

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: P688729

Luminaire Tested: SQ4R-PH1-050D-92765-1-UNV-STD-W-4_6500K

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688729
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2203-586-36)
Test Lab: INNOVATION CENTER
Issue Date: 5/22/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-PH1-050D-92765-1-UNV-STD-W-4_6500K
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE HEX CONTINUOUS LENS.
500 LUMENS PER FOOT
Light Source: 6500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2065.5 lumens
Efficiency: N/A
Efficacy: 97.4 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.22 / 1.28
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

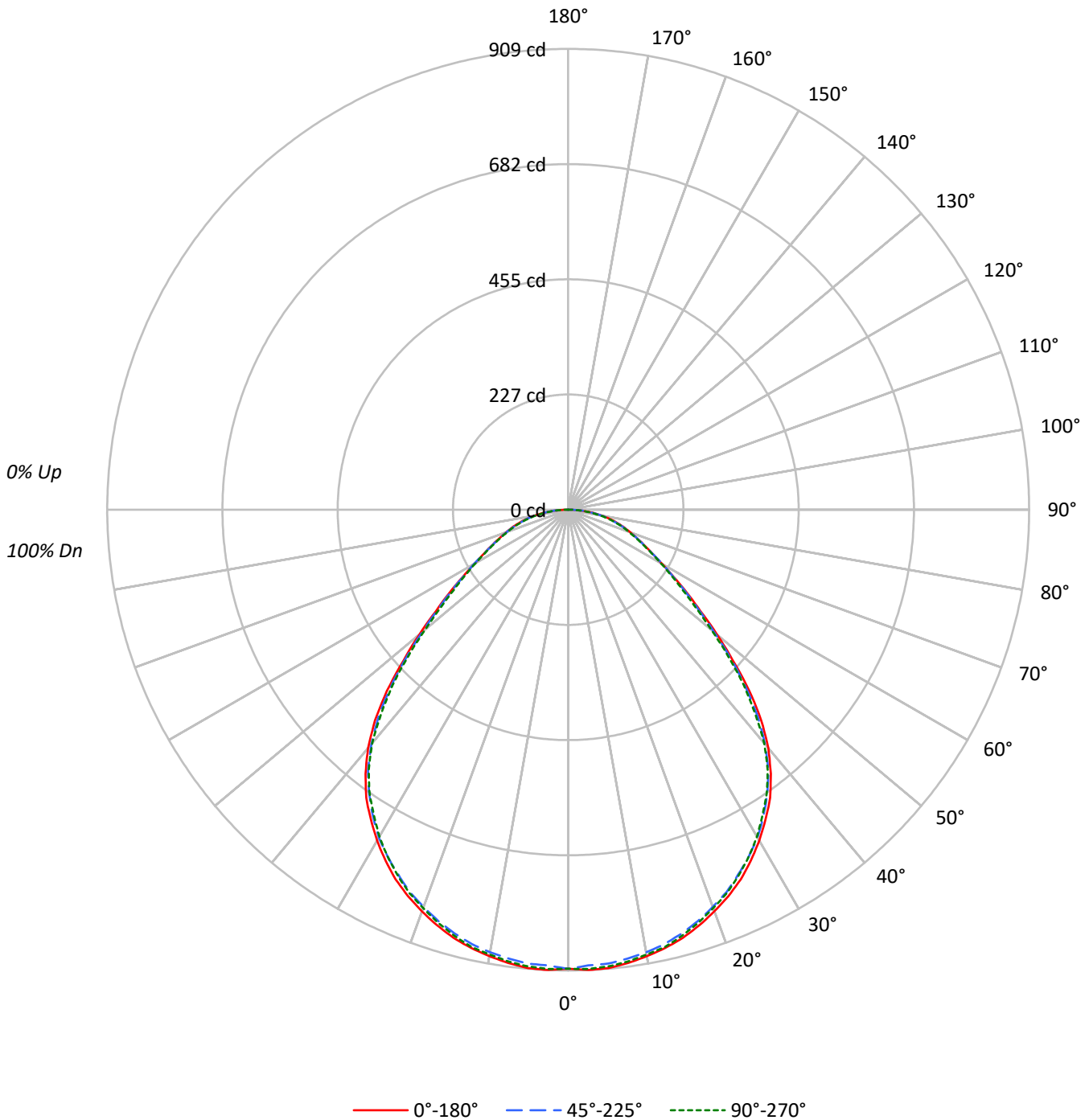
Input Watts (W): 21.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	110	105	102	98	107	103	100	96	99	96	93	95	93	91	92	90	88	86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	79	76	74
3	93	83	76	70	90	82	75	69	79	73	68	76	71	67	73	69	66	64
4	86	75	66	60	83	73	66	60	71	64	59	69	63	58	66	62	57	55
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49
6	74	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43
7	68	56	47	42	67	55	47	41	53	46	41	52	46	41	51	45	41	39
8	64	51	43	37	62	50	43	37	49	42	37	48	42	37	47	41	37	35
9	60	47	39	34	58	47	39	34	45	39	34	44	38	34	43	38	33	32
10	56	44	36	31	55	43	36	31	42	35	31	41	35	31	40	35	31	29

