

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: P518353

Luminaire Tested: **SQ4-BB-025U-100D-835-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518353  
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-6  
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**

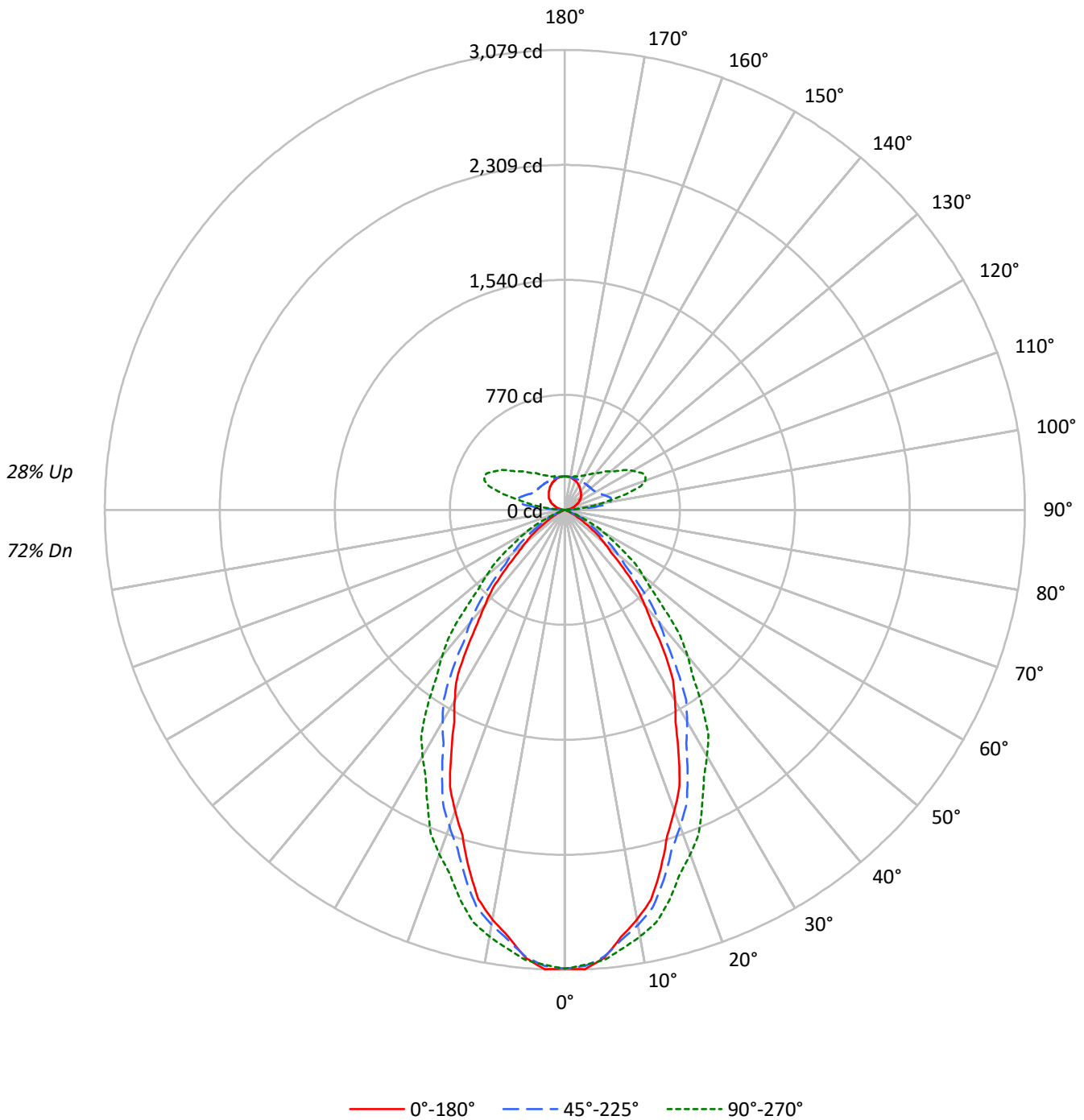
Lumens per Lamp: N/A  
Luminaire Lumens: 5114.4 lumens  
Efficiency: N/A  
Efficacy: 80.5 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 63.5  
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	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	18544	18682
10°	17394	17626	18117
15°	15812	16314	17223
20°	14036	14766	16059
25°	12223	13192	14755
30°	10470	11621	13521
35°	8682	9864	12029
40°	6670	7887	10249
45°	4822	5972	8247
50°	3285	4451	6541
55°	2135	3219	5084
60°	1225	2267	3674
65°	325	1384	1860
70°	160	428	534
75°	71	36	0
80°	53	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	280.3	5.5
10°-20°	716.9	14.0
20°-30°	897.5	17.5
30°-40°	829.0	16.2
40°-50°	557.0	10.9
50°-60°	287.7	5.6
60°-70°	90.1	1.8
70°-80°	5.7	0.1
80°-90°	1.3	0.0
90°-100°	108.9	2.1
100°-110°	286.4	5.6
110°-120°	297.0	5.8
120°-130°	238.2	4.7
130°-140°	186.9	3.7
140°-150°	143.5	2.8
150°-160°	103.3	2.0
160°-170°	63.2	1.2
170°-180°	21.4	0.4
0°-30°	1894.7	37.0
0°-40°	2723.7	53.3
0°-60°	3568.4	69.8
0°-90°	3665.5	71.7
90°-120°	692.3	13.5
90°-150°	1261.0	24.7
90°-180°	1449.0	28.3
0°-180°	5114.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3072	3072	3072	3072	3072	
5°	3011	2980	3003	3014	3026	279
15°	2483	2474	2562	2648	2705	692
25°	1801	1816	1944	2077	2174	826
35°	1156	1185	1314	1468	1602	716
45°	554	588	687	820	948	435
55°	199	233	300	385	474	186
65°	22	43	95	115	128	38
75°	3	3	2	0	0	4
85°	0	0	0	0	0	0
90°	1	4	12	6	6	1
95°	14	56	188	97	66	16
105°	52	78	317	481	448	55
115°	92	111	254	506	578	91
125°	128	143	231	390	460	113
135°	152	167	224	315	357	118
145°	176	188	221	268	290	110
155°	199	205	221	242	249	92
165°	215	218	221	229	232	61
175°	224	224	222	225	225	21
180°	224	224	224	224	224	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3071.7	3071.7	3071.7	3071.7	3071.7
2.5°	3078.9	3049.8	3057.5	3057.3	3049.1
5°	3010.8	2980.3	3003.4	3014.0	3025.7
7.5°	2883.6	2859.8	2904.1	2937.3	2961.5
10°	2784.9	2764.6	2822.1	2867.4	2900.8
12.5°	2670.8	2655.1	2724.6	2786.8	2829.5
15°	2483.2	2474.5	2562.0	2648.0	2704.7
17.5°	2282.3	2282.0	2381.9	2488.7	2556.9
20°	2144.4	2148.8	2255.9	2373.6	2453.5
22.5°	2006.5	2016.7	2131.0	2253.8	2345.3
25°	1801.1	1815.7	1943.8	2076.8	2174.1
27.5°	1603.8	1625.0	1759.8	1898.0	2016.6
30°	1474.2	1498.9	1636.2	1781.6	1903.7
32.5°	1347.0	1376.3	1510.2	1664.0	1788.3
35°	1156.2	1185.2	1313.7	1468.3	1602.0
37.5°	959.1	987.6	1113.1	1265.3	1409.7
40°	830.7	862.7	982.3	1129.8	1276.5
42.5°	714.2	746.2	858.7	1003.6	1142.2
45°	554.3	587.7	686.6	820.2	948.1
47.5°	421.7	458.1	544.8	665.7	782.3
50°	343.3	379.6	465.1	571.7	683.6
52.5°	280.3	315.4	392.6	493.0	595.6
55°	199.1	232.6	300.2	385.4	474.1
57.5°	137.6	166.4	227.1	298.2	367.7
60°	99.6	127.2	184.3	242.0	298.7
62.5°	66.3	91.6	147.4	191.7	229.7
65°	22.3	42.6	95.1	114.7	127.8
67.5°	11.3	13.6	49.9	52.7	57.1
70°	8.9	8.9	23.8	25.4	29.7
72.5°	6.5	6.5	9.5	12.2	13.1
75°	3.0	3.0	1.5	0.0	0.0
77.5°	1.5	1.5	1.2	0.0	0.0
80°	1.5	1.5	0.0	0.0	0.0
82.5°	0.3	0.3	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.3	0.8	2.3	1.1	1.1
90°	1.4	4.2	11.5	5.7	5.7
92.5°	6.0	29.0	64.2	28.4	18.3
95°	14.3	56.4	187.7	96.7	65.9
97.5°	24.9	61.9	280.9	223.3	164.5
100°	33.0	66.6	309.5	313.7	243.6
102.5°	39.8	71.2	317.5	390.7	330.7
105°	51.6	78.2	316.7	480.7	448.5
107.5°	63.6	88.3	298.6	527.5	535.3
110°	71.6	94.1	283.7	539.5	573.2



