

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: P688986

Luminaire Tested: SQ4R-PW1-100D-92765-1-UNV-STD-W-4_4500K

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688986
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-92765-1-UNV-STD-W-4_4500K
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
1000 LUMENS PER FOOT
Light Source: 4500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3904.4 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

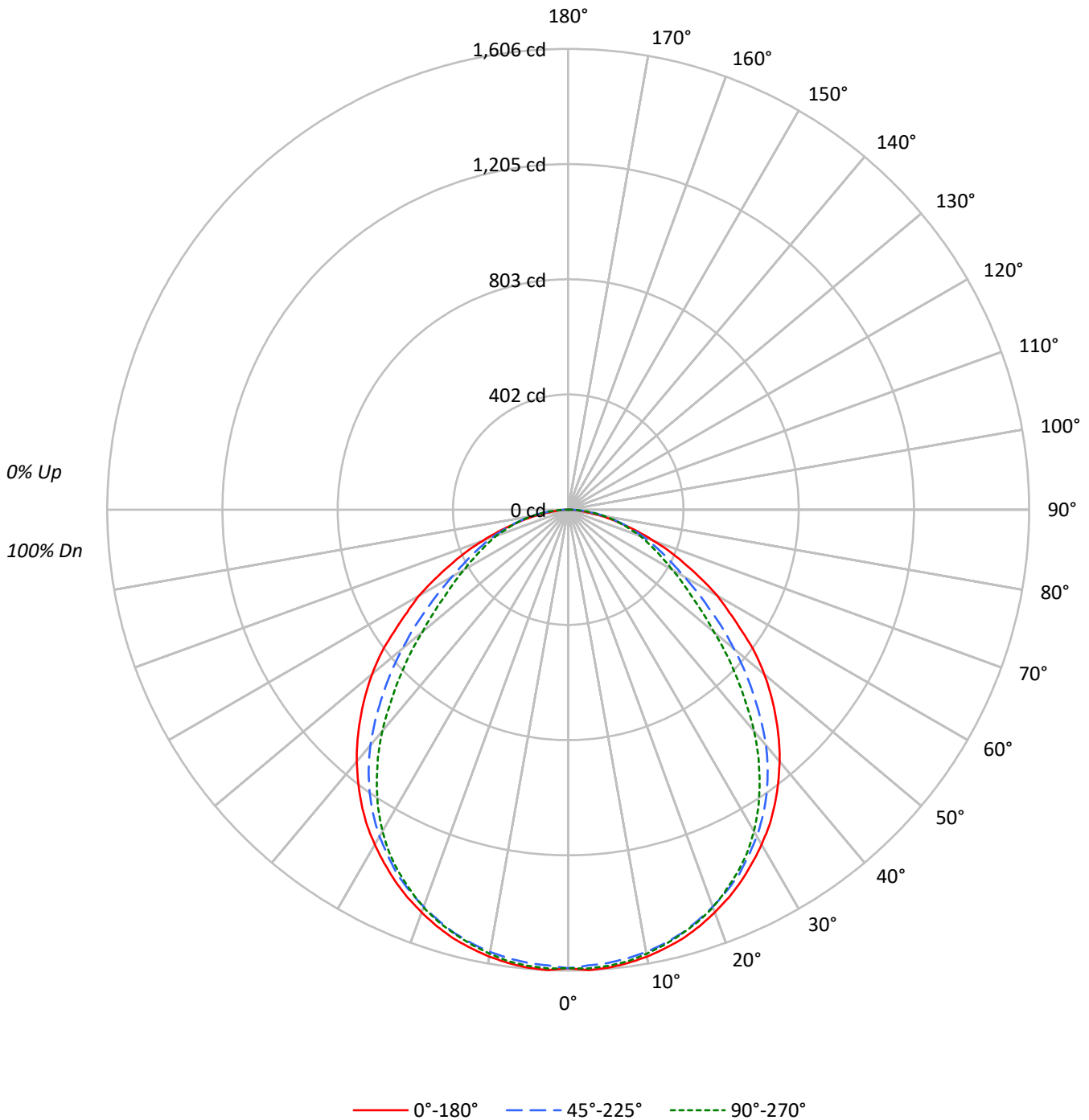
Input Watts (W): 46.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15384	15384	15384
5°	15483	15324	15423
10°	15461	15300	15361
15°	15415	15232	15251
20°	15298	15088	15109
25°	15164	14924	14814
30°	14979	14613	14385
35°	14750	14170	13663
40°	14404	13475	12674
45°	13927	12444	11354
50°	13351	11290	9936
55°	12411	10032	8792
60°	11549	8978	8068
65°	10247	8328	7627
70°	8903	7921	7516
75°	7335	7488	7183
80°	5810	7058	7058
85°	4308	6352	6583

