

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: P565149

Luminaire Tested: **SQ4-PW1-150U-100D-835-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P565149  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G2-2106-289-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/30/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-PW1-150U-100D-835-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 29405.1 lumens  
Efficiency: N/A  
Efficacy: 131.4 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: Semi-Indirect

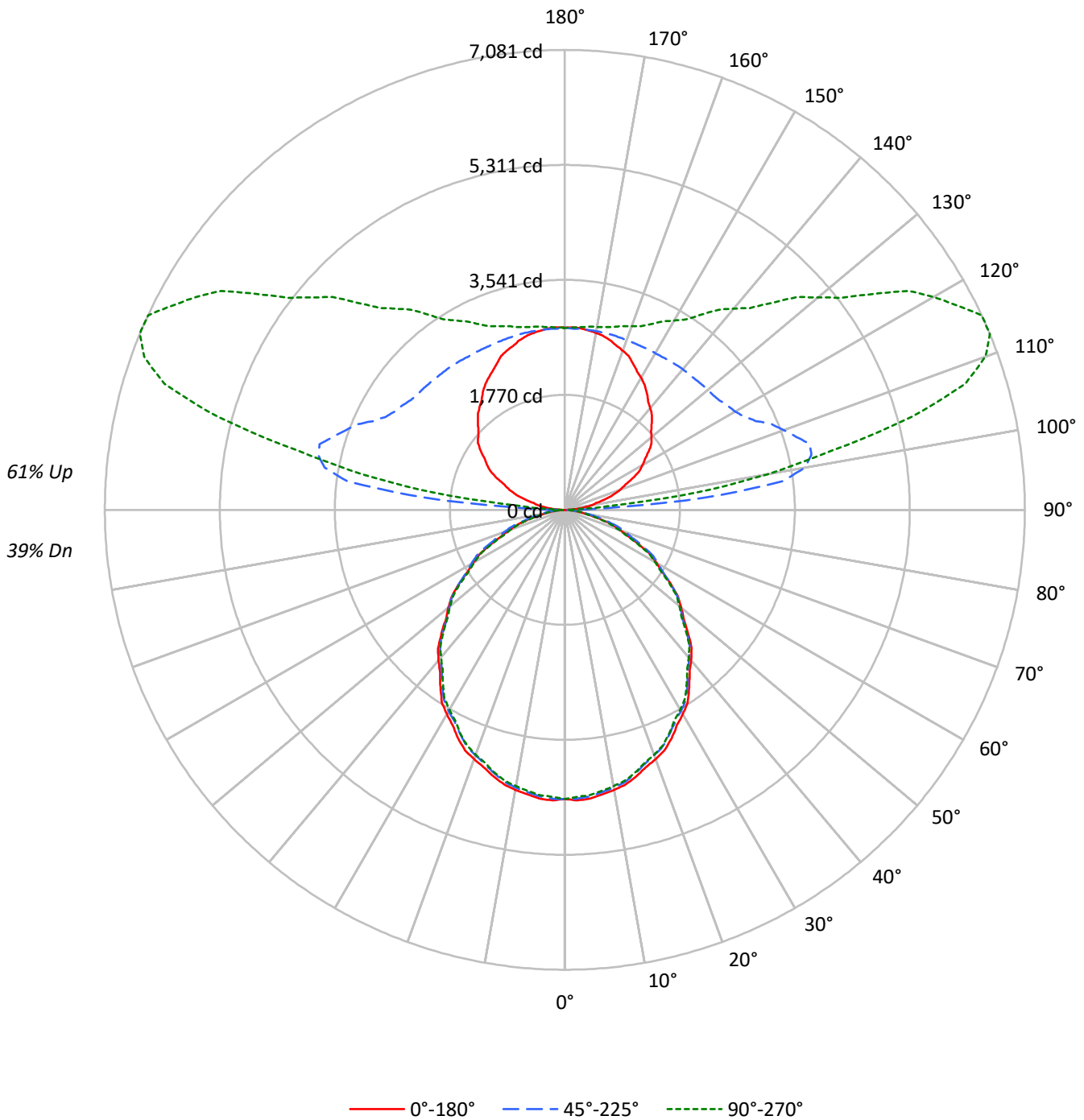
Input Watts (W): 223.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	104	104	104	104	95	95	95	95	77	77	77	61	61	61	46	46	46	39
1	95	91	87	84	86	83	80	77	68	65	63	53	52	51	40	39	39	33
2	87	80	74	69	79	73	67	63	59	56	52	47	44	42	36	34	33	27
3	79	70	63	57	72	64	58	53	52	48	44	42	38	36	32	30	28	23
4	72	62	54	48	66	57	50	45	46	41	38	37	33	31	28	26	24	20
5	66	55	47	41	60	50	43	38	41	36	32	33	29	27	25	23	21	17
6	61	49	41	36	55	45	38	33	37	32	28	30	26	23	23	20	18	15
7	56	44	37	31	51	41	34	29	34	29	25	27	23	20	21	18	16	14
8	52	40	33	27	47	37	30	26	31	26	22	25	21	18	19	17	15	12
9	49	37	29	24	44	34	27	23	28	23	20	23	19	16	18	15	13	11
10	45	34	27	22	41	31	25	20	26	21	18	21	17	15	17	14	12	10

