

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: P518971

Luminaire Tested: **SQ4-WB-025U-050D-830-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518971  
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-050D-830-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 250 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

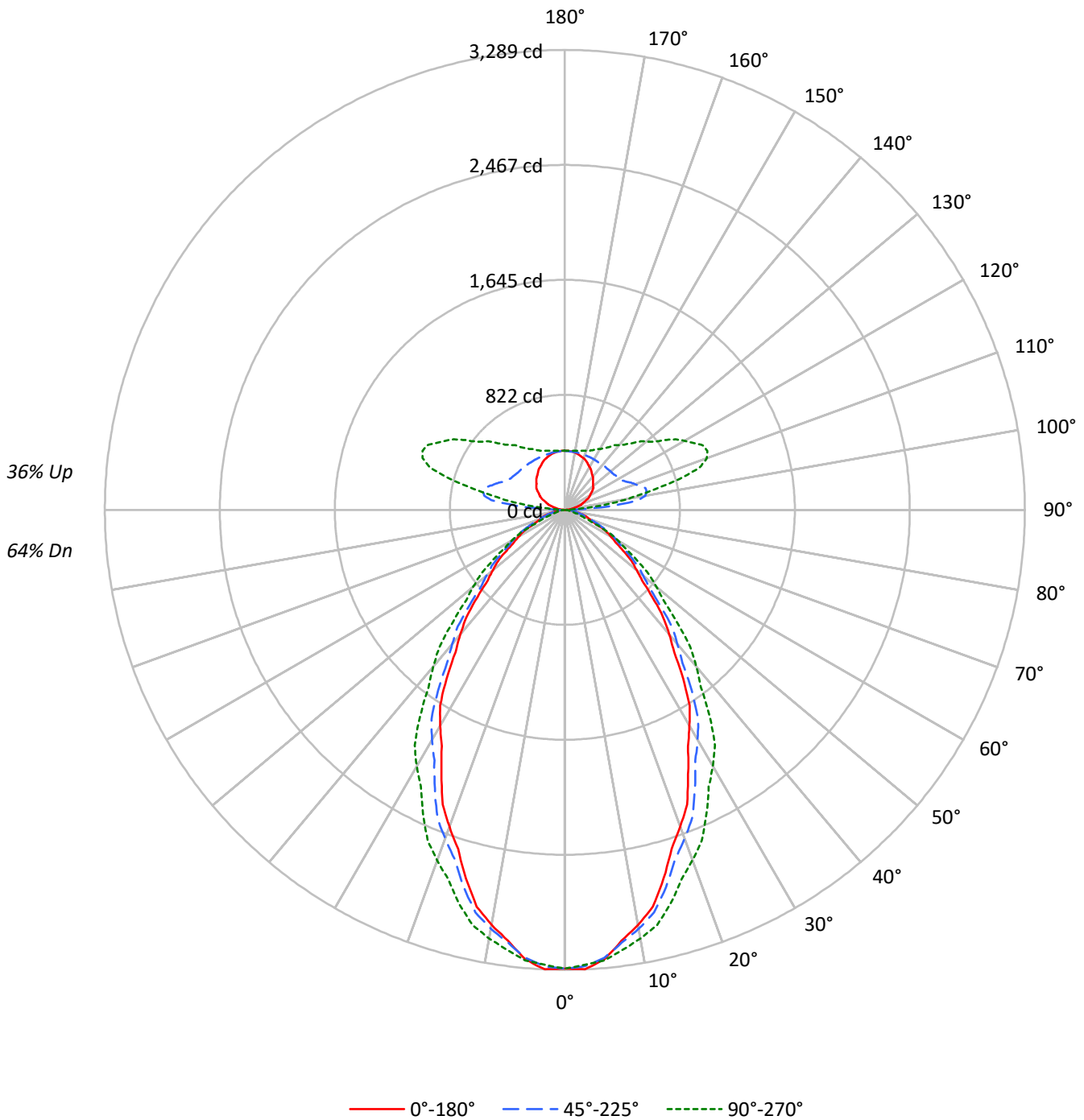
Lumens per Lamp: N/A  
Luminaire Lumens: 7518.1 lumens  
Efficiency: N/A  
Efficacy: 109.3 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 68.8  
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	110	110	110	110	104	104	104	104	91	91	91	79	79	79	69	69	69	64				
1	102	98	95	92	96	93	90	87	82	80	78	72	70	69	63	62	61	56				
2	94	88	82	78	89	83	78	74	74	70	67	65	62	60	57	55	54	50				
3	87	79	72	67	82	74	68	64	66	62	58	59	56	53	52	50	47	44				
4	81	71	63	58	76	67	61	56	60	55	51	54	50	47	48	45	42	39				
5	75	64	56	51	70	61	54	49	55	49	45	49	45	41	44	41	38	35				
6	69	58	51	45	65	55	48	44	50	44	40	45	41	37	40	37	34	32				
7	65	53	46	40	61	51	44	39	46	40	36	42	37	34	37	34	31	29				
8	60	49	41	36	57	47	40	35	42	37	33	38	34	31	35	31	28	26				
9	57	45	38	33	53	43	37	32	39	34	30	36	31	28	32	29	26	24				
10	53	42	35	30	50	40	34	29	37	31	28	33	29	26	30	27	24	22				

