

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: P688966

Luminaire Tested: SQ4R-PW1-050D-93050-1-UNV-STD-W-4\_4000K

Issue Date: 5/22/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P688966  
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\_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: 2003.4 lumens  
Efficiency: N/A  
Efficacy: 94.1 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

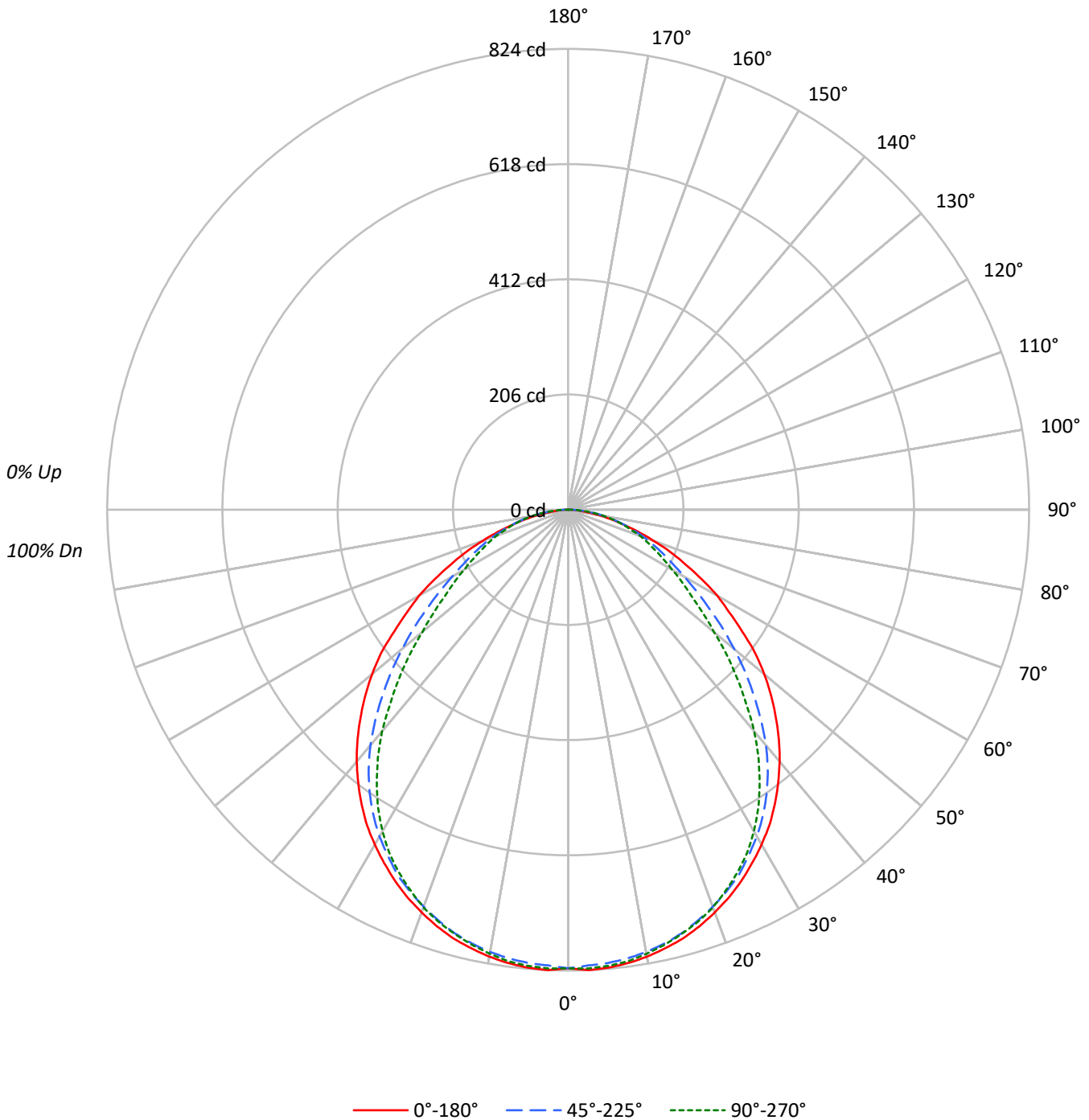
Input Watts (W): 21.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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°	7893	7893	7893
5°	7944	7863	7914
10°	7933	7851	7881
15°	7910	7815	7825
20°	7850	7741	7753
25°	7780	7658	7602
30°	7685	7498	7380
35°	7568	7270	7011
40°	7391	6913	6504
45°	7145	6385	5826
50°	6851	5793	5098
55°	6368	5148	4510
60°	5925	4606	4140
65°	5258	4274	3914
70°	4568	4065	3856
75°	3764	3842	3686
80°	2977	3620	3620
85°	2209	3259	3380

