

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: P564235

Luminaire Tested: **SQ4-PR1-100U-050D-830-1D-UNV-STD-W-6**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P564235  
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-050D-830-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

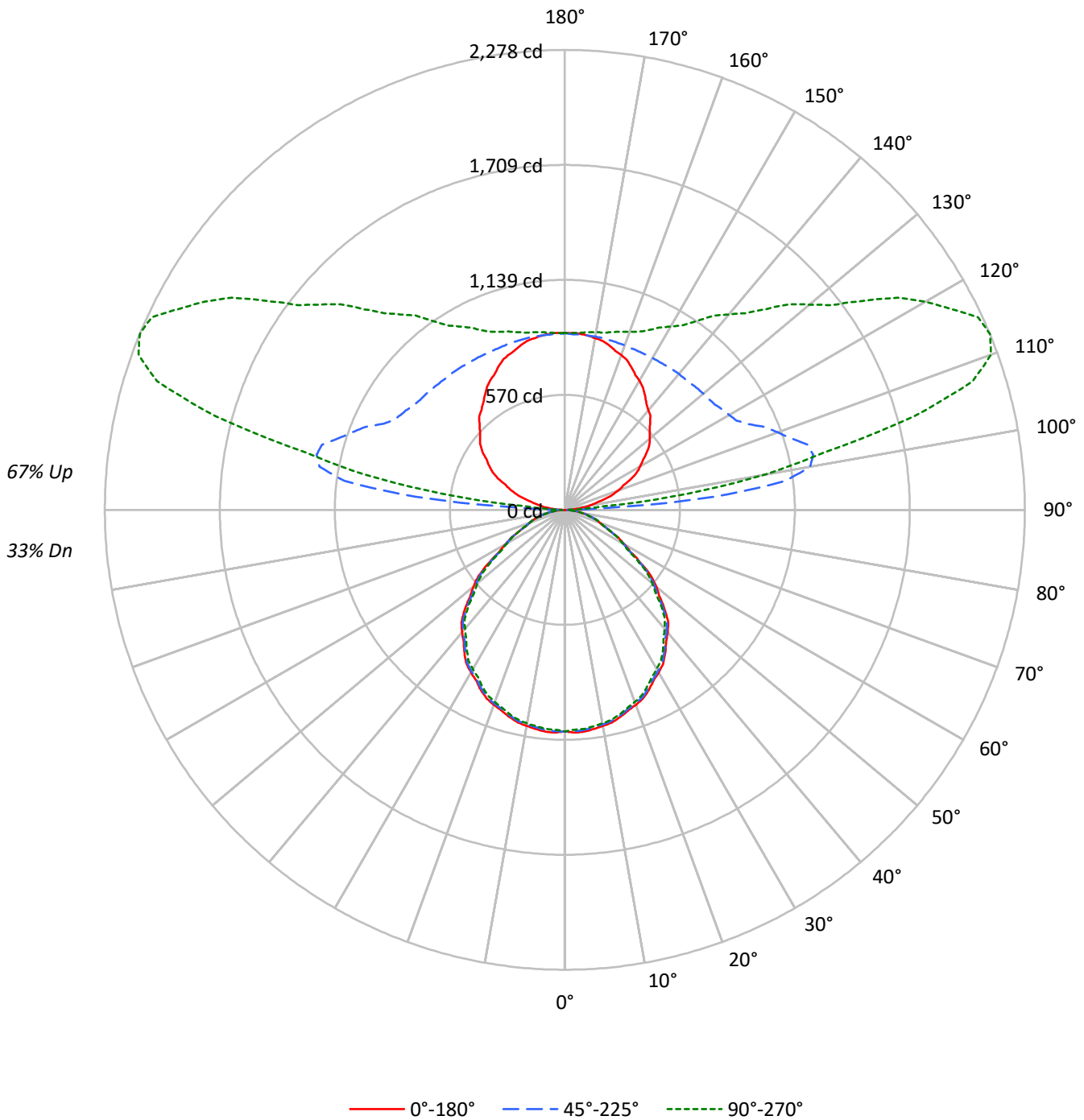
Lumens per Lamp: N/A  
Luminaire Lumens: 8431.9 lumens  
Efficiency: N/A  
Efficacy: 131.1 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 64.3  
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: P564235  
CATALOG NUMBER: SQ4-PR1-100U-050D-830-1D-UNV-STD-W-6

