

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: P518707

Luminaire Tested: **SQ4-BB-100U-075D-830-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518707
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-075D-830-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

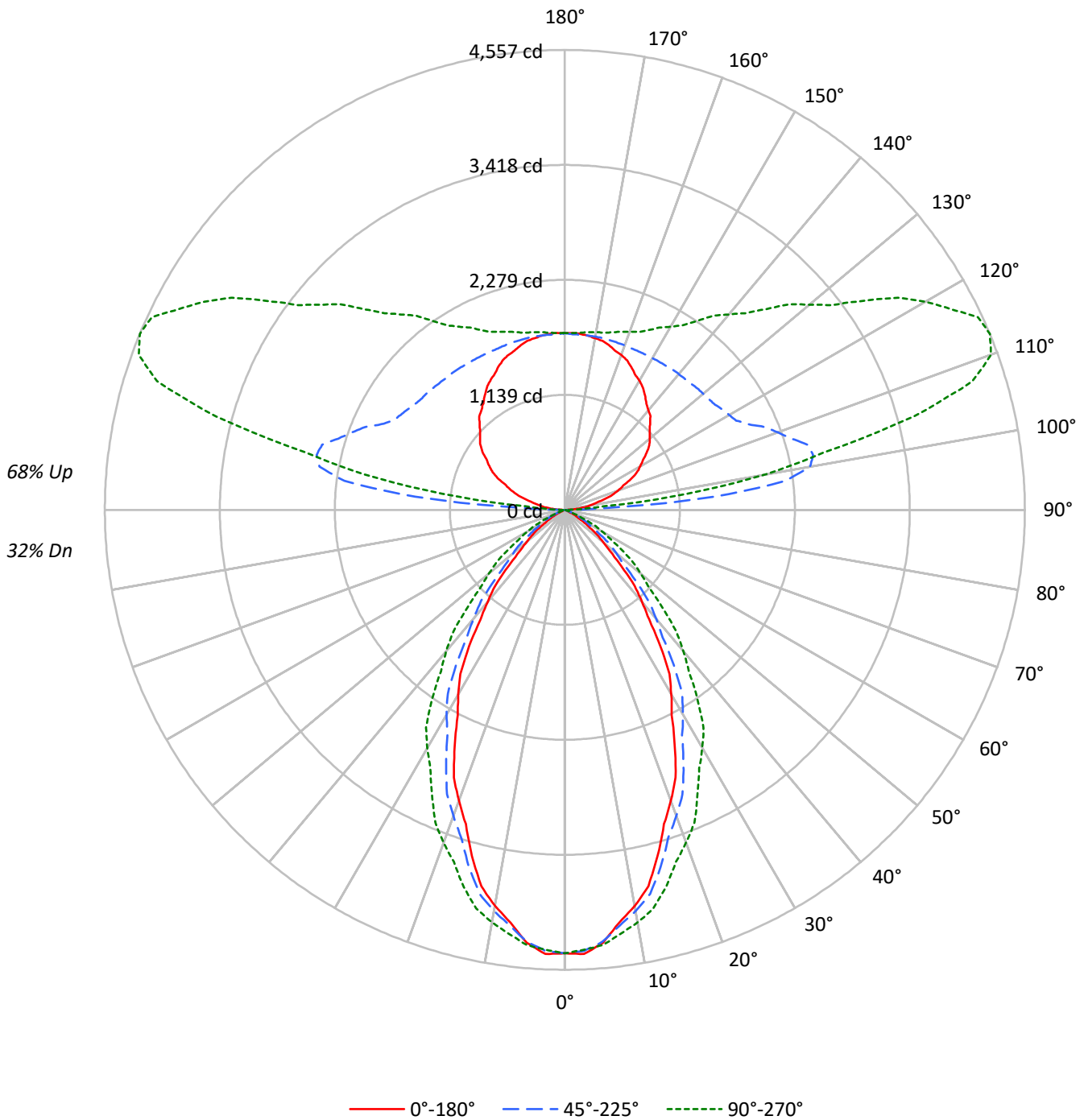
Lumens per Lamp: N/A
Luminaire Lumens: 16618.4 lumens
Efficiency: N/A
Efficacy: 108.3 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 153.4
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	103	103	103	103	92	92	92	92	73	73	73	55	55	55	39	39	39	32
1	95	91	88	85	85	82	79	77	66	64	62	50	49	48	36	36	35	29
2	87	81	75	71	78	73	69	65	59	56	53	46	44	42	33	32	31	26
3	80	72	66	60	72	65	60	56	53	49	46	41	39	37	31	29	28	23
4	74	64	57	52	67	59	53	48	48	44	40	38	35	33	28	27	25	21
5	68	58	51	45	62	53	47	42	43	39	36	34	31	29	26	24	23	19
6	63	52	45	40	57	48	42	37	39	35	32	31	28	26	24	22	21	18
7	59	48	40	35	53	44	37	33	36	32	28	29	26	24	22	20	19	16
8	55	43	36	32	49	40	34	30	33	29	25	27	24	21	21	19	17	15
9	51	40	33	28	46	37	31	27	31	26	23	25	22	19	19	17	16	14
10	48	37	30	26	43	34	28	24	28	24	21	23	20	18	18	16	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13514	13514	13514
5°	13296	13264	13362
10°	12441	12607	12959
15°	11310	11669	12319
20°	10040	10562	11487
25°	8743	9436	10554
30°	7489	8312	9671
35°	6209	7056	8604
40°	4771	5641	7331
45°	3449	4272	5899
50°	2350	3184	4679
55°	1528	2302	3636
60°	876	1621	2628
65°	232	990	1330
70°	115	306	382
75°	51	25	0
80°	37	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	401.0	2.4
10°-20°	1025.5	6.2
20°-30°	1283.9	7.7
30°-40°	1185.9	7.1
40°-50°	796.8	4.8
50°-60°	411.6	2.5
60°-70°	128.9	0.8
70°-80°	8.2	0.0
80°-90°	3.8	0.0
90°-100°	819.7	4.9
100°-110°	2262.9	13.6
110°-120°	2333.8	14.0
120°-130°	1875.4	11.3
130°-140°	1473.9	8.9
140°-150°	1130.4	6.8
150°-160°	812.4	4.9
