

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: P520367

Luminaire Tested: **SQ4-F-150U-050D-835-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520367  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G3-1910-536-17)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-F-150U-050D-835-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

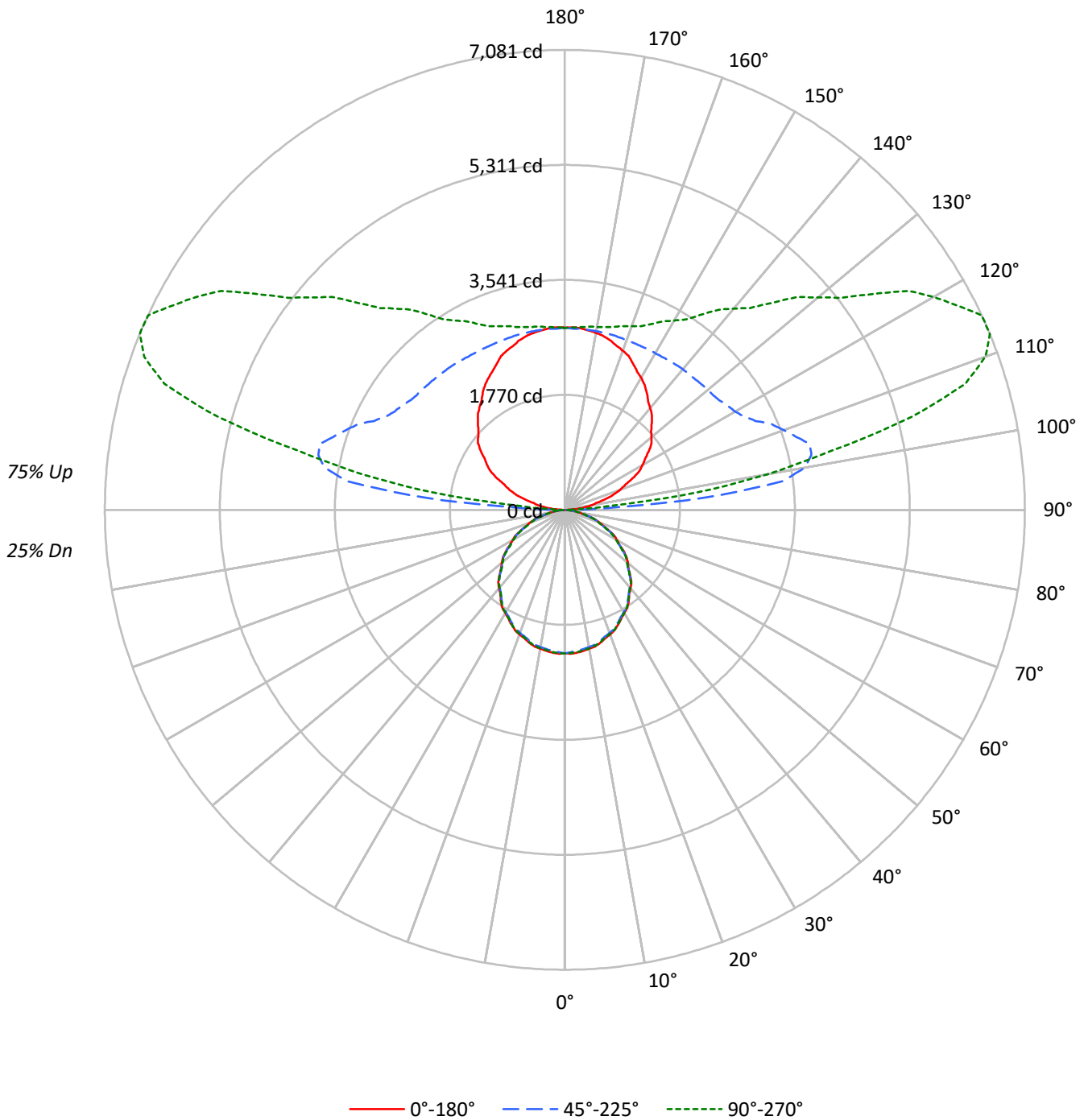
Lumens per Lamp: N/A  
Luminaire Lumens: 24108.8 lumens  
Efficiency: N/A  
Efficacy: 137.1 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 175.9  
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	50	30	10	0	
RCR																						
0	101	101	101	101	90	90	90	90	69	69	69	51	51	51	33	33	33	25				
1	92	88	84	81	82	79	75	73	61	59	57	44	43	42	29	29	28	21				
2	84	77	71	66	74	69	64	59	53	50	47	39	37	35	26	25	23	18				
3	76	67	60	55	68	60	54	49	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	23	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	18	23	18	15	17	14	12	12	10	8	6				

