

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: P688967

Luminaire Tested: SQ4R-PW1-050D-93050-1-UNV-STD-W-4\_4500K

Issue Date: 5/22/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P688967  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2203-586-35)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/22/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: CORELITE  
Catalog Number: SQ4R-PW1-050D-93050-1-UNV-STD-W-4\_4500K  
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.  
500 LUMENS PER FOOT  
Light Source: 4500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2025.6 lumens  
Efficiency: N/A  
Efficacy: 95.1 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.2 / 1.29  
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')  
CIE Type: Direct

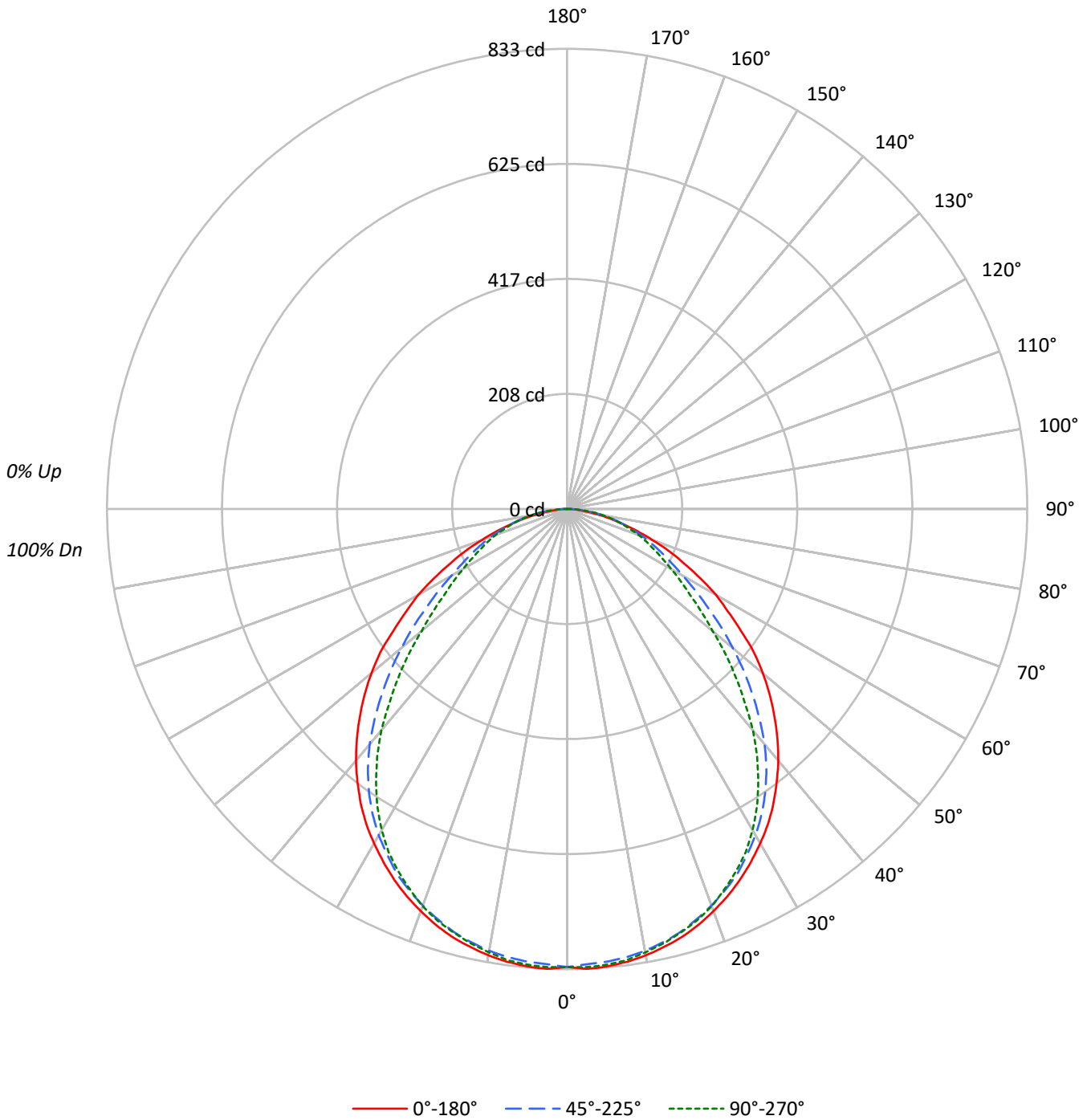
Input Watts (W): 21.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



