

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: P564589

Luminaire Tested: **SQ4-PW1-025U-100D-940-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P564589  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-32, 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-PW1-025U-100D-940-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 250 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12324.6 lumens  
Efficiency: N/A  
Efficacy: 99.7 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

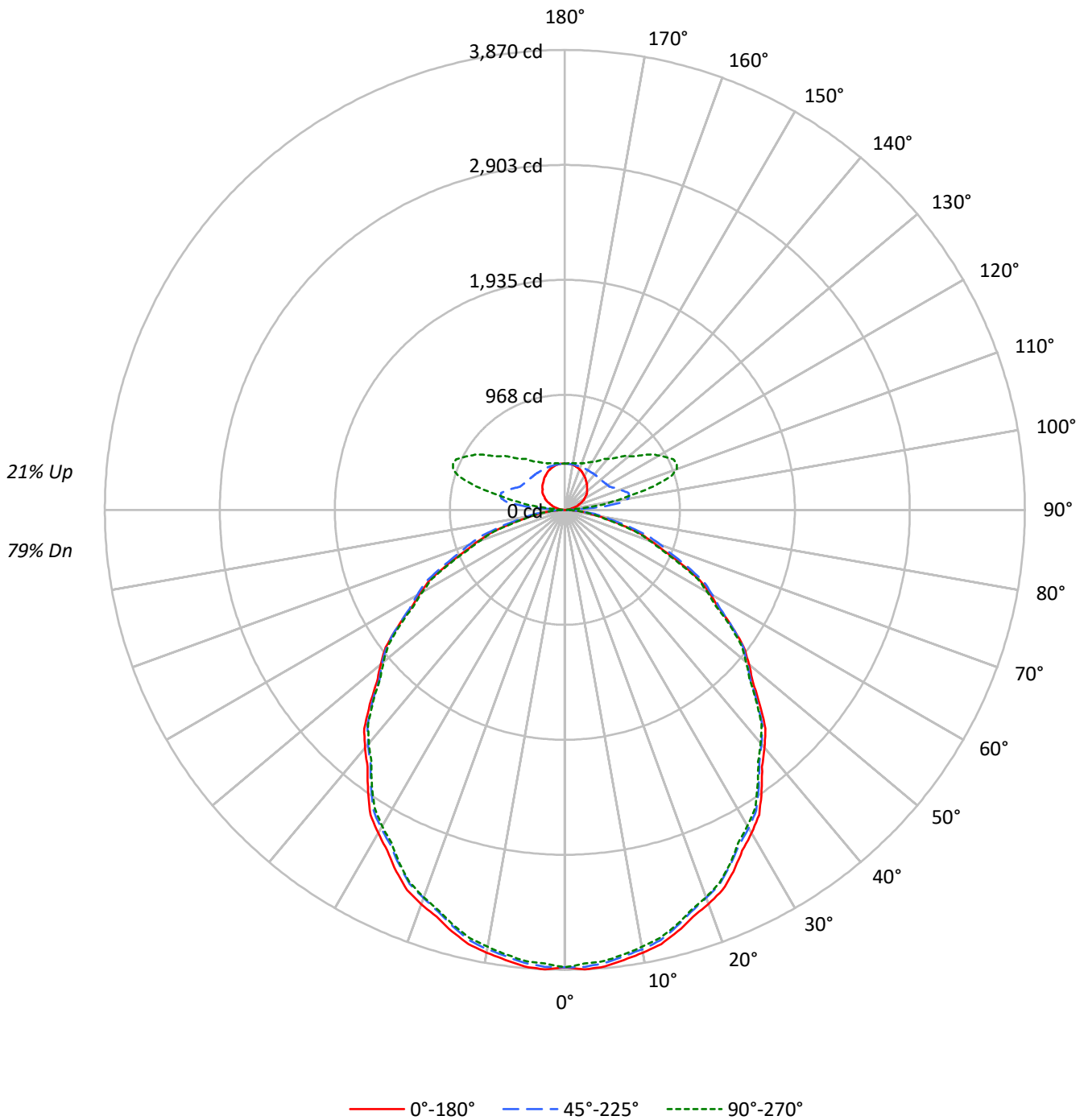
Input Watts (W): 123.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



