

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: P564957

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

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P564957  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-PW1-100U-100D-835-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 23380.1 lumens  
Efficiency: N/A  
Efficacy: 128.3 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: General Diffuse

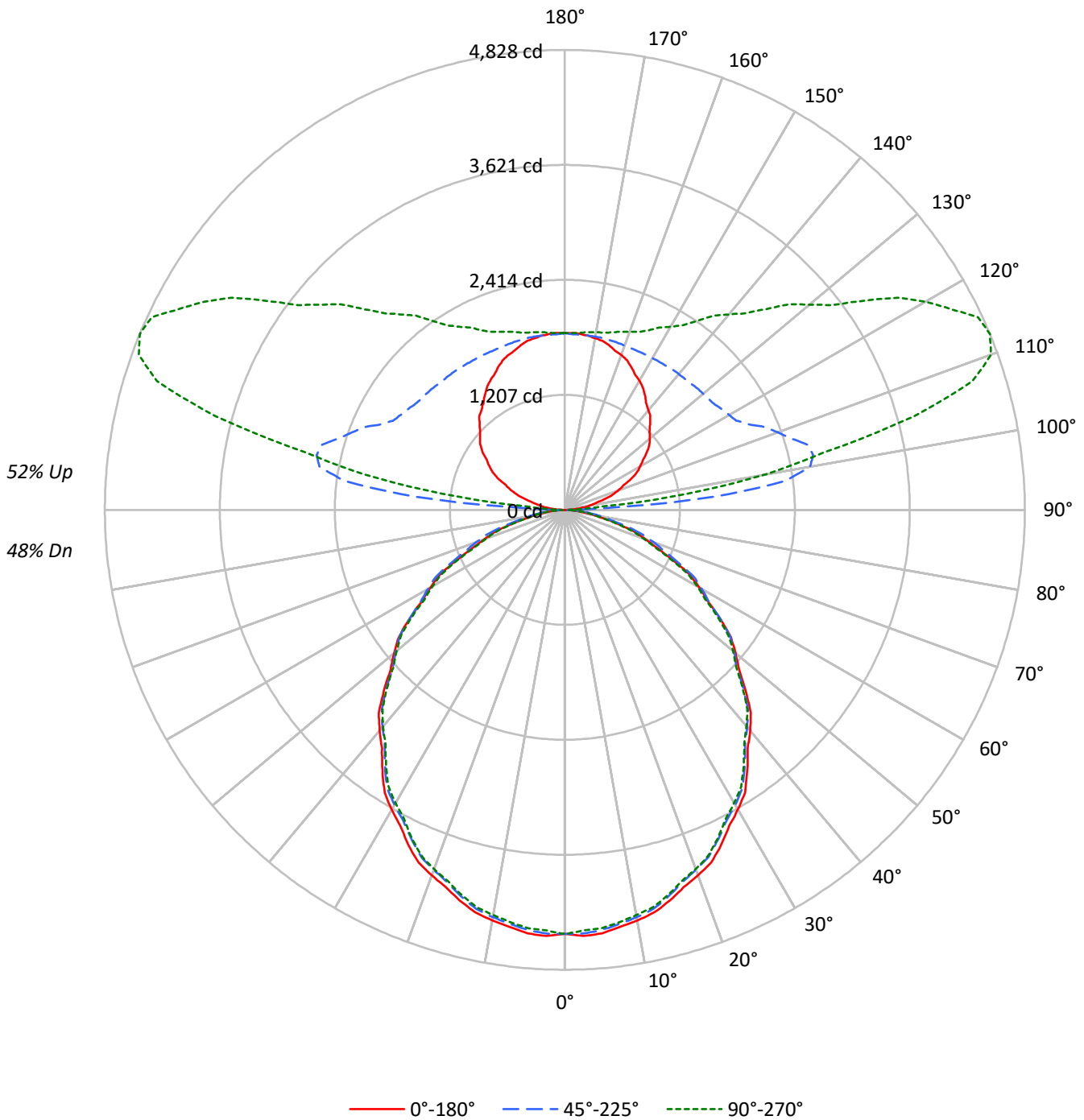
Input Watts (W): 182.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	107	107	107	107	98	98	98	98	82	82	82	68	68	68	55	55	55	48				48
1	98	93	89	86	90	86	83	80	72	70	68	60	58	57	49	47	46				41	
2	89	82	75	70	82	75	70	66	64	60	56	53	50	48	43	41	39				35	
3	81	72	64	59	74	66	60	55	56	51	47	47	43	40	38	36	33				29	
4	74	63	56	50	68	59	52	47	50	45	40	42	38	35	34	31	29				25	
5	68	57	48	43	62	52	45	40	45	39	35	37	33	30	31	28	25				22	
6	63	51	43	37	58	47	40	35	40	35	30	34	30	26	28	25	22				19	
7	58	46	38	32	53	43	35	30	36	31	27	31	26	23	25	22	20				17	
8	54	42	34	29	49	39	32	27	33	28	24	28	24	21	23	20	18				15	
9	50	38	30	25	46	35	29	24	30	25	21	26	22	19	21	18	16				14	
10	47	35	28	23	43	32	26	22	28	23	19	24	20	17	20	17	14				12	

