

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P521947

Luminaire Tested: **SQ4-WB-100U-100D-93050-1D-UNV-STD-W-4 (3500K)**

Issue Date: 5/5/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P521947  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-50,  
Test Lab: INNOVATION CENTER  
Issue Date: 5/5/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-WB-100U-100D-93050-1D-UNV-STD-W-4 (3500K)  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

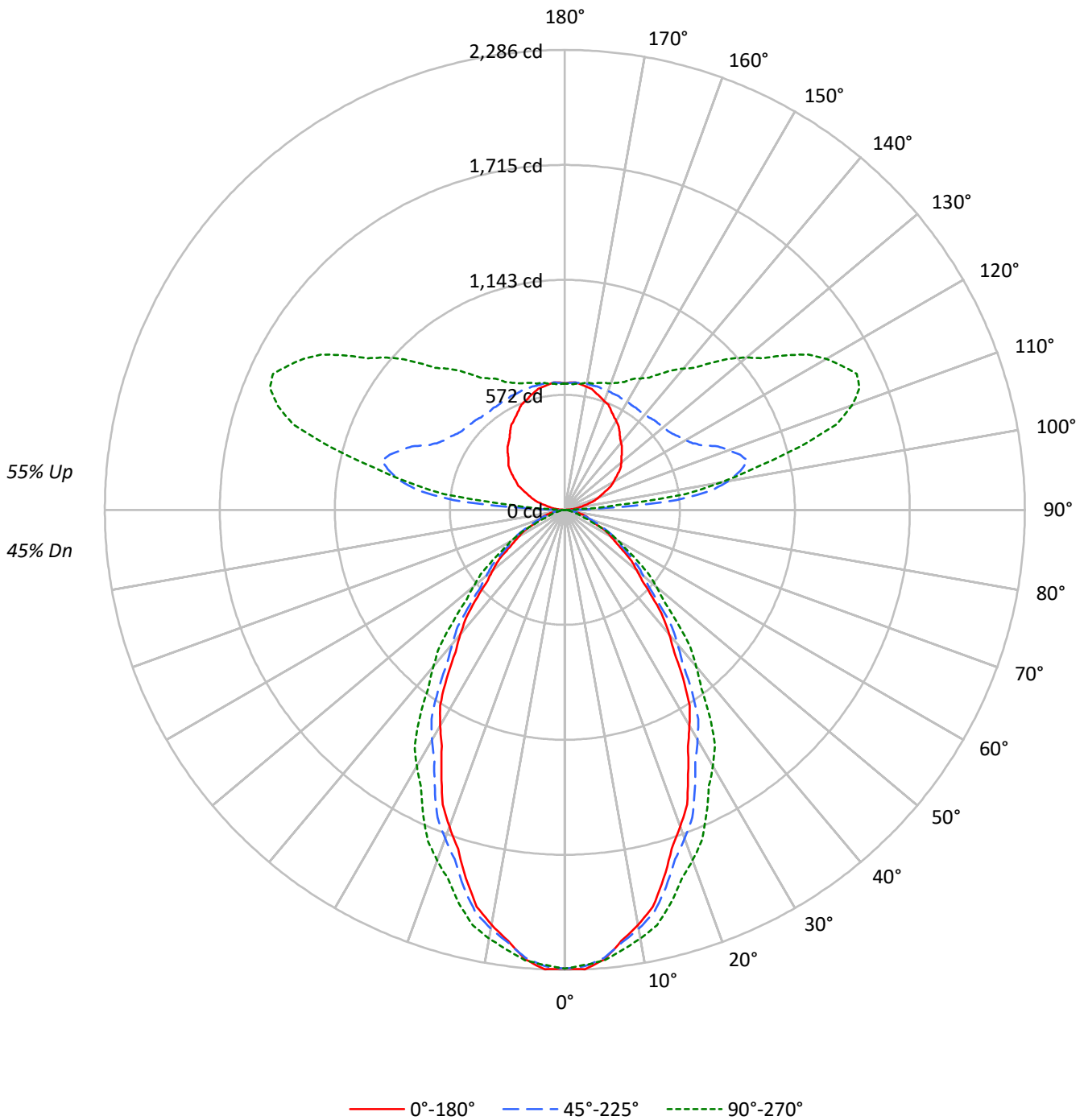
Lumens per Lamp: N/A  
Luminaire Lumens: 7395.2 lumens  
Efficiency: N/A  
Efficacy: 98.9 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 74.8  
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: P521947

