

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P521924

Luminaire Tested: **SQ4-WB-100U-050D-93050-1D-UNV-STD-W-4 (5000K)**

Issue Date: 5/5/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P521924  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-50,  
Test Lab: INNOVATION CENTER  
Issue Date: 5/5/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-WB-100U-050D-93050-1D-UNV-STD-W-4 (5000K)  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

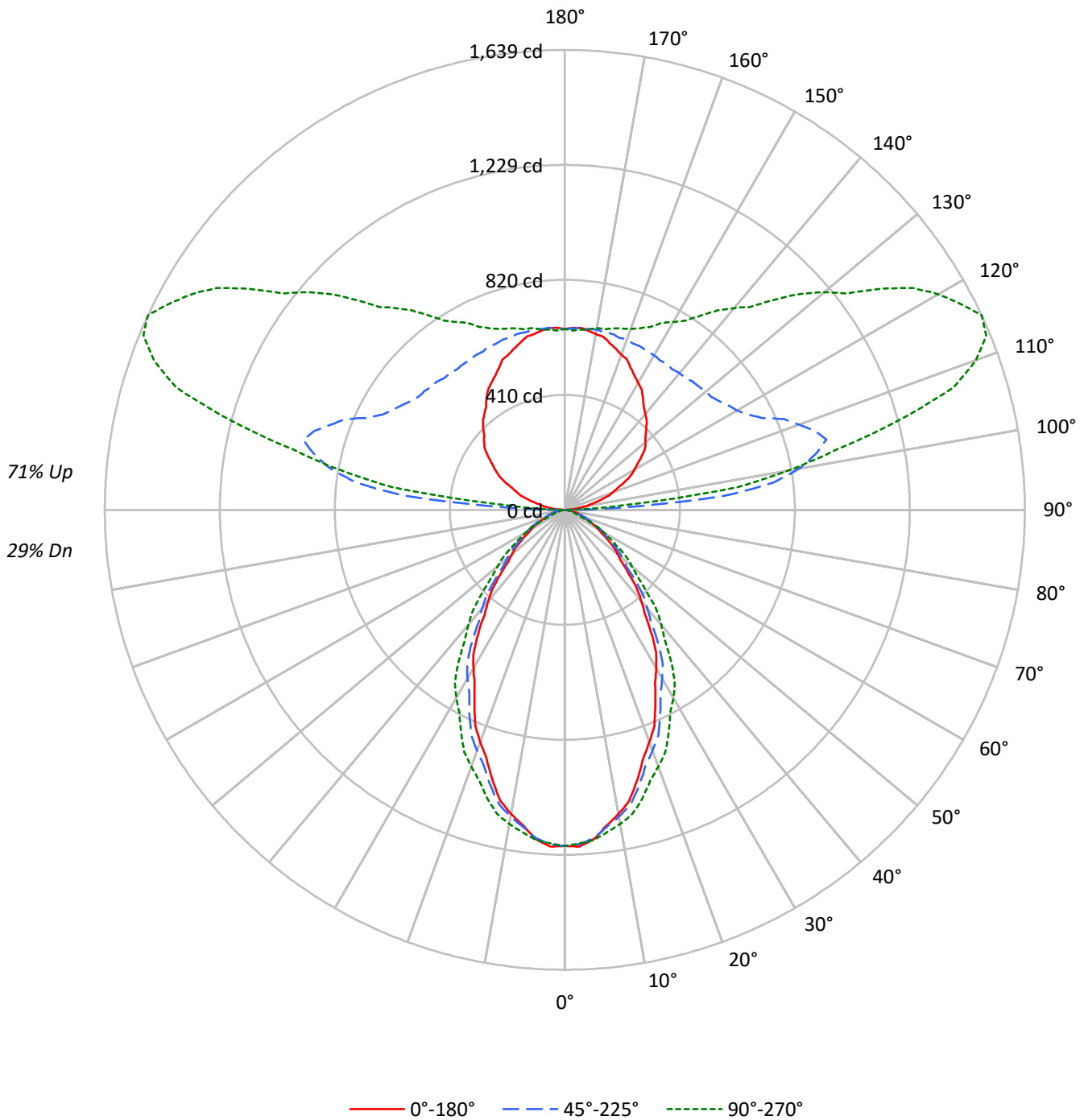
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5918.6 lumens  
Efficiency: N/A  
Efficacy: 111.5 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 53.1  
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: P521924  
CATALOG NUMBER: SQ4-WB-100U-050D-93050-1D-UNV-STD-W-4 (5000K)

