

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: P511767

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

Issue Date: 4/9/2021

Test Information

Test Method: LM-79-08
Report Number: P511767
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-830-1D-UNV-STD-W-4
Description: CORELITE SQW WALL MOUNTED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

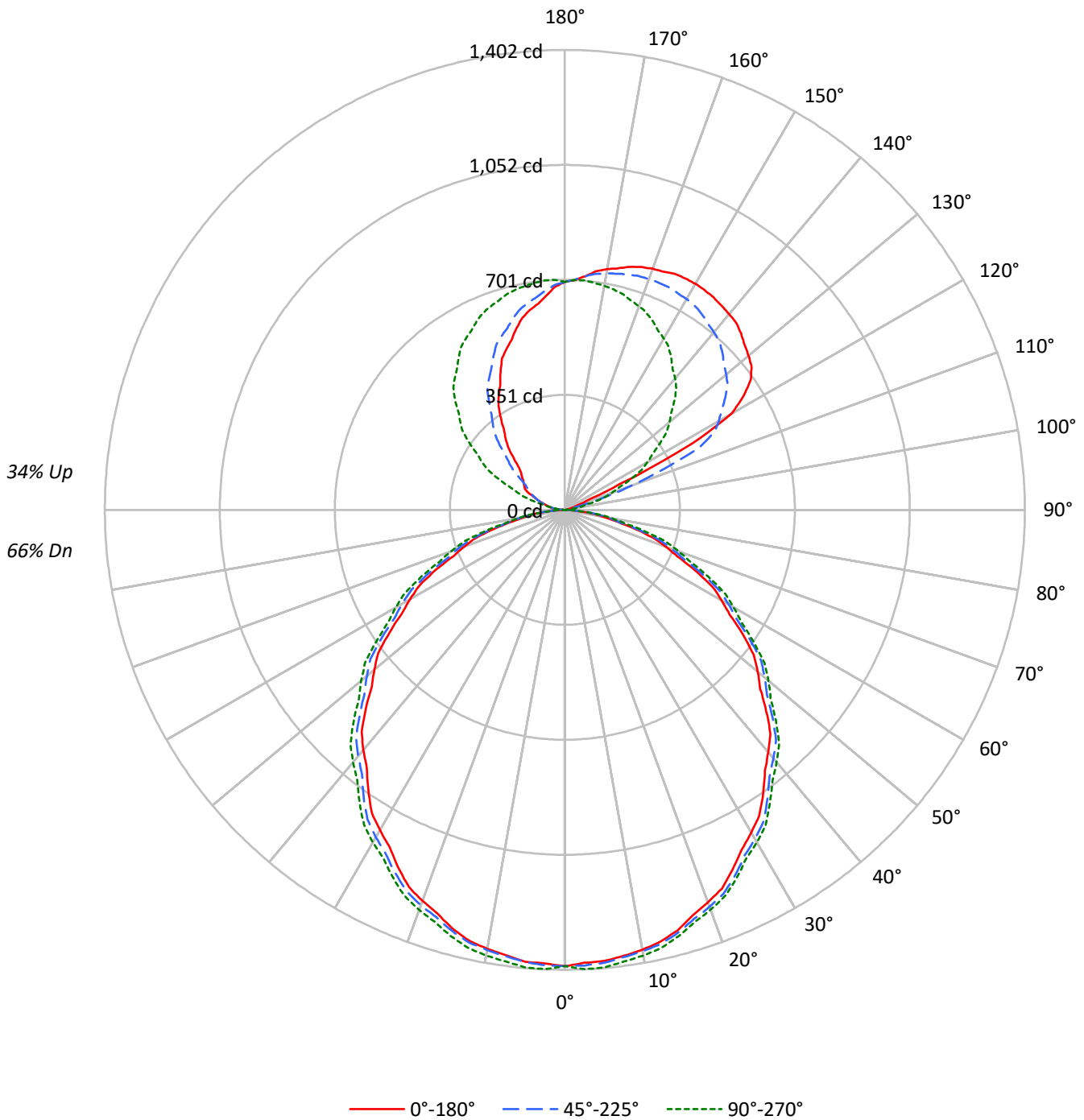
Lumens per Lamp: N/A
Luminaire Lumens: 5727.7 lumens
Efficiency: N/A
Efficacy: 112.7 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.25 / 1.35
Luminous Opening: Rectangular (W 4' x L: 0.08' x H: 0')
CIE Type: Semi-Direct

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°	44918	44918	44918
5°	44752	45362	44814
10°	44653	45240	44558
15°	44360	44958	44202
20°	43753	44595	43591
25°	43084	44124	42849
30°	42385	43649	42034
35°	41581	42989	41171
40°	40649	42318	40253
45°	39653	41544	39178
50°	38557	40687	38040
55°	37270	39550	36741
60°	35644	38376	35153
65°	33536	36844	33100
70°	30855	34764	30496
75°	26787	31491	27374
80°	21534	26090	22762
85°	11856	17784	15339