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 7145 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	77.8	3.9
10°-20°	222.2	11.1
20°-30°	332.8	16.6
30°-40°	386.7	19.3
40°-50°	364.8	18.2
50°-60°	284.7	14.2
60°-70°	193.2	9.6
70°-80°	108.8	5.4
80°-90°	32.3	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°	632.8	31.6
0°-40°	1019.5	50.9
0°-60°	1669.0	83.3
0°-90°	2003.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2003.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	820	820	820	820	820	
5°	822	820	814	820	819	78
15°	794	790	784	788	785	224
25°	732	729	721	719	716	337
35°	644	638	619	605	596	402
45°	525	509	469	440	428	405
55°	379	357	307	277	269	341
65°	231	210	188	176	172	231
75°	101	105	103	99	99	110
85°	20	28	30	30	31	24
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	819.9	819.9	819.9	819.9	819.9
2.5°	824.1	822.0	815.7	822.0	821.0
5°	822.0	819.9	813.6	819.9	818.9
7.5°	817.8	816.8	809.4	815.7	814.6
10°	811.5	810.4	803.1	808.3	806.2
12.5°	803.1	802.0	794.6	798.8	796.7
15°	793.6	790.4	784.1	788.3	785.1
17.5°	780.9	777.8	770.4	773.5	772.5
20°	766.2	763.0	755.6	758.8	756.7
22.5°	750.4	747.2	738.8	739.8	736.7
25°	732.4	729.3	720.9	718.7	715.6
27.5°	712.4	710.3	697.7	695.6	692.4
30°	691.3	688.2	674.5	670.3	663.9
32.5°	669.2	662.9	648.1	639.7	632.3
35°	643.9	637.6	618.6	604.9	596.5
37.5°	616.5	607.0	586.0	567.0	558.6
40°	588.1	577.5	550.1	524.8	517.5
42.5°	557.5	544.9	510.1	483.7	471.1
45°	524.8	509.0	469.0	439.5	427.9
47.5°	492.2	472.1	428.9	397.3	384.7
50°	457.4	433.1	386.8	353.1	340.4
52.5°	421.6	395.2	347.8	313.0	303.5
55°	379.4	357.3	306.7	277.2	268.7
57.5°	341.5	317.2	273.0	247.7	241.3
60°	307.7	278.2	239.2	220.3	215.0
62.5°	268.7	242.4	211.8	197.1	191.8
65°	230.8	209.7	187.6	176.0	171.8
67.5°	198.1	180.2	165.5	156.0	153.9
70°	162.3	152.8	144.4	137.0	137.0
72.5°	131.7	128.6	123.3	119.1	115.9
75°	101.2	105.4	103.3	99.1	99.1
77.5°	76.9	83.3	84.3	82.2	83.3
80°	53.7	63.2	65.3	64.3	65.3
82.5°	33.7	45.3	47.4	47.4	48.5
85°	20.0	28.5	29.5	29.5	30.6
87.5°	8.4	13.7	14.8	14.8	14.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)