

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: P518330

Luminaire Tested: **SQ4-BB-025U-075D-835-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518330  
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-075D-835-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 250 LUMENS PER FOOT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

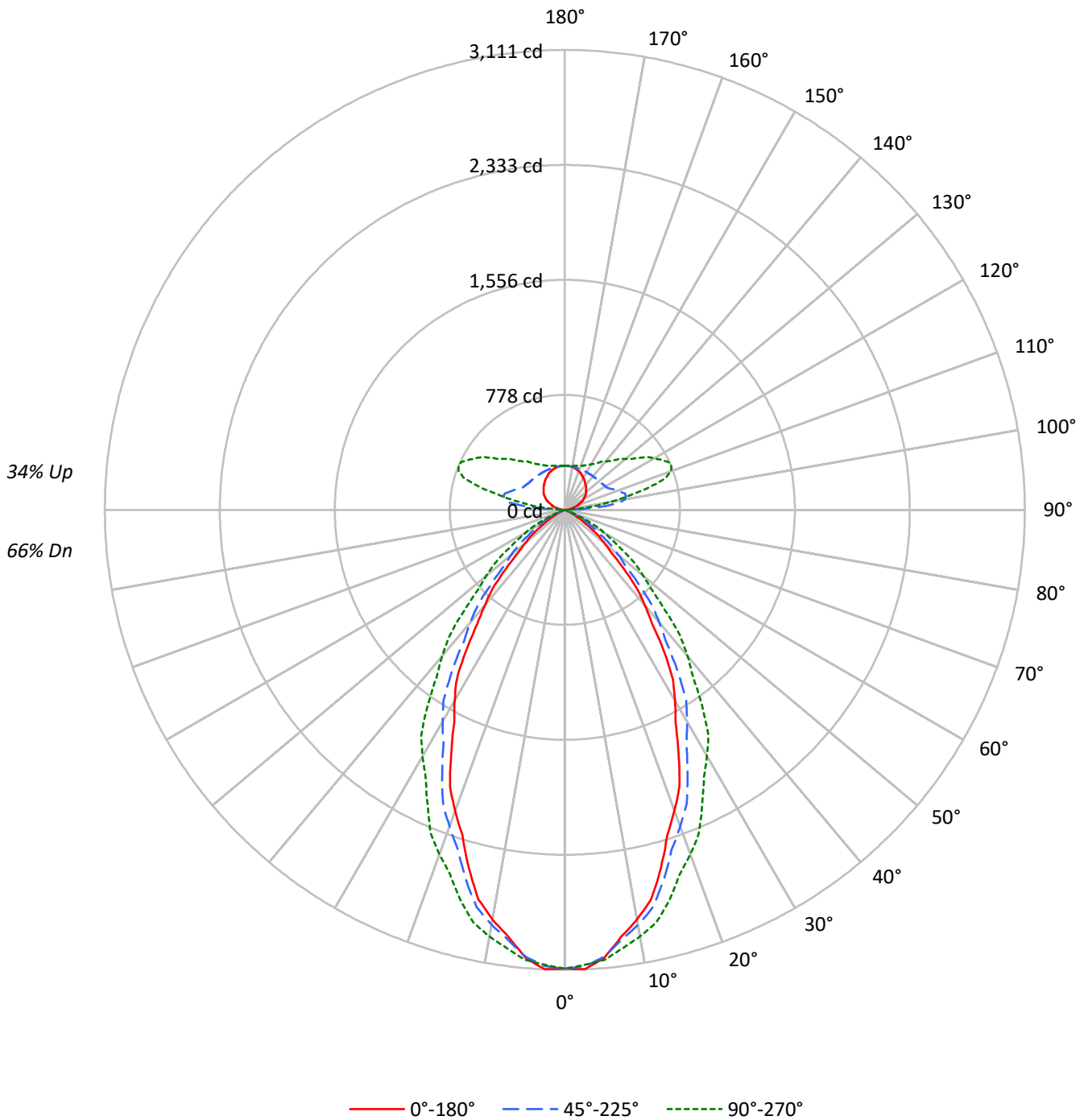
Lumens per Lamp: N/A  
Luminaire Lumens: 5635.7 lumens  
Efficiency: N/A  
Efficacy: 86.8 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 64.9  
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	111	111	111	111	104	104	104	104	92	92	92	81	81	81	71	71	71	66				
1	104	100	97	94	98	95	92	89	84	82	80	75	73	72	66	65	64	60				
2	96	90	85	81	91	86	81	77	77	73	71	69	66	64	61	59	58	54				
3	90	82	75	71	84	78	72	68	70	66	62	63	60	57	56	54	52	49				
4	83	74	67	62	79	71	65	60	64	59	56	58	54	51	52	49	47	44				
5	78	67	60	55	73	64	58	53	59	54	50	53	49	46	48	45	43	40				
6	72	62	55	49	68	59	53	48	54	49	45	49	45	42	45	42	39	37				
7	68	57	50	45	64	54	48	43	50	45	41	46	41	38	42	38	36	34				
8	63	52	45	41	60	50	44	39	46	41	37	43	38	35	39	36	33	31				
9	60	48	42	37	57	47	40	36	43	38	34	40	35	32	37	33	31	29				
10	56	45	38	34	53	43	37	33	40	35	32	37	33	30	34	31	28	27				

