

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: P521338

Luminaire Tested: **SQ4-BB-150U-125D-93050-1D-UNV-STD-W-4 (4500K)**

Issue Date: 5/5/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P521338  
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-BB-150U-125D-93050-1D-UNV-STD-W-4 (4500K)  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

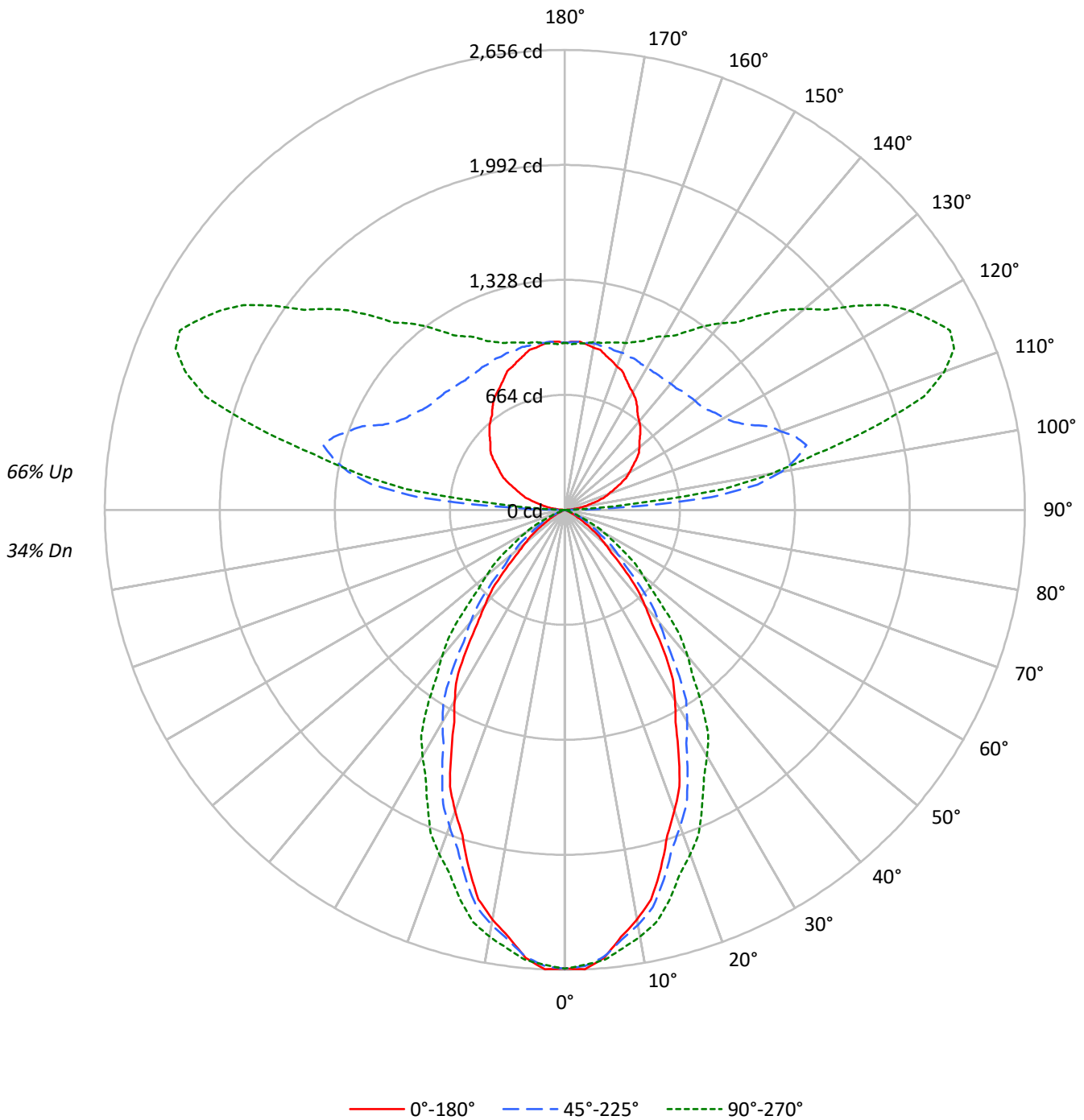
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9406.3 lumens  
Efficiency: N/A  
Efficacy: 88.4 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 106.4  
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: P521338  
CATALOG NUMBER: SQ4-BB-150U-125D-93050-1D-UNV-STD-W-4 (4500K)

