

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: P688574

Luminaire Tested: SQ4R-PR1-050D-840-1-UNV-STD-W-4

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688574
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 5/22/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-PR1-050D-840-1-UNV-STD-W-4
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2021.3 lumens
Efficiency: N/A
Efficacy: 106.9 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.23 / 1.34
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

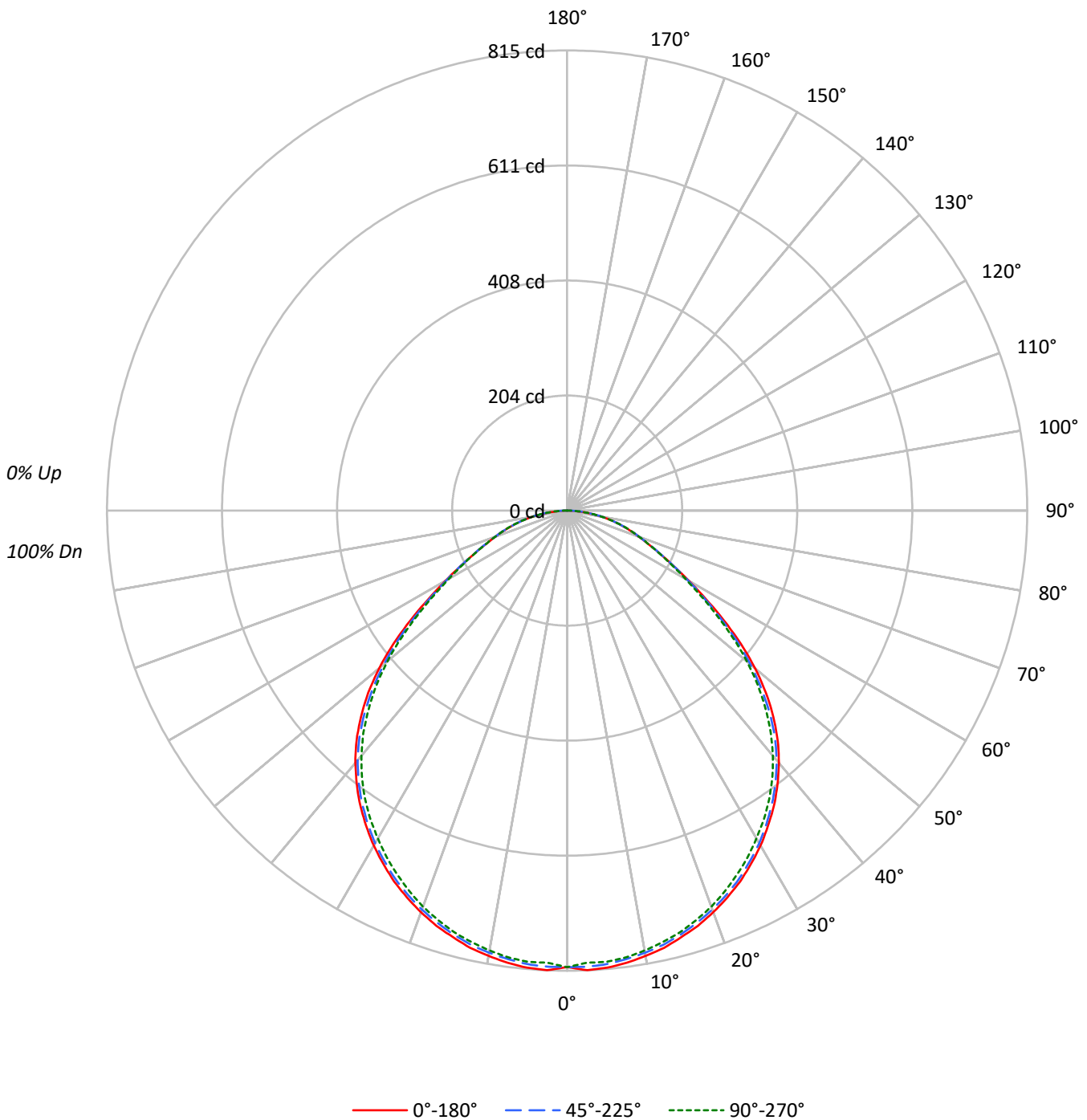
Input Watts (W): 18.9
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	101	98	107	103	99	96	99	96	93		95	92	90		91	89	87	85
2	100	93	86	81	98	91	85	80	87	82	78		84	80	76		81	78	75	72
3	92	82	74	68	90	80	73	68	78	71	66		75	70	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	58	50	44	57	49	44		55	49	44		53	48	43	41
7	67	54	46	40	65	53	45	39	52	44	39		50	44	39		49	43	39	37
8	63	49	41	36	61	49	41	35	47	40	35		46	40	35		45	39	35	33
9	58	45	37	32	57	45	37	32	44	37	32		43	36	32		42	36	31	30
10	55	42	34	29	54	41	34	29	40	34	29		40	33	29		39	33	29	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7784	7784	7784
5°	7854	7793	7753
10°	7829	7775	7734
15°	7794	7746	7704
20°	7756	7705	7648
25°	7700	7649	7560
30°	7617	7564	7455
35°	7505	7440	7334
40°	7334	7255	7125
45°	7035	6912	6769
50°	6508	6352	6226
55°	5680	5552	5435
60°	4787	4746	4652
65°	4141	4157	4126
70°	3803	3823	3823
75°	3653	3653	3679
80°	3437	3476	3437
85°	2773	3082	3082

