

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: P519601

Luminaire Tested: **SQ4-WB-150U-100D-835-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519601  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, 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-150U-100D-835-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

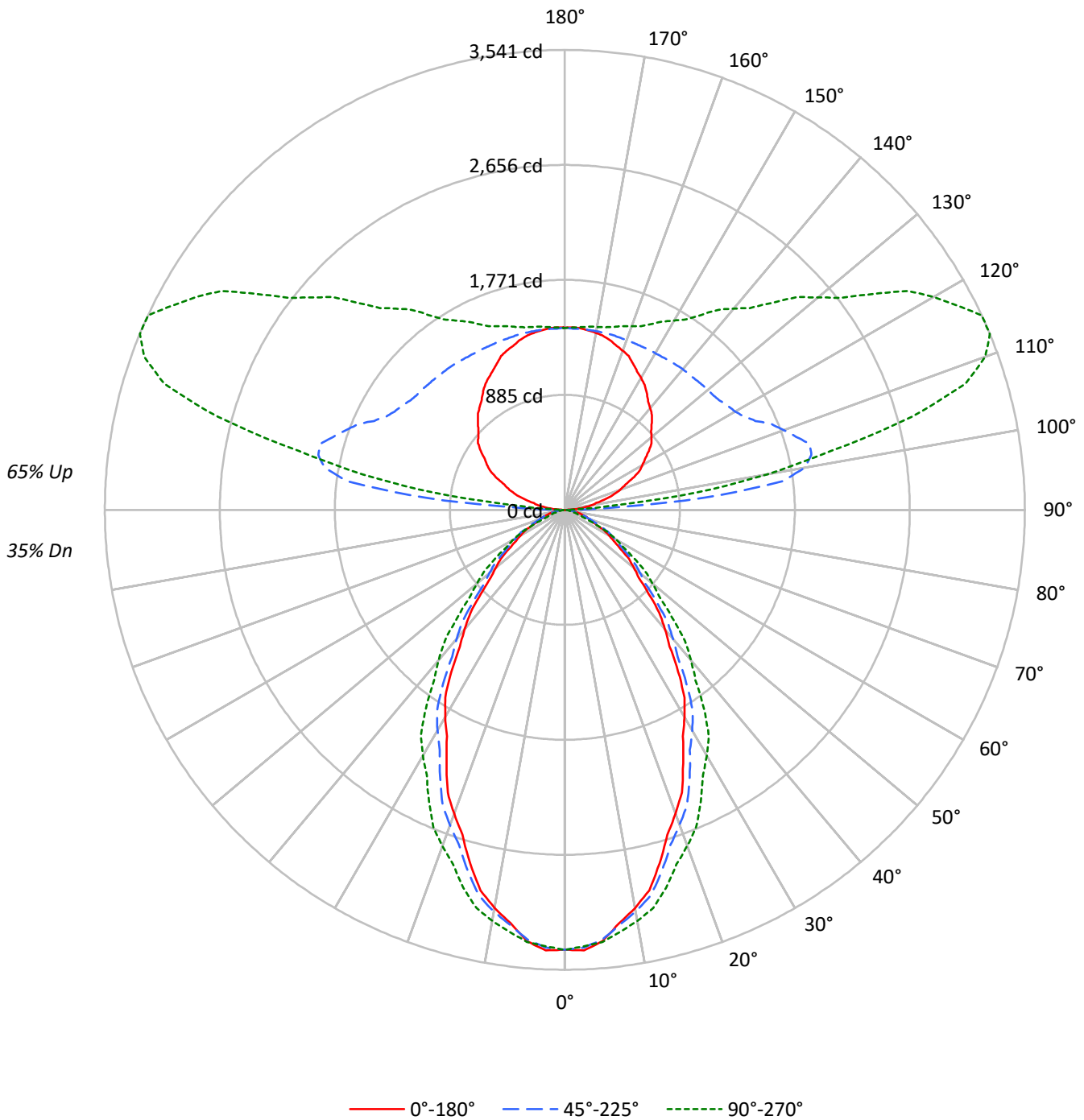
Lumens per Lamp: N/A  
Luminaire Lumens: 13974.4 lumens  
Efficiency: N/A  
Efficacy: 124.0 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 112.7  
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	94	94	94	94	75	75	75	58	58	58	43	43	43	35
1	95	91	88	85	86	83	80	77	67	65	63	52	51	50	39	38	38	31
2	87	81	75	71	79	73	69	65	60	56	54	47	45	43	35	34	33	28
3	80	72	65	60	73	65	60	55	53	49	46	42	40	37	32	30	29	24
4	74	64	57	51	67	58	52	47	48	44	40	38	35	33	29	27	26	22
5	68	57	50	44	62	53	46	41	43	39	35	35	31	29	27	25	23	20
6	63	52	44	39	57	47	41	36	39	35	31	32	28	26	25	22	21	18
7	58	47	40	34	53	43	37	32	36	31	28	29	26	23	23	20	19	16
8	54	43	36	31	49	39	33	29	33	28	25	27	23	21	21	19	17	15
9	51	39	32	27	46	36	30	26	30	26	22	25	21	19	20	17	16	13
10	47	36	29	25	43	33	27	23	28	23	20	23	20	17	18	16	14	12

