

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: P844859

Luminaire Tested: **SQ4P-BB-100U-075D-B35-1D-UNV**

Issue Date: 8/14/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P844859  
REPORT IS A COMBINATION OF REPORTS P700076 AND P700246  
Test Lab: INNOVATION CENTER  
Issue Date: 8/14/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4P-BB-100U-075D-B35-1D-UNV  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1000 LUMENS PER FOOT  
UPLIGHT, 750 LUMENS PER FOOT DOWNLIGHT  
  
Light Source: -  
Ballast/Driver: -

**Summary**

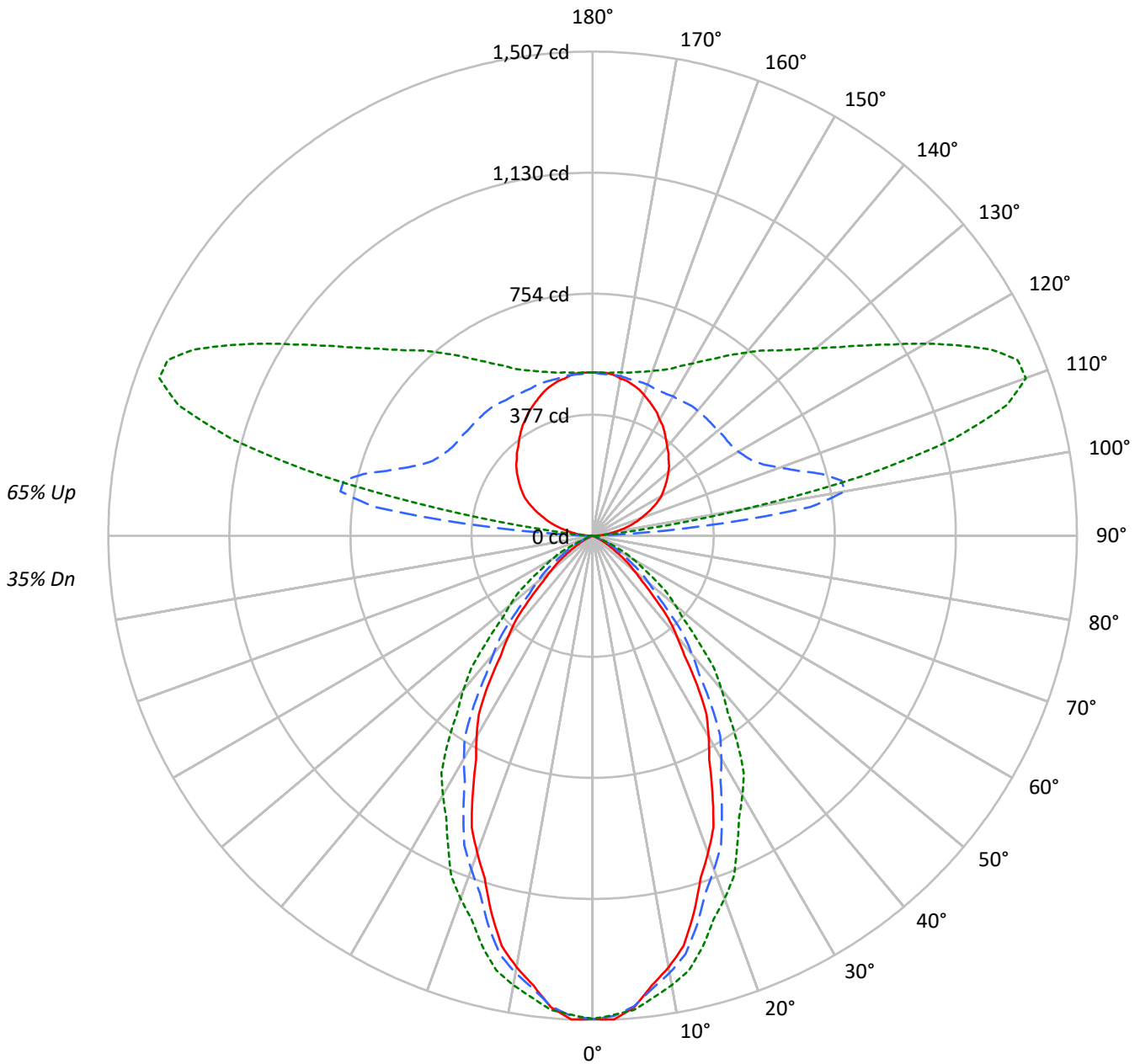
Lumens per Lamp: N/A  
Luminaire Lumens: 5095.7 lumens  
Efficiency: N/A  
Efficacy: 98.8 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 51.6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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: 25 FT

