

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: P565155

Luminaire Tested: **SQ4-PW1-150U-100D-840-1D-UNV-STD-W-6**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P565155  
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-100D-840-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

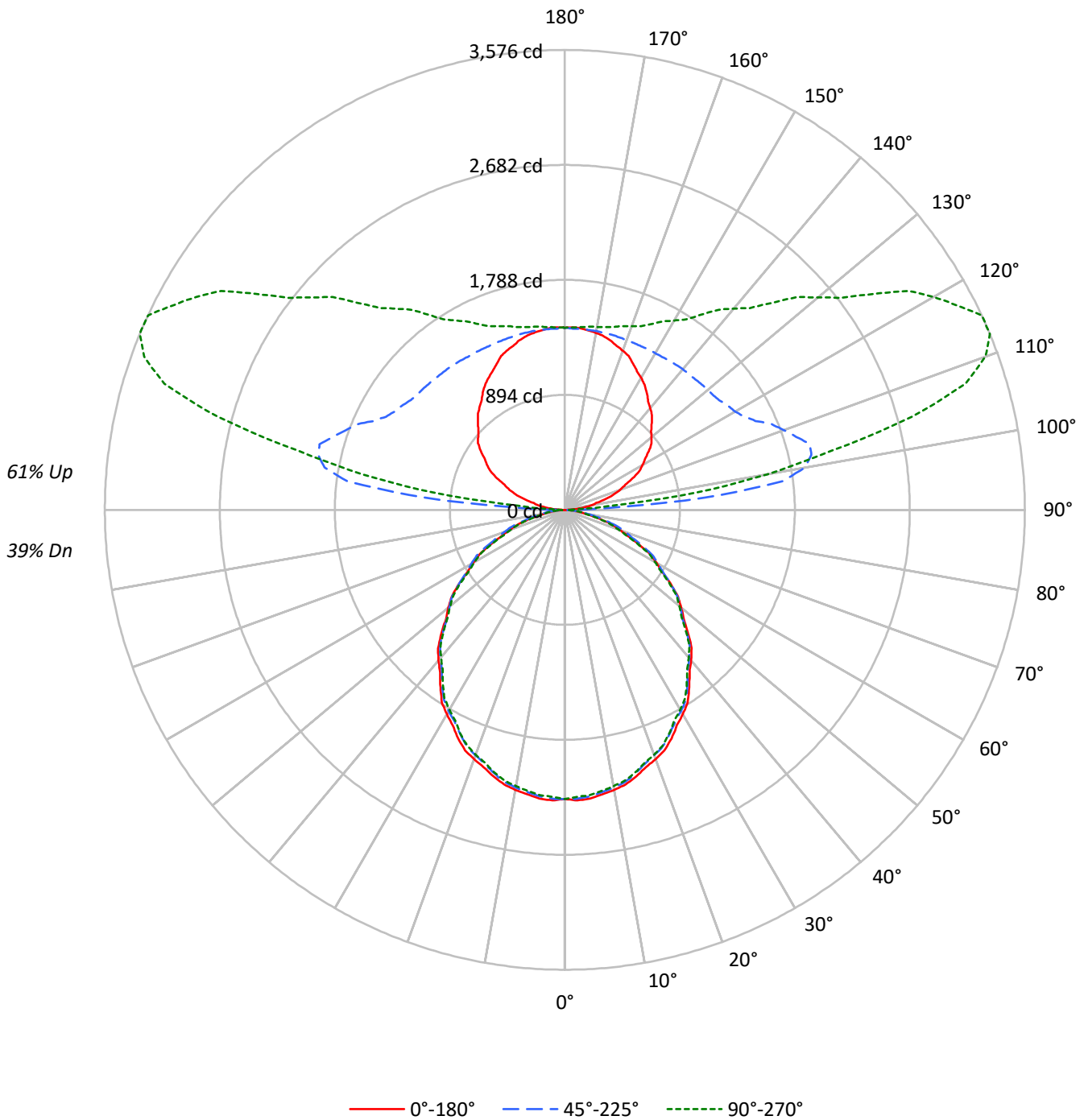
Lumens per Lamp: N/A  
Luminaire Lumens: 14850.5 lumens  
Efficiency: N/A  
Efficacy: 131.8 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31  
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 112.7  
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



