

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: P511844

Luminaire Tested: **SQW-F-100U-025D-940-1D-UNV-STD-W-4**

Issue Date: 4/9/2021

Test Information

Test Method: LM-79-08
Report Number: P511844
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-025D-940-1D-UNV-STD-W-4
Description: CORELITE SQW WALL MOUNTED LED LUMINAIRE
DOWNLIGHT 250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

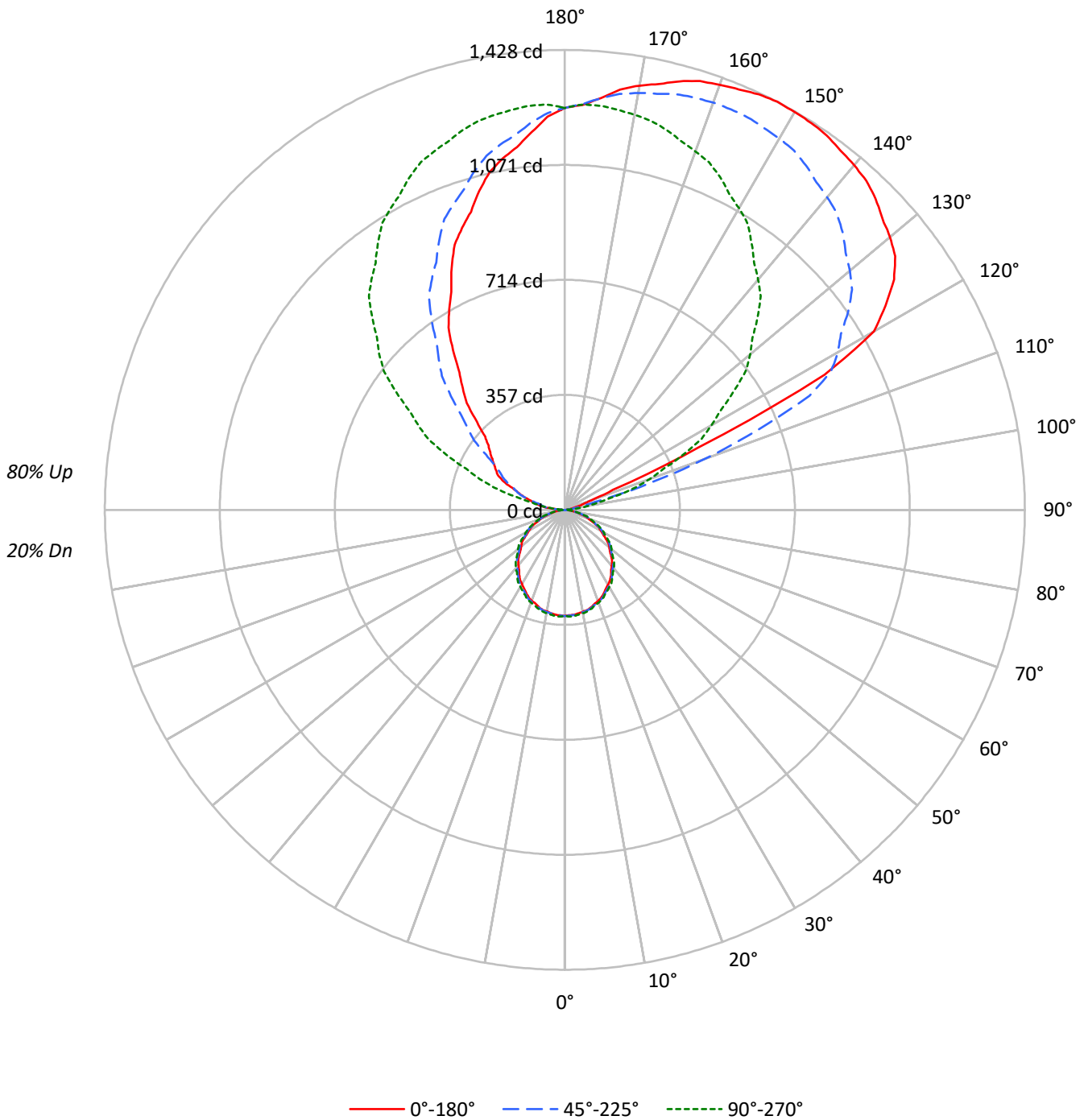
Lumens per Lamp: N/A
Luminaire Lumens: 4387.8 lumens
Efficiency: N/A
Efficacy: 122.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.25 / 1.35
Luminous Opening: Rectangular (W 4' x L: 0.08' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 35.8
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



