

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: P519430

Luminaire Tested: **SQ4-WB-100U-125D-830-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519430  
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-830-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

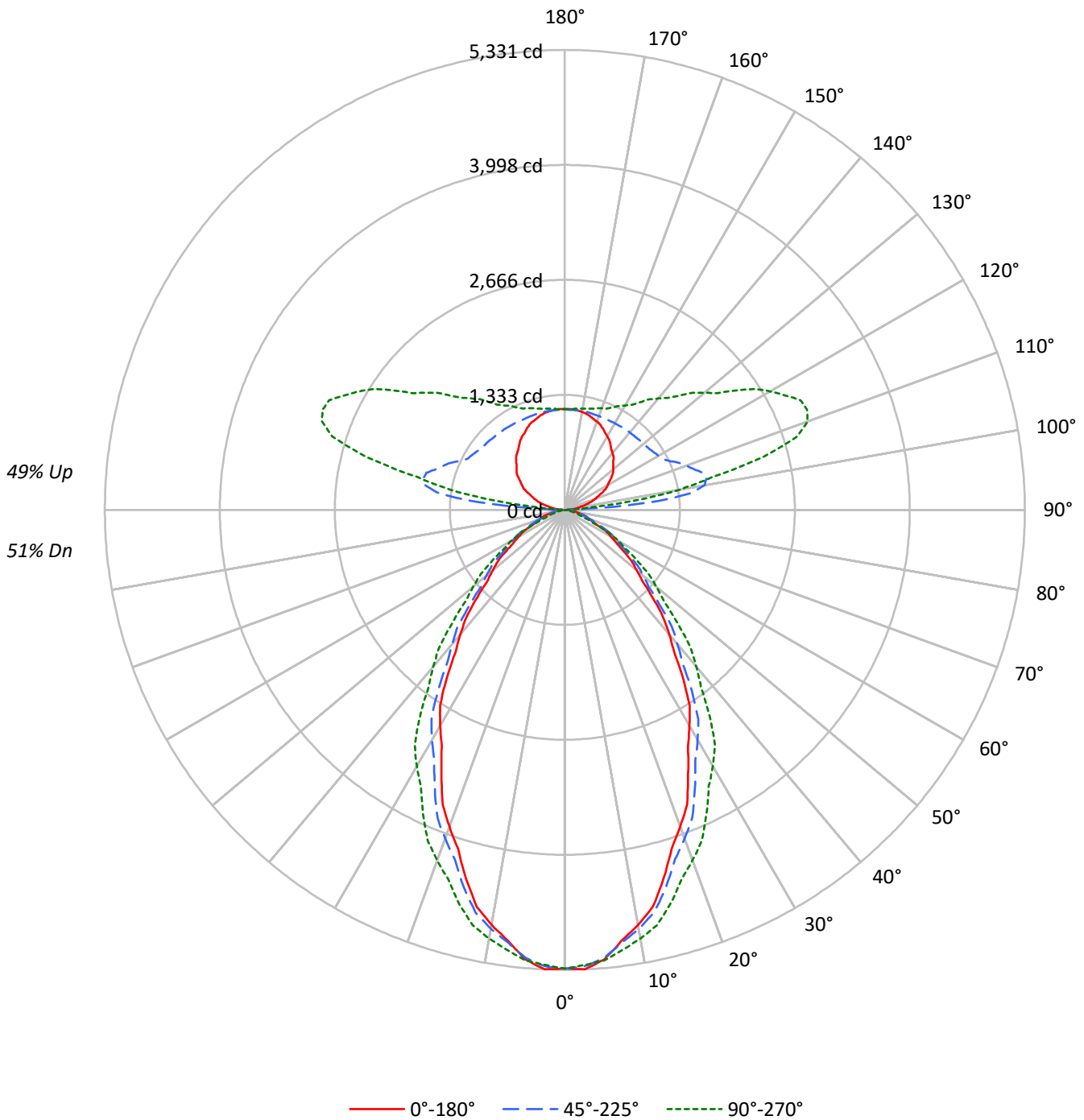
Lumens per Lamp: N/A  
Luminaire Lumens: 15333.6 lumens  
Efficiency: N/A  
Efficacy: 109.1 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 140.6  
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°	24532	24532	24532
5°	24226	24140	24280
10°	22889	23096	23632
15°	21130	21620	22589
20°	19188	19910	21227
25°	17210	18148	19776
30°	15388	16395	18272
35°	13457	14429	16492
40°	11326	12225	14277
45°	9347	10154	11920
50°	7804	8507	9930
55°	6625	7300	8201
60°	5662	6329	6545
65°	4508	5324	4229
70°	3998	4154	2580
75°	3702	3369	1581
80°	3408	3100	1363
85°	3086	2842	1112



