

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: P688988

Luminaire Tested: SQ4R-PW1-100D-92765-1-UNV-STD-W-4_5700K

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688988
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_5700K
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
1000 LUMENS PER FOOT
Light Source: 5700K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4071.6 lumens
Efficiency: N/A
Efficacy: 87.7 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

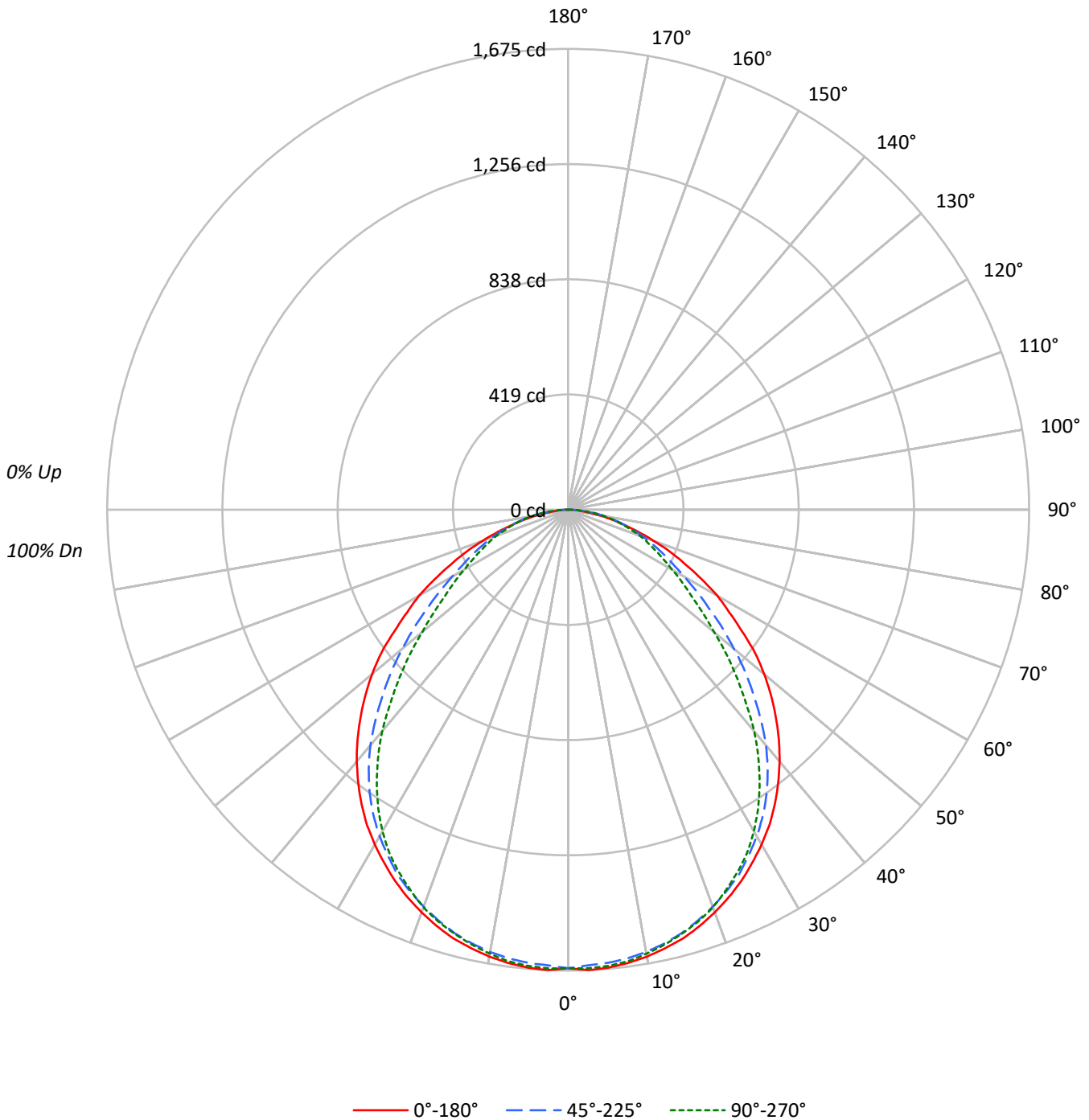
Input Watts (W): 46.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	16043	16043	16043
5°	16146	15980	16084
10°	16123	15955	16019
15°	16076	15883	15904
20°	15954	15734	15756
25°	15813	15563	15450
30°	15620	15239	15001
35°	15381	14777	14248
40°	15021	14052	13217
45°	14523	12977	11840
50°	13923	11774	10361
55°	12943	10462	9168
60°	12042	9362	8412
65°	10686	8686	7953
70°	9286	8259	7837
75°	7648	7808	7488
80°	6054	7363	7363
85°	4496	6628	6860

