

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: P520267

Luminaire Tested: **SQ4-F-125U-050D-830-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520267
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-24, G3-1910-536-17)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-125U-050D-830-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

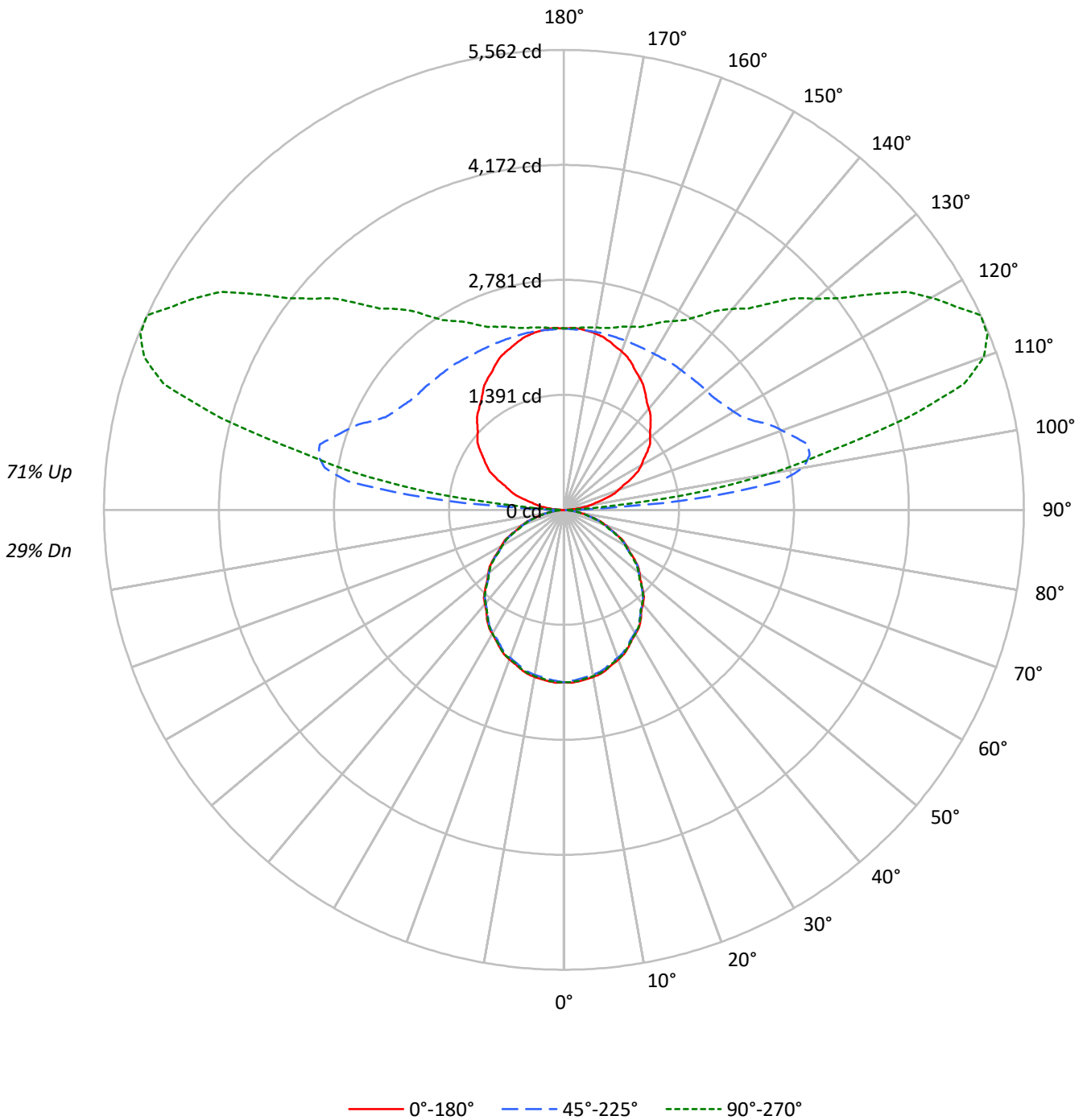
Lumens per Lamp: N/A
Luminaire Lumens: 19854.3 lumens
Efficiency: N/A
Efficacy: 129.9 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 152.8
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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	37	37	37	29
1	93	89	85	82	83	80	77	74	63	60	58	47	45	44	32	31	31	24
2	85	77	72	67	76	70	65	60	55	51	48	41	39	37	28	27	26	20
3	77	68	61	55	69	61	55	50	48	44	40	36	33	31	25	23	22	17
4	70	60	52	47	63	54	47	42	43	38	34	32	29	26	22	20	19	15
5	64	53	45	40	57	48	41	36	38	33	29	29	25	23	20	18	16	13
6	59	48	40	34	53	43	36	31	34	29	25	26	22	20	18	16	14	11
7	55	43	35	30	49	39	32	27	31	26	22	23	20	17	16	14	13	10
8	51	39	31	26	45	35	28	24	28	23	20	21	18	15	15	13	11	9
9	47	35	28	23	42	32	26	21	26	21	17	20	16	14	14	12	10	8
10	44	32	25	21	39	29	23	19	23	19	16	18	15	12	13	11	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6415	6415	6415
5°	6430	6353	6405
10°	6409	6330	6374
15°	6365	6285	6338
20°	6306	6232	6278
25°	6234	6159	6216
30°	6147	6098	6138
35°	6080	6007	6038
40°	5963	5908	5919
45°	5841	5793	5793
50°	5718	5664	5638
55°	5584	5510	5479
60°	5375	5290	5255
65°	5121	5018	4958
70°	4770	4670	4570
75°	4280	4148	4048
80°	3461	3413	3314
85°	2071	2368	2463



