

Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P564674

Luminaire Tested: **SQ4-PW1-050U-100D-840-1D-UNV-STD-W-4**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P564674  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G2-2106-289-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/30/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-PW1-050U-100D-840-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

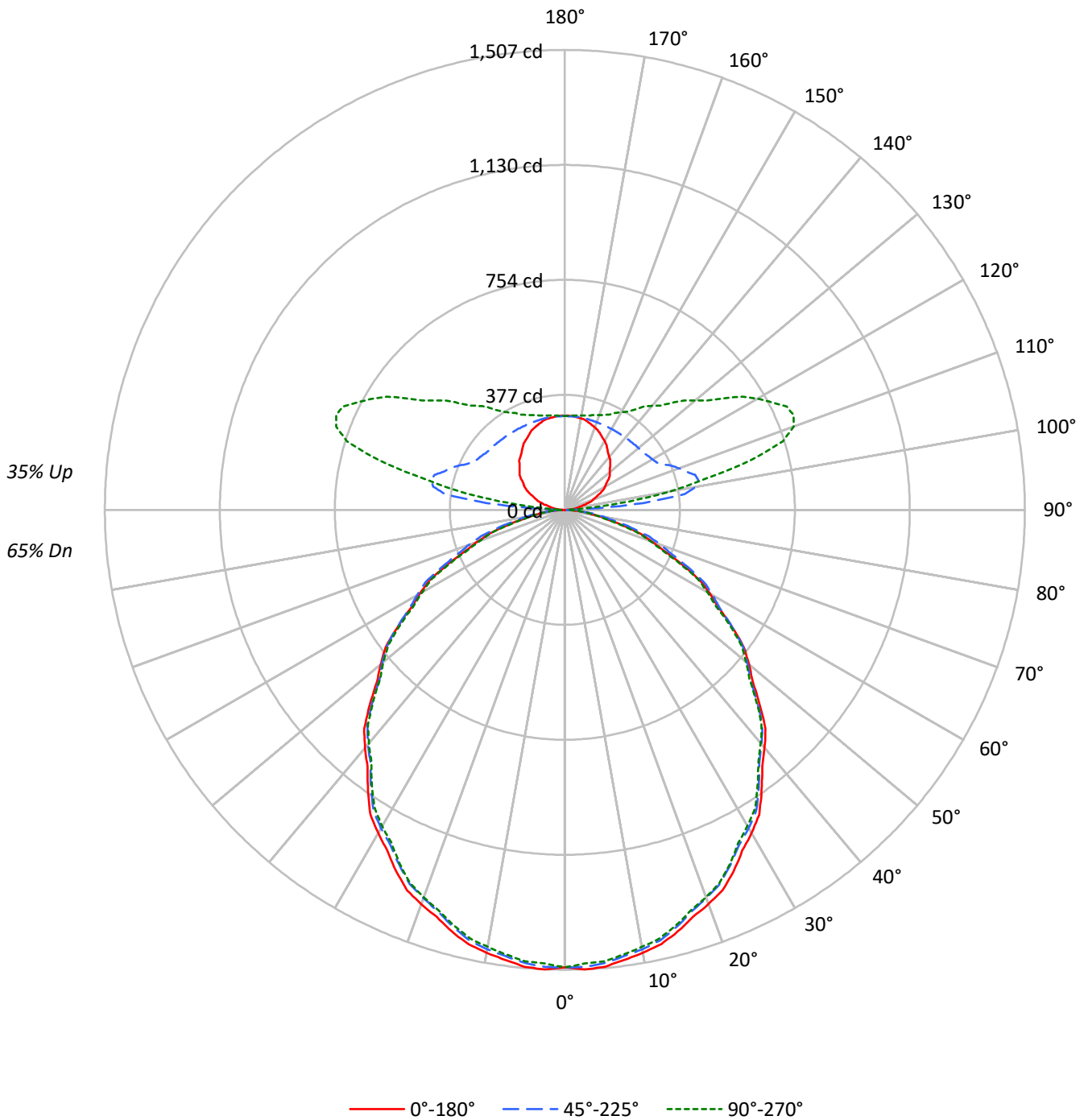
Lumens per Lamp: N/A  
Luminaire Lumens: 5826.9 lumens  
Efficiency: N/A  
Efficacy: 129.2 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 45.1  
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	70	70	70	65
1	101	97	93	90	95	91	88	85	81	78	76	71	69	68	62	61	60	55
2	92	85	79	73	87	80	75	70	71	67	63	63	59	57	55	53	50	47
3	84	75	67	61	79	71	64	59	63	58	53	56	51	48	49	46	43	40
4	77	66	58	52	72	63	55	50	56	50	45	50	45	41	44	40	37	34
5	71	59	51	45	67	56	48	43	50	44	39	45	40	36	39	36	32	30
6	66	53	45	39	61	50	43	37	45	39	34	40	35	31	36	32	29	26
7	61	48	40	34	57	46	38	33	41	35	30	37	32	28	33	29	25	23
8	56	44	36	30	53	42	34	29	38	31	27	34	29	25	30	26	23	21
9	53	40	32	27	49	38	31	26	34	29	24	31	26	22	28	24	21	19
10	49	37	29	24	46	35	28	24	32	26	22	29	24	20	26	22	19	17

