

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: P565104

Luminaire Tested: **SQ4-PW1-150U-050D-835-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P565104  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, 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-PW1-150U-050D-835-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

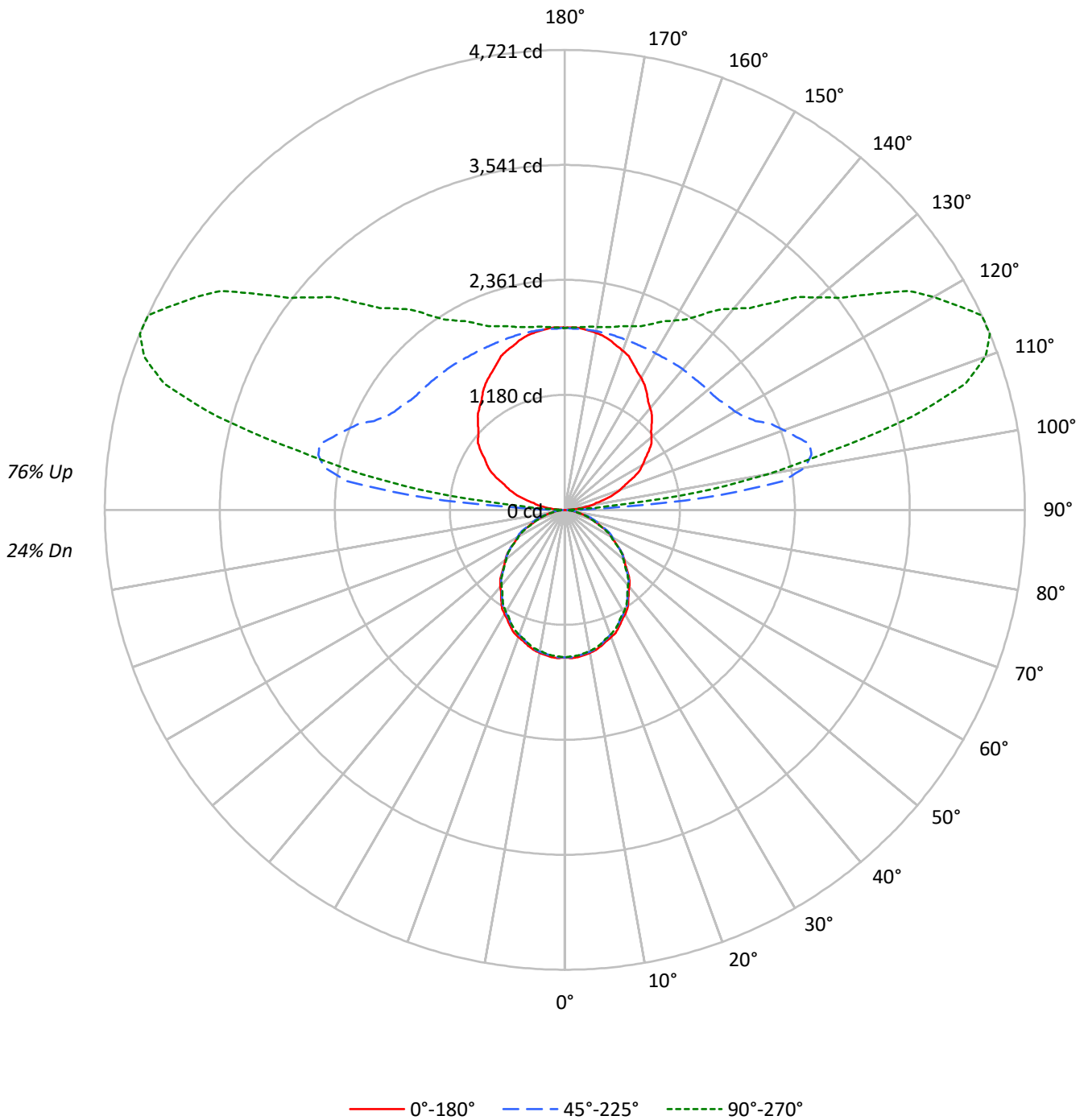
Lumens per Lamp: N/A  
Luminaire Lumens: 15907.9 lumens  
Efficiency: N/A  
Efficacy: 142.2 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 111.9  
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	32	32	32	24
1	92	88	84	81	82	78	75	72	60	58	57	44	43	42	29	28	27	21
2	84	77	71	66	74	68	64	59	53	50	47	39	37	35	25	24	23	17
3	76	67	60	55	68	60	54	50	47	43	39	34	32	29	22	21	20	15
4	70	60	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	40	34	52	42	36	31	33	28	25	24	21	19	16	14	13	10
7	54	43	35	30	48	38	32	27	30	25	22	22	19	17	15	13	11	9
8	50	38	31	26	45	35	28	24	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	19	23	18	15	17	14	12	12	10	8	6

