

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: P520375

Luminaire Tested: **SQ4-F-150U-050D-930-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520375
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, 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-150U-050D-930-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

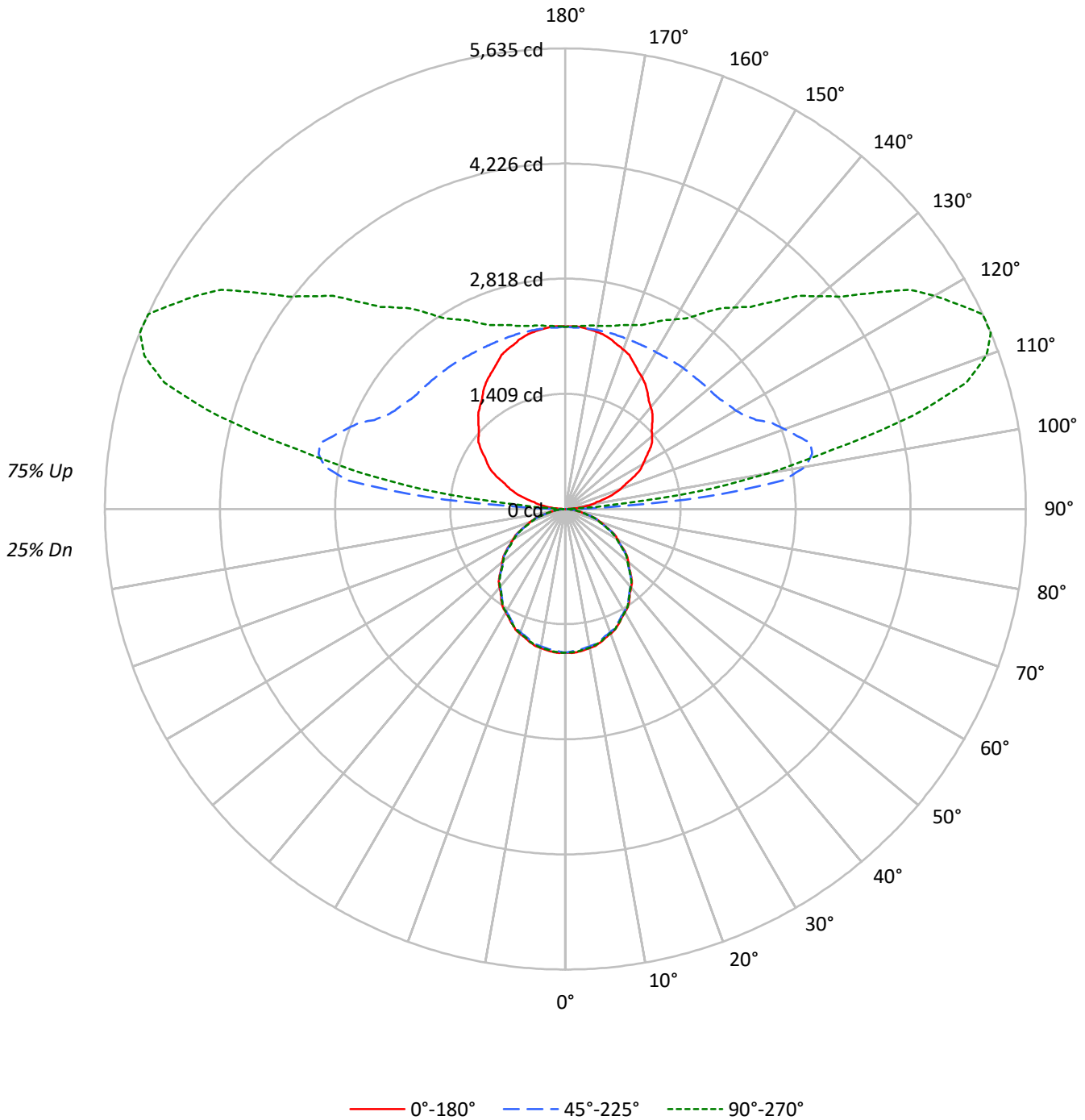
Lumens per Lamp: N/A
Luminaire Lumens: 19184.7 lumens
Efficiency: N/A
Efficacy: 109.1 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 175.9
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	101	101	101	101	90	90	90	90	69	69	69	51	51	51	33	33	33	25
1	92	88	84	81	82	79	75	73	61	59	57	44	43	42	29	29	28	21
2	84	77	71	66	74	69	64	59	53	50	47	39	37	35	26	25	23	18
3	76	67	60	55	68	60	54	49	47	43	39	34	32	29	23	21	20	15
4	70	59	52	46	62	53	47	42	41	37	33	30	27	25	20	18	17	13
5	64	53	45	39	57	47	41	36	37	32	29	27	24	22	18	16	15	11
6	59	47	39	34	52	42	36	31	33	28	25	24	21	19	16	14	13	10
7	54	42	35	29	48	38	31	27	30	25	22	22	19	16	15	13	11	8
8	50	38	31	26	44	34	28	23	27	22	19	20	17	15	14	12	10	8
9	47	35	28	23	41	31	25	21	25	20	17	18	15	13	13	11	9	7
10	43	32	25	20	39	29	23	18	23	18	15	17	14	12	12	10	8	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5408	5408	5408
5°	5421	5356	5399
10°	5403	5337	5374
15°	5366	5299	5344
20°	5316	5254	5292
25°	5256	5192	5240
30°	5183	5141	5174
35°	5126	5064	5091
40°	5028	4981	4990
45°	4925	4883	4883
50°	4820	4775	4753
55°	4708	4645	4619
60°	4532	4459	4430
65°	4317	4232	4180
70°	4022	3937	3852
75°	3609	3496	3411
80°	2919	2876	2793
85°	1743	1994	2078



