

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: P688912

Luminaire Tested: SQ4R-PR1-100D-93050-1-UNV-STD-W-4_3000K

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688912
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 5/22/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-PR1-100D-93050-1-UNV-STD-W-4_3000K
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
1000 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3653.9 lumens
Efficiency: N/A
Efficacy: 78.9 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.23 / 1.34
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

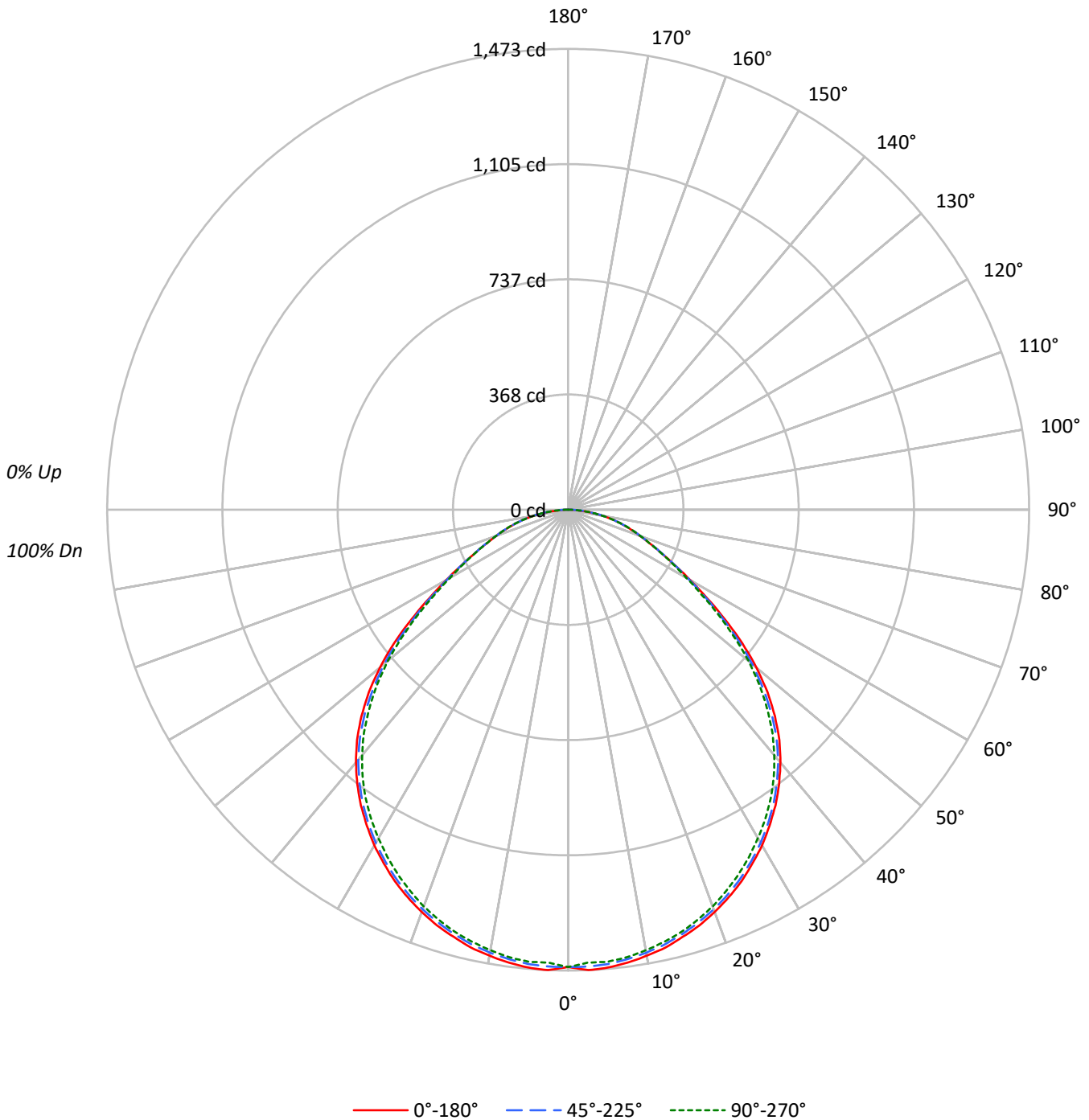
Input Watts (W): 46.3
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	85
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	72
3	92	82	74	68	90	80	73	68	78	71	66	75	70	65	72	68	64	62
4	85	73	65	58	82	72	64	58	69	63	57	67	61	56	65	60	56	54
5	78	66	57	51	76	65	57	50	63	55	50	61	54	49	59	53	49	47
6	72	59	51	45	70	58	50	44	57	49	44	55	49	44	53	48	43	41
7	67	54	46	40	65	53	45	39	52	44	39	50	44	39	49	43	39	37
8	63	49	41	36	61	49	41	35	47	40	35	46	40	35	45	39	35	33
9	58	45	37	32	57	45	37	32	44	37	32	43	36	32	42	36	31	30
10	55	42	34	29	54	41	34	29	40	34	29	40	33	29	39	33	29	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14071	14071	14071
5°	14198	14088	14016
10°	14153	14055	13980
15°	14090	14003	13928
20°	14020	13929	13826
25°	13921	13827	13667
30°	13771	13672	13477
35°	13567	13449	13257
40°	13259	13116	12878
45°	12718	12495	12239
50°	11766	11483	11257
55°	10269	10037	9826
60°	8653	8582	8410
65°	7486	7513	7456
70°	6874	6910	6910
75°	6603	6603	6651
80°	6209	6282	6209
85°	5004	5567	5567

