

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: P564931

Luminaire Tested: **SQ4-PW1-100U-075D-830-1D-UNV-STD-W-6**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P564931  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-PW1-100U-075D-830-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

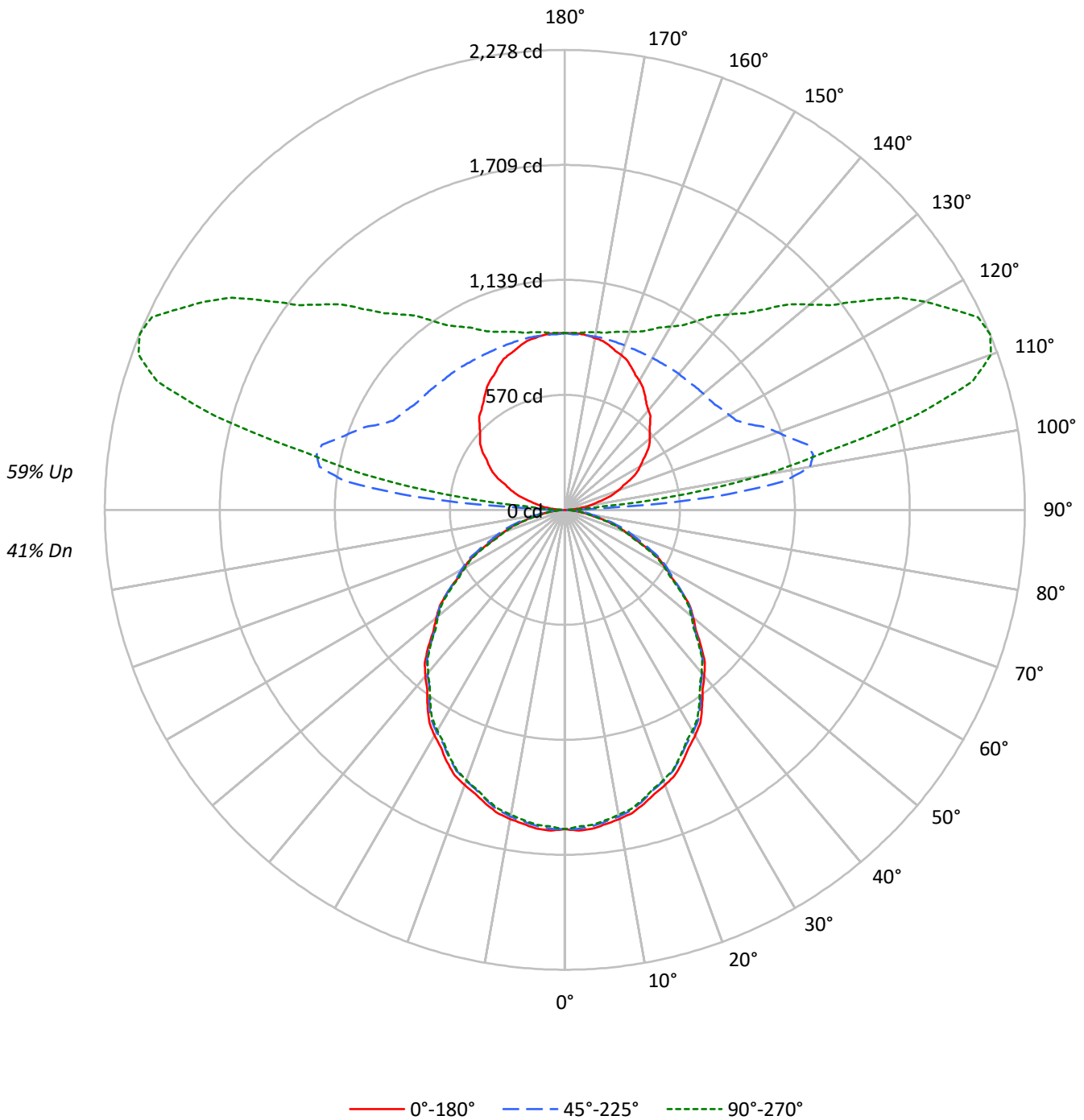
Lumens per Lamp: N/A  
Luminaire Lumens: 9711.7 lumens  
Efficiency: N/A  
Efficacy: 124.5 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31  
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 78  
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	105	105	105	105	96	96	96	96	79	79	79	63	63	63	48	48	48	41
1	96	92	88	84	87	84	81	78	69	67	65	55	54	52	43	42	41	35
2	87	80	74	69	79	73	68	64	60	57	54	49	46	44	38	36	35	30
3	80	70	63	58	72	65	58	53	53	49	45	43	40	37	33	31	29	25
4	73	62	55	49	66	57	50	45	47	42	38	38	35	32	30	27	25	22
5	67	55	48	42	61	51	44	39	42	37	33	34	31	28	27	24	22	19
6	62	50	42	36	56	46	39	34	38	33	29	31	27	24	24	22	19	16
7	57	45	37	32	52	41	34	29	35	29	25	28	24	21	22	19	17	15
8	53	41	33	28	48	37	31	26	31	26	22	26	22	19	20	18	15	13
9	49	37	30	25	45	34	28	23	29	24	20	24	20	17	19	16	14	12
10	46	34	27	22	42	31	25	21	26	21	18	22	18	15	18	15	13	11

