

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: CORELITE

Report Number: P519888

Luminaire Tested: **SQ4-F-050U-050D-835-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519888
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G3-1910-536-17)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-050U-050D-835-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

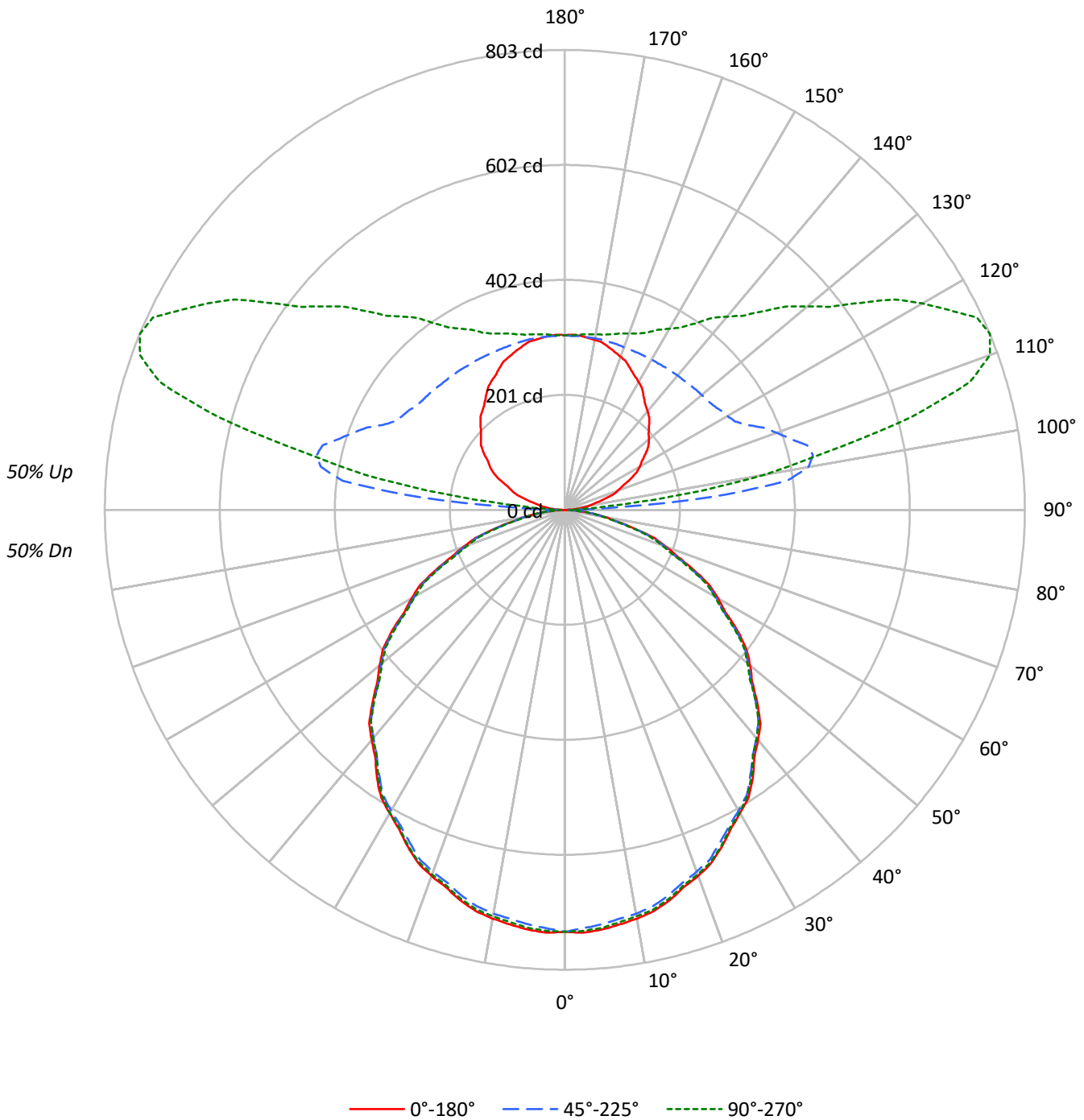
Lumens per Lamp: N/A
Luminaire Lumens: 4003.4 lumens
Efficiency: N/A
Efficacy: 140.5 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 28.5
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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50				
1	98	93	90	86	90	86	83	80	73	71	69	61	59	58	50	49	48	42				
2	89	82	75	70	82	75	70	66	64	60	57	53	51	48	44	42	40	35				
3	81	72	64	58	75	66	60	55	56	51	47	47	44	41	39	36	34	30				
4	74	63	55	49	68	59	52	46	50	45	40	42	38	35	34	32	29	25				
5	68	56	48	42	62	52	45	40	45	39	35	38	33	30	31	28	25	22				
6	63	50	42	36	58	47	40	34	40	34	30	34	30	26	28	25	22	19				
7	58	46	38	32	53	42	35	30	36	31	27	31	26	23	26	22	20	17				
8	54	41	33	28	49	38	31	27	33	28	24	28	24	21	23	20	18	15				
9	50	38	30	25	46	35	28	24	30	25	21	26	22	18	22	18	16	14				
10	47	35	27	22	43	32	26	21	28	23	19	24	20	17	20	17	14	12				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6796	6796	6796
5°	6813	6730	6785
10°	6790	6707	6753
15°	6743	6658	6716
20°	6680	6603	6651
25°	6605	6524	6585
30°	6514	6460	6503
35°	6441	6364	6397
40°	6318	6259	6270
45°	6189	6136	6136
50°	6057	6001	5972
55°	5916	5837	5805
60°	5694	5604	5567
65°	5425	5318	5253
70°	5055	4947	4842
75°	4534	4395	4288
80°	3666	3613	3512
85°	2191	2509	2615