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	79.7	101.0	270.0	531.9	583.5
115°	91.7	111.3	253.6	506.0	577.5
117.5°	103.5	121.4	242.5	470.1	549.4
120°	110.3	127.1	237.9	446.0	523.0
122.5°	117.2	134.0	234.4	421.9	497.8
125°	127.5	142.9	230.7	389.9	460.0
127.5°	135.8	151.5	227.5	364.2	423.3
130°	140.4	157.2	226.4	348.0	402.7
132.5°	145.0	161.8	225.3	334.1	383.2
135°	151.9	167.3	223.5	314.8	356.8
137.5°	159.1	174.2	223.3	300.3	334.7
140°	164.8	178.8	222.1	288.8	321.0
142.5°	169.4	182.3	222.1	280.6	308.4
145°	176.3	187.5	220.7	268.4	289.5
147.5°	183.1	194.1	220.7	258.3	275.7
150°	187.7	197.5	220.7	252.5	266.5
152.5°	192.3	199.9	220.7	247.9	258.5
155°	199.2	204.8	220.7	242.3	249.3
157.5°	204.3	209.7	220.7	237.4	242.5
160°	207.8	212.0	220.7	235.1	237.9
162.5°	211.2	214.3	220.7	232.8	235.6
165°	214.9	217.7	220.7	229.3	232.1
167.5°	218.4	219.8	222.1	227.9	229.0
170°	220.7	222.1	222.1	227.8	227.8
172.5°	221.8	222.1	222.1	226.7	225.5
175°	223.5	223.5	222.1	225.0	225.0
177.5°	223.5	223.5	222.4	224.7	223.5
180°	223.5	223.5	223.5	223.5	223.5

(END OF REPORT)