

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: P511768

Luminaire Tested: **SQW-F-050U-100D-835-1D-UNV-STD-W-4**

Issue Date: 4/9/2021

Test Information

Test Method: LM-79-08
Report Number: P511768
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-835-1D-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, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

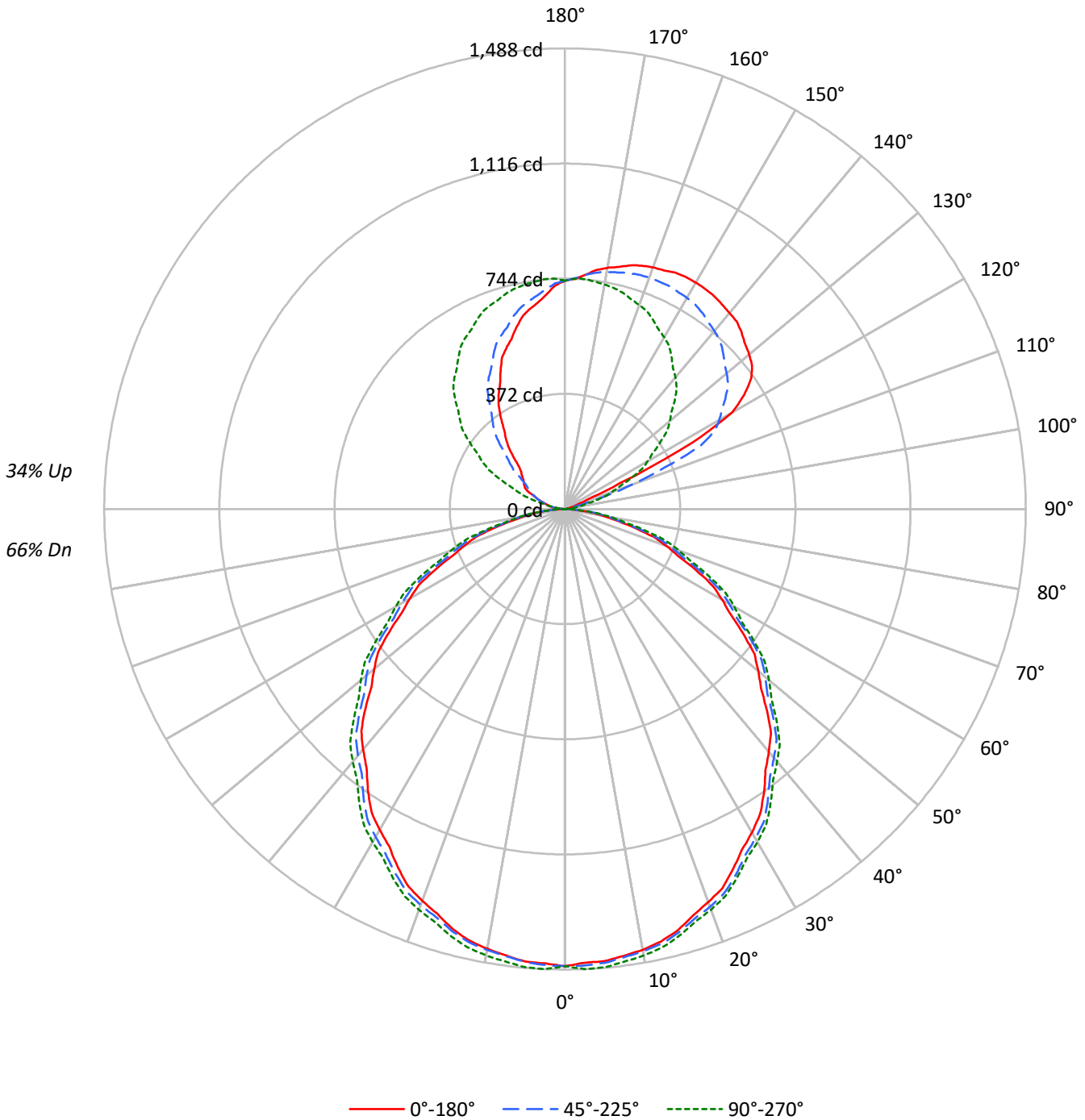
Lumens per Lamp: N/A
Luminaire Lumens: 6082.0 lumens
Efficiency: N/A
Efficacy: 119.7 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.25 / 1.35
Luminous Opening: Rectangular (W 4' x L: 0.08' x H: 0')
CIE Type: Semi-Direct

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°	47695	47695	47695
5°	47521	48169	47586
10°	47414	48037	47316
15°	47104	47739	46937
20°	46461	47354	46289
25°	45749	46854	45500
30°	45006	46348	44633
35°	44152	45650	43718
40°	43166	44936	42744
45°	42106	44115	41603
50°	40943	43204	40391
55°	39578	41999	39015
60°	37846	40752	37329
65°	35607	39121	35148
70°	32762	36916	32384
75°	28447	33437	29071
80°	22873	27708	24175
85°	12597	18896	16302



