

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: P565105

Luminaire Tested: **SQ4-PW1-150U-050D-840-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P565105  
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-840-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

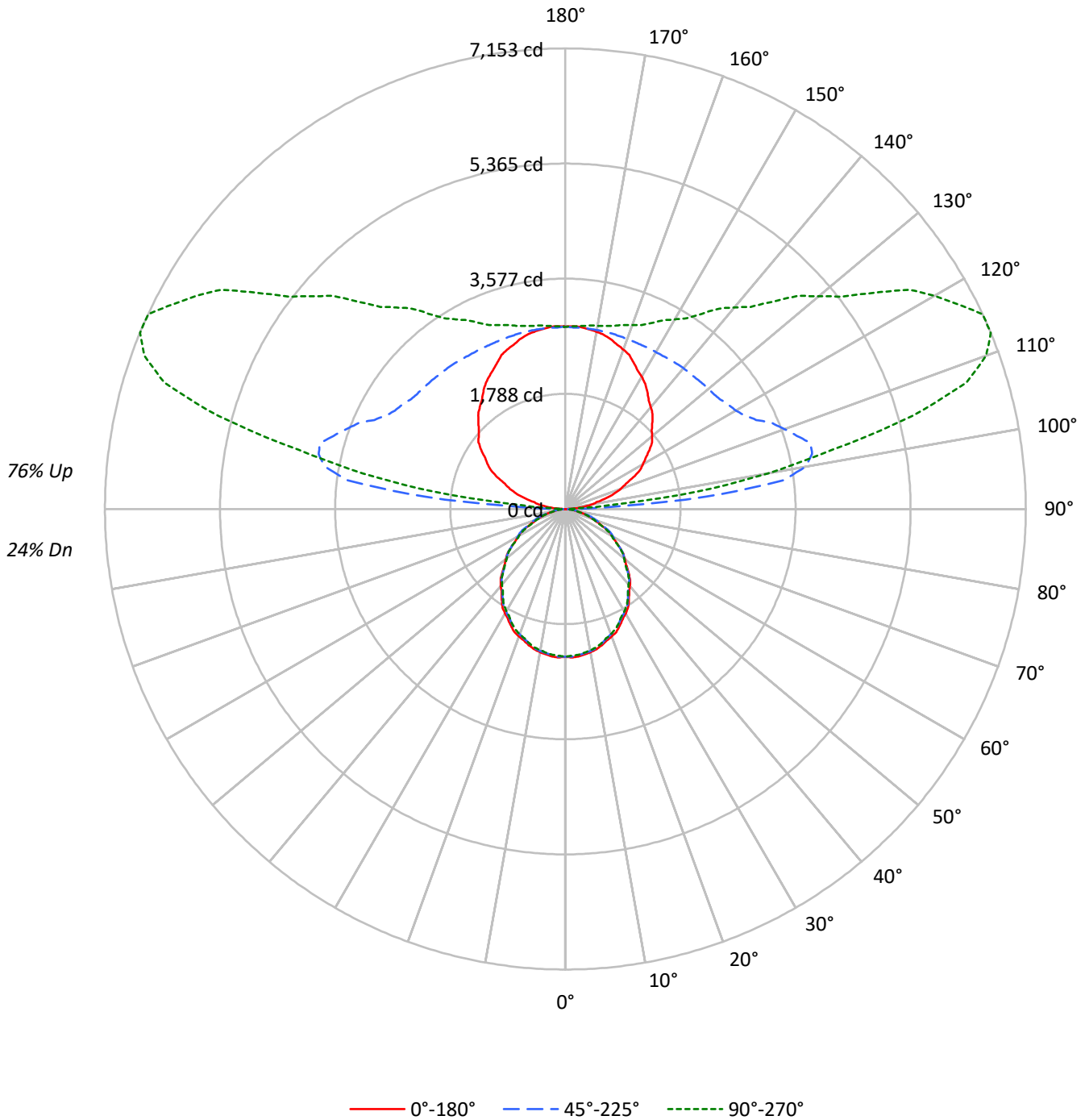
Lumens per Lamp: N/A  
Luminaire Lumens: 24102.0 lumens  
Efficiency: N/A  
Efficacy: 142.7 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: Semi-Indirect

