

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: P686061

Luminaire Tested: SQ4R-F-050D-830-1-UNV-STD-W-4

Issue Date: 11/18/2022

**Test Information**

Test Method: LM-79-2019  
Report Number: P686061  
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-830-1-UNV-STD-W-4  
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH FROSTED LENS.  
500 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1983.5 lumens  
Efficiency: N/A  
Efficacy: 104.9 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

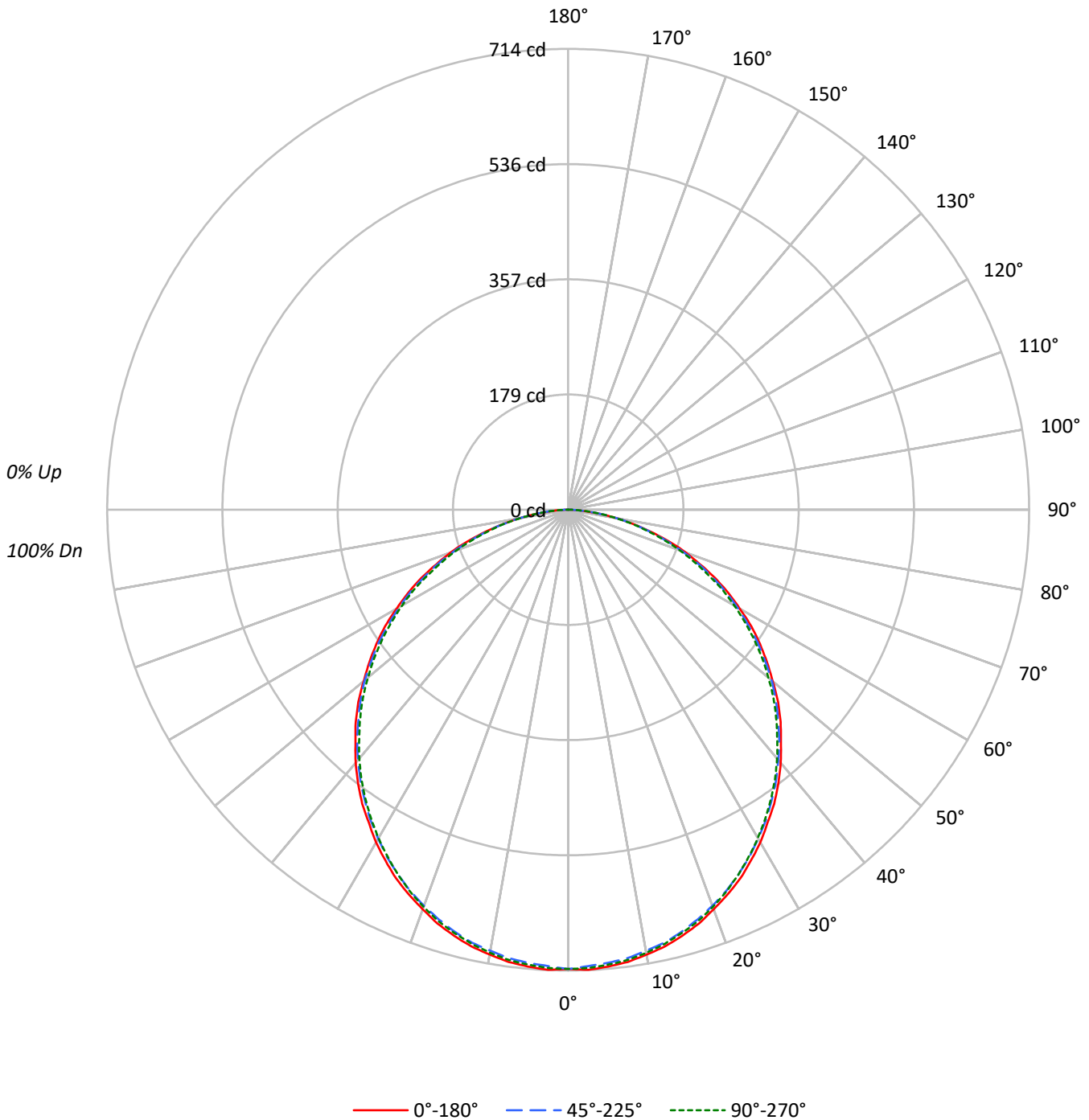
Input Watts (W): 18.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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°	6851	6851	6851
5°	6867	6811	6839
10°	6842	6784	6813
15°	6810	6752	6771
20°	6750	6690	6710
25°	6698	6624	6624
30°	6618	6541	6531
35°	6537	6456	6433
40°	6437	6363	6327
45°	6335	6255	6202
50°	6193	6163	6061
55°	6086	6006	5907
60°	5909	5815	5722
65°	5722	5588	5456
70°	5447	5283	5174
75°	4944	4836	4728
80°	4225	4225	4175
85°	3027	3237	3237

