

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: P564909

Luminaire Tested: **SQ4-PW1-100U-050D-835-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564909
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G2-2106-289-3)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PW1-100U-050D-835-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17836.9 lumens
Efficiency: N/A
Efficacy: 140.0 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

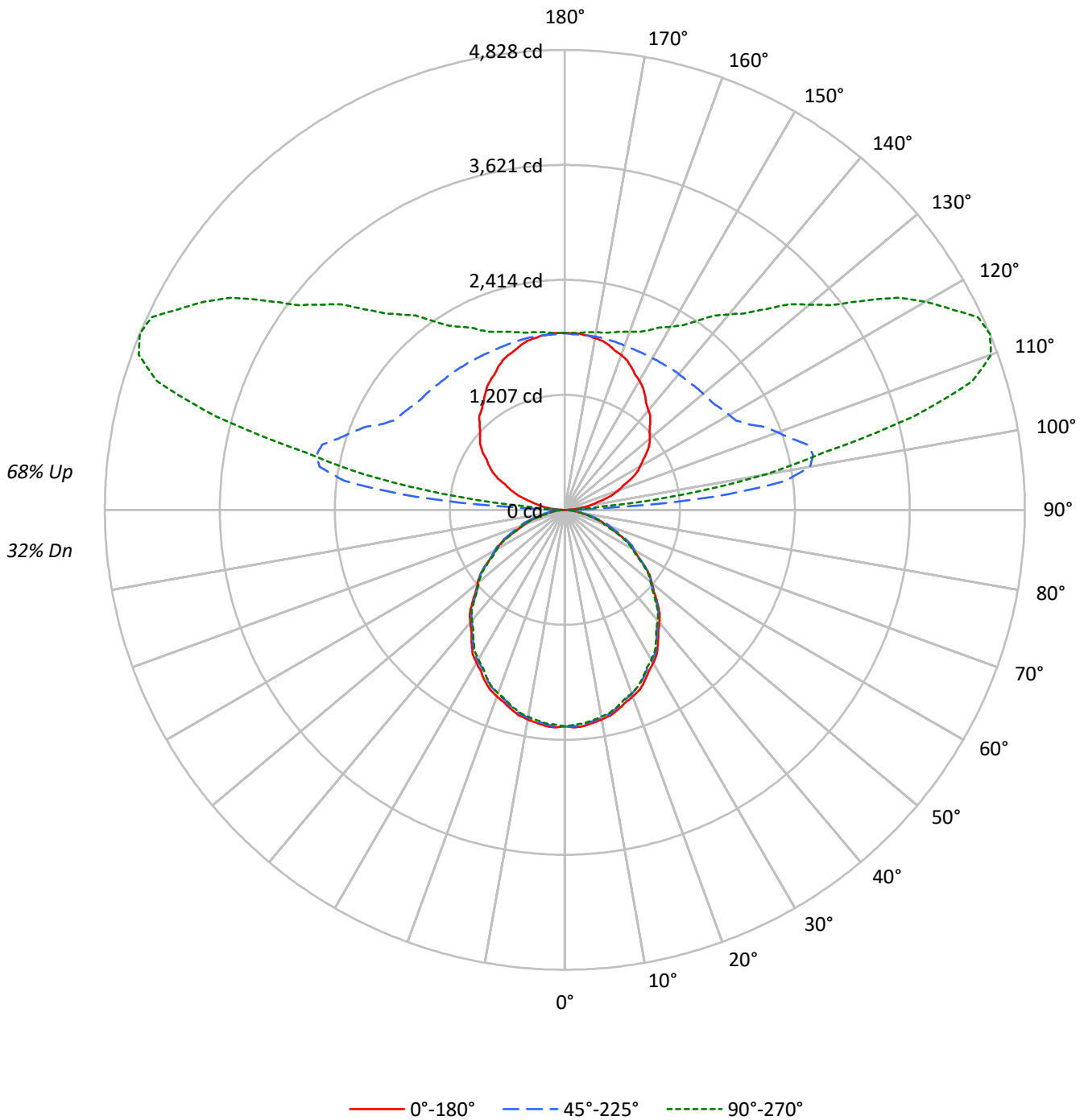
Input Watts (W): 127.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	32
1	94	90	86	83	84	81	78	75	64	62	60	49	48	47	35	35	34	27
2	86	78	72	67	77	71	66	62	57	53	50	43	41	39	31	30	29	23
3	78	69	62	56	70	62	56	51	50	46	42	38	35	33	28	26	24	20
4	71	61	53	47	64	55	49	43	44	40	36	34	31	28	25	23	21	17
5	65	54	46	40	59	49	42	37	39	35	31	31	27	24	22	20	18	15
6	60	48	41	35	54	44	37	32	35	30	27	28	24	21	20	18	16	13
7	55	44	36	31	50	40	33	28	32	27	23	25	21	19	18	16	14	11
8	51	39	32	27	46	36	29	25	29	24	21	23	19	17	17	15	13	10
9	48	36	29	24	43	33	26	22	27	22	18	21	17	15	16	13	11	9
10	45	33	26	21	40	30	24	20	24	20	17	19	16	13	14	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6992	6992	6992
5°	7037	6981	6950
10°	6980	6924	6887
15°	6906	6830	6805
20°	6824	6719	6706
25°	6729	6606	6586
30°	6587	6487	6444
35°	6400	6309	6272
40°	6200	6103	6079
45°	5959	5880	5854
50°	5712	5664	5626
55°	5445	5445	5359
60°	5113	5212	5026
65°	4679	4912	4562
70°	4125	4521	4017
75°	3522	4046	3427
80°	2731	3406	2766
85°	1768	2615	2332



