

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: P519027

Luminaire Tested: **SQ4-WB-025U-100D-840-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519027  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-32, 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-025U-100D-840-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 250 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

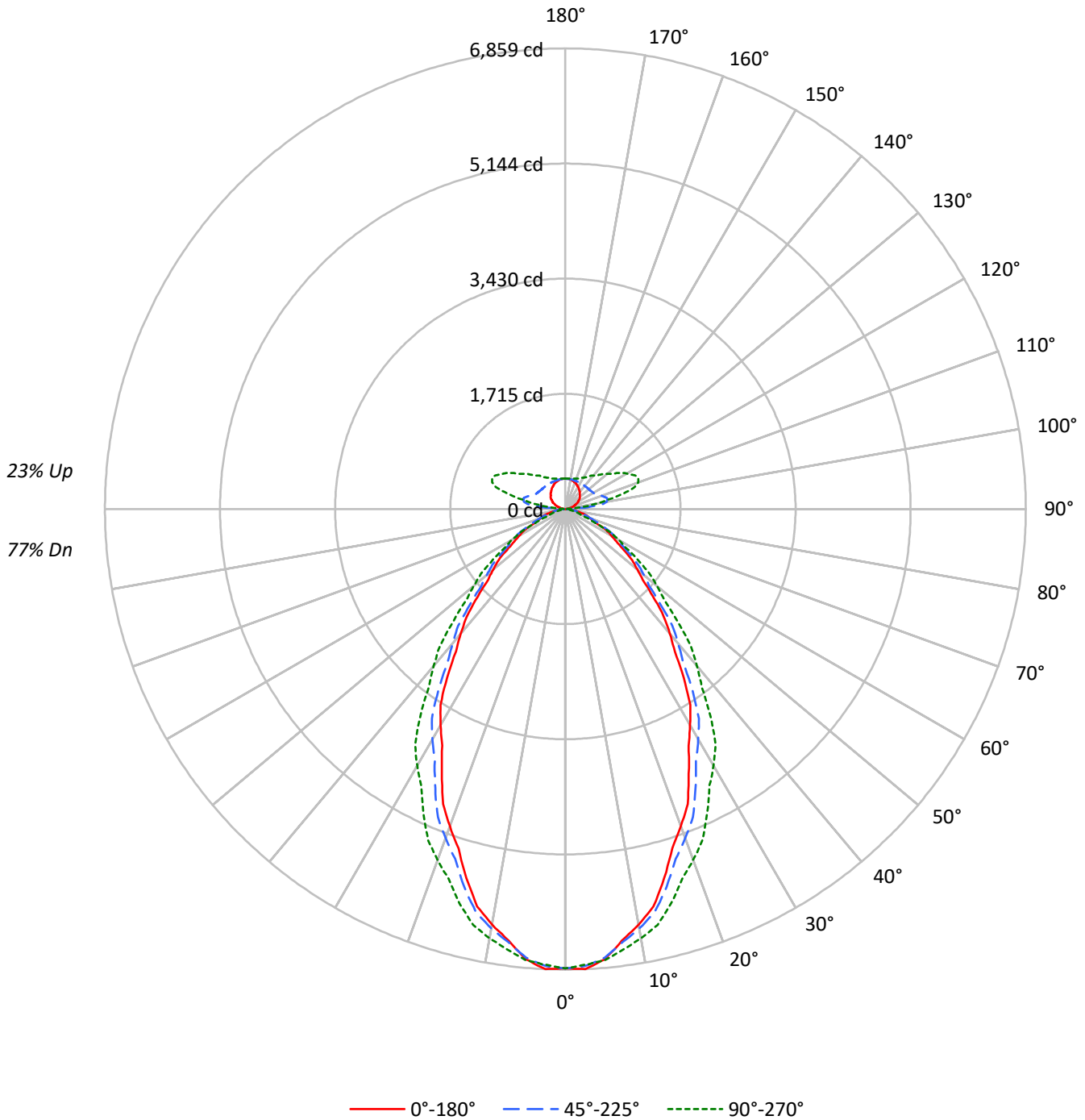
Lumens per Lamp: N/A  
Luminaire Lumens: 12899.9 lumens  
Efficiency: N/A  
Efficacy: 104.4 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 123.6  
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	114	114	114	114	108	108	108	108	99	99	99	89	89	89	81	81	81	77
1	106	102	98	95	101	97	94	92	89	87	85	82	80	78	75	73	72	69
2	98	91	86	81	93	87	82	78	80	76	73	74	71	68	68	66	64	60
3	90	82	75	70	86	79	73	68	73	68	64	67	63	60	62	59	56	53
4	84	74	67	61	80	71	65	59	66	61	56	61	57	53	57	53	50	48
5	78	67	60	54	74	65	58	53	60	54	50	56	51	48	52	48	45	43
6	73	61	54	48	69	59	52	47	55	49	45	51	47	43	48	44	41	39
7	68	56	49	43	65	54	47	42	51	45	41	48	43	39	45	40	37	35
8	63	52	44	39	61	50	43	38	47	41	37	44	39	35	41	37	34	32
9	60	48	41	36	57	46	40	35	44	38	34	41	36	33	39	34	31	29
10	56	44	37	33	54	43	37	32	41	35	31	38	33	30	36	32	29	27