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 12718 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	138.3	3.8
10°-20°	395.7	10.8
20°-30°	596.8	16.3
30°-40°	711.2	19.5
40°-50°	701.6	19.2
50°-60°	535.2	14.6
60°-70°	330.3	9.0
70°-80°	188.2	5.2
80°-90°	56.8	1.6
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°	1130.7	30.9
0°-40°	1841.9	50.4
0°-60°	3078.6	84.3
0°-90°	3653.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3653.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1462	1462	1462	1462	1462	
5°	1469	1453	1458	1453	1450	139
15°	1414	1399	1405	1400	1397	399
25°	1310	1294	1302	1288	1287	603
35°	1154	1141	1144	1129	1128	721
45°	934	922	918	901	899	717
55°	612	602	598	588	585	548
65°	329	326	330	327	327	332
75°	178	178	178	179	179	187
85°	45	48	50	50	50	54
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1461.6	1461.6	1461.6	1461.6	1461.6
2.5°	1472.9	1456.5	1461.6	1457.8	1449.0
5°	1469.1	1452.8	1457.8	1452.8	1450.3
7.5°	1460.3	1444.0	1449.0	1444.0	1442.7
10°	1447.7	1432.6	1437.7	1432.6	1430.1
12.5°	1433.9	1417.5	1423.8	1417.5	1415.0
15°	1413.7	1398.6	1404.9	1399.9	1397.4
17.5°	1393.6	1377.2	1383.5	1378.5	1374.7
20°	1368.4	1353.3	1359.6	1350.8	1349.5
22.5°	1340.7	1325.6	1331.9	1319.3	1319.3
25°	1310.5	1294.1	1301.7	1287.9	1286.6
27.5°	1275.3	1260.2	1266.5	1252.6	1251.3
30°	1238.8	1223.7	1229.9	1214.8	1212.3
32.5°	1197.2	1183.4	1188.4	1173.3	1172.0
35°	1154.4	1140.6	1144.3	1129.2	1128.0
37.5°	1106.6	1094.0	1096.5	1080.1	1078.9
40°	1055.0	1042.4	1043.6	1026.0	1024.7
42.5°	998.3	985.7	984.5	966.8	965.6
45°	934.1	921.5	917.7	901.4	898.9
47.5°	863.6	851.0	843.5	829.6	828.4
50°	785.6	773.0	766.7	755.3	751.6
52.5°	701.2	688.6	683.6	673.5	669.7
55°	611.8	601.8	598.0	587.9	585.4
57.5°	526.2	518.7	517.4	507.3	506.1
60°	449.4	445.7	445.7	436.8	436.8
62.5°	384.0	381.4	384.0	378.9	377.7
65°	328.6	326.1	329.8	327.3	327.3
67.5°	282.0	282.0	284.5	283.3	283.3
70°	244.2	244.2	245.5	245.5	245.5
72.5°	210.2	209.0	212.8	212.8	211.5
75°	177.5	177.5	177.5	178.8	178.8
77.5°	144.8	144.8	146.0	146.0	144.8
80°	112.0	113.3	113.3	112.0	112.0
82.5°	79.3	80.6	80.6	80.6	79.3
85°	45.3	47.8	50.4	50.4	50.4
87.5°	16.4	21.4	25.2	25.2	23.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)