

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: P520394

Luminaire Tested: **SQ4-F-150U-075D-835-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520394
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G3-1910-536-18)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-150U-075D-835-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

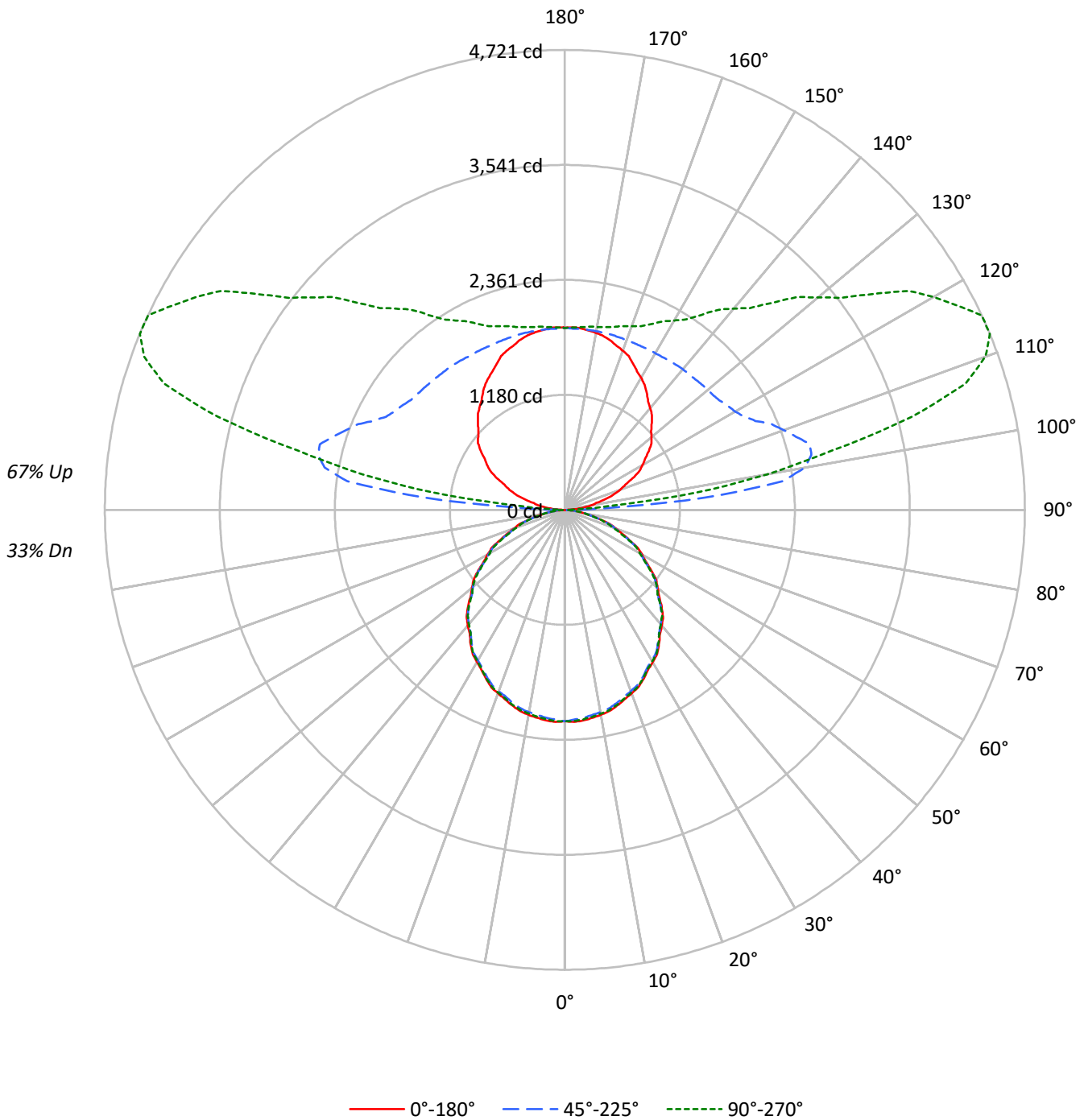
Lumens per Lamp: N/A
Luminaire Lumens: 17978.0 lumens
Efficiency: N/A
Efficacy: 135.8 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 132.4
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	62	60	50	48	47	36	35	34	28
2	85	78	72	67	77	71	66	61	57	53	50	43	41	39	31	30	29	23
3	78	69	62	56	70	62	56	51	50	45	42	38	35	33	28	26	24	20
4	71	61	53	47	64	55	48	43	44	39	36	34	31	28	25	23	21	17
5	65	54	46	40	58	49	42	37	39	34	30	30	27	24	22	20	18	14
6	60	48	40	35	54	44	37	32	35	30	26	27	24	21	20	18	16	13
7	55	43	36	30	50	39	33	28	32	27	23	25	21	19	18	16	14	11
8	51	39	32	26	46	36	29	24	29	24	20	23	19	16	17	14	13	10
9	48	36	28	23	43	33	26	22	26	22	18	21	17	15	15	13	11	9
10	44	33	26	21	40	30	24	19	24	20	16	19	16	13	14	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10014	10014	10014
5°	10052	9925	9998
10°	10012	9883	9957
15°	9935	9813	9897
20°	9845	9729	9807
25°	9737	9637	9707
30°	9614	9509	9561
35°	9487	9388	9432
40°	9327	9233	9221
45°	9167	9052	9078
50°	8913	8842	8842
55°	8706	8595	8516
60°	8425	8281	8208
65°	7971	7820	7713
70°	7486	7300	7115
75°	6736	6490	6349
80°	5385	5281	5228
85°	3229	3647	3753



