

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: P563977

Luminaire Tested: **SQ4-PR1-050U-075D-840-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P563977  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, 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-PR1-050U-075D-840-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 14694.0 lumens  
Efficiency: N/A  
Efficacy: 139.1 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

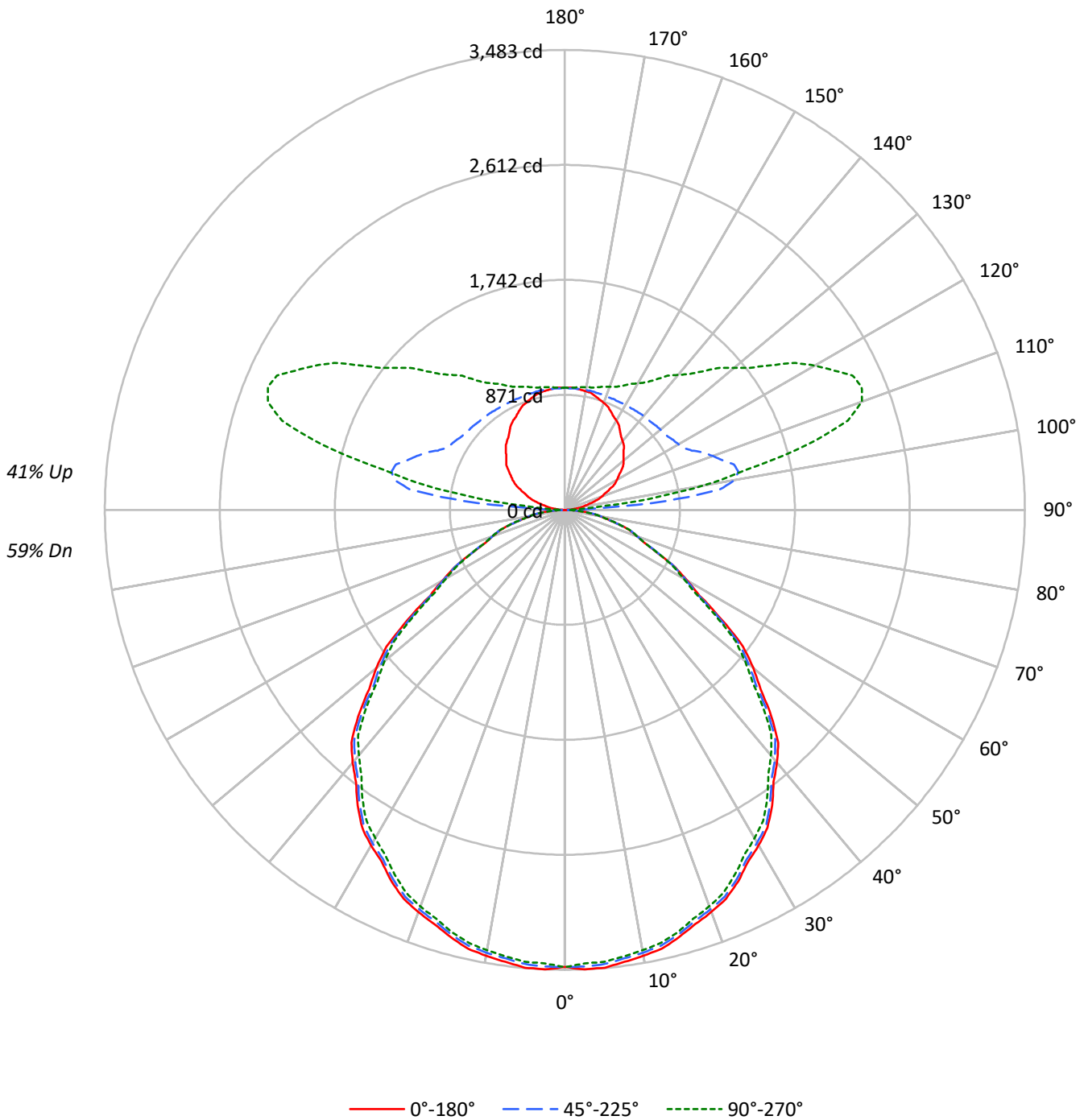
Input Watts (W): 105.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	109	109	109	109	102	102	102	102	88	88	88	76	76	76	64	64	64	59
1	100	96	92	89	93	90	86	83	78	76	73	67	65	64	57	56	55	50
2	91	84	78	73	85	79	73	69	69	65	61	59	56	54	51	49	47	43
3	84	74	67	61	78	70	63	58	61	56	52	53	49	46	45	43	40	37
4	77	66	58	52	71	62	55	49	54	49	44	47	43	40	41	38	35	32
5	71	59	51	45	66	55	48	43	49	43	39	43	38	35	37	33	31	28
6	65	53	45	39	61	50	43	37	44	38	34	39	34	30	33	30	27	24
7	60	48	40	34	56	45	38	33	40	34	30	35	30	27	31	27	24	22
8	56	44	36	30	52	41	34	29	37	31	27	32	28	24	28	24	22	19
9	52	40	32	27	49	38	31	26	34	28	24	30	25	22	26	22	20	17
10	49	37	29	25	46	35	28	24	31	25	22	27	23	20	24	20	18	16

