

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: P519366

Luminaire Tested: **SQ4-WB-100U-050D-840-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519366  
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-840-1D-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: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

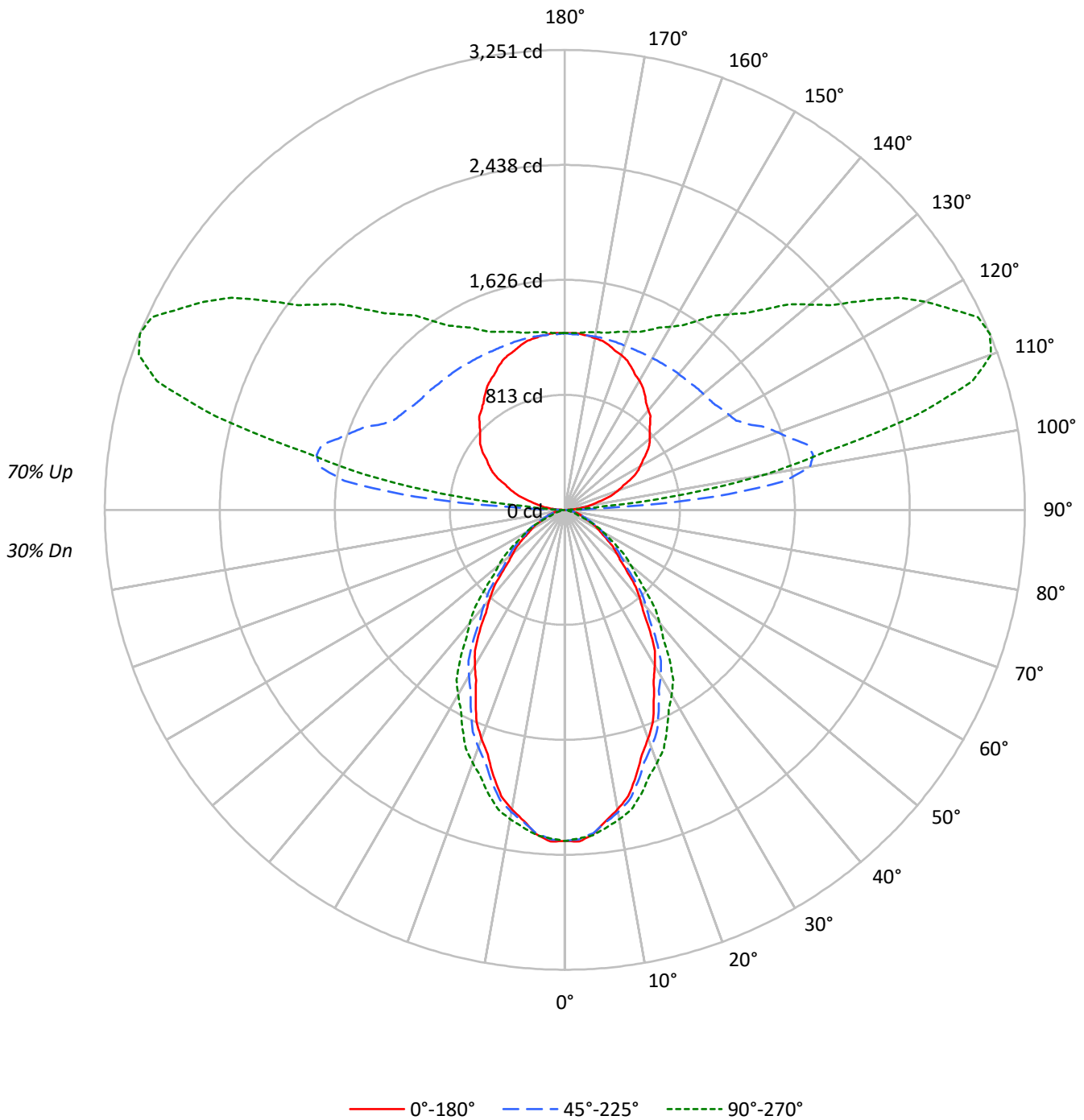
Lumens per Lamp: N/A  
Luminaire Lumens: 11526.6 lumens  
Efficiency: N/A  
Efficacy: 136.1 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: Semi-Indirect

