

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: P518795

Luminaire Tested: **SQ4-BB-125U-050D-935-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518795
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-24, 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-125U-050D-935-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

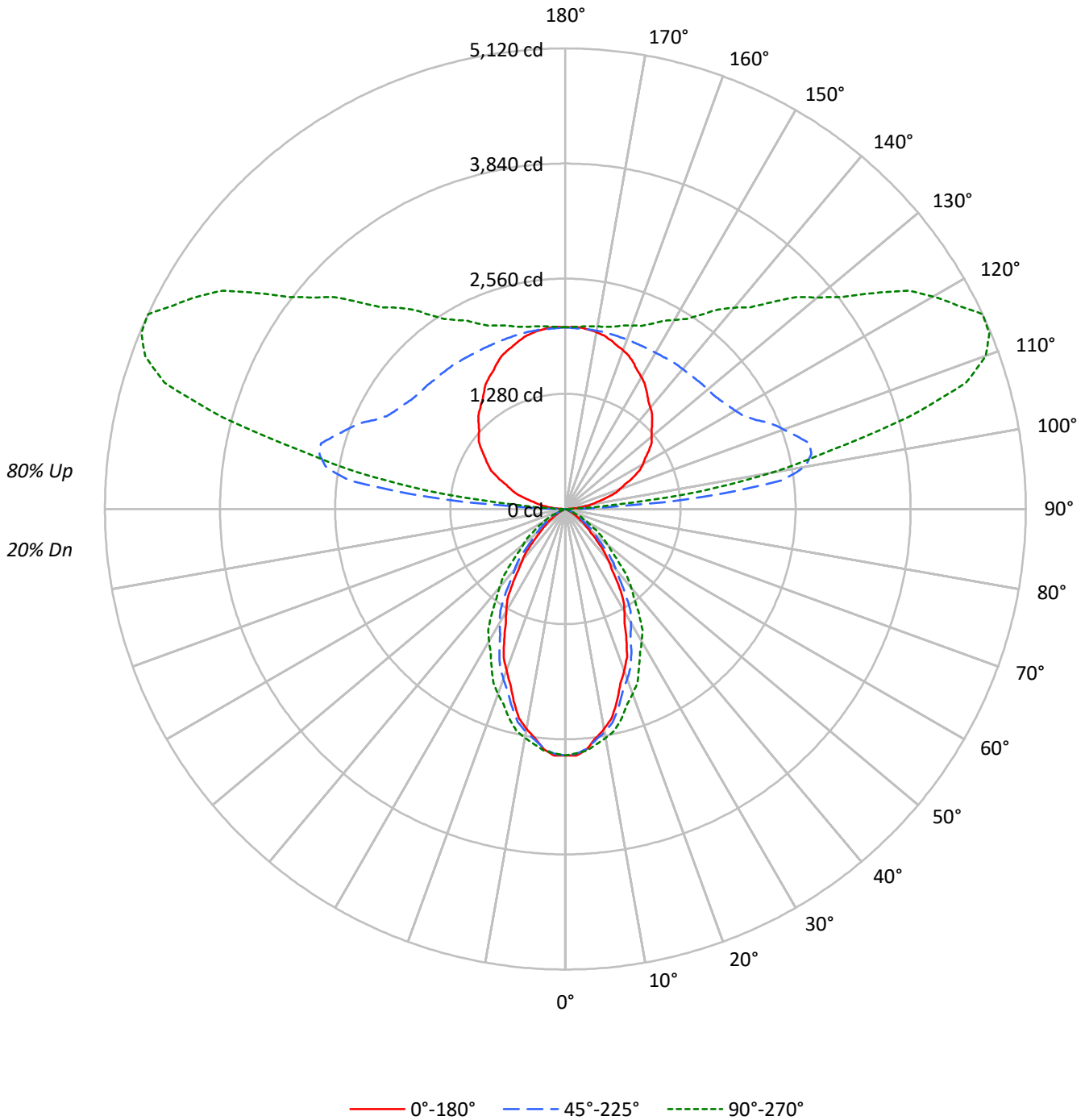
Lumens per Lamp: N/A
Luminaire Lumens: 16303.7 lumens
Efficiency: N/A
Efficacy: 111.4 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 146.4
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	100	100	100	100	88	88	88	88	67	67	67	47	47	47	29	29	29	20
1	92	88	84	81	81	78	75	73	59	58	56	42	41	40	26	26	25	18
2	84	78	72	68	74	69	64	61	53	50	47	38	36	35	24	23	23	17
3	77	69	62	57	68	61	56	52	47	44	41	34	32	30	22	21	20	15
4	71	61	54	49	63	55	49	44	42	38	35	31	28	26	20	19	18	14
5	65	55	47	42	58	49	43	38	38	34	31	28	25	23	19	17	16	12
6	60	49	42	37	53	44	38	33	35	30	27	26	23	21	17	16	15	11
7	56	45	37	32	49	40	34	29	31	27	24	23	21	19	16	14	13	10
8	52	40	33	29	46	36	30	26	29	24	21	21	19	17	15	13	12	9
9	48	37	30	26	43	33	27	23	26	22	19	20	17	15	14	12	11	9
10	45	34	27	23	40	31	25	21	24	20	17	18	16	14	13	11	10	8