TEST NUMBER: P688967

CATALOG NUMBER: SQ4R-PW1-050D-93050-1-UNV-STD-W-4\_4500K

### Luminous Intensity Polar Plot



TEST NUMBER: P688967

CATALOG NUMBER: SQ4R-PW1-050D-93050-1-UNV-STD-W-4\_4500K

**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	105	101	97	107	103	99	96	99	96	93		95	92	90		91	89	87	85
2	100	92	86	81	98	91	85	80	87	82	78		84	80	76		81	77	74	72
3	92	82	74	68	89	80	73	67	77	71	66		75	69	65		72	68	64	62
4	85	73	65	58	82	72	64	58	69	63	57		67	61	56		65	60	56	54
5	78	66	57	51	76	65	57	50	63	55	50		61	54	49		59	53	49	47
6	72	59	51	45	70	59	50	44	57	49	44		55	49	44		54	48	43	41
7	67	54	46	40	65	53	45	40	52	45	39		50	44	39		49	43	39	37
8	63	50	41	36	61	49	41	36	48	40	35		46	40	35		45	39	35	33
9	59	46	38	32	57	45	37	32	44	37	32		43	36	32		42	36	32	30
10	55	42	34	29	54	42	34	29	41	34	29		40	33	29		39	33	29	27

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

	0°	45°	90°
0°	7981	7981	7981
5°	8033	7950	8002
10°	8021	7938	7969
15°	7997	7902	7913
20°	7937	7827	7839
25°	7867	7743	7685
30°	7771	7582	7463
35°	7652	7351	7088
40°	7473	6990	6575
45°	7226	6456	5890
50°	6927	5858	5155
55°	6439	5205	4560
60°	5990	4658	4186
65°	5317	4321	3957
70°	4619	4110	3899
75°	3805	3883	3727
80°	3010	3665	3665
85°	2231	3292	3413

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 7226 cd/sqm

TEST NUMBER: P688967

CATALOG NUMBER: SQ4R-PW1-050D-93050-1-UNV-STD-W-4\_4500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	78.7	3.9
10°-20°	224.7	11.1
20°-30°	336.5	16.6
30°-40°	391.0	19.3
40°-50°	368.9	18.2
50°-60°	287.8	14.2
60°-70°	195.4	9.6
70°-80°	110.0	5.4
80°-90°	32.7	1.6
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°	639.8	31.6
0°-40°	1030.8	50.9
0°-60°	1687.5	83.3
0°-90°	2025.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2025.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	829	829	829	829	829	
5°	831	829	823	829	828	79
15°	802	799	793	797	794	226
25°	741	737	729	727	724	341
35°	651	645	626	612	603	407
45°	531	515	474	444	433	409
55°	384	361	310	280	272	344
65°	233	212	190	178	174	233
75°	102	107	104	100	100	111
85°	20	29	30	30	31	24
90°	0	0	0	0	0	

TEST NUMBER: P688967

CATALOG NUMBER: SQ4R-PW1-050D-93050-1-UNV-STD-W-4\_4500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	829.0	829.0	829.0	829.0	829.0
2.5°	833.3	831.2	824.8	831.2	830.1
5°	831.2	829.0	822.6	829.0	828.0
7.5°	826.9	825.8	818.4	824.8	823.7
10°	820.5	819.4	812.0	817.3	815.2
12.5°	812.0	810.9	803.4	807.7	805.6
15°	802.4	799.2	792.8	797.1	793.9
17.5°	789.6	786.4	778.9	782.1	781.1
20°	774.7	771.5	764.0	767.2	765.1
22.5°	758.7	755.5	747.0	748.0	744.8
25°	740.6	737.4	728.9	726.7	723.5
27.5°	720.3	718.2	705.4	703.3	700.1
30°	699.0	695.8	682.0	677.7	671.3
32.5°	676.6	670.3	655.3	646.8	639.3
35°	651.1	644.7	625.5	611.6	603.1
37.5°	623.4	613.8	592.5	573.3	564.8
40°	594.6	583.9	556.2	530.7	523.2
42.5°	563.7	550.9	515.7	489.1	476.3
45°	530.7	514.7	474.2	444.3	432.6
47.5°	497.6	477.4	433.7	401.7	388.9
50°	462.5	438.0	391.1	357.0	344.2
52.5°	426.2	399.6	351.6	316.5	306.9
55°	383.6	361.2	310.1	280.2	271.7
57.5°	345.2	320.7	276.0	250.4	244.0
60°	311.1	281.3	241.9	222.7	217.4
62.5°	271.7	245.1	214.2	199.3	193.9
65°	233.4	212.1	189.7	178.0	173.7
67.5°	200.3	182.2	167.3	157.7	155.6
70°	164.1	154.5	146.0	138.5	138.5
72.5°	133.2	130.0	124.7	120.4	117.2
75°	102.3	106.6	104.4	100.2	100.2
77.5°	77.8	84.2	85.2	83.1	84.2
80°	54.3	63.9	66.1	65.0	66.1
82.5°	34.1	45.8	48.0	48.0	49.0
85°	20.2	28.8	29.8	29.8	30.9
87.5°	8.5	13.9	14.9	14.9	14.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)