

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

(formerly Eaton)

Brand: CORELITE

Report Number: P564233

Luminaire Tested: **SQ4-PR1-100U-050D-830-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564233
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G2-2106-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PR1-100U-050D-830-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16863.8 lumens
Efficiency: N/A
Efficacy: 132.4 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

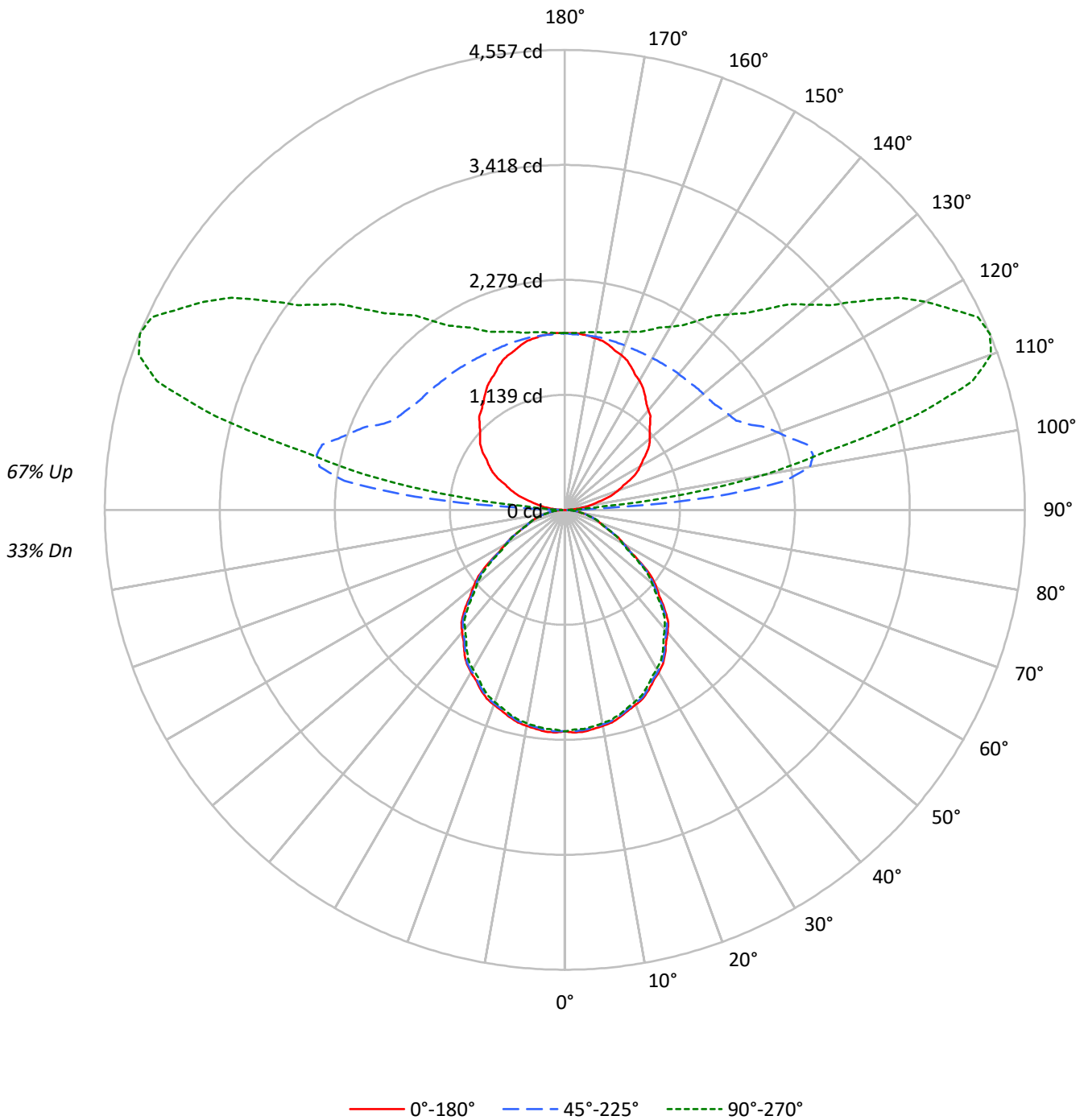
Input Watts (W): 127.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	0
RCR																		
0	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40	33
1	94	90	86	83	85	81	78	75	65	63	61	50	48	47	36	35	34	28
2	86	79	73	68	77	71	66	62	57	53	50	44	42	40	32	30	29	24
3	78	69	62	57	70	63	57	52	50	46	43	39	36	34	28	26	25	20
4	72	61	54	48	64	56	49	44	45	40	36	35	31	29	25	23	22	17
5	66	55	47	41	59	50	43	38	40	35	31	31	28	25	23	21	19	15
6	60	49	41	35	54	44	38	33	36	31	27	28	25	22	21	18	17	13
7	56	44	36	31	50	40	33	29	33	28	24	25	22	19	19	17	15	12
8	52	40	32	27	47	36	30	25	30	25	21	23	20	17	17	15	13	11
9	48	36	29	24	43	33	27	22	27	22	19	21	18	15	16	14	12	10
10	45	33	26	22	40	30	24	20	25	20	17	20	16	14	15	12	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6751	6751	6751
5°	6811	6759	6724
10°	6790	6743	6707
15°	6760	6718	6682
20°	6726	6683	6633
25°	6678	6634	6557
30°	6607	6559	6466
35°	6509	6452	6360
40°	6360	6292	6179
45°	6101	5995	5871
50°	5644	5509	5400
55°	4926	4815	4714
60°	4151	4117	4035
65°	3590	3604	3577
70°	3298	3315	3315
75°	3168	3168	3190
80°	2981	3014	2981
85°	2403	2668	2668



