

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: P688503

Luminaire Tested: SQ4R-PH1-050D-930-1-UNV-STD-W-4

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688503
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2203-586-36)
Test Lab: INNOVATION CENTER
Issue Date: 5/22/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-PH1-050D-930-1-UNV-STD-W-4
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE HEX CONTINUOUS LENS.
500 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1500.4 lumens
Efficiency: N/A
Efficacy: 79.4 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.22 / 1.28
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

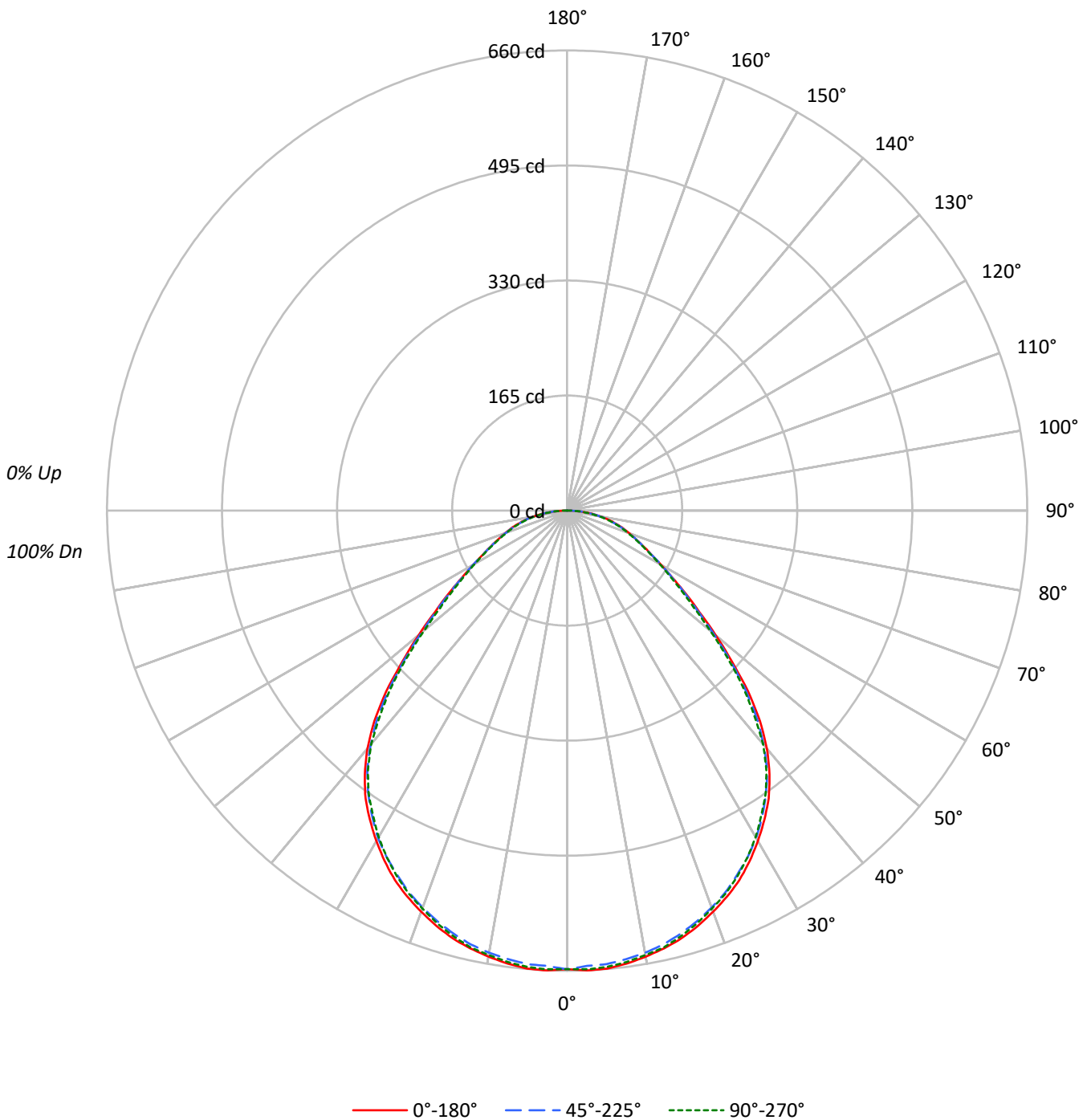
Input Watts (W): 18.9
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	110	105	102	98	107	103	100	96	99	96	93	95	93	91	92	90	88	86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	79	76	74
3	93	83	76	70	90	82	75	69	79	73	68	76	71	67	73	69	66	64
4	86	75	66	60	83	73	66	60	71	64	59	69	63	58	66	62	57	55
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49
6	74	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43
7	68	56	47	42	67	55	47	41	53	46	41	52	46	41	51	45	41	39
8	64	51	43	37	62	50	43	37	49	42	37	48	42	37	47	41	37	35
9	60	47	39	34	58	47	39	34	45	39	34	44	38	34	43	38	33	32
10	56	44	36	31	55	43	36	31	42	35	31	41	35	31	40	35	31	29

