

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: P844905

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

Issue Date: 8/14/2023



Test Information

Test Method: LM-79-08
Report Number: P844905
REPORT IS A COMBINATION OF REPORTS P700191 AND P700244
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4P-F-050U-050D-B40-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 500 LUMENS PER FOOT
UPLIGHT, 500 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

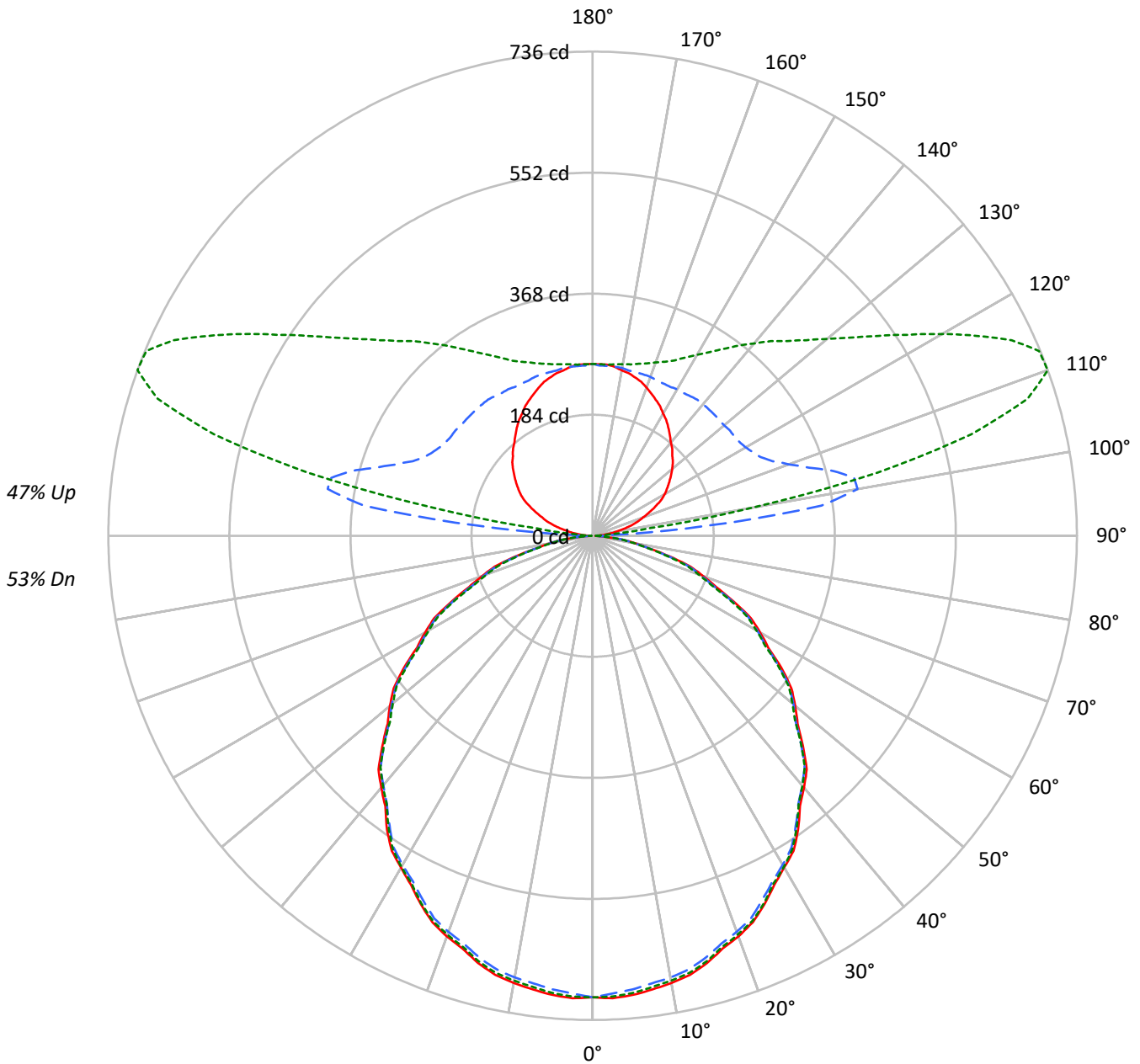
Lumens per Lamp: N/A
Luminaire Lumens: 3609.1 lumens
Efficiency: N/A
Efficacy: 121.1 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 29.8
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

