

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: P511862

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

Issue Date: 4/9/2021

Test Information

Test Method: LM-79-08
Report Number: P511862
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-100D-940-1D-UNV-STD-W-4
Description: CORELITE SQW WALL MOUNTED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

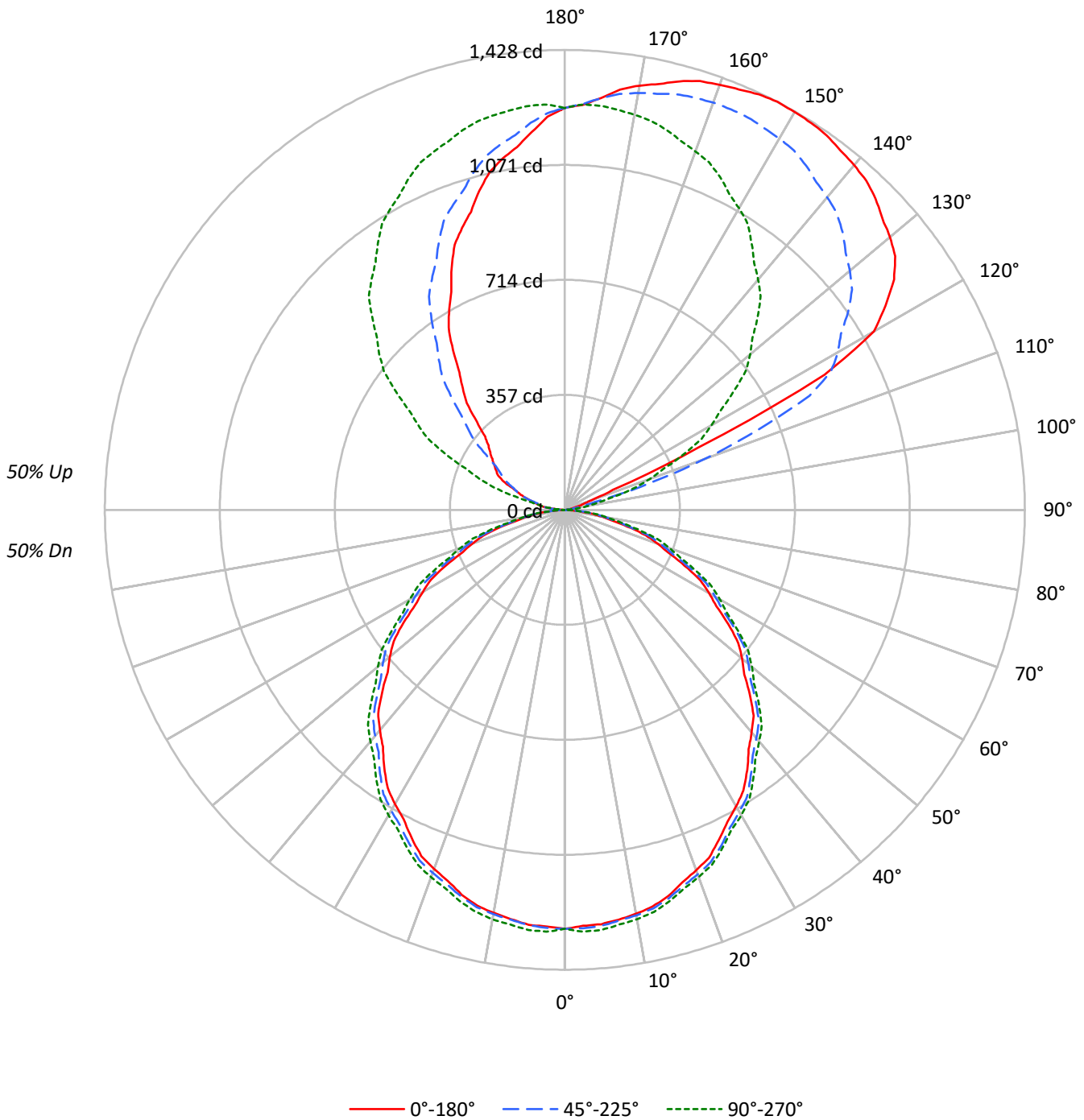
Lumens per Lamp: N/A
Luminaire Lumens: 7042.3 lumens
Efficiency: N/A
Efficacy: 111.1 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.25 / 1.35
Luminous Opening: Rectangular (W 4' x L: 0.08' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 63.4
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	107	107	107	107	99	99	99	99	84	84	84	69	69	69	56	56	56	50
1	98	94	90	86	90	86	83	80	73	71	69	61	59	58	50	49	48	42
2	89	82	75	70	82	75	70	66	64	60	57	54	51	48	44	42	40	35
3	81	72	64	58	75	66	60	55	56	52	48	47	44	41	39	36	34	30
4	74	63	55	49	68	59	52	46	50	45	40	42	38	35	35	32	29	26
5	68	56	48	42	63	52	45	40	45	39	35	38	33	30	31	28	25	22
6	63	50	42	36	58	47	40	34	40	35	30	34	30	26	28	25	22	19
7	58	46	38	32	53	42	35	30	36	31	27	31	26	23	26	22	20	17
8	54	41	34	28	49	39	32	27	33	28	24	28	24	21	24	20	18	15
9	50	38	30	25	46	35	28	24	30	25	21	26	22	18	22	18	16	14
10	47	35	27	22	43	32	26	21	28	23	19	24	20	17	20	17	14	12

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	1.7
10°-20°	350.7	5.0
20°-30°	525.6	7.5
30°-40°	625.0	8.9
40°-50°	639.8	9.1
50°-60°	570.3	8.1
60°-70°	425.1	6.0
70°-80°	232.3	3.3
80°-90°	55.1	0.8
90°-100°	30.7	0.4
100°-110°	145.0	2.1
110°-120°	425.9	6.0
120°-130°	619.2	8.8
130°-140°	662.5	9.4
140°-150°	631.5	9.0
150°-160°	521.0	7.4
160°-170°	341.3	4.8
170°-180°	118.4	1.7
0°-30°	999.3	14.2
0°-40°	1624.3	23.1
0°-60°	2834.4	40.2
0°-90°	3547.0	50.4
90°-120°	601.5	8.5
90°-150°	2514.7	35.7
90°-180°	3495.0	49.6
0°-180°	7042.3	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°	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	

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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°	3.3	4.0	7.6	14.4	13.0	15.3	13.4	10.4	10.6
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



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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)