

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: P518891

Luminaire Tested: **SQ4-BB-150U-050D-935-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518891
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, 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-150U-050D-935-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

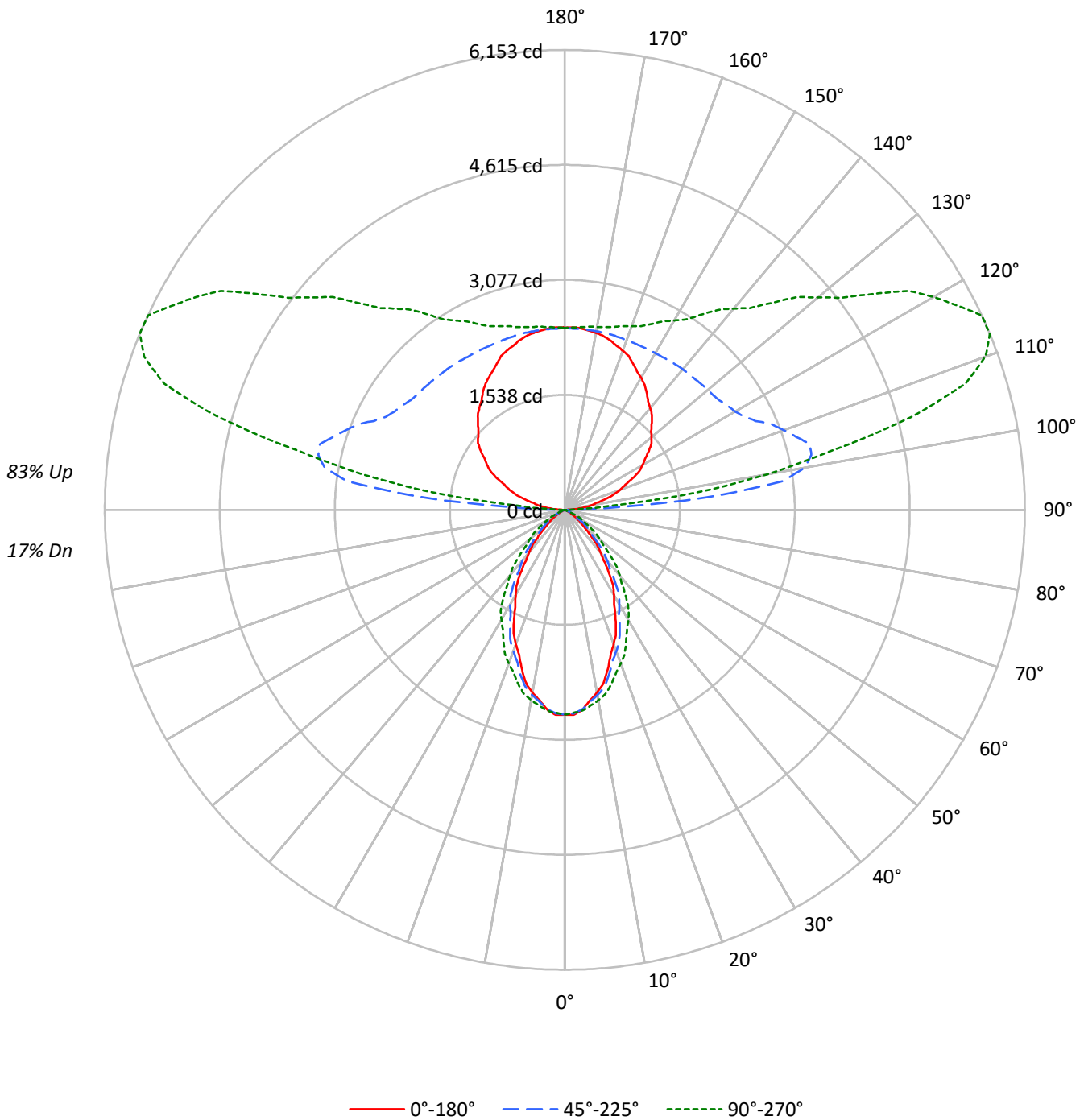
Lumens per Lamp: N/A
Luminaire Lumens: 18974.9 lumens
Efficiency: N/A
Efficacy: 112.3 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 168.9
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	99	99	99	99	87	87	87	87	65	65	65	45	45	45	26	26	26	17
1	91	87	84	81	80	77	74	72	58	56	54	40	39	38	24	23	23	16
2	83	77	71	67	73	68	63	60	51	48	46	36	34	33	22	21	20	14
3	76	68	61	56	67	60	55	51	46	42	39	32	30	29	20	19	18	13
4	70	60	53	48	62	54	48	43	41	37	34	29	27	25	18	17	16	12
5	64	54	47	41	57	48	42	37	37	33	30	26	24	22	17	15	14	11
6	59	48	41	36	52	43	37	33	33	29	26	24	21	19	15	14	13	10
7	55	44	37	32	48	39	33	29	30	26	23	22	19	17	14	13	12	9
8	51	40	33	28	45	36	30	25	28	23	20	20	18	16	13	12	11	8
9	47	36	29	25	42	32	27	23	25	21	18	19	16	14	12	11	10	8
10	44	33	27	22	39	30	24	20	23	19	16	17	15	13	11	10	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8423	8423	8423
5°	8288	8267	8329
10°	7755	7858	8077
15°	7050	7273	7678
20°	6258	6583	7160
25°	5450	5881	6578
30°	4668	5181	6028
35°	3870	4398	5363
40°	2974	3516	4569
45°	2150	2663	3677
50°	1465	1984	2916
55°	952	1435	2266
60°	546	1011	1638
65°	145	617	830
70°	72	191	238
75°	32	15	0
80°	23	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	250.0	1.3
10°-20°	639.2	3.4
20°-30°	800.2	4.2
30°-40°	739.2	3.9
40°-50°	496.7	2.6
50°-60°	256.6	1.4
60°-70°	80.3	0.4
70°-80°	5.1	0.0
80°-90°	5.2	0.0
90°-100°	1131.9	6.0
100°-110°	3060.3	16.1
110°-120°	3217.5	17.0
120°-130°	2613.5	13.8
130°-140°	2050.0	10.8
