

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: P686066

Luminaire Tested: SQ4R-F-050D-940-1-UNV-STD-W-4

Issue Date: 11/18/2022

**Test Information**

Test Method: LM-79-2019  
Report Number: P686066  
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-940-1-UNV-STD-W-4  
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH FROSTED LENS.  
500 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

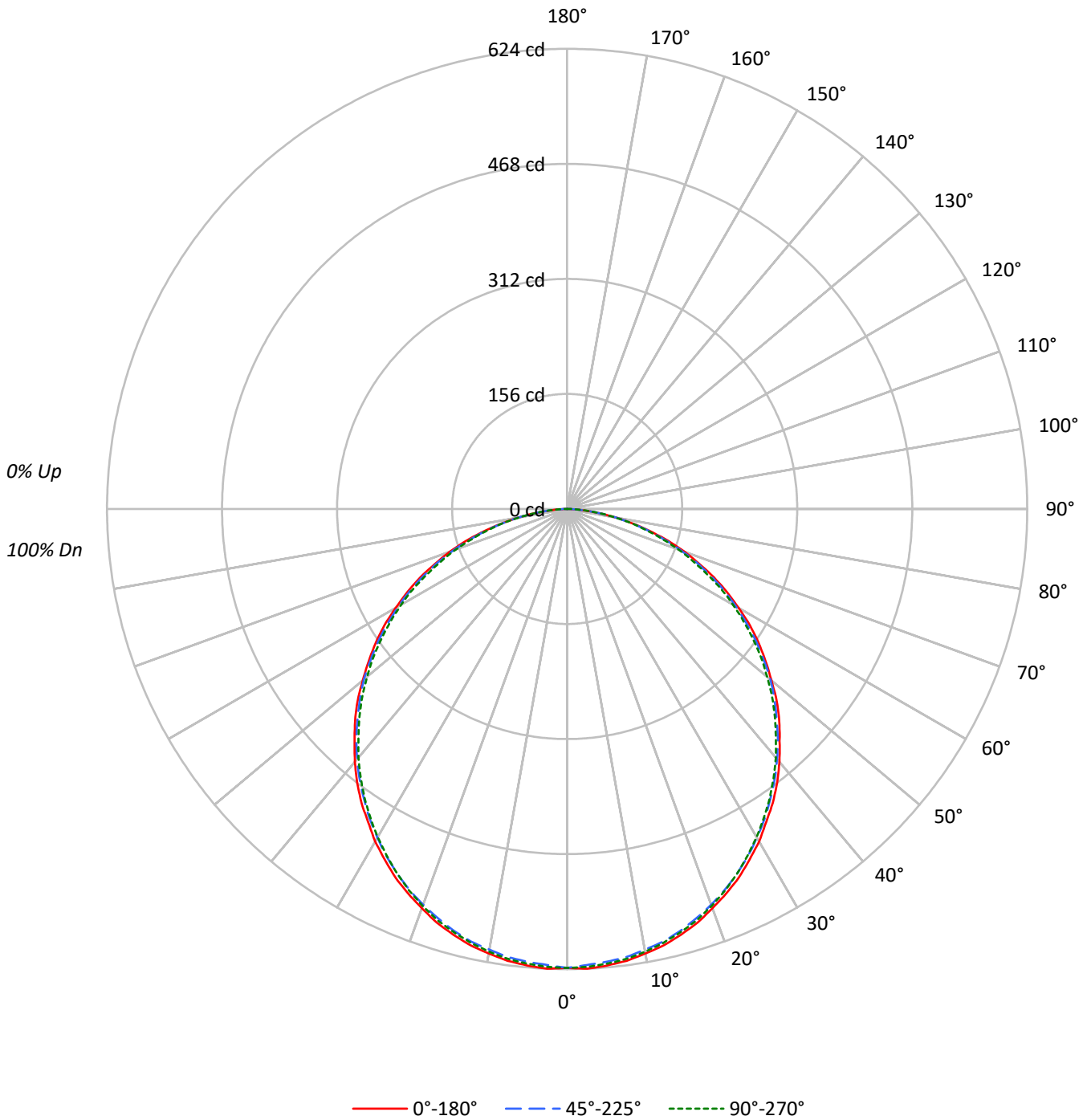
Lumens per Lamp: N/A  
Luminaire Lumens: 1734.6 lumens  
Efficiency: N/A  
Efficacy: 91.8 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.23 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')  
CIE Type: Direct

