

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: P519555

Luminaire Tested: **SQ4-WB-150U-050D-840-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519555  
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-050D-840-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

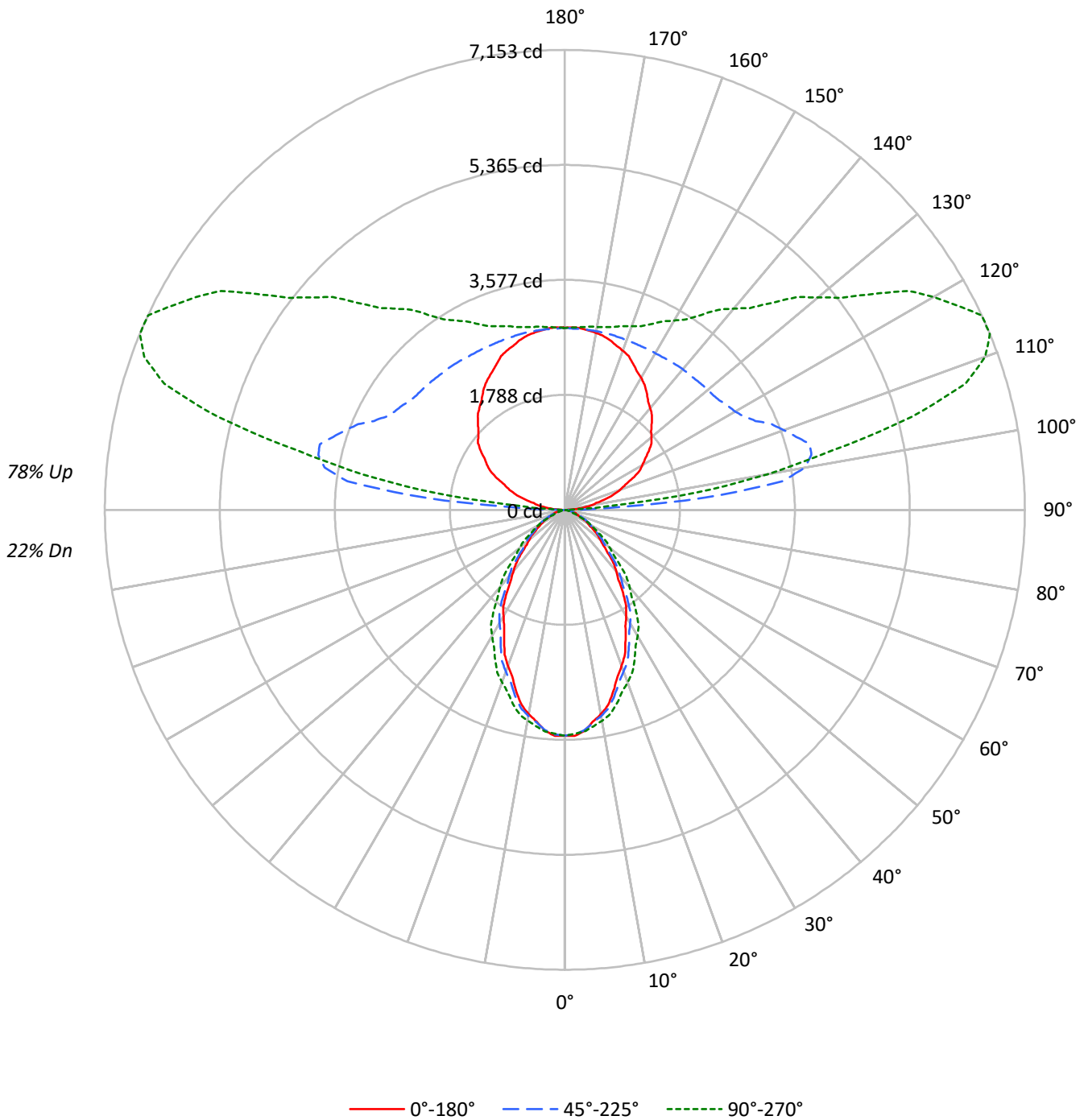
Lumens per Lamp: N/A  
Luminaire Lumens: 23375.5 lumens  
Efficiency: N/A  
Efficacy: 138.4 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 168.9  
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	100	100	100	100	89	89	89	89	68	68	68	48	48	48	30	30	30	22
1	92	88	84	81	81	78	75	73	60	58	56	43	42	41	27	27	26	19
2	84	77	72	67	74	69	64	60	53	50	47	38	37	35	25	24	23	17
3	77	68	62	56	68	61	56	51	47	43	40	34	32	30	22	21	20	15
4	71	61	54	48	63	54	48	44	42	38	35	31	28	26	20	19	18	13
5	65	54	47	41	57	49	42	38	38	34	30	28	25	23	19	17	16	12
6	60	49	41	36	53	44	37	33	34	30	26	25	23	20	17	16	14	11
7	55	44	37	32	49	40	33	29	31	27	23	23	20	18	16	14	13	10
8	51	40	33	28	46	36	30	25	28	24	21	21	18	16	15	13	12	9
9	48	36	29	25	42	33	27	23	26	22	19	20	17	15	14	12	11	8
10	45	33	27	22	40	30	24	20	24	20	17	18	15	13	13	11	10	8

