

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: P518755

Luminaire Tested: **SQ4-BB-100U-125D-830-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518755
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-100U-125D-830-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

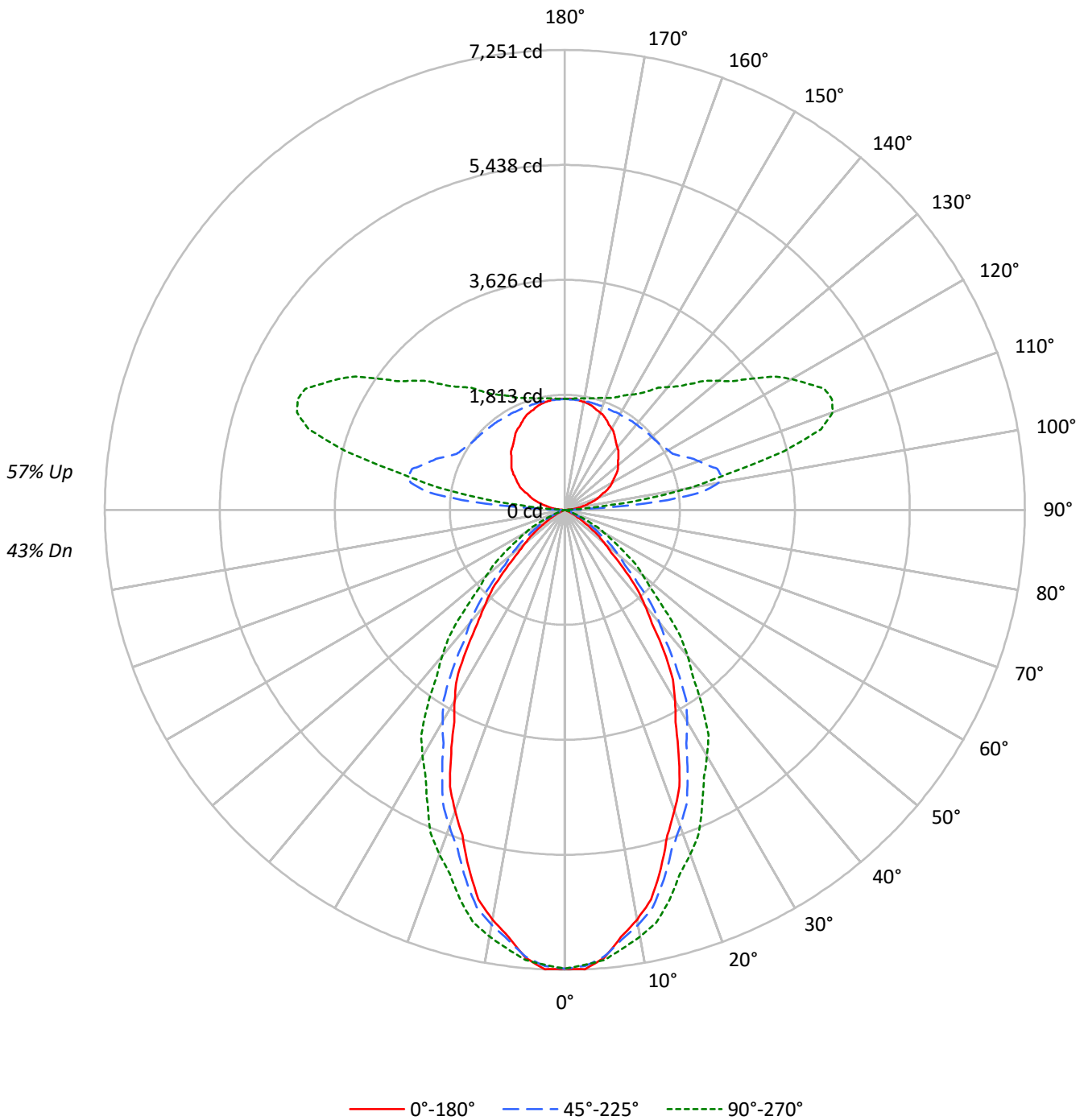
Lumens per Lamp: N/A
Luminaire Lumens: 20006.4 lumens
Efficiency: N/A
Efficacy: 93.1 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 214.8
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	106	106	106	106	96	96	96	96	80	80	80	64	64	64	50	50	50	43
1	98	94	91	88	89	86	84	81	72	70	68	59	57	56	46	46	45	39
2	90	84	79	74	83	77	73	69	65	62	59	53	51	50	43	42	40	36
3	83	75	69	64	76	70	64	60	59	55	52	49	46	44	39	38	36	32
4	77	68	61	56	71	63	57	52	53	49	45	44	41	39	36	34	33	29
5	71	61	54	49	66	57	51	46	49	44	40	41	38	35	34	31	30	26
6	66	56	48	43	61	52	45	41	44	40	36	38	34	31	31	29	27	24
7	62	51	44	39	57	47	41	37	41	36	32	35	31	29	29	27	25	22
8	58	46	39	35	53	43	37	33	38	33	29	32	29	26	27	24	23	20
9	54	43	36	31	50	40	34	30	35	30	27	30	26	24	25	23	21	19
10	51	40	33	29	47	37	31	27	32	28	25	28	24	22	24	21	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	22248	22248	22248
5°	21890	21836	21998
10°	20482	20755	21335
15°	18620	19211	20281
20°	16528	17388	18911
25°	14394	15534	17375
30°	12329	13684	15921
35°	10223	11616	14165
40°	7854	9287	12070
45°	5678	7033	9711
50°	3868	5241	7703
55°	2515	3791	5986
60°	1442	2669	4327
65°	382	1630	2190
70°	189	504	629
75°	83	42	0
80°	62	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	660.2	3.3
10°-20°	1688.4	8.4
20°-30°	2113.7	10.6
30°-40°	1952.3	9.8
40°-50°	1311.9	6.6
50°-60°	677.6	3.4
60°-70°	212.2	1.1
70°-80°	13.4	0.1
80°-90°	3.9	0.0
90°-100°	819.7	4.1
100°-110°	2262.9	11.3
110°-120°	2333.8	11.7
120°-130°	1875.4	9.4
130°-140°	1473.9	7.4
140°-150°	1130.4	5.7
150°-160°	812.4	4.1