**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	2.2
10°-20°	936.7	6.4
20°-30°	1412.8	9.6
30°-40°	1683.3	11.5
40°-50°	1659.6	11.3
50°-60°	1268.4	8.6
60°-70°	784.9	5.3
70°-80°	445.8	3.0
80°-90°	139.2	0.9
90°-100°	443.8	3.0
100°-110°	1205.5	8.2
110°-120°	1239.5	8.4
120°-130°	991.0	6.7
130°-140°	778.7	5.3
140°-150°	597.1	4.1
150°-160°	429.4	2.9
160°-170°	262.6	1.8
170°-180°	88.5	0.6
0°-30°	2676.9	18.2
0°-40°	4360.2	29.7
0°-60°	7288.2	49.6
0°-90°	8658.1	58.9
90°-120°	2888.8	19.7
90°-150°	5255.5	35.8
90°-180°	6036.0	41.1
0°-180°	14694.0	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°	3	12	21	27	27	9
95°	65	243	773	336	226	69
105°	214	333	1326	2019	1899	227
115°	380	462	1061	2111	2405	375
125°	523	596	960	1618	1908	466
135°	630	700	933	1318	1486	487
145°	728	781	922	1120	1204	457
155°	823	852	916	1005	1034	380
165°	892	903	918	957	960	252
175°	924	927	922	933	930	88
180°	924	924	924	924	924	

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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°	31.6	42.7	51.9	53.0	50.7
90°	3.0	11.7	20.8	26.8	26.8
92.5°	26.8	121.5	211.0	90.6	76.7
95°	65.4	242.7	772.8	336.3	225.9
97.5°	108.2	268.0	1184.8	921.8	647.4
100°	136.7	285.0	1310.9	1328.8	1073.1
102.5°	165.3	301.9	1344.1	1643.4	1417.9
105°	214.0	333.2	1325.7	2018.6	1899.4
107.5°	264.5	369.8	1249.0	2212.3	2245.4
110°	300.2	396.1	1192.0	2250.4	2392.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	331.1	422.4	1134.9	2218.8	2433.2
115°	380.5	461.9	1061.2	2111.2	2404.7
117.5°	426.8	504.7	1014.2	1958.6	2289.4
120°	457.8	533.3	992.8	1856.3	2184.8
122.5°	483.9	559.5	978.5	1753.8	2070.6
125°	523.2	595.8	960.1	1617.7	1908.3
127.5°	558.2	630.3	950.0	1514.5	1763.9
130°	579.6	649.4	945.2	1449.7	1673.5
132.5°	601.0	670.8	940.5	1394.4	1592.6
135°	630.2	699.9	933.4	1317.7	1486.2
137.5°	661.7	725.0	929.8	1249.9	1391.7
140°	680.7	741.7	927.4	1206.7	1334.6
142.5°	699.7	756.1	925.0	1173.0	1279.9
145°	728.3	780.6	921.5	1119.6	1203.8
147.5°	760.4	805.1	918.5	1077.5	1143.8
150°	781.8	819.5	918.5	1053.4	1105.8
152.5°	798.4	831.5	916.1	1031.8	1074.8
155°	823.4	852.4	915.5	1005.3	1034.4
157.5°	847.7	870.4	915.5	987.4	1009.4
160°	862.0	882.4	915.5	975.4	992.8
162.5°	876.3	892.0	917.9	965.7	978.5
165°	891.7	903.4	918.5	957.2	960.1
167.5°	907.8	913.6	921.5	947.1	949.4
170°	912.5	918.4	921.5	942.3	942.3
172.5°	917.3	920.8	921.5	937.5	937.5
175°	924.4	927.3	921.5	933.3	930.4
177.5°	926.8	926.8	919.7	929.1	924.4
180°	924.4	924.4	924.4	924.4	924.4

(END OF REPORT)