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

	0°	45°	90°
0°	14317	14317	14317
5°	14087	14052	14157
10°	13181	13357	13729
15°	11983	12363	13051
20°	10637	11189	12170
25°	9263	9997	11181
30°	7934	8806	10245
35°	6579	7475	9115
40°	5054	5977	7767
45°	3654	4526	6250
50°	2489	3373	4957
55°	1618	2439	3852
60°	928	1718	2784
65°	246	1049	1409
70°	121	324	405
75°	53	27	0
80°	40	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	283.2	5.0
10°-20°	724.3	12.9
20°-30°	906.8	16.1
30°-40°	837.6	14.9
40°-50°	562.8	10.0
50°-60°	290.7	5.2
60°-70°	91.1	1.6
70°-80°	5.7	0.1
80°-90°	1.7	0.0
90°-100°	145.3	2.6
100°-110°	381.9	6.8
110°-120°	396.0	7.0
120°-130°	317.6	5.6
130°-140°	249.2	4.4
140°-150°	191.3	3.4
150°-160°	137.8	2.4
160°-170°	84.3	1.5
170°-180°	28.5	0.5
0°-30°	1914.4	34.0
0°-40°	2751.9	48.8
0°-60°	3605.4	64.0
0°-90°	3703.9	65.7
90°-120°	923.2	16.4
90°-150°	1681.3	29.8
90°-180°	1932.0	34.3
0°-180°	5635.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3104	3104	3104	3104	3104	
5°	3042	3011	3034	3045	3057	282
15°	2509	2500	2589	2676	2733	699
25°	1820	1834	1964	2098	2197	834
35°	1168	1198	1327	1484	1619	724
45°	560	594	694	829	958	440
55°	201	235	303	389	479	188
65°	22	43	96	116	129	38
75°	3	3	2	0	0	4
85°	0	0	0	0	0	0
90°	2	6	15	8	8	2
95°	19	75	250	129	88	21
105°	69	104	422	641	598	73
115°	122	148	338	675	770	121
125°	170	191	308	520	613	151
135°	202	223	298	420	476	157
145°	235	250	294	358	386	147
155°	266	273	294	323	332	122
165°	287	290	294	306	310	81
175°	298	298	296	300	300	28
180°	298	298	298	298	298	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3103.6	3103.6	3103.6	3103.6	3103.6
2.5°	3110.8	3081.5	3089.2	3089.0	3080.8
5°	3042.0	3011.2	3034.5	3045.3	3057.1
7.5°	2913.5	2889.4	2934.2	2967.8	2992.2
10°	2813.8	2793.3	2851.4	2897.2	2930.9
12.5°	2698.5	2682.6	2752.9	2815.7	2858.9
15°	2509.0	2500.2	2588.6	2675.5	2732.7
17.5°	2306.0	2305.7	2406.6	2514.5	2583.5
20°	2166.7	2171.1	2279.3	2398.2	2479.0
22.5°	2027.3	2037.6	2153.2	2277.2	2369.7
25°	1819.8	1834.5	1964.0	2098.3	2196.7
27.5°	1620.4	1641.9	1778.1	1917.7	2037.5
30°	1489.5	1514.5	1653.2	1800.1	1923.4
32.5°	1361.0	1390.6	1525.8	1681.2	1806.9
35°	1168.2	1197.5	1327.3	1483.6	1618.6
37.5°	969.1	997.8	1124.6	1278.4	1424.3
40°	839.3	871.6	992.5	1141.5	1289.8
42.5°	721.6	753.9	867.6	1014.0	1154.1
45°	560.1	593.8	693.7	828.8	958.0
47.5°	426.1	462.8	550.5	672.6	790.4
50°	346.8	383.6	470.0	577.6	690.7
52.5°	283.2	318.7	396.7	498.2	601.8
55°	201.2	235.0	303.3	389.4	479.0
57.5°	139.0	168.1	229.4	301.3	371.5
60°	100.6	128.5	186.2	244.5	301.8
62.5°	67.0	92.5	148.9	193.7	232.1
65°	22.5	43.1	96.1	115.9	129.1
67.5°	11.4	13.8	50.5	53.3	57.7
70°	9.0	9.0	24.0	25.6	30.0
72.5°	6.6	6.6	9.6	12.3	13.2
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°	0.4	1.1	3.1	1.5	1.5
90°	1.9	5.6	15.3	7.6	7.6
92.5°	8.0	38.7	85.6	37.9	24.5
95°	19.1	75.1	250.3	129.0	87.9
97.5°	33.2	82.6	374.5	297.8	219.3
100°	43.9	88.8	412.7	418.2	324.8
102.5°	53.1	95.0	423.4	520.9	441.0
105°	68.8	104.3	422.2	641.0	598.0
107.5°	84.8	117.7	398.2	703.3	713.8
110°	95.5	125.4	378.3	719.4	764.2



