

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: P845504

Luminaire Tested: SQ2R-FA-075D-940-UNV-STD-W-4

Issue Date: 6/14/2024

Test Information

Test Method: LM-79-2019
Report Number: P845504
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-940-UNV-STD-W-4
Description: CONTINUA SQ2 RECESSED, ASYMMETRIC LENS
750 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

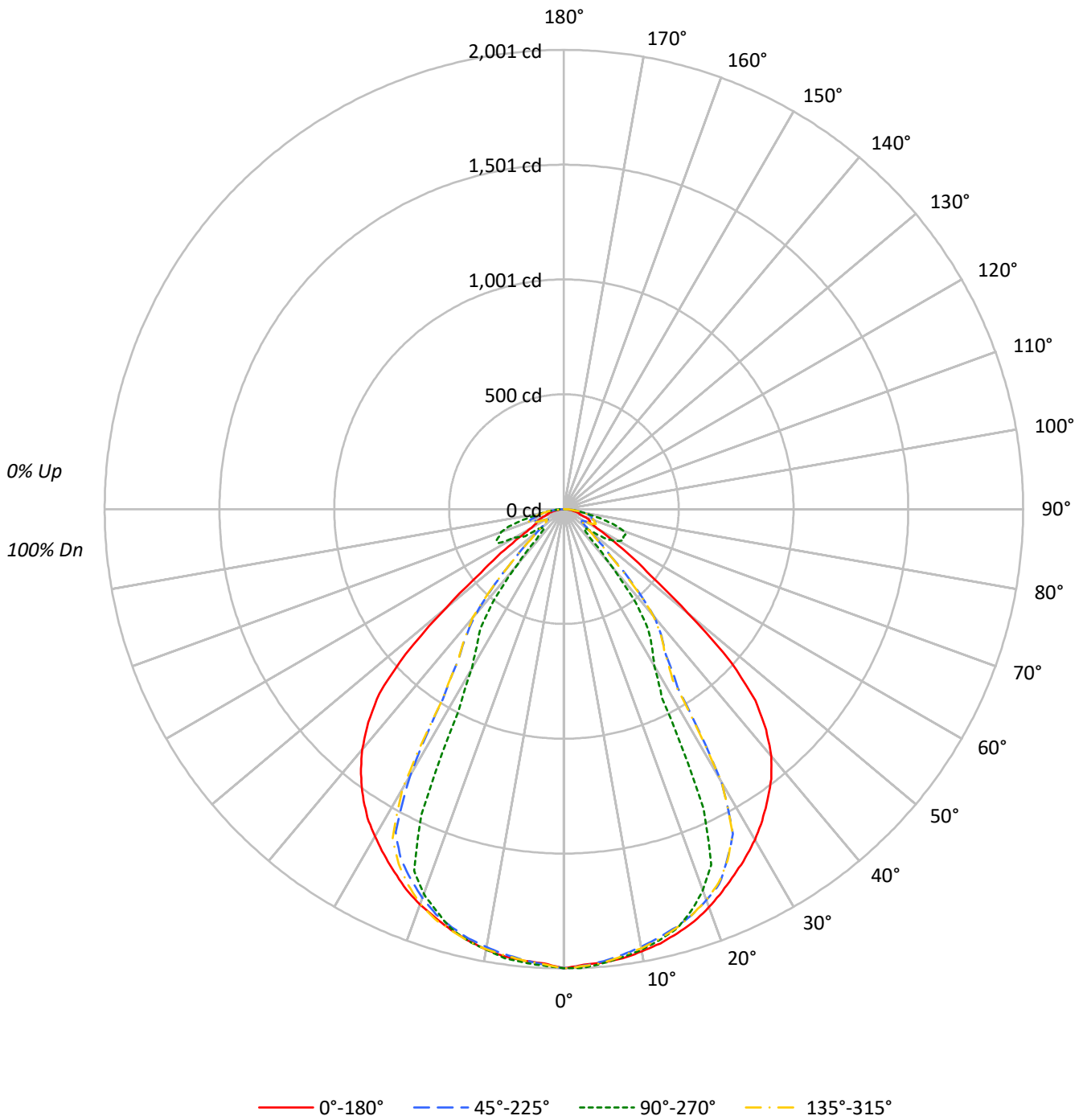
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2918.7 lumens
Efficiency: N/A
Efficacy: 109.3 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				
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	94	92	90	88				
2	103	97	91	87	101	95	90	86	92	87	84	88	85	82	86	83	80	78				
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70				
4	90	80	73	68	88	79	72	67	77	71	66	75	70	66	73	68	65	63				
5	84	74	66	61	82	73	66	61	71	65	60	69	64	59	67	63	59	57				
6	79	68	61	55	77	67	60	55	65	59	55	64	58	54	62	58	54	52				
7	74	63	56	50	73	62	55	50	61	55	50	60	54	50	58	53	49	48				
8	70	59	51	46	69	58	51	46	57	50	46	56	50	46	55	49	46	44				
9	66	55	48	43	65	54	47	43	53	47	43	52	46	42	51	46	42	41				
10	63	51	44	40	61	51	44	40	50	44	40	49	43	39	48	43	39	38				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	32301	32301	32301	32301
5°	32131	32180	32008	32156
10°	32082	31959	31959	31959
15°	31978	31649	31726	31649
20°	31730	30381	31496	30667
25°	31313	25641	31098	26179
30°	31025	14712	30687	14907
35°	30480	12638	30094	12461
40°	29636	6646	28810	6582
45°	26939	2859	25976	2859
50°	17774	3449	16865	3220
55°	9937	6370	9427	5776
60°	5360	8964	5260	8037
65°	4726	10892	4955	12393
70°	4414	13034	4201	13747
75°	4142	11198	4236	11578
80°	3505	7996	3505	8415
85°	3075	4465	2797	5317

