

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: P688612

Luminaire Tested: SQ4R-PW1-050D-935-1-UNV-STD-W-4

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688612
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-935-1-UNV-STD-W-4
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
500 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1632.1 lumens
Efficiency: N/A
Efficacy: 86.4 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

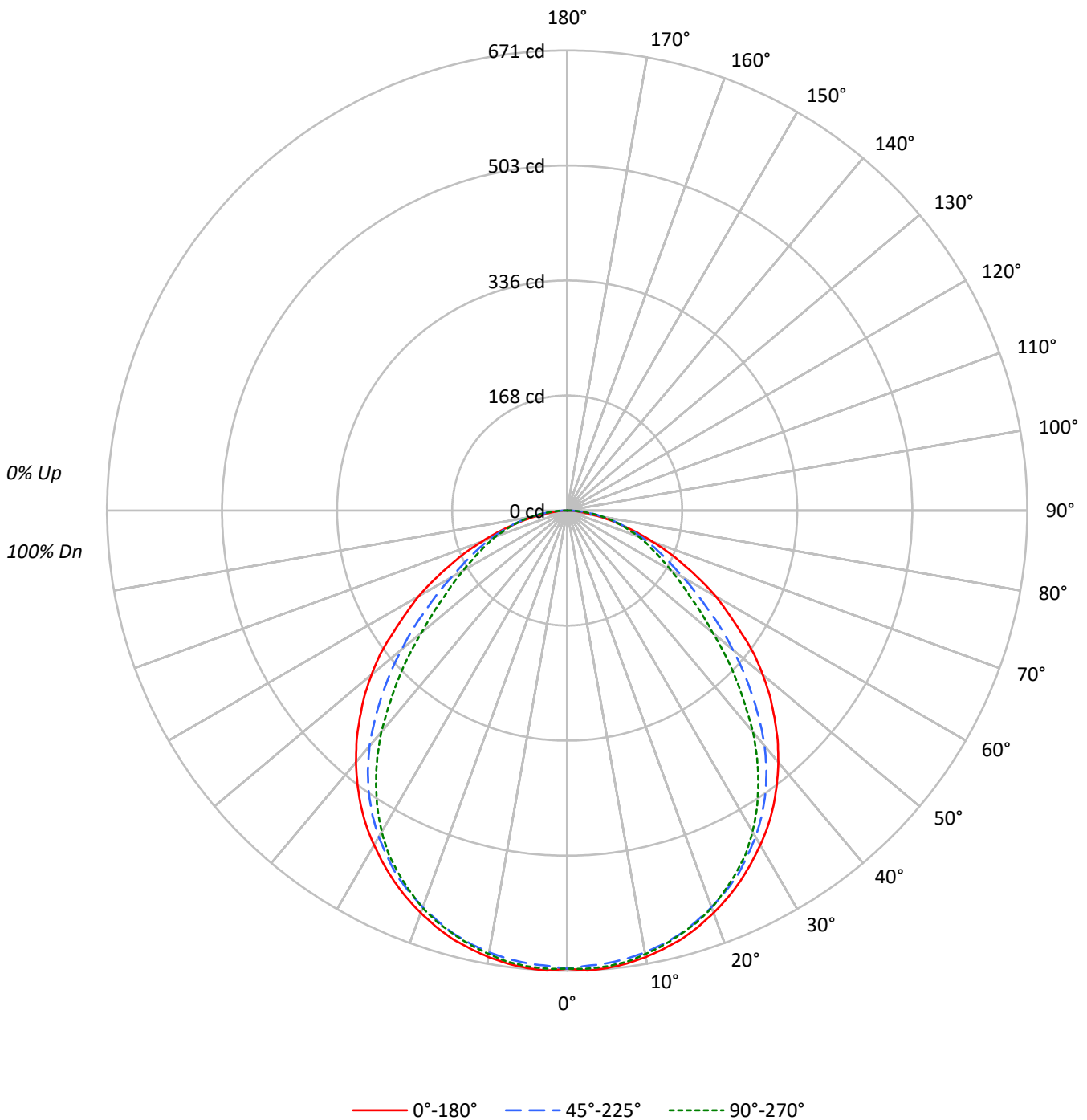
Input Watts (W): 18.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	6431	6431	6431
5°	6472	6405	6447
10°	6463	6395	6421
15°	6444	6367	6375
20°	6395	6307	6316
25°	6339	6239	6193
30°	6261	6109	6013
35°	6166	5923	5712
40°	6021	5633	5299
45°	5822	5202	4746
50°	5581	4719	4153
55°	5188	4193	3674
60°	4827	3753	3371
65°	4283	3481	3187
70°	3721	3310	3141
75°	3065	3128	3002
80°	2428	2949	2949
85°	1801	2651	2750

