

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: P564265

Luminaire Tested: **SQ4-PR1-100U-075D-840-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P564265  
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-075D-840-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

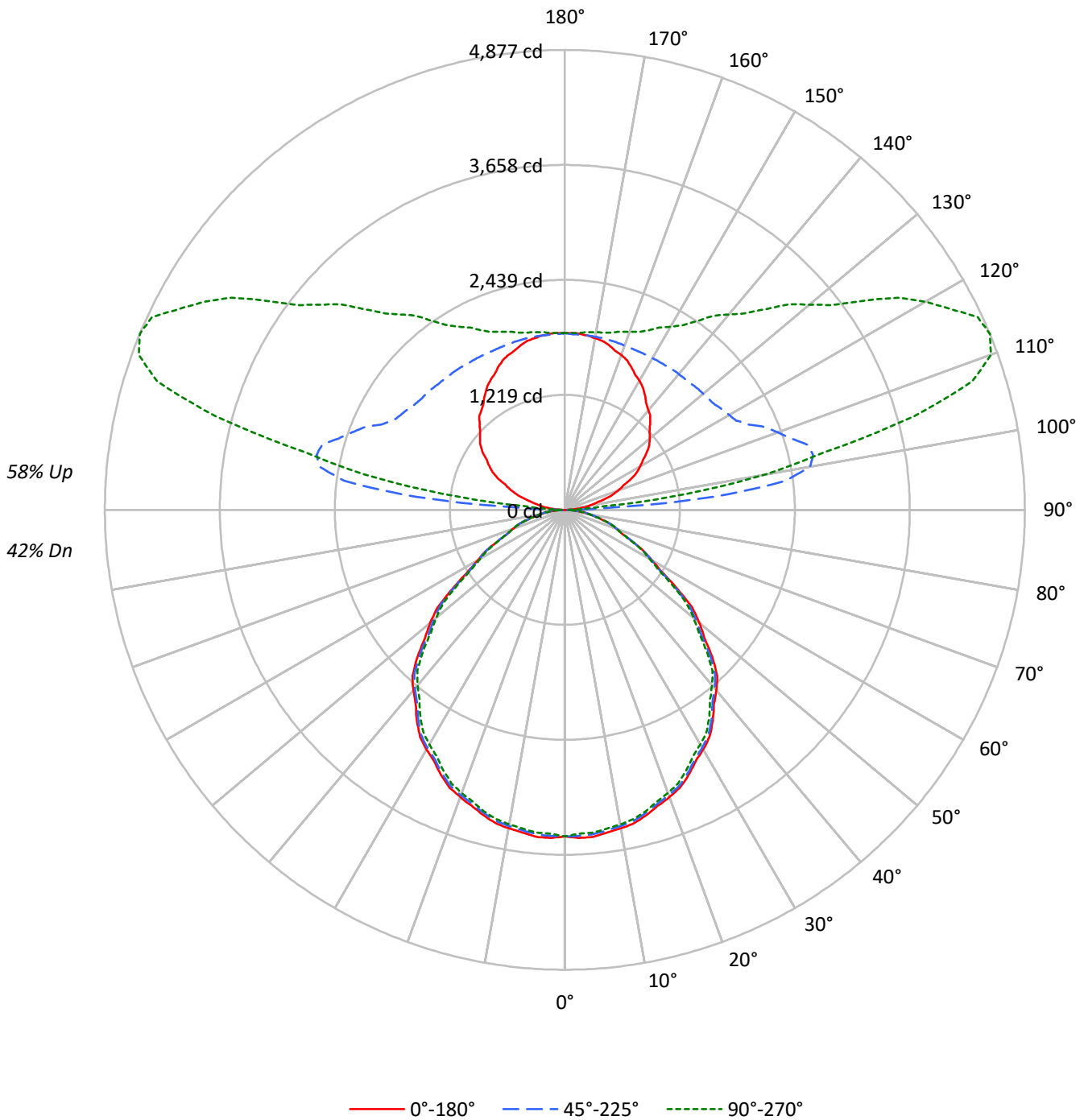
Lumens per Lamp: N/A  
Luminaire Lumens: 20828.6 lumens  
Efficiency: N/A  
Efficacy: 135.8 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 153.4  
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	105	105	105	105	96	96	96	96	79	79	79	63	63	63	48	48	48	42
1	96	92	88	85	88	84	81	78	69	67	65	56	54	53	43	42	41	35
2	88	81	75	70	80	74	69	64	61	57	54	49	47	44	38	37	35	30
3	80	71	64	58	73	65	59	54	54	49	46	44	40	38	34	32	30	26
4	73	63	55	49	67	58	51	46	48	43	39	39	35	33	31	28	26	22
5	67	56	48	42	61	52	45	39	43	38	34	35	31	28	28	25	23	19
6	62	50	42	37	56	46	39	34	39	33	29	32	28	25	25	22	20	17
7	57	45	38	32	52	42	35	30	35	30	26	29	25	22	23	20	18	15
8	53	41	34	28	48	38	31	27	32	27	23	26	22	20	21	18	16	14
9	49	38	30	25	45	35	28	24	29	24	21	24	20	18	19	17	15	12
10	46	34	27	23	42	32	25	21	27	22	19	22	19	16	18	15	13	11