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.5	2.3
10°-20°	374.9	6.5
20°-30°	561.9	9.8
30°-40°	668.1	11.7
40°-50°	684.0	11.9
50°-60°	609.7	10.6
60°-70°	454.5	7.9
70°-80°	248.3	4.3
80°-90°	58.6	1.0
90°-100°	17.0	0.3
100°-110°	78.0	1.4
110°-120°	228.6	4.0
120°-130°	344.1	6.0
130°-140°	369.6	6.5
140°-150°	352.7	6.2
150°-160°	290.2	5.1
160°-170°	190.0	3.3
170°-180°	65.9	1.2
0°-30°	1068.3	18.7
0°-40°	1736.4	30.3
0°-60°	3030.1	52.9
0°-90°	3791.5	66.2
90°-120°	323.6	5.7
90°-150°	1390.0	24.3
90°-180°	1936.0	33.8
0°-180°	5727.7	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1391	1391	1391	1391	1391	
5°	1381	1386	1399	1383	1382	131
15°	1327	1334	1345	1329	1322	373
25°	1209	1229	1238	1222	1203	557
35°	1055	1076	1090	1069	1044	659
45°	868	895	910	884	858	670
55°	662	688	702	682	653	591
65°	439	460	482	457	433	434
75°	215	232	252	234	219	230
85°	32	44	48	49	41	47
90°	1	1	1	2	4	1
95°	5	6	13	21	20	6
105°	21	50	89	59	63	25
115°	183	455	222	112	123	245
125°	692	598	354	167	154	608
135°	760	679	473	281	216	586
145°	790	728	564	404	340	495
155°	793	749	634	515	464	366
165°	767	743	681	606	571	218
175°	715	715	702	671	655	69
180°	694	694	694	694	694	



