

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: P688751

Luminaire Tested: SQ4R-PH1-100D-92765-1-UNV-STD-W-4\_4000K

Issue Date: 5/22/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P688751  
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\_4000K  
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE HEX CONTINUOUS LENS.  
1000 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3782.3 lumens  
Efficiency: N/A  
Efficacy: 81.9 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

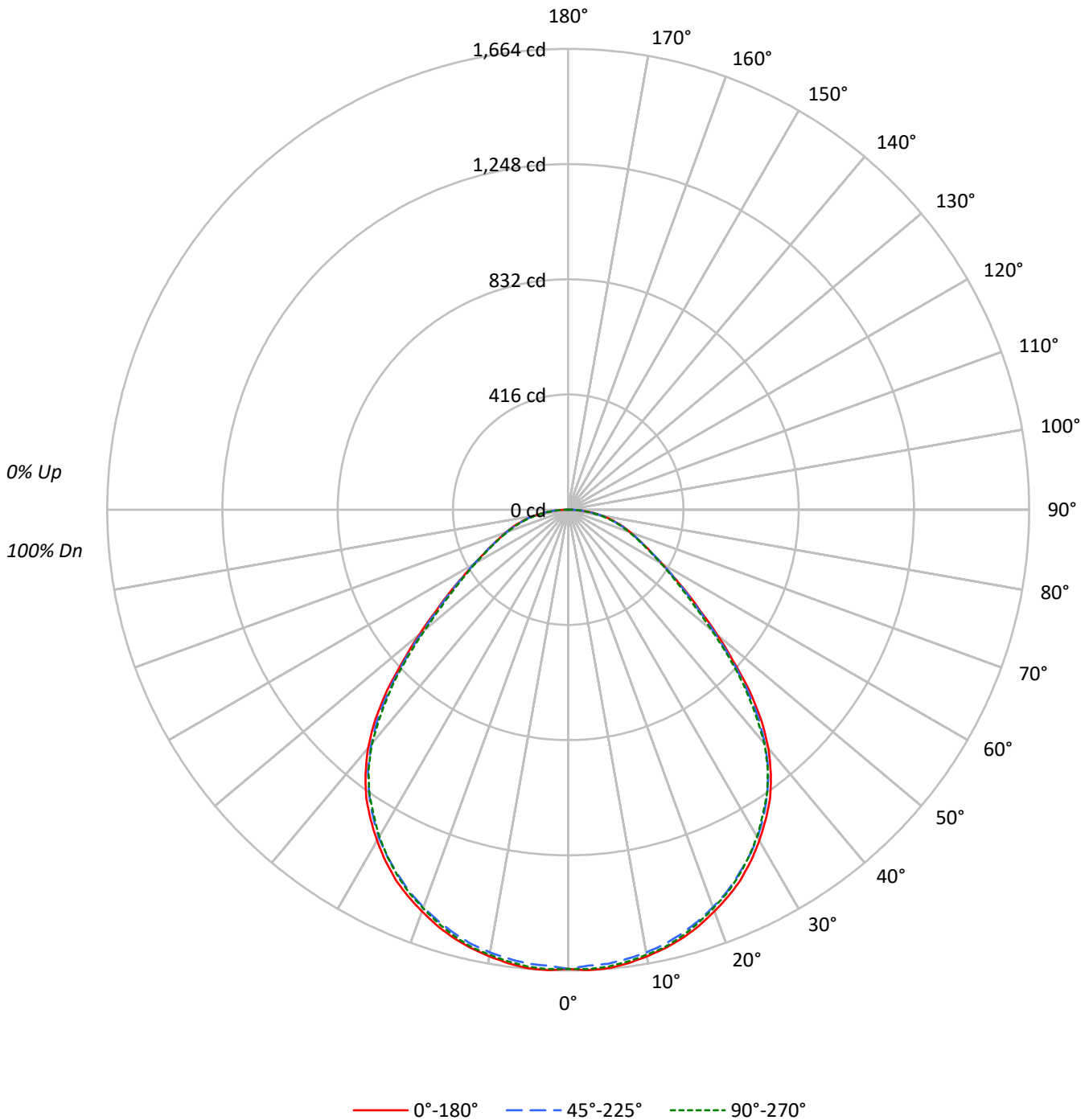
Input Watts (W): 46.2  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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°	15963	15963	15963
5°	16064	15906	16005
10°	16010	15869	15949
15°	15955	15792	15873
20°	15813	15645	15687
25°	15657	15439	15482
30°	15338	15201	15157
35°	14940	14724	14700
40°	14123	13892	13841
45°	12598	12348	12207
50°	10516	10302	10087
55°	8762	8659	8453
60°	7529	7567	7411
65°	6902	6855	6761
70°	6685	6626	6511
75°	6777	6625	6472
80°	6808	6697	6470
85°	6561	6561	6109

