

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: P844941

Luminaire Tested: **SQ4P-F-100U-050D-B40-1D-UNV**

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-08
Report Number: P844941
REPORT IS A COMBINATION OF REPORTS P700079 AND P700246
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4P-F-100U-050D-B40-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1000 LUMENS PER FOOT
UPLIGHT, 500 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

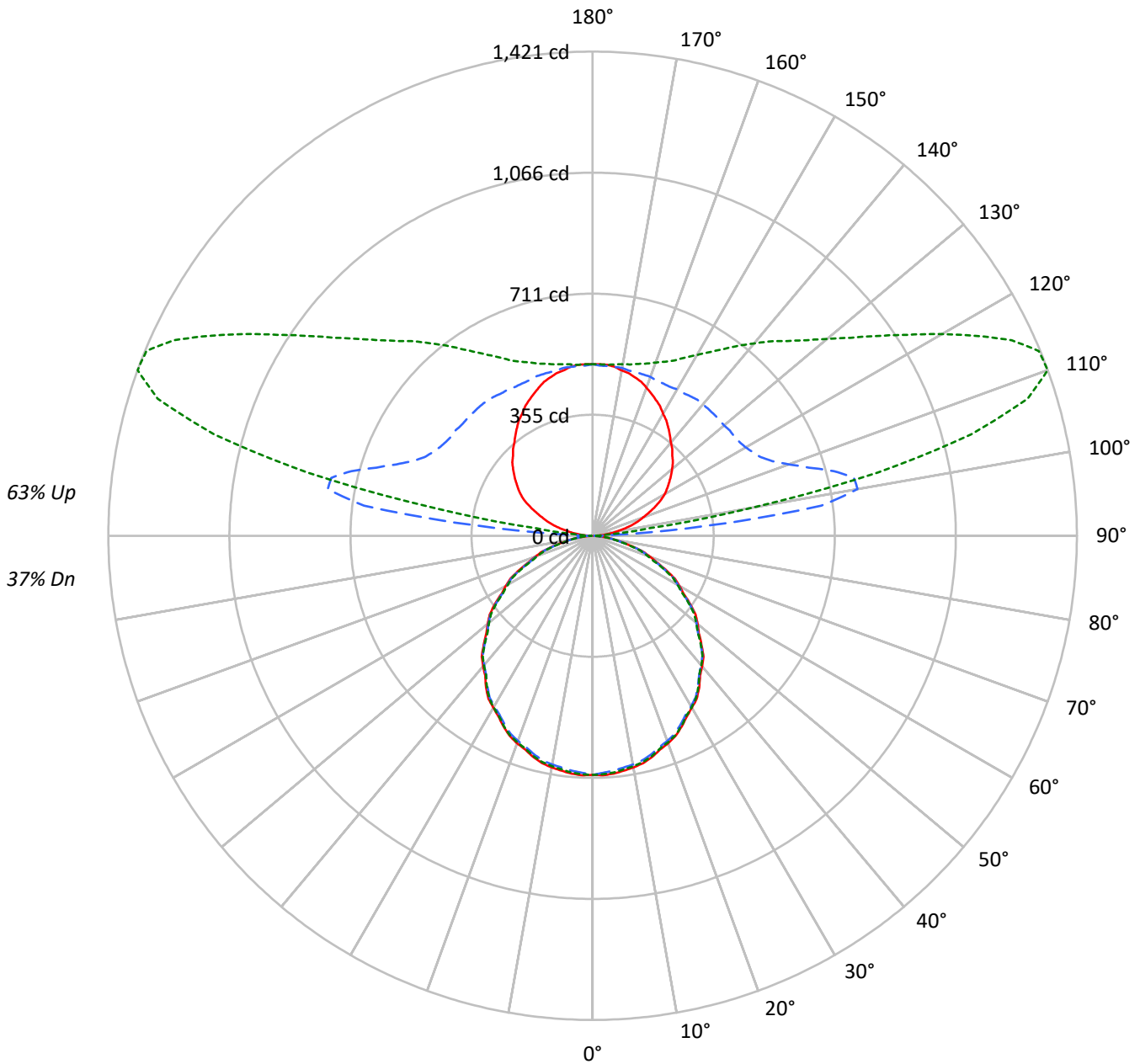
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5184.8 lumens
Efficiency: N/A
Efficacy: 121.1 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: Semi-Indirect