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

	0°	45°	90°
0°	6796	6796	6796
5°	6813	6731	6785
10°	6790	6707	6753
15°	6743	6659	6715
20°	6680	6603	6651
25°	6605	6525	6585
30°	6513	6461	6503
35°	6441	6364	6397
40°	6318	6259	6270
45°	6189	6137	6137
50°	6058	6001	5972
55°	5916	5837	5805
60°	5695	5604	5568
65°	5425	5317	5253
70°	5054	4947	4841
75°	4534	4394	4288
80°	3668	3615	3510
85°	2191	2505	2611



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	208.5	0.9
10°-20°	593.7	2.5
20°-30°	891.8	3.7
30°-40°	1064.5	4.4
40°-50°	1090.8	4.5
50°-60°	972.8	4.0
60°-70°	724.5	3.0
70°-80°	393.3	1.6
80°-90°	96.9	0.4
90°-100°	1302.7	5.4
100°-110°	3522.1	14.6
110°-120°	3703.0	15.4
120°-130°	3007.8	12.5
130°-140°	2359.4	9.8
140°-150°	1810.8	7.5
150°-160°	1302.3	5.4
160°-170°	795.6	3.3
170°-180°	268.2	1.1
0°-30°	1694.0	7.0
0°-40°	2758.5	11.4
0°-60°	4822.2	20.0
0°-90°	6036.9	25.0
90°-120°	8527.7	35.4
90°-150°	15705.7	65.1
90°-180°	18072.0	75.0
0°-180°	24108.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2210	2210	2210	2210	2210	
5°	2207	2204	2180	2201	2198	210
15°	2118	2112	2091	2109	2109	597
25°	1946	1941	1923	1935	1941	896
35°	1716	1710	1695	1695	1704	1071
45°	1423	1426	1411	1408	1411	1098
55°	1103	1103	1089	1080	1083	983
65°	746	743	731	722	722	738
75°	382	379	370	364	361	403
85°	62	68	71	74	74	87
90°	6	18	39	42	39	15
95°	202	710	2166	1121	667	212
105°	655	1012	3907	5764	5528	690
115°	1153	1409	3240	6273	7081	1138
125°	1578	1808	2921	4928	5790	1407
135°	1892	2116	2842	3980	4505	1462
145°	2200	2365	2803	3406	3666	1376
155°	2483	2581	2779	3056	3156	1145
165°	2703	2730	2791	2900	2915	761
175°	2806	2803	2794	2830	2824	266
180°	2803	2803	2803	2803	2803	

