

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: P521049

Luminaire Tested: **SQ4-BB-050U-075D-93050-1D-UNV-STD-W-4 (3000K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521049
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-050U-075D-93050-1D-UNV-STD-W-4 (3000K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

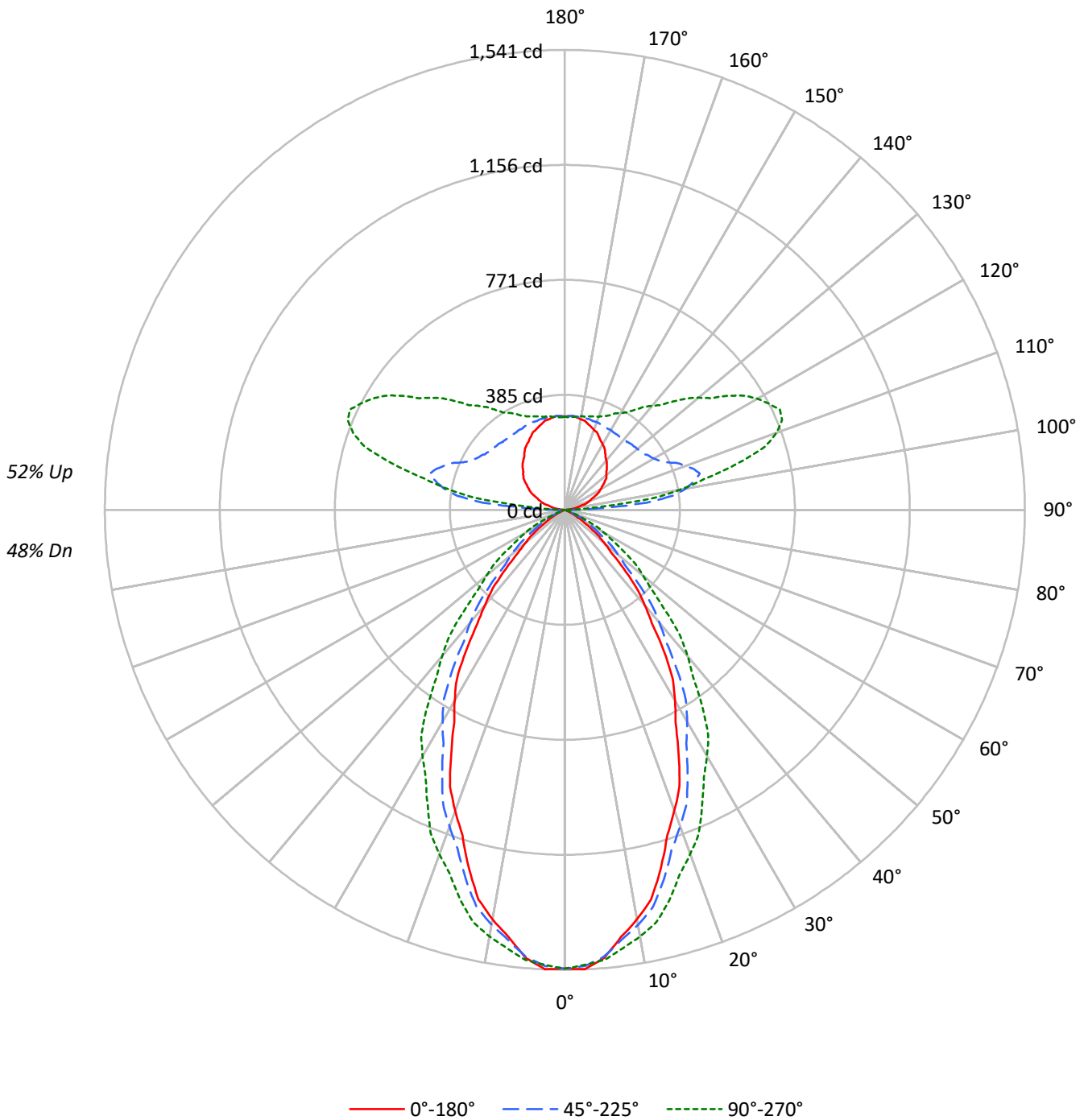
Lumens per Lamp: N/A
Luminaire Lumens: 3856.4 lumens
Efficiency: N/A
Efficacy: 81.0 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 47.6
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	0
RCR																		
0	107	107	107	107	98	98	98	98	82	82	82	67	67	67	54	54	54	48
1	99	95	92	89	91	88	85	83	74	72	71	62	61	59	50	49	49	43
2	92	85	80	76	84	79	75	71	67	64	61	56	54	52	46	45	44	39
3	85	77	70	65	78	71	66	61	61	57	54	51	49	46	43	41	39	35
4	78	69	62	57	72	64	58	54	55	51	47	47	44	41	39	37	36	32
5	73	62	55	50	67	58	52	47	51	46	42	43	40	37	36	34	32	29
6	68	57	50	44	62	53	47	42	46	41	38	40	36	34	34	31	29	27
7	63	52	45	40	58	49	42	38	43	38	34	37	33	30	31	29	27	24
8	59	48	41	36	54	45	39	34	39	34	31	34	30	28	29	27	25	22
9	55	44	37	32	51	41	35	31	36	32	28	32	28	26	27	25	23	21
10	52	41	34	30	48	38	32	28	34	29	26	30	26	24	26	23	21	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14183	14183	14183
5°	13954	13920	14024
10°	13057	13231	13600
15°	11870	12246	12928
20°	10536	11084	12055
