

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: P845502

Luminaire Tested: SQ2R-FA-075D-930-UNV-STD-W-4

Issue Date: 6/14/2024

Test Information

Test Method: LM-79-2019
Report Number: P845502
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2308-131-11)
Test Lab: INNOVATION CENTER
Issue Date: 6/14/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2R-FA-075D-930-UNV-STD-W-4
Description: CONTINUA SQ2 RECESSED, ASYMMETRIC LENS
750 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

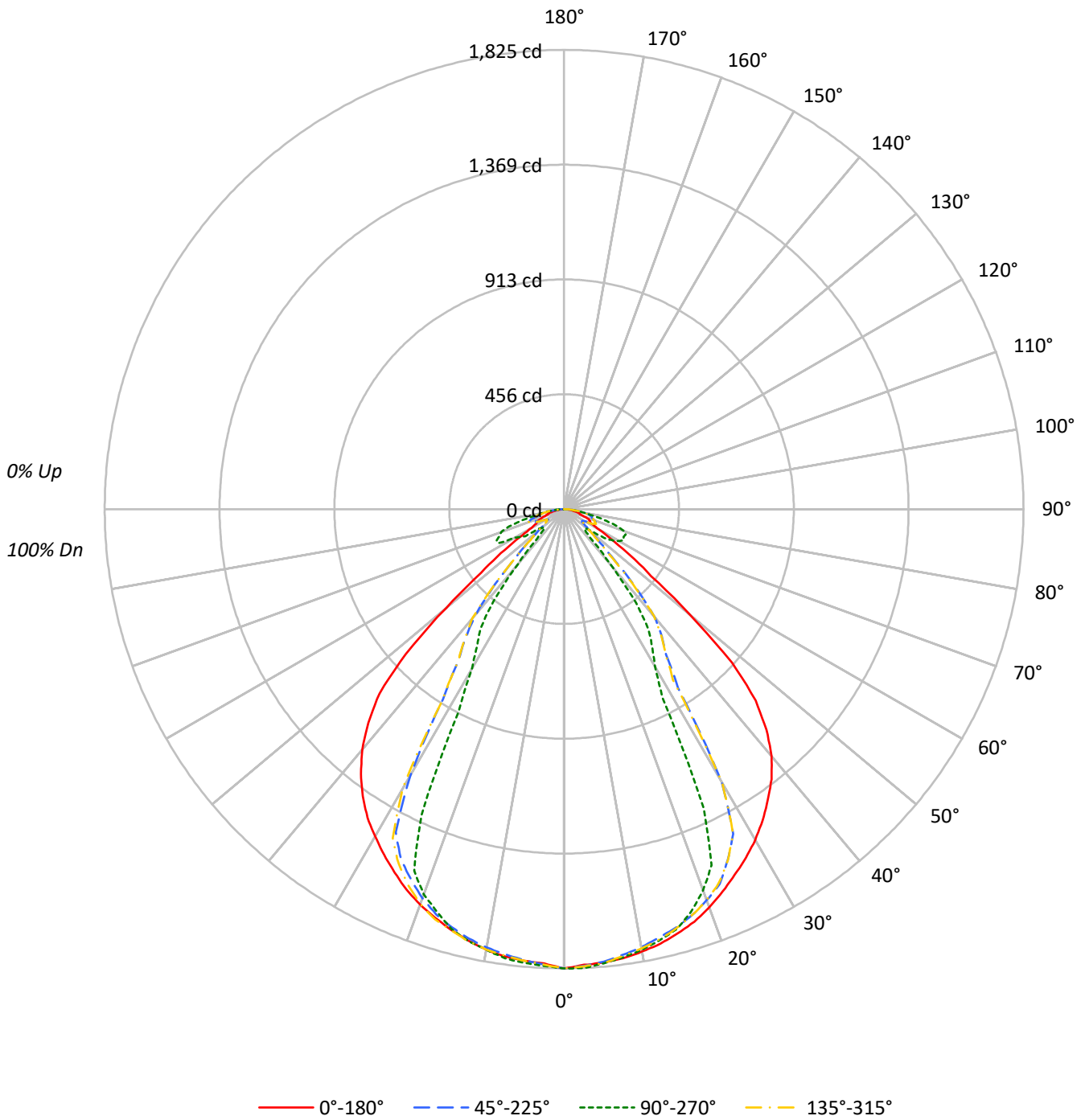
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2662.9 lumens
Efficiency: N/A
Efficacy: 99.7 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 0.95 / 0.93
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 26.7
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	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	94	92	90	88				88
2	103	97	91	87	101	95	90	86	92	87	84	88	85	82	86	83	80	78				78
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70				70
4	90	80	73	68	88	79	72	67	77	71	66	75	70	66	73	68	65	63				63
5	84	74	66	61	82	73	66	61	71	65	60	69	64	59	67	63	59	57				57
6	79	68	61	55	77	67	60	55	65	59	55	64	58	54	62	58	54	52				52
7	74	63	56	50	73	62	55	50	61	55	50	60	54	50	58	53	49	48				48
8	70	59	51	46	69	58	51	46	57	50	46	56	50	46	55	49	46	44				44
9	66	55	48	43	65	54	47	43	53	47	43	52	46	42	51	46	42	41				41
10	63	51	44	40	61	51	44	40	50	44	40	49	43	39	48	43	39	38				38

