

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: P518723

Luminaire Tested: **SQ4-BB-100U-075D-935-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518723
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-935-1D-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: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

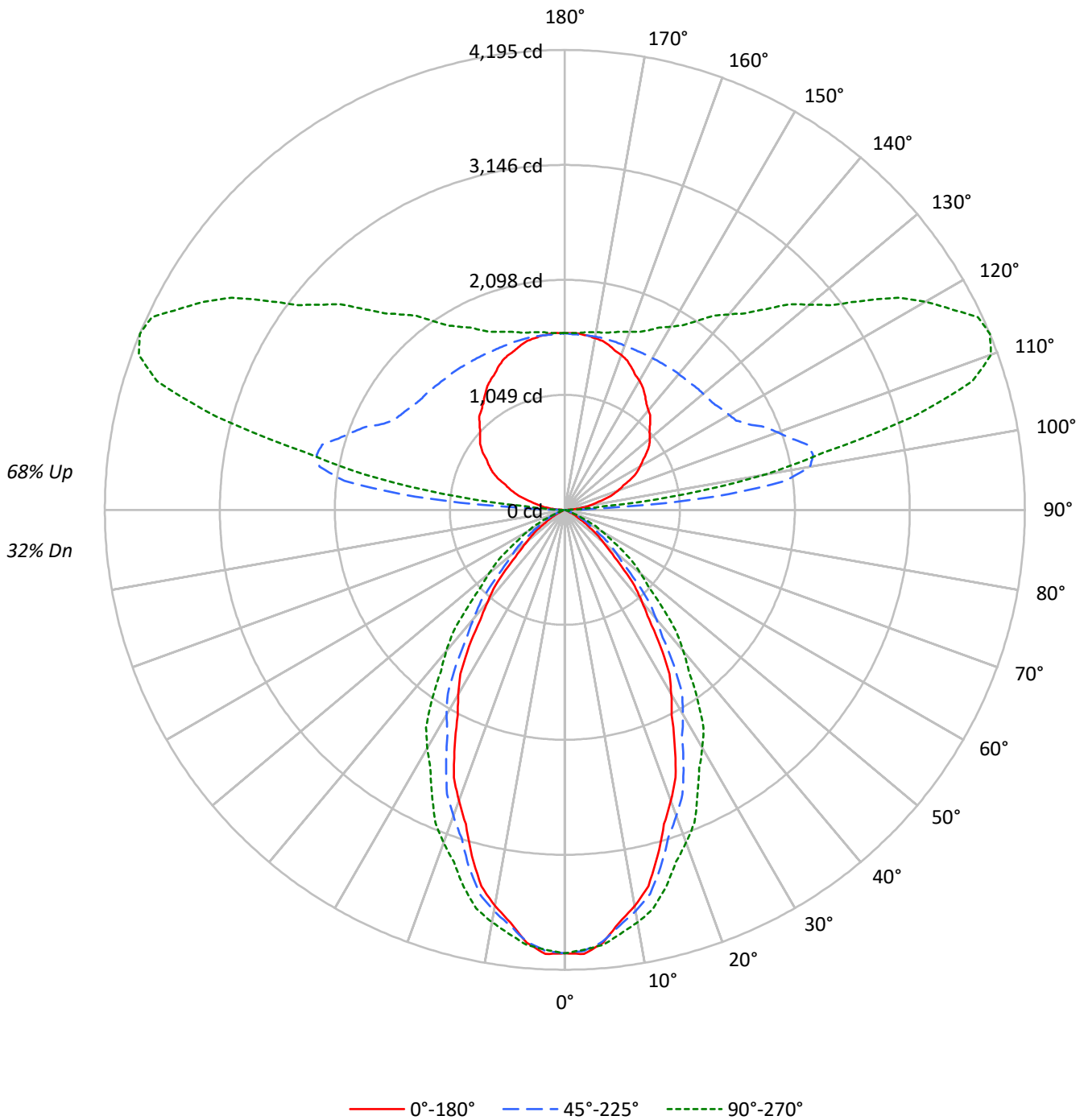
Lumens per Lamp: N/A
Luminaire Lumens: 15298.0 lumens
Efficiency: N/A
Efficacy: 99.7 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

