

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P521092

Luminaire Tested: **SQ4-BB-075U-050D-93050-1D-UNV-STD-W-4 (5000K)**

Issue Date: 5/5/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P521092  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-50,  
Test Lab: INNOVATION CENTER  
Issue Date: 5/5/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-BB-075U-050D-93050-1D-UNV-STD-W-4 (5000K)  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 750 LUMENS PER FOOT  
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

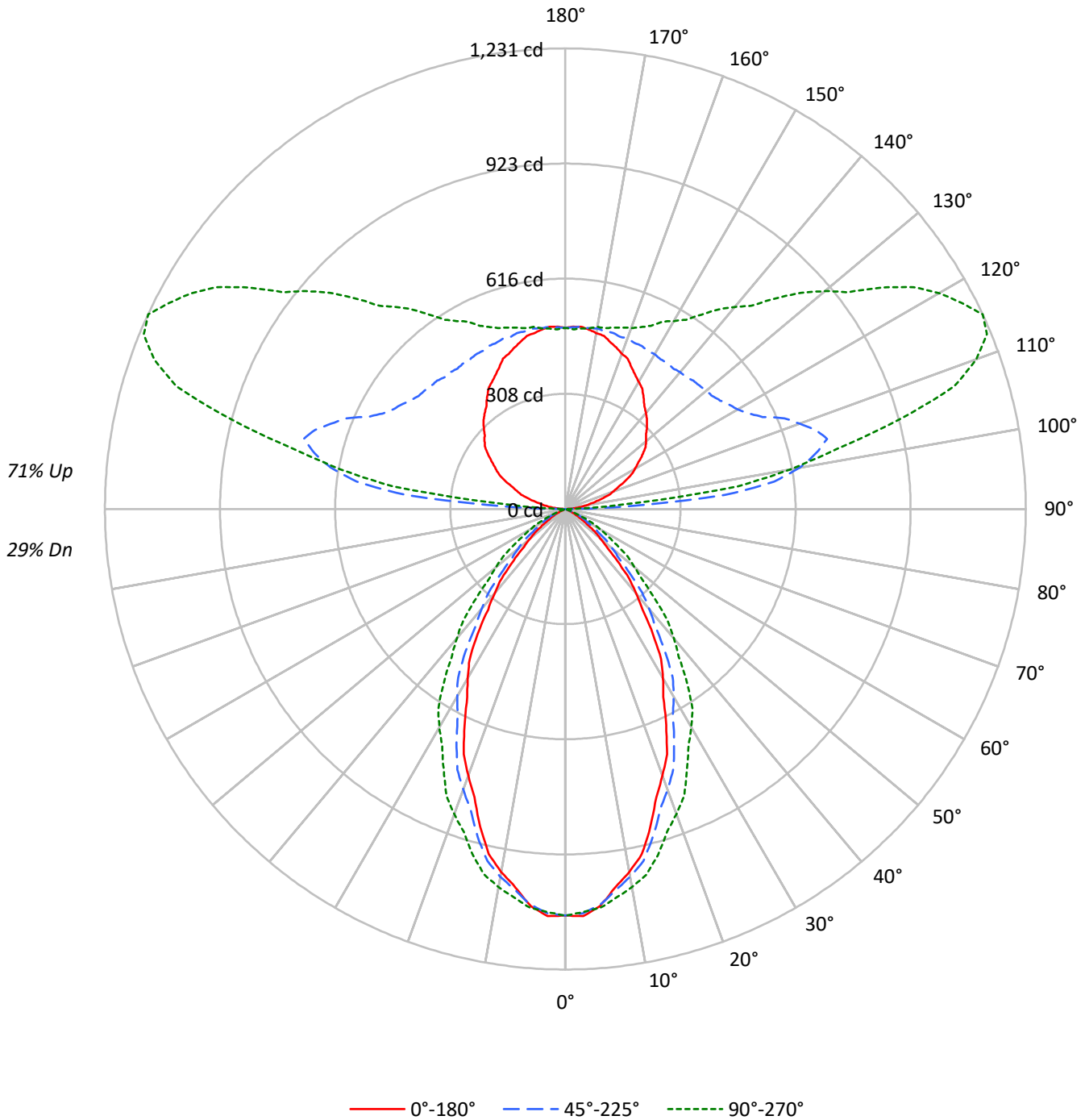
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4428.9 lumens  
Efficiency: N/A  
Efficacy: 99.7 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): 44.4  
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	0
RCR																		
0	102	102	102	102	92	92	92	92	72	72	72	54	54	54	37	37	37	29
1	94	90	87	84	84	81	79	76	64	63	61	49	48	47	34	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	71	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	31	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	38	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	20	20	18	16	14
9	50	39	32	28	46	36	30	26	30	25	22	24	21	19	18	16	15	13
10	47	36	30	25	43	33	27	23	28	23	20	22	19	17	17	15	14	12

