

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: P518839

Luminaire Tested: **SQ4-BB-125U-100D-930-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518839
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-100D-930-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

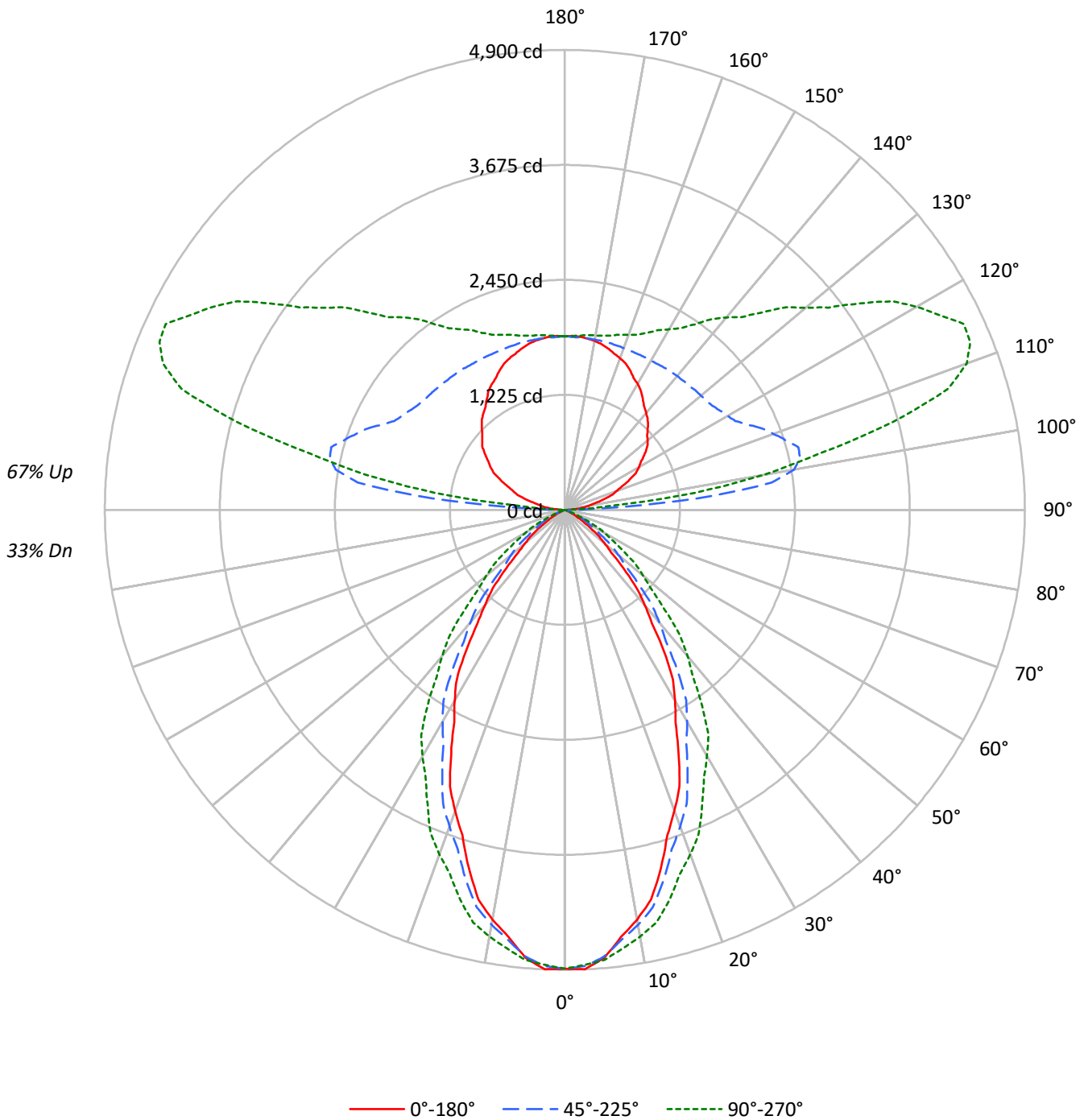
Lumens per Lamp: N/A
Luminaire Lumens: 17770.9 lumens
Efficiency: N/A
Efficacy: 88.3 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 201.2
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	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40	33
1	95	91	88	85	86	83	80	77	66	64	63	51	50	49	37	37	36	30
2	88	81	76	71	79	74	69	65	59	56	54	46	45	43	34	33	32	27
3	81	72	66	61	73	66	60	56	54	50	47	42	40	38	32	30	29	24
4	74	65	58	53	67	59	53	49	48	44	41	38	36	33	29	27	26	22
5	69	58	51	46	62	53	47	42	44	39	36	35	32	30	27	25	24	20
6	64	53	45	40	58	48	42	38	40	35	32	32	29	27	25	23	21	18
7	59	48	41	36	53	44	38	33	37	32	29	30	26	24	23	21	20	17
8	55	44	37	32	50	40	34	30	34	29	26	27	24	22	21	19	18	15
9	51	40	33	29	47	37	31	27	31	27	23	25	22	20	20	18	16	14
10	48	37	30	26	44	34	28	24	29	24	21	24	20	18	19	17	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15035	15035	15035
5°	14793	14756	14866
10°	13841	14026	14417
15°	12583	12982	13705
20°	11170	11750	12780
25°	9727	10498	11742
30°	8332	9247	10759
35°	6908	7850	9572
40°	5308	6276	8156
45°	3837	4752	6563
50°	2614	3542	5205
55°	1699	2562	4045
60°	975	1804	2924
65°	258	1102	1480
70°	128	340	425
75°	56	29	0
80°	43	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	446.1	2.5
10°-20°	1140.9	6.4
20°-30°	1428.3	8.0
30°-40°	1319.3	7.4
40°-50°	886.5	5.0
50°-60°	457.9	2.6
60°-70°	143.4	0.8
70°-80°	9.1	0.1
80°-90°	4.5	0.0
90°-100°	864.9	4.9
100°-110°	2329.7	13.1
110°-120°	2444.9	13.8
120°-130°	1984.0	11.2
130°-140°	1556.0	8.8
140°-150°	1194.6	6.7
150°-160°	858.9	4.8
