

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: P519900

Luminaire Tested: **SQ4-F-050U-050D-935-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519900
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-935-1D-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

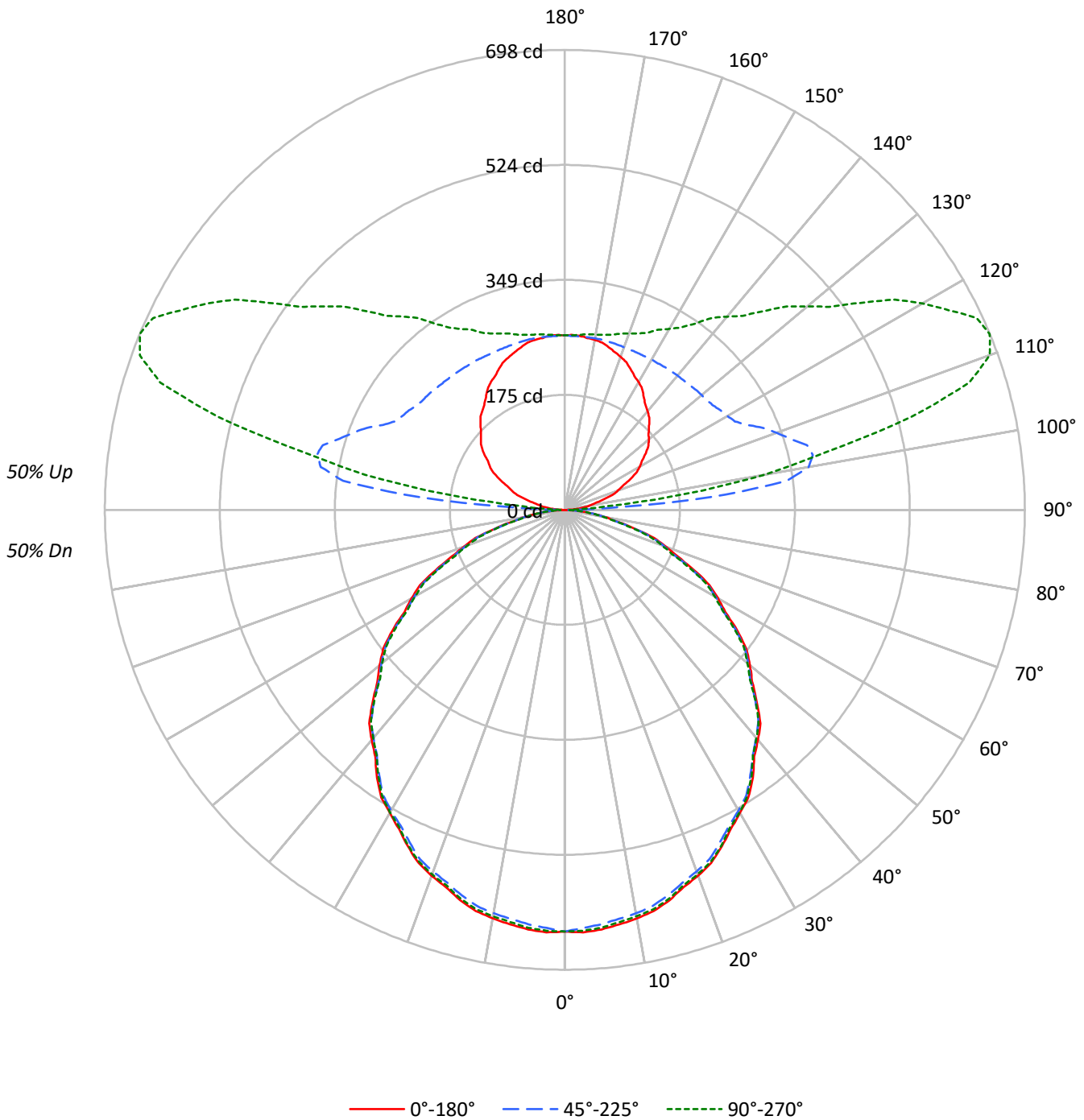
Lumens per Lamp: N/A
Luminaire Lumens: 3478.6 lumens
Efficiency: N/A
Efficacy: 122.1 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 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	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°	5905	5905	5905
5°	5920	5849	5896
10°	5899	5827	5868
15°	5859	5785	5835
20°	5804	5737	5779
25°	5738	5669	5722
30°	5659	5613	5650
35°	5598	5530	5558
40°	5491	5438	5449
45°	5377	5333	5333
50°	5263	5215	5190
55°	5141	5072	5044
60°	4949	4870	4838
65°	4713	4619	4563
70°	4392	4297	4205
75°	3939	3818	3725
80°	3188	3145	3050
85°	1895	2181	2265