160°-170°	496.8	2.5
170°-180°	167.5	0.8
0°-30°	4462.2	22.3
0°-40°	6414.5	32.1
0°-60°	8404.0	42.0
0°-90°	8633.5	43.2
90°-120°	5416.4	27.1
90°-150°	9896.1	49.5
90°-180°	11373.0	56.8
0°-180°	20006.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7234	7234	7234	7234	7234	
5°	7091	7019	7073	7098	7126	657
15°	5848	5828	6034	6236	6370	1629
25°	4242	4276	4578	4891	5120	1945
35°	2723	2791	3094	3458	3773	1687
45°	1306	1384	1617	1932	2233	1025
55°	469	548	707	908	1116	438
65°	52	100	224	270	301	89
75°	7	7	4	0	0	10
85°	0	0	0	0	0	1
90°	6	11	22	25	28	9
95°	120	444	1487	611	398	129
105°	403	622	2490	3801	3579	429
115°	722	873	2005	3970	4514	710
125°	991	1128	1818	3076	3610	882
135°	1193	1322	1767	2491	2809	923
145°	1384	1479	1745	2121	2282	866
155°	1560	1612	1731	1903	1963	719
165°	1689	1711	1739	1807	1820	476
175°	1750	1753	1742	1767	1762	166
180°	1750	1750	1750	1750	1750	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7234.3	7234.3	7234.3	7234.3	7234.3
2.5°	7251.1	7182.6	7200.7	7200.2	7181.1
5°	7090.8	7018.9	7073.3	7098.4	7125.8
7.5°	6791.2	6735.1	6839.5	6917.8	6974.6
10°	6558.8	6510.9	6646.3	6753.1	6831.8
12.5°	6290.0	6253.1	6416.7	6563.2	6663.8
15°	5848.3	5827.8	6033.8	6236.3	6369.8
17.5°	5375.1	5374.5	5609.6	5861.1	6021.9
20°	5050.3	5060.6	5312.8	5590.1	5778.3
22.5°	4725.6	4749.5	5018.8	5307.9	5523.5
25°	4241.9	4276.1	4577.9	4891.1	5120.3
27.5°	3777.1	3827.0	4144.6	4470.1	4749.4
30°	3471.9	3530.1	3853.4	4195.9	4483.4
32.5°	3172.3	3241.4	3556.6	3918.8	4211.8
35°	2722.9	2791.4	3093.9	3458.1	3772.9
37.5°	2258.8	2325.9	2621.4	2979.8	3320.0
40°	1956.4	2031.7	2313.4	2660.8	3006.4
42.5°	1682.0	1757.3	2022.2	2363.5	2690.0
45°	1305.5	1384.2	1617.0	1931.8	2232.9
47.5°	993.3	1078.8	1283.1	1567.9	1842.3
50°	808.5	894.0	1095.5	1346.4	1610.0
52.5°	660.1	742.9	924.7	1161.2	1402.8
55°	469.0	547.7	707.0	907.7	1116.5
57.5°	324.1	391.8	534.8	702.3	865.9
