

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: P518436

Luminaire Tested: **SQ4-BB-050U-075D-935-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518436  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, 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-050U-075D-935-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

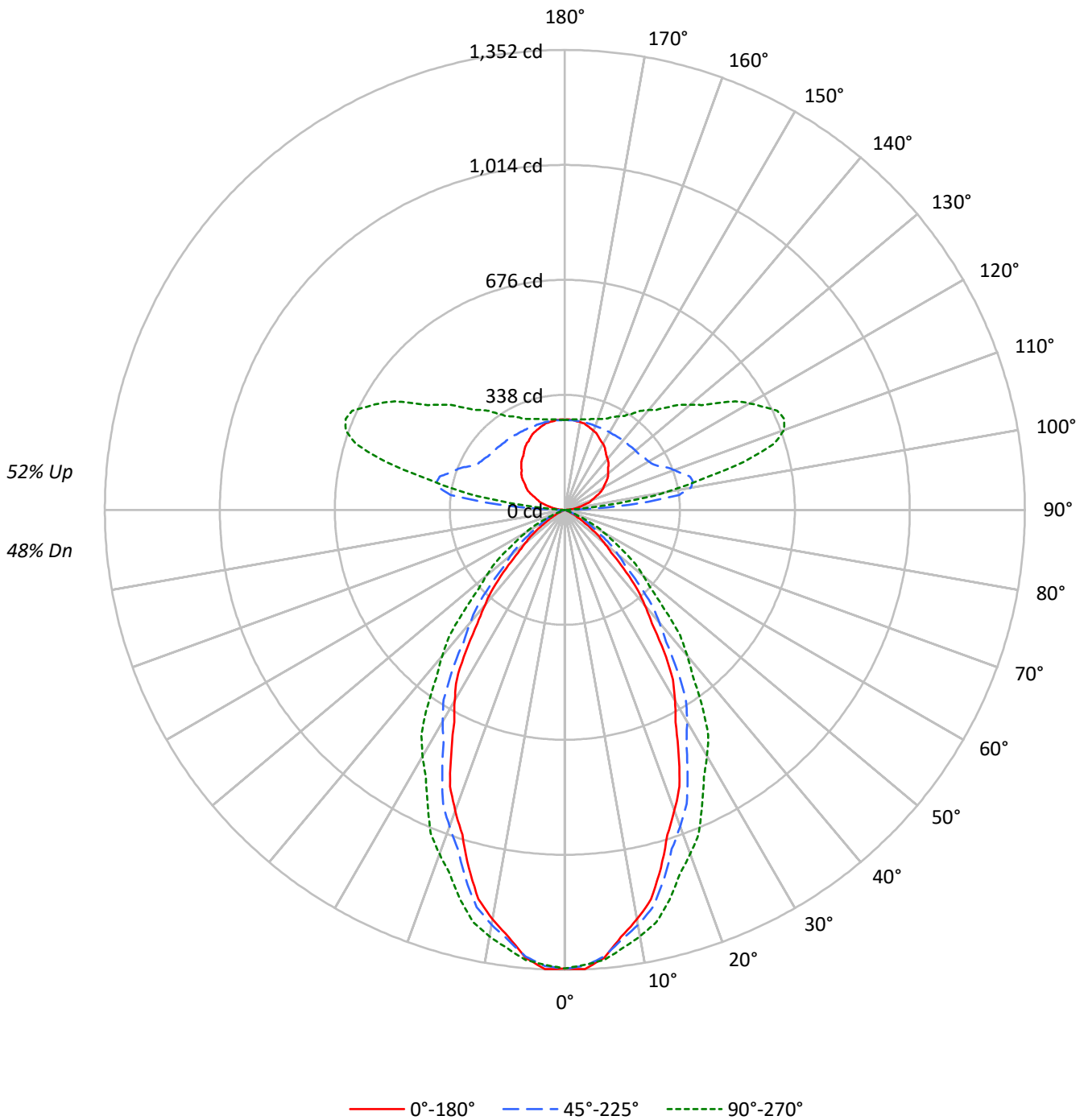
Lumens per Lamp: N/A  
Luminaire Lumens: 3340.2 lumens  
Efficiency: N/A  
Efficacy: 92.0 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 36.3  
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	107	107	107	107	98	98	98	98	82	82	82	68	68	68	54	54	54	48	48	48	48	
1	99	95	92	89	91	88	85	83	75	73	71	62	61	60	51	50	49	44	44	44	44	
2	92	85	80	76	84	79	75	71	68	64	62	57	55	53	47	45	44	40	40	40	40	
3	85	77	70	65	78	71	66	62	61	57	54	52	49	47	43	41	40	36	36	36	36	
4	79	69	62	57	73	64	58	54	56	51	48	47	44	42	40	38	36	32	32	32	32	
5	73	63	55	50	67	59	52	48	51	46	42	44	40	37	37	34	33	29	29	29	29	
6	68	57	50	45	63	53	47	42	47	42	38	40	37	34	34	32	30	27	27	27	27	
7	63	52	45	40	58	49	43	38	43	38	34	37	33	31	32	29	27	25	25	25	25	
8	59	48	41	36	55	45	39	34	40	35	31	34	31	28	30	27	25	23	23	23	23	
9	55	44	37	33	51	42	35	31	37	32	28	32	28	26	28	25	23	21	21	21	21	
10	52	41	34	30	48	38	33	29	34	29	26	30	26	24	26	23	21	20	20	20	20	

