

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: P511771

Luminaire Tested: **SQW-F-050U-100D-935-1D-UNV-STD-W-4**

Issue Date: 4/9/2021

Test Information

Test Method: LM-79-08
Report Number: P511771
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-935-1D-UNV-STD-W-4
Description: CORELITE SQW WALL MOUNTED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

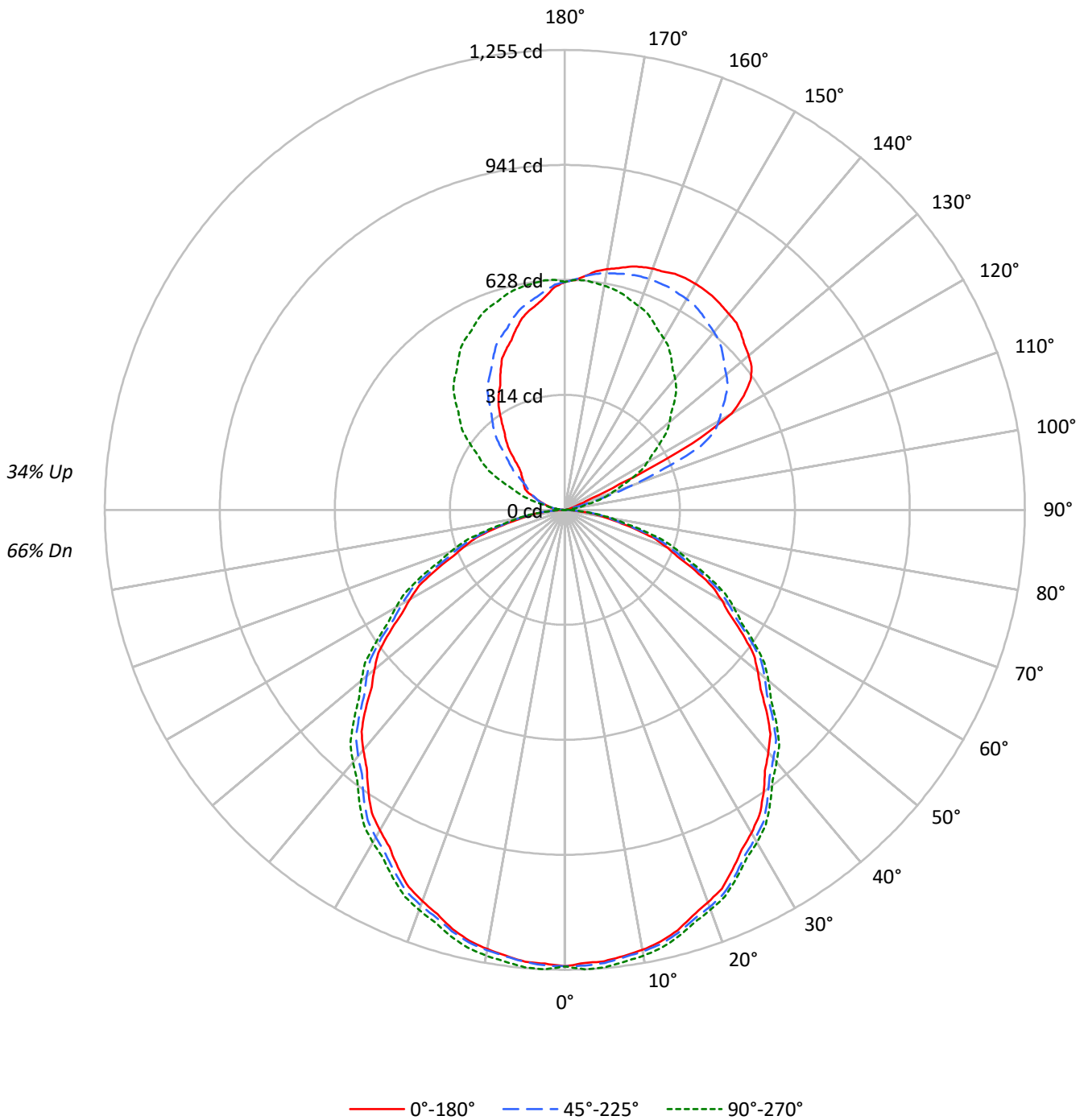
Lumens per Lamp: N/A
Luminaire Lumens: 5129.3 lumens
Efficiency: N/A
Efficacy: 101.0 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.25 / 1.35
Luminous Opening: Rectangular (W 4' x L: 0.08' x H: 0')
CIE Type: Semi-Direct

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°	40223	40223	40223
5°	40078	40623	40130
10°	39987	40512	39905
15°	39726	40261	39586
20°	39182	39935	39038
25°	38584	39514	38374
30°	37955	39088	37642
35°	37237	38499	36871
40°	36404	37896	36050
45°	35511	37205	35086
50°	34528	36437	34066
55°	33380	35418	32901
60°	31917	34371	31485
65°	30029	32993	29639
70°	27626	31138	27314
75°	23993	28197	24517
80°	19284	23375	20381
85°	10634	15932	13746



