

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: P519030

Luminaire Tested: **SQ4-WB-025U-100D-840-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519030  
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-8  
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**

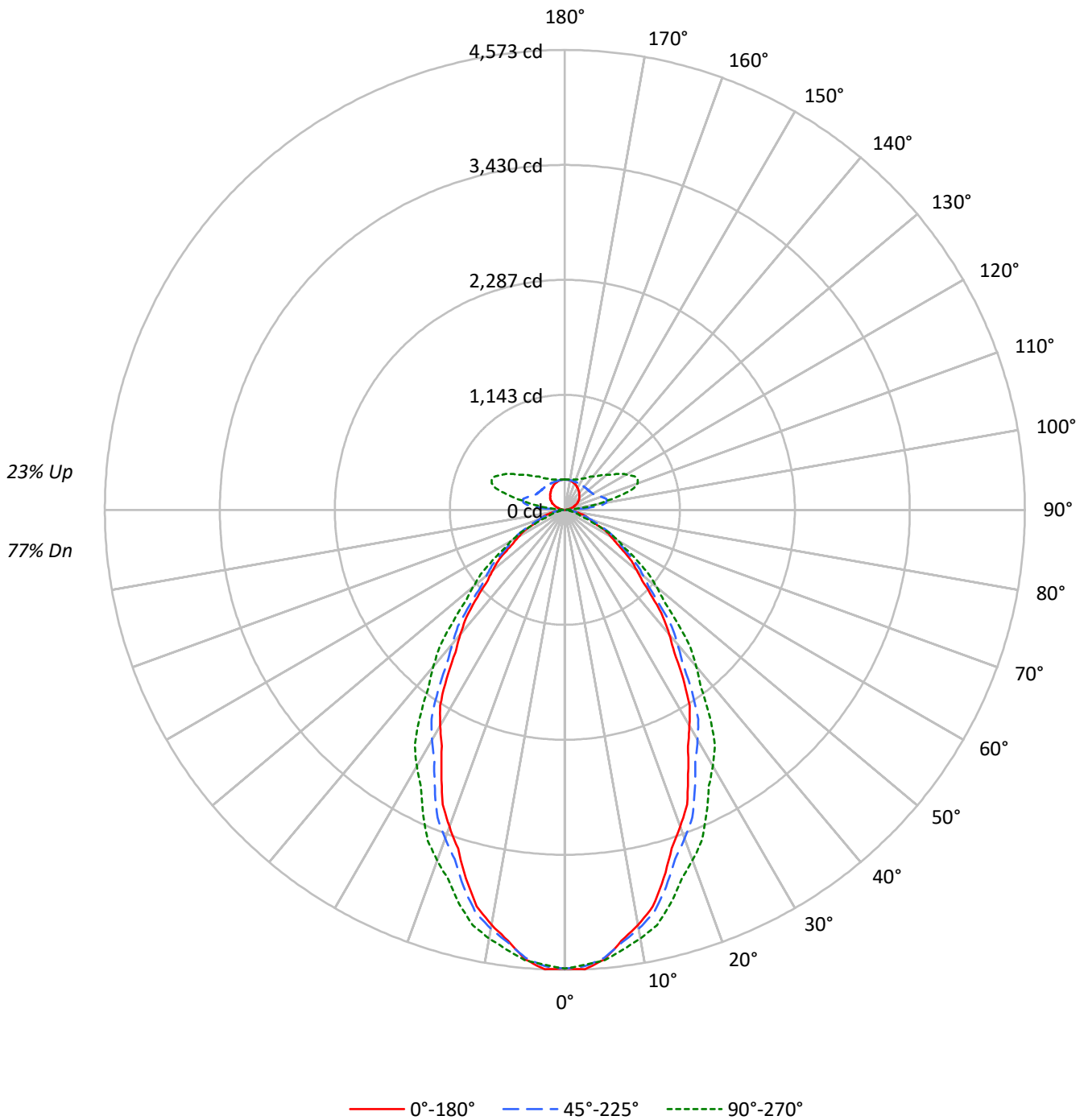
Lumens per Lamp: N/A  
Luminaire Lumens: 8599.9 lumens  
Efficiency: N/A  
Efficacy: 104.6 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 82.2  
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	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	20271
15°	18124	18545	19376
20°	16458	17077	18208
25°	14763	15567	16963
30°	13199	14063	15673
35°	11542	12376	14146
40°	9715	10487	12246
45°	8018	8709	10224
50°	6694	7297	8518
55°	5682	6262	7035
60°	4857	5430	5614
65°	3867	4566	3627
70°	3429	3563	2213
75°	3174	2889	1356
80°	2925	2659	1169
85°	2646	2435	953