### Luminous Intensity Polar Plot





TEST NUMBER: P521924

CATALOG NUMBER: SQ4-WB-100U-050D-93050-1D-UNV-STD-W-4 (5000K)

**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	102	102	102	102	92	92	92	92	72	72	72	54	54	54	37	37	37	29
1	94	90	86	83	84	81	78	75	64	62	60	48	47	46	34	33	33	26
2	86	79	74	69	77	71	67	63	57	54	51	43	41	40	31	30	29	23
3	79	70	64	58	71	63	58	53	51	47	44	39	36	34	28	26	25	20
4	72	63	55	50	65	57	51	46	45	41	38	35	32	30	25	24	22	18
5	67	56	49	43	60	51	44	40	41	36	33	32	29	26	23	21	20	16
6	62	50	43	38	55	46	39	35	37	32	29	29	26	23	21	19	18	15
7	57	46	38	33	51	42	35	31	34	29	26	27	23	21	20	18	16	13
8	53	42	34	29	48	38	32	27	31	26	23	24	21	19	18	16	15	12
9	49	38	31	26	44	35	29	24	28	24	21	23	19	17	17	15	13	11
10	46	35	28	24	42	32	26	22	26	22	19	21	18	16	16	14	12	10

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

	0°	45°	90°
0°	11054	11054	11054
5°	10916	10877	10941
10°	10313	10407	10648
15°	9520	9742	10178
20°	8646	8971	9564
25°	7754	8178	8911
30°	6933	7387	8233
35°	6063	6501	7431
40°	5103	5509	6433
45°	4212	4575	5370
50°	3517	3834	4474
55°	2985	3289	3695
60°	2552	2853	2949
65°	2030	2399	1906
70°	1802	1872	1163
75°	1668	1519	713
80°	1536	1397	616
85°	1387	1281	498



TEST NUMBER: P521924

CATALOG NUMBER: SQ4-WB-100U-050D-93050-1D-UNV-STD-W-4 (5000K)

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	109.9	1.9
10°-20°	285.8	4.8
20°-30°	370.2	6.3
30°-40°	362.6	6.1
40°-50°	277.5	4.7
50°-60°	184.9	3.1
60°-70°	100.9	1.7
70°-80°	42.1	0.7
80°-90°	11.9	0.2
90°-100°	332.2	5.6
100°-110°	802.9	13.6
110°-120°	856.3	14.5
120°-130°	693.6	11.7
130°-140°	537.0	9.1
140°-150°	409.7	6.9
150°-160°	296.5	5.0
160°-170°	182.6	3.1
170°-180°	61.8	1.0
0°-30°	766.0	12.9
0°-40°	1128.5	19.1
0°-60°	1591.0	26.9
0°-90°	1745.9	29.5
90°-120°	1991.5	33.6
90°-150°	3631.7	61.4
90°-180°	4173.0	70.5
0°-180°	5918.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1198	1198	1198	1198	1198	
5°	1179	1167	1174	1177	1181	110
15°	997	993	1020	1048	1066	278
25°	762	764	803	838	875	350
35°	538	541	577	616	660	335
45°	323	329	351	377	412	252
55°	186	193	204	212	230	168
65°	93	101	110	96	87	97
75°	47	47	43	29	20	50
85°	13	13	12	8	5	14
90°	0	0	0	0	0	2
95°	33	166	569	370	259	37
105°	128	222	965	1249	1233	136
115°	235	300	775	1470	1639	232
125°	334	385	673	1169	1373	298
135°	411	459	646	922	1061	317
145°	486	522	633	784	845	304
155°	557	581	642	694	719	257
165°	616	625	650	660	669	174
175°	651	648	651	646	644	62
180°	644	644	644	644	644	



TEST NUMBER: P521924

CATALOG NUMBER: SQ4-WB-100U-050D-93050-1D-UNV-STD-W-4 (5000K)

