

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: P688753

Luminaire Tested: SQ4R-PH1-100D-92765-1-UNV-STD-W-4_5000K

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688753
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2203-586-36)
Test Lab: INNOVATION CENTER
Issue Date: 5/22/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4R-PH1-100D-92765-1-UNV-STD-W-4_5000K
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE HEX CONTINUOUS LENS.
1000 LUMENS PER FOOT
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3937.5 lumens
Efficiency: N/A
Efficacy: 84.9 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.22 / 1.28
Luminous Opening: Rectangular (W 0.29' x L: 3.83' x H: 0')
CIE Type: Direct

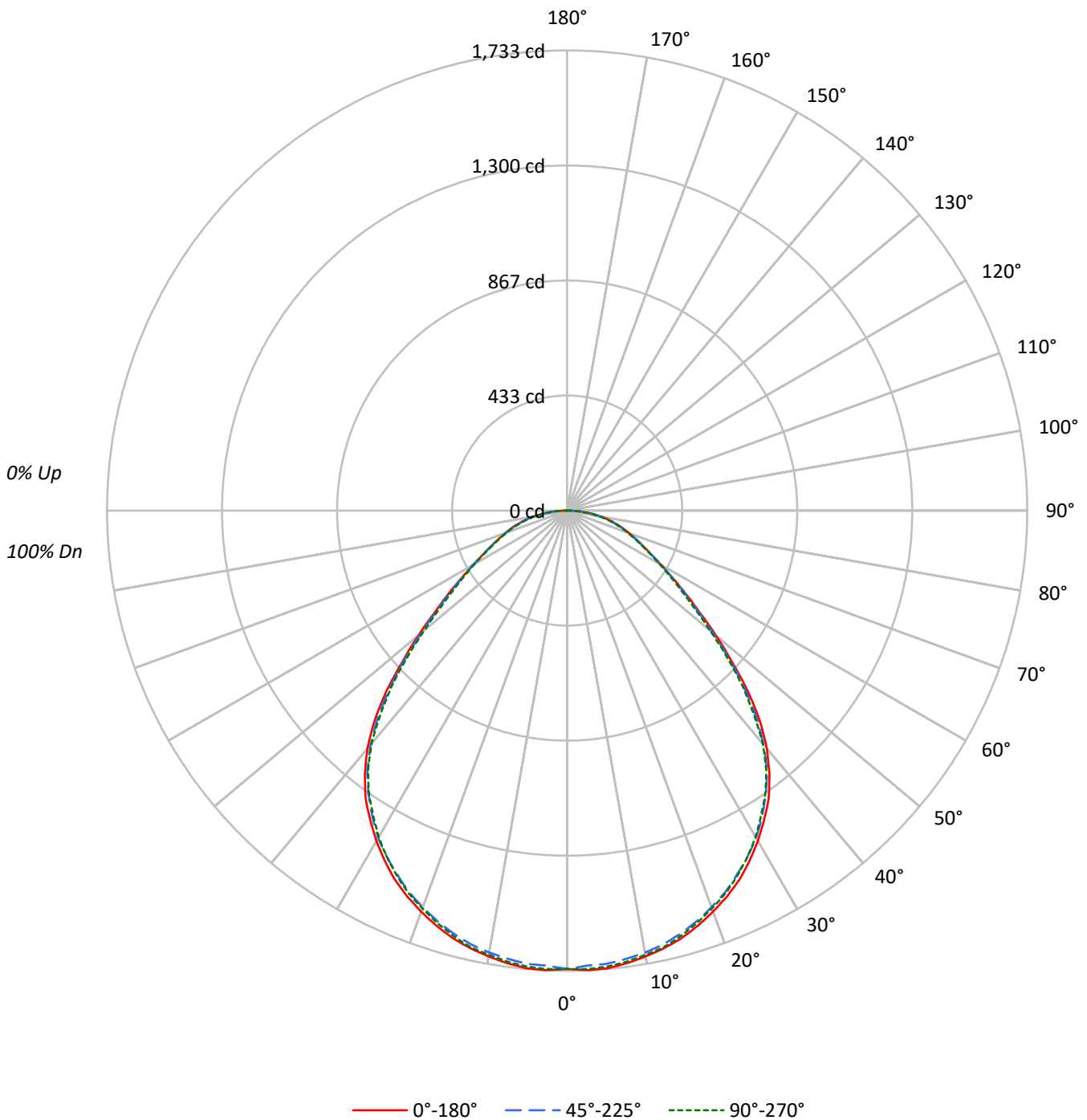
Input Watts (W): 46.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	110	105	102	98	107	103	100	96	99	96	93		95	93	91		92	90	88	86
2	101	93	87	82	98	91	86	81	88	83	79		85	81	77		82	79	76	74
3	93	83	76	70	90	82	75	69	79	73	68		76	71	67		73	69	66	64
4	86	75	66	60	83	73	66	60	71	64	59		69	63	58		66	62	57	55
5	79	67	59	53	77	66	58	52	64	57	52		62	56	51		60	55	51	49
6	74	61	53	47	72	60	52	46	58	51	46		57	50	46		55	50	45	43
7	68	56	47	42	67	55	47	41	53	46	41		52	46	41		51	45	41	39
8	64	51	43	37	62	50	43	37	49	42	37		48	42	37		47	41	37	35
9	60	47	39	34	58	47	39	34	45	39	34		44	38	34		43	38	33	32
10	56	44	36	31	55	43	36	31	42	35	31		41	35	31		40	35	31	29

