

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: P564437

Luminaire Tested: **SQ4-PR1-150U-050D-930-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P564437  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, 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-PR1-150U-050D-930-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

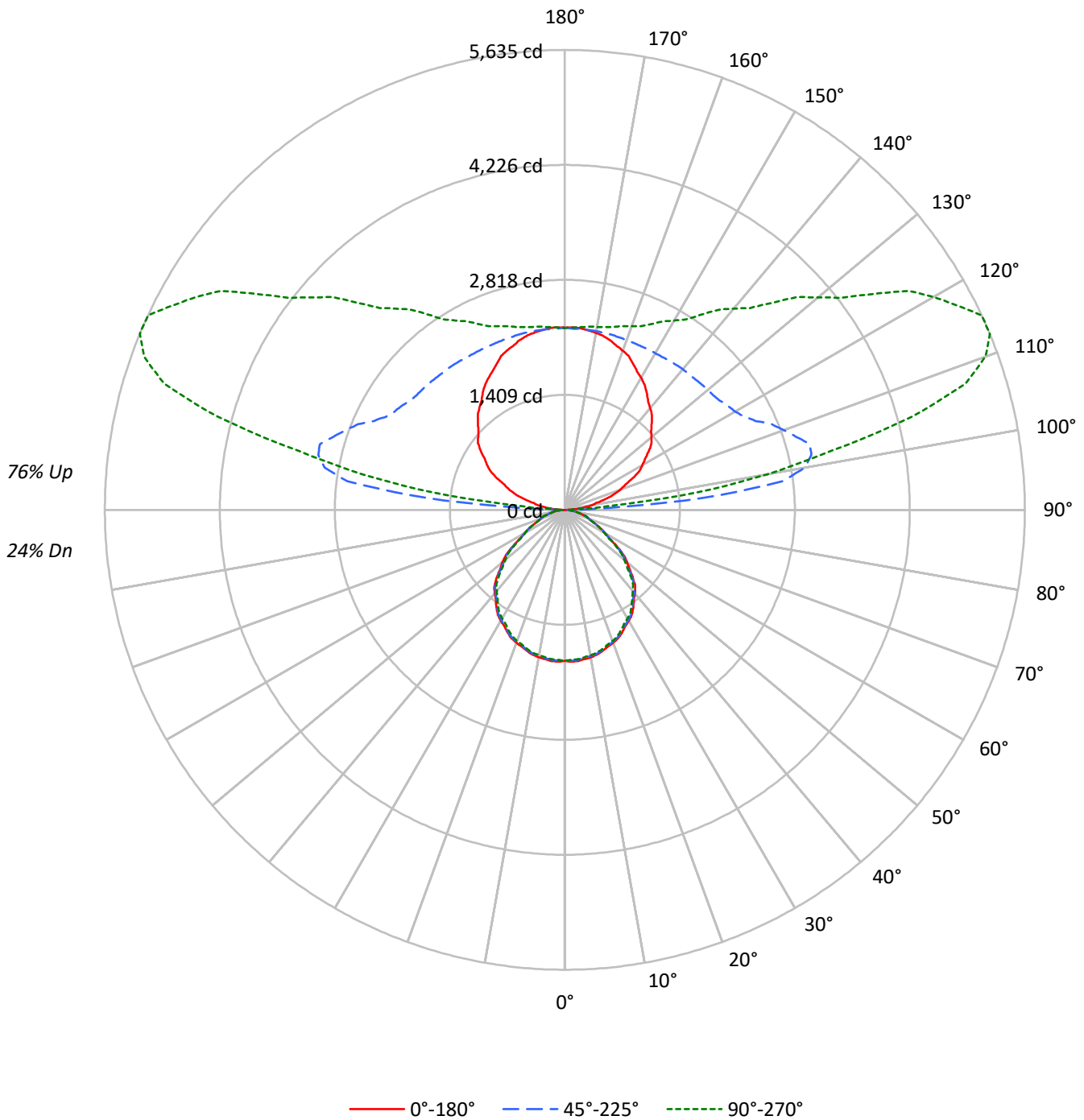
Lumens per Lamp: N/A  
Luminaire Lumens: 19011.5 lumens  
Efficiency: N/A  
Efficacy: 112.6 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 168.9  
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	50	50	50	33	33	33	24
1	92	88	84	81	82	78	75	73	61	59	57	44	43	42	29	28	28	21
2	84	77	71	66	75	69	64	60	53	50	47	39	37	35	26	25	24	18
3	77	68	61	55	68	61	55	50	47	43	40	34	32	30	23	21	20	15
4	70	60	52	47	62	54	47	42	42	37	34	31	28	25	20	19	17	13
5	64	53	46	40	57	48	41	36	37	33	29	28	24	22	18	17	15	11
6	59	48	40	34	52	43	36	31	33	29	25	25	22	19	17	15	13	10
7	54	43	35	30	48	38	32	27	30	26	22	22	19	17	15	13	12	9
8	50	39	31	26	45	35	28	24	27	23	19	20	17	15	14	12	11	8
9	47	35	28	23	42	32	25	21	25	20	17	19	16	13	13	11	10	7
10	44	32	25	21	39	29	23	19	23	19	15	17	14	12	12	10	9	7

