

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: P521326

Luminaire Tested: **SQ4-BB-150U-100D-93050-1D-UNV-STD-W-4 (5000K)**

Issue Date: 5/5/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P521326  
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-100D-93050-1D-UNV-STD-W-4 (5000K)  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

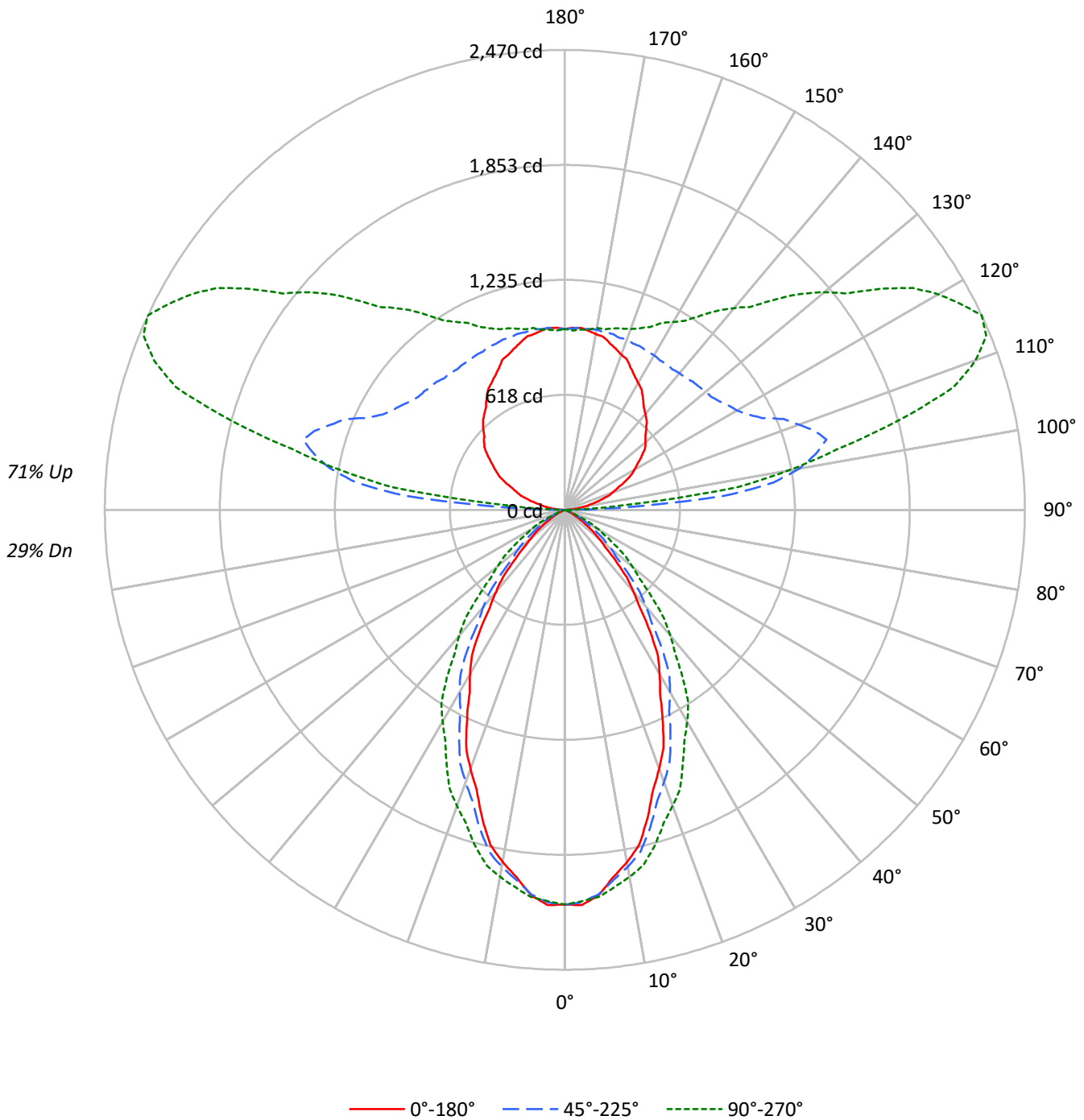
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8816.4 lumens  
Efficiency: N/A  
Efficacy: 94.5 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): 93.3  
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