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 14523 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	158.1	3.9
10°-20°	451.6	11.1
20°-30°	676.4	16.6
30°-40°	785.9	19.3
40°-50°	741.5	18.2
50°-60°	578.5	14.2
60°-70°	392.7	9.6
70°-80°	221.2	5.4
80°-90°	65.7	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°	1286.1	31.6
0°-40°	2072.0	50.9
0°-60°	3392.0	83.3
0°-90°	4071.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4071.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1666	1666	1666	1666	1666	
5°	1671	1666	1654	1666	1664	159
15°	1613	1606	1594	1602	1596	455
25°	1489	1482	1465	1461	1454	686
35°	1309	1296	1257	1230	1212	818
45°	1067	1034	953	893	870	822
55°	771	726	623	563	546	692
65°	469	426	381	358	349	469
75°	206	214	210	201	201	224
85°	41	58	60	60	62	49
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1666.4	1666.4	1666.4	1666.4	1666.4
2.5°	1675.0	1670.7	1657.8	1670.7	1668.5
5°	1670.7	1666.4	1653.5	1666.4	1664.3
7.5°	1662.1	1660.0	1645.0	1657.8	1655.7
10°	1649.3	1647.1	1632.1	1642.8	1638.6
12.5°	1632.1	1630.0	1615.0	1623.6	1619.3
15°	1612.9	1606.4	1593.6	1602.1	1595.7
17.5°	1587.1	1580.7	1565.7	1572.2	1570.0
20°	1557.2	1550.7	1535.7	1542.2	1537.9
22.5°	1525.0	1518.6	1501.5	1503.6	1497.2
25°	1488.6	1482.2	1465.1	1460.8	1454.4
27.5°	1447.9	1443.6	1417.9	1413.7	1407.2
30°	1405.1	1398.7	1370.8	1362.2	1349.4
32.5°	1360.1	1347.3	1317.3	1300.1	1285.1
35°	1308.7	1295.9	1257.3	1229.5	1212.3
37.5°	1253.0	1233.7	1190.9	1152.3	1135.2
40°	1195.2	1173.8	1118.1	1066.7	1051.7
42.5°	1133.1	1107.4	1036.7	983.1	957.4
45°	1066.7	1034.5	953.1	893.2	869.6
47.5°	1000.3	959.6	871.8	807.5	781.8
50°	929.6	880.3	786.1	717.5	691.8
52.5°	856.8	803.2	706.8	636.1	616.9
55°	771.1	726.1	623.3	563.3	546.2
57.5°	694.0	644.7	554.8	503.3	490.5
60°	625.4	565.5	486.2	447.7	436.9
62.5°	546.2	492.6	430.5	400.5	389.8
65°	469.1	426.2	381.3	357.7	349.1
67.5°	402.7	366.3	336.3	317.0	312.7
70°	329.9	310.6	293.4	278.4	278.4
72.5°	267.7	261.3	250.6	242.0	235.6
75°	205.6	214.2	209.9	201.3	201.3
77.5°	156.4	169.2	171.4	167.1	169.2
80°	109.2	128.5	132.8	130.7	132.8
82.5°	68.5	92.1	96.4	96.4	98.5
85°	40.7	57.8	60.0	60.0	62.1
87.5°	17.1	27.8	30.0	30.0	30.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)