

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: P519597

Luminaire Tested: **SQ4-WB-150U-100D-830-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519597  
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-830-1D-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: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

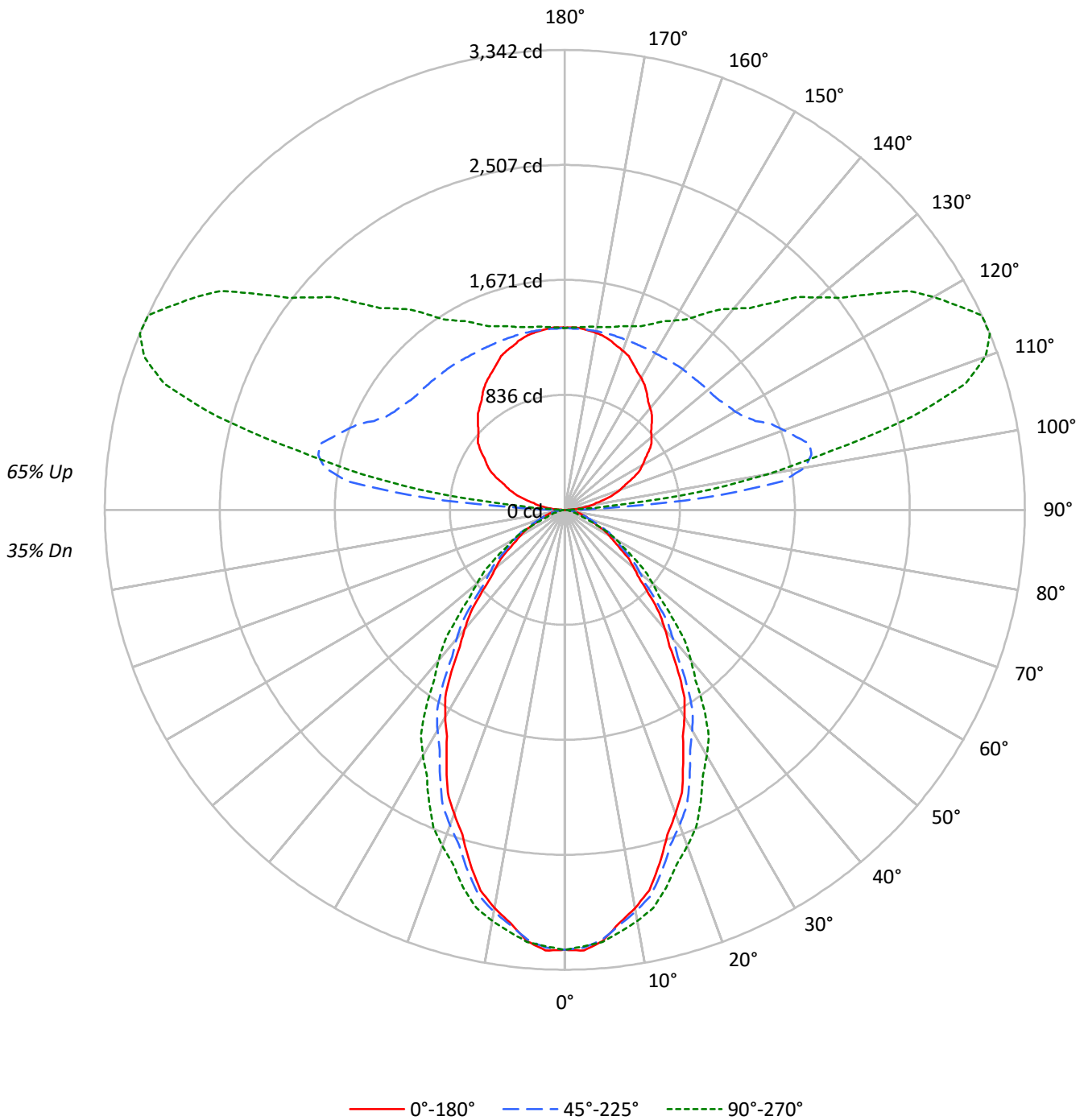
Lumens per Lamp: N/A  
Luminaire Lumens: 13190.4 lumens  
Efficiency: N/A  
Efficacy: 117.0 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')  
CIE Type: Semi-Indirect

