

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: P519406

Luminaire Tested: **SQ4-WB-100U-100D-830-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519406
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-100D-830-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

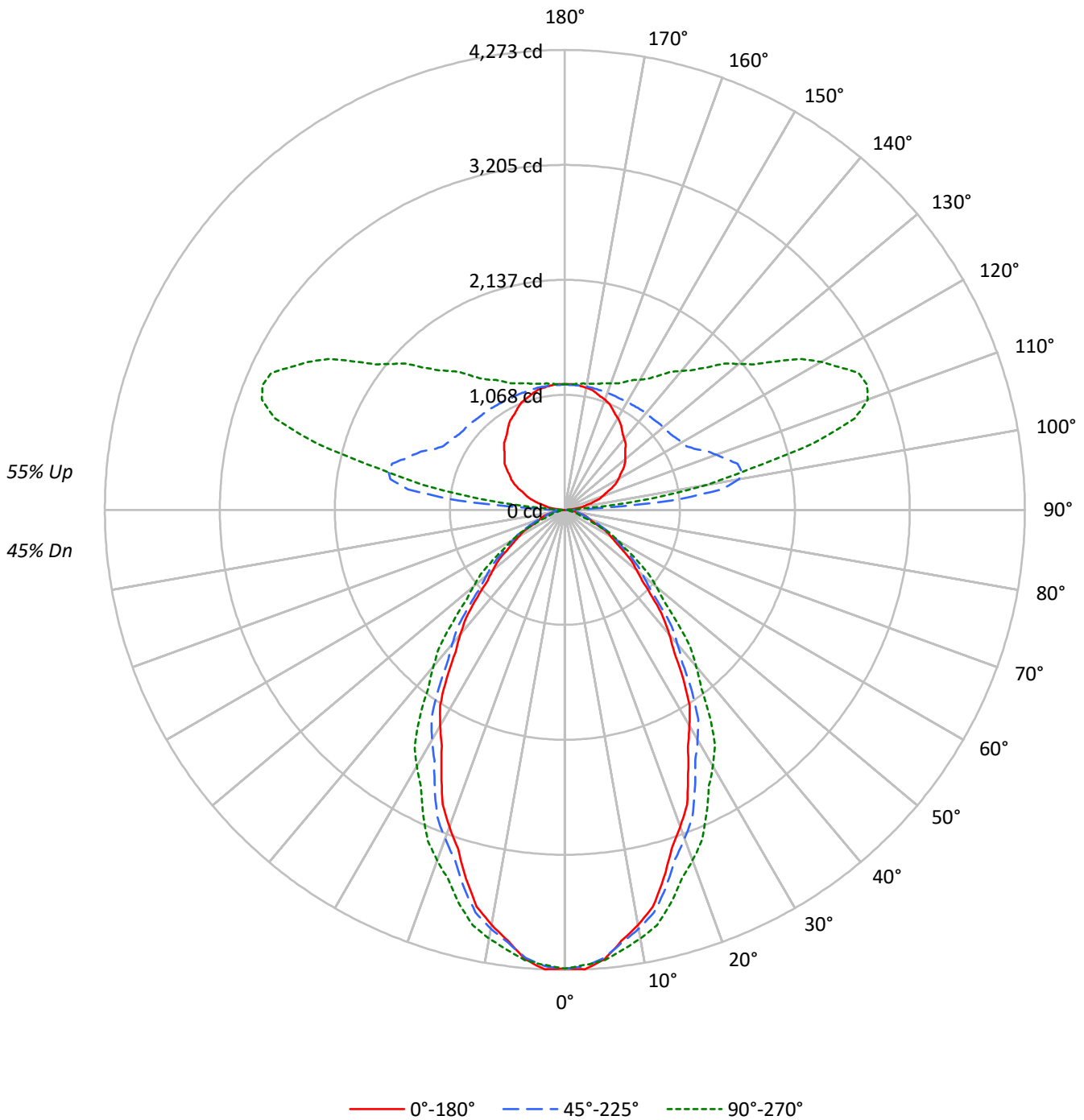
Lumens per Lamp: N/A
Luminaire Lumens: 13795.9 lumens
Efficiency: N/A
Efficacy: 113.8 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 121.2
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



