

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: P844917

Luminaire Tested: **SQ4P-F-075U-050D-B40-1D-UNV**

Issue Date: 8/14/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P844917  
REPORT IS A COMBINATION OF REPORTS P700219 AND P700245  
Test Lab: INNOVATION CENTER  
Issue Date: 8/14/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4P-F-075U-050D-B40-1D-UNV  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 750 LUMENS PER FOOT  
UPLIGHT, 500 LUMENS PER FOOT DOWNLIGHT  
  
Light Source: -  
Ballast/Driver: -

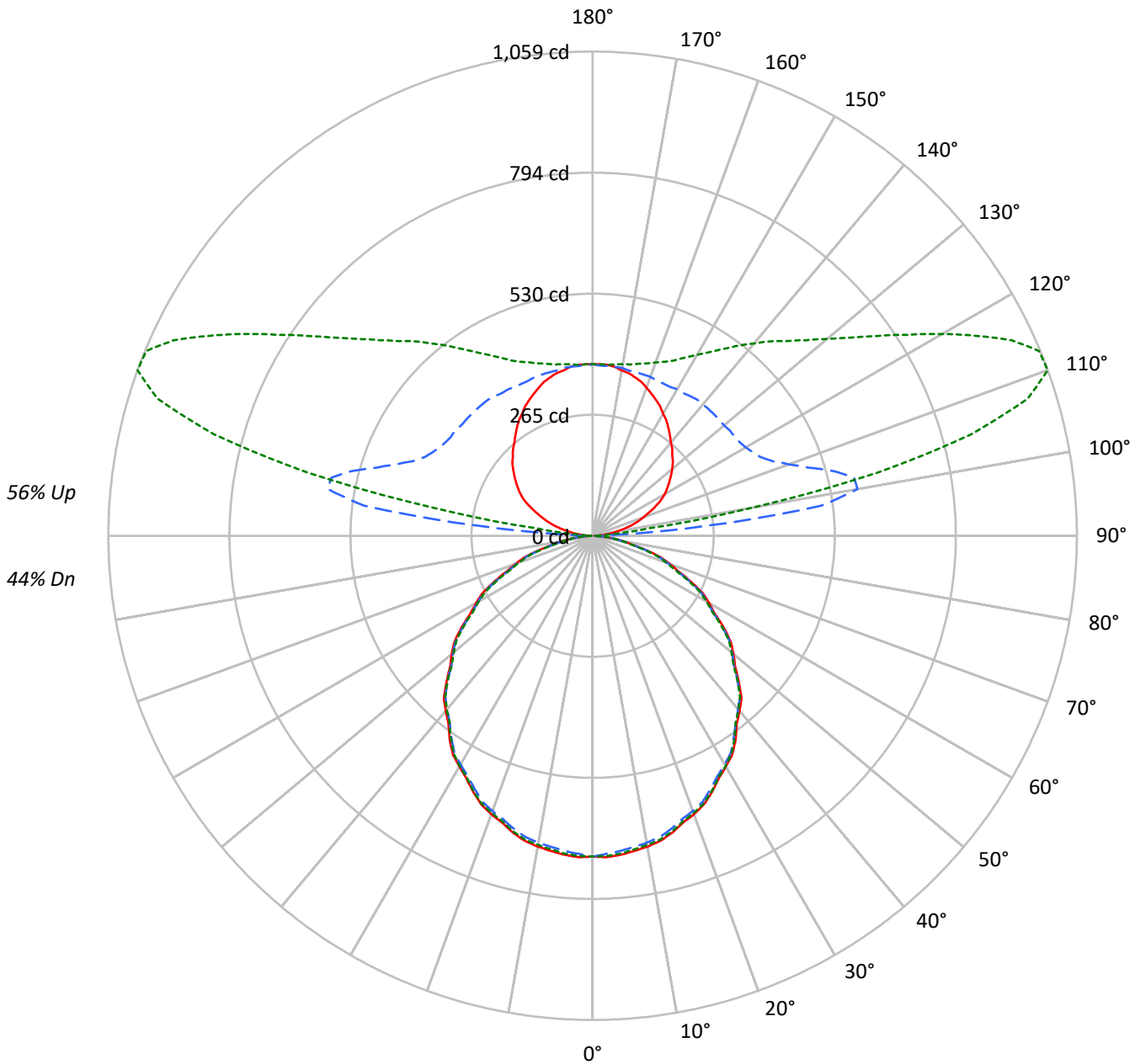
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4352.3 lumens  
Efficiency: N/A  
Efficacy: 121.6 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 35.8  
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

