

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

Brand: CORELITE

Report Number: P686064

Luminaire Tested: SQ4R-F-050D-930-1-UNV-STD-W-4

Issue Date: 11/18/2022

Test Information

Test Method: LM-79-2019
Report Number: P686064
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2203-586-2)
Test Lab: INNOVATION CENTER
Issue Date: 11/18/2022
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-F-050D-930-1-UNV-STD-W-4
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH FROSTED LENS.
500 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1647.8 lumens
Efficiency: N/A
Efficacy: 87.2 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.23 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

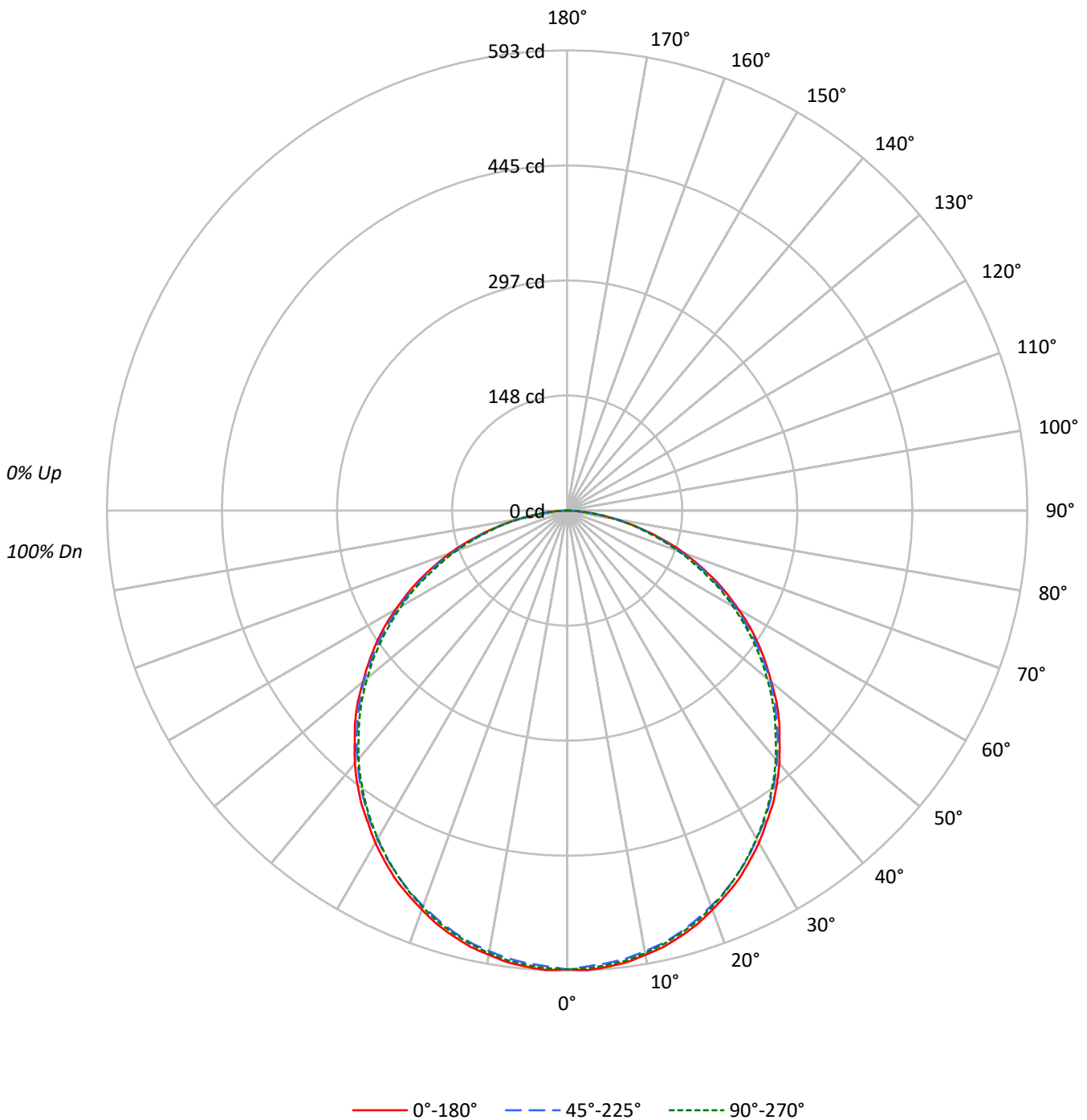
Input Watts (W): 18.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	109	104	100	96	106	102	98	94	97	94	91		94	91	88		90	88	86	84
2	99	91	84	78	96	89	82	77	85	80	75		82	77	74		79	75	72	70
3	90	80	71	65	88	78	70	64	75	68	63		72	67	62		70	65	61	59
4	82	70	62	55	80	69	61	54	67	59	54		64	58	53		62	57	52	50
5	76	63	54	47	74	62	53	47	60	52	46		58	51	46		56	50	45	43
6	70	57	48	41	68	56	47	41	54	46	41		52	45	40		51	45	40	38
7	65	51	43	36	63	51	42	36	49	41	36		48	41	36		46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32		44	37	32		42	36	32	30
9	56	43	35	29	55	42	35	29	41	34	29		40	34	29		39	33	29	27
10	53	40	32	27	52	39	32	26	38	31	26		37	31	26		36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5692	5692	5692
5°	5705	5658	5682
10°	5684	5636	5660
15°	5657	5608	5625
20°	5607	5557	5574
25°	5564	5504	5504
30°	5497	5434	5425
35°	5430	5364	5344
40°	5348	5286	5256
45°	5262	5197	5152
50°	5145	5121	5035
55°	5057	4988	4906
60°	4910	4831	4754
65°	4754	4643	4531
70°	4526	4388	4298
75°	4107	4017	3928
80°	3509	3509	3465
85°	2507	2695	2695

