

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: P564985

Luminaire Tested: **SQ4-PW1-100U-125D-840-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P564985  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-PW1-100U-125D-840-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 26774.8 lumens  
Efficiency: N/A  
Efficacy: 124.6 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: General Diffuse

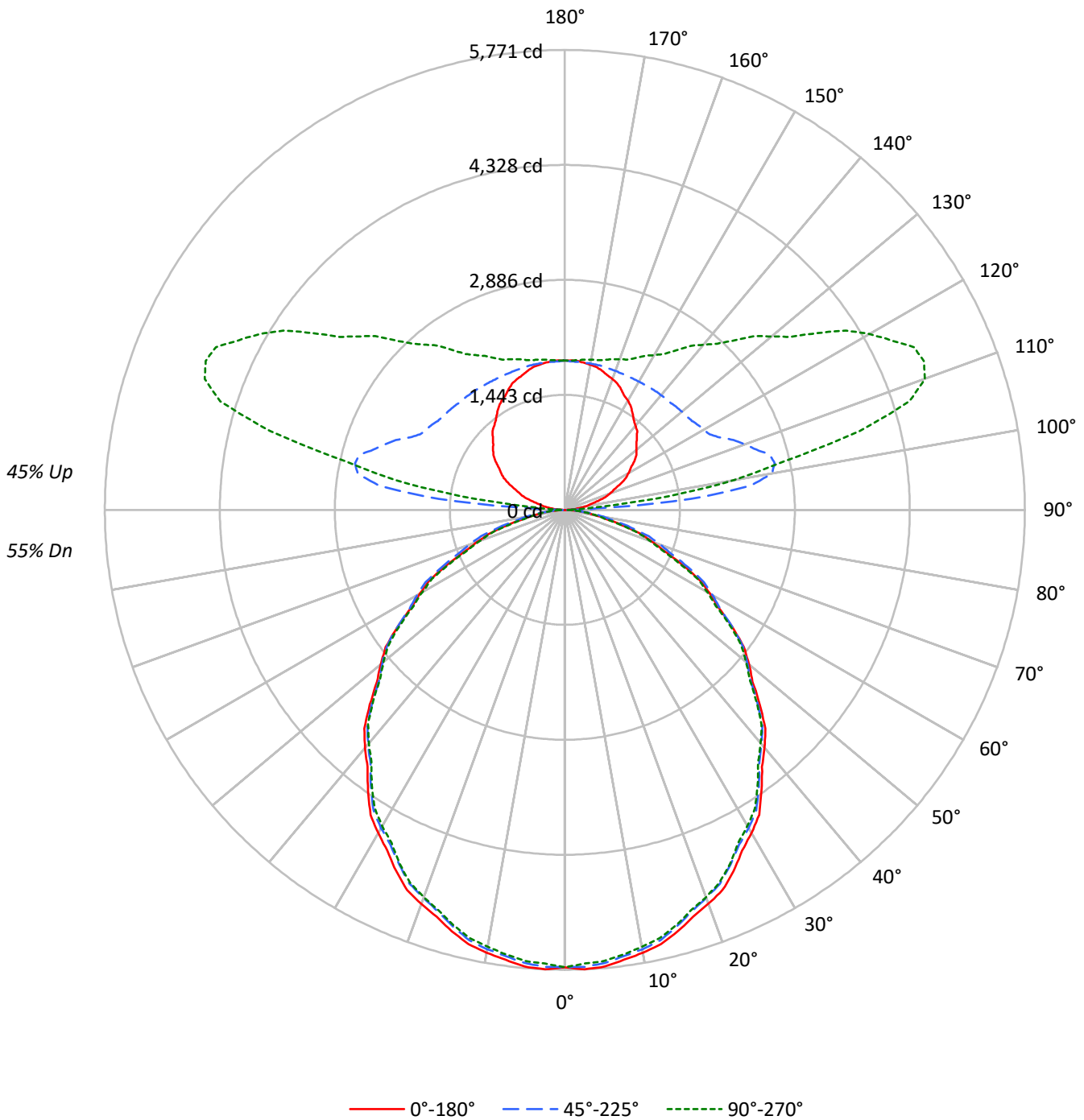
Input Watts (W): 214.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20					20					20					20				
RC	80					70					50					30				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																				
0	108	108	108	108	100	100	100	100	86	86	86	73	73	73	60	60	60	55		
1	99	95	91	87	92	88	85	82	76	73	71	64	62	61	53	52	51	46		
2	90	83	77	71	83	77	72	67	66	62	59	56	53	51	47	45	43	39		
3	82	73	65	60	76	68	61	56	59	54	49	50	46	43	42	39	37	33		
4	75	64	57	50	70	60	53	48	52	47	42	44	40	37	37	34	32	28		
5	69	57	49	43	64	54	46	41	47	41	36	40	36	32	34	30	28	25		
6	64	52	43	38	59	48	41	36	42	36	32	36	32	28	31	27	24	22		
7	59	47	39	33	55	44	36	31	38	32	28	33	28	25	28	24	22	19		
8	55	42	35	29	51	40	33	28	35	29	25	30	26	22	26	22	19	17		
9	51	39	31	26	47	36	30	25	32	26	22	28	23	20	24	20	18	15		
10	48	36	28	23	44	33	27	22	29	24	20	26	21	18	22	19	16	14		