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1198.1	1198.1	1198.1	1198.1	1198.1
2.5°	1201.0	1190.3	1193.0	1193.0	1189.7
5°	1178.6	1166.8	1174.4	1177.1	1181.3
7.5°	1134.9	1125.9	1139.8	1150.1	1158.4
10°	1100.8	1093.1	1110.8	1125.8	1136.6
12.5°	1061.3	1054.8	1076.7	1096.8	1110.9
15°	996.7	993.1	1019.9	1047.6	1065.6
17.5°	927.7	925.9	956.6	989.0	1012.0
20°	880.6	880.0	913.7	947.4	974.1
22.5°	833.0	834.2	869.5	904.6	935.0
25°	761.7	763.8	803.3	838.3	875.3
27.5°	695.8	696.7	737.6	774.5	814.0
30°	650.8	653.4	693.4	731.7	772.8
32.5°	605.8	608.8	648.0	687.5	729.5
35°	538.3	540.9	577.2	616.1	659.8
37.5°	468.7	472.2	504.5	541.2	584.2
40°	423.7	428.9	457.4	492.0	534.1
42.5°	380.4	386.8	413.2	446.0	484.1
45°	322.8	329.0	350.6	377.2	411.6
47.5°	273.2	280.2	296.9	319.8	349.2
50°	245.0	251.7	267.1	284.0	311.7
52.5°	220.2	226.8	240.6	253.6	277.3
55°	185.6	193.3	204.5	212.3	229.7
57.5°	157.2	164.6	173.5	177.0	187.6
60°	138.3	146.5	154.6	154.2	159.8
62.5°	121.0	128.0	136.1	130.5	130.8
65°	93.0	100.8	109.9	96.0	87.3
67.5°	75.2	76.8	86.2	66.9	56.6
70°	66.8	66.8	69.4	51.8	43.1
72.5°	58.8	58.8	56.4	42.2	33.0
75°	46.8	46.8	42.6	29.2	20.0
77.5°	36.1	35.7	32.6	21.8	14.5
80°	28.9	28.9	26.3	17.2	11.6
82.5°	22.6	22.6	20.4	13.5	8.6
85°	13.1	13.1	12.1	7.8	4.7
87.5°	4.6	4.6	4.2	2.5	2.1
90°	0.0	0.0	0.0	0.0	0.0
92.5°	10.9	89.9	211.8	103.0	69.9
95°	32.8	166.2	569.2	370.1	259.3
97.5°	58.1	184.1	749.6	722.2	620.0
100°	77.8	195.2	849.0	896.2	812.1
102.5°	96.4	205.3	914.5	1041.1	991.2
105°	128.3	221.7	965.0	1248.6	1232.6
107.5°	159.7	241.1	935.3	1414.9	1452.6
110°	181.5	257.6	887.2	1486.7	1557.4

TEST NUMBER: P521924

CATALOG NUMBER: SQ4-WB-100U-050D-93050-1D-UNV-STD-W-4 (5000K)

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	203.4	274.1	844.6	1504.2	1625.1
115°	234.8	300.2	775.3	1469.8	1639.3
117.5°	265.9	327.6	734.6	1390.8	1589.3
120°	286.6	344.0	708.4	1328.7	1536.9
122.5°	308.5	361.6	692.0	1265.3	1470.3
125°	334.4	385.1	672.9	1168.9	1373.1
127.5°	360.1	407.9	659.5	1087.3	1266.7
130°	375.4	422.1	655.2	1030.4	1206.6
132.5°	389.6	438.4	648.6	989.4	1138.9
135°	410.9	458.9	645.6	921.8	1060.6
137.5°	431.1	479.4	636.1	875.9	980.6
140°	446.3	490.4	636.1	843.0	939.1
142.5°	461.6	505.7	630.6	814.3	895.4
145°	485.9	522.0	633.3	783.5	844.9
147.5°	508.6	543.5	631.7	748.1	798.8
150°	522.8	553.5	636.1	732.5	772.6
152.5°	538.1	567.7	635.0	716.0	751.8
155°	556.9	580.9	641.5	694.0	719.3
157.5°	579.6	600.1	640.2	685.5	700.5
160°	588.3	605.6	645.6	674.5	685.2
162.5°	602.5	617.7	643.4	671.2	677.6
165°	615.6	624.9	649.7	659.5	668.8
167.5°	631.7	637.8	648.1	658.7	659.0
170°	636.1	640.1	652.4	651.2	657.9
172.5°	643.7	646.6	649.2	652.1	648.1
175°	651.1	648.4	651.1	645.6	644.3
177.5°	649.7	649.7	647.5	645.2	639.9
180°	644.3	644.3	644.3	644.3	644.3

(END OF REPORT)