160°-170°	524.8	3.0
170°-180°	177.0	1.0
0°-30°	3015.4	17.0
0°-40°	4334.7	24.4
0°-60°	5679.1	32.0
0°-90°	5836.1	32.8
90°-120°	5639.5	31.7
90°-150°	10374.1	58.4
90°-180°	11935.0	67.2
0°-180°	17770.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4889	4889	4889	4889	4889	
5°	4792	4743	4780	4797	4815	444
15°	3952	3938	4077	4214	4304	1101
25°	2866	2890	3094	3305	3460	1314
35°	1840	1886	2091	2337	2550	1140
45°	882	935	1093	1305	1509	693
55°	317	370	478	613	754	296
65°	36	68	151	183	203	60
75°	5	5	2	0	0	7
85°	0	0	0	0	0	1
90°	5	14	28	31	31	9
95°	132	470	1418	725	502	138
105°	431	670	2576	3855	3617	453
115°	761	931	2146	4146	4689	749
125°	1039	1193	1926	3256	3832	927
135°	1251	1396	1872	2627	2974	965
145°	1446	1559	1849	2246	2412	907
155°	1642	1701	1832	2015	2080	756
165°	1780	1801	1839	1912	1922	502
175°	1851	1849	1842	1868	1863	176
180°	1849	1849	1849	1849	1849	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4888.7	4888.7	4888.7	4888.7	4888.7
2.5°	4900.0	4853.8	4866.0	4865.7	4852.7
5°	4791.7	4743.1	4779.9	4796.9	4815.4
7.5°	4589.3	4551.3	4621.9	4674.8	4713.2
10°	4432.2	4399.8	4491.3	4563.5	4616.7
12.5°	4250.6	4225.6	4336.2	4435.2	4503.2
15°	3952.1	3938.2	4077.4	4214.3	4304.5
17.5°	3632.3	3631.9	3790.8	3960.7	4069.4
20°	3412.9	3419.8	3590.2	3777.6	3904.8
22.5°	3193.4	3209.6	3391.6	3586.9	3732.6
25°	2866.5	2889.6	3093.6	3305.2	3460.2
27.5°	2552.4	2586.2	2800.8	3020.7	3209.5
30°	2346.2	2385.5	2604.0	2835.4	3029.7
32.5°	2143.7	2190.4	2403.4	2648.2	2846.2
35°	1840.1	1886.3	2090.8	2336.8	2549.6
37.5°	1526.4	1571.8	1771.5	2013.7	2243.5
40°	1322.1	1373.0	1563.3	1798.1	2031.6
42.5°	1136.7	1187.5	1366.6	1597.2	1817.8
45°	882.2	935.4	1092.7	1305.4	1508.9
47.5°	671.2	729.0	867.0	1059.5	1245.0
50°	546.3	604.2	740.3	909.9	1087.9
52.5°	446.1	502.0	624.9	784.7	947.9
55°	316.9	370.1	477.8	613.4	754.5
57.5°	219.0	264.8	361.4	474.6	585.1
60°	158.5	202.4	293.3	385.2	475.4
