

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: P518346

Luminaire Tested: **SQ4-BB-025U-075D-940-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518346  
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-940-1D-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: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

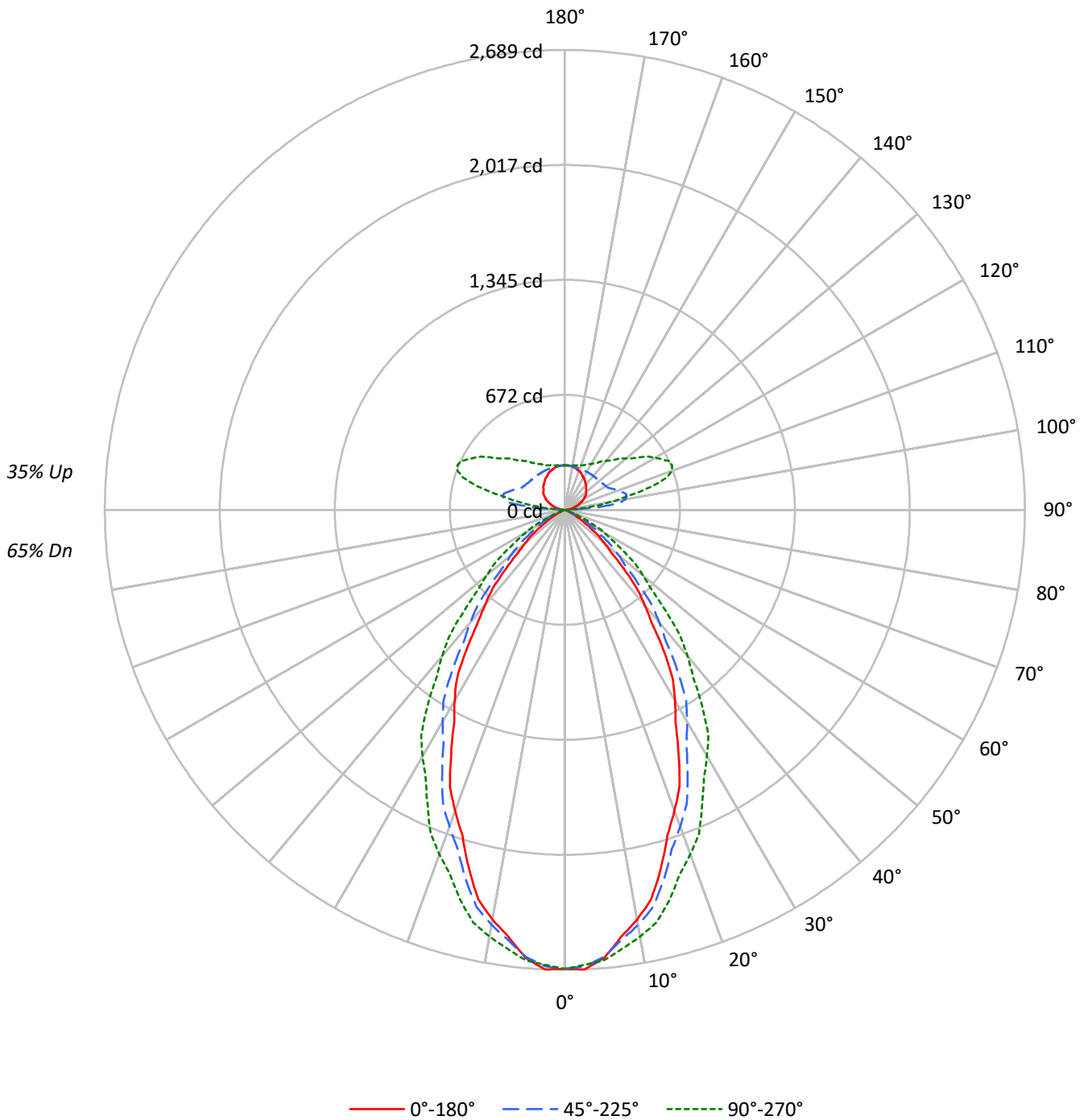
Lumens per Lamp: N/A  
Luminaire Lumens: 4888.8 lumens  
Efficiency: N/A  
Efficacy: 75.3 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: Semi-Direct

