

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: P519374

Luminaire Tested: **SQ4-WB-100U-050D-935-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519374  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-100U-050D-935-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

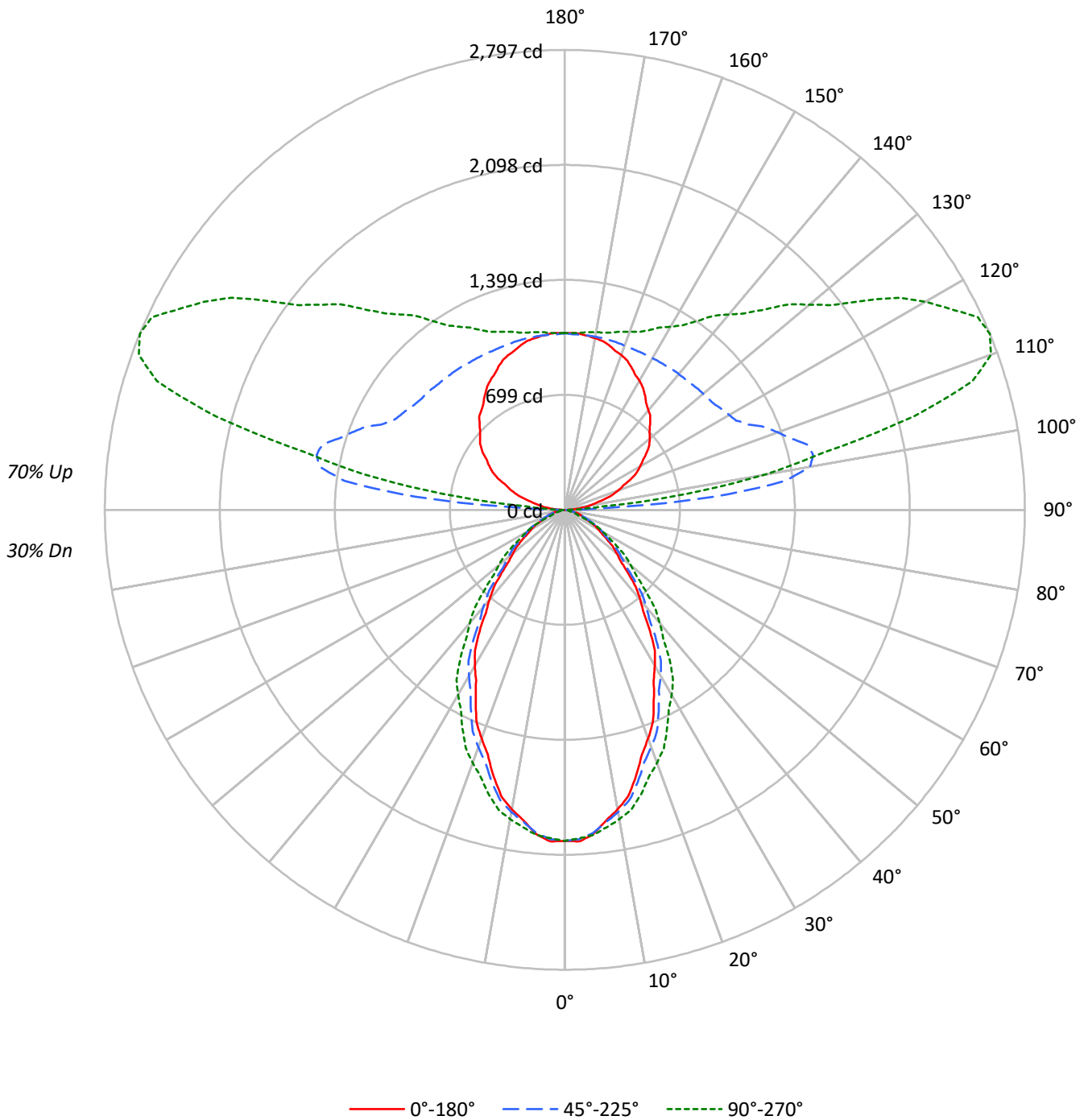
Lumens per Lamp: N/A  
Luminaire Lumens: 9915.6 lumens  
Efficiency: N/A  
Efficacy: 117.1 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 84.7  
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	102	102	102	102	92	92	92	92	72	72	72	54	54	54	37	37	37	30
1	94	90	86	83	84	81	78	75	64	62	60	48	47	46	34	33	33	26
2	86	79	74	69	77	72	67	63	57	54	51	43	41	40	31	30	29	23
3	79	70	64	58	71	64	58	53	51	47	44	39	36	34	28	27	25	20
4	72	63	55	50	65	57	51	46	46	41	38	35	32	30	25	24	22	18
5	67	56	49	43	60	51	44	40	41	36	33	32	29	26	23	21	20	16
6	62	50	43	38	55	46	39	35	37	33	29	29	26	23	21	19	18	15
7	57	46	38	33	51	42	35	31	34	29	26	27	23	21	20	18	16	13
8	53	42	34	29	48	38	32	27	31	26	23	24	21	19	18	16	15	12
9	49	38	31	26	44	35	29	24	28	24	21	23	19	17	17	15	14	11
10	46	35	28	24	42	32	26	22	26	22	19	21	18	16	16	14	12	10