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	196.8	1.0
10°-20°	560.4	2.8
20°-30°	841.7	4.2
30°-40°	1004.8	5.1
40°-50°	1029.6	5.2
50°-60°	918.3	4.6
60°-70°	683.9	3.4
70°-80°	371.2	1.9
80°-90°	91.1	0.5
90°-100°	1025.8	5.2
100°-110°	2763.4	13.9
110°-120°	2900.1	14.6
120°-130°	2353.3	11.9
130°-140°	1845.6	9.3
140°-150°	1417.0	7.1
150°-160°	1018.8	5.1
160°-170°	622.4	3.1
170°-180°	209.9	1.1
0°-30°	1599.0	8.1
0°-40°	2603.7	13.1
0°-60°	4551.6	22.9
0°-90°	5697.8	28.7
90°-120°	6689.3	33.7
90°-150°	12305.3	62.0
90°-180°	14156.0	71.3
0°-180°	19854.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2086	2086	2086	2086	2086	
5°	2083	2080	2058	2077	2075	198
15°	1999	1994	1974	1991	1991	563
25°	1837	1832	1815	1826	1832	846
35°	1620	1614	1600	1600	1608	1011
45°	1343	1346	1332	1329	1332	1036
55°	1042	1042	1028	1019	1022	928
65°	704	701	690	681	681	697
75°	360	357	349	343	341	381
85°	59	64	67	70	70	82
90°	6	16	34	36	36	13
95°	156	558	1682	860	595	163
105°	511	795	3056	4572	4291	537
115°	902	1104	2545	4917	5562	888
125°	1232	1415	2285	3862	4545	1100
135°	1483	1655	2221	3116	3528	1145
145°	1715	1849	2193	2664	2861	1076
155°	1947	2018	2173	2390	2467	896
165°	2112	2136	2182	2269	2280	596
175°	2196	2193	2184	2215	2210	209
180°	2193	2193	2193	2193	2193	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2085.8	2085.8	2085.8	2085.8	2085.8
2.5°	2092.5	2088.1	2070.1	2085.7	2083.5
5°	2082.9	2080.3	2057.8	2077.3	2074.6
7.5°	2067.9	2062.4	2040.5	2059.5	2056.7
10°	2052.3	2046.8	2027.1	2043.8	2041.1
12.5°	2032.2	2028.9	2007.0	2023.8	2023.2
15°	1999.2	1993.7	1974.1	1990.8	1990.8
17.5°	1955.6	1952.4	1933.4	1949.4	1947.3
20°	1926.7	1921.1	1904.3	1918.3	1918.3
22.5°	1890.9	1887.6	1870.7	1882.6	1884.7
25°	1837.2	1831.8	1814.9	1826.2	1831.7
27.5°	1778.1	1773.7	1759.6	1767.0	1770.8
30°	1731.1	1731.1	1717.2	1720.2	1728.4
32.5°	1688.7	1688.7	1672.5	1675.4	1679.3
35°	1619.5	1614.0	1599.9	1600.1	1608.3
37.5°	1539.0	1536.3	1527.3	1525.7	1527.9
40°	1485.4	1482.7	1471.5	1474.3	1474.3
42.5°	1431.9	1429.1	1417.9	1414.1	1418.4
45°	1343.0	1345.8	1331.9	1329.1	1331.9
47.5°	1255.3	1255.3	1244.2	1236.5	1240.9