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

	0°	45°	90°
0°	10090	10090	10090
5°	9964	9928	9986
10°	9414	9499	9720
15°	8690	8892	9291
20°	7892	8188	8730
25°	7078	7464	8133
30°	6329	6743	7515
35°	5534	5935	6783
40°	4658	5028	5872
45°	3844	4176	4903
50°	3209	3499	4085
55°	2725	3003	3373
60°	2329	2603	2692
65°	1854	2190	1739
70°	1644	1708	1061
75°	1522	1385	650
80°	1403	1275	561
85°	1270	1168	459



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	300.9	4.0
10°-20°	782.7	10.4
20°-30°	1013.9	13.5
30°-40°	992.8	13.2
40°-50°	759.9	10.1
50°-60°	506.4	6.7
60°-70°	276.3	3.7
70°-80°	115.1	1.5
80°-90°	34.9	0.5
90°-100°	205.7	2.7
100°-110°	540.7	7.2
110°-120°	560.7	7.5
120°-130°	449.7	6.0
130°-140°	352.9	4.7
140°-150°	270.8	3.6
150°-160°	195.1	2.6
160°-170°	119.3	1.6
170°-180°	40.3	0.5
0°-30°	2097.5	27.9
0°-40°	3090.3	41.1
0°-60°	4356.6	57.9
0°-90°	4783.0	63.6
90°-120°	1307.0	17.4
90°-150°	2380.4	31.7
90°-180°	2735.0	36.4
0°-180°	7518.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3281	3281	3281	3281	3281	
5°	3228	3195	3216	3224	3235	300
15°	2729	2720	2793	2869	2918	762
25°	2086	2092	2200	2296	2397	959
35°	1474	1481	1581	1687	1807	916
45°	884	901	960	1033	1127	689
55°	508	529	560	581	629	461
65°	255	276	301	263	239	265
75°	128	128	117	80	55	137
85°	36	36	33	21	13	39
90°	3	8	22	11	11	4
95°	27	106	354	183	124	30
105°	97	148	598	908	847	103
115°	173	210	479	955	1090	171
125°	241	270	436	736	868	214
135°	287	316	422	594	674	222
145°	333	354	417	507	546	208
155°	376	387	417	458	471	173
165°	406	411	417	433	438	115
175°	422	422	419	425	425	40
180°	422	422	422	422	422	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3280.8	3280.8	3280.8	3280.8	3280.8
2.5°	3288.9	3259.6	3267.0	3266.8	3257.8
5°	3227.5	3195.2	3216.0	3223.5	3234.7
7.5°	3107.8	3083.3	3121.3	3149.5	3172.3
10°	3014.5	2993.4	3041.8	3082.8	3112.4
12.5°	2906.2	2888.5	2948.5	3003.5	3042.1
15°	2729.4	2719.6	2792.8	2868.8	2918.0
17.5°	2540.3	2535.5	2619.5	2708.1	2771.2
20°	2411.3	2409.9	2502.0	2594.3	2667.5
22.5°	2281.2	2284.3	2381.1	2477.1	2560.4
25°	2085.9	2091.6	2199.7	2295.6	2396.9
27.5°	1905.4	1908.0	2019.7	2120.9	2229.0
30°	1782.2	1789.2	1898.8	2003.6	2116.2
