

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: P562945

Luminaire Tested: **SQ4-PC3-100U-100D-840-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P562945  
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-840-1D-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: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

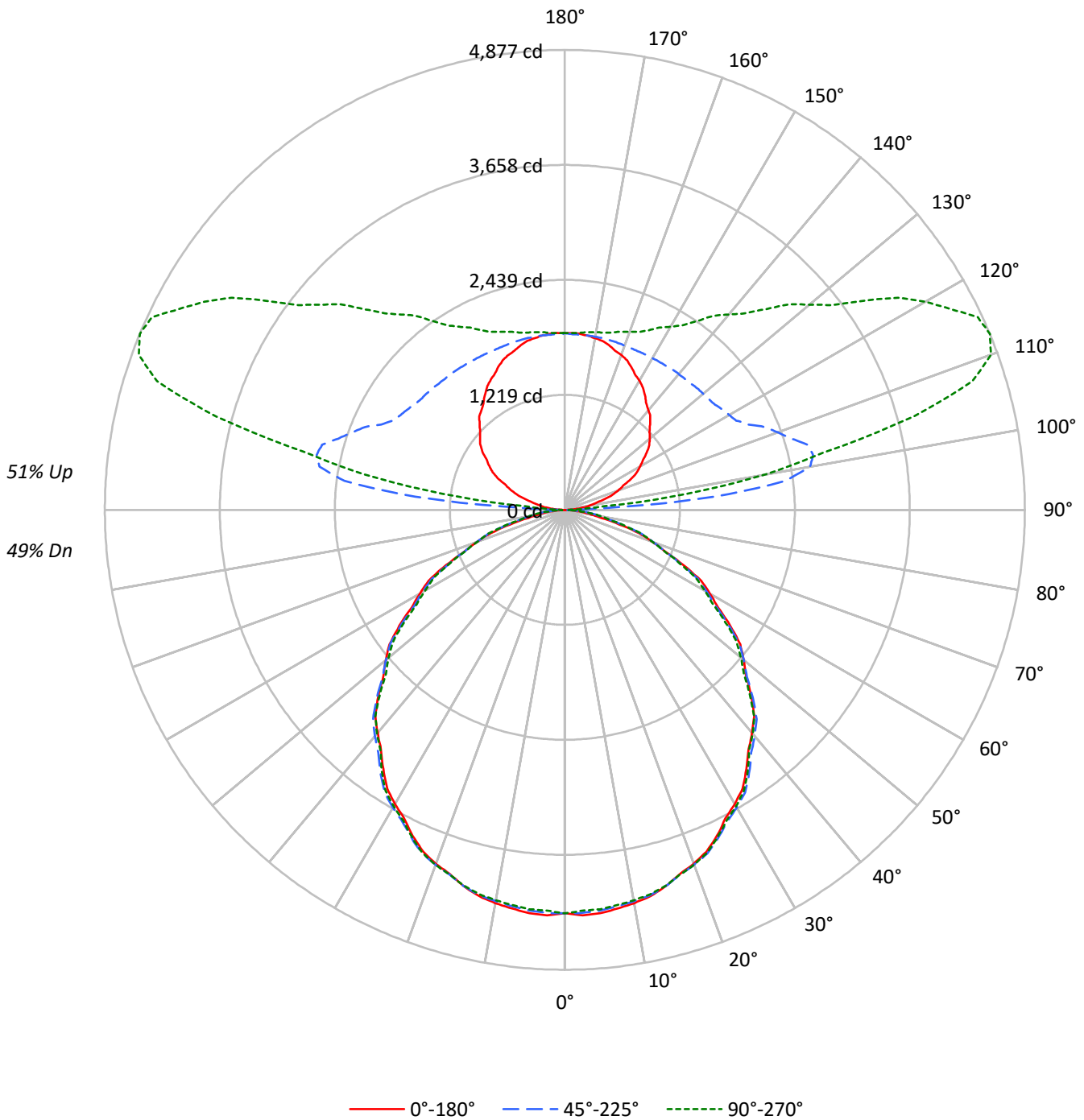
Lumens per Lamp: N/A  
Luminaire Lumens: 23852.3 lumens  
Efficiency: N/A  
Efficacy: 130.9 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.37  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: General Diffuse

