

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: P522591

Luminaire Tested: **SQW-F-100U-025D-93050-1D-UNV-STD-W-4 (4500K)**

Issue Date: 5/11/2021

Test Information

Test Method: LM-79-08
Report Number: P522591
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-53,
Test Lab: INNOVATION CENTER
Issue Date: 5/11/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQW-F-100U-025D-93050-1D-UNV-STD-W-4 (4500K)
Description: CORELITE SQW WALL MOUNTED LED LUMINAIRE
DOWNLIGHT 250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

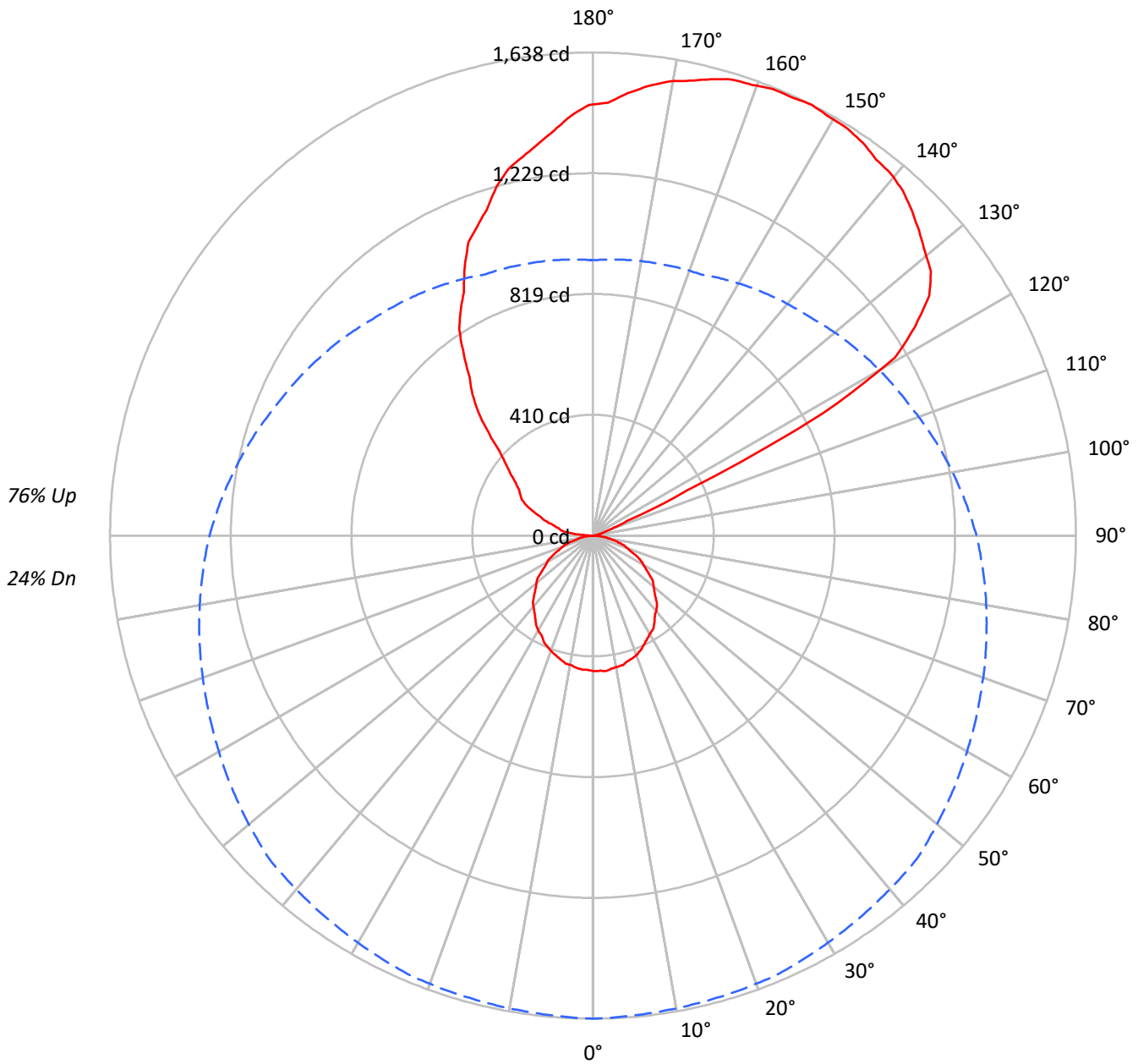
Lumens per Lamp: N/A
Luminaire Lumens: 5339.8 lumens
Efficiency: N/A
Efficacy: 109.4 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.26 / 1.36
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 48.8
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



