

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: P518461

Luminaire Tested: **SQ4-BB-050U-100D-935-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518461
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-100D-935-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

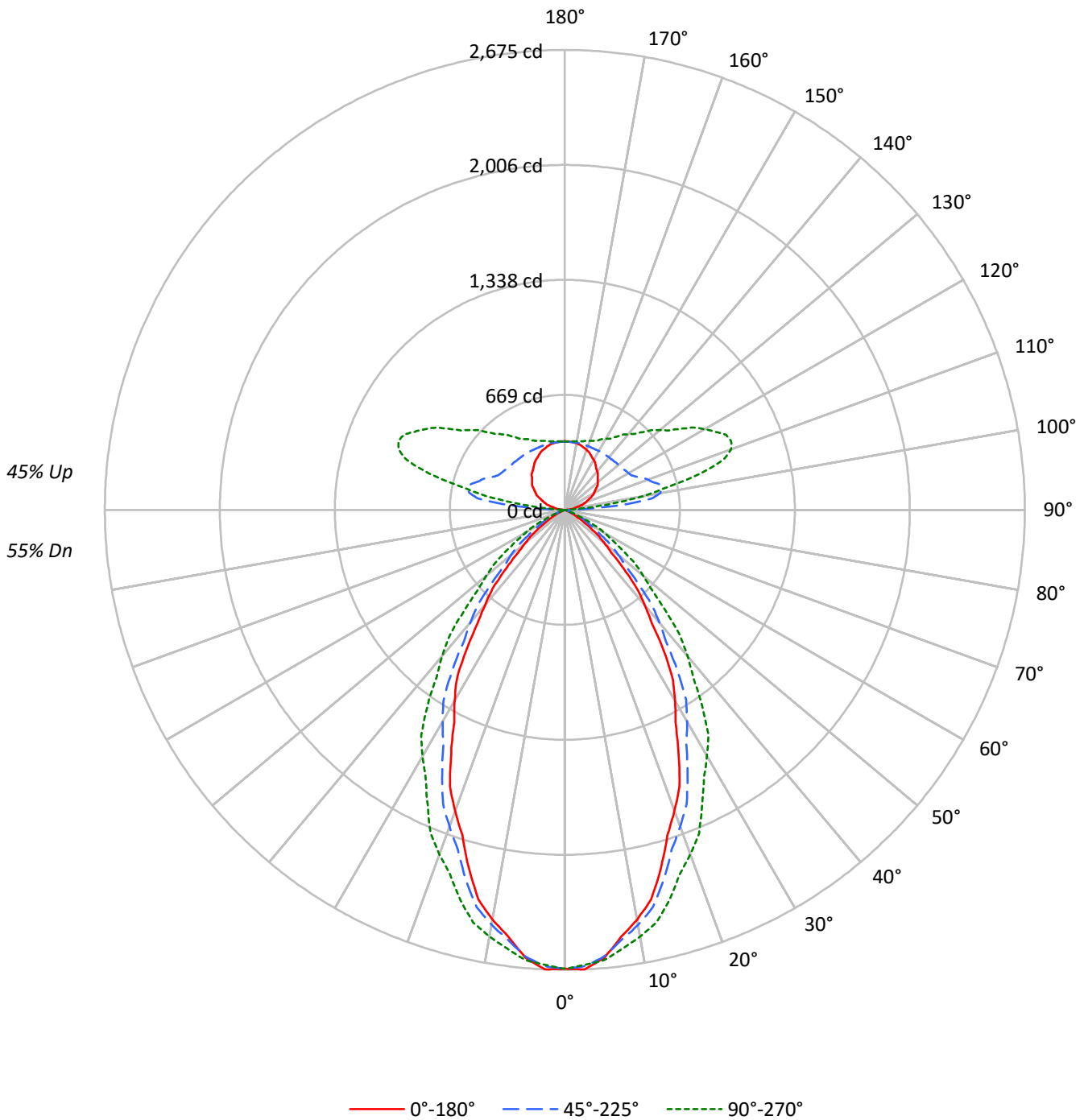
Lumens per Lamp: N/A
Luminaire Lumens: 5781.5 lumens
Efficiency: N/A
Efficacy: 78.8 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 73.4
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	50	30	10	50	30	10	0																			
RCR																																														
0	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61	55																												
1	101	97	94	91	94	91	88	86	78	77	75	67	66	65	57	56	55	50																												
2	94	87	82	78	87	82	77	74	71	68	65	61	59	57	52	51	50	45																												
3	87	79	72	67	81	74	68	64	65	61	57	56	53	51	48	46	45	41																												
4	80	71	64	59	75	67	61	56	59	54	51	52	48	46	45	42	40	37																												
5	75	65	57	52	70	61	55	50	54	49	45	47	44	41	41	39	37	34																												
6	70	59	52	46	65	56	49	45	49	44	41	44	40	37	38	36	33	31																												
7	65	54	47	42	61	51	45	40	46	41	37	41	37	34	36	33	31	28																												
8	61	50	43	38	57	47	41	36	42	37	34	38	34	31	33	30	28	26																												
9	57	46	39	34	53	44	37	33	39	34	31	35	31	28	31	28	26	24																												
10	54	42	36	31	50	40	34	30	36	32	28	33	29	26	29	26	24	22																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16416	16416	16416
5°	16153	16112	16232
10°	15113	15315	15742
15°	13740	14175	14965
20°	12196	12830	13954
25°	10621	11462	12821
30°	9097	10097	11748
35°	7543	8571	10452
40°	5796	6853	8906
45°	4189	5190	7166
50°	2854	3868	5684
55°	1855	2797	4417
60°	1064	1969	3192
65°	282	1202	1615
70°	138	372	464
75°	62	31	0
