

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:

Luminaire Tested: SQ4-FB-0U-100D-935-1D-UNV-STD-W-8

Issue Date: 8/1/2024

Test Information

Test Method: LM-79-2019
Report Number:
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2301-892-3)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-0U-100D-935-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

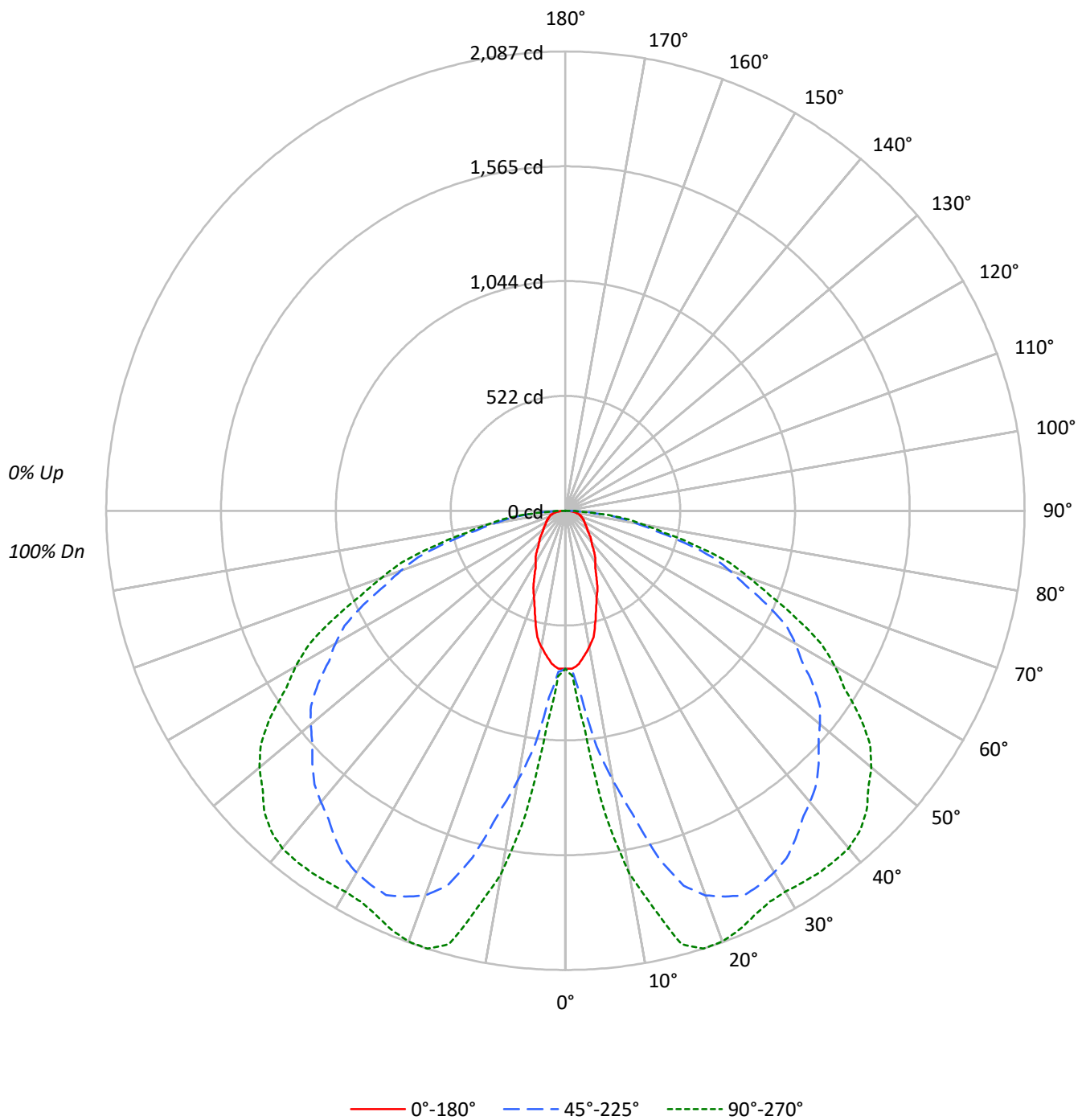
Lumens per Lamp: N/A
Luminaire Lumens: 5557.8 lumens
Efficiency: N/A
Efficacy: 77.5 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Direct

Input Watts (W): 71.7
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
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	108	103	98	94	105	100	96	92	96	93	89		92	89	87		89
2	97	88	81	75	95	87	80	74	83	77	72		80	75	71		77
3	88	77	68	61	86	75	67	61	72	65	59		69	63	58		67
4	80	67	58	51	78	66	57	51	63	56	50		61	54	49		59
5	73	60	50	43	71	58	50	43	56	48	42		54	47	42		52
6	67	53	44	37	65	52	43	37	50	42	36		49	42	36		47
7	62	48	39	32	60	47	38	32	45	38	32		44	37	32		43
8	58	43	34	28	56	43	34	28	41	34	28		40	33	28		39
9	54	40	31	25	52	39	31	25	38	30	25		37	30	25		36
10	50	36	28	23	49	36	28	22	35	27	22		34	27	22		33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3313	3313	3313
5°	3240	3941	4587
10°	2942	5830	7832
15°	2503	7792	9738
20°	2041	9131	10225
25°	1704	9808	10332
30°	1439	10111	10652
35°	1274	10260	11314
40°	1112	10409	12057
45°	1009	10613	12624
50°	928	10838	13026
55°	891	11041	13168
60°	916	11142	13060
65°	957	11053	12678
70°	1028	10714	11991
75°	1153	9939	10990
80°	1288	8587	9569
85°	1223	7151	8188