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.8	2.3
10°-20°	335.7	6.5
20°-30°	503.2	9.8
30°-40°	598.3	11.7
40°-50°	612.5	11.9
50°-60°	546.0	10.6
60°-70°	407.0	7.9
70°-80°	222.4	4.3
80°-90°	52.4	1.0
90°-100°	15.3	0.3
100°-110°	69.8	1.4
110°-120°	204.7	4.0
120°-130°	308.2	6.0
130°-140°	331.0	6.5
140°-150°	315.8	6.2
150°-160°	259.9	5.1
160°-170°	170.2	3.3
170°-180°	59.0	1.2
0°-30°	956.7	18.7
0°-40°	1555.0	30.3
0°-60°	2713.5	52.9
0°-90°	3395.4	66.2
90°-120°	289.8	5.7
90°-150°	1244.8	24.3
90°-180°	1734.0	33.8
0°-180°	5129.3	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1246	1246	1246	1246	1246	
5°	1236	1241	1253	1239	1238	117
15°	1188	1195	1204	1190	1184	334
25°	1083	1101	1109	1095	1077	499
35°	945	964	977	957	935	590
45°	778	801	815	792	768	600
55°	593	616	629	611	584	529
65°	393	412	432	409	388	389
75°	192	208	226	209	196	206
85°	29	40	43	44	37	42
90°	1	1	1	2	4	1
95°	4	5	11	19	18	5
105°	19	45	80	53	56	22
115°	164	407	199	100	110	220
125°	619	535	317	149	138	544
135°	680	608	424	252	194	525
145°	708	652	506	361	304	444
155°	710	671	568	461	415	328
165°	687	665	610	543	512	195
175°	640	640	629	601	586	62
180°	622	622	622	622	622	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1245.6	1245.6	1245.6	1245.6	1245.6	1245.6	1245.6	1245.6	1245.6
2.5°	1237.5	1243.5	1245.0	1243.9	1255.1	1244.5	1244.3	1243.5	1239.6
5°	1236.4	1238.0	1241.4	1239.2	1253.2	1239.2	1238.9	1237.2	1238.0
7.5°	1228.3	1229.9	1231.8	1229.6	1243.6	1229.3	1229.1	1226.3	1227.1
10°	1219.5	1221.1	1223.7	1221.5	1235.5	1219.8	1220.3	1216.1	1217.0
12.5°	1207.3	1209.0	1213.6	1210.7	1224.0	1209.0	1209.5	1204.7	1204.8
15°	1188.3	1190.8	1195.0	1190.3	1204.3	1189.5	1190.0	1184.9	1184.1
17.5°	1161.1	1166.1	1171.3	1167.2	1179.7	1165.5	1166.2	1158.4	1156.2
20°	1140.2	1145.2	1153.7	1149.0	1162.1	1147.3	1148.7	1136.8	1136.0
22.5°	1119.3	1122.9	1133.5	1128.7	1141.9	1127.1	1127.7	1113.9	1113.7
25°	1082.9	1087.8	1100.6	1096.6	1109.0	1094.2	1094.7	1079.4	1077.0
27.5°	1045.6	1050.7	1063.6	1059.9	1072.6	1057.4	1058.4	1041.4	1036.5
30°	1017.9	1023.7	1037.3	1034.3	1048.3	1031.8	1031.4	1014.4	1009.5
32.5°	988.2	995.3	1009.0	1007.3	1020.0	1004.1	1002.4	985.4	980.5
35°	944.6	952.0	964.0	965.1	976.6	961.8	957.2	941.1	935.3
37.5°	897.3	904.3	917.2	919.5	930.7	915.2	908.8	894.1	887.5
40°	863.6	871.8	885.5	889.1	899.0	884.2	877.1	861.8	855.2
42.5°	830.5	838.8	853.1	858.7	866.0	851.8	843.4	828.7	820.8
45°	777.6	785.8	801.2	808.9	814.7	801.5	791.9	776.5	768.3
47.5°	723.8	732.8	748.4	757.9	761.7	749.7	740.8	723.7	714.5
50°	687.3	696.4	712.6	722.8	725.3	714.6	705.0	688.0	678.1
52.5°	650.2	658.0	674.2	685.7	686.8	678.1	667.9	650.9	641.6
55°	592.9	601.1	616.5	630.0	629.1	623.4	610.6	593.5	584.4
57.5°	534.0	540.6	556.6	571.0	571.3	564.7	552.4	535.5	526.6
60°	494.2	500.8	516.1	530.5	532.2	525.6	511.9	495.7	487.5
