

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: P688968

Luminaire Tested: SQ4R-PW1-050D-93050-1-UNV-STD-W-4\_5000K

Issue Date: 5/22/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P688968  
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\_5000K  
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.  
500 LUMENS PER FOOT  
Light Source: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2043.1 lumens  
Efficiency: N/A  
Efficacy: 96.4 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

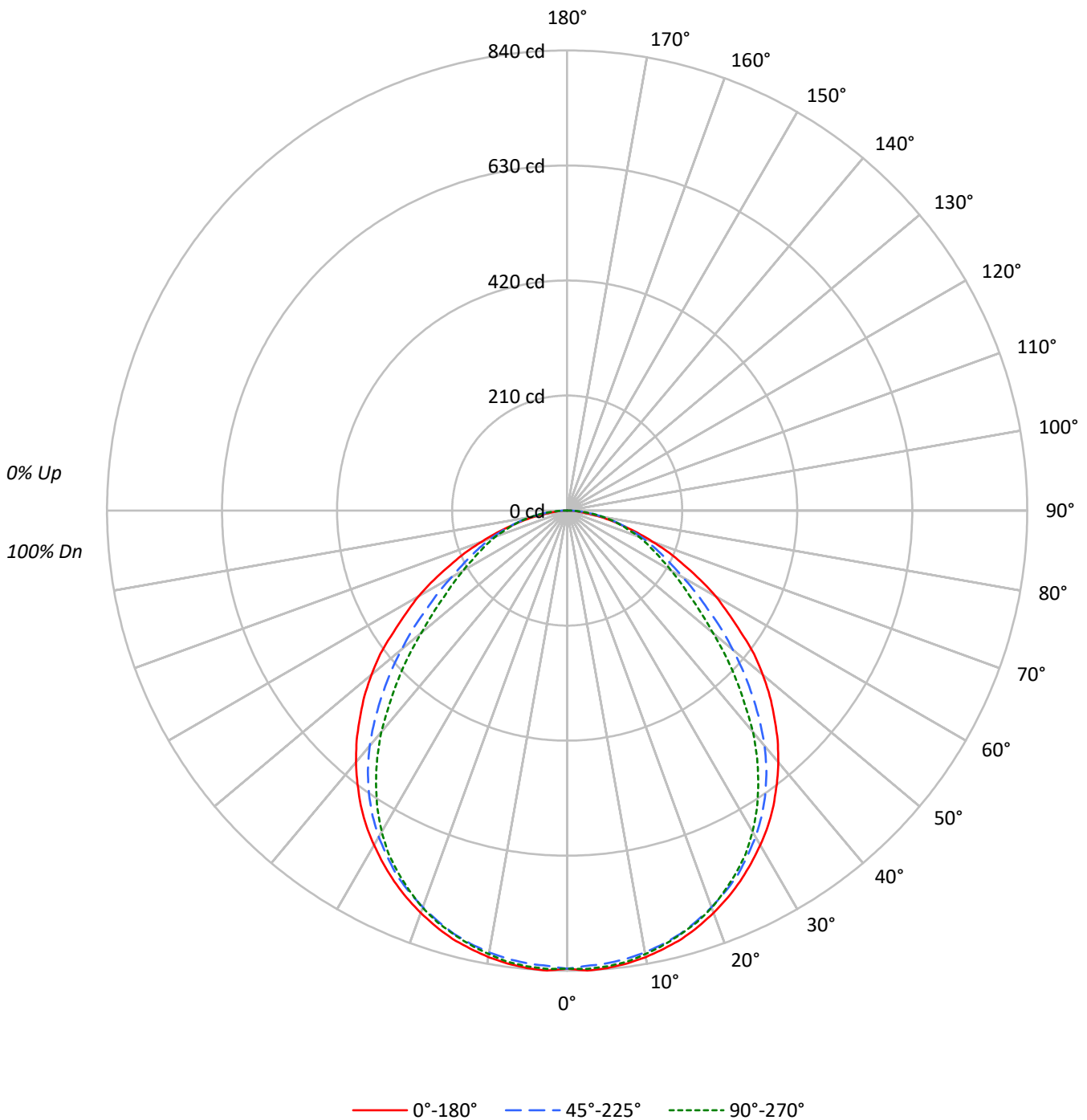
Input Watts (W): 21.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	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°	8050	8050	8050
5°	8101	8018	8071
10°	8091	8006	8038
15°	8066	7970	7981
20°	8006	7895	7906
25°	7935	7810	7752
30°	7838	7647	7527
35°	7718	7415	7149
40°	7537	7050	6632
45°	7287	6512	5942
50°	6987	5907	5200
55°	6494	5250	4601
60°	6042	4698	4223
65°	5362	4358	3991
70°	4659	4143	3932
75°	3839	3917	3757
80°	3038	3692	3692
85°	2253	3325	3446