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

	0°	45°	90°
0°	20833	20833	20833
5°	20573	20500	20619
10°	19437	19614	20069
15°	17944	18360	19183
20°	16294	16907	18026
25°	14615	15412	16794
30°	13068	13923	15516
35°	11428	12254	14005
40°	9618	10382	12124
45°	7937	8623	10122
50°	6627	7225	8433
55°	5626	6199	6965
60°	4809	5375	5558
65°	3829	4520	3590
70°	3394	3528	2192
75°	3144	2861	1343
80°	2894	2632	1158
85°	2625	2414	946



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	310.7	2.2
10°-20°	808.1	5.8
20°-30°	1046.7	7.5
30°-40°	1025.0	7.3
40°-50°	784.6	5.6
50°-60°	522.8	3.7
60°-70°	285.3	2.0
70°-80°	118.9	0.9
80°-90°	36.6	0.3
90°-100°	651.3	4.7
100°-110°	1761.1	12.6
110°-120°	1851.5	13.2
120°-130°	1503.9	10.8
130°-140°	1179.7	8.4
140°-150°	905.4	6.5
150°-160°	651.2	4.7
160°-170°	397.8	2.8
170°-180°	134.1	1.0
0°-30°	2165.4	15.5
0°-40°	3190.4	22.8
0°-60°	4497.8	32.2
0°-90°	4938.5	35.3
90°-120°	4263.9	30.5
90°-150°	7852.9	56.2
90°-180°	9036.0	64.7
0°-180°	13974.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3387	3387	3387	3387	3387	
5°	3332	3299	3320	3328	3340	310
15°	2818	2808	2883	2962	3012	787
25°	2154	2159	2271	2370	2474	990
35°	1522	1529	1632	1742	1865	946
45°	912	930	991	1066	1164	712
55°	525	546	578	600	650	476
65°	263	285	311	271	247	273
75°	132	132	120	83	56	141
85°	37	37	34	22	13	40
90°	3	9	20	21	20	9
95°	101	355	1083	561	333	106
105°	327	506	1954	2882	2764	345
115°	576	705	1620	3136	3541	569
125°	789	904	1460	2464	2895	703
135°	946	1058	1421	1990	2252	731
145°	1100	1182	1402	1703	1833	688
155°	1242	1290	1389	1528	1578	573
165°	1352	1365	1396	1450	1457	381
175°	1403	1402	1397	1415	1412	133
180°	1402	1402	1402	1402	1402	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3387.1	3387.1	3387.1	3387.1	3387.1
2.5°	3395.4	3365.2	3372.8	3372.6	3363.3
5°	3332.1	3298.7	3320.2	3327.9	3339.5
7.5°	3208.4	3183.1	3222.4	3251.5	3275.0
10°	3112.1	3090.3	3140.4	3182.7	3213.2
12.5°	3000.4	2982.1	3044.1	3100.8	3140.7
15°	2817.9	2807.7	2883.2	2961.7	3012.5
17.5°	2622.6	2617.6	2704.3	2795.9	2861.0
20°	2489.4	2487.9	2583.0	2678.4	2753.9
22.5°	2355.0	2358.2	2458.2	2557.3	2643.4
25°	2153.5	2159.3	2270.9	2369.9	2474.5
27.5°	1967.1	1969.8	2085.2	2189.6	2301.2
30°	1839.9	1847.2	1960.3	2068.5	2184.7
32.5°	1712.7	1721.1	1831.9	1943.7	2062.3
35°	1521.9	1529.1	1631.9	1741.7	1865.2
37.5°	1325.1	1335.0	1426.2	1530.0	1651.5
40°	1197.9	1212.4	1293.0	1390.8	1510.0
42.5°	1075.4	1093.4	1168.2	1261.0	1368.5
45°	912.5	930.0	991.3	1066.3	1163.7
47.5°	772.2	792.3	839.4	904.0	987.1
50°	692.6	711.5	755.0	802.9	881.3
52.5°	622.4	641.3	680.1	717.0	783.8
55°	524.6	546.4	578.1	600.1	649.5
57.5°	444.4	465.3	490.4	500.3	530.3
60°	390.9	414.1	436.9	435.8	451.8
62.5°	342.1	361.9	384.6	368.9	369.8
65°	263.1	284.9	310.6	271.4	246.7
67.5°	212.5	217.2	243.7	189.3	159.9
70°	188.7	188.7	196.2	146.6	121.9
72.5°	166.2	166.2	159.3	119.2	93.3
75°	132.3	132.3	120.4	82.6	56.5
77.5°	102.0	100.8	92.1	61.7	41.0
80°	81.7	81.7	74.3	48.7	32.7
82.5°	63.9	63.9	57.7	38.0	24.4
85°	37.2	37.2	34.2	22.1	13.4
87.5°	13.7	14.9	15.8	11.3	9.9
90°	3.0	8.9	19.6	21.1	19.6
92.5°	42.8	156.1	308.1	133.7	96.9
95°	101.1	354.8	1083.2	560.6	333.4
97.5°	162.3	406.9	1688.4	1397.3	1026.2
100°	208.2	428.0	1876.7	1957.2	1582.5
102.5°	250.4	457.2	1943.1	2381.7	2101.5
105°	327.4	505.9	1953.6	2881.8	2763.8
107.5°	398.6	561.4	1868.3	3193.7	3232.9
110°	454.1	601.6	1792.2	3277.5	3444.1



