

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: P564000

Luminaire Tested: **SQ4-PR1-050U-100D-835-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P564000  
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-835-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

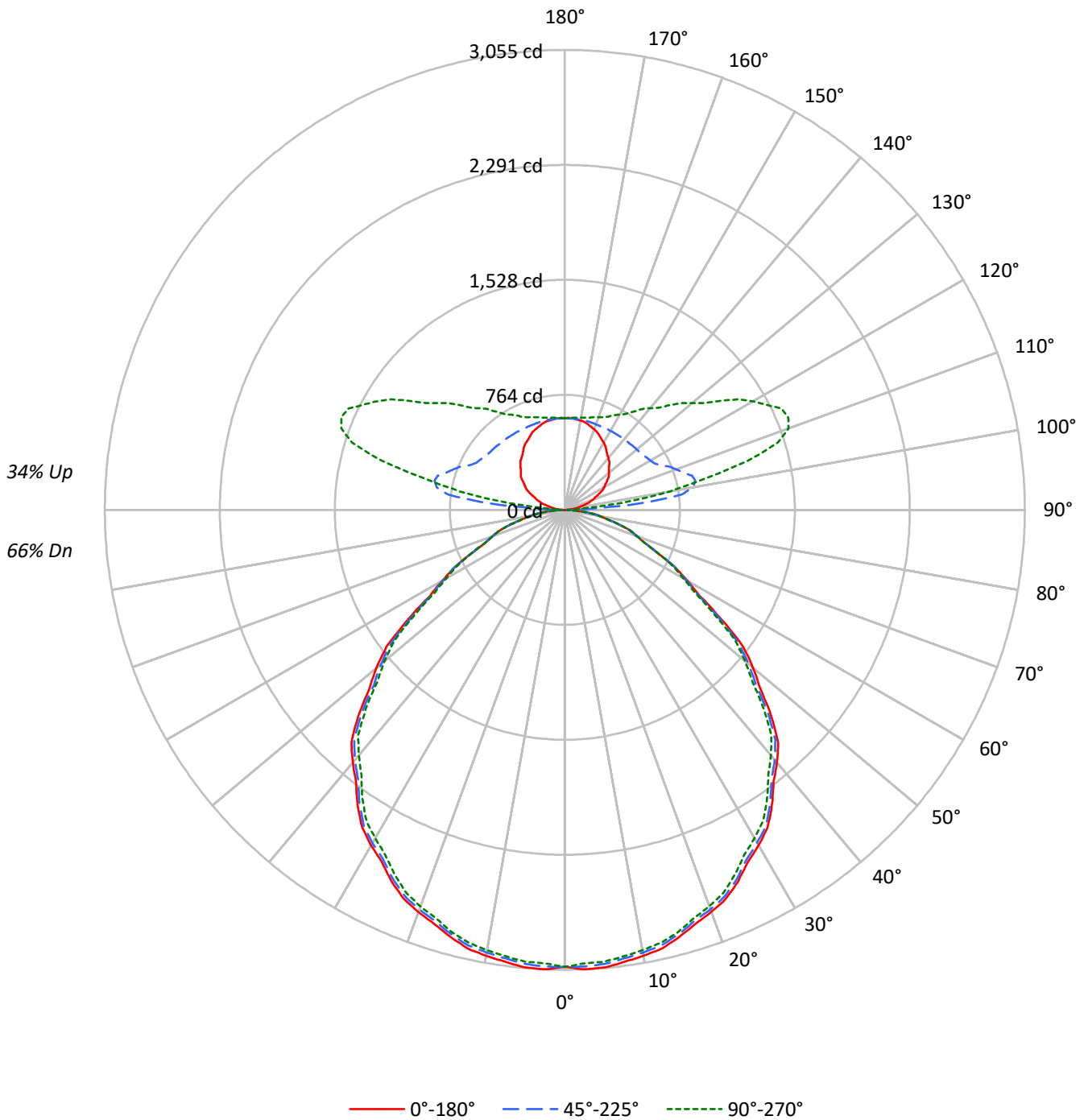
Lumens per Lamp: N/A  
Luminaire Lumens: 11576.0 lumens  
Efficiency: N/A  
Efficacy: 121.3 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 95.4  
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			
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	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°	14006	14006	14006
5°	14132	14023	13950
10°	14087	13989	13916
15°	14025	13938	13863
20°	13955	13864	13762
25°	13856	13763	13604
30°	13707	13609	13414
35°	13504	13387	13195
40°	13197	13055	12818
45°	12659	12437	12181
50°	11711	11430	11204
55°	10221	9990	9780
60°	8614	8541	8372
65°	7450	7478	7421
70°	6842	6877	6877
75°	6572	6572	6618
80°	6182	6254	6182
85°	4981	5536	5536



