

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P518470

Luminaire Tested: **SQ4-BB-050U-125D-830-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518470
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G2-2009-966-12)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-BB-050U-125D-830-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

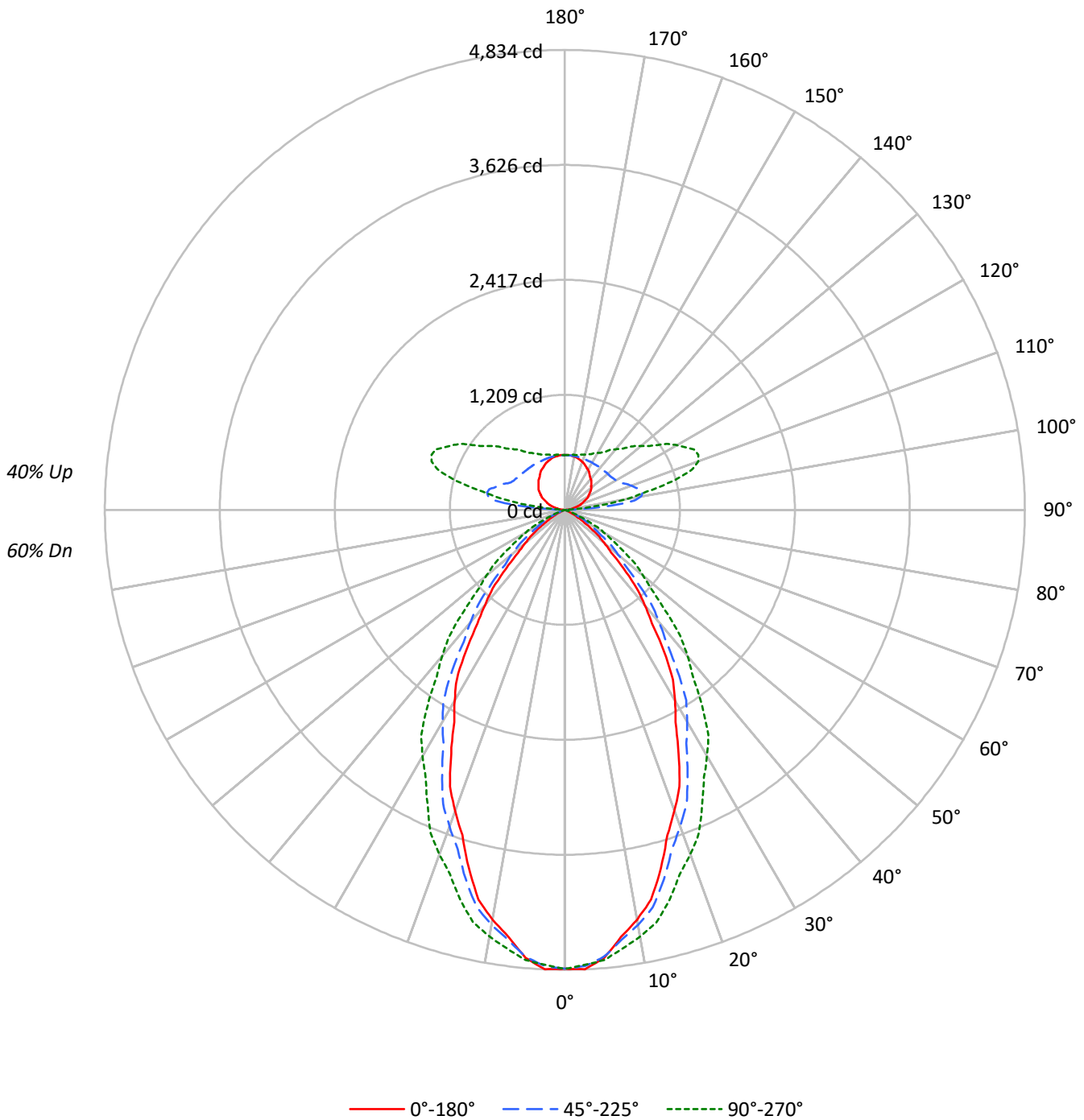
Lumens per Lamp: N/A
Luminaire Lumens: 9515.8 lumens
Efficiency: N/A
Efficacy: 82.9 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 114.8
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	110	110	110	110	102	102	102	102	89	89	89	77	77	77	66	66	66	60
1	102	99	96	93	96	93	90	88	81	79	78	71	70	68	61	61	60	55
2	95	89	84	79	89	84	79	76	74	71	68	65	63	61	57	55	54	50
3	88	80	74	69	83	76	70	66	67	63	60	60	57	54	52	50	48	45
4	82	73	66	61	77	69	63	58	61	57	53	55	51	48	48	46	44	41
5	76	66	59	54	72	63	56	52	56	51	48	50	47	44	45	42	40	37
6	71	60	53	48	67	57	51	46	52	47	43	47	43	40	42	39	36	34
7	66	55	48	43	62	53	46	42	48	43	39	43	39	36	39	36	33	31
8	62	51	44	39	59	49	42	38	44	39	35	40	36	33	36	33	31	29
9	58	47	40	36	55	45	39	35	41	36	33	37	33	30	34	31	28	26
10	55	44	37	33	52	42	36	32	38	33	30	35	31	28	32	29	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	22249	22249	22249
5°	21890	21836	21998
10°	20482	20756	21334
15°	18620	19211	20281
20°	16529	17388	18911
25°	14394	15534	17375
30°	12329	13684	15921
35°	10223	11616	14165
40°	7854	9288	12070
45°	5678	7033	9711
50°	3868	5241	7703
55°	2515	3791	5986
60°	1442	2669	4327
65°	382	1630	2191
70°	189	503	630
75°	84	41	0
80°	61	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	440.1	4.6
10°-20°	1125.6	11.8
20°-30°	1409.1	14.8
30°-40°	1301.6	13.7
40°-50°	874.6	9.2
50°-60°	451.7	4.7
60°-70°	141.5	1.5
70°-80°	8.9	0.1
80°-90°	2.4	0.0
90°-100°	276.5	2.9
100°-110°	751.0	7.9
