

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: P511845

Luminaire Tested: **SQW-F-100U-050D-830-1D-UNV-STD-W-4**

Issue Date: 4/9/2021

Test Information

Test Method: LM-79-08
Report Number: P511845
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-830-1D-UNV-STD-W-4
Description: CORELITE SQW WALL MOUNTED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

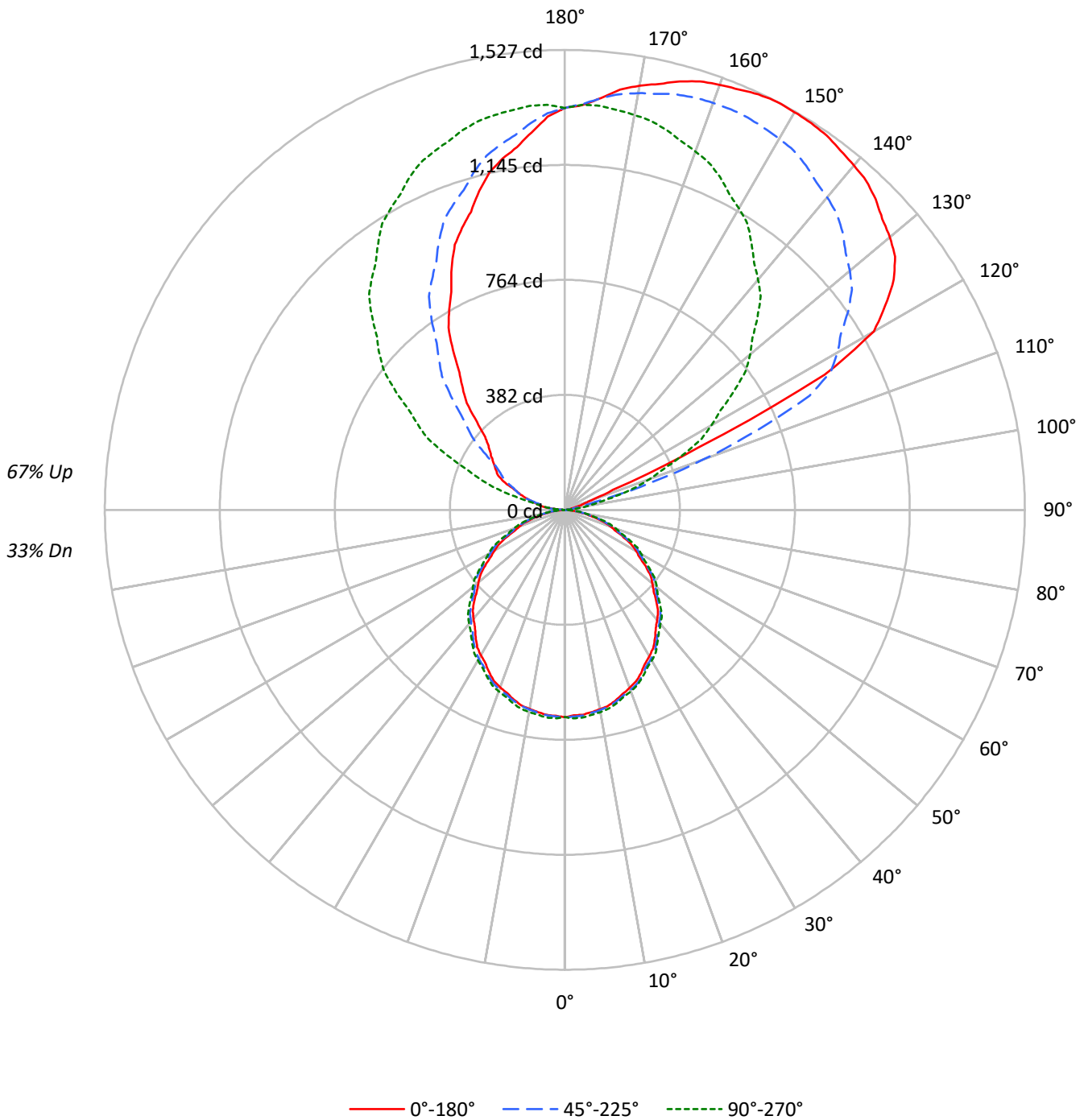
Lumens per Lamp: N/A
Luminaire Lumens: 5608.2 lumens
Efficiency: N/A
Efficacy: 127.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.25 / 1.35
Luminous Opening: Rectangular (W 4' x L: 0.08' x H: 0')
CIE Type: Semi-Indirect

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°	22230	22230	22230
5°	22133	22438	22162
10°	22048	22356	22019
15°	21881	22228	21817
20°	21619	22038	21553
25°	21307	21777	21171
30°	20929	21526	20788
35°	20566	21161	20345
40°	20086	20841	19888
45°	19569	20473	19354
50°	19065	20015	18784
55°	18449	19513	18185
60°	17638	18917	17392
65°	16481	17987	16260
70°	15201	16985	15031
75°	13400	15396	13275
80°	10860	12962	11028
85°	6299	8707	7336