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

	0°	45°	90°
0°	21043	21043	21043
5°	20780	20706	20827
10°	19633	19811	20270
15°	18124	18545	19376
20°	16458	17078	18207
25°	14762	15567	16963
30°	13199	14063	15673
35°	11542	12377	14146
40°	9715	10486	12246
45°	8017	8710	10224
50°	6694	7297	8518
55°	5682	6262	7035
60°	4857	5429	5614
65°	3867	4566	3627
70°	3429	3563	2214
75°	3175	2890	1356
80°	2924	2658	1171
85°	2650	2438	953



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	627.6	4.9
10°-20°	1632.4	12.7
20°-30°	2114.5	16.4
30°-40°	2070.6	16.1
40°-50°	1584.9	12.3
50°-60°	1056.1	8.2
60°-70°	576.3	4.5
70°-80°	240.1	1.9
80°-90°	70.4	0.5
90°-100°	220.1	1.7
100°-110°	578.6	4.5
110°-120°	600.0	4.7
120°-130°	481.3	3.7
130°-140°	377.6	2.9
140°-150°	289.8	2.2
150°-160°	208.7	1.6
160°-170°	127.7	1.0
170°-180°	43.1	0.3
0°-30°	4374.5	33.9
0°-40°	6445.1	50.0
0°-60°	9086.1	70.4
0°-90°	9972.9	77.3
90°-120°	1398.7	10.8
90°-150°	2547.3	19.7
90°-180°	2927.0	22.7
0°-180°	12899.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	6842	6842	6842	6842	6842	
5°	6731	6664	6707	6723	6746	626
15°	5692	5672	5824	5983	6086	1590
25°	4350	4362	4588	4788	4999	2001
35°	3074	3089	3297	3518	3768	1911
45°	1843	1879	2003	2154	2351	1438
55°	1060	1104	1168	1212	1312	961
65°	531	575	628	548	498	552
75°	267	267	243	167	114	285
85°	75	75	69	45	27	82
90°	3	9	23	12	12	6
95°	29	114	379	195	133	32
105°	104	158	640	971	906	110
115°	185	225	512	1022	1167	183
125°	258	289	466	788	929	229
135°	307	338	452	636	721	237
145°	356	379	446	542	585	223
155°	402	414	446	490	504	185
165°	434	440	446	463	469	123
175°	452	452	449	454	454	43
180°	452	452	452	452	452	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	6842.3	6842.3	6842.3	6842.3	6842.3
2.5°	6859.1	6798.1	6813.5	6813.1	6794.3
5°	6731.2	6663.7	6707.2	6722.8	6746.2
7.5°	6481.4	6430.4	6509.7	6568.4	6615.9
10°	6286.9	6242.8	6343.9	6429.4	6491.0
12.5°	6061.1	6024.1	6149.4	6264.1	6344.5
15°	5692.4	5671.9	5824.5	5983.0	6085.7
17.5°	5297.9	5287.9	5463.0	5648.0	5779.5
20°	5028.9	5026.0	5218.1	5410.7	5563.3
22.5°	4757.5	4764.0	4965.9	5166.2	5339.9
25°	4350.4	4362.1	4587.6	4787.5	4998.9
27.5°	3973.9	3979.2	4212.3	4423.4	4648.8
30°	3716.9	3731.6	3960.1	4178.6	4413.4
