

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: P518352

Luminaire Tested: **SQ4-BB-025U-100D-835-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518352  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-32, 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-025U-100D-835-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 250 LUMENS PER FOOT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

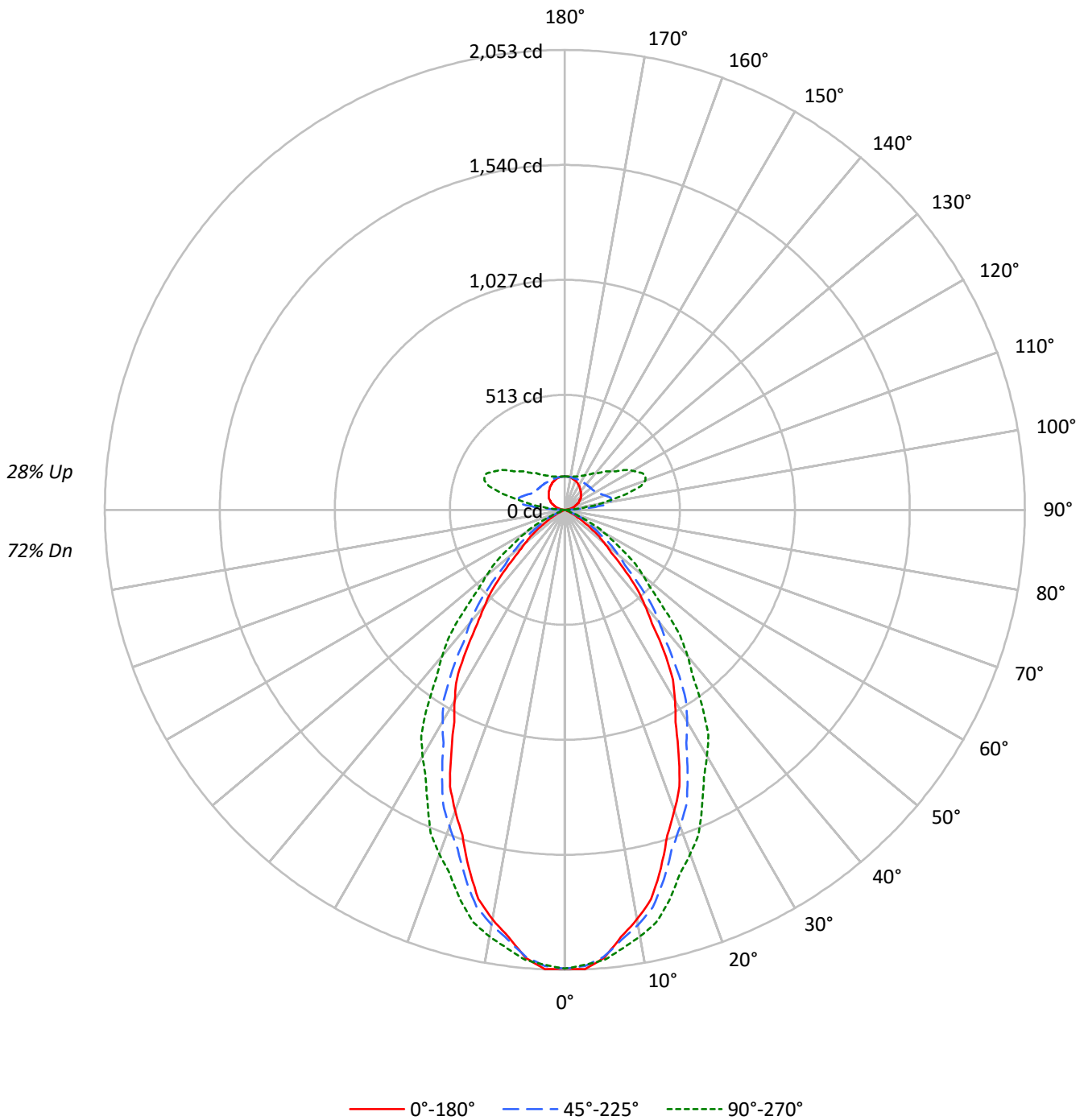
Lumens per Lamp: N/A  
Luminaire Lumens: 3409.6 lumens  
Efficiency: N/A  
Efficacy: 88.1 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 38.7  
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	112	112	112	112	106	106	106	106	95	95	95	85	85	85	76	76	76	76	76	76	72	
1	105	102	99	96	100	97	94	92	87	86	84	79	78	76	71	70	69	69	69	69	65	
2	98	92	87	83	93	88	83	80	80	77	74	73	70	68	66	64	62	62	62	62	59	
3	91	83	77	72	87	80	74	70	73	69	65	67	63	61	61	58	56	56	56	56	53	
4	85	76	69	64	81	73	67	62	67	62	58	61	58	55	56	53	51	51	51	51	48	
5	79	69	62	57	75	66	60	55	61	56	52	57	52	49	52	49	46	46	46	46	44	
6	74	63	56	51	70	61	55	50	57	51	47	52	48	45	48	45	42	42	42	42	40	
7	69	58	51	46	66	56	50	45	52	47	43	49	44	41	45	42	39	39	39	39	37	
8	65	54	47	42	62	52	46	41	49	43	39	45	41	38	42	38	36	36	36	36	34	
9	61	50	43	39	58	48	42	38	45	40	36	42	38	35	40	36	33	33	33	33	31	
10	58	47	40	36	55	45	39	35	42	37	33	40	35	32	37	33	31	31	31	31	29	