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	70	70	70	65				
1	104	100	97	94	97	95	92	89	84	82	80	75	73	72	66	65	64	60				
2	96	90	85	81	91	85	81	77	77	73	70	68	66	64	61	59	58	54				
3	90	82	75	70	84	77	72	68	70	66	62	63	60	57	56	54	52	49				
4	83	74	67	62	79	70	64	60	64	59	55	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	41	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	42	38	35	39	35	33	31				
9	60	48	42	37	57	47	40	36	43	38	34	40	35	32	36	33	30	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°	12377	12377	12377
5°	12178	12148	12238
10°	11394	11546	11869
15°	10359	10687	11282
20°	9195	9673	10520
25°	8008	8642	9666
30°	6859	7612	8857
35°	5687	6462	7880
40°	4370	5167	6715
45°	3159	3912	5402
50°	2152	2916	4285
55°	1399	2109	3330
60°	803	1485	2407
65°	213	907	1218
70°	105	281	351
75°	46	23	0
80°	35	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	244.9	5.0
10°-20°	626.2	12.8
20°-30°	783.9	16.0
30°-40°	724.1	14.8
40°-50°	486.5	10.0
50°-60°	251.3	5.1
60°-70°	78.7	1.6
70°-80°	5.0	0.1
80°-90°	1.5	0.0
90°-100°	126.8	2.6
100°-110°	333.5	6.8
110°-120°	345.8	7.1
120°-130°	277.3	5.7
130°-140°	217.6	4.5
140°-150°	167.0	3.4
150°-160°	120.3	2.5
160°-170°	73.6	1.5
170°-180°	24.9	0.5
0°-30°	1654.9	33.9
0°-40°	2379.0	48.7
0°-60°	3116.8	63.8
0°-90°	3202.0	65.5
90°-120°	806.1	16.5
90°-150°	1468.1	30.0
90°-180°	1687.0	34.5
0°-180°	4888.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2683	2683	2683	2683	2683	
5°	2630	2603	2623	2633	2643	244
15°	2169	2161	2238	2313	2362	604
25°	1573	1586	1698	1814	1899	721
35°	1010	1035	1148	1282	1399	626
45°	484	513	600	716	828	380
55°	174	203	262	337	414	162
65°	20	37	83	100	112	33
75°	3	3	1	0	0	4
85°	0	0	0	0	0	0
90°	2	5	13	7	7	1
95°	17	66	218	113	77	19
105°	60	91	369	560	522	64
115°	107	130	295	589	672	105
125°	148	166	269	454	536	132
135°	177	195	260	366	415	137
145°	205	218	257	312	337	129
155°	232	238	257	282	290	107
165°	250	254	257	267	270	71
175°	260	260	259	262	262	25
180°	260	260	260	260	260	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2683.0	2683.0	2683.0	2683.0	2683.0
2.5°	2689.2	2663.9	2670.5	2670.4	2663.3
5°	2629.8	2603.1	2623.3	2632.6	2642.8
7.5°	2518.7	2497.9	2536.6	2565.6	2586.7
10°	2432.5	2414.7	2464.9	2504.5	2533.7
12.5°	2332.8	2319.1	2379.8	2434.1	2471.4
15°	2169.0	2161.4	2237.8	2312.9	2362.4
17.5°	1993.5	1993.2	2080.5	2173.7	2233.4
20°	1873.0	1876.9	1970.4	2073.2	2143.0
22.5°	1752.6	1761.5	1861.4	1968.6	2048.5
25°	1573.2	1585.9	1697.8	1814.0	1899.0
27.5°	1400.8	1419.4	1537.1	1657.8	1761.4
30°	1287.6	1309.2	1429.1	1556.2	1662.8
32.5°	1176.5	1202.2	1319.0	1453.4	1562.0
35°	1009.9	1035.2	1147.5	1282.5	1399.3
37.5°	837.7	862.6	972.2	1105.1	1231.3
40°	725.6	753.5	858.0	986.8	1115.0
42.5°	623.8	651.8	750.0	876.6	997.7
45°	484.2	513.4	599.7	716.4	828.1
47.5°	368.4	400.1	475.9	581.5	683.3
50°	299.8	331.6	406.3	499.4	597.1
52.5°	244.8	275.5	342.9	430.6	520.2
55°	173.9	203.1	262.2	336.6	414.1
57.5°	120.2	145.3	198.3	260.5	321.1
60°	87.0	111.1	161.0	211.4	260.9
62.5°	57.9	80.0	128.8	167.4	200.7
65°	19.5	37.2	83.1	100.2	111.6
67.5°	9.9	11.9	43.6	46.0	49.8
70°	7.8	7.8	20.8	22.2	26.0
72.5°	5.7	5.7	8.3	10.7	11.4
75°	2.6	2.6	1.3	0.0	0.0
77.5°	1.3	1.3	1.0	0.0	0.0
80°	1.3	1.3	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	1.0	2.7	1.3	1.3
90°	1.7	4.9	13.3	6.7	6.7
92.5°	7.0	33.8	74.7	33.1	21.4
95°	16.7	65.6	218.5	112.6	76.7
97.5°	29.0	72.1	327.0	260.0	191.5
100°	38.4	77.5	360.3	365.2	283.6
102.5°	46.4	82.9	369.7	454.9	385.0
105°	60.1	91.1	368.7	559.7	522.2
107.5°	74.1	102.8	347.7	614.1	623.3
110°	83.4	109.5	330.3	628.2	667.3

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	92.8	117.6	314.3	619.3	679.3
115°	106.8	129.6	295.3	589.1	672.3
117.5°	120.4	141.3	282.3	547.3	639.6
120°	128.5	148.0	276.9	519.2	608.9
122.5°	136.5	156.0	272.9	491.1	579.6
125°	148.5	166.4	268.6	454.0	535.5
127.5°	158.2	176.4	264.9	424.0	492.8
130°	163.5	183.1	263.6	405.2	468.8
132.5°	168.8	188.4	262.3	389.0	446.1
135°	176.8	194.8	260.3	366.5	415.4
137.5°	185.2	202.8	259.9	349.6	389.7
140°	191.9	208.2	258.6	336.2	373.7
142.5°	197.2	212.2	258.6	326.7	359.0
145°	205.2	218.2	256.9	312.5	337.0
147.5°	213.2	225.9	256.9	300.7	321.0
150°	218.5	230.0	256.9	294.0	310.3
152.5°	223.9	232.7	256.9	288.6	301.0
155°	231.9	238.4	256.9	282.1	290.3
157.5°	237.9	244.1	256.9	276.4	282.3
160°	241.9	246.8	256.9	273.7	276.9
162.5°	245.9	249.5	256.9	271.0	274.3
165°	250.2	253.5	256.9	267.0	270.3
167.5°	254.2	255.9	258.6	265.3	266.6
170°	256.9	258.5	258.6	265.3	265.3
172.5°	258.2	258.6	258.6	263.9	262.6
175°	260.3	260.3	258.6	261.9	261.9
177.5°	260.3	260.3	258.9	261.6	260.3
180°	260.3	260.3	260.3	260.3	260.3

(END OF REPORT)