

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: P688514

Luminaire Tested: SQ4R-PH1-100D-840-1-UNV-STD-W-4

Issue Date: 5/22/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P688514  
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-840-1-UNV-STD-W-4  
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE HEX CONTINUOUS LENS.  
1000 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3697.7 lumens  
Efficiency: N/A  
Efficacy: 99.9 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

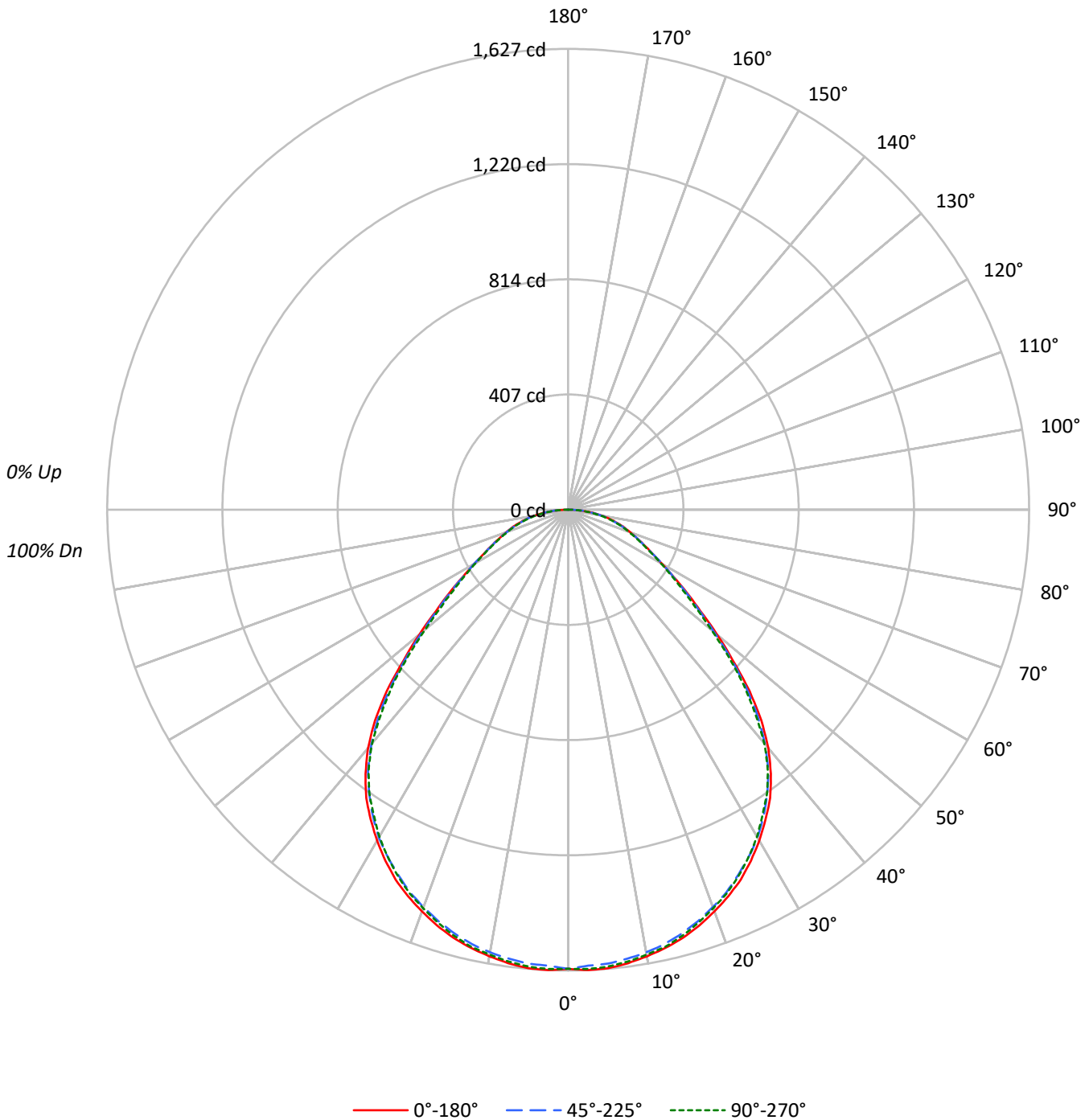
Input Watts (W): 37  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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°	15606	15606	15606
5°	15704	15550	15646
10°	15651	15514	15592
15°	15598	15439	15519
20°	15460	15296	15337
25°	15306	15094	15136
30°	14995	14862	14817
35°	14606	14395	14371
40°	13808	13582	13532
45°	12316	12071	11935
50°	10281	10071	9861
55°	8565	8465	8263
60°	7359	7398	7244
65°	6748	6702	6611
70°	6533	6477	6364
75°	6625	6476	6327
80°	6659	6548	6326
85°	6407	6407	5965