### Luminous Intensity Polar Plot





TEST NUMBER: P564235

CATALOG NUMBER: SQ4-PR1-100U-050D-830-1D-UNV-STD-W-6

**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	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40	33
1	94	90	86	83	85	81	78	75	65	63	61	50	48	47	36	35	34	28
2	86	79	73	68	77	71	66	62	57	53	50	44	42	40	32	30	29	24
3	78	69	62	57	70	63	57	52	50	46	43	39	36	34	28	26	25	20
4	72	61	54	48	64	56	49	44	45	40	36	35	31	29	25	23	22	17
5	66	55	47	41	59	50	43	38	40	35	31	31	28	25	23	21	19	15
6	60	49	41	35	54	44	38	33	36	31	27	28	25	22	21	18	17	13
7	56	44	36	31	50	40	33	29	33	28	24	25	22	19	19	17	15	12
8	52	40	32	27	47	36	30	25	30	25	21	23	20	17	17	15	13	11
9	48	36	29	24	43	33	27	22	27	22	19	21	18	15	16	14	12	10
10	45	33	26	22	40	30	24	20	25	20	17	20	16	14	15	12	11	9

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

	0°	45°	90°
0°	6751	6751	6751
5°	6811	6759	6724
10°	6790	6742	6707
15°	6760	6718	6682
20°	6726	6682	6633
25°	6679	6633	6557
30°	6607	6560	6465
35°	6509	6452	6360
40°	6361	6293	6179
45°	6101	5994	5871
50°	5645	5509	5400
55°	4926	4815	4714
60°	4152	4116	4035
65°	3590	3605	3577
70°	3298	3314	3314
75°	3168	3168	3189
80°	2979	3014	2979
85°	2399	2668	2668



TEST NUMBER: P564235

CATALOG NUMBER: SQ4-PR1-100U-050D-830-1D-UNV-STD-W-6

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	103.8	1.2
10°-20°	296.9	3.5
20°-30°	447.9	5.3
30°-40°	533.6	6.3
40°-50°	526.1	6.2
50°-60°	402.1	4.8
60°-70°	248.8	3.0
70°-80°	141.3	1.7
80°-90°	44.8	0.5
90°-100°	409.9	4.9
100°-110°	1131.5	13.4
110°-120°	1166.9	13.8
120°-130°	937.7	11.1
130°-140°	736.9	8.7
140°-150°	565.2	6.7
150°-160°	406.2	4.8
160°-170°	248.4	2.9
170°-180°	83.8	1.0
0°-30°	848.6	10.1
0°-40°	1382.2	16.4
0°-60°	2310.5	27.4
0°-90°	2745.4	32.6
90°-120°	2708.2	32.1
90°-150°	4948.1	58.7
90°-180°	5686.0	67.4
0°-180°	8431.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1098	1098	1098	1098	1098	
5°	1103	1091	1095	1091	1089	105
15°	1062	1050	1055	1051	1049	300
25°	984	972	977	967	966	453
35°	867	857	859	848	847	541
45°	701	692	689	677	675	537
55°	459	452	449	441	440	412
65°	247	245	248	246	246	250
75°	133	133	133	134	134	141
85°	34	36	38	38	38	40
90°	3	6	11	13	14	6
95°	60	222	744	306	199	64
105°	202	311	1245	1900	1790	215
115°	361	437	1003	1985	2257	355
125°	496	564	909	1538	1805	441
135°	596	661	884	1246	1404	462
145°	692	740	872	1060	1141	433
155°	780	806	865	952	982	359
165°	844	855	870	903	910	238
175°	875	876	871	884	881	83
180°	875	875	875	875	875	

