

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: P511772

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

Issue Date: 4/9/2021

Test Information

Test Method: LM-79-08
Report Number: P511772
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-940-1D-UNV-STD-W-4
Description: CORELITE SQW WALL MOUNTED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

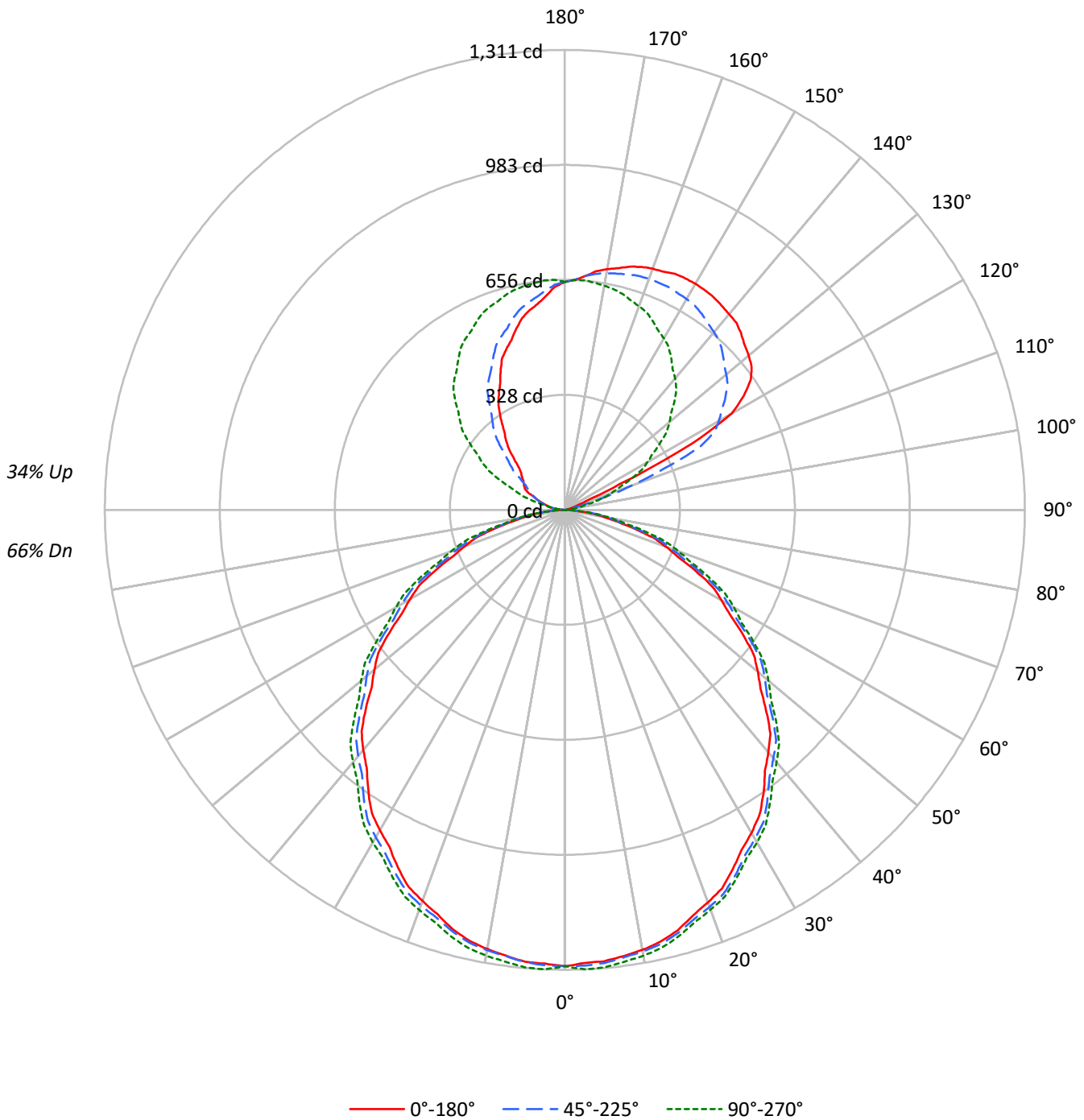
Lumens per Lamp: N/A
Luminaire Lumens: 5357.9 lumens
Efficiency: N/A
Efficacy: 105.5 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.25 / 1.35
Luminous Opening: Rectangular (W 4' x L: 0.08' x H: 0')
CIE Type: Semi-Direct

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°	42015	42015	42015
5°	41864	42435	41919
10°	41768	42319	41683
15°	41495	42056	41347
20°	40928	41715	40777
25°	40301	41274	40084
30°	39648	40830	39320
35°	38897	40213	38514
40°	38027	39587	37656
45°	37091	38863	36648
50°	36070	38060	35583
55°	34866	37000	34371
60°	33338	35902	32886
65°	31366	34460	30961
70°	28863	32517	28532
75°	25066	29457	25615
80°	20158	24417	21293
85°	11115	16636	14376