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



TEST NUMBER: P565105  
CATALOG NUMBER: SQ4-PW1-150U-050D-840-1D-UNV-STD-W-12

### Luminous Intensity Polar Plot





TEST NUMBER: P565105

CATALOG NUMBER: SQ4-PW1-150U-050D-840-1D-UNV-STD-W-12

**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	50	30	10	0	
RCR																						
0	101	101	101	101	90	90	90	90	69	69	69	50	50	50	32	32	32	24				24
1	92	88	84	81	82	78	75	72	60	58	57	44	43	42	29	28	27	21				21
2	84	77	71	66	74	68	64	59	53	50	47	39	37	35	25	24	23	17				17
3	76	67	60	55	68	60	54	50	47	43	39	34	32	29	22	21	20	15				15
4	70	60	52	46	62	53	47	42	41	37	33	30	27	25	20	18	17	13				13
5	64	53	45	39	57	47	41	36	37	32	29	27	24	22	18	16	15	11				11
6	59	47	40	34	52	42	36	31	33	28	25	24	21	19	16	14	13	10				10
7	54	43	35	30	48	38	32	27	30	25	22	22	19	17	15	13	11	9				9
8	50	38	31	26	45	35	28	24	27	22	19	20	17	15	14	12	10	8				8
9	47	35	28	23	41	31	25	21	25	20	17	18	15	13	13	11	9	7				7
10	43	32	25	20	39	29	23	19	23	18	15	17	14	12	12	10	8	6				6

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

	0°	45°	90°
0°	7062	7062	7062
5°	7108	7051	7020
10°	7051	6994	6956
15°	6976	6899	6873
20°	6893	6787	6774
25°	6796	6673	6652
30°	6653	6552	6509
35°	6464	6373	6335
40°	6262	6165	6140
45°	6019	5939	5913
50°	5769	5721	5682
55°	5500	5500	5413
60°	5164	5264	5077
65°	4726	4961	4608
70°	4166	4566	4057
75°	3558	4086	3461
80°	2759	3439	2795
85°	1785	2643	2357



TEST NUMBER: P565105

CATALOG NUMBER: SQ4-PW1-150U-050D-840-1D-UNV-STD-W-12

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	216.2	0.9
10°-20°	610.5	2.5
20°-30°	905.5	3.8
30°-40°	1059.6	4.4
40°-50°	1054.8	4.4
50°-60°	910.9	3.8
60°-70°	655.7	2.7
70°-80°	343.8	1.4
80°-90°	91.2	0.4
90°-100°	1315.8	5.5
100°-110°	3557.5	14.8
110°-120°	3740.2	15.5
120°-130°	3038.1	12.6
130°-140°	2383.1	9.9
140°-150°	1829.1	7.6
150°-160°	1315.4	5.5
160°-170°	803.6	3.3
170°-180°	270.9	1.1
0°-30°	1732.2	7.2
0°-40°	2791.8	11.6
0°-60°	4757.6	19.7
0°-90°	5848.2	24.3
90°-120°	8613.5	35.7
90°-150°	15863.8	65.8
90°-180°	18254.0	75.7
0°-180°	24102.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2296	2296	2296	2296	2296	
5°	2302	2277	2284	2278	2274	218
15°	2191	2163	2167	2163	2159	618
25°	2003	1969	1966	1954	1960	921
35°	1722	1698	1697	1681	1687	1076
45°	1384	1372	1366	1362	1360	1068
55°	1026	1024	1026	1012	1010	915
65°	649	669	682	655	633	644
75°	299	327	344	321	291	321
85°	51	66	75	71	67	67
90°	6	18	40	43	40	15
95°	204	717	2188	1132	674	214
105°	661	1022	3947	5822	5583	696
115°	1164	1423	3273	6336	7153	1150
125°	1594	1826	2950	4978	5848	1421
135°	1911	2137	2871	4020	4550	1477
145°	2222	2388	2831	3441	3703	1390
155°	2508	2606	2807	3086	3188	1157
165°	2731	2757	2819	2929	2944	769
175°	2834	2831	2822	2858	2852	269
180°	2831	2831	2831	2831	2831	