TEST NUMBER: P564589

CATALOG NUMBER: SQ4-PW1-025U-100D-940-1D-UNV-STD-W-12

### Luminous Intensity Polar Plot





TEST NUMBER: P564589

CATALOG NUMBER: SQ4-PW1-025U-100D-940-1D-UNV-STD-W-12

**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	114	114	114	114	109	109	109	109	100	100	100	91	91	91	83	83	83	79				
1	105	100	96	93	100	96	92	89	88	85	83	81	78	76	74	72	71	67				
2	95	88	81	76	91	84	78	73	77	73	69	71	67	64	65	62	60	57				
3	87	77	70	63	83	74	67	62	68	63	58	63	58	54	58	54	51	48				
4	80	69	60	54	76	66	58	52	61	55	50	56	51	47	52	48	44	41				
5	73	61	53	46	70	59	51	45	55	48	43	50	45	41	47	42	38	36				
6	68	55	47	41	65	53	45	40	49	43	38	46	40	36	42	38	34	32				
7	63	50	42	36	60	48	40	35	45	38	33	42	36	32	39	34	30	28				
8	58	46	37	32	56	44	36	31	41	34	30	38	33	28	36	31	27	25				
9	55	42	34	29	52	40	33	28	38	31	27	35	30	26	33	28	25	23				
10	51	38	31	26	49	37	30	25	35	29	24	33	27	23	31	26	22	20				

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

	0°	45°	90°
0°	11837	11837	11837
5°	11913	11819	11767
10°	11818	11723	11659
15°	11693	11563	11520
20°	11553	11376	11353
25°	11392	11184	11150
30°	11151	10982	10910
35°	10834	10681	10618
40°	10496	10333	10292
45°	10088	9955	9911
50°	9669	9589	9523
55°	9218	9218	9073
60°	8656	8823	8510
65°	7921	8316	7724
70°	6982	7653	6800
75°	5964	6850	5802
80°	4624	5765	4684
85°	2992	4428	3949



TEST NUMBER: P564589

CATALOG NUMBER: SQ4-PW1-025U-100D-940-1D-UNV-STD-W-12

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	362.4	2.9
10°-20°	1023.2	8.3
20°-30°	1517.8	12.3
30°-40°	1775.9	14.4
40°-50°	1768.0	14.3
50°-60°	1526.8	12.4
60°-70°	1099.0	8.9
70°-80°	576.3	4.7
80°-90°	145.0	1.2
90°-100°	190.3	1.5
100°-110°	500.2	4.1
110°-120°	518.7	4.2
120°-130°	416.0	3.4
130°-140°	326.4	2.6
140°-150°	250.5	2.0
150°-160°	180.4	1.5
160°-170°	110.4	0.9
170°-180°	37.3	0.3
0°-30°	2903.4	23.6
0°-40°	4679.4	38.0
0°-60°	7974.1	64.7
0°-90°	9794.4	79.5
90°-120°	1209.1	9.8
90°-150°	2202.1	17.9
90°-180°	2530.0	20.5
0°-180°	12324.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3849	3849	3849	3849	3849	
5°	3859	3816	3828	3818	3812	366
15°	3672	3626	3632	3625	3618	1035
25°	3357	3301	3296	3276	3286	1544
35°	2886	2846	2845	2818	2828	1804
45°	2319	2300	2289	2282	2279	1790
55°	1719	1716	1719	1695	1692	1534
65°	1088	1122	1143	1098	1061	1079
75°	502	548	576	538	488	538
85°	85	111	126	118	112	112
90°	2	7	20	10	10	5
95°	25	98	328	169	115	28
105°	90	137	553	840	783	95
115°	160	194	443	884	1008	158
125°	223	250	403	681	803	198
135°	265	292	390	550	623	205
145°	308	327	385	469	506	193
155°	348	358	385	423	435	160
165°	375	380	385	400	405	106
175°	390	390	388	393	393	37
180°	390	390	390	390	390	