140°-150°	1573.4	8.3
150°-160°	1131.6	6.0
160°-170°	691.3	3.6
170°-180°	233.1	1.2
0°-30°	1689.4	8.9
0°-40°	2428.6	12.8
0°-60°	3181.8	16.8
0°-90°	3272.4	17.2
90°-120°	7409.7	39.0
90°-150°	13646.6	71.9
90°-180°	15703.0	82.8
0°-180°	18974.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2739	2739	2739	2739	2739	
5°	2685	2657	2678	2688	2698	249
15°	2214	2206	2284	2361	2412	617
25°	1606	1619	1733	1852	1939	736
35°	1031	1057	1171	1309	1428	639
45°	494	524	612	731	845	388
55°	178	207	268	344	423	166
65°	20	38	85	102	114	34
75°	3	3	1	0	0	4
85°	0	0	0	0	0	0
90°	5	16	34	37	34	12
95°	176	616	1882	974	579	184
105°	569	879	3395	5008	4803	599
115°	1002	1224	2816	5451	6153	989
125°	1371	1571	2538	4282	5031	1222
135°	1644	1839	2470	3458	3914	1270
145°	1911	2055	2436	2960	3185	1196
155°	2158	2242	2414	2655	2742	995
165°	2349	2372	2425	2520	2532	662
175°	2438	2436	2428	2459	2454	231
180°	2436	2436	2436	2436	2436	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2738.9	2738.9	2738.9	2738.9	2738.9
2.5°	2745.3	2719.4	2726.2	2726.0	2718.8
5°	2684.6	2657.4	2678.0	2687.5	2697.9
7.5°	2571.2	2549.9	2589.5	2619.1	2640.6
10°	2483.2	2465.1	2516.3	2556.7	2586.5
12.5°	2381.4	2367.4	2429.4	2484.9	2522.9
15°	2214.2	2206.4	2284.4	2361.1	2411.6
17.5°	2035.1	2034.8	2123.8	2219.0	2279.9
20°	1912.1	1916.0	2011.5	2116.4	2187.7
22.5°	1789.1	1798.2	1900.2	2009.6	2091.2
25°	1606.0	1618.9	1733.2	1851.8	1938.6
27.5°	1430.0	1448.9	1569.2	1692.4	1798.1
30°	1314.5	1336.5	1458.9	1588.6	1697.4
32.5°	1201.0	1227.2	1346.5	1483.7	1594.6
35°	1030.9	1056.8	1171.4	1309.2	1428.4
37.5°	855.2	880.6	992.5	1128.2	1257.0
40°	740.7	769.2	875.9	1007.4	1138.2
42.5°	636.8	665.3	765.6	894.9	1018.5
45°	494.3	524.1	612.2	731.4	845.4
47.5°	376.1	408.4	485.8	593.6	697.5
50°	306.1	338.5	414.7	509.8	609.5
52.5°	249.9	281.3	350.1	439.6	531.1
55°	177.6	207.4	267.7	343.7	422.7
57.5°	122.7	148.4	202.5	265.9	327.8
