

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: P519082

Luminaire Tested: **SQ4-WB-050U-050D-930-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519082
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-930-1D-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: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

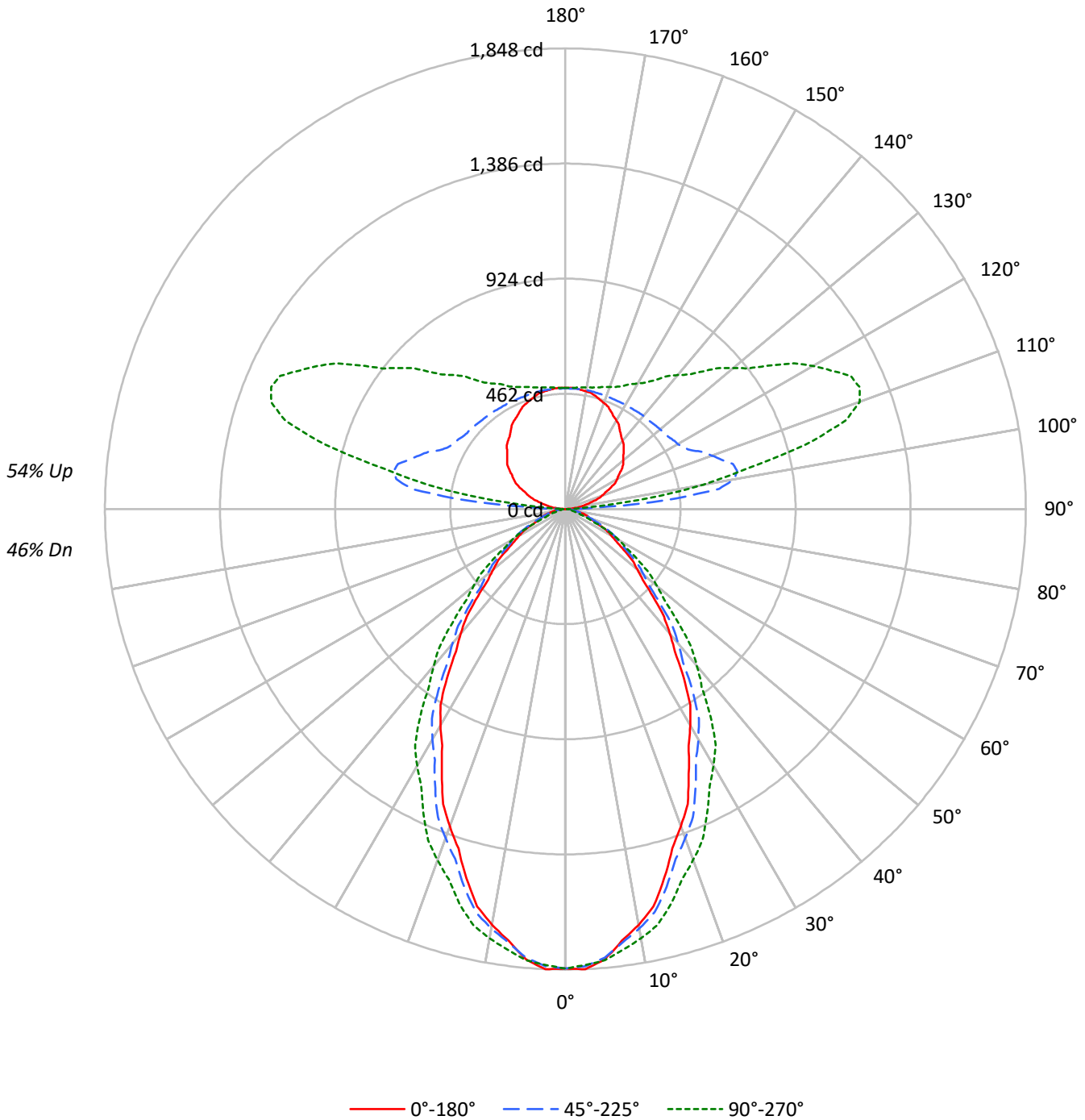
Lumens per Lamp: N/A
Luminaire Lumens: 5859.0 lumens
Efficiency: N/A
Efficacy: 99.5 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

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°	8506	8506	8506
5°	8400	8370	8419
10°	7937	8008	8194
15°	7326	7497	7832
20°	6653	6903	7360
25°	5968	6293	6857
30°	5336	5685	6336
35°	4666	5003	5718
40°	3927	4239	4950
45°	3241	3521	4133
50°	2706	2950	3443
55°	2297	2531	2844
60°	1963	2195	2270
65°	1563	1846	1466
70°	1387	1440	894
75°	1283	1167	547
80°	1182	1076	473
85°	1069	984	386