TEST NUMBER: P511767

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1391.0	1391.0	1391.0	1391.0	1391.0	1391.0	1391.0	1391.0	1391.0
2.5°	1381.9	1388.5	1390.2	1389.0	1401.5	1389.7	1389.4	1388.6	1384.2
5°	1380.6	1382.4	1386.2	1383.8	1399.4	1383.8	1383.4	1381.6	1382.5
7.5°	1371.6	1373.4	1375.5	1373.0	1388.7	1372.7	1372.5	1369.3	1370.2
10°	1361.8	1363.6	1366.5	1364.0	1379.7	1362.2	1362.7	1358.0	1358.9
12.5°	1348.2	1350.0	1355.2	1351.9	1366.8	1350.1	1350.6	1345.2	1345.4
15°	1326.9	1329.7	1334.5	1329.2	1344.8	1328.2	1328.8	1323.1	1322.2
17.5°	1296.6	1302.1	1307.9	1303.3	1317.3	1301.5	1302.2	1293.5	1291.1
20°	1273.2	1278.8	1288.3	1283.0	1297.7	1281.1	1282.7	1269.4	1268.5
22.5°	1249.9	1253.9	1265.7	1260.4	1275.1	1258.5	1259.3	1243.9	1243.7
25°	1209.2	1214.7	1229.0	1224.6	1238.4	1221.8	1222.4	1205.4	1202.6
27.5°	1167.6	1173.3	1187.7	1183.5	1197.7	1180.8	1181.9	1162.9	1157.4
30°	1136.7	1143.1	1158.3	1154.9	1170.6	1152.2	1151.8	1132.8	1127.3
32.5°	1103.5	1111.5	1126.7	1124.8	1138.9	1121.3	1119.4	1100.4	1094.9
35°	1054.8	1063.0	1076.4	1077.6	1090.5	1074.0	1068.9	1050.8	1044.4
37.5°	1002.0	1009.8	1024.2	1026.8	1039.3	1022.0	1014.8	998.5	991.1
40°	964.3	973.6	988.8	992.8	1003.9	987.3	979.4	962.3	954.9
42.5°	927.4	936.6	952.7	958.9	967.0	951.1	941.7	925.3	916.5
45°	868.3	877.5	894.7	903.3	909.7	895.0	884.3	867.1	857.9
47.5°	808.2	818.3	835.7	846.3	850.6	837.1	827.2	808.2	797.8
50°	767.5	777.7	795.8	807.1	809.9	797.9	787.3	768.2	757.2
52.5°	726.1	734.7	752.8	765.7	767.0	757.2	745.9	726.8	716.5
55°	662.0	671.3	688.4	703.5	702.5	696.1	681.8	662.8	652.6
57.5°	596.3	603.7	621.6	637.6	637.9	630.6	616.8	598.0	588.0
60°	551.9	559.2	576.3	592.4	594.2	586.9	571.6	553.5	544.3
62.5°	507.4	514.0	530.4	547.9	549.8	542.4	526.4	509.1	499.9
65°	438.9	444.4	460.5	478.5	482.2	473.9	456.7	441.5	433.2
67.5°	371.2	376.6	391.6	409.4	414.2	404.8	389.3	374.8	366.7
70°	326.8	331.4	345.6	362.7	368.2	358.1	345.6	330.4	323.0
72.5°	281.6	286.2	300.4	316.7	321.5	312.1	300.4	286.8	283.8
75°	214.7	219.3	231.7	248.7	252.4	244.1	233.6	221.3	219.4
77.5°	155.0	158.0	169.1	180.9	183.3	178.3	172.0	161.0	160.1
80°	115.8	119.5	130.0	139.4	140.3	137.6	132.8	123.3	122.4
82.5°	81.2	84.1	93.0	101.7	100.4	100.6	97.4	88.7	88.5
85°	32.0	34.8	44.3	51.7	48.0	50.8	49.0	42.4	41.4
87.5°	3.2	3.9	7.7	15.2	13.8	16.0	13.9	10.4	10.6
90°	1.0	1.0	1.0	1.0	1.0	1.0	1.9	2.9	3.9
92.5°	2.5	2.5	2.5	3.3	3.3	7.9	5.8	5.3	6.2
95°	4.8	4.8	5.8	14.5	12.6	19.2	21.3	20.4	20.4
97.5°	8.5	8.5	11.1	38.6	28.5	26.2	35.9	37.0	36.7
100°	11.6	11.6	16.5	61.6	41.7	34.1	39.8	45.6	47.5
102.5°	14.7	15.5	25.0	95.4	58.8	43.6	45.2	51.1	53.0
105°	21.3	23.2	50.4	160.4	89.2	57.9	59.2	60.2	63.0
107.5°	31.6	38.6	127.8	228.9	125.9	76.0	78.6	75.5	75.7
110°	41.7	57.8	216.3	272.7	152.3	88.7	90.2	86.3	87.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	68.1	114.6	328.8	307.5	180.2	103.8	98.7	102.6	100.5
115°	183.3	299.0	454.9	357.7	222.1	129.2	111.5	120.3	123.2
117.5°	438.0	516.2	514.3	400.2	263.8	159.9	123.4	131.6	136.4
120°	587.8	599.2	542.2	426.6	291.0	181.0	131.9	137.8	142.6
122.5°	646.0	632.3	565.5	450.7	316.6	203.5	143.6	142.5	148.0
125°	691.6	666.9	597.5	484.0	354.0	241.2	166.8	151.4	154.2
127.5°	717.4	690.1	625.0	515.2	392.1	278.8	197.7	166.0	164.3
130°	731.3	704.8	642.1	534.7	416.1	305.1	220.2	178.4	173.6
132.5°	743.0	718.7	657.6	553.4	439.4	330.7	244.2	196.9	188.4
135°	759.5	736.7	679.0	578.6	473.3	367.1	281.3	228.6	216.3
137.5°	773.4	750.3	697.0	602.6	502.6	402.7	317.4	267.4	253.0
140°	778.9	758.0	707.1	616.7	522.8	425.1	341.4	290.7	279.3
142.5°	784.3	764.2	716.4	630.7	539.9	446.7	366.3	315.5	303.4
145°	790.5	770.6	728.4	648.9	564.5	478.2	403.5	351.8	339.5
147.5°	793.8	776.0	737.4	664.3	588.6	507.2	440.2	388.1	376.9
150°	795.4	778.3	742.0	674.4	603.3	526.5	462.7	413.0	402.5
152.5°	795.4	777.5	744.3	682.3	615.7	544.2	484.4	437.0	427.4
155°	793.4	776.4	748.8	692.2	634.4	569.9	515.0	474.1	463.6
157.5°	785.7	775.4	748.8	701.3	650.5	593.7	544.9	508.4	499.1
160°	781.8	772.3	748.8	706.1	660.5	608.4	563.5	529.4	520.9
162.5°	776.4	766.9	747.3	709.3	669.1	621.5	581.4	548.1	541.8
165°	767.2	757.8	743.0	712.2	680.9	640.1	606.2	577.9	571.3
167.5°	754.2	748.9	737.0	713.1	688.1	656.8	627.2	604.5	599.2
170°	744.9	741.1	732.3	712.5	693.5	666.0	641.1	621.7	617.9
172.5°	733.3	731.0	725.3	711.8	697.4	675.2	654.3	635.6	632.6
175°	714.9	716.8	714.9	708.9	702.2	687.1	671.2	657.6	654.7
177.5°	700.7	700.7	702.2	702.2	701.5	693.9	686.7	679.0	680.5
180°	694.5	694.5	694.5	694.5	694.5	694.5	694.5	694.5	694.5

(END OF REPORT)