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	165.9	0.9
10°-20°	472.5	2.5
20°-30°	709.6	3.7
30°-40°	847.1	4.4
40°-50°	868.0	4.5
50°-60°	774.1	4.0
60°-70°	576.5	3.0
70°-80°	313.0	1.6
80°-90°	77.1	0.4
90°-100°	1036.6	5.4
100°-110°	2802.7	14.6
110°-120°	2946.7	15.4
120°-130°	2393.5	12.5
130°-140°	1877.5	9.8
140°-150°	1441.0	7.5
150°-160°	1036.3	5.4
160°-170°	633.1	3.3
170°-180°	213.4	1.1
0°-30°	1348.0	7.0
0°-40°	2195.1	11.4
0°-60°	3837.3	20.0
0°-90°	4803.9	25.0
90°-120°	6786.0	35.4
90°-150°	12497.9	65.1
90°-180°	14381.0	75.0
0°-180°	19184.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1758	1758	1758	1758	1758	
5°	1756	1754	1735	1751	1749	167
15°	1686	1681	1664	1678	1678	475
25°	1549	1544	1530	1540	1544	713
35°	1365	1361	1349	1349	1356	852
45°	1132	1135	1123	1121	1123	874
55°	878	878	866	859	862	782
65°	593	591	582	574	574	587
75°	304	301	294	290	287	321
85°	49	54	56	59	59	69
90°	5	14	31	34	31	12
95°	161	565	1724	892	531	168
105°	521	805	3109	4586	4399	549
115°	917	1121	2579	4992	5635	906
125°	1256	1439	2324	3922	4607	1119
135°	1505	1684	2262	3167	3585	1163
145°	1750	1882	2230	2710	2917	1095
155°	1976	2053	2211	2432	2511	911
165°	2151	2172	2221	2308	2319	606
175°	2233	2231	2223	2252	2247	212
180°	2230	2230	2230	2230	2230	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1758.4	1758.4	1758.4	1758.4	1758.4
2.5°	1764.1	1760.4	1745.2	1758.3	1756.6
5°	1756.1	1753.8	1734.9	1751.3	1749.0
7.5°	1743.3	1738.7	1720.3	1736.2	1734.0
10°	1730.1	1725.6	1709.0	1723.0	1720.8
12.5°	1713.2	1710.4	1692.1	1706.2	1705.7
15°	1685.5	1680.8	1664.3	1678.4	1678.4
17.5°	1648.7	1645.9	1629.9	1643.5	1641.7
20°	1624.2	1619.6	1605.4	1617.1	1617.1
22.5°	1594.2	1591.4	1577.2	1587.1	1588.9
25°	1548.9	1544.3	1530.1	1539.6	1544.2
27.5°	1499.0	1495.4	1483.5	1489.6	1492.9
30°	1459.5	1459.5	1447.7	1450.2	1457.1
32.5°	1423.7	1423.7	1410.1	1412.4	1415.7
35°	1365.3	1360.7	1348.8	1349.0	1355.9
37.5°	1297.6	1295.2	1287.6	1286.2	1288.1
40°	1252.3	1250.0	1240.6	1242.9	1242.9
42.5°	1207.1	1204.9	1195.4	1192.1	1195.8
45°	1132.3	1134.6	1122.8	1120.6	1122.8
47.5°	1058.3	1058.3	1049.0	1042.5	1046.1
