

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: P518380

Luminaire Tested: **SQ4-BB-025U-125D-840-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518380  
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-125D-840-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 250 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

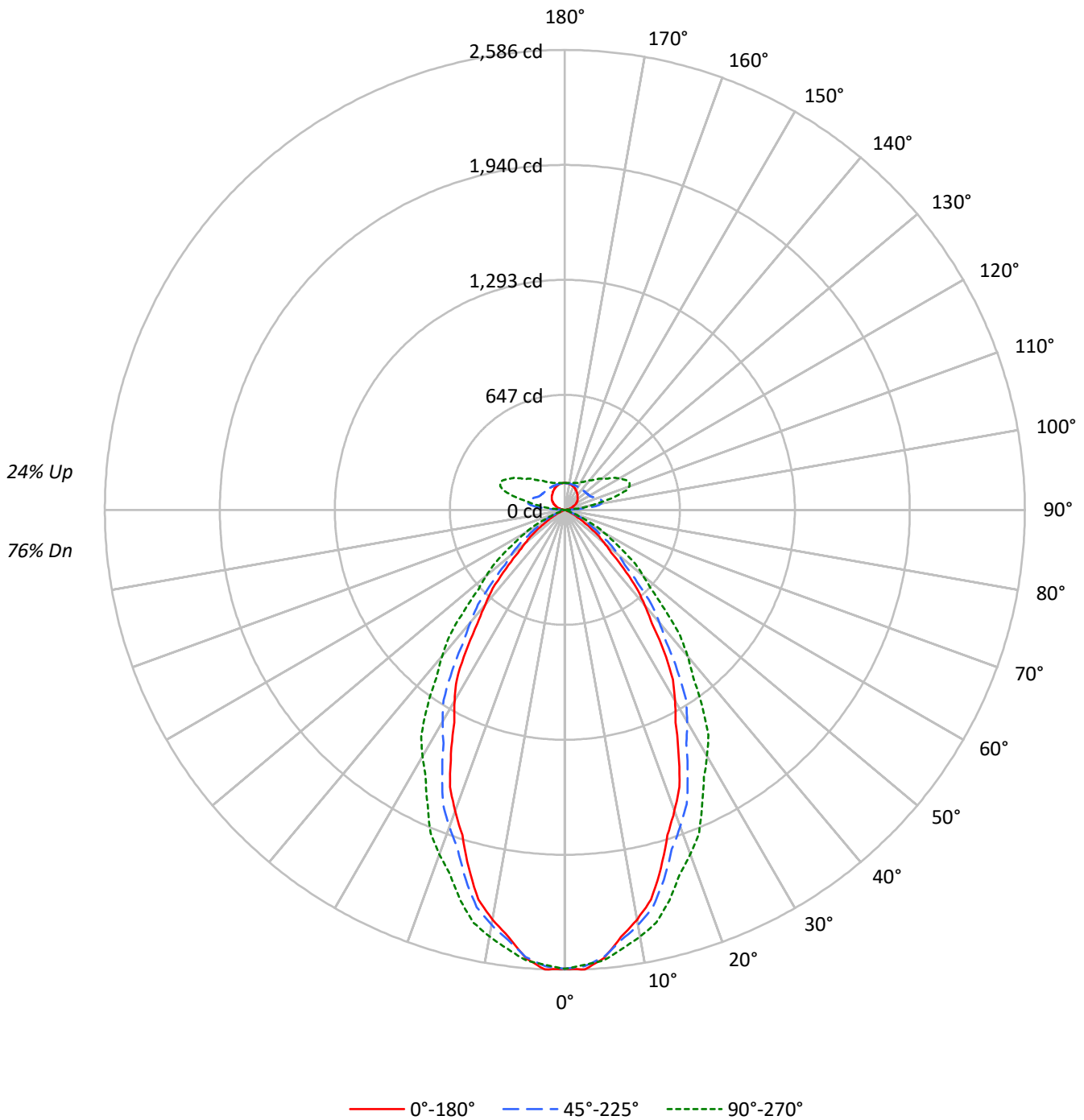
Lumens per Lamp: N/A  
Luminaire Lumens: 4054.7 lumens  
Efficiency: N/A  
Efficacy: 81.9 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 49.5  
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	113	113	113	113	108	108	108	108	98	98	98	88	88	88	80	80	80	76				76
1	106	103	100	97	101	98	96	93	90	88	86	82	81	79	75	74	73	69				69
2	99	93	88	84	95	89	85	81	82	79	76	75	73	71	69	67	66	63				63
3	92	84	78	74	88	81	76	71	75	71	67	69	66	63	64	62	59	57				57
4	86	77	70	65	82	74	68	63	69	64	60	64	60	57	59	56	54	51				51
5	80	70	63	58	77	68	62	57	63	58	54	59	55	51	55	52	49	46				46
6	75	65	57	52	72	62	56	51	58	53	49	55	50	47	51	47	45	42				42
7	70	59	52	47	67	58	51	46	54	49	45	51	46	43	48	44	41	39				39
8	66	55	48	43	63	53	47	42	50	45	41	47	43	39	44	41	38	36				36
9	62	51	44	40	60	50	43	39	47	41	38	44	40	36	42	38	35	33				33
10	59	48	41	37	56	46	40	36	44	38	35	41	37	34	39	35	32	31				31