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



TEST NUMBER: P519597  
CATALOG NUMBER: SQ4-WB-150U-100D-830-1D-UNV-STD-W-6

### Luminous Intensity Polar Plot





TEST NUMBER: P519597

CATALOG NUMBER: SQ4-WB-150U-100D-830-1D-UNV-STD-W-6

**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°	19664	19664	19664
5°	19419	19350	19462
10°	18347	18513	18943
15°	16937	17330	18107
20°	15380	15959	17014
25°	13795	14547	15852
30°	12335	13141	14646
35°	10786	11566	13219
40°	9079	9800	11444
45°	7492	8139	9554
50°	6255	6819	7960
55°	5310	5852	6574
60°	4538	5073	5247
65°	3614	4267	3390
70°	3205	3331	2068
75°	2968	2700	1267
80°	2735	2483	1095
85°	2477	2279	889



TEST NUMBER: P519597

CATALOG NUMBER: SQ4-WB-150U-100D-830-1D-UNV-STD-W-6

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	293.2	2.2
10°-20°	762.7	5.8
20°-30°	988.0	7.5
30°-40°	967.5	7.3
40°-50°	740.5	5.6
50°-60°	493.5	3.7
60°-70°	269.3	2.0
70°-80°	112.2	0.9
80°-90°	34.5	0.3
90°-100°	614.8	4.7
100°-110°	1662.2	12.6
110°-120°	1747.6	13.2
120°-130°	1419.5	10.8
130°-140°	1113.5	8.4
140°-150°	854.6	6.5
150°-160°	614.6	4.7
160°-170°	375.5	2.8
170°-180°	126.6	1.0
0°-30°	2043.9	15.5
0°-40°	3011.4	22.8
0°-60°	4245.4	32.2
0°-90°	4661.4	35.3
90°-120°	4024.6	30.5
90°-150°	7412.3	56.2
90°-180°	8529.0	64.7
0°-180°	13190.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3197	3197	3197	3197	3197	
5°	3145	3114	3134	3141	3152	293
15°	2660	2650	2722	2796	2844	743
25°	2033	2038	2144	2237	2336	935
35°	1436	1443	1540	1644	1760	893
45°	861	878	936	1006	1098	672
55°	495	516	546	566	613	449
65°	248	269	293	256	233	258
75°	125	125	114	78	53	133
85°	35	35	32	21	13	38
90°	3	8	18	20	18	8
95°	95	335	1022	529	315	100
105°	309	478	1844	2720	2609	325
115°	544	665	1529	2960	3342	537
125°	745	853	1378	2326	2733	664
135°	893	999	1341	1878	2126	690
145°	1038	1116	1323	1608	1730	649
155°	1172	1218	1312	1442	1490	541
165°	1276	1288	1317	1369	1376	359
175°	1324	1323	1319	1336	1333	126
180°	1323	1323	1323	1323	1323	