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

	0°	45°	90°
0°	9727	9727	9727
5°	9789	9712	9669
10°	9711	9633	9581
15°	9608	9502	9466
20°	9494	9348	9329
25°	9361	9191	9163
30°	9163	9025	8965
35°	8903	8778	8725
40°	8625	8491	8457
45°	8290	8181	8144
50°	7946	7879	7826
55°	7575	7575	7455
60°	7113	7251	6993
65°	6509	6833	6347
70°	5739	6289	5588
75°	4900	5630	4767
80°	3801	4739	3850
85°	2456	3642	3246



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	148.9	1.5
10°-20°	420.4	4.3
20°-30°	623.6	6.4
30°-40°	729.7	7.5
40°-50°	726.4	7.5
50°-60°	627.3	6.5
60°-70°	451.5	4.6
70°-80°	236.8	2.4
80°-90°	60.5	0.6
90°-100°	409.9	4.2
100°-110°	1131.5	11.7
110°-120°	1166.9	12.0
120°-130°	937.7	9.7
130°-140°	736.9	7.6
140°-150°	565.2	5.8
150°-160°	406.2	4.2
160°-170°	248.4	2.6
170°-180°	83.8	0.9
0°-30°	1192.9	12.3
0°-40°	1922.6	19.8
0°-60°	3276.4	33.7
0°-90°	4025.2	41.4
90°-120°	2708.2	27.9
90°-150°	4948.1	50.9
90°-180°	5686.0	58.5
0°-180°	9711.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1581	1581	1581	1581	1581	
5°	1586	1568	1573	1569	1566	150
15°	1509	1490	1492	1489	1487	425
25°	1379	1356	1354	1346	1350	634
35°	1186	1169	1169	1158	1162	741
45°	953	945	940	938	936	735
55°	706	705	706	697	695	630
65°	447	461	470	451	436	443
75°	206	225	237	221	201	221
85°	35	46	52	49	46	46
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	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1581.4	1581.4	1581.4	1581.4	1581.4
2.5°	1590.3	1577.2	1581.4	1577.8	1570.2
5°	1585.5	1567.8	1573.0	1568.8	1566.0
7.5°	1569.4	1553.0	1556.8	1552.3	1550.7
10°	1554.9	1538.5	1542.4	1536.7	1534.0
12.5°	1538.2	1520.7	1524.5	1518.9	1517.3
15°	1508.9	1489.8	1492.2	1489.3	1486.6
17.5°	1474.9	1455.6	1456.0	1451.5	1451.0
20°	1450.4	1430.0	1428.1	1422.6	1425.3
22.5°	1423.6	1402.1	1400.2	1392.5	1396.3
25°	1379.3	1356.2	1354.3	1346.0	1350.1
27.5°	1328.1	1305.2	1305.2	1293.6	1298.0
30°	1290.2	1268.4	1270.7	1256.9	1262.3
32.5°	1250.0	1230.4	1231.7	1217.8	1223.3
35°	1185.7	1169.3	1169.0	1157.9	1162.0
37.5°	1119.9	1105.5	1103.2	1096.8	1097.9
40°	1074.2	1062.0	1057.5	1053.3	1053.3
42.5°	1026.3	1015.1	1010.7	1007.6	1006.5
45°	953.0	944.8	940.5	937.6	936.3
47.5°	880.5	872.9	869.1	867.1	865.8
50°	830.4	824.9	823.4	819.2	817.9
52.5°	780.2	777.0	775.5	770.2	768.8
55°	706.4	705.0	706.4	696.6	695.2
57.5°	629.5	631.7	636.2	623.0	619.7
60°	578.2	583.7	589.4	573.9	568.5
62.5°	525.8	534.5	542.5	524.8	517.2
65°	447.2	460.9	469.5	451.1	436.1
67.5°	371.4	388.3	398.8	378.9	362.0
70°	319.1	338.1	349.7	329.8	310.7
72.5°	273.4	294.6	304.0	285.2	266.1
75°	206.2	225.3	236.9	221.1	200.6
77.5°	146.3	164.3	173.9	160.1	143.2
80°	107.3	126.4	133.8	122.3	108.7
82.5°	76.1	91.9	97.0	90.1	80.8
85°	34.8	45.7	51.6	48.7	46.0
87.5°	9.5	17.7	23.4	23.7	25.1
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

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**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)