CATALOG NUMBER: SQ4-WB-100U-100D-93050-1D-UNV-STD-W-4 (3500K)

### Luminous Intensity Polar Plot





TEST NUMBER: P521947

CATALOG NUMBER: SQ4-WB-100U-100D-93050-1D-UNV-STD-W-4 (3500K)

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20					20					20					20									
RC	80					70					50					30					10				
RW	70	50	30	10	70	50	30	10	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	51	51	51	45							
1	98	94	90	87	89	86	83	81	72	70	68	59	58	56	47	46	45	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	53	70	61	55	50	52	47	44	43	40	37	35	33	31	28							
5	70	60	52	47	65	55	49	44	47	42	38	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	60	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	38	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°	21040	21040	21040
5°	20778	20704	20824
10°	19631	19809	20268
15°	18122	18543	19374
20°	16456	17076	18205
25°	14761	15565	16961
30°	13198	14062	15671
35°	11541	12375	14144
40°	9713	10485	12245
45°	8017	8708	10223
50°	6693	7296	8517
55°	5681	6262	7034
60°	4857	5429	5613
65°	3866	4565	3626
70°	3429	3563	2215
75°	3176	2891	1355
80°	2922	2657	1169
85°	2646	2435	953



TEST NUMBER: P521947

CATALOG NUMBER: SQ4-WB-100U-100D-93050-1D-UNV-STD-W-4 (3500K)

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	209.2	2.8
10°-20°	544.1	7.4
20°-30°	704.7	9.5
30°-40°	690.1	9.3
40°-50°	528.2	7.1
50°-60°	352.0	4.8
60°-70°	192.1	2.6
70°-80°	80.0	1.1
80°-90°	22.7	0.3
90°-100°	324.2	4.4
100°-110°	783.5	10.6
110°-120°	835.7	11.3
120°-130°	676.8	9.2
130°-140°	524.0	7.1
140°-150°	399.8	5.4
150°-160°	289.4	3.9
160°-170°	178.2	2.4
170°-180°	60.4	0.8
0°-30°	1458.0	19.7
0°-40°	2148.1	29.0
0°-60°	3028.3	41.0
0°-90°	3323.1	44.9
90°-120°	1943.4	26.3
90°-150°	3544.1	47.9
90°-180°	4072.0	55.1
0°-180°	7395.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2280	2280	2280	2280	2280	
5°	2244	2221	2236	2241	2248	209
15°	1897	1890	1941	1994	2028	530
25°	1450	1454	1529	1596	1666	667
35°	1025	1030	1099	1173	1256	637
45°	614	626	667	718	784	479
55°	353	368	389	404	437	320
65°	177	192	209	183	166	184
75°	89	89	81	56	38	95
85°	25	25	23	15	9	27
90°	0	0	0	0	0	3
95°	32	162	556	361	253	36
105°	125	216	942	1218	1203	132
115°	229	293	757	1434	1600	227
125°	326	376	657	1141	1340	291
135°	401	448	630	900	1035	310
145°	474	509	618	765	824	296
155°	544	567	626	677	702	251
165°	601	610	634	644	653	170
175°	635	633	635	630	629	60
180°	629	629	629	629	629	

TEST NUMBER: P521947

CATALOG NUMBER: SQ4-WB-100U-100D-93050-1D-UNV-STD-W-4 (3500K)

