

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: P688959

Luminaire Tested: SQ4R-PW1-050D-92765-1-UNV-STD-W-4\_4000K

Issue Date: 5/22/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P688959  
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-92765-1-UNV-STD-W-4\_4000K  
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.  
500 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1921.1 lumens  
Efficiency: N/A  
Efficacy: 90.6 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

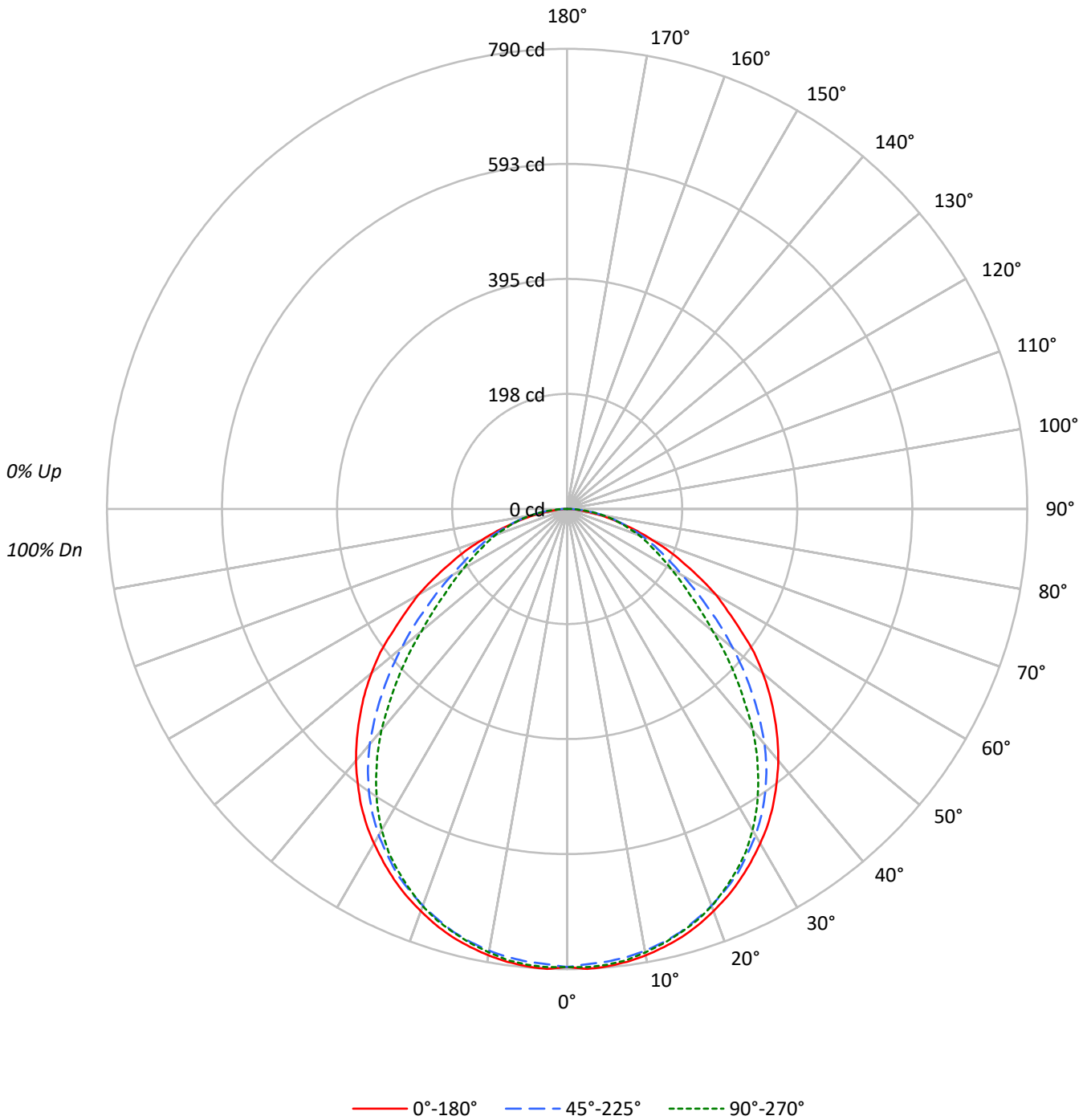
Input Watts (W): 21.2  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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°	7570	7570	7570
5°	7618	7540	7589
10°	7608	7528	7558
15°	7585	7494	7504
20°	7527	7424	7434
25°	7461	7343	7289
30°	7370	7190	7078
35°	7257	6972	6723
40°	7087	6629	6236
45°	6852	6123	5586
50°	6569	5555	4889
55°	6106	4936	4325
60°	5682	4417	3970
65°	5041	4098	3752
70°	4380	3899	3699
75°	3608	3683	3534
80°	2855	3476	3476
85°	2121	3126	3237