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.5	1.7
10°-20°	197.9	4.9
20°-30°	297.3	7.4
30°-40°	354.8	8.9
40°-50°	363.6	9.1
50°-60°	324.3	8.1
60°-70°	241.5	6.0
70°-80°	131.1	3.3
80°-90°	31.5	0.8
90°-100°	146.4	3.7
100°-110°	397.8	9.9
110°-120°	409.0	10.2
120°-130°	327.0	8.2
130°-140°	257.0	6.4
140°-150°	197.0	4.9
150°-160°	141.7	3.5
160°-170°	86.7	2.2
170°-180°	29.2	0.7
0°-30°	564.7	14.1
0°-40°	919.5	23.0
0°-60°	1607.4	40.1
0°-90°	2011.5	50.2
90°-120°	953.3	23.8
90°-150°	1734.4	43.3
90°-180°	1992.0	49.8
0°-180°	4003.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	737	737	737	737	737	
5°	736	735	727	734	733	70
15°	706	704	697	703	703	199
25°	649	647	641	645	647	299
35°	572	570	565	565	568	357
45°	474	475	470	469	470	366
55°	368	368	363	360	361	328
65°	248	248	244	241	241	246
75°	127	126	123	121	120	134
85°	21	23	24	25	25	29
90°	1	4	7	9	9	2
95°	22	80	255	111	75	23
105°	71	110	438	666	627	75
115°	126	152	350	697	794	124
125°	173	197	317	534	630	154
135°	208	231	308	435	490	161
145°	240	258	304	370	397	151
155°	272	281	302	332	341	125
165°	294	298	303	316	317	83
175°	305	306	304	308	307	29
180°	305	305	305	305	305	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	736.6	736.6	736.6	736.6	736.6
2.5°	739.0	737.4	731.1	736.6	735.8
5°	735.6	734.6	726.7	733.6	732.6
7.5°	730.3	728.3	720.6	727.3	726.3
10°	724.8	722.8	715.9	721.8	720.8
12.5°	717.7	716.5	708.8	714.7	714.5
15°	706.0	704.0	697.1	703.1	703.1
17.5°	690.6	689.5	682.7	688.5	687.7
20°	680.4	678.4	672.5	677.4	677.4
22.5°	667.8	666.6	660.7	664.8	665.6
25°	648.8	646.9	640.9	644.9	646.9
27.5°	627.9	626.3	621.4	624.0	625.4
30°	611.4	611.4	606.4	607.5	610.4
32.5°	596.4	596.4	590.6	591.6	593.0
35°	571.9	569.9	565.0	565.1	568.0
37.5°	543.5	542.5	539.4	538.8	539.6
40°	524.6	523.6	519.7	520.6	520.6
42.5°	505.6	504.7	500.7	499.3	500.9
45°	474.3	475.3	470.3	469.4	470.3
47.5°	443.3	443.3	439.4	436.6	438.2