62.5°	454.4	460.3	475.0	490.7	492.4	485.8	471.4	455.9	447.7
65°	393.0	398.0	412.4	428.5	431.8	424.4	409.0	395.4	387.9
67.5°	332.5	337.2	350.7	366.6	370.9	362.5	348.6	335.7	328.4
70°	292.6	296.8	309.5	324.8	329.8	320.7	309.5	295.9	289.3
72.5°	252.2	256.3	269.0	283.6	287.9	279.5	269.0	256.8	254.2
75°	192.3	196.4	207.5	222.7	226.0	218.6	209.2	198.2	196.5
77.5°	138.8	141.5	151.5	162.0	164.1	159.7	154.0	144.2	143.4
80°	103.7	107.0	116.4	124.8	125.7	123.2	118.9	110.5	109.6
82.5°	72.7	75.3	83.3	91.1	89.9	90.1	87.2	79.4	79.3
85°	28.7	31.1	39.6	46.3	43.0	45.5	43.9	37.9	37.1
87.5°	2.9	3.5	6.9	13.6	12.3	14.3	12.5	9.3	9.5
90°	0.9	0.9	0.9	0.9	0.9	0.9	1.7	2.6	3.5
92.5°	2.3	2.3	2.3	3.0	3.0	7.0	5.2	4.7	5.6
95°	4.3	4.3	5.2	13.0	11.3	17.2	19.1	18.2	18.2
97.5°	7.6	7.6	9.9	34.5	25.5	23.5	32.1	33.2	32.8
100°	10.4	10.4	14.8	55.2	37.4	30.6	35.6	40.9	42.6
102.5°	13.2	13.9	22.4	85.4	52.6	39.0	40.5	45.7	47.4
105°	19.1	20.8	45.2	143.6	79.9	51.9	53.0	53.9	56.5
107.5°	28.3	34.6	114.5	205.0	112.7	68.1	70.4	67.6	67.8
110°	37.4	51.8	193.7	244.2	136.4	79.5	80.8	77.3	78.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	61.0	102.6	294.5	275.4	161.4	92.9	88.4	91.9	90.0
115°	164.2	267.8	407.4	320.4	198.9	115.7	99.9	107.8	110.3
117.5°	392.3	462.3	460.5	358.4	236.3	143.2	110.5	117.9	122.1
120°	526.4	536.6	485.6	382.0	260.6	162.1	118.1	123.4	127.7
122.5°	578.5	566.3	506.4	403.6	283.5	182.3	128.6	127.6	132.6
125°	619.3	597.2	535.1	433.4	317.0	216.0	149.4	135.6	138.1
127.5°	642.4	618.0	559.7	461.3	351.1	249.7	177.0	148.7	147.1
130°	654.9	631.2	575.0	478.8	372.6	273.3	197.2	159.7	155.5
132.5°	665.4	643.6	588.9	495.6	393.5	296.2	218.7	176.3	168.7
135°	680.1	659.7	608.0	518.2	423.9	328.8	251.9	204.7	193.7
137.5°	692.6	671.9	624.2	539.6	450.1	360.6	284.2	239.4	226.5
140°	697.5	678.8	633.2	552.3	468.2	380.7	305.8	260.4	250.2
142.5°	702.4	684.4	641.6	564.8	483.5	400.1	328.0	282.6	271.7
145°	707.9	690.1	652.3	581.1	505.5	428.2	361.3	315.1	304.0
147.5°	710.9	694.9	660.3	594.9	527.1	454.2	394.2	347.6	337.5
150°	712.3	697.0	664.5	604.0	540.3	471.5	414.3	369.8	360.5
152.5°	712.3	696.3	666.6	611.0	551.4	487.4	433.8	391.4	382.7
155°	710.5	695.2	670.6	619.9	568.1	510.3	461.2	424.5	415.2
157.5°	703.6	694.4	670.6	628.0	582.5	531.7	488.0	455.3	447.0
160°	700.1	691.6	670.6	632.3	591.5	544.8	504.7	474.1	466.4
162.5°	695.2	686.7	669.2	635.2	599.2	556.5	520.7	490.8	485.2
165°	687.1	678.6	665.4	637.8	609.8	573.3	542.9	517.6	511.6
167.5°	675.4	670.7	660.0	638.6	616.2	588.2	561.6	541.4	536.6
170°	667.1	663.7	655.8	638.0	621.1	596.4	574.2	556.7	553.3
172.5°	656.7	654.6	649.6	637.4	624.5	604.7	586.0	569.2	566.5
175°	640.2	641.9	640.2	634.8	628.9	615.3	601.1	588.9	586.3
177.5°	627.5	627.5	628.9	628.9	628.2	621.4	615.0	608.1	609.4
180°	621.9	621.9	621.9	621.9	621.9	621.9	621.9	621.9	621.9

(END OF REPORT)