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 12598 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	157.3	4.2
10°-20°	449.3	11.9
20°-30°	673.1	17.8
30°-40°	783.1	20.7
40°-50°	696.5	18.4
50°-60°	467.7	12.4
60°-70°	302.3	8.0
70°-80°	188.4	5.0
80°-90°	64.6	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°	1279.6	33.8
0°-40°	2062.8	54.5
0°-60°	3227.0	85.3
0°-90°	3782.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3782.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1658	1658	1658	1658	1658	
5°	1662	1658	1646	1658	1656	158
15°	1601	1597	1584	1595	1593	451
25°	1474	1468	1453	1462	1458	678
35°	1271	1265	1253	1253	1251	790
45°	925	921	907	895	897	707
55°	522	522	516	508	504	473
65°	303	305	301	299	297	304
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°	1658.1	1658.1	1658.1	1658.1	1658.1
2.5°	1664.3	1660.2	1647.9	1662.2	1660.2
5°	1662.2	1658.1	1645.9	1658.1	1656.1
7.5°	1652.0	1649.9	1635.6	1649.9	1645.9
10°	1637.7	1637.7	1623.3	1635.6	1631.5
12.5°	1621.3	1619.2	1607.0	1619.2	1617.2
15°	1600.8	1596.7	1584.4	1594.7	1592.6
17.5°	1574.2	1572.2	1557.8	1568.1	1564.0
20°	1543.5	1539.4	1527.1	1535.3	1531.2
22.5°	1510.7	1506.7	1494.4	1500.5	1498.5
25°	1473.9	1467.8	1453.4	1461.6	1457.5
27.5°	1428.9	1426.8	1412.5	1416.6	1412.5
30°	1379.7	1377.7	1367.4	1367.4	1363.4
32.5°	1326.5	1328.6	1312.2	1314.2	1306.0
35°	1271.2	1265.1	1252.8	1252.8	1250.8
37.5°	1201.6	1197.5	1187.3	1185.3	1183.2
40°	1123.8	1119.8	1105.4	1101.3	1101.3
42.5°	1031.7	1027.6	1013.3	1007.2	999.0
45°	925.3	921.2	906.9	894.6	896.6
47.5°	806.5	810.6	796.3	786.1	784.0
50°	702.1	700.1	687.8	681.7	673.5
52.5°	601.8	603.9	593.7	589.6	579.3
55°	522.0	522.0	515.9	507.7	503.6
57.5°	450.4	454.5	448.3	444.2	440.1
60°	391.0	393.0	393.0	384.9	384.9
62.5°	341.9	343.9	341.9	337.8	337.8
65°	303.0	305.0	300.9	298.9	296.8
67.5°	268.2	270.2	268.2	266.1	262.0
70°	237.5	237.5	235.4	235.4	231.3
72.5°	210.8	208.8	206.8	206.8	204.7
75°	182.2	180.1	178.1	178.1	174.0
77.5°	153.5	151.5	151.5	147.4	145.3
80°	122.8	122.8	120.8	118.7	116.7
82.5°	94.2	92.1	90.1	88.0	86.0
85°	59.4	61.4	59.4	57.3	55.3
87.5°	26.6	28.7	28.7	28.7	26.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)