

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: P521207

Luminaire Tested: **SQ4-BB-100U-075D-93050-1D-UNV-STD-W-4 (4000K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521207
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-100U-075D-93050-1D-UNV-STD-W-4 (4000K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

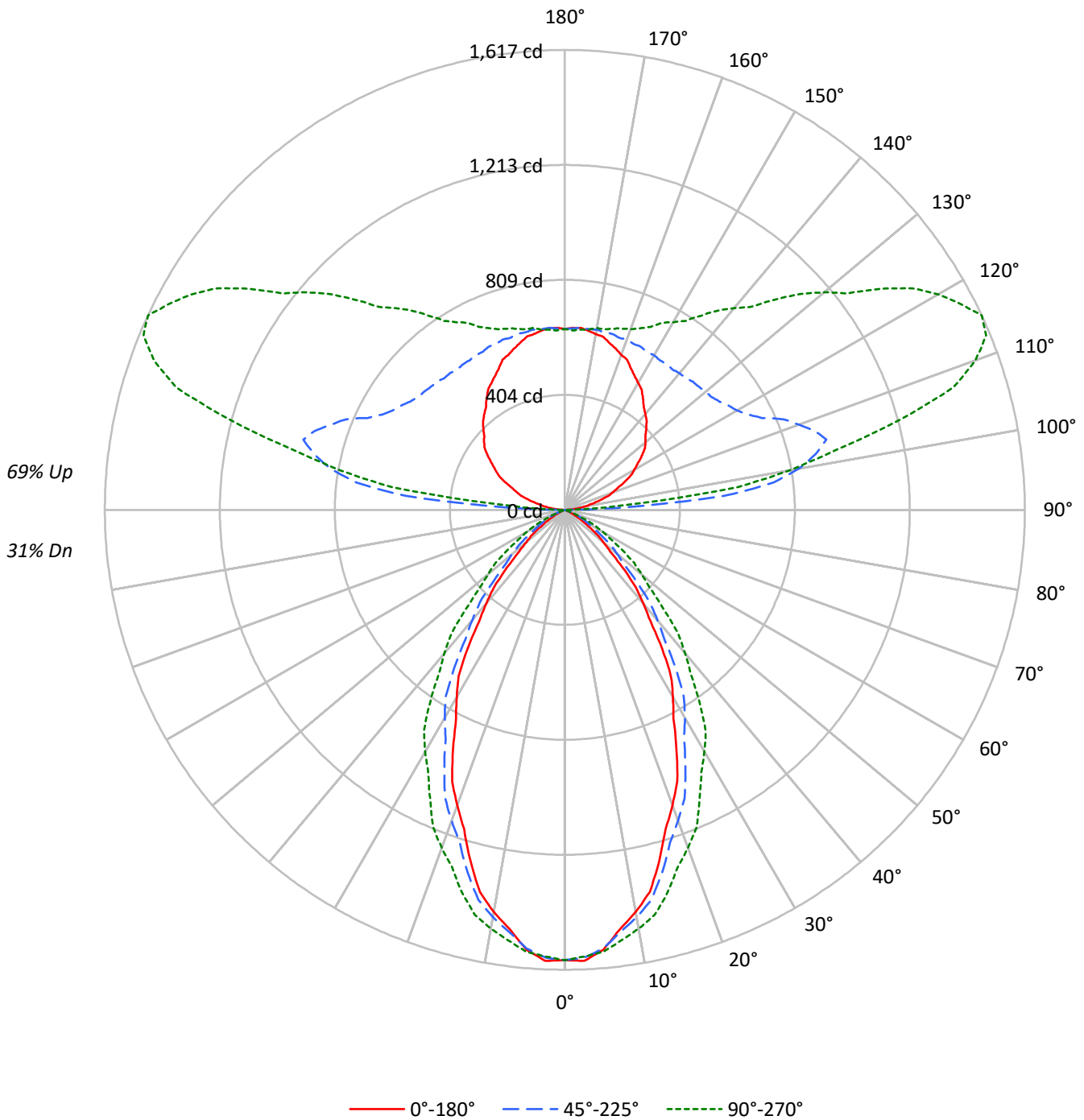
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6004.1 lumens
Efficiency: N/A
Efficacy: 94.0 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): 63.9
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	103	103	103	103	92	92	92	92	73	73	73	55	55	55	39	39	39	31	31	31	31	
1	95	91	88	85	85	82	79	77	66	64	62	50	49	48	36	36	35	29	29	29	29	
2	87	81	75	71	78	73	69	65	59	56	53	46	44	42	33	32	31	26	26	26	26	
3	80	72	66	60	72	65	60	56	53	49	46	41	39	37	31	29	28	23	23	23	23	
4	74	64	57	52	67	59	53	48	48	44	40	38	35	33	28	27	25	21	21	21	21	
5	68	58	51	45	62	53	47	42	43	39	35	34	31	29	26	24	23	19	19	19	19	
6	63	52	45	40	57	48	42	37	39	35	32	31	28	26	24	22	21	18	18	18	18	
7	59	48	40	35	53	44	37	33	36	31	28	29	26	23	22	20	19	16	16	16	16	
8	55	43	36	32	49	40	34	30	33	29	25	27	24	21	21	19	17	15	15	15	15	
9	51	40	33	28	46	37	31	27	31	26	23	25	22	19	19	17	16	14	14	14	14	
10	48	37	30	26	43	34	28	24	28	24	21	23	20	18	18	16	15	13	13	13	13	