160°-170°	496.8	3.0
170°-180°	167.5	1.0
0°-30°	2710.4	16.3
0°-40°	3896.3	23.4
0°-60°	5104.7	30.7
0°-90°	5245.6	31.6
90°-120°	5416.4	32.6
90°-150°	9896.1	59.5
90°-180°	11373.0	68.4
0°-180°	16618.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4394	4394	4394	4394	4394	
5°	4307	4263	4296	4312	4328	399
15°	3552	3540	3665	3788	3869	989
25°	2577	2597	2781	2971	3110	1181
35°	1654	1696	1879	2100	2292	1025
45°	793	841	982	1173	1356	623
55°	285	333	429	551	678	266
65°	32	61	136	164	183	54
75°	4	4	2	0	0	6
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°	4394.2	4394.2	4394.2	4394.2	4394.2
2.5°	4404.4	4362.8	4373.8	4373.5	4361.9
5°	4307.0	4263.4	4296.4	4311.7	4328.3
7.5°	4125.1	4091.0	4154.4	4202.0	4236.5
10°	3983.9	3954.8	4037.1	4101.9	4149.7
12.5°	3820.6	3798.2	3897.6	3986.6	4047.7
15°	3552.4	3539.9	3665.0	3788.0	3869.1
17.5°	3264.9	3264.5	3407.4	3560.1	3657.8
20°	3067.7	3073.9	3227.1	3395.5	3509.8
22.5°	2870.4	2884.9	3048.5	3224.1	3355.1
25°	2576.6	2597.4	2780.7	2970.9	3110.2
27.5°	2294.3	2324.6	2517.5	2715.2	2884.8
30°	2108.9	2144.2	2340.6	2548.7	2723.3
32.5°	1926.9	1968.9	2160.3	2380.4	2558.3
35°	1653.9	1695.5	1879.3	2100.5	2291.7
37.5°	1372.0	1412.8	1592.3	1810.0	2016.6
40°	1188.4	1234.1	1405.2	1616.2	1826.1
42.5°	1021.7	1067.4	1228.3	1435.7	1634.0
45°	793.0	840.8	982.2	1173.4	1356.3
47.5°	603.3	655.3	779.4	952.4	1119.1
50°	491.1	543.0	665.4	817.9	977.9
52.5°	400.9	451.2	561.7	705.3	852.1
55°	284.9	332.7	429.4	551.4	678.2
57.5°	196.9	238.0	324.8	426.6	525.9
60°	142.4	181.9	263.6	346.2	427.3
62.5°	94.8	131.0	210.9	274.2	328.7
65°	31.9	61.0	136.1	164.1	182.8
67.5°	16.2	19.5	71.4	75.4	81.6
70°	12.8	12.8	34.0	36.3	42.5
72.5°	9.4	9.4	13.6	17.5	18.7
75°	4.3	4.3	2.1	0.0	0.0
77.5°	2.1	2.1	1.7	0.0	0.0
80°	2.1	2.1	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°	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)