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	487.8	3.2
10°-20°	1268.7	8.3
20°-30°	1643.4	10.7
30°-40°	1609.3	10.5
40°-50°	1231.8	8.0
50°-60°	820.8	5.4
60°-70°	447.9	2.9
70°-80°	186.6	1.2
80°-90°	55.3	0.4
90°-100°	546.5	3.6
100°-110°	1508.6	9.8
110°-120°	1555.9	10.1
120°-130°	1250.3	8.2
130°-140°	982.6	6.4
140°-150°	753.6	4.9
150°-160°	541.6	3.5
160°-170°	331.2	2.2
170°-180°	111.7	0.7
0°-30°	3399.9	22.2
0°-40°	5009.2	32.7
0°-60°	7061.8	46.1
0°-90°	7751.7	50.6
90°-120°	3611.0	23.5
90°-150°	6597.5	43.0
90°-180°	7582.0	49.4
0°-180°	15333.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5318	5318	5318	5318	5318	
5°	5232	5179	5213	5225	5243	487
15°	4424	4408	4527	4650	4730	1235
25°	3381	3390	3566	3721	3885	1555
35°	2390	2401	2562	2735	2928	1486
45°	1433	1460	1556	1674	1827	1117
55°	824	858	908	942	1020	747
65°	413	447	488	426	387	429
75°	208	208	189	130	89	222
85°	58	58	54	35	21	63
90°	4	7	15	17	19	9
95°	80	296	991	408	265	86
105°	269	415	1660	2534	2386	286
115°	482	582	1337	2646	3010	473
125°	661	752	1212	2051	2407	588
135°	795	881	1178	1661	1873	615
145°	922	986	1163	1414	1522	577
155°	1040	1075	1154	1269	1309	479
165°	1126	1140	1159	1204	1214	317
175°	1167	1169	1161	1178	1174	111
180°	1167	1167	1167	1167	1167	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	5318.0	5318.0	5318.0	5318.0	5318.0
2.5°	5331.0	5283.6	5295.6	5295.2	5280.6
5°	5231.6	5179.2	5213.0	5225.1	5243.3
7.5°	5037.5	4997.8	5059.4	5105.1	5142.0
10°	4886.3	4852.1	4930.6	4997.0	5045.0
12.5°	4710.8	4682.1	4779.4	4868.6	4931.1
15°	4424.3	4408.3	4526.9	4650.1	4729.9
17.5°	4117.6	4109.9	4246.0	4389.7	4491.9
20°	3908.6	3906.3	4055.6	4205.3	4323.9
22.5°	3697.6	3702.6	3859.6	4015.2	4150.3
25°	3381.2	3390.3	3565.5	3721.0	3885.2
27.5°	3088.6	3092.7	3273.9	3437.9	3613.1
30°	2888.8	2900.2	3077.8	3247.7	3430.2
32.5°	2689.1	2702.3	2876.2	3051.7	3237.9
35°	2389.5	2400.9	2562.1	2734.6	2928.5
37.5°	2080.5	2096.0	2239.2	2402.2	2593.0
40°	1880.8	1903.6	2030.1	2183.7	2370.8
42.5°	1688.5	1716.8	1834.1	1979.8	2148.7
45°	1432.8	1460.1	1556.4	1674.2	1827.1
47.5°	1212.5	1244.0	1317.9	1419.4	1549.9
