

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: P511856

Luminaire Tested: **SQW-F-100U-075D-940-1D-UNV-STD-W-4**

Issue Date: 4/9/2021

Test Information

Test Method: LM-79-08
Report Number: P511856
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-075D-940-1D-UNV-STD-W-4
Description: CORELITE SQW WALL MOUNTED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

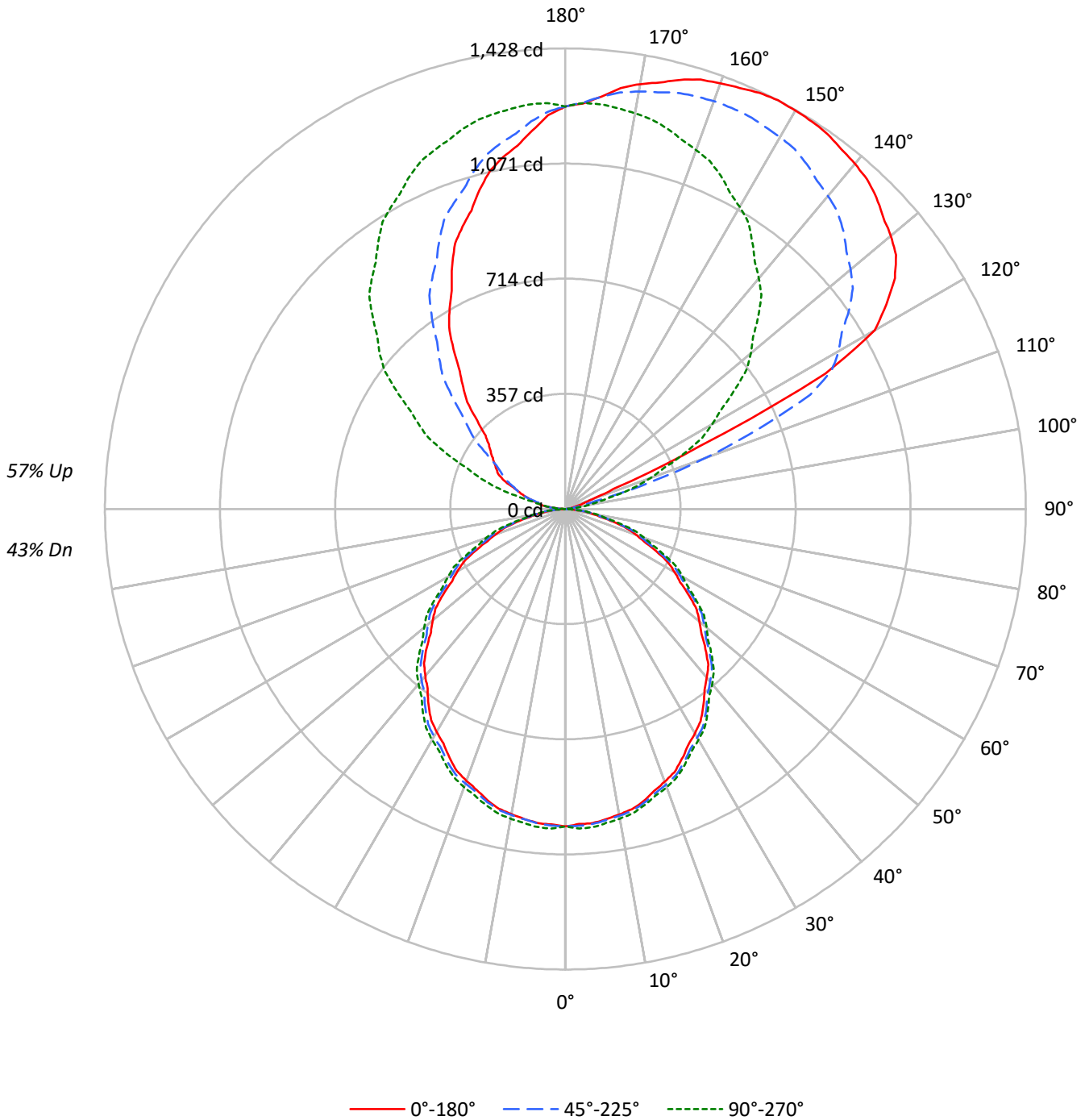
Lumens per Lamp: N/A
Luminaire Lumens: 6177.0 lumens
Efficiency: N/A
Efficacy: 114.0 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.25 / 1.35
Luminous Opening: Rectangular (W 4' x L: 0.08' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 54.2
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: P511856
CATALOG NUMBER: SQW-F-100U-075D-940-1D-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P511856

CATALOG NUMBER: SQW-F-100U-075D-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	50	30	10	0	
RCR																						
0	106	106	106	106	97	97	97	97	80	80	80	64	64	64	50	50	50	43				
1	96	92	88	85	88	84	81	78	70	67	65	56	55	53	44	43	42	37				
2	88	80	74	69	80	74	68	64	61	57	54	50	47	44	39	37	35	30				
3	80	70	63	57	73	65	58	53	54	49	45	44	40	38	34	32	30	26				
4	73	62	54	48	66	57	50	45	48	43	38	39	35	32	31	28	26	22				
5	67	55	47	41	61	51	44	39	43	37	33	35	31	28	28	25	22	19				
6	62	50	42	36	56	46	39	33	38	33	29	31	27	24	25	22	20	17				
7	57	45	37	31	52	41	34	29	35	29	25	28	24	21	23	20	17	15				
8	53	40	33	28	48	37	31	26	32	26	22	26	22	19	21	18	16	13				
9	49	37	29	24	45	34	27	23	29	24	20	24	20	17	19	16	14	12				
10	46	34	27	22	42	31	25	21	27	21	18	22	18	15	18	15	13	11				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	31775	31775	31775
5°	31696	32098	31696
10°	31544	31977	31514
15°	31365	31776	31248
20°	30938	31543	30818
25°	30478	31201	30321
30°	29957	30811	29759
35°	29416	30350	29172
40°	28779	29858	28483
45°	28081	29328	27757
50°	27264	28721	26952
55°	26387	27969	26038
60°	25259	27138	24975
65°	23763	26048	23557
70°	21961	24538	21791
75°	19127	21984	19127
80°	15398	18354	15900
85°	8818	12412	10448