25°	9176	9902	11076
30°	7859	8723	10150
35°	6517	7404	9030
40°	5007	5921	7694
45°	3619	4483	6191
50°	2466	3341	4910
55°	1604	2416	3815
60°	919	1701	2759
65°	245	1039	1397
70°	121	321	402
75°	53	25	0
80°	37	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.3	3.6
10°-20°	358.8	9.3
20°-30°	449.1	11.6
30°-40°	414.8	10.8
40°-50°	278.8	7.2
50°-60°	144.0	3.7
60°-70°	45.1	1.2
70°-80°	2.8	0.1
80°-90°	0.0	0.0
90°-100°	161.0	4.2
100°-110°	389.2	10.1
110°-120°	415.1	10.8
120°-130°	336.2	8.7
130°-140°	260.3	6.7
140°-150°	198.6	5.1
150°-160°	143.7	3.7
160°-170°	88.5	2.3
170°-180°	30.0	0.8
0°-30°	948.2	24.6
0°-40°	1363.0	35.3
0°-60°	1785.8	46.3
0°-90°	1833.7	47.6
90°-120°	965.3	25.0
90°-150°	1760.4	45.6
90°-180°	2023.0	52.5
0°-180°	3856.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1537	1537	1537	1537	1537	
5°	1507	1491	1503	1508	1514	140
15°	1243	1238	1282	1325	1354	346
25°	901	909	973	1039	1088	413
35°	579	593	657	735	802	358
45°	277	294	344	410	474	218
55°	100	116	150	193	237	93
65°	11	21	48	57	64	19
75°	2	2	1	0	0	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	16	81	276	179	126	18
105°	62	108	468	605	598	66
115°	114	146	376	712	795	113
125°	162	187	326	567	666	145
135°	199	222	313	447	514	154
145°	236	253	307	380	410	147
155°	270	282	311	336	349	125
165°	298	303	315	320	324	84
175°	316	314	316	313	312	30
180°	312	312	312	312	312	



