

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: P520418

Luminaire Tested: **SQ4-F-150U-100D-835-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520418
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G3-1910-536-19)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-150U-100D-835-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

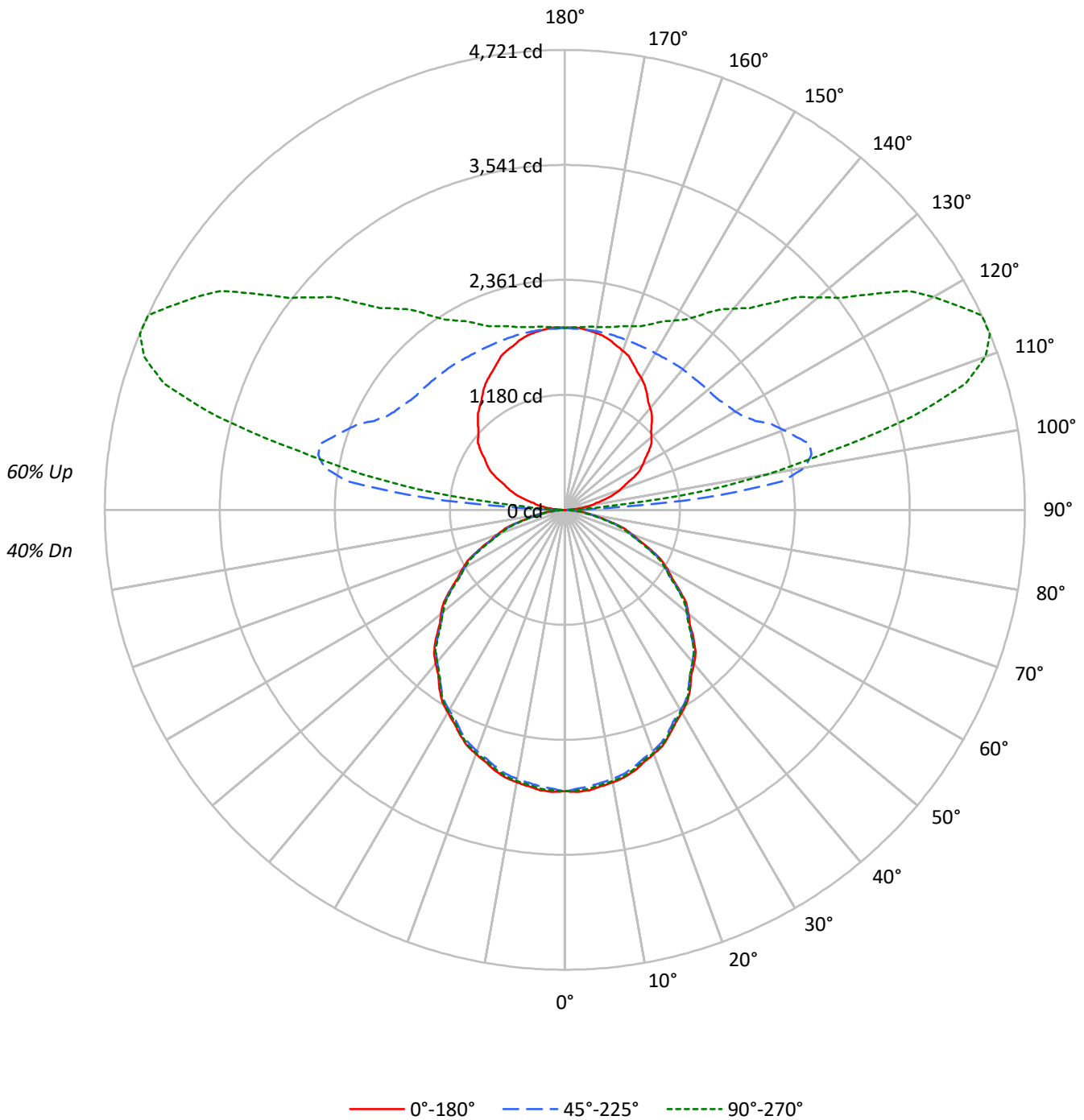
Lumens per Lamp: N/A
Luminaire Lumens: 19926.6 lumens
Efficiency: N/A
Efficacy: 134.2 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 148.5
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	105	105	105	105	95	95	95	95	78	78	78	61	61	61	47	47	47	40
1	95	91	87	84	87	83	80	77	68	66	64	54	52	51	41	40	39	33
2	87	80	73	68	79	73	67	63	59	56	52	47	45	42	36	34	33	28
3	79	70	63	57	72	64	57	52	52	48	44	42	39	36	32	30	28	23
4	72	62	54	48	65	56	50	44	46	41	37	37	33	31	28	26	24	20
5	66	55	47	41	60	50	43	38	41	36	32	33	29	26	26	23	21	17
6	61	49	41	35	55	45	38	33	37	32	28	30	26	23	23	20	18	15
7	56	44	36	31	51	41	34	29	34	28	24	27	23	20	21	18	16	13
8	52	40	32	27	47	37	30	25	31	25	22	25	21	18	19	17	14	12
9	48	36	29	24	44	34	27	22	28	23	19	23	19	16	18	15	13	11
10	45	33	26	21	41	31	24	20	26	21	17	21	17	15	16	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13319	13319	13319
5°	13379	13196	13297
10°	13311	13144	13246
15°	13230	13051	13155
20°	13094	12939	13046
25°	12951	12800	12901
30°	12794	12656	12720
35°	12633	12477	12544
40°	12423	12279	12291
45°	12204	12036	11997
50°	11890	11747	11719
55°	11539	11412	11331
60°	11190	10988	10952
65°	10643	10405	10317
70°	9889	9649	9462
75°	8830	8548	8370
80°	7266	7003	6687
85°	4298	4721	4827