TEST NUMBER: P511844
CATALOG NUMBER: SQW-F-100U-025D-940-1D-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P511844

CATALOG NUMBER: SQW-F-100U-025D-940-1D-UNV-STD-W-4

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	100	100	100	100	88	88	88	88	67	67	67	47	47	47	29	29	29	20
1	91	87	83	80	80	77	74	71	58	56	55	41	40	39	25	25	24	17
2	83	76	70	65	73	67	62	58	51	48	45	36	34	32	22	21	20	14
3	76	67	60	54	66	59	53	49	45	41	38	32	29	27	20	18	17	12
4	69	59	51	46	61	52	46	41	40	35	32	28	26	23	18	16	15	10
5	63	52	44	39	56	46	40	35	35	31	27	25	22	20	16	14	13	9
6	58	47	39	33	51	41	35	30	32	27	24	23	20	17	14	13	11	8
7	53	42	34	29	47	37	31	26	29	24	21	21	18	15	13	11	10	7
8	49	38	30	25	44	34	27	23	26	21	18	19	16	13	12	10	9	6
9	46	34	27	22	40	31	24	20	24	19	16	17	14	12	11	9	8	6
10	43	31	24	20	38	28	22	18	22	17	14	16	13	11	10	8	7	5

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	10640	10640	10640
5°	10593	10736	10593
10°	10542	10686	10516
15°	10484	10631	10427
20°	10354	10536	10323
25°	10201	10422	10108
30°	9986	10314	9918
35°	9828	10139	9725
40°	9544	9991	9434
45°	9293	9695	9175
50°	9028	9515	8897
55°	8681	9272	8681
60°	8305	8990	8305
65°	7878	8619	7878
70°	7317	8148	7232
75°	6376	7361	6488
80°	5244	6062	5411
85°	2927	4261	3594



TEST NUMBER: P511844

CATALOG NUMBER: SQW-F-100U-025D-940-1D-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	31.1	0.7
10°-20°	88.6	2.0
20°-30°	132.8	3.0
30°-40°	157.6	3.6
40°-50°	160.1	3.6
50°-60°	142.7	3.3
60°-70°	106.5	2.4
70°-80°	58.6	1.3
80°-90°	14.5	0.3
90°-100°	30.7	0.7
100°-110°	145.0	3.3
110°-120°	425.9	9.7
120°-130°	619.2	14.1
130°-140°	662.5	15.1
140°-150°	631.5	14.4
150°-160°	521.0	11.9
160°-170°	341.3	7.8
170°-180°	118.4	2.7
0°-30°	252.5	5.8
0°-40°	410.1	9.3
0°-60°	712.9	16.2
0°-90°	892.5	20.3
90°-120°	601.5	13.7
90°-150°	2514.7	57.3
90°-180°	3495.0	79.7
0°-180°	4387.8	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	330	330	330	330	330	
5°	327	328	331	328	327	31
15°	314	315	318	314	312	88
25°	286	290	292	289	284	132
35°	249	255	257	253	247	155
45°	204	210	212	208	201	157
55°	154	161	165	159	154	138
65°	103	108	113	108	103	102
75°	51	55	59	55	52	55
85°	8	11	12	12	10	11
90°	3	3	2	4	7	2
95°	9	10	24	37	33	10
105°	39	109	161	103	110	48
115°	458	838	406	194	211	520
125°	1247	1073	640	298	275	1105
135°	1365	1220	846	500	386	1053
145°	1418	1306	1011	721	605	889
155°	1424	1345	1140	923	831	658
165°	1378	1336	1221	1087	1026	391
175°	1283	1283	1260	1206	1177	124
180°	1248	1248	1248	1248	1248	



