

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: P519074

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

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519074  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G2-2009-966-13)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-WB-050U-050D-835-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

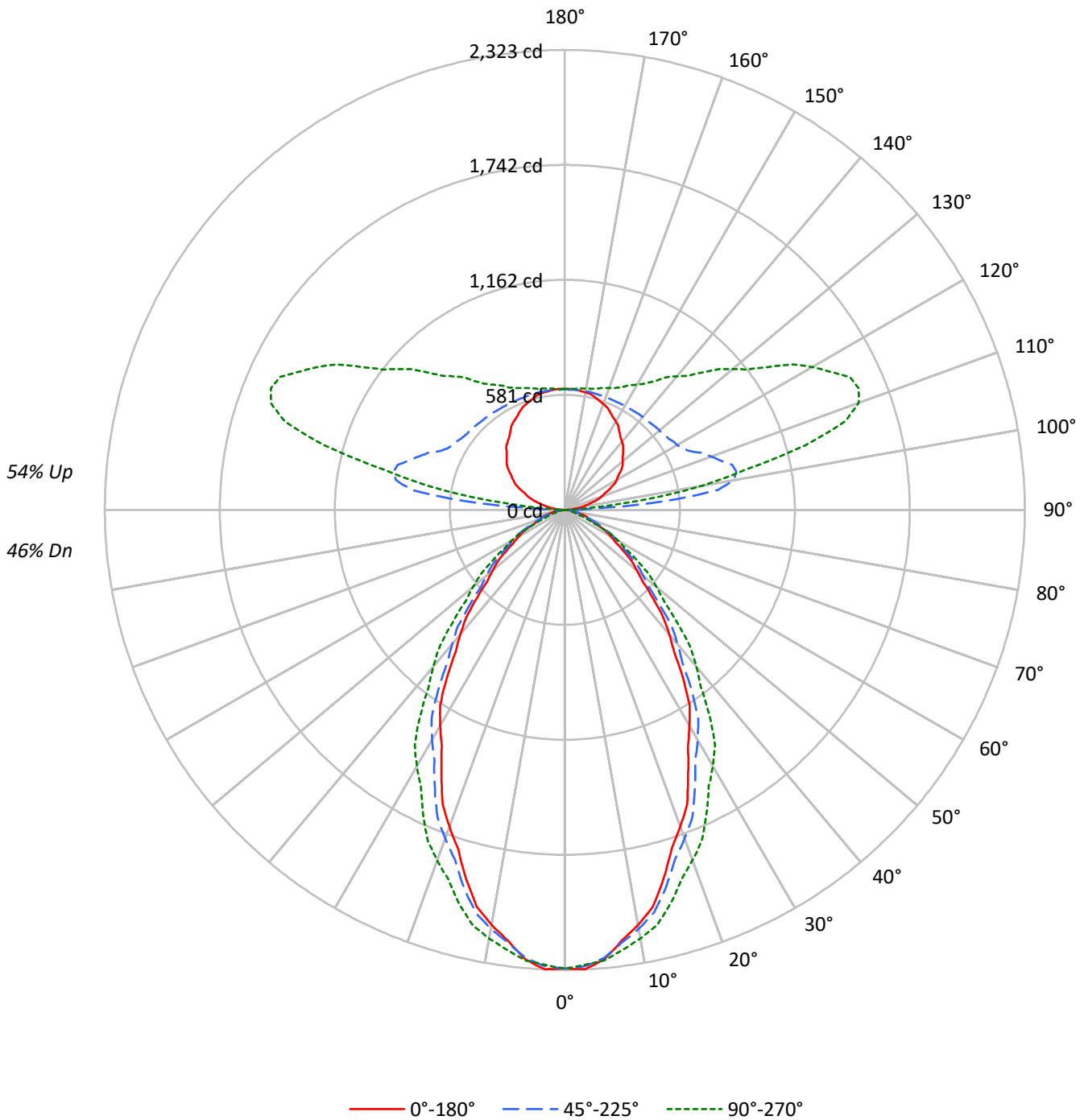
Lumens per Lamp: N/A  
Luminaire Lumens: 7362.8 lumens  
Efficiency: N/A  
Efficacy: 125.0 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 58.9  
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	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52	46
1	98	94	91	87	90	87	84	81	73	70	69	60	58	57	48	47	46	41
2	90	83	78	73	83	77	72	68	65	61	59	54	51	49	43	42	41	36
3	83	74	68	62	76	69	63	58	58	54	51	49	46	43	40	38	36	32
4	76	66	59	54	70	62	55	50	52	48	44	44	41	38	36	34	32	28
5	71	60	52	47	65	56	49	44	48	43	39	40	36	34	33	31	29	25
6	65	54	47	41	60	50	44	39	43	38	34	37	33	30	30	28	26	23
7	61	49	42	37	56	46	39	35	40	35	31	34	30	27	28	25	23	21
8	57	45	38	33	52	42	36	31	36	31	28	31	27	25	26	23	21	19
9	53	41	34	30	49	39	32	28	34	29	25	29	25	22	24	22	20	17
10	50	38	31	27	46	36	30	26	31	26	23	27	23	21	23	20	18	16

