

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: P518482

Luminaire Tested: **SQ4-BB-050U-125D-930-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518482
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-930-1D-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, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

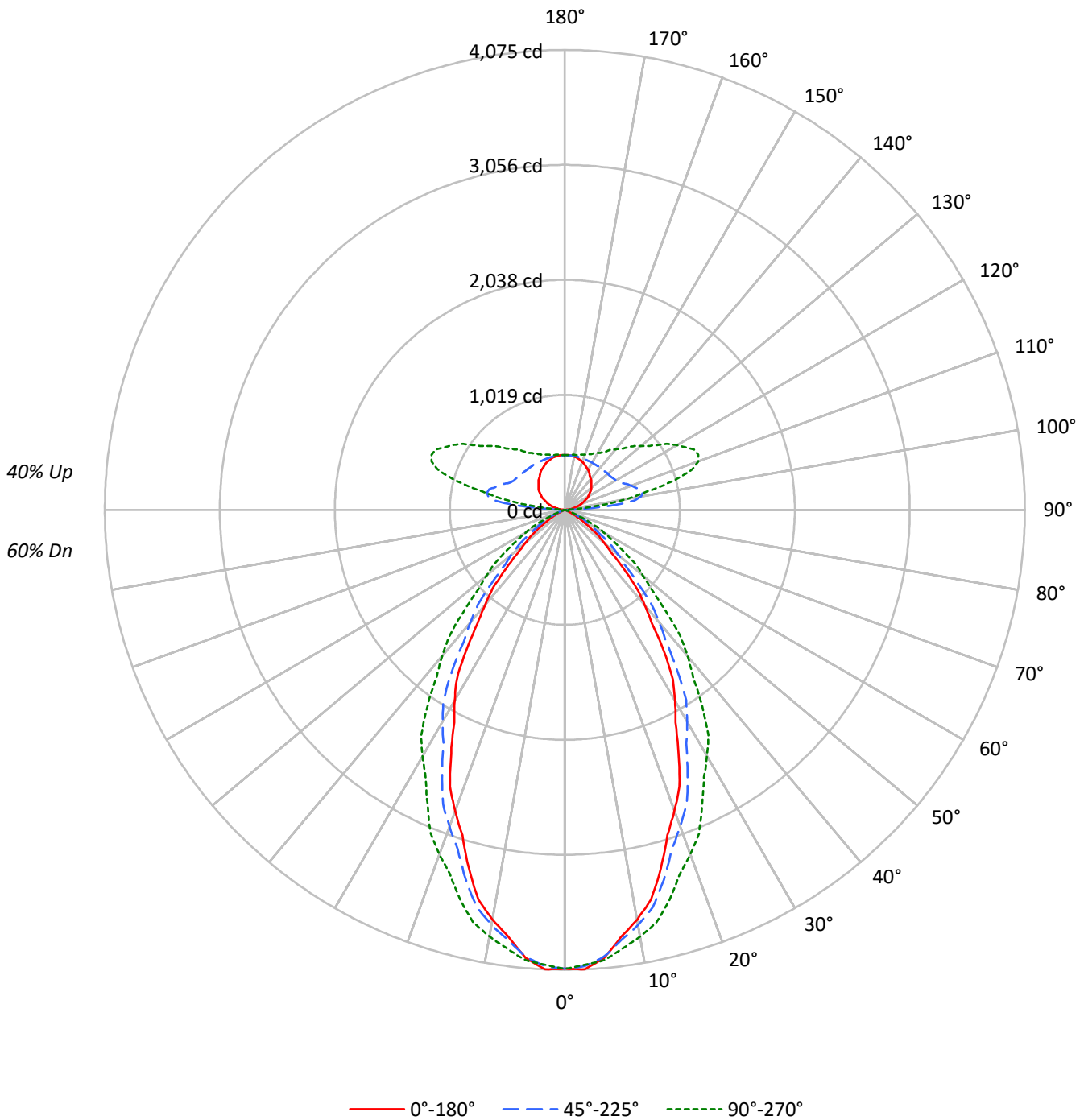
Lumens per Lamp: N/A
Luminaire Lumens: 8022.3 lumens
Efficiency: N/A
Efficacy: 69.9 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Direct