TEST NUMBER: P520367

CATALOG NUMBER: SQ4-F-150U-050D-835-1D-UNV-STD-W-12

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2209.8	2209.8	2209.8	2209.8	2209.8
2.5°	2216.9	2212.2	2193.2	2209.7	2207.4
5°	2206.8	2203.9	2180.2	2200.8	2197.9
7.5°	2190.8	2185.0	2161.8	2181.8	2179.0
10°	2174.3	2168.4	2147.6	2165.3	2162.4
12.5°	2153.0	2149.5	2126.3	2144.1	2143.5
15°	2118.0	2112.2	2091.4	2109.2	2109.2
17.5°	2071.9	2068.5	2048.2	2065.3	2063.0
20°	2041.1	2035.3	2017.5	2032.3	2032.3
22.5°	2003.3	1999.8	1982.0	1994.5	1996.8
25°	1946.5	1940.7	1922.8	1934.7	1940.6
27.5°	1883.8	1879.1	1864.2	1872.0	1876.1
30°	1834.1	1834.1	1819.3	1822.4	1831.1
32.5°	1789.1	1789.1	1771.9	1775.0	1779.0
35°	1715.7	1709.9	1695.0	1695.2	1703.9
37.5°	1630.5	1627.7	1618.1	1616.4	1618.7
40°	1573.7	1570.9	1559.0	1561.9	1561.9
42.5°	1516.9	1514.1	1502.2	1498.1	1502.8
45°	1422.9	1425.7	1411.0	1408.2	1411.0
47.5°	1330.0	1330.0	1318.2	1310.0	1314.6
50°	1266.1	1266.1	1254.3	1248.3	1248.3
52.5°	1199.8	1202.1	1188.0	1179.8	1182.1
55°	1103.4	1103.4	1088.6	1079.8	1082.7
57.5°	996.9	996.9	982.1	973.3	978.6
60°	925.9	925.9	911.1	902.3	905.2
62.5°	854.9	854.9	840.1	831.2	831.8
65°	745.5	742.6	730.7	721.8	721.8
67.5°	640.1	632.7	623.6	611.7	611.7
70°	562.1	559.2	550.2	538.4	538.4
72.5°	491.1	485.8	476.9	467.4	467.4
75°	381.6	378.7	369.8	363.8	360.9
77.5°	273.3	271.1	270.4	262.2	264.5
80°	207.1	207.1	204.1	198.2	198.2
82.5°	147.9	150.2	145.0	143.7	141.4
85°	62.1	67.9	71.0	74.0	74.0
87.5°	13.0	22.3	24.3	27.2	26.6
90°	6.0	17.8	39.2	42.2	39.2
92.5°	85.7	312.3	616.1	267.5	193.8
95°	202.1	709.6	2166.4	1121.2	666.8
97.5°	324.6	813.7	3376.9	2794.5	2052.3
100°	416.4	856.0	3753.4	3914.4	3165.0
102.5°	500.9	914.4	3886.1	4763.4	4203.0
105°	654.7	1011.7	3907.3	5763.5	5527.5
107.5°	797.1	1122.9	3736.5	6387.4	6465.9
110°	908.2	1203.2	3584.4	6554.9	6888.3



TEST NUMBER: P520367

CATALOG NUMBER: SQ4-F-150U-050D-835-1D-UNV-STD-W-12

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	1007.1	1283.2	3444.4	6521.4	7081.3
115°	1152.6	1409.2	3240.5	6273.0	7081.3
117.5°	1295.0	1535.7	3105.9	5893.5	6809.8
120°	1381.9	1617.9	3026.2	5621.1	6556.4
122.5°	1463.9	1695.3	2978.0	5329.3	6271.5
125°	1578.0	1808.1	2920.7	4928.5	5790.1
127.5°	1683.0	1909.0	2886.9	4601.6	5359.2
130°	1741.0	1973.9	2872.4	4399.6	5084.0
132.5°	1801.3	2032.0	2857.9	4217.3	4847.4
135°	1891.8	2116.0	2842.2	3979.6	4504.7
137.5°	1982.9	2194.8	2828.9	3786.6	4214.4
140°	2045.7	2243.3	2824.1	3662.5	4043.1
142.5°	2106.0	2291.8	2814.4	3550.3	3883.7
145°	2199.6	2364.8	2803.0	3406.3	3665.9
147.5°	2284.6	2431.0	2789.7	3275.8	3475.2
150°	2347.4	2477.1	2784.9	3204.9	3364.2
152.5°	2405.3	2518.6	2782.5	3139.1	3270.1
155°	2483.2	2580.6	2778.8	3055.7	3156.0
157.5°	2564.1	2631.9	2779.4	2997.5	3063.6
160°	2609.8	2666.0	2781.9	2960.9	3008.2
162.5°	2646.0	2692.7	2784.3	2931.7	2967.2
165°	2703.4	2729.9	2790.9	2899.9	2914.6
167.5°	2742.6	2760.9	2791.5	2872.5	2879.6
170°	2766.8	2775.6	2793.9	2860.3	2860.3
172.5°	2786.1	2787.9	2793.9	2845.7	2843.4
175°	2806.0	2803.1	2793.9	2830.0	2824.1
177.5°	2812.6	2805.6	2793.3	2817.3	2810.2
180°	2803.0	2803.0	2803.0	2803.0	2803.0

(END OF REPORT)