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 13222 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.2	1.7
10°-20°	410.3	7.4
20°-30°	719.0	12.9
30°-40°	925.8	16.7
40°-50°	1033.6	18.6
50°-60°	991.2	17.8
60°-70°	788.8	14.2
70°-80°	464.7	8.4
80°-90°	130.3	2.3
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°	1223.4	22.0
0°-40°	2149.2	38.7
0°-60°	4174.0	75.1
0°-90°	5557.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5557.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	718	718	718	718	718	
5°	700	750	851	960	991	64
15°	524	963	1631	1973	2039	145
25°	335	1092	1927	2026	2030	154
35°	226	1025	1822	1933	2009	141
45°	155	804	1627	1849	1935	120
55°	111	537	1373	1588	1637	101
65°	88	351	1013	1143	1162	87
75°	65	221	558	608	617	67
85°	23	60	135	152	155	26
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
0°	718.2	718.2	718.2	718.2	718.2	718.2	718.2	718.2	718.2	718.2
2.5°	718.2	718.2	721.9	727.4	729.2	736.6	747.7	753.3	757.0	753.3
5°	699.7	708.9	738.9	782.8	826.7	875.2	937.5	967.6	986.0	990.6
7.5°	663.2	688.6	774.0	888.6	1016.0	1142.6	1252.0	1340.7	1392.4	1394.8
10°	628.1	672.0	803.6	979.1	1154.6	1334.7	1484.8	1577.2	1651.1	1671.9
12.5°	589.3	655.4	835.0	1069.6	1309.8	1512.1	1678.8	1780.4	1839.5	1847.4
15°	524.2	621.2	879.8	1212.3	1510.2	1752.7	1912.0	1992.8	2029.8	2039.0
17.5°	463.7	590.7	919.1	1324.1	1676.9	1895.4	2016.4	2067.2	2085.7	2086.6
20°	415.7	561.1	937.5	1401.7	1761.9	1958.2	2045.9	2078.3	2087.5	2082.9
22.5°	380.6	529.7	948.6	1453.4	1813.6	1982.2	2047.8	2063.5	2067.2	2062.6
25°	334.8	478.0	949.1	1521.8	1865.8	1988.2	2022.9	2027.5	2032.1	2029.8
27.5°	294.2	420.3	935.2	1567.0	1873.2	1960.0	1976.2	1987.8	2002.1	2005.3
30°	270.2	383.3	916.8	1581.8	1865.8	1930.5	1946.7	1967.4	1992.8	1999.8
32.5°	251.7	348.2	889.0	1583.6	1847.4	1895.4	1917.1	1956.4	1992.8	2003.5
35°	226.3	295.6	842.9	1570.3	1805.8	1838.1	1884.3	1949.0	1997.5	2009.0
37.5°	201.4	257.7	780.0	1543.0	1751.3	1785.0	1861.2	1939.3	1993.3	2007.6
40°	184.7	235.5	732.0	1517.1	1708.8	1748.1	1842.7	1928.2	1985.9	2002.1
42.5°	171.8	217.1	680.3	1483.9	1660.8	1714.8	1820.6	1911.6	1965.6	1978.1
45°	154.7	189.4	598.1	1422.5	1586.4	1667.2	1782.7	1870.5	1921.3	1935.1
47.5°	138.6	170.0	512.2	1352.3	1510.7	1609.5	1727.7	1810.9	1857.5	1866.8
50°	129.3	157.0	454.9	1302.4	1457.1	1563.3	1683.4	1766.5	1805.8	1815.0
52.5°	121.9	145.9	401.3	1245.1	1401.7	1515.3	1629.8	1705.6	1741.1	1744.8
55°	110.8	131.6	330.2	1156.9	1313.9	1431.7	1542.5	1602.6	1628.0	1637.2
57.5°	104.8	121.0	274.3	1061.3	1215.1	1333.3	1434.0	1480.7	1501.0	1504.2
60°	99.3	115.5	244.8	993.0	1152.3	1263.1	1350.9	1390.1	1408.6	1415.5
62.5°	93.8	111.8	222.6	922.8	1078.4	1185.5	1262.2	1295.9	1310.7	1312.1
65°	87.7	106.2	196.3	815.1	962.9	1062.2	1122.3	1150.0	1156.9	1161.5
67.5°	81.7	100.7	177.3	706.6	843.8	926.0	970.3	994.3	995.7	1005.4
70°	76.2	97.0	166.3	632.7	755.1	833.6	870.6	889.0	886.7	889.0
72.5°	72.5	91.4	158.9	557.0	670.1	732.0	765.3	778.2	779.6	780.0
75°	64.7	80.8	147.8	441.1	531.1	584.2	609.6	607.3	614.2	616.6
77.5°	55.9	69.7	121.5	325.1	398.1	433.2	453.5	460.0	457.7	458.1
80°	48.5	62.3	99.3	249.4	309.4	337.1	355.6	360.2	357.9	360.2
82.5°	39.3	51.3	77.1	184.7	231.8	254.0	266.9	267.9	269.3	273.4
85°	23.1	30.0	46.2	101.6	129.3	140.9	150.1	152.4	154.7	154.7
87.5°	9.2	12.9	24.0	42.5	53.6	57.3	57.3	53.6	57.3	51.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)