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°	10797	10797	10797
5°	10662	10624	10686
10°	10074	10165	10401
15°	9300	9515	9942
20°	8445	8762	9342
25°	7574	7988	8704
30°	6772	7216	8042
35°	5922	6350	7259
40°	4985	5381	6283
45°	4114	4469	5246
50°	3435	3744	4371
55°	2915	3213	3610
60°	2492	2785	2880
65°	1984	2342	1861
70°	1759	1829	1136
75°	1629	1483	695
80°	1501	1363	600
85°	1360	1249	487



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	214.7	1.9
10°-20°	558.4	4.8
20°-30°	723.3	6.3
30°-40°	708.3	6.1
40°-50°	542.1	4.7
50°-60°	361.3	3.1
60°-70°	197.1	1.7
70°-80°	82.1	0.7
80°-90°	25.8	0.2
90°-100°	584.8	5.1
100°-110°	1614.4	14.0
110°-120°	1664.9	14.4
120°-130°	1337.9	11.6
130°-140°	1051.5	9.1
140°-150°	806.4	7.0
150°-160°	579.6	5.0
160°-170°	354.4	3.1
170°-180°	119.5	1.0
0°-30°	1496.4	13.0
0°-40°	2204.6	19.1
0°-60°	3108.0	27.0
0°-90°	3413.2	29.6
90°-120°	3864.1	33.5
90°-150°	7060.0	61.2
90°-180°	8113.0	70.4
0°-180°	11526.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2340	2340	2340	2340	2340	
5°	2302	2279	2294	2300	2308	214
15°	1947	1940	1992	2047	2082	544
25°	1488	1492	1569	1638	1710	684
35°	1052	1057	1128	1204	1289	654
45°	631	643	685	737	804	492
55°	362	378	400	415	449	329
65°	182	197	215	188	170	189
75°	91	91	83	57	39	98
85°	26	26	24	15	9	28
90°	4	8	16	18	20	7
95°	86	316	1061	436	284	92
105°	288	444	1776	2712	2553	306
115°	516	623	1430	2832	3221	507
125°	707	805	1297	2194	2575	629
135°	851	943	1261	1777	2004	659
145°	987	1055	1245	1513	1628	618
155°	1113	1150	1235	1358	1401	513
165°	1205	1220	1241	1289	1299	340
175°	1249	1251	1243	1261	1257	119
180°	1249	1249	1249	1249	1249	

