

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: P688960

Luminaire Tested: SQ4R-PW1-050D-92765-1-UNV-STD-W-4_4500K

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688960
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-92765-1-UNV-STD-W-4_4500K
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
500 LUMENS PER FOOT
Light Source: 4500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1961.5 lumens
Efficiency: N/A
Efficacy: 92.5 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

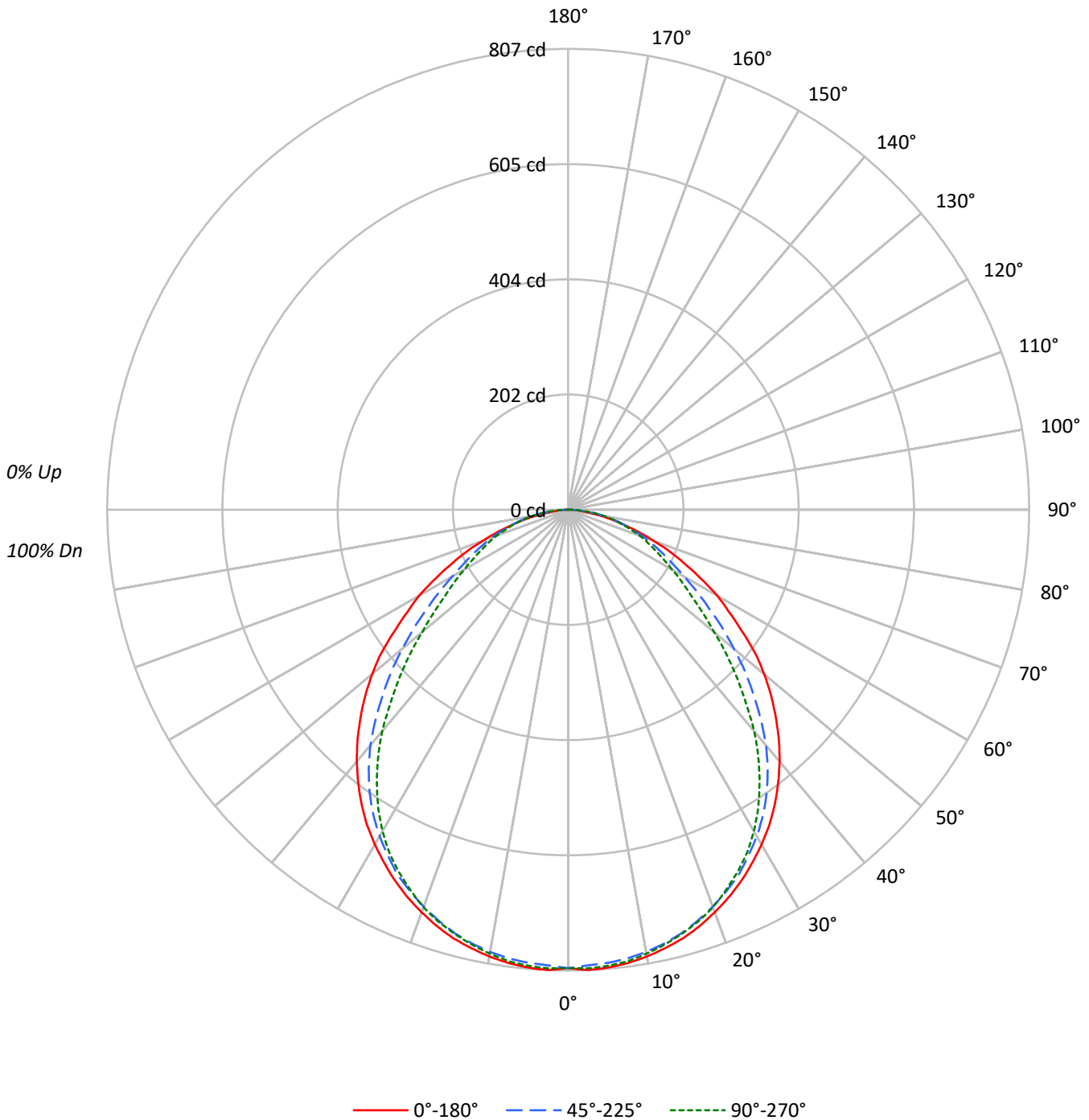
Input Watts (W): 21.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	7729	7729	7729
5°	7778	7698	7748
10°	7767	7687	7717
15°	7744	7652	7662
20°	7686	7579	7591
25°	7617	7497	7442
30°	7525	7341	7227
35°	7410	7119	6864
40°	7236	6769	6367
45°	6997	6252	5703
50°	6707	5672	4992
55°	6236	5040	4416
60°	5801	4509	4053
65°	5148	4185	3832
70°	4473	3980	3775
75°	3686	3761	3608
80°	2916	3548	3548
85°	2165	3192	3303