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 12316 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	153.7	4.2
10°-20°	439.2	11.9
20°-30°	658.0	17.8
30°-40°	765.6	20.7
40°-50°	681.0	18.4
50°-60°	457.2	12.4
60°-70°	295.5	8.0
70°-80°	184.2	5.0
80°-90°	63.1	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°	1251.0	33.8
0°-40°	2016.6	54.5
0°-60°	3154.8	85.3
0°-90°	3697.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3697.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1621	1621	1621	1621	1621	
5°	1625	1621	1609	1621	1619	154
15°	1565	1561	1549	1559	1557	441
25°	1441	1435	1421	1429	1425	662
35°	1243	1237	1225	1225	1223	773
45°	905	901	887	875	877	691
55°	510	510	504	496	492	462
65°	296	298	294	292	290	297
75°	178	176	174	174	170	187
85°	58	60	58	56	54	64
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1621.0	1621.0	1621.0	1621.0	1621.0
2.5°	1627.1	1623.0	1611.0	1625.0	1623.0
5°	1625.0	1621.0	1609.0	1621.0	1619.0
7.5°	1615.0	1613.0	1599.0	1613.0	1609.0
10°	1601.0	1601.0	1587.0	1599.0	1595.0
12.5°	1585.0	1583.0	1571.0	1583.0	1581.0
15°	1565.0	1561.0	1549.0	1559.0	1557.0
17.5°	1539.0	1537.0	1523.0	1533.0	1529.0
20°	1509.0	1505.0	1493.0	1501.0	1497.0
22.5°	1477.0	1473.0	1460.9	1466.9	1464.9
25°	1440.9	1434.9	1420.9	1428.9	1424.9
27.5°	1396.9	1394.9	1380.9	1384.9	1380.9
30°	1348.9	1346.9	1336.9	1336.9	1332.9
32.5°	1296.8	1298.8	1282.8	1284.8	1276.8
35°	1242.8	1236.8	1224.8	1224.8	1222.8
37.5°	1174.8	1170.8	1160.7	1158.7	1156.7
40°	1098.7	1094.7	1080.7	1076.7	1076.7
42.5°	1008.7	1004.6	990.6	984.6	976.6
45°	904.6	900.6	886.6	874.6	876.6
47.5°	788.5	792.5	778.5	768.5	766.5
50°	686.4	684.4	672.4	666.4	658.4
52.5°	588.4	590.4	580.4	576.4	566.4
55°	510.3	510.3	504.3	496.3	492.3
57.5°	440.3	444.3	438.3	434.3	430.3
60°	382.2	384.2	384.2	376.2	376.2
62.5°	334.2	336.2	334.2	330.2	330.2
65°	296.2	298.2	294.2	292.2	290.2
67.5°	262.2	264.2	262.2	260.2	256.2
70°	232.1	232.1	230.1	230.1	226.1
72.5°	206.1	204.1	202.1	202.1	200.1
75°	178.1	176.1	174.1	174.1	170.1
77.5°	150.1	148.1	148.1	144.1	142.1
80°	120.1	120.1	118.1	116.1	114.1
82.5°	92.1	90.1	88.1	86.1	84.1
85°	58.0	60.0	58.0	56.0	54.0
87.5°	26.0	28.0	28.0	28.0	26.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)