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	12441	12441	12441
5°	12240	12209	12300
10°	11453	11606	11929
15°	10411	10742	11340
20°	9242	9722	10574
25°	8048	8686	9715
30°	6894	7651	8902
35°	5716	6495	7920
40°	4391	5193	6748
45°	3175	3933	5431
50°	2163	2931	4307
55°	1406	2120	3347
60°	806	1493	2419
65°	214	910	1225
70°	105	281	351
75°	46	25	0
80°	37	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	123.1	3.7
10°-20°	314.7	9.4
20°-30°	393.9	11.8
30°-40°	363.9	10.9
40°-50°	244.5	7.3
50°-60°	126.3	3.8
60°-70°	39.5	1.2
70°-80°	2.5	0.1
80°-90°	1.1	0.0
90°-100°	127.2	3.8
100°-110°	345.7	10.3
110°-120°	355.4	10.6
120°-130°	284.2	8.5
130°-140°	223.3	6.7
140°-150°	171.2	5.1
150°-160°	123.1	3.7
160°-170°	75.3	2.3
170°-180°	25.4	0.8
0°-30°	831.7	24.9
0°-40°	1195.6	35.8
0°-60°	1566.4	46.9
0°-90°	1609.5	48.2
90°-120°	828.3	24.8
90°-150°	1507.0	45.1
90°-180°	1731.0	51.8
0°-180°	3340.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1348	1348	1348	1348	1348	
5°	1322	1308	1318	1323	1328	123
15°	1090	1086	1125	1162	1187	304
25°	791	797	853	912	954	362
35°	508	520	577	644	703	314
45°	243	258	301	360	416	191
55°	87	102	132	169	208	82
65°	10	19	42	50	56	17
75°	1	1	1	0	0	2
85°	0	0	0	0	0	0
90°	1	3	6	8	8	1
95°	19	70	222	96	65	20
105°	61	96	380	579	545	65
115°	109	132	304	605	690	108
125°	150	171	275	464	547	134
135°	181	201	268	378	426	140
145°	209	224	264	321	345	131
155°	236	244	262	288	297	109
165°	256	259	263	274	275	72
175°	265	266	264	268	267	25
180°	265	265	265	265	265	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1348.4	1348.4	1348.4	1348.4	1348.4
2.5°	1351.5	1338.7	1342.1	1342.0	1338.4
5°	1321.6	1308.2	1318.3	1323.0	1328.1
7.5°	1265.8	1255.3	1274.8	1289.4	1299.9
10°	1222.5	1213.5	1238.8	1258.7	1273.3
12.5°	1172.4	1165.5	1196.0	1223.3	1242.0
15°	1090.0	1086.2	1124.6	1162.4	1187.2
17.5°	1001.8	1001.7	1045.5	1092.4	1122.4
20°	941.3	943.2	990.2	1041.9	1077.0
22.5°	880.8	885.2	935.4	989.3	1029.5
25°	790.6	797.0	853.2	911.6	954.3
27.5°	704.0	713.3	772.5	833.2	885.2
30°	647.1	657.9	718.2	782.0	835.6
32.5°	591.3	604.1	662.9	730.4	785.0
35°	507.5	520.3	576.7	644.5	703.2
37.5°	421.0	433.5	488.6	555.4	618.8
40°	364.6	378.7	431.2	495.9	560.3
42.5°	313.5	327.5	376.9	440.5	501.4
45°	243.3	258.0	301.4	360.1	416.2
47.5°	185.1	201.1	239.1	292.2	343.4
50°	150.7	166.6	204.2	251.0	300.1
52.5°	123.0	138.5	172.3	216.4	261.5
55°	87.4	102.1	131.8	169.2	208.1
57.5°	60.4	73.0	99.7	130.9	161.4
60°	43.7	55.8	80.9	106.2	131.1
62.5°	29.1	40.2	64.7	84.1	100.8
65°	9.8	18.7	41.7	50.4	56.1
67.5°	5.0	6.0	21.9	23.1	25.0
70°	3.9	3.9	10.4	11.1	13.0
72.5°	2.9	2.9	4.2	5.4	5.7
75°	1.3	1.3	0.7	0.0	0.0
77.5°	0.7	0.7	0.5	0.0	0.0
80°	0.7	0.7	0.0	0.0	0.0
82.5°	0.1	0.1	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.2	0.7	1.2	1.5	1.5
90°	0.9	3.4	6.0	7.7	7.7
92.5°	7.7	34.8	60.5	26.0	22.0
95°	18.8	69.6	221.6	96.4	64.8
97.5°	31.0	76.9	339.7	264.3	185.6
100°	39.2	81.7	375.9	381.0	307.7
102.5°	47.4	86.6	385.4	471.2	406.6
105°	61.4	95.5	380.1	578.8	544.6
107.5°	75.9	106.0	358.2	634.4	643.9
110°	86.1	113.6	341.8	645.3	686.1