50°	422.0	422.0	418.1	416.1	416.1
52.5°	399.9	400.7	396.0	393.2	394.0
55°	367.8	367.8	362.9	359.9	360.9
57.5°	332.3	332.3	327.4	324.4	326.2
60°	308.6	308.6	303.7	300.7	301.7
62.5°	285.0	285.0	280.0	277.1	277.3
65°	248.5	247.5	243.6	240.6	240.6
67.5°	213.4	210.9	207.9	203.9	203.9
70°	187.4	186.4	183.4	179.5	179.5
72.5°	163.7	161.9	159.0	155.8	155.8
75°	127.2	126.2	123.3	121.3	120.3
77.5°	91.1	90.3	90.1	87.4	88.2
80°	69.0	69.0	68.0	66.1	66.1
82.5°	49.3	50.1	48.3	47.9	47.1
85°	20.7	22.7	23.7	24.7	24.7
87.5°	4.1	7.0	6.9	8.1	8.1
90°	1.0	3.8	6.9	8.8	8.8
92.5°	8.8	40.1	69.7	29.9	25.3
95°	21.6	80.1	255.0	111.0	74.6
97.5°	35.7	88.4	391.0	304.2	213.6
100°	45.1	94.0	432.6	438.5	354.1
102.5°	54.6	99.6	443.5	542.4	467.9
105°	70.7	110.0	437.5	666.2	626.8
107.5°	87.3	122.1	412.2	730.1	741.0
110°	99.1	130.7	393.4	742.6	789.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	109.3	139.4	374.6	732.2	803.0
115°	125.6	152.4	350.2	696.7	793.6
117.5°	140.9	166.5	334.7	646.4	755.5
120°	151.0	176.0	327.7	612.6	721.0
122.5°	159.7	184.7	322.9	578.8	683.4
125°	172.6	196.6	316.9	533.8	629.8
127.5°	184.2	208.0	313.5	499.8	582.1
130°	191.3	214.3	312.0	478.4	552.3
132.5°	198.3	221.4	310.4	460.2	525.6
135°	207.9	231.0	308.0	434.8	490.4
137.5°	218.3	239.2	306.8	412.4	459.2
140°	224.6	244.7	306.1	398.2	440.4
142.5°	230.9	249.5	305.3	387.1	422.4
145°	240.3	257.6	304.1	369.5	397.3
147.5°	250.9	265.7	303.1	355.6	377.5
150°	258.0	270.4	303.1	347.7	364.9
152.5°	263.5	274.4	302.3	340.5	354.7
155°	271.7	281.3	302.1	331.8	341.4
157.5°	279.8	287.2	302.1	325.9	333.1
160°	284.5	291.1	302.1	321.9	327.7
162.5°	289.2	294.4	302.9	318.7	322.9
165°	294.3	298.1	303.1	315.9	316.9
167.5°	299.6	301.5	304.1	312.5	313.3
170°	301.2	303.0	304.1	311.0	311.0
172.5°	302.7	303.9	304.1	309.4	309.4
175°	305.1	306.1	304.1	308.0	307.0
177.5°	305.9	305.9	303.5	306.7	305.1
180°	305.1	305.1	305.1	305.1	305.1

(END OF REPORT)