

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: P688502

Luminaire Tested: SQ4R-PH1-050D-840-1-UNV-STD-W-4

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688502
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-840-1-UNV-STD-W-4
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE HEX 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: 1899.1 lumens
Efficiency: N/A
Efficacy: 100.5 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

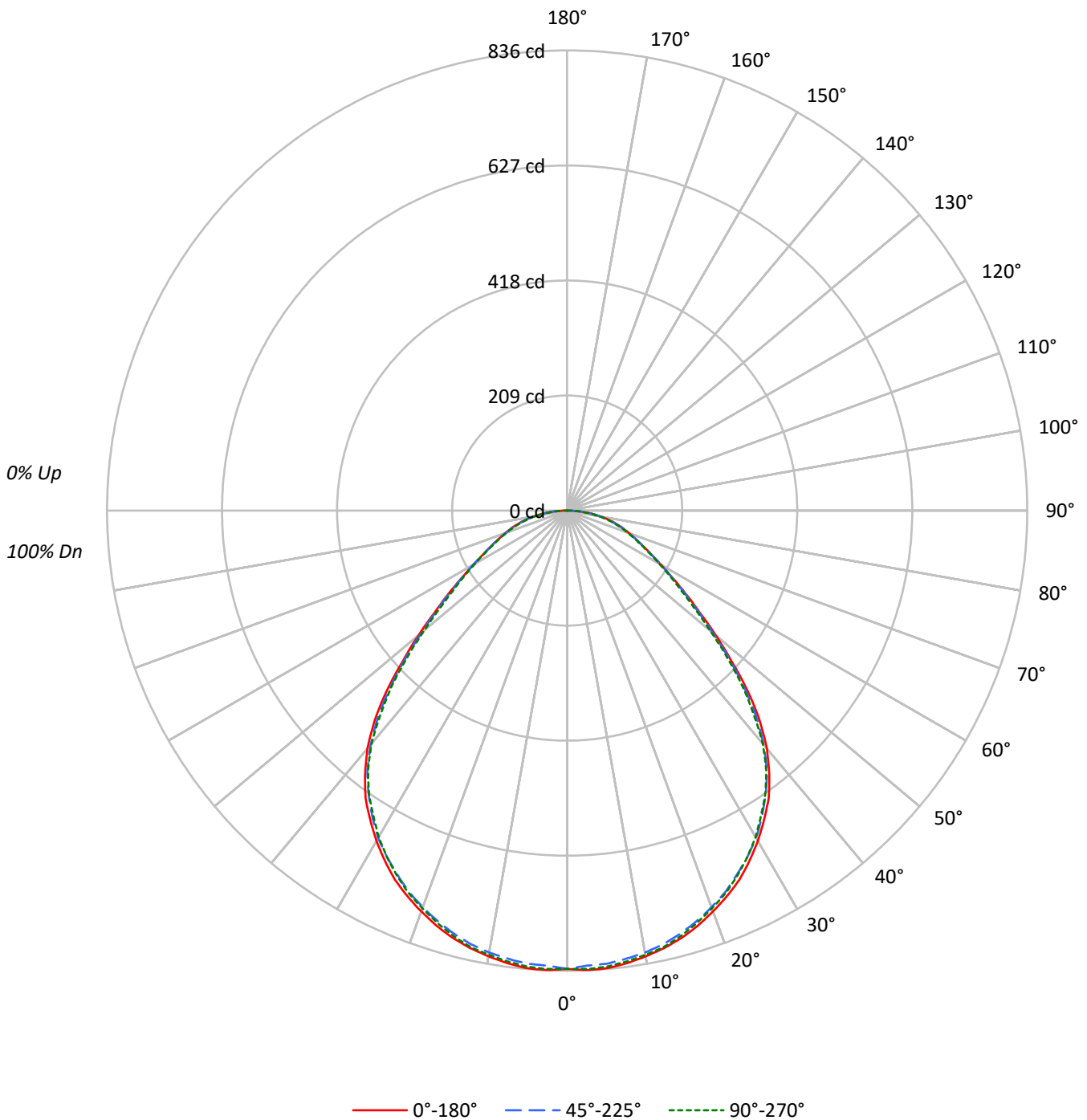
Input Watts (W): 18.9
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	8016	8016	8016
5°	8066	7986	8036
10°	8039	7968	8008
15°	8011	7930	7971
20°	7940	7856	7877
25°	7862	7752	7774
30°	7702	7633	7609
35°	7502	7393	7381
40°	7092	6975	6950
45°	6326	6199	6130
50°	5281	5173	5065
55°	4399	4347	4245
60°	3780	3799	3720
65°	3465	3442	3394
70°	3355	3327	3268
75°	3404	3325	3251
80°	3421	3360	3249
85°	3292	3292	3071

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6326 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.0	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°	642.5	33.8
0°-40°	1035.7	54.5
0°-60°	1620.3	85.3
0°-90°	1899.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1899.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	833	833	833	833	833	
5°	835	833	826	833	832	79
15°	804	802	796	801	800	227
25°	740	737	730	734	732	340
35°	638	635	629	629	628	397
45°	465	462	455	449	450	355
55°	262	262	259	255	253	238
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°	832.6	832.6	832.6	832.6	832.6
2.5°	835.6	833.6	827.4	834.6	833.6
5°	834.6	832.6	826.4	832.6	831.5
7.5°	829.5	828.4	821.3	828.4	826.4
10°	822.3	822.3	815.1	821.3	819.2
12.5°	814.1	813.0	806.9	813.0	812.0
15°	803.8	801.7	795.6	800.7	799.7
17.5°	790.4	789.4	782.2	787.3	785.3
20°	775.0	772.9	766.8	770.9	768.8
22.5°	758.6	756.5	750.3	753.4	752.4
25°	740.1	737.0	729.8	733.9	731.8
27.5°	717.4	716.4	709.2	711.3	709.2
30°	692.8	691.7	686.6	686.6	684.5
32.5°	666.0	667.1	658.9	659.9	655.8
35°	638.3	635.2	629.0	629.0	628.0
37.5°	603.3	601.3	596.2	595.1	594.1
40°	564.3	562.2	555.0	553.0	553.0
42.5°	518.0	516.0	508.8	505.7	501.6
45°	464.6	462.5	455.3	449.2	450.2
47.5°	405.0	407.0	399.8	394.7	393.7
50°	352.6	351.5	345.4	342.3	338.2
52.5°	302.2	303.2	298.1	296.0	290.9
55°	262.1	262.1	259.0	254.9	252.9
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°	171.7	172.7	171.7	169.6	169.6
65°	152.1	153.1	151.1	150.1	149.0
67.5°	134.6	135.7	134.6	133.6	131.6
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	90.5	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	46.3	45.2	44.2	43.2
85°	29.8	30.8	29.8	28.8	27.8
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)