

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: P688991

Luminaire Tested: SQ4R-PW1-100D-93050-1-UNV-STD-W-4_3500K

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688991
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2203-586-35)
Test Lab: INNOVATION CENTER
Issue Date: 5/22/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-PW1-100D-93050-1-UNV-STD-W-4_3500K
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
1000 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3917.7 lumens
Efficiency: N/A
Efficacy: 84.3 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.2 / 1.29
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

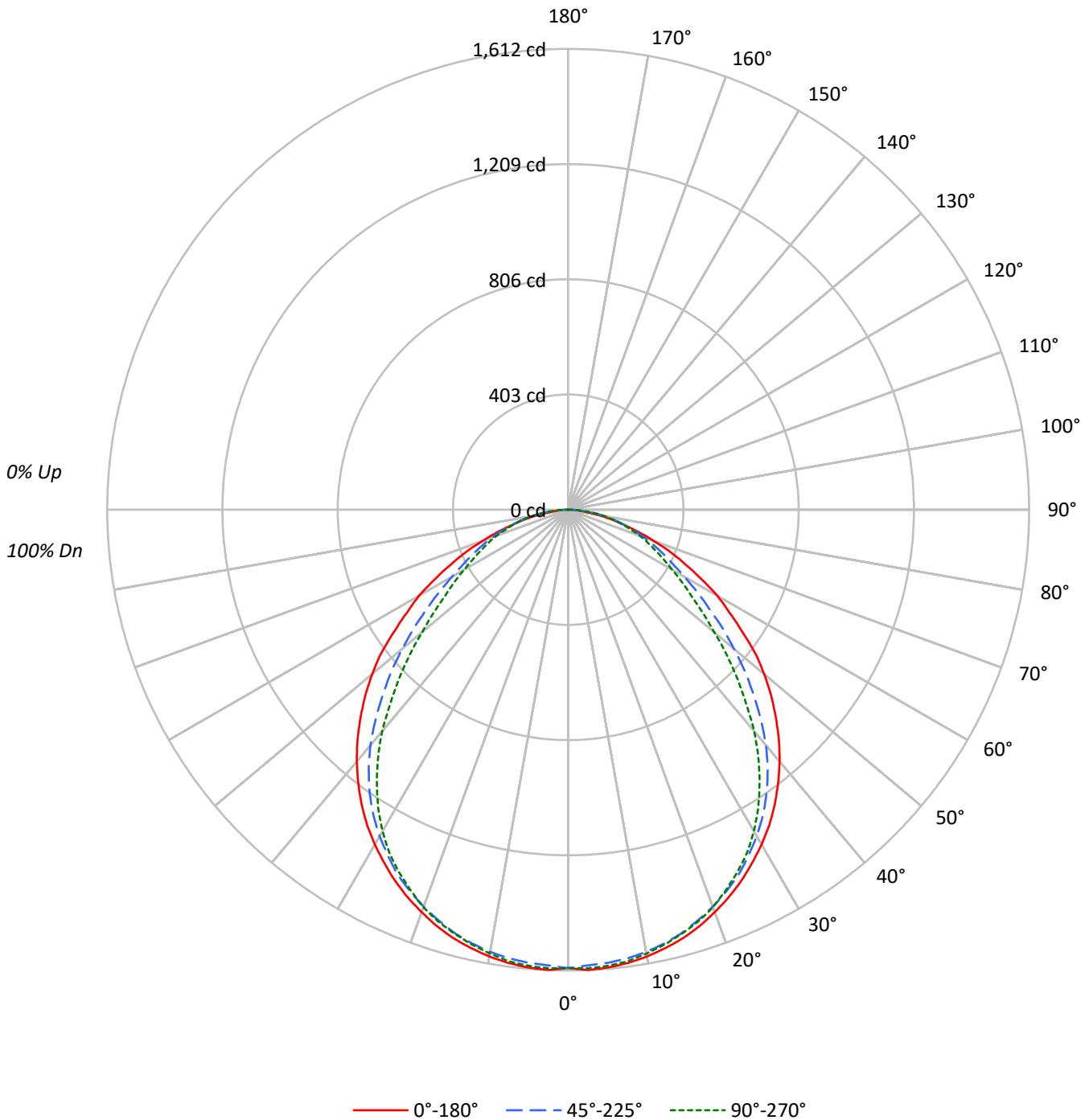
Input Watts (W): 46.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	109	105	101	97	107	103	99	96	99	96	93	95	92	90	91	89	87	85				85
2	100	92	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74	72				72
3	92	82	74	68	89	80	73	67	77	71	66	75	69	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	59	50	44	57	49	44	55	49	44	54	48	43	41				41
7	67	54	46	40	65	53	45	40	52	45	39	50	44	39	49	43	39	37				37
8	63	50	41	36	61	49	41	36	48	40	35	46	40	35	45	39	35	33				33
9	59	46	38	32	57	45	37	32	44	37	32	43	36	32	42	36	32	30				30
10	55	42	34	29	54	42	34	29	41	34	29	40	33	29	39	33	29	27				27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15436	15436	15436
5°	15535	15377	15476
10°	15513	15353	15413
15°	15468	15283	15303
20°	15350	15139	15161
25°	15216	14975	14865
30°	15030	14663	14434
35°	14799	14219	13710
40°	14453	13520	12717
45°	13975	12486	11392
50°	13397	11329	9971
55°	12453	10066	8820
60°	11587	9007	8095
65°	10281	8358	7652
70°	8934	7949	7541
75°	7361	7514	7205
80°	5827	7085	7085
85°	4330	6374	6606