— Vertical Plane Through 0° Lateral - - - Horizontal Cone Through 152.5° Vertical



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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	101	101	101	101	90	90	90	90	69	69	69	50	50	50	32	32	32	24
1	92	88	84	81	82	78	75	72	60	58	56	44	42	41	28	28	27	20
2	84	76	71	66	74	68	63	59	53	49	46	38	36	34	25	24	23	17
3	76	67	60	54	67	60	54	49	46	42	39	34	31	29	22	20	19	14
4	70	59	52	46	62	53	46	41	41	36	33	30	27	25	20	18	16	12
5	64	53	45	39	56	47	40	35	36	32	28	27	24	21	18	16	14	10
6	58	47	39	34	52	42	35	30	33	28	24	24	21	18	16	14	12	9
7	54	42	35	29	48	38	31	27	29	25	21	22	18	16	14	12	11	8
8	50	38	31	26	44	34	28	23	27	22	19	20	17	14	13	11	10	7
9	46	35	27	23	41	31	25	21	24	20	17	18	15	13	12	10	9	6
10	43	32	25	20	38	28	22	18	22	18	15	17	14	11	11	9	8	6

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	7427	7427	7427
5°	7473	7506	7391
10°	7425	7442	7309
15°	7383	7435	7265
20°	7380	7397	7187
25°	7235	7326	7108
30°	7154	7230	6963
35°	7082	7121	6800
40°	6993	6993	6671
45°	6786	6925	6508
50°	6699	6825	6340
55°	6503	6674	6075
60°	6278	6474	5851
65°	6067	6262	5559
70°	5717	6005	5235
75°	5271	5458	4697
80°	4640	4826	3970
85°	3390	3779	2631