TEST NUMBER: P511844

CATALOG NUMBER: SQW-F-100U-025D-940-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	329.5	329.5	329.5	329.5	329.5	329.5	329.5	329.5	329.5
2.5°	327.4	328.7	328.8	328.8	331.6	328.8	328.8	328.8	328.1
5°	326.8	326.8	327.7	327.8	331.2	327.8	327.7	326.8	326.8
7.5°	324.4	324.5	325.4	325.3	328.1	324.4	324.5	324.4	324.2
10°	321.5	322.4	323.3	322.5	325.9	321.6	322.4	321.5	320.7
12.5°	318.7	319.6	320.5	319.7	323.1	319.5	319.6	318.7	318.5
15°	313.6	314.5	315.4	314.6	318.0	313.7	313.6	312.7	311.9
17.5°	306.2	307.8	309.0	308.2	311.5	307.4	308.2	306.0	304.6
20°	301.3	302.1	304.8	304.0	306.6	303.1	303.9	300.4	300.4
22.5°	295.6	296.5	299.2	298.4	301.6	297.5	298.3	294.7	294.1
25°	286.3	287.2	289.8	289.0	292.5	288.2	288.9	284.5	283.7
27.5°	275.6	276.6	280.8	280.0	283.7	278.5	279.3	274.8	273.8
30°	267.8	269.5	273.1	272.3	276.6	271.4	272.2	267.8	266.0
32.5°	260.8	262.5	265.3	265.9	268.9	264.4	264.5	260.0	258.3
35°	249.3	251.0	254.6	254.7	257.2	252.9	252.8	248.4	246.7
37.5°	236.3	237.8	241.7	242.8	244.7	240.8	239.8	235.3	233.6
40°	226.4	227.3	232.6	234.4	237.0	230.9	229.9	225.5	223.8
42.5°	217.2	218.8	223.4	224.5	226.4	222.4	220.8	216.3	214.6
45°	203.5	205.2	209.7	211.4	212.3	208.9	207.9	203.4	200.9
47.5°	189.6	191.3	195.7	197.7	198.6	196.0	193.3	189.5	186.9
50°	179.7	181.4	185.9	188.5	189.4	186.8	184.1	179.7	177.1
52.5°	170.5	171.6	176.0	179.4	179.5	177.6	174.2	169.8	167.9
55°	154.2	156.7	161.2	164.7	164.7	163.0	159.4	155.0	154.2
57.5°	139.9	140.9	145.4	148.9	149.1	148.0	144.5	140.0	139.2
60°	128.6	130.3	134.8	138.3	139.2	137.5	133.9	129.5	128.6
62.5°	119.5	119.8	124.2	127.8	128.6	126.9	123.3	119.6	118.0
65°	103.1	103.9	107.5	111.9	112.8	111.0	107.5	103.9	103.1
67.5°	87.4	88.3	91.6	95.9	96.9	95.2	90.7	88.1	87.2
70°	77.5	78.4	81.0	84.6	86.3	84.6	80.2	77.5	76.6
72.5°	67.0	67.8	70.5	74.0	75.1	73.3	69.6	67.6	66.8
75°	51.1	52.8	54.6	58.2	59.0	58.2	54.6	52.8	52.0
77.5°	37.4	38.2	40.0	42.5	43.2	42.5	40.9	38.2	38.2
80°	28.2	29.1	30.8	32.6	32.6	32.6	31.7	29.1	29.1
82.5°	19.7	20.6	21.7	24.1	23.4	24.1	23.3	21.3	20.6
85°	7.9	8.8	10.6	12.3	11.5	12.3	11.5	9.7	9.7
87.5°	1.2	1.9	1.9	3.9	3.9	4.7	3.5	3.3	3.5
90°	2.6	2.6	2.6	1.7	1.7	2.6	3.5	6.1	7.0
92.5°	4.7	4.7	4.7	5.9	6.6	13.6	9.0	10.2	9.7
95°	8.7	9.5	10.4	26.9	23.5	34.5	37.4	35.6	33.0
97.5°	15.3	16.1	21.7	73.6	52.0	46.9	61.2	64.8	61.4
100°	20.9	21.7	32.2	119.0	75.6	60.3	69.5	80.8	80.8
102.5°	27.1	28.6	50.9	179.5	106.2	76.0	80.0	90.6	93.4
105°	39.1	43.4	108.6	303.6	160.8	101.3	102.6	107.0	109.5
107.5°	61.0	78.4	280.7	420.5	229.3	132.4	135.2	133.7	132.5
110°	86.0	125.1	461.5	492.4	280.7	156.7	154.7	153.8	151.2



