

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: P519387

Luminaire Tested: **SQ4-WB-100U-075D-840-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519387  
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-075D-840-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

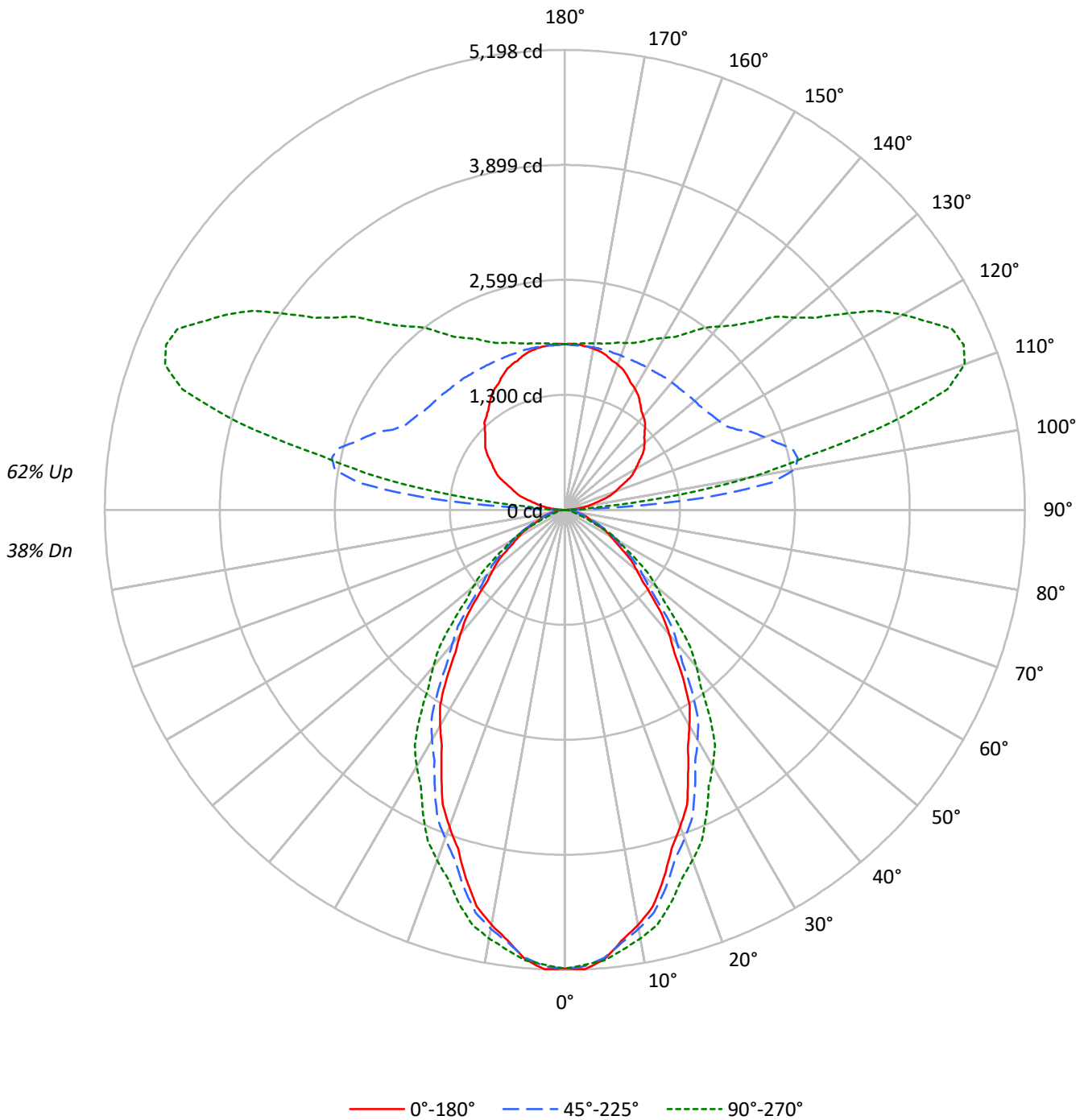
Lumens per Lamp: N/A  
Luminaire Lumens: 19729.6 lumens  
Efficiency: N/A  
Efficacy: 128.6 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 153.4  
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	104	104	104	104	95	95	95	95	77	77	77	60	60	60	45	45	45	38
1	96	92	89	85	87	84	81	78	69	67	65	54	53	52	41	41	40	34
2	88	81	76	71	80	74	70	66	61	58	55	49	47	45	38	36	35	30
3	81	72	66	60	74	66	61	56	55	51	47	44	41	39	34	32	31	26
4	75	65	57	52	68	59	53	48	49	45	41	40	37	34	31	29	27	24
5	69	58	51	45	62	53	47	42	45	40	36	36	33	30	29	26	25	21
6	64	52	45	40	58	48	42	37	40	36	32	33	30	27	26	24	22	19
7	59	48	40	35	54	44	37	33	37	32	29	30	27	24	24	22	20	17
8	55	43	36	31	50	40	34	29	34	29	26	28	24	22	23	20	18	16
9	51	40	33	28	47	37	31	26	31	26	23	26	22	20	21	19	17	15
10	48	37	30	25	44	34	28	24	29	24	21	24	21	18	20	17	15	13

