

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: P520439

Luminaire Tested: **SQ4-F-150U-125D-835-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520439  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G3-1910-536-20)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-F-150U-125D-835-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

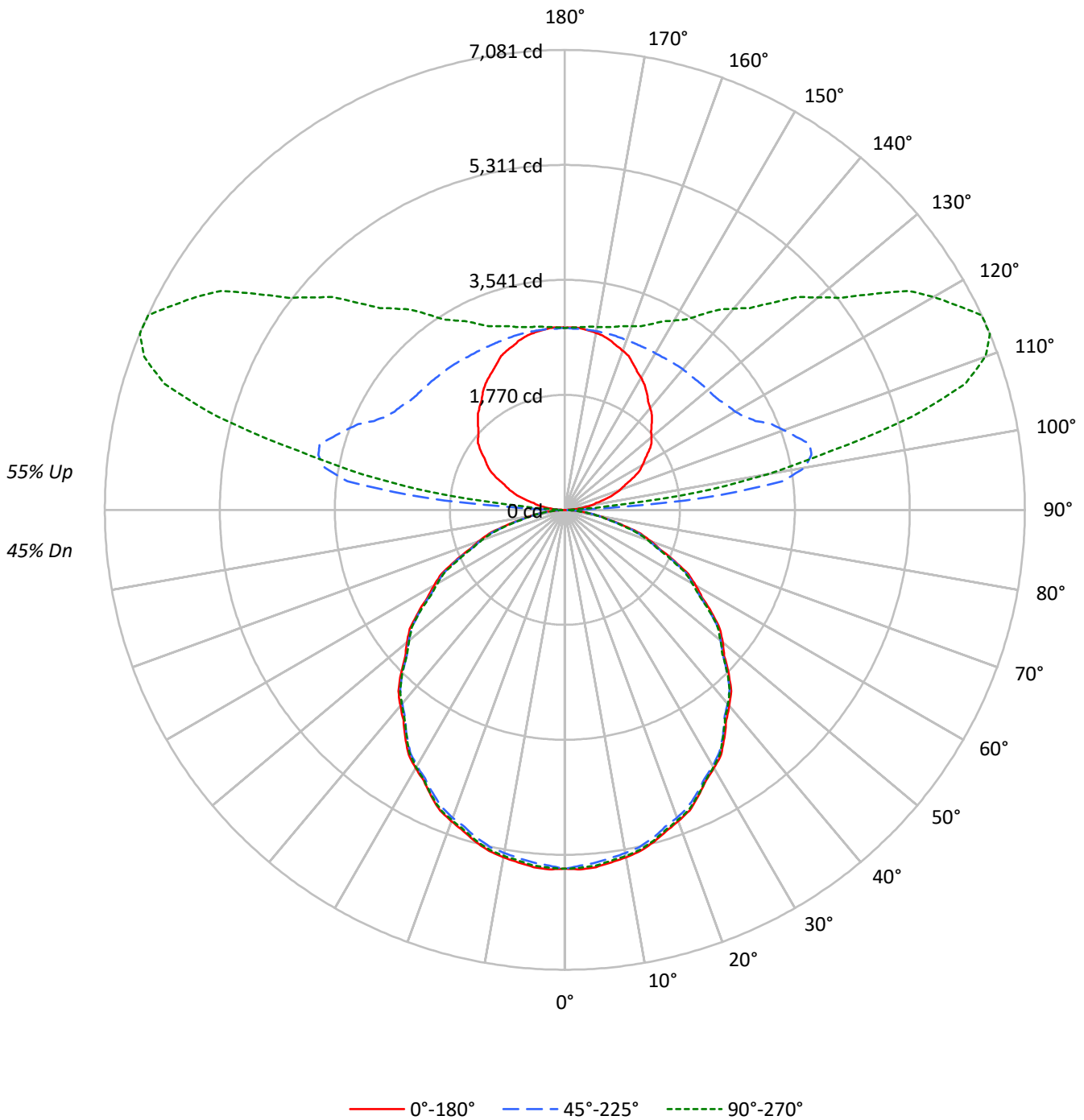
Lumens per Lamp: N/A  
Luminaire Lumens: 33150.6 lumens  
Efficiency: N/A  
Efficacy: 127.4 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 260.3  
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: P520439  
CATALOG NUMBER: SQ4-F-150U-125D-835-1D-UNV-STD-W-12

### Luminous Intensity Polar Plot





TEST NUMBER: P520439

CATALOG NUMBER: SQ4-F-150U-125D-835-1D-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	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52	45
1	97	92	89	85	89	85	82	79	71	68	66	58	56	55	46	45	44	38
2	88	81	75	69	80	74	69	64	62	58	55	51	48	46	40	38	37	32
3	80	71	63	58	73	65	59	54	55	50	46	45	41	38	36	33	31	27
4	73	63	55	49	67	58	51	45	48	43	39	40	36	33	32	29	27	23
5	67	56	48	42	61	51	44	39	43	38	34	36	32	28	29	26	23	20
6	62	50	42	36	57	46	39	34	39	33	29	32	28	25	26	23	20	17
7	57	45	37	31	52	42	35	29	35	30	26	29	25	22	24	20	18	15
8	53	41	33	28	48	38	31	26	32	27	23	27	22	19	22	19	16	14
9	49	37	30	25	45	34	28	23	29	24	20	24	20	17	20	17	15	12
10	46	34	27	22	42	32	25	21	27	22	18	23	19	16	18	15	13	11