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CATALOG NUMBER: SQ4-BB-050U-075D-93050-1D-UNV-STD-W-4 (3000K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1537.2	1537.2	1537.2	1537.2	1537.2
2.5°	1540.8	1526.2	1530.1	1530.0	1525.9
5°	1506.7	1491.4	1503.0	1508.3	1514.2
7.5°	1443.1	1431.1	1453.3	1470.0	1482.0
10°	1393.7	1383.5	1412.3	1435.0	1451.7
12.5°	1336.6	1328.7	1363.5	1394.6	1416.0
15°	1242.7	1238.3	1282.1	1325.2	1353.5
17.5°	1142.2	1142.0	1192.0	1245.4	1279.6
20°	1073.1	1075.3	1128.9	1187.8	1227.8
22.5°	1004.1	1009.2	1066.4	1127.9	1173.7
25°	901.4	908.6	972.7	1039.3	1088.0
27.5°	802.6	813.2	880.7	949.8	1009.2
30°	737.7	750.1	818.8	891.6	952.7
32.5°	674.1	688.8	755.7	832.7	895.0
35°	578.6	593.1	657.4	734.8	801.7
37.5°	480.0	494.2	557.0	633.2	705.5
40°	415.7	431.7	491.6	565.4	638.8
42.5°	357.4	373.4	429.7	502.2	571.6
45°	277.4	294.1	343.6	410.5	474.5
47.5°	211.1	229.2	272.6	333.2	391.5
50°	171.8	190.0	232.8	286.1	342.1
52.5°	140.3	157.9	196.5	246.7	298.1
55°	99.7	116.4	150.2	192.9	237.2
57.5°	68.9	83.3	113.6	149.2	184.0
60°	49.8	63.6	92.2	121.1	149.5
62.5°	33.2	45.8	73.8	95.9	115.0
65°	11.2	21.3	47.6	57.4	64.0
67.5°	5.7	6.8	25.0	26.4	28.6
70°	4.5	4.5	11.9	12.7	14.9
72.5°	3.3	3.3	4.8	6.1	6.5
75°	1.5	1.5	0.7	0.0	0.0
77.5°	0.7	0.7	0.6	0.0	0.0
80°	0.7	0.7	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°	5.3	43.6	102.7	49.9	33.9
95°	15.9	80.6	275.9	179.4	125.7
97.5°	28.2	89.3	363.4	350.1	300.5
100°	37.7	94.6	411.5	434.4	393.7
102.5°	46.7	99.5	443.3	504.7	480.5
105°	62.2	107.5	467.8	605.2	597.5
107.5°	77.4	116.9	453.4	685.9	704.1
110°	88.0	124.9	430.1	720.6	754.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	98.6	132.9	409.4	729.1	787.7
115°	113.8	145.5	375.8	712.5	794.6
117.5°	128.9	158.8	356.1	674.1	770.4
120°	138.9	166.8	343.4	644.1	745.0
122.5°	149.5	175.3	335.4	613.3	712.7
125°	162.1	186.7	326.2	566.6	665.6
127.5°	174.5	197.7	319.7	527.0	614.0
130°	181.9	204.6	317.6	499.5	584.9
132.5°	188.8	212.5	314.4	479.6	552.1
135°	199.2	222.4	313.0	446.8	514.1
137.5°	208.9	232.4	308.3	424.6	475.3
140°	216.4	237.7	308.3	408.6	455.2
142.5°	223.8	245.1	305.7	394.7	434.0
145°	235.5	253.0	307.0	379.8	409.6
147.5°	246.5	263.5	306.2	362.6	387.2
150°	253.4	268.3	308.3	355.1	374.5
152.5°	260.8	275.2	307.8	347.1	364.4
155°	269.9	281.6	311.0	336.4	348.7
157.5°	280.9	290.9	310.3	332.3	339.5
160°	285.2	293.6	313.0	327.0	332.1
162.5°	292.0	299.4	311.9	325.3	328.4
165°	298.4	302.9	314.9	319.7	324.2
167.5°	306.2	309.2	314.1	319.3	319.4
170°	308.3	310.3	316.3	315.7	318.9
172.5°	312.0	313.4	314.7	316.1	314.1
175°	315.6	314.3	315.6	312.9	312.3
177.5°	314.9	314.9	313.9	312.8	310.2
180°	312.3	312.3	312.3	312.3	312.3

(END OF REPORT)