

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: P521403

Luminaire Tested: **SQ4-F-050U-050D-93050-1D-UNV-STD-W-4 (4500K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521403
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-50,
Test Lab: INNOVATION CENTER
Issue Date: 5/5/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-050U-050D-93050-1D-UNV-STD-W-4 (4500K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

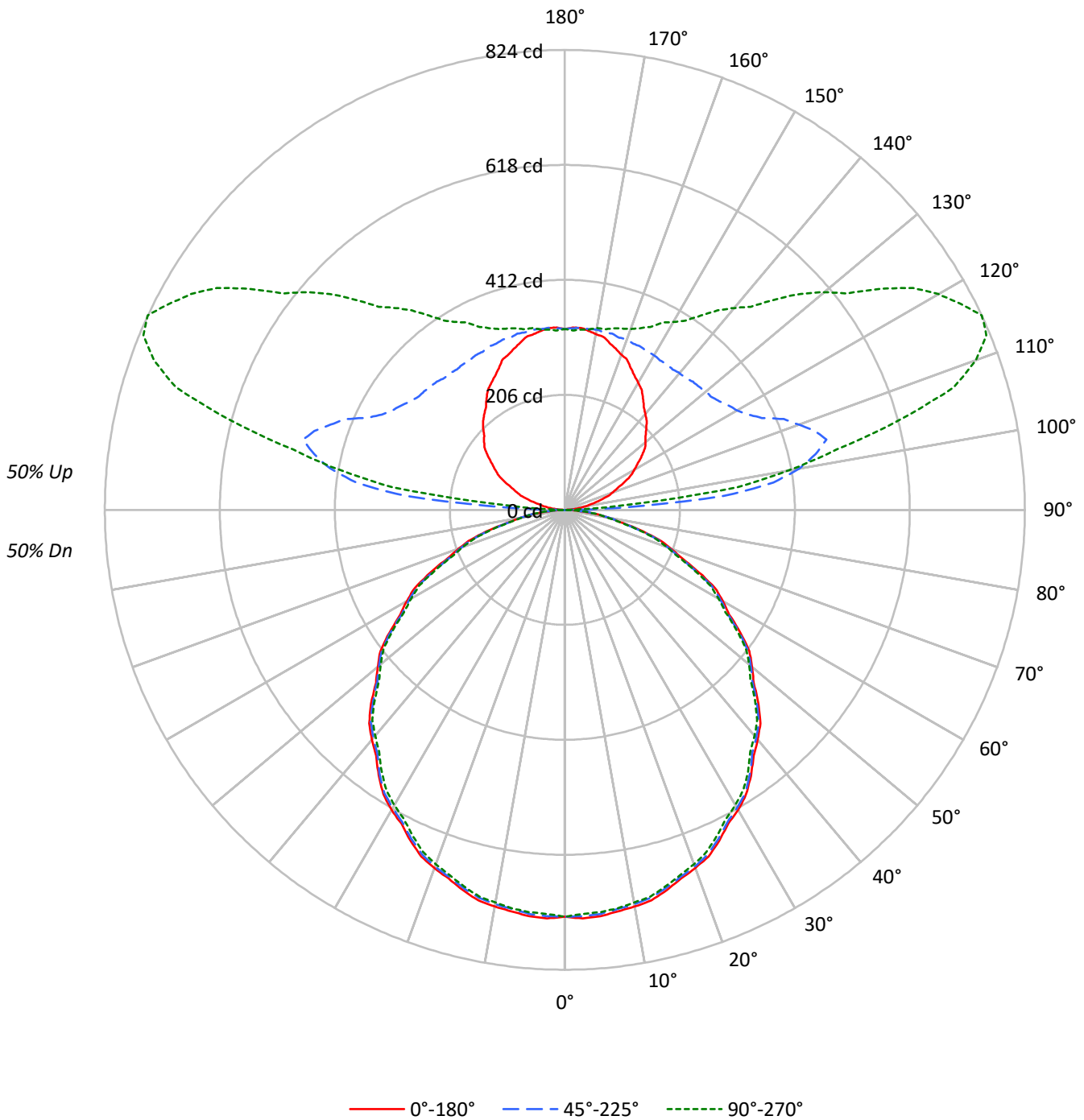
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4172.5 lumens
Efficiency: N/A
Efficacy: 113.1 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.37
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 36.9
Input Voltage (V): 120
Input Current (Ain): 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: 24 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	0
RCR																		
0	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	98	93	89	86	90	86	83	80	73	70	68	60	59	57	49	48	47	42
2	89	81	75	70	82	75	70	65	64	60	56	53	50	47	43	41	39	35
3	81	71	64	58	74	66	59	54	56	51	47	47	43	40	38	35	33	29
4	74	63	55	49	68	58	51	46	50	44	40	41	37	34	34	31	28	25
5	68	56	48	42	62	52	45	39	44	39	34	37	33	29	30	27	25	21
6	62	50	42	36	57	47	39	34	40	34	30	33	29	26	28	24	22	19
7	58	45	37	31	53	42	35	30	36	30	26	30	26	23	25	22	19	17
8	53	41	33	28	49	38	31	26	33	27	23	28	23	20	23	20	17	15
9	50	37	30	25	46	35	28	23	30	25	21	25	21	18	21	18	15	13
10	46	34	27	22	43	32	25	21	28	22	19	23	19	16	20	16	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6723	6723	6723
5°	6768	6730	6702
10°	6760	6722	6694
15°	6737	6699	6669
20°	6705	6675	6635
25°	6662	6621	6559
30°	6614	6571	6506
35°	6546	6511	6443
40°	6472	6423	6362
45°	6401	6335	6281
50°	6281	6238	6179
55°	6172	6106	6042
60°	6028	5934	5859
65°	5798	5643	5578
70°	5436	5298	5244
75°	4934	4787	4716
80°	4112	4166	4054
85°	2911	3451	3451



