

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: P564289

Luminaire Tested: **SQ4-PR1-100U-100D-840-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P564289  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G2-2106-289-4)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/30/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-PR1-100U-100D-840-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

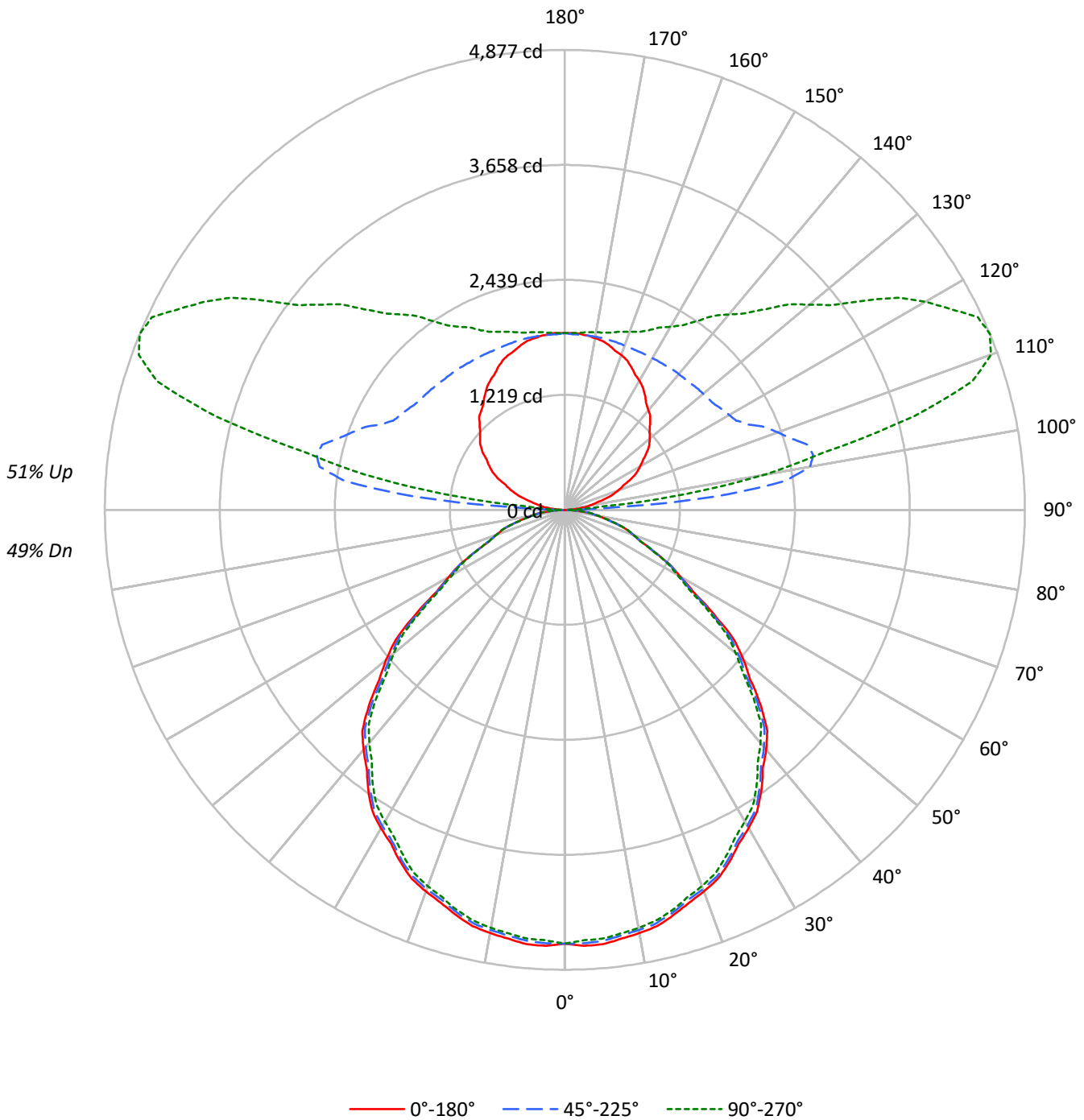
Lumens per Lamp: N/A  
Luminaire Lumens: 23673.4 lumens  
Efficiency: N/A  
Efficacy: 129.9 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: General Diffuse

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				49				
1	98	94	90	86	90	86	83	80	73	70	68	60	59	57	49	48	47				41					
2	89	82	76	71	82	76	71	66	64	60	57	53	51	48	43	42	40				35					
3	82	72	65	59	75	67	61	56	57	52	48	47	44	41	39	36	34				30					
4	75	64	56	50	69	59	53	47	51	45	41	42	39	35	35	32	30				26					
5	69	57	49	43	63	53	46	41	45	40	36	38	34	31	31	28	26				23					
6	63	51	43	38	58	48	41	36	41	35	31	34	30	27	28	25	23				20					
7	59	46	39	33	54	43	36	31	37	32	28	31	27	24	26	23	20				18					
8	54	42	34	29	50	39	32	28	34	28	25	29	24	21	24	21	18				16					
9	51	38	31	26	47	36	29	25	31	26	22	26	22	19	22	19	17				14					
10	47	35	28	23	44	33	27	22	29	23	20	24	20	17	20	17	15				13					

