

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: P688550

Luminaire Tested: SQ4R-PP3-100D-840-1-UNV-STD-W-4

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688550
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2103-172-1)
Test Lab: INNOVATION CENTER
Issue Date: 5/22/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-PP3-100D-840-1-UNV-STD-W-4
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE PRISM CONTINUOUS LENS.
1000 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3979.0 lumens
Efficiency: N/A
Efficacy: 107.5 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.22 / 1.33
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

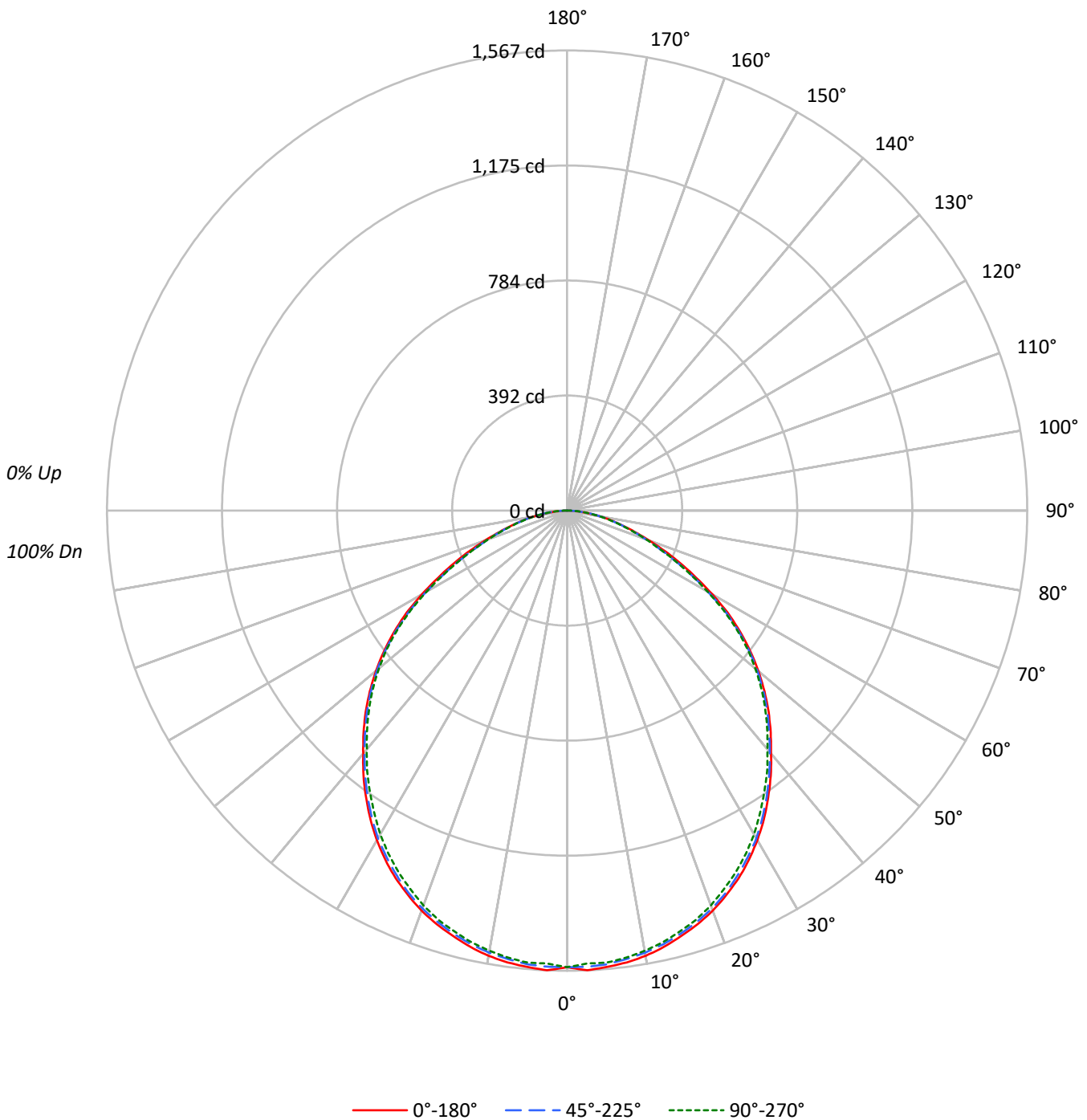
Input Watts (W): 37
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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	98	95	93	95	92	90	91	89	87	85				85
2	100	92	86	80	97	90	84	79	87	82	77	84	79	76	81	77	74	72				72
3	92	81	74	67	89	80	73	67	77	71	66	74	69	64	72	67	63	61				61
4	84	72	64	57	82	71	63	57	69	62	56	66	60	56	64	59	55	53				53
5	77	65	56	50	75	64	56	50	62	55	49	60	53	48	58	52	48	46				46
6	72	59	50	44	70	58	49	43	56	49	43	54	48	43	53	47	42	40				40
7	66	53	45	39	65	52	44	39	51	44	38	49	43	38	48	42	38	36				36
8	62	49	40	35	60	48	40	34	47	39	34	45	39	34	44	38	34	32				32
9	58	45	37	31	56	44	36	31	43	36	31	42	35	31	41	35	31	29				29
10	54	41	34	28	53	41	33	28	40	33	28	39	33	28	38	32	28	26				26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14968	14968	14968
5°	15077	14985	14932
10°	15052	14945	14879
15°	14952	14871	14789
20°	14853	14769	14658
25°	14676	14575	14431
30°	14405	14329	14147
35°	14028	13932	13755
40°	13579	13494	13339
45°	13208	13115	12986
50°	12734	12653	12530
55°	12075	11916	11823
60°	10992	10679	10625
65°	9684	9281	9249
70°	8360	8017	8017
75°	7198	7097	6993
80°	6348	6420	6270
85°	4971	5424	5424