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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	109	104	100	96	106	102	98	94	97	94	91	94	91	88	90	88	86	84				84
2	99	91	84	78	96	89	82	77	85	80	75	82	77	74	79	75	72	70				70
3	90	80	71	65	88	78	70	64	75	68	63	72	67	62	70	65	61	59				59
4	82	70	62	55	80	69	61	54	67	59	54	64	58	53	62	57	52	50				50
5	76	63	54	47	74	62	53	47	60	52	46	58	51	46	56	50	45	43				43
6	70	57	48	41	68	56	47	41	54	46	41	52	45	40	51	45	40	38				38
7	65	51	43	36	63	51	42	36	49	41	36	48	41	36	46	40	35	33				33
8	60	47	38	32	59	46	38	32	45	37	32	44	37	32	42	36	32	30				30
9	56	43	35	29	55	42	35	29	41	34	29	40	34	29	39	33	29	27				27
10	53	40	32	27	52	39	32	26	38	31	26	37	31	26	36	30	26	24				24

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	5991	5991	5991
5°	6005	5956	5981
10°	5983	5933	5958
15°	5955	5904	5921
20°	5902	5850	5867
25°	5856	5794	5794
30°	5787	5721	5711
35°	5717	5646	5626
40°	5629	5565	5532
45°	5540	5469	5423
50°	5416	5390	5301
55°	5322	5252	5165
60°	5168	5085	5004
65°	5005	4889	4770
70°	4763	4619	4523
75°	4326	4229	4133
80°	3698	3698	3648
85°	2640	2828	2828

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 5540 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	58.8	3.4
10°-20°	167.8	9.7
20°-30°	252.3	14.5
30°-40°	301.5	17.4
40°-50°	310.7	17.9
50°-60°	279.6	16.1
60°-70°	212.5	12.3
70°-80°	120.8	7.0
80°-90°	30.5	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°	479.0	27.6
0°-40°	780.5	45.0
0°-60°	1370.7	79.0
0°-90°	1734.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1734.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	622	622	622	622	622	
5°	621	621	616	621	619	59
15°	598	597	592	596	594	169
25°	551	550	545	547	545	254
35°	486	485	480	480	479	304
45°	407	407	402	399	398	313
55°	317	316	313	310	308	283
65°	220	219	215	212	209	217
75°	116	115	114	113	111	124
85°	24	25	26	26	26	30
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	622.3	622.3	622.3	622.3	622.3
2.5°	624.0	622.3	618.9	623.1	621.4
5°	621.4	620.6	616.3	621.4	618.9
7.5°	618.0	617.2	612.9	617.2	615.4
10°	612.0	611.2	606.9	611.2	609.5
12.5°	606.0	605.2	600.9	604.3	602.6
15°	597.5	596.6	592.4	595.8	594.1
17.5°	588.1	587.2	582.1	585.5	584.7
20°	576.1	575.3	571.0	573.6	572.7
22.5°	564.2	563.3	559.0	561.6	559.9
25°	551.3	549.6	545.4	547.1	545.4
27.5°	535.9	535.1	530.8	531.7	530.0
30°	520.6	519.7	514.6	515.4	513.7
32.5°	502.6	502.6	498.3	498.3	496.6
35°	486.4	484.7	480.4	480.4	478.7
37.5°	467.6	465.9	462.4	461.6	459.9
40°	447.9	447.1	442.8	441.9	440.2
42.5°	426.5	427.4	423.1	420.6	418.8
45°	406.9	406.9	401.7	399.2	398.3
47.5°	385.5	385.5	381.2	378.7	377.0
50°	361.6	363.3	359.9	355.6	353.9
52.5°	339.3	340.2	335.9	333.4	331.7
55°	317.1	316.3	312.9	310.3	307.7
57.5°	294.0	293.2	288.1	285.5	283.8
60°	268.4	268.4	264.1	261.6	259.9
62.5°	244.5	243.6	240.2	236.8	235.9
65°	219.7	218.8	214.6	212.0	209.4
67.5°	193.2	192.3	189.8	186.3	184.6
70°	169.2	166.7	164.1	161.6	160.7
72.5°	143.6	141.0	138.5	136.8	135.1
75°	116.3	115.4	113.7	112.8	111.1
77.5°	91.5	91.5	89.8	88.9	88.9
80°	66.7	66.7	66.7	65.8	65.8
82.5°	43.6	44.4	44.4	43.6	44.4
85°	23.9	24.8	25.6	25.6	25.6
87.5°	7.7	10.3	9.4	10.3	10.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)