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

	0°	45°	90°
0°	16991	16991	16991
5°	17046	16830	16971
10°	16968	16759	16892
15°	16854	16651	16786
20°	16698	16509	16638
25°	16508	16333	16467
30°	16304	16164	16250
35°	16073	15936	15947
40°	15808	15637	15686
45°	15512	15340	15366
50°	15173	14998	14955
55°	14787	14575	14542
60°	14307	13989	13914
65°	13564	13275	13099
70°	12631	12303	12139
75°	11236	10983	10659
80°	9155	8885	8832
85°	5473	6224	6224



TEST NUMBER: P520439

CATALOG NUMBER: SQ4-F-150U-125D-835-1D-UNV-STD-W-12

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	521.3	1.6
10°-20°	1484.6	4.5
20°-30°	2230.4	6.7
30°-40°	2661.4	8.0
40°-50°	2728.0	8.2
50°-60°	2431.5	7.3
60°-70°	1810.1	5.5
70°-80°	980.6	3.0
80°-90°	231.0	0.7
90°-100°	1302.7	3.9
100°-110°	3522.1	10.6
110°-120°	3703.0	11.2
120°-130°	3007.8	9.1
130°-140°	2359.4	7.1
140°-150°	1810.8	5.5
150°-160°	1302.3	3.9
160°-170°	795.6	2.4
170°-180°	268.2	0.8
0°-30°	4236.3	12.8
0°-40°	6897.7	20.8
0°-60°	12057.2	36.4
0°-90°	15078.8	45.5
90°-120°	8527.7	25.7
90°-150°	15705.7	47.4
90°-180°	18072.0	54.5
0°-180°	33150.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5525	5525	5525	5525	5525	
5°	5522	5513	5452	5500	5497	524
15°	5294	5282	5230	5275	5272	1492
25°	4865	4856	4813	4841	4853	2240
35°	4281	4278	4245	4245	4248	2677
45°	3567	3558	3527	3521	3533	2748
55°	2758	2749	2718	2697	2712	2463
65°	1864	1852	1824	1812	1800	1846
75°	946	946	924	906	897	1004
85°	155	176	176	179	176	214
90°	6	18	39	42	39	17
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: P520439

CATALOG NUMBER: SQ4-F-150U-125D-835-1D-UNV-STD-W-12

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	5524.7	5524.7	5524.7	5524.7	5524.7
2.5°	5541.7	5532.2	5483.3	5524.5	5517.4
5°	5521.6	5512.7	5451.7	5500.3	5497.3
7.5°	5474.8	5463.5	5407.9	5453.4	5448.1
10°	5433.5	5424.5	5366.6	5412.1	5409.1
12.5°	5382.4	5373.5	5315.5	5361.1	5360.5
15°	5293.6	5281.7	5229.8	5275.3	5272.3
17.5°	5187.2	5173.5	5122.1	5158.1	5164.1
20°	5102.0	5093.1	5044.3	5077.8	5083.8
22.5°	5014.5	5003.1	4951.8	4990.3	4996.2
25°	4864.9	4856.0	4813.2	4840.9	4852.7
27.5°	4700.7	4700.7	4661.2	4680.8	4687.9
30°	4591.2	4591.2	4551.7	4564.2	4576.0
32.5°	4474.5	4465.0	4427.7	4437.7	4449.5
35°	4281.1	4278.2	4244.6	4244.7	4247.7
37.5°	4081.0	4072.7	4036.0	4038.8	4053.1
40°	3937.5	3931.5	3894.9	3895.3	3907.1
42.5°	3791.6	3785.6	3753.9	3749.1	3753.9
45°	3566.6	3557.6	3527.0	3521.3	3533.1
47.5°	3327.0	3329.3	3292.9	3284.5	3291.1
50°	3171.3	3171.3	3134.8	3116.8	3125.7
52.5°	3008.3	3003.6	2967.0	2946.8	2967.6
55°	2757.8	2748.9	2718.3	2697.3	2712.2
57.5°	2501.2	2487.5	2456.8	2433.9	2442.2
60°	2326.0	2305.2	2274.3	2256.2	2262.2
62.5°	2143.6	2132.3	2099.2	2071.5	2084.6
65°	1863.9	1852.0	1824.3	1811.9	1800.0
67.5°	1589.6	1581.9	1550.7	1537.7	1530.0
70°	1404.7	1389.8	1368.2	1352.9	1350.0
72.5°	1224.7	1207.5	1185.8	1172.8	1165.1
75°	945.6	945.6	924.3	905.9	897.0
77.5°	679.9	682.2	664.7	658.5	654.3
80°	516.9	516.9	501.7	495.7	498.7
82.5°	361.2	368.3	363.0	354.4	350.3
85°	155.1	175.8	176.4	179.3	176.4
87.5°	28.0	47.0	54.1	49.8	44.4
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: P520439

CATALOG NUMBER: SQ4-F-150U-125D-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)