

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: P518504

Luminaire Tested: **SQ4-BB-075U-050D-930-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518504  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, 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-075U-050D-930-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

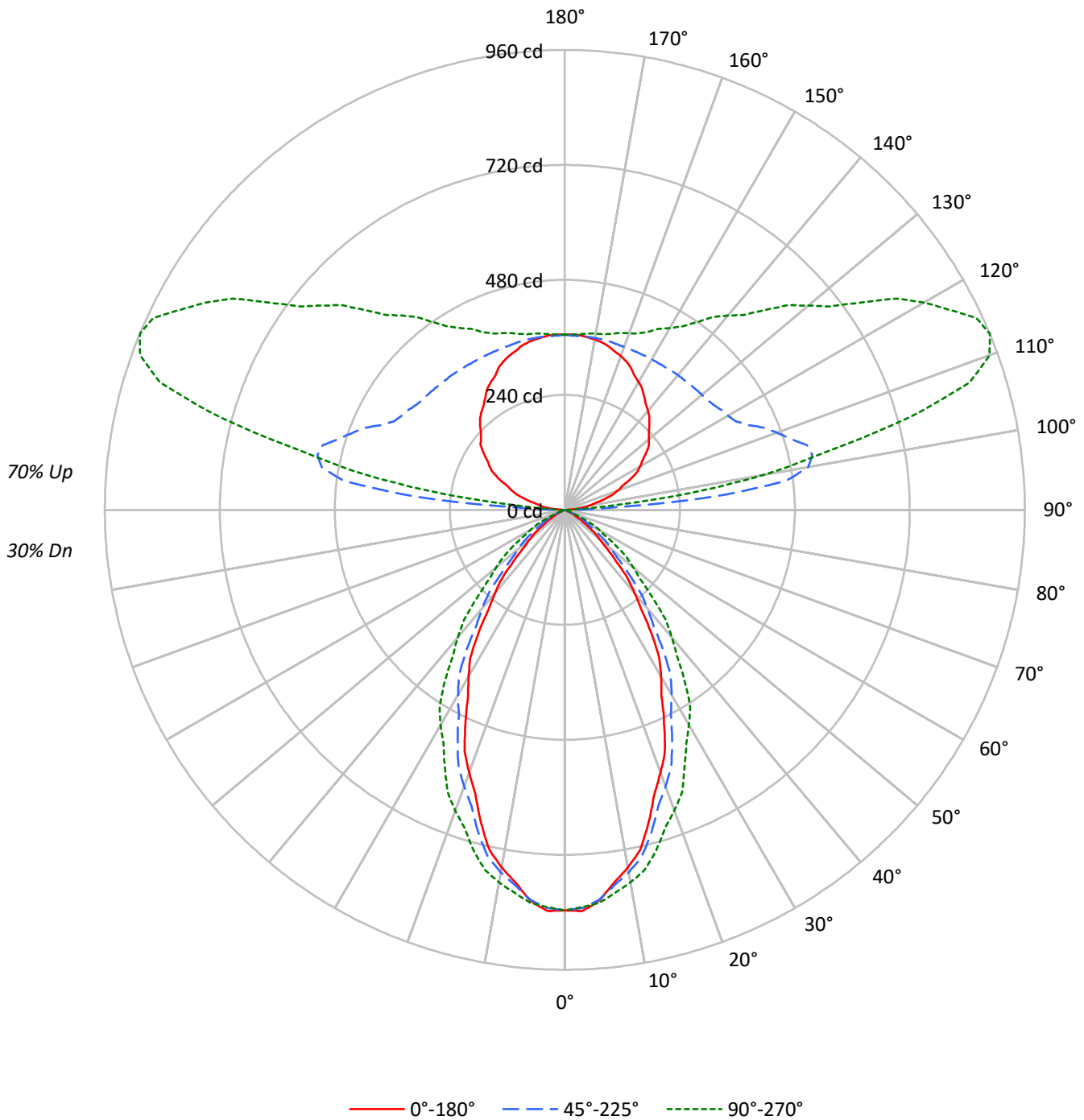
Lumens per Lamp: N/A  
Luminaire Lumens: 3380.7 lumens  
Efficiency: N/A  
Efficacy: 97.4 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 34.7  
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	102	102	102	102	92	92	92	92	72	72	72	54	54	54	37	37	37	30				
1	94	90	87	84	84	81	79	76	64	63	61	49	48	47	35	34	33	27				
2	87	80	75	70	78	72	68	64	58	55	52	44	42	41	32	31	30	24				
3	80	71	65	60	72	65	59	55	52	48	45	40	38	36	29	28	27	22				
4	73	64	57	52	66	58	52	47	47	43	39	36	34	32	27	25	24	20				
5	68	57	50	45	61	52	46	41	42	38	35	33	30	28	25	23	22	18				
6	63	52	45	39	56	47	41	36	39	34	31	30	27	25	23	21	20	16				
7	58	47	40	35	52	43	37	32	35	31	27	28	25	23	21	19	18	15				
8	54	43	36	31	49	39	33	29	32	28	25	26	23	21	20	18	16	14				
9	51	39	33	28	46	36	30	26	30	25	22	24	21	19	18	16	15	13				
10	47	36	30	25	43	33	27	24	28	23	20	22	19	17	17	15	14	12				

