

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: P563101

Luminaire Tested: **SQ4-PC3-150U-050D-940-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P563101  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G2-2106-289-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/30/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-PC3-150U-050D-940-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE PYRAMID CONTINUOUS LENS.  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

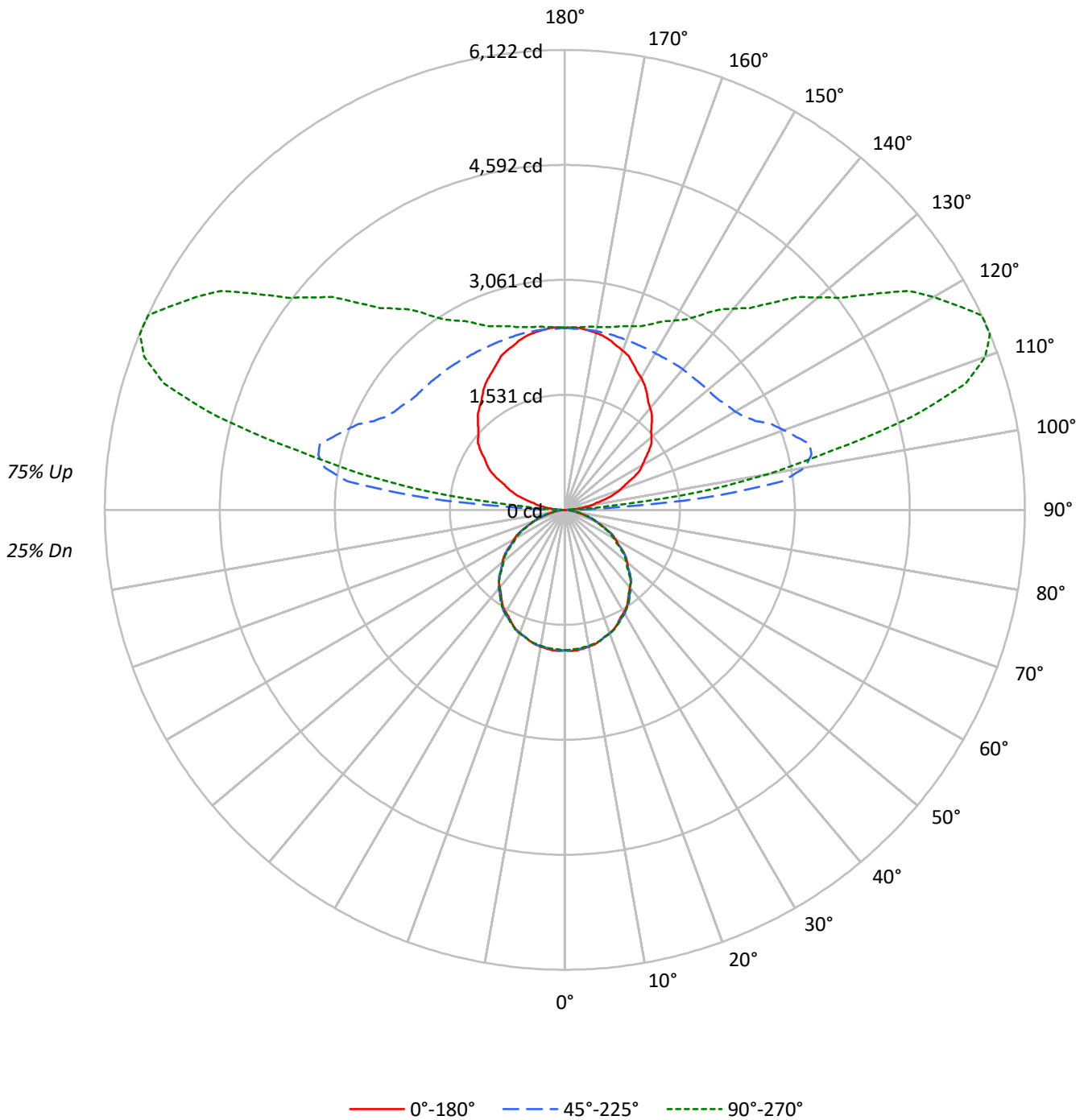
Lumens per Lamp: N/A  
Luminaire Lumens: 20731.6 lumens  
Efficiency: N/A  
Efficacy: 122.7 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.37  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: Semi-Indirect