### Luminous Intensity Polar Plot





TEST NUMBER: P521338

CATALOG NUMBER: SQ4-BB-150U-125D-93050-1D-UNV-STD-W-4 (4500K)

**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	103	103	103	103	93	93	93	93	74	74	74	57	57	57	41	41	41	34
1	95	92	88	85	86	83	80	78	67	65	63	52	51	50	38	38	37	31
2	88	81	76	72	79	74	69	66	60	57	54	47	45	43	35	34	33	28
3	81	73	66	61	73	66	61	56	54	50	47	43	40	38	32	31	30	25
4	75	65	58	53	67	59	53	49	49	45	41	39	36	34	30	28	27	23
5	69	59	51	46	62	54	47	43	44	40	36	36	32	30	27	26	24	21
6	64	53	46	40	58	49	42	38	40	36	32	33	29	27	25	23	22	19
7	59	48	41	36	54	44	38	34	37	32	29	30	27	24	23	21	20	17
8	55	44	37	32	50	41	34	30	34	29	26	28	25	22	22	20	18	16
9	52	40	34	29	47	37	31	27	31	27	24	26	23	20	20	18	17	15
10	48	37	31	26	44	34	29	25	29	25	22	24	21	19	19	17	16	14

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

	0°	45°	90°
0°	24447	24447	24447
5°	24053	23994	24172
10°	22506	22806	23443
15°	20461	21109	22285
20°	18162	19105	20779
25°	15817	17069	19092
30°	13547	15036	17494
35°	11233	12763	15564
40°	8631	10205	13263
45°	6238	7727	10672
50°	4250	5759	8464
55°	2763	4165	6577
60°	1585	2934	4755
65°	419	1790	2406
70°	208	553	691
75°	93	46	0
80°	69	0	0
85°	0	0	0



TEST NUMBER: P521338

CATALOG NUMBER: SQ4-BB-150U-125D-93050-1D-UNV-STD-W-4 (4500K)

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	241.8	2.6
10°-20°	618.4	6.6
20°-30°	774.2	8.2
30°-40°	715.1	7.6
40°-50°	480.5	5.1
50°-60°	248.2	2.6
60°-70°	77.7	0.8
70°-80°	4.9	0.1
80°-90°	0.1	0.0
90°-100°	497.2	5.3
100°-110°	1201.7	12.8
110°-120°	1281.7	13.6
120°-130°	1038.1	11.0
130°-140°	803.7	8.5
140°-150°	613.1	6.5
150°-160°	443.8	4.7
160°-170°	273.4	2.9
170°-180°	92.6	1.0
0°-30°	1634.4	17.4
0°-40°	2349.4	25.0
0°-60°	3078.1	32.7
0°-90°	3160.9	33.6
90°-120°	2980.7	31.7
90°-150°	5435.7	57.8
90°-180°	6245.0	66.4
0°-180°	9406.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2650	2650	2650	2650	2650	
5°	2597	2571	2591	2600	2610	241
15°	2142	2134	2210	2284	2333	597
25°	1554	1566	1677	1791	1875	712
35°	997	1022	1133	1267	1382	618
45°	478	507	592	708	818	376
55°	172	201	259	332	409	160
65°	19	37	82	99	110	32
75°	3	3	1	0	0	4
85°	0	0	0	0	0	0
90°	0	0	0	0	0	2
95°	49	249	852	554	388	55
105°	192	332	1444	1869	1845	203
115°	351	449	1160	2200	2454	347
125°	500	576	1007	1750	2055	447
135°	615	687	966	1380	1587	475
145°	727	781	948	1173	1265	455
155°	834	870	960	1039	1077	385
165°	921	935	972	987	1001	260
175°	974	970	974	966	964	92
180°	964	964	964	964	964	



TEST NUMBER: P521338

CATALOG NUMBER: SQ4-BB-150U-125D-93050-1D-UNV-STD-W-4 (4500K)

