

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: P518458

Luminaire Tested: **SQ4-BB-050U-100D-930-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518458
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-930-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7059.9 lumens
Efficiency: N/A
Efficacy: 74.0 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: General Diffuse

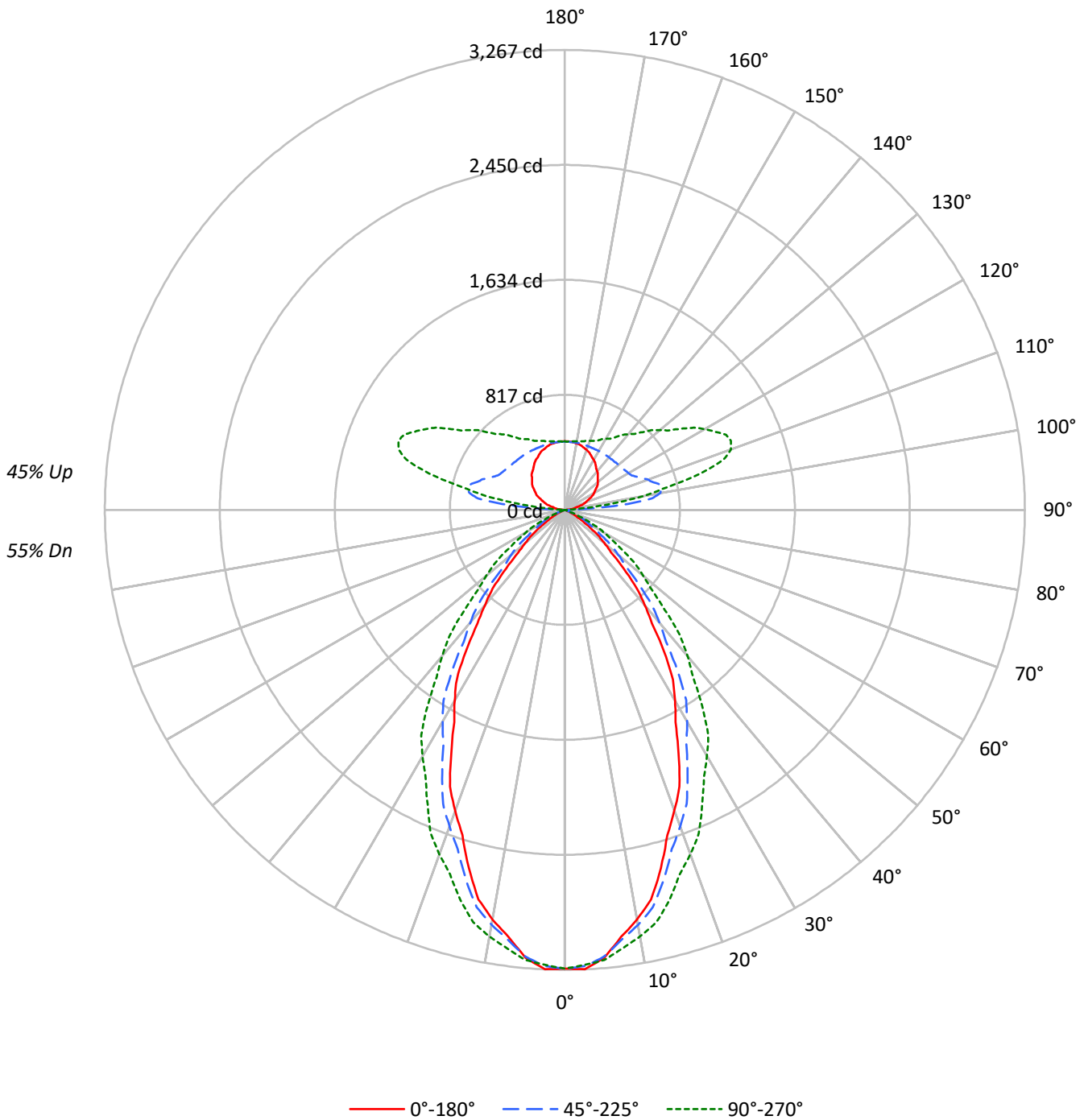
Input Watts (W): 95.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	15035	15035	15035
5°	14793	14756	14866
10°	13841	14026	14417
15°	12583	12982	13705
20°	11169	11750	12780
25°	9727	10498	11742
30°	8332	9247	10759
35°	6908	7849	9572
40°	5308	6276	8156
45°	3837	4753	6563
50°	2614	3542	5205
55°	1699	2562	4045
60°	974	1804	2924
65°	259	1101	1480
70°	128	340	425
75°	57	29	0
80°	43	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	297.4	4.2
10°-20°	760.6	10.8
20°-30°	952.2	13.5
30°-40°	879.5	12.5
40°-50°	591.0	8.4
50°-60°	305.3	4.3
60°-70°	95.6	1.4
70°-80°	6.1	0.1
80°-90°	2.0	0.0
90°-100°	233.1	3.3
100°-110°	633.2	9.0
110°-120°	651.0	9.2
120°-130°	520.5	7.4
130°-140°	409.0	5.8
140°-150°	313.6	4.4
150°-160°	225.5	3.2
160°-170°	137.9	2.0
170°-180°	46.5	0.7
0°-30°	2010.3	28.5
0°-40°	2889.8	40.9
0°-60°	3786.1	53.6
0°-90°	3889.7	55.1
90°-120°	1517.2	21.5
90°-150°	2760.3	39.1
90°-180°	3170.0	44.9
0°-180°	7059.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3259	3259	3259	3259	3259	
5°	3194	3162	3187	3198	3210	296
15°	2635	2626	2718	2810	2870	734
25°	1911	1926	2062	2204	2307	876
35°	1227	1258	1394	1558	1700	760
45°	588	624	728	870	1006	462
55°	211	247	318	409	503	197
65°	24	45	101	122	136	40
75°	3	3	2	0	0	5
85°	0	0	0	0	0	0
90°	2	6	11	14	14	2
95°	34	128	406	177	119	36
105°	112	175	696	1060	998	119
115°	200	243	557	1109	1263	197
125°	275	313	504	850	1002	245
135°	331	368	490	692	781	256
145°	382	410	484	588	632	240
155°	432	448	481	528	543	199
165°	468	474	482	503	504	132
175°	486	487	484	490	489	46
180°	486	486	486	486	486	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3259.1	3259.1	3259.1	3259.1	3259.1
2.5°	3266.7	3235.9	3244.0	3243.8	3235.2
5°	3194.5	3162.1	3186.6	3197.9	3210.2
7.5°	3059.5	3034.2	3081.3	3116.5	3142.1
10°	2954.8	2933.2	2994.2	3042.3	3077.8
12.5°	2833.7	2817.1	2890.8	2956.8	3002.1
15°	2634.7	2625.5	2718.3	2809.5	2869.7