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5822 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.4	3.9
10°-20°	181.0	11.1
20°-30°	271.1	16.6
30°-40°	315.0	19.3
40°-50°	297.2	18.2
50°-60°	231.9	14.2
60°-70°	157.4	9.6
70°-80°	88.6	5.4
80°-90°	26.3	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°	515.5	31.6
0°-40°	830.6	50.9
0°-60°	1359.7	83.3
0°-90°	1632.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1632.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	668	668	668	668	668	
5°	670	668	663	668	667	64
15°	646	644	639	642	640	182
25°	597	594	587	586	583	275
35°	525	519	504	493	486	328
45°	428	415	382	358	349	330
55°	309	291	250	226	219	278
65°	188	171	153	143	140	188
75°	82	86	84	81	81	90
85°	16	23	24	24	25	20
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	668.0	668.0	668.0	668.0	668.0
2.5°	671.4	669.7	664.5	669.7	668.8
5°	669.7	668.0	662.8	668.0	667.1
7.5°	666.3	665.4	659.4	664.5	663.7
10°	661.1	660.2	654.2	658.5	656.8
12.5°	654.2	653.4	647.4	650.8	649.1
15°	646.5	643.9	638.8	642.2	639.6
17.5°	636.2	633.6	627.6	630.2	629.3
20°	624.2	621.6	615.6	618.2	616.5
22.5°	611.3	608.7	601.9	602.7	600.1
25°	596.7	594.1	587.3	585.5	583.0
27.5°	580.4	578.7	568.4	566.7	564.1
30°	563.2	560.7	549.5	546.1	540.9
32.5°	545.2	540.0	528.0	521.2	515.1
35°	524.6	519.4	504.0	492.8	486.0
37.5°	502.3	494.5	477.4	461.9	455.0
40°	479.1	470.5	448.2	427.6	421.6
42.5°	454.2	443.9	415.6	394.1	383.8
45°	427.6	414.7	382.1	358.0	348.6
47.5°	401.0	384.6	349.4	323.7	313.4
50°	372.6	352.9	315.1	287.6	277.3
52.5°	343.4	322.0	283.3	255.0	247.3
55°	309.1	291.1	249.8	225.8	218.9
57.5°	278.2	258.4	222.4	201.8	196.6
60°	250.7	226.7	194.9	179.4	175.1
62.5°	218.9	197.5	172.6	160.6	156.3
65°	188.0	170.9	152.8	143.4	139.9
67.5°	161.4	146.8	134.8	127.1	125.4
70°	132.2	124.5	117.6	111.6	111.6
72.5°	107.3	104.7	100.5	97.0	94.4
75°	82.4	85.9	84.1	80.7	80.7
77.5°	62.7	67.8	68.7	67.0	67.8
80°	43.8	51.5	53.2	52.4	53.2
82.5°	27.5	36.9	38.6	38.6	39.5
85°	16.3	23.2	24.0	24.0	24.9
87.5°	6.9	11.2	12.0	12.0	12.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)