

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: P511850

Luminaire Tested: **SQW-F-100U-050D-940-1D-UNV-STD-W-4**

Issue Date: 4/9/2021

Test Information

Test Method: LM-79-08
Report Number: P511850
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-940-1D-UNV-STD-W-4
Description: CORELITE SQW WALL MOUNTED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

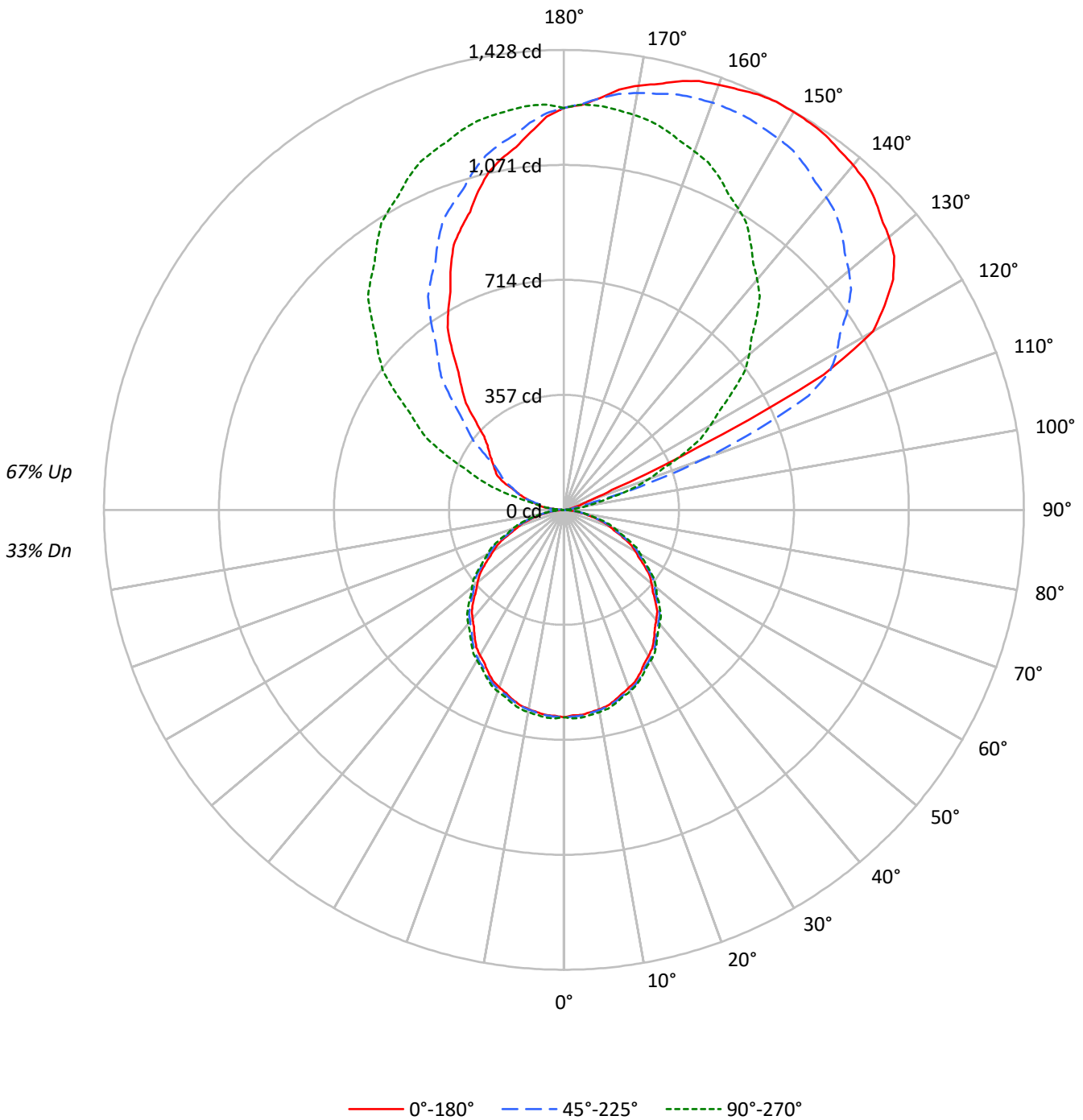
Lumens per Lamp: N/A
Luminaire Lumens: 5246.1 lumens
Efficiency: N/A
Efficacy: 119.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.25 / 1.35
Luminous Opening: Rectangular (W 4' x L: 0.08' x H: 0')
CIE Type: Semi-Indirect

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°	20796	20796	20796
5°	20704	20989	20733
10°	20625	20913	20595
15°	20470	20791	20410
20°	20223	20615	20162
25°	19932	20370	19807
30°	19576	20135	19445
35°	19237	19793	19033
40°	18792	19496	18607
45°	18304	19148	18103
50°	17834	18718	17568
55°	17261	18252	17014
60°	16501	17696	16269
65°	15412	16825	15213
70°	14219	15890	14058
75°	12527	14398	12414
80°	10153	12125	10321
85°	5891	8151	6854



