

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: P521455

Luminaire Tested: **SQ4-F-075U-050D-93050-1D-UNV-STD-W-4 (4500K)**

Issue Date: 5/5/2021

Test Information

Test Method: LM-79-08
Report Number: P521455
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-075U-050D-93050-1D-UNV-STD-W-4 (4500K)
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

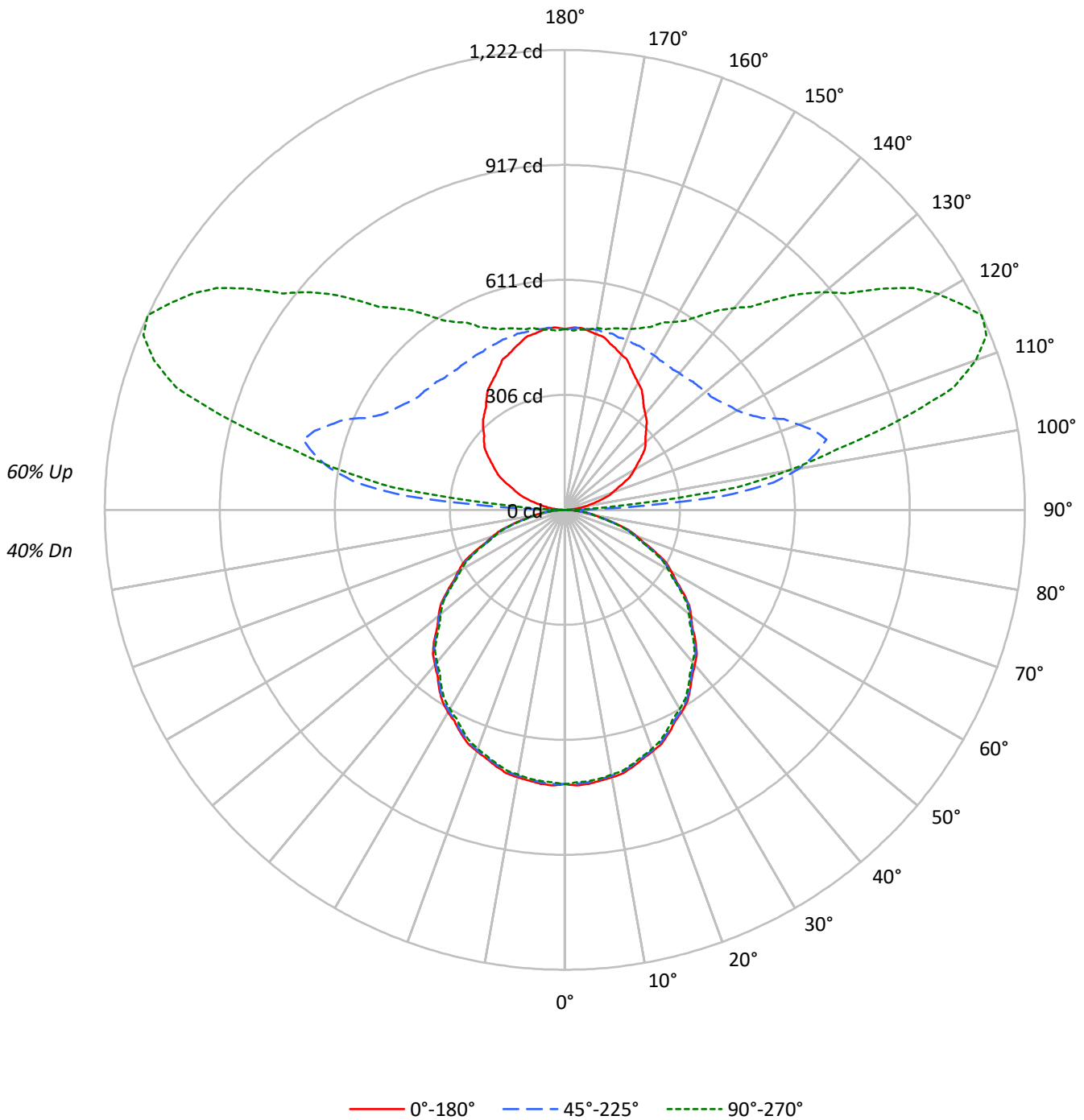
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5185.9 lumens
Efficiency: N/A
Efficacy: 116.5 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): 44.5
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	50	30	10	0	
RCR																						
0	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47	40				
1	95	91	87	84	87	83	80	77	68	66	64	54	53	51	41	40	39	33				
2	87	79	73	68	79	72	67	63	59	56	52	47	45	42	36	34	33	28				
3	79	70	62	57	72	64	57	52	52	48	44	42	38	36	32	30	28	23				
4	72	61	54	48	65	56	49	44	46	41	37	37	33	30	28	26	24	20				
5	66	55	47	41	60	50	43	38	41	36	32	33	29	26	26	23	21	17				
6	61	49	41	35	55	45	38	33	37	32	28	30	26	23	23	20	18	15				
7	56	44	36	31	51	40	33	28	34	28	24	27	23	20	21	18	16	13				
8	52	40	32	27	47	37	30	25	30	25	21	25	21	18	19	16	14	12				
9	48	36	29	24	44	33	27	22	28	23	19	23	19	16	18	15	13	11				
10	45	33	26	21	41	31	24	20	26	21	17	21	17	14	16	14	12	10				