80°	46	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	243.6	4.2
10°-20°	622.9	10.8
20°-30°	779.8	13.5
30°-40°	720.3	12.5
40°-50°	484.0	8.4
50°-60°	250.0	4.3
60°-70°	78.3	1.4
70°-80°	5.0	0.1
80°-90°	1.6	0.0
90°-100°	190.9	3.3
100°-110°	518.5	9.0
110°-120°	533.1	9.2
120°-130°	426.2	7.4
130°-140°	334.9	5.8
140°-150°	256.8	4.4
150°-160°	184.7	3.2
160°-170°	112.9	2.0
170°-180°	38.1	0.7
0°-30°	1646.3	28.5
0°-40°	2366.6	40.9
0°-60°	3100.6	53.6
0°-90°	3185.4	55.1
90°-120°	1242.5	21.5
90°-150°	2260.4	39.1
90°-180°	2596.0	44.9
0°-180°	5781.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2669	2669	2669	2669	2669	
5°	2616	2590	2610	2619	2629	243
15°	2158	2150	2226	2301	2350	601
25°	1565	1578	1689	1804	1889	717
35°	1005	1030	1142	1276	1392	622
45°	482	511	597	713	824	378
55°	173	202	261	335	412	161
65°	19	37	83	100	111	33
75°	3	3	1	0	0	4
85°	0	0	0	0	0	0
90°	1	5	9	12	12	2
95°	28	104	332	145	97	30
105°	92	143	570	868	817	98
115°	164	199	456	908	1034	161
125°	225	256	413	696	821	201
135°	271	301	402	567	639	210
145°	313	336	396	482	518	197
155°	354	367	394	432	445	163
165°	384	389	395	412	413	108
175°	398	399	396	401	400	38
180°	398	398	398	398	398	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2669.0	2669.0	2669.0	2669.0	2669.0
2.5°	2675.2	2649.9	2656.6	2656.4	2649.4
5°	2616.1	2589.5	2609.6	2618.9	2629.0
7.5°	2505.5	2484.8	2523.3	2552.2	2573.2
10°	2419.8	2402.1	2452.1	2491.5	2520.5
12.5°	2320.6	2307.0	2367.4	2421.4	2458.5
15°	2157.7	2150.1	2226.1	2300.8	2350.1
17.5°	1983.1	1982.8	2069.6	2162.4	2221.7
20°	1863.3	1867.1	1960.1	2062.4	2131.8
22.5°	1743.4	1752.3	1851.6	1958.3	2037.8
25°	1565.0	1577.6	1688.9	1804.5	1889.1
27.5°	1393.5	1411.9	1529.1	1649.2	1752.2
30°	1280.9	1302.4	1421.7	1548.0	1654.1
32.5°	1170.4	1195.9	1312.2	1445.8	1553.9
35°	1004.6	1029.8	1141.5	1275.8	1392.0
37.5°	833.4	858.1	967.1	1099.4	1224.9
40°	721.8	749.6	853.5	981.7	1109.2
42.5°	620.6	648.3	746.1	872.0	992.4
