

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: P518725

Luminaire Tested: **SQ4-BB-100U-075D-935-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518725
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-6
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

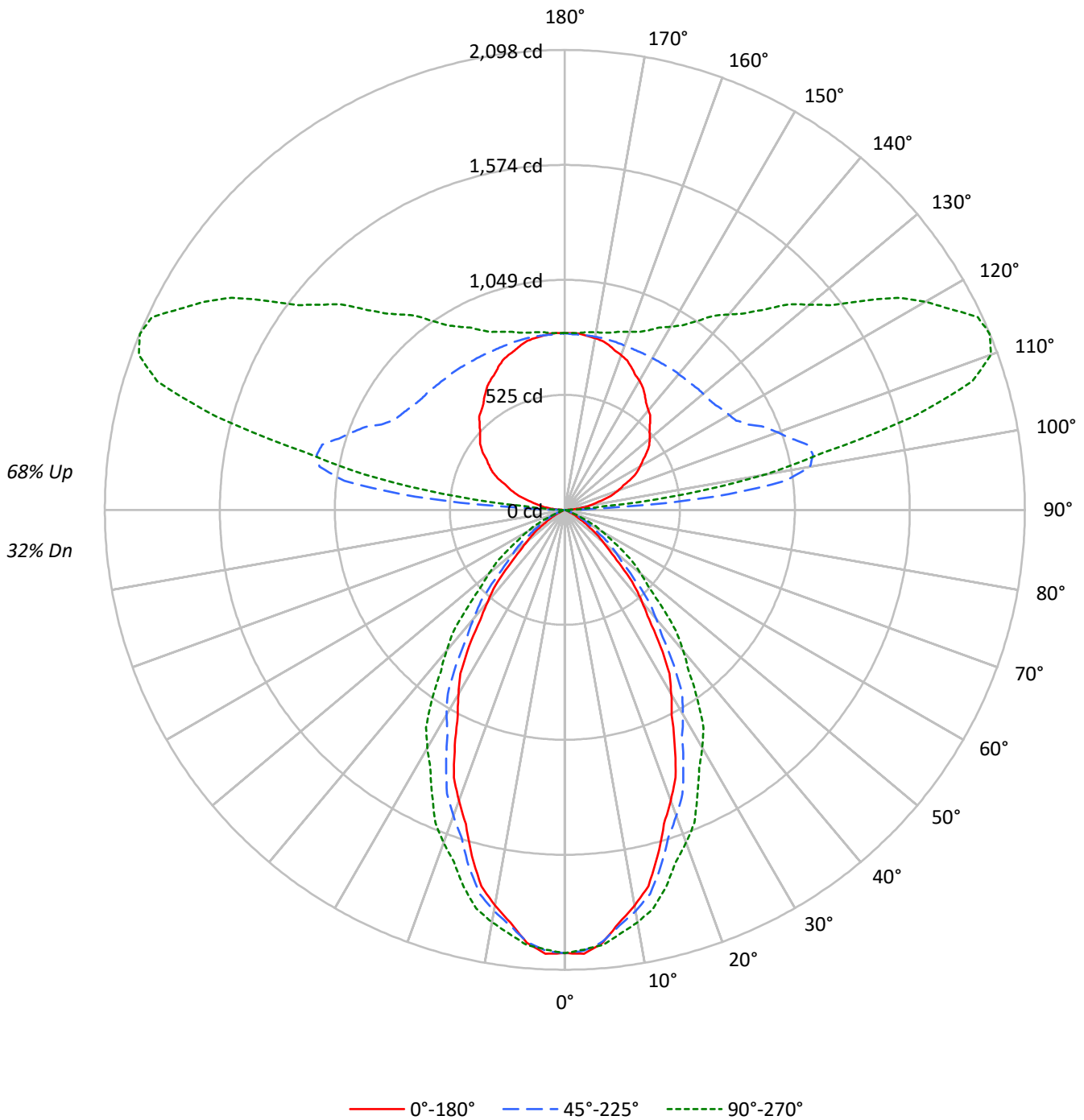
Lumens per Lamp: N/A
Luminaire Lumens: 7649.0 lumens
Efficiency: N/A
Efficacy: 98.1 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 78
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	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°	10411	10742	11340
20°	9242	9722	10574
25°	8048	8686	9715
30°	6894	7651	8902
35°	5716	6495	7920
40°	4392	5193	6749
45°	3175	3933	5431
50°	2163	2931	4307
55°	1406	2120	3347
60°	807	1492	2420
65°	214	911	1224
70°	106	282	352
75°	48	24	0
80°	35	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	184.6	2.4
10°-20°	472.0	6.2
20°-30°	590.9	7.7
30°-40°	545.8	7.1
40°-50°	366.8	4.8
50°-60°	189.4	2.5
60°-70°	59.3	0.8
70°-80°	3.8	0.0
80°-90°	1.7	0.0
90°-100°	377.3	4.9
100°-110°	1041.6	13.6
110°-120°	1074.2	14.0
120°-130°	863.2	11.3
130°-140°	678.4	8.9
140°-150°	520.3	6.8
150°-160°	373.9	4.9
160°-170°	228.7	3.0
170°-180°	77.1	1.0
0°-30°	1247.5	16.3
0°-40°	1793.3	23.4
0°-60°	2349.5	30.7
0°-90°	2414.4	31.6
90°-120°	2493.0	32.6
90°-150°	4554.9	59.5
90°-180°	5235.0	68.4
0°-180°	7649.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2022	2022	2022	2022	2022	
5°	1982	1962	1978	1984	1992	184
15°	1635	1629	1687	1744	1781	455
25°	1186	1196	1280	1367	1432	544
35°	761	780	865	967	1055	472
45°	365	387	452	540	624	287
55°	131	153	198	254	312	122
65°	15	28	63	76	84	25
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	3	5	10	12	13	4
95°	55	204	684	281	183	59
105°	186	286	1146	1750	1647	197
115°	333	402	923	1827	2078	327
125°	456	519	837	1416	1662	406
135°	549	608	813	1147	1293	425
145°	637	681	803	976	1051	399
155°	718	742	797	876	904	331
165°	777	787	800	832	838	219
175°	806	807	802	813	811	77
180°	806	806	806	806	806	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2022.5	2022.5	2022.5	2022.5	2022.5
2.5°	2027.2	2008.1	2013.1	2013.0	2007.7
5°	1982.4	1962.3	1977.5	1984.5	1992.2
7.5°	1898.7	1883.0	1912.2	1934.0	1949.9
10°	1833.7	1820.3	1858.1	1888.0	1910.0
12.5°	1758.5	1748.2	1794.0	1834.9	1863.0
15°	1635.0	1629.3	1686.9	1743.5	1780.8
17.5°	1502.8	1502.6	1568.3	1638.6	1683.6
