

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: P562941

Luminaire Tested: **SQ4-PC3-100U-100D-835-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P562941  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G2-2106-289-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/30/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-PC3-100U-100D-835-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE PYRAMID CONTINUOUS LENS.  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

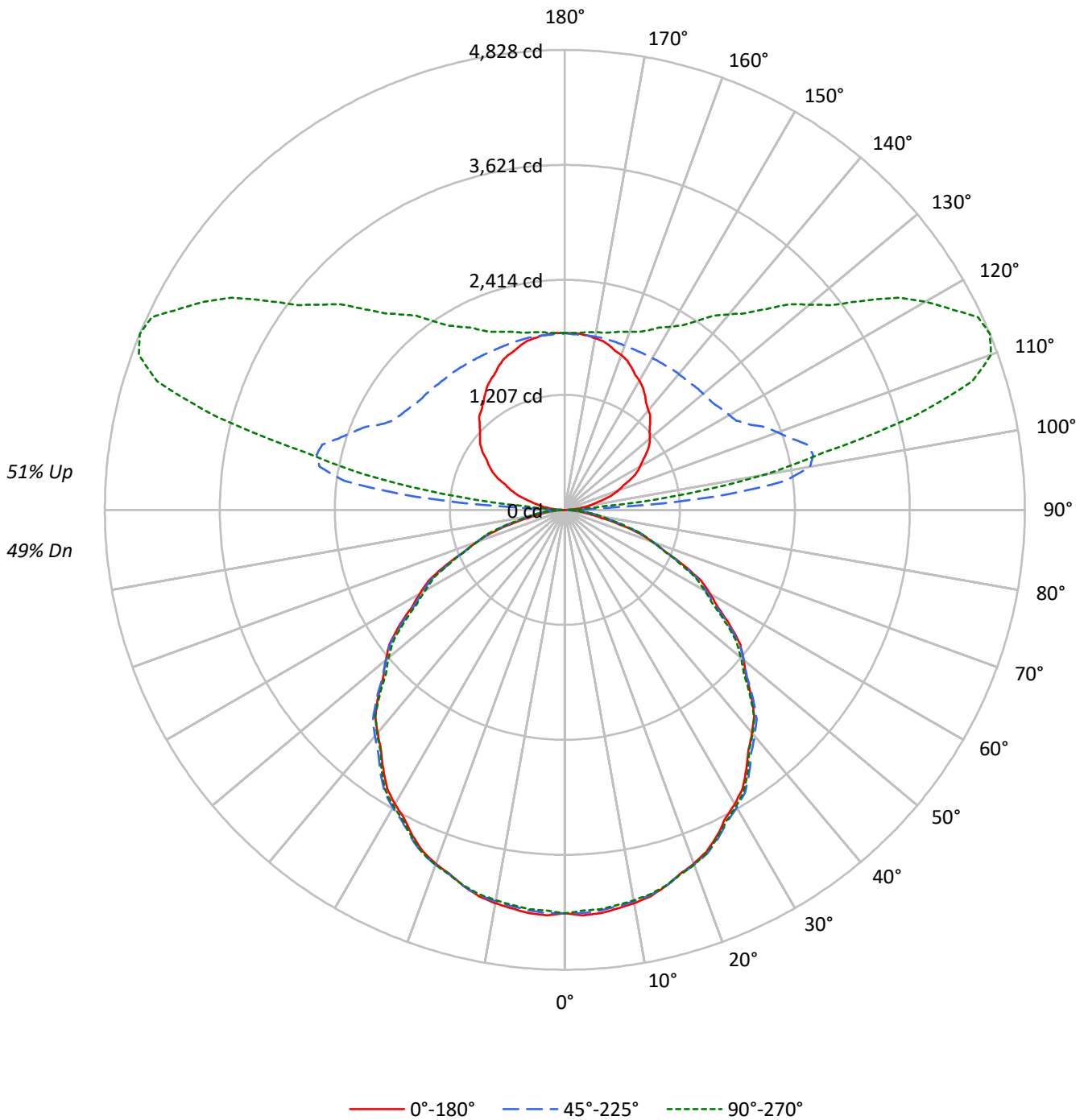
Lumens per Lamp: N/A  
Luminaire Lumens: 23614.7 lumens  
Efficiency: N/A  
Efficacy: 129.6 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.37  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: General Diffuse

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	83	83	83	68	68	68	55	55	55	49				
1	98	93	89	86	90	86	83	80	73	70	68	60	59	57	49	48	47	41				
2	89	81	75	70	82	75	70	66	64	60	56	53	50	48	43	41	39	35				
3	81	72	64	58	74	66	60	55	56	51	47	47	43	40	38	36	33	29				
4	74	63	55	49	68	59	52	46	50	45	40	42	38	34	34	31	29	25				
5	68	56	48	42	62	52	45	40	45	39	35	37	33	30	31	28	25	22				
6	63	51	42	37	57	47	40	34	40	34	30	34	29	26	28	24	22	19				
7	58	46	38	32	53	42	35	30	36	31	27	31	26	23	25	22	20	17				
8	54	41	34	28	49	38	32	27	33	28	24	28	24	20	23	20	17	15				
9	50	38	30	25	46	35	28	24	30	25	21	26	21	18	21	18	16	14				
10	47	35	27	23	43	32	26	21	28	23	19	24	20	17	20	17	14	12				

