

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: P688613

Luminaire Tested: SQ4R-PW1-050D-940-1-UNV-STD-W-4

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688613
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-940-1-UNV-STD-W-4
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: 1624.9 lumens
Efficiency: N/A
Efficacy: 86.0 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

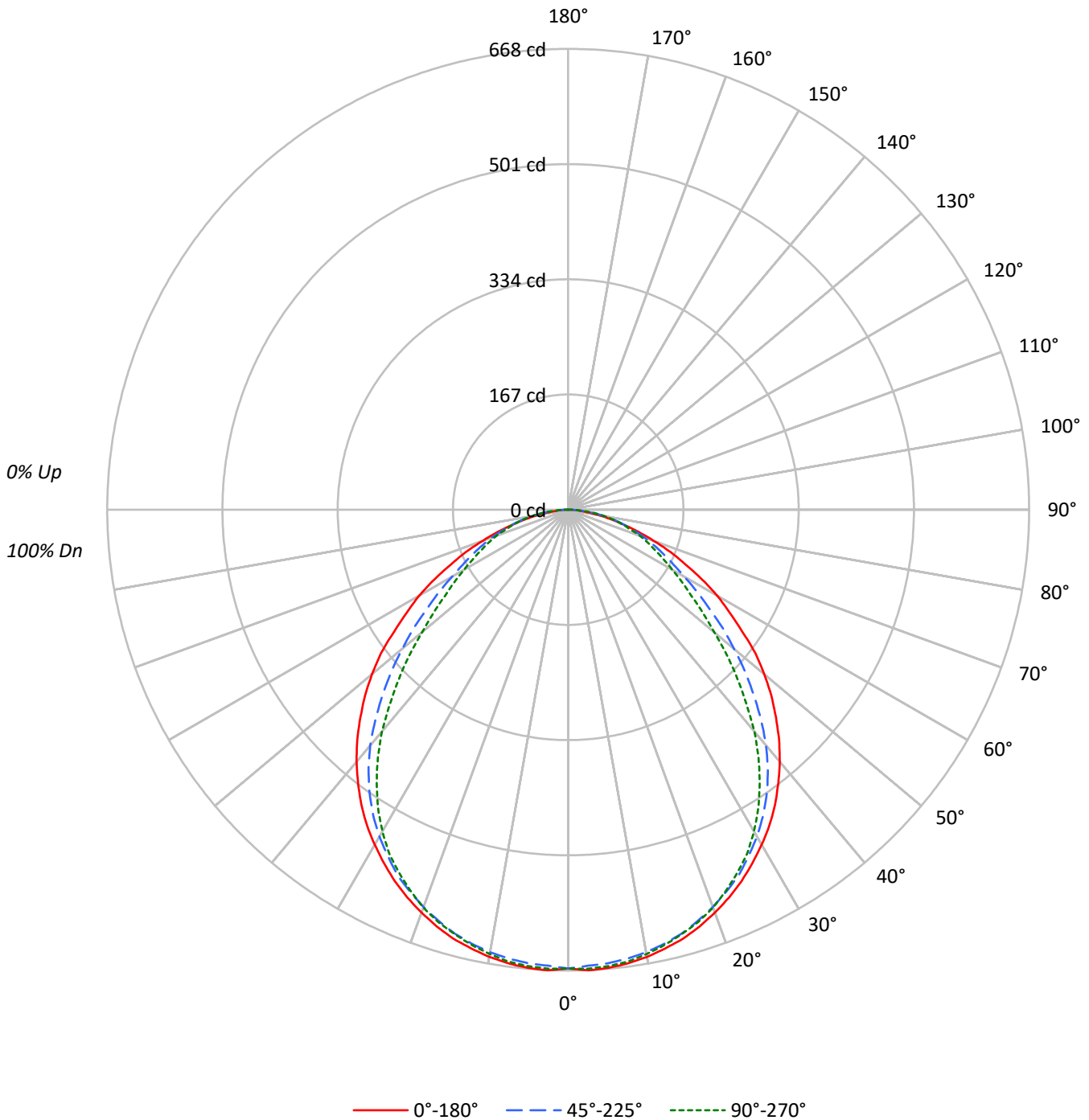
Input Watts (W): 18.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	6402	6402	6402
5°	6443	6377	6419
10°	6434	6367	6392
15°	6416	6339	6347
20°	6366	6279	6287
25°	6311	6211	6165
30°	6233	6082	5986
35°	6138	5898	5686
40°	5995	5608	5275
45°	5796	5179	4724
50°	5557	4698	4135
55°	5165	4174	3659
60°	4806	3735	3358
65°	4264	3467	3173
70°	3704	3296	3127
75°	3054	3117	2987
80°	2417	2938	2938
85°	1789	2640	2739

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5796 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.1	3.9
10°-20°	180.2	11.1
20°-30°	269.9	16.6
30°-40°	313.6	19.3
40°-50°	295.9	18.2
50°-60°	230.9	14.2
60°-70°	156.7	9.6
70°-80°	88.3	5.4
80°-90°	26.2	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°	513.3	31.6
0°-40°	826.9	50.9
0°-60°	1353.7	83.3
0°-90°	1624.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1624.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	665	665	665	665	665	
5°	667	665	660	665	664	63
15°	644	641	636	639	637	181
25°	594	592	585	583	580	274
35°	522	517	502	491	484	326
45°	426	413	380	356	347	328
55°	308	290	249	225	218	276
65°	187	170	152	143	139	187
75°	82	86	84	80	80	89
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°	665.0	665.0	665.0	665.0	665.0
2.5°	668.4	666.7	661.6	666.7	665.9
5°	666.7	665.0	659.9	665.0	664.2
7.5°	663.3	662.5	656.5	661.6	660.7
10°	658.2	657.3	651.3	655.6	653.9
12.5°	651.3	650.5	644.5	647.9	646.2
15°	643.7	641.1	636.0	639.4	636.8
17.5°	633.4	630.8	624.8	627.4	626.6
20°	621.4	618.9	612.9	615.4	613.7
22.5°	608.6	606.0	599.2	600.1	597.5
25°	594.1	591.5	584.7	583.0	580.4
27.5°	577.8	576.1	565.9	564.2	561.6
30°	560.7	558.2	547.1	543.6	538.5
32.5°	542.8	537.7	525.7	518.9	512.9
35°	522.3	517.1	501.8	490.6	483.8
37.5°	500.0	492.4	475.3	459.9	453.0
40°	477.0	468.4	446.2	425.7	419.7
42.5°	452.2	441.9	413.7	392.3	382.1
45°	425.7	412.9	380.4	356.4	347.0
47.5°	399.2	382.9	347.9	322.3	312.0
50°	371.0	351.3	313.7	286.4	276.1
52.5°	341.9	320.5	282.1	253.9	246.2
55°	307.7	289.8	248.7	224.8	218.0
57.5°	276.9	257.3	221.4	200.9	195.7
60°	249.6	225.7	194.0	178.6	174.4
62.5°	218.0	196.6	171.8	159.8	155.6
65°	187.2	170.1	152.2	142.7	139.3
67.5°	160.7	146.2	134.2	126.5	124.8
70°	131.6	123.9	117.1	111.1	111.1
72.5°	106.8	104.3	100.0	96.6	94.0
75°	82.1	85.5	83.8	80.3	80.3
77.5°	62.4	67.5	68.4	66.7	67.5
80°	43.6	51.3	53.0	52.1	53.0
82.5°	27.4	36.8	38.5	38.5	39.3
85°	16.2	23.1	23.9	23.9	24.8
87.5°	6.8	11.1	12.0	12.0	12.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)