

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: P564673

Luminaire Tested: **SQ4-PW1-050U-100D-840-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P564673  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G2-2106-289-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/30/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-PW1-050U-100D-840-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.  
DOWNLIGHT 1000 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: 17480.8 lumens  
Efficiency: N/A  
Efficacy: 130.1 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: Semi-Direct

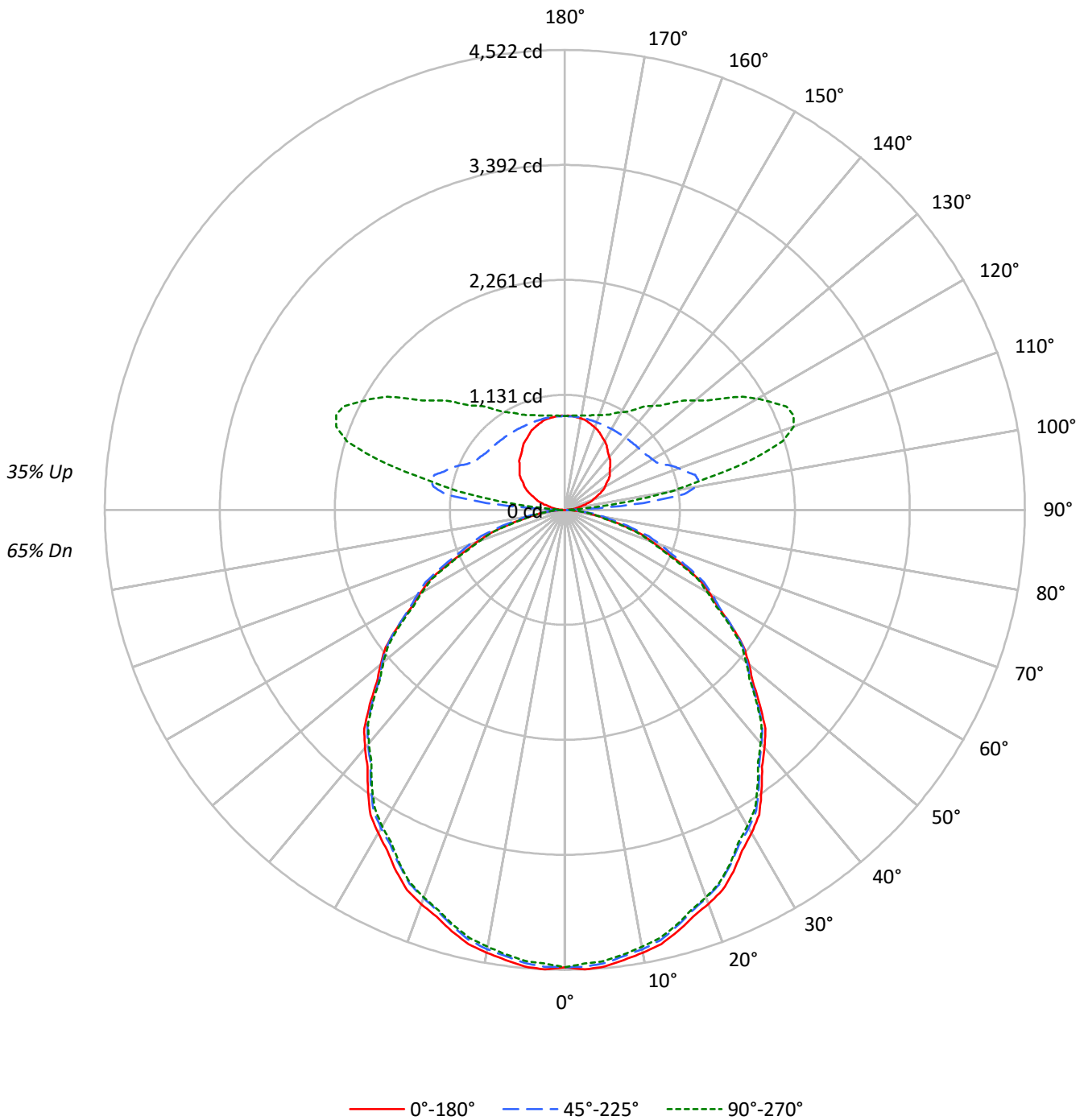
Input Watts (W): 134.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	111	111	111	111	104	104	104	104	92	92	92	81	81	81	70	70	70	65
1	101	97	93	90	95	91	88	85	81	78	76	71	69	68	62	61	60	55
2	92	85	79	73	87	80	75	70	71	67	63	63	59	57	55	53	50	47
3	84	75	67	61	79	71	64	59	63	58	53	56	51	48	49	46	43	40
4	77	66	58	52	72	63	55	50	56	50	45	50	45	41	44	40	37	34
5	71	59	51	45	67	56	48	43	50	44	39	45	40	36	39	36	32	30
6	66	53	45	39	61	50	43	37	45	39	34	40	35	31	36	32	29	26
7	61	48	40	34	57	46	38	33	41	35	30	37	32	28	33	29	25	23
8	56	44	36	30	53	42	34	29	38	31	27	34	29	25	30	26	23	21
9	53	40	32	27	49	38	31	26	34	29	24	31	26	22	28	24	21	19
10	49	37	29	24	46	35	28	24	32	26	22	29	24	20	26	22	19	17