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

	0°	45°	90°
0°	6992	6992	6992
5°	7037	6981	6950
10°	6980	6924	6887
15°	6907	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	5625
55°	5445	5445	5359
60°	5113	5211	5026
65°	4678	4912	4563
70°	4125	4521	4017
75°	3522	4046	3427
80°	2731	3406	2768
85°	1768	2615	2334



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	142.7	0.9
10°-20°	402.9	2.5
20°-30°	597.7	3.8
30°-40°	699.3	4.4
40°-50°	696.2	4.4
50°-60°	601.2	3.8
60°-70°	432.8	2.7
70°-80°	226.9	1.4
80°-90°	60.2	0.4
90°-100°	868.4	5.5
100°-110°	2348.1	14.8
110°-120°	2468.6	15.5
120°-130°	2005.2	12.6
130°-140°	1572.9	9.9
140°-150°	1207.2	7.6
150°-160°	868.2	5.5
160°-170°	530.4	3.3
170°-180°	178.8	1.1
0°-30°	1143.3	7.2
0°-40°	1842.7	11.6
0°-60°	3140.1	19.7
0°-90°	3860.0	24.3
90°-120°	5685.1	35.7
90°-150°	10470.5	65.8
90°-180°	12048.0	75.7
0°-180°	15907.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1516	1516	1516	1516	1516	
5°	1520	1503	1508	1504	1501	144
15°	1446	1428	1430	1427	1425	408
25°	1322	1300	1298	1290	1294	608
35°	1136	1121	1120	1110	1114	710
45°	913	906	901	899	897	705
55°	677	676	677	668	666	604
65°	429	442	450	432	418	425
75°	198	216	227	212	192	212
85°	33	44	49	47	44	44
90°	4	12	26	28	26	10
95°	135	473	1444	747	444	141
105°	436	674	2605	3842	3685	460
115°	768	940	2160	4182	4721	759
125°	1052	1205	1947	3286	3860	938
135°	1261	1411	1895	2653	3003	975
145°	1466	1576	1869	2271	2444	917
155°	1655	1720	1853	2037	2104	764
165°	1802	1820	1861	1933	1943	508
175°	1871	1869	1863	1887	1883	178
180°	1869	1869	1869	1869	1869	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1515.6	1515.6	1515.6	1515.6	1515.6
2.5°	1524.1	1511.6	1515.6	1512.2	1504.9
5°	1519.6	1502.6	1507.6	1503.5	1500.9
7.5°	1504.1	1488.5	1492.1	1487.8	1486.2
10°	1490.2	1474.6	1478.2	1472.8	1470.2
12.5°	1474.2	1457.5	1461.1	1455.7	1454.2
15°	1446.2	1427.9	1430.1	1427.4	1424.8
17.5°	1413.6	1395.0	1395.4	1391.1	1390.6
20°	1390.1	1370.5	1368.7	1363.4	1366.0
22.5°	1364.4	1343.8	1342.0	1334.6	1338.3
25°	1322.0	1299.8	1297.9	1290.0	1293.9
27.5°	1272.8	1250.9	1250.9	1239.8	1244.0
30°	1236.5	1215.6	1217.8	1204.6	1209.8
32.5°	1198.1	1179.3	1180.4	1167.2	1172.4
35°	1136.4	1120.7	1120.3	1109.8	1113.7
37.5°	1073.3	1059.5	1057.3	1051.2	1052.2
40°	1029.5	1017.8	1013.5	1009.5	1009.5
42.5°	983.6	972.9	968.7	965.7	964.6
45°	913.4	905.5	901.3	898.6	897.3
47.5°	843.9	836.6	833.0	831.1	829.8
50°	795.9	790.6	789.2	785.1	783.8
52.5°	747.8	744.7	743.2	738.1	736.8
55°	677.0	675.7	677.0	667.6	666.3
57.5°	603.3	605.4	609.7	597.1	594.0
60°	554.2	559.4	564.8	550.0	544.8
62.5°	504.0	512.3	520.0	503.0	495.7
65°	428.6	441.7	450.0	432.3	418.0
67.5°	356.0	372.2	382.2	363.1	346.9
70°	305.8	324.1	335.2	316.1	297.8
72.5°	262.0	282.4	291.4	273.3	255.0
75°	197.6	215.9	227.0	211.9	192.3
77.5°	140.2	157.4	166.6	153.5	137.3
80°	102.8	121.1	128.2	117.2	104.2
82.5°	72.9	88.1	92.9	86.3	77.4
85°	33.4	43.8	49.4	46.7	44.1
87.5°	9.4	18.2	25.5	25.9	26.6
90°	4.0	11.9	26.1	28.1	26.1
92.5°	57.1	208.2	410.7	178.3	129.1
95°	134.8	473.1	1444.2	747.4	444.5
97.5°	216.4	542.5	2251.2	1863.0	1368.2
100°	277.6	570.6	2502.3	2609.6	2110.0
102.5°	333.9	609.6	2590.8	3175.7	2802.0
105°	436.5	674.5	2604.9	3842.4	3685.0
107.5°	531.4	748.6	2491.0	4258.3	4310.6
110°	605.5	802.1	2389.6	4369.9	4592.2