110°-120°	772.2	8.1
120°-130°	617.4	6.5
130°-140°	485.1	5.1
140°-150°	372.0	3.9
150°-160°	267.5	2.8
160°-170°	163.6	1.7
170°-180°	55.1	0.6
0°-30°	2974.8	31.3
0°-40°	4276.4	44.9
0°-60°	5602.7	58.9
0°-90°	5755.5	60.5
90°-120°	1799.7	18.9
90°-150°	3274.1	34.4
90°-180°	3760.0	39.5
0°-180°	9515.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4823	4823	4823	4823	4823	
5°	4727	4679	4716	4732	4750	438
15°	3899	3885	4022	4158	4246	1086
25°	2828	2851	3052	3261	3414	1296
35°	1815	1861	2063	2305	2515	1125
45°	870	923	1078	1288	1489	684
55°	313	365	471	605	744	292
65°	35	67	149	180	201	59
75°	5	5	2	0	0	7
85°	0	0	0	0	0	1
90°	2	7	13	17	17	3
95°	41	151	482	210	141	43
105°	133	208	826	1258	1183	142
115°	237	288	661	1315	1498	234
125°	326	371	598	1008	1189	291
135°	393	436	582	821	926	304
145°	454	486	574	698	750	285
155°	513	531	570	626	644	237
165°	556	563	572	596	598	157
175°	576	578	574	581	580	55
180°	576	576	576	576	576	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4822.9	4822.9	4822.9	4822.9	4822.9
2.5°	4834.1	4788.4	4800.5	4800.2	4787.4
5°	4727.2	4679.3	4715.5	4732.3	4750.5
7.5°	4527.5	4490.0	4559.7	4611.9	4649.7
10°	4372.5	4340.6	4430.9	4502.1	4554.5
12.5°	4193.3	4168.7	4277.8	4375.5	4442.5
15°	3898.9	3885.2	4022.5	4157.6	4246.5
17.5°	3583.4	3583.0	3739.8	3907.4	4014.6
20°	3366.9	3373.7	3541.9	3726.7	3852.2
22.5°	3150.4	3166.3	3345.9	3538.6	3682.4
25°	2827.9	2850.7	3051.9	3260.7	3413.6
27.5°	2518.1	2551.4	2763.0	2980.1	3166.2
30°	2314.6	2353.4	2568.9	2797.3	2988.9
32.5°	2114.9	2161.0	2371.1	2612.6	2807.8
35°	1815.3	1860.9	2062.6	2305.4	2515.3
37.5°	1505.9	1550.6	1747.6	1986.6	2213.3
40°	1304.3	1354.5	1542.3	1773.9	2004.3
42.5°	1121.4	1171.6	1348.2	1575.7	1793.3
45°	870.3	922.8	1078.0	1287.9	1488.6
47.5°	662.2	719.2	855.4	1045.3	1228.2
50°	539.0	596.0	730.3	897.6	1073.3
52.5°	440.1	495.3	616.4	774.1	935.2