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.0	2.3
10°-20°	350.7	6.5
20°-30°	525.6	9.8
30°-40°	625.0	11.7
40°-50°	639.8	11.9
50°-60°	570.3	10.6
60°-70°	425.1	7.9
70°-80°	232.3	4.3
80°-90°	54.8	1.0
90°-100°	15.9	0.3
100°-110°	73.0	1.4
110°-120°	213.9	4.0
120°-130°	321.9	6.0
130°-140°	345.7	6.5
140°-150°	329.9	6.2
150°-160°	271.5	5.1
160°-170°	177.8	3.3
170°-180°	61.6	1.2
0°-30°	999.3	18.7
0°-40°	1624.3	30.3
0°-60°	2834.4	52.9
0°-90°	3546.7	66.2
90°-120°	302.7	5.7
90°-150°	1300.3	24.3
90°-180°	1811.0	33.8
0°-180°	5357.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1301	1301	1301	1301	1301	
5°	1292	1297	1309	1294	1293	123
15°	1241	1248	1258	1243	1237	349
25°	1131	1150	1158	1144	1125	521
35°	987	1007	1020	1000	977	617
45°	812	837	851	827	802	626
55°	619	644	657	638	610	553
65°	410	431	451	427	405	406
75°	201	217	236	218	205	215
85°	30	41	45	46	39	44
90°	1	1	1	2	4	1
95°	4	5	12	20	19	5
105°	20	47	84	55	59	23
115°	172	426	208	104	115	229
125°	647	559	331	156	144	568
135°	710	635	443	263	202	548
145°	740	681	528	377	318	463
155°	742	700	593	482	434	343
165°	718	695	637	567	534	203
175°	669	669	657	628	612	65
180°	650	650	650	650	650	

