

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: P519361

Luminaire Tested: **SQ4-WB-100U-050D-835-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519361  
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-835-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

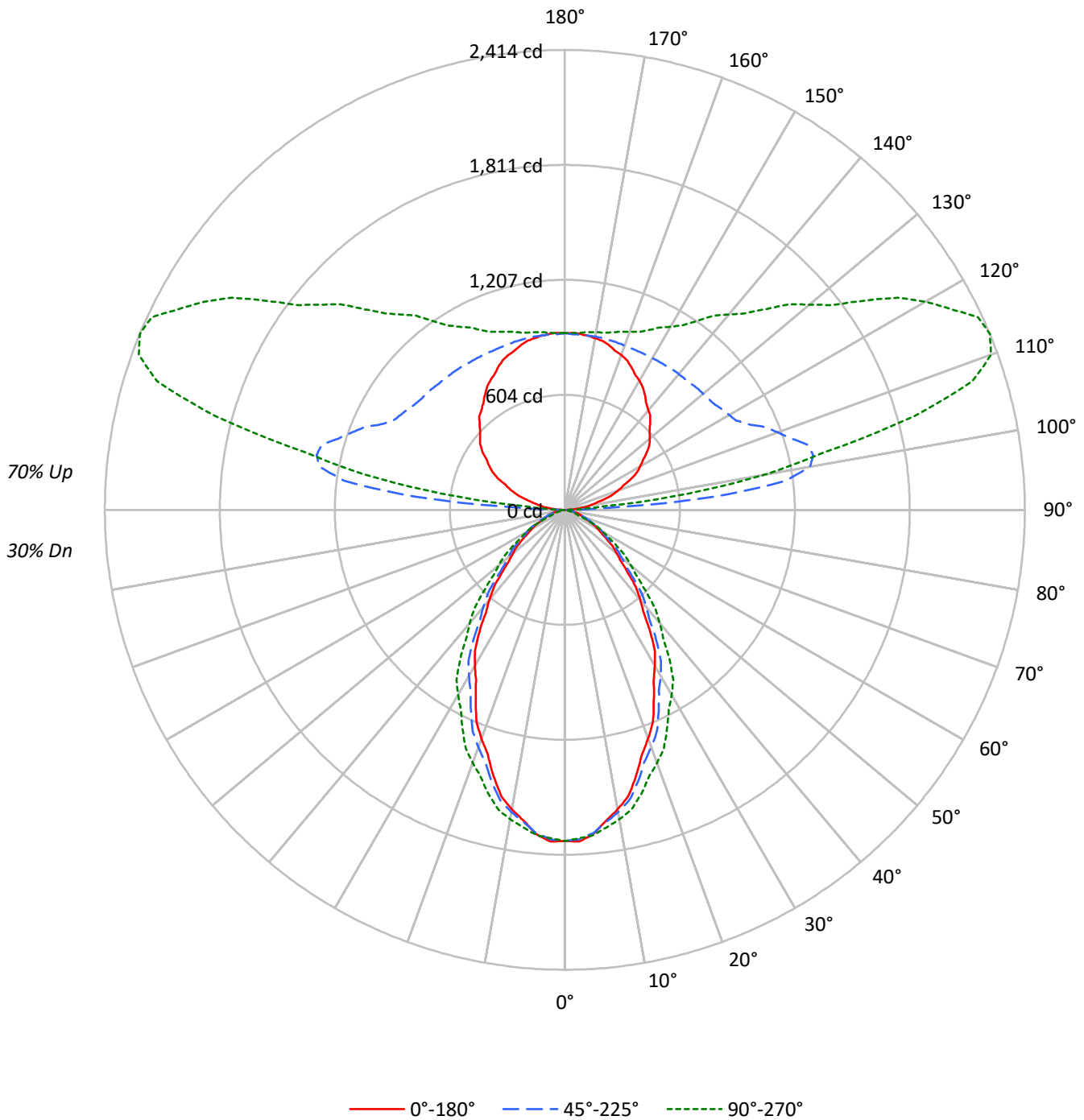
Lumens per Lamp: N/A  
Luminaire Lumens: 8558.9 lumens  
Efficiency: N/A  
Efficacy: 133.1 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 64.3  
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: P519361  
CATALOG NUMBER: SQ4-WB-100U-050D-835-1D-UNV-STD-W-6

