

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: P519363

Luminaire Tested: **SQ4-WB-100U-050D-840-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519363  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G2-2009-966-13)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-WB-100U-050D-840-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

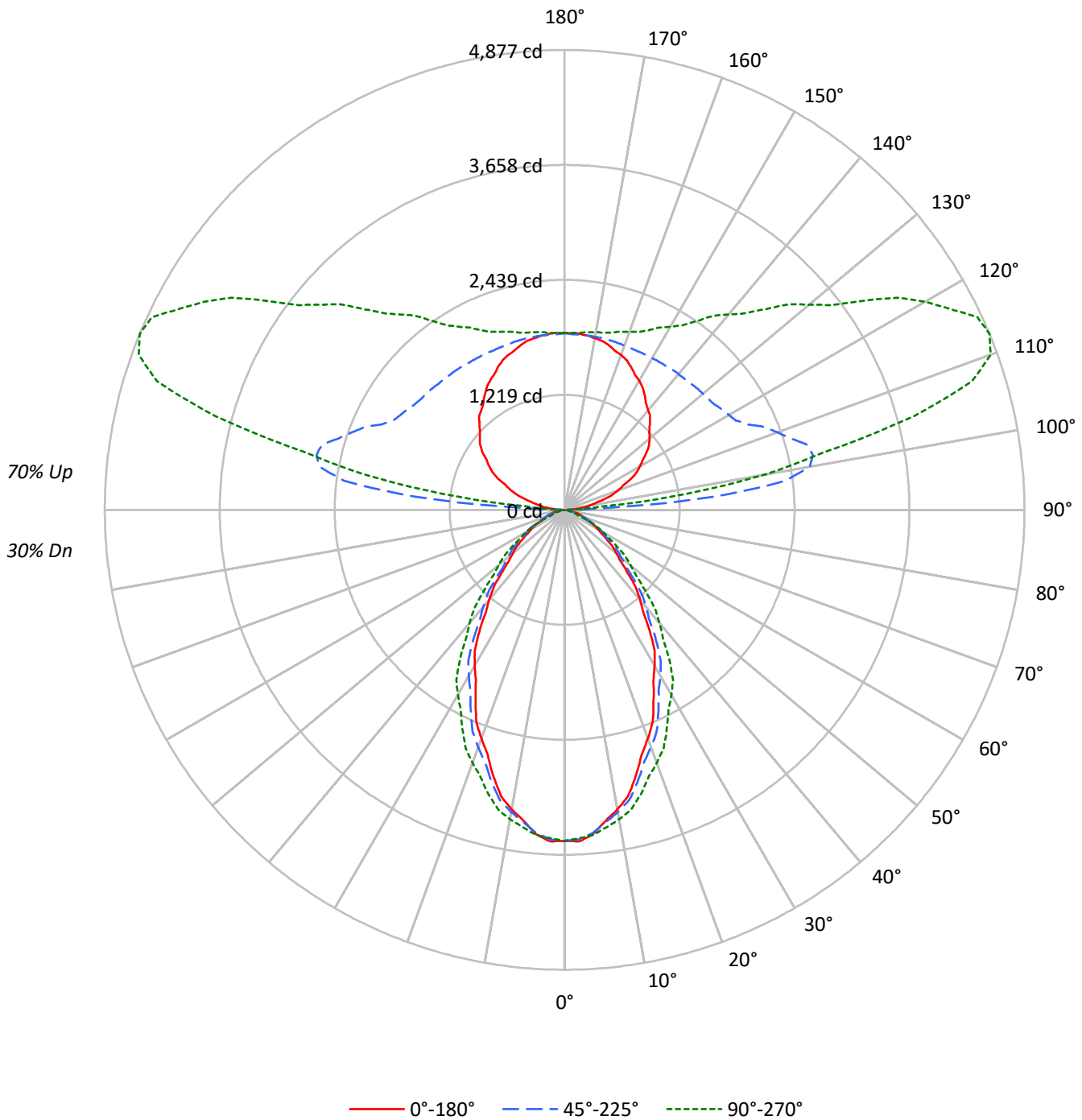
Lumens per Lamp: N/A  
Luminaire Lumens: 17289.9 lumens  
Efficiency: N/A  
Efficacy: 135.7 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 127.4  
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	102	102	102	102	92	92	92	92	72	72	72	54	54	54	37	37	37	30
1	94	90	86	83	84	81	78	75	64	62	60	48	47	46	34	33	33	26
2	86	79	74	69	77	72	67	63	57	54	51	43	41	40	31	30	29	23
3	79	70	64	58	71	64	58	53	51	47	44	39	36	34	28	27	25	20
4	72	63	55	50	65	57	51	46	46	41	38	35	32	30	25	24	22	18
5	67	56	49	43	60	51	44	40	41	36	33	32	29	26	23	21	20	16
6	62	50	43	38	55	46	39	35	37	33	29	29	26	23	21	19	18	15
7	57	46	38	33	51	42	35	31	34	29	26	27	23	21	20	18	16	13
8	53	42	34	29	48	38	32	27	31	26	23	24	21	19	18	16	15	12
9	49	38	31	26	44	35	29	24	28	24	21	23	19	17	17	15	14	11
10	46	35	28	24	42	32	26	22	26	22	19	21	18	16	16	14	12	10