TEST NUMBER: P511772

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

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1301.1	1301.1	1301.1	1301.1	1301.1	1301.1	1301.1	1301.1	1301.1
2.5°	1292.7	1298.9	1300.4	1299.3	1311.0	1300.0	1299.7	1298.9	1294.8
5°	1291.5	1293.2	1296.7	1294.4	1309.1	1294.4	1294.1	1292.4	1293.2
7.5°	1283.0	1284.7	1286.7	1284.4	1299.0	1284.0	1283.9	1280.9	1281.8
10°	1273.8	1275.6	1278.2	1275.9	1290.6	1274.2	1274.7	1270.3	1271.2
12.5°	1261.2	1262.9	1267.7	1264.6	1278.6	1262.9	1263.4	1258.3	1258.5
15°	1241.2	1243.8	1248.3	1243.3	1258.0	1242.5	1243.0	1237.7	1236.8
17.5°	1212.9	1218.0	1223.4	1219.2	1232.3	1217.4	1218.2	1210.0	1207.8
20°	1191.0	1196.2	1205.1	1200.2	1213.9	1198.4	1199.8	1187.5	1186.6
22.5°	1169.2	1173.0	1184.0	1179.0	1192.8	1177.3	1178.0	1163.5	1163.4
25°	1131.1	1136.3	1149.6	1145.5	1158.4	1142.9	1143.5	1127.5	1125.0
27.5°	1092.2	1097.5	1111.0	1107.1	1120.4	1104.5	1105.6	1087.8	1082.7
30°	1063.3	1069.3	1083.6	1080.4	1095.0	1077.8	1077.4	1059.7	1054.5
32.5°	1032.3	1039.7	1054.0	1052.1	1065.4	1048.9	1047.1	1029.3	1024.2
35°	986.7	994.4	1006.9	1008.1	1020.1	1004.6	999.9	983.0	977.0
37.5°	937.3	944.6	958.1	960.5	972.2	956.0	949.3	934.0	927.1
40°	902.1	910.7	925.0	928.7	939.1	923.6	916.2	900.2	893.3
42.5°	867.5	876.2	891.2	897.0	904.5	889.7	880.9	865.6	857.3
45°	812.2	820.8	836.9	845.0	851.0	837.2	827.2	811.1	802.5
47.5°	756.0	765.5	781.7	791.7	795.7	783.1	773.8	756.0	746.3
50°	718.0	727.4	744.4	755.0	757.6	746.4	736.5	718.6	708.3
52.5°	679.2	687.3	704.2	716.2	717.4	708.3	697.7	679.9	670.2
55°	619.3	627.9	644.0	658.0	657.2	651.2	637.8	620.0	610.5
57.5°	557.8	564.7	581.4	596.4	596.7	589.9	577.0	559.4	550.1
60°	516.2	523.1	539.1	554.1	555.9	549.0	534.7	517.8	509.2
62.5°	474.6	480.9	496.1	512.6	514.3	507.4	492.4	476.2	467.6
65°	410.5	415.7	430.8	447.6	451.0	443.3	427.3	413.0	405.2
67.5°	347.3	352.3	366.3	383.0	387.4	378.7	364.2	350.6	343.0
70°	305.7	310.0	323.3	339.3	344.4	335.0	323.3	309.1	302.2
72.5°	263.4	267.7	281.0	296.3	300.8	292.0	281.0	268.3	265.5
75°	200.9	205.2	216.7	232.6	236.1	228.3	218.5	207.0	205.3
77.5°	145.0	147.8	158.2	169.2	171.4	166.8	160.9	150.6	149.8
80°	108.4	111.8	121.6	130.4	131.3	128.7	124.2	115.4	114.5
82.5°	75.9	78.7	87.0	95.1	93.9	94.1	91.1	83.0	82.8
85°	30.0	32.5	41.4	48.4	44.9	47.5	45.8	39.6	38.8
87.5°	3.0	3.7	7.2	14.2	12.9	14.9	13.0	9.7	9.9
90°	0.9	0.9	0.9	0.9	0.9	0.9	1.8	2.7	3.6
92.5°	2.4	2.4	2.4	3.1	3.1	7.3	5.4	4.9	5.8
95°	4.5	4.5	5.4	13.6	11.8	18.0	20.0	19.1	19.1
97.5°	8.0	8.0	10.3	36.1	26.7	24.5	33.6	34.7	34.3
100°	10.9	10.9	15.4	57.6	39.0	31.9	37.2	42.7	44.5
102.5°	13.8	14.5	23.4	89.2	55.0	40.8	42.3	47.8	49.5
105°	20.0	21.7	47.2	150.0	83.5	54.2	55.3	56.3	59.0
107.5°	29.6	36.1	119.6	214.1	117.8	71.1	73.5	70.6	70.8
110°	39.0	54.1	202.3	255.1	142.5	83.0	84.4	80.8	81.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	63.7	107.2	307.6	287.6	168.6	97.1	92.4	96.0	94.0
115°	171.5	279.7	425.5	334.6	207.8	120.8	104.3	112.6	115.2
117.5°	409.7	482.9	481.1	374.4	246.8	149.6	115.4	123.1	127.6
120°	549.8	560.5	507.2	399.1	272.2	169.3	123.4	128.9	133.4
122.5°	604.3	591.5	529.0	421.6	296.2	190.4	134.3	133.3	138.5
125°	646.9	623.9	558.9	452.7	331.2	225.6	156.1	141.6	144.3
127.5°	671.1	645.5	584.7	481.9	366.7	260.8	184.9	155.3	153.7
130°	684.1	659.3	600.7	500.1	389.2	285.4	206.0	166.8	162.4
132.5°	695.0	672.3	615.2	517.7	411.0	309.4	228.5	184.2	176.2
135°	710.4	689.1	635.1	541.3	442.8	343.4	263.1	213.9	202.3
137.5°	723.5	701.9	652.0	563.7	470.2	376.7	296.9	250.1	236.6
140°	728.6	709.1	661.4	576.9	489.1	397.7	319.4	272.0	261.3
142.5°	733.7	714.9	670.2	590.0	505.0	417.9	342.6	295.2	283.8
145°	739.5	720.8	681.4	607.0	528.1	447.3	377.4	329.1	317.6
147.5°	742.6	725.9	689.8	621.4	550.6	474.4	411.7	363.1	352.6
150°	744.0	728.0	694.1	630.9	564.4	492.5	432.8	386.3	376.5
152.5°	744.0	727.3	696.3	638.3	576.0	509.1	453.1	408.8	399.8
155°	742.2	726.2	700.5	647.5	593.4	533.1	481.8	443.5	433.7
157.5°	734.9	725.4	700.5	656.0	608.5	555.4	509.7	475.6	466.9
160°	731.3	722.4	700.5	660.5	617.9	569.1	527.2	495.2	487.2
162.5°	726.2	717.4	699.0	663.5	625.9	581.3	543.9	512.7	506.8
165°	717.7	708.8	695.0	666.2	636.9	598.8	567.1	540.6	534.4
167.5°	705.5	700.6	689.4	667.1	643.7	614.4	586.7	565.5	560.5
170°	696.8	693.3	685.0	666.5	648.7	623.0	599.7	581.5	578.0
172.5°	685.9	683.8	678.5	665.9	652.4	631.6	612.1	594.6	591.8
175°	668.7	670.5	668.7	663.1	656.9	642.7	627.9	615.1	612.4
177.5°	655.5	655.5	656.9	656.9	656.2	649.1	642.4	635.2	636.6
180°	649.6	649.6	649.6	649.6	649.6	649.6	649.6	649.6	649.6

(END OF REPORT)