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°	18756	18756	18756
5°	18455	18409	18546
10°	17268	17498	17986
15°	15698	16196	17098
20°	13935	14659	15943
25°	12135	13096	14648
30°	10394	11536	13422
35°	8619	9793	11942
40°	6622	7830	10175
45°	4787	5929	8188
50°	3261	4419	6494
55°	2120	3195	5047
60°	1216	2250	3648
65°	322	1374	1847
70°	159	425	530
75°	70	36	0
80°	53	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	371.1	4.6
10°-20°	948.9	11.8
20°-30°	1188.0	14.8
30°-40°	1097.3	13.7
40°-50°	737.3	9.2
50°-60°	380.8	4.7
60°-70°	119.3	1.5
70°-80°	7.6	0.1
80°-90°	2.0	0.0
90°-100°	233.1	2.9
100°-110°	633.2	7.9
110°-120°	651.0	8.1
120°-130°	520.5	6.5
130°-140°	409.0	5.1
140°-150°	313.6	3.9
150°-160°	225.5	2.8
160°-170°	137.9	1.7
170°-180°	46.5	0.6
0°-30°	2507.9	31.3
0°-40°	3605.2	44.9
0°-60°	4723.4	58.9
0°-90°	4852.2	60.5
90°-120°	1517.2	18.9
90°-150°	2760.3	34.4
90°-180°	3170.0	39.5
0°-180°	8022.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4066	4066	4066	4066	4066	
5°	3985	3945	3976	3990	4005	369
15°	3287	3275	3391	3505	3580	915
25°	2384	2403	2573	2749	2878	1093
35°	1530	1569	1739	1944	2120	948
45°	734	778	909	1086	1255	576
55°	264	308	397	510	628	246
65°	30	56	126	152	169	50
75°	4	4	2	0	0	6
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°	4065.9	4065.9	4065.9	4065.9	4065.9
2.5°	4075.4	4036.9	4047.1	4046.8	4036.0
5°	3985.3	3944.9	3975.5	3989.6	4005.0
7.5°	3816.9	3785.4	3844.1	3888.1	3920.0
10°	3686.3	3659.4	3735.5	3795.5	3839.7
12.5°	3535.2	3514.5	3606.4	3688.8	3745.3
15°	3287.0	3275.4	3391.2	3505.1	3580.1
17.5°	3021.0	3020.6	3152.8	3294.1	3384.5
20°	2838.5	2844.3	2986.0	3141.9	3247.6
22.5°	2655.9	2669.4	2820.8	2983.3	3104.4
25°	2384.1	2403.3	2572.9	2749.0	2877.8
27.5°	2122.9	2150.9	2329.4	2512.4	2669.3
30°	1951.3	1984.0	2165.7	2358.3	2519.8
32.5°	1783.0	1821.8	1998.9	2202.5	2367.2
35°	1530.4	1568.9	1738.9	1943.6	2120.5
37.5°	1269.5	1307.2	1473.3	1674.8	1866.0
40°	1099.6	1141.9	1300.2	1495.5	1689.7
42.5°	945.4	987.7	1136.6	1328.4	1511.9
45°	733.7	778.0	908.8	1085.7	1255.0
47.5°	558.3	606.3	721.1	881.2	1035.5
50°	454.4	502.5	615.7	756.8	904.9
52.5°	371.0	417.5	519.7	652.6	788.4
55°	263.6	307.8	397.3	510.2	627.5
57.5°	182.2	220.2	300.6	394.7	486.7
60°	131.8	168.3	243.9	320.4	395.4
62.5°	87.7	121.2	195.1	253.7	304.1
65°	29.5	56.4	125.9	151.9	169.2
67.5°	14.9	18.0	66.1	69.8	75.5
70°	11.8	11.8	31.5	33.6	39.3
72.5°	8.7	8.7	12.6	16.2	17.3
75°	3.9	3.9	2.0	0.0	0.0
77.5°	2.0	2.0	1.6	0.0	0.0
80°	2.0	2.0	0.0	0.0	0.0
82.5°	0.4	0.4	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)