

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: P688760

Luminaire Tested: SQ4R-PH1-100D-93050-1-UNV-STD-W-4_5000K

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688760
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_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: 4022.4 lumens
Efficiency: N/A
Efficacy: 87.1 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

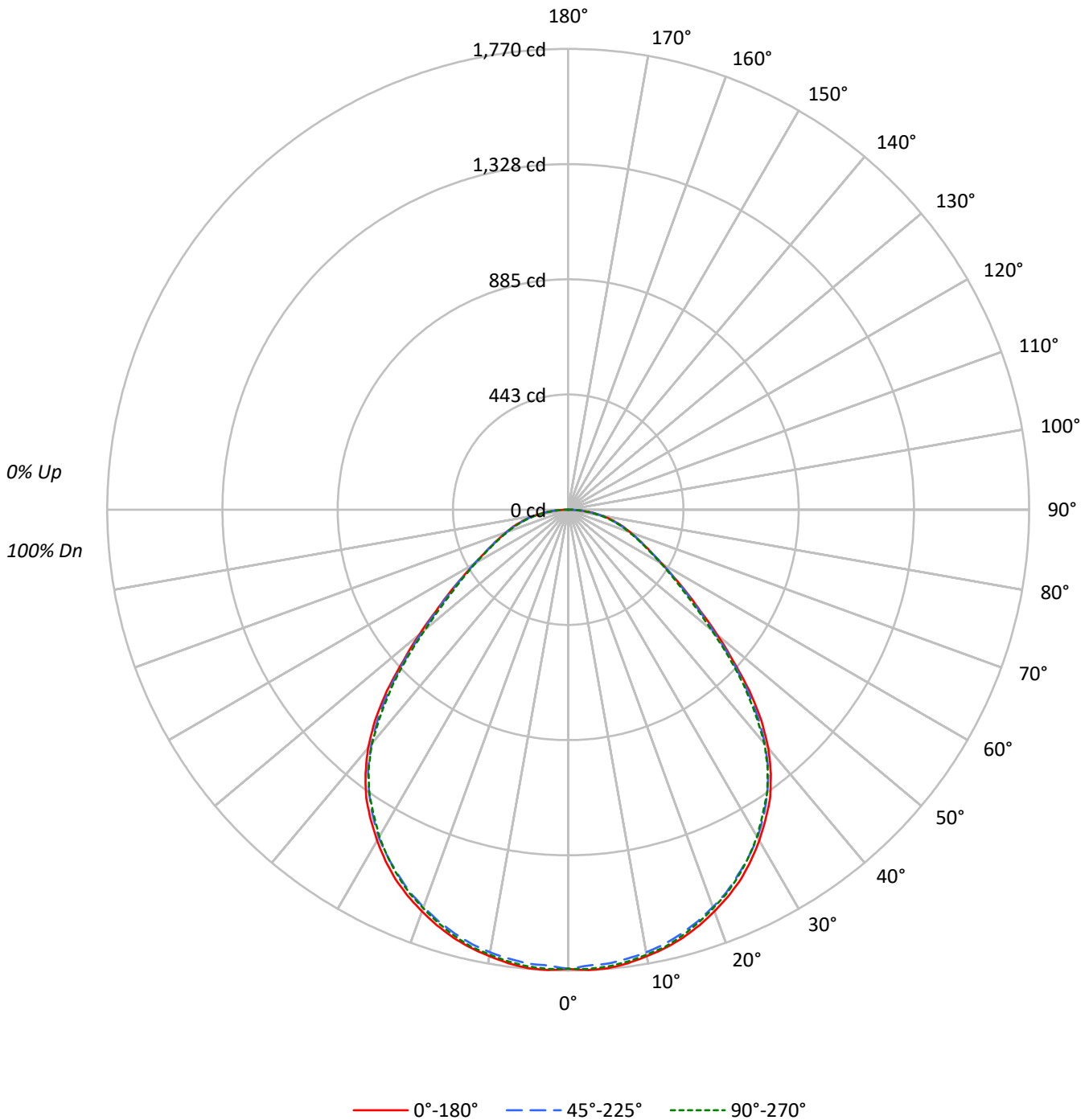
Input Watts (W): 46.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	16977	16977	16977
5°	17083	16915	17020
10°	17026	16877	16962
15°	16968	16794	16881
20°	16818	16639	16683
25°	16651	16419	16465
30°	16312	16167	16118
35°	15889	15658	15634
40°	15021	14774	14719
45°	13397	13130	12982
50°	11184	10956	10727
55°	9317	9208	8988
60°	8006	8048	7881
65°	7340	7290	7192
70°	7107	7048	6925
75°	7209	7045	6881
80°	7241	7119	6880
85°	6970	6970	6495