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

	0°	45°	90°
0°	10797	10797	10797
5°	10662	10624	10686
10°	10074	10165	10401
15°	9300	9515	9942
20°	8445	8763	9342
25°	7575	7988	8704
30°	6772	7216	8042
35°	5923	6351	7258
40°	4985	5380	6283
45°	4114	4469	5246
50°	3435	3744	4371
55°	2916	3213	3610
60°	2492	2786	2880
65°	1984	2343	1861
70°	1759	1828	1136
75°	1629	1483	695
80°	1500	1364	600
85°	1359	1249	490



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	322.0	1.4
10°-20°	837.6	3.6
20°-30°	1084.9	4.6
30°-40°	1062.4	4.5
40°-50°	813.2	3.5
50°-60°	541.9	2.3
60°-70°	295.7	1.3
70°-80°	123.2	0.5
80°-90°	40.8	0.2
90°-100°	1315.8	5.6
100°-110°	3557.5	15.2
110°-120°	3740.2	16.0
120°-130°	3038.1	13.0
130°-140°	2383.1	10.2
140°-150°	1829.1	7.8
150°-160°	1315.4	5.6
160°-170°	803.6	3.4
170°-180°	270.9	1.2
0°-30°	2244.5	9.6
0°-40°	3307.0	14.1
0°-60°	4662.1	19.9
0°-90°	5121.8	21.9
90°-120°	8613.5	36.8
90°-150°	15863.8	67.9
90°-180°	18254.0	78.1
0°-180°	23375.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3511	3511	3511	3511	3511	
5°	3454	3419	3442	3450	3462	321
15°	2921	2910	2989	3070	3123	816
25°	2232	2238	2354	2456	2565	1027
35°	1578	1585	1692	1805	1933	981
45°	946	964	1028	1105	1206	738
55°	544	566	599	622	673	493
65°	273	295	322	281	256	283
75°	137	137	125	86	58	146
85°	38	38	35	23	14	42
90°	6	18	40	43	40	16
95°	204	717	2188	1132	674	214
105°	661	1022	3947	5822	5583	696
115°	1164	1423	3273	6336	7153	1150
125°	1594	1826	2950	4978	5848	1421
135°	1911	2137	2871	4020	4550	1477
145°	2222	2388	2831	3441	3703	1390
155°	2508	2606	2807	3086	3188	1157
165°	2731	2757	2819	2929	2944	769
175°	2834	2831	2822	2858	2852	269
180°	2831	2831	2831	2831	2831	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3510.8	3510.8	3510.8	3510.8	3510.8
2.5°	3519.4	3488.1	3496.0	3495.8	3486.1
5°	3453.8	3419.2	3441.5	3449.5	3461.5
7.5°	3325.6	3299.4	3340.1	3370.2	3394.6
10°	3225.8	3203.2	3255.1	3298.9	3330.6
12.5°	3110.0	3091.0	3155.2	3214.1	3255.4
15°	2920.8	2910.2	2988.6	3069.9	3122.6
17.5°	2718.4	2713.2	2803.1	2898.0	2965.5
20°	2580.3	2578.8	2677.4	2776.2	2854.5
22.5°	2441.1	2444.4	2548.0	2650.8	2739.9
25°	2232.2	2238.2	2353.9	2456.5	2564.9
27.5°	2039.0	2041.7	2161.3	2269.6	2385.3
30°	1907.1	1914.7	2031.9	2144.0	2264.5
32.5°	1775.3	1784.0	1898.8	2014.7	2137.6
35°	1577.5	1585.0	1691.5	1805.3	1933.3
37.5°	1373.5	1383.8	1478.3	1585.9	1711.8
40°	1241.6	1256.7	1340.2	1441.6	1565.1
42.5°	1114.7	1133.4	1210.8	1307.0	1418.5
45°	945.9	963.9	1027.5	1105.3	1206.2
47.5°	800.4	821.2	870.1	937.0	1023.2
50°	717.9	737.5	782.6	832.2	913.5
52.5°	645.2	664.7	704.9	743.2	812.5
55°	543.8	566.4	599.3	622.0	673.2
57.5°	460.6	482.3	508.4	518.6	549.6
60°	405.2	429.3	452.9	451.7	468.3
62.5°	354.6	375.1	398.7	382.4	383.3
65°	272.7	295.3	322.0	281.3	255.7
67.5°	220.3	225.1	252.6	196.2	165.8
70°	195.6	195.6	203.3	151.9	126.3
72.5°	172.2	172.2	165.1	123.6	96.7
75°	137.1	137.1	124.8	85.7	58.5
77.5°	105.7	104.5	95.5	63.9	42.5
80°	84.7	84.7	77.0	50.5	33.9
82.5°	66.2	66.2	59.8	39.4	25.3
85°	38.5	38.5	35.4	22.9	13.9
87.5°	14.8	17.2	20.2	15.9	14.1
90°	6.1	18.0	39.6	42.6	39.6
92.5°	86.6	315.4	622.3	270.1	195.7
95°	204.2	716.7	2188.2	1132.4	673.5
97.5°	327.9	822.0	3410.8	2822.7	2073.0
100°	420.6	864.6	3791.2	3953.8	3196.9
102.5°	505.9	923.7	3925.3	4811.4	4245.3
105°	661.3	1021.9	3946.6	5821.5	5583.1
107.5°	805.2	1134.1	3774.1	6451.7	6530.9
110°	917.3	1215.3	3620.5	6620.9	6957.6