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	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°	13160	13160	13160
5°	13259	13173	13124
10°	13226	13165	13127
15°	13157	13157	13145
20°	13070	13109	13109
25°	12947	13041	13001
30°	12790	12944	12888
35°	12599	12793	12703
40°	12391	12566	12439
45°	12166	12252	12062
50°	11848	11848	11658
55°	11472	11323	11153
60°	10918	10698	10528
65°	10091	9889	9803
70°	8835	8906	8871
75°	7109	7863	7909
80°	5053	6666	6737
85°	3077	5593	5593



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	405.0	1.7
10°-20°	1162.1	4.9
20°-30°	1759.9	7.4
30°-40°	2109.9	8.8
40°-50°	2151.3	9.0
50°-60°	1878.0	7.9
60°-70°	1344.5	5.6
70°-80°	692.5	2.9
80°-90°	179.0	0.8
90°-100°	877.2	3.7
100°-110°	2421.6	10.2
110°-120°	2497.4	10.5
120°-130°	2006.9	8.4
130°-140°	1577.2	6.6
140°-150°	1209.7	5.1
150°-160°	869.4	3.6
160°-170°	531.7	2.2
170°-180°	179.2	0.8
0°-30°	3327.0	13.9
0°-40°	5436.8	22.8
0°-60°	9466.2	39.7
0°-90°	11682.1	49.0
90°-120°	5796.2	24.3
90°-150°	10589.9	44.4
90°-180°	12170.0	51.0
0°-180°	23852.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4279	4279	4279	4279	4279	
5°	4295	4252	4267	4255	4251	408
15°	4132	4098	4132	4132	4128	1165
25°	3816	3788	3843	3831	3831	1756
35°	3356	3348	3407	3384	3384	2099
45°	2797	2790	2817	2781	2773	2153
55°	2140	2112	2112	2080	2080	1907
65°	1387	1356	1359	1347	1347	1371
75°	598	625	662	666	666	647
85°	87	134	158	162	158	119
90°	6	12	24	27	30	13
95°	129	475	1591	654	426	138
105°	432	666	2664	4067	3830	459
115°	773	934	2146	4248	4831	760
125°	1061	1207	1945	3292	3863	944
135°	1277	1414	1891	2666	3006	988
145°	1480	1583	1867	2270	2442	927
155°	1669	1725	1852	2036	2101	769
165°	1807	1831	1861	1933	1948	509
175°	1873	1876	1864	1891	1885	178
180°	1873	1873	1873	1873	1873	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4279.0	4279.0	4279.0	4279.0	4279.0
2.5°	4304.4	4267.2	4279.0	4269.2	4253.7
5°	4294.9	4252.2	4267.1	4255.2	4251.3
7.5°	4264.0	4221.3	4241.0	4233.0	4229.1
10°	4235.4	4192.8	4215.6	4207.6	4203.7
12.5°	4197.4	4157.9	4183.9	4176.0	4175.2
15°	4132.4	4097.6	4132.4	4132.3	4128.5
17.5°	4050.8	4019.0	4056.3	4058.7	4056.3
20°	3993.7	3958.9	4005.6	4001.8	4005.6
22.5°	3924.0	3895.3	3945.4	3935.2	3939.1
25°	3815.5	3788.3	3843.2	3831.3	3831.3
27.5°	3687.1	3667.7	3727.5	3714.8	3714.8
30°	3601.5	3582.1	3645.1	3629.2	3629.2
32.5°	3506.4	3493.2	3553.2	3534.1	3534.1