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	207.6	1.2
10°-20°	593.9	3.5
20°-30°	895.8	5.3
30°-40°	1067.3	6.3
40°-50°	1052.3	6.2
50°-60°	804.2	4.8
60°-70°	497.7	3.0
70°-80°	282.7	1.7
80°-90°	89.6	0.5
90°-100°	819.7	4.9
100°-110°	2262.9	13.4
110°-120°	2333.8	13.8
120°-130°	1875.4	11.1
130°-140°	1473.9	8.7
140°-150°	1130.4	6.7
150°-160°	812.4	4.8
160°-170°	496.8	2.9
170°-180°	167.5	1.0
0°-30°	1697.2	10.1
0°-40°	2764.5	16.4
0°-60°	4620.9	27.4
0°-90°	5490.9	32.6
90°-120°	5416.4	32.1
90°-150°	9896.1	58.7
90°-180°	11373.0	67.4
0°-180°	16863.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2195	2195	2195	2195	2195	
5°	2206	2182	2189	2182	2178	209
15°	2123	2101	2110	2102	2099	599
25°	1968	1944	1955	1934	1932	906
35°	1734	1713	1719	1696	1694	1082
45°	1403	1384	1378	1354	1350	1075
55°	919	904	898	883	879	823
65°	493	490	495	492	492	500
75°	267	267	267	268	268	282
85°	68	72	76	76	76	79
90°	6	11	22	25	28	11
95°	120	444	1487	611	398	129
105°	403	622	2490	3801	3579	429
115°	722	873	2005	3970	4514	710
125°	991	1128	1818	3076	3610	882
135°	1193	1322	1767	2491	2809	923
145°	1384	1479	1745	2121	2282	866
155°	1560	1612	1731	1903	1963	719
165°	1689	1711	1739	1807	1820	476
175°	1750	1753	1742	1767	1762	166
180°	1750	1750	1750	1750	1750	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2195.0	2195.0	2195.0	2195.0	2195.0
2.5°	2208.6	2189.4	2195.0	2190.2	2179.9
5°	2206.3	2182.3	2189.3	2181.7	2178.0
7.5°	2189.3	2165.7	2172.7	2165.1	2162.9
10°	2174.2	2152.0	2159.1	2151.4	2147.7
12.5°	2157.6	2133.9	2142.4	2133.3	2129.6
15°	2123.2	2101.0	2109.9	2102.3	2098.6
17.5°	2085.3	2061.7	2070.6	2061.8	2057.0
20°	2055.1	2032.9	2041.9	2028.6	2026.7
22.5°	2021.8	1999.6	2008.6	1990.8	1990.4
25°	1968.1	1944.1	1954.9	1934.1	1932.2
27.5°	1904.2	1882.0	1891.0	1869.8	1867.5
30°	1860.4	1838.2	1847.1	1824.4	1820.7
32.5°	1810.4	1789.7	1797.2	1774.5	1772.3
35°	1733.7	1713.4	1718.6	1695.8	1694.0
37.5°	1646.3	1627.9	1630.8	1605.8	1604.0
40°	1584.3	1565.8	1567.3	1540.8	1539.0
42.5°	1516.3	1497.8	1496.2	1469.7	1467.9
45°	1402.8	1384.3	1378.3	1353.6	1349.9
47.5°	1273.5	1255.0	1243.6	1223.5	1221.0
