

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: P519439

Luminaire Tested: **SQ4-WB-100U-125D-930-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519439  
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-125D-930-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

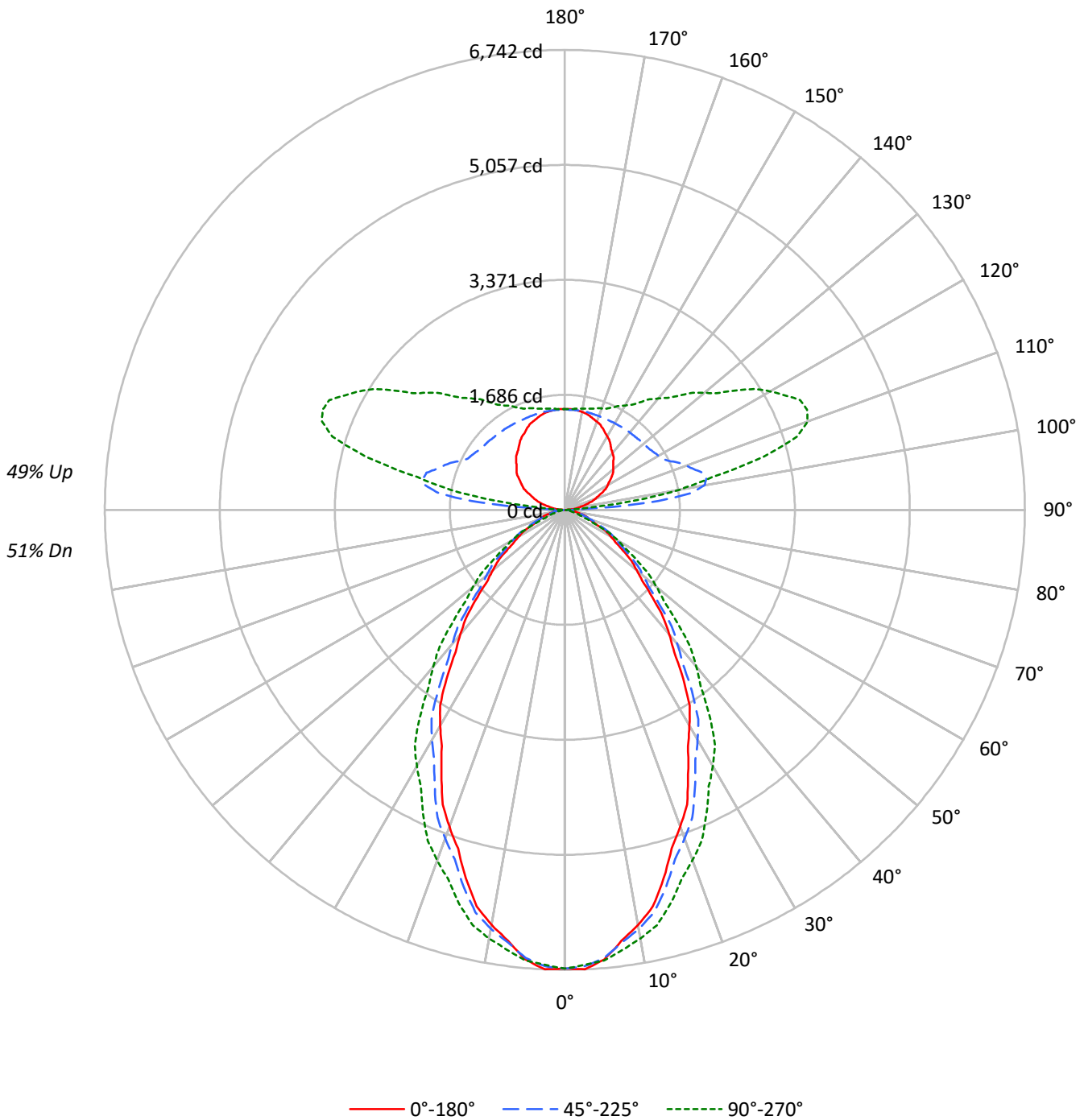
Lumens per Lamp: N/A  
Luminaire Lumens: 19390.7 lumens  
Efficiency: N/A  
Efficacy: 90.3 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: General Diffuse