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.9	1.7
10°-20°	197.5	4.7
20°-30°	298.5	7.2
30°-40°	359.5	8.6
40°-50°	373.4	8.9
50°-60°	338.7	8.1
60°-70°	256.8	6.2
70°-80°	143.2	3.4
80°-90°	37.9	0.9
90°-100°	167.0	4.0
100°-110°	403.7	9.7
110°-120°	430.6	10.3
120°-130°	348.7	8.4
130°-140°	270.0	6.5
140°-150°	206.0	4.9
150°-160°	149.1	3.6
160°-170°	91.8	2.2
170°-180°	31.1	0.7
0°-30°	565.0	13.5
0°-40°	924.5	22.2
0°-60°	1636.5	39.2
0°-90°	2074.5	49.7
90°-120°	1001.3	24.0
90°-150°	1826.0	43.8
90°-180°	2098.0	50.3
0°-180°	4172.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	729	729	729	729	729	
5°	731	725	727	725	724	69
15°	705	697	701	699	698	199
25°	654	648	650	644	644	301
35°	581	575	578	571	572	363
45°	491	486	486	480	481	377
55°	384	383	380	376	376	343
65°	266	263	258	256	256	262
75°	138	136	134	132	132	146
85°	28	30	33	33	33	34
90°	0	0	0	0	0	2
95°	16	84	286	186	130	18
105°	64	112	485	628	620	68
115°	118	151	390	739	824	117
125°	168	194	338	588	690	150
135°	207	231	325	464	533	159
145°	244	262	318	394	425	153
155°	280	292	323	349	362	129
165°	310	314	327	332	336	87
175°	327	326	327	325	324	31
180°	324	324	324	324	324	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	728.7	728.7	728.7	728.7	728.7
2.5°	732.8	727.2	728.7	727.8	724.7
5°	730.8	724.8	726.7	724.6	723.6
7.5°	725.7	719.5	721.6	719.6	720.2
10°	721.6	714.6	717.5	715.5	714.5
12.5°	716.7	709.0	711.8	709.0	709.6
15°	705.3	697.4	701.3	699.2	698.2
17.5°	692.7	685.7	689.6	686.4	686.4
20°	682.9	676.0	679.9	675.8	675.8
22.5°	672.3	664.6	668.5	663.6	663.6
25°	654.4	647.5	650.4	644.3	644.3
27.5°	633.9	626.7	630.6	624.5	624.5
30°	620.8	612.9	616.8	610.7	610.7
32.5°	604.6	599.0	601.3	595.2	595.2
35°	581.2	575.2	578.1	571.0	572.0
37.5°	555.3	551.1	551.2	544.9	546.1
40°	537.4	532.4	533.3	526.2	528.2
42.5°	518.7	514.5	514.6	509.1	510.3
45°	490.6	485.6	485.5	480.4	481.4
47.5°	458.8	456.2	455.8	449.9	450.9