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.5	0.8
10°-20°	124.2	2.3
20°-30°	186.7	3.5
30°-40°	222.8	4.2
40°-50°	228.9	4.3
50°-60°	205.4	3.8
60°-70°	155.5	2.9
70°-80°	88.8	1.7
80°-90°	23.3	0.4
90°-100°	36.9	0.7
100°-110°	163.6	3.1
110°-120°	470.3	8.8
120°-130°	716.3	13.4
130°-140°	777.6	14.6
140°-150°	743.6	13.9
150°-160°	612.6	11.5
160°-170°	400.9	7.5
170°-180°	138.7	2.6
0°-30°	354.4	6.6
0°-40°	577.2	10.8
0°-60°	1011.6	18.9
0°-90°	1279.2	24.0
90°-120°	670.9	12.6
90°-150°	2908.4	54.5
90°-180°	4061.0	76.1
0°-180°	5339.8	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	460	460	460	460	460	
5°	461	459	463	456	456	44
15°	442	445	445	441	435	125
25°	406	410	411	406	399	188
35°	359	361	361	353	345	225
45°	297	303	303	292	285	230
55°	231	236	237	225	216	207
65°	159	162	164	153	146	156
75°	84	88	88	80	75	89
85°	18	21	20	17	14	22
90°	0	0	0	0	0	1
95°	5	8	26	57	56	7
105°	37	99	188	129	138	43
115°	353	927	474	222	249	487
125°	1401	1220	756	374	319	1230
135°	1544	1398	1002	621	494	1192
145°	1616	1504	1195	884	754	1013
155°	1632	1566	1338	1108	1010	756
165°	1598	1558	1435	1289	1227	453
175°	1504	1508	1479	1413	1379	145
180°	1461	1461	1461	1461	1461	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	460.0	460.0	460.0	460.0	460.0	460.0	460.0	460.0	460.0
2.5°	459.2	460.0	461.7	459.3	462.5	459.3	460.0	458.4	456.0
5°	461.1	459.1	459.0	459.1	463.1	458.1	456.0	455.0	456.0
7.5°	455.4	455.8	455.6	455.3	459.6	451.9	454.9	451.9	452.3
10°	452.9	450.9	453.9	451.9	453.9	450.9	450.9	447.8	445.8
12.5°	450.5	449.3	450.7	447.1	453.1	445.4	444.4	443.8	444.2
15°	441.7	444.7	444.8	441.8	444.8	437.8	440.7	436.6	434.6
17.5°	436.8	433.8	435.2	432.8	436.2	430.5	430.1	425.9	426.5
20°	429.5	426.5	429.5	425.5	430.5	421.6	424.4	419.3	418.3
22.5°	419.7	419.1	423.0	419.8	420.8	415.8	415.5	409.5	408.5
25°	406.1	407.1	410.2	405.2	411.2	403.2	406.1	397.0	399.0
27.5°	394.3	394.5	398.0	395.5	396.7	390.6	390.8	383.1	381.7
30°	383.7	384.7	389.8	385.8	387.8	380.8	382.7	372.5	373.5
32.5°	376.4	374.2	378.4	374.4	378.0	371.0	371.3	363.5	362.1
35°	359.3	359.3	361.3	361.3	361.3	354.3	353.2	346.0	345.0
37.5°	341.6	340.8	347.7	342.4	344.8	339.1	336.9	329.9	328.7
40°	331.8	327.8	333.8	331.8	331.8	326.8	324.7	318.5	316.5
42.5°	318.0	317.2	321.6	320.5	322.8	314.7	312.5	305.5	304.3
45°	297.2	298.2	303.3	301.3	303.3	298.3	292.1	287.0	285.0
47.5°	279.7	278.1	282.9	282.8	284.8	277.2	274.4	266.7	266.3
50°	266.7	266.7	270.7	269.8	271.7	265.8	260.6	254.4	252.4
52.5°	253.6	252.0	256.9	256.7	257.1	251.9	246.7	241.4	240.2
55°	231.0	232.0	236.1	236.1	237.1	232.2	224.9	218.8	215.8
57.5°	209.9	209.3	213.1	214.3	214.3	209.4	202.9	197.8	196.6
60°	194.4	195.4	198.5	200.5	200.5	195.5	188.3	183.2	181.2
62.5°	179.7	179.9	183.8	185.1	186.7	180.9	174.4	169.3	167.3
65°	158.8	157.8	161.8	163.9	163.9	158.9	152.7	147.5	145.5
