

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: P564234

Luminaire Tested: **SQ4-PR1-100U-050D-830-1D-UNV-STD-W-4**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P564234  
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-830-1D-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: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

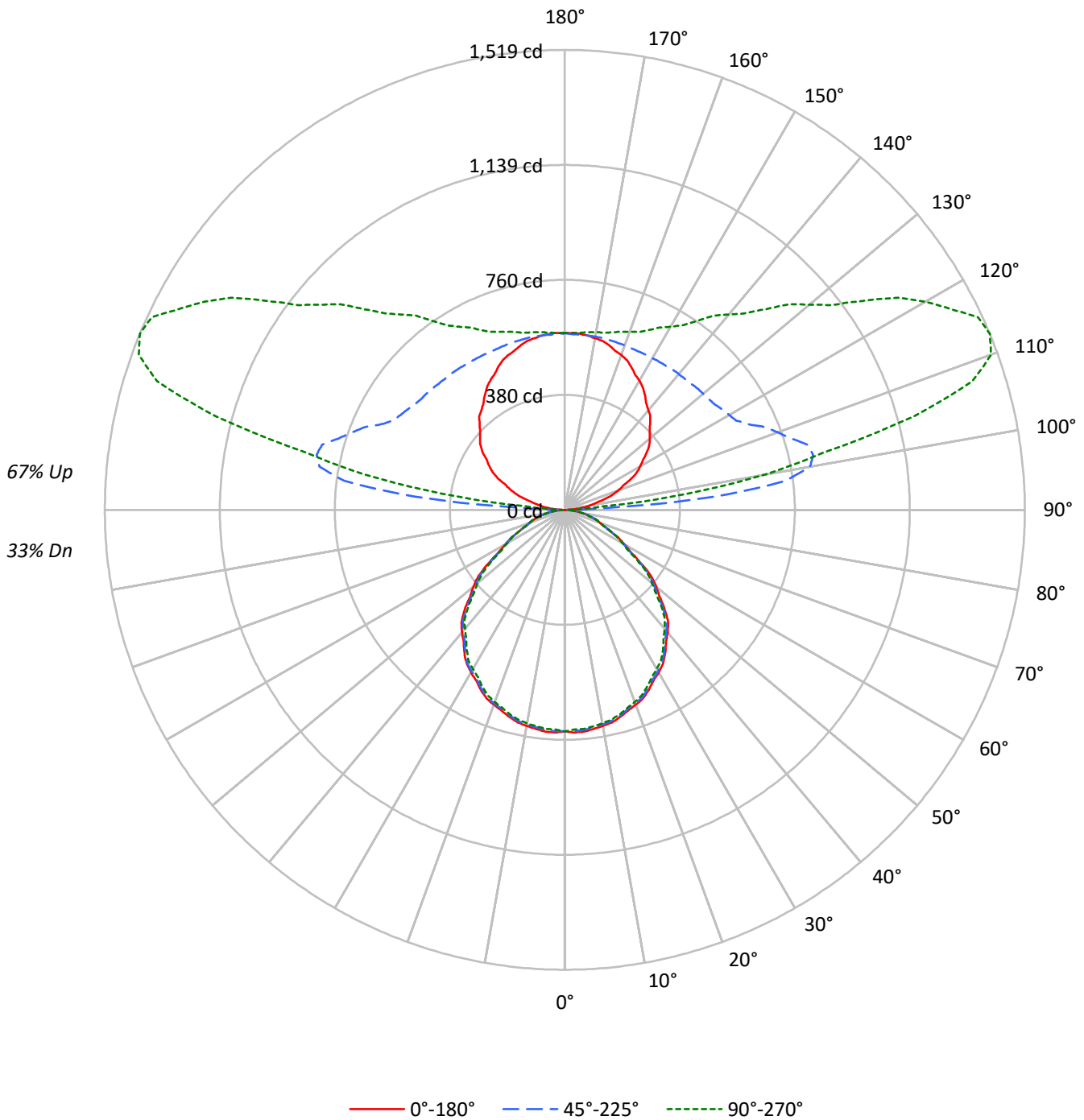
Lumens per Lamp: N/A  
Luminaire Lumens: 5621.2 lumens  
Efficiency: N/A  
Efficacy: 136.1 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

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°	6751	6751	6751
5°	6811	6759	6724
10°	6789	6743	6707
15°	6760	6718	6681
20°	6726	6682	6633
25°	6678	6633	6557
30°	6606	6559	6466
35°	6509	6453	6360
40°	6360	6292	6179
45°	6101	5994	5872
50°	5644	5509	5400
55°	4927	4814	4713
60°	4152	4117	4036
65°	3591	3604	3578
70°	3299	3315	3315
75°	3169	3169	3190
80°	2981	3013	2981
85°	2403	2668	2668