50°	437.6	436.7	434.6	429.5	430.5
52.5°	416.5	415.5	413.4	408.4	409.4
55°	383.7	382.7	379.6	375.6	375.6
57.5°	349.5	348.5	345.2	341.2	341.2
60°	326.7	325.7	321.6	317.5	317.5
62.5°	303.1	301.3	297.2	293.9	293.9
65°	265.6	262.7	258.5	255.5	255.5
67.5°	226.8	224.8	221.7	218.8	218.8
70°	201.5	199.5	196.4	194.4	194.4
72.5°	176.3	174.3	171.2	169.2	169.2
75°	138.4	136.4	134.3	132.3	132.3
77.5°	101.0	100.4	100.4	98.3	98.3
80°	77.4	78.3	78.4	76.3	76.3
82.5°	55.4	57.2	58.0	57.6	57.6
85°	27.5	30.5	32.6	32.6	32.6
87.5°	8.1	10.5	13.0	13.0	13.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	5.5	45.2	106.5	51.8	35.1
95°	16.5	83.6	286.2	186.1	130.4
97.5°	29.2	92.6	376.9	363.1	311.7
100°	39.1	98.2	426.9	450.6	408.3
102.5°	48.5	103.2	459.8	523.5	498.4
105°	64.5	111.5	485.2	627.8	619.7
107.5°	80.3	121.2	470.2	711.4	730.4
110°	91.3	129.5	446.1	747.5	783.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	102.3	137.8	424.7	756.3	817.1
115°	118.0	150.9	389.8	739.0	824.2
117.5°	133.7	164.7	369.4	699.3	799.1
120°	144.1	173.0	356.2	668.1	772.8
122.5°	155.1	181.8	348.0	636.2	739.3
125°	168.1	193.6	338.3	587.7	690.4
127.5°	181.0	205.1	331.6	546.7	636.9
130°	188.7	212.2	329.4	518.1	606.7
132.5°	195.9	220.4	326.1	497.5	572.6
135°	206.6	230.7	324.6	463.5	533.2
137.5°	216.7	241.0	319.8	440.4	493.0
140°	224.4	246.6	319.8	423.9	472.2
142.5°	232.1	254.2	317.1	409.4	450.2
145°	244.3	262.4	318.4	393.9	424.8
147.5°	255.7	273.3	317.6	376.1	401.6
150°	262.9	278.3	319.8	368.3	388.4
152.5°	270.5	285.4	319.3	360.0	378.0
155°	280.0	292.1	322.6	348.9	361.7
157.5°	291.4	301.7	321.9	344.7	352.2
160°	295.8	304.5	324.6	339.2	344.5
162.5°	302.9	310.6	323.5	337.5	340.7
165°	309.5	314.2	326.7	331.6	336.3
167.5°	317.6	320.7	325.9	331.2	331.3
170°	319.8	321.8	328.0	327.4	330.8
172.5°	323.7	325.1	326.4	327.9	325.9
175°	327.4	326.0	327.4	324.6	323.9
177.5°	326.7	326.7	325.6	324.4	321.7
180°	323.9	323.9	323.9	323.9	323.9

(END OF REPORT)