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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	91	91	91	91	71	71	71	53	53	53	37	37	37	29
1	94	90	87	84	84	81	78	76	64	62	61	48	47	46	34	33	33	26
2	86	80	75	70	77	72	68	64	57	54	52	44	42	40	31	30	29	24
3	80	71	65	60	71	64	59	55	51	48	45	40	37	35	29	27	26	21
4	73	64	57	51	66	58	52	47	46	42	39	36	33	31	26	25	23	19
5	68	57	50	45	61	52	46	41	42	38	34	33	30	28	24	22	21	18
6	62	52	44	39	56	47	41	36	38	34	30	30	27	25	22	21	19	16
7	58	47	40	35	52	43	37	32	35	30	27	28	25	22	21	19	17	15
8	54	43	36	31	49	39	33	29	32	28	24	25	22	20	19	17	16	14
9	50	39	32	28	45	36	30	26	30	25	22	24	21	18	18	16	15	13
10	47	36	29	25	42	33	27	23	27	23	20	22	19	17	17	15	14	12

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

	0°	45°	90°
0°	19555	19555	19555
5°	19241	19192	19335
10°	18003	18242	18752
15°	16367	16885	17825
20°	14528	15283	16621
25°	12652	13653	15272
30°	10837	12028	13993
35°	8986	10210	12450
40°	6904	8163	10608
45°	4991	6181	8536
50°	3400	4607	6771
55°	2210	3331	5262
60°	1268	2347	3803
65°	336	1432	1925
70°	167	442	553
75°	75	36	0
80°	53	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	193.4	2.2
10°-20°	494.7	5.6
20°-30°	619.3	7.0
30°-40°	572.0	6.5
40°-50°	384.4	4.4
50°-60°	198.5	2.3
60°-70°	62.2	0.7
70°-80°	3.9	0.0
80°-90°	0.1	0.0
90°-100°	500.6	5.7
100°-110°	1209.9	13.7
110°-120°	1290.5	14.6
120°-130°	1045.2	11.9
130°-140°	809.2	9.2
140°-150°	617.3	7.0
150°-160°	446.9	5.1
160°-170°	275.2	3.1
170°-180°	93.2	1.1
0°-30°	1307.3	14.8
0°-40°	1879.3	21.3
0°-60°	2462.2	27.9
0°-90°	2528.4	28.7
90°-120°	3001.0	34.0
90°-150°	5472.7	62.1
90°-180°	6288.0	71.3
0°-180°	8816.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2120	2120	2120	2120	2120	
5°	2078	2056	2072	2080	2088	193
15°	1714	1707	1768	1827	1866	477
25°	1243	1253	1341	1433	1500	570
35°	798	818	906	1013	1105	494
45°	382	406	474	566	654	300
55°	137	160	207	266	327	128
65°	15	29	66	79	88	26
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	2
95°	49	250	858	558	391	55
105°	193	334	1454	1882	1857	204
115°	354	452	1168	2215	2470	350
125°	504	580	1014	1762	2069	450
135°	619	692	973	1389	1598	478
145°	732	787	954	1181	1273	458
155°	839	875	967	1046	1084	387
165°	928	942	979	994	1008	262
175°	981	977	981	973	971	93
180°	971	971	971	971	971	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2119.5	2119.5	2119.5	2119.5	2119.5
2.5°	2124.4	2104.4	2109.7	2109.5	2103.9
5°	2077.5	2056.4	2072.3	2079.7	2087.7
7.5°	1989.7	1973.3	2003.8	2026.8	2043.4
10°	1921.6	1907.6	1947.2	1978.5	2001.6
12.5°	1842.9	1832.0	1880.0	1922.9	1952.4
15°	1713.5	1707.4	1767.8	1827.1	1866.2
17.5°	1574.8	1574.6	1643.5	1717.2	1764.3
20°	1479.7	1482.7	1556.6	1637.8	1692.9
22.5°	1384.5	1391.5	1470.4	1555.1	1618.3
25°	1242.8	1252.8	1341.2	1433.0	1500.2
27.5°	1106.6	1121.3	1214.3	1309.7	1391.5
30°	1017.2	1034.2	1129.0	1229.3	1313.5
32.5°	929.4	949.7	1042.0	1148.1	1234.0
35°	797.8	817.8	906.5	1013.1	1105.4
37.5°	661.8	681.4	768.0	873.0	972.7
40°	573.2	595.3	677.8	779.6	880.8
42.5°	492.8	514.9	592.5	692.5	788.1
45°	382.5	405.5	473.7	566.0	654.2
47.5°	291.0	316.1	375.9	459.4	539.8
50°	236.9	261.9	321.0	394.5	471.7
52.5°	193.4	217.7	270.9	340.2	411.0
55°	137.4	160.5	207.1	265.9	327.1
57.5°	95.0	114.8	156.7	205.8	253.7
60°	68.7	87.8	127.2	167.0	206.1
62.5°	45.7	63.2	101.7	132.3	158.5
65°	15.4	29.4	65.6	79.2	88.2
67.5°	7.8	9.4	34.5	36.4	39.4
70°	6.2	6.2	16.4	17.5	20.5
72.5°	4.5	4.5	6.6	8.4	9.0
75°	2.1	2.1	1.0	0.0	0.0
77.5°	1.0	1.0	0.8	0.0	0.0
80°	1.0	1.0	0.0	0.0	0.0
82.5°	0.2	0.2	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°	16.5	135.5	319.2	155.2	105.3
95°	49.4	250.5	857.7	557.7	390.8
97.5°	87.6	277.5	1129.6	1088.3	934.2
100°	117.2	294.2	1279.4	1350.6	1223.9
102.5°	145.2	309.3	1378.1	1568.9	1493.7
105°	193.3	334.1	1454.2	1881.5	1857.4
107.5°	240.7	363.3	1409.4	2132.2	2189.0
110°	273.6	388.2	1337.0	2240.3	2346.9