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 26939 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	188.4	6.5
10°-20°	534.6	18.3
20°-30°	731.3	25.1
30°-40°	612.5	21.0
40°-50°	343.3	11.8
50°-60°	182.0	6.2
60°-70°	169.8	5.8
70°-80°	124.8	4.3
80°-90°	31.9	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°	1454.4	49.8
0°-40°	2066.8	70.8
0°-60°	2592.2	88.8
0°-90°	2918.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2918.7	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	2001	2001	2001	2001	2001	
5°	1982	1986	1975	1984	1982	188
15°	1913	1893	1898	1893	1913	540
25°	1758	1439	1746	1470	1758	811
35°	1546	641	1527	632	1546	966
45°	1180	125	1138	125	1180	870
55°	353	226	335	205	353	333
65°	124	285	130	324	124	124
75°	66	180	68	186	66	68
85°	17	24	15	29	17	19
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°	2000.6	2000.6	2000.6	2000.6	2000.6	2000.6	2000.6	2000.6	2000.6	2000.6	2000.6
2.5°	1987.0	2024.7	1991.5	1987.0	2000.6	1997.5	1993.0	2011.1	1980.9	2011.1	1987.0
5°	1982.5	2017.2	1977.9	1967.4	1985.5	1973.4	1984.0	2005.1	1974.9	2002.1	1971.9
7.5°	1973.4	2005.1	1958.3	1950.8	1968.9	1958.3	1962.8	1991.5	1965.9	1984.0	1956.8
10°	1956.8	1984.0	1937.2	1932.7	1949.3	1938.7	1943.2	1973.4	1949.3	1965.9	1938.7
12.5°	1938.7	1958.3	1911.5	1910.0	1923.6	1917.6	1919.1	1943.2	1925.1	1941.7	1916.1
15°	1913.1	1932.7	1885.9	1878.4	1893.4	1887.4	1890.4	1913.1	1898.0	1908.5	1885.9
17.5°	1884.4	1899.5	1854.2	1837.6	1839.1	1846.7	1854.2	1881.4	1866.3	1879.9	1851.2
20°	1846.7	1864.8	1813.5	1771.2	1768.2	1775.8	1813.5	1840.6	1833.1	1848.2	1802.9
22.5°	1802.9	1813.5	1768.2	1689.8	1677.7	1685.2	1762.2	1795.4	1793.9	1802.9	1744.1
25°	1757.7	1769.7	1685.2	1585.7	1439.3	1576.6	1688.3	1745.6	1745.6	1754.6	1680.7
27.5°	1712.4	1715.4	1594.7	1068.2	923.3	1024.4	1591.7	1685.2	1697.3	1695.8	1587.2
30°	1664.1	1653.6	1374.4	822.3	789.1	810.2	1376.0	1621.9	1646.0	1629.4	1339.7
32.5°	1608.3	1573.6	924.8	739.3	713.6	731.7	882.6	1546.4	1593.2	1552.5	982.2
35°	1546.4	1468.0	774.0	668.4	641.2	665.3	767.9	1442.3	1526.8	1430.3	799.6
37.5°	1483.1	1225.1	698.5	568.8	514.5	559.7	695.5	1220.6	1452.9	1169.3	701.6