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°	12440	12440	12440
5°	12240	12210	12300
10°	11453	11605	11929
15°	10412	10742	11340
20°	9242	9722	10574
25°	8048	8686	9715
30°	6894	7651	8902
35°	5716	6495	7920
40°	4392	5193	6749
45°	3175	3932	5430
50°	2163	2930	4307
55°	1406	2120	3347
60°	806	1493	2420
65°	214	911	1225
70°	105	281	352
75°	46	24	0
80°	35	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	369.2	2.4
10°-20°	944.0	6.2
20°-30°	1181.8	7.7
30°-40°	1091.6	7.1
40°-50°	733.5	4.8
50°-60°	378.9	2.5
60°-70°	118.7	0.8
70°-80°	7.5	0.0
80°-90°	3.5	0.0
90°-100°	754.6	4.9
100°-110°	2083.1	13.6
110°-120°	2148.4	14.0
120°-130°	1726.4	11.3
130°-140°	1356.8	8.9
140°-150°	1040.6	6.8
150°-160°	747.9	4.9
160°-170°	457.3	3.0
170°-180°	154.2	1.0
0°-30°	2495.0	16.3
0°-40°	3586.7	23.4
0°-60°	4699.1	30.7
0°-90°	4828.7	31.6
90°-120°	4986.1	32.6
90°-150°	9109.9	59.5
90°-180°	10469.0	68.4
0°-180°	15298.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4045	4045	4045	4045	4045	
5°	3965	3925	3955	3969	3984	368
15°	3270	3259	3374	3487	3562	911
25°	2372	2391	2560	2735	2863	1087
35°	1522	1561	1730	1934	2110	943
45°	730	774	904	1080	1248	573
55°	262	306	395	508	624	245
65°	29	56	125	151	168	50
75°	4	4	2	0	0	6
85°	0	0	0	0	0	1
90°	5	10	21	23	26	8
95°	111	408	1369	563	366	119
105°	371	573	2292	3499	3295	395
115°	665	804	1846	3654	4156	654
125°	913	1039	1673	2832	3323	812
135°	1098	1217	1627	2293	2586	850
145°	1274	1362	1606	1952	2101	797
155°	1436	1484	1593	1752	1807	662
165°	1555	1575	1601	1663	1676	438
175°	1611	1614	1604	1627	1622	153
180°	1611	1611	1611	1611	1611	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4045.1	4045.1	4045.1	4045.1	4045.1
2.5°	4054.4	4016.2	4026.3	4026.0	4015.3
5°	3964.8	3924.6	3955.0	3969.1	3984.4
7.5°	3797.3	3765.9	3824.3	3868.1	3899.8
10°	3667.4	3640.6	3716.3	3776.0	3820.0
12.5°	3517.1	3496.4	3587.9	3669.8	3726.1
15°	3270.1	3258.6	3373.8	3487.1	3561.7
17.5°	3005.5	3005.1	3136.6	3277.2	3367.2
20°	2823.9	2829.6	2970.7	3125.7	3231.0
22.5°	2642.3	2655.7	2806.3	2967.9	3088.5
25°	2371.8	2391.0	2559.7	2734.8	2863.0
27.5°	2112.0	2139.9	2317.4	2499.5	2655.6
30°	1941.3	1973.8	2154.6	2346.1	2506.9
32.5°	1773.8	1812.4	1988.7	2191.2	2355.0
35°	1522.5	1560.8	1730.0	1933.6	2109.6
37.5°	1263.0	1300.5	1465.8	1666.2	1856.4
40°	1093.9	1136.0	1293.6	1487.8	1681.0
42.5°	940.5	982.6	1130.7	1321.6	1504.1
45°	729.9	774.0	904.1	1080.2	1248.5
47.5°	555.4	603.2	717.4	876.7	1030.1
50°	452.1	499.9	612.5	752.9	900.2
52.5°	369.1	415.4	517.0	649.3	784.4
55°	262.2	306.2	395.3	507.6	624.3
57.5°	181.2	219.1	299.0	392.7	484.2
60°	131.1	167.5	242.7	318.7	393.4
62.5°	87.3	120.6	194.1	252.4	302.5
65°	29.4	56.1	125.2	151.1	168.3
67.5°	14.9	17.9	65.8	69.4	75.1
70°	11.7	11.7	31.3	33.4	39.1
72.5°	8.6	8.6	12.5	16.1	17.2
75°	3.9	3.9	2.0	0.0	0.0
77.5°	2.0	2.0	1.6	0.0	0.0
80°	2.0	2.0	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°	1.0	2.0	4.1	4.7	5.2
90°	5.2	10.2	20.6	23.3	25.8
92.5°	46.4	192.6	344.4	125.7	98.0
95°	110.9	408.3	1368.9	562.7	366.1
97.5°	183.6	457.3	2027.9	1561.3	1130.7
100°	237.2	486.7	2271.3	2287.3	1858.8
102.5°	288.7	520.1	2318.7	2826.1	2419.8
105°	371.2	572.9	2291.9	3498.9	3294.7
107.5°	458.9	638.4	2164.0	3823.4	3898.0
110°	520.8	682.1	2065.0	3893.2	4135.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	576.5	731.7	1972.2	3838.1	4195.0
115°	665.1	803.8	1845.9	3654.2	4155.8
117.5°	742.5	880.6	1762.9	3395.4	3966.1
120°	794.0	930.2	1729.9	3220.2	3794.9
122.5°	843.5	973.6	1703.1	3056.5	3601.0
125°	912.6	1038.7	1673.2	2831.6	3323.1
127.5°	971.4	1097.4	1655.6	2641.3	3065.3
130°	1010.6	1136.6	1647.4	2524.9	2910.6
132.5°	1047.7	1167.7	1639.1	2427.2	2776.6
135°	1098.2	1216.7	1626.7	2293.4	2585.8
137.5°	1155.0	1262.9	1620.6	2181.0	2430.6
140°	1185.9	1291.8	1616.4	2106.1	2325.4
142.5°	1221.0	1318.8	1612.3	2039.5	2232.6
145°	1273.6	1361.8	1606.1	1952.4	2101.1
147.5°	1324.1	1401.2	1600.5	1878.9	1994.4
150°	1361.2	1424.2	1598.4	1835.1	1928.4
152.5°	1390.1	1449.1	1596.3	1797.6	1874.8
155°	1436.0	1483.9	1593.2	1751.8	1807.2
157.5°	1478.3	1515.1	1593.7	1718.4	1756.2
160°	1503.0	1535.8	1595.8	1699.6	1727.3
162.5°	1523.6	1552.4	1597.9	1682.9	1704.6
165°	1554.6	1574.7	1601.0	1663.1	1675.7
167.5°	1578.3	1590.4	1603.5	1651.1	1655.1
170°	1590.7	1600.7	1603.5	1644.8	1644.8
172.5°	1601.0	1607.0	1603.5	1636.5	1634.5
175°	1611.3	1613.8	1603.5	1626.6	1621.6
177.5°	1615.4	1613.4	1603.0	1617.4	1613.3
180°	1611.3	1611.3	1611.3	1611.3	1611.3

(END OF REPORT)