

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: P688965

Luminaire Tested: SQ4R-PW1-050D-93050-1-UNV-STD-W-4_3500K

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688965
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_3500K
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: 1968.1 lumens
Efficiency: N/A
Efficacy: 92.4 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

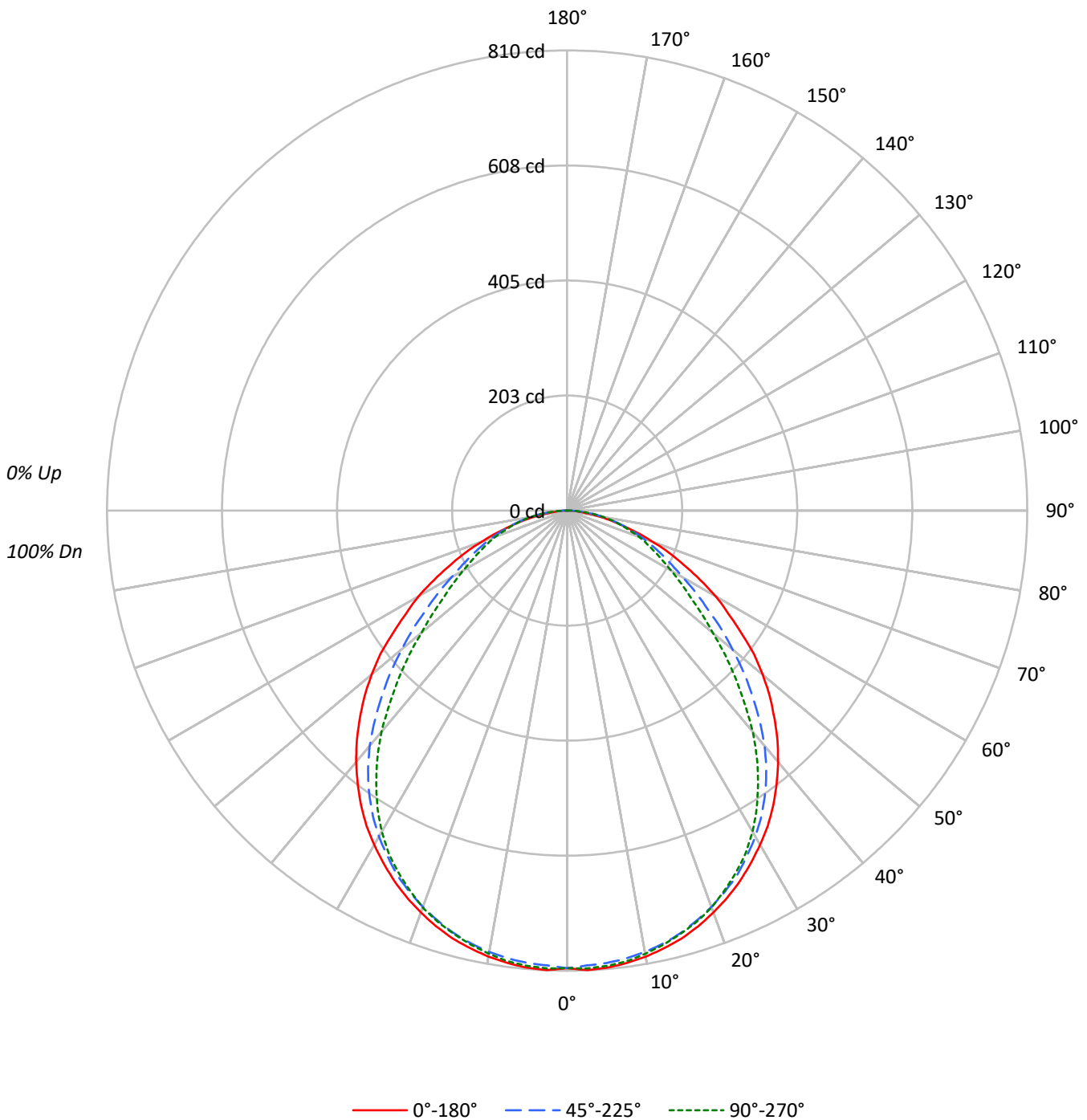
Input Watts (W): 21.3
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	7755	7755	7755
5°	7805	7725	7775
10°	7793	7712	7743
15°	7770	7678	7688
20°	7712	7606	7616
25°	7644	7523	7468
30°	7550	7366	7251
35°	7435	7143	6887
40°	7260	6793	6389
45°	7020	6272	5724
50°	6729	5691	5008
55°	6256	5057	4431
60°	5821	4525	4067
65°	5164	4198	3845
70°	4487	3991	3789
75°	3697	3776	3619
80°	2927	3559	3559
85°	2176	3203	3314

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7020 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.4	3.9
10°-20°	218.3	11.1
20°-30°	327.0	16.6
30°-40°	379.9	19.3
40°-50°	358.4	18.2
50°-60°	279.6	14.2
60°-70°	189.8	9.6
70°-80°	106.9	5.4
80°-90°	31.8	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°	621.7	31.6
0°-40°	1001.6	50.9
0°-60°	1639.6	83.3
0°-90°	1968.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1968.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	806	806	806	806	806	
5°	808	806	799	806	804	77
15°	780	776	770	774	771	220
25°	720	716	708	706	703	331
35°	633	626	608	594	586	395
45°	516	500	461	432	420	398
55°	373	351	301	272	264	335
65°	227	206	184	173	169	226
75°	99	104	102	97	97	108
85°	20	28	29	29	30	24
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	805.5	805.5	805.5	805.5	805.5
2.5°	809.7	807.6	801.4	807.6	806.5
5°	807.6	805.5	799.3	805.5	804.5
7.5°	803.4	802.4	795.2	801.4	800.3
10°	797.2	796.2	788.9	794.1	792.1
12.5°	788.9	787.9	780.7	784.8	782.7
15°	779.6	776.5	770.3	774.5	771.3
17.5°	767.2	764.1	756.9	760.0	758.9
20°	752.7	749.6	742.4	745.5	743.4
22.5°	737.2	734.1	725.8	726.8	723.7
25°	719.6	716.5	708.2	706.1	703.0
27.5°	699.9	697.8	685.4	683.3	680.2
30°	679.2	676.1	662.6	658.5	652.3
32.5°	657.5	651.2	636.7	628.5	621.2
35°	632.6	626.4	607.8	594.3	586.0
37.5°	605.7	596.4	575.7	557.0	548.7
40°	577.7	567.4	540.5	515.6	508.4
42.5°	547.7	535.3	501.1	475.2	462.8
45°	515.6	500.1	460.7	431.7	420.4
47.5°	483.5	463.8	421.4	390.3	377.9
50°	449.3	425.5	380.0	346.8	334.4
52.5°	414.1	388.3	341.7	307.5	298.2
55°	372.7	351.0	301.3	272.3	264.0
57.5°	335.5	311.6	268.2	243.3	237.1
60°	302.3	273.3	235.0	216.4	211.2
62.5°	264.0	238.1	208.1	193.6	188.4
65°	226.7	206.0	184.3	172.9	168.8
67.5°	194.6	177.0	162.6	153.2	151.2
70°	159.4	150.1	141.8	134.6	134.6
72.5°	129.4	126.3	121.1	117.0	113.9
75°	99.4	103.5	101.5	97.3	97.3
77.5°	75.6	81.8	82.8	80.8	81.8
80°	52.8	62.1	64.2	63.2	64.2
82.5°	33.1	44.5	46.6	46.6	47.6
85°	19.7	28.0	29.0	29.0	30.0
87.5°	8.3	13.5	14.5	14.5	14.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)