

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: P564237

Luminaire Tested: **SQ4-PR1-100U-050D-835-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564237
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-835-1D-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: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17866.2 lumens
Efficiency: N/A
Efficacy: 140.2 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

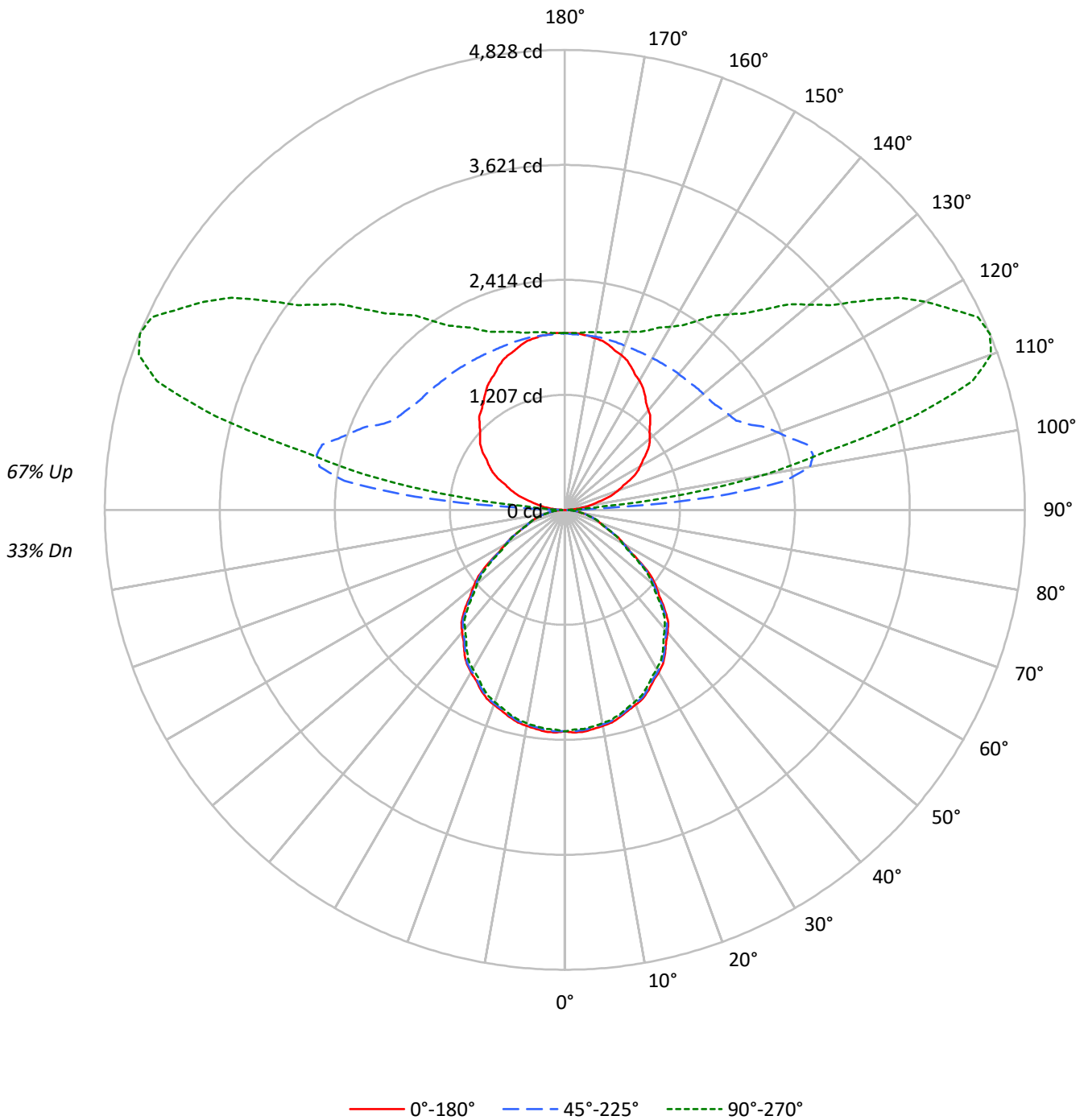
Input Watts (W): 127.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	7152	7152	7152
5°	7216	7161	7123
10°	7193	7143	7106
15°	7162	7117	7079
20°	7126	7080	7027
25°	7075	7028	6946
30°	6999	6949	6850
35°	6896	6836	6738
40°	6739	6666	6545
45°	6464	6351	6220
50°	5980	5836	5721
55°	5220	5101	4994
60°	4398	4362	4275
65°	3804	3819	3790
70°	3494	3512	3512
75°	3356	3356	3379
80°	3158	3193	3158
85°	2544	2826	2826