50°	1087.4	1117.1	1185.4	1260.5	1383.7
52.5°	977.3	1006.9	1067.8	1125.7	1230.7
55°	823.7	857.9	907.7	942.2	1019.7
57.5°	697.7	730.6	770.0	785.6	832.6
60°	613.7	650.2	686.0	684.3	709.4
62.5°	537.2	568.2	603.9	579.2	580.6
65°	413.0	447.2	487.7	426.1	387.4
67.5°	333.7	341.0	382.7	297.2	251.1
70°	296.4	296.4	308.0	230.1	191.3
72.5°	260.9	260.9	250.1	187.2	146.5
75°	207.7	207.7	189.0	129.7	88.7
77.5°	160.1	158.3	144.7	96.8	64.4
80°	128.3	128.3	116.7	76.4	51.3
82.5°	100.3	100.3	90.5	59.7	38.3
85°	58.3	58.3	53.7	34.7	21.0
87.5°	21.3	22.0	21.7	14.5	13.1
90°	3.7	7.4	14.9	16.8	18.7
92.5°	33.6	139.5	249.4	91.0	70.9
95°	80.3	295.7	991.4	407.5	265.1
97.5°	132.9	331.2	1468.6	1130.7	818.9
100°	171.8	352.5	1644.9	1656.5	1346.1
102.5°	209.1	376.7	1679.2	2046.7	1752.4
105°	268.9	414.9	1659.8	2534.0	2386.1
107.5°	332.3	462.3	1567.2	2768.9	2823.0
110°	377.1	494.0	1495.5	2819.5	2994.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	417.5	529.9	1428.3	2779.6	3038.1
115°	481.7	582.1	1336.8	2646.4	3009.7
117.5°	537.7	637.8	1276.7	2459.0	2872.3
120°	575.1	673.6	1252.8	2332.1	2748.3
122.5°	610.9	705.1	1233.4	2213.6	2607.9
125°	660.9	752.2	1211.7	2050.6	2406.6
127.5°	703.5	794.8	1199.0	1912.9	2219.9
130°	731.9	823.2	1193.0	1828.6	2107.9
132.5°	758.8	845.7	1187.1	1757.8	2010.8
135°	795.4	881.2	1178.1	1660.9	1872.7
137.5°	836.4	914.6	1173.6	1579.5	1760.3
140°	858.8	935.5	1170.6	1525.3	1684.1
142.5°	884.2	955.1	1167.7	1477.0	1616.9
145°	922.3	986.2	1163.2	1413.9	1521.6
147.5°	958.9	1014.8	1159.1	1360.7	1444.3
150°	985.8	1031.4	1157.6	1329.0	1396.6
152.5°	1006.7	1049.4	1156.1	1301.9	1357.7
155°	1039.9	1074.6	1153.8	1268.6	1308.8
157.5°	1070.6	1097.2	1154.2	1244.5	1271.8
160°	1088.5	1112.2	1155.7	1230.8	1250.9
162.5°	1103.4	1124.2	1157.2	1218.8	1234.5
165°	1125.8	1140.4	1159.4	1204.5	1213.6
167.5°	1143.0	1151.8	1161.3	1195.7	1198.6
170°	1152.0	1159.3	1161.3	1191.2	1191.2
172.5°	1159.4	1163.8	1161.3	1185.2	1183.7
175°	1166.9	1168.7	1161.3	1178.0	1174.4
177.5°	1169.9	1168.4	1160.9	1171.3	1168.4
180°	1166.9	1166.9	1166.9	1166.9	1166.9

(END OF REPORT)