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	139.6	2.3
10°-20°	398.1	6.5
20°-30°	596.7	9.8
30°-40°	709.4	11.7
40°-50°	726.3	11.9
50°-60°	647.4	10.6
60°-70°	482.6	7.9
70°-80°	263.7	4.3
80°-90°	62.2	1.0
90°-100°	18.1	0.3
100°-110°	82.8	1.4
110°-120°	242.8	4.0
120°-130°	365.4	6.0
130°-140°	392.4	6.5
140°-150°	374.5	6.2
150°-160°	308.2	5.1
160°-170°	201.8	3.3
170°-180°	70.0	1.2
0°-30°	1134.4	18.7
0°-40°	1843.8	30.3
0°-60°	3217.5	52.9
0°-90°	4026.0	66.2
90°-120°	343.7	5.7
90°-150°	1476.0	24.3
90°-180°	2056.0	33.8
0°-180°	6082.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1477	1477	1477	1477	1477	
5°	1466	1472	1486	1469	1468	139
15°	1409	1417	1428	1411	1404	397
25°	1284	1305	1315	1298	1277	592
35°	1120	1143	1158	1135	1109	700
45°	922	950	966	939	911	711
55°	703	731	746	724	693	628
65°	466	489	512	485	460	461
75°	228	246	268	248	233	244
85°	34	47	51	52	44	50
90°	1	1	1	2	4	1
95°	5	6	13	23	22	6
105°	23	54	95	63	67	26
115°	195	483	236	118	131	260
125°	734	634	376	177	164	645
135°	806	721	503	299	230	623
145°	839	774	599	428	360	526
155°	842	795	674	547	492	389
165°	815	789	723	644	607	231
175°	759	759	746	713	695	74
180°	737	737	737	737	737	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1477.0	1477.0	1477.0	1477.0	1477.0	1477.0	1477.0	1477.0	1477.0
2.5°	1467.4	1474.4	1476.2	1474.9	1488.2	1475.7	1475.4	1474.5	1469.8
5°	1466.0	1468.0	1472.0	1469.4	1486.0	1469.4	1469.0	1467.0	1468.0
7.5°	1456.4	1458.4	1460.6	1458.0	1474.6	1457.6	1457.4	1454.0	1455.0
10°	1446.0	1448.0	1451.0	1448.4	1465.0	1446.4	1447.0	1442.0	1443.0
12.5°	1431.6	1433.6	1439.0	1435.6	1451.4	1433.6	1434.2	1428.4	1428.6
15°	1409.0	1411.9	1417.0	1411.4	1428.0	1410.4	1411.0	1405.0	1404.0
17.5°	1376.8	1382.7	1388.8	1383.9	1398.8	1382.0	1382.8	1373.5	1371.0
20°	1352.0	1357.9	1368.0	1362.4	1378.0	1360.4	1362.0	1348.0	1347.0
22.5°	1327.2	1331.5	1344.0	1338.4	1354.0	1336.4	1337.2	1320.8	1320.6
25°	1284.0	1289.9	1305.0	1300.3	1315.0	1297.4	1298.0	1279.9	1277.0
27.5°	1239.8	1245.9	1261.2	1256.7	1271.8	1253.8	1255.0	1234.9	1229.0
30°	1207.0	1213.8	1230.0	1226.4	1243.0	1223.4	1223.0	1202.9	1197.0
32.5°	1171.8	1180.2	1196.4	1194.3	1209.4	1190.6	1188.6	1168.5	1162.6
35°	1120.0	1128.8	1143.0	1144.3	1158.0	1140.4	1135.0	1115.8	1109.0
37.5°	1064.0	1072.2	1087.6	1090.3	1103.6	1085.2	1077.6	1060.2	1052.4
40°	1024.0	1033.8	1050.0	1054.3	1066.0	1048.4	1040.0	1021.8	1014.0
42.5°	984.8	994.6	1011.6	1018.2	1026.8	1010.0	1000.0	982.6	973.2
45°	922.0	931.8	950.0	959.2	966.0	950.4	939.0	920.8	911.0
47.5°	858.2	869.0	887.4	898.7	903.2	888.9	878.4	858.2	847.2
50°	815.0	825.8	845.0	857.1	860.0	847.3	836.0	815.7	804.0
52.5°	771.0	780.2	799.4	813.0	814.4	804.0	792.0	771.8	760.8
55°	703.0	712.8	731.0	747.0	746.0	739.2	724.0	703.8	693.0
57.5°	633.2	641.0	660.0	677.0	677.4	669.6	655.0	635.0	624.4
60°	586.0	593.8	612.0	629.0	631.0	623.2	607.0	587.8	578.0