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

	0°	45°	90°
0°	13692	13692	13692
5°	13781	13672	13611
10°	13671	13560	13487
15°	13526	13376	13326
20°	13364	13159	13133
25°	13178	12938	12898
30°	12899	12704	12620
35°	12532	12356	12282
40°	12142	11952	11905
45°	11669	11516	11465
50°	11186	11091	11017
55°	10663	10663	10495
60°	10013	10206	9844
65°	9162	9619	8935
70°	8077	8853	7865
75°	6898	7923	6712
80°	5349	6670	5419
85°	3462	5120	4566



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	419.2	1.4
10°-20°	1183.6	4.0
20°-30°	1755.7	6.0
30°-40°	2054.3	7.0
40°-50°	2045.2	7.0
50°-60°	1766.1	6.0
60°-70°	1271.3	4.3
70°-80°	666.6	2.3
80°-90°	171.1	0.6
90°-100°	1302.7	4.4
100°-110°	3522.1	12.0
110°-120°	3703.0	12.6
120°-130°	3007.8	10.2
130°-140°	2359.4	8.0
140°-150°	1810.8	6.2
150°-160°	1302.3	4.4
160°-170°	795.6	2.7
170°-180°	268.2	0.9
0°-30°	3358.6	11.4
0°-40°	5412.9	18.4
0°-60°	9224.2	31.4
0°-90°	11333.2	38.5
90°-120°	8527.7	29.0
90°-150°	15705.8	53.4
90°-180°	18072.0	61.5
0°-180°	29405.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4452	4452	4452	4452	4452	
5°	4464	4414	4429	4417	4409	423
15°	4248	4194	4201	4193	4185	1197
25°	3883	3818	3813	3790	3801	1786
35°	3338	3292	3291	3260	3271	2087
45°	2683	2660	2648	2640	2636	2070
55°	1989	1985	1989	1961	1957	1774
65°	1259	1298	1322	1270	1228	1248
75°	580	634	667	622	565	622
85°	98	129	145	137	129	129
90°	6	18	39	42	39	17
95°	202	710	2166	1121	667	212
105°	655	1012	3907	5764	5528	690
115°	1153	1409	3240	6273	7081	1138
125°	1578	1808	2921	4929	5790	1407
135°	1892	2116	2842	3980	4505	1462
145°	2200	2365	2803	3406	3666	1376
155°	2483	2580	2779	3056	3156	1145
165°	2703	2730	2791	2900	2915	762
175°	2806	2803	2794	2830	2824	266
180°	2803	2803	2803	2803	2803	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4452.1	4452.1	4452.1	4452.1	4452.1
2.5°	4477.2	4440.4	4452.1	4442.2	4420.7
5°	4463.9	4414.0	4428.6	4416.7	4409.0
7.5°	4418.4	4372.4	4383.1	4370.4	4365.8
10°	4377.6	4331.6	4342.3	4326.4	4318.8
12.5°	4330.5	4281.4	4292.1	4276.3	4271.7
15°	4248.2	4194.5	4201.1	4193.1	4185.4
17.5°	4152.4	4098.0	4099.1	4086.5	4085.0
20°	4083.4	4025.9	4020.6	4005.1	4012.8
22.5°	4008.1	3947.5	3942.2	3920.5	3931.2
25°	3883.4	3818.2	3812.7	3789.5	3801.0
27.5°	3739.0	3674.6	3674.7	3642.0	3654.3
30°	3632.3	3570.9	3577.4	3538.5	3553.9
32.5°	3519.3	3464.1	3467.6	3428.7	3444.0
