

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: P519073

Luminaire Tested: **SQ4-WB-050U-050D-835-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519073  
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-6  
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**

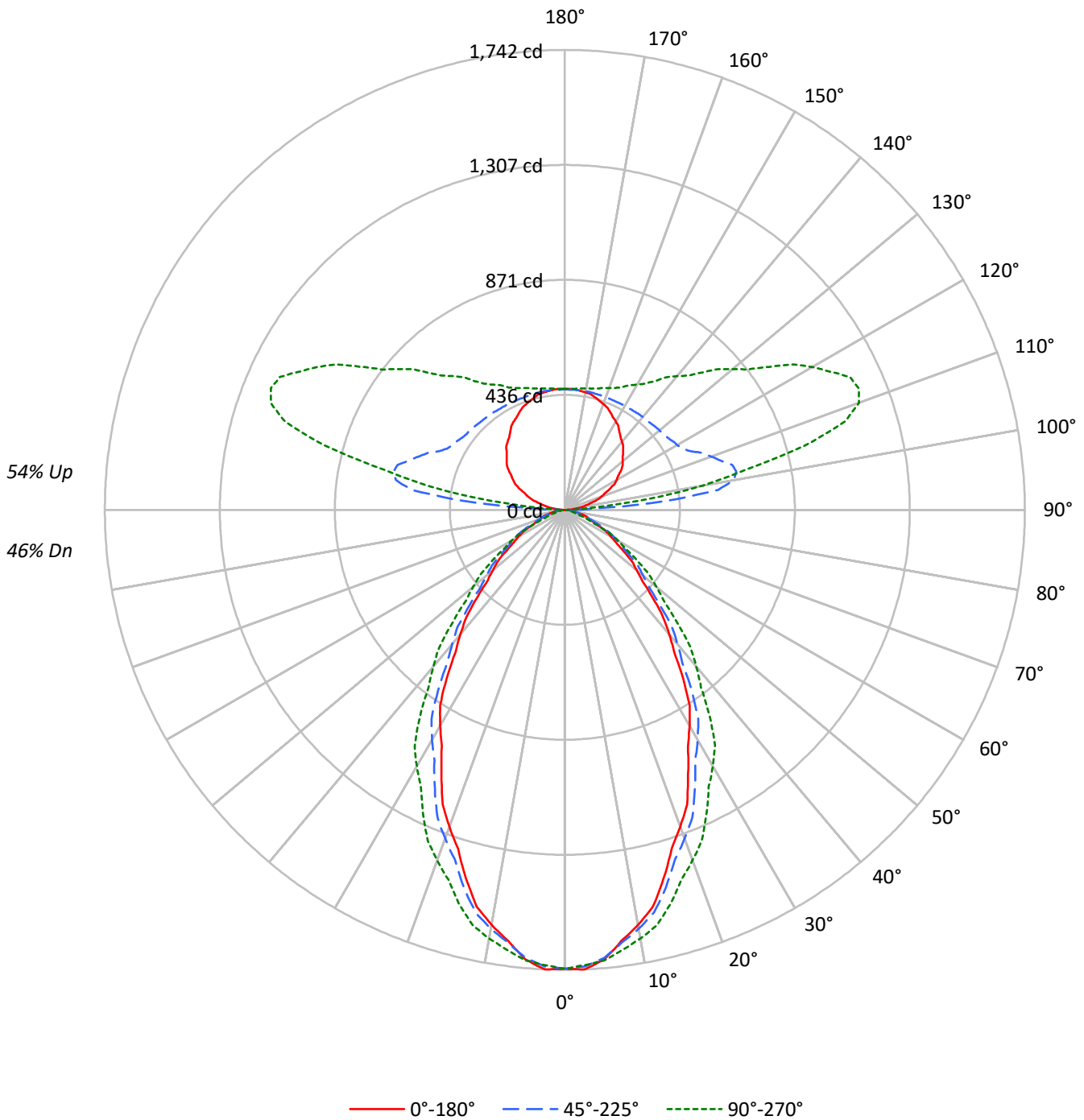
Lumens per Lamp: N/A  
Luminaire Lumens: 5522.1 lumens  
Efficiency: N/A  
Efficacy: 123.3 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 44.8  
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	9250
25°	7499	7908	8617
30°	6705	7144	7962
35°	5864	6287	7186
40°	4935	5327	6221
45°	4073	4424	5194
50°	3401	3707	4327
55°	2887	3181	3573
60°	2468	2758	2852
65°	1965	2320	1843
70°	1741	1811	1124
75°	1614	1469	689
80°	1484	1350	595
85°	1348	1235	487



