

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: P688752

Luminaire Tested: SQ4R-PH1-100D-92765-1-UNV-STD-W-4_4500K

Issue Date: 5/22/2023

Test Information

Test Method: LM-79-2019
Report Number: P688752
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_4500K
Description: CORELITE SQ4R RECESSED LED LUMINAIRE WITH PERCEIVE HEX CONTINUOUS LENS.
1000 LUMENS PER FOOT
Light Source: 4500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3861.7 lumens
Efficiency: N/A
Efficacy: 83.4 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

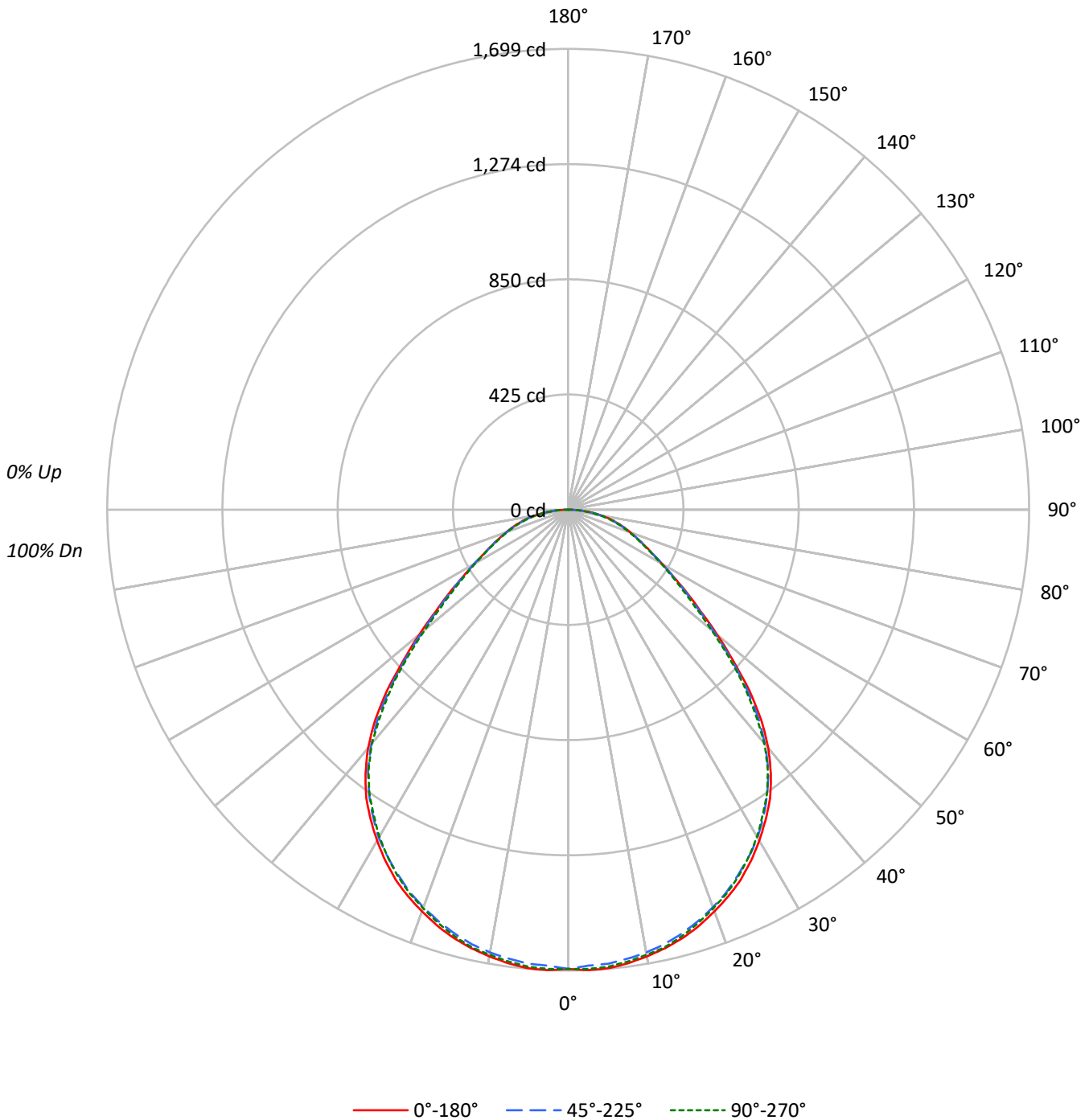
Input Watts (W): 46.3
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	16299	16299	16299
5°	16401	16240	16341
10°	16346	16203	16285
15°	16290	16124	16207
20°	16145	15974	16017
25°	15985	15763	15807
30°	15660	15521	15474
35°	15254	15033	15008
40°	14420	14184	14132
45°	12862	12606	12463
50°	10737	10519	10299
55°	8946	8841	8631
60°	7686	7727	7565
65°	7046	6998	6905
70°	6823	6767	6649
75°	6919	6762	6610
80°	6952	6836	6603
85°	6694	6694	6230

