

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: P688512

Luminaire Tested: SQ4R-PH1-100D-830-1-UNV-STD-W-4

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688512
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-PH1-100D-830-1-UNV-STD-W-4
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE HEX CONTINUOUS LENS.
1000 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3516.5 lumens
Efficiency: N/A
Efficacy: 95.0 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

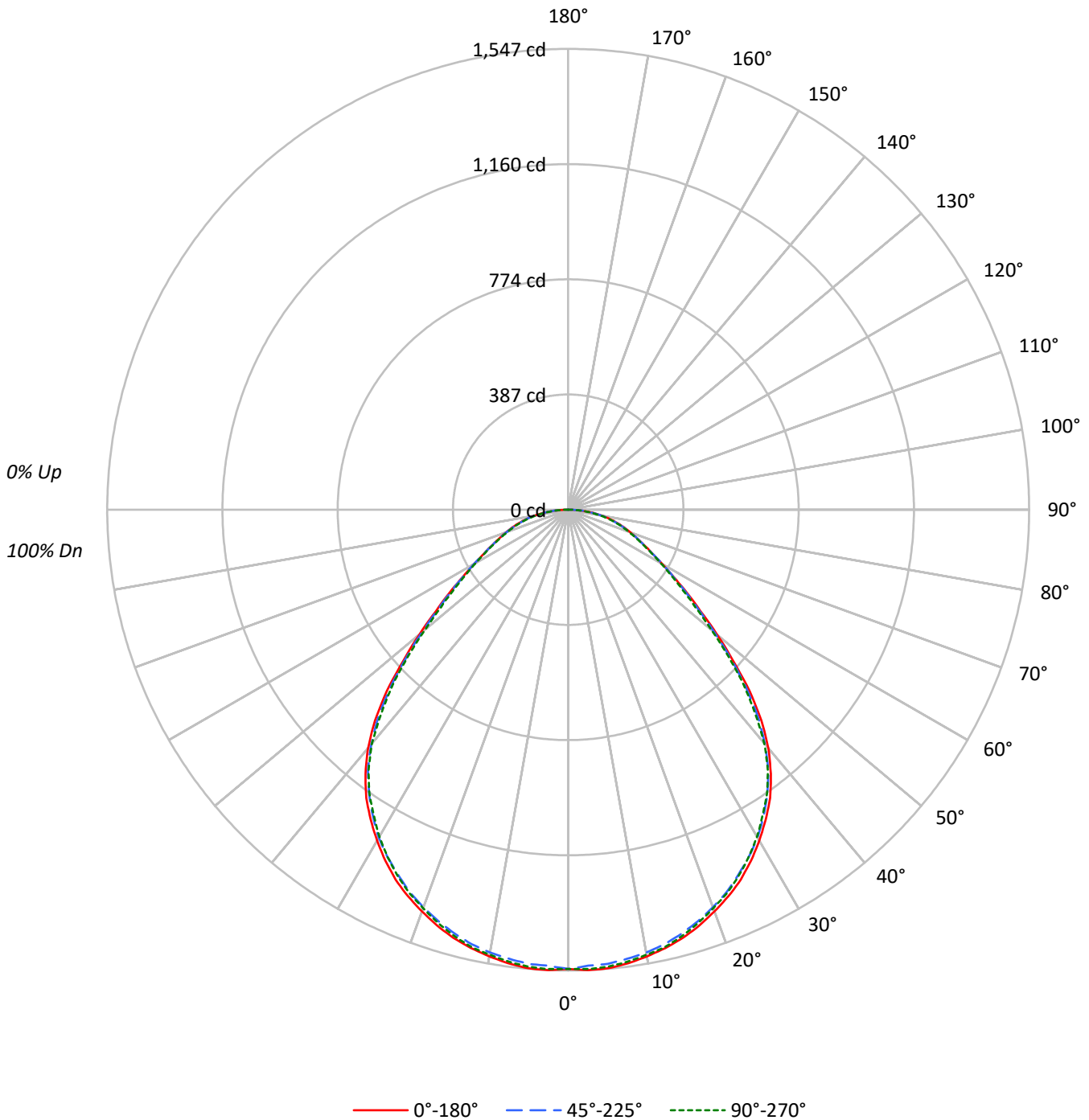
Input Watts (W): 37
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	14842	14842	14842
5°	14935	14788	14880
10°	14885	14754	14829
15°	14834	14682	14758
20°	14702	14546	14585
25°	14556	14354	14395
30°	14260	14133	14090
35°	13891	13690	13667
40°	13132	12916	12868
45°	11712	11479	11350
50°	9777	9578	9379
55°	8146	8050	7859
60°	6999	7036	6889
65°	6417	6374	6287
70°	6215	6162	6055
75°	6301	6160	6019
80°	6331	6226	6015
85°	6097	6097	5678