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	204.9	1.1
10°-20°	583.3	3.2
20°-30°	876.4	4.9
30°-40°	1045.8	5.8
40°-50°	1072.5	6.0
50°-60°	955.6	5.3
60°-70°	712.5	4.0
70°-80°	386.4	2.1
80°-90°	92.7	0.5
90°-100°	868.4	4.8
100°-110°	2348.1	13.1
110°-120°	2468.7	13.7
120°-130°	2005.2	11.2
130°-140°	1572.9	8.7
140°-150°	1207.2	6.7
150°-160°	868.2	4.8
160°-170°	530.4	3.0
170°-180°	178.8	1.0
0°-30°	1664.6	9.3
0°-40°	2710.4	15.1
0°-60°	4738.5	26.4
0°-90°	5930.1	33.0
90°-120°	5685.2	31.6
90°-150°	10470.5	58.2
90°-180°	12048.0	67.0
0°-180°	17978.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2171	2171	2171	2171	2171	
5°	2171	2167	2143	2161	2159	206
15°	2080	2076	2055	2070	2072	587
25°	1913	1911	1893	1903	1907	881
35°	1685	1681	1667	1667	1675	1052
45°	1405	1399	1388	1388	1392	1082
55°	1082	1080	1069	1059	1059	967
65°	730	730	716	708	707	727
75°	378	370	364	358	356	397
85°	61	65	69	69	71	85
90°	4	12	26	28	26	11
95°	135	473	1444	747	444	141
105°	436	674	2605	3842	3685	460
115°	768	940	2160	4182	4721	759
125°	1052	1205	1947	3286	3860	938
135°	1261	1411	1895	2653	3003	975
145°	1466	1576	1869	2271	2444	917
155°	1656	1720	1852	2037	2104	764
165°	1802	1820	1861	1933	1943	508
175°	1871	1869	1863	1887	1883	178
180°	1869	1869	1869	1869	1869	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2170.8	2170.8	2170.8	2170.8	2170.8
2.5°	2178.7	2174.1	2155.1	2170.8	2169.3
5°	2170.8	2167.0	2143.3	2161.0	2159.0
7.5°	2153.1	2148.9	2125.6	2143.3	2142.9
10°	2137.4	2131.6	2109.8	2127.5	2125.6
12.5°	2116.9	2111.1	2089.4	2107.1	2105.1
15°	2080.3	2076.5	2054.7	2070.5	2072.4
17.5°	2038.6	2031.3	2011.8	2027.2	2029.1
20°	2005.5	1999.7	1981.9	1995.7	1997.6
22.5°	1970.9	1965.1	1947.3	1961.0	1963.0
25°	1913.0	1911.0	1893.3	1903.3	1907.1
27.5°	1850.4	1845.0	1830.7	1838.3	1842.2
30°	1804.8	1800.9	1785.1	1791.1	1794.9
32.5°	1757.5	1755.3	1741.0	1743.9	1749.3
35°	1684.7	1680.9	1667.0	1667.2	1674.9
37.5°	1604.0	1599.8	1588.3	1586.4	1589.5
40°	1548.9	1543.1	1533.2	1531.2	1531.2
42.5°	1492.2	1488.0	1474.9	1471.5	1476.1
45°	1405.2	1399.4	1387.5	1387.6	1391.5
47.5°	1311.2	1308.9	1295.0	1288.7	1290.3