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

	0°	45°	90°
0°	17649	17649	17649
5°	17763	17622	17545
10°	17621	17479	17384
15°	17434	17241	17177
20°	17226	16961	16928
25°	16985	16677	16625
30°	16627	16375	16267
35°	16154	15926	15831
40°	15650	15407	15346
45°	15042	14844	14778
50°	14418	14297	14200
55°	13744	13744	13528
60°	12906	13155	12688
65°	11811	12399	11517
70°	10411	11412	10138
75°	8892	10213	8652
80°	6895	8597	6985
85°	4460	6602	5889



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	540.4	2.0
10°-20°	1525.7	5.7
20°-30°	2263.1	8.5
30°-40°	2648.0	9.9
40°-50°	2636.2	9.8
50°-60°	2276.4	8.5
60°-70°	1638.6	6.1
70°-80°	859.3	3.2
80°-90°	216.9	0.8
90°-100°	877.2	3.3
100°-110°	2421.6	9.0
110°-120°	2497.4	9.3
120°-130°	2006.9	7.5
130°-140°	1577.2	5.9
140°-150°	1209.7	4.5
150°-160°	869.4	3.2
160°-170°	531.7	2.0
170°-180°	179.2	0.7
0°-30°	4329.1	16.2
0°-40°	6977.1	26.1
0°-60°	11889.8	44.4
0°-90°	14604.6	54.5
90°-120°	5796.2	21.6
90°-150°	10589.9	39.6
90°-180°	12170.0	45.5
0°-180°	26774.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5739	5739	5739	5739	5739	
5°	5754	5690	5708	5693	5683	545
15°	5476	5407	5415	5405	5395	1543
25°	5006	4922	4914	4884	4899	2302
35°	4303	4243	4242	4202	4217	2690
45°	3458	3429	3413	3403	3398	2668
55°	2563	2558	2563	2528	2523	2287
65°	1623	1672	1704	1637	1583	1608
75°	748	818	860	802	728	802
85°	126	166	187	177	167	167
90°	6	12	24	27	30	14
95°	129	475	1591	654	426	138
105°	432	666	2664	4067	3830	459
115°	773	934	2146	4248	4831	760
125°	1061	1207	1945	3292	3863	944
135°	1277	1414	1891	2666	3006	988
145°	1480	1583	1867	2270	2442	927
155°	1669	1725	1852	2036	2101	769
165°	1807	1831	1861	1933	1948	509
175°	1873	1876	1864	1891	1885	178
180°	1873	1873	1873	1873	1873	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	5738.7	5738.7	5738.7	5738.7	5738.7
2.5°	5771.0	5723.6	5738.7	5725.9	5698.2
5°	5753.9	5689.6	5708.3	5693.0	5683.1
7.5°	5695.2	5635.9	5649.7	5633.4	5627.4
10°	5642.6	5583.3	5597.1	5576.7	5566.8
12.5°	5581.9	5518.7	5532.4	5512.0	5506.1
15°	5475.8	5406.6	5415.1	5404.8	5394.9
17.5°	5352.4	5282.2	5283.6	5267.4	5265.4
20°	5263.4	5189.3	5182.5	5162.5	5172.4
22.5°	5166.3	5088.2	5081.4	5053.4	5067.2
25°	5005.5	4921.5	4914.5	4884.5	4899.4
27.5°	4819.5	4736.4	4736.6	4694.5	4710.3
30°	4682.0	4602.9	4611.2	4561.1	4580.8
32.5°	4536.3	4465.2	4469.6	4419.5	4439.3