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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20									
RC	80									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	104	104	104	104	94	94	94	94	75	75	75	58	58	58	43	43	43	35																			
1	96	92	89	86	87	83	81	78	68	66	64	53	52	51	39	39	38	32																			
2	88	82	76	72	80	74	70	66	61	58	55	48	46	44	36	35	34	29																			
3	81	73	67	62	74	67	61	57	55	51	48	44	41	39	33	32	31	26																			
4	75	65	59	53	68	60	54	49	50	45	42	40	37	35	31	29	28	24																			
5	69	59	52	46	63	54	48	43	45	40	37	36	33	31	28	27	25	22																			
6	64	53	46	41	58	49	43	38	41	36	33	33	30	28	26	24	23	20																			
7	60	49	41	36	54	45	39	34	38	33	30	31	28	25	24	22	21	18																			
8	56	44	37	33	51	41	35	31	35	30	27	28	25	23	23	21	19	17																			
9	52	41	34	29	47	38	32	28	32	27	24	26	23	21	21	19	18	15																			
10	49	38	31	27	44	35	29	25	30	25	22	25	21	19	20	18	16	14																			

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

	0°	45°	90°
0°	13873	13873	13873
5°	13650	13616	13718
10°	12770	12942	13303
15°	11611	11979	12646
20°	10307	10842	11792
25°	8975	9686	10835
30°	7689	8533	9928
35°	6374	7243	8831
40°	4897	5792	7525
45°	3542	4385	6055
50°	2411	3267	4804
55°	1568	2363	3732
60°	899	1664	2700
65°	238	1017	1367
70°	119	313	391
75°	53	25	0
80°	37	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	137.2	2.7
10°-20°	350.9	6.9
20°-30°	439.3	8.6
30°-40°	405.8	8.0
40°-50°	272.7	5.4
50°-60°	140.8	2.8
60°-70°	44.1	0.9
70°-80°	2.8	0.1
80°-90°	1.3	0.0
90°-100°	202.4	4.0
100°-110°	704.3	13.8
110°-120°	682.2	13.4
120°-130°	535.2	10.5
130°-140°	423.6	8.3
140°-150°	326.9	6.4
150°-160°	234.3	4.6
160°-170°	143.3	2.8
170°-180°	48.5	1.0
0°-30°	927.5	18.2
0°-40°	1333.3	26.2
0°-60°	1746.8	34.3
0°-90°	1795.0	35.2
90°-120°	1588.9	31.2
90°-150°	2874.6	56.4
90°-180°	3301.0	64.8
0°-180°	5095.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1504	1504	1504	1504	1504	
5°	1474	1459	1470	1475	1481	137
15°	1216	1211	1254	1296	1324	339
25°	882	889	952	1017	1064	404
35°	566	580	643	719	784	351
45°	272	288	336	402	464	213
55°	98	114	147	189	232	91
65°	11	21	47	56	63	18
75°	2	2	1	0	0	2
85°	0	0	0	0	0	0
90°	8	11	11	8	4	5
95°	34	118	342	87	53	36
105°	118	167	740	1249	1162	124
115°	205	247	550	1162	1370	202
125°	277	342	512	865	1032	248
135°	334	376	509	721	816	259
145°	391	418	505	622	676	245
155°	444	459	497	554	573	205
165°	486	490	501	524	528	137
175°	509	509	505	512	509	48
180°	509	509	509	509	509	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1503.7	1503.7	1503.7	1503.7	1503.7
2.5°	1507.1	1493.0	1496.6	1496.6	1492.6
5°	1473.8	1458.8	1470.2	1475.4	1481.2
7.5°	1411.6	1399.9	1421.7	1437.8	1449.6
10°	1363.1	1353.3	1381.4	1403.6	1420.0
12.5°	1307.4	1299.6	1333.7	1364.2	1385.1
15°	1215.6	1211.4	1254.1	1296.1	1324.0
17.5°	1117.3	1117.1	1165.9	1218.2	1251.7
20°	1049.8	1052.0	1104.3	1161.9	1201.0
22.5°	982.3	987.2	1043.2	1103.3	1148.1
25°	881.6	888.7	951.5	1016.6	1064.3
27.5°	785.1	795.5	861.5	929.1	987.2
30°	721.7	733.7	801.0	872.1	931.9
32.5°	659.3	673.7	739.1	814.6	875.3
35°	565.9	580.2	643.1	718.8	784.1
37.5°	469.5	483.4	544.8	619.4	690.1
40°	406.6	422.3	480.9	553.1	624.8
42.5°	349.6	365.3	420.3	491.2	559.2
45°	271.5	287.7	336.1	401.5	464.1
47.5°	206.6	224.2	266.7	326.0	382.9
50°	168.0	185.7	227.6	279.8	334.7
52.5°	137.2	154.5	192.2	241.3	291.5
55°	97.5	113.8	146.9	188.8	232.0
57.5°	67.3	81.5	111.2	145.9	180.1
60°	48.7	62.2	90.2	118.4	146.3
62.5°	32.5	44.8	72.1	93.8	112.5
65°	10.9	20.9	46.6	56.2	62.6
67.5°	5.6	6.6	24.4	25.8	28.0
70°	4.4	4.4	11.6	12.3	14.5
72.5°	3.1	3.1	4.6	6.0	6.5
75°	1.5	1.5	0.7	0.0	0.0
77.5°	0.7	0.7	0.7	0.0	0.0
80°	0.7	0.7	0.0	0.0	0.0
82.5°	0.2	0.2	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°	7.6	11.4	11.4	7.6	3.8
92.5°	19.0	57.0	53.1	22.8	19.0
95°	34.2	117.6	341.6	87.3	53.1
97.5°	53.1	132.9	683.2	311.3	167.0
100°	72.1	140.4	797.0	747.7	482.0
102.5°	94.9	151.8	793.2	1051.4	865.3
105°	117.6	167.0	740.1	1248.7	1161.5