TEST NUMBER: P565105

CATALOG NUMBER: SQ4-PW1-150U-050D-840-1D-UNV-STD-W-12

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2296.3	2296.3	2296.3	2296.3	2296.3
2.5°	2309.2	2290.2	2296.3	2291.2	2280.1
5°	2302.4	2276.6	2284.1	2278.0	2274.0
7.5°	2278.9	2255.1	2260.7	2254.1	2251.8
10°	2257.8	2234.1	2239.6	2231.4	2227.5
12.5°	2233.6	2208.2	2213.7	2205.6	2203.2
15°	2191.1	2163.4	2166.8	2162.7	2158.7
17.5°	2141.7	2113.6	2114.2	2107.7	2106.9
20°	2106.1	2076.4	2073.7	2065.7	2069.7
22.5°	2067.3	2036.0	2033.3	2022.1	2027.6
25°	2002.9	1969.3	1966.5	1954.5	1960.4
27.5°	1928.5	1895.2	1895.3	1878.4	1884.8
30°	1873.4	1841.8	1845.1	1825.1	1833.0
32.5°	1815.2	1786.7	1788.5	1768.4	1776.3
35°	1721.7	1698.0	1697.4	1681.4	1687.3
37.5°	1626.2	1605.2	1601.9	1592.7	1594.2
40°	1559.9	1542.0	1535.6	1529.5	1529.5
42.5°	1490.3	1474.0	1467.6	1463.1	1461.5
45°	1383.8	1372.0	1365.6	1361.5	1359.6
47.5°	1278.6	1267.6	1262.0	1259.2	1257.2
50°	1205.8	1197.9	1195.7	1189.6	1187.6
52.5°	1133.0	1128.2	1126.1	1118.4	1116.4
55°	1025.7	1023.8	1025.7	1011.5	1009.6
57.5°	914.1	917.2	923.8	904.6	899.9
60°	839.6	847.5	855.8	833.4	825.4
62.5°	763.5	776.2	787.8	762.1	751.0
65°	649.4	669.2	681.8	655.0	633.2
67.5°	539.4	563.9	579.0	550.1	525.6
70°	463.3	491.0	507.8	478.9	451.2
72.5°	396.9	427.8	441.5	414.1	386.4
75°	299.4	327.1	343.9	321.0	291.3
77.5°	212.4	238.5	252.5	232.5	208.0
80°	155.8	183.5	194.2	177.6	157.8
82.5°	110.5	133.4	140.8	130.8	117.3
85°	50.6	66.4	74.9	70.7	66.8
87.5°	14.2	27.6	38.7	39.3	40.3
90°	6.1	18.0	39.6	42.6	39.6
92.5°	86.6	315.4	622.3	270.1	195.7
95°	204.2	716.7	2188.2	1132.4	673.5
97.5°	327.9	822.0	3410.8	2822.7	2073.0
100°	420.6	864.6	3791.2	3953.8	3196.9
102.5°	505.9	923.7	3925.3	4811.4	4245.3
105°	661.3	1021.9	3946.6	5821.5	5583.1
107.5°	805.2	1134.1	3774.1	6451.7	6530.9
110°	917.3	1215.3	3620.5	6620.9	6957.6

TEST NUMBER: P565105

CATALOG NUMBER: SQ4-PW1-150U-050D-840-1D-UNV-STD-W-12

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	1017.3	1296.2	3479.1	6587.1	7152.6
115°	1164.2	1423.4	3273.1	6336.2	7152.6
117.5°	1308.0	1551.2	3137.2	5952.8	6878.3
120°	1395.8	1634.2	3056.7	5677.7	6622.4
122.5°	1478.7	1712.3	3007.9	5382.9	6334.7
125°	1593.9	1826.3	2950.0	4978.2	5848.3
127.5°	1699.9	1928.2	2915.9	4647.9	5413.1
130°	1758.4	1993.9	2901.3	4443.8	5135.1
132.5°	1819.4	2052.4	2886.7	4259.7	4896.2
135°	1910.8	2137.3	2870.8	4019.6	4550.0
137.5°	2002.9	2216.8	2857.4	3824.8	4256.8
140°	2066.2	2265.9	2852.5	3699.3	4083.7
142.5°	2127.2	2314.9	2842.8	3586.1	3922.8
145°	2221.7	2388.5	2831.2	3440.6	3702.8
147.5°	2307.6	2455.4	2817.8	3308.7	3510.2
150°	2371.0	2502.1	2812.9	3237.1	3398.0
152.5°	2429.5	2543.9	2810.5	3170.6	3302.9
155°	2508.1	2606.5	2806.8	3086.4	3187.8
157.5°	2589.8	2658.4	2807.4	3027.7	3094.5
160°	2636.1	2692.8	2809.9	2990.7	3038.4
162.5°	2672.7	2719.8	2812.3	2961.2	2997.0
165°	2730.6	2757.4	2819.0	2929.0	2943.9
167.5°	2770.2	2788.7	2819.6	2901.4	2908.6
170°	2794.6	2803.6	2822.0	2889.1	2889.1
172.5°	2814.1	2815.9	2822.0	2874.4	2872.0
175°	2834.2	2831.3	2822.0	2858.5	2852.5
177.5°	2840.9	2833.8	2821.4	2845.7	2838.5
180°	2831.2	2831.2	2831.2	2831.2	2831.2

(END OF REPORT)