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	503.6	641.6	1722.2	3260.7	3540.7
115°	576.3	704.6	1620.2	3136.5	3540.7
117.5°	647.5	767.9	1553.0	2946.8	3404.9
120°	690.9	808.9	1513.1	2810.6	3278.2
122.5°	732.0	847.6	1489.0	2664.6	3135.8
125°	789.0	904.1	1460.3	2464.3	2895.0
127.5°	841.5	954.5	1443.4	2300.8	2679.6
130°	870.5	987.0	1436.2	2199.8	2542.0
132.5°	900.6	1016.0	1428.9	2108.6	2423.7
135°	945.9	1058.0	1421.1	1989.8	2252.3
137.5°	991.5	1097.4	1414.5	1893.3	2107.2
140°	1022.8	1121.7	1412.1	1831.2	2021.5
142.5°	1053.0	1145.9	1407.2	1775.2	1941.9
145°	1099.8	1182.4	1401.5	1703.1	1833.0
147.5°	1142.3	1215.5	1394.9	1637.9	1737.6
150°	1173.7	1238.6	1392.4	1602.4	1682.1
152.5°	1202.7	1259.3	1391.2	1569.5	1635.0
155°	1241.6	1290.3	1389.4	1527.8	1578.0
157.5°	1282.0	1315.9	1389.7	1498.8	1531.8
160°	1304.9	1333.0	1390.9	1480.5	1504.1
162.5°	1323.0	1346.3	1392.1	1465.9	1483.6
165°	1351.7	1365.0	1395.5	1449.9	1457.3
167.5°	1371.3	1380.5	1395.8	1436.3	1439.8
170°	1383.4	1387.8	1397.0	1430.2	1430.2
172.5°	1393.0	1393.9	1397.0	1422.9	1421.7
175°	1403.0	1401.5	1397.0	1415.0	1412.1
177.5°	1406.3	1402.8	1396.7	1408.7	1405.1
180°	1401.5	1401.5	1401.5	1401.5	1401.5

(END OF REPORT)