

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: P521194

Luminaire Tested: **SQ4-BB-100U-050D-93050-1D-UNV-STD-W-4 (4000K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521194
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-050D-93050-1D-UNV-STD-W-4 (4000K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

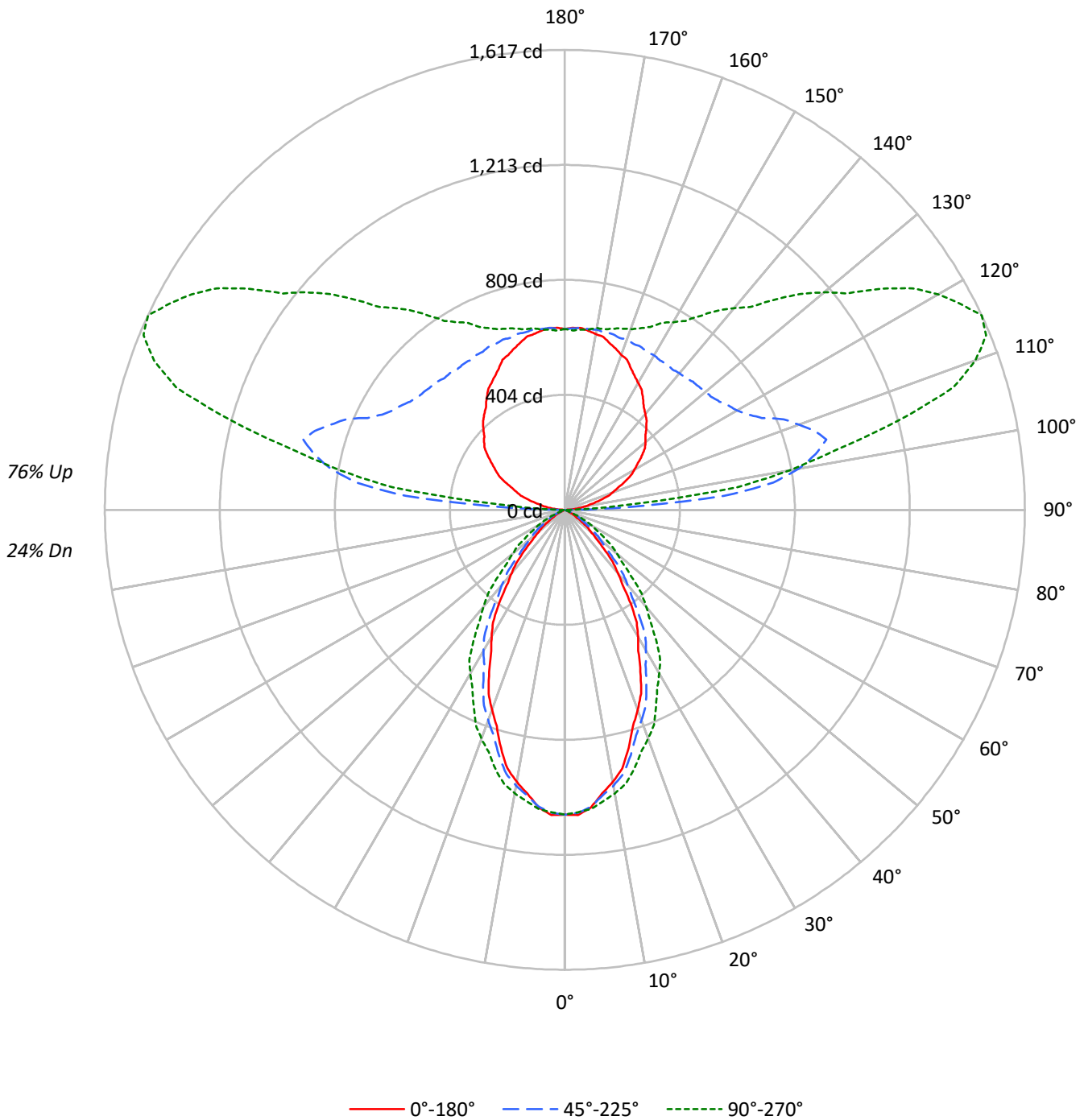
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5393.8 lumens
Efficiency: N/A
Efficacy: 101.4 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): 53.2
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	101	101	101	101	90	90	90	90	69	69	69	50	50	50	32	32	32	24
1	93	89	86	82	82	79	77	74	61	60	58	45	44	43	29	29	29	22
2	85	79	73	69	76	70	66	62	55	52	49	40	39	37	27	26	25	20
3	78	70	63	58	69	63	57	53	49	45	42	36	34	32	25	24	23	18
4	72	62	55	50	64	56	50	45	44	40	37	33	30	28	23	21	20	16
5	66	56	49	43	59	50	44	39	40	36	32	30	27	25	21	19	18	15
6	61	50	43	38	54	45	39	35	36	32	28	27	25	22	19	18	17	13
7	57	46	38	33	51	41	35	31	33	29	25	25	22	20	18	16	15	12
8	53	41	34	30	47	38	31	27	30	26	23	23	20	18	17	15	14	11
9	49	38	31	26	44	34	28	24	28	23	20	21	19	16	15	14	13	10
10	46	35	28	24	41	32	26	22	26	21	19	20	17	15	14	13	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9888	9888	9888
5°	9728	9704	9776
10°	9102	9224	9482
15°	8276	8538	9013
20°	7346	7728	8404
25°	6397	6904	7722
30°	5479	6081	7076
35°	4544	5162	6295
40°	3490	4127	5364
45°	2523	3125	4316
50°	1720	2330	3423
55°	1118	1684	2661
60°	640	1186	1923
65°	170	725	974
70°	84	224	281
75°	36	18	0
80°	27	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.8	1.8
10°-20°	250.1	4.6
20°-30°	313.1	5.8
30°-40°	289.2	5.4
40°-50°	194.3	3.6
50°-60°	100.4	1.9
60°-70°	31.4	0.6
70°-80°	2.0	0.0
80°-90°	0.0	0.0
90°-100°	327.6	6.1
100°-110°	791.9	14.7