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6332	6332	6332
5°	6373	6310	6348
10°	6350	6295	6327
15°	6329	6264	6297
20°	6273	6207	6223
25°	6211	6124	6142
30°	6084	6030	6012
35°	5927	5841	5831
40°	5603	5511	5491
45°	4997	4897	4843
50°	4171	4086	4002
55°	3476	3434	3354
60°	2986	3002	2940
65°	2738	2720	2681
70°	2652	2629	2584
75°	2689	2626	2567
80°	2700	2656	2567
85°	2596	2596	2419

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4997 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.4	4.2
10°-20°	178.2	11.9
20°-30°	267.0	17.8
30°-40°	310.7	20.7
40°-50°	276.3	18.4
50°-60°	185.5	12.4
60°-70°	119.9	8.0
70°-80°	74.7	5.0
80°-90°	25.6	1.7
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°	507.6	33.8
0°-40°	818.2	54.5
0°-60°	1280.1	85.3
0°-90°	1500.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1500.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	658	658	658	658	658	
5°	659	658	653	658	657	63
15°	635	633	628	633	632	179
25°	585	582	576	580	578	269
35°	504	502	497	497	496	313
45°	367	365	360	355	356	281
55°	207	207	205	201	200	188
65°	120	121	119	119	118	120
75°	72	72	71	71	69	76
85°	24	24	24	23	22	26
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	657.7	657.7	657.7	657.7	657.7
2.5°	660.2	658.5	653.7	659.4	658.5
5°	659.4	657.7	652.9	657.7	656.9
7.5°	655.3	654.5	648.8	654.5	652.9
10°	649.6	649.6	643.9	648.8	647.2
12.5°	643.1	642.3	637.4	642.3	641.5
15°	635.0	633.4	628.5	632.6	631.8
17.5°	624.4	623.6	617.9	622.0	620.4
20°	612.3	610.6	605.8	609.0	607.4
22.5°	599.3	597.6	592.8	595.2	594.4
25°	584.7	582.2	576.5	579.8	578.2
27.5°	566.8	566.0	560.3	561.9	560.3
30°	547.3	546.5	542.4	542.4	540.8
32.5°	526.2	527.0	520.5	521.3	518.1
35°	504.3	501.8	497.0	497.0	496.1
37.5°	476.7	475.0	471.0	470.2	469.3
40°	445.8	444.2	438.5	436.9	436.9
42.5°	409.3	407.6	402.0	399.5	396.3
45°	367.0	365.4	359.7	354.9	355.7
47.5°	319.9	321.6	315.9	311.8	311.0
50°	278.5	277.7	272.8	270.4	267.2
52.5°	238.7	239.5	235.5	233.9	229.8
55°	207.1	207.1	204.6	201.4	199.8
57.5°	178.6	180.3	177.8	176.2	174.6
60°	155.1	155.9	155.9	152.7	152.7
62.5°	135.6	136.4	135.6	134.0	134.0
65°	120.2	121.0	119.4	118.6	117.7
67.5°	106.4	107.2	106.4	105.6	103.9
70°	94.2	94.2	93.4	93.4	91.8
72.5°	83.6	82.8	82.0	82.0	81.2
75°	72.3	71.5	70.6	70.6	69.0
77.5°	60.9	60.1	60.1	58.5	57.7
80°	48.7	48.7	47.9	47.1	46.3
82.5°	37.4	36.5	35.7	34.9	34.1
85°	23.5	24.4	23.5	22.7	21.9
87.5°	10.6	11.4	11.4	11.4	10.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)