TEST NUMBER: P519406
CATALOG NUMBER: SQ4-WB-100U-100D-830-1D-UNV-STD-W-8

Luminous Intensity Polar Plot





TEST NUMBER: P519406

CATALOG NUMBER: SQ4-WB-100U-100D-830-1D-UNV-STD-W-8

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	65	65	65	52	52	52	45
1	98	94	90	87	89	86	83	81	72	70	68	59	58	56	47	46	46	40
2	90	83	78	73	82	77	72	68	64	61	58	53	51	49	43	41	40	35
3	83	74	67	62	76	68	63	58	58	54	50	48	45	43	39	37	35	31
4	76	66	59	54	70	61	55	50	52	47	44	44	40	37	36	33	31	28
5	70	60	52	47	65	55	49	44	47	42	39	40	36	33	33	30	28	25
6	65	54	46	41	60	50	44	39	43	38	34	36	33	30	30	27	25	22
7	61	49	42	36	56	46	39	34	39	34	31	33	30	27	28	25	23	20
8	56	45	38	33	52	42	35	31	36	31	28	31	27	24	26	23	21	19
9	53	41	34	29	49	39	32	28	33	28	25	29	25	22	24	21	19	17
10	49	38	31	27	46	36	29	25	31	26	23	27	23	20	22	20	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	19664	19664	19664
5°	19419	19349	19462
10°	18347	18513	18943
15°	16937	17330	18107
20°	15380	15959	17015
25°	13795	14547	15852
30°	12335	13142	14646
35°	10786	11566	13220
40°	9079	9800	11444
45°	7492	8139	9554
50°	6255	6819	7960
55°	5311	5852	6574
60°	4538	5073	5246
65°	3614	4267	3389
70°	3203	3330	2069
75°	2968	2700	1267
80°	2734	2484	1092
85°	2477	2276	889



TEST NUMBER: P519406

CATALOG NUMBER: SQ4-WB-100U-100D-830-1D-UNV-STD-W-8

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	391.0	2.8
10°-20°	1017.0	7.4
20°-30°	1317.3	9.5
30°-40°	1290.0	9.4
40°-50°	987.4	7.2
50°-60°	657.9	4.8
60°-70°	359.0	2.6
70°-80°	149.6	1.1
80°-90°	44.8	0.3
90°-100°	546.5	4.0
100°-110°	1508.6	10.9
110°-120°	1555.9	11.3
120°-130°	1250.3	9.1
130°-140°	982.6	7.1
140°-150°	753.6	5.5
150°-160°	541.6	3.9
160°-170°	331.2	2.4
170°-180°	111.7	0.8
0°-30°	2725.3	19.8
0°-40°	4015.2	29.1
0°-60°	5660.5	41.0
0°-90°	6214.0	45.0
90°-120°	3611.0	26.2
90°-150°	6597.5	47.8
90°-180°	7582.0	55.0
0°-180°	13795.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4263	4263	4263	4263	4263	
5°	4194	4151	4178	4188	4203	390
15°	3546	3534	3629	3727	3791	990
25°	2710	2718	2858	2983	3114	1246
35°	1915	1924	2054	2192	2347	1191
45°	1148	1170	1248	1342	1464	896
55°	660	688	728	755	817	599
65°	331	358	391	342	310	344
75°	166	166	152	104	71	178
85°	47	47	43	28	17	51
90°	4	7	15	17	19	8
95°	80	296	991	408	265	86
105°	269	415	1660	2534	2386	286
115°	482	582	1337	2646	3010	473
125°	661	752	1212	2051	2407	588
135°	795	881	1178	1661	1873	615
145°	922	986	1163	1414	1522	577
155°	1040	1075	1154	1269	1309	479
165°	1126	1140	1159	1204	1214	317
175°	1167	1169	1161	1178	1174	111
180°	1167	1167	1167	1167	1167	