20°	1412.0	1414.8	1485.3	1562.9	1615.5
22.5°	1321.1	1327.8	1403.1	1484.0	1544.2
25°	1185.9	1195.5	1279.9	1367.4	1431.5
27.5°	1056.0	1069.9	1158.7	1249.7	1327.8
30°	970.7	986.9	1077.3	1173.1	1253.4
32.5°	886.9	906.2	994.3	1095.6	1177.5
35°	761.3	780.4	865.0	966.8	1054.8
37.5°	631.5	650.3	732.9	833.1	928.2
40°	547.0	568.0	646.8	743.9	840.5
42.5°	470.3	491.3	565.4	660.8	752.1
45°	365.0	387.0	452.1	540.1	624.3
47.5°	277.7	301.6	358.7	438.3	515.1
50°	226.0	249.9	306.3	376.4	450.1
52.5°	184.5	207.7	258.5	324.6	392.2
55°	131.1	153.1	197.7	253.8	312.1
57.5°	90.6	109.6	149.5	196.3	242.1
60°	65.6	83.7	121.3	159.4	196.7
62.5°	43.6	60.3	97.1	126.2	151.3
65°	14.7	28.1	62.6	75.5	84.1
67.5°	7.4	9.0	32.9	34.7	37.6
70°	5.9	5.9	15.7	16.7	19.6
72.5°	4.3	4.3	6.3	8.0	8.6
75°	2.0	2.0	1.0	0.0	0.0
77.5°	1.0	1.0	0.8	0.0	0.0
80°	1.0	1.0	0.0	0.0	0.0
82.5°	0.2	0.2	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.5	1.0	2.1	2.3	2.6
90°	2.6	5.1	10.3	11.6	12.9
92.5°	23.2	96.3	172.2	62.8	49.0
95°	55.4	204.2	684.5	281.4	183.0
97.5°	91.8	228.7	1013.9	780.6	565.4
100°	118.6	243.4	1135.6	1143.7	929.4
102.5°	144.4	260.1	1159.3	1413.1	1209.9
105°	185.6	286.4	1145.9	1749.5	1647.4
107.5°	229.4	319.2	1082.0	1911.7	1949.0
110°	260.4	341.0	1032.5	1946.6	2067.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	288.2	365.9	986.1	1919.0	2097.5
115°	332.6	401.9	922.9	1827.1	2077.9
117.5°	371.2	440.3	881.4	1697.7	1983.0
120°	397.0	465.1	864.9	1610.1	1897.4
122.5°	421.8	486.8	851.5	1528.3	1800.5
125°	456.3	519.3	836.6	1415.8	1661.6
127.5°	485.7	548.7	827.8	1320.7	1532.6
130°	505.3	568.3	823.7	1262.5	1455.3
132.5°	523.9	583.9	819.6	1213.6	1388.3
135°	549.1	608.4	813.4	1146.7	1292.9
137.5°	577.5	631.4	810.3	1090.5	1215.3
140°	593.0	645.9	808.2	1053.0	1162.7
142.5°	610.5	659.4	806.2	1019.7	1116.3
145°	636.8	680.9	803.1	976.2	1050.6
147.5°	662.0	700.6	800.2	939.5	997.2
150°	680.6	712.1	799.2	917.6	964.2
152.5°	695.0	724.5	798.2	898.8	937.4
155°	718.0	741.9	796.6	875.9	903.6
157.5°	739.1	757.5	796.9	859.2	878.1
160°	751.5	767.9	797.9	849.8	863.6
162.5°	761.8	776.2	798.9	841.5	852.3
165°	777.3	787.4	800.5	831.6	837.9
167.5°	789.1	795.2	801.8	825.5	827.6
170°	795.3	800.4	801.8	822.4	822.4
172.5°	800.5	803.5	801.8	818.2	817.2
175°	805.6	806.9	801.8	813.3	810.8
177.5°	807.7	806.7	801.5	808.7	806.7
180°	805.6	805.6	805.6	805.6	805.6

(END OF REPORT)