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				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	107	107	107	107	99	99	99	99	84	84	84	70	70	70	57	57	57	51
1	99	95	92	89	91	88	85	83	75	73	71	63	62	60	52	51	50	45
2	91	84	79	74	84	78	74	70	67	64	61	57	54	52	47	45	44	40
3	84	75	69	63	78	70	64	60	60	56	53	51	48	46	43	41	39	35
4	77	68	60	55	72	63	57	52	54	50	46	47	43	40	39	37	35	31
5	72	61	53	48	66	57	50	45	49	44	40	42	39	36	36	33	31	28
6	66	55	48	42	61	52	45	40	45	40	36	39	35	32	33	30	28	25
7	62	50	43	38	57	47	41	36	41	36	32	36	32	29	31	28	25	23
8	58	46	39	34	53	43	37	32	38	33	29	33	29	26	28	25	23	21
9	54	42	35	30	50	40	33	29	35	30	27	31	27	24	27	24	21	19
10	50	39	32	28	47	37	31	27	33	28	24	29	25	22	25	22	20	18

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

	0°	45°	90°
0°	20682	20682	20682
5°	20424	20351	20470
10°	19296	19472	19923
15°	17814	18227	19044
20°	16176	16785	17896
25°	14509	15300	16672
30°	12973	13822	15404
35°	11345	12165	13904
40°	9548	10307	12036
45°	7880	8560	10049
50°	6579	7172	8372
55°	5585	6155	6914
60°	4774	5336	5518
65°	3801	4488	3564
70°	3370	3502	2176
75°	3120	2840	1332
80°	2874	2612	1149
85°	2604	2396	939



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	616.8	3.2
10°-20°	1604.4	8.3
20°-30°	2078.2	10.7
30°-40°	2035.1	10.5
40°-50°	1557.7	8.0
50°-60°	1038.0	5.4
60°-70°	566.4	2.9
70°-80°	236.0	1.2
80°-90°	69.9	0.4
90°-100°	691.1	3.6
100°-110°	1907.8	9.8
110°-120°	1967.5	10.1
120°-130°	1581.1	8.2
130°-140°	1242.6	6.4
140°-150°	953.0	4.9
150°-160°	684.9	3.5
160°-170°	418.9	2.2
170°-180°	141.2	0.7
0°-30°	4299.5	22.2
0°-40°	6334.6	32.7
0°-60°	8930.3	46.1
0°-90°	9802.7	50.6
90°-120°	4566.4	23.5
90°-150°	8343.0	43.0
90°-180°	9588.0	49.4
0°-180°	19390.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	6725	6725	6725	6725	6725	
5°	6616	6550	6592	6608	6631	615
15°	5595	5575	5725	5880	5981	1562
25°	4276	4287	4509	4706	4913	1966
35°	3022	3036	3240	3458	3703	1879
45°	1812	1846	1968	2117	2310	1413
55°	1042	1085	1148	1191	1290	944
65°	522	566	617	539	490	543
75°	263	263	239	164	112	280
85°	74	74	68	44	27	80
90°	5	9	19	21	24	11
95°	102	374	1254	515	335	109
105°	340	525	2099	3204	3017	362
115°	609	736	1690	3347	3806	599
125°	836	951	1532	2593	3043	744
135°	1006	1114	1490	2100	2368	778
145°	1166	1247	1471	1788	1924	730
155°	1315	1359	1459	1604	1655	606
165°	1424	1442	1466	1523	1535	401
175°	1476	1478	1469	1490	1485	140
180°	1476	1476	1476	1476	1476	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	6725.0	6725.0	6725.0	6725.0	6725.0
2.5°	6741.6	6681.5	6696.7	6696.3	6677.8
5°	6615.9	6549.5	6592.2	6607.5	6630.6
7.5°	6370.3	6320.1	6398.1	6455.8	6502.5
10°	6179.1	6135.8	6235.2	6319.2	6379.8
12.5°	5957.2	5920.9	6044.0	6156.7	6235.8
15°	5594.9	5574.7	5724.7	5880.4	5981.4
17.5°	5207.1	5197.3	5369.4	5551.2	5680.4
20°	4942.7	4939.8	5128.6	5317.9	5468.0
22.5°	4676.0	4682.3	4880.7	5077.6	5248.4
25°	4275.8	4287.4	4508.9	4705.5	4913.2
27.5°	3905.8	3911.0	4140.1	4347.5	4569.1
30°	3653.2	3667.6	3892.2	4107.0	4337.8
32.5°	3400.6	3417.3	3637.2	3859.2	4094.6
35°	3021.7	3036.1	3240.1	3458.1	3703.3
37.5°	2631.0	2650.6	2831.7	3037.8	3279.0
40°	2378.4	2407.3	2567.3	2761.5	2998.1
42.5°	2135.3	2171.0	2319.4	2503.7	2717.2
45°	1811.8	1846.5	1968.2	2117.2	2310.5
47.5°	1533.3	1573.1	1666.7	1794.9	1960.0
50°	1375.1	1412.6	1499.0	1594.1	1749.9
52.5°	1235.8	1273.3	1350.3	1423.6	1556.3
55°	1041.7	1084.9	1147.9	1191.4	1289.5
57.5°	882.3	923.9	973.8	993.4	1052.9
60°	776.1	822.2	867.6	865.3	897.1
62.5°	679.3	718.5	763.7	732.4	734.2
65°	522.3	565.6	616.7	538.9	489.8
67.5°	422.0	431.2	483.9	375.8	317.5
70°	374.8	374.8	389.5	291.0	242.0
72.5°	329.9	329.9	316.3	236.7	185.3
75°	262.6	262.6	239.0	164.1	112.1
77.5°	202.4	200.1	183.0	122.4	81.4
80°	162.3	162.3	147.5	96.7	64.9
82.5°	126.9	126.9	114.5	75.5	48.4
85°	73.8	73.8	67.9	43.9	26.6
87.5°	26.9	27.8	27.4	18.4	16.5
90°	4.7	9.3	18.9	21.3	23.6
92.5°	42.5	176.4	315.4	115.1	89.7
95°	101.5	373.9	1253.7	515.3	335.3
97.5°	168.1	418.8	1857.2	1429.9	1035.6
100°	217.2	445.8	2080.1	2094.8	1702.3
102.5°	264.4	476.4	2123.5	2588.2	2216.1
105°	340.0	524.7	2099.0	3204.4	3017.4
107.5°	420.3	584.6	1981.9	3501.6	3569.9
110°	476.9	624.7	1891.2	3565.5	3787.1



