

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: P844813

Luminaire Tested: **SQ4P-BB-025U-075D-B50-1D-UNV**

Issue Date: 8/14/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P844813  
REPORT IS A COMBINATION OF REPORTS P700160 AND P700243  
Test Lab: INNOVATION CENTER  
Issue Date: 8/14/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4P-BB-025U-075D-B50-1D-UNV  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 250 LUMENS PER FOOT  
UPLIGHT, 750 LUMENS PER FOOT DOWNLIGHT  
  
Light Source: -  
Ballast/Driver: -

**Summary**

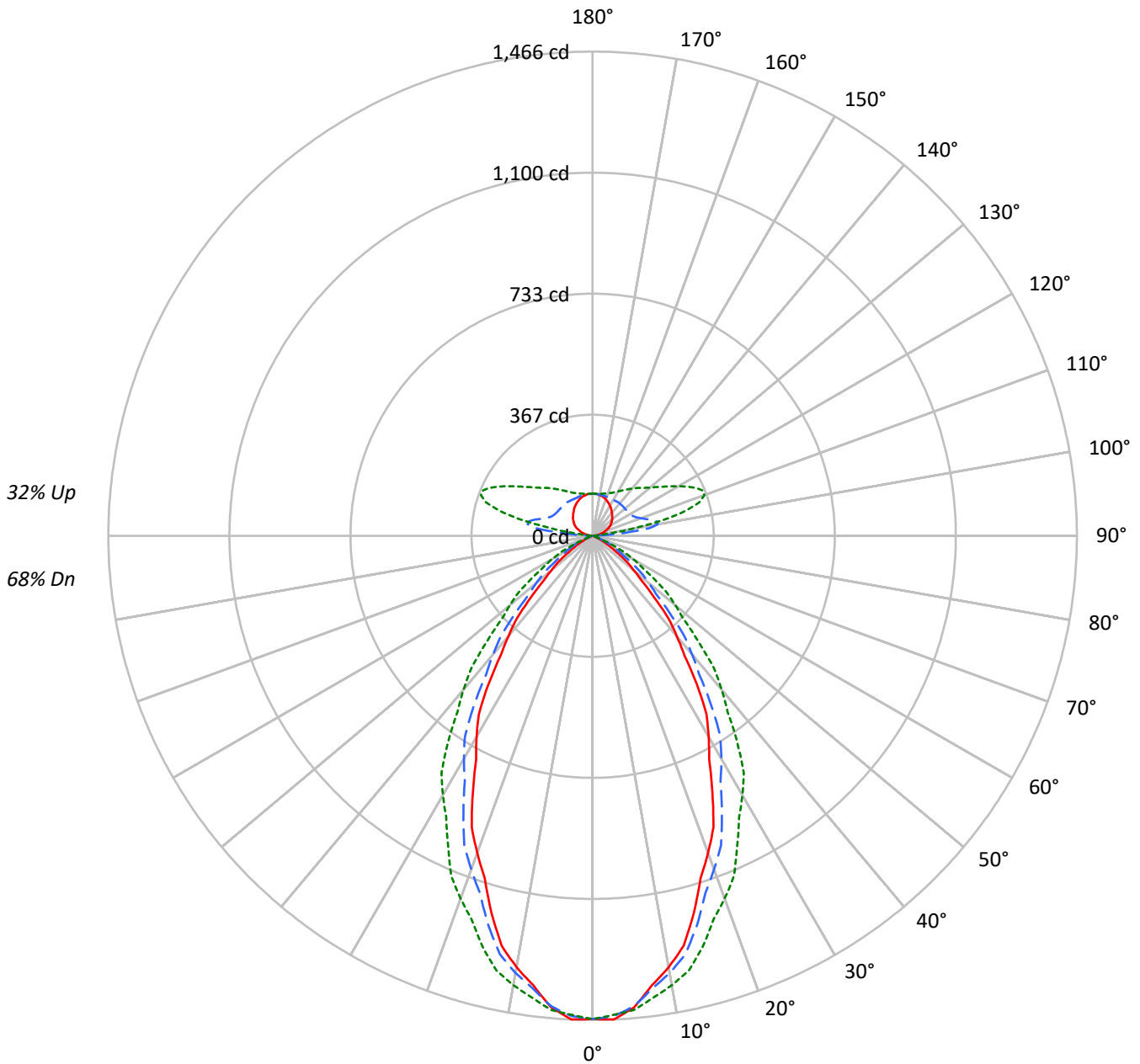
Lumens per Lamp: N/A  
Luminaire Lumens: 2573.4 lumens  
Efficiency: N/A  
Efficacy: 78.9 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 32.6  
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	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72	68																			
1	104	101	98	95	98	95	93	90	85	83	82	76	75	74	68	67	66	62																			
2	97	91	86	82	92	86	82	78	78	75	72	70	68	65	63	61	59	56																			
3	90	82	76	71	85	78	73	69	71	67	63	64	61	58	58	56	54	50																			
4	84	75	68	63	79	71	65	61	65	60	56	59	55	52	54	51	49	46																			
5	78	68	61	56	74	65	59	54	60	55	51	54	50	47	50	47	44	42																			
6	73	62	55	50	69	60	53	49	55	50	46	50	46	43	46	43	40	38																			
7	68	57	50	45	65	55	49	44	51	45	42	47	42	39	43	40	37	35																			
8	64	53	46	41	61	51	45	40	47	42	38	44	39	36	40	37	34	32																			
9	60	49	42	38	57	47	41	37	44	39	35	41	36	33	38	34	31	30																			
10	57	46	39	35	54	44	38	34	41	36	32	38	34	31	35	32	29	27																			