### Luminous Intensity Polar Plot





TEST NUMBER: P519361

CATALOG NUMBER: SQ4-WB-100U-050D-835-1D-UNV-STD-W-6

**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°	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



TEST NUMBER: P519361

CATALOG NUMBER: SQ4-WB-100U-050D-835-1D-UNV-STD-W-6

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	159.4	1.9
10°-20°	414.6	4.8
20°-30°	537.1	6.3
30°-40°	525.9	6.1
40°-50°	402.6	4.7
50°-60°	268.3	3.1
60°-70°	146.4	1.7
70°-80°	61.0	0.7
80°-90°	19.2	0.2
90°-100°	434.2	5.1
100°-110°	1198.7	14.0
110°-120°	1236.3	14.4
120°-130°	993.5	11.6
130°-140°	780.8	9.1
140°-150°	598.8	7.0
150°-160°	430.4	5.0
160°-170°	263.2	3.1
170°-180°	88.7	1.0
0°-30°	1111.1	13.0
0°-40°	1637.0	19.1
0°-60°	2307.8	27.0
0°-90°	2534.4	29.6
90°-120°	2869.2	33.5
90°-150°	5242.2	61.2
90°-180°	6024.0	70.4
0°-180°	8558.9	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°	3	6	12	13	15	5
95°	64	235	788	324	211	68
105°	214	330	1319	2013	1896	227
115°	383	462	1062	2103	2391	376
125°	525	598	963	1629	1912	467
135°	632	700	936	1320	1488	489
145°	733	784	924	1124	1209	459
155°	826	854	917	1008	1040	381
165°	895	906	921	957	964	252
175°	927	929	923	936	933	88
180°	927	927	927	927	927	



TEST NUMBER: P519361

CATALOG NUMBER: SQ4-WB-100U-050D-835-1D-UNV-STD-W-6

**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°	7.3	7.9	8.5	6.3	6.0
90°	3.0	5.9	11.9	13.4	14.8
92.5°	26.7	110.8	198.2	72.3	56.4
95°	63.8	235.0	787.8	323.8	210.7
97.5°	105.6	263.2	1166.9	898.4	650.7
100°	136.5	280.1	1307.0	1316.2	1069.6
102.5°	166.2	299.3	1334.3	1626.3	1392.4
105°	213.6	329.7	1318.9	2013.4	1895.9
107.5°	264.1	367.3	1245.3	2200.2	2243.1
110°	299.7	392.5	1188.3	2240.3	2379.6

TEST NUMBER: P519361

CATALOG NUMBER: SQ4-WB-100U-050D-835-1D-UNV-STD-W-6

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	331.7	421.1	1134.9	2208.6	2414.0
115°	382.7	462.5	1062.2	2102.8	2391.4
117.5°	427.3	506.7	1014.4	1953.8	2282.3
120°	456.9	535.3	995.4	1853.0	2183.7
122.5°	485.4	560.3	980.0	1758.9	2072.2
125°	525.2	597.7	962.8	1629.4	1912.3
127.5°	559.0	631.5	952.7	1519.9	1763.9
130°	581.5	654.1	948.0	1453.0	1674.9
132.5°	602.9	672.0	943.2	1396.7	1597.8
135°	632.0	700.2	936.1	1319.7	1488.0
137.5°	664.6	726.7	932.5	1255.1	1398.7
140°	682.4	743.3	930.2	1211.9	1338.1
142.5°	702.6	758.9	927.8	1173.6	1284.7
145°	732.9	783.6	924.2	1123.5	1209.1
147.5°	761.9	806.3	921.0	1081.2	1147.7
150°	783.3	819.6	919.8	1056.0	1109.7
152.5°	799.9	833.9	918.6	1034.4	1078.8
155°	826.3	853.9	916.8	1008.0	1040.0
157.5°	850.7	871.8	917.1	988.8	1010.6
160°	864.9	883.8	918.3	978.0	994.0
162.5°	876.8	893.3	919.5	968.4	980.9
165°	894.6	906.2	921.3	957.0	964.3
167.5°	908.2	915.2	922.8	950.1	952.4
170°	915.3	921.1	922.8	946.5	946.5
172.5°	921.3	924.7	922.8	941.7	940.6
175°	927.2	928.7	922.8	936.0	933.1
177.5°	929.6	928.4	922.5	930.7	928.4
180°	927.2	927.2	927.2	927.2	927.2

(END OF REPORT)