55°	312.7	365.1	471.3	605.1	744.3
57.5°	216.1	261.2	356.5	468.2	577.2
60°	156.3	199.7	289.3	380.0	469.0
62.5°	104.1	143.8	231.5	300.9	360.7
65°	35.0	66.9	149.3	180.1	200.7
67.5°	17.7	21.4	78.4	82.8	89.6
70°	14.0	14.0	37.3	39.8	46.7
72.5°	10.3	10.3	14.9	19.2	20.5
75°	4.7	4.7	2.3	0.0	0.0
77.5°	2.3	2.3	1.9	0.0	0.0
80°	2.3	2.3	0.0	0.0	0.0
82.5°	0.5	0.5	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.4	1.5	2.6	3.3	3.3
90°	1.9	7.3	13.0	16.7	16.7
92.5°	16.7	75.7	131.5	56.5	47.8
95°	40.7	151.2	481.5	209.5	140.7
97.5°	67.4	167.0	738.1	574.3	403.3
100°	85.2	177.5	816.7	827.8	668.5
102.5°	103.0	188.1	837.4	1023.8	883.3
105°	133.3	207.6	825.9	1257.5	1183.3
107.5°	164.8	230.4	778.1	1378.2	1398.9
110°	187.0	246.8	742.6	1402.0	1490.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	206.3	263.1	707.0	1382.3	1515.9
115°	237.0	287.7	661.1	1315.2	1498.1
117.5°	265.9	314.4	631.8	1220.2	1426.3
120°	285.2	332.3	618.5	1156.5	1361.1
122.5°	301.5	348.6	609.6	1092.6	1290.0
125°	325.9	371.2	598.1	1007.8	1188.9
127.5°	347.8	392.7	591.8	943.5	1098.9
130°	361.1	404.6	588.9	903.2	1042.6
132.5°	374.4	417.9	585.9	868.7	992.2
135°	392.6	436.0	581.5	820.9	925.9
137.5°	412.2	451.7	579.2	778.7	867.0
140°	424.1	462.1	577.8	751.8	831.5
142.5°	435.9	471.0	576.3	730.8	797.4
145°	453.7	486.3	574.1	697.5	750.0
147.5°	473.7	501.6	572.2	671.3	712.6
150°	487.0	510.6	572.2	656.3	688.9
152.5°	497.4	518.0	570.7	642.8	669.6
155°	513.0	531.1	570.4	626.3	644.4
157.5°	528.1	542.3	570.4	615.1	628.9
160°	537.0	549.7	570.4	607.6	618.5
162.5°	545.9	555.7	571.8	601.7	609.6
165°	555.5	562.8	572.2	596.3	598.1
167.5°	565.5	569.2	574.1	590.0	591.5
170°	568.5	572.1	574.1	587.0	587.0
172.5°	571.5	573.6	574.1	584.1	584.1
175°	575.9	577.7	574.1	581.4	579.6
177.5°	577.4	577.4	573.0	578.8	575.9
180°	575.9	575.9	575.9	575.9	575.9

(END OF REPORT)