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 12862 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.6	4.2
10°-20°	458.7	11.9
20°-30°	687.2	17.8
30°-40°	799.6	20.7
40°-50°	711.2	18.4
50°-60°	477.5	12.4
60°-70°	308.7	8.0
70°-80°	192.4	5.0
80°-90°	65.9	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°	1306.5	33.8
0°-40°	2106.1	54.5
0°-60°	3294.7	85.3
0°-90°	3861.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3861.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1693	1693	1693	1693	1693	
5°	1697	1693	1680	1693	1691	161
15°	1634	1630	1618	1628	1626	461
25°	1505	1499	1484	1492	1488	692
35°	1298	1292	1279	1279	1277	807
45°	945	940	926	913	915	722
55°	533	533	527	518	514	483
65°	309	311	307	305	303	310
75°	186	184	182	182	178	196
85°	61	63	61	58	56	67
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1693.0	1693.0	1693.0	1693.0	1693.0
2.5°	1699.2	1695.0	1682.5	1697.1	1695.0
5°	1697.1	1693.0	1680.4	1693.0	1690.9
7.5°	1686.7	1684.6	1670.0	1684.6	1680.4
10°	1672.1	1672.1	1657.4	1670.0	1665.8
12.5°	1655.3	1653.2	1640.7	1653.2	1651.2
15°	1634.4	1630.3	1617.7	1628.2	1626.1
17.5°	1607.3	1605.2	1590.5	1601.0	1596.8
20°	1575.9	1571.7	1559.2	1567.5	1563.4
22.5°	1542.5	1538.3	1525.7	1532.0	1529.9
25°	1504.8	1498.6	1483.9	1492.3	1488.1
27.5°	1458.9	1456.8	1442.1	1446.3	1442.1
30°	1408.7	1406.6	1396.2	1396.2	1392.0
32.5°	1354.4	1356.5	1339.7	1341.8	1333.5
35°	1297.9	1291.7	1279.1	1279.1	1277.0
37.5°	1226.9	1222.7	1212.2	1210.1	1208.1
40°	1147.4	1143.3	1128.6	1124.5	1124.5
42.5°	1053.4	1049.2	1034.6	1028.3	1020.0
45°	944.7	940.5	925.9	913.4	915.4
47.5°	823.5	827.7	813.0	802.6	800.5
50°	716.9	714.8	702.3	696.0	687.6
52.5°	614.5	616.6	606.1	601.9	591.5
55°	533.0	533.0	526.7	518.3	514.2
57.5°	459.8	464.0	457.7	453.5	449.4
60°	399.2	401.3	401.3	392.9	392.9
62.5°	349.0	351.1	349.0	344.9	344.9
65°	309.3	311.4	307.2	305.1	303.1
67.5°	273.8	275.9	273.8	271.7	267.5
70°	242.4	242.4	240.4	240.4	236.2
72.5°	215.3	213.2	211.1	211.1	209.0
75°	186.0	183.9	181.8	181.8	177.7
77.5°	156.8	154.7	154.7	150.5	148.4
80°	125.4	125.4	123.3	121.2	119.1
82.5°	96.1	94.1	92.0	89.9	87.8
85°	60.6	62.7	60.6	58.5	56.4
87.5°	27.2	29.3	29.3	29.3	27.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)