17.5°	2421.6	2421.2	2527.2	2640.5	2712.9
20°	2275.2	2279.9	2393.5	2518.4	2603.2
22.5°	2128.9	2139.7	2261.0	2391.3	2488.4
25°	1911.0	1926.4	2062.4	2203.5	2306.8
27.5°	1701.6	1724.1	1867.2	2013.8	2139.6
30°	1564.1	1590.3	1736.0	1890.3	2019.8
32.5°	1429.2	1460.3	1602.3	1765.5	1897.4
35°	1226.7	1257.5	1393.8	1557.9	1699.7
37.5°	1017.6	1047.8	1181.0	1342.4	1495.7
40°	881.4	915.3	1042.2	1198.7	1354.4
42.5°	757.8	791.7	911.0	1064.8	1211.9
45°	588.1	623.6	728.5	870.3	1006.0
47.5°	447.5	486.0	578.0	706.4	830.0
50°	364.2	402.8	493.5	606.6	725.3
52.5°	297.4	334.7	416.6	523.1	632.0
55°	211.3	246.7	318.5	408.9	503.0
57.5°	146.0	176.5	240.9	316.4	390.1
60°	105.6	134.9	195.5	256.8	316.9
62.5°	70.3	97.1	156.4	203.4	243.8
65°	23.7	45.2	100.9	121.7	135.6
67.5°	12.0	14.4	53.0	55.9	60.5
70°	9.5	9.5	25.2	26.9	31.5
72.5°	6.9	6.9	10.1	13.0	13.9
75°	3.2	3.2	1.6	0.0	0.0
77.5°	1.6	1.6	1.3	0.0	0.0
80°	1.6	1.6	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	1.2	2.2	2.8	2.8
90°	1.6	6.1	10.9	14.1	14.1
92.5°	14.1	63.8	110.8	47.6	40.3
95°	34.3	127.5	405.9	176.7	118.7
97.5°	56.8	140.8	622.3	484.1	340.0
100°	71.8	149.7	688.5	697.9	563.6
102.5°	86.8	158.5	706.0	863.1	744.7
105°	112.4	175.0	696.3	1060.2	997.6
107.5°	138.9	194.2	656.0	1161.9	1179.3
110°	157.7	208.1	626.0	1182.0	1256.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	173.9	221.8	596.1	1165.3	1278.0
115°	199.8	242.6	557.3	1108.8	1263.0
117.5°	224.2	265.1	532.7	1028.7	1202.4
120°	240.4	280.1	521.4	975.0	1147.5
122.5°	254.2	293.8	513.9	921.1	1087.5
125°	274.8	312.9	504.3	849.6	1002.3
127.5°	293.2	331.0	499.0	795.4	926.4
130°	304.4	341.1	496.5	761.4	878.9
132.5°	315.7	352.3	494.0	732.4	836.5
135°	331.0	367.6	490.2	692.1	780.6
137.5°	347.5	380.8	488.3	656.5	730.9
140°	357.5	389.6	487.1	633.8	701.0
142.5°	367.5	397.1	485.8	616.1	672.2
145°	382.5	410.0	484.0	588.0	632.3
147.5°	399.4	422.9	482.4	565.9	600.7
150°	410.6	430.4	482.4	553.3	580.8
152.5°	419.3	436.7	481.2	541.9	564.5
155°	432.4	447.7	480.8	528.0	543.3
157.5°	445.3	457.2	480.8	518.6	530.2
160°	452.7	463.4	480.8	512.3	521.4
162.5°	460.2	468.5	482.1	507.2	513.9
165°	468.4	474.5	482.4	502.7	504.3
167.5°	476.8	479.8	484.0	497.4	498.6
170°	479.3	482.3	484.0	494.9	494.9
172.5°	481.8	483.6	484.0	492.4	492.4
175°	485.5	487.1	484.0	490.2	488.7
177.5°	486.8	486.8	483.0	488.0	485.5
180°	485.5	485.5	485.5	485.5	485.5

(END OF REPORT)