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	671.4	855.5	2296.3	4347.6	4720.9
115°	768.4	939.5	2160.3	4182.0	4720.9
117.5°	863.3	1023.8	2070.6	3929.0	4539.9
120°	921.3	1078.6	2017.5	3747.5	4370.9
122.5°	976.0	1130.2	1985.3	3552.9	4181.0
125°	1052.0	1205.4	1947.1	3285.7	3860.0
127.5°	1122.0	1272.7	1924.6	3067.7	3572.8
130°	1160.6	1316.0	1914.9	2933.0	3389.3
132.5°	1200.8	1354.6	1905.3	2811.5	3231.6
135°	1261.2	1410.7	1894.8	2653.0	3003.1
137.5°	1321.9	1463.2	1886.0	2524.4	2809.6
140°	1363.8	1495.5	1882.7	2441.7	2695.4
142.5°	1404.0	1527.9	1876.3	2366.9	2589.2
145°	1466.4	1576.5	1868.7	2270.9	2443.9
147.5°	1523.1	1620.6	1859.8	2183.9	2316.8
150°	1564.9	1651.5	1856.6	2136.6	2242.8
152.5°	1603.5	1679.1	1855.0	2092.7	2180.0
155°	1655.4	1720.3	1852.6	2037.1	2104.0
157.5°	1709.3	1754.6	1853.0	1998.4	2042.4
160°	1739.9	1777.3	1854.6	1974.0	2005.4
162.5°	1764.1	1795.1	1856.2	1954.5	1978.1
165°	1802.3	1820.0	1860.6	1933.2	1943.1
167.5°	1828.4	1840.6	1861.0	1915.0	1919.7
170°	1844.5	1850.4	1862.6	1906.9	1906.9
172.5°	1857.4	1858.6	1862.6	1897.2	1895.6
175°	1870.7	1868.7	1862.6	1886.7	1882.7
177.5°	1875.1	1870.4	1862.2	1878.2	1873.5
180°	1868.7	1868.7	1868.7	1868.7	1868.7

(END OF REPORT)