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

	0°	45°	90°
0°	7714	7714	7714
5°	7590	7571	7628
10°	7102	7197	7397
15°	6456	6661	7032
20°	5731	6029	6558
25°	4991	5386	6025
30°	4275	4745	5521
35°	3545	4028	4912
40°	2723	3221	4185
45°	1969	2439	3368
50°	1341	1817	2671
55°	872	1314	2075
60°	500	926	1500
65°	133	565	760
70°	65	175	219
75°	29	14	0
80°	21	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	76.3	2.3
10°-20°	195.1	5.8
20°-30°	244.3	7.2
30°-40°	225.6	6.7
40°-50°	151.6	4.5
50°-60°	78.3	2.3
60°-70°	24.5	0.7
70°-80°	1.5	0.0
80°-90°	1.0	0.0
90°-100°	172.5	5.1
100°-110°	474.5	14.0
110°-120°	489.8	14.5
120°-130°	392.4	11.6
130°-140°	308.2	9.1
140°-150°	236.2	7.0
150°-160°	169.8	5.0
160°-170°	103.8	3.1
170°-180°	35.0	1.0
0°-30°	515.7	15.3
0°-40°	741.4	21.9
0°-60°	971.3	28.7
0°-90°	998.4	29.5
90°-120°	1136.8	33.6
90°-150°	2073.6	61.3
90°-180°	2382.0	70.5
0°-180°	3380.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	836	836	836	836	836	
5°	820	811	818	820	824	76
15°	676	674	697	721	736	188
25°	490	494	529	565	592	225
35°	315	323	358	400	436	195
45°	151	160	187	223	258	118
55°	54	63	82	105	129	51
65°	6	12	26	31	35	10
75°	1	1	0	0	0	1
85°	0	0	0	0	0	0
90°	1	3	5	7	7	2
95°	26	94	305	130	83	27
105°	85	130	523	796	743	89
115°	150	183	419	835	948	148
125°	207	236	380	644	754	185
135°	250	277	370	520	589	193
145°	289	308	364	444	478	181
155°	327	337	362	399	410	150
165°	353	358	363	378	380	100
175°	366	366	364	369	368	35
180°	366	366	366	366	366	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	836.1	836.1	836.1	836.1	836.1
2.5°	838.1	830.2	832.2	832.2	830.0
5°	819.5	811.2	817.5	820.4	823.6
7.5°	784.9	778.4	790.5	799.5	806.1
10°	758.1	752.5	768.2	780.5	789.6
12.5°	727.0	722.7	741.6	758.6	770.2
15°	675.9	673.6	697.4	720.8	736.2
17.5°	621.3	621.2	648.4	677.4	696.0
20°	583.7	584.9	614.1	646.1	667.9
22.5°	546.2	548.9	580.1	613.5	638.4
25°	490.3	494.2	529.1	565.3	591.8
27.5°	436.6	442.3	479.0	516.6	548.9
30°	401.3	408.0	445.4	485.0	518.2
32.5°	366.7	374.6	411.1	452.9	486.8
35°	314.7	322.6	357.6	399.7	436.1
37.5°	261.1	268.8	303.0	344.4	383.7
40°	226.1	234.8	267.4	307.5	347.5
42.5°	194.4	203.1	233.7	273.2	310.9
45°	150.9	160.0	186.9	223.3	258.1
47.5°	114.8	124.7	148.3	181.2	212.9
50°	93.4	103.3	126.6	155.6	186.1
52.5°	76.3	85.9	106.9	134.2	162.1
55°	54.2	63.3	81.7	104.9	129.0
57.5°	37.5	45.3	61.8	81.2	100.1
60°	27.1	34.6	50.2	65.9	81.3
62.5°	18.0	24.9	40.1	52.2	62.5
65°	6.1	11.6	25.9	31.2	34.8
67.5°	3.1	3.7	13.6	14.3	15.5
70°	2.4	2.4	6.5	6.9	8.1
72.5°	1.8	1.8	2.6	3.3	3.6
75°	0.8	0.8	0.4	0.0	0.0
77.5°	0.4	0.4	0.3	0.0	0.0
80°	0.4	0.4	0.0	0.0	0.0
82.5°	0.1	0.1	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.2	0.6	1.1	1.4	1.4
90°	0.8	3.1	5.4	7.0	7.0
92.5°	10.7	45.9	79.5	30.5	25.1
95°	25.7	94.1	305.0	130.4	83.3
97.5°	41.9	104.4	465.4	358.6	253.0
100°	53.7	110.7	515.9	520.7	424.8
102.5°	64.9	118.3	528.9	646.0	558.0
105°	84.8	130.5	522.9	796.3	743.0
107.5°	103.8	145.5	493.1	869.9	885.7
110°	117.5	155.5	470.7	888.2	943.0

