

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: P844906

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

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-08
Report Number: P844906
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-B50-1D-UNV
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 500 LUMENS PER FOOT
UPLIGHT, 500 LUMENS PER FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

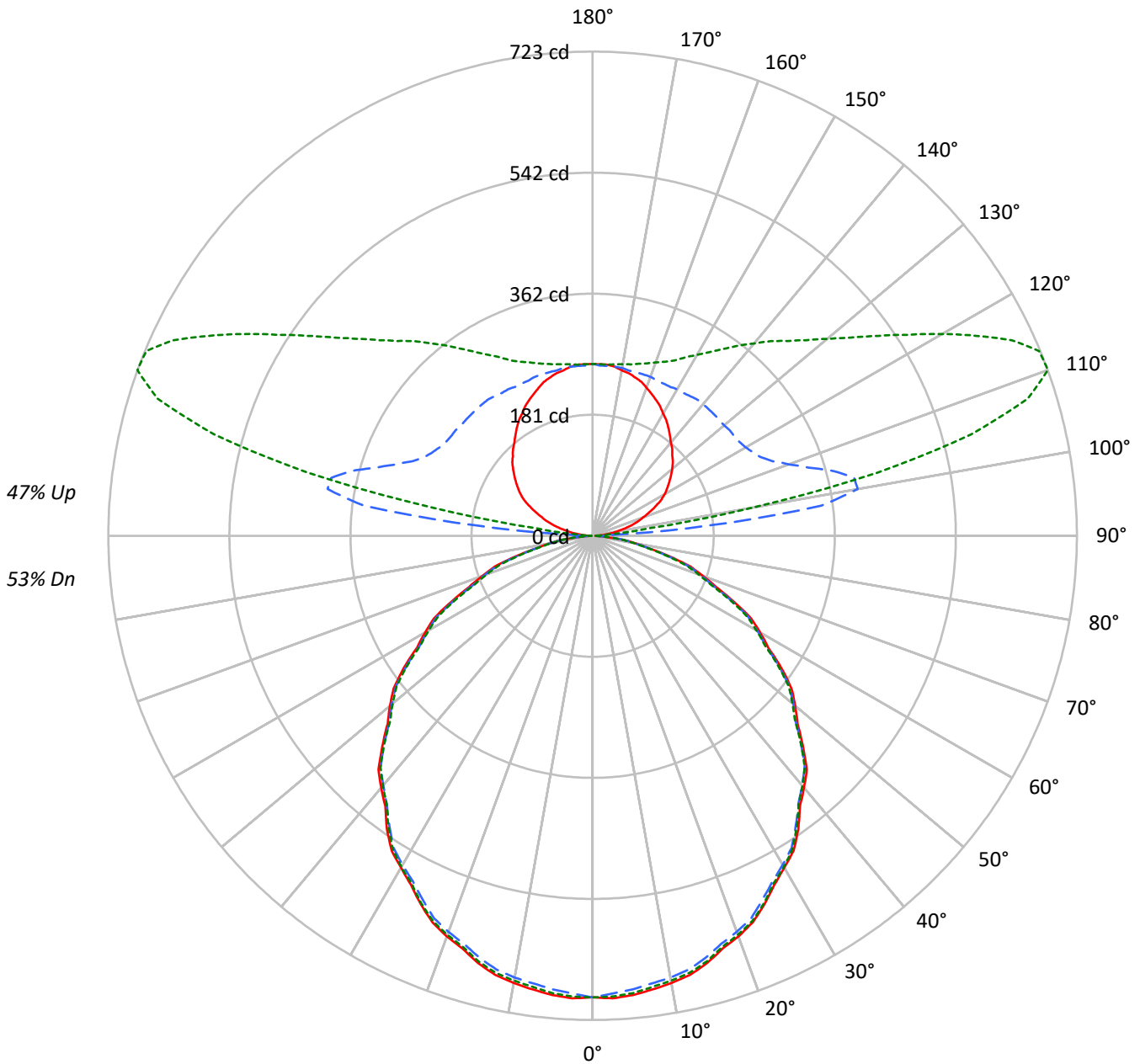
Lumens per Lamp: N/A
Luminaire Lumens: 3545.6 lumens
Efficiency: N/A
Efficacy: 119.0 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

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

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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	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°	6360	6360	6360
5°	6376	6299	6350
10°	6353	6275	6319
15°	6310	6231	6284
20°	6250	6179	6224
25°	6180	6106	6163
30°	6095	6045	6084
35°	6028	5956	5986
40°	5914	5856	5868
45°	5791	5742	5742
50°	5668	5616	5589
55°	5537	5463	5432
60°	5329	5244	5211
65°	5076	4975	4914
70°	4732	4629	4529
75°	4242	4114	4010
80°	3432	3390	3284
85°	2032	2350	2435