TEST NUMBER: P565155  
CATALOG NUMBER: SQ4-PW1-150U-100D-840-1D-UNV-STD-W-6

### Luminous Intensity Polar Plot





TEST NUMBER: P565155

CATALOG NUMBER: SQ4-PW1-150U-100D-840-1D-UNV-STD-W-6

**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	104	104	104	104	95	95	95	95	77	77	77	61	61	61	46	46	46	39
1	95	91	87	84	86	83	80	77	68	65	63	53	52	51	40	39	39	33
2	87	80	74	69	79	73	67	63	59	56	52	47	44	42	36	34	33	27
3	79	70	63	57	72	64	58	53	52	48	44	42	38	36	32	30	28	23
4	72	62	54	48	66	57	50	45	46	41	38	37	33	31	28	26	24	20
5	66	55	47	41	60	50	43	38	41	36	32	33	29	27	25	23	21	17
6	61	49	41	36	55	45	38	33	37	32	28	30	26	23	23	20	18	15
7	56	44	37	31	51	41	34	29	34	29	25	27	23	20	21	18	16	14
8	52	40	33	27	47	37	30	26	31	26	22	25	21	18	19	17	15	12
9	49	37	29	24	44	34	27	23	28	23	20	23	19	16	18	15	13	11
10	45	34	27	22	41	31	25	20	26	21	18	21	17	15	17	14	12	10

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

	0°	45°	90°
0°	13830	13830	13830
5°	13919	13809	13748
10°	13808	13697	13622
15°	13662	13511	13460
20°	13498	13291	13265
25°	13310	13068	13028
30°	13029	12832	12747
35°	12659	12480	12406
40°	12264	12073	12025
45°	11787	11632	11580
50°	11298	11203	11128
55°	10771	10771	10600
60°	10113	10309	9943
65°	9255	9716	9025
70°	8159	8942	7945
75°	6968	8004	6780
80°	5402	6737	5473
85°	3493	5173	4615



TEST NUMBER: P565155

CATALOG NUMBER: SQ4-PW1-150U-100D-840-1D-UNV-STD-W-6

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	211.7	1.4
10°-20°	597.8	4.0
20°-30°	886.7	6.0
30°-40°	1037.5	7.0
40°-50°	1032.9	7.0
50°-60°	891.9	6.0
60°-70°	642.0	4.3
70°-80°	336.7	2.3
80°-90°	86.4	0.6
90°-100°	657.9	4.4
100°-110°	1778.8	12.0
110°-120°	1870.1	12.6
120°-130°	1519.0	10.2
130°-140°	1191.6	8.0
140°-150°	914.5	6.2
150°-160°	657.7	4.4
160°-170°	401.8	2.7
170°-180°	135.5	0.9
0°-30°	1696.2	11.4
0°-40°	2733.7	18.4
0°-60°	4658.5	31.4
0°-90°	5723.7	38.5
90°-120°	4306.8	29.0
90°-150°	7931.9	53.4
90°-180°	9127.0	61.5
0°-180°	14850.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2248	2248	2248	2248	2248	
5°	2254	2229	2237	2230	2227	214
15°	2146	2118	2122	2118	2114	605
25°	1961	1928	1926	1914	1920	902
35°	1686	1663	1662	1646	1652	1054
45°	1355	1343	1337	1333	1331	1045
55°	1004	1002	1004	990	988	896
65°	636	655	668	641	620	630
75°	293	320	337	314	285	314
85°	50	65	73	69	65	65
90°	3	9	20	21	20	9
95°	102	358	1094	566	337	107
105°	331	511	1973	2911	2792	348
115°	582	712	1636	3168	3576	575
125°	797	913	1475	2489	2924	710
135°	955	1069	1435	2010	2275	738
145°	1111	1194	1416	1720	1851	695
155°	1254	1303	1403	1543	1594	578
165°	1365	1379	1410	1464	1472	385
175°	1417	1416	1411	1429	1426	135
180°	1416	1416	1416	1416	1416	

