

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: P688610

Luminaire Tested: SQ4R-PW1-050D-840-1-UNV-STD-W-4

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688610
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-840-1-UNV-STD-W-4
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE WAVES 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: 1953.9 lumens
Efficiency: N/A
Efficacy: 103.4 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

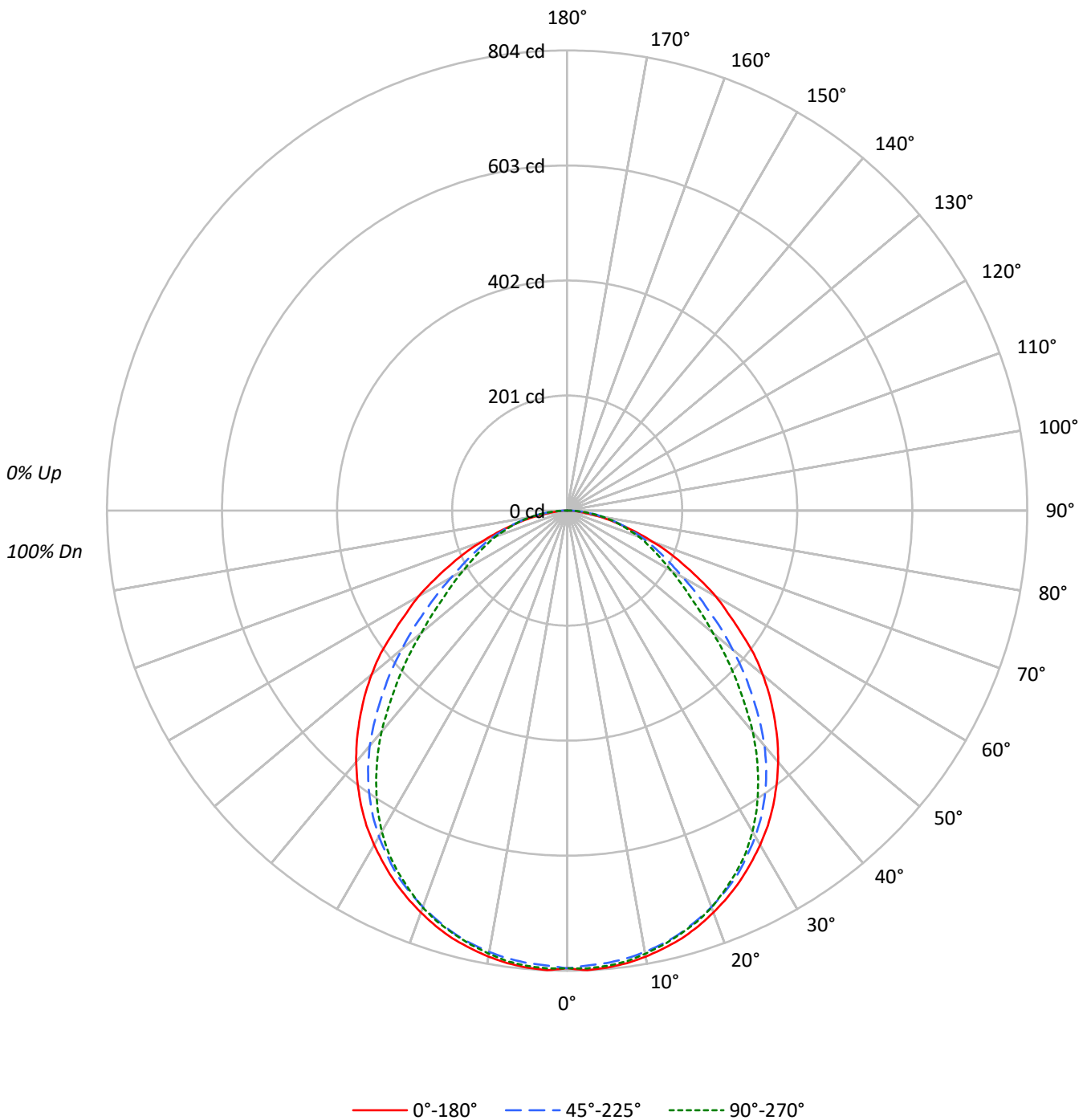
Input Watts (W): 18.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				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°	7699	7699	7699
5°	7748	7668	7718
10°	7737	7656	7687
15°	7714	7622	7632
20°	7655	7551	7561
25°	7589	7469	7414
30°	7496	7313	7198
35°	7381	7090	6838
40°	7208	6743	6343
45°	6970	6228	5682
50°	6681	5650	4973
55°	6210	5020	4399
60°	5778	4492	4038
65°	5128	4169	3816
70°	4456	3963	3761
75°	3671	3746	3593
80°	2905	3532	3532
85°	2154	3181	3292

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6970 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.9	3.9
10°-20°	216.7	11.1
20°-30°	324.6	16.6
30°-40°	377.1	19.3
40°-50°	355.8	18.2
50°-60°	277.6	14.2
60°-70°	188.5	9.6
70°-80°	106.1	5.4
80°-90°	31.5	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°	617.2	31.6
0°-40°	994.3	50.9
0°-60°	1627.7	83.3
0°-90°	1953.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1953.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	800	800	800	800	800	
5°	802	800	794	800	799	76
15°	774	771	765	769	766	218
25°	714	711	703	701	698	329
35°	628	622	603	590	582	392
45°	512	496	457	429	417	395
55°	370	348	299	270	262	332
65°	225	204	183	172	168	225
75°	99	103	101	97	97	107
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°	799.7	799.7	799.7	799.7	799.7
2.5°	803.8	801.7	795.6	801.7	800.7
5°	801.7	799.7	793.5	799.7	798.6
7.5°	797.6	796.6	789.4	795.6	794.5
10°	791.4	790.4	783.2	788.4	786.3
12.5°	783.2	782.2	775.0	779.1	777.1
15°	774.0	770.9	764.7	768.8	765.7
17.5°	761.6	758.6	751.4	754.4	753.4
20°	747.2	744.2	737.0	740.1	738.0
22.5°	731.8	728.7	720.5	721.6	718.5
25°	714.4	711.3	703.1	701.0	697.9
27.5°	694.8	692.8	680.4	678.4	675.3
30°	674.3	671.2	657.8	653.7	647.5
32.5°	652.7	646.5	632.1	623.9	616.7
35°	628.0	621.9	603.3	590.0	581.8
37.5°	601.3	592.0	571.5	553.0	544.8
40°	573.5	563.3	536.5	511.9	504.7
42.5°	543.7	531.4	497.5	471.8	459.4
45°	511.9	496.5	457.4	428.6	417.3
47.5°	480.0	460.5	418.3	387.5	375.2
50°	446.1	422.4	377.2	344.3	332.0
52.5°	411.1	385.4	339.2	305.3	296.0
55°	370.0	348.4	299.1	270.3	262.1
57.5°	333.0	309.4	266.2	241.5	235.4
60°	300.1	271.4	233.3	214.8	209.7
62.5°	262.1	236.4	206.6	192.2	187.1
65°	225.1	204.5	183.0	171.7	167.5
67.5°	193.2	175.8	161.4	152.1	150.1
70°	158.3	149.0	140.8	133.6	133.6
72.5°	128.5	125.4	120.3	116.1	113.1
75°	98.7	102.8	100.7	96.6	96.6
77.5°	75.0	81.2	82.2	80.2	81.2
80°	52.4	61.7	63.7	62.7	63.7
82.5°	32.9	44.2	46.3	46.3	47.3
85°	19.5	27.8	28.8	28.8	29.8
87.5°	8.2	13.4	14.4	14.4	14.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)