

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: P520988

Luminaire Tested: **SQ4-BB-025U-050D-93050-1D-UNV-STD-W-4 (5000K)**

Issue Date: 5/5/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P520988  
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-025U-050D-93050-1D-UNV-STD-W-4 (5000K)  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 250 LUMENS PER FOOT  
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

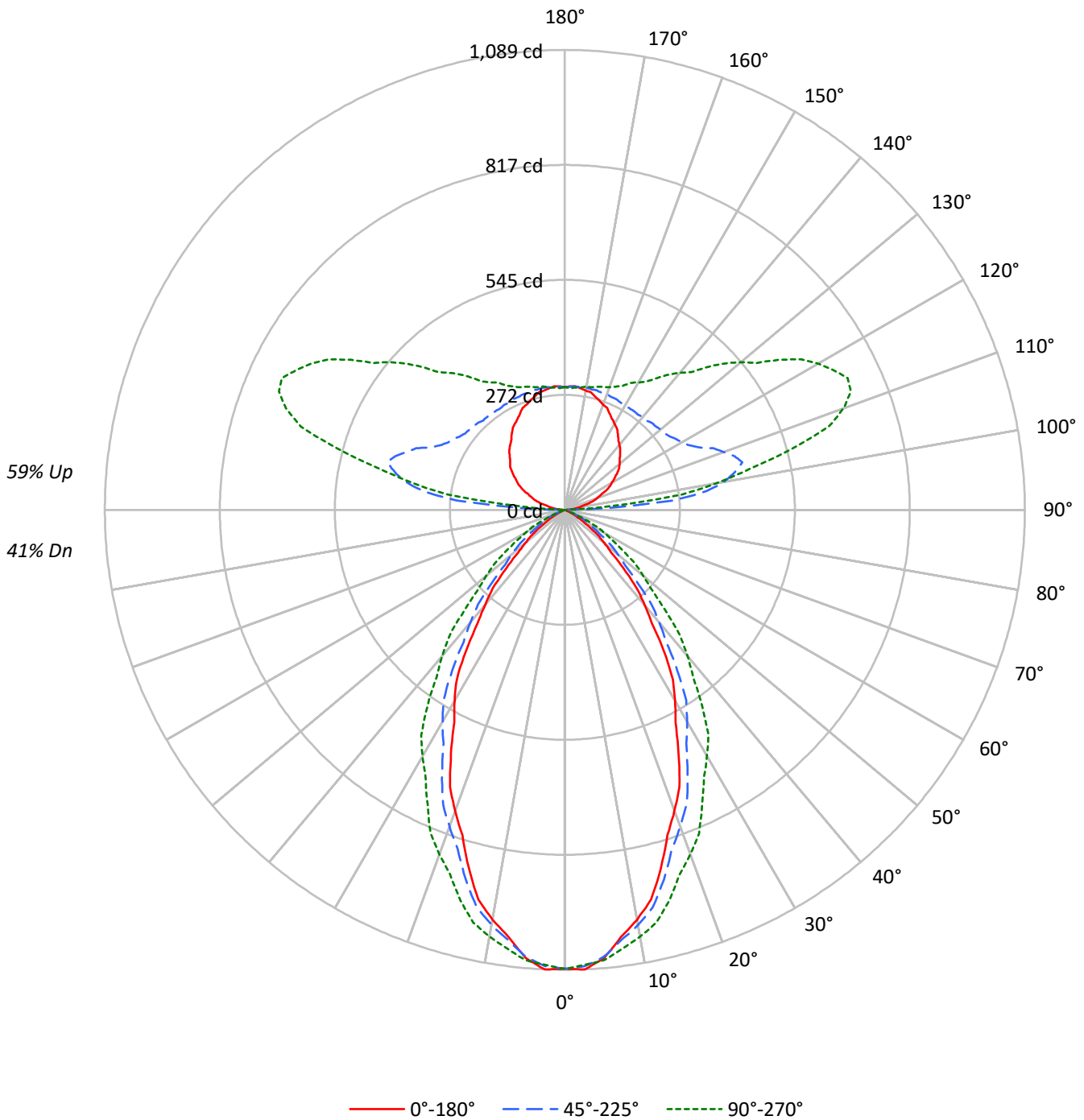
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3177.2 lumens  
Efficiency: N/A  
Efficacy: 90.3 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: General Diffuse