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	29471	29471	29471	29471
5°	29315	29360	29204	29337
10°	29270	29158	29158	29158
15°	29175	28876	28946	28876
20°	28950	27720	28737	27979
25°	28568	23395	28372	23885
30°	28307	13422	27999	13602
35°	27809	11531	27457	11369
40°	27040	6064	26285	6005
45°	24578	2610	23699	2610
50°	16216	3147	15388	2939
55°	9067	5813	8602	5270
60°	4889	8179	4802	7333
65°	4313	9941	4523	11308
70°	4027	11892	3833	12543
75°	3780	10218	3861	10561
80°	3199	7299	3199	7680
85°	2797	4076	2556	4854

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 24578 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	171.9	6.5
10°-20°	487.8	18.3
20°-30°	667.2	25.1
30°-40°	558.8	21.0
40°-50°	313.2	11.8
50°-60°	166.1	6.2
60°-70°	154.9	5.8
70°-80°	113.9	4.3
80°-90°	29.1	1.1
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°	1326.9	49.8
0°-40°	1885.7	70.8
0°-60°	2365.0	88.8
0°-90°	2662.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2662.9	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1825	1825	1825	1825	1825	
5°	1809	1812	1802	1810	1809	172
15°	1745	1728	1732	1728	1745	492
25°	1604	1313	1593	1341	1604	740
35°	1411	585	1393	577	1411	882
45°	1076	114	1038	114	1076	794
55°	322	206	306	187	322	304
65°	113	260	118	296	113	113
75°	61	164	62	169	61	62
85°	15	22	14	26	15	17
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	1825.3	1825.3	1825.3	1825.3	1825.3	1825.3	1825.3	1825.3	1825.3	1825.3	1825.3
2.5°	1812.9	1847.3	1817.0	1812.9	1825.3	1822.5	1818.4	1834.9	1807.4	1834.9	1812.9
5°	1808.7	1840.4	1804.6	1795.0	1811.5	1800.5	1810.1	1829.4	1801.9	1826.6	1799.1
7.5°	1800.5	1829.4	1786.7	1779.8	1796.4	1786.7	1790.9	1817.0	1793.6	1810.1	1785.3
10°	1785.3	1810.1	1767.5	1763.3	1778.5	1768.8	1773.0	1800.5	1778.5	1793.6	1768.8
12.5°	1768.8	1786.7	1744.1	1742.7	1755.1	1749.6	1750.9	1773.0	1756.4	1771.6	1748.2
15°	1745.4	1763.3	1720.7	1713.8	1727.5	1722.0	1724.8	1745.4	1731.7	1741.3	1720.7
17.5°	1719.3	1733.0	1691.7	1676.6	1678.0	1684.9	1691.7	1716.5	1702.8	1715.1	1689.0
20°	1684.9	1701.4	1654.6	1616.0	1613.3	1620.2	1654.6	1679.4	1672.5	1686.2	1644.9
22.5°	1644.9	1654.6	1613.3	1541.7	1530.7	1537.6	1607.8	1638.1	1636.7	1644.9	1591.3
25°	1603.6	1614.7	1537.6	1446.7	1313.2	1438.5	1540.3	1592.6	1592.6	1600.9	1533.4
27.5°	1562.4	1565.1	1455.0	974.6	842.4	934.7	1452.2	1537.6	1548.6	1547.2	1448.1
30°	1518.3	1508.7	1254.0	750.2	719.9	739.2	1255.4	1479.8	1501.8	1486.6	1222.3
32.5°	1467.4	1435.7	843.8	674.5	651.1	667.6	805.3	1410.9	1453.6	1416.4	896.1
35°	1410.9	1339.4	706.2	609.8	585.0	607.0	700.6	1316.0	1393.0	1304.9	729.6
37.5°	1353.1	1117.7	637.3	518.9	469.4	510.7	634.6	1113.6	1325.6	1066.8	640.1
40°	1282.9	827.3	558.9	356.5	287.7	335.9	554.7	788.7	1247.1	850.7	545.1
42.5°	1189.3	699.3	421.2	194.1	148.7	174.8	399.2	688.3	1150.8	706.2	406.1