TEST NUMBER: P565155

CATALOG NUMBER: SQ4-PW1-150U-100D-840-1D-UNV-STD-W-6

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2248.5	2248.5	2248.5	2248.5	2248.5
2.5°	2261.1	2242.5	2248.5	2243.5	2232.6
5°	2254.4	2229.2	2236.6	2230.5	2226.7
7.5°	2231.4	2208.2	2213.6	2207.2	2204.9
10°	2210.8	2187.6	2193.0	2185.0	2181.1
12.5°	2187.1	2162.3	2167.6	2159.7	2157.3
15°	2145.5	2118.3	2121.7	2117.6	2113.8
17.5°	2097.1	2069.6	2070.2	2063.8	2063.0
20°	2062.2	2033.2	2030.6	2022.7	2026.6
22.5°	2024.2	1993.6	1990.9	1980.0	1985.4
25°	1961.2	1928.3	1925.6	1913.8	1919.6
27.5°	1888.3	1855.8	1855.8	1839.3	1845.5
30°	1834.4	1803.4	1806.7	1787.1	1794.8
32.5°	1777.4	1749.5	1751.2	1731.6	1739.3
35°	1685.9	1662.6	1662.1	1646.4	1652.2
37.5°	1592.3	1571.8	1568.6	1559.5	1561.0
40°	1527.4	1509.9	1503.6	1497.7	1497.7
42.5°	1459.2	1443.3	1437.0	1432.6	1431.1
45°	1355.0	1343.4	1337.2	1333.2	1331.2
47.5°	1252.0	1241.2	1235.8	1232.9	1231.0
50°	1180.7	1172.9	1170.8	1164.8	1162.9
52.5°	1109.4	1104.7	1102.6	1095.1	1093.1
55°	1004.4	1002.4	1004.4	990.5	988.5
57.5°	895.0	898.1	904.5	885.8	881.2
60°	822.1	829.9	838.0	816.0	808.3
62.5°	747.6	760.0	771.4	746.2	735.4
65°	635.9	655.3	667.6	641.4	620.1
67.5°	528.1	552.2	567.0	538.7	514.7
70°	453.7	480.8	497.2	468.9	441.8
72.5°	388.7	418.9	432.3	405.5	378.4
75°	293.2	320.3	336.8	314.3	285.3
77.5°	208.0	233.6	247.2	227.7	203.6
80°	152.5	179.7	190.2	173.9	154.5
82.5°	108.2	130.6	137.9	128.1	114.9
85°	49.5	65.0	73.3	69.2	65.4
87.5°	13.3	25.3	34.1	34.4	35.7
90°	3.0	9.0	19.8	21.3	19.8
92.5°	43.3	157.7	311.2	135.1	97.8
95°	102.1	358.4	1094.1	566.2	336.8
97.5°	164.0	411.0	1705.4	1411.3	1036.5
100°	210.3	432.3	1895.6	1976.9	1598.4
102.5°	252.9	461.8	1962.6	2405.7	2122.6
105°	330.7	510.9	1973.3	2910.8	2791.6
107.5°	402.6	567.1	1887.1	3225.8	3265.5
110°	458.7	607.7	1810.3	3310.4	3478.8



TEST NUMBER: P565155

CATALOG NUMBER: SQ4-PW1-150U-100D-840-1D-UNV-STD-W-6

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	508.6	648.1	1739.5	3293.5	3576.3
115°	582.1	711.7	1636.5	3168.1	3576.3
117.5°	654.0	775.6	1568.6	2976.4	3439.2
120°	697.9	817.1	1528.4	2838.9	3311.2
122.5°	739.3	856.1	1504.0	2691.5	3167.3
125°	796.9	913.2	1475.0	2489.1	2924.1
127.5°	850.0	964.1	1458.0	2323.9	2706.5
130°	879.2	996.9	1450.6	2221.9	2567.6
132.5°	909.7	1026.2	1443.3	2129.9	2448.1
135°	955.4	1068.6	1435.4	2009.8	2275.0
137.5°	1001.4	1108.4	1428.7	1912.4	2128.4
140°	1033.1	1132.9	1426.3	1849.7	2041.9
142.5°	1063.6	1157.5	1421.4	1793.1	1961.4
145°	1110.8	1194.3	1415.6	1720.3	1851.4
147.5°	1153.8	1227.7	1408.9	1654.4	1755.1
150°	1185.5	1251.1	1406.5	1618.6	1699.0
152.5°	1214.8	1272.0	1405.2	1585.3	1651.5
155°	1254.1	1303.2	1403.4	1543.2	1593.9
157.5°	1294.9	1329.2	1403.7	1513.9	1547.2
160°	1318.1	1346.4	1404.9	1495.4	1519.2
162.5°	1336.4	1359.9	1406.1	1480.6	1498.5
165°	1365.3	1378.7	1409.5	1464.5	1472.0
167.5°	1385.1	1394.4	1409.8	1450.7	1454.3
170°	1397.3	1401.8	1411.0	1444.5	1444.5
172.5°	1407.1	1408.0	1411.0	1437.2	1436.0
175°	1417.1	1415.6	1411.0	1429.2	1426.3
177.5°	1420.5	1416.9	1410.7	1422.8	1419.3
180°	1415.6	1415.6	1415.6	1415.6	1415.6

(END OF REPORT)