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

	0°	45°	90°
0°	9288	9288	9288
5°	9172	9140	9192
10°	8666	8745	8947
15°	8000	8185	8553
20°	7265	7538	8037
25°	6516	6871	7487
30°	5826	6207	6918
35°	5095	5463	6244
40°	4288	4628	5405
45°	3539	3845	4513
50°	2955	3221	3760
55°	2509	2764	3105
60°	2144	2396	2478
65°	1707	2015	1601
70°	1513	1573	977
75°	1401	1276	599
80°	1291	1174	515
85°	1170	1074	423



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	184.7	1.9
10°-20°	480.4	4.8
20°-30°	622.2	6.3
30°-40°	609.3	6.1
40°-50°	466.4	4.7
50°-60°	310.8	3.1
60°-70°	169.6	1.7
70°-80°	70.7	0.7
80°-90°	22.2	0.2
90°-100°	503.0	5.1
100°-110°	1388.8	14.0
110°-120°	1432.3	14.4
120°-130°	1150.9	11.6
130°-140°	904.5	9.1
140°-150°	693.7	7.0
150°-160°	498.6	5.0
160°-170°	304.9	3.1
170°-180°	102.8	1.0
0°-30°	1287.2	13.0
0°-40°	1896.5	19.1
0°-60°	2673.7	27.0
0°-90°	2936.1	29.6
90°-120°	3324.1	33.5
90°-150°	6073.2	61.2
90°-180°	6979.0	70.4
0°-180°	9915.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2013	2013	2013	2013	2013	
5°	1981	1961	1974	1978	1985	184
15°	1675	1669	1714	1760	1791	468
25°	1280	1284	1350	1409	1471	589
35°	905	909	970	1035	1109	562
45°	542	553	589	634	692	423
55°	312	325	344	357	386	283
65°	156	169	185	161	147	163
75°	79	79	72	49	34	84
85°	22	22	20	13	8	24
90°	3	7	14	16	17	6
95°	74	272	913	375	244	79
105°	248	382	1528	2333	2196	263
115°	443	536	1231	2436	2770	436
125°	608	692	1115	1888	2215	541
135°	732	811	1084	1529	1724	566
145°	849	908	1071	1302	1401	532
155°	957	989	1062	1168	1205	441
165°	1036	1050	1067	1109	1117	292
175°	1074	1076	1069	1084	1081	102
180°	1074	1074	1074	1074	1074	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2013.4	2013.4	2013.4	2013.4	2013.4
2.5°	2018.4	2000.4	2004.9	2004.8	1999.3
5°	1980.7	1960.9	1973.7	1978.2	1985.1
7.5°	1907.2	1892.2	1915.5	1932.8	1946.8
10°	1850.0	1837.0	1866.8	1891.9	1910.0
12.5°	1783.5	1772.6	1809.5	1843.3	1866.9
15°	1675.0	1669.0	1713.9	1760.5	1790.8
17.5°	1559.0	1556.0	1607.5	1662.0	1700.7
20°	1479.8	1478.9	1535.5	1592.1	1637.1
22.5°	1399.9	1401.8	1461.2	1520.2	1571.3
25°	1280.1	1283.6	1349.9	1408.8	1471.0
27.5°	1169.4	1170.9	1239.5	1301.6	1368.0
30°	1093.7	1098.0	1165.3	1229.6	1298.7
32.5°	1018.1	1023.1	1089.0	1155.4	1225.9