TEST NUMBER: P511856

CATALOG NUMBER: SQW-F-100U-075D-940-1D-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.0	1.5
10°-20°	265.1	4.3
20°-30°	397.2	6.4
30°-40°	472.3	7.6
40°-50°	483.5	7.8
50°-60°	431.1	7.0
60°-70°	322.1	5.2
70°-80°	175.6	2.8
80°-90°	41.9	0.7
90°-100°	30.7	0.5
100°-110°	145.0	2.3
110°-120°	425.9	6.9
120°-130°	619.2	10.0
130°-140°	662.5	10.7
140°-150°	631.5	10.2
150°-160°	521.0	8.4
160°-170°	341.3	5.5
170°-180°	118.4	1.9
0°-30°	755.3	12.2
0°-40°	1227.6	19.9
0°-60°	2142.1	34.7
0°-90°	2681.7	43.4
90°-120°	601.5	9.7
90°-150°	2514.7	40.7
90°-180°	3495.0	56.6
0°-180°	6177.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	984	984	984	984	984	
5°	978	980	990	979	978	93
15°	938	944	950	940	935	264
25°	855	869	876	865	851	394
35°	746	761	770	757	740	466
45°	615	633	642	626	608	474
55°	469	487	497	482	462	418
65°	311	327	341	325	308	308
75°	153	165	176	166	153	164
85°	24	31	34	34	28	34
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: P511856

CATALOG NUMBER: SQW-F-100U-075D-940-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	984.0	984.0	984.0	984.0	984.0	984.0	984.0	984.0	984.0
2.5°	977.7	982.5	983.3	982.1	991.8	982.8	982.6	982.5	979.1
5°	977.8	977.8	980.5	979.0	990.2	979.0	978.7	977.0	977.8
7.5°	969.7	970.8	972.7	971.0	981.5	970.2	970.8	968.2	969.6
10°	962.0	963.7	966.4	964.0	975.2	963.1	963.7	961.1	961.1
12.5°	953.5	955.3	958.6	955.5	966.7	955.4	955.3	951.9	951.9
15°	938.2	939.9	943.5	940.2	950.5	938.5	940.0	935.5	934.7
17.5°	916.5	920.1	924.8	921.5	932.0	919.8	920.6	914.6	913.0
20°	900.3	904.6	910.0	906.7	917.9	905.0	906.5	897.7	896.8
22.5°	883.4	887.0	894.5	891.2	901.7	889.5	891.0	879.3	879.2
25°	855.4	858.8	868.6	866.2	875.7	863.6	865.1	851.8	851.0
27.5°	825.3	829.7	839.5	837.3	846.8	833.8	835.3	821.0	819.3
30°	803.4	808.6	818.4	816.8	826.3	813.4	814.9	799.9	798.1
32.5°	780.2	786.7	796.5	795.7	804.5	792.2	791.6	777.3	774.9
35°	746.2	751.3	761.1	762.2	769.9	758.7	756.7	742.6	740.0
37.5°	708.8	714.1	724.0	726.2	732.9	721.9	718.7	704.5	701.8
40°	682.7	688.8	698.6	702.2	708.3	697.9	693.3	679.1	675.7
42.5°	655.9	662.7	673.2	676.9	682.2	671.9	666.5	653.0	648.9
45°	614.9	621.8	633.4	637.9	642.2	632.7	626.3	612.2	607.8
47.5°	572.3	579.1	591.1	596.6	599.9	592.2	584.8	570.6	565.4
50°	542.7	549.5	562.9	569.1	571.7	564.0	555.9	541.7	536.5
52.5°	513.8	520.0	533.3	540.2	542.1	535.8	527.0	513.5	507.6
55°	468.7	474.7	487.2	495.1	496.8	491.7	481.9	467.7	462.5
57.5°	422.1	428.2	440.5	449.3	451.2	446.0	435.4	422.9	417.0
60°	391.1	397.2	408.8	417.6	420.2	415.0	404.4	391.9	386.7
62.5°	359.4	364.1	376.3	385.2	389.2	384.7	373.3	359.5	355.0
65°	311.0	316.1	326.8	337.5	340.9	337.5	325.1	312.6	308.3
67.5°	264.3	267.7	277.5	288.0	292.3	288.5	277.3	264.6	261.8
70°	232.6	236.0	245.8	255.6	259.9	254.7	244.9	234.3	230.8
72.5°	199.4	202.9	212.0	221.7	225.3	220.2	211.8	202.5	198.4
75°	153.3	156.7	164.7	172.7	176.2	172.7	165.6	157.6	153.3
77.5°	110.3	113.6	120.5	127.4	129.0	126.7	121.7	114.8	111.5
80°	82.8	85.4	91.6	97.8	98.7	97.8	94.3	88.0	85.5
82.5°	58.1	60.0	66.2	71.0	70.5	72.4	68.9	63.4	61.5
85°	23.8	25.5	30.8	36.1	33.5	37.8	34.4	30.8	28.2
87.5°	3.3	3.3	6.2	10.2	9.5	12.4	9.9	8.2	7.0
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: P511856

CATALOG NUMBER: SQW-F-100U-075D-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)