TEST NUMBER: P564589

CATALOG NUMBER: SQ4-PW1-025U-100D-940-1D-UNV-STD-W-12

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3848.8	3848.8	3848.8	3848.8	3848.8
2.5°	3870.5	3838.7	3848.8	3840.2	3821.7
5°	3859.0	3815.8	3828.4	3818.1	3811.5
7.5°	3819.6	3779.8	3789.1	3778.2	3774.2
10°	3784.4	3744.6	3753.8	3740.1	3733.5
12.5°	3743.7	3701.2	3710.4	3696.8	3692.8
15°	3672.4	3626.0	3631.8	3624.8	3618.2
17.5°	3589.7	3542.6	3543.6	3532.7	3531.4
20°	3530.0	3480.3	3475.8	3462.4	3469.0
22.5°	3464.9	3412.5	3408.0	3389.2	3398.5
25°	3357.1	3300.7	3296.0	3275.9	3285.9
27.5°	3232.3	3176.6	3176.7	3148.4	3159.1
30°	3140.1	3087.0	3092.6	3059.0	3072.2
32.5°	3042.4	2994.7	2997.6	2964.0	2977.3
35°	2885.7	2845.9	2845.0	2818.1	2828.1
37.5°	2725.7	2690.5	2685.0	2669.5	2672.1
40°	2614.5	2584.6	2573.8	2563.6	2563.6
42.5°	2497.8	2470.6	2459.8	2452.3	2449.7
45°	2319.4	2299.5	2288.9	2282.1	2278.7
47.5°	2143.1	2124.5	2115.3	2110.5	2107.2
50°	2021.0	2007.8	2004.1	1993.8	1990.5
52.5°	1899.0	1891.0	1887.4	1874.5	1871.2
55°	1719.2	1715.9	1719.2	1695.4	1692.1
57.5°	1532.1	1537.4	1548.3	1516.3	1508.3
60°	1407.3	1420.5	1434.4	1396.8	1383.5
62.5°	1279.8	1301.0	1320.5	1277.3	1258.7
65°	1088.5	1121.7	1142.8	1097.9	1061.4
67.5°	904.0	945.2	970.5	922.1	881.0
70°	776.5	823.0	851.1	802.6	756.2
72.5°	665.3	717.0	739.9	694.1	647.7
75°	501.9	548.3	576.5	538.0	488.3
77.5°	356.1	399.8	423.2	389.7	348.6
80°	261.1	307.5	325.5	297.7	264.5
82.5°	185.1	223.6	236.0	219.2	196.7
85°	84.8	111.3	125.5	118.5	111.9
87.5°	22.2	41.7	55.5	53.6	56.3
90°	2.5	7.4	20.0	10.0	10.0
92.5°	10.5	50.6	112.1	49.6	32.0
95°	25.0	98.4	327.8	168.9	115.1
97.5°	43.5	108.1	490.5	390.0	287.3
100°	57.6	116.3	540.5	547.8	425.4
102.5°	69.6	124.4	554.5	682.3	577.6
105°	90.1	136.6	553.0	839.5	783.3
107.5°	111.1	154.2	521.5	921.2	934.9
110°	125.1	164.3	495.5	942.2	1001.0

TEST NUMBER: P564589

CATALOG NUMBER: SQ4-PW1-025U-100D-940-1D-UNV-STD-W-12

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	139.1	176.3	471.5	928.9	1019.0
115°	160.2	194.4	442.9	883.7	1008.5
117.5°	180.7	212.0	423.4	820.9	959.4
120°	192.7	222.0	415.4	778.8	913.4
122.5°	204.7	234.1	409.4	736.7	869.3
125°	222.7	249.6	402.9	680.9	803.3
127.5°	237.2	264.6	397.4	636.0	739.2
130°	245.2	274.6	395.4	607.8	703.2
132.5°	253.2	282.6	393.4	583.5	669.1
135°	265.3	292.2	390.4	549.7	623.1
137.5°	277.8	304.2	389.9	524.4	584.6
140°	287.8	312.2	387.9	504.3	560.5
142.5°	295.8	318.3	387.9	490.1	538.5
145°	307.8	327.4	385.4	468.8	505.5
147.5°	319.8	338.9	385.4	451.1	481.5
150°	327.8	344.9	385.4	441.0	465.4
152.5°	335.8	349.0	385.4	432.8	451.4
155°	347.8	357.6	385.4	423.2	435.4
157.5°	356.8	366.1	385.4	414.6	423.4
160°	362.8	370.2	385.4	410.5	415.4
162.5°	368.9	374.2	385.4	406.5	411.4
165°	375.4	380.3	385.4	400.5	405.4
167.5°	381.4	383.8	387.9	397.9	399.9
170°	385.4	387.8	387.9	397.9	397.9
172.5°	387.4	387.9	387.9	395.8	393.9
175°	390.4	390.4	387.9	392.9	392.9
177.5°	390.4	390.4	388.4	392.3	390.4
180°	390.4	390.4	390.4	390.4	390.4

(END OF REPORT)