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

	0°	45°	90°
0°	18893	18893	18893
5°	18590	18543	18681
10°	17394	17626	18118
15°	15813	16314	17223
20°	14036	14766	16060
25°	12224	13192	14755
30°	10470	11621	13520
35°	8682	9864	12029
40°	6670	7888	10249
45°	4821	5972	8248
50°	3285	4451	6541
55°	2136	3219	5083
60°	1225	2266	3674
65°	325	1384	1860
70°	159	429	534
75°	71	36	0
80°	53	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	186.9	5.5
10°-20°	477.9	14.0
20°-30°	598.3	17.5
30°-40°	552.6	16.2
40°-50°	371.3	10.9
50°-60°	191.8	5.6
60°-70°	60.1	1.8
70°-80°	3.8	0.1
80°-90°	0.9	0.0
90°-100°	72.6	2.1
100°-110°	190.9	5.6
110°-120°	198.0	5.8
120°-130°	158.8	4.7
130°-140°	124.6	3.7
140°-150°	95.6	2.8
150°-160°	68.9	2.0
160°-170°	42.1	1.2
170°-180°	14.2	0.4
0°-30°	1263.1	37.0
0°-40°	1815.8	53.3
0°-60°	2378.9	69.8
0°-90°	2443.7	71.7
90°-120°	461.6	13.5
90°-150°	840.6	24.7
90°-180°	966.0	28.3
0°-180°	3409.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2048	2048	2048	2048	2048	
5°	2007	1987	2002	2009	2017	186
15°	1656	1650	1708	1765	1803	461
25°	1201	1210	1296	1384	1449	551
35°	771	790	876	979	1068	477
45°	370	392	458	547	632	290
55°	133	155	200	257	316	124
65°	15	28	63	76	85	25
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	1	3	8	4	4	1
95°	10	38	125	64	44	11
105°	34	52	211	320	299	36
115°	61	74	169	337	385	60
125°	85	95	154	260	307	75
135°	101	112	149	210	238	78
145°	118	125	147	179	193	74
155°	133	136	147	162	166	61
165°	143	145	147	153	155	40
175°	149	149	148	150	150	14
180°	149	149	149	149	149	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2047.8	2047.8	2047.8	2047.8	2047.8
2.5°	2052.6	2033.2	2038.3	2038.2	2032.8
5°	2007.2	1986.9	2002.2	2009.4	2017.1
7.5°	1922.4	1906.5	1936.1	1958.2	1974.3
10°	1856.6	1843.0	1881.4	1911.6	1933.9
12.5°	1780.5	1770.1	1816.4	1857.8	1886.3
15°	1655.5	1649.7	1708.0	1765.3	1803.1
17.5°	1521.5	1521.4	1587.9	1659.1	1704.6
20°	1429.6	1432.5	1503.9	1582.4	1635.7
22.5°	1337.7	1344.4	1420.7	1502.5	1563.6
25°	1200.8	1210.4	1295.9	1384.5	1449.4
27.5°	1069.2	1083.3	1173.2	1265.4	1344.4
30°	982.8	999.3	1090.8	1187.7	1269.1
32.5°	898.0	917.6	1006.8	1109.3	1192.2
35°	770.8	790.2	875.8	978.9	1068.0
37.5°	639.4	658.4	742.0	843.5	939.8
40°	553.8	575.1	654.9	753.2	851.0
42.5°	476.1	497.5	572.4	669.1	761.5
45°	369.5	391.8	457.7	546.8	632.1
47.5°	281.2	305.4	363.2	443.8	521.5
50°	228.9	253.1	310.1	381.1	455.7
52.5°	186.8	210.3	261.7	328.7	397.1
55°	132.8	155.0	200.1	256.9	316.0
57.5°	91.7	110.9	151.4	198.8	245.1
60°	66.4	84.8	122.8	161.4	199.1
62.5°	44.2	61.0	98.3	127.8	153.2
65°	14.9	28.4	63.4	76.5	85.2
67.5°	7.5	9.1	33.3	35.1	38.0
70°	5.9	5.9	15.9	16.9	19.8
72.5°	4.4	4.4	6.3	8.1	8.7
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°	0.2	0.6	1.5	0.8	0.8
90°	1.0	2.8	7.6	3.8	3.8
92.5°	4.0	19.3	42.8	19.0	12.2
95°	9.6	37.6	125.1	64.5	43.9
97.5°	16.6	41.3	187.2	148.9	109.7
100°	22.0	44.4	206.3	209.1	162.4
102.5°	26.6	47.5	211.7	260.5	220.5
105°	34.4	52.1	211.1	320.5	299.0
107.5°	42.4	58.9	199.1	351.7	356.9
110°	47.8	62.7	189.1	359.7	382.1