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	1017.3	1296.2	3479.1	6587.1	7152.6
115°	1164.2	1423.4	3273.1	6336.2	7152.6
117.5°	1308.0	1551.2	3137.2	5952.8	6878.3
120°	1395.8	1634.2	3056.7	5677.7	6622.4
122.5°	1478.7	1712.3	3007.9	5382.9	6334.7
125°	1593.9	1826.3	2950.0	4978.2	5848.3
127.5°	1699.9	1928.2	2915.9	4647.9	5413.1
130°	1758.4	1993.9	2901.3	4443.8	5135.1
132.5°	1819.4	2052.4	2886.7	4259.7	4896.2
135°	1910.8	2137.3	2870.8	4019.6	4550.0
137.5°	2002.9	2216.8	2857.4	3824.8	4256.8
140°	2066.2	2265.9	2852.5	3699.3	4083.7
142.5°	2127.2	2314.9	2842.8	3586.1	3922.8
145°	2221.7	2388.5	2831.2	3440.6	3702.8
147.5°	2307.6	2455.4	2817.8	3308.7	3510.2
150°	2371.0	2502.1	2812.9	3237.1	3398.0
152.5°	2429.5	2543.9	2810.5	3170.6	3302.9
155°	2508.1	2606.5	2806.8	3086.4	3187.8
157.5°	2589.8	2658.4	2807.4	3027.7	3094.5
160°	2636.1	2692.8	2809.9	2990.7	3038.4
162.5°	2672.7	2719.8	2812.3	2961.2	2997.0
165°	2730.6	2757.4	2819.0	2929.0	2943.9
167.5°	2770.2	2788.7	2819.6	2901.4	2908.6
170°	2794.6	2803.6	2822.0	2889.1	2889.1
172.5°	2814.1	2815.9	2822.0	2874.4	2872.0
175°	2834.2	2831.3	2822.0	2858.5	2852.5
177.5°	2840.9	2833.8	2821.4	2845.7	2838.5
180°	2831.2	2831.2	2831.2	2831.2	2831.2

(END OF REPORT)