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 6335 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	67.3	3.4
10°-20°	191.9	9.7
20°-30°	288.5	14.5
30°-40°	344.8	17.4
40°-50°	355.3	17.9
50°-60°	319.7	16.1
60°-70°	243.0	12.3
70°-80°	138.2	7.0
80°-90°	34.9	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°	547.7	27.6
0°-40°	892.5	45.0
0°-60°	1567.4	79.0
0°-90°	1983.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1983.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	712	712	712	712	712	
5°	711	710	705	711	708	68
15°	683	682	677	681	679	193
25°	630	628	624	626	624	290
35°	556	554	549	549	547	348
45°	465	465	459	456	456	358
55°	363	362	358	355	352	324
65°	251	250	245	242	240	248
75°	133	132	130	129	127	141
85°	27	28	29	29	29	34
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	711.6	711.6	711.6	711.6	711.6
2.5°	713.6	711.6	707.7	712.6	710.6
5°	710.6	709.6	704.8	710.6	707.7
7.5°	706.7	705.7	700.9	705.7	703.8
10°	699.9	698.9	694.0	698.9	696.9
12.5°	693.0	692.1	687.2	691.1	689.1
15°	683.3	682.3	677.4	681.3	679.3
17.5°	672.5	671.5	665.7	669.6	668.6
20°	658.8	657.8	653.0	655.9	654.9
22.5°	645.1	644.2	639.3	642.2	640.2
25°	630.5	628.5	623.6	625.6	623.6
27.5°	612.9	611.9	607.0	608.0	606.0
30°	595.3	594.3	588.4	589.4	587.5
32.5°	574.8	574.8	569.9	569.9	567.9
35°	556.2	554.2	549.3	549.3	547.4
37.5°	534.7	532.7	528.8	527.8	525.9
40°	512.2	511.2	506.3	505.4	503.4
42.5°	487.8	488.7	483.9	480.9	479.0
45°	465.3	465.3	459.4	456.5	455.5
47.5°	440.8	440.8	436.0	433.0	431.1
50°	413.5	415.4	411.5	406.6	404.7
52.5°	388.1	389.0	384.1	381.2	379.3
55°	362.6	361.7	357.8	354.8	351.9
57.5°	336.3	335.3	329.4	326.5	324.5
60°	306.9	306.9	302.0	299.1	297.2
62.5°	279.6	278.6	274.7	270.8	269.8
65°	251.2	250.2	245.3	242.4	239.5
67.5°	220.9	219.9	217.0	213.1	211.1
70°	193.5	190.6	187.7	184.7	183.8
72.5°	164.2	161.3	158.4	156.4	154.4
75°	132.9	132.0	130.0	129.0	127.1
77.5°	104.6	104.6	102.6	101.7	101.7
80°	76.2	76.2	76.2	75.3	75.3
82.5°	49.9	50.8	50.8	49.9	50.8
85°	27.4	28.3	29.3	29.3	29.3
87.5°	8.8	11.7	10.8	11.7	11.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)