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

	0°	45°	90°
0°	13497	13497	13497
5°	13279	13247	13346
10°	12425	12591	12943
15°	11296	11654	12304
20°	10027	10549	11472
25°	8731	9424	10540
30°	7480	8301	9658
35°	6201	7047	8593
40°	4765	5634	7322
45°	3446	4267	5891
50°	2347	3178	4673
55°	1525	2299	3630
60°	875	1620	2626
65°	231	989	1330
70°	116	305	380
75°	50	25	0
80°	37	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	133.5	5.2
10°-20°	341.4	13.3
20°-30°	427.4	16.6
30°-40°	394.8	15.3
40°-50°	265.3	10.3
50°-60°	137.0	5.3
60°-70°	42.9	1.7
70°-80°	2.7	0.1
80°-90°	0.4	0.0
90°-100°	50.8	2.0
100°-110°	176.7	6.9
110°-120°	171.2	6.7
120°-130°	134.2	5.2
130°-140°	106.3	4.1
140°-150°	82.0	3.2
150°-160°	58.8	2.3
160°-170°	36.0	1.4
170°-180°	12.2	0.5
0°-30°	902.3	35.1
0°-40°	1297.1	50.4
0°-60°	1699.4	66.0
0°-90°	1745.4	67.8
90°-120°	398.6	15.5
90°-150°	721.1	28.0
90°-180°	828.0	32.2
0°-180°	2573.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1463	1463	1463	1463	1463	
5°	1434	1419	1430	1435	1441	133
15°	1183	1178	1220	1261	1288	329
25°	858	865	926	989	1035	393
35°	551	564	626	699	763	341
45°	264	280	327	391	452	207
55°	95	111	143	184	226	88
65°	11	20	45	55	61	18
75°	1	1	1	0	0	2
85°	0	0	0	0	0	0
90°	2	3	3	2	1	1
95°	9	30	86	22	13	9
105°	30	42	186	313	291	31
115°	51	62	138	291	344	51
125°	70	86	128	217	259	62
135°	84	94	128	181	205	65
145°	98	105	127	156	170	61
155°	111	115	125	139	144	51
165°	122	123	126	131	132	34
175°	128	128	127	128	128	12
180°	128	128	128	128	128	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1462.9	1462.9	1462.9	1462.9	1462.9
2.5°	1466.2	1452.5	1456.0	1456.0	1452.1
5°	1433.8	1419.3	1430.3	1435.4	1441.0
7.5°	1373.3	1362.0	1383.1	1398.8	1410.3
10°	1326.2	1316.6	1344.0	1365.5	1381.5
12.5°	1271.9	1264.4	1297.5	1327.2	1347.5
15°	1182.6	1178.5	1220.1	1261.0	1288.1
17.5°	1087.0	1086.8	1134.2	1185.2	1217.7
20°	1021.3	1023.4	1074.4	1130.4	1168.4
22.5°	955.6	960.4	1014.9	1073.4	1116.9
25°	857.7	864.6	925.7	989.1	1035.4
27.5°	763.8	773.9	838.2	903.9	960.4
30°	702.1	713.8	779.2	848.4	906.6
