

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: P688756

Luminaire Tested: SQ4R-PH1-100D-93050-1-UNV-STD-W-4_3000K

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688756
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-93050-1-UNV-STD-W-4_3000K
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE HEX CONTINUOUS LENS.
1000 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3779.9 lumens
Efficiency: N/A
Efficacy: 81.6 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

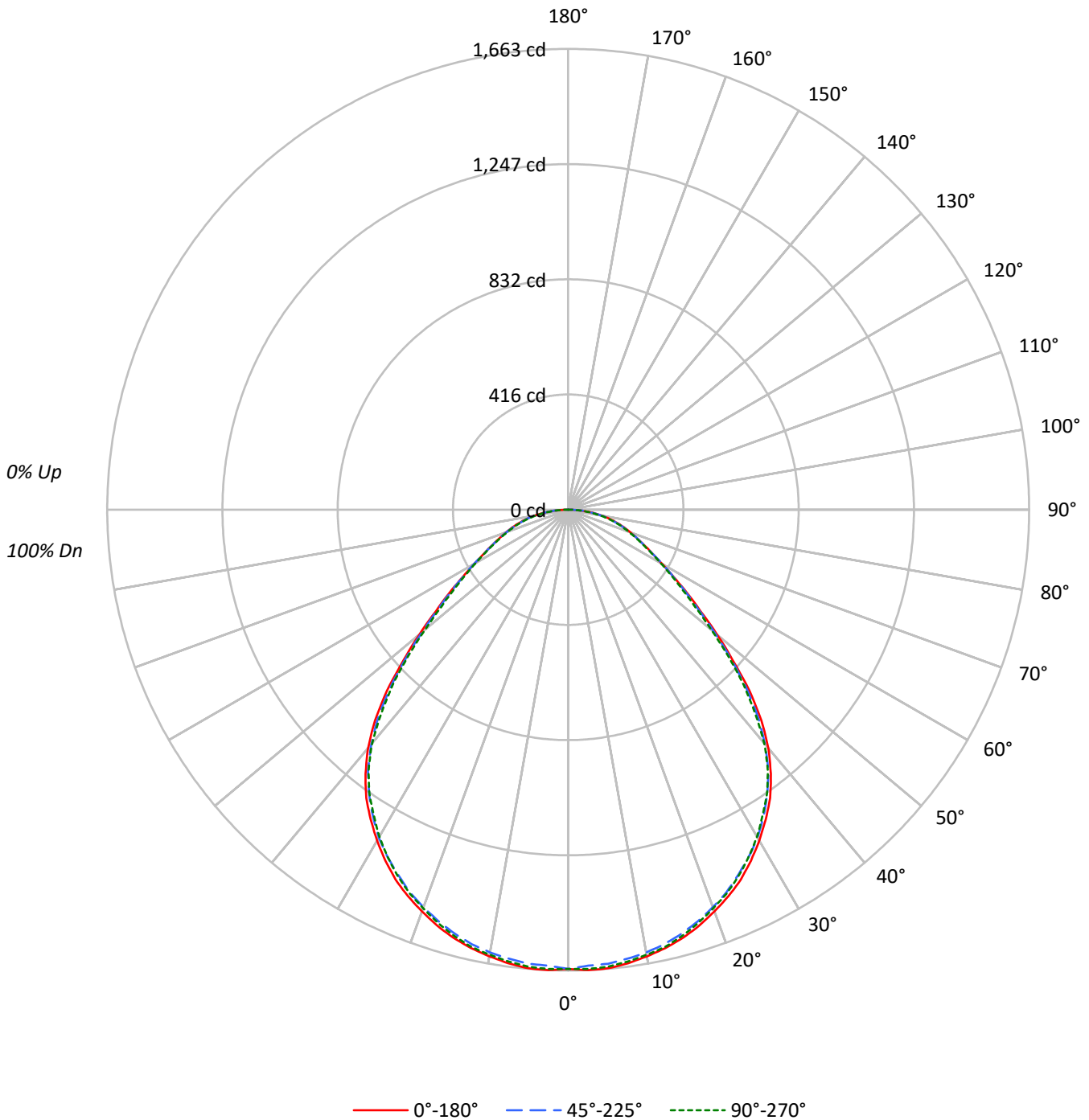
Input Watts (W): 46.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15953	15953	15953
5°	16054	15896	15994
10°	15999	15859	15940
15°	15945	15782	15863
20°	15803	15635	15677
25°	15646	15429	15473
30°	15328	15192	15147
35°	14931	14715	14691
40°	14115	13883	13832
45°	12590	12339	12199
50°	10510	10296	10081
55°	8757	8653	8448
60°	7523	7563	7405
65°	6898	6850	6757
70°	6680	6623	6508
75°	6774	6621	6469
80°	6803	6692	6464
85°	6550	6550	6097

