

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: P688730

Luminaire Tested: SQ4R-PH1-050D-93050-1-UNV-STD-W-4_3000K

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688730
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-93050-1-UNV-STD-W-4_3000K
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE HEX CONTINUOUS LENS.
500 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1898.9 lumens
Efficiency: N/A
Efficacy: 89.6 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

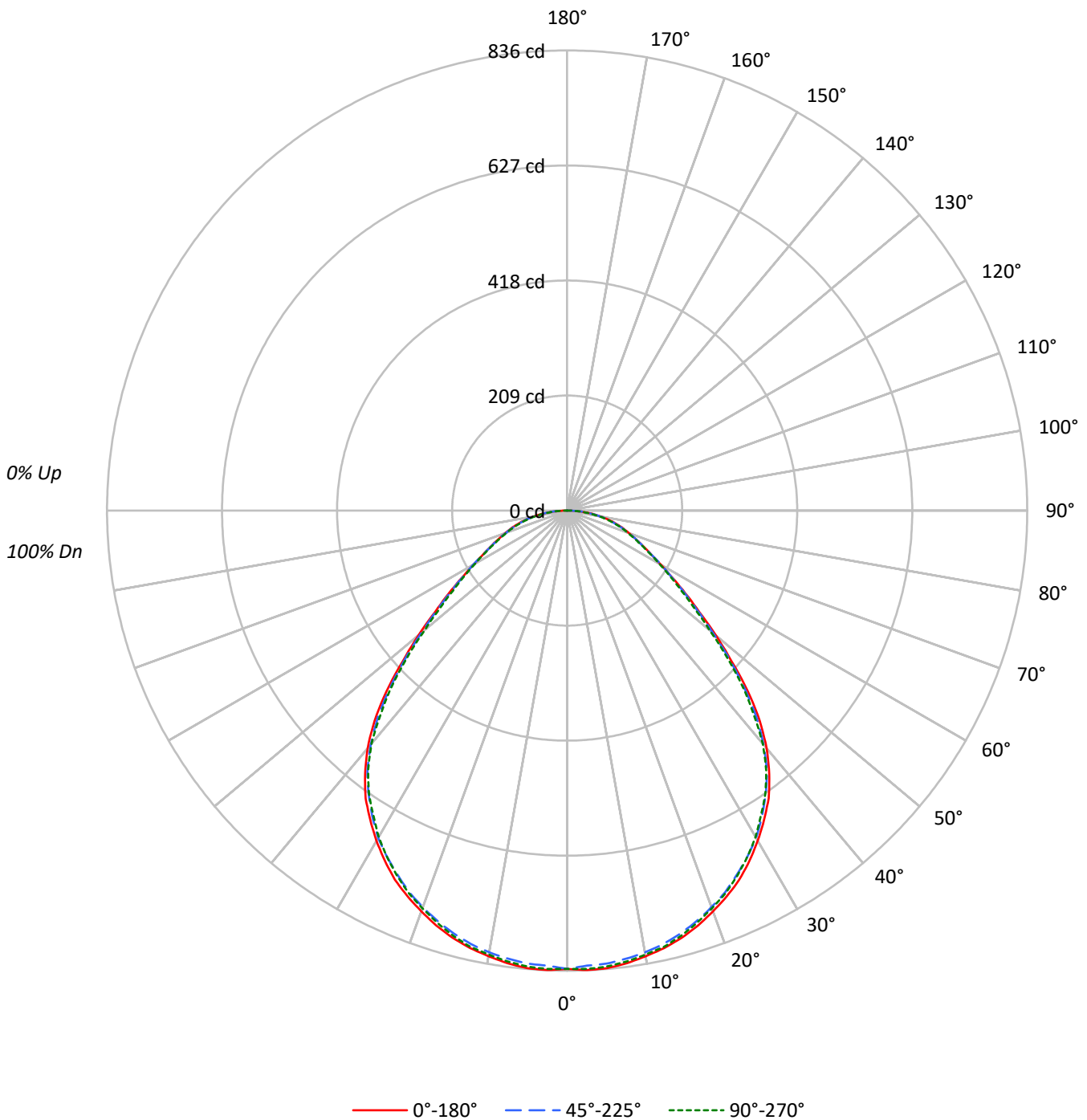
Input Watts (W): 21.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	8015	8015	8015
5°	8065	7985	8035
10°	8038	7967	8007
15°	8010	7929	7970
20°	7939	7855	7875
25°	7861	7751	7773
30°	7701	7632	7609
35°	7501	7393	7380
40°	7091	6975	6949
45°	6324	6199	6128
50°	5280	5172	5064
55°	4399	4347	4243
60°	3780	3799	3720
65°	3465	3442	3394
70°	3355	3327	3268
75°	3404	3325	3251
80°	3421	3360	3249
85°	3292	3292	3060