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 13975 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	152.1	3.9
10°-20°	434.5	11.1
20°-30°	650.9	16.6
30°-40°	756.2	19.3
40°-50°	713.5	18.2
50°-60°	556.7	14.2
60°-70°	377.9	9.6
70°-80°	212.8	5.4
80°-90°	63.2	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°	1237.5	31.6
0°-40°	1993.7	50.9
0°-60°	3263.8	83.3
0°-90°	3917.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3917.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1603	1603	1603	1603	1603	
5°	1608	1603	1591	1603	1601	153
15°	1552	1546	1533	1542	1535	438
25°	1432	1426	1410	1406	1399	660
35°	1259	1247	1210	1183	1166	787
45°	1026	995	917	859	837	791
55°	742	699	600	542	526	666
65°	451	410	367	344	336	451
75°	198	206	202	194	194	215
85°	39	56	58	58	60	47
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1603.4	1603.4	1603.4	1603.4	1603.4
2.5°	1611.7	1607.5	1595.2	1607.5	1605.5
5°	1607.5	1603.4	1591.1	1603.4	1601.4
7.5°	1599.3	1597.2	1582.8	1595.2	1593.1
10°	1586.9	1584.9	1570.5	1580.8	1576.6
12.5°	1570.5	1568.4	1554.0	1562.2	1558.1
15°	1551.9	1545.7	1533.4	1541.6	1535.4
17.5°	1527.2	1521.0	1506.6	1512.7	1510.7
20°	1498.3	1492.1	1477.7	1483.9	1479.8
22.5°	1467.4	1461.2	1444.7	1446.8	1440.6
25°	1432.4	1426.2	1409.7	1405.6	1399.4
27.5°	1393.2	1389.1	1364.4	1360.2	1354.0
30°	1352.0	1345.8	1319.0	1310.8	1298.4
32.5°	1308.7	1296.3	1267.5	1251.0	1236.6
35°	1259.2	1246.9	1209.8	1183.0	1166.5
37.5°	1205.7	1187.1	1145.9	1108.8	1092.3
40°	1150.0	1129.4	1075.8	1026.4	1011.9
42.5°	1090.2	1065.5	997.5	946.0	921.2
45°	1026.4	995.4	917.1	859.4	836.7
47.5°	962.5	923.3	838.8	777.0	752.2
50°	894.5	847.1	756.4	690.4	665.7
52.5°	824.4	772.9	680.1	612.1	593.6
55°	741.9	698.7	599.7	542.0	525.5
57.5°	667.8	620.3	533.8	484.3	472.0
60°	601.8	544.1	467.8	430.7	420.4
62.5°	525.5	474.0	414.3	385.4	375.1
65°	451.3	410.1	366.9	344.2	335.9
67.5°	387.5	352.4	323.6	305.0	300.9
70°	317.4	298.8	282.4	267.9	267.9
72.5°	257.6	251.4	241.1	232.9	226.7
75°	197.9	206.1	202.0	193.7	193.7
77.5°	150.4	162.8	164.9	160.8	162.8
80°	105.1	123.7	127.8	125.7	127.8
82.5°	66.0	88.6	92.7	92.7	94.8
85°	39.2	55.6	57.7	57.7	59.8
87.5°	16.5	26.8	28.9	28.9	28.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)