35°	3338.1	3292.1	3291.0	3259.9	3271.4
37.5°	3153.0	3112.3	3105.9	3087.9	3091.0
40°	3024.3	2989.8	2977.2	2965.5	2965.5
42.5°	2889.4	2857.9	2845.4	2836.7	2833.7
45°	2683.0	2660.0	2647.7	2639.8	2636.0
47.5°	2479.1	2457.6	2446.9	2441.3	2437.5
50°	2337.9	2322.5	2318.2	2306.4	2302.6
52.5°	2196.6	2187.4	2183.3	2168.3	2164.5
55°	1988.7	1984.9	1988.7	1961.2	1957.4
57.5°	1772.2	1778.4	1791.1	1754.0	1744.8
60°	1627.9	1643.2	1659.3	1615.8	1600.4
62.5°	1480.4	1504.9	1527.5	1477.5	1456.1
65°	1259.1	1297.5	1321.9	1270.0	1227.8
67.5°	1045.8	1093.3	1122.6	1066.6	1019.1
70°	898.3	952.0	984.6	928.4	874.7
72.5°	769.6	829.4	855.9	802.9	749.2
75°	580.5	634.2	666.8	622.4	564.9
77.5°	411.9	462.5	489.5	450.8	403.2
80°	302.0	355.7	376.6	344.3	306.0
82.5°	214.2	258.7	273.0	253.6	227.5
85°	98.1	128.7	145.1	137.1	129.4
87.5°	26.3	50.1	67.5	68.1	70.6
90°	6.0	17.8	39.2	42.2	39.2
92.5°	85.7	312.3	616.1	267.5	193.7
95°	202.2	709.6	2166.4	1121.1	666.8
97.5°	324.7	813.8	3376.9	2794.6	2052.3
100°	416.4	855.9	3753.4	3914.4	3165.0
102.5°	500.9	914.5	3886.2	4763.5	4203.0
105°	654.7	1011.7	3907.3	5763.5	5527.5
107.5°	797.1	1122.8	3736.5	6387.4	6465.9
110°	908.2	1203.2	3584.4	6554.9	6888.3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	1007.1	1283.3	3444.4	6521.4	7081.4
115°	1152.6	1409.2	3240.5	6273.0	7081.4
117.5°	1295.0	1535.7	3105.9	5893.5	6809.8
120°	1381.9	1617.9	3026.3	5621.2	6556.4
122.5°	1463.9	1695.2	2978.0	5329.3	6271.6
125°	1578.0	1808.1	2920.7	4928.6	5790.0
127.5°	1683.0	1909.0	2886.9	4601.6	5359.2
130°	1740.9	1974.0	2872.4	4399.5	5084.0
132.5°	1801.3	2032.0	2857.9	4217.3	4847.4
135°	1891.8	2116.0	2842.2	3979.6	4504.7
137.5°	1982.9	2194.7	2828.9	3786.7	4214.4
140°	2045.7	2243.3	2824.1	3662.5	4043.1
142.5°	2106.0	2291.9	2814.4	3550.4	3883.7
145°	2199.5	2364.7	2803.0	3406.3	3665.9
147.5°	2284.6	2431.0	2789.7	3275.8	3475.2
150°	2347.4	2477.2	2784.9	3204.9	3364.2
152.5°	2405.3	2518.6	2782.5	3139.1	3270.0
155°	2483.2	2580.5	2778.8	3055.7	3156.0
157.5°	2564.0	2631.9	2779.4	2997.6	3063.7
160°	2609.9	2665.9	2781.9	2960.9	3008.2
162.5°	2646.1	2692.7	2784.3	2931.7	2967.1
165°	2703.4	2730.0	2790.9	2899.9	2914.6
167.5°	2742.6	2760.9	2791.5	2872.5	2879.6
170°	2766.8	2775.6	2793.9	2860.3	2860.3
172.5°	2786.1	2787.9	2793.9	2845.8	2843.4
175°	2806.0	2803.0	2793.9	2830.0	2824.1
177.5°	2812.6	2805.6	2793.3	2817.3	2810.2
180°	2803.0	2803.0	2803.0	2803.0	2803.0

(END OF REPORT)