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	182.2	223.9	577.0	1256.3	1431.0
115°	204.9	246.7	550.3	1161.5	1370.2
117.5°	227.7	273.3	535.2	1074.2	1282.9
120°	246.7	296.0	523.8	990.6	1195.6
122.5°	261.9	318.8	516.2	922.3	1108.3
125°	277.0	341.6	512.4	865.3	1032.4
127.5°	292.3	356.8	512.4	823.7	964.1
130°	307.5	364.4	508.6	781.9	907.1
132.5°	322.6	368.1	508.6	751.5	857.8
135°	334.0	375.8	508.6	721.2	816.0
137.5°	349.2	383.3	508.6	694.6	781.9
140°	360.6	394.8	508.6	668.0	743.9
142.5°	375.8	406.1	508.6	641.5	709.8
145°	390.9	417.6	504.8	622.5	675.6
147.5°	406.1	428.9	501.0	603.5	645.3
150°	417.6	440.3	501.0	584.5	618.6
152.5°	432.7	451.7	497.2	565.5	595.9
155°	444.1	459.2	497.2	554.2	573.1
157.5°	455.4	470.7	497.2	542.8	558.0
160°	466.9	478.2	501.0	535.2	546.5
162.5°	478.2	485.9	501.0	527.5	535.2
165°	485.9	489.7	501.0	523.8	527.5
167.5°	493.4	497.2	501.0	520.0	520.0
170°	497.2	501.0	504.8	516.2	516.2
172.5°	504.8	504.8	504.8	512.4	512.4
175°	508.6	508.6	504.8	512.4	508.6
177.5°	508.6	508.6	504.8	512.4	508.6
180°	508.6	508.6	508.6	508.6	508.6



Report Generated By 670246072 / DESKTOP-50001EG







— 0°-180°    - - 45°-225°    - - - - 90°-270°







107.5°	140.4	186.0	671.8	1336.0	1351.2
110°	159.4	204.9	618.6	1324.7	1434.7



(END OF REPORT)