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	5691	5691	5691
5°	5742	5698	5669
10°	5724	5684	5655
15°	5699	5664	5633
20°	5670	5634	5592
25°	5630	5593	5528
30°	5570	5530	5451
35°	5487	5439	5362
40°	5362	5305	5209
45°	5144	5053	4949
50°	4759	4644	4553
55°	4153	4059	3974
60°	3500	3470	3402
65°	3027	3039	3016
70°	2780	2795	2795
75°	2670	2670	2689
80°	2513	2541	2513
85°	2025	2251	2251



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	175.0	0.9
10°-20°	500.7	2.6
20°-30°	755.2	4.0
30°-40°	899.8	4.7
40°-50°	887.1	4.7
50°-60°	678.0	3.6
60°-70°	419.6	2.2
70°-80°	238.3	1.3
80°-90°	77.2	0.4
90°-100°	1036.6	5.5
100°-110°	2802.7	14.7
110°-120°	2946.7	15.5
120°-130°	2393.5	12.6
130°-140°	1877.5	9.9
140°-150°	1441.0	7.6
150°-160°	1036.3	5.5
160°-170°	633.1	3.3
170°-180°	213.4	1.1
0°-30°	1430.8	7.5
0°-40°	2330.6	12.3
0°-60°	3895.7	20.5
0°-90°	4630.7	24.4
90°-120°	6786.0	35.7
90°-150°	12497.9	65.7
90°-180°	14381.0	75.6
0°-180°	19011.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1850	1850	1850	1850	1850	
5°	1860	1840	1846	1839	1836	176
15°	1790	1771	1779	1772	1769	505
25°	1659	1639	1648	1630	1629	764
35°	1462	1444	1449	1430	1428	912
45°	1183	1167	1162	1141	1138	906
55°	775	762	757	744	741	694
65°	416	413	418	414	414	421
75°	225	225	225	226	226	237
85°	57	60	64	64	64	67
90°	5	14	31	34	31	13
95°	161	565	1724	892	531	168
105°	521	805	3109	4586	4398	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	2711	2917	1095
155°	1976	2054	2211	2432	2511	911
165°	2151	2172	2221	2308	2319	606
175°	2233	2230	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°	1850.5	1850.5	1850.5	1850.5	1850.5
2.5°	1862.0	1845.8	1850.5	1846.5	1837.8
5°	1860.1	1839.8	1845.7	1839.3	1836.2
7.5°	1845.7	1825.8	1831.7	1825.3	1823.4
10°	1833.0	1814.3	1820.2	1813.8	1810.7
12.5°	1818.9	1799.0	1806.2	1798.5	1795.4
15°	1789.9	1771.2	1778.8	1772.3	1769.2
17.5°	1758.1	1738.1	1745.6	1738.2	1734.2
20°	1732.6	1713.9	1721.4	1710.2	1708.7
22.5°	1704.5	1685.8	1693.4	1678.4	1678.0
25°	1659.2	1639.0	1648.1	1630.5	1629.0
27.5°	1605.4	1586.7	1594.2	1576.3	1574.4
30°	1568.4	1549.7	1557.2	1538.0	1534.9
32.5°	1526.3	1508.9	1515.2	1496.0	1494.1
35°	1461.6	1444.5	1448.8	1429.7	1428.1