Input Watts (W): 42.8
Input Voltage (V): NR
Input Current (A_{in}): 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					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	104	104	104	104	94	94	94	94	76	76	76	59	59	59	44	44	44	37				
1	95	91	87	83	86	82	79	76	67	64	62	52	51	49	39	38	37	31				
2	86	79	73	68	78	72	67	62	58	55	51	46	43	41	34	33	31	26				
3	79	69	62	56	71	63	57	52	51	47	43	40	37	35	30	28	26	22				
4	72	61	53	48	65	56	49	44	45	41	37	36	32	30	27	25	23	19				
5	66	54	46	41	59	50	43	38	41	35	31	32	28	26	24	22	20	16				
6	61	49	41	35	55	44	37	32	36	31	27	29	25	22	22	19	17	14				
7	56	44	36	31	50	40	33	28	33	28	24	26	22	20	20	17	15	13				
8	52	40	32	27	47	36	30	25	30	25	21	24	20	17	18	16	14	11				
9	48	36	29	24	44	33	27	22	27	22	19	22	18	16	17	14	12	10				
10	45	33	26	21	41	30	24	20	25	20	17	20	17	14	16	13	11	9				

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



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.2	1.3
10°-20°	188.5	3.6
20°-30°	283.1	5.5
30°-40°	338.0	6.5
40°-50°	346.3	6.7
50°-60°	308.9	6.0
60°-70°	230.0	4.4
70°-80°	124.9	2.4
80°-90°	30.1	0.6
90°-100°	200.5	3.9
100°-110°	697.4	13.5
110°-120°	675.6	13.0
120°-130°	530.0	10.2
130°-140°	419.5	8.1
140°-150°	323.7	6.2
150°-160°	232.1	4.5
160°-170°	141.9	2.7
170°-180°	48.0	0.9
0°-30°	537.8	10.4
0°-40°	875.8	16.9
0°-60°	1531.1	29.5
0°-90°	1916.1	37.0
90°-120°	1573.5	30.3
90°-150°	2846.7	54.9
90°-180°	3269.0	63.0
0°-180°	5184.8	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°	8	11	11	8	4	5
95°	34	116	338	86	53	36
105°	116	165	733	1237	1150	122
115°	203	244	545	1150	1357	200
125°	274	338	507	857	1022	246
135°	331	372	504	714	808	256
145°	387	414	500	616	669	242
155°	440	455	492	549	568	203
165°	481	485	496	519	522	136
175°	504	504	500	507	504	48
180°	504	504	504	504	504	



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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°	7.6	11.2	11.2	7.6	3.8
92.5°	18.8	56.4	52.6	22.6	18.8
95°	33.8	116.5	338.3	86.4	52.6
97.5°	52.6	131.6	676.6	308.3	165.4
100°	71.4	139.1	789.3	740.5	477.4
102.5°	94.0	150.3	785.5	1041.2	856.9
105°	116.5	165.4	732.9	1236.6	1150.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	180.4	221.7	571.4	1244.1	1417.1
115°	202.9	244.3	545.0	1150.2	1356.9
117.5°	225.5	270.7	530.0	1063.7	1270.4
120°	244.3	293.1	518.7	981.0	1184.0
122.5°	259.3	315.7	511.2	913.3	1097.6
125°	274.3	338.3	507.4	856.9	1022.4
127.5°	289.5	353.3	507.4	815.7	954.7
130°	304.5	360.9	503.6	774.3	898.3
132.5°	319.5	364.6	503.6	744.2	849.5
135°	330.7	372.1	503.6	714.2	808.1
137.5°	345.8	379.6	503.6	687.8	774.3
140°	357.1	390.9	503.6	661.5	736.7
142.5°	372.1	402.2	503.6	635.2	702.9
145°	387.1	413.5	499.9	616.4	669.0
147.5°	402.2	424.7	496.2	597.6	639.0
150°	413.5	436.0	496.2	578.8	612.6
152.5°	428.5	447.3	492.4	560.0	590.2
155°	439.8	454.8	492.4	548.8	567.6
157.5°	451.0	466.1	492.4	537.5	552.6
160°	462.3	473.6	496.2	530.0	541.2
162.5°	473.6	481.1	496.2	522.4	530.0
165°	481.1	484.9	496.2	518.7	522.4
167.5°	488.6	492.4	496.2	515.0	515.0
170°	492.4	496.2	499.9	511.2	511.2
172.5°	499.9	499.9	499.9	507.4	507.4
175°	503.6	503.6	499.9	507.4	503.6
177.5°	503.6	503.6	499.9	507.4	503.6
180°	503.6	503.6	503.6	503.6	503.6



Report Generated By 670246072 / DESKTOP-50001EG





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







107.5°	139.1	184.2	665.3	1323.1	1338.1
110°	157.9	202.9	612.6	1311.8	1420.7



(END OF REPORT)