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	2.4
10°-20°	369.5	6.2
20°-30°	462.6	7.7
30°-40°	427.3	7.1
40°-50°	287.1	4.8
50°-60°	148.3	2.5
60°-70°	46.5	0.8
70°-80°	2.9	0.0
80°-90°	0.1	0.0
90°-100°	327.6	5.5
100°-110°	791.9	13.2
110°-120°	844.6	14.1
120°-130°	684.0	11.4
130°-140°	529.6	8.8
140°-150°	404.0	6.7
150°-160°	292.5	4.9
160°-170°	180.1	3.0
170°-180°	61.0	1.0
0°-30°	976.6	16.3
0°-40°	1403.9	23.4
0°-60°	1839.3	30.6
0°-90°	1888.8	31.5
90°-120°	1964.1	32.7
90°-150°	3581.8	59.7
90°-180°	4115.0	68.5
0°-180°	6004.1	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	1
95°	32	164	561	365	256	36
105°	126	219	952	1231	1216	134
115°	232	296	765	1450	1617	229
125°	330	380	664	1153	1354	294
135°	405	453	637	909	1046	313
145°	479	515	625	773	833	300
155°	549	573	633	684	709	254
165°	607	616	641	650	660	171
175°	642	640	642	637	635	61
180°	635	635	635	635	635	

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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°	10.8	88.7	208.9	101.6	68.9
95°	32.3	163.9	561.4	365.0	255.8
97.5°	57.3	181.6	739.3	712.3	611.4
100°	76.7	192.6	837.3	883.9	801.0
102.5°	95.0	202.4	902.0	1026.8	977.6
105°	126.5	218.7	951.8	1231.4	1215.6
107.5°	157.5	237.8	922.4	1395.5	1432.6
110°	179.0	254.1	875.0	1466.2	1536.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	200.6	270.3	833.0	1483.5	1602.8
115°	231.5	296.0	764.6	1449.6	1616.8
117.5°	262.2	323.1	724.5	1371.6	1567.5
120°	282.7	339.3	698.7	1310.5	1515.8
122.5°	304.2	356.6	682.5	1247.9	1450.1
125°	329.8	379.8	663.7	1152.9	1354.3
127.5°	355.1	402.2	650.5	1072.4	1249.3
130°	370.2	416.3	646.2	1016.3	1190.0
132.5°	384.2	432.4	639.7	975.8	1123.3
135°	405.2	452.6	636.8	909.1	1046.0
137.5°	425.1	472.8	627.3	863.9	967.1
140°	440.2	483.6	627.3	831.4	926.2
142.5°	455.3	498.7	621.9	803.1	883.1
145°	479.2	514.8	624.6	772.7	833.3
147.5°	501.6	536.1	623.0	737.8	787.8
150°	515.6	545.9	627.3	722.5	761.9
152.5°	530.7	559.9	626.2	706.2	741.5
155°	549.2	572.9	632.7	684.4	709.4
157.5°	571.6	591.9	631.4	676.1	690.9
160°	580.2	597.3	636.8	665.3	675.8
162.5°	594.2	609.2	634.6	661.9	668.3
165°	607.1	616.3	640.8	650.4	659.6
167.5°	623.0	629.1	639.2	649.7	649.9
170°	627.3	631.3	643.5	642.3	648.9
172.5°	634.9	637.8	640.3	643.1	639.2
175°	642.1	639.5	642.1	636.7	635.4
177.5°	640.8	640.8	638.6	636.4	631.1
180°	635.4	635.4	635.4	635.4	635.4

(END OF REPORT)