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	306.5	413.1	1272.8	2266.7	2448.9
115°	353.8	452.3	1168.3	2214.9	2470.3
117.5°	400.7	493.6	1107.0	2095.8	2395.1
120°	431.9	518.4	1067.5	2002.3	2316.1
122.5°	464.9	544.9	1042.8	1906.8	2215.7
125°	503.9	580.4	1014.1	1761.5	2069.2
127.5°	542.6	614.6	993.9	1638.5	1908.8
130°	565.6	636.0	987.3	1552.8	1818.3
132.5°	587.0	660.6	977.4	1491.0	1716.3
135°	619.1	691.5	972.9	1389.0	1598.2
137.5°	649.6	722.4	958.5	1320.0	1477.7
140°	672.6	739.0	958.5	1270.3	1415.1
142.5°	695.6	762.0	950.3	1227.0	1349.3
145°	732.3	786.6	954.4	1180.7	1273.2
147.5°	766.4	819.1	951.9	1127.3	1203.7
150°	787.8	834.0	958.5	1103.9	1164.2
152.5°	810.8	855.5	956.9	1079.0	1132.9
155°	839.2	875.4	966.7	1045.8	1084.0
157.5°	873.4	904.3	964.7	1033.1	1055.6
160°	886.5	912.7	972.9	1016.5	1032.6
162.5°	907.9	930.8	969.6	1011.4	1021.0
165°	927.7	941.7	979.1	993.8	1007.9
167.5°	951.9	961.2	976.6	992.7	993.1
170°	958.5	964.5	983.2	981.4	991.4
172.5°	970.0	974.5	978.3	982.6	976.6
175°	981.1	977.1	981.1	972.9	970.9
177.5°	979.1	979.1	975.8	972.3	964.3
180°	970.9	970.9	970.9	970.9	970.9

(END OF REPORT)