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	169.1	2.9
10°-20°	439.9	7.5
20°-30°	569.8	9.7
30°-40°	558.0	9.5
40°-50°	427.1	7.3
50°-60°	284.6	4.9
60°-70°	155.3	2.7
70°-80°	64.7	1.1
80°-90°	20.2	0.3
90°-100°	233.1	4.0
100°-110°	633.2	10.8
110°-120°	651.0	11.1
120°-130°	520.5	8.9
130°-140°	409.0	7.0
140°-150°	313.6	5.4
150°-160°	225.5	3.8
160°-170°	137.9	2.4
170°-180°	46.5	0.8
0°-30°	1178.9	20.1
0°-40°	1736.9	29.6
0°-60°	2448.6	41.8
0°-90°	2688.8	45.9
90°-120°	1517.2	25.9
90°-150°	2760.3	47.1
90°-180°	3170.0	54.1
0°-180°	5859.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1844	1844	1844	1844	1844	
5°	1814	1796	1808	1812	1818	169
15°	1534	1528	1570	1612	1640	428
25°	1172	1176	1236	1290	1347	539
35°	828	832	888	948	1015	515
45°	497	506	540	580	634	387
55°	286	298	315	327	354	259
65°	143	155	169	148	134	149
75°	72	72	66	45	31	77
85°	20	20	19	12	7	22
90°	2	6	11	14	14	3
95°	34	128	406	177	119	36
105°	112	175	696	1060	998	119
115°	200	243	557	1109	1263	197
125°	275	313	504	850	1002	245
135°	331	368	490	692	781	256
145°	382	410	484	588	632	240
155°	432	448	481	528	543	199
165°	468	474	482	503	504	132
175°	486	487	484	490	489	46
180°	486	486	486	486	486	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1843.9	1843.9	1843.9	1843.9	1843.9
2.5°	1848.5	1832.0	1836.2	1836.1	1831.0
5°	1814.0	1795.8	1807.5	1811.7	1818.0
7.5°	1746.7	1732.9	1754.3	1770.1	1782.9
10°	1694.3	1682.4	1709.6	1732.7	1749.3
12.5°	1633.4	1623.4	1657.2	1688.1	1709.8
15°	1534.0	1528.5	1569.7	1612.4	1640.0
17.5°	1427.7	1425.0	1472.2	1522.1	1557.5
20°	1355.2	1354.4	1406.2	1458.1	1499.3
22.5°	1282.1	1283.8	1338.2	1392.2	1439.1
25°	1172.4	1175.5	1236.3	1290.2	1347.1
27.5°	1070.9	1072.3	1135.2	1192.0	1252.8
30°	1001.7	1005.6	1067.2	1126.1	1189.4
32.5°	932.4	937.0	997.3	1058.1	1122.7
35°	828.5	832.5	888.4	948.2	1015.4
37.5°	721.4	726.8	776.4	832.9	899.1
40°	652.1	660.0	703.9	757.2	822.0
42.5°	585.5	595.3	636.0	686.5	745.0
45°	496.8	506.3	539.7	580.5	633.5
47.5°	420.4	431.3	457.0	492.2	537.4
50°	377.0	387.3	411.0	437.1	479.8
52.5°	338.9	349.1	370.2	390.3	426.7
55°	285.6	297.5	314.7	326.7	353.6
57.5°	241.9	253.3	267.0	272.4	288.7
60°	212.8	225.5	237.9	237.3	246.0
62.5°	186.3	197.0	209.4	200.8	201.3
65°	143.2	155.1	169.1	147.8	134.3
67.5°	115.7	118.2	132.7	103.0	87.1
70°	102.8	102.8	106.8	79.8	66.3
72.5°	90.5	90.5	86.7	64.9	50.8
75°	72.0	72.0	65.5	45.0	30.7
77.5°	55.5	54.9	50.2	33.6	22.3
80°	44.5	44.5	40.5	26.5	17.8
82.5°	34.8	34.8	31.4	20.7	13.3
85°	20.2	20.2	18.6	12.0	7.3
87.5°	7.4	8.3	8.7	6.7	6.0
90°	1.6	6.1	10.9	14.1	14.1
92.5°	14.1	63.8	110.8	47.6	40.3
95°	34.3	127.5	405.9	176.7	118.7
97.5°	56.8	140.8	622.3	484.1	340.0
100°	71.8	149.7	688.5	697.9	563.6
102.5°	86.8	158.5	706.0	863.1	744.7
105°	112.4	175.0	696.3	1060.2	997.6
107.5°	138.9	194.2	656.0	1161.9	1179.3
110°	157.7	208.1	626.0	1182.0	1256.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	173.9	221.8	596.1	1165.3	1278.0
115°	199.8	242.6	557.3	1108.8	1263.0
117.5°	224.2	265.1	532.7	1028.7	1202.4
120°	240.4	280.1	521.4	975.0	1147.5
122.5°	254.2	293.8	513.9	921.1	1087.5
125°	274.8	312.9	504.3	849.6	1002.3
127.5°	293.2	331.0	499.0	795.4	926.4
130°	304.4	341.1	496.5	761.4	878.9
132.5°	315.7	352.3	494.0	732.4	836.5
135°	331.0	367.6	490.2	692.1	780.6
137.5°	347.5	380.8	488.3	656.5	730.9
140°	357.5	389.6	487.1	633.8	701.0
142.5°	367.5	397.1	485.8	616.1	672.2
145°	382.5	410.0	484.0	588.0	632.3
147.5°	399.4	422.9	482.4	565.9	600.7
150°	410.6	430.4	482.4	553.3	580.8
152.5°	419.3	436.7	481.2	541.9	564.5
155°	432.4	447.7	480.8	528.0	543.3
157.5°	445.3	457.2	480.8	518.6	530.2
160°	452.7	463.4	480.8	512.3	521.4
162.5°	460.2	468.5	482.1	507.2	513.9
165°	468.4	474.5	482.4	502.7	504.3
167.5°	476.8	479.8	484.0	497.4	498.6
170°	479.3	482.3	484.0	494.9	494.9
172.5°	481.8	483.6	484.0	492.4	492.4
175°	485.5	487.1	484.0	490.2	488.7
177.5°	486.8	486.8	483.0	488.0	485.5
180°	485.5	485.5	485.5	485.5	485.5

(END OF REPORT)