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	1.5
10°-20°	639.2	3.9
20°-30°	800.2	4.9
30°-40°	739.2	4.5
40°-50°	496.7	3.0
50°-60°	256.6	1.6
60°-70°	80.3	0.5
70°-80°	5.1	0.0
80°-90°	4.8	0.0
90°-100°	944.3	5.8
100°-110°	2543.8	15.6
110°-120°	2669.6	16.4
120°-130°	2166.3	13.3
130°-140°	1699.0	10.4
140°-150°	1304.4	8.0
150°-160°	937.9	5.8
160°-170°	573.0	3.5
170°-180°	193.2	1.2
0°-30°	1689.4	10.4
0°-40°	2428.6	14.9
0°-60°	3181.8	19.5
0°-90°	3272.1	20.1
90°-120°	6157.8	37.8
90°-150°	11327.5	69.5
90°-180°	13032.0	79.9
0°-180°	16303.7	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	15	31	33	33	10
95°	144	514	1548	792	548	150
105°	471	732	2813	4209	3950	495
115°	831	1017	2343	4526	5120	817
125°	1134	1302	2104	3555	4184	1013
135°	1366	1524	2044	2868	3248	1054
145°	1579	1702	2019	2452	2633	990
155°	1792	1858	2001	2200	2271	825
165°	1944	1967	2008	2088	2098	548
175°	2021	2019	2011	2039	2034	192
180°	2019	2019	2019	2019	2019	

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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	3.0	6.2	6.7	6.7
90°	5.1	15.2	30.9	33.4	33.4
92.5°	62.7	221.7	438.2	210.9	146.6
95°	144.0	513.6	1548.1	791.6	547.7
97.5°	229.9	587.9	2428.0	2028.4	1529.6
100°	295.7	617.6	2707.8	2833.2	2350.4
102.5°	359.5	659.2	2800.4	3435.8	3039.6
105°	470.6	732.1	2813.3	4208.9	3949.9
107.5°	575.5	808.8	2693.4	4606.1	4673.0
110°	645.5	866.7	2584.4	4729.5	4973.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	719.5	924.7	2479.5	4702.2	5103.0
115°	830.6	1016.7	2342.7	4526.5	5119.9
117.5°	931.9	1106.4	2236.7	4246.2	4907.0
120°	997.8	1166.2	2183.2	4045.0	4723.9
122.5°	1055.4	1221.8	2144.2	3839.3	4516.1
125°	1134.0	1302.5	2103.5	3555.3	4183.9
127.5°	1209.7	1375.6	2077.8	3304.8	3866.1
130°	1254.9	1420.9	2067.5	3161.3	3654.2
132.5°	1300.2	1464.1	2057.2	3034.9	3487.5
135°	1365.5	1523.9	2044.4	2868.2	3247.9
137.5°	1427.7	1579.6	2037.7	2726.7	3038.5
140°	1470.9	1616.8	2031.5	2639.7	2921.3
142.5°	1516.2	1652.0	2027.4	2558.4	2795.8
145°	1578.9	1702.1	2018.7	2452.2	2633.3
147.5°	1646.8	1753.9	2009.9	2362.9	2505.2
150°	1692.1	1785.1	2005.8	2306.8	2425.0
152.5°	1733.2	1814.2	2003.7	2261.0	2357.1
155°	1792.4	1857.7	2000.7	2200.3	2270.7
157.5°	1844.3	1895.1	2001.2	2157.6	2204.8
160°	1877.2	1920.0	2003.2	2132.6	2167.8
162.5°	1906.0	1940.7	2005.3	2111.8	2137.0
165°	1944.1	1966.7	2008.4	2088.3	2098.4
167.5°	1974.9	1988.0	2010.9	2070.2	2074.2
170°	1995.5	2000.5	2010.9	2059.8	2059.8
172.5°	2007.9	2008.9	2013.0	2049.5	2049.5
175°	2021.2	2018.7	2010.9	2039.1	2034.1
177.5°	2026.9	2022.9	2012.5	2028.9	2024.8
180°	2018.7	2018.7	2018.7	2018.7	2018.7

(END OF REPORT)