

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: P688757

Luminaire Tested: SQ4R-PH1-100D-93050-1-UNV-STD-W-4_3500K

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688757
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_3500K
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE HEX CONTINUOUS LENS.
1000 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3874.9 lumens
Efficiency: N/A
Efficacy: 83.3 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

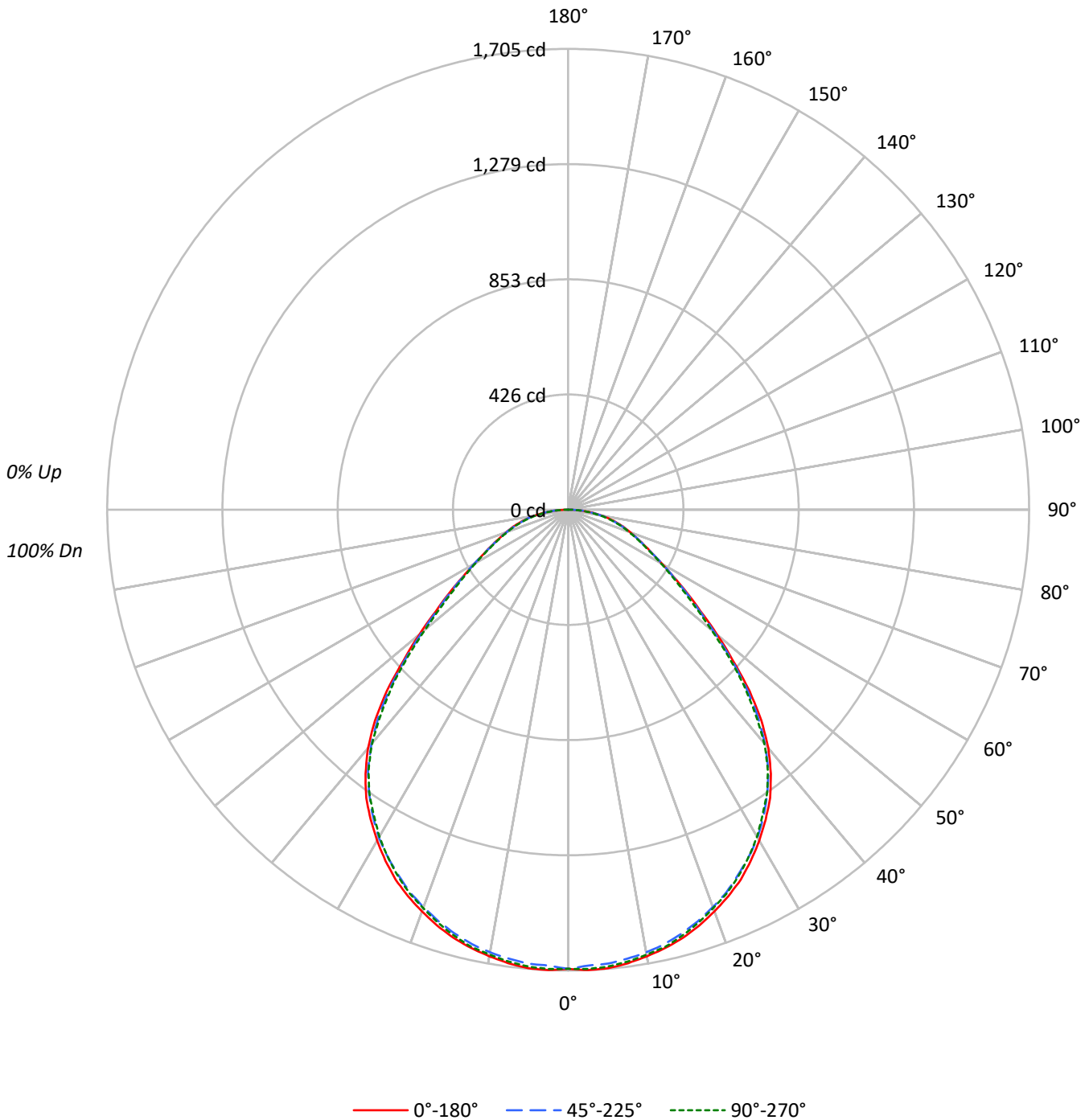
Input Watts (W): 46.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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				
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°	16354	16354	16354
5°	16457	16295	16396
10°	16401	16258	16340
15°	16346	16178	16262
20°	16201	16029	16072
25°	16040	15817	15862
30°	15713	15573	15527
35°	15306	15085	15060
40°	14470	14233	14180
45°	12906	12650	12507
50°	10773	10555	10334
55°	8976	8871	8659
60°	7713	7754	7592
65°	7071	7023	6927
70°	6849	6789	6671
75°	6941	6788	6632
80°	6975	6858	6625
85°	6716	6716	6252