35°	4302.7	4243.4	4242.1	4202.0	4216.8
37.5°	4064.1	4011.7	4003.4	3980.3	3984.2
40°	3898.3	3853.8	3837.6	3822.4	3822.4
42.5°	3724.3	3683.8	3667.7	3656.5	3652.5
45°	3458.4	3428.7	3412.9	3402.6	3397.7
47.5°	3195.5	3167.8	3154.0	3146.8	3141.9
50°	3013.4	2993.7	2988.2	2972.9	2967.9
52.5°	2831.4	2819.6	2814.2	2794.9	2790.0
55°	2563.4	2558.5	2563.4	2527.9	2523.0
57.5°	2284.4	2292.3	2308.6	2260.8	2249.0
60°	2098.3	2118.1	2138.7	2082.7	2062.9
62.5°	1908.2	1939.8	1968.8	1904.5	1876.8
65°	1623.0	1672.4	1703.9	1636.9	1582.6
67.5°	1348.0	1409.3	1447.1	1374.9	1313.6
70°	1157.8	1227.1	1269.1	1196.7	1127.5
72.5°	992.0	1069.1	1103.2	1034.9	965.7
75°	748.3	817.5	859.5	802.2	728.1
77.5°	530.9	596.1	631.0	581.1	519.8
80°	389.3	458.5	485.4	443.8	394.4
82.5°	276.1	333.4	351.9	326.9	293.3
85°	126.4	166.0	187.1	176.7	166.9
87.5°	33.6	62.4	81.6	82.4	86.9
90°	6.0	11.9	24.0	27.0	30.0
92.5°	53.9	223.9	400.4	146.1	113.9
95°	128.9	474.6	1591.4	654.1	425.6
97.5°	213.4	531.6	2357.4	1814.9	1314.4
100°	275.7	565.8	2640.3	2658.9	2160.8
102.5°	335.7	604.7	2695.4	3285.3	2812.9
105°	431.6	666.0	2664.2	4067.4	3830.0
107.5°	533.4	742.1	2515.6	4444.6	4531.3
110°	605.4	792.9	2400.5	4525.7	4807.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	670.1	850.6	2292.6	4461.6	4876.6
115°	773.2	934.4	2145.8	4247.9	4831.0
117.5°	863.1	1023.7	2049.3	3947.0	4610.4
120°	923.0	1081.3	2010.9	3743.3	4411.4
122.5°	980.6	1131.8	1979.8	3553.1	4186.1
125°	1060.9	1207.4	1945.0	3291.6	3863.0
127.5°	1129.2	1275.7	1924.6	3070.4	3563.3
130°	1174.8	1321.3	1915.0	2935.2	3383.5
132.5°	1217.9	1357.4	1905.4	2821.5	3227.7
135°	1276.7	1414.4	1891.0	2666.0	3005.9
137.5°	1342.6	1468.0	1883.9	2535.4	2825.5
140°	1378.6	1501.6	1879.1	2448.3	2703.2
142.5°	1419.3	1533.0	1874.3	2370.9	2595.3
145°	1480.5	1583.0	1867.1	2269.6	2442.5
147.5°	1539.2	1628.9	1860.5	2184.2	2318.4
150°	1582.4	1655.6	1858.1	2133.3	2241.7
152.5°	1615.9	1684.5	1855.7	2089.7	2179.3
155°	1669.3	1725.0	1852.1	2036.4	2100.8
157.5°	1718.4	1761.2	1852.7	1997.5	2041.5
160°	1747.2	1785.3	1855.1	1975.7	2007.9
162.5°	1771.2	1804.6	1857.5	1956.4	1981.6
165°	1807.1	1830.6	1861.1	1933.3	1948.0
167.5°	1834.7	1848.8	1864.1	1919.3	1924.0
170°	1849.1	1860.8	1864.1	1912.0	1912.0
172.5°	1861.1	1868.1	1864.1	1902.4	1900.0
175°	1873.1	1876.0	1864.1	1890.9	1885.1
177.5°	1877.9	1875.5	1863.5	1880.2	1875.5
180°	1873.1	1873.1	1873.1	1873.1	1873.1

(END OF REPORT)