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 7287 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	79.3	3.9
10°-20°	226.6	11.1
20°-30°	339.4	16.6
30°-40°	394.4	19.3
40°-50°	372.1	18.2
50°-60°	290.3	14.2
60°-70°	197.1	9.6
70°-80°	111.0	5.4
80°-90°	32.9	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°	645.4	31.6
0°-40°	1039.7	50.9
0°-60°	1702.1	83.3
0°-90°	2043.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2043.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	836	836	836	836	836	
5°	838	836	830	836	835	80
15°	809	806	800	804	801	228
25°	747	744	735	733	730	344
35°	657	650	631	617	608	410
45°	535	519	478	448	436	413
55°	387	364	313	283	274	347
65°	235	214	191	180	175	235
75°	103	108	105	101	101	112
85°	20	29	30	30	31	25
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	836.2	836.2	836.2	836.2	836.2
2.5°	840.5	838.3	831.9	838.3	837.3
5°	838.3	836.2	829.7	836.2	835.1
7.5°	834.0	833.0	825.4	831.9	830.8
10°	827.6	826.5	819.0	824.4	822.2
12.5°	819.0	817.9	810.4	814.7	812.5
15°	809.3	806.1	799.6	803.9	800.7
17.5°	796.4	793.2	785.7	788.9	787.8
20°	781.4	778.1	770.6	773.8	771.7
22.5°	765.2	762.0	753.4	754.5	751.3
25°	747.0	743.7	735.2	733.0	729.8
27.5°	726.6	724.4	711.5	709.4	706.1
30°	705.1	701.8	687.9	683.6	677.1
32.5°	682.5	676.0	661.0	652.4	644.9
35°	656.7	650.2	630.9	616.9	608.3
37.5°	628.7	619.1	597.6	578.2	569.6
40°	599.7	589.0	561.0	535.2	527.7
42.5°	568.6	555.7	520.2	493.3	480.4
45°	535.2	519.1	478.3	448.2	436.4
47.5°	501.9	481.5	437.4	405.2	392.3
50°	466.5	441.7	394.4	360.1	347.2
52.5°	429.9	403.0	354.7	319.2	309.5
55°	386.9	364.4	312.8	282.7	274.1
57.5°	348.2	323.5	278.4	252.6	246.1
60°	313.8	283.7	244.0	224.6	219.3
62.5°	274.1	247.2	216.0	201.0	195.6
65°	235.4	213.9	191.3	179.5	175.2
67.5°	202.1	183.8	168.7	159.1	156.9
70°	165.5	155.8	147.2	139.7	139.7
72.5°	134.3	131.1	125.7	121.5	118.2
75°	103.2	107.5	105.3	101.0	101.0
77.5°	78.5	84.9	86.0	83.8	84.9
80°	54.8	64.5	66.6	65.6	66.6
82.5°	34.4	46.2	48.4	48.4	49.4
85°	20.4	29.0	30.1	30.1	31.2
87.5°	8.6	14.0	15.0	15.0	15.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)