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	13830	13830	13830
5°	13919	13810	13748
10°	13808	13697	13623
15°	13662	13511	13460
20°	13498	13291	13266
25°	13310	13068	13027
30°	13029	12832	12747
35°	12659	12481	12406
40°	12263	12073	12025
45°	11786	11632	11580
50°	11298	11203	11127
55°	10771	10771	10600
60°	10114	10308	9942
65°	9254	9717	9025
70°	8157	8942	7944
75°	6969	8003	6780
80°	5403	6737	5473
85°	3493	5176	4615



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	141.2	2.4
10°-20°	398.5	6.8
20°-30°	591.1	10.1
30°-40°	691.7	11.9
40°-50°	688.6	11.8
50°-60°	594.6	10.2
60°-70°	428.0	7.3
70°-80°	224.5	3.9
80°-90°	56.8	1.0
90°-100°	147.9	2.5
100°-110°	401.8	6.9
110°-120°	413.2	7.1
120°-130°	330.3	5.7
130°-140°	259.5	4.5
140°-150°	199.0	3.4
150°-160°	143.1	2.5
160°-170°	87.5	1.5
170°-180°	29.5	0.5
0°-30°	1130.8	19.4
0°-40°	1822.5	31.3
0°-60°	3105.7	53.3
0°-90°	3815.0	65.5
90°-120°	962.9	16.5
90°-150°	1751.8	30.1
90°-180°	2012.0	34.5
0°-180°	5826.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1499	1499	1499	1499	1499	
5°	1503	1486	1491	1487	1484	142
15°	1430	1412	1414	1412	1409	403
25°	1308	1286	1284	1276	1280	601
35°	1124	1108	1108	1098	1102	703
45°	903	896	892	889	888	697
55°	670	668	670	660	659	597
65°	424	437	445	428	413	420
75°	196	214	224	210	190	210
85°	33	43	49	46	44	44
90°	1	4	7	9	9	3
95°	22	81	258	112	75	23
105°	71	111	442	673	633	76
115°	127	154	354	704	802	125
125°	174	199	320	539	636	155
135°	210	233	311	439	495	162
145°	243	260	307	373	401	152
155°	274	284	305	335	345	127
165°	297	301	306	319	320	84
175°	308	309	307	311	310	29
180°	308	308	308	308	308	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1499.0	1499.0	1499.0	1499.0	1499.0
2.5°	1507.4	1495.0	1499.0	1495.6	1488.4
5°	1502.9	1486.2	1491.1	1487.0	1484.4
7.5°	1487.6	1472.1	1475.7	1471.5	1469.9
10°	1473.9	1458.4	1462.0	1456.7	1454.1
12.5°	1458.0	1441.5	1445.1	1439.8	1438.2
15°	1430.3	1412.2	1414.5	1411.8	1409.2
17.5°	1398.1	1379.7	1380.1	1375.9	1375.4
20°	1374.8	1355.5	1353.7	1348.5	1351.1
22.5°	1349.5	1329.1	1327.3	1320.0	1323.6
25°	1307.5	1285.5	1283.7	1275.9	1279.7
27.5°	1258.9	1237.2	1237.2	1226.2	1230.3
30°	1223.0	1202.3	1204.5	1191.4	1196.5
32.5°	1184.9	1166.3	1167.5	1154.4	1159.6
35°	1123.9	1108.4	1108.1	1097.6	1101.5
37.5°	1061.6	1047.9	1045.7	1039.7	1040.7
40°	1018.2	1006.6	1002.4	998.4	998.4
42.5°	972.8	962.2	958.0	955.1	954.1
45°	903.3	895.6	891.5	888.8	887.5
47.5°	834.7	827.4	823.8	822.0	820.7
50°	787.1	782.0	780.5	776.5	775.2
52.5°	739.6	736.5	735.1	730.0	728.8
55°	669.6	668.3	669.6	660.3	659.0
57.5°	596.7	598.8	603.0	590.5	587.4
60°	548.1	553.2	558.6	544.0	538.8
62.5°	498.4	506.7	514.3	497.5	490.2
65°	423.9	436.9	445.1	427.6	413.4
67.5°	352.1	368.1	378.0	359.1	343.1
70°	302.4	320.5	331.5	312.6	294.5
72.5°	259.1	279.3	288.2	270.3	252.3
75°	195.5	213.5	224.5	209.5	190.2
77.5°	138.7	155.7	164.8	151.8	135.8
80°	101.7	119.8	126.8	115.9	103.0
82.5°	72.1	87.1	91.9	85.4	76.6
85°	33.0	43.3	48.9	46.2	43.6
87.5°	8.7	16.5	21.5	21.9	22.9
90°	1.0	3.9	6.9	8.9	8.9
92.5°	8.9	40.5	70.3	30.2	25.6
95°	21.8	80.9	257.6	112.1	75.3
97.5°	36.1	89.3	394.9	307.3	215.8
100°	45.6	95.0	437.0	442.9	357.7
102.5°	55.1	100.6	448.0	547.8	472.6
105°	71.3	111.1	441.9	672.9	633.1
107.5°	88.2	123.3	416.3	737.4	748.5
110°	100.1	132.0	397.3	750.1	797.6