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.4	1.7
10°-20°	172.0	4.9
20°-30°	258.3	7.4
30°-40°	308.3	8.9
40°-50°	315.9	9.1
50°-60°	281.8	8.1
60°-70°	209.8	6.0
70°-80°	113.9	3.3
80°-90°	27.4	0.8
90°-100°	127.3	3.7
100°-110°	345.7	9.9
110°-120°	355.4	10.2
120°-130°	284.2	8.2
130°-140°	223.3	6.4
140°-150°	171.2	4.9
150°-160°	123.1	3.5
160°-170°	75.3	2.2
170°-180°	25.4	0.7
0°-30°	490.6	14.1
0°-40°	799.0	23.0
0°-60°	1396.7	40.2
0°-90°	1747.8	50.2
90°-120°	828.4	23.8
90°-150°	1507.0	43.3
90°-180°	1731.0	49.8
0°-180°	3478.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	640	640	640	640	640	
5°	639	638	632	637	637	61
15°	613	612	606	611	611	173
25°	564	562	557	560	562	260
35°	497	495	491	491	494	310
45°	412	413	409	408	409	318
55°	320	320	315	313	314	285
65°	216	215	212	209	209	214
75°	110	110	107	105	104	117
85°	18	20	21	21	21	25
90°	1	3	6	8	8	2
95°	19	70	222	96	65	20
105°	61	96	380	579	545	65
115°	109	132	304	605	690	108
125°	150	171	275	464	547	134
135°	181	201	268	378	426	140
145°	209	224	264	321	345	131
155°	236	244	262	288	297	109
165°	256	259	263	274	275	72
175°	265	266	264	268	267	25
180°	265	265	265	265	265	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	640.0	640.0	640.0	640.0	640.0
2.5°	642.0	640.7	635.2	640.0	639.4
5°	639.2	638.3	631.5	637.4	636.6
7.5°	634.5	632.9	626.1	632.0	631.1
10°	629.7	628.0	622.0	627.1	626.3
12.5°	623.6	622.6	615.9	621.0	620.8
15°	613.4	611.7	605.7	610.9	610.9
17.5°	600.1	599.1	593.2	598.1	597.6
20°	591.1	589.5	584.3	588.6	588.6
22.5°	580.2	579.2	574.1	577.6	578.3
25°	563.7	562.1	556.9	560.4	562.1
27.5°	545.6	544.3	540.0	542.2	543.4
30°	531.2	531.2	526.9	527.8	530.3
32.5°	518.2	518.2	513.2	514.1	515.3
35°	497.0	495.3	491.0	491.0	493.5
37.5°	472.2	471.4	468.7	468.2	468.9
40°	455.9	455.0	451.5	452.4	452.4
42.5°	439.4	438.5	435.0	433.9	435.2
45°	412.1	413.0	408.7	407.8	408.7
47.5°	385.3	385.3	381.8	379.4	380.7
50°	366.7	366.7	363.3	361.6	361.6
52.5°	347.5	348.2	344.0	341.7	342.4
55°	319.6	319.6	315.3	312.8	313.6
57.5°	288.7	288.7	284.5	281.9	283.4
60°	268.2	268.2	263.9	261.3	262.2
62.5°	247.6	247.6	243.4	240.8	240.9
65°	215.9	215.1	211.6	209.0	209.0
67.5°	185.4	183.2	180.6	177.2	177.2
70°	162.8	161.9	159.3	155.9	155.9
72.5°	142.2	140.7	138.1	135.4	135.4
75°	110.5	109.6	107.1	105.4	104.5
77.5°	79.2	78.5	78.3	75.9	76.6
80°	60.0	60.0	59.2	57.4	57.4
82.5°	42.8	43.5	42.0	41.6	40.9
85°	17.9	19.6	20.6	21.4	21.4
87.5°	3.5	6.1	6.0	7.0	7.0
90°	0.9	3.3	6.0	7.7	7.7
92.5°	7.7	34.8	60.5	26.0	22.0
95°	18.7	69.6	221.6	96.5	64.8
97.5°	31.0	76.8	339.7	264.4	185.7
100°	39.3	81.7	375.8	381.0	307.7
102.5°	47.4	86.5	385.4	471.2	406.5
105°	61.3	95.6	380.2	578.9	544.6
107.5°	75.9	106.0	358.2	634.4	643.8
110°	86.1	113.6	341.8	645.3	686.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	95.0	121.1	325.4	636.3	697.7
115°	109.1	132.5	304.3	605.4	689.5
117.5°	122.4	144.7	290.9	561.6	656.5
120°	131.3	152.9	284.7	532.2	626.5
122.5°	138.8	160.4	280.5	502.9	593.8
125°	150.0	170.8	275.3	463.9	547.2
127.5°	160.0	180.8	272.4	434.3	505.8
130°	166.2	186.2	271.0	415.7	479.8
132.5°	172.3	192.3	269.7	399.9	456.7
135°	180.7	200.7	267.6	377.8	426.2
137.5°	189.7	207.9	266.6	358.4	399.1
140°	195.2	212.6	265.9	346.0	382.7
142.5°	200.7	216.8	265.2	336.4	367.0
145°	208.8	223.8	264.3	321.1	345.2
147.5°	218.0	230.9	263.4	309.0	327.9
150°	224.1	235.0	263.4	302.0	317.1
152.5°	228.9	238.5	262.7	295.9	308.2
155°	236.1	244.4	262.5	288.3	296.6
157.5°	243.1	249.5	262.5	283.1	289.5
160°	247.2	253.0	262.5	279.7	284.7
162.5°	251.3	255.7	263.2	276.9	280.5
165°	255.7	259.1	263.4	274.5	275.3
167.5°	260.3	262.0	264.3	271.5	272.2
170°	261.7	263.4	264.3	270.1	270.1
172.5°	263.0	264.1	264.3	268.9	268.9
175°	265.0	265.9	264.3	267.6	266.8
177.5°	265.7	265.7	263.7	266.4	265.0
180°	265.0	265.0	265.0	265.0	265.0

(END OF REPORT)