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

	0°	45°	90°
0°	15946	15946	15946
5°	15747	15691	15782
10°	14878	15012	15361
15°	13734	14053	14683
20°	12472	12941	13797
25°	11187	11797	12854
30°	10002	10657	11877
35°	8747	9379	10720
40°	7362	7947	9280
45°	6076	6600	7748
50°	5072	5530	6455
55°	4306	4745	5331
60°	3681	4114	4254
65°	2930	3460	2749
70°	2598	2700	1678
75°	2406	2190	1028
80°	2216	2015	887
85°	2008	1845	723



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	475.6	2.4
10°-20°	1237.0	6.3
20°-30°	1602.3	8.1
30°-40°	1569.0	8.0
40°-50°	1201.0	6.1
50°-60°	800.3	4.1
60°-70°	436.7	2.2
70°-80°	182.0	0.9
80°-90°	55.4	0.3
90°-100°	877.2	4.4
100°-110°	2421.6	12.3
110°-120°	2497.4	12.7
120°-130°	2006.9	10.2
130°-140°	1577.2	8.0
140°-150°	1209.7	6.1
150°-160°	869.4	4.4
160°-170°	531.7	2.7
170°-180°	179.2	0.9
0°-30°	3314.9	16.8
0°-40°	4884.0	24.8
0°-60°	6885.3	34.9
0°-90°	7559.4	38.3
90°-120°	5796.2	29.4
90°-150°	10589.9	53.7
90°-180°	12170.0	61.7
0°-180°	19729.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5185	5185	5185	5185	5185	
5°	5101	5050	5083	5094	5112	475
15°	4314	4298	4414	4534	4612	1205
25°	3297	3306	3476	3628	3788	1516
35°	2330	2341	2498	2666	2855	1448
45°	1397	1424	1518	1632	1781	1089
55°	803	836	885	919	994	728
65°	403	436	476	416	378	419
75°	202	202	184	126	86	216
85°	57	57	52	34	20	62
90°	6	12	24	27	30	12
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°	5185.0	5185.0	5185.0	5185.0	5185.0
2.5°	5197.7	5151.5	5163.2	5162.8	5148.6
5°	5100.8	5049.7	5082.6	5094.4	5112.2
7.5°	4911.5	4872.8	4932.9	4977.4	5013.5
10°	4764.1	4730.7	4807.3	4872.1	4918.8
12.5°	4593.0	4565.0	4659.9	4746.8	4807.8
15°	4313.6	4298.1	4413.7	4533.8	4611.7
17.5°	4014.7	4007.1	4139.8	4279.9	4379.6
20°	3810.8	3808.6	3954.2	4100.1	4215.8
22.5°	3605.2	3610.1	3763.0	3914.8	4046.5
25°	3296.7	3305.5	3476.4	3627.9	3788.1
27.5°	3011.3	3015.4	3192.0	3352.0	3522.8
30°	2816.6	2827.7	3000.9	3166.5	3344.4
32.5°	2621.8	2634.8	2804.3	2975.4	3157.0
35°	2329.7	2340.8	2498.1	2666.2	2855.3
37.5°	2028.5	2043.6	2183.2	2342.1	2528.1
40°	1833.7	1856.0	1979.4	2129.1	2311.5
42.5°	1646.3	1673.9	1788.2	1930.3	2094.9
45°	1396.9	1423.6	1517.5	1632.4	1781.4
47.5°	1182.2	1212.9	1285.0	1383.9	1511.1
50°	1060.2	1089.1	1155.8	1229.0	1349.1
52.5°	952.8	981.7	1041.1	1097.6	1199.9
55°	803.1	836.5	885.0	918.6	994.2
57.5°	680.3	712.3	750.8	765.9	811.8
60°	598.4	633.9	668.9	667.2	691.6
62.5°	523.7	554.0	588.8	564.7	566.1
65°	402.7	436.1	475.5	415.5	377.7
67.5°	325.3	332.5	373.1	289.7	244.8
70°	288.9	288.9	300.3	224.4	186.6
72.5°	254.4	254.4	243.9	182.5	142.9
75°	202.5	202.5	184.3	126.5	86.5
77.5°	156.1	154.3	141.1	94.4	62.8
80°	125.1	125.1	113.8	74.5	50.1
82.5°	97.8	97.8	88.3	58.2	37.3
85°	56.9	56.9	52.3	33.8	20.5
87.5°	21.2	22.4	23.0	16.3	15.1
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)