

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: P518712

Luminaire Tested: **SQ4-BB-100U-075D-835-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P518712
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-835-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

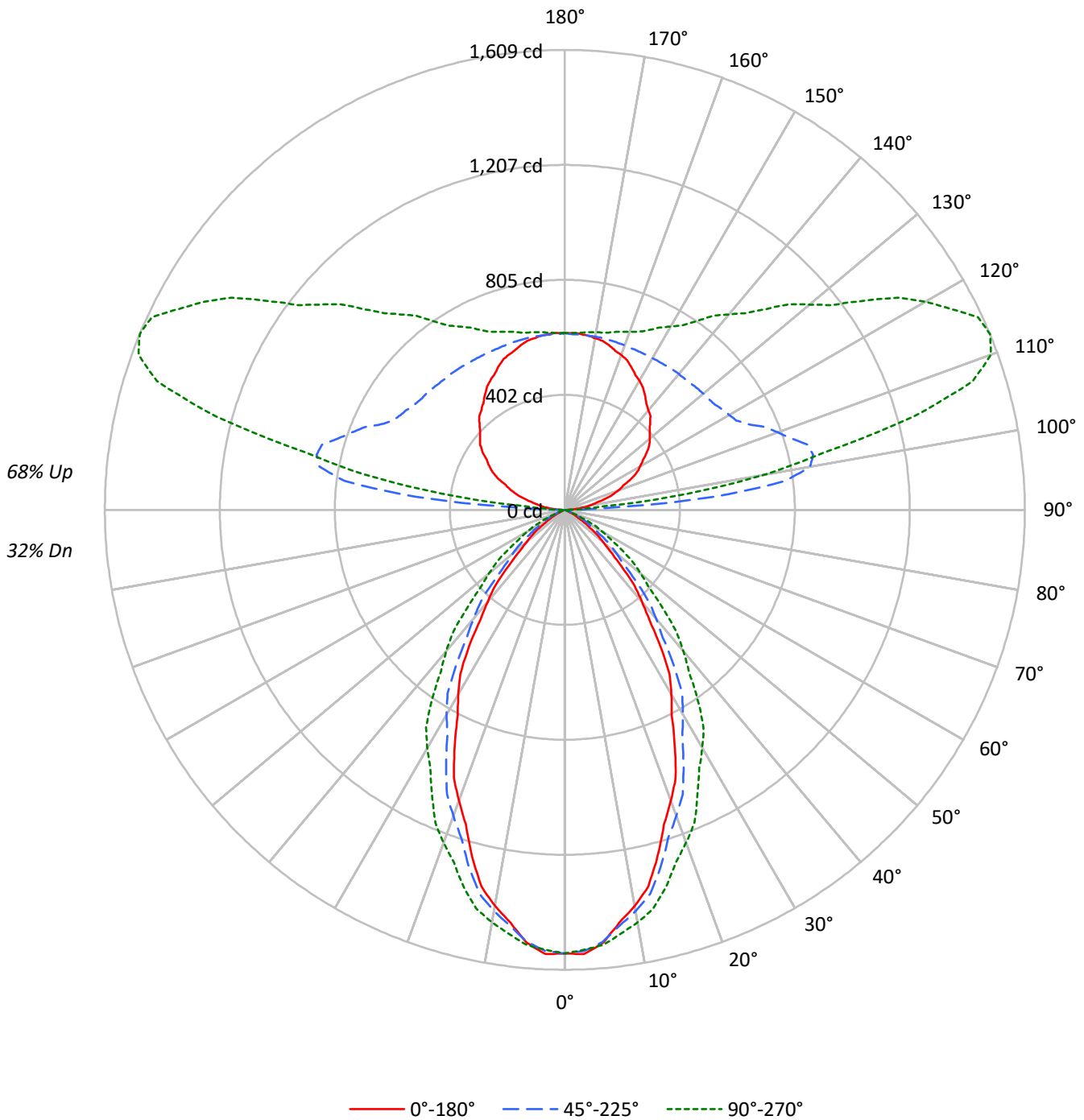
Lumens per Lamp: N/A
Luminaire Lumens: 5868.8 lumens
Efficiency: N/A
Efficacy: 119.5 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 49.1
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°	14317	14317	14317
5°	14087	14052	14156
10°	13181	13357	13730
15°	11983	12363	13051
20°	10636	11189	12170
25°	9263	9997	11181
30°	7934	8806	10245
35°	6579	7475	9115
40°	5055	5976	7767
45°	3653	4525	6250
50°	2489	3373	4956
55°	1618	2440	3852
60°	928	1718	2784
65°	247	1048	1410
70°	121	324	405
75°	53	29	0
80°	43	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.6	2.4
10°-20°	362.2	6.2
20°-30°	453.4	7.7
30°-40°	418.8	7.1
40°-50°	281.4	4.8
50°-60°	145.3	2.5
60°-70°	45.5	0.8
70°-80°	2.9	0.0
80°-90°	1.3	0.0
90°-100°	289.5	4.9
100°-110°	799.1	13.6
110°-120°	824.2	14.0
120°-130°	662.3	11.3
130°-140°	520.5	8.9
140°-150°	399.2	6.8
150°-160°	286.9	4.9
160°-170°	175.5	3.0
170°-180°	59.2	1.0
0°-30°	957.2	16.3
0°-40°	1376.0	23.4
0°-60°	1802.7	30.7
0°-90°	1852.5	31.6
90°-120°	1912.8	32.6
90°-150°	3494.8	59.5
90°-180°	4016.0	68.4
0°-180°	5868.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1552	1552	1552	1552	1552	
5°	1521	1506	1517	1523	1528	141
15°	1254	1250	1294	1338	1366	349
25°	910	917	982	1049	1098	417
35°	584	599	664	742	809	362
45°	280	297	347	414	479	220
55°	101	118	152	195	240	94
65°	11	22	48	58	65	19
75°	2	2	1	0	0	2
85°	0	0	0	0	0	0
90°	2	4	8	9	10	3
95°	42	157	525	216	140	45
105°	142	220	879	1342	1264	152
115°	255	308	708	1402	1594	251
125°	350	398	642	1086	1275	312
135°	421	467	624	880	992	326
145°	489	522	616	749	806	306
155°	551	569	611	672	693	254
165°	596	604	614	638	643	168
175°	618	619	615	624	622	59
180°	618	618	618	618	618	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1551.8	1551.8	1551.8	1551.8	1551.8
2.5°	1555.4	1540.7	1544.6	1544.5	1540.4
5°	1521.0	1505.6	1517.3	1522.7	1528.5
7.5°	1456.8	1444.7	1467.1	1483.9	1496.1
10°	1406.9	1396.6	1425.7	1448.6	1465.5
12.5°	1349.3	1341.3	1376.4	1407.8	1429.4
15°	1254.5	1250.1	1294.3	1337.7	1366.4
17.5°	1153.0	1152.9	1203.3	1257.2	1291.7
20°	1083.3	1085.5	1139.6	1199.1	1239.5
22.5°	1013.7	1018.8	1076.6	1138.6	1184.8
25°	909.9	917.3	982.0	1049.2	1098.3
27.5°	810.2	820.9	889.0	958.9	1018.8
30°	744.7	757.2	826.6	900.1	961.7
32.5°	680.5	695.3	762.9	840.6	903.5
35°	584.1	598.8	663.7	741.8	809.3
37.5°	484.5	498.9	562.3	639.2	712.2
40°	419.7	435.8	496.2	570.8	644.9
42.5°	360.8	377.0	433.8	507.0	577.0
45°	280.0	296.9	346.8	414.4	479.0
47.5°	213.1	231.4	275.2	336.3	395.2
50°	173.4	191.8	235.0	288.8	345.3
52.5°	141.6	159.4	198.3	249.1	300.9
55°	100.6	117.5	151.7	194.7	239.5
57.5°	69.5	84.1	114.7	150.6	185.7
60°	50.3	64.2	93.1	122.3	150.9
62.5°	33.5	46.3	74.5	96.8	116.1
65°	11.3	21.5	48.0	58.0	64.6
67.5°	5.7	6.9	25.2	26.6	28.8
70°	4.5	4.5	12.0	12.8	15.0
72.5°	3.3	3.3	4.8	6.2	6.6
75°	1.5	1.5	0.8	0.0	0.0
77.5°	0.8	0.8	0.6	0.0	0.0
80°	0.8	0.8	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°	0.4	0.8	1.6	1.8	2.0
90°	2.0	3.9	7.9	8.9	9.9
92.5°	17.8	73.9	132.1	48.2	37.6
95°	42.5	156.6	525.2	215.9	140.4
97.5°	70.4	175.4	778.0	599.0	433.8
100°	91.0	186.7	871.3	877.5	713.1
102.5°	110.8	199.5	889.5	1084.2	928.3
105°	142.4	219.8	879.2	1342.3	1264.0
107.5°	176.0	244.9	830.2	1466.8	1495.4
110°	199.8	261.7	792.2	1493.5	1586.4