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	527.9	670.1	1806.2	3515.0	3841.9
115°	609.1	736.1	1690.5	3346.6	3806.0
117.5°	680.0	806.5	1614.5	3109.6	3632.2
120°	727.2	851.9	1584.3	2949.1	3475.5
122.5°	772.5	891.7	1559.7	2799.3	3297.9
125°	835.8	951.2	1532.3	2593.2	3043.4
127.5°	889.6	1005.1	1516.3	2419.0	2807.3
130°	925.5	1041.0	1508.7	2312.4	2665.6
132.5°	959.5	1069.4	1501.2	2222.9	2542.8
135°	1005.8	1114.3	1489.8	2100.3	2368.1
137.5°	1057.7	1156.6	1484.2	1997.4	2226.0
140°	1086.1	1183.0	1480.4	1928.8	2129.7
142.5°	1118.2	1207.8	1476.6	1867.8	2044.7
145°	1166.4	1247.2	1470.9	1788.0	1924.3
147.5°	1212.6	1283.3	1465.7	1720.8	1826.5
150°	1246.6	1304.3	1463.8	1680.6	1766.1
152.5°	1273.1	1327.1	1462.0	1646.3	1717.0
155°	1315.1	1359.0	1459.1	1604.3	1655.1
157.5°	1353.8	1387.5	1459.6	1573.7	1608.3
160°	1376.5	1406.5	1461.5	1556.5	1581.9
162.5°	1395.4	1421.7	1463.4	1541.3	1561.1
165°	1423.7	1442.2	1466.2	1523.1	1534.7
167.5°	1445.4	1456.5	1468.6	1512.1	1515.8
170°	1456.8	1466.0	1468.6	1506.3	1506.3
172.5°	1466.2	1471.7	1468.6	1498.7	1496.9
175°	1475.7	1478.0	1468.6	1489.7	1485.1
177.5°	1479.4	1477.6	1468.1	1481.2	1477.5
180°	1475.7	1475.7	1475.7	1475.7	1475.7

(END OF REPORT)