

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: P564254

Luminaire Tested: **SQ4-PR1-100U-050D-940-1D-UNV-STD-W-4**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P564254  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-PR1-100U-050D-940-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

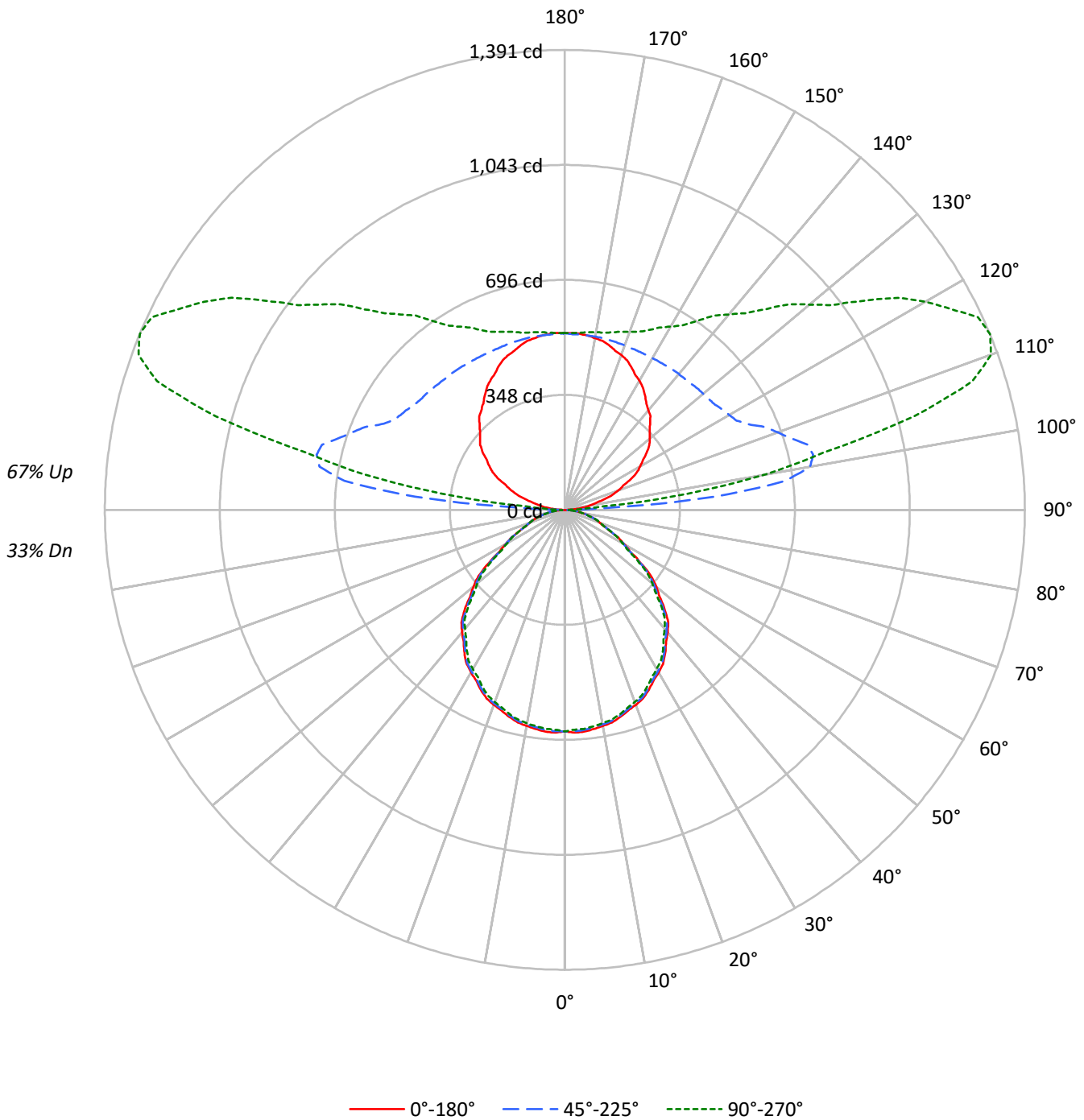
Lumens per Lamp: N/A  
Luminaire Lumens: 5148.4 lumens  
Efficiency: N/A  
Efficacy: 124.7 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 41.3  
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	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40	33
1	94	90	86	83	85	81	78	75	65	63	61	50	48	47	36	35	34	28
2	86	79	73	68	77	71	66	62	57	53	50	44	42	40	32	30	29	24
3	78	69	62	57	70	63	57	52	50	46	43	39	36	34	28	26	25	20
4	72	61	54	48	64	56	49	44	45	40	36	35	31	29	25	23	22	17
5	66	55	47	41	59	50	43	38	40	35	31	31	28	25	23	21	19	15
6	60	49	41	35	54	44	38	33	36	31	27	28	25	22	21	18	17	13
7	56	44	36	31	50	40	33	29	33	28	24	25	22	19	19	17	15	12
8	52	40	32	27	47	36	30	25	30	25	21	23	20	17	17	15	13	11
9	48	36	29	24	43	33	27	22	27	22	19	21	18	15	16	14	12	10
10	45	33	26	22	40	30	24	20	25	20	17	20	16	14	15	12	11	9