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

	0°	45°	90°
0°	10797	10797	10797
5°	10662	10624	10686
10°	10074	10165	10401
15°	9300	9515	9942
20°	8445	8763	9342
25°	7575	7988	8704
30°	6772	7216	8042
35°	5923	6351	7258
40°	4985	5380	6283
45°	4114	4469	5246
50°	3435	3744	4371
55°	2916	3213	3610
60°	2492	2786	2880
65°	1984	2343	1861
70°	1759	1828	1136
75°	1629	1483	695
80°	1500	1364	600
85°	1359	1249	490



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	322.0	1.9
10°-20°	837.6	4.8
20°-30°	1084.9	6.3
30°-40°	1062.4	6.1
40°-50°	813.2	4.7
50°-60°	541.9	3.1
60°-70°	295.7	1.7
70°-80°	123.2	0.7
80°-90°	38.8	0.2
90°-100°	877.2	5.1
100°-110°	2421.6	14.0
110°-120°	2497.4	14.4
120°-130°	2006.9	11.6
130°-140°	1577.2	9.1
140°-150°	1209.7	7.0
150°-160°	869.4	5.0
160°-170°	531.7	3.1
170°-180°	179.2	1.0
0°-30°	2244.5	13.0
0°-40°	3307.0	19.1
0°-60°	4662.1	27.0
0°-90°	5119.7	29.6
90°-120°	5796.2	33.5
90°-150°	10589.9	61.2
90°-180°	12170.0	70.4
0°-180°	17289.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3511	3511	3511	3511	3511	
5°	3454	3419	3442	3450	3462	321
15°	2921	2910	2989	3070	3123	816
25°	2232	2238	2354	2456	2565	1027
35°	1578	1585	1692	1805	1933	981
45°	946	964	1028	1105	1206	738
55°	544	566	599	622	673	493
65°	273	295	322	281	256	283
75°	137	137	125	86	58	146
85°	38	38	35	23	14	42
90°	6	12	24	27	30	11
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°	3510.8	3510.8	3510.8	3510.8	3510.8
2.5°	3519.4	3488.1	3496.0	3495.8	3486.1
5°	3453.8	3419.2	3441.5	3449.5	3461.5
7.5°	3325.6	3299.4	3340.1	3370.2	3394.6
10°	3225.8	3203.2	3255.1	3298.9	3330.6
12.5°	3110.0	3091.0	3155.2	3214.1	3255.4
15°	2920.8	2910.2	2988.6	3069.9	3122.6
17.5°	2718.4	2713.2	2803.1	2898.0	2965.5
20°	2580.3	2578.8	2677.4	2776.2	2854.5
22.5°	2441.1	2444.4	2548.0	2650.8	2739.9
25°	2232.2	2238.2	2353.9	2456.5	2564.9
27.5°	2039.0	2041.7	2161.3	2269.6	2385.3
30°	1907.1	1914.7	2031.9	2144.0	2264.5
32.5°	1775.3	1784.0	1898.8	2014.7	2137.6
35°	1577.5	1585.0	1691.5	1805.3	1933.3
37.5°	1373.5	1383.8	1478.3	1585.9	1711.8
40°	1241.6	1256.7	1340.2	1441.6	1565.1
42.5°	1114.7	1133.4	1210.8	1307.0	1418.5
45°	945.9	963.9	1027.5	1105.3	1206.2
47.5°	800.4	821.2	870.1	937.0	1023.2
50°	717.9	737.5	782.6	832.2	913.5
52.5°	645.2	664.7	704.9	743.2	812.5
55°	543.8	566.4	599.3	622.0	673.2
57.5°	460.6	482.3	508.4	518.6	549.6
60°	405.2	429.3	452.9	451.7	468.3
62.5°	354.6	375.1	398.7	382.4	383.3
65°	272.7	295.3	322.0	281.3	255.7
67.5°	220.3	225.1	252.6	196.2	165.8
70°	195.6	195.6	203.3	151.9	126.3
72.5°	172.2	172.2	165.1	123.6	96.7
75°	137.1	137.1	124.8	85.7	58.5
77.5°	105.7	104.5	95.5	63.9	42.5
80°	84.7	84.7	77.0	50.5	33.9
82.5°	66.2	66.2	59.8	39.4	25.3
85°	38.5	38.5	35.4	22.9	13.9
87.5°	14.8	15.9	17.1	12.8	12.2
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)