

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: P521311

Luminaire Tested: **SQ4-BB-150U-075D-93050-1D-UNV-STD-W-4 (4000K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521311
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 (4000K)
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 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

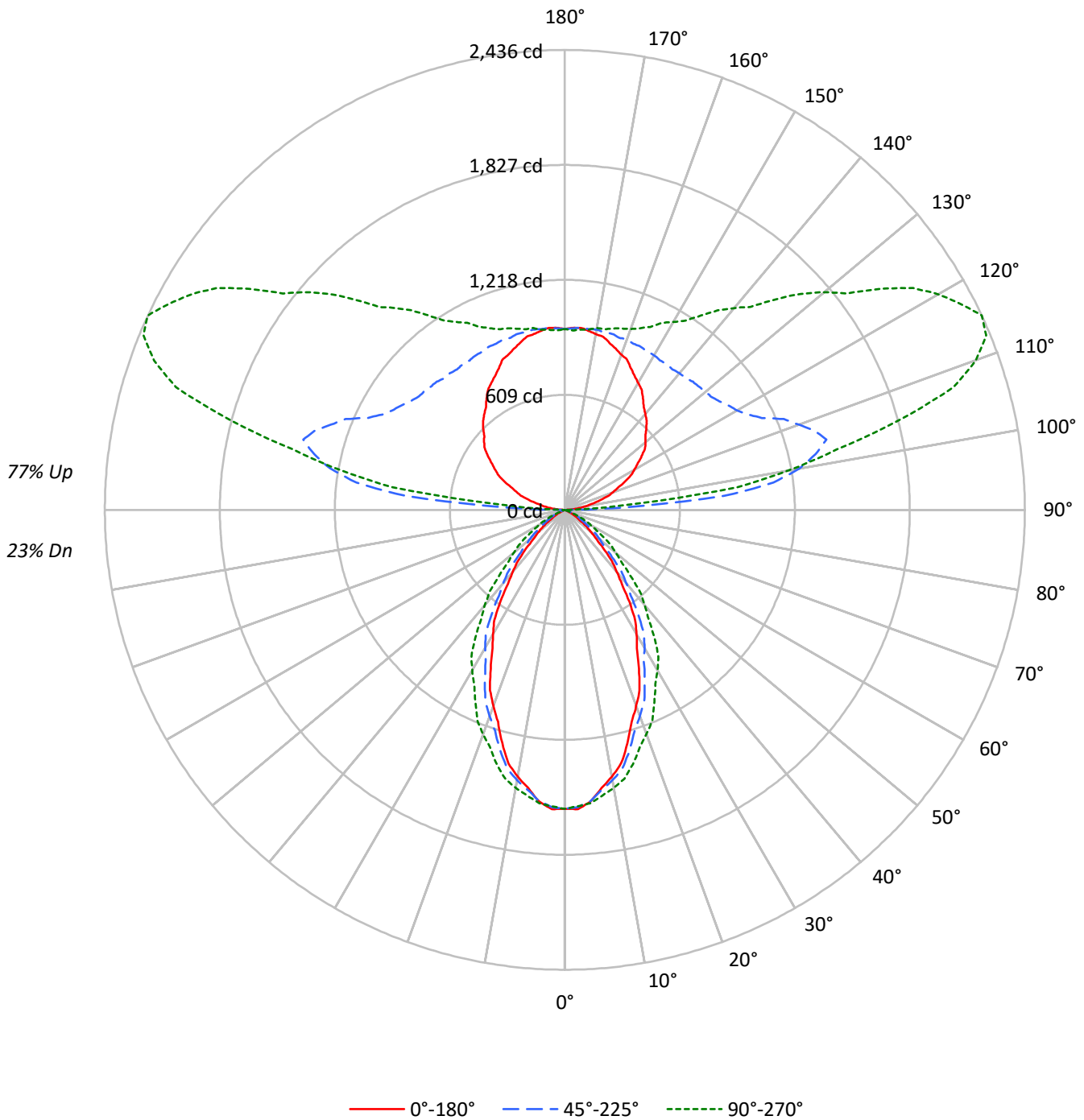
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8090.4 lumens
Efficiency: N/A
Efficacy: 97.9 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): 82.6
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	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°	14608	14608	14608
5°	14373	14338	14444
10°	13449	13627	14008
15°	12226	12614	13316
20°	10852	11417	12417
25°	9451	10199	11409
30°	8096	8985	10453
35°	6712	7626	9300
40°	5157	6098	7925
45°	3728	4618	6376
50°	2539	3442	5058
55°	1650	2488	3931
60°	947	1753	2842
65°	251	1070	1439
70°	124	332	413
75°	53	29	0
80°	43	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.5	1.8
10°-20°	369.5	4.6
20°-30°	462.6	5.7
30°-40°	427.3	5.3
40°-50°	287.1	3.5
50°-60°	148.3	1.8
60°-70°	46.5	0.6
70°-80°	2.9	0.0
80°-90°	0.1	0.0
90°-100°	493.7	6.1
100°-110°	1193.3	14.7
110°-120°	1272.7	15.7
120°-130°	1030.8	12.7
130°-140°	798.1	9.9
140°-150°	608.8	7.5
150°-160°	440.7	5.4
160°-170°	271.4	3.4
170°-180°	91.9	1.1
0°-30°	976.6	12.1
0°-40°	1403.9	17.4
0°-60°	1839.3	22.7
0°-90°	1888.8	23.3
90°-120°	2959.8	36.6
90°-150°	5397.5	66.7
90°-180°	6202.0	76.7
0°-180°	8090.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1583	1583	1583	1583	1583	
5°	1552	1536	1548	1554	1560	144
15°	1280	1276	1321	1365	1394	356
25°	928	936	1002	1070	1121	426
35°	596	611	677	757	826	369
45°	286	303	354	423	489	224
55°	103	120	155	199	244	96
65°	12	22	49	59	66	19
75°	2	2	1	0	0	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	2
95°	49	247	846	550	385	55
105°	191	330	1434	1856	1832	201
115°	349	446	1152	2184	2436	345
125°	497	572	1000	1737	2041	443
135°	611	682	960	1370	1576	471
145°	722	776	941	1164	1256	451
155°	828	863	954	1031	1069	382
165°	915	929	966	980	994	258
175°	968	964	968	960	958	91
180°	958	958	958	958	958	



