

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: P688914

Luminaire Tested: SQ4R-PR1-100D-93050-1-UNV-STD-W-4_4000K

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688914
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_4000K
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
1000 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3812.8 lumens
Efficiency: N/A
Efficacy: 82.0 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

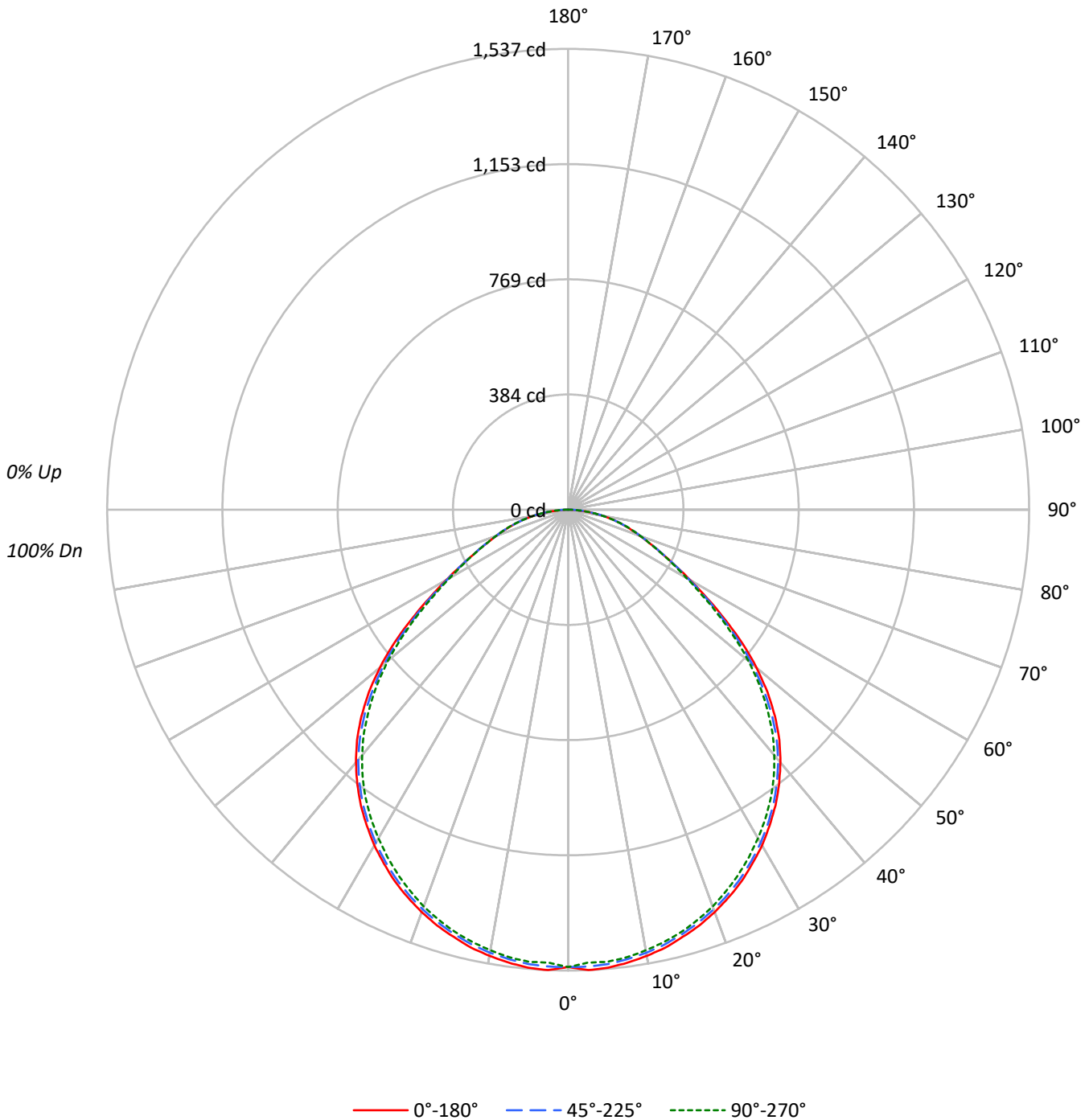
Input Watts (W): 46.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	85				85
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	72				72
3	92	82	74	68	90	80	73	68	78	71	66	75	70	65	72	68	64	62				62
4	85	73	65	58	82	72	64	58	69	63	57	67	61	56	65	60	56	54				54
5	78	66	57	51	76	65	57	50	63	55	50	61	54	49	59	53	49	47				47
6	72	59	51	45	70	58	50	44	57	49	44	55	49	44	53	48	43	41				41
7	67	54	46	40	65	53	45	39	52	44	39	50	44	39	49	43	39	37				37
8	63	49	41	36	61	49	41	35	47	40	35	46	40	35	45	39	35	33				33
9	58	45	37	32	57	45	37	32	44	37	32	43	36	32	42	36	31	30				30
10	55	42	34	29	54	41	34	29	40	34	29	40	33	29	39	33	29	27				27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14683	14683	14683
5°	14815	14701	14625
10°	14768	14666	14589
15°	14703	14612	14533
20°	14629	14535	14427
25°	14526	14429	14261
30°	14369	14267	14063
35°	14157	14034	13833
40°	13834	13686	13439
45°	13271	13038	12770
50°	12277	11982	11745
55°	10715	10474	10252
60°	9030	8953	8776
65°	7811	7841	7779
70°	7172	7212	7212
75°	6889	6889	6937
80°	6481	6553	6481
85°	5225	5799	5799