50°	1195.1	1195.1	1183.9	1178.3	1178.3
52.5°	1132.5	1134.7	1121.3	1113.6	1115.7
55°	1041.5	1041.5	1027.6	1019.2	1021.9
57.5°	941.0	941.0	927.0	918.7	923.6
60°	873.9	873.9	860.0	851.7	854.4
62.5°	807.0	807.0	793.0	784.6	785.2
65°	703.7	700.9	689.6	681.3	681.3
67.5°	604.3	597.2	588.6	577.4	577.4
70°	530.5	527.7	519.4	508.2	508.2
72.5°	463.5	458.6	450.1	441.2	441.2
75°	360.2	357.4	349.1	343.3	340.7
77.5°	258.0	255.8	255.2	247.4	249.7
80°	195.4	195.4	192.7	187.1	187.1
82.5°	139.6	141.8	136.9	135.7	133.5
85°	58.7	64.1	67.1	69.8	69.8
87.5°	12.3	21.0	22.4	25.1	25.1
90°	5.6	16.5	33.5	36.3	36.3
92.5°	68.2	240.8	476.0	229.1	159.3
95°	156.4	558.0	1681.7	859.9	595.0
97.5°	249.7	638.7	2637.6	2203.5	1661.5
100°	321.3	670.9	2941.6	3077.7	2553.2
102.5°	390.5	716.2	3042.1	3732.4	3301.9
105°	511.2	795.3	3056.1	4572.1	4290.8
107.5°	625.2	878.7	2925.9	5003.7	5076.4
110°	701.2	941.5	2807.5	5137.7	5402.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	781.6	1004.5	2693.5	5108.0	5543.5
115°	902.3	1104.4	2544.8	4917.3	5561.8
117.5°	1012.4	1201.9	2429.8	4612.7	5330.5
120°	1083.9	1266.8	2371.7	4394.1	5131.7
122.5°	1146.5	1327.2	2329.2	4170.7	4906.0
125°	1231.9	1415.0	2285.1	3862.2	4545.0
127.5°	1314.1	1494.4	2257.1	3590.1	4199.8
130°	1363.2	1543.5	2246.0	3434.2	3969.6
132.5°	1412.4	1590.5	2234.8	3296.9	3788.6
135°	1483.3	1655.4	2220.8	3115.8	3528.2
137.5°	1550.9	1715.9	2213.6	2962.1	3300.8
140°	1597.9	1756.4	2206.9	2867.5	3173.4
142.5°	1647.0	1794.5	2202.4	2779.3	3037.1
145°	1715.2	1849.0	2192.9	2663.9	2860.6
147.5°	1788.9	1905.3	2183.4	2566.8	2721.5
150°	1838.2	1939.2	2179.0	2505.9	2634.2
152.5°	1882.9	1970.8	2176.7	2456.2	2560.5
155°	1947.1	2018.1	2173.3	2390.2	2466.7
157.5°	2003.5	2058.7	2173.9	2343.8	2395.2
160°	2039.2	2085.7	2176.1	2316.7	2354.9
162.5°	2070.5	2108.2	2178.4	2294.1	2321.4
165°	2111.9	2136.4	2181.7	2268.6	2279.5
167.5°	2145.4	2159.6	2184.5	2248.8	2253.3
170°	2167.7	2173.2	2184.5	2237.6	2237.6
172.5°	2181.1	2182.2	2186.8	2226.4	2226.4
175°	2195.7	2193.0	2184.5	2215.1	2209.7
177.5°	2201.9	2197.5	2186.2	2203.9	2199.6
180°	2192.9	2192.9	2192.9	2192.9	2192.9

(END OF REPORT)