50°	1007.5	1007.5	998.1	993.4	993.4
52.5°	954.8	956.6	945.3	938.8	940.6
55°	878.0	878.0	866.3	859.2	861.5
57.5°	793.3	793.3	781.5	774.5	778.7
60°	736.8	736.8	725.0	718.0	720.3
62.5°	680.3	680.3	668.5	661.4	661.9
65°	593.2	590.9	581.5	574.4	574.4
67.5°	509.4	503.4	496.2	486.8	486.8
70°	447.3	444.9	437.8	428.4	428.4
72.5°	390.8	386.6	379.4	371.9	371.9
75°	303.7	301.3	294.2	289.5	287.1
77.5°	217.5	215.7	215.2	208.6	210.4
80°	164.8	164.8	162.4	157.7	157.7
82.5°	117.7	119.5	115.4	114.4	112.5
85°	49.4	54.0	56.5	58.9	58.9
87.5°	10.4	17.7	19.3	21.7	21.2
90°	4.8	14.2	31.2	33.6	31.2
92.5°	68.2	248.5	490.3	212.9	154.1
95°	160.9	564.7	1723.9	892.1	530.7
97.5°	258.3	647.6	2687.2	2223.8	1633.1
100°	331.4	681.2	2986.8	3114.9	2518.6
102.5°	398.6	727.7	3092.4	3790.6	3344.5
105°	521.0	805.1	3109.2	4586.4	4398.6
107.5°	634.4	893.5	2973.3	5082.8	5145.2
110°	722.7	957.4	2852.4	5216.1	5481.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	801.5	1021.2	2740.9	5189.5	5635.0
115°	917.2	1121.4	2578.6	4991.8	5635.0
117.5°	1030.5	1222.1	2471.5	4689.8	5418.9
120°	1099.6	1287.5	2408.1	4473.1	5217.2
122.5°	1164.9	1349.0	2369.7	4240.8	4990.6
125°	1255.7	1438.8	2324.1	3921.9	4607.4
127.5°	1339.3	1519.0	2297.3	3661.7	4264.6
130°	1385.3	1570.8	2285.7	3500.9	4045.6
132.5°	1433.3	1616.9	2274.2	3356.0	3857.4
135°	1505.4	1683.8	2261.7	3166.7	3584.6
137.5°	1577.9	1746.5	2251.1	3013.2	3353.7
140°	1627.9	1785.1	2247.3	2914.4	3217.2
142.5°	1675.9	1823.8	2239.6	2825.2	3090.5
145°	1750.3	1881.8	2230.5	2710.5	2917.2
147.5°	1818.0	1934.4	2219.9	2606.7	2765.5
150°	1867.9	1971.2	2216.1	2550.3	2677.0
152.5°	1914.1	2004.2	2214.2	2498.0	2602.2
155°	1976.0	2053.4	2211.3	2431.6	2511.4
157.5°	2040.3	2094.4	2211.8	2385.3	2437.9
160°	2076.9	2121.4	2213.7	2356.2	2393.7
162.5°	2105.6	2142.8	2215.6	2332.9	2361.0
165°	2151.3	2172.4	2220.9	2307.6	2319.3
167.5°	2182.5	2197.0	2221.3	2285.8	2291.4
170°	2201.7	2208.7	2223.3	2276.1	2276.1
172.5°	2217.0	2218.4	2223.3	2264.6	2262.7
175°	2232.9	2230.6	2223.3	2252.0	2247.3
177.5°	2238.2	2232.5	2222.8	2241.8	2236.2
180°	2230.5	2230.5	2230.5	2230.5	2230.5

(END OF REPORT)