TEST NUMBER: P521311

CATALOG NUMBER: SQ4-BB-150U-075D-93050-1D-UNV-STD-W-4 (4000K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1583.3	1583.3	1583.3	1583.3	1583.3
2.5°	1587.0	1572.0	1576.0	1575.9	1571.7
5°	1551.9	1536.2	1548.1	1553.6	1559.6
7.5°	1486.3	1474.1	1496.9	1514.0	1526.5
10°	1435.5	1425.0	1454.6	1478.0	1495.2
12.5°	1376.6	1368.6	1404.4	1436.4	1458.5
15°	1280.0	1275.5	1320.6	1364.9	1394.1
17.5°	1176.4	1176.3	1227.7	1282.8	1318.0
20°	1105.3	1107.6	1162.8	1223.5	1264.7
22.5°	1034.2	1039.5	1098.4	1161.7	1208.9
25°	928.4	935.9	1001.9	1070.5	1120.7
27.5°	826.7	837.6	907.1	978.3	1039.5
30°	759.9	772.6	843.4	918.3	981.2
32.5°	694.3	709.4	778.4	857.7	921.8
35°	595.9	610.9	677.1	756.8	825.7
37.5°	494.4	509.1	573.7	652.2	726.6
40°	428.2	444.7	506.3	582.3	658.0
42.5°	368.1	384.6	442.6	517.3	588.7
45°	285.7	302.9	353.9	422.8	488.7
47.5°	217.4	236.1	280.8	343.2	403.2
50°	176.9	195.7	239.8	294.7	352.4
52.5°	144.5	162.6	202.4	254.1	307.0
55°	102.6	119.9	154.7	198.7	244.4
57.5°	70.9	85.8	117.0	153.7	189.5
60°	51.3	65.6	95.0	124.8	154.0
62.5°	34.2	47.2	76.0	98.8	118.4
65°	11.5	22.0	49.0	59.1	65.9
67.5°	5.8	7.0	25.7	27.2	29.4
70°	4.6	4.6	12.3	13.1	15.3
72.5°	3.4	3.4	4.9	6.3	6.7
75°	1.5	1.5	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°	16.2	133.7	314.8	153.1	103.9
95°	48.7	247.0	845.9	550.1	385.4
97.5°	86.4	273.7	1114.1	1073.3	921.4
100°	115.6	290.2	1261.8	1332.0	1207.0
102.5°	143.2	305.1	1359.2	1547.4	1473.2
105°	190.7	329.5	1434.2	1855.7	1831.9
107.5°	237.3	358.3	1390.0	2102.9	2158.9
110°	269.8	382.9	1318.6	2209.5	2314.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	302.3	407.4	1255.3	2235.6	2415.3
115°	348.9	446.1	1152.3	2184.5	2436.4
117.5°	395.2	486.8	1091.8	2067.0	2362.1
120°	426.0	511.3	1052.9	1974.8	2284.2
122.5°	458.5	537.4	1028.5	1880.6	2185.2
125°	497.0	572.4	1000.1	1737.3	2040.8
127.5°	535.2	606.2	980.2	1616.0	1882.6
130°	557.9	627.3	973.7	1531.5	1793.3
132.5°	579.0	651.6	964.0	1470.5	1692.7
135°	610.6	682.0	959.5	1370.0	1576.2
137.5°	640.6	712.4	945.3	1301.9	1457.4
140°	663.4	728.8	945.3	1252.9	1395.7
142.5°	686.1	751.5	937.2	1210.2	1330.8
145°	722.2	775.7	941.3	1164.5	1255.7
147.5°	755.9	807.8	938.9	1111.8	1187.2
150°	777.0	822.6	945.3	1088.7	1148.2
152.5°	799.7	843.7	943.7	1064.2	1117.4
155°	827.7	863.4	953.5	1031.4	1069.1
157.5°	861.4	891.9	951.4	1018.9	1041.1
160°	874.3	900.1	959.5	1002.5	1018.4
162.5°	895.4	918.1	956.3	997.5	1007.0
165°	914.9	928.8	965.6	980.1	994.0
167.5°	938.9	948.0	963.2	979.0	979.4
170°	945.3	951.3	969.7	967.9	977.8
172.5°	956.7	961.1	964.8	969.1	963.2
175°	967.7	963.7	967.7	959.5	957.5
177.5°	965.6	965.6	962.4	959.0	951.0
180°	957.5	957.5	957.5	957.5	957.5

(END OF REPORT)