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.8	1.2
10°-20°	173.3	3.3
20°-30°	259.6	4.9
30°-40°	308.6	5.9
40°-50°	315.8	6.0
50°-60°	281.6	5.4
60°-70°	208.9	4.0
70°-80°	114.4	2.2
80°-90°	27.7	0.5
90°-100°	30.7	0.6
100°-110°	145.0	2.8
110°-120°	425.9	8.1
120°-130°	619.2	11.8
130°-140°	662.5	12.6
140°-150°	631.5	12.0
150°-160°	521.0	9.9
160°-170°	341.3	6.5
170°-180°	118.4	2.3
0°-30°	493.7	9.4
0°-40°	802.3	15.3
0°-60°	1399.7	26.7
0°-90°	1750.7	33.4
90°-120°	601.5	11.5
90°-150°	2514.7	47.9
90°-180°	3495.0	66.6
0°-180°	5246.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	644	644	644	644	644	
5°	639	641	648	640	640	61
15°	612	617	622	614	610	173
25°	559	568	572	566	556	257
35°	488	497	502	495	483	305
45°	401	413	419	410	396	310
55°	307	317	324	316	302	273
65°	202	211	220	210	199	200
75°	100	108	115	108	100	107
85°	16	21	22	23	18	22
90°	3	3	2	4	7	2
95°	9	10	24	37	33	10
105°	39	109	161	103	110	48
115°	458	838	406	194	211	520
125°	1247	1073	640	298	275	1105
135°	1365	1220	846	500	386	1053
145°	1418	1306	1011	721	605	889
155°	1424	1345	1140	923	831	658
165°	1378	1336	1221	1087	1026	391
175°	1283	1283	1260	1206	1177	124
180°	1248	1248	1248	1248	1248	