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 13271 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.3	3.8
10°-20°	412.9	10.8
20°-30°	622.7	16.3
30°-40°	742.1	19.5
40°-50°	732.1	19.2
50°-60°	558.4	14.6
60°-70°	344.7	9.0
70°-80°	196.4	5.2
80°-90°	59.2	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°	1179.9	30.9
0°-40°	1922.0	50.4
0°-60°	3212.5	84.3
0°-90°	3812.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3812.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1525	1525	1525	1525	1525	
5°	1533	1516	1521	1516	1513	146
15°	1475	1459	1466	1461	1458	417
25°	1368	1350	1358	1344	1342	630
35°	1205	1190	1194	1178	1177	752
45°	975	962	958	941	938	748
55°	638	628	624	614	611	572
65°	343	340	344	342	342	346
75°	185	185	185	186	186	196
85°	47	50	52	52	52	56
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1525.1	1525.1	1525.1	1525.1	1525.1
2.5°	1536.9	1519.9	1525.1	1521.2	1512.0
5°	1533.0	1515.9	1521.2	1515.9	1513.3
7.5°	1523.8	1506.7	1512.0	1506.7	1505.4
10°	1510.7	1494.9	1500.2	1494.9	1492.3
12.5°	1496.2	1479.1	1485.7	1479.1	1476.5
15°	1475.2	1459.4	1466.0	1460.8	1458.1
17.5°	1454.2	1437.1	1443.7	1438.4	1434.5
20°	1427.9	1412.1	1418.7	1409.5	1408.2
22.5°	1399.0	1383.2	1389.8	1376.7	1376.7
25°	1367.5	1350.4	1358.3	1343.8	1342.5
27.5°	1330.7	1314.9	1321.5	1307.1	1305.7
30°	1292.6	1276.8	1283.4	1267.6	1265.0
32.5°	1249.3	1234.8	1240.1	1224.3	1223.0
35°	1204.6	1190.1	1194.1	1178.3	1177.0
37.5°	1154.7	1141.5	1144.2	1127.1	1125.8
40°	1100.8	1087.7	1089.0	1070.6	1069.3
42.5°	1041.7	1028.6	1027.3	1008.9	1007.6
45°	974.7	961.6	957.6	940.6	937.9
47.5°	901.1	888.0	880.1	865.7	864.4
50°	819.7	806.6	800.0	788.2	784.2
52.5°	731.7	718.6	713.3	702.8	698.8
55°	638.4	627.9	624.0	613.5	610.8
57.5°	549.1	541.2	539.9	529.4	528.1
60°	469.0	465.0	465.0	455.8	455.8
62.5°	400.7	398.0	400.7	395.4	394.1
65°	342.9	340.2	344.2	341.5	341.5
67.5°	294.3	294.3	296.9	295.6	295.6
70°	254.8	254.8	256.2	256.2	256.2
72.5°	219.4	218.1	222.0	222.0	220.7
75°	185.2	185.2	185.2	186.5	186.5
77.5°	151.1	151.1	152.4	152.4	151.1
80°	116.9	118.2	118.2	116.9	116.9
82.5°	82.8	84.1	84.1	84.1	82.8
85°	47.3	49.9	52.5	52.5	52.5
87.5°	17.1	22.3	26.3	26.3	25.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)