50°	1179.7	1161.3	1151.4	1134.2	1128.7
52.5°	1078.4	1059.9	1051.6	1035.9	1030.4
55°	918.8	904.0	898.0	882.8	879.1
57.5°	767.2	757.2	755.5	740.7	739.2
60°	674.9	669.4	669.3	656.0	656.0
62.5°	596.3	592.2	595.2	586.4	585.0
65°	493.4	489.8	495.3	491.6	491.6
67.5°	412.2	412.2	415.6	414.0	414.0
70°	366.8	366.8	368.7	368.7	368.7
72.5°	325.9	324.5	329.3	329.3	327.8
75°	266.6	266.6	266.6	268.5	268.5
77.5°	207.6	208.0	209.5	209.1	207.6
80°	168.3	170.1	170.2	168.3	168.3
82.5°	128.9	130.8	130.8	130.4	128.9
85°	68.1	71.8	75.6	75.6	75.6
87.5°	20.8	27.8	34.7	35.3	34.3
90°	5.6	11.1	22.4	25.3	28.0
92.5°	50.4	209.2	374.2	136.5	106.4
95°	120.4	443.5	1487.1	611.3	397.7
97.5°	199.4	496.8	2202.9	1696.0	1228.3
100°	257.7	528.7	2467.3	2484.7	2019.2
102.5°	313.7	565.0	2518.8	3070.0	2628.6
105°	403.3	622.3	2489.7	3800.9	3579.1
107.5°	498.5	693.5	2350.8	4153.4	4234.5
110°	565.7	741.0	2243.3	4229.2	4492.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	626.2	794.9	2142.4	4169.3	4557.1
115°	722.5	873.2	2005.2	3969.6	4514.5
117.5°	806.6	956.6	1915.0	3688.4	4308.4
120°	862.6	1010.4	1879.2	3498.1	4122.4
122.5°	916.3	1057.6	1850.1	3320.4	3911.8
125°	991.4	1128.3	1817.6	3076.0	3609.9
127.5°	1055.3	1192.2	1798.5	2869.3	3329.9
130°	1097.8	1234.7	1789.6	2742.9	3161.8
132.5°	1138.2	1268.5	1780.6	2636.7	3016.2
135°	1193.0	1321.7	1767.2	2491.3	2809.0
137.5°	1254.7	1371.9	1760.4	2369.3	2640.4
140°	1288.3	1403.3	1756.0	2287.9	2526.1
142.5°	1326.4	1432.6	1751.5	2215.5	2425.3
145°	1383.5	1479.3	1744.8	2120.9	2282.5
147.5°	1438.4	1522.2	1738.6	2041.1	2166.5
150°	1478.7	1547.2	1736.4	1993.5	2094.8
152.5°	1510.1	1574.1	1734.1	1952.8	2036.6
155°	1559.9	1611.9	1730.8	1903.0	1963.2
157.5°	1605.8	1645.8	1731.3	1866.7	1907.8
160°	1632.7	1668.3	1733.6	1846.3	1876.4
162.5°	1655.1	1686.4	1735.8	1828.2	1851.7
165°	1688.7	1710.7	1739.2	1806.7	1820.4
167.5°	1714.5	1727.7	1742.0	1793.6	1798.0
170°	1728.0	1738.9	1742.0	1786.8	1786.8
172.5°	1739.2	1745.7	1742.0	1777.8	1775.6
175°	1750.4	1753.1	1742.0	1767.0	1761.6
177.5°	1754.8	1752.6	1741.4	1757.0	1752.6
180°	1750.4	1750.4	1750.4	1750.4	1750.4

(END OF REPORT)