37.5°	1388.0	1372.4	1374.9	1353.8	1352.3
40°	1335.7	1320.1	1321.3	1299.0	1297.4
42.5°	1278.3	1262.7	1261.4	1239.1	1237.5
45°	1182.7	1167.1	1161.9	1141.2	1138.0
47.5°	1073.6	1058.1	1048.5	1031.5	1029.3
50°	994.6	979.0	970.7	956.2	951.6
52.5°	909.2	893.6	886.5	873.3	868.7
55°	774.6	762.2	757.1	744.3	741.2
57.5°	646.8	638.4	636.9	624.5	623.2
60°	569.0	564.3	564.2	553.1	553.1
62.5°	502.7	499.3	501.8	494.4	493.2
65°	416.0	412.9	417.6	414.4	414.4
67.5°	347.5	347.5	350.3	349.1	349.1
70°	309.2	309.2	310.8	310.8	310.8
72.5°	274.8	273.5	277.7	277.6	276.4
75°	224.7	224.7	224.7	226.3	226.3
77.5°	175.0	175.3	176.6	176.3	175.0
80°	141.9	143.4	143.5	141.9	141.9
82.5°	108.7	110.3	110.3	110.0	108.7
85°	57.4	60.5	63.8	63.8	63.8
87.5°	17.5	24.4	31.7	32.2	30.5
90°	4.8	14.2	31.2	33.6	31.2
92.5°	68.2	248.5	490.3	212.8	154.1
95°	160.9	564.7	1723.9	892.1	530.6
97.5°	258.3	647.6	2687.1	2223.8	1633.1
100°	331.3	681.1	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	4398.5
107.5°	634.3	893.5	2973.3	5082.8	5145.2
110°	722.7	957.4	2852.3	5216.1	5481.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	801.4	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	5419.0
120°	1099.6	1287.4	2408.2	4473.1	5217.3
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	1519.1	2297.2	3661.7	4264.6
130°	1385.4	1570.8	2285.7	3501.0	4045.6
132.5°	1433.4	1617.0	2274.2	3355.9	3857.4
135°	1505.4	1683.8	2261.7	3166.8	3584.6
137.5°	1577.9	1746.5	2251.1	3013.2	3353.7
140°	1627.8	1785.1	2247.3	2914.4	3217.3
142.5°	1675.9	1823.8	2239.6	2825.2	3090.5
145°	1750.3	1881.8	2230.5	2710.6	2917.2
147.5°	1818.0	1934.4	2219.9	2606.7	2765.4
150°	1867.9	1971.2	2216.1	2550.3	2677.1
152.5°	1914.0	2004.2	2214.2	2497.9	2602.2
155°	1976.0	2053.5	2211.3	2431.6	2511.4
157.5°	2040.3	2094.3	2211.8	2385.3	2437.9
160°	2076.8	2121.4	2213.7	2356.2	2393.8
162.5°	2105.6	2142.7	2215.6	2332.9	2361.1
165°	2151.3	2172.4	2220.9	2307.6	2319.3
167.5°	2182.5	2197.0	2221.4	2285.8	2291.5
170°	2201.7	2208.7	2223.3	2276.1	2276.1
172.5°	2217.0	2218.4	2223.3	2264.5	2262.7
175°	2232.9	2230.5	2223.3	2252.0	2247.3
177.5°	2238.2	2232.5	2222.8	2241.9	2236.2
180°	2230.5	2230.5	2230.5	2230.5	2230.5

(END OF REPORT)