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

	0°	45°	90°
0°	13029	13029	13029
5°	13127	13042	12993
10°	13095	13034	12997
15°	13026	13026	13014
20°	12941	12979	12979
25°	12818	12911	12871
30°	12662	12815	12760
35°	12474	12665	12577
40°	12268	12441	12315
45°	12044	12130	11942
50°	11730	11730	11542
55°	11357	11210	11042
60°	10809	10592	10423
65°	9991	9791	9705
70°	8747	8817	8782
75°	7038	7784	7831
80°	5001	6599	6670
85°	3045	5536	5536



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	400.9	1.7
10°-20°	1150.5	4.9
20°-30°	1742.4	7.4
30°-40°	2088.9	8.8
40°-50°	2129.9	9.0
50°-60°	1859.3	7.9
60°-70°	1331.1	5.6
70°-80°	685.6	2.9
80°-90°	177.2	0.8
90°-100°	868.4	3.7
100°-110°	2397.4	10.2
110°-120°	2472.6	10.5
120°-130°	1986.9	8.4
130°-140°	1561.5	6.6
140°-150°	1197.6	5.1
150°-160°	860.7	3.6
160°-170°	526.4	2.2
170°-180°	177.5	0.8
0°-30°	3293.8	13.9
0°-40°	5382.7	22.8
0°-60°	9371.9	39.7
0°-90°	11565.8	49.0
90°-120°	5738.4	24.3
90°-150°	10484.4	44.4
90°-180°	12049.0	51.0
0°-180°	23614.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4236	4236	4236	4236	4236	
5°	4252	4210	4225	4213	4209	404
15°	4091	4057	4091	4091	4087	1154
25°	3777	3751	3805	3793	3793	1738
35°	3322	3315	3373	3350	3350	2078
45°	2769	2762	2789	2754	2746	2132
55°	2118	2091	2091	2059	2059	1888
65°	1373	1342	1345	1334	1334	1358
75°	592	619	655	659	659	640
85°	86	132	157	161	157	117
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°	4236.4	4236.4	4236.4	4236.4	4236.4
2.5°	4261.5	4224.7	4236.4	4226.6	4211.3
5°	4252.1	4209.9	4224.6	4212.8	4208.9
7.5°	4221.5	4179.3	4198.7	4190.8	4187.0
10°	4193.2	4151.0	4173.6	4165.7	4161.9
12.5°	4155.6	4116.5	4142.2	4134.4	4133.6
15°	4091.2	4056.7	4091.2	4091.2	4087.3
17.5°	4010.4	3979.0	4015.9	4018.2	4015.9
20°	3954.0	3919.4	3965.7	3961.9	3965.7
22.5°	3884.9	3856.5	3906.1	3896.0	3899.8
25°	3777.4	3750.6	3804.9	3793.1	3793.1
27.5°	3650.4	3631.2	3690.4	3677.8	3677.8
30°	3565.6	3546.4	3608.8	3593.1	3593.1
32.5°	3471.5	3458.4	3517.8	3498.9	3498.9
35°	3322.4	3314.8	3373.4	3349.9	3349.9
37.5°	3168.7	3161.8	3214.9	3186.5	3177.3
40°	3055.7	3051.9	3098.8	3067.5	3067.5
42.5°	2942.7	2938.9	2979.6	2941.9	2941.9
45°	2769.3	2761.7	2789.0	2753.5	2745.8
47.5°	2580.3	2572.6	2589.7	2551.2	2547.3
50°	2451.6	2443.9	2451.6	2416.2	2412.4
52.5°	2319.8	2306.0	2307.3	2271.9	2271.2
55°	2118.2	2091.3	2090.7	2059.4	2059.4
57.5°	1904.8	1869.5	1872.6	1845.9	1842.0
60°	1757.3	1719.0	1722.0	1698.4	1694.6
62.5°	1613.0	1568.5	1577.7	1551.0	1550.2
65°	1372.9	1342.2	1345.4	1333.7	1333.7
67.5°	1142.3	1113.9	1134.4	1125.0	1124.2
70°	972.8	953.6	980.6	980.6	976.7
72.5°	815.9	815.1	848.8	848.9	851.2
75°	592.3	619.2	655.1	659.0	659.0
77.5°	395.4	443.0	482.5	484.0	483.3
80°	282.4	336.1	372.6	380.4	376.6
82.5°	191.4	248.2	278.5	286.3	282.4
85°	86.3	132.3	156.9	160.7	156.9
87.5°	26.3	55.1	67.5	68.0	62.4
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)