

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: P565180

Luminaire Tested: **SQ4-PW1-150U-125D-840-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P565180  
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-125D-840-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

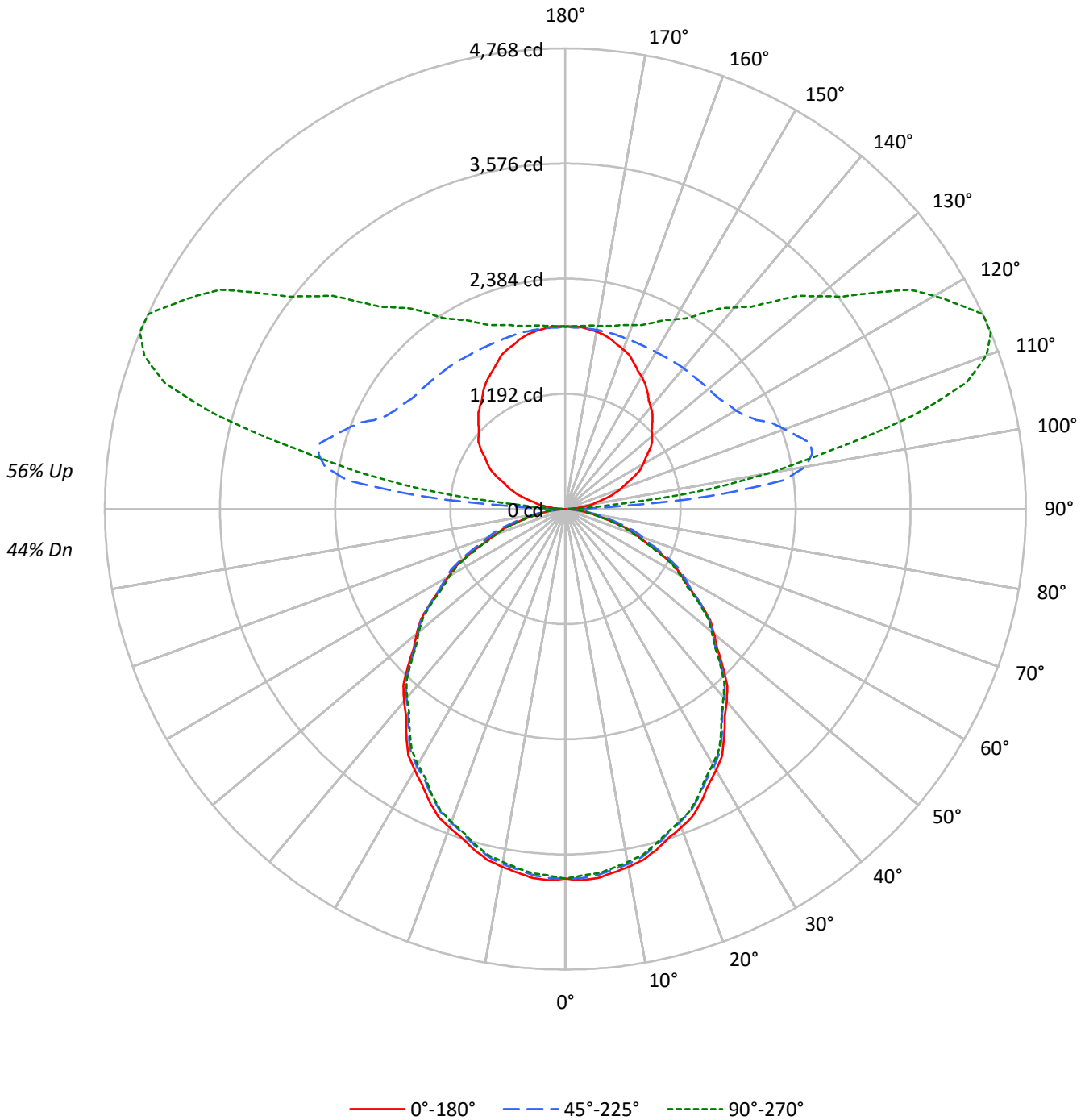
Lumens per Lamp: N/A  
Luminaire Lumens: 21906.9 lumens  
Efficiency: N/A  
Efficacy: 130.6 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 167.8  
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	0
RCR																		
0	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	44
1	97	92	89	85	88	85	82	79	70	68	66	57	56	54	45	44	43	38
2	88	81	75	70	80	74	69	65	62	58	55	50	48	45	40	38	37	32
3	80	71	64	58	73	65	59	54	55	50	46	45	41	38	35	33	31	27
4	73	63	55	49	67	58	51	46	48	43	39	40	36	33	32	29	27	23
5	67	56	48	42	62	52	45	39	43	38	34	36	32	29	29	26	23	20
6	62	50	42	36	57	46	39	34	39	34	30	32	28	25	26	23	21	18
7	57	45	37	32	52	42	35	30	35	30	26	29	25	22	24	21	18	16
8	53	41	33	28	49	38	31	26	32	27	23	27	23	20	22	19	16	14
9	50	37	30	25	45	35	28	24	30	24	21	25	21	18	20	17	15	13
10	46	34	27	22	42	32	25	21	27	22	19	23	19	16	19	16	13	11