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

	0°	45°	90°
0°	10025	10025	10025
5°	9864	9839	9913
10°	9230	9353	9614
15°	8391	8657	9139
20°	7448	7835	8521
25°	6487	7000	7829
30°	5556	6166	7174
35°	4607	5234	6383
40°	3540	4185	5439
45°	2559	3169	4376
50°	1743	2361	3471
55°	1132	1708	2698
60°	650	1203	1950
65°	172	734	987
70°	86	227	283
75°	39	18	0
80°	27	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	99.2	2.2
10°-20°	253.6	5.7
20°-30°	317.5	7.2
30°-40°	293.3	6.6
40°-50°	197.1	4.4
50°-60°	101.8	2.3
60°-70°	31.9	0.7
70°-80°	2.0	0.0
80°-90°	0.0	0.0
90°-100°	249.4	5.6
100°-110°	602.8	13.6
110°-120°	642.9	14.5
120°-130°	520.7	11.8
130°-140°	403.1	9.1
140°-150°	307.5	6.9
150°-160°	222.6	5.0
160°-170°	137.1	3.1
170°-180°	46.4	1.0
0°-30°	670.2	15.1
0°-40°	963.5	21.8
0°-60°	1262.3	28.5
0°-90°	1296.3	29.3
90°-120°	1495.1	33.8
90°-150°	2726.5	61.6
90°-180°	3133.0	70.7
0°-180°	4428.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1087	1087	1087	1087	1087	
5°	1065	1054	1062	1066	1070	99
15°	878	875	906	937	957	245
25°	637	642	688	735	769	292
35°	409	419	465	519	567	253
45°	196	208	243	290	335	154
55°	70	82	106	136	168	66
65°	8	15	34	41	45	13
75°	1	1	0	0	0	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	25	125	427	278	195	28
105°	96	166	724	937	925	102
115°	176	225	582	1103	1231	174
125°	251	289	505	878	1031	224
135°	308	344	485	692	796	238
145°	365	392	476	588	634	228
155°	418	436	482	521	540	193
165°	462	469	488	495	502	130
175°	489	487	489	485	484	46
180°	484	484	484	484	484	



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CATALOG NUMBER: SQ4-BB-075U-050D-93050-1D-UNV-STD-W-4 (5000K)

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1086.6	1086.6	1086.6	1086.6	1086.6
2.5°	1089.2	1078.9	1081.6	1081.5	1078.6
5°	1065.1	1054.3	1062.4	1066.2	1070.3
7.5°	1020.1	1011.6	1027.3	1039.1	1047.6
10°	985.2	978.0	998.3	1014.4	1026.2
12.5°	944.8	939.2	963.8	985.8	1000.9
15°	878.5	875.4	906.3	936.7	956.8
17.5°	807.4	807.3	842.6	880.4	904.5
20°	758.6	760.1	798.0	839.7	867.9
22.5°	709.8	713.4	753.9	797.3	829.7
25°	637.2	642.3	687.6	734.7	769.1
27.5°	567.3	574.8	622.5	671.4	713.4
30°	521.5	530.2	578.8	630.2	673.4
32.5°	476.5	486.9	534.2	588.6	632.6
35°	409.0	419.3	464.7	519.4	566.7
37.5°	339.3	349.4	393.8	447.6	498.7
40°	293.9	305.2	347.5	399.7	451.6
42.5°	252.7	264.0	303.8	355.0	404.1
45°	196.1	207.9	242.9	290.2	335.4
47.5°	149.2	162.0	192.7	235.5	276.7
50°	121.4	134.3	164.5	202.2	241.8
52.5°	99.1	111.6	138.9	174.4	210.7
55°	70.4	82.3	106.2	136.3	167.7
57.5°	48.7	58.9	80.3	105.5	130.1
60°	35.2	45.0	65.2	85.6	105.7
62.5°	23.4	32.4	52.1	67.8	81.3
65°	7.9	15.1	33.6	40.6	45.2
67.5°	4.0	4.8	17.7	18.6	20.2
70°	3.2	3.2	8.4	9.0	10.5
72.5°	2.3	2.3	3.4	4.3	4.6
75°	1.1	1.1	0.5	0.0	0.0
77.5°	0.5	0.5	0.4	0.0	0.0
80°	0.5	0.5	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°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	8.2	67.5	159.0	77.3	52.5
95°	24.6	124.8	427.3	277.9	194.7
97.5°	43.7	138.2	562.8	542.2	465.4
100°	58.4	146.6	637.4	672.8	609.7
102.5°	72.3	154.1	686.6	781.6	744.2
105°	96.3	166.5	724.5	937.3	925.3
107.5°	119.9	181.0	702.1	1062.3	1090.5
110°	136.3	193.4	666.1	1116.1	1169.2

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	152.7	205.8	634.1	1129.3	1220.0
115°	176.3	225.3	582.0	1103.4	1230.7
117.5°	199.6	245.9	551.5	1044.1	1193.2
120°	215.2	258.3	531.8	997.5	1153.8
122.5°	231.6	271.5	519.5	949.9	1103.8
125°	251.1	289.1	505.2	877.6	1030.9
127.5°	270.3	306.2	495.1	816.3	950.9
130°	281.8	316.9	491.9	773.6	905.9
132.5°	292.5	329.1	486.9	742.8	855.0
135°	308.4	344.5	484.7	692.0	796.2
137.5°	323.6	359.9	477.5	657.6	736.2
140°	335.1	368.1	477.5	632.9	705.0
142.5°	346.6	379.6	473.4	611.3	672.2
145°	364.8	391.9	475.5	588.2	634.3
147.5°	381.8	408.1	474.2	561.6	599.7
150°	392.5	415.5	477.5	549.9	580.0
152.5°	403.9	426.2	476.7	537.6	564.4
155°	418.1	436.1	481.6	521.0	540.0
157.5°	435.1	450.5	480.6	514.7	525.9
160°	441.7	454.7	484.7	506.4	514.4
162.5°	452.3	463.7	483.1	503.9	508.7
165°	462.2	469.2	487.8	495.1	502.1
167.5°	474.2	478.9	486.5	494.5	494.7
170°	477.5	480.5	489.8	488.9	493.9
172.5°	483.3	485.5	487.4	489.5	486.5
175°	488.8	486.8	488.8	484.7	483.7
177.5°	487.8	487.8	486.1	484.4	480.4
180°	483.7	483.7	483.7	483.7	483.7

(END OF REPORT)