60°	88.8	113.4	164.3	215.8	266.3
62.5°	59.1	81.6	131.4	170.9	204.9
65°	19.9	38.0	84.8	102.3	114.0
67.5°	10.1	12.1	44.5	47.0	50.9
70°	8.0	8.0	21.2	22.6	26.5
72.5°	5.8	5.8	8.5	10.9	11.7
75°	2.7	2.7	1.3	0.0	0.0
77.5°	1.3	1.3	1.1	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°	1.0	3.1	6.8	7.3	6.8
90°	5.2	15.5	34.1	36.6	34.1
92.5°	74.5	271.3	535.3	232.4	168.3
95°	175.6	616.5	1882.3	974.1	579.4
97.5°	282.1	707.1	2934.1	2428.2	1783.2
100°	361.8	743.7	3261.3	3401.2	2750.1
102.5°	435.2	794.6	3376.7	4139.0	3651.9
105°	568.9	879.1	3395.0	5007.9	4802.8
107.5°	692.6	975.6	3246.6	5550.0	5618.1
110°	789.1	1045.4	3114.5	5695.5	5985.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	875.1	1115.0	2992.8	5666.4	6153.0
115°	1001.5	1224.5	2815.6	5450.6	6153.0
117.5°	1125.2	1334.4	2698.7	5120.8	5917.0
120°	1200.7	1405.8	2629.5	4884.2	5696.8
122.5°	1272.0	1473.0	2587.5	4630.6	5449.3
125°	1371.1	1571.1	2537.7	4282.4	5030.9
127.5°	1462.3	1658.7	2508.4	3998.3	4656.5
130°	1512.7	1715.2	2495.8	3822.7	4417.4
132.5°	1565.1	1765.6	2483.2	3664.4	4211.9
135°	1643.8	1838.6	2469.6	3457.8	3914.1
137.5°	1722.9	1907.0	2458.0	3290.2	3661.9
140°	1777.5	1949.2	2453.8	3182.3	3513.0
142.5°	1829.9	1991.4	2445.5	3084.9	3374.6
145°	1911.2	2054.7	2435.5	2959.7	3185.3
147.5°	1985.1	2112.2	2424.0	2846.3	3019.6
150°	2039.6	2152.4	2419.8	2784.7	2923.1
152.5°	2090.0	2188.4	2417.7	2727.5	2841.3
155°	2157.6	2242.2	2414.5	2655.1	2742.2
157.5°	2227.9	2286.8	2415.0	2604.6	2662.0
160°	2267.7	2316.4	2417.1	2572.7	2613.8
162.5°	2299.2	2339.7	2419.2	2547.3	2578.1
165°	2349.0	2372.0	2425.0	2519.7	2532.5
167.5°	2383.1	2399.0	2425.5	2495.9	2502.1
170°	2404.0	2411.7	2427.6	2485.3	2485.3
172.5°	2420.8	2422.3	2427.6	2472.7	2470.6
175°	2438.1	2435.5	2427.6	2459.0	2453.8
177.5°	2443.9	2437.7	2427.1	2447.9	2441.8
180°	2435.5	2435.5	2435.5	2435.5	2435.5

(END OF REPORT)