110°-120°	844.6	15.7
120°-130°	684.0	12.7
130°-140°	529.6	9.8
140°-150°	404.0	7.5
150°-160°	292.5	5.4
160°-170°	180.1	3.3
170°-180°	61.0	1.1
0°-30°	661.0	12.3
0°-40°	950.3	17.6
0°-60°	1245.0	23.1
0°-90°	1278.4	23.7
90°-120°	1964.1	36.4
90°-150°	3581.8	66.4
90°-180°	4115.0	76.3
0°-180°	5393.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1072	1072	1072	1072	1072	
5°	1050	1040	1048	1052	1056	97
15°	866	863	894	924	944	241
25°	628	634	678	725	758	288
35°	403	414	458	512	559	250
45°	193	205	240	286	331	152
55°	70	81	105	134	165	65
65°	8	15	33	40	45	13
75°	1	1	0	0	0	1
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°	1071.7	1071.7	1071.7	1071.7	1071.7
2.5°	1074.2	1064.0	1066.7	1066.7	1063.8
5°	1050.4	1039.8	1047.8	1051.6	1055.6
7.5°	1006.1	997.7	1013.2	1024.8	1033.2
10°	971.6	964.5	984.6	1000.4	1012.1
12.5°	931.8	926.3	950.6	972.3	987.2
15°	866.4	863.3	893.9	923.9	943.6
17.5°	796.3	796.2	831.0	868.3	892.1
20°	748.2	749.7	787.1	828.1	856.0
22.5°	700.1	703.6	743.5	786.3	818.3
25°	628.4	633.5	678.2	724.6	758.5
27.5°	559.5	566.9	614.0	662.2	703.6
30°	514.3	523.0	570.8	621.6	664.2
32.5°	470.0	480.2	526.9	580.5	623.9
35°	403.4	413.5	458.3	512.3	558.9
37.5°	334.6	344.6	388.3	441.4	491.8
40°	289.8	301.0	342.7	394.2	445.4
42.5°	249.2	260.3	299.6	350.1	398.5
45°	193.4	205.1	239.5	286.2	330.8
47.5°	147.1	159.8	190.1	232.3	272.9
50°	119.8	132.4	162.3	199.5	238.5
52.5°	97.8	110.1	137.0	172.0	207.8
55°	69.5	81.1	104.7	134.5	165.4
57.5°	48.0	58.0	79.2	104.0	128.3
60°	34.7	44.4	64.3	84.4	104.2
62.5°	23.1	31.9	51.4	66.9	80.2
65°	7.8	14.9	33.2	40.0	44.6
67.5°	3.9	4.8	17.4	18.4	19.9
70°	3.1	3.1	8.3	8.8	10.4
72.5°	2.3	2.3	3.3	4.3	4.6
75°	1.0	1.0	0.5	0.0	0.0
77.5°	0.5	0.5	0.4	0.0	0.0
80°	0.5	0.5	0.0	0.0	0.0
82.5°	0.1	0.1	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)