TEST NUMBER: P519366

CATALOG NUMBER: SQ4-WB-100U-050D-840-1D-UNV-STD-W-8

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2340.5	2340.5	2340.5	2340.5	2340.5
2.5°	2346.3	2325.4	2330.7	2330.5	2324.1
5°	2302.5	2279.4	2294.3	2299.6	2307.7
7.5°	2217.1	2199.6	2226.7	2246.8	2263.1
10°	2150.5	2135.5	2170.0	2199.3	2220.4
12.5°	2073.3	2060.7	2103.5	2142.7	2170.3
15°	1947.2	1940.2	1992.4	2046.6	2081.7
17.5°	1812.2	1808.8	1868.7	1932.0	1977.0
20°	1720.2	1719.2	1784.9	1850.8	1903.0
22.5°	1627.4	1629.6	1698.7	1767.2	1826.6
25°	1488.1	1492.1	1569.3	1637.7	1710.0
27.5°	1359.3	1361.1	1440.9	1513.1	1590.2
30°	1271.4	1276.4	1354.6	1429.4	1509.7
32.5°	1183.5	1189.3	1265.9	1343.1	1425.1
35°	1051.6	1056.7	1127.6	1203.5	1288.9
37.5°	915.7	922.5	985.5	1057.3	1141.2
40°	827.8	837.8	893.5	961.1	1043.4
42.5°	743.1	755.6	807.2	871.4	945.7
45°	630.6	642.6	685.0	736.9	804.1
47.5°	533.6	547.5	580.0	624.7	682.1
50°	478.6	491.6	521.7	554.8	609.0
52.5°	430.1	443.2	470.0	495.4	541.6
55°	362.5	377.6	399.5	414.7	448.8
57.5°	307.1	321.5	338.9	345.7	366.4
60°	270.1	286.2	301.9	301.2	312.2
62.5°	236.4	250.1	265.8	254.9	255.5
65°	181.8	196.8	214.6	187.6	170.5
67.5°	146.9	150.1	168.4	130.8	110.5
70°	130.4	130.4	135.6	101.3	84.2
72.5°	114.8	114.8	110.1	82.4	64.5
75°	91.4	91.4	83.2	57.1	39.0
77.5°	70.5	69.6	63.7	42.6	28.3
80°	56.5	56.5	51.3	33.6	22.6
82.5°	44.2	44.2	39.8	26.3	16.8
85°	25.7	25.7	23.6	15.3	9.2
87.5°	9.8	10.6	11.4	8.5	8.1
90°	4.0	7.9	16.0	18.0	20.0
92.5°	36.0	149.3	266.9	97.4	75.9
95°	85.9	316.4	1060.9	436.1	283.7
97.5°	142.3	354.4	1571.6	1210.0	876.3
100°	183.8	377.2	1760.2	1772.6	1440.5
102.5°	223.8	403.1	1796.9	2190.2	1875.3
105°	287.7	444.0	1776.2	2711.6	2553.4
107.5°	355.6	494.7	1677.1	2963.1	3020.9
110°	403.6	528.6	1600.3	3017.1	3204.7



TEST NUMBER: P519366

CATALOG NUMBER: SQ4-WB-100U-050D-840-1D-UNV-STD-W-8

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	446.7	567.1	1528.4	2974.4	3251.0
115°	515.5	622.9	1430.5	2831.9	3220.7
117.5°	575.4	682.5	1366.2	2631.3	3073.6
120°	615.4	720.9	1340.6	2495.6	2941.0
122.5°	653.7	754.5	1319.8	2368.8	2790.7
125°	707.3	804.9	1296.7	2194.4	2575.3
127.5°	752.8	850.5	1283.1	2047.0	2375.5
130°	783.2	880.9	1276.7	1956.8	2255.7
132.5°	812.0	904.9	1270.3	1881.0	2151.8
135°	851.1	942.9	1260.7	1777.3	2003.9
137.5°	895.1	978.7	1255.9	1690.3	1883.7
140°	919.1	1001.1	1252.7	1632.2	1802.1
142.5°	946.2	1022.0	1249.5	1580.6	1730.2
145°	987.0	1055.4	1244.7	1513.1	1628.3
147.5°	1026.1	1085.9	1240.3	1456.1	1545.6
150°	1054.9	1103.7	1238.7	1422.2	1494.5
152.5°	1077.3	1123.0	1237.1	1393.1	1452.9
155°	1112.9	1150.0	1234.7	1357.6	1400.6
157.5°	1145.6	1174.1	1235.1	1331.7	1361.0
160°	1164.8	1190.2	1236.7	1317.1	1338.6
162.5°	1180.8	1203.1	1238.3	1304.2	1321.0
165°	1204.8	1220.4	1240.7	1288.9	1298.7
167.5°	1223.1	1232.5	1242.7	1279.5	1282.7
170°	1232.7	1240.5	1242.7	1274.7	1274.7
172.5°	1240.7	1245.4	1242.7	1268.3	1266.7
175°	1248.7	1250.7	1242.7	1260.6	1256.7
177.5°	1251.9	1250.3	1242.3	1253.4	1250.3
180°	1248.7	1248.7	1248.7	1248.7	1248.7

(END OF REPORT)