35°	3355.9	3348.1	3407.4	3383.6	3383.6
37.5°	3200.5	3193.6	3247.3	3218.6	3209.3
40°	3086.4	3082.6	3130.0	3098.3	3098.3
42.5°	2972.3	2968.5	3009.6	2971.5	2971.5
45°	2797.2	2789.5	2817.0	2781.2	2773.4
47.5°	2606.2	2598.5	2615.7	2576.8	2573.0
50°	2476.3	2468.5	2476.3	2440.5	2436.7
52.5°	2343.2	2329.2	2330.5	2294.8	2294.0
55°	2139.5	2112.4	2111.8	2080.1	2080.1
57.5°	1924.0	1888.3	1891.5	1864.5	1860.6
60°	1775.0	1736.3	1739.3	1715.5	1711.6
62.5°	1629.2	1584.3	1593.5	1566.6	1565.8
65°	1386.7	1355.7	1359.0	1347.1	1347.1
67.5°	1153.7	1125.1	1145.8	1136.3	1135.5
70°	982.6	963.2	990.5	990.4	986.6
72.5°	824.1	823.3	857.4	857.4	859.8
75°	598.3	625.4	661.7	665.6	665.6
77.5°	399.4	447.4	487.3	488.9	488.1
80°	285.3	339.5	376.4	384.2	380.4
82.5°	193.3	250.7	281.3	289.1	285.3
85°	87.2	133.7	158.5	162.4	158.5
87.5°	26.6	55.6	68.2	68.7	63.0
90°	6.0	11.9	24.0	27.0	30.0
92.5°	53.9	223.9	400.4	146.1	113.9
95°	128.9	474.6	1591.4	654.1	425.6
97.5°	213.4	531.6	2357.4	1814.9	1314.4
100°	275.7	565.8	2640.3	2658.9	2160.8
102.5°	335.7	604.7	2695.4	3285.3	2812.9
105°	431.6	666.0	2664.2	4067.4	3830.0
107.5°	533.4	742.1	2515.6	4444.6	4531.3
110°	605.4	792.9	2400.5	4525.7	4807.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	670.1	850.6	2292.6	4461.6	4876.6
115°	773.2	934.4	2145.8	4247.9	4831.0
117.5°	863.1	1023.7	2049.3	3947.0	4610.4
120°	923.0	1081.3	2010.9	3743.3	4411.4
122.5°	980.6	1131.8	1979.8	3553.1	4186.1
125°	1060.9	1207.4	1945.0	3291.6	3863.0
127.5°	1129.2	1275.7	1924.6	3070.4	3563.3
130°	1174.8	1321.3	1915.0	2935.2	3383.5
132.5°	1217.9	1357.4	1905.4	2821.5	3227.7
135°	1276.7	1414.4	1891.0	2666.0	3005.9
137.5°	1342.6	1468.0	1883.9	2535.4	2825.5
140°	1378.6	1501.6	1879.1	2448.3	2703.2
142.5°	1419.3	1533.0	1874.3	2370.9	2595.3
145°	1480.5	1583.0	1867.1	2269.6	2442.5
147.5°	1539.2	1628.9	1860.5	2184.2	2318.4
150°	1582.4	1655.6	1858.1	2133.3	2241.7
152.5°	1615.9	1684.5	1855.7	2089.7	2179.3
155°	1669.3	1725.0	1852.1	2036.4	2100.8
157.5°	1718.4	1761.2	1852.7	1997.5	2041.5
160°	1747.2	1785.3	1855.1	1975.7	2007.9
162.5°	1771.2	1804.6	1857.5	1956.4	1981.6
165°	1807.1	1830.6	1861.1	1933.3	1948.0
167.5°	1834.7	1848.8	1864.1	1919.3	1924.0
170°	1849.1	1860.8	1864.1	1912.0	1912.0
172.5°	1861.1	1868.1	1864.1	1902.4	1900.0
175°	1873.1	1876.0	1864.1	1890.9	1885.1
177.5°	1877.9	1875.5	1863.5	1880.2	1875.5
180°	1873.1	1873.1	1873.1	1873.1	1873.1

(END OF REPORT)