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7035 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.5	3.8
10°-20°	218.9	10.8
20°-30°	330.1	16.3
30°-40°	393.4	19.5
40°-50°	388.1	19.2
50°-60°	296.0	14.6
60°-70°	182.7	9.0
70°-80°	104.1	5.2
80°-90°	31.4	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°	625.5	30.9
0°-40°	1018.9	50.4
0°-60°	1703.0	84.3
0°-90°	2021.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2021.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	808	808	808	808	808	
5°	813	804	806	804	802	77
15°	782	774	777	774	773	221
25°	725	716	720	712	712	334
35°	639	631	633	625	624	399
45°	517	510	508	499	497	396
55°	338	333	331	325	324	303
65°	182	180	182	181	181	183
75°	98	98	98	99	99	104
85°	25	26	28	28	28	30
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	808.5	808.5	808.5	808.5	808.5
2.5°	814.8	805.7	808.5	806.4	801.5
5°	812.7	803.6	806.4	803.6	802.2
7.5°	807.8	798.7	801.5	798.7	798.1
10°	800.8	792.5	795.3	792.5	791.1
12.5°	793.2	784.1	787.6	784.1	782.7
15°	782.0	773.7	777.2	774.4	773.0
17.5°	770.9	761.8	765.3	762.5	760.4
20°	757.0	748.6	752.1	747.2	746.5
22.5°	741.6	733.3	736.8	729.8	729.8
25°	724.9	715.9	720.1	712.4	711.7
27.5°	705.4	697.1	700.6	692.9	692.2
30°	685.2	676.9	680.4	672.0	670.6
32.5°	662.3	654.6	657.4	649.0	648.3
35°	638.6	630.9	633.0	624.7	624.0
37.5°	612.1	605.2	606.5	597.5	596.8
40°	583.6	576.6	577.3	567.6	566.9
42.5°	552.2	545.3	544.6	534.8	534.1
45°	516.7	509.8	507.7	498.6	497.2
47.5°	477.7	470.8	466.6	458.9	458.2
50°	434.5	427.6	424.1	417.8	415.7
52.5°	387.9	380.9	378.1	372.6	370.5
55°	338.4	332.9	330.8	325.2	323.8
57.5°	291.1	286.9	286.2	280.6	279.9
60°	248.6	246.5	246.5	241.6	241.6
62.5°	212.4	211.0	212.4	209.6	208.9
65°	181.8	180.4	182.5	181.1	181.1
67.5°	156.0	156.0	157.4	156.7	156.7
70°	135.1	135.1	135.8	135.8	135.8
72.5°	116.3	115.6	117.7	117.7	117.0
75°	98.2	98.2	98.2	98.9	98.9
77.5°	80.1	80.1	80.8	80.8	80.1
80°	62.0	62.7	62.7	62.0	62.0
82.5°	43.9	44.6	44.6	44.6	43.9
85°	25.1	26.5	27.9	27.9	27.9
87.5°	9.1	11.8	13.9	13.9	13.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)