32.5°	3459.9	3476.9	3700.7	3926.5	4166.0
35°	3074.4	3089.1	3296.6	3518.4	3767.9
37.5°	2676.9	2696.8	2881.0	3090.8	3336.2
40°	2419.9	2449.2	2612.0	2809.6	3050.4
42.5°	2172.5	2208.9	2359.8	2547.3	2764.5
45°	1843.4	1878.7	2002.6	2154.1	2350.8
47.5°	1560.0	1600.5	1695.7	1826.2	1994.1
50°	1399.1	1437.2	1525.2	1621.9	1780.4
52.5°	1257.4	1295.5	1373.9	1448.4	1583.4
55°	1059.8	1103.9	1167.9	1212.2	1312.0
57.5°	897.7	940.0	990.8	1010.8	1071.2
60°	789.6	836.6	882.7	880.4	912.7
62.5°	691.1	731.1	777.0	745.2	747.0
65°	531.4	575.4	627.5	548.3	498.4
67.5°	429.3	438.7	492.4	382.4	323.1
70°	381.3	381.3	396.3	296.1	246.2
72.5°	335.7	335.7	321.8	240.8	188.5
75°	267.2	267.2	243.2	166.9	114.1
77.5°	206.0	203.6	186.1	124.6	82.9
80°	165.1	165.1	150.1	98.3	66.1
82.5°	129.1	129.1	116.5	76.8	49.2
85°	75.1	75.1	69.1	44.6	27.0
87.5°	27.0	28.1	28.7	16.7	14.3
90°	2.9	8.6	23.2	11.6	11.6
92.5°	12.2	58.6	129.7	57.4	37.1
95°	28.9	113.9	379.2	195.4	133.2
97.5°	50.4	125.1	567.4	451.2	332.3
100°	66.6	134.5	625.3	633.6	492.1
102.5°	80.5	143.9	641.5	789.2	668.1
105°	104.2	158.0	639.7	971.1	906.0
107.5°	128.5	178.3	603.3	1065.6	1081.5
110°	144.7	190.0	573.2	1090.0	1157.9

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	160.9	204.0	545.4	1074.6	1178.7
115°	185.3	224.9	512.4	1022.2	1166.6
117.5°	209.0	245.2	489.8	949.6	1109.8
120°	222.9	256.9	480.5	900.9	1056.6
122.5°	236.8	270.8	473.6	852.2	1005.6
125°	257.6	288.8	466.0	787.7	929.2
127.5°	274.4	306.1	459.7	735.7	855.1
130°	283.7	317.6	457.4	703.0	813.4
132.5°	292.9	326.9	455.0	675.0	774.0
135°	306.8	338.0	451.6	635.9	720.8
137.5°	321.3	351.9	451.0	606.6	676.2
140°	332.9	361.2	448.7	583.3	648.4
142.5°	342.2	368.2	448.7	566.9	622.9
145°	356.0	378.7	445.8	542.3	584.7
147.5°	369.9	392.0	445.8	521.8	556.9
150°	379.2	399.0	445.8	510.1	538.4
152.5°	388.5	403.8	445.8	500.7	522.2
155°	402.4	413.7	445.8	489.5	503.7
157.5°	412.8	423.5	445.8	479.6	489.8
160°	419.7	428.2	445.8	474.9	480.5
162.5°	426.7	432.9	445.8	470.2	475.9
165°	434.2	439.9	445.8	463.3	468.9
167.5°	441.2	444.0	448.7	460.3	462.6
170°	445.8	448.6	448.7	460.3	460.3
172.5°	448.1	448.7	448.7	457.9	455.6
175°	451.6	451.6	448.7	454.5	454.5
177.5°	451.6	451.6	449.3	453.8	451.6
180°	451.6	451.6	451.6	451.6	451.6

(END OF REPORT)