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

	0°	45°	90°
0°	17649	17649	17649
5°	17763	17623	17544
10°	17621	17479	17384
15°	17434	17241	17177
20°	17226	16961	16928
25°	16985	16677	16625
30°	16626	16375	16267
35°	16154	15927	15831
40°	15650	15407	15346
45°	15042	14843	14777
50°	14418	14297	14200
55°	13745	13745	13528
60°	12907	13155	12689
65°	11811	12399	11516
70°	10411	11412	10139
75°	8892	10213	8652
80°	6894	8597	6984
85°	4462	6600	5886



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	360.3	1.6
10°-20°	1017.1	4.6
20°-30°	1508.7	6.9
30°-40°	1765.3	8.1
40°-50°	1757.5	8.0
50°-60°	1517.6	6.9
60°-70°	1092.4	5.0
70°-80°	572.9	2.6
80°-90°	146.0	0.7
90°-100°	877.2	4.0
100°-110°	2371.7	10.8
110°-120°	2493.5	11.4
120°-130°	2025.4	9.2
130°-140°	1588.7	7.3
140°-150°	1219.4	5.6
150°-160°	877.0	4.0
160°-170°	535.7	2.4
170°-180°	180.6	0.8
0°-30°	2886.1	13.2
0°-40°	4651.4	21.2
0°-60°	7926.5	36.2
0°-90°	9737.8	44.5
90°-120°	5742.4	26.2
90°-150°	10575.8	48.3
90°-180°	12169.0	55.5
0°-180°	21906.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3826	3826	3826	3826	3826	
5°	3836	3793	3806	3795	3789	363
15°	3650	3604	3610	3603	3597	1029
25°	3337	3281	3276	3256	3266	1534
35°	2868	2829	2828	2801	2811	1793
45°	2306	2286	2275	2268	2265	1779
55°	1709	1706	1709	1685	1682	1525
65°	1082	1115	1136	1091	1055	1072
75°	499	545	573	535	485	535
85°	84	111	125	118	111	111
90°	4	12	26	28	26	12
95°	136	478	1459	755	449	142
105°	441	681	2631	3881	3722	464
115°	776	949	2182	4224	4768	766
125°	1063	1218	1967	3319	3899	947
135°	1274	1425	1914	2680	3033	984
145°	1481	1592	1888	2294	2468	927
155°	1672	1738	1871	2058	2125	771
165°	1820	1838	1879	1953	1963	513
175°	1890	1888	1881	1906	1902	179
180°	1888	1888	1888	1888	1888	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3825.8	3825.8	3825.8	3825.8	3825.8
2.5°	3847.4	3815.7	3825.8	3817.3	3798.8
5°	3835.9	3793.1	3805.6	3795.3	3788.7
7.5°	3796.8	3757.3	3766.5	3755.6	3751.6
10°	3761.7	3722.2	3731.4	3717.8	3711.2
12.5°	3721.3	3679.1	3688.3	3674.7	3670.7
15°	3650.5	3604.4	3610.1	3603.2	3596.6
17.5°	3568.3	3521.5	3522.4	3511.6	3510.3
20°	3508.9	3459.5	3455.0	3441.7	3448.3
22.5°	3444.2	3392.1	3387.6	3368.9	3378.2
25°	3337.0	3281.0	3276.4	3256.4	3266.2
27.5°	3213.0	3157.6	3157.7	3129.6	3140.2
30°	3121.3	3068.6	3074.1	3040.7	3053.9
32.5°	3024.2	2976.8	2979.7	2946.3	2959.5
35°	2868.5	2828.9	2828.1	2801.3	2811.2
37.5°	2709.4	2674.5	2669.0	2653.5	2656.1
40°	2598.8	2569.2	2558.4	2548.3	2548.3
42.5°	2482.9	2455.9	2445.1	2437.7	2435.0
45°	2305.6	2285.8	2275.2	2268.4	2265.1
47.5°	2130.3	2111.9	2102.7	2097.9	2094.6
50°	2009.0	1995.8	1992.1	1981.9	1978.6
52.5°	1887.6	1879.7	1876.2	1863.3	1860.0
55°	1709.0	1705.7	1709.0	1685.3	1682.0
57.5°	1522.9	1528.2	1539.1	1507.2	1499.3
60°	1398.9	1412.0	1425.8	1388.4	1375.3
62.5°	1272.1	1293.2	1312.6	1269.7	1251.2
65°	1082.0	1115.0	1135.9	1091.3	1055.0
67.5°	898.6	939.5	964.7	916.6	875.7
70°	771.9	818.0	846.1	797.8	751.7
72.5°	661.3	712.8	735.5	690.0	643.8
75°	498.9	545.0	573.0	534.8	485.4
77.5°	353.9	397.4	420.7	387.4	346.5
80°	259.5	305.7	323.6	295.9	262.9
82.5°	184.0	222.3	234.6	217.9	195.5
85°	84.3	110.6	124.7	117.8	111.2
87.5°	22.4	42.4	56.5	57.0	59.2
90°	4.1	12.0	26.4	28.4	26.4
92.5°	57.7	210.3	414.9	180.1	130.4
95°	136.1	477.8	1458.8	754.9	449.0
97.5°	218.6	548.0	2273.9	1881.8	1382.0
100°	280.4	576.4	2527.4	2635.8	2131.3
102.5°	337.3	615.8	2616.8	3207.6	2830.2
105°	440.9	681.3	2631.1	3881.0	3722.1
107.5°	536.8	756.1	2516.1	4301.1	4354.0
110°	611.5	810.2	2413.7	4413.9	4638.4