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: P563101  
CATALOG NUMBER: SQ4-PC3-150U-050D-940-1D-UNV-STD-W-12

### Luminous Intensity Polar Plot





TEST NUMBER: P563101

CATALOG NUMBER: SQ4-PC3-150U-050D-940-1D-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	0
RCR																		
0	101	101	101	101	90	90	90	90	69	69	69	50	50	50	33	33	33	25
1	92	88	84	81	82	78	75	73	61	59	57	44	43	42	29	28	28	21
2	84	77	71	66	74	69	64	59	53	50	47	39	37	35	26	24	23	17
3	76	67	60	55	68	60	54	50	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	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°	5751	5751	5751
5°	5795	5757	5736
10°	5780	5754	5737
15°	5750	5750	5745
20°	5712	5729	5729
25°	5658	5699	5682
30°	5590	5657	5633
35°	5506	5591	5552
40°	5415	5492	5436
45°	5317	5354	5272
50°	5178	5178	5095
55°	5013	4948	4874
60°	4771	4676	4601
65°	4410	4322	4284
70°	3861	3893	3877
75°	3107	3436	3457
80°	2209	2913	2943
85°	1344	2445	2445



TEST NUMBER: P563101

CATALOG NUMBER: SQ4-PC3-150U-050D-940-1D-UNV-STD-W-12

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	177.0	0.9
10°-20°	507.9	2.4
20°-30°	769.1	3.7
30°-40°	922.1	4.4
40°-50°	940.2	4.5
50°-60°	820.7	4.0
60°-70°	587.6	2.8
70°-80°	302.6	1.5
80°-90°	81.6	0.4
90°-100°	1126.1	5.4
100°-110°	3044.8	14.7
110°-120°	3201.2	15.4
120°-130°	2600.2	12.5
130°-140°	2039.6	9.8
140°-150°	1565.4	7.6
150°-160°	1125.8	5.4
160°-170°	687.8	3.3
170°-180°	231.9	1.1
0°-30°	1454.0	7.0
0°-40°	2376.1	11.5
0°-60°	4137.0	20.0
0°-90°	5108.8	24.6
90°-120°	7372.0	35.6
90°-150°	13577.3	65.5
90°-180°	15623.0	75.4
0°-180°	20731.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1870	1870	1870	1870	1870	
5°	1877	1858	1865	1860	1858	178
15°	1806	1791	1806	1806	1804	509
25°	1668	1656	1680	1674	1674	767
35°	1467	1463	1489	1479	1479	917
45°	1222	1219	1231	1216	1212	941
55°	935	923	923	909	909	833
65°	606	592	594	589	589	599
75°	262	273	289	291	291	283
85°	38	58	69	71	69	52
90°	5	15	34	36	34	13
95°	175	613	1873	969	576	183
105°	566	875	3378	4982	4778	596
115°	996	1218	2801	5423	6122	984
125°	1364	1563	2525	4261	5005	1216
135°	1635	1829	2457	3440	3894	1264
145°	1902	2044	2423	2945	3169	1190
155°	2147	2231	2402	2642	2728	990
165°	2337	2360	2413	2507	2520	658
175°	2426	2423	2415	2446	2441	230
180°	2423	2423	2423	2423	2423	