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 13397 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	167.2	4.2
10°-20°	477.8	11.9
20°-30°	715.8	17.8
30°-40°	832.9	20.7
40°-50°	740.7	18.4
50°-60°	497.4	12.4
60°-70°	321.5	8.0
70°-80°	200.4	5.0
80°-90°	68.7	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°	1360.8	33.8
0°-40°	2193.7	54.5
0°-60°	3431.8	85.3
0°-90°	4022.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4022.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1763	1763	1763	1763	1763	
5°	1768	1763	1750	1763	1761	168
15°	1702	1698	1685	1696	1694	480
25°	1568	1561	1546	1554	1550	721
35°	1352	1345	1332	1332	1330	840
45°	984	980	964	951	954	752
55°	555	555	549	540	536	503
65°	322	324	320	318	316	323
75°	194	192	189	189	185	204
85°	63	65	63	61	59	70
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1763.4	1763.4	1763.4	1763.4	1763.4
2.5°	1769.9	1765.6	1752.5	1767.7	1765.6
5°	1767.7	1763.4	1750.3	1763.4	1761.2
7.5°	1756.9	1754.7	1739.4	1754.7	1750.3
10°	1741.6	1741.6	1726.4	1739.4	1735.1
12.5°	1724.2	1722.0	1709.0	1722.0	1719.8
15°	1702.4	1698.1	1685.0	1695.9	1693.7
17.5°	1674.1	1672.0	1656.7	1667.6	1663.2
20°	1641.5	1637.1	1624.1	1632.8	1628.4
22.5°	1606.6	1602.3	1589.2	1595.8	1593.6
25°	1567.5	1560.9	1545.7	1554.4	1550.0
27.5°	1519.6	1517.4	1502.1	1506.5	1502.1
30°	1467.3	1465.1	1454.3	1454.3	1449.9
32.5°	1410.7	1412.9	1395.5	1397.7	1388.9
35°	1351.9	1345.4	1332.3	1332.3	1330.2
37.5°	1277.9	1273.6	1262.7	1260.5	1258.3
40°	1195.2	1190.8	1175.6	1171.2	1171.2
42.5°	1097.2	1092.9	1077.6	1071.1	1062.4
45°	984.0	979.7	964.4	951.4	953.5
47.5°	857.7	862.1	846.9	836.0	833.8
50°	746.7	744.5	731.5	724.9	716.2
52.5°	640.0	642.2	631.3	627.0	616.1
55°	555.1	555.1	548.6	539.9	535.5
57.5°	478.9	483.3	476.8	472.4	468.1
60°	415.8	418.0	418.0	409.3	409.3
62.5°	363.6	365.7	363.6	359.2	359.2
65°	322.2	324.4	320.0	317.8	315.7
67.5°	285.2	287.4	285.2	283.0	278.7
70°	252.5	252.5	250.4	250.4	246.0
72.5°	224.2	222.1	219.9	219.9	217.7
75°	193.8	191.6	189.4	189.4	185.0
77.5°	163.3	161.1	161.1	156.7	154.6
80°	130.6	130.6	128.4	126.3	124.1
82.5°	100.1	98.0	95.8	93.6	91.4
85°	63.1	65.3	63.1	61.0	58.8
87.5°	28.3	30.5	30.5	30.5	28.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)