62.5°	538.8	545.8	563.2	581.8	583.8	576.0	559.0	540.6	530.8
65°	466.0	471.9	489.0	508.1	512.0	503.2	485.0	468.8	460.0
67.5°	394.2	399.9	415.8	434.7	439.8	429.8	413.4	398.0	389.4
70°	347.0	351.9	367.0	385.1	391.0	380.2	367.0	350.8	343.0
72.5°	299.0	303.9	319.0	336.3	341.4	331.4	319.0	304.5	301.4
75°	228.0	232.9	246.0	264.1	268.0	259.2	248.0	235.0	233.0
77.5°	164.6	167.7	179.6	192.1	194.6	189.3	182.6	171.0	170.0
80°	123.0	126.9	138.0	148.0	149.0	146.1	141.0	131.0	130.0
82.5°	86.2	89.3	98.8	108.0	106.6	106.8	103.4	94.2	94.0
85°	34.0	36.9	47.0	54.9	51.0	53.9	52.0	45.0	44.0
87.5°	3.4	4.2	8.2	16.2	14.6	17.0	14.8	11.0	11.2
90°	1.0	1.0	1.0	1.0	1.0	1.0	2.1	3.1	4.1
92.5°	2.7	2.7	2.7	3.5	3.5	8.3	6.2	5.6	6.6
95°	5.1	5.1	6.2	15.4	13.4	20.4	22.7	21.6	21.6
97.5°	9.1	9.1	11.7	41.0	30.3	27.9	38.1	39.3	38.9
100°	12.4	12.4	17.5	65.4	44.3	36.2	42.2	48.5	50.5
102.5°	15.7	16.5	26.6	101.3	62.4	46.3	48.0	54.2	56.2
105°	22.7	24.7	53.6	170.3	94.8	61.5	62.8	63.9	66.9
107.5°	33.6	41.0	135.7	243.1	133.7	80.7	83.4	80.1	80.3
110°	44.3	61.4	229.7	289.6	161.7	94.2	95.8	91.7	92.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	72.3	121.6	349.2	326.5	191.4	110.2	104.8	108.9	106.7
115°	194.7	317.5	483.0	379.9	235.9	137.2	118.4	127.8	130.8
117.5°	465.1	548.1	546.1	425.0	280.1	169.8	131.0	139.8	144.8
120°	624.2	636.2	575.7	453.0	309.0	192.2	140.1	146.4	151.4
122.5°	686.0	671.4	600.5	478.6	336.2	216.1	152.4	151.3	157.2
125°	734.4	708.2	634.5	513.9	375.9	256.1	177.2	160.7	163.8
127.5°	761.8	732.8	663.7	547.0	416.3	296.1	209.9	176.3	174.5
130°	776.6	748.4	681.8	567.7	441.9	324.0	233.8	189.4	184.4
132.5°	788.9	763.2	698.3	587.6	466.6	351.2	259.3	209.1	200.0
135°	806.5	782.3	721.0	614.4	502.6	389.8	298.7	242.8	229.7
137.5°	821.3	796.7	740.1	639.9	533.7	427.6	337.0	283.9	268.6
140°	827.1	804.9	750.8	654.8	555.1	451.4	362.5	308.7	296.6
142.5°	832.8	811.5	760.7	669.8	573.3	474.4	388.9	335.1	322.2
145°	839.4	818.3	773.5	689.1	599.4	507.8	428.5	373.6	360.5
147.5°	842.9	824.0	783.0	705.3	625.0	538.6	467.4	412.1	400.2
150°	844.6	826.4	787.9	716.2	640.6	559.1	491.3	438.5	427.4
152.5°	844.6	825.6	790.4	724.5	653.8	577.9	514.4	464.1	453.8
155°	842.5	824.4	795.1	735.0	673.6	605.1	546.9	503.4	492.3
157.5°	834.3	823.4	795.1	744.7	690.7	630.5	578.6	539.9	530.0
160°	830.1	820.1	795.1	749.7	701.4	646.0	598.4	562.2	553.1
162.5°	824.4	814.3	793.5	753.2	710.5	659.9	617.4	582.0	575.3
165°	814.7	804.6	788.9	756.3	723.0	679.7	643.7	613.7	606.6
167.5°	800.9	795.3	782.6	757.2	730.7	697.4	666.0	641.9	636.3
170°	791.0	787.0	777.6	756.6	736.4	707.2	680.8	660.1	656.1
172.5°	778.6	776.2	770.2	755.8	740.5	717.0	694.8	675.0	671.7
175°	759.1	761.1	759.1	752.7	745.7	729.6	712.7	698.2	695.2
177.5°	744.0	744.0	745.7	745.7	744.9	736.8	729.2	721.0	722.6
180°	737.4	737.4	737.4	737.4	737.4	737.4	737.4	737.4	737.4

(END OF REPORT)