**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	1.8
10°-20°	1183.6	5.1
20°-30°	1755.7	7.5
30°-40°	2054.3	8.8
40°-50°	2045.2	8.7
50°-60°	1766.1	7.6
60°-70°	1271.3	5.4
70°-80°	666.6	2.9
80°-90°	169.1	0.7
90°-100°	868.4	3.7
100°-110°	2397.4	10.3
110°-120°	2472.6	10.6
120°-130°	1986.9	8.5
130°-140°	1561.5	6.7
140°-150°	1197.6	5.1
150°-160°	860.7	3.7
160°-170°	526.4	2.3
170°-180°	177.5	0.8
0°-30°	3358.6	14.4
0°-40°	5412.9	23.2
0°-60°	9224.2	39.5
0°-90°	11331.2	48.5
90°-120°	5738.4	24.5
90°-150°	10484.4	44.8
90°-180°	12049.0	51.5
0°-180°	23380.1	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	12	24	27	30	13
95°	128	470	1576	648	421	137
105°	427	659	2638	4027	3792	455
115°	766	925	2124	4206	4783	752
125°	1050	1195	1926	3259	3824	935
135°	1264	1400	1872	2639	2976	978
145°	1466	1567	1848	2247	2418	918
155°	1653	1708	1834	2016	2080	762
165°	1789	1812	1842	1914	1929	504
175°	1854	1857	1846	1872	1866	176
180°	1854	1854	1854	1854	1854	

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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	48.9	64.4	65.0	68.7
90°	5.9	11.7	23.7	26.8	29.7
92.5°	53.4	221.7	396.4	144.7	112.7
95°	127.6	469.9	1575.5	647.6	421.3
97.5°	211.3	526.3	2333.9	1796.9	1301.3
100°	273.0	560.2	2614.0	2632.4	2139.2
102.5°	332.3	598.6	2668.6	3252.5	2784.9
105°	427.3	659.3	2637.7	4026.9	3791.9
107.5°	528.1	734.7	2490.5	4400.3	4486.2
110°	599.3	785.0	2376.6	4480.6	4759.1

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	663.4	842.1	2269.8	4417.2	4828.0
115°	765.5	925.1	2124.4	4205.6	4782.9
117.5°	854.5	1013.5	2028.9	3907.7	4564.5
120°	913.9	1070.5	1990.9	3706.0	4367.5
122.5°	970.8	1120.5	1960.0	3517.7	4144.4
125°	1050.3	1195.4	1925.6	3258.8	3824.5
127.5°	1118.0	1263.0	1905.4	3039.9	3527.8
130°	1163.1	1308.1	1895.9	2905.9	3349.8
132.5°	1205.8	1343.9	1886.4	2793.4	3195.5
135°	1264.0	1400.3	1872.2	2639.4	2975.9
137.5°	1329.2	1453.4	1865.1	2510.1	2797.3
140°	1364.8	1486.7	1860.3	2423.9	2676.3
142.5°	1405.2	1517.8	1855.6	2347.2	2569.5
145°	1465.7	1567.3	1848.5	2247.0	2418.1
147.5°	1523.9	1612.6	1841.9	2162.4	2295.3
150°	1566.6	1639.1	1839.6	2112.0	2219.4
152.5°	1599.8	1667.7	1837.2	2068.9	2157.6
155°	1652.6	1707.8	1833.6	2016.1	2079.9
157.5°	1701.3	1743.7	1834.2	1977.6	2021.2
160°	1729.8	1767.5	1836.6	1956.0	1987.9
162.5°	1753.5	1786.6	1839.0	1936.9	1961.8
165°	1789.1	1812.3	1842.5	1914.1	1928.6
167.5°	1816.4	1830.4	1845.5	1900.2	1904.8
170°	1830.7	1842.3	1845.5	1893.0	1893.0
172.5°	1842.5	1849.5	1845.5	1883.4	1881.1
175°	1854.4	1857.3	1845.5	1872.1	1866.3
177.5°	1859.2	1856.8	1844.9	1861.4	1856.8
180°	1854.4	1854.4	1854.4	1854.4	1854.4

(END OF REPORT)