35°	904.7	909.0	970.0	1035.3	1108.7
37.5°	787.7	793.6	847.8	909.5	981.7
40°	712.1	720.7	768.6	826.8	897.6
42.5°	639.3	650.0	694.4	749.6	813.5
45°	542.4	552.8	589.3	633.9	691.8
47.5°	459.0	471.0	499.0	537.4	586.8
50°	411.7	422.9	448.8	477.2	523.9
52.5°	370.0	381.2	404.3	426.2	465.9
55°	311.9	324.8	343.7	356.7	386.1
57.5°	264.2	276.6	291.5	297.4	315.2
60°	232.4	246.2	259.7	259.1	268.6
62.5°	203.4	215.1	228.6	219.3	219.8
65°	156.4	169.3	184.6	161.3	146.7
67.5°	126.3	129.1	144.9	112.5	95.1
70°	112.2	112.2	116.6	87.1	72.4
72.5°	98.8	98.8	94.7	70.9	55.5
75°	78.6	78.6	71.6	49.1	33.6
77.5°	60.6	59.9	54.8	36.6	24.4
80°	48.6	48.6	44.2	28.9	19.4
82.5°	38.0	38.0	34.3	22.6	14.5
85°	22.1	22.1	20.3	13.1	8.0
87.5°	8.5	9.1	9.8	7.3	7.0
90°	3.4	6.8	13.7	15.5	17.2
92.5°	30.9	128.4	229.6	83.8	65.3
95°	73.9	272.2	912.6	375.1	244.1
97.5°	122.4	304.9	1351.9	1040.9	753.8
100°	158.1	324.5	1514.2	1524.9	1239.2
102.5°	192.5	346.8	1545.8	1884.1	1613.2
105°	247.5	381.9	1527.9	2332.6	2196.5
107.5°	305.9	425.6	1442.7	2548.9	2598.7
110°	347.2	454.7	1376.7	2595.5	2756.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	384.3	487.8	1314.8	2558.7	2796.7
115°	443.4	535.9	1230.6	2436.1	2770.5
117.5°	495.0	587.1	1175.2	2263.6	2644.0
120°	529.4	620.1	1153.2	2146.8	2529.9
122.5°	562.4	649.1	1135.4	2037.7	2400.7
125°	608.4	692.4	1115.4	1887.7	2215.4
127.5°	647.6	731.6	1103.7	1760.9	2043.5
130°	673.7	757.8	1098.2	1683.3	1940.4
132.5°	698.5	778.5	1092.7	1618.1	1851.0
135°	732.2	811.1	1084.5	1528.9	1723.9
137.5°	770.0	841.9	1080.4	1454.0	1620.4
140°	790.6	861.2	1077.6	1404.1	1550.3
142.5°	814.0	879.2	1074.9	1359.7	1488.4
145°	849.0	907.9	1070.7	1301.6	1400.7
147.5°	882.7	934.1	1067.0	1252.6	1329.6
150°	907.5	949.5	1065.6	1223.4	1285.6
152.5°	926.7	966.0	1064.2	1198.4	1249.8
155°	957.3	989.2	1062.2	1167.8	1204.8
157.5°	985.5	1010.0	1062.5	1145.6	1170.8
160°	1002.0	1023.8	1063.9	1133.0	1151.5
162.5°	1015.8	1034.9	1065.2	1122.0	1136.4
165°	1036.4	1049.8	1067.3	1108.8	1117.2
167.5°	1052.2	1060.3	1069.0	1100.7	1103.4
170°	1060.4	1067.2	1069.0	1096.5	1096.5
172.5°	1067.3	1071.3	1069.0	1091.0	1089.7
175°	1074.2	1075.9	1069.0	1084.4	1081.1
177.5°	1076.9	1075.6	1068.7	1078.2	1075.6
180°	1074.2	1074.2	1074.2	1074.2	1074.2

(END OF REPORT)