45°	1076.4	622.2	265.7	123.9	114.3	119.8	245.0	611.2	1037.9	597.4	271.2
47.5°	904.4	499.7	180.3	104.6	112.9	104.6	174.8	484.5	853.4	474.9	180.3
50°	645.6	370.3	132.1	106.0	125.3	106.0	128.0	357.9	612.6	392.3	130.8
52.5°	436.4	296.0	101.9	118.4	156.9	121.1	99.1	289.1	414.3	298.7	95.0
55°	322.1	245.0	86.7	152.8	206.5	156.9	86.7	238.1	305.6	235.4	84.0
57.5°	217.5	192.7	85.3	194.1	231.3	198.2	86.7	185.8	207.9	187.2	75.7
60°	151.4	144.5	97.7	209.2	253.3	212.0	99.1	139.0	148.7	137.7	82.6
62.5°	118.4	106.0	122.5	231.3	265.7	223.0	125.3	100.5	125.3	95.0	93.6
65°	112.9	73.0	139.0	229.9	260.2	229.9	140.4	68.8	118.4	74.3	123.9
67.5°	106.0	55.1	136.3	227.1	264.3	229.9	132.1	52.3	101.9	50.9	121.1
70°	85.3	48.2	126.6	232.6	251.9	224.4	126.6	46.8	81.2	45.4	148.7
72.5°	67.4	45.4	115.6	210.6	216.1	202.3	117.0	45.4	68.8	39.9	137.7
75°	60.6	45.4	112.9	172.1	163.8	163.8	110.1	44.0	61.9	41.3	108.7
77.5°	48.2	41.3	97.7	119.8	112.9	112.9	96.4	39.9	45.4	37.2	92.2
80°	34.4	37.2	77.1	82.6	78.5	78.5	74.3	35.8	34.4	34.4	73.0
82.5°	24.8	30.3	55.1	55.1	52.3	50.9	53.7	30.3	24.8	27.5	52.3
85°	15.1	22.0	31.7	26.2	22.0	20.6	30.3	20.6	13.8	20.6	30.3
87.5°	6.9	12.4	5.5	5.5	5.5	5.5	5.5	12.4	6.9	11.0	6.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	247.5°	270°	292.5°	315°	337.5°	360°
0°	1825.3	1825.3	1825.3	1825.3	1825.3	1825.3
2.5°	1807.4	1817.0	1817.0	1811.5	1839.0	1812.9
5°	1792.2	1810.1	1801.9	1801.9	1829.4	1808.7
7.5°	1782.6	1800.5	1792.2	1789.5	1817.0	1800.5
10°	1766.1	1778.5	1773.0	1777.1	1801.9	1785.3
12.5°	1742.7	1757.8	1752.3	1759.2	1781.2	1768.8
15°	1715.1	1727.5	1730.3	1733.0	1759.2	1745.4
17.5°	1672.5	1678.0	1693.1	1708.3	1734.4	1719.3
20°	1620.2	1628.4	1636.7	1669.7	1701.4	1684.9
22.5°	1561.0	1555.5	1577.5	1617.4	1658.7	1644.9
25°	1446.7	1340.7	1457.7	1555.5	1607.8	1603.6
27.5°	1062.7	908.5	1043.4	1474.3	1556.8	1562.4
30°	792.9	729.6	791.5	1281.5	1499.0	1518.3
32.5°	681.4	642.8	674.5	898.9	1426.1	1467.4
35°	607.0	576.8	607.0	729.6	1325.6	1410.9
37.5°	517.6	459.8	518.9	647.0	1121.9	1353.1
40°	363.4	284.9	352.4	564.4	847.9	1282.9
42.5°	212.0	158.3	198.2	414.3	702.0	1189.3
45°	130.8	114.3	125.3	268.4	594.7	1076.4
47.5°	103.2	106.0	103.2	178.9	473.5	904.4
50°	97.7	117.0	97.7	130.8	377.2	645.6
52.5°	108.7	129.4	107.4	96.4	291.8	436.4
55°	119.8	187.2	121.1	84.0	227.1	322.1
57.5°	170.7	206.5	173.4	78.5	185.8	217.5
60°	176.2	227.1	174.8	84.0	136.3	151.4
62.5°	216.1	294.6	216.1	99.1	92.2	118.4
65°	268.4	296.0	271.2	122.5	71.6	112.9
67.5°	256.0	276.7	253.3	126.6	49.6	106.0
70°	250.5	265.7	247.8	150.0	45.4	85.3
72.5°	229.9	228.5	224.4	136.3	39.9	67.4
75°	181.7	169.3	174.8	119.8	41.3	60.6
77.5°	119.8	114.3	115.6	95.0	37.2	48.2
80°	85.3	82.6	81.2	77.1	34.4	34.4
82.5°	57.8	55.1	53.7	55.1	27.5	24.8
85°	28.9	26.2	24.8	34.4	20.6	15.1
87.5°	6.9	6.9	5.5	6.9	9.6	6.9
90°	0.0	0.0	0.0	0.0	0.0	0.0