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 6852 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	74.6	3.9
10°-20°	213.1	11.1
20°-30°	319.2	16.6
30°-40°	370.8	19.3
40°-50°	349.9	18.2
50°-60°	273.0	14.2
60°-70°	185.3	9.6
70°-80°	104.3	5.4
80°-90°	31.0	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°	606.8	31.6
0°-40°	977.6	50.9
0°-60°	1600.5	83.3
0°-90°	1921.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1921.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	786	786	786	786	786	
5°	788	786	780	786	785	75
15°	761	758	752	756	753	215
25°	702	699	691	689	686	323
35°	618	611	593	580	572	386
45°	503	488	450	421	410	388
55°	364	343	294	266	258	327
65°	221	201	180	169	165	221
75°	97	101	99	95	95	106
85°	19	27	28	28	29	23
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	786.3	786.3	786.3	786.3	786.3
2.5°	790.3	788.3	782.2	788.3	787.3
5°	788.3	786.3	780.2	786.3	785.3
7.5°	784.2	783.2	776.2	782.2	781.2
10°	778.2	777.2	770.1	775.2	773.1
12.5°	770.1	769.1	762.0	766.1	764.0
15°	761.0	758.0	751.9	756.0	752.9
17.5°	748.9	745.8	738.8	741.8	740.8
20°	734.7	731.7	724.6	727.7	725.6
22.5°	719.6	716.5	708.5	709.5	706.4
25°	702.4	699.4	691.3	689.2	686.2
27.5°	683.2	681.2	669.0	667.0	664.0
30°	663.0	659.9	646.8	642.8	636.7
32.5°	641.7	635.7	621.5	613.5	606.4
35°	617.5	611.4	593.2	580.1	572.0
37.5°	591.2	582.1	561.9	543.7	535.6
40°	563.9	553.8	527.5	503.3	496.2
42.5°	534.6	522.5	489.1	463.9	451.8
45°	503.3	488.1	449.7	421.4	410.3
47.5°	472.0	452.8	411.3	381.0	368.9
50°	438.6	415.4	370.9	338.6	326.4
52.5°	404.3	379.0	333.5	300.2	291.1
55°	363.8	342.6	294.1	265.8	257.7
57.5°	327.4	304.2	261.8	237.5	231.4
60°	295.1	266.8	229.4	211.2	206.2
62.5°	257.7	232.4	203.1	189.0	183.9
65°	221.3	201.1	179.9	168.8	164.7
67.5°	190.0	172.8	158.7	149.6	147.6
70°	155.6	146.5	138.5	131.4	131.4
72.5°	126.3	123.3	118.2	114.2	111.2
75°	97.0	101.1	99.0	95.0	95.0
77.5°	73.8	79.8	80.9	78.8	79.8
80°	51.5	60.6	62.7	61.6	62.7
82.5°	32.3	43.5	45.5	45.5	46.5
85°	19.2	27.3	28.3	28.3	29.3
87.5°	8.1	13.1	14.1	14.1	14.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)