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	219.9	1.2
10°-20°	629.2	3.5
20°-30°	949.0	5.3
30°-40°	1130.7	6.3
40°-50°	1114.8	6.2
50°-60°	852.0	4.8
60°-70°	527.3	3.0
70°-80°	299.5	1.7
80°-90°	94.9	0.5
90°-100°	868.4	4.9
100°-110°	2397.4	13.4
110°-120°	2472.6	13.8
120°-130°	1986.9	11.1
130°-140°	1561.5	8.7
140°-150°	1197.6	6.7
150°-160°	860.7	4.8
160°-170°	526.4	2.9
170°-180°	177.5	1.0
0°-30°	1798.1	10.1
0°-40°	2928.8	16.4
0°-60°	4895.6	27.4
0°-90°	5817.3	32.6
90°-120°	5738.4	32.1
90°-150°	10484.4	58.7
90°-180°	12049.0	67.4
0°-180°	17866.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2326	2326	2326	2326	2326	
5°	2338	2312	2320	2311	2307	222
15°	2249	2226	2235	2227	2223	635
25°	2085	2060	2071	2049	2047	960
35°	1837	1815	1821	1797	1795	1146
45°	1486	1467	1460	1434	1430	1139
55°	974	958	951	935	931	872
65°	523	519	525	521	521	530
75°	282	282	282	284	284	298
85°	72	76	80	80	80	84
90°	6	12	24	27	30	12
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°	2325.5	2325.5	2325.5	2325.5	2325.5
2.5°	2339.9	2319.5	2325.5	2320.4	2309.5
5°	2337.5	2312.0	2319.5	2311.4	2307.4
7.5°	2319.5	2294.4	2301.8	2293.8	2291.4
10°	2303.4	2279.9	2287.4	2279.3	2275.4
12.5°	2285.8	2260.7	2269.8	2260.1	2256.2
15°	2249.4	2225.9	2235.3	2227.2	2223.3
17.5°	2209.3	2184.2	2193.7	2184.3	2179.3
20°	2177.3	2153.8	2163.2	2149.2	2147.2
22.5°	2142.0	2118.5	2128.0	2109.1	2108.8
25°	2085.1	2059.7	2071.1	2049.0	2047.1
27.5°	2017.4	1993.9	2003.4	1980.9	1978.6
30°	1970.9	1947.4	1956.9	1932.8	1928.9
32.5°	1918.1	1896.1	1904.0	1880.0	1877.6
35°	1836.7	1815.2	1820.7	1796.6	1794.7
37.5°	1744.2	1724.6	1727.8	1701.3	1699.3
40°	1678.5	1658.9	1660.5	1632.4	1630.4
42.5°	1606.4	1586.8	1585.2	1557.1	1555.1
45°	1486.2	1466.6	1460.2	1434.1	1430.1
47.5°	1349.2	1329.6	1317.6	1296.3	1293.5
50°	1249.9	1230.3	1219.8	1201.7	1195.8
52.5°	1142.5	1122.9	1114.1	1097.5	1091.6
55°	973.5	957.8	951.4	935.3	931.4
57.5°	812.8	802.2	800.4	784.7	783.2
60°	715.1	709.2	709.1	695.0	695.0
62.5°	631.7	627.4	630.5	621.3	619.7
65°	522.8	518.9	524.8	520.8	520.8
67.5°	436.7	436.7	440.3	438.7	438.7
70°	388.6	388.6	390.6	390.6	390.6
72.5°	345.3	343.7	348.9	348.9	347.3
75°	282.4	282.4	282.4	284.4	284.4
77.5°	219.9	220.3	221.9	221.5	219.9
80°	178.3	180.2	180.3	178.3	178.3
82.5°	136.6	138.6	138.6	138.2	136.6
85°	72.1	76.0	80.1	80.1	80.1
87.5°	22.0	29.4	36.8	37.4	36.4
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)