60°	234.5	299.5	434.0	570.0	703.5
62.5°	156.1	215.6	347.2	451.4	541.1
65°	52.5	100.4	224.0	270.2	301.0
67.5°	26.6	32.1	117.6	124.1	134.4
70°	21.0	21.0	56.0	59.7	70.0
72.5°	15.4	15.4	22.4	28.7	30.8
75°	7.0	7.0	3.5	0.0	0.0
77.5°	3.5	3.5	2.8	0.0	0.0
80°	3.5	3.5	0.0	0.0	0.0
82.5°	0.7	0.7	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	1.1	2.2	4.5	5.1	5.6
90°	5.6	11.1	22.4	25.3	28.0
92.5°	50.4	209.2	374.2	136.5	106.4
95°	120.4	443.5	1487.1	611.3	397.7
97.5°	199.4	496.8	2202.9	1696.0	1228.3
100°	257.7	528.7	2467.3	2484.7	2019.2
102.5°	313.7	565.0	2518.8	3070.0	2628.6
105°	403.3	622.3	2489.7	3800.9	3579.1
107.5°	498.5	693.5	2350.8	4153.4	4234.5
110°	565.7	741.0	2243.3	4229.2	4492.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	626.2	794.9	2142.4	4169.3	4557.1
115°	722.5	873.2	2005.2	3969.6	4514.5
117.5°	806.6	956.6	1915.0	3688.4	4308.4
120°	862.6	1010.4	1879.2	3498.1	4122.4
122.5°	916.3	1057.6	1850.1	3320.4	3911.8
125°	991.4	1128.3	1817.6	3076.0	3609.9
127.5°	1055.3	1192.2	1798.5	2869.3	3329.9
130°	1097.8	1234.7	1789.6	2742.9	3161.8
132.5°	1138.2	1268.5	1780.6	2636.7	3016.2
135°	1193.0	1321.7	1767.2	2491.3	2809.0
137.5°	1254.7	1371.9	1760.4	2369.3	2640.4
140°	1288.3	1403.3	1756.0	2287.9	2526.1
142.5°	1326.4	1432.6	1751.5	2215.5	2425.3
145°	1383.5	1479.3	1744.8	2120.9	2282.5
147.5°	1438.4	1522.2	1738.6	2041.1	2166.5
150°	1478.7	1547.2	1736.4	1993.5	2094.8
152.5°	1510.1	1574.1	1734.1	1952.8	2036.6
155°	1559.9	1611.9	1730.8	1903.0	1963.2
157.5°	1605.8	1645.8	1731.3	1866.7	1907.8
160°	1632.7	1668.3	1733.6	1846.3	1876.4
162.5°	1655.1	1686.4	1735.8	1828.2	1851.7
165°	1688.7	1710.7	1739.2	1806.7	1820.4
167.5°	1714.5	1727.7	1742.0	1793.6	1798.0
170°	1728.0	1738.9	1742.0	1786.8	1786.8
172.5°	1739.2	1745.7	1742.0	1777.8	1775.6
175°	1750.4	1753.1	1742.0	1767.0	1761.6
177.5°	1754.8	1752.6	1741.4	1757.0	1752.6
180°	1750.4	1750.4	1750.4	1750.4	1750.4

(END OF REPORT)