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 13927 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	151.6	3.9
10°-20°	433.0	11.1
20°-30°	648.6	16.6
30°-40°	753.6	19.3
40°-50°	711.1	18.2
50°-60°	554.8	14.2
60°-70°	376.6	9.6
70°-80°	212.1	5.4
80°-90°	63.0	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°	1233.3	31.6
0°-40°	1986.9	50.9
0°-60°	3252.8	83.3
0°-90°	3904.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3904.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1598	1598	1598	1598	1598	
5°	1602	1598	1586	1598	1596	152
15°	1547	1540	1528	1536	1530	436
25°	1428	1421	1405	1401	1395	657
35°	1255	1243	1206	1179	1162	784
45°	1023	992	914	856	834	789
55°	739	696	598	540	524	664
65°	450	409	366	343	335	449
75°	197	205	201	193	193	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°	1598.0	1598.0	1598.0	1598.0	1598.0
2.5°	1606.2	1602.1	1589.8	1602.1	1600.0
5°	1602.1	1598.0	1585.7	1598.0	1595.9
7.5°	1593.9	1591.8	1577.4	1589.8	1587.7
10°	1581.6	1579.5	1565.1	1575.4	1571.3
12.5°	1565.1	1563.1	1548.7	1556.9	1552.8
15°	1546.6	1540.5	1528.2	1536.4	1530.2
17.5°	1522.0	1515.8	1501.5	1507.6	1505.6
20°	1493.2	1487.1	1472.7	1478.9	1474.7
22.5°	1462.4	1456.3	1439.8	1441.9	1435.7
25°	1427.5	1421.3	1404.9	1400.8	1394.6
27.5°	1388.5	1384.4	1359.7	1355.6	1349.5
30°	1347.4	1341.2	1314.5	1306.3	1294.0
32.5°	1304.3	1291.9	1263.2	1246.8	1232.4
35°	1255.0	1242.7	1205.7	1179.0	1162.5
37.5°	1201.6	1183.1	1142.0	1105.0	1088.6
40°	1146.1	1125.6	1072.2	1022.9	1008.5
42.5°	1086.5	1061.9	994.1	942.8	918.1
45°	1022.9	992.1	914.0	856.5	833.9
47.5°	959.2	920.2	836.0	774.3	749.7
50°	891.4	844.2	753.8	688.1	663.4
52.5°	821.6	770.2	677.8	610.0	591.5
55°	739.4	696.3	597.7	540.2	523.8
57.5°	665.5	618.2	532.0	482.7	470.4
60°	599.8	542.2	466.3	429.3	419.0
62.5°	523.8	472.4	412.8	384.1	373.8
65°	449.8	408.7	365.6	343.0	334.8
67.5°	386.1	351.2	322.5	304.0	299.9
70°	316.3	297.8	281.4	267.0	267.0
72.5°	256.7	250.6	240.3	232.1	225.9
75°	197.2	205.4	201.3	193.1	193.1
77.5°	149.9	162.3	164.3	160.2	162.3
80°	104.8	123.2	127.3	125.3	127.3
82.5°	65.7	88.3	92.4	92.4	94.5
85°	39.0	55.5	57.5	57.5	59.6
87.5°	16.4	26.7	28.8	28.8	28.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)