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	1.3
10°-20°	197.5	3.8
20°-30°	298.5	5.8
30°-40°	359.5	6.9
40°-50°	373.4	7.2
50°-60°	338.7	6.5
60°-70°	256.8	5.0
70°-80°	143.2	2.8
80°-90°	37.9	0.7
90°-100°	247.7	4.8
100°-110°	598.7	11.5
110°-120°	638.5	12.3
120°-130°	517.2	10.0
130°-140°	400.4	7.7
140°-150°	305.5	5.9
150°-160°	221.1	4.3
160°-170°	136.2	2.6
170°-180°	46.1	0.9
0°-30°	565.0	10.9
0°-40°	924.5	17.8
0°-60°	1636.5	31.6
0°-90°	2074.5	40.0
90°-120°	1485.0	28.6
90°-150°	2708.0	52.2
90°-180°	3111.0	60.0
0°-180°	5185.9	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°	24	124	424	276	193	27
105°	96	165	720	931	919	101
115°	175	224	578	1096	1222	173
125°	249	287	502	872	1024	222
135°	306	342	481	687	791	237
145°	362	389	472	584	630	226
155°	415	433	478	518	536	192
165°	459	466	484	492	499	130
175°	486	484	486	481	480	46
180°	480	480	480	480	480	

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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°	8.1	67.1	158.0	76.8	52.1
95°	24.4	123.9	424.4	276.0	193.4
97.5°	43.4	137.3	559.0	538.5	462.3
100°	58.0	145.6	633.1	668.3	605.6
102.5°	71.9	153.1	681.9	776.3	739.1
105°	95.7	165.3	719.6	931.0	919.1
107.5°	119.1	179.8	697.4	1055.1	1083.1
110°	135.4	192.1	661.6	1108.5	1161.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	151.6	204.4	629.8	1121.6	1211.8
115°	175.1	223.8	578.1	1096.0	1222.4
117.5°	198.3	244.2	547.8	1037.0	1185.1
120°	213.7	256.5	528.2	990.8	1146.0
122.5°	230.0	269.6	516.0	943.5	1096.4
125°	249.4	287.2	501.8	871.6	1023.9
127.5°	268.5	304.1	491.8	810.8	944.5
130°	279.9	314.7	488.5	768.4	899.7
132.5°	290.5	326.9	483.7	737.8	849.2
135°	306.4	342.2	481.4	687.3	790.8
137.5°	321.4	357.4	474.3	653.2	731.2
140°	332.8	365.7	474.3	628.6	700.2
142.5°	344.2	377.1	470.2	607.2	667.7
145°	362.3	389.2	472.3	584.2	630.0
147.5°	379.2	405.3	471.0	557.8	595.6
150°	389.8	412.7	474.3	546.2	576.1
152.5°	401.2	423.3	473.5	533.9	560.6
155°	415.3	433.2	478.4	517.5	536.4
157.5°	432.2	447.5	477.3	511.2	522.3
160°	438.7	451.6	481.4	503.0	510.9
162.5°	449.3	460.6	479.8	500.5	505.2
165°	459.0	466.0	484.5	491.7	498.7
167.5°	471.0	475.6	483.2	491.2	491.4
170°	474.3	477.3	486.5	485.6	490.6
172.5°	480.0	482.2	484.1	486.2	483.2
175°	485.5	483.5	485.5	481.4	480.4
177.5°	484.5	484.5	482.8	481.1	477.1
180°	480.4	480.4	480.4	480.4	480.4

(END OF REPORT)