TEST NUMBER: P844917  
CATALOG NUMBER: SQ4P-F-075U-050D-B40-1D-UNV

### Luminous Intensity Polar Plot





TEST NUMBER: P844917

CATALOG NUMBER: SQ4P-F-075U-050D-B40-1D-UNV

**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	50	30	10	0					
RCR																										
0	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	44								
1	96	92	88	85	88	84	81	78	70	68	66	57	55	54	45	44	43	37								
2	88	80	74	69	80	74	68	64	61	57	54	50	47	45	39	37	36	31								
3	80	71	63	57	73	65	58	53	54	49	45	44	41	38	35	32	30	26								
4	73	62	54	48	67	57	50	45	48	43	39	39	35	32	31	28	26	22								
5	67	55	47	41	61	51	44	39	43	37	33	35	31	28	28	25	23	19								
6	62	50	42	36	56	46	39	33	38	33	29	32	27	24	25	22	20	17								
7	57	45	37	31	52	41	34	29	35	29	25	29	25	21	23	20	18	15								
8	53	41	33	28	48	37	31	26	32	26	22	26	22	19	21	18	16	13								
9	49	37	30	24	45	34	28	23	29	24	20	24	20	17	19	16	14	12								
10	46	34	27	22	42	31	25	21	27	22	18	22	18	15	18	15	13	11								

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

	0°	45°	90°
0°	6473	6473	6473
5°	6489	6412	6463
10°	6467	6387	6432
15°	6423	6342	6397
20°	6362	6290	6335
25°	6291	6215	6273
30°	6204	6153	6193
35°	6136	6062	6093
40°	6018	5961	5974
45°	5895	5845	5845
50°	5770	5717	5688
55°	5635	5561	5529
60°	5425	5338	5303
65°	5165	5065	5001
70°	4815	4710	4610
75°	4317	4189	4082
80°	3496	3448	3342
85°	2075	2392	2488



TEST NUMBER: P844917

CATALOG NUMBER: SQ4P-F-075U-050D-B40-1D-UNV

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	66.2	1.5
10°-20°	188.5	4.3
20°-30°	283.1	6.5
30°-40°	338.0	7.8
40°-50°	346.3	8.0
50°-60°	308.9	7.1
60°-70°	230.0	5.3
70°-80°	124.9	2.9
80°-90°	29.8	0.7
90°-100°	149.4	3.4
100°-110°	519.9	11.9
110°-120°	503.6	11.6
120°-130°	395.1	9.1
130°-140°	312.7	7.2
140°-150°	241.3	5.5
150°-160°	173.0	4.0
160°-170°	105.8	2.4
170°-180°	35.8	0.8
0°-30°	537.8	12.4
0°-40°	875.8	20.1
0°-60°	1531.1	35.2
0°-90°	1915.8	44.0
90°-120°	1172.9	26.9
90°-150°	2122.0	48.8
90°-180°	2437.0	56.0
0°-180°	4352.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	702	702	702	702	702	
5°	701	700	692	699	698	67
15°	672	671	664	670	670	189
25°	618	616	610	614	616	285
35°	545	543	538	538	541	340
45°	452	453	448	447	448	349
55°	350	350	346	343	344	312
65°	237	236	232	229	229	234
75°	121	120	118	116	114	128
85°	20	22	23	24	24	28
90°	6	8	8	6	3	4
95°	25	87	252	64	39	27
105°	87	123	546	922	857	91
115°	151	182	406	857	1011	149
125°	205	252	378	639	762	183
135°	246	277	375	532	602	191
145°	289	308	373	460	499	181
155°	328	339	367	409	423	151
165°	359	362	370	387	390	101
175°	375	375	373	378	375	36
180°	375	375	375	375	375	