45°	481.6	510.7	596.6	712.7	823.8
47.5°	366.5	398.0	473.4	578.5	679.7
50°	298.3	329.8	404.2	496.8	594.0
52.5°	243.5	274.1	341.1	428.4	517.5
55°	173.0	202.1	260.8	334.9	411.9
57.5°	119.6	144.6	197.3	259.1	319.5
60°	86.5	110.5	160.1	210.3	259.5
62.5°	57.6	79.6	128.1	166.5	199.6
65°	19.4	37.0	82.6	99.7	111.0
67.5°	9.8	11.8	43.4	45.8	49.6
70°	7.7	7.7	20.7	22.0	25.8
72.5°	5.7	5.7	8.3	10.6	11.4
75°	2.6	2.6	1.3	0.0	0.0
77.5°	1.3	1.3	1.0	0.0	0.0
80°	1.3	1.3	0.0	0.0	0.0
82.5°	0.3	0.3	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.3	1.0	1.8	2.3	2.3
90°	1.3	5.0	8.9	11.5	11.5
92.5°	11.5	52.3	90.8	39.0	33.0
95°	28.1	104.4	332.4	144.7	97.2
97.5°	46.5	115.3	509.6	396.5	278.5
100°	58.8	122.6	563.8	571.5	461.5
102.5°	71.1	129.8	578.1	706.9	609.8
105°	92.1	143.3	570.2	868.2	817.0
107.5°	113.8	159.0	537.2	951.5	965.8
110°	129.1	170.4	512.7	967.9	1029.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	142.4	181.7	488.1	954.3	1046.6
115°	163.6	198.7	456.4	908.1	1034.3
117.5°	183.6	217.1	436.2	842.4	984.7
120°	196.9	229.4	427.0	798.4	939.7
122.5°	208.1	240.6	420.9	754.3	890.6
125°	225.0	256.3	413.0	695.8	820.8
127.5°	240.1	271.1	408.6	651.4	758.7
130°	249.3	279.3	406.6	623.5	719.8
132.5°	258.5	288.5	404.5	599.8	685.0
135°	271.0	301.0	401.5	566.7	639.3
137.5°	284.6	311.8	399.9	537.6	598.6
140°	292.8	319.0	398.9	519.0	574.0
142.5°	301.0	325.2	397.9	504.5	550.5
145°	313.2	335.7	396.3	481.5	517.8
147.5°	327.0	346.3	395.1	463.5	492.0
150°	336.2	352.5	395.1	453.1	475.6
152.5°	343.4	357.7	394.0	443.8	462.3
155°	354.1	366.6	393.8	432.4	444.9
157.5°	364.6	374.4	393.8	424.7	434.2
160°	370.8	379.5	393.8	419.5	427.0
162.5°	376.9	383.7	394.8	415.4	420.9
165°	383.6	388.6	395.1	411.7	413.0
167.5°	390.5	393.0	396.3	407.4	408.4
170°	392.5	395.0	396.3	405.3	405.3
172.5°	394.5	396.0	396.3	403.2	403.2
175°	397.6	398.9	396.3	401.4	400.2
177.5°	398.6	398.6	395.6	399.6	397.6
180°	397.6	397.6	397.6	397.6	397.6

(END OF REPORT)