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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	15.74	17.05	16.10	17.36	17.67	14.58	15.89	14.95	16.20	16.52
	3H	16.46	17.63	16.84	17.96	18.32	20.78	21.95	21.16	22.28	22.65
	4H	16.89	17.98	17.29	18.33	18.71	22.08	23.18	22.48	23.53	23.91
	6H	17.26	18.27	17.68	18.64	19.03	22.71	23.72	23.12	24.09	24.48
	8H	17.39	18.35	17.82	18.74	19.14	22.84	23.80	23.27	24.19	24.60
	12H	17.48	18.39	17.91	18.77	19.20	22.90	23.81	23.33	24.19	24.62
4H	2H	16.18	17.27	16.58	17.62	18.01	15.16	16.26	15.57	16.61	16.99
	3H	17.20	18.11	17.61	18.51	18.91	21.54	22.45	21.95	22.85	23.25
	4H	17.77	18.59	18.20	19.01	19.45	23.00	23.82	23.43	24.24	24.68
	6H	18.27	18.98	18.73	19.42	19.89	23.76	24.47	24.22	24.91	25.38
	8H	18.44	19.11	18.91	19.55	20.02	23.93	24.59	24.40	25.04	25.51
	12H	18.58	19.17	19.06	19.65	20.12	24.01	24.60	24.50	25.08	25.55
8H	4H	18.90	19.56	19.37	20.01	20.48	23.15	23.81	23.62	24.26	24.73
	6H	19.52	20.07	20.02	20.56	21.04	24.04	24.58	24.54	25.08	25.56
	8H	19.76	20.24	20.28	20.76	21.25	24.29	24.77	24.81	25.29	25.78
	12H	19.95	20.38	20.47	20.87	21.44	24.43	24.86	24.95	25.35	25.92
12H	4H	19.07	19.65	19.55	20.14	20.61	23.13	23.72	23.61	24.20	24.67
	6H	19.80	20.28	20.32	20.80	21.29	24.05	24.53	24.57	25.05	25.54
	8H	20.12	20.54	20.63	21.04	21.61	24.35	24.78	24.86	25.27	25.84