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

	0°	45°	90°
0°	10689	10689	10689
5°	10556	10519	10580
10°	9973	10064	10297
15°	9207	9420	9843
20°	8361	8675	9249
25°	7499	7908	8617
30°	6705	7144	7961
35°	5864	6287	7186
40°	4935	5327	6221
45°	4073	4425	5194
50°	3400	3707	4327
55°	2887	3181	3573
60°	2467	2758	2852
65°	1965	2320	1843
70°	1741	1810	1125
75°	1613	1469	688
80°	1485	1350	595
85°	1344	1239	487



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	212.5	2.9
10°-20°	552.8	7.5
20°-30°	716.1	9.7
30°-40°	701.2	9.5
40°-50°	536.7	7.3
50°-60°	357.6	4.9
60°-70°	195.2	2.7
70°-80°	81.3	1.1
80°-90°	25.4	0.3
90°-100°	292.9	4.0
100°-110°	795.7	10.8
110°-120°	818.1	11.1
120°-130°	654.1	8.9
130°-140°	513.9	7.0
140°-150°	394.1	5.4
150°-160°	283.4	3.8
160°-170°	173.3	2.4
170°-180°	58.4	0.8
0°-30°	1481.5	20.1
0°-40°	2182.7	29.6
0°-60°	3077.1	41.8
0°-90°	3378.9	45.9
90°-120°	1906.7	25.9
90°-150°	3468.7	47.1
90°-180°	3984.0	54.1
0°-180°	7362.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2317	2317	2317	2317	2317	
5°	2280	2257	2272	2277	2285	212
15°	1928	1921	1972	2026	2061	538
25°	1473	1477	1554	1621	1693	678
35°	1041	1046	1116	1192	1276	647
45°	624	636	678	730	796	487
55°	359	374	396	410	444	325
65°	180	195	212	186	169	187
75°	90	90	82	56	39	97
85°	25	25	23	15	9	28
90°	2	8	14	18	18	4
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°	2317.2	2317.2	2317.2	2317.2	2317.2
2.5°	2322.9	2302.2	2307.5	2307.3	2300.9
5°	2279.6	2256.7	2271.5	2276.7	2284.7
7.5°	2195.0	2177.7	2204.6	2224.4	2240.5
10°	2129.1	2114.2	2148.4	2177.4	2198.3
12.5°	2052.7	2040.1	2082.5	2121.4	2148.6
15°	1927.8	1920.8	1972.5	2026.2	2061.0
17.5°	1794.2	1790.8	1850.1	1912.7	1957.3
20°	1703.1	1702.1	1767.1	1832.4	1884.1
22.5°	1611.2	1613.4	1681.7	1749.6	1808.4
25°	1473.3	1477.3	1553.6	1621.3	1692.9
27.5°	1345.8	1347.6	1426.5	1498.0	1574.4
30°	1258.8	1263.7	1341.1	1415.1	1494.6
32.5°	1171.7	1177.5	1253.3	1329.7	1410.9
35°	1041.2	1046.1	1116.4	1191.5	1276.0
37.5°	906.6	913.3	975.7	1046.7	1129.8
40°	819.5	829.5	884.6	951.5	1033.0
42.5°	735.7	748.1	799.2	862.7	936.2
45°	624.3	636.2	678.2	729.5	796.1
47.5°	528.3	542.0	574.3	618.5	675.3
50°	473.8	486.7	516.5	549.3	602.9
52.5°	425.8	438.7	465.3	490.5	536.2
55°	358.9	373.8	395.5	410.5	444.3
57.5°	304.0	318.3	335.5	342.3	362.8
60°	267.4	283.3	298.9	298.2	309.1
62.5°	234.1	247.6	263.1	252.4	253.0
65°	180.0	194.9	212.5	185.7	168.8
67.5°	145.4	148.6	166.7	129.5	109.4
70°	129.1	129.1	134.2	100.3	83.4
72.5°	113.7	113.7	109.0	81.5	63.9
75°	90.5	90.5	82.4	56.5	38.6
77.5°	69.8	69.0	63.0	42.2	28.1
80°	55.9	55.9	50.8	33.3	22.4
82.5°	43.7	43.7	39.5	26.0	16.7
85°	25.4	25.4	23.4	15.1	9.2
87.5°	9.3	10.5	10.9	8.4	7.6
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)