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.0	1.2
10°-20°	185.2	3.3
20°-30°	277.5	4.9
30°-40°	329.9	5.9
40°-50°	337.6	6.0
50°-60°	301.1	5.4
60°-70°	223.4	4.0
70°-80°	122.3	2.2
80°-90°	29.6	0.5
90°-100°	32.8	0.6
100°-110°	155.0	2.8
110°-120°	455.3	8.1
120°-130°	661.9	11.8
130°-140°	708.2	12.6
140°-150°	675.0	12.0
150°-160°	557.0	9.9
160°-170°	364.8	6.5
170°-180°	126.5	2.3
0°-30°	527.8	9.4
0°-40°	857.6	15.3
0°-60°	1496.3	26.7
0°-90°	1871.6	33.4
90°-120°	643.1	11.5
90°-150°	2688.2	47.9
90°-180°	3737.0	66.6
0°-180°	5608.2	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	688	688	688	688	688	
5°	683	686	692	685	684	65
15°	654	659	665	656	653	184
25°	598	607	611	606	594	275
35°	522	531	537	529	516	326
45°	428	442	448	438	424	331
55°	328	339	347	338	323	292
65°	216	226	235	225	213	214
75°	107	115	123	115	106	114
85°	17	23	24	24	20	24
90°	3	3	2	4	7	2
95°	9	11	25	40	35	11
105°	42	116	172	110	117	51
115°	490	896	434	207	226	556
125°	1333	1148	684	319	294	1181
135°	1459	1304	904	534	413	1126
145°	1516	1396	1081	770	647	950
155°	1522	1437	1219	987	888	703
165°	1473	1428	1306	1162	1096	418
175°	1372	1372	1346	1290	1258	133
180°	1334	1334	1334	1334	1334	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	688.4	688.4	688.4	688.4	688.4	688.4	688.4	688.4	688.4
2.5°	683.1	686.1	686.9	686.3	692.9	687.0	686.9	686.1	684.6
5°	682.8	683.7	685.6	683.9	692.2	683.9	684.6	682.8	683.7
7.5°	677.7	678.6	679.8	678.8	686.3	678.8	679.4	677.5	677.5
10°	672.4	673.3	675.2	673.5	681.8	673.5	673.3	671.5	671.5
12.5°	666.4	667.3	669.2	667.5	675.8	667.5	667.3	664.7	665.4
15°	654.5	657.3	659.2	656.6	664.9	656.6	656.4	654.5	652.6
17.5°	640.4	643.1	646.4	643.6	651.1	642.7	643.6	639.4	637.7
20°	629.1	631.8	636.6	633.0	641.3	632.1	633.8	628.1	627.2
22.5°	617.0	619.1	626.1	622.5	630.0	621.6	622.5	615.3	614.4
25°	598.0	599.8	607.4	604.7	611.2	602.9	605.5	595.2	594.2
27.5°	576.3	579.1	586.0	584.2	591.6	582.4	585.0	574.2	572.6
30°	561.3	564.0	571.6	569.9	577.3	568.1	570.7	558.4	557.5
32.5°	544.7	548.9	555.8	555.6	561.5	553.0	554.1	542.6	540.9
35°	521.7	524.5	531.1	531.3	536.8	529.4	529.3	517.9	516.1
37.5°	495.4	499.0	506.1	507.2	512.5	504.4	503.1	492.8	489.9
40°	476.5	480.2	488.8	489.8	494.4	487.0	485.0	475.5	471.8
42.5°	458.4	462.1	470.7	471.7	476.3	469.7	466.2	457.4	452.2
45°	428.5	433.1	441.7	444.6	448.3	441.8	437.9	427.5	423.8
47.5°	399.9	403.5	412.3	417.0	418.7	414.3	409.3	398.1	394.2
50°	379.5	383.2	392.7	397.4	398.4	394.7	388.9	378.5	373.9
52.5°	358.4	362.1	372.4	377.1	378.0	374.3	368.6	358.1	353.5
55°	327.7	331.4	339.0	346.6	346.6	344.7	338.1	326.7	323.0
57.5°	295.0	298.5	308.0	314.5	314.7	312.2	305.3	294.9	291.2
60°	273.1	275.9	285.3	292.0	292.9	291.0	283.5	273.0	269.3
62.5°	249.0	252.5	262.0	269.4	271.0	268.5	260.1	250.4	245.2
65°	215.7	217.5	226.0	233.6	235.4	232.7	225.1	215.6	212.8
