

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: P521313

Luminaire Tested: **SQ4-BB-150U-075D-93050-1D-UNV-STD-W-4 (5000K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521313
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-075D-93050-1D-UNV-STD-W-4 (5000K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

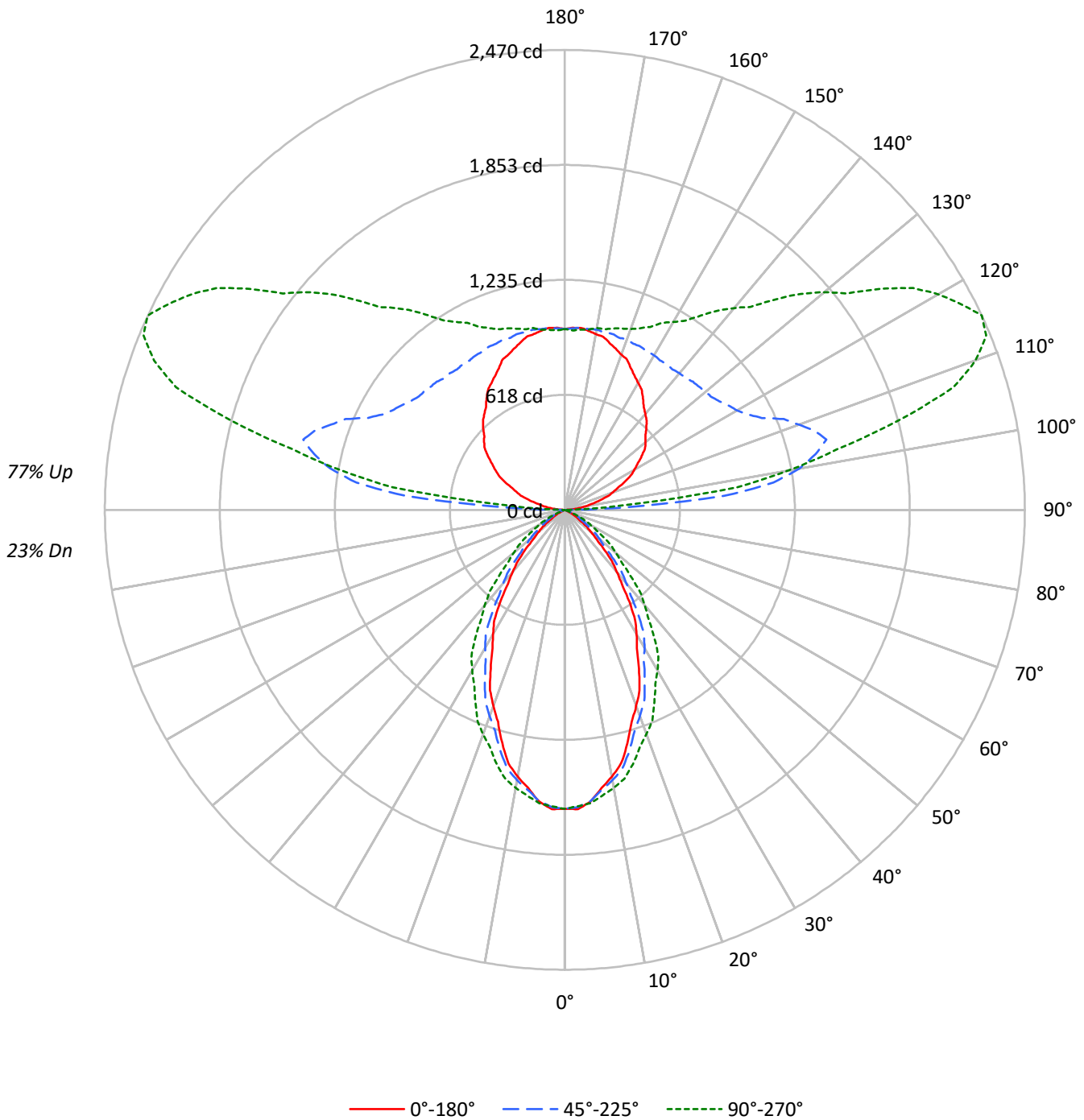
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8203.1 lumens
Efficiency: N/A
Efficacy: 99.6 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): 82.4
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: P521313
CATALOG NUMBER: SQ4-BB-150U-075D-93050-1D-UNV-STD-W-4 (5000K)

Luminous Intensity Polar Plot





TEST NUMBER: P521313

CATALOG NUMBER: SQ4-BB-150U-075D-93050-1D-UNV-STD-W-4 (5000K)