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	159.4	2.9
10°-20°	414.6	7.5
20°-30°	537.1	9.7
30°-40°	525.9	9.5
40°-50°	402.6	7.3
50°-60°	268.3	4.9
60°-70°	146.4	2.7
70°-80°	61.0	1.1
80°-90°	19.0	0.3
90°-100°	219.7	4.0
100°-110°	596.8	10.8
110°-120°	613.6	11.1
120°-130°	490.6	8.9
130°-140°	385.5	7.0
140°-150°	295.6	5.4
150°-160°	212.5	3.8
160°-170°	130.0	2.4
170°-180°	43.8	0.8
0°-30°	1111.1	20.1
0°-40°	1637.0	29.6
0°-60°	2307.8	41.8
0°-90°	2534.2	45.9
90°-120°	1430.0	25.9
90°-150°	2601.6	47.1
90°-180°	2988.0	54.1
0°-180°	5522.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1738	1738	1738	1738	1738	
5°	1710	1692	1704	1708	1714	159
15°	1446	1441	1479	1520	1546	404
25°	1105	1108	1165	1216	1270	508
35°	781	785	837	894	957	485
45°	468	477	509	547	597	365
55°	269	280	297	308	333	244
65°	135	146	159	139	127	140
75°	68	68	62	42	29	72
85°	19	19	18	11	7	21
90°	2	6	10	13	13	3
95°	32	120	383	166	112	34
105°	106	165	656	999	940	113
115°	188	229	525	1045	1190	186
125°	259	295	475	801	945	231
135°	312	346	462	652	736	241
145°	360	386	456	554	596	226
155°	408	422	453	498	512	188
165°	441	447	455	474	475	125
175°	458	459	456	462	461	43
180°	458	458	458	458	458	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1737.9	1737.9	1737.9	1737.9	1737.9
2.5°	1742.2	1726.7	1730.6	1730.5	1725.7
5°	1709.7	1692.5	1703.6	1707.5	1713.5
7.5°	1646.2	1633.3	1653.4	1668.3	1680.4
10°	1596.8	1585.6	1611.3	1633.0	1648.7
12.5°	1539.5	1530.1	1561.9	1591.0	1611.5
15°	1445.8	1440.6	1479.4	1519.6	1545.7
17.5°	1345.6	1343.1	1387.6	1434.6	1468.0
20°	1277.3	1276.6	1325.4	1374.3	1413.1
22.5°	1208.4	1210.0	1261.3	1312.2	1356.3
25°	1105.0	1108.0	1165.2	1216.0	1269.7
27.5°	1009.3	1010.7	1069.9	1123.5	1180.8
30°	944.1	947.8	1005.8	1061.3	1121.0
32.5°	878.8	883.1	940.0	997.3	1058.2
35°	780.9	784.6	837.3	893.7	957.0
37.5°	679.9	685.0	731.8	785.0	847.4
40°	614.6	622.1	663.4	713.6	774.8
42.5°	551.8	561.0	599.4	647.0	702.2
45°	468.2	477.2	508.6	547.1	597.1
47.5°	396.2	406.5	430.7	463.9	506.5
50°	355.4	365.1	387.4	411.9	452.2
52.5°	319.4	329.1	349.0	367.9	402.2
55°	269.2	280.4	296.6	307.9	333.2
57.5°	228.0	238.7	251.7	256.7	272.1
60°	200.6	212.5	224.2	223.6	231.8
62.5°	175.5	185.7	197.4	189.3	189.7
65°	135.0	146.2	159.4	139.3	126.6
67.5°	109.0	111.4	125.1	97.1	82.1
70°	96.8	96.8	100.7	75.2	62.5
72.5°	85.3	85.3	81.7	61.2	47.9
75°	67.9	67.9	61.8	42.4	29.0
77.5°	52.3	51.7	47.3	31.6	21.0
80°	41.9	41.9	38.1	25.0	16.8
82.5°	32.8	32.8	29.6	19.5	12.5
85°	19.1	19.1	17.5	11.3	6.9
87.5°	7.0	7.9	8.2	6.3	5.7
90°	1.5	5.8	10.3	13.2	13.2
92.5°	13.2	60.1	104.5	44.9	38.0
95°	32.4	120.1	382.6	166.5	111.8
97.5°	53.6	132.7	586.5	456.3	320.5
100°	67.7	141.1	648.9	657.8	531.2
102.5°	81.8	149.4	665.4	813.5	701.9
105°	105.9	164.9	656.3	999.2	940.2
107.5°	131.0	183.0	618.3	1095.1	1111.5
110°	148.6	196.1	590.0	1114.0	1184.5

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	163.9	209.1	561.8	1098.3	1204.5
115°	188.3	228.6	525.3	1045.1	1190.4
117.5°	211.3	249.9	502.0	969.6	1133.3
120°	226.6	264.0	491.5	918.9	1081.5
122.5°	239.5	277.0	484.4	868.2	1025.0
125°	259.0	294.9	475.3	800.8	944.7
127.5°	276.3	312.0	470.3	749.7	873.1
130°	286.9	321.5	467.9	717.6	828.4
132.5°	297.5	332.1	465.6	690.3	788.4
135°	311.9	346.5	462.0	652.3	735.7
137.5°	327.5	358.9	460.3	618.7	688.9
140°	337.0	367.2	459.1	597.4	660.7
142.5°	346.4	374.3	457.9	580.6	633.6
145°	360.5	386.4	456.1	554.2	595.9
147.5°	376.4	398.5	454.7	533.4	566.2
150°	387.0	405.7	454.7	521.5	547.4
152.5°	395.2	411.6	453.5	510.8	532.1
155°	407.6	422.0	453.2	497.7	512.1
157.5°	419.6	430.9	453.2	488.8	499.7
160°	426.7	436.8	453.2	482.8	491.5
162.5°	433.8	441.5	454.4	478.1	484.4
165°	441.4	447.2	454.7	473.8	475.3
167.5°	449.4	452.2	456.1	468.8	470.0
170°	451.7	454.6	456.1	466.4	466.4
172.5°	454.1	455.8	456.1	464.1	464.1
175°	457.6	459.1	456.1	462.0	460.6
177.5°	458.8	458.8	455.3	459.9	457.6
180°	457.6	457.6	457.6	457.6	457.6

(END OF REPORT)