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

	0°	45°	90°
0°	10647	10647	10647
5°	10743	10660	10605
10°	10709	10634	10578
15°	10662	10595	10538
20°	10608	10540	10462
25°	10533	10463	10341
30°	10420	10346	10198
35°	10266	10176	10031
40°	10032	9924	9745
45°	9623	9454	9260
50°	8902	8689	8517
55°	7770	7594	7435
60°	6548	6493	6364
65°	5664	5686	5642
70°	5202	5229	5229
75°	4995	4995	5031
80°	4700	4754	4700
85°	3786	4210	4210



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	327.4	1.6
10°-20°	936.7	4.5
20°-30°	1412.8	6.8
30°-40°	1683.3	8.1
40°-50°	1659.6	8.0
50°-60°	1268.4	6.1
60°-70°	784.9	3.8
70°-80°	445.8	2.1
80°-90°	139.5	0.7
90°-100°	877.2	4.2
100°-110°	2421.6	11.6
110°-120°	2497.4	12.0
120°-130°	2006.9	9.6
130°-140°	1577.2	7.6
140°-150°	1209.7	5.8
150°-160°	869.4	4.2
160°-170°	531.7	2.6
170°-180°	179.2	0.9
0°-30°	2676.9	12.9
0°-40°	4360.2	20.9
0°-60°	7288.2	35.0
0°-90°	8658.4	41.6
90°-120°	5796.2	27.8
90°-150°	10589.9	50.8
90°-180°	12170.0	58.4
0°-180°	20828.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3462	3462	3462	3462	3462	
5°	3480	3442	3453	3441	3435	330
15°	3349	3314	3328	3316	3310	945
25°	3104	3066	3083	3050	3048	1429
35°	2734	2702	2710	2675	2672	1707
45°	2213	2183	2174	2135	2129	1695
55°	1449	1426	1416	1392	1387	1299
65°	778	772	781	775	775	788
75°	420	420	420	423	423	444
85°	107	113	119	119	119	125
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°	3462.0	3462.0	3462.0	3462.0	3462.0
2.5°	3483.4	3453.1	3462.0	3454.4	3438.1
5°	3479.9	3442.0	3453.0	3441.0	3435.1
7.5°	3453.0	3415.7	3426.8	3414.8	3411.3
10°	3429.2	3394.2	3405.3	3393.3	3387.4
12.5°	3402.9	3365.6	3379.1	3364.6	3358.8
15°	3348.7	3313.7	3327.8	3315.7	3309.9
17.5°	3289.0	3251.7	3265.8	3251.9	3244.3
20°	3241.3	3206.3	3220.4	3199.5	3196.6
22.5°	3188.8	3153.8	3168.0	3139.9	3139.3
25°	3104.1	3066.2	3083.3	3050.4	3047.5
27.5°	3003.4	2968.4	2982.5	2949.0	2945.5
30°	2934.2	2899.2	2913.3	2877.4	2871.6
32.5°	2855.5	2822.8	2834.6	2798.7	2795.2
35°	2734.4	2702.3	2710.5	2674.7	2671.8
37.5°	2596.6	2567.5	2572.2	2532.7	2529.8
40°	2498.8	2469.7	2472.0	2430.2	2427.3
42.5°	2391.5	2362.3	2359.9	2318.1	2315.1
45°	2212.6	2183.4	2173.8	2134.9	2129.1
47.5°	2008.6	1979.4	1961.5	1929.8	1925.7
50°	1860.7	1831.5	1816.0	1788.9	1780.2
52.5°	1700.9	1671.7	1658.5	1633.9	1625.1
55°	1449.2	1425.9	1416.4	1392.4	1386.6
57.5°	1210.0	1194.3	1191.6	1168.3	1165.9
60°	1064.5	1055.8	1055.6	1034.7	1034.7
62.5°	940.5	934.1	938.7	924.9	922.6
65°	778.3	772.4	781.3	775.3	775.3
67.5°	650.1	650.1	655.4	653.0	653.0
70°	578.5	578.5	581.5	581.5	581.5
72.5°	514.1	511.7	519.4	519.4	517.1
75°	420.4	420.4	420.4	423.4	423.4
77.5°	327.4	328.0	330.4	329.7	327.4
80°	265.4	268.3	268.4	265.4	265.4
82.5°	203.4	206.3	206.3	205.7	203.4
85°	107.3	113.2	119.3	119.3	119.3
87.5°	32.2	42.7	52.5	53.1	51.3
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)