TEST NUMBER: P563101

CATALOG NUMBER: SQ4-PC3-150U-050D-940-1D-UNV-STD-W-12

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1870.1	1870.1	1870.1	1870.1	1870.1
2.5°	1881.2	1864.9	1870.1	1865.8	1859.0
5°	1877.0	1858.4	1864.9	1859.6	1858.0
7.5°	1863.5	1844.9	1853.5	1850.0	1848.3
10°	1851.0	1832.4	1842.4	1838.9	1837.2
12.5°	1834.4	1817.1	1828.5	1825.0	1824.7
15°	1806.0	1790.8	1806.0	1806.0	1804.3
17.5°	1770.3	1756.5	1772.8	1773.8	1772.8
20°	1745.4	1730.2	1750.6	1748.9	1750.6
22.5°	1714.9	1702.4	1724.3	1719.8	1721.5
25°	1667.5	1655.6	1679.6	1674.4	1674.4
27.5°	1611.4	1602.9	1629.0	1623.5	1623.5
30°	1574.0	1565.5	1593.0	1586.1	1586.1
32.5°	1532.4	1526.7	1552.9	1544.5	1544.5
35°	1466.6	1463.2	1489.1	1478.7	1478.7
37.5°	1398.7	1395.7	1419.2	1406.6	1402.6
40°	1348.9	1347.2	1367.9	1354.1	1354.1
42.5°	1299.0	1297.3	1315.3	1298.7	1298.7
45°	1222.5	1219.1	1231.1	1215.5	1212.1
47.5°	1139.0	1135.6	1143.2	1126.2	1124.5
50°	1082.2	1078.8	1082.2	1066.6	1064.9
52.5°	1024.0	1017.9	1018.5	1002.9	1002.6
55°	935.0	923.2	922.9	909.1	909.1
57.5°	840.8	825.3	826.6	814.8	813.1
60°	775.7	758.8	760.2	749.7	748.0
62.5°	712.0	692.4	696.4	684.6	684.3
65°	606.0	592.5	593.9	588.7	588.7
67.5°	504.2	491.7	500.8	496.6	496.3
70°	429.4	421.0	432.9	432.8	431.2
72.5°	360.2	359.8	374.7	374.7	375.7
75°	261.5	273.3	289.2	290.9	290.9
77.5°	174.5	195.5	213.0	213.7	213.3
80°	124.7	148.4	164.5	167.9	166.2
82.5°	84.5	109.6	122.9	126.4	124.7
85°	38.1	58.4	69.3	71.0	69.3
87.5°	12.1	26.4	34.5	34.9	31.7
90°	5.2	15.4	33.9	36.5	33.9
92.5°	74.1	269.9	532.6	231.2	167.5
95°	174.8	613.4	1872.8	969.2	576.4
97.5°	280.7	703.5	2919.2	2415.8	1774.2
100°	359.9	739.9	3244.7	3383.9	2736.1
102.5°	433.0	790.5	3359.5	4117.9	3633.4
105°	566.0	874.6	3377.8	4982.5	4778.4
107.5°	689.1	970.7	3230.1	5521.8	5589.6
110°	785.1	1040.1	3098.7	5666.6	5954.8



TEST NUMBER: P563101

CATALOG NUMBER: SQ4-PC3-150U-050D-940-1D-UNV-STD-W-12

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	870.7	1109.4	2977.7	5637.7	6121.7
115°	996.4	1218.3	2801.3	5422.9	6121.7
117.5°	1119.5	1327.6	2685.0	5094.8	5887.0
120°	1194.6	1398.6	2616.1	4859.4	5667.9
122.5°	1265.6	1465.5	2574.4	4607.1	5421.6
125°	1364.1	1563.1	2524.8	4260.7	5005.4
127.5°	1454.9	1650.3	2495.6	3978.0	4632.9
130°	1505.0	1706.5	2483.1	3803.3	4395.0
132.5°	1557.2	1756.6	2470.6	3645.8	4190.5
135°	1635.4	1829.2	2457.0	3440.2	3894.2
137.5°	1714.2	1897.3	2445.6	3273.5	3643.3
140°	1768.4	1939.3	2441.4	3166.1	3495.1
142.5°	1820.6	1981.3	2433.0	3069.2	3357.4
145°	1901.5	2044.3	2423.1	2944.7	3169.1
147.5°	1975.0	2101.5	2411.6	2831.9	3004.3
150°	2029.3	2141.5	2407.5	2770.6	2908.3
152.5°	2079.3	2177.3	2405.4	2713.7	2826.9
155°	2146.6	2230.8	2402.3	2641.6	2728.3
157.5°	2216.5	2275.2	2402.8	2591.4	2648.5
160°	2256.2	2304.6	2404.9	2559.7	2600.5
162.5°	2287.5	2327.8	2407.0	2534.4	2565.0
165°	2337.0	2360.0	2412.7	2506.9	2519.6
167.5°	2371.0	2386.8	2413.2	2483.3	2489.4
170°	2391.8	2399.5	2415.3	2472.7	2472.7
172.5°	2408.5	2410.0	2415.3	2460.1	2458.1
175°	2425.7	2423.2	2415.3	2446.5	2441.4
177.5°	2431.5	2425.3	2414.8	2435.5	2429.4
180°	2423.1	2423.1	2423.1	2423.1	2423.1

(END OF REPORT)