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	69.2	1.2
10°-20°	198.0	3.5
20°-30°	298.6	5.3
30°-40°	355.8	6.3
40°-50°	350.7	6.2
50°-60°	268.1	4.8
60°-70°	165.9	3.0
70°-80°	94.2	1.7
80°-90°	29.9	0.5
90°-100°	273.2	4.9
100°-110°	754.3	13.4
110°-120°	777.9	13.8
120°-130°	625.1	11.1
130°-140°	491.3	8.7
140°-150°	376.8	6.7
150°-160°	270.8	4.8
160°-170°	165.6	2.9
170°-180°	55.8	1.0
0°-30°	565.7	10.1
0°-40°	921.5	16.4
0°-60°	1540.3	27.4
0°-90°	1830.3	32.6
90°-120°	1805.5	32.1
90°-150°	3298.7	58.7
90°-180°	3791.0	67.4
0°-180°	5621.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	732	732	732	732	732	
5°	735	727	730	727	726	70
15°	708	700	703	701	700	200
25°	656	648	652	645	644	302
35°	578	571	573	565	565	361
45°	468	461	459	451	450	358
55°	306	301	299	294	293	274
65°	164	163	165	164	164	167
75°	89	89	89	90	90	94
85°	23	24	25	25	25	26
90°	2	4	8	8	9	4
95°	40	148	496	204	133	43
105°	134	207	830	1267	1193	143
115°	241	291	668	1323	1505	237
125°	330	376	606	1025	1203	294
135°	398	441	589	830	936	308
145°	461	493	582	707	761	289
155°	520	537	577	634	654	240
165°	563	570	580	602	607	159
175°	584	584	581	589	587	55
180°	584	584	584	584	584	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	731.7	731.7	731.7	731.7	731.7
2.5°	736.2	729.8	731.7	730.1	726.6
5°	735.4	727.4	729.8	727.2	726.0
7.5°	729.8	721.9	724.2	721.7	721.0
10°	724.7	717.3	719.7	717.1	715.9
12.5°	719.2	711.3	714.1	711.1	709.9
15°	707.7	700.3	703.3	700.8	699.5
17.5°	695.1	687.2	690.2	687.3	685.7
20°	685.0	677.6	680.6	676.2	675.6
22.5°	673.9	666.5	669.5	663.6	663.5
25°	656.0	648.0	651.6	644.7	644.1
27.5°	634.7	627.3	630.3	623.3	622.5
30°	620.1	612.7	615.7	608.1	606.9
32.5°	603.5	596.6	599.1	591.5	590.8
35°	577.9	571.1	572.9	565.3	564.7
37.5°	548.8	542.6	543.6	535.3	534.7
40°	528.1	521.9	522.4	513.6	513.0
42.5°	505.4	499.3	498.7	489.9	489.3
45°	467.6	461.4	459.4	451.2	450.0
47.5°	424.5	418.3	414.5	407.8	407.0
50°	393.2	387.1	383.8	378.1	376.2
52.5°	359.5	353.3	350.5	345.3	343.5
55°	306.3	301.3	299.3	294.3	293.0
57.5°	255.7	252.4	251.8	246.9	246.4
60°	225.0	223.1	223.1	218.7	218.7
62.5°	198.8	197.4	198.4	195.5	195.0
65°	164.5	163.3	165.1	163.9	163.9
67.5°	137.4	137.4	138.5	138.0	138.0
70°	122.3	122.3	122.9	122.9	122.9
72.5°	108.6	108.2	109.8	109.8	109.3
75°	88.9	88.9	88.9	89.5	89.5
77.5°	69.2	69.3	69.8	69.7	69.2
80°	56.1	56.7	56.7	56.1	56.1
82.5°	43.0	43.6	43.6	43.5	43.0
85°	22.7	23.9	25.2	25.2	25.2
87.5°	6.9	9.3	11.6	11.8	11.4
90°	1.9	3.7	7.5	8.4	9.3
92.5°	16.8	69.7	124.7	45.5	35.5
95°	40.1	147.8	495.7	203.8	132.6
97.5°	66.5	165.6	734.3	565.3	409.4
100°	85.9	176.2	822.4	828.2	673.1
102.5°	104.6	188.3	839.6	1023.3	876.2
105°	134.4	207.4	829.9	1267.0	1193.0
107.5°	166.2	231.2	783.6	1384.5	1411.5
110°	188.6	247.0	747.8	1409.7	1497.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	208.7	265.0	714.1	1389.8	1519.0
115°	240.8	291.1	668.4	1323.2	1504.8
117.5°	268.9	318.9	638.3	1229.5	1436.1
120°	287.5	336.8	626.4	1166.0	1374.1
122.5°	305.4	352.5	616.7	1106.8	1303.9
125°	330.5	376.1	605.9	1025.3	1203.3
127.5°	351.8	397.4	599.5	956.4	1110.0
130°	365.9	411.6	596.5	914.3	1053.9
132.5°	379.4	422.8	593.5	878.9	1005.4
135°	397.7	440.6	589.1	830.4	936.3
137.5°	418.2	457.3	586.8	789.8	880.1
140°	429.4	467.8	585.3	762.6	842.0
142.5°	442.1	477.5	583.8	738.5	808.4
145°	461.2	493.1	581.6	707.0	760.8
147.5°	479.5	507.4	579.5	680.4	722.2
150°	492.9	515.7	578.8	664.5	698.3
152.5°	503.4	524.7	578.0	650.9	678.9
155°	520.0	537.3	576.9	634.3	654.4
157.5°	535.3	548.6	577.1	622.2	635.9
160°	544.2	556.1	577.9	615.4	625.5
162.5°	551.7	562.1	578.6	609.4	617.2
165°	562.9	570.2	579.7	602.2	606.8
167.5°	571.5	575.9	580.7	597.9	599.3
170°	576.0	579.6	580.7	595.6	595.6
172.5°	579.7	581.9	580.7	592.6	591.9
175°	583.5	584.4	580.7	589.0	587.2
177.5°	584.9	584.2	580.5	585.7	584.2
180°	583.5	583.5	583.5	583.5	583.5

(END OF REPORT)