

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: P564656

Luminaire Tested: **SQ4-PW1-050U-075D-930-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P564656  
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-075D-930-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

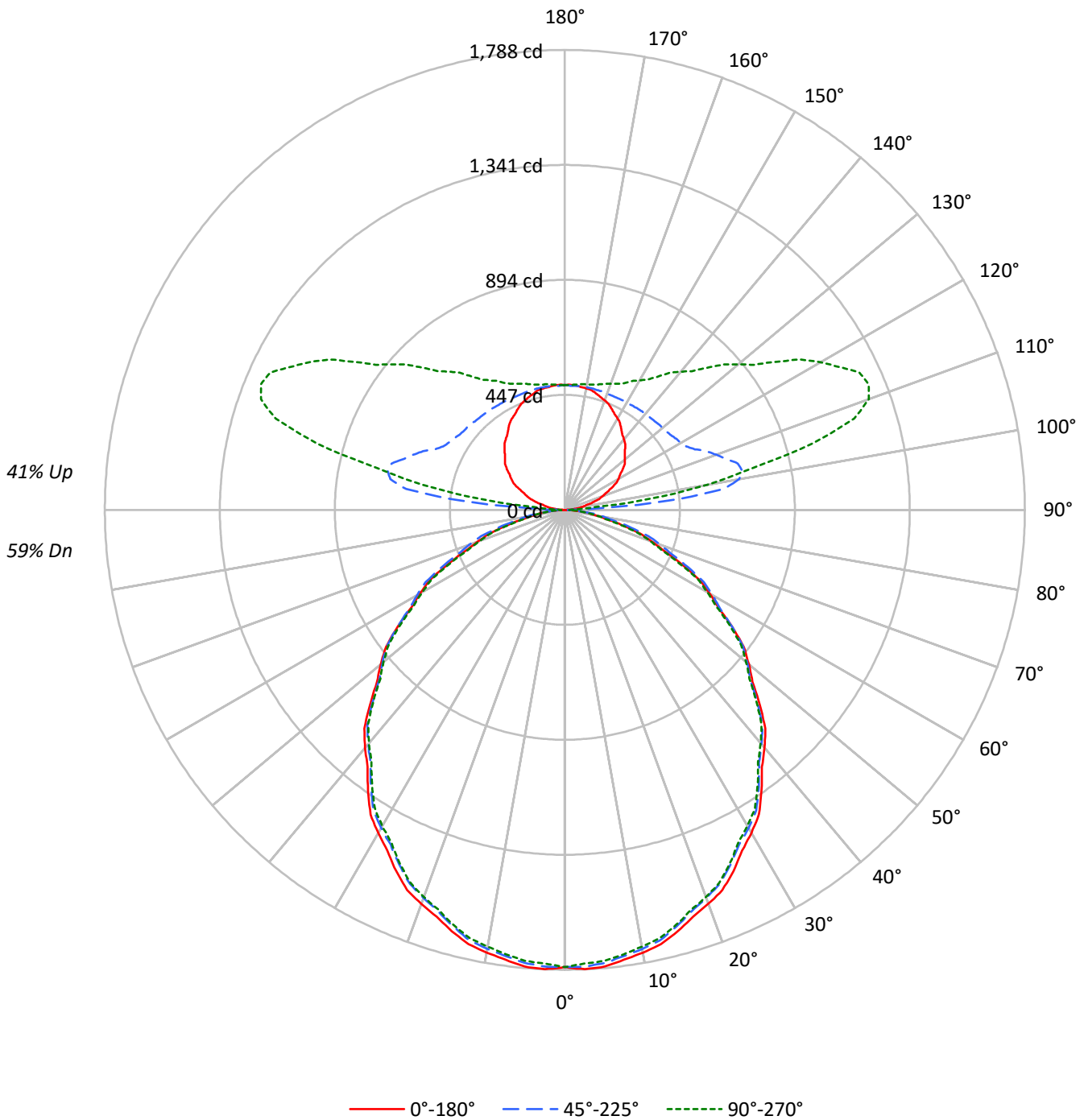
Lumens per Lamp: N/A  
Luminaire Lumens: 7694.6 lumens  
Efficiency: N/A  
Efficacy: 98.5 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 78.1  
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