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	101	101	101	101	90	90	90	90	69	69	69	49	49	49	32	32	32	23
1	93	89	85	82	82	79	76	74	61	59	58	44	43	43	29	29	28	21
2	85	78	73	69	75	70	66	62	55	52	49	40	38	37	27	26	25	19
3	78	70	63	58	69	62	57	53	49	45	42	36	34	32	24	23	22	17
4	72	62	55	50	64	56	50	45	44	40	37	33	30	28	22	21	20	16
5	66	56	48	43	59	50	44	39	40	35	32	30	27	25	21	19	18	14
6	61	50	43	38	54	45	39	35	36	32	28	27	24	22	19	18	16	13
7	57	45	38	33	50	41	35	31	33	28	25	25	22	20	18	16	15	12
8	53	41	34	29	47	37	31	27	30	26	23	23	20	18	16	15	14	11
9	49	38	31	26	44	34	28	24	28	23	20	21	18	16	15	14	12	10
10	46	35	28	24	41	32	26	22	25	21	18	20	17	15	14	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14812	14812	14812
5°	14573	14537	14645
10°	13636	13818	14204
15°	12396	12790	13501
20°	11003	11576	12590
25°	9582	10342	11568
30°	8209	9110	10599
35°	6805	7733	9429
40°	5229	6183	8036
45°	3780	4682	6465
50°	2575	3489	5128
55°	1674	2524	3986
60°	960	1777	2880
65°	255	1085	1458
70°	127	334	418
75°	57	29	0
80°	43	0	0
85°	0	0	0



TEST NUMBER: P521313

CATALOG NUMBER: SQ4-BB-150U-075D-93050-1D-UNV-STD-W-4 (5000K)

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	146.5	1.8
10°-20°	374.7	4.6
20°-30°	469.0	5.7
30°-40°	433.2	5.3
40°-50°	291.1	3.5
50°-60°	150.4	1.8
60°-70°	47.1	0.6
70°-80°	3.0	0.0
80°-90°	0.1	0.0
90°-100°	500.6	6.1
100°-110°	1209.9	14.7
110°-120°	1290.5	15.7
120°-130°	1045.2	12.7
130°-140°	809.2	9.9
140°-150°	617.3	7.5
150°-160°	446.9	5.4
160°-170°	275.2	3.4
170°-180°	93.2	1.1
0°-30°	990.2	12.1
0°-40°	1423.5	17.4
0°-60°	1864.9	22.7
0°-90°	1915.1	23.3
90°-120°	3001.0	36.6
90°-150°	5472.7	66.7
90°-180°	6288.0	76.7
0°-180°	8203.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1605	1605	1605	1605	1605	
5°	1574	1558	1570	1575	1581	146
15°	1298	1293	1339	1384	1414	361
25°	941	949	1016	1085	1136	432
35°	604	619	687	767	837	374
45°	290	307	359	429	496	228
55°	104	122	157	201	248	97
65°	12	22	50	60	67	20
75°	2	2	1	0	0	2
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	



TEST NUMBER: P521313

CATALOG NUMBER: SQ4-BB-150U-075D-93050-1D-UNV-STD-W-4 (5000K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1605.4	1605.4	1605.4	1605.4	1605.4
2.5°	1609.1	1593.9	1597.9	1597.8	1593.6
5°	1573.5	1557.6	1569.6	1575.2	1581.3
7.5°	1507.0	1494.6	1517.8	1535.1	1547.7
10°	1455.5	1444.8	1474.9	1498.6	1516.1
12.5°	1395.8	1387.6	1423.9	1456.4	1478.8
15°	1297.8	1293.3	1339.0	1383.9	1413.5
17.5°	1192.8	1192.7	1244.8	1300.6	1336.3
20°	1120.7	1123.0	1179.0	1240.5	1282.3
22.5°	1048.7	1054.0	1113.7	1177.9	1225.7
25°	941.3	948.9	1015.9	1085.4	1136.3
27.5°	838.2	849.3	919.7	992.0	1053.9
30°	770.5	783.4	855.1	931.1	994.9
32.5°	704.0	719.3	789.2	869.6	934.6
35°	604.2	619.4	686.6	767.4	837.2
37.5°	501.3	516.1	581.7	661.3	736.7
40°	434.2	450.9	513.4	590.5	667.2
42.5°	373.3	390.0	448.8	524.5	596.9
45°	289.7	307.2	358.8	428.7	495.5
47.5°	220.4	239.4	284.7	347.9	408.8
50°	179.4	198.4	243.1	298.8	357.3
52.5°	146.5	164.9	205.2	257.7	311.3
55°	104.1	121.5	156.9	201.4	247.8
57.5°	71.9	87.0	118.7	155.8	192.1
60°	52.0	66.5	96.3	126.5	156.1
62.5°	34.6	47.9	77.0	100.2	120.1
65°	11.7	22.3	49.7	60.0	66.8
67.5°	5.9	7.1	26.1	27.5	29.8
70°	4.7	4.7	12.4	13.3	15.5
72.5°	3.4	3.4	5.0	6.4	6.8
75°	1.6	1.6	0.8	0.0	0.0
77.5°	0.8	0.8	0.6	0.0	0.0
80°	0.8	0.8	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



TEST NUMBER: P521313

CATALOG NUMBER: SQ4-BB-150U-075D-93050-1D-UNV-STD-W-4 (5000K)

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)