TEST NUMBER: P844917

CATALOG NUMBER: SQ4P-F-075U-050D-B40-1D-UNV

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	701.6	701.6	701.6	701.6	701.6
2.5°	703.7	702.4	696.3	701.6	700.9
5°	700.7	699.8	692.3	698.7	697.8
7.5°	695.6	693.8	686.4	692.8	691.8
10°	690.3	688.4	681.8	687.5	686.6
12.5°	683.6	682.5	675.1	680.8	680.6
15°	672.4	670.6	664.0	669.7	669.7
17.5°	657.8	656.7	650.2	655.7	655.1
20°	648.0	646.3	640.6	645.2	645.2
22.5°	636.0	634.9	629.3	633.2	634.0
25°	618.0	616.2	610.5	614.3	616.2
27.5°	598.1	596.7	592.0	594.3	595.7
30°	582.3	582.3	577.6	578.6	581.3
32.5°	568.1	568.1	562.5	563.6	564.9
35°	544.8	543.0	538.2	538.2	541.0
37.5°	517.7	516.8	513.8	513.2	514.0
40°	499.7	498.8	494.9	496.0	496.0
42.5°	481.7	480.7	476.9	475.6	477.1
45°	451.8	452.7	448.0	447.0	448.0
47.5°	422.4	422.4	418.5	415.9	417.4
50°	402.0	402.0	398.3	396.3	396.3
52.5°	380.9	381.7	377.1	374.5	375.3
55°	350.3	350.3	345.7	342.9	343.7
57.5°	316.5	316.5	311.8	309.0	310.7
60°	294.0	294.0	289.3	286.5	287.4
62.5°	271.4	271.4	266.8	264.0	264.1
65°	236.6	235.8	232.0	229.1	229.1
67.5°	203.2	200.8	198.0	194.3	194.3
70°	178.5	177.4	174.6	170.9	170.9
72.5°	155.9	154.3	151.4	148.5	148.5
75°	121.1	120.2	117.5	115.5	114.5
77.5°	86.8	86.1	85.9	83.2	84.0
80°	65.8	65.8	64.9	62.9	62.9
82.5°	46.9	47.7	46.0	45.6	44.9
85°	19.6	21.5	22.6	23.5	23.5
87.5°	3.9	5.9	5.2	6.0	6.0
90°	5.6	8.4	8.4	5.6	2.8
92.5°	14.1	42.1	39.2	16.8	14.1
95°	25.2	86.8	252.2	64.4	39.2
97.5°	39.2	98.1	504.3	229.8	123.3
100°	53.2	103.7	588.3	552.0	355.8
102.5°	70.1	112.0	585.6	776.1	638.8
105°	86.8	123.3	546.4	921.8	857.3



TEST NUMBER: P844917

CATALOG NUMBER: SQ4P-F-075U-050D-B40-1D-UNV

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	134.5	165.3	425.9	927.4	1056.3
115°	151.3	182.1	406.2	857.3	1011.4
117.5°	168.1	201.8	395.1	792.9	947.0
120°	182.1	218.5	386.7	731.3	882.5
122.5°	193.3	235.4	381.0	680.9	818.1
125°	204.6	252.2	378.2	638.8	762.1
127.5°	215.7	263.4	378.2	608.0	711.7
130°	227.0	269.0	375.4	577.2	669.6
132.5°	238.1	271.7	375.4	554.8	633.2
135°	246.5	277.3	375.4	532.3	602.4
137.5°	257.8	283.0	375.4	512.7	577.2
140°	266.2	291.4	375.4	493.1	549.2
142.5°	277.3	299.8	375.4	473.5	523.9
145°	288.6	308.2	372.6	459.5	498.7
147.5°	299.8	316.6	369.8	445.5	476.3
150°	308.2	325.0	369.8	431.4	456.7
152.5°	319.4	333.4	367.0	417.5	439.9
155°	327.8	339.0	367.0	409.0	423.1
157.5°	336.2	347.4	367.0	400.6	411.9
160°	344.6	353.0	369.8	395.1	403.4
162.5°	353.0	358.7	369.8	389.5	395.1
165°	358.7	361.5	369.8	386.7	389.5
167.5°	364.3	367.0	369.8	383.8	383.8
170°	367.0	369.8	372.6	381.0	381.0
172.5°	372.6	372.6	372.6	378.2	378.2
175°	375.4	375.4	372.6	378.2	375.4
177.5°	375.4	375.4	372.6	378.2	375.4
180°	375.4	375.4	375.4	375.4	375.4



Report Generated By 670246072 / DESKTOP-50001EG







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







107.5°	103.7	137.3	495.9	986.2	997.5
110°	117.6	151.3	456.7	977.8	1059.1



(END OF REPORT)