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2280.5	2280.5	2280.5	2280.5	2280.5
2.5°	2286.1	2265.8	2270.9	2270.8	2264.5
5°	2243.5	2221.0	2235.5	2240.7	2248.5
7.5°	2160.2	2143.2	2169.6	2189.2	2205.1
10°	2095.4	2080.7	2114.4	2142.9	2163.4
12.5°	2020.1	2007.8	2049.6	2087.8	2114.6
15°	1897.3	1890.4	1941.3	1994.1	2028.3
17.5°	1765.8	1762.4	1820.8	1882.4	1926.3
20°	1676.1	1675.1	1739.2	1803.4	1854.2
22.5°	1585.7	1587.8	1655.1	1721.9	1779.8
25°	1450.0	1453.9	1529.0	1595.7	1666.1
27.5°	1324.5	1326.2	1403.9	1474.3	1549.4
30°	1238.8	1243.7	1319.9	1392.7	1471.0
32.5°	1153.2	1158.8	1233.4	1308.7	1388.5
35°	1024.7	1029.6	1098.7	1172.7	1255.8
37.5°	892.2	898.8	960.2	1030.1	1111.9
40°	806.5	816.3	870.6	936.4	1016.7
42.5°	724.1	736.2	786.5	849.0	921.4
45°	614.4	626.1	667.4	718.0	783.5
47.5°	519.9	533.4	565.2	608.7	664.6
50°	466.3	479.0	508.3	540.6	593.4
52.5°	419.1	431.8	457.9	482.7	527.8
55°	353.2	367.9	389.3	404.0	437.3
57.5°	299.2	313.3	330.2	336.9	357.0
60°	263.2	278.8	294.2	293.4	304.2
62.5°	230.4	243.7	259.0	248.4	249.0
65°	177.1	191.8	209.1	182.7	166.1
67.5°	143.1	146.2	164.1	127.4	107.7
70°	127.1	127.1	132.1	98.7	82.1
72.5°	111.9	111.9	107.3	80.3	62.8
75°	89.1	89.1	81.1	55.6	38.0
77.5°	68.6	67.9	62.0	41.5	27.6
80°	55.0	55.0	50.0	32.8	22.0
82.5°	43.0	43.0	38.8	25.6	16.4
85°	25.0	25.0	23.0	14.9	9.0
87.5°	8.8	8.8	8.0	4.8	4.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	10.7	87.8	206.7	100.5	68.2
95°	32.0	162.2	555.5	361.2	253.1
97.5°	56.7	179.7	731.5	704.8	605.0
100°	75.9	190.5	828.5	874.6	792.6
102.5°	94.0	200.3	892.5	1016.0	967.3
105°	125.2	216.4	941.7	1218.4	1202.8
107.5°	155.8	235.3	912.7	1380.8	1417.5
110°	177.2	251.4	865.8	1450.8	1519.8

TEST NUMBER: P521947

CATALOG NUMBER: SQ4-WB-100U-100D-93050-1D-UNV-STD-W-4 (3500K)

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	198.5	267.5	824.3	1467.9	1585.9
115°	229.1	292.9	756.6	1434.3	1599.8
117.5°	259.5	319.6	716.9	1357.2	1551.0
120°	279.7	335.7	691.3	1296.7	1499.9
122.5°	301.0	352.9	675.3	1234.8	1434.9
125°	326.3	375.8	656.7	1140.7	1340.0
127.5°	351.4	398.0	643.6	1061.1	1236.1
130°	366.3	411.9	639.4	1005.6	1177.5
132.5°	380.2	427.8	633.0	965.6	1111.4
135°	400.9	447.8	630.0	899.5	1035.0
137.5°	420.7	467.8	620.7	854.8	956.9
140°	435.6	478.6	620.7	822.7	916.4
142.5°	450.5	493.5	615.4	794.6	873.8
145°	474.2	509.4	618.1	764.6	824.5
147.5°	496.3	530.4	616.5	730.0	779.5
150°	510.2	540.1	620.7	714.9	753.9
152.5°	525.1	554.0	619.7	698.8	733.7
155°	543.5	566.9	626.0	677.2	702.0
157.5°	565.6	585.6	624.7	669.0	683.6
160°	574.1	591.0	630.0	658.3	668.7
162.5°	588.0	602.8	627.9	655.0	661.2
165°	600.7	609.9	634.0	643.6	652.7
167.5°	616.5	622.4	632.4	642.8	643.1
170°	620.7	624.6	636.7	635.5	642.0
172.5°	628.2	631.0	633.5	636.4	632.4
175°	635.4	632.8	635.4	630.0	628.7
177.5°	634.0	634.0	631.9	629.7	624.5
180°	628.7	628.7	628.7	628.7	628.7

(END OF REPORT)