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	678.2	864.1	2319.4	4391.4	4768.4
115°	776.1	948.9	2182.1	4224.1	4768.4
117.5°	872.0	1034.1	2091.4	3968.5	4585.6
120°	930.5	1089.4	2037.8	3785.2	4414.9
122.5°	985.8	1141.5	2005.3	3588.6	4223.1
125°	1062.6	1217.5	1966.7	3318.8	3898.8
127.5°	1133.3	1285.5	1943.9	3098.6	3608.7
130°	1172.3	1329.2	1934.2	2962.5	3423.4
132.5°	1212.9	1368.3	1924.4	2839.8	3264.1
135°	1273.9	1424.9	1913.9	2679.7	3033.3
137.5°	1335.2	1477.9	1904.9	2549.8	2837.9
140°	1377.5	1510.6	1901.7	2466.2	2722.5
142.5°	1418.1	1543.3	1895.2	2390.7	2615.2
145°	1481.1	1592.4	1887.5	2293.7	2468.5
147.5°	1538.4	1636.9	1878.5	2205.8	2340.1
150°	1580.7	1668.1	1875.3	2158.1	2265.4
152.5°	1619.7	1696.0	1873.6	2113.8	2202.0
155°	1672.1	1737.7	1871.2	2057.6	2125.2
157.5°	1726.5	1772.2	1871.6	2018.5	2063.0
160°	1757.4	1795.2	1873.2	1993.8	2025.6
162.5°	1781.8	1813.2	1874.9	1974.1	1998.0
165°	1820.4	1838.3	1879.3	1952.7	1962.6
167.5°	1846.8	1859.1	1879.7	1934.3	1939.1
170°	1863.1	1869.0	1881.4	1926.1	1926.1
172.5°	1876.1	1877.3	1881.4	1916.3	1914.7
175°	1889.5	1887.5	1881.4	1905.7	1901.7
177.5°	1894.0	1889.2	1881.0	1897.1	1892.3
180°	1887.5	1887.5	1887.5	1887.5	1887.5

(END OF REPORT)