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	214.1	1.2
10°-20°	604.4	3.4
20°-30°	896.5	5.0
30°-40°	1049.0	5.9
40°-50°	1044.3	5.9
50°-60°	901.8	5.1
60°-70°	649.2	3.6
70°-80°	340.4	1.9
80°-90°	88.2	0.5
90°-100°	868.4	4.9
100°-110°	2397.4	13.4
110°-120°	2472.6	13.9
120°-130°	1986.9	11.1
130°-140°	1561.5	8.8
140°-150°	1197.6	6.7
150°-160°	860.7	4.8
160°-170°	526.4	3.0
170°-180°	177.5	1.0
0°-30°	1715.0	9.6
0°-40°	2764.0	15.5
0°-60°	4710.2	26.4
0°-90°	5788.0	32.4
90°-120°	5738.4	32.2
90°-150°	10484.4	58.8
90°-180°	12049.0	67.6
0°-180°	17836.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2273	2273	2273	2273	2273	
5°	2279	2254	2261	2255	2251	216
15°	2169	2142	2145	2141	2137	611
25°	1983	1950	1947	1935	1941	912
35°	1705	1681	1680	1665	1670	1066
45°	1370	1358	1352	1348	1346	1057
55°	1016	1014	1016	1002	1000	906
65°	643	662	675	648	627	637
75°	296	324	340	318	288	318
85°	50	66	74	70	66	66
90°	6	12	24	27	30	11
95°	128	470	1576	648	421	137
105°	427	659	2638	4027	3792	455
115°	766	925	2124	4206	4783	752
125°	1050	1195	1926	3259	3824	935
135°	1264	1400	1872	2639	2976	978
145°	1466	1567	1848	2247	2418	918
155°	1653	1708	1834	2016	2080	762
165°	1789	1812	1842	1914	1929	504
175°	1854	1857	1846	1872	1866	176
180°	1854	1854	1854	1854	1854	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2273.4	2273.4	2273.4	2273.4	2273.4
2.5°	2286.2	2267.4	2273.4	2268.3	2257.4
5°	2279.4	2254.0	2261.4	2255.3	2251.4
7.5°	2256.2	2232.7	2238.2	2231.7	2229.3
10°	2235.3	2211.8	2217.3	2209.2	2205.3
12.5°	2211.3	2186.2	2191.7	2183.6	2181.3
15°	2169.2	2141.8	2145.2	2141.1	2137.2
17.5°	2120.4	2092.6	2093.1	2086.7	2085.9
20°	2085.1	2055.7	2053.1	2045.2	2049.1
22.5°	2046.7	2015.7	2013.0	2001.9	2007.4
25°	1983.0	1949.7	1946.9	1935.0	1940.9
27.5°	1909.3	1876.4	1876.4	1859.7	1866.0
30°	1854.8	1823.4	1826.7	1806.9	1814.7
32.5°	1797.1	1768.9	1770.7	1750.8	1758.6
35°	1704.6	1681.1	1680.5	1664.6	1670.5
37.5°	1610.0	1589.3	1586.0	1576.8	1578.4
40°	1544.3	1526.7	1520.3	1514.3	1514.3
42.5°	1475.4	1459.3	1453.0	1448.5	1447.0
45°	1370.1	1358.3	1352.0	1348.0	1346.0
47.5°	1265.9	1254.9	1249.5	1246.6	1244.7