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

	0°	45°	90°
0°	6182	6182	6182
5°	6239	6190	6158
10°	6219	6175	6143
15°	6191	6152	6120
20°	6160	6121	6075
25°	6116	6075	6005
30°	6050	6008	5921
35°	5962	5910	5825
40°	5826	5763	5658
45°	5588	5491	5377
50°	5170	5045	4946
55°	4512	4411	4317
60°	3803	3770	3696
65°	3288	3301	3277
70°	3021	3037	3037
75°	2902	2902	2923
80°	2731	2758	2731
85°	2202	2445	2445



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	63.4	1.2
10°-20°	181.3	3.5
20°-30°	273.5	5.3
30°-40°	325.8	6.3
40°-50°	321.2	6.2
50°-60°	245.5	4.8
60°-70°	151.9	3.0
70°-80°	86.3	1.7
80°-90°	27.4	0.5
90°-100°	250.2	4.9
100°-110°	690.9	13.4
110°-120°	712.5	13.8
120°-130°	572.6	11.1
130°-140°	450.0	8.7
140°-150°	345.1	6.7
150°-160°	248.0	4.8
160°-170°	151.7	2.9
170°-180°	51.1	1.0
0°-30°	518.1	10.1
0°-40°	844.0	16.4
0°-60°	1410.7	27.4
0°-90°	1676.3	32.6
90°-120°	1653.6	32.1
90°-150°	3021.2	58.7
90°-180°	3472.0	67.4
0°-180°	5148.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	670	670	670	670	670	
5°	674	666	668	666	665	64
15°	648	641	644	642	641	183
25°	601	594	597	590	590	276
35°	529	523	525	518	517	330
45°	428	423	421	413	412	328
55°	280	276	274	270	268	251
65°	151	150	151	150	150	153
75°	81	81	81	82	82	86
85°	21	22	23	23	23	24
90°	2	3	7	8	8	3
95°	37	135	454	187	121	39
105°	123	190	760	1160	1093	131
115°	221	267	612	1212	1378	217
125°	303	344	555	939	1102	269
135°	364	404	540	761	858	282
145°	422	452	533	648	697	264
155°	476	492	528	581	599	219
165°	516	522	531	552	556	145
175°	534	535	532	540	538	51
180°	534	534	534	534	534	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	670.1	670.1	670.1	670.1	670.1
2.5°	674.3	668.4	670.1	668.7	665.5
5°	673.6	666.2	668.4	666.0	664.9
7.5°	668.4	661.2	663.3	661.0	660.3
10°	663.8	657.0	659.1	656.8	655.7
12.5°	658.7	651.5	654.1	651.3	650.1
15°	648.2	641.4	644.1	641.8	640.7
17.5°	636.6	629.4	632.1	629.4	628.0
20°	627.4	620.6	623.4	619.3	618.7
22.5°	617.2	610.5	613.2	607.8	607.7
25°	600.8	593.5	596.8	590.4	589.9
27.5°	581.3	574.6	577.3	570.8	570.1
30°	567.9	561.2	563.9	557.0	555.8
32.5°	552.7	546.4	548.7	541.7	541.1