Input Watts (W): 35.2  
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	105	105	105	105	96	96	96	96	78	78	78	62	62	62	48	48	48	41
1	97	93	90	87	89	86	83	80	71	69	67	57	56	55	44	44	43	37
2	90	83	78	74	82	77	72	68	64	61	58	52	50	48	41	40	39	34
3	83	75	68	63	76	69	63	59	58	54	51	47	45	42	38	36	35	30
4	77	67	60	55	70	62	56	51	52	48	44	43	40	38	35	33	31	27
5	71	61	53	48	65	56	50	45	47	43	39	39	36	34	32	30	28	25
6	66	55	48	43	60	51	45	40	43	39	35	36	33	30	30	27	26	23
7	61	50	43	38	56	47	40	36	40	35	32	34	30	28	28	25	23	21
8	57	46	39	34	52	43	37	32	37	32	29	31	28	25	26	23	22	19
9	53	42	35	31	49	39	33	29	34	29	26	29	25	23	24	22	20	18
10	50	39	32	28	46	36	31	27	32	27	24	27	24	21	23	20	18	17

**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	3.1
10°-20°	253.6	8.0
20°-30°	317.5	10.0
30°-40°	293.3	9.2
40°-50°	197.1	6.2
50°-60°	101.8	3.2
60°-70°	31.9	1.0
70°-80°	2.0	0.1
80°-90°	0.0	0.0
90°-100°	149.8	4.7
100°-110°	361.9	11.4
110°-120°	386.0	12.2
120°-130°	312.7	9.8
130°-140°	242.1	7.6
140°-150°	184.7	5.8
150°-160°	133.7	4.2
160°-170°	82.3	2.6
170°-180°	27.9	0.9
0°-30°	670.2	21.1
0°-40°	963.5	30.3
0°-60°	1262.3	39.7
0°-90°	1296.3	40.8
90°-120°	897.7	28.3
90°-150°	1637.1	51.5
90°-180°	1881.0	59.2
0°-180°	3177.2	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°	15	75	257	167	117	17
105°	58	100	435	563	556	61
115°	106	135	350	663	739	105
125°	151	174	303	527	619	135
135°	185	207	291	416	478	143
145°	219	235	286	353	381	137
155°	251	262	289	313	324	116
165°	278	282	293	297	302	78
175°	294	292	294	291	290	28
180°	290	290	290	290	290	

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**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°	4.9	40.5	95.5	46.4	31.5
95°	14.8	74.9	256.6	166.8	116.9
97.5°	26.2	83.0	337.9	325.6	279.5
100°	35.1	88.0	382.7	404.0	366.1
102.5°	43.4	92.5	412.2	469.3	446.8
105°	57.8	100.0	435.0	562.8	555.6
107.5°	72.0	108.7	421.6	637.8	654.8
110°	81.8	116.1	399.9	670.2	702.1

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	<i>91.7</i>	123.6	380.7	678.1	732.6
115°	<i>105.8</i>	135.3	349.5	662.6	739.0
117.5°	<i>119.9</i>	147.7	331.2	626.9	716.4
120°	<i>129.2</i>	155.1	319.3	599.0	692.8
122.5°	<i>139.1</i>	163.0	312.0	570.4	662.8
125°	<i>150.7</i>	173.6	303.3	526.9	619.0
127.5°	<i>162.3</i>	183.9	297.3	490.1	571.0
130°	<i>169.2</i>	190.3	295.3	464.5	543.9
132.5°	<i>175.6</i>	197.6	292.4	446.0	513.4
135°	<i>185.2</i>	206.9	291.0	415.5	478.1
137.5°	<i>194.3</i>	216.1	286.7	394.9	442.0
140°	<i>201.2</i>	221.1	286.7	380.0	423.3
142.5°	<i>208.1</i>	227.9	284.3	367.1	403.6
145°	<i>219.0</i>	235.3	285.5	353.2	380.9
147.5°	<i>229.3</i>	245.0	284.8	337.2	360.1
150°	<i>235.7</i>	249.5	286.7	330.2	348.3
152.5°	<i>242.5</i>	255.9	286.2	322.8	338.9
155°	<i>251.0</i>	261.9	289.2	312.8	324.3
157.5°	<i>261.3</i>	270.5	288.6	309.0	315.8
160°	<i>265.2</i>	273.0	291.0	304.1	308.9
162.5°	<i>271.6</i>	278.4	290.0	302.5	305.4
165°	<i>277.5</i>	281.7	292.9	297.3	301.5
167.5°	<i>284.8</i>	287.5	292.1	296.9	297.1
170°	<i>286.7</i>	288.5	294.1	293.6	296.6
172.5°	<i>290.2</i>	291.5	292.6	293.9	292.1
175°	<i>293.5</i>	292.3	293.5	291.0	290.4
177.5°	<i>292.9</i>	292.9	291.9	290.9	288.5
180°	<i>290.4</i>	290.4	290.4	290.4	290.4

(END OF REPORT)