40°	1406.1	906.7	612.5	390.8	315.3	368.1	608.0	864.5	1366.9	932.4	597.5
42.5°	1303.5	766.4	461.7	212.7	162.9	191.6	437.5	754.4	1261.3	774.0	445.1
45°	1179.8	681.9	291.2	135.8	125.2	131.3	268.6	669.9	1137.6	654.8	297.2
47.5°	991.2	547.7	197.6	114.7	123.7	114.7	191.6	531.1	935.4	520.5	197.6
50°	707.6	405.8	144.8	116.2	137.3	116.2	140.3	392.3	671.4	430.0	143.3
52.5°	478.3	324.4	111.6	129.7	172.0	132.8	108.6	316.8	454.1	327.4	104.1
55°	353.0	268.6	95.0	167.5	226.3	172.0	95.0	261.0	334.9	258.0	92.0
57.5°	238.4	211.2	93.5	212.7	253.5	217.3	95.0	203.7	227.8	205.2	83.0
60°	166.0	158.4	107.1	229.3	277.6	232.3	108.6	152.4	162.9	150.9	90.5
62.5°	129.7	116.2	134.3	253.5	291.2	244.4	137.3	110.1	137.3	104.1	102.6
65°	123.7	80.0	152.4	252.0	285.1	252.0	153.9	75.4	129.7	81.5	135.8
67.5°	116.2	60.3	149.4	248.9	289.7	252.0	144.8	57.3	111.6	55.8	132.8
70°	93.5	52.8	138.8	255.0	276.1	245.9	138.8	51.3	89.0	49.8	162.9
72.5°	73.9	49.8	126.7	230.8	236.9	221.8	128.2	49.8	75.4	43.8	150.9
75°	66.4	49.8	123.7	188.6	179.5	179.5	120.7	48.3	67.9	45.3	119.2
77.5°	52.8	45.3	107.1	131.3	123.7	123.7	105.6	43.8	49.8	40.7	101.1
80°	37.7	40.7	84.5	90.5	86.0	86.0	81.5	39.2	37.7	37.7	80.0
82.5°	27.2	33.2	60.3	60.3	57.3	55.8	58.8	33.2	27.2	30.2	57.3
85°	16.6	24.1	34.7	28.7	24.1	22.6	33.2	22.6	15.1	22.6	33.2
87.5°	7.5	13.6	6.0	6.0	6.0	6.0	6.0	13.6	7.5	12.1	7.5
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°	2000.6	2000.6	2000.6	2000.6	2000.6	2000.6
2.5°	1980.9	1991.5	1991.5	1985.5	2015.6	1987.0
5°	1964.4	1984.0	1974.9	1974.9	2005.1	1982.5
7.5°	1953.8	1973.4	1964.4	1961.3	1991.5	1973.4
10°	1935.7	1949.3	1943.2	1947.8	1974.9	1956.8
12.5°	1910.0	1926.6	1920.6	1928.1	1952.3	1938.7
15°	1879.9	1893.4	1896.5	1899.5	1928.1	1913.1
17.5°	1833.1	1839.1	1855.7	1872.3	1901.0	1884.4
20°	1775.8	1784.8	1793.9	1830.1	1864.8	1846.7
22.5°	1710.9	1704.9	1729.0	1772.7	1818.0	1802.9
25°	1585.7	1469.5	1597.7	1704.9	1762.2	1757.7
27.5°	1164.7	995.8	1143.6	1615.8	1706.4	1712.4
30°	869.0	799.6	867.5	1404.6	1643.0	1664.1
32.5°	746.8	704.6	739.3	985.2	1563.0	1608.3
35°	665.3	632.2	665.3	799.6	1452.9	1546.4