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	53.1	67.3	180.0	354.6	389.0
115°	61.1	74.2	169.1	337.3	385.0
117.5°	69.0	80.9	161.6	313.4	366.3
120°	73.6	84.8	158.6	297.3	348.7
122.5°	78.1	89.4	156.3	281.2	331.9
125°	85.0	95.3	153.8	259.9	306.6
127.5°	90.6	101.0	151.7	242.8	282.2
130°	93.6	104.8	150.9	232.0	268.4
132.5°	96.7	107.9	150.2	222.8	255.4
135°	101.3	111.5	149.0	209.8	237.9
137.5°	106.0	116.1	148.8	200.2	223.2
140°	109.9	119.2	148.1	192.5	214.0
142.5°	112.9	121.5	148.1	187.1	205.6
145°	117.5	125.0	147.1	179.0	193.0
147.5°	122.1	129.4	147.1	172.2	183.8
150°	125.1	131.7	147.1	168.3	177.7
152.5°	128.2	133.2	147.1	165.2	172.3
155°	132.8	136.5	147.1	161.5	166.2
157.5°	136.2	139.8	147.1	158.3	161.6
160°	138.5	141.3	147.1	156.7	158.6
162.5°	140.8	142.9	147.1	155.2	157.0
165°	143.3	145.2	147.1	152.9	154.8
167.5°	145.6	146.5	148.1	151.9	152.7
170°	147.1	148.0	148.1	151.9	151.9
172.5°	147.9	148.1	148.1	151.1	150.4
175°	149.0	149.0	148.1	150.0	150.0
177.5°	149.0	149.0	148.3	149.8	149.0
180°	149.0	149.0	149.0	149.0	149.0

(END OF REPORT)