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

	0°	45°	90°
0°	13830	13830	13830
5°	13919	13809	13748
10°	13808	13697	13622
15°	13662	13511	13460
20°	13499	13291	13265
25°	13310	13068	13028
30°	13029	12832	12747
35°	12659	12480	12406
40°	12264	12073	12025
45°	11787	11632	11580
50°	11298	11203	11127
55°	10771	10771	10601
60°	10114	10308	9943
65°	9255	9716	9024
70°	8158	8942	7944
75°	6968	8003	6779
80°	5403	6737	5473
85°	3497	5173	4612



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	423.5	2.4
10°-20°	1195.5	6.8
20°-30°	1773.4	10.1
30°-40°	2075.0	11.9
40°-50°	2065.8	11.8
50°-60°	1783.9	10.2
60°-70°	1284.1	7.3
70°-80°	673.4	3.9
80°-90°	170.5	1.0
90°-100°	443.8	2.5
100°-110°	1205.5	6.9
110°-120°	1239.5	7.1
120°-130°	991.0	5.7
130°-140°	778.7	4.5
140°-150°	597.1	3.4
150°-160°	429.4	2.5
160°-170°	262.6	1.5
170°-180°	88.5	0.5
0°-30°	3392.4	19.4
0°-40°	5467.4	31.3
0°-60°	9317.0	53.3
0°-90°	11444.9	65.5
90°-120°	2888.8	16.5
90°-150°	5255.5	30.1
90°-180°	6036.0	34.5
0°-180°	17480.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4497	4497	4497	4497	4497	
5°	4509	4458	4473	4461	4453	427
15°	4291	4237	4243	4235	4228	1209
25°	3922	3857	3851	3828	3839	1804
35°	3372	3325	3324	3293	3304	2108
45°	2710	2687	2674	2666	2662	2091
55°	2009	2005	2009	1981	1977	1792
65°	1272	1311	1335	1283	1240	1260
75°	586	641	674	629	570	629
85°	99	130	147	138	131	131
90°	3	12	21	27	27	8
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	

TEST NUMBER: P564673

CATALOG NUMBER: SQ4-PW1-050U-100D-840-1D-UNV-STD-W-12

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4496.9	4496.9	4496.9	4496.9	4496.9
2.5°	4522.3	4485.1	4496.9	4486.9	4465.2
5°	4508.8	4458.5	4473.2	4461.1	4453.3
7.5°	4462.9	4416.4	4427.2	4414.4	4409.8
10°	4421.7	4375.2	4386.0	4370.0	4362.2
12.5°	4374.1	4324.5	4335.3	4319.3	4314.7
15°	4290.9	4236.7	4243.4	4235.3	4227.5
17.5°	4194.2	4139.2	4140.3	4127.6	4126.1
20°	4124.5	4066.4	4061.1	4045.4	4053.2
22.5°	4048.4	3987.2	3981.9	3959.9	3970.8
25°	3922.4	3856.6	3851.1	3827.6	3839.2
27.5°	3776.6	3711.5	3711.7	3678.7	3691.0
30°	3668.9	3606.9	3613.4	3574.1	3589.6
32.5°	3554.8	3499.0	3502.5	3463.2	3478.7
35°	3371.7	3325.2	3324.2	3292.7	3304.4
37.5°	3184.7	3143.6	3137.2	3119.0	3122.1
40°	3054.7	3019.9	3007.2	2995.3	2995.3
42.5°	2918.4	2886.7	2874.1	2865.3	2862.2
45°	2710.0	2686.8	2674.4	2666.4	2662.5
47.5°	2504.0	2482.3	2471.5	2465.9	2462.0
50°	2361.4	2345.9	2341.6	2329.6	2325.7
52.5°	2218.7	2209.5	2205.3	2190.1	2186.3
55°	2008.8	2004.9	2008.8	1980.9	1977.1
57.5°	1790.1	1796.3	1809.1	1771.6	1762.3
60°	1644.3	1659.7	1675.9	1632.0	1616.5
62.5°	1495.3	1520.1	1542.8	1492.4	1470.7
65°	1271.8	1310.6	1335.2	1282.7	1240.1
67.5°	1056.3	1104.3	1133.9	1077.4	1029.3
70°	907.3	961.5	994.5	937.8	883.5
72.5°	777.4	837.8	864.5	811.0	756.8
75°	586.4	640.6	673.5	628.6	570.5
77.5°	416.0	467.2	494.5	455.3	407.3
80°	305.1	359.3	380.4	347.8	309.0
82.5°	216.3	261.3	275.8	256.1	229.8
85°	99.1	130.0	146.6	138.5	130.7
87.5°	26.0	49.4	64.4	65.6	68.7
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

TEST NUMBER: P564673

CATALOG NUMBER: SQ4-PW1-050U-100D-840-1D-UNV-STD-W-12

**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)