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5262 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.9	3.4
10°-20°	159.5	9.7
20°-30°	239.7	14.5
30°-40°	286.4	17.4
40°-50°	295.1	17.9
50°-60°	265.6	16.1
60°-70°	201.9	12.3
70°-80°	114.8	7.0
80°-90°	29.0	1.8
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	455.0	27.6
0°-40°	741.4	45.0
0°-60°	1302.1	79.0
0°-90°	1647.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1647.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	591	591	591	591	591	
5°	590	590	586	590	588	56
15°	568	567	563	566	564	160
25°	524	522	518	520	518	241
35°	462	460	456	456	455	289
45°	386	386	382	379	378	298
55°	301	300	297	295	292	269
65°	209	208	204	201	199	206
75°	110	110	108	107	106	118
85°	23	24	24	24	24	28
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	591.2	591.2	591.2	591.2	591.2
2.5°	592.8	591.2	587.9	592.0	590.3
5°	590.3	589.5	585.5	590.3	587.9
7.5°	587.1	586.3	582.2	586.3	584.7
10°	581.4	580.6	576.5	580.6	579.0
12.5°	575.7	574.9	570.9	574.1	572.5
15°	567.6	566.8	562.7	566.0	564.4
17.5°	558.7	557.9	553.0	556.2	555.4
20°	547.3	546.5	542.4	544.9	544.1
22.5°	535.9	535.1	531.1	533.5	531.9
25°	523.8	522.1	518.1	519.7	518.1
27.5°	509.1	508.3	504.3	505.1	503.5
30°	494.5	493.7	488.8	489.7	488.0
32.5°	477.5	477.5	473.4	473.4	471.8
35°	462.0	460.4	456.4	456.4	454.7
37.5°	444.2	442.6	439.3	438.5	436.9
40°	425.5	424.7	420.6	419.8	418.2
42.5°	405.2	406.0	402.0	399.5	397.9
45°	386.5	386.5	381.7	379.2	378.4
47.5°	366.2	366.2	362.2	359.7	358.1
50°	343.5	345.1	341.9	337.8	336.2
52.5°	322.4	323.2	319.1	316.7	315.1
55°	301.3	300.4	297.2	294.8	292.3
57.5°	279.3	278.5	273.7	271.2	269.6
60°	255.0	255.0	250.9	248.5	246.9
62.5°	232.2	231.4	228.2	224.9	224.1
65°	208.7	207.9	203.8	201.4	198.9
67.5°	183.5	182.7	180.3	177.0	175.4
70°	160.8	158.3	155.9	153.5	152.7
72.5°	136.4	134.0	131.5	129.9	128.3
75°	110.4	109.6	108.0	107.2	105.6
77.5°	86.9	86.9	85.3	84.5	84.5
80°	63.3	63.3	63.3	62.5	62.5
82.5°	41.4	42.2	42.2	41.4	42.2
85°	22.7	23.5	24.4	24.4	24.4
87.5°	7.3	9.7	8.9	9.7	9.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)