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	<i>110.4</i>	140.8	378.3	739.6	811.1
115°	<i>126.8</i>	154.0	353.7	703.7	801.6
117.5°	<i>142.3</i>	168.2	338.1	652.9	763.1
120°	<i>152.6</i>	177.8	330.9	618.8	728.3
122.5°	<i>161.3</i>	186.5	326.2	584.6	690.2
125°	<i>174.4</i>	198.6	320.0	539.2	636.1
127.5°	<i>186.1</i>	210.1	316.7	504.8	588.0
130°	<i>193.2</i>	216.5	315.1	483.2	557.8
132.5°	<i>200.3</i>	223.6	313.5	464.8	530.9
135°	<i>210.1</i>	233.3	311.1	439.2	495.4
137.5°	<i>220.6</i>	241.7	309.9	416.6	463.9
140°	<i>226.9</i>	247.2	309.1	402.2	444.9
142.5°	<i>233.2</i>	252.0	308.3	391.0	426.6
145°	<i>242.8</i>	260.2	307.2	373.2	401.3
147.5°	<i>253.5</i>	268.4	306.2	359.2	381.3
150°	<i>260.6</i>	273.2	306.2	351.1	368.6
152.5°	<i>266.1</i>	277.2	305.4	343.9	358.3
155°	<i>274.5</i>	284.1	305.2	335.1	344.8
157.5°	<i>282.6</i>	290.1	305.2	329.1	336.5
160°	<i>287.3</i>	294.1	305.2	325.1	330.9
162.5°	<i>292.1</i>	297.3	306.0	321.9	326.2
165°	<i>297.2</i>	301.1	306.2	319.1	320.0
167.5°	<i>302.6</i>	304.5	307.2	315.7	316.5
170°	<i>304.2</i>	306.1	307.2	314.1	314.1
172.5°	<i>305.8</i>	306.9	307.2	312.5	312.5
175°	<i>308.1</i>	309.1	307.2	311.1	310.1
177.5°	<i>308.9</i>	308.9	306.6	309.7	308.1
180°	<i>308.1</i>	308.1	308.1	308.1	308.1

(END OF REPORT)