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6997 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.2	3.9
10°-20°	217.5	11.1
20°-30°	325.9	16.6
30°-40°	378.6	19.3
40°-50°	357.2	18.2
50°-60°	278.7	14.2
60°-70°	189.2	9.6
70°-80°	106.5	5.4
80°-90°	31.6	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°	619.6	31.6
0°-40°	998.2	50.9
0°-60°	1634.1	83.3
0°-90°	1961.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1961.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	803	803	803	803	803	
5°	805	803	797	803	802	76
15°	777	774	768	772	769	219
25°	717	714	706	704	701	330
35°	630	624	606	592	584	394
45°	514	498	459	430	419	396
55°	372	350	300	271	263	334
65°	226	205	184	172	168	226
75°	99	103	101	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°	802.8	802.8	802.8	802.8	802.8
2.5°	806.9	804.8	798.7	804.8	803.8
5°	804.8	802.8	796.6	802.8	801.7
7.5°	800.7	799.7	792.5	798.7	797.6
10°	794.5	793.5	786.3	791.4	789.4
12.5°	786.3	785.2	778.0	782.1	780.1
15°	777.0	773.9	767.7	771.8	768.7
17.5°	764.6	761.5	754.3	757.4	756.3
20°	750.2	747.1	739.8	742.9	740.9
22.5°	734.7	731.6	723.3	724.4	721.3
25°	717.1	714.0	705.8	703.7	700.6
27.5°	697.5	695.5	683.1	681.0	677.9
30°	676.9	673.8	660.4	656.3	650.1
32.5°	655.2	649.0	634.6	626.3	619.1
35°	630.5	624.3	605.7	592.3	584.0
37.5°	603.6	594.3	573.7	555.1	546.9
40°	575.8	565.5	538.6	513.9	506.6
42.5°	545.8	533.5	499.4	473.6	461.2
45°	513.9	498.4	459.2	430.3	418.9
47.5°	481.9	462.3	420.0	389.0	376.6
50°	447.8	424.1	378.7	345.7	333.3
52.5°	412.7	386.9	340.5	306.5	297.2
55°	371.5	349.8	300.3	271.4	263.1
57.5°	334.3	310.6	267.2	242.5	236.3
60°	301.3	272.4	234.2	215.7	210.5
62.5°	263.1	237.3	207.4	193.0	187.8
65°	226.0	205.3	183.7	172.3	168.2
67.5°	194.0	176.4	162.0	152.7	150.7
70°	158.9	149.6	141.4	134.1	134.1
72.5°	129.0	125.9	120.7	116.6	113.5
75°	99.1	103.2	101.1	97.0	97.0
77.5°	75.3	81.5	82.5	80.5	81.5
80°	52.6	61.9	64.0	62.9	64.0
82.5°	33.0	44.4	46.4	46.4	47.5
85°	19.6	27.9	28.9	28.9	29.9
87.5°	8.3	13.4	14.4	14.4	14.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)