	90.2
130°	409.0	394.3	359.6	298.0	229.7	167.8	121.3	98.7	94.5
132.5°	415.9	402.0	368.2	307.5	242.6	180.7	134.2	108.1	102.2
135°	424.0	410.4	378.9	321.7	259.8	201.0	153.5	125.4	117.0
137.5°	431.3	418.7	388.8	334.5	277.8	219.2	173.0	145.8	136.5
140°	434.8	422.2	394.0	342.3	289.8	232.1	186.8	158.7	150.3
142.5°	438.2	426.4	399.1	350.1	300.1	244.9	200.5	172.4	164.0
145°	441.2	430.7	406.9	360.7	315.6	263.1	222.2	193.0	184.6
147.5°	444.4	433.3	411.8	369.8	328.3	281.0	241.7	213.7	205.5
150°	444.4	435.0	414.4	375.9	336.0	293.0	255.5	227.4	220.1
152.5°	445.3	435.0	416.9	381.1	344.6	304.1	268.4	241.2	234.7
155°	444.4	435.0	419.7	387.8	354.3	318.6	287.7	261.8	255.5
157.5°	440.6	434.5	419.7	391.8	364.1	331.4	304.4	284.1	275.2
160°	438.0	432.7	419.7	394.5	369.3	339.9	315.6	296.1	289.8
162.5°	435.4	430.2	418.9	397.1	374.4	347.6	325.1	306.5	301.9
165°	429.4	425.2	416.5	398.9	381.1	358.0	339.2	323.0	318.8
167.5°	422.7	419.8	412.6	400.1	386.0	368.0	351.7	339.1	334.3
170°	417.6	415.5	410.1	400.1	388.6	373.9	358.5	347.7	344.6
172.5°	410.7	409.5	406.6	398.5	390.3	378.1	366.3	356.3	353.2
175°	400.4	400.4	400.4	397.1	392.9	384.5	375.7	368.2	366.1
177.5°	392.3	393.1	394.0	393.1	393.1	388.9	384.5	380.2	381.1
180°	389.7	389.7	389.7	389.7	389.7	389.7	389.7	389.7	389.7

(END OF REPORT)