37.5°	567.3	503.9	568.8	709.1	1229.6	1483.1
40°	398.3	312.3	386.2	618.6	929.4	1406.1
42.5°	232.3	173.5	217.3	454.1	769.4	1303.5
45°	143.3	125.2	137.3	294.2	651.8	1179.8
47.5°	113.2	116.2	113.2	196.1	519.0	991.2
50°	107.1	128.2	107.1	143.3	413.4	707.6
52.5°	119.2	141.8	117.7	105.6	319.8	478.3
55°	131.3	205.2	132.8	92.0	248.9	353.0
57.5°	187.1	226.3	190.1	86.0	203.7	238.4
60°	193.1	248.9	191.6	92.0	149.4	166.0
62.5°	236.9	322.9	236.9	108.6	101.1	129.7
65°	294.2	324.4	297.2	134.3	78.5	123.7
67.5°	280.6	303.3	277.6	138.8	54.3	116.2
70°	274.6	291.2	271.6	164.5	49.8	93.5
72.5°	252.0	250.4	245.9	149.4	43.8	73.9
75°	199.2	185.6	191.6	131.3	45.3	66.4
77.5°	131.3	125.2	126.7	104.1	40.7	52.8
80°	93.5	90.5	89.0	84.5	37.7	37.7
82.5°	63.4	60.3	58.8	60.3	30.2	27.2
85°	31.7	28.7	27.2	37.7	22.6	16.6
87.5°	7.5	7.5	6.0	7.5	10.6	7.5
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	16.06	17.36	16.42	17.68	17.99	14.90	16.21	15.27	16.52	16.84
	3H	16.78	17.95	17.16	18.28	18.64	21.10	22.27	21.48	22.60	22.97
	4H	17.20	18.30	17.61	18.65	19.03	22.40	23.50	22.80	23.85	24.23
	6H	17.58	18.59	17.99	18.96	19.35	23.03	24.03	23.44	24.41	24.80
	8H	17.71	18.67	18.14	19.06	19.46	23.16	24.12	23.59	24.51	24.91
	12H	17.79	18.71	18.23	19.09	19.52	23.21	24.13	23.65	24.51	24.94
4H	2H	16.50	17.59	16.90	17.94	18.33	15.48	16.58	15.88	16.93	17.31
	3H	17.51	18.42	17.93	18.83	19.23	21.85	22.76	22.27	23.17	23.57
	4H	18.09	18.91	18.52	19.33	19.77	23.32	24.14	23.75	24.56	25.00
	6H	18.59	19.30	19.05	19.74	20.21	24.08	24.79	24.54	25.23	25.70
	8H	18.76	19.43	19.23	19.87	20.34	24.25	24.91	24.72	25.36	25.83
	12H	18.90	19.49	19.38	19.97	20.44	24.33	24.92	24.82	25.40	25.87
8H	4H	19.22	19.88	19.69	20.33	20.80	23.47	24.13	23.94	24.58	25.05
	6H	19.84	20.38	20.34	20.88	21.36	24.36	24.90	24.86	25.40	25.88
	8H	20.08	20.56	20.60	21.08	21.57	24.61	25.09	25.13	25.61	26.10
	12H	20.27	20.70	20.78	21.19	21.76	24.75	25.18	25.26	25.67	26.24
12H	4H	19.38	19.97	19.87	20.45	20.93	23.45	24.04	23.93	24.52	24.99
	6H	20.11	20.60	20.64	21.12	21.61	24.37	24.85	24.89	25.37	25.86
	8H	20.44	20.86	20.95	21.36	21.93	24.67	25.09	25.18	25.59	26.16