67.5°	182.9	184.0	192.1	199.7	201.7	198.8	191.2	184.7	180.2
70°	161.0	162.9	169.5	177.1	179.9	176.2	168.6	162.8	159.2
72.5°	139.2	141.0	147.7	154.5	157.3	154.3	147.5	141.7	138.1
75°	107.4	108.3	114.9	121.5	123.4	120.6	114.9	110.1	106.4
77.5°	77.2	78.1	85.1	89.1	90.8	89.1	84.6	80.0	77.4
80°	58.4	59.3	64.0	68.8	69.7	68.8	65.0	61.2	59.3
82.5°	40.3	41.2	46.7	49.9	50.1	50.7	47.7	44.6	42.0
85°	17.0	17.9	22.6	25.4	23.5	26.3	24.5	21.6	19.8
87.5°	2.8	2.8	5.1	7.2	7.2	8.1	6.8	6.5	5.3
90°	2.8	2.8	2.8	1.9	1.9	2.8	3.7	6.5	7.4
92.5°	5.0	5.0	5.0	6.3	7.1	14.5	9.7	11.0	10.4
95°	9.3	10.2	11.2	28.7	25.1	36.9	40.0	38.0	35.3
97.5°	16.4	17.3	23.2	78.6	55.6	50.1	65.4	69.2	65.6
100°	22.3	23.2	34.4	127.2	80.8	64.5	74.3	86.4	86.4
102.5°	29.0	30.6	54.5	191.9	113.5	81.2	85.5	96.9	99.8
105°	41.8	46.4	116.1	324.5	171.9	108.3	109.6	114.4	117.1
107.5°	65.2	83.8	300.1	449.5	245.1	141.5	144.6	142.9	141.6
110°	92.0	133.8	493.4	526.4	300.1	167.5	165.4	164.4	161.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	172.3	286.0	691.9	593.7	354.4	196.3	181.7	192.6	187.7
115°	489.7	696.8	895.7	687.4	433.9	246.8	207.2	222.2	225.8
117.5°	972.1	1051.5	996.3	766.7	511.6	304.8	230.4	244.2	251.3
120°	1184.7	1167.4	1045.3	820.2	562.2	345.9	249.0	257.5	263.9
122.5°	1261.3	1220.8	1086.2	866.3	610.5	390.6	272.8	269.5	277.3
125°	1333.4	1280.7	1147.5	929.2	683.9	462.2	318.7	288.2	293.6
127.5°	1381.9	1326.8	1201.4	990.0	756.2	535.8	378.7	317.8	312.2
130°	1408.6	1355.0	1234.9	1024.5	803.7	584.8	421.8	344.4	330.8
132.5°	1429.5	1380.2	1263.9	1061.8	844.6	631.5	466.5	379.2	359.0
135°	1458.8	1412.5	1303.6	1111.2	904.1	700.6	534.3	441.6	412.6
137.5°	1481.3	1438.1	1335.4	1154.3	962.3	767.7	603.4	511.5	481.5
140°	1493.2	1451.4	1354.7	1180.6	997.9	809.9	649.5	556.8	526.8
142.5°	1503.6	1463.3	1371.1	1206.0	1032.1	851.3	698.6	602.9	574.4
145°	1516.4	1478.3	1395.6	1242.4	1080.6	912.6	770.3	673.1	646.7
147.5°	1522.6	1488.4	1414.6	1274.5	1127.7	971.0	839.6	746.6	718.3
150°	1524.8	1492.1	1423.5	1294.0	1155.9	1008.7	882.7	795.6	766.6
152.5°	1527.0	1492.9	1429.5	1310.6	1181.9	1043.5	925.1	842.5	816.4
155°	1522.0	1492.0	1437.4	1330.8	1219.1	1092.8	986.8	911.0	888.3
157.5°	1510.5	1490.3	1439.1	1347.3	1248.6	1137.6	1044.8	976.1	953.7
160°	1501.6	1484.3	1438.4	1356.4	1266.5	1165.6	1079.7	1017.0	996.1
162.5°	1491.9	1473.9	1434.7	1362.6	1283.6	1192.2	1113.9	1053.5	1037.0
165°	1472.8	1456.4	1428.2	1369.1	1305.5	1228.3	1162.4	1110.1	1096.4
167.5°	1447.9	1437.7	1414.6	1371.1	1322.6	1259.9	1203.7	1161.8	1149.8
170°	1430.0	1422.7	1404.9	1370.6	1331.5	1279.7	1231.2	1193.8	1184.7
172.5°	1407.0	1404.1	1392.3	1367.8	1339.0	1295.9	1255.0	1222.8	1214.4
175°	1371.5	1375.1	1371.5	1360.9	1346.4	1317.3	1289.7	1264.5	1258.1
177.5°	1344.7	1346.2	1348.4	1348.4	1346.2	1333.1	1318.0	1304.6	1306.1
180°	1334.3	1334.3	1334.3	1334.3	1334.3	1334.3	1334.3	1334.3	1334.3

(END OF REPORT)