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8718	8718	8718
5°	8772	8686	8740
10°	8743	8666	8710
15°	8713	8623	8668
20°	8636	8543	8567
25°	8550	8431	8455
30°	8376	8301	8276
35°	8159	8040	8027
40°	7713	7587	7558
45°	6880	6742	6666
50°	5742	5626	5509
55°	4785	4728	4616
60°	4111	4132	4047
65°	3768	3743	3693
70°	3651	3620	3555
75°	3701	3619	3534
80°	3720	3659	3532
85°	3579	3579	3336

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6880 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.9	4.2
10°-20°	245.3	11.9
20°-30°	367.6	17.8
30°-40°	427.7	20.7
40°-50°	380.4	18.4
50°-60°	255.4	12.4
60°-70°	165.1	8.0
70°-80°	102.9	5.0
80°-90°	35.3	1.7
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°	698.8	33.8
0°-40°	1126.4	54.5
0°-60°	1762.2	85.3
0°-90°	2065.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2065.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	906	906	906	906	906	
5°	908	906	899	906	904	86
15°	874	872	865	871	870	246
25°	805	802	794	798	796	370
35°	694	691	684	684	683	432
45°	505	503	495	488	490	386
55°	285	285	282	277	275	258
65°	165	167	164	163	162	166
75°	100	98	97	97	95	105
85°	32	34	32	31	30	36
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	905.5	905.5	905.5	905.5	905.5
2.5°	908.8	906.6	899.9	907.7	906.6
5°	907.7	905.5	898.8	905.5	904.4
7.5°	902.1	901.0	893.2	901.0	898.8
10°	894.3	894.3	886.5	893.2	891.0
12.5°	885.4	884.2	877.5	884.2	883.1
15°	874.2	871.9	865.2	870.8	869.7
17.5°	859.6	858.5	850.7	856.3	854.1
20°	842.9	840.6	833.9	838.4	836.2
22.5°	825.0	822.8	816.1	819.4	818.3
25°	804.9	801.5	793.7	798.2	795.9
27.5°	780.3	779.2	771.3	773.6	771.3
30°	753.5	752.3	746.7	746.7	744.5
32.5°	724.4	725.5	716.6	717.7	713.2
35°	694.2	690.8	684.1	684.1	683.0
37.5°	656.2	654.0	648.4	647.3	646.1
40°	613.7	611.5	603.7	601.4	601.4
42.5°	563.4	561.2	553.4	550.0	545.5
45°	505.3	503.0	495.2	488.5	489.6
47.5°	440.4	442.7	434.9	429.3	428.1
50°	383.4	382.3	375.6	372.3	367.8
52.5°	328.7	329.8	324.2	321.9	316.4
55°	285.1	285.1	281.7	277.2	275.0
57.5°	245.9	248.2	244.8	242.6	240.3
60°	213.5	214.6	214.6	210.2	210.2
62.5°	186.7	187.8	186.7	184.5	184.5
65°	165.4	166.6	164.3	163.2	162.1
67.5°	146.4	147.6	146.4	145.3	143.1
70°	129.7	129.7	128.6	128.6	126.3
72.5°	115.1	114.0	112.9	112.9	111.8
75°	99.5	98.4	97.3	97.3	95.0
77.5°	83.8	82.7	82.7	80.5	79.4
80°	67.1	67.1	66.0	64.8	63.7
82.5°	51.4	50.3	49.2	48.1	47.0
85°	32.4	33.5	32.4	31.3	30.2
87.5°	14.5	15.7	15.7	15.7	14.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)