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.0	1.8
10°-20°	185.2	5.2
20°-30°	278.2	7.8
30°-40°	332.1	9.4
40°-50°	340.3	9.6
50°-60°	303.4	8.6
60°-70°	226.0	6.4
70°-80°	122.7	3.5
80°-90°	29.0	0.8
90°-100°	102.0	2.9
100°-110°	355.0	10.0
110°-120°	343.9	9.7
120°-130°	269.8	7.6
130°-140°	213.5	6.0
140°-150°	164.8	4.6
150°-160°	118.1	3.3
160°-170°	72.3	2.0
170°-180°	24.4	0.7
0°-30°	528.4	14.9
0°-40°	860.4	24.3
0°-60°	1504.2	42.4
0°-90°	1881.8	53.1
90°-120°	800.9	22.6
90°-150°	1449.0	40.9
90°-180°	1664.0	46.9
0°-180°	3545.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	689	689	689	689	689	
5°	688	688	680	686	686	65
15°	661	659	652	658	658	186
25°	607	605	600	604	605	280
35°	535	533	529	529	532	334
45°	444	445	440	439	440	343
55°	344	344	340	337	338	307
65°	232	232	228	225	225	230
75°	119	118	115	114	112	126
85°	19	21	22	23	23	27
90°	4	6	6	4	2	3
95°	17	59	172	44	27	18
105°	59	84	373	629	585	62
115°	103	124	277	585	691	102
125°	140	172	258	436	520	125
135°	168	189	256	364	411	130
145°	197	210	254	314	340	123
155°	224	232	251	279	289	103
165°	245	247	253	264	266	69
175°	256	256	254	258	256	24
180°	256	256	256	256	256	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	689.3	689.3	689.3	689.3	689.3
2.5°	691.4	690.0	684.0	689.3	688.6
5°	688.4	687.5	680.1	686.4	685.6
7.5°	683.4	681.6	674.3	680.6	679.7
10°	678.1	676.3	669.8	675.4	674.5
12.5°	671.6	670.5	663.3	668.8	668.6
15°	660.6	658.8	652.3	657.9	657.9
17.5°	646.2	645.2	638.8	644.1	643.6
20°	636.6	634.9	629.3	633.9	633.9
22.5°	624.8	623.8	618.2	622.1	622.8
25°	607.1	605.4	599.8	603.5	605.4
27.5°	587.6	586.2	581.6	583.9	585.2
30°	572.1	572.1	567.4	568.5	571.1
32.5°	558.1	558.1	552.7	553.7	554.9
35°	535.2	533.4	528.8	528.8	531.5
37.5°	508.6	507.7	504.8	504.2	505.0
40°	491.0	490.0	486.2	487.2	487.2
42.5°	473.3	472.2	468.5	467.3	468.7
45°	443.8	444.8	440.1	439.2	440.1
47.5°	415.0	415.0	411.2	408.6	410.0
50°	394.9	394.9	391.3	389.4	389.4
52.5°	374.2	375.0	370.4	368.0	368.7
55°	344.2	344.2	339.6	336.8	337.7
57.5°	310.9	310.9	306.4	303.6	305.2
60°	288.8	288.8	284.2	281.4	282.4
62.5°	266.7	266.7	262.1	259.3	259.4
65°	232.5	231.6	227.9	225.1	225.1
67.5°	199.6	197.3	194.5	190.9	190.9
70°	175.4	174.3	171.6	167.9	167.9
72.5°	153.2	151.6	148.7	145.9	145.9
75°	119.0	118.1	115.4	113.5	112.5
77.5°	85.3	84.5	84.3	81.8	82.5
80°	64.6	64.6	63.8	61.8	61.8
82.5°	46.1	46.8	45.2	44.8	44.1
85°	19.2	21.1	22.2	23.0	23.0
87.5°	3.8	5.8	5.1	5.9	5.9
90°	3.8	5.7	5.7	3.8	1.9
92.5°	9.5	28.7	26.8	11.5	9.5
95°	17.2	59.3	172.2	44.0	26.8
97.5°	26.8	66.9	344.3	156.9	84.2
100°	36.4	70.8	401.8	376.9	243.0
102.5°	47.8	76.5	399.9	529.9	436.2
105°	59.3	84.2	373.1	629.4	585.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	91.9	112.9	290.8	633.3	721.3
115°	103.3	124.3	277.4	585.4	690.6
117.5°	114.8	137.8	269.7	541.4	646.6
120°	124.3	149.2	264.0	499.3	602.6
122.5°	132.0	160.7	260.2	464.9	558.6
125°	139.7	172.2	258.3	436.2	520.4
127.5°	147.3	179.8	258.3	415.2	485.9
130°	155.0	183.6	256.4	394.1	457.3
132.5°	162.6	185.5	256.4	378.8	432.4
135°	168.3	189.4	256.4	363.5	411.4
137.5°	176.0	193.3	256.4	350.1	394.1
140°	181.7	199.0	256.4	336.7	375.0
142.5°	189.4	204.7	256.4	323.3	357.8
145°	197.1	210.5	254.5	313.8	340.5
147.5°	204.7	216.2	252.6	304.2	325.2
150°	210.5	221.9	252.6	294.7	311.9
152.5°	218.1	227.6	250.7	285.0	300.4
155°	223.8	231.5	250.7	279.3	288.8
157.5°	229.5	237.2	250.7	273.6	281.2
160°	235.3	241.1	252.6	269.7	275.5
162.5°	241.1	244.9	252.6	265.9	269.7
165°	244.9	246.8	252.6	264.0	265.9
167.5°	248.7	250.7	252.6	262.1	262.1
170°	250.7	252.6	254.5	260.2	260.2
172.5°	254.5	254.5	254.5	258.3	258.3
175°	256.4	256.4	254.5	258.3	256.4
177.5°	256.4	256.4	254.5	258.3	256.4
180°	256.4	256.4	256.4	256.4	256.4



Report Generated By 670246072 / DESKTOP-50001EG





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







107.5°	70.8	93.8	338.6	673.5	681.1
110°	80.4	103.3	311.9	667.7	723.2



(END OF REPORT)