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	272.5	1.4
10°-20°	776.0	3.9
20°-30°	1165.4	5.8
30°-40°	1390.7	7.0
40°-50°	1425.5	7.2
50°-60°	1269.4	6.4
60°-70°	946.3	4.7
70°-80°	512.3	2.6
80°-90°	120.5	0.6
90°-100°	868.4	4.4
100°-110°	2348.1	11.8
110°-120°	2468.7	12.4
120°-130°	2005.2	10.1
130°-140°	1572.9	7.9
140°-150°	1207.2	6.1
150°-160°	868.2	4.4
160°-170°	530.4	2.7
170°-180°	178.8	0.9
0°-30°	2213.9	11.1
0°-40°	3604.6	18.1
0°-60°	6299.6	31.6
0°-90°	7878.7	39.5
90°-120°	5685.2	28.5
90°-150°	10470.5	52.5
90°-180°	12048.0	60.5
0°-180°	19926.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2887	2887	2887	2887	2887	
5°	2889	2883	2850	2875	2871	274
15°	2770	2761	2733	2754	2754	780
25°	2544	2539	2515	2529	2534	1172
35°	2243	2234	2216	2220	2227	1400
45°	1871	1861	1845	1835	1839	1439
55°	1435	1437	1419	1405	1409	1284
65°	975	971	953	943	945	964
75°	495	490	480	470	470	528
85°	81	89	89	91	91	114
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°	2887.3	2887.3	2887.3	2887.3	2887.3
2.5°	2898.4	2892.1	2866.6	2887.2	2884.1
5°	2889.2	2883.4	2849.6	2875.3	2871.4
7.5°	2862.3	2856.4	2826.6	2850.3	2846.8
10°	2841.7	2835.8	2806.0	2829.8	2827.8
12.5°	2814.7	2808.9	2779.1	2802.8	2800.9
15°	2770.3	2760.6	2732.7	2754.5	2754.5
17.5°	2711.7	2704.4	2678.4	2696.6	2697.0
20°	2667.3	2661.4	2635.6	2655.4	2657.4
22.5°	2622.9	2617.1	2588.0	2606.4	2609.8
25°	2544.4	2538.6	2514.7	2528.7	2534.5
27.5°	2463.6	2455.1	2431.5	2443.9	2448.1
30°	2401.8	2397.9	2376.0	2382.0	2387.9
32.5°	2336.8	2332.9	2314.2	2317.1	2327.6
35°	2243.2	2233.5	2215.5	2219.6	2227.4
37.5°	2132.6	2128.0	2110.5	2108.3	2115.6
40°	2062.9	2055.2	2039.1	2035.2	2041.1
42.5°	1986.8	1979.1	1959.8	1956.1	1963.4
45°	1870.7	1861.0	1844.9	1835.1	1839.0
47.5°	1740.7	1740.7	1724.0	1712.6	1718.5
50°	1656.7	1656.7	1636.8	1627.0	1632.9
52.5°	1569.5	1571.0	1549.6	1544.5	1542.5
55°	1434.7	1436.7	1418.9	1405.1	1408.9
57.5°	1304.7	1300.5	1279.7	1270.6	1272.6
60°	1212.8	1206.9	1191.0	1177.3	1187.0
62.5°	1119.2	1116.6	1100.6	1085.1	1084.0
65°	975.0	971.1	953.2	943.3	945.2
67.5°	831.5	826.8	810.5	796.3	801.4
70°	733.2	733.2	715.4	707.3	701.5
72.5°	642.8	635.1	621.8	610.6	606.4
75°	495.4	489.6	479.6	469.6	469.6
77.5°	360.7	355.6	349.2	342.4	340.4
80°	273.5	271.5	263.6	261.4	251.7
82.5°	192.6	192.2	187.5	182.3	181.9
85°	81.2	89.0	89.2	91.2	91.2
87.5°	15.1	26.0	27.3	24.6	24.2
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)