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 11712 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	146.2	4.2
10°-20°	417.7	11.9
20°-30°	625.8	17.8
30°-40°	728.1	20.7
40°-50°	647.6	18.4
50°-60°	434.8	12.4
60°-70°	281.1	8.0
70°-80°	175.2	5.0
80°-90°	60.0	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°	1189.7	33.8
0°-40°	1917.8	54.5
0°-60°	3000.2	85.3
0°-90°	3516.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3516.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1542	1542	1542	1542	1542	
5°	1545	1542	1530	1542	1540	147
15°	1488	1484	1473	1483	1481	420
25°	1370	1365	1351	1359	1355	630
35°	1182	1176	1165	1165	1163	735
45°	860	856	843	832	834	658
55°	485	485	480	472	468	440
65°	282	284	280	278	276	282
75°	169	168	166	166	162	178
85°	55	57	55	53	51	61
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1541.6	1541.6	1541.6	1541.6	1541.6
2.5°	1547.3	1543.5	1532.1	1545.4	1543.5
5°	1545.4	1541.6	1530.2	1541.6	1539.7
7.5°	1535.9	1534.0	1520.7	1534.0	1530.2
10°	1522.6	1522.6	1509.2	1520.7	1516.9
12.5°	1507.3	1505.4	1494.0	1505.4	1503.5
15°	1488.3	1484.5	1473.1	1482.6	1480.7
17.5°	1463.6	1461.7	1448.3	1457.9	1454.0
20°	1435.0	1431.2	1419.8	1427.4	1423.6
22.5°	1404.6	1400.8	1389.3	1395.0	1393.1
25°	1370.3	1364.6	1351.3	1358.9	1355.1
27.5°	1328.4	1326.5	1313.2	1317.0	1313.2
30°	1282.8	1280.9	1271.3	1271.3	1267.5
32.5°	1233.3	1235.2	1220.0	1221.9	1214.2
35°	1181.9	1176.2	1164.8	1164.8	1162.9
37.5°	1117.2	1113.4	1103.9	1102.0	1100.1
40°	1044.9	1041.1	1027.7	1023.9	1023.9
42.5°	959.2	955.4	942.1	936.4	928.8
45°	860.2	856.4	843.1	831.7	833.6
47.5°	749.9	753.7	740.3	730.8	728.9
50°	652.8	650.9	639.5	633.8	626.2
52.5°	559.5	561.4	551.9	548.1	538.6
55°	485.3	485.3	479.6	472.0	468.2
57.5°	418.7	422.5	416.8	413.0	409.2
60°	363.5	365.4	365.4	357.8	357.8
62.5°	317.8	319.7	317.8	314.0	314.0
65°	281.7	283.6	279.8	277.9	276.0
67.5°	249.3	251.2	249.3	247.4	243.6
70°	220.8	220.8	218.9	218.9	215.1
72.5°	196.0	194.1	192.2	192.2	190.3
75°	169.4	167.5	165.6	165.6	161.8
77.5°	142.7	140.8	140.8	137.0	135.1
80°	114.2	114.2	112.3	110.4	108.5
82.5°	87.5	85.6	83.7	81.8	79.9
85°	55.2	57.1	55.2	53.3	51.4
87.5°	24.7	26.6	26.6	26.6	24.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)