35°	529.3	523.1	524.7	517.7	517.2
37.5°	502.6	497.0	497.9	490.2	489.7
40°	483.7	478.0	478.5	470.4	469.8
42.5°	462.9	457.3	456.8	448.7	448.1
45°	428.3	422.6	420.8	413.2	412.1
47.5°	388.8	383.1	379.7	373.5	372.7
50°	360.2	354.5	351.5	346.3	344.6
52.5°	329.2	323.6	321.0	316.3	314.6
55°	280.5	276.0	274.2	269.5	268.4
57.5°	234.2	231.2	230.6	226.1	225.7
60°	206.1	204.4	204.3	200.3	200.3
62.5°	182.0	180.8	181.7	179.0	178.6
65°	150.6	149.5	151.2	150.1	150.1
67.5°	125.8	125.8	126.9	126.4	126.4
70°	112.0	112.0	112.6	112.6	112.6
72.5°	99.5	99.1	100.5	100.5	100.1
75°	81.4	81.4	81.4	82.0	82.0
77.5°	63.4	63.5	64.0	63.8	63.4
80°	51.4	51.9	51.9	51.4	51.4
82.5°	39.4	39.9	39.9	39.8	39.4
85°	20.8	21.9	23.1	23.1	23.1
87.5°	6.3	8.5	10.6	10.8	10.5
90°	1.7	3.4	6.8	7.7	8.5
92.5°	15.4	63.9	114.2	41.7	32.5
95°	36.8	135.4	454.0	186.6	121.4
97.5°	60.9	151.7	672.5	517.8	375.0
100°	78.7	161.4	753.2	758.6	616.4
102.5°	95.8	172.5	769.0	937.3	802.5
105°	123.1	190.0	760.1	1160.4	1092.7
107.5°	152.2	211.7	717.7	1268.0	1292.7
110°	172.7	226.2	684.8	1291.1	1371.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	191.2	242.7	654.1	1272.9	1391.2
115°	220.6	266.6	612.2	1211.9	1378.2
117.5°	246.2	292.0	584.6	1126.0	1315.3
120°	263.3	308.5	573.7	1067.9	1258.5
122.5°	279.8	322.9	564.8	1013.7	1194.2
125°	302.7	344.5	554.9	939.1	1102.1
127.5°	322.2	364.0	549.1	876.0	1016.6
130°	335.2	377.0	546.3	837.4	965.3
132.5°	347.5	387.3	543.6	805.0	920.8
135°	364.2	403.5	539.5	760.6	857.6
137.5°	383.0	418.8	537.4	723.3	806.1
140°	393.3	428.4	536.1	698.5	771.2
142.5°	404.9	437.4	534.7	676.4	740.4
145°	422.4	451.6	532.7	647.5	696.8
147.5°	439.1	464.7	530.8	623.1	661.4
150°	451.4	472.3	530.1	608.6	639.5
152.5°	461.0	480.6	529.4	596.2	621.7
155°	476.2	492.1	528.4	581.0	599.3
157.5°	490.2	502.5	528.6	569.9	582.4
160°	498.5	509.3	529.2	563.6	572.8
162.5°	505.3	514.8	529.9	558.1	565.3
165°	515.6	522.2	530.9	551.6	555.7
167.5°	523.4	527.4	531.8	547.6	548.9
170°	527.5	530.9	531.8	545.5	545.5
172.5°	530.9	533.0	531.8	542.7	542.1
175°	534.4	535.2	531.8	539.5	537.8
177.5°	535.7	535.1	531.6	536.4	535.0
180°	534.4	534.4	534.4	534.4	534.4

(END OF REPORT)