

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: P564002

Luminaire Tested: **SQ4-PR1-050U-100D-840-1D-UNV-STD-W-4**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P564002  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G2-2106-289-4)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/30/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-PR1-050U-100D-840-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

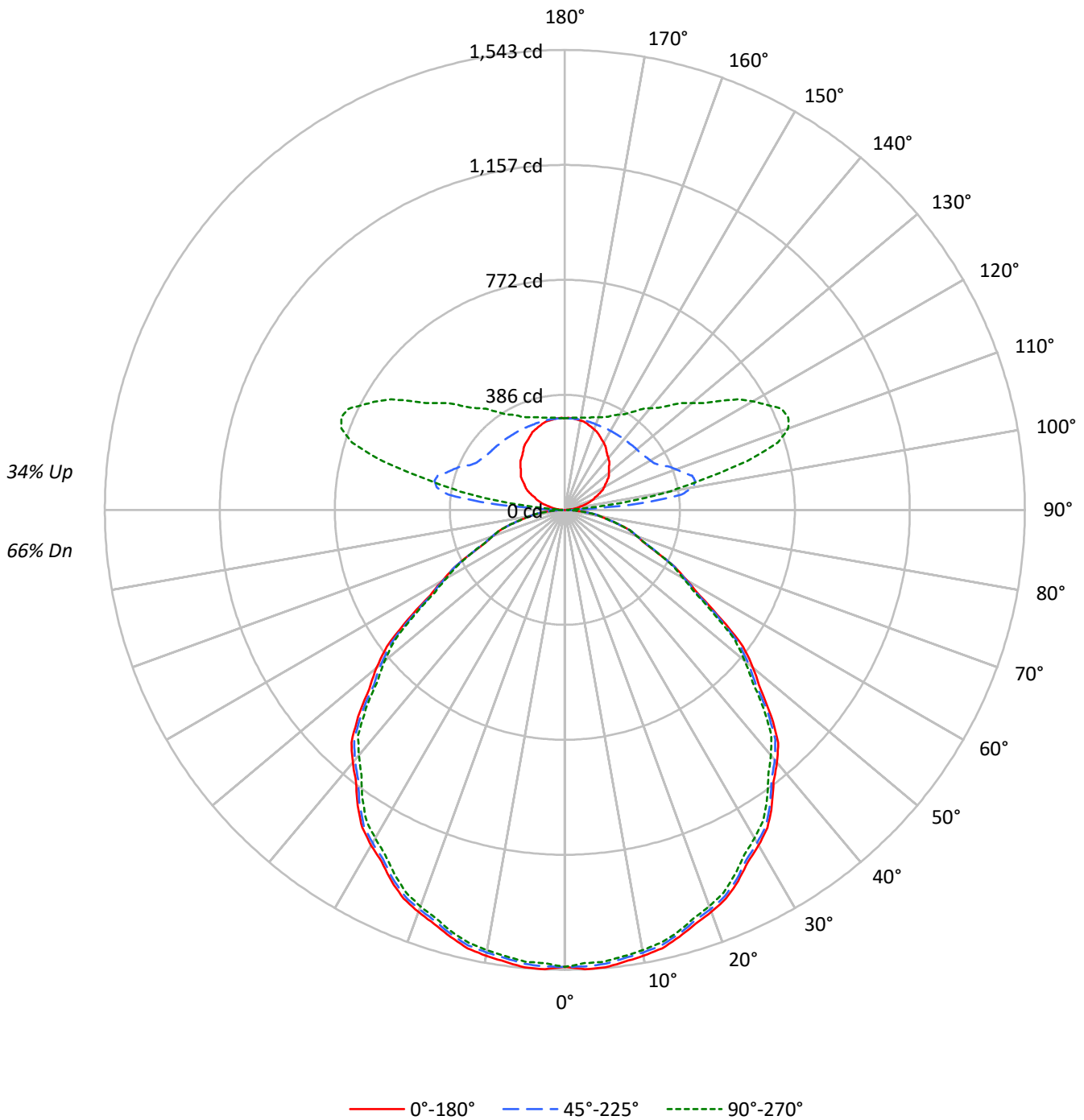
Lumens per Lamp: N/A  
Luminaire Lumens: 5846.2 lumens  
Efficiency: N/A  
Efficacy: 129.6 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Direct