67.5°	135.0	136.4	139.6	140.9	141.9	135.9	129.9	126.6	125.6
70°	121.1	120.1	124.2	126.2	127.2	121.3	116.0	111.9	110.9
72.5°	106.5	106.3	109.5	111.6	111.8	105.8	101.4	98.1	95.5
75°	84.5	85.5	87.5	87.5	87.5	83.5	80.4	77.3	75.3
77.5°	62.9	63.9	65.7	67.6	66.6	63.0	59.8	56.8	55.0
80°	49.9	50.9	51.9	52.9	51.9	49.9	46.8	43.7	42.7
82.5°	36.8	37.0	39.7	39.9	38.9	36.9	34.6	31.5	31.3
85°	18.3	19.3	21.4	21.4	20.4	19.4	17.3	15.2	14.2
87.5°	4.1	4.9	6.5	8.1	6.5	6.5	4.9	3.2	2.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92.5°	1.1	1.1	2.2	3.3	5.4	20.4	22.9	20.7	19.6
95°	5.4	5.4	8.2	25.9	25.9	41.8	57.2	55.8	55.8
97.5°	12.3	13.6	19.1	78.8	58.8	57.2	81.7	89.9	90.7
100°	17.7	19.0	30.0	128.4	87.1	73.8	87.1	106.3	110.3
102.5°	24.2	26.6	47.4	202.7	123.1	88.5	102.4	116.1	120.1
105°	36.8	40.8	99.4	339.6	187.9	117.3	129.3	136.2	137.5
107.5°	55.3	70.2	272.0	477.7	266.6	155.3	162.3	167.0	168.6
110°	74.9	106.8	472.4	561.0	325.4	184.3	179.7	191.9	189.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	126.1	219.8	693.5	629.4	384.2	218.6	196.1	216.0	217.6
115°	352.6	605.6	927.2	726.7	473.8	278.1	221.9	241.2	249.2
117.5°	885.0	1053.0	1050.2	816.8	559.8	348.2	253.0	262.2	271.2
120°	1189.9	1215.2	1112.3	877.6	615.4	398.4	279.1	275.2	283.2
122.5°	1303.2	1282.7	1159.2	931.1	672.0	450.8	312.9	289.3	296.3
125°	1401.0	1361.0	1219.9	1007.2	755.6	528.0	374.4	319.9	318.6
127.5°	1455.1	1413.3	1279.2	1073.4	832.4	608.2	444.4	363.2	351.0
130°	1481.3	1442.7	1320.6	1113.9	883.6	662.6	495.6	401.2	382.6
132.5°	1512.9	1471.1	1350.0	1155.5	932.6	713.8	546.8	446.9	425.1
135°	1543.9	1505.3	1398.2	1209.7	1002.0	789.1	620.8	522.2	494.2
137.5°	1571.7	1536.3	1442.3	1252.4	1064.7	863.1	699.3	603.2	569.1
140°	1590.2	1551.6	1460.9	1285.2	1102.8	909.8	751.5	655.6	629.0
142.5°	1596.7	1573.0	1480.5	1312.7	1145.3	954.4	803.8	704.7	680.2
145°	1616.1	1600.1	1504.4	1345.8	1195.4	1021.0	883.6	780.9	754.3
147.5°	1628.6	1604.6	1526.5	1381.5	1244.4	1080.6	956.0	857.4	832.7
150°	1629.7	1611.1	1543.9	1403.5	1277.1	1124.0	1000.7	907.6	885.0
152.5°	1638.4	1615.5	1552.6	1422.2	1301.0	1160.7	1045.3	958.7	934.0
155°	1632.4	1616.4	1565.7	1446.2	1338.3	1207.9	1108.2	1031.5	1010.2
157.5°	1632.4	1612.7	1567.3	1464.8	1374.3	1259.8	1167.1	1096.2	1080.2
160°	1621.5	1613.5	1568.4	1478.0	1392.8	1289.0	1206.3	1141.8	1120.5
162.5°	1617.2	1603.9	1570.6	1486.9	1409.1	1312.7	1240.0	1178.9	1163.0
165°	1598.4	1586.4	1557.5	1490.9	1435.0	1355.1	1289.3	1234.7	1226.7
167.5°	1576.9	1567.5	1548.5	1497.4	1452.2	1386.9	1331.5	1287.4	1276.5
170°	1561.6	1547.0	1539.8	1500.8	1460.9	1406.3	1358.8	1319.0	1307.0
172.5°	1535.5	1533.6	1527.8	1492.5	1468.5	1423.5	1383.8	1347.4	1339.7
175°	1504.4	1504.4	1508.5	1486.6	1478.6	1441.3	1413.2	1391.2	1379.2
177.5°	1468.5	1469.6	1478.3	1477.2	1478.3	1457.0	1448.9	1428.1	1426.0
180°	1460.9	1460.9	1460.9	1460.9	1460.9	1460.9	1460.9	1460.9	1460.9

(END OF REPORT)