

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: P563617

Luminaire Tested: **SQ4-PP3-100U-100D-840-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P563617  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G2-2103-172-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/30/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-PP3-100U-100D-840-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE PRISM CONTINUOUS LENS.  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

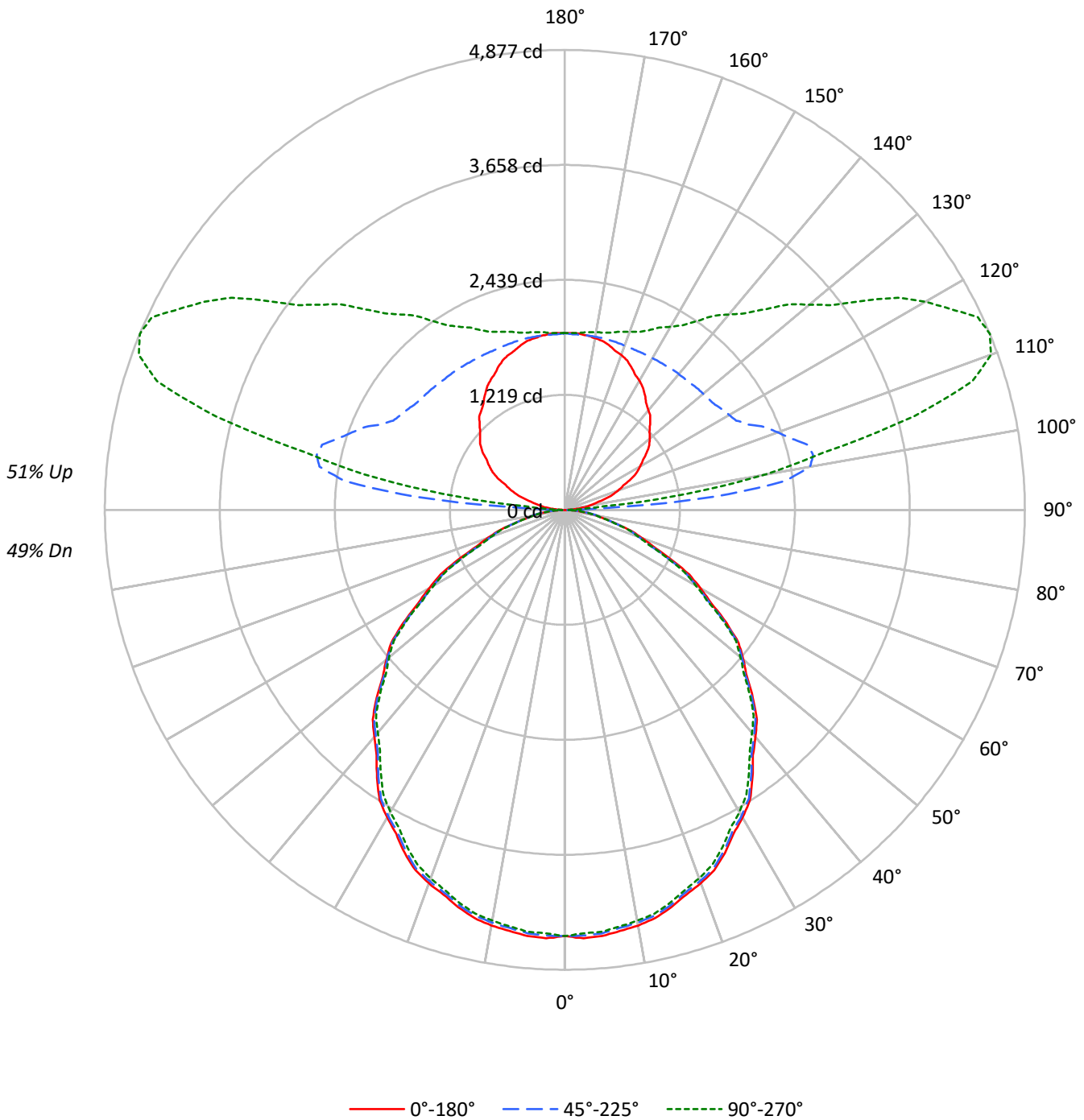
Lumens per Lamp: N/A  
Luminaire Lumens: 23741.8 lumens  
Efficiency: N/A  
Efficacy: 130.3 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.22 / 1.33  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: General Diffuse

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	90	86	90	86	83	80	73	70	68	60	59	57	49	48	47	41
2	89	82	76	71	82	76	70	66	64	60	57	53	50	48	43	41	40	35
3	81	72	65	59	75	67	60	55	57	52	48	47	44	41	38	36	34	30
4	74	64	56	50	68	59	52	47	50	45	41	42	38	35	34	32	29	26
5	68	57	49	43	63	53	46	40	45	40	35	38	34	30	31	28	26	22
6	63	51	43	37	58	47	40	35	41	35	31	34	30	27	28	25	23	20
7	58	46	38	33	54	43	36	31	37	31	27	31	27	24	26	22	20	17
8	54	42	34	29	50	39	32	27	34	28	24	28	24	21	24	20	18	16
9	50	38	31	26	46	36	29	24	31	25	22	26	22	19	22	19	16	14
10	47	35	28	23	43	33	26	22	28	23	19	24	20	17	20	17	15	13

