

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: P845314

Luminaire Tested: **SQ4P-WB-025U-050D-B50-1D-UNV**

Issue Date: 8/14/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P845314  
REPORT IS A COMBINATION OF REPORTS P700183 AND P700243  
Test Lab: INNOVATION CENTER  
Issue Date: 8/14/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4P-WB-025U-050D-B50-1D-UNV  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 250 LUMENS PER FOOT UPLIGHT, 500 LUMENS PER FOOT DOWNLIGHT  
  
Light Source: -  
Ballast/Driver: -

**Summary**

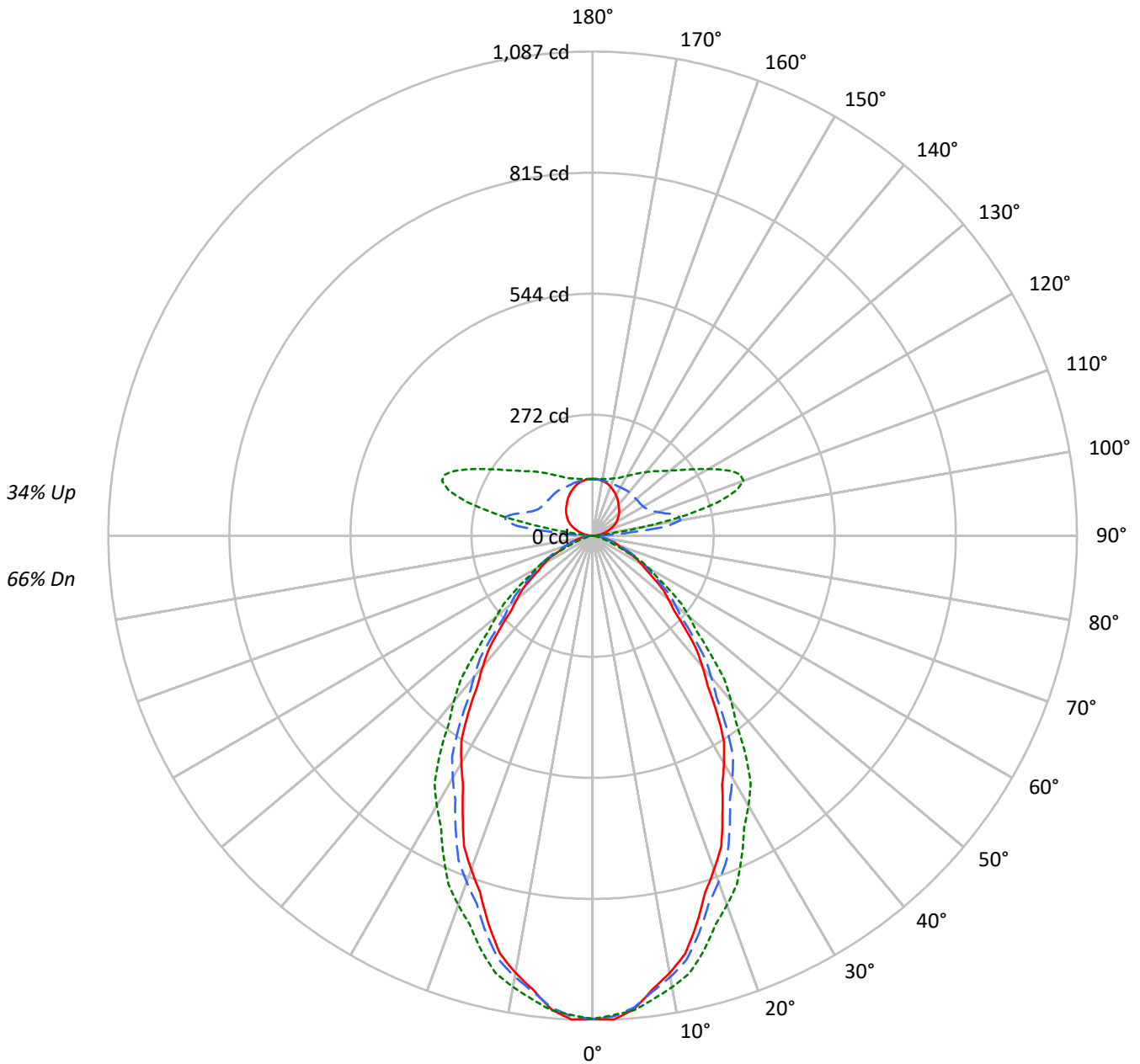
Lumens per Lamp: N/A  
Luminaire Lumens: 2408.7 lumens  
Efficiency: N/A  
Efficacy: 101.2 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 23.8  
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	104	104	104	104	92	92	92	81	81	81	70	70	70	66																			
1	103	99	95	92	97	93	90	88	83	81	79	73	72	70	65	63	62	58																			
2	95	88	83	78	89	83	79	75	75	71	68	66	64	61	59	57	55	51																			
3	88	79	72	67	82	75	69	64	67	63	59	60	57	54	54	51	49	45																			
4	81	71	64	58	76	68	61	56	61	56	52	55	51	48	49	46	43	40																			
5	75	64	57	51	71	61	55	49	55	50	46	50	46	42	45	42	39	36																			
6	70	59	51	46	66	56	49	44	51	45	41	46	42	38	42	38	35	33																			
7	65	54	46	41	61	51	44	40	47	41	37	42	38	34	38	35	32	30																			
8	61	49	42	37	58	47	40	36	43	38	34	39	35	31	36	32	29	27																			
9	57	45	38	33	54	44	37	33	40	34	31	37	32	29	33	30	27	25																			
10	54	42	35	31	51	40	34	30	37	32	28	34	30	26	31	28	25	23																			