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 12906 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	161.1	4.2
10°-20°	460.3	11.9
20°-30°	689.5	17.8
30°-40°	802.3	20.7
40°-50°	713.6	18.4
50°-60°	479.2	12.4
60°-70°	309.7	8.0
70°-80°	193.1	5.0
80°-90°	66.2	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°	1310.9	33.8
0°-40°	2113.2	54.5
0°-60°	3306.0	85.3
0°-90°	3874.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3874.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1699	1699	1699	1699	1699	
5°	1703	1699	1686	1699	1697	162
15°	1640	1636	1623	1634	1632	462
25°	1510	1504	1489	1497	1493	694
35°	1302	1296	1284	1284	1281	810
45°	948	944	929	916	919	725
55°	535	535	528	520	516	485
65°	310	312	308	306	304	311
75°	187	185	182	182	178	196
85°	61	63	61	59	57	67
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1698.7	1698.7	1698.7	1698.7	1698.7
2.5°	1705.0	1700.8	1688.2	1702.9	1700.8
5°	1702.9	1698.7	1686.1	1698.7	1696.6
7.5°	1692.4	1690.3	1675.6	1690.3	1686.1
10°	1677.7	1677.7	1663.1	1675.6	1671.5
12.5°	1661.0	1658.9	1646.3	1658.9	1656.8
15°	1640.0	1635.8	1623.2	1633.7	1631.6
17.5°	1612.7	1610.6	1596.0	1606.4	1602.2
20°	1581.3	1577.1	1564.5	1572.9	1568.7
22.5°	1547.7	1543.5	1530.9	1537.2	1535.1
25°	1510.0	1503.7	1489.0	1497.4	1493.2
27.5°	1463.8	1461.7	1447.1	1451.2	1447.1
30°	1413.5	1411.4	1400.9	1400.9	1396.7
32.5°	1359.0	1361.1	1344.3	1346.4	1338.0
35°	1302.3	1296.1	1283.5	1283.5	1281.4
37.5°	1231.0	1226.9	1216.4	1214.3	1212.2
40°	1151.4	1147.2	1132.5	1128.3	1128.3
42.5°	1057.0	1052.8	1038.1	1031.8	1023.4
45°	947.9	943.7	929.1	916.5	918.6
47.5°	826.3	830.5	815.8	805.3	803.2
50°	719.3	717.2	704.7	698.4	690.0
52.5°	616.6	618.7	608.2	604.0	593.5
55°	534.8	534.8	528.5	520.1	515.9
57.5°	461.4	465.6	459.3	455.1	450.9
60°	400.6	402.7	402.7	394.3	394.3
62.5°	350.2	352.3	350.2	346.0	346.0
65°	310.4	312.5	308.3	306.2	304.1
67.5°	274.7	276.8	274.7	272.6	268.4
70°	243.3	243.3	241.2	241.2	237.0
72.5°	216.0	213.9	211.8	211.8	209.7
75°	186.6	184.6	182.5	182.5	178.3
77.5°	157.3	155.2	155.2	151.0	148.9
80°	125.8	125.8	123.7	121.6	119.5
82.5°	96.5	94.4	92.3	90.2	88.1
85°	60.8	62.9	60.8	58.7	56.6
87.5°	27.3	29.4	29.4	29.4	27.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)