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	50	30	10	0	
RCR																						
0	111	111	111	111	104	104	104	104	92	92	92	81	81	81	70	70	70	66				
1	102	97	94	90	95	92	88	85	81	79	76	72	70	68	63	62	60	56				
2	93	85	79	74	87	81	75	71	72	68	64	63	60	57	56	53	51	48				
3	85	76	68	62	80	71	65	60	64	58	54	56	52	49	50	47	44	41				
4	78	67	59	53	73	64	56	51	57	51	47	51	46	42	45	41	38	35				
5	72	60	52	46	67	57	50	44	51	45	40	46	41	37	40	37	34	31				
6	66	54	46	40	62	51	44	38	46	40	35	41	36	33	37	33	30	27				
7	61	49	41	35	58	47	39	34	42	36	31	38	33	29	34	30	26	24				
8	57	45	37	31	54	42	35	30	38	32	28	34	30	26	31	27	24	22				
9	53	41	33	28	50	39	32	27	35	29	25	32	27	23	29	24	21	19				
10	50	37	30	25	47	36	29	24	33	27	23	29	25	21	26	22	20	18				

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

	0°	45°	90°
0°	14147	14147	14147
5°	14274	14164	14090
10°	14229	14130	14056
15°	14166	14078	14003
20°	14095	14004	13901
25°	13995	13902	13740
30°	13844	13746	13549
35°	13641	13521	13328
40°	13329	13186	12947
45°	12786	12562	12304
50°	11829	11544	11316
55°	10325	10090	9878
60°	8700	8626	8457
65°	7525	7554	7497
70°	6911	6946	6946
75°	6638	6638	6684
80°	6243	6317	6243
85°	5028	5589	5589



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	145.0	2.5
10°-20°	414.9	7.1
20°-30°	625.7	10.7
30°-40°	745.6	12.8
40°-50°	735.0	12.6
50°-60°	561.8	9.6
60°-70°	347.6	5.9
70°-80°	197.4	3.4
80°-90°	61.2	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	4.4
140°-150°	199.0	3.4
150°-160°	143.1	2.4
160°-170°	87.5	1.5
170°-180°	29.5	0.5
0°-30°	1185.6	20.3
0°-40°	1931.1	33.0
0°-60°	3227.9	55.2
0°-90°	3834.3	65.6
90°-120°	962.9	16.5
90°-150°	1751.8	30.0
90°-180°	2012.0	34.4
0°-180°	5846.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1533	1533	1533	1533	1533	
5°	1541	1524	1529	1524	1521	146
15°	1483	1468	1474	1468	1466	419
25°	1375	1358	1366	1351	1350	633
35°	1211	1197	1200	1185	1183	756
45°	980	967	963	946	943	751
55°	642	632	627	617	614	575
65°	345	342	346	343	343	349
75°	186	186	186	188	188	197
85°	48	50	53	53	53	55
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°	1533.3	1533.3	1533.3	1533.3	1533.3
2.5°	1542.8	1529.4	1533.3	1530.0	1522.7
5°	1541.2	1524.4	1529.3	1524.0	1521.4
7.5°	1529.3	1512.8	1517.7	1512.4	1510.9
10°	1518.8	1503.3	1508.2	1502.9	1500.3
12.5°	1507.2	1490.6	1496.6	1490.2	1487.6
15°	1483.1	1467.6	1473.9	1468.5	1466.0
17.5°	1456.7	1440.2	1446.4	1440.3	1436.9
20°	1435.6	1420.1	1426.3	1417.1	1415.8
22.5°	1412.3	1396.8	1403.1	1390.7	1390.4
25°	1374.8	1358.0	1365.6	1351.0	1349.7
27.5°	1330.2	1314.7	1320.9	1306.1	1304.6
30°	1299.5	1284.1	1290.3	1274.4	1271.8
32.5°	1264.7	1250.2	1255.4	1239.6	1238.0
35°	1211.1	1196.9	1200.5	1184.6	1183.3
37.5°	1150.0	1137.1	1139.2	1121.8	1120.5
40°	1106.7	1093.8	1094.8	1076.3	1075.0
42.5°	1059.2	1046.3	1045.2	1026.7	1025.4
45°	979.9	967.0	962.8	945.5	943.0
47.5°	889.6	876.7	868.7	854.7	852.9
50°	824.1	811.2	804.3	792.3	788.4
52.5°	753.3	740.4	734.6	723.6	719.8
55°	641.9	631.5	627.3	616.7	614.1
57.5°	535.9	529.0	527.7	517.4	516.4
60°	471.5	467.6	467.5	458.3	458.3
62.5°	416.5	413.7	415.8	409.7	408.6
65°	344.7	342.1	346.0	343.4	343.4
67.5°	287.9	287.9	290.3	289.2	289.2
70°	256.2	256.2	257.5	257.5	257.5
72.5°	227.7	226.7	230.1	230.0	229.0
75°	186.2	186.2	186.2	187.5	187.5
77.5°	145.0	145.3	146.3	146.0	145.0
80°	117.5	118.8	118.9	117.5	117.5
82.5°	90.1	91.4	91.4	91.1	90.1
85°	47.5	50.1	52.8	52.8	52.8
87.5°	13.9	18.6	22.5	22.9	21.9
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)