TEST NUMBER: P564235

CATALOG NUMBER: SQ4-PR1-100U-050D-830-1D-UNV-STD-W-6

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1097.5	1097.5	1097.5	1097.5	1097.5
2.5°	1104.3	1094.7	1097.5	1095.1	1089.9
5°	1103.2	1091.2	1094.7	1090.8	1089.0
7.5°	1094.7	1082.8	1086.3	1082.5	1081.4
10°	1087.1	1076.0	1079.5	1075.7	1073.9
12.5°	1078.8	1067.0	1071.2	1066.6	1064.8
15°	1061.6	1050.5	1055.0	1051.1	1049.3
17.5°	1042.7	1030.8	1035.3	1030.9	1028.5
20°	1027.5	1016.5	1020.9	1014.3	1013.4
22.5°	1010.9	999.8	1004.3	995.4	995.2
25°	984.1	972.0	977.4	967.0	966.1
27.5°	952.1	941.0	945.5	934.9	933.8
30°	930.2	919.1	923.6	912.2	910.3
32.5°	905.2	894.9	898.6	887.2	886.1
35°	866.8	856.7	859.3	847.9	847.0
37.5°	823.2	813.9	815.4	802.9	802.0
40°	792.2	782.9	783.7	770.4	769.5
42.5°	758.1	748.9	748.1	734.9	733.9
45°	701.4	692.2	689.1	676.8	674.9
47.5°	636.8	627.5	621.8	611.8	610.5
50°	589.9	580.6	575.7	567.1	564.3
52.5°	539.2	530.0	525.8	518.0	515.2
55°	459.4	452.0	449.0	441.4	439.6
57.5°	383.6	378.6	377.7	370.4	369.6
60°	337.5	334.7	334.6	328.0	328.0
62.5°	298.1	296.1	297.6	293.2	292.5
65°	246.7	244.9	247.7	245.8	245.8
67.5°	206.1	206.1	207.8	207.0	207.0
70°	183.4	183.4	184.3	184.3	184.3
72.5°	163.0	162.2	164.7	164.7	163.9
75°	133.3	133.3	133.3	134.2	134.2
77.5°	103.8	104.0	104.7	104.5	103.8
80°	84.1	85.1	85.1	84.1	84.1
82.5°	64.5	65.4	65.4	65.2	64.5
85°	34.0	35.9	37.8	37.8	37.8
87.5°	10.4	13.9	17.4	17.6	17.2
90°	2.8	5.5	11.2	12.6	14.0
92.5°	25.2	104.6	187.1	68.3	53.2
95°	60.2	221.8	743.6	305.6	198.8
97.5°	99.7	248.4	1101.5	848.0	614.2
100°	128.8	264.4	1233.7	1242.4	1009.6
102.5°	156.8	282.5	1259.4	1535.0	1314.3
105°	201.6	311.2	1244.9	1900.5	1789.6
107.5°	249.3	346.7	1175.4	2076.7	2117.2
110°	282.9	370.5	1121.6	2114.6	2246.1

TEST NUMBER: P564235

CATALOG NUMBER: SQ4-PR1-100U-050D-830-1D-UNV-STD-W-6

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	313.1	397.4	1071.2	2084.7	2278.5
115°	361.3	436.6	1002.6	1984.8	2257.3
117.5°	403.3	478.3	957.5	1844.2	2154.2
120°	431.3	505.2	939.6	1749.1	2061.2
122.5°	458.2	528.8	925.0	1660.2	1955.9
125°	495.7	564.2	908.8	1538.0	1805.0
127.5°	527.6	596.1	899.3	1434.6	1664.9
130°	548.9	617.4	894.8	1371.4	1580.9
132.5°	569.1	634.2	890.3	1318.3	1508.1
135°	596.5	660.9	883.6	1245.7	1404.5
137.5°	627.3	685.9	880.2	1184.6	1320.2
140°	644.1	701.6	878.0	1143.9	1263.1
142.5°	663.2	716.3	875.7	1107.8	1212.6
145°	691.7	739.7	872.4	1060.5	1141.2
147.5°	719.2	761.1	869.3	1020.6	1083.3
150°	739.4	773.6	868.2	996.8	1047.4
152.5°	755.0	787.1	867.1	976.4	1018.3
155°	780.0	806.0	865.4	951.5	981.6
157.5°	802.9	822.9	865.7	933.3	953.9
160°	816.4	834.2	866.8	923.1	938.2
162.5°	827.6	843.2	867.9	914.1	925.9
165°	844.4	855.3	869.6	903.3	910.2
167.5°	857.3	863.8	871.0	896.8	899.0
170°	864.0	869.5	871.0	893.4	893.4
172.5°	869.6	872.9	871.0	888.9	887.8
175°	875.2	876.5	871.0	883.5	880.8
177.5°	877.4	876.3	870.7	878.5	876.3
180°	875.2	875.2	875.2	875.2	875.2

(END OF REPORT)