62.5°	105.5	145.7	234.6	305.1	365.6
65°	35.5	67.9	151.4	182.6	203.4
67.5°	18.0	21.7	79.5	83.9	90.8
70°	14.2	14.2	37.8	40.4	47.3
72.5°	10.4	10.4	15.1	19.4	20.8
75°	4.7	4.7	2.4	0.0	0.0
77.5°	2.4	2.4	1.9	0.0	0.0
80°	2.4	2.4	0.0	0.0	0.0
82.5°	0.5	0.5	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.9	2.8	5.7	6.1	6.1
90°	4.7	13.9	28.3	30.6	30.6
92.5°	57.5	203.0	401.3	193.2	134.2
95°	131.9	470.4	1417.8	725.0	501.6
97.5°	210.5	538.5	2223.7	1857.7	1400.8
100°	270.8	565.6	2479.9	2594.7	2152.5
102.5°	329.2	603.7	2564.7	3146.6	2783.7
105°	431.0	670.5	2576.5	3854.6	3617.4
107.5°	527.1	740.8	2466.7	4218.4	4279.7
110°	591.1	793.8	2366.9	4331.4	4554.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	659.0	846.9	2270.8	4306.4	4673.4
115°	760.7	931.1	2145.5	4145.5	4689.0
117.5°	853.5	1013.3	2048.5	3888.8	4494.0
120°	913.8	1068.1	1999.5	3704.5	4326.3
122.5°	966.5	1119.0	1963.7	3516.1	4136.0
125°	1038.6	1192.9	1926.5	3256.0	3831.7
127.5°	1107.8	1259.8	1902.9	3026.7	3540.6
130°	1149.3	1301.3	1893.5	2895.2	3346.6
132.5°	1190.7	1340.9	1884.1	2779.5	3194.0
135°	1250.6	1395.6	1872.3	2626.8	2974.5
137.5°	1307.5	1446.6	1866.2	2497.2	2782.8
140°	1347.1	1480.7	1860.5	2417.5	2675.4
142.5°	1388.6	1512.9	1856.7	2343.1	2560.4
145°	1446.0	1558.9	1848.7	2245.8	2411.6
147.5°	1508.2	1606.3	1840.7	2164.0	2294.3
150°	1549.6	1634.8	1837.0	2112.6	2220.8
152.5°	1587.3	1661.5	1835.1	2070.7	2158.7
155°	1641.5	1701.4	1832.3	2015.1	2079.5
157.5°	1689.1	1735.6	1832.7	1976.0	2019.2
160°	1719.2	1758.4	1834.6	1953.1	1985.3
162.5°	1745.6	1777.4	1836.5	1934.0	1957.1
165°	1780.4	1801.2	1839.3	1912.5	1921.7
167.5°	1808.7	1820.7	1841.7	1895.9	1899.6
170°	1827.5	1832.2	1841.7	1886.4	1886.4
172.5°	1838.9	1839.8	1843.6	1877.0	1877.0
175°	1851.1	1848.8	1841.7	1867.5	1862.9
177.5°	1856.3	1852.6	1843.1	1858.1	1854.4
180°	1848.7	1848.7	1848.7	1848.7	1848.7

(END OF REPORT)