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 13208 cd/sqm

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CATALOG NUMBER: SQ4R-PP3-100D-840-1-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.1	3.7
10°-20°	420.0	10.6
20°-30°	629.1	15.8
30°-40°	737.8	18.5
40°-50°	740.1	18.6
50°-60°	632.0	15.9
60°-70°	410.7	10.3
70°-80°	205.7	5.2
80°-90°	56.4	1.4
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°	1196.2	30.1
0°-40°	1934.0	48.6
0°-60°	3306.1	83.1
0°-90°	3979.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3979.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1555	1555	1555	1555	1555	
5°	1560	1545	1551	1545	1545	148
15°	1500	1485	1492	1486	1484	423
25°	1382	1365	1372	1360	1358	636
35°	1194	1181	1185	1172	1170	746
45°	970	963	963	954	954	747
55°	719	717	710	706	704	640
65°	425	417	407	405	406	424
75°	194	194	191	189	188	209
85°	45	49	49	49	49	53
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1554.7	1554.7	1554.7	1554.7	1554.7
2.5°	1566.9	1550.6	1554.7	1551.9	1543.8
5°	1560.1	1545.1	1550.6	1545.1	1545.1
7.5°	1551.9	1535.6	1541.0	1535.6	1535.6
10°	1539.7	1523.3	1528.8	1523.3	1522.0
12.5°	1522.0	1505.6	1512.4	1505.6	1505.6
15°	1500.2	1485.2	1492.0	1486.5	1483.8
17.5°	1477.0	1460.7	1468.8	1462.0	1460.7
20°	1449.8	1433.4	1441.6	1430.7	1430.7
22.5°	1417.1	1400.7	1410.2	1395.3	1395.3
25°	1381.6	1365.3	1372.1	1359.8	1358.5
27.5°	1340.8	1324.4	1331.2	1317.6	1317.6
30°	1295.8	1280.8	1289.0	1274.0	1272.6
32.5°	1246.7	1233.1	1238.6	1223.6	1222.2
35°	1193.6	1181.3	1185.4	1171.8	1170.4
37.5°	1139.1	1125.5	1130.9	1118.7	1118.7
40°	1080.5	1072.3	1073.7	1064.2	1061.4
42.5°	1026.0	1016.5	1017.8	1008.3	1008.3
45°	970.1	963.3	963.3	953.8	953.8
47.5°	911.5	906.1	904.7	896.6	896.6
50°	850.2	846.1	844.8	838.0	836.6
52.5°	786.2	784.8	779.4	773.9	773.9
55°	719.4	716.7	709.9	705.8	704.4
57.5°	648.6	643.1	636.3	629.5	630.9
60°	570.9	565.5	554.6	551.8	551.8
62.5°	496.0	489.2	478.3	474.2	476.9
65°	425.1	416.9	407.4	404.7	406.0
67.5°	359.7	351.5	340.6	340.6	339.3
70°	297.0	292.9	284.8	284.8	284.8
72.5°	241.2	239.8	234.4	234.4	233.0
75°	193.5	193.5	190.8	189.4	188.0
77.5°	152.6	152.6	151.2	149.9	147.2
80°	114.5	117.2	115.8	114.5	113.1
82.5°	79.0	81.8	81.8	79.0	79.0
85°	45.0	49.1	49.1	49.1	49.1
87.5°	15.0	20.4	21.8	21.8	23.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)