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	129.9	166.8	448.3	876.4	959.8
115°	150.2	182.9	419.4	835.1	947.7
117.5°	169.5	199.6	401.0	777.1	904.4
120°	181.3	210.2	392.9	733.6	865.2
122.5°	191.9	220.8	387.3	695.5	820.4
125°	207.0	235.9	380.5	643.6	753.9
127.5°	221.3	248.8	376.0	600.4	697.1
130°	228.8	256.9	373.5	574.7	662.9
132.5°	237.5	265.6	371.6	552.1	631.8
135°	249.8	277.1	369.6	520.5	589.0
137.5°	261.3	286.7	367.9	495.0	551.5
140°	270.0	293.6	367.2	478.1	529.1
142.5°	277.5	299.2	366.0	463.0	506.7
145°	288.7	308.4	364.1	443.5	477.7
147.5°	300.6	317.7	363.2	426.2	453.6
150°	308.1	323.3	362.6	416.7	438.0
152.5°	315.0	329.0	362.0	408.6	426.2
155°	326.8	337.4	361.8	398.6	410.0
157.5°	335.3	344.0	361.8	390.5	398.4
160°	341.6	348.4	361.8	386.1	392.1
162.5°	346.5	352.2	362.4	382.3	387.2
165°	353.2	357.8	363.4	378.2	380.5
167.5°	357.9	361.4	364.1	374.7	375.3
170°	361.0	363.3	364.1	373.5	373.5
172.5°	363.5	364.6	364.1	371.6	371.0
175°	365.7	366.4	364.1	368.8	368.0
177.5°	366.3	366.3	363.8	367.5	366.3
180°	365.7	365.7	365.7	365.7	365.7

(END OF REPORT)