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6324 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.9	4.2
10°-20°	225.6	11.9
20°-30°	337.9	17.8
30°-40°	393.2	20.7
40°-50°	349.7	18.4
50°-60°	234.8	12.4
60°-70°	151.8	8.0
70°-80°	94.6	5.0
80°-90°	32.4	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°	642.4	33.8
0°-40°	1035.6	54.5
0°-60°	1620.1	85.3
0°-90°	1898.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1898.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	832	832	832	832	832	
5°	834	832	826	832	831	79
15°	804	802	796	801	800	227
25°	740	737	730	734	732	340
35°	638	635	629	629	628	397
45°	464	462	455	449	450	355
55°	262	262	259	255	253	237
65°	152	153	151	150	149	152
75°	92	90	89	89	87	96
85°	30	31	30	29	28	33
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	832.5	832.5	832.5	832.5	832.5
2.5°	835.5	833.5	827.3	834.5	833.5
5°	834.5	832.5	826.3	832.5	831.4
7.5°	829.4	828.3	821.2	828.3	826.3
10°	822.2	822.2	815.0	821.2	819.1
12.5°	814.0	812.9	806.8	812.9	811.9
15°	803.7	801.6	795.5	800.6	799.6
17.5°	790.3	789.3	782.1	787.2	785.2
20°	774.9	772.9	766.7	770.8	768.7
22.5°	758.5	756.4	750.2	753.3	752.3
25°	740.0	736.9	729.7	733.8	731.7
27.5°	717.4	716.3	709.1	711.2	709.1
30°	692.7	691.7	686.5	686.5	684.5
32.5°	666.0	667.0	658.8	659.8	655.7
35°	638.2	635.1	629.0	629.0	627.9
37.5°	603.3	601.2	596.1	595.1	594.0
40°	564.2	562.2	555.0	552.9	552.9
42.5°	518.0	515.9	508.7	505.6	501.5
45°	464.5	462.5	455.3	449.1	450.1
47.5°	404.9	407.0	399.8	394.6	393.6
50°	352.5	351.5	345.3	342.2	338.1
52.5°	302.2	303.2	298.0	296.0	290.8
55°	262.1	262.1	259.0	254.9	252.8
57.5°	226.1	228.2	225.1	223.0	221.0
60°	196.3	197.3	197.3	193.2	193.2
62.5°	171.6	172.7	171.6	169.6	169.6
65°	152.1	153.1	151.1	150.0	149.0
67.5°	134.6	135.7	134.6	133.6	131.5
70°	119.2	119.2	118.2	118.2	116.1
72.5°	105.9	104.8	103.8	103.8	102.8
75°	91.5	90.4	89.4	89.4	87.4
77.5°	77.1	76.1	76.1	74.0	73.0
80°	61.7	61.7	60.6	59.6	58.6
82.5°	47.3	46.2	45.2	44.2	43.2
85°	29.8	30.8	29.8	28.8	27.7
87.5°	13.4	14.4	14.4	14.4	13.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)