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16619	16619	16619
5°	16724	16558	16662
10°	16667	16521	16604
15°	16610	16440	16525
20°	16463	16288	16332
25°	16299	16073	16118
30°	15968	15826	15778
35°	15554	15328	15303
40°	14704	14463	14409
45°	13115	12854	12708
50°	10949	10725	10501
55°	9121	9013	8800
60°	7837	7879	7713
65°	7185	7137	7039
70°	6958	6899	6778
75°	7056	6896	6736
80°	7091	6969	6736
85°	6827	6827	6352

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 13115 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	163.7	4.2
10°-20°	467.7	11.9
20°-30°	700.7	17.8
30°-40°	815.3	20.7
40°-50°	725.1	18.4
50°-60°	486.9	12.4
60°-70°	314.7	8.0
70°-80°	196.2	5.0
80°-90°	67.2	1.7
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°	1332.1	33.8
0°-40°	2147.4	54.5
0°-60°	3359.4	85.3
0°-90°	3937.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3937.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1726	1726	1726	1726	1726	
5°	1730	1726	1713	1726	1724	164
15°	1666	1662	1650	1660	1658	470
25°	1534	1528	1513	1522	1517	705
35°	1323	1317	1304	1304	1302	823
45°	963	959	944	931	933	736
55°	543	543	537	528	524	492
65°	315	318	313	311	309	316
75°	190	188	185	185	181	200
85°	62	64	62	60	58	68
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1726.2	1726.2	1726.2	1726.2	1726.2
2.5°	1732.6	1728.3	1715.5	1730.5	1728.3
5°	1730.5	1726.2	1713.4	1726.2	1724.1
7.5°	1719.8	1717.7	1702.8	1717.7	1713.4
10°	1704.9	1704.9	1690.0	1702.8	1698.5
12.5°	1687.8	1685.7	1672.9	1685.7	1683.6
15°	1666.5	1662.3	1649.5	1660.1	1658.0
17.5°	1638.8	1636.7	1621.8	1632.4	1628.2
20°	1606.9	1602.6	1589.8	1598.3	1594.1
22.5°	1572.8	1568.5	1555.7	1562.1	1560.0
25°	1534.4	1528.0	1513.1	1521.6	1517.3
27.5°	1487.5	1485.4	1470.5	1474.7	1470.5
30°	1436.4	1434.2	1423.6	1423.6	1419.3
32.5°	1381.0	1383.1	1366.0	1368.2	1359.6
35°	1323.4	1317.0	1304.2	1304.2	1302.1
37.5°	1251.0	1246.7	1236.0	1233.9	1231.8
40°	1170.0	1165.7	1150.8	1146.5	1146.5
42.5°	1074.1	1069.8	1054.9	1048.5	1040.0
45°	963.3	959.0	944.1	931.3	933.4
47.5°	839.7	843.9	829.0	818.3	816.2
50°	731.0	728.8	716.1	709.7	701.1
52.5°	626.5	628.7	618.0	613.8	603.1
55°	543.4	543.4	537.0	528.5	524.3
57.5°	468.8	473.1	466.7	462.4	458.2
60°	407.0	409.2	409.2	400.6	400.6
62.5°	355.9	358.0	355.9	351.6	351.6
65°	315.4	317.5	313.3	311.1	309.0
67.5°	279.2	281.3	279.2	277.0	272.8
70°	247.2	247.2	245.1	245.1	240.8
72.5°	219.5	217.4	215.2	215.2	213.1
75°	189.7	187.5	185.4	185.4	181.1
77.5°	159.8	157.7	157.7	153.4	151.3
80°	127.9	127.9	125.7	123.6	121.5
82.5°	98.0	95.9	93.8	91.6	89.5
85°	61.8	63.9	61.8	59.7	57.5
87.5°	27.7	29.8	29.8	29.8	27.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)