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	418.4	4.9
10°-20°	1088.3	12.7
20°-30°	1409.6	16.4
30°-40°	1380.4	16.1
40°-50°	1056.6	12.3
50°-60°	704.1	8.2
60°-70°	384.2	4.5
70°-80°	160.1	1.9
80°-90°	47.0	0.5
90°-100°	146.7	1.7
100°-110°	385.7	4.5
110°-120°	400.0	4.7
120°-130°	320.8	3.7
130°-140°	251.7	2.9
140°-150°	193.2	2.2
150°-160°	139.2	1.6
160°-170°	85.1	1.0
170°-180°	28.8	0.3
0°-30°	2916.3	33.9
0°-40°	4296.7	50.0
0°-60°	6057.4	70.4
0°-90°	6648.6	77.3
90°-120°	932.4	10.8
90°-150°	1698.2	19.7
90°-180°	1951.0	22.7
0°-180°	8599.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4562	4562	4562	4562	4562	
5°	4488	4442	4472	4482	4498	417
15°	3795	3781	3883	3989	4057	1060
25°	2900	2908	3058	3192	3333	1334
35°	2050	2059	2198	2346	2512	1274
45°	1229	1252	1335	1436	1567	958
55°	706	736	779	808	875	641
65°	354	384	418	366	332	368
75°	178	178	162	111	76	190
85°	50	50	46	30	18	54
90°	2	6	15	8	8	4
95°	19	76	253	130	89	22
105°	70	105	426	647	604	74
115°	124	150	342	682	778	122
125°	172	192	311	525	620	152
135°	205	225	301	424	480	158
145°	237	252	297	362	390	149
155°	268	276	297	326	336	123
165°	290	293	297	309	313	82
175°	301	301	299	303	303	29
180°	301	301	301	301	301	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4561.5	4561.5	4561.5	4561.5	4561.5
2.5°	4572.7	4532.0	4542.3	4542.0	4529.5
5°	4487.5	4442.5	4471.5	4481.8	4497.5
7.5°	4321.0	4286.9	4339.8	4378.9	4410.6
10°	4191.3	4161.9	4229.3	4286.3	4327.4
12.5°	4040.7	4016.1	4099.6	4176.1	4229.7
15°	3794.9	3781.2	3883.0	3988.7	4057.1
17.5°	3531.9	3525.3	3642.0	3765.3	3853.0
20°	3352.6	3350.6	3478.7	3607.1	3708.9
22.5°	3171.7	3176.0	3310.6	3444.1	3560.0
25°	2900.3	2908.1	3058.4	3191.7	3332.6
27.5°	2649.3	2652.8	2808.2	2948.9	3099.2
30°	2477.9	2487.7	2640.0	2785.7	2942.3
32.5°	2306.6	2317.9	2467.1	2617.7	2777.4
35°	2049.6	2059.4	2197.7	2345.6	2511.9
37.5°	1784.6	1797.9	1920.7	2060.5	2224.1
40°	1613.3	1632.8	1741.4	1873.1	2033.6
42.5°	1448.3	1472.6	1573.2	1698.2	1843.0
45°	1229.0	1252.4	1335.0	1436.1	1567.2
47.5°	1040.0	1067.0	1130.5	1217.5	1329.4
50°	932.7	958.2	1016.8	1081.2	1186.9
52.5°	838.3	863.7	915.9	965.6	1055.6
55°	706.5	735.9	778.6	808.1	874.7
57.5°	598.5	626.6	660.5	673.8	714.2
60°	526.4	557.7	588.5	586.9	608.5
62.5°	460.8	487.4	518.0	496.8	498.0
65°	354.3	383.6	418.3	365.5	332.3
67.5°	286.2	292.5	328.3	254.9	215.4
70°	254.2	254.2	264.2	197.4	164.1
72.5°	223.8	223.8	214.6	160.5	125.7
75°	178.1	178.1	162.1	111.3	76.1
77.5°	137.3	135.7	124.1	83.0	55.2
80°	110.1	110.1	100.1	65.6	44.0
82.5°	86.1	86.1	77.7	51.2	32.8
85°	50.0	50.0	46.0	29.8	18.0
87.5°	18.0	18.8	19.1	11.1	9.6
90°	1.9	5.7	15.4	7.7	7.7
92.5°	8.1	39.1	86.5	38.3	24.7
95°	19.3	75.9	252.8	130.3	88.8
97.5°	33.6	83.4	378.2	300.8	221.5
100°	44.4	89.7	416.8	422.4	328.1
102.5°	53.6	95.9	427.6	526.2	445.4
105°	69.5	105.3	426.5	647.4	604.0
107.5°	85.7	118.9	402.2	710.4	721.0
110°	96.5	126.7	382.1	726.6	771.9



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	107.3	136.0	363.6	716.4	785.8
115°	123.5	149.9	341.6	681.5	777.7
117.5°	139.3	163.5	326.5	633.1	739.9
120°	148.6	171.2	320.3	600.6	704.4
122.5°	157.9	180.5	315.7	568.1	670.4
125°	171.8	192.5	310.7	525.1	619.5
127.5°	182.9	204.1	306.5	490.4	570.1
130°	189.1	211.8	304.9	468.7	542.3
132.5°	195.3	217.9	303.4	450.0	516.0
135°	204.6	225.3	301.0	423.9	480.5
137.5°	214.2	234.6	300.7	404.4	450.8
140°	221.9	240.8	299.1	388.9	432.3
142.5°	228.1	245.5	299.1	377.9	415.3
145°	237.4	252.5	297.2	361.5	389.8
147.5°	246.6	261.3	297.2	347.9	371.3
150°	252.8	266.0	297.2	340.1	358.9
152.5°	259.0	269.2	297.2	333.8	348.1
155°	268.2	275.8	297.2	326.4	335.8
157.5°	275.2	282.4	297.2	319.7	326.5
160°	279.8	285.5	297.2	316.6	320.3
162.5°	284.5	288.6	297.2	313.5	317.3
165°	289.5	293.2	297.2	308.9	312.6
167.5°	294.1	296.0	299.1	306.9	308.4
170°	297.2	299.1	299.1	306.8	306.8
172.5°	298.7	299.1	299.1	305.3	303.8
175°	301.0	301.0	299.1	303.0	303.0
177.5°	301.0	301.0	299.5	302.6	301.0
180°	301.0	301.0	301.0	301.0	301.0

(END OF REPORT)