32.5°	641.4	655.5	719.1	792.5	851.6
35°	550.6	564.5	625.7	699.3	762.9
37.5°	456.8	470.3	530.0	602.6	671.4
40°	395.6	410.8	467.8	538.1	607.9
42.5°	340.2	355.4	408.9	477.9	544.0
45°	264.1	279.9	327.0	390.6	451.5
47.5°	201.0	218.1	259.4	317.1	372.5
50°	163.5	180.7	221.4	272.2	325.6
52.5°	133.5	150.3	187.0	234.8	283.6
55°	94.8	110.7	142.9	183.6	225.7
57.5°	65.5	79.3	108.2	141.9	175.2
60°	47.4	60.5	87.8	115.2	142.3
62.5°	31.6	43.6	70.2	91.3	109.5
65°	10.6	20.4	45.3	54.6	60.9
67.5°	5.4	6.4	23.7	25.1	27.2
70°	4.3	4.3	11.3	12.0	14.1
72.5°	3.0	3.0	4.5	5.8	6.3
75°	1.4	1.4	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°	1.9	2.9	2.9	1.9	1.0
92.5°	4.8	14.3	13.3	5.7	4.8
95°	8.6	29.5	85.7	21.9	13.3
97.5°	13.3	33.3	171.4	78.1	41.9
100°	18.1	35.2	199.9	187.5	120.9
102.5°	23.8	38.1	199.0	263.7	217.1
105°	29.5	41.9	185.6	313.3	291.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	45.7	56.2	144.7	315.2	359.0
115°	51.4	61.9	138.0	291.4	343.8
117.5°	57.1	68.5	134.2	269.4	321.9
120°	61.9	74.3	131.4	248.5	300.0
122.5°	65.7	80.0	129.5	231.3	278.1
125°	69.5	85.7	128.5	217.1	259.0
127.5°	73.3	89.5	128.5	206.6	241.8
130°	77.1	91.4	127.6	196.1	227.5
132.5°	80.9	92.3	127.6	188.5	215.2
135°	83.8	94.3	127.6	180.9	204.7
137.5°	87.6	96.2	127.6	174.2	196.1
140°	90.4	99.0	127.6	167.6	186.6
142.5°	94.3	101.9	127.6	160.9	178.0
145°	98.1	104.7	126.6	156.1	169.5
147.5°	101.9	107.6	125.7	151.4	161.8
150°	104.7	110.4	125.7	146.6	155.2
152.5°	108.5	113.3	124.7	141.9	149.5
155°	111.4	115.2	124.7	139.0	143.8
157.5°	114.2	118.1	124.7	136.1	139.9
160°	117.1	120.0	125.7	134.2	137.1
162.5°	120.0	121.9	125.7	132.3	134.2
165°	121.9	122.8	125.7	131.4	132.3
167.5°	123.8	124.7	125.7	130.4	130.4
170°	124.7	125.7	126.6	129.5	129.5
172.5°	126.6	126.6	126.6	128.5	128.5
175°	127.6	127.6	126.6	128.5	127.6
177.5°	127.6	127.6	126.6	128.5	127.6
180°	127.6	127.6	127.6	127.6	127.6



Report Generated By 670246072 / DESKTOP-50001EG







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







107.5°	35.2	46.6	168.5	335.2	339.0
110°	40.0	51.4	155.2	332.4	360.0



(END OF REPORT)