TEST NUMBER: P511850

CATALOG NUMBER: SQW-F-100U-050D-940-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	644.0	644.0	644.0	644.0	644.0	644.0	644.0	644.0	644.0
2.5°	639.0	641.8	642.6	642.0	648.2	642.7	642.6	641.8	640.4
5°	638.7	639.5	641.3	639.7	647.5	639.7	640.4	638.7	639.6
7.5°	633.9	634.8	635.9	635.0	642.0	635.0	635.5	633.7	633.7
10°	629.0	629.9	631.6	630.0	637.8	630.0	629.9	628.1	628.1
12.5°	623.4	624.2	626.0	624.4	632.2	624.4	624.2	621.8	622.5
15°	612.3	614.8	616.7	614.2	621.9	614.2	614.0	612.2	610.5
17.5°	599.0	601.6	604.7	602.0	609.1	601.2	602.0	598.1	596.6
20°	588.5	591.1	595.5	592.2	599.9	591.3	592.9	587.6	586.7
22.5°	577.2	579.1	585.6	582.3	589.3	581.4	582.3	575.6	574.7
25°	559.4	561.1	568.2	565.7	571.7	564.0	566.4	556.7	555.9
27.5°	539.1	541.7	548.1	546.5	553.4	544.8	547.2	537.2	535.6
30°	525.0	527.6	534.7	533.1	540.0	531.4	533.8	522.4	521.5
32.5°	509.5	513.5	519.9	519.7	525.2	517.3	518.3	507.6	506.0
35°	488.0	490.6	496.8	497.0	502.1	495.2	495.1	484.5	482.8
37.5°	463.4	466.8	473.4	474.4	479.4	471.8	470.6	461.0	458.3
40°	445.8	449.2	457.2	458.2	462.5	455.6	453.7	444.8	441.4
42.5°	428.8	432.3	440.3	441.3	445.6	439.4	436.1	427.9	423.0
45°	400.8	405.1	413.2	415.9	419.3	413.3	409.6	399.9	396.4
47.5°	374.0	377.5	385.7	390.1	391.7	387.5	382.9	372.4	368.8
50°	355.0	358.5	367.4	371.8	372.6	369.2	363.8	354.0	349.7
52.5°	335.3	338.7	348.3	352.7	353.6	350.2	344.8	335.0	330.7
55°	306.6	310.0	317.1	324.2	324.2	322.5	316.3	305.6	302.2
57.5°	275.9	279.2	288.1	294.2	294.4	292.0	285.6	275.8	272.4
60°	255.5	258.1	266.9	273.1	274.0	272.2	265.2	255.4	251.9
62.5°	232.9	236.2	245.1	252.0	253.5	251.1	243.3	234.2	229.4
65°	201.7	203.5	211.4	218.5	220.2	217.7	210.5	201.7	199.1
67.5°	171.1	172.1	179.7	186.8	188.7	185.9	178.8	172.7	168.6
70°	150.6	152.4	158.6	165.7	168.3	164.8	157.7	152.3	148.9
72.5°	130.2	131.9	138.1	144.5	147.1	144.4	138.0	132.6	129.1
75°	100.4	101.3	107.5	113.7	115.4	112.8	107.5	103.0	99.5
77.5°	72.2	73.1	79.6	83.4	84.9	83.4	79.1	74.8	72.4
80°	54.6	55.5	59.9	64.3	65.2	64.3	60.8	57.2	55.5
82.5°	37.7	38.6	43.7	46.7	46.9	47.4	44.6	41.7	39.3
85°	15.9	16.7	21.1	23.7	22.0	24.6	22.9	20.2	18.5
87.5°	2.6	2.6	4.8	6.7	6.7	7.5	6.3	6.1	4.9
90°	2.6	2.6	2.6	1.7	1.7	2.6	3.5	6.1	7.0
92.5°	4.7	4.7	4.7	5.9	6.6	13.6	9.0	10.2	9.7
95°	8.7	9.5	10.4	26.9	23.5	34.5	37.4	35.6	33.0
97.5°	15.3	16.1	21.7	73.6	52.0	46.9	61.2	64.8	61.4
100°	20.9	21.7	32.2	119.0	75.6	60.3	69.5	80.8	80.8
102.5°	27.1	28.6	50.9	179.5	106.2	76.0	80.0	90.6	93.4
105°	39.1	43.4	108.6	303.6	160.8	101.3	102.6	107.0	109.5
107.5°	61.0	78.4	280.7	420.5	229.3	132.4	135.2	133.7	132.5
110°	86.0	125.1	461.5	492.4	280.7	156.7	154.7	153.8	151.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	161.1	267.6	647.2	555.4	331.5	183.6	170.0	180.2	175.6
115°	458.1	651.8	837.9	643.0	405.9	230.8	193.8	207.8	211.2
117.5°	909.3	983.6	931.9	717.2	478.6	285.1	215.6	228.4	235.0
120°	1108.2	1092.1	977.8	767.2	525.9	323.6	232.9	240.9	246.8
122.5°	1179.8	1141.9	1016.1	810.4	571.1	365.4	255.2	252.1	259.4
125°	1247.3	1198.0	1073.4	869.2	639.7	432.4	298.1	269.6	274.7
127.5°	1292.7	1241.2	1123.9	926.1	707.3	501.2	354.3	297.3	292.0
130°	1317.7	1267.5	1155.2	958.4	751.8	547.0	394.6	322.2	309.4
132.5°	1337.2	1291.1	1182.3	993.2	790.1	590.7	436.3	354.7	335.9
135°	1364.6	1321.3	1219.5	1039.5	845.7	655.3	499.8	413.1	385.9
137.5°	1385.7	1345.2	1249.2	1079.8	900.1	718.1	564.5	478.5	450.4
140°	1396.8	1357.7	1267.3	1104.3	933.5	757.6	607.6	520.9	492.8
142.5°	1406.5	1368.8	1282.6	1128.2	965.5	796.4	653.5	564.0	537.3
145°	1418.5	1382.8	1305.5	1162.1	1010.9	853.6	720.6	629.6	605.0
147.5°	1424.3	1392.3	1323.3	1192.2	1054.8	908.3	785.4	698.4	671.9
150°	1426.3	1395.7	1331.6	1210.5	1081.3	943.6	825.7	744.3	717.1
152.5°	1428.4	1396.5	1337.2	1226.0	1105.6	976.1	865.4	788.1	763.7
155°	1423.7	1395.7	1344.6	1244.9	1140.4	1022.2	923.1	852.2	830.9
157.5°	1413.0	1394.1	1346.2	1260.3	1168.0	1064.2	977.3	913.0	892.1
160°	1404.6	1388.5	1345.5	1268.8	1184.7	1090.4	1010.0	951.3	931.8
162.5°	1395.6	1378.7	1342.0	1274.6	1200.7	1115.2	1042.0	985.5	970.0
165°	1377.7	1362.4	1335.9	1280.7	1221.2	1149.0	1087.4	1038.4	1025.6
167.5°	1354.4	1344.9	1323.3	1282.6	1237.2	1178.6	1125.9	1086.8	1075.5
170°	1337.7	1330.9	1314.2	1282.1	1245.5	1197.1	1151.7	1116.7	1108.2
172.5°	1316.1	1313.4	1302.4	1279.5	1252.5	1212.2	1173.9	1143.8	1136.0
175°	1282.9	1286.3	1282.9	1273.1	1259.5	1232.3	1206.4	1182.8	1176.9
177.5°	1257.9	1259.3	1261.4	1261.3	1259.3	1247.0	1232.9	1220.4	1221.7
180°	1248.2	1248.2	1248.2	1248.2	1248.2	1248.2	1248.2	1248.2	1248.2

(END OF REPORT)