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

	0°	45°	90°
0°	13900	13900	13900
5°	14002	13916	13867
10°	13978	13879	13817
15°	13886	13810	13734
20°	13793	13716	13612
25°	13630	13535	13401
30°	13377	13307	13138
35°	13027	12938	12775
40°	12611	12531	12388
45°	12266	12180	12060
50°	11826	11750	11636
55°	11214	11065	10980
60°	10208	9916	9868
65°	8994	8619	8590
70°	7764	7444	7444
75°	6684	6590	6495
80°	5892	5963	5823
85°	4612	5032	5032



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	427.4	1.8
10°-20°	1220.3	5.1
20°-30°	1827.8	7.7
30°-40°	2144.0	9.0
40°-50°	2150.7	9.1
50°-60°	1834.7	7.7
60°-70°	1196.5	5.0
70°-80°	600.3	2.5
80°-90°	170.0	0.7
90°-100°	877.2	3.7
100°-110°	2421.6	10.2
110°-120°	2497.4	10.5
120°-130°	2006.9	8.5
130°-140°	1577.2	6.6
140°-150°	1209.7	5.1
150°-160°	869.4	3.7
160°-170°	531.7	2.2
170°-180°	179.2	0.8
0°-30°	3475.5	14.6
0°-40°	5619.5	23.7
0°-60°	9604.8	40.5
0°-90°	11571.6	48.7
90°-120°	5796.2	24.4
90°-150°	10589.9	44.6
90°-180°	12170.0	51.3
0°-180°	23741.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4520	4520	4520	4520	4520	
5°	4536	4493	4508	4492	4492	431
15°	4361	4319	4337	4321	4314	1230
25°	4017	3970	3989	3953	3949	1847
35°	3470	3435	3446	3406	3403	2168
45°	2820	2801	2800	2773	2773	2172
55°	2092	2084	2064	2052	2048	1859
65°	1236	1213	1184	1176	1180	1233
75°	562	562	555	550	547	610
85°	131	142	143	143	143	154
90°	6	12	24	27	30	14
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°	4519.6	4519.6	4519.6	4519.6	4519.6
2.5°	4548.1	4511.0	4519.6	4512.9	4494.3
5°	4535.5	4492.9	4507.7	4491.9	4491.9
7.5°	4504.6	4458.1	4472.9	4457.0	4456.3
10°	4476.1	4429.6	4444.4	4428.4	4424.6
12.5°	4434.9	4388.4	4406.3	4387.3	4386.5
15°	4361.2	4318.6	4337.4	4321.4	4313.7
17.5°	4278.0	4231.5	4254.2	4232.0	4228.9
20°	4214.6	4168.1	4190.9	4159.2	4159.2
22.5°	4138.6	4092.1	4118.0	4076.8	4076.8
25°	4016.6	3970.1	3988.8	3953.1	3949.2
27.5°	3871.6	3825.9	3845.4	3805.0	3804.3
30°	3767.0	3724.4	3747.2	3703.6	3699.7
32.5°	3652.9	3613.4	3630.0	3586.3	3582.4
35°	3469.9	3435.1	3446.2	3406.5	3402.6
37.5°	3277.4	3241.8	3254.4	3220.3	3218.8
40°	3141.2	3117.9	3121.4	3093.5	3085.7
42.5°	3014.4	2988.1	2991.4	2963.7	2962.1
45°	2820.3	2800.9	2800.5	2772.8	2772.8
47.5°	2614.3	2599.6	2595.3	2572.3	2571.6
50°	2471.7	2460.1	2455.9	2436.0	2432.1
52.5°	2322.8	2317.4	2303.8	2287.1	2286.4
55°	2091.5	2083.7	2063.7	2051.8	2047.9
57.5°	1840.3	1824.8	1802.3	1784.9	1788.0
60°	1659.7	1644.2	1612.2	1604.3	1604.3
62.5°	1485.4	1466.8	1434.7	1423.8	1430.0
65°	1235.9	1212.6	1184.4	1176.5	1180.4
67.5°	1009.3	988.4	957.8	957.7	954.6
70°	863.5	851.9	827.9	827.9	827.9
72.5°	733.6	728.2	710.6	710.6	707.5
75°	562.5	562.5	554.6	550.5	546.6
77.5°	421.5	423.0	419.1	415.0	408.0
80°	332.7	340.5	336.7	332.6	328.8
82.5°	250.3	258.1	257.5	250.3	249.6
85°	130.7	142.3	142.6	142.6	142.6
87.5°	36.1	49.6	55.5	56.2	59.9
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)