TEST NUMBER: P844905

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

Luminous Intensity Polar Plot





TEST NUMBER: P844905

CATALOG NUMBER: SQ4P-F-050U-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	50	30	10	0		
RCR																										
0	108	108	108	108	100	100	100	100	85	85	85	71	71	71	59	59	59	53								
1	98	94	90	87	91	87	84	81	75	72	70	63	61	59	52	51	50	45								
2	90	82	76	71	83	76	71	66	65	61	58	55	52	50	46	44	42	37								
3	82	72	65	59	75	67	60	55	57	52	48	49	45	42	40	38	35	31								
4	75	64	56	50	69	59	52	47	51	45	41	43	39	36	36	33	30	27								
5	68	57	48	42	63	53	46	40	46	40	35	39	34	31	32	29	26	23								
6	63	51	43	37	58	47	40	35	41	35	31	35	30	27	29	26	23	20								
7	58	46	38	32	54	43	36	30	37	31	27	32	27	24	27	23	21	18								
8	54	42	34	28	50	39	32	27	34	28	24	29	25	21	25	21	18	16								
9	50	38	30	25	47	36	29	24	31	25	22	27	22	19	23	19	17	14								
10	47	35	28	23	44	33	26	22	29	23	19	25	20	17	21	18	15	13								

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: P844905

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.2	1.8
10°-20°	188.5	5.2
20°-30°	283.1	7.8
30°-40°	338.0	9.4
40°-50°	346.3	9.6
50°-60°	308.9	8.6
60°-70°	230.0	6.4
70°-80°	124.9	3.5
80°-90°	29.5	0.8
90°-100°	103.8	2.9
100°-110°	361.4	10.0
110°-120°	350.0	9.7
120°-130°	274.6	7.6
130°-140°	217.3	6.0
140°-150°	167.7	4.6
150°-160°	120.2	3.3
160°-170°	73.5	2.0
170°-180°	24.9	0.7
0°-30°	537.8	14.9
0°-40°	875.8	24.3
0°-60°	1531.1	42.4
0°-90°	1915.5	53.1
90°-120°	815.2	22.6
90°-150°	1474.9	40.9
90°-180°	1694.0	46.9
0°-180°	3609.1	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°	4	6	6	4	2	3
95°	18	60	175	45	27	19
105°	60	86	380	641	596	63
115°	105	127	282	596	703	104
125°	142	175	263	444	530	127
135°	171	193	261	370	419	133
145°	201	214	259	319	347	125
155°	228	236	255	284	294	105
165°	249	251	257	269	271	70
175°	261	261	259	263	261	25
180°	261	261	261	261	261	



TEST NUMBER: P844905

CATALOG NUMBER: SQ4P-F-050U-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°	3.9	5.8	5.8	3.9	1.9
92.5°	9.7	29.2	27.2	11.7	9.7
95°	17.5	60.4	175.3	44.8	27.2
97.5°	27.2	68.1	350.5	159.7	85.7
100°	37.0	72.1	408.9	383.7	247.3
102.5°	48.6	77.9	407.0	539.4	444.0
105°	60.4	85.7	379.8	640.6	595.9



TEST NUMBER: P844905

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

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	93.5	114.9	296.0	644.6	734.2
115°	105.1	126.6	282.4	595.9	703.0
117.5°	116.9	140.2	274.5	551.1	658.2
120°	126.6	151.9	268.7	508.3	613.4
122.5°	134.4	163.6	264.8	473.2	568.6
125°	142.2	175.3	262.9	444.0	529.7
127.5°	149.9	183.1	262.9	422.6	494.6
130°	157.8	186.9	261.0	401.2	465.4
132.5°	165.5	188.9	261.0	385.6	440.1
135°	171.3	192.7	261.0	370.0	418.7
137.5°	179.2	196.7	261.0	356.3	401.2
140°	185.0	202.5	261.0	342.8	381.7
142.5°	192.7	208.3	261.0	329.1	364.2
145°	200.6	214.3	259.0	319.4	346.6
147.5°	208.3	220.1	257.1	309.6	331.0
150°	214.3	225.9	257.1	299.9	317.5
152.5°	222.0	231.7	255.2	290.1	305.7
155°	227.8	235.7	255.2	284.3	294.0
157.5°	233.6	241.5	255.2	278.5	286.3
160°	239.6	245.4	257.1	274.5	280.4
162.5°	245.4	249.2	257.1	270.7	274.5
165°	249.2	251.2	257.1	268.7	270.7
167.5°	253.1	255.2	257.1	266.8	266.8
170°	255.2	257.1	259.0	264.8	264.8
172.5°	259.0	259.0	259.0	262.9	262.9
175°	261.0	261.0	259.0	262.9	261.0
177.5°	261.0	261.0	259.0	262.9	261.0
180°	261.0	261.0	261.0	261.0	261.0



Report Generated By 670246072 / DESKTOP-50001EG





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







107.5°	72.1	95.5	344.7	685.5	693.3
110°	81.8	105.1	317.5	679.6	736.1



(END OF REPORT)