TEST NUMBER: P511844

CATALOG NUMBER: SQW-F-100U-025D-940-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	161.1	267.6	647.2	555.4	331.5	183.6	170.0	180.2	175.6
115°	458.1	651.8	837.9	643.0	405.9	230.8	193.8	207.8	211.2
117.5°	909.3	983.6	931.9	717.2	478.6	285.1	215.6	228.4	235.0
120°	1108.2	1092.1	977.8	767.2	525.9	323.6	232.9	240.9	246.8
122.5°	1179.8	1141.9	1016.1	810.4	571.1	365.4	255.2	252.1	259.4
125°	1247.3	1198.0	1073.4	869.2	639.7	432.4	298.1	269.6	274.7
127.5°	1292.7	1241.2	1123.9	926.1	707.3	501.2	354.3	297.3	292.0
130°	1317.7	1267.5	1155.2	958.4	751.8	547.0	394.6	322.2	309.4
132.5°	1337.2	1291.1	1182.3	993.2	790.1	590.7	436.3	354.7	335.9
135°	1364.6	1321.3	1219.5	1039.5	845.7	655.3	499.8	413.1	385.9
137.5°	1385.7	1345.2	1249.2	1079.8	900.1	718.1	564.5	478.5	450.4
140°	1396.8	1357.7	1267.3	1104.3	933.5	757.6	607.6	520.9	492.8
142.5°	1406.5	1368.8	1282.6	1128.2	965.5	796.4	653.5	564.0	537.3
145°	1418.5	1382.8	1305.5	1162.1	1010.9	853.6	720.6	629.6	605.0
147.5°	1424.3	1392.3	1323.3	1192.2	1054.8	908.3	785.4	698.4	671.9
150°	1426.3	1395.7	1331.6	1210.5	1081.3	943.6	825.7	744.3	717.1
152.5°	1428.4	1396.5	1337.2	1226.0	1105.6	976.1	865.4	788.1	763.7
155°	1423.7	1395.7	1344.6	1244.9	1140.4	1022.2	923.1	852.2	830.9
157.5°	1413.0	1394.1	1346.2	1260.3	1168.0	1064.2	977.3	913.0	892.1
160°	1404.6	1388.5	1345.5	1268.8	1184.7	1090.4	1010.0	951.3	931.8
162.5°	1395.6	1378.7	1342.0	1274.6	1200.7	1115.2	1042.0	985.5	970.0
165°	1377.7	1362.4	1335.9	1280.7	1221.2	1149.0	1087.4	1038.4	1025.6
167.5°	1354.4	1344.9	1323.3	1282.6	1237.2	1178.6	1125.9	1086.8	1075.5
170°	1337.7	1330.9	1314.2	1282.1	1245.5	1197.1	1151.7	1116.7	1108.2
172.5°	1316.1	1313.4	1302.4	1279.5	1252.5	1212.2	1173.9	1143.8	1136.0
175°	1282.9	1286.3	1282.9	1273.1	1259.5	1232.3	1206.4	1182.8	1176.9
177.5°	1257.9	1259.3	1261.4	1261.3	1259.3	1247.0	1232.9	1220.4	1221.7
180°	1248.2	1248.2	1248.2	1248.2	1248.2	1248.2	1248.2	1248.2	1248.2

(END OF REPORT)