TEST NUMBER: P519406

CATALOG NUMBER: SQ4-WB-100U-100D-830-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4262.7	4262.7	4262.7	4262.7	4262.7
2.5°	4273.2	4235.1	4244.8	4244.5	4232.8
5°	4193.5	4151.4	4178.5	4188.2	4202.9
7.5°	4037.9	4006.1	4055.5	4092.1	4121.7
10°	3916.7	3889.2	3952.2	4005.5	4043.9
12.5°	3776.0	3753.0	3831.0	3902.5	3952.6
15°	3546.3	3533.5	3628.6	3727.4	3791.4
17.5°	3300.6	3294.3	3403.4	3518.6	3600.6
20°	3133.0	3131.1	3250.8	3370.8	3465.9
22.5°	2963.9	2967.9	3093.7	3218.5	3326.7
25°	2710.3	2717.6	2858.0	2982.6	3114.3
27.5°	2475.7	2479.0	2624.2	2755.7	2896.2
30°	2315.6	2324.7	2467.1	2603.2	2749.5
32.5°	2155.5	2166.1	2305.5	2446.2	2595.4
35°	1915.3	1924.5	2053.7	2191.9	2347.4
37.5°	1667.7	1680.1	1794.9	1925.5	2078.4
40°	1507.6	1525.9	1627.3	1750.4	1900.4
42.5°	1353.4	1376.1	1470.2	1587.0	1722.3
45°	1148.4	1170.4	1247.6	1342.0	1464.5
47.5°	971.9	997.1	1056.4	1137.7	1242.3
50°	871.6	895.4	950.2	1010.4	1109.2
52.5°	783.3	807.1	855.9	902.3	986.5
55°	660.3	687.7	727.6	755.2	817.4
57.5°	559.3	585.6	617.2	629.7	667.4
60°	491.9	521.2	549.9	548.5	568.6
62.5°	430.6	455.4	484.1	464.3	465.4
65°	331.1	358.5	390.9	341.6	310.5
67.5°	267.5	273.3	306.8	238.2	201.3
70°	237.5	237.5	246.9	184.5	153.4
72.5°	209.1	209.1	200.5	150.0	117.5
75°	166.5	166.5	151.5	104.0	71.1
77.5°	128.3	126.8	116.0	77.6	51.6
80°	102.9	102.9	93.5	61.3	41.1
82.5°	80.4	80.4	72.6	47.9	30.7
85°	46.8	46.8	43.0	27.8	16.8
87.5°	17.2	17.9	18.0	12.3	11.2
90°	3.7	7.4	14.9	16.8	18.7
92.5°	33.6	139.5	249.4	91.0	70.9
95°	80.3	295.7	991.4	407.5	265.1
97.5°	132.9	331.2	1468.6	1130.7	818.9
100°	171.8	352.5	1644.9	1656.5	1346.1
102.5°	209.1	376.7	1679.2	2046.7	1752.4
105°	268.9	414.9	1659.8	2534.0	2386.1
107.5°	332.3	462.3	1567.2	2768.9	2823.0
110°	377.1	494.0	1495.5	2819.5	2994.7

TEST NUMBER: P519406

CATALOG NUMBER: SQ4-WB-100U-100D-830-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	<i>417.5</i>	529.9	1428.3	2779.6	3038.1
115°	<i>481.7</i>	582.1	1336.8	2646.4	3009.7
117.5°	<i>537.7</i>	637.8	1276.7	2459.0	2872.3
120°	<i>575.1</i>	673.6	1252.8	2332.1	2748.3
122.5°	<i>610.9</i>	705.1	1233.4	2213.6	2607.9
125°	<i>660.9</i>	752.2	1211.7	2050.6	2406.6
127.5°	<i>703.5</i>	794.8	1199.0	1912.9	2219.9
130°	<i>731.9</i>	823.2	1193.0	1828.6	2107.9
132.5°	<i>758.8</i>	845.7	1187.1	1757.8	2010.8
135°	<i>795.4</i>	881.2	1178.1	1660.9	1872.7
137.5°	<i>836.4</i>	914.6	1173.6	1579.5	1760.3
140°	<i>858.8</i>	935.5	1170.6	1525.3	1684.1
142.5°	<i>884.2</i>	955.1	1167.7	1477.0	1616.9
145°	<i>922.3</i>	986.2	1163.2	1413.9	1521.6
147.5°	<i>958.9</i>	1014.8	1159.1	1360.7	1444.3
150°	<i>985.8</i>	1031.4	1157.6	1329.0	1396.6
152.5°	<i>1006.7</i>	1049.4	1156.1	1301.9	1357.7
155°	<i>1039.9</i>	1074.6	1153.8	1268.6	1308.8
157.5°	<i>1070.6</i>	1097.2	1154.2	1244.5	1271.8
160°	<i>1088.5</i>	1112.2	1155.7	1230.8	1250.9
162.5°	<i>1103.4</i>	1124.2	1157.2	1218.8	1234.5
165°	<i>1125.8</i>	1140.4	1159.4	1204.5	1213.6
167.5°	<i>1143.0</i>	1151.8	1161.3	1195.7	1198.6
170°	<i>1152.0</i>	1159.3	1161.3	1191.2	1191.2
172.5°	<i>1159.4</i>	1163.8	1161.3	1185.2	1183.7
175°	<i>1166.9</i>	1168.7	1161.3	1178.0	1174.4
177.5°	<i>1169.9</i>	1168.4	1160.9	1171.3	1168.4
180°	<i>1166.9</i>	1166.9	1166.9	1166.9	1166.9

(END OF REPORT)