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

	0°	45°	90°
0°	23808	23808	23808
5°	23425	23367	23541
10°	21918	22210	22830
15°	19926	20558	21702
20°	17688	18607	20237
25°	15403	16623	18593
30°	13193	14643	17037
35°	10940	12430	15158
40°	8405	9939	12916
45°	6076	7526	10393
50°	4140	5609	8243
55°	2691	4057	6405
60°	1543	2856	4630
65°	408	1744	2345
70°	202	540	674
75°	89	43	0
80°	64	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	235.5	5.8
10°-20°	602.2	14.9
20°-30°	753.9	18.6
30°-40°	696.4	17.2
40°-50°	467.9	11.5
50°-60°	241.7	6.0
60°-70°	75.7	1.9
70°-80°	4.8	0.1
80°-90°	0.9	0.0
90°-100°	73.4	1.8
100°-110°	192.9	4.8
110°-120°	200.0	4.9
120°-130°	160.4	4.0
130°-140°	125.9	3.1
140°-150°	96.6	2.4
150°-160°	69.6	1.7
160°-170°	42.6	1.0
170°-180°	14.4	0.4
0°-30°	1591.7	39.3
0°-40°	2288.1	56.4
0°-60°	2997.7	73.9
0°-90°	3079.1	75.9
90°-120°	466.2	11.5
90°-150°	849.1	20.9
90°-180°	976.0	24.1
0°-180°	4054.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2580	2580	2580	2580	2580	
5°	2529	2504	2523	2532	2542	234
15°	2086	2079	2152	2224	2272	581
25°	1513	1525	1633	1745	1826	694
35°	971	996	1104	1234	1346	602
45°	466	494	577	689	796	366
55°	167	195	252	324	398	156
65°	19	36	80	96	107	32
75°	2	2	1	0	0	4
85°	0	0	0	0	0	0
90°	1	3	8	4	4	1
95°	10	38	126	65	44	11
105°	35	53	213	324	302	37
115°	62	75	171	341	389	61
125°	86	96	155	263	310	76
135°	102	113	150	212	240	79
145°	119	126	149	181	195	74
155°	134	138	149	163	168	62
165°	145	147	149	154	156	41
175°	150	150	150	152	152	14
180°	150	150	150	150	150	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2580.5	2580.5	2580.5	2580.5	2580.5
2.5°	2586.5	2562.1	2568.5	2568.3	2561.5
5°	2529.3	2503.7	2523.0	2532.0	2541.8
7.5°	2422.4	2402.4	2439.7	2467.6	2487.8
10°	2339.5	2322.4	2370.7	2408.8	2436.9
12.5°	2243.7	2230.5	2288.8	2341.1	2377.0
15°	2086.1	2078.8	2152.3	2224.5	2272.1
17.5°	1917.3	1917.1	2001.0	2090.7	2148.0
20°	1801.5	1805.1	1895.1	1994.0	2061.1
22.5°	1685.6	1694.2	1790.2	1893.3	1970.3
25°	1513.1	1525.3	1632.9	1744.6	1826.4
27.5°	1347.3	1365.1	1478.4	1594.5	1694.1