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2649.7	2649.7	2649.7	2649.7	2649.7
2.5°	2655.8	2630.8	2637.4	2637.2	2630.2
5°	2597.1	2570.8	2590.7	2599.9	2610.0
7.5°	2487.4	2466.8	2505.1	2533.8	2554.6
10°	2402.3	2384.7	2434.3	2473.4	2502.3
12.5°	2303.8	2290.3	2350.2	2403.9	2440.7
15°	2142.1	2134.5	2210.0	2284.2	2333.1
17.5°	1968.7	1968.5	2054.6	2146.7	2205.6
20°	1849.8	1853.5	1945.9	2047.5	2116.4
22.5°	1730.8	1739.6	1838.2	1944.1	2023.1
25°	1553.7	1566.2	1676.7	1791.4	1875.4
27.5°	1383.4	1401.7	1518.0	1637.3	1739.5
30°	1271.6	1293.0	1411.4	1536.8	1642.1
32.5°	1161.9	1187.2	1302.7	1435.3	1542.6
35°	997.3	1022.4	1133.2	1266.6	1381.9
37.5°	827.3	851.9	960.1	1091.4	1216.0
40°	716.6	744.2	847.3	974.6	1101.2
42.5°	616.1	643.7	740.7	865.7	985.3
45°	478.1	507.0	592.2	707.6	817.9
47.5°	363.8	395.1	469.9	574.3	674.8
50°	296.1	327.5	401.2	493.2	589.7
52.5°	241.8	272.1	338.7	425.3	513.8
55°	171.8	200.6	258.9	332.5	408.9
57.5°	118.7	143.5	195.9	257.2	317.1
60°	85.9	109.7	159.0	208.8	257.7
62.5°	57.2	79.0	127.2	165.3	198.2
65°	19.2	36.8	82.0	99.0	110.2
67.5°	9.7	11.7	43.1	45.5	49.2
70°	7.7	7.7	20.5	21.9	25.6
72.5°	5.6	5.6	8.2	10.5	11.3
75°	2.6	2.6	1.3	0.0	0.0
77.5°	1.3	1.3	1.0	0.0	0.0
80°	1.3	1.3	0.0	0.0	0.0
82.5°	0.3	0.3	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	16.3	134.6	317.1	154.1	104.6
95°	49.0	248.8	851.9	554.0	388.2
97.5°	87.0	275.6	1122.0	1080.9	927.9
100°	116.4	292.2	1270.7	1341.4	1215.6
102.5°	144.2	307.2	1368.8	1558.3	1483.6
105°	192.0	331.9	1444.4	1868.8	1844.8
107.5°	239.0	360.9	1399.8	2117.8	2174.1
110°	271.7	385.6	1327.9	2225.2	2331.0

TEST NUMBER: P521338

CATALOG NUMBER: SQ4-BB-150U-125D-93050-1D-UNV-STD-W-4 (4500K)

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	304.4	410.3	1264.2	2251.4	2432.4
115°	351.4	449.3	1160.4	2199.9	2453.6
117.5°	398.0	490.3	1099.5	2081.6	2378.8
120°	429.0	514.9	1060.3	1988.8	2300.4
122.5°	461.7	541.2	1035.8	1893.9	2200.7
125°	500.5	576.4	1007.2	1749.6	2055.2
127.5°	538.9	610.4	987.2	1627.4	1895.9
130°	561.8	631.7	980.6	1542.3	1806.0
132.5°	583.1	656.2	970.8	1480.9	1704.7
135°	614.9	686.8	966.3	1379.6	1587.4
137.5°	645.2	717.5	952.0	1311.1	1467.7
140°	668.1	734.0	952.0	1261.7	1405.6
142.5°	690.9	756.9	943.9	1218.7	1340.2
145°	727.3	781.2	947.9	1172.7	1264.6
147.5°	761.2	813.5	945.5	1119.6	1195.5
150°	782.5	828.4	952.0	1096.4	1156.3
152.5°	805.3	849.7	950.4	1071.7	1125.3
155°	833.5	869.5	960.2	1038.7	1076.6
157.5°	867.4	898.2	958.2	1026.1	1048.5
160°	880.5	906.5	966.3	1009.6	1025.6
162.5°	901.8	924.5	963.1	1004.5	1014.1
165°	921.4	935.4	972.5	987.1	1001.1
167.5°	945.5	954.7	970.0	985.9	986.3
170°	952.0	958.0	976.5	974.7	984.7
172.5°	963.5	967.9	971.6	976.0	970.0
175°	974.5	970.5	974.5	966.3	964.3
177.5°	972.5	972.5	969.2	965.7	957.7
180°	964.3	964.3	964.3	964.3	964.3

(END OF REPORT)