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

	0°	45°	90°
0°	10006	10006	10006
5°	9881	9846	9903
10°	9336	9420	9639
15°	8618	8819	9214
20°	7826	8120	8658
25°	7020	7403	8067
30°	6277	6687	7452
35°	5487	5885	6727
40°	4619	4986	5823
45°	3813	4141	4862
50°	3182	3469	4051
55°	2701	2977	3344
60°	2310	2581	2670
65°	1840	2170	1722
70°	1632	1694	1052
75°	1511	1376	645
80°	1392	1265	558
85°	1249	1154	455



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	99.5	4.1
10°-20°	258.8	10.7
20°-30°	335.1	13.9
30°-40°	328.2	13.6
40°-50°	251.2	10.4
50°-60°	167.4	6.9
60°-70°	91.3	3.8
70°-80°	38.1	1.6
80°-90°	11.1	0.5
90°-100°	50.8	2.1
100°-110°	176.7	7.3
110°-120°	171.2	7.1
120°-130°	134.2	5.6
130°-140°	106.3	4.4
140°-150°	82.0	3.4
150°-160°	58.8	2.4
160°-170°	36.0	1.5
170°-180°	12.2	0.5
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0°-30°	693.4	28.8
0°-40°	1021.6	42.4
0°-60°	1440.2	59.8
0°-90°	1580.7	65.6
90°-120°	398.6	16.5
90°-150°	721.1	29.9
90°-180°	828.0	34.4
0°-180°	2408.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1084	1084	1084	1084	1084	
5°	1067	1056	1063	1066	1069	99
15°	902	899	923	948	965	252
25°	690	692	727	759	792	317
35°	487	490	522	558	597	303
45°	292	298	317	341	373	228
55°	168	175	185	192	208	152
65°	84	91	99	87	79	88
75°	42	42	39	26	18	45
85°	12	12	11	7	4	13
90°	2	3	3	2	1	2
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°	1084.5	1084.5	1084.5	1084.5	1084.5
2.5°	1087.2	1077.5	1080.0	1079.9	1076.8
5°	1066.9	1056.2	1063.1	1065.6	1069.3
7.5°	1027.3	1019.2	1031.8	1041.1	1048.7
10°	996.5	989.5	1005.5	1019.1	1028.9
12.5°	960.8	954.8	974.8	992.9	1005.6
15°	902.2	899.0	923.3	948.3	964.6
17.5°	839.8	838.2	866.0	895.3	916.0
20°	797.1	796.7	827.0	857.7	881.8
22.5°	754.1	755.1	787.0	818.8	846.4
25°	689.6	691.5	727.2	758.9	792.4
27.5°	629.9	630.7	667.6	701.1	736.9
30°	589.2	591.4	627.7	662.3	699.5
32.5°	548.5	551.1	586.6	622.3	660.3
35°	487.2	489.6	522.5	557.7	597.3
37.5°	424.2	427.5	456.7	489.8	528.8
40°	383.5	388.2	414.0	445.4	483.5
42.5°	344.3	350.2	374.1	403.8	438.1
45°	292.2	297.8	317.4	341.4	372.6
47.5°	247.2	253.7	268.8	289.5	316.1
50°	221.7	227.8	241.7	257.0	282.2
52.5°	199.3	205.4	217.7	229.5	251.0
55°	167.9	175.0	185.1	192.2	207.9
57.5°	142.3	149.0	157.1	160.2	169.7
60°	125.2	132.6	139.9	139.5	144.7
62.5°	109.6	116.0	123.1	118.1	118.4
65°	84.3	91.2	99.4	86.9	78.9
67.5°	68.1	69.5	78.0	60.6	51.2
70°	60.5	60.5	62.8	46.9	39.0
72.5°	53.2	53.2	51.0	38.2	29.8
75°	42.4	42.4	38.6	26.5	18.1
77.5°	32.7	32.3	29.5	19.7	13.1
80°	26.2	26.2	23.8	15.6	10.5
82.5°	20.5	20.5	18.5	12.2	7.7
85°	11.8	11.8	10.9	7.1	4.3
87.5°	4.2	4.2	3.8	2.3	1.9
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)