30°	1238.4	1259.2	1374.5	1496.7	1599.2
32.5°	1131.6	1156.2	1268.6	1397.9	1502.3
35°	971.3	995.7	1103.6	1233.5	1345.8
37.5°	805.7	829.7	935.1	1062.9	1184.2
40°	697.9	724.7	825.2	949.1	1072.4
42.5°	600.0	626.8	721.3	843.1	959.5
45°	465.7	493.7	576.8	689.1	796.5
47.5°	354.3	384.8	457.7	559.3	657.2
50°	288.4	318.9	390.8	480.3	574.3
52.5°	235.5	265.0	329.8	414.2	500.4
55°	167.3	195.4	252.2	323.8	398.2
57.5°	115.6	139.8	190.8	250.5	308.9
60°	83.6	106.8	154.8	203.3	250.9
62.5°	55.7	76.9	123.8	161.0	193.0
65°	18.7	35.8	79.9	96.4	107.4
67.5°	9.5	11.4	41.9	44.3	47.9
70°	7.5	7.5	20.0	21.3	25.0
72.5°	5.5	5.5	8.0	10.3	11.0
75°	2.5	2.5	1.2	0.0	0.0
77.5°	1.2	1.2	1.0	0.0	0.0
80°	1.2	1.2	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	2.9	7.7	3.9	3.9
92.5°	4.1	19.5	43.2	19.1	12.4
95°	9.6	38.0	126.4	65.1	44.4
97.5°	16.8	41.7	189.1	150.4	110.8
100°	22.2	44.8	208.4	211.2	164.0
102.5°	26.8	48.0	213.8	263.1	222.7
105°	34.7	52.7	213.2	323.7	302.0
107.5°	42.8	59.4	201.1	355.2	360.5
110°	48.2	63.3	191.1	363.3	386.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	53.6	68.0	181.8	358.2	392.9
115°	61.8	75.0	170.8	340.7	388.9
117.5°	69.7	81.7	163.3	316.5	369.9
120°	74.3	85.6	160.2	300.3	352.2
122.5°	78.9	90.3	157.9	284.1	335.2
125°	85.9	96.3	155.3	262.6	309.7
127.5°	91.5	102.0	153.2	245.2	285.0
130°	94.6	105.9	152.5	234.3	271.1
132.5°	97.6	109.0	151.7	225.0	258.0
135°	102.3	112.7	150.5	212.0	240.3
137.5°	107.1	117.3	150.3	202.2	225.4
140°	111.0	120.4	149.6	194.4	216.1
142.5°	114.1	122.7	149.6	189.0	207.6
145°	118.7	126.2	148.6	180.8	194.9
147.5°	123.3	130.7	148.6	173.9	185.6
150°	126.4	133.0	148.6	170.0	179.5
152.5°	129.5	134.6	148.6	166.9	174.1
155°	134.1	137.9	148.6	163.2	167.9
157.5°	137.6	141.2	148.6	159.9	163.3
160°	139.9	142.7	148.6	158.3	160.2
162.5°	142.2	144.3	148.6	156.7	158.6
165°	144.7	146.6	148.6	154.4	156.3
167.5°	147.1	148.0	149.6	153.4	154.2
170°	148.6	149.5	149.6	153.4	153.4
172.5°	149.4	149.6	149.6	152.6	151.9
175°	150.5	150.5	149.6	151.5	151.5
177.5°	150.5	150.5	149.8	151.3	150.5
180°	150.5	150.5	150.5	150.5	150.5

(END OF REPORT)