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	95.0	121.1	325.4	636.2	697.7
115°	109.1	132.4	304.3	605.4	689.5
117.5°	122.4	144.7	290.8	561.6	656.5
120°	131.3	152.9	284.7	532.3	626.5
122.5°	138.8	160.4	280.6	502.9	593.7
125°	150.0	170.8	275.3	463.9	547.2
127.5°	160.1	180.7	272.4	434.3	505.8
130°	166.2	186.2	271.0	415.7	479.9
132.5°	172.3	192.3	269.7	399.8	456.7
135°	180.7	200.7	267.6	377.8	426.2
137.5°	189.7	207.9	266.6	358.4	399.1
140°	195.2	212.7	265.9	346.0	382.7
142.5°	200.6	216.8	265.2	336.3	367.0
145°	208.8	223.8	264.2	321.0	345.2
147.5°	218.0	230.9	263.4	309.0	328.0
150°	224.2	235.0	263.4	302.1	317.1
152.5°	228.9	238.4	262.7	295.9	308.2
155°	236.1	244.4	262.5	288.3	296.6
157.5°	243.1	249.6	262.5	283.1	289.5
160°	247.2	253.0	262.5	279.7	284.7
162.5°	251.3	255.8	263.2	276.9	280.6
165°	255.7	259.0	263.4	274.5	275.3
167.5°	260.3	262.0	264.2	271.6	272.2
170°	261.7	263.3	264.2	270.2	270.2
172.5°	263.0	264.0	264.2	268.8	268.8
175°	265.1	265.9	264.2	267.6	266.8
177.5°	265.8	265.8	263.7	266.4	265.1
180°	265.1	265.1	265.1	265.1	265.1

(END OF REPORT)