32.5°	1659.0	1667.1	1774.4	1882.7	1997.6
35°	1474.1	1481.2	1580.7	1687.0	1806.7
37.5°	1283.5	1293.1	1381.4	1482.0	1599.7
40°	1160.3	1174.4	1252.4	1347.2	1462.6
42.5°	1041.7	1059.1	1131.5	1221.4	1325.6
45°	883.9	900.8	960.2	1032.9	1127.2
47.5°	748.0	767.4	813.1	875.7	956.2
50°	670.8	689.1	731.3	777.7	853.7
52.5°	602.9	621.2	658.8	694.5	759.2
55°	508.2	529.3	560.0	581.2	629.1
57.5°	430.4	450.7	475.1	484.6	513.6
60°	378.6	401.1	423.2	422.1	437.6
62.5°	331.4	350.5	372.6	357.3	358.2
65°	254.8	275.9	300.9	262.9	239.0
67.5°	205.9	210.4	236.1	183.3	154.9
70°	182.8	182.8	190.0	142.0	118.0
72.5°	160.9	160.9	154.3	115.5	90.4
75°	128.1	128.1	116.6	80.0	54.7
77.5°	98.8	97.6	89.3	59.7	39.7
80°	79.2	79.2	72.0	47.2	31.7
82.5°	61.9	61.9	55.9	36.8	23.6
85°	36.0	36.0	33.1	21.4	13.0
87.5°	13.2	14.3	15.8	9.0	7.9
90°	2.7	8.0	21.6	10.8	10.8
92.5°	11.4	54.7	121.2	53.7	34.6
95°	27.1	106.4	354.4	182.6	124.4
97.5°	47.1	116.9	530.2	421.6	310.5
100°	62.2	125.7	584.3	592.1	459.9
102.5°	75.2	134.4	599.4	737.5	624.3
105°	97.4	147.6	597.8	907.5	846.7
107.5°	120.1	166.7	563.7	995.8	1010.6
110°	135.3	177.6	535.6	1018.5	1082.0

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	150.4	190.6	509.6	1004.2	1101.5
115°	173.1	210.2	478.8	955.2	1090.1
117.5°	195.3	229.2	457.7	887.4	1037.1
120°	208.3	240.0	449.0	841.9	987.3
122.5°	221.3	253.0	442.5	796.4	939.7
125°	240.8	269.8	435.5	736.1	868.3
127.5°	256.4	286.1	429.6	687.5	799.1
130°	265.1	296.8	427.4	657.0	760.1
132.5°	273.8	305.5	425.2	630.8	723.3
135°	286.7	315.8	422.0	594.2	673.6
137.5°	300.3	328.8	421.4	566.8	631.9
140°	311.1	337.5	419.3	545.1	605.9
142.5°	319.7	344.1	419.3	529.8	582.1
145°	332.7	353.9	416.6	506.7	546.4
147.5°	345.7	366.3	416.6	487.7	520.5
150°	354.4	372.9	416.6	476.7	503.1
152.5°	363.0	377.3	416.6	467.9	488.0
155°	376.0	386.6	416.6	457.5	470.7
157.5°	385.7	395.8	416.6	448.2	457.7
160°	392.2	400.2	416.6	443.8	449.0
162.5°	398.7	404.5	416.6	439.4	444.7
165°	405.8	411.0	416.6	432.9	438.2
167.5°	412.3	414.9	419.3	430.2	432.3
170°	416.6	419.2	419.3	430.1	430.1
172.5°	418.7	419.3	419.3	427.9	425.8
175°	422.0	422.0	419.3	424.7	424.7
177.5°	422.0	422.0	419.8	424.1	422.0
180°	422.0	422.0	422.0	422.0	422.0

(END OF REPORT)