50°	1241.9	1245.7	1232.0	1224.4	1232.0
52.5°	1182.1	1179.8	1167.5	1159.7	1162.8
55°	1082.5	1080.5	1068.7	1058.8	1058.8
57.5°	982.5	977.5	965.2	957.8	963.6
60°	913.2	911.2	897.5	883.8	889.6
62.5°	843.9	840.5	826.6	817.7	821.9
65°	730.2	730.2	716.4	708.5	706.6
67.5°	630.6	621.3	613.7	604.1	601.5
70°	555.0	547.3	541.2	533.3	527.5
72.5°	481.0	476.4	467.2	459.4	458.2
75°	377.9	370.2	364.1	358.2	356.2
77.5°	268.8	267.3	261.8	258.6	259.8
80°	202.7	202.7	198.8	198.8	196.8
82.5°	142.9	144.5	143.7	140.5	140.1
85°	61.0	64.8	68.9	68.9	70.9
87.5°	11.8	21.1	22.4	22.8	22.4
90°	4.0	11.9	26.2	28.1	26.2
92.5°	57.1	208.1	410.7	178.3	129.2
95°	134.8	473.0	1444.2	747.4	444.5
97.5°	216.4	542.5	2251.2	1863.1	1368.2
100°	277.6	570.6	2502.3	2609.6	2110.1
102.5°	333.9	609.6	2590.8	3175.7	2802.0
105°	436.5	674.5	2604.9	3842.4	3685.0
107.5°	531.5	748.6	2491.0	4258.2	4310.6
110°	605.4	802.2	2389.6	4369.9	4592.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	671.4	855.5	2296.3	4347.7	4720.9
115°	768.4	939.5	2160.4	4182.0	4720.9
117.5°	863.3	1023.8	2070.6	3929.0	4539.9
120°	921.3	1078.6	2017.5	3747.5	4370.9
122.5°	976.0	1130.1	1985.3	3552.8	4181.1
125°	1052.0	1205.4	1947.1	3285.8	3860.0
127.5°	1122.0	1272.7	1924.6	3067.7	3572.8
130°	1160.6	1316.0	1914.9	2933.1	3389.4
132.5°	1200.8	1354.7	1905.2	2811.5	3231.6
135°	1261.2	1410.7	1894.8	2653.0	3003.2
137.5°	1322.0	1463.1	1885.9	2524.4	2809.6
140°	1363.8	1495.5	1882.7	2441.6	2695.3
142.5°	1404.0	1527.9	1876.3	2366.9	2589.2
145°	1466.3	1576.5	1868.6	2270.8	2443.9
147.5°	1523.1	1620.6	1859.8	2183.9	2316.8
150°	1564.9	1651.4	1856.5	2136.6	2242.7
152.5°	1603.5	1679.1	1854.9	2092.8	2180.1
155°	1655.5	1720.3	1852.5	2037.1	2104.0
157.5°	1709.4	1754.5	1852.9	1998.4	2042.5
160°	1740.0	1777.3	1854.5	1973.9	2005.4
162.5°	1764.1	1795.2	1856.1	1954.4	1978.1
165°	1802.3	1819.9	1860.6	1933.2	1943.1
167.5°	1828.4	1840.7	1861.0	1915.0	1919.7
170°	1844.5	1850.4	1862.6	1906.8	1906.8
172.5°	1857.4	1858.6	1862.6	1897.2	1895.6
175°	1870.6	1868.7	1862.6	1886.6	1882.7
177.5°	1875.1	1870.3	1862.2	1878.2	1873.4
180°	1868.6	1868.6	1868.6	1868.6	1868.6

(END OF REPORT)