50°	1193.8	1186.0	1183.8	1177.7	1175.8
52.5°	1121.7	1117.0	1114.9	1107.2	1105.3
55°	1015.5	1013.6	1015.5	1001.5	999.5
57.5°	905.0	908.1	914.6	895.6	890.9
60°	831.2	839.1	847.3	825.1	817.2
62.5°	755.9	768.5	780.0	754.5	743.5
65°	643.0	662.5	675.0	648.5	626.9
67.5°	534.0	558.3	573.3	544.7	520.4
70°	458.7	486.1	502.8	474.1	446.7
72.5°	393.0	423.5	437.1	410.0	382.6
75°	296.4	323.9	340.5	317.8	288.4
77.5°	210.3	236.2	250.0	230.2	205.9
80°	154.2	181.6	192.3	175.8	156.2
82.5°	109.4	132.1	139.4	129.5	116.2
85°	50.1	65.7	74.1	70.0	66.1
87.5°	14.0	26.1	35.2	35.8	38.0
90°	5.9	11.7	23.7	26.8	29.7
92.5°	53.4	221.7	396.4	144.7	112.7
95°	127.6	469.9	1575.5	647.6	421.3
97.5°	211.3	526.3	2333.9	1796.9	1301.3
100°	273.0	560.2	2614.0	2632.4	2139.2
102.5°	332.3	598.6	2668.6	3252.5	2784.9
105°	427.3	659.3	2637.7	4026.9	3791.9
107.5°	528.1	734.7	2490.5	4400.3	4486.2
110°	599.3	785.0	2376.6	4480.6	4759.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	663.4	842.1	2269.8	4417.2	4828.0
115°	765.5	925.1	2124.4	4205.6	4782.9
117.5°	854.5	1013.5	2028.9	3907.7	4564.5
120°	913.9	1070.5	1990.9	3706.0	4367.5
122.5°	970.8	1120.5	1960.0	3517.7	4144.4
125°	1050.3	1195.4	1925.6	3258.8	3824.5
127.5°	1118.0	1263.0	1905.4	3039.9	3527.8
130°	1163.1	1308.1	1895.9	2905.9	3349.8
132.5°	1205.8	1343.9	1886.4	2793.4	3195.5
135°	1264.0	1400.3	1872.2	2639.4	2975.9
137.5°	1329.2	1453.4	1865.1	2510.1	2797.3
140°	1364.8	1486.7	1860.3	2423.9	2676.3
142.5°	1405.2	1517.8	1855.6	2347.2	2569.5
145°	1465.7	1567.3	1848.5	2247.0	2418.1
147.5°	1523.9	1612.6	1841.9	2162.4	2295.3
150°	1566.6	1639.1	1839.6	2112.0	2219.4
152.5°	1599.8	1667.7	1837.2	2068.9	2157.6
155°	1652.6	1707.8	1833.6	2016.1	2079.9
157.5°	1701.3	1743.7	1834.2	1977.6	2021.2
160°	1729.8	1767.5	1836.6	1956.0	1987.9
162.5°	1753.5	1786.6	1839.0	1936.9	1961.8
165°	1789.1	1812.3	1842.5	1914.1	1928.6
167.5°	1816.4	1830.4	1845.5	1900.2	1904.8
170°	1830.7	1842.3	1845.5	1893.0	1893.0
172.5°	1842.5	1849.5	1845.5	1883.4	1881.1
175°	1854.4	1857.3	1845.5	1872.1	1866.3
177.5°	1859.2	1856.8	1844.9	1861.4	1856.8
180°	1854.4	1854.4	1854.4	1854.4	1854.4

(END OF REPORT)