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	287.1	2.5
10°-20°	821.4	7.1
20°-30°	1239.0	10.7
30°-40°	1476.3	12.8
40°-50°	1455.5	12.6
50°-60°	1112.3	9.6
60°-70°	688.3	5.9
70°-80°	390.9	3.4
80°-90°	121.3	1.0
90°-100°	292.9	2.5
100°-110°	795.7	6.9
110°-120°	818.1	7.1
120°-130°	654.1	5.7
130°-140°	513.9	4.4
140°-150°	394.1	3.4
150°-160°	283.4	2.4
160°-170°	173.3	1.5
170°-180°	58.4	0.5
0°-30°	2347.5	20.3
0°-40°	3823.8	33.0
0°-60°	6391.6	55.2
0°-90°	7592.2	65.6
90°-120°	1906.7	16.5
90°-150°	3468.7	30.0
90°-180°	3984.0	34.4
0°-180°	11576.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3036	3036	3036	3036	3036	
5°	3052	3018	3028	3018	3012	290
15°	2937	2906	2918	2908	2903	829
25°	2722	2689	2704	2675	2673	1253
35°	2398	2370	2377	2346	2343	1497
45°	1940	1915	1906	1872	1867	1487
55°	1271	1250	1242	1221	1216	1139
65°	682	677	685	680	680	691
75°	369	369	369	371	371	389
85°	94	99	105	105	105	109
90°	2	8	14	18	18	7
95°	43	160	510	222	149	46
105°	141	220	875	1332	1254	150
115°	251	305	700	1393	1587	248
125°	345	393	634	1068	1260	308
135°	416	462	616	870	981	322
145°	481	515	608	739	795	302
155°	543	563	604	664	683	251
165°	589	596	606	632	634	166
175°	610	612	608	616	614	58
180°	610	610	610	610	610	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3036.1	3036.1	3036.1	3036.1	3036.1
2.5°	3054.9	3028.3	3036.1	3029.5	3015.1
5°	3051.8	3018.5	3028.2	3017.6	3012.5
7.5°	3028.2	2995.5	3005.2	2994.7	2991.6
10°	3007.3	2976.6	2986.4	2975.8	2970.7
12.5°	2984.3	2951.6	2963.4	2950.7	2945.6
15°	2936.7	2906.0	2918.4	2907.8	2902.7
17.5°	2884.4	2851.7	2864.0	2851.8	2845.2
20°	2842.6	2811.9	2824.2	2805.9	2803.3
22.5°	2796.5	2765.8	2778.2	2753.6	2753.1
25°	2722.3	2689.0	2704.0	2675.1	2672.6
27.5°	2633.9	2603.2	2615.6	2586.2	2583.1
30°	2573.2	2542.5	2554.9	2523.4	2518.3
32.5°	2504.2	2475.5	2485.9	2454.4	2451.3
35°	2398.0	2369.9	2377.1	2345.6	2343.1
37.5°	2277.2	2251.6	2255.7	2221.2	2218.6
40°	2191.4	2165.8	2167.9	2131.2	2128.6
42.5°	2097.3	2071.7	2069.5	2032.9	2030.3
45°	1940.4	1914.8	1906.4	1872.3	1867.1
47.5°	1761.5	1735.9	1720.2	1692.4	1688.8
50°	1631.8	1606.2	1592.6	1568.9	1561.2
52.5°	1491.6	1466.1	1454.5	1432.9	1425.2
55°	1270.9	1250.5	1242.1	1221.1	1216.0
57.5°	1061.2	1047.4	1045.0	1024.5	1022.5
60°	933.6	925.9	925.7	907.4	907.4
62.5°	824.8	819.2	823.2	811.1	809.1
65°	682.5	677.4	685.1	679.9	679.9
67.5°	570.1	570.1	574.8	572.7	572.7
70°	507.3	507.3	509.9	509.9	509.9
72.5°	450.8	448.8	455.5	455.5	453.4
75°	368.7	368.7	368.7	371.3	371.3
77.5°	287.1	287.6	289.7	289.2	287.1
80°	232.7	235.3	235.4	232.7	232.7
82.5°	178.3	180.9	181.0	180.4	178.3
85°	94.1	99.3	104.6	104.6	104.6
87.5°	27.6	36.9	44.6	45.3	43.3
90°	2.0	7.7	13.7	17.7	17.7
92.5°	17.7	80.2	139.3	59.8	50.6
95°	43.2	160.2	510.1	222.0	149.1
97.5°	71.4	176.9	782.0	608.4	427.3
100°	90.2	188.1	865.2	877.1	708.2
102.5°	109.1	199.2	887.2	1084.7	935.8
105°	141.3	219.9	875.0	1332.3	1253.6
107.5°	174.6	244.1	824.4	1460.1	1482.0
110°	198.2	261.5	786.7	1485.3	1579.3

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	218.6	278.8	749.1	1464.4	1606.0
115°	251.1	304.8	700.4	1393.4	1587.2
117.5°	281.7	333.1	669.4	1292.7	1511.0
120°	302.1	352.0	655.3	1225.2	1442.0
122.5°	319.4	369.3	645.9	1157.6	1366.7
125°	345.3	393.3	633.7	1067.7	1259.5
127.5°	368.4	416.0	627.0	999.6	1164.2
130°	382.6	428.6	623.9	956.8	1104.5
132.5°	396.7	442.7	620.7	920.4	1051.2
135°	415.9	462.0	616.0	869.7	980.9
137.5°	436.7	478.5	613.7	824.9	918.6
140°	449.3	489.6	612.1	796.5	880.9
142.5°	461.8	499.0	610.5	774.2	844.8
145°	480.7	515.2	608.2	738.9	794.6
147.5°	501.9	531.4	606.2	711.2	754.9
150°	516.0	540.9	606.2	695.3	729.8
152.5°	527.0	548.8	604.7	681.0	709.4
155°	543.4	562.6	604.3	663.6	682.7
157.5°	559.5	574.5	604.3	651.7	666.3
160°	568.9	582.4	604.3	643.8	655.3
162.5°	578.4	588.7	605.8	637.4	645.9
165°	588.6	596.2	606.2	631.8	633.7
167.5°	599.2	603.0	608.2	625.1	626.6
170°	602.3	606.1	608.2	621.9	621.9
172.5°	605.4	607.7	608.2	618.8	618.8
175°	610.1	612.1	608.2	616.0	614.1
177.5°	611.7	611.7	607.0	613.2	610.1
180°	610.1	610.1	610.1	610.1	610.1

(END OF REPORT)