TEST NUMBER: P518712

CATALOG NUMBER: SQ4-BB-100U-075D-835-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	221.1	280.7	756.6	1472.4	1609.3
115°	255.2	308.4	708.1	1401.9	1594.3
117.5°	284.8	337.8	676.3	1302.6	1521.5
120°	304.6	356.8	663.6	1235.3	1455.8
122.5°	323.6	373.5	653.3	1172.6	1381.5
125°	350.1	398.5	641.9	1086.3	1274.8
127.5°	372.7	421.0	635.1	1013.3	1175.9
130°	387.7	436.0	632.0	968.6	1116.6
132.5°	401.9	448.0	628.8	931.1	1065.2
135°	421.3	466.8	624.1	879.8	992.0
137.5°	443.1	484.5	621.7	836.7	932.4
140°	454.9	495.6	620.1	808.0	892.1
142.5°	468.4	505.9	618.5	782.4	856.5
145°	488.6	522.4	616.2	749.0	806.0
147.5°	508.0	537.5	614.0	720.8	765.1
150°	522.2	546.4	613.2	704.0	739.8
152.5°	533.3	555.9	612.4	689.6	719.2
155°	550.9	569.3	611.2	672.0	693.3
157.5°	567.1	581.2	611.4	659.2	673.7
160°	576.6	589.2	612.2	652.0	662.6
162.5°	584.5	595.5	613.0	645.6	653.9
165°	596.4	604.1	614.2	638.0	642.9
167.5°	605.5	610.1	615.2	633.4	634.9
170°	610.2	614.1	615.2	631.0	631.0
172.5°	614.2	616.5	615.2	627.8	627.0
175°	618.1	619.1	615.2	624.0	622.1
177.5°	619.7	618.9	615.0	620.5	618.9
180°	618.1	618.1	618.1	618.1	618.1

(END OF REPORT)