TEST NUMBER: P519597

CATALOG NUMBER: SQ4-WB-150U-100D-830-1D-UNV-STD-W-6

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3197.0	3197.0	3197.0	3197.0	3197.0
2.5°	3204.9	3176.4	3183.6	3183.4	3174.6
5°	3145.1	3113.6	3133.9	3141.2	3152.1
7.5°	3028.4	3004.5	3041.6	3069.0	3091.3
10°	2937.5	2916.9	2964.2	3004.1	3032.9
12.5°	2832.0	2814.7	2873.3	2926.9	2964.4
15°	2659.8	2650.1	2721.5	2795.5	2843.5
17.5°	2475.4	2470.8	2552.6	2639.0	2700.4
20°	2349.7	2348.4	2438.1	2528.1	2599.4
22.5°	2222.9	2225.9	2320.3	2413.9	2495.1
25°	2032.7	2038.2	2143.5	2236.9	2335.7
27.5°	1856.8	1859.2	1968.2	2066.8	2172.1
30°	1736.7	1743.6	1850.3	1952.4	2062.1
32.5°	1616.6	1624.6	1729.1	1834.6	1946.6
35°	1436.5	1443.3	1540.3	1644.0	1760.5
37.5°	1250.8	1260.1	1346.1	1444.1	1558.8
40°	1130.7	1144.4	1220.5	1312.8	1425.3
42.5°	1015.1	1032.1	1102.6	1190.2	1291.7
45°	861.3	877.8	935.7	1006.5	1098.4
47.5°	728.9	747.8	792.3	853.3	931.8
50°	653.7	671.5	712.6	757.8	831.9
52.5°	587.5	605.3	641.9	676.8	739.8
55°	495.2	515.8	545.7	566.4	613.0
57.5°	419.4	439.2	462.9	472.3	500.5
60°	368.9	390.9	412.4	411.4	426.5
62.5°	322.9	341.6	363.1	348.2	349.0
65°	248.3	268.9	293.2	256.2	232.9
67.5°	200.6	205.0	230.1	178.7	150.9
70°	178.2	178.2	185.2	138.3	115.0
72.5°	156.8	156.8	150.4	112.5	88.1
75°	124.9	124.9	113.6	78.0	53.3
77.5°	96.2	95.1	87.0	58.2	38.7
80°	77.2	77.2	70.1	46.0	30.9
82.5°	60.3	60.3	54.4	35.9	23.0
85°	35.1	35.1	32.3	20.9	12.6
87.5°	12.9	14.0	14.9	10.7	9.3
90°	2.8	8.4	18.5	19.9	18.5
92.5°	40.4	147.4	290.8	126.2	91.4
95°	95.4	334.9	1022.4	529.1	314.7
97.5°	153.2	384.1	1593.7	1318.9	968.6
100°	196.5	404.0	1771.4	1847.4	1493.7
102.5°	236.4	431.6	1834.1	2248.1	1983.6
105°	309.0	477.5	1844.0	2720.1	2608.7
107.5°	376.2	529.9	1763.4	3014.5	3051.5
110°	428.6	567.8	1691.7	3093.6	3250.9



TEST NUMBER: P519597

CATALOG NUMBER: SQ4-WB-150U-100D-830-1D-UNV-STD-W-6

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	475.3	605.6	1625.6	3077.8	3342.0
115°	544.0	665.1	1529.3	2960.5	3342.0
117.5°	611.2	724.8	1465.8	2781.4	3213.9
120°	652.2	763.6	1428.2	2652.9	3094.3
122.5°	690.9	800.1	1405.4	2515.1	2959.8
125°	744.7	853.3	1378.4	2326.0	2732.6
127.5°	794.3	900.9	1362.4	2171.7	2529.2
130°	821.6	931.6	1355.6	2076.4	2399.4
132.5°	850.1	959.0	1348.8	1990.3	2287.7
135°	892.8	998.6	1341.4	1878.1	2126.0
137.5°	935.8	1035.8	1335.1	1787.1	1989.0
140°	965.4	1058.7	1332.8	1728.5	1908.1
142.5°	993.9	1081.6	1328.3	1675.6	1832.9
145°	1038.1	1116.0	1322.9	1607.6	1730.1
147.5°	1078.2	1147.3	1316.6	1546.0	1640.1
150°	1107.8	1169.1	1314.3	1512.5	1587.7
152.5°	1135.2	1188.6	1313.2	1481.5	1543.3
155°	1171.9	1217.9	1311.5	1442.1	1489.5
157.5°	1210.1	1242.1	1311.7	1414.7	1445.9
160°	1231.7	1258.2	1312.9	1397.4	1419.7
162.5°	1248.8	1270.8	1314.0	1383.6	1400.3
165°	1275.9	1288.4	1317.2	1368.6	1375.5
167.5°	1294.4	1303.0	1317.4	1355.7	1359.0
170°	1305.8	1309.9	1318.6	1349.9	1349.9
172.5°	1314.9	1315.7	1318.6	1343.1	1341.9
175°	1324.3	1322.9	1318.6	1335.6	1332.8
177.5°	1327.4	1324.1	1318.3	1329.6	1326.3
180°	1322.9	1322.9	1322.9	1322.9	1322.9

(END OF REPORT)