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	106.2	134.6	360.0	709.2	778.0
115°	122.3	148.4	338.2	674.7	770.0
117.5°	137.9	161.9	323.3	626.8	732.5
120°	147.1	169.5	317.2	594.6	697.4
122.5°	156.3	178.7	312.6	562.5	663.7
125°	170.0	190.6	307.6	519.9	613.3
127.5°	181.1	202.0	303.4	485.5	564.4
130°	187.2	209.7	301.9	464.0	536.9
132.5°	193.4	215.8	300.3	445.5	510.9
135°	202.5	223.1	298.0	419.7	475.7
137.5°	212.1	232.2	297.7	400.4	446.3
140°	219.7	238.4	296.1	385.0	428.0
142.5°	225.8	243.0	296.1	374.2	411.2
145°	235.0	249.9	294.2	357.9	385.9
147.5°	244.2	258.7	294.2	344.4	367.6
150°	250.3	263.4	294.2	336.7	355.4
152.5°	256.4	266.5	294.2	330.5	344.7
155°	265.6	273.0	294.2	323.1	332.4
157.5°	272.4	279.5	294.2	316.5	323.3
160°	277.0	282.6	294.2	313.4	317.2
162.5°	281.6	285.7	294.2	310.4	314.1
165°	286.6	290.3	294.2	305.8	309.5
167.5°	291.2	293.0	296.1	303.8	305.3
170°	294.2	296.1	296.1	303.8	303.8
172.5°	295.8	296.1	296.1	302.2	300.7
175°	298.0	298.0	296.1	300.0	300.0
177.5°	298.0	298.0	296.5	299.5	298.0
180°	298.0	298.0	298.0	298.0	298.0

(END OF REPORT)