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 12590 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.2	4.2
10°-20°	449.0	11.9
20°-30°	672.6	17.8
30°-40°	782.6	20.7
40°-50°	696.1	18.4
50°-60°	467.4	12.4
60°-70°	302.1	8.0
70°-80°	188.3	5.0
80°-90°	64.5	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°	1278.8	33.8
0°-40°	2061.4	54.5
0°-60°	3224.9	85.3
0°-90°	3779.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3779.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1657	1657	1657	1657	1657	
5°	1661	1657	1645	1657	1655	158
15°	1600	1596	1583	1594	1592	451
25°	1473	1467	1452	1461	1457	677
35°	1270	1264	1252	1252	1250	790
45°	925	921	906	894	896	707
55°	522	522	516	507	503	473
65°	303	305	301	299	297	303
75°	182	180	178	178	174	192
85°	59	61	59	57	55	66
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1657.1	1657.1	1657.1	1657.1	1657.1
2.5°	1663.2	1659.1	1646.8	1661.2	1659.1
5°	1661.2	1657.1	1644.8	1657.1	1655.0
7.5°	1650.9	1648.9	1634.6	1648.9	1644.8
10°	1636.6	1636.6	1622.3	1634.6	1630.5
12.5°	1620.2	1618.2	1605.9	1618.2	1616.1
15°	1599.8	1595.7	1583.4	1593.6	1591.6
17.5°	1573.2	1571.1	1556.8	1567.1	1563.0
20°	1542.5	1538.4	1526.1	1534.3	1530.2
22.5°	1509.8	1505.7	1493.4	1499.5	1497.5
25°	1472.9	1466.8	1452.5	1460.7	1456.6
27.5°	1427.9	1425.9	1411.6	1415.7	1411.6
30°	1378.8	1376.8	1366.6	1366.6	1362.5
32.5°	1325.7	1327.7	1311.3	1313.4	1305.2
35°	1270.4	1264.3	1252.0	1252.0	1250.0
37.5°	1200.9	1196.8	1186.5	1184.5	1182.4
40°	1123.1	1119.0	1104.7	1100.6	1100.6
42.5°	1031.1	1027.0	1012.7	1006.5	998.3
45°	924.7	920.6	906.3	894.0	896.0
47.5°	806.0	810.1	795.8	785.6	783.5
50°	701.7	699.6	687.4	681.2	673.1
52.5°	601.5	603.5	593.3	589.2	578.9
55°	521.7	521.7	515.5	507.3	503.3
57.5°	450.1	454.2	448.0	443.9	439.8
60°	390.7	392.8	392.8	384.6	384.6
62.5°	341.6	343.7	341.6	337.6	337.6
65°	302.8	304.8	300.7	298.7	296.6
67.5°	268.0	270.0	268.0	265.9	261.9
70°	237.3	237.3	235.3	235.3	231.2
72.5°	210.7	208.7	206.6	206.6	204.6
75°	182.1	180.0	178.0	178.0	173.9
77.5°	153.4	151.4	151.4	147.3	145.2
80°	122.7	122.7	120.7	118.7	116.6
82.5°	94.1	92.1	90.0	88.0	85.9
85°	59.3	61.4	59.3	57.3	55.2
87.5°	26.6	28.6	28.6	28.6	26.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)