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

	0°	45°	90°
0°	14147	14147	14147
5°	14274	14164	14091
10°	14229	14130	14056
15°	14166	14078	14002
20°	14095	14004	13900
25°	13996	13902	13740
30°	13845	13746	13549
35°	13640	13521	13328
40°	13329	13186	12948
45°	12786	12562	12304
50°	11829	11544	11317
55°	10325	10091	9878
60°	8700	8627	8456
65°	7525	7554	7496
70°	6911	6947	6947
75°	6638	6638	6685
80°	6245	6316	6245
85°	5032	5593	5593



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	435.0	1.8
10°-20°	1244.6	5.3
20°-30°	1877.2	7.9
30°-40°	2236.7	9.4
40°-50°	2205.2	9.3
50°-60°	1685.3	7.1
60°-70°	1042.9	4.4
70°-80°	592.3	2.5
80°-90°	184.1	0.8
90°-100°	877.2	3.7
100°-110°	2421.6	10.2
110°-120°	2497.4	10.5
120°-130°	2006.9	8.5
130°-140°	1577.2	6.7
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°	3556.7	15.0
0°-40°	5793.4	24.5
0°-60°	9683.9	40.9
0°-90°	11503.2	48.6
90°-120°	5796.2	24.5
90°-150°	10589.9	44.7
90°-180°	12170.0	51.4
0°-180°	23673.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4600	4600	4600	4600	4600	
5°	4624	4573	4588	4572	4564	439
15°	4449	4403	4422	4406	4398	1256
25°	4124	4074	4097	4053	4049	1898
35°	3633	3591	3602	3554	3550	2268
45°	2940	2901	2888	2837	2829	2252
55°	1926	1895	1882	1850	1842	1725
65°	1034	1026	1038	1030	1030	1047
75°	559	559	559	563	563	590
85°	143	150	158	158	158	166
90°	6	12	24	27	30	15
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°	4599.9	4599.9	4599.9	4599.9	4599.9
2.5°	4628.5	4588.2	4599.9	4589.9	4568.2
5°	4623.7	4573.3	4588.0	4572.0	4564.3
7.5°	4588.0	4538.5	4553.2	4537.2	4532.6
10°	4556.3	4509.9	4524.7	4508.6	4500.9
12.5°	4521.5	4471.9	4489.8	4470.6	4462.8
15°	4449.4	4402.9	4421.6	4405.6	4397.9
17.5°	4370.1	4320.5	4339.2	4320.8	4310.7
20°	4306.7	4260.3	4279.0	4251.2	4247.3
22.5°	4237.0	4190.5	4209.3	4172.0	4171.2
25°	4124.5	4074.1	4096.8	4053.1	4049.2
27.5°	3990.6	3944.1	3962.8	3918.4	3913.7
30°	3898.6	3852.2	3870.9	3823.2	3815.4
32.5°	3794.1	3750.7	3766.3	3718.7	3714.0
35°	3633.2	3590.6	3601.5	3553.9	3550.0
37.5°	3450.1	3411.4	3417.7	3365.3	3361.4
40°	3320.2	3281.5	3284.5	3229.0	3225.1
42.5°	3177.6	3138.8	3135.6	3080.0	3076.1
45°	2939.8	2901.1	2888.3	2836.6	2828.9
47.5°	2668.8	2630.1	2606.2	2564.1	2558.7
50°	2472.3	2433.6	2412.9	2377.0	2365.3
52.5°	2259.9	2221.2	2203.7	2170.9	2159.3
55°	1925.6	1894.6	1882.0	1850.1	1842.3
57.5°	1607.8	1586.9	1583.2	1552.3	1549.2
60°	1414.4	1402.8	1402.6	1374.8	1374.8
62.5°	1249.6	1241.1	1247.3	1229.0	1225.9
65°	1034.1	1026.3	1038.1	1030.1	1030.1
67.5°	863.7	863.7	870.9	867.7	867.7
70°	768.6	768.6	772.6	772.6	772.6
72.5°	683.1	680.0	690.2	690.1	687.0
75°	558.6	558.6	558.6	562.6	562.6
77.5°	435.0	435.8	439.0	438.1	435.0
80°	352.6	356.5	356.6	352.6	352.6
82.5°	270.2	274.1	274.2	273.3	270.2
85°	142.6	150.4	158.5	158.5	158.5
87.5°	42.4	56.0	68.2	68.7	66.2
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)