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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	109	109	109	109	102	102	102	102	88	88	88	76	76	76	64	64	64	59
1	100	96	92	88	93	89	86	83	78	75	73	67	65	63	57	56	55	50
2	91	84	77	72	85	78	73	68	68	64	60	59	56	53	50	48	46	42
3	83	74	66	60	77	69	62	57	60	55	51	52	48	45	45	42	39	36
4	76	65	57	51	71	61	54	48	54	48	43	46	42	39	40	37	34	31
5	70	58	50	44	65	55	47	42	48	42	38	42	37	34	36	32	30	27
6	64	52	44	38	60	49	42	36	43	37	33	38	33	29	33	29	26	23
7	60	47	39	33	55	44	37	32	39	33	29	34	30	26	30	26	23	21
8	55	43	35	30	52	40	33	28	36	30	26	31	27	23	27	24	21	19
9	52	39	32	26	48	37	30	25	33	27	23	29	24	21	25	22	19	17
10	48	36	29	24	45	34	27	23	30	25	21	27	22	19	23	20	17	15

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

	0°	45°	90°
0°	8200	8200	8200
5°	8253	8188	8151
10°	8187	8121	8077
15°	8100	8011	7981
20°	8004	7881	7865
25°	7892	7748	7725
30°	7725	7608	7558
35°	7506	7400	7356
40°	7272	7158	7130
45°	6988	6896	6866
50°	6699	6643	6598
55°	6386	6386	6285
60°	5997	6112	5896
65°	5487	5761	5351
70°	4837	5302	4711
75°	4132	4745	4019
80°	3204	3993	3246
85°	2075	3065	2736



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	167.4	2.2
10°-20°	472.6	6.1
20°-30°	701.0	9.1
30°-40°	820.2	10.7
40°-50°	816.6	10.6
50°-60°	705.1	9.2
60°-70°	507.6	6.6
70°-80°	266.2	3.5
80°-90°	67.8	0.9
90°-100°	233.1	3.0
100°-110°	633.2	8.2
110°-120°	651.0	8.5
120°-130°	520.5	6.8
130°-140°	409.0	5.3
140°-150°	313.6	4.1
150°-160°	225.5	2.9
160°-170°	137.9	1.8
170°-180°	46.5	0.6
0°-30°	1341.0	17.4
0°-40°	2161.2	28.1
0°-60°	3682.9	47.9
0°-90°	4524.5	58.8
90°-120°	1517.2	19.7
90°-150°	2760.3	35.9
90°-180°	3170.0	41.2
0°-180°	7694.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1778	1778	1778	1778	1778	
5°	1782	1762	1768	1763	1760	169
15°	1696	1675	1677	1674	1671	478
25°	1550	1524	1522	1513	1518	713
35°	1333	1314	1314	1302	1306	833
45°	1071	1062	1057	1054	1052	827
55°	794	792	794	783	782	708
65°	503	518	528	507	490	498
75°	232	253	266	248	226	248
85°	39	51	58	55	52	52
90°	2	6	11	14	14	4
95°	34	128	406	177	119	36
105°	112	175	696	1060	998	119
115°	200	243	557	1109	1263	197
125°	275	313	504	850	1002	245
135°	331	368	490	692	781	256
145°	382	410	484	588	632	240
155°	432	448	481	528	543	199
165°	468	474	482	503	504	132
175°	486	487	484	490	489	46
180°	486	486	486	486	486	

TEST NUMBER: P564656

CATALOG NUMBER: SQ4-PW1-050U-075D-930-1D-UNV-STD-W-8

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1777.6	1777.6	1777.6	1777.6	1777.6
2.5°	1787.6	1772.9	1777.6	1773.6	1765.0
5°	1782.3	1762.4	1768.2	1763.4	1760.3
7.5°	1764.1	1745.7	1750.0	1745.0	1743.1
10°	1747.8	1729.4	1733.7	1727.4	1724.3
12.5°	1729.0	1709.4	1713.7	1707.4	1705.5
15°	1696.1	1674.7	1677.3	1674.1	1671.1
17.5°	1657.9	1636.2	1636.6	1631.6	1631.0
20°	1630.4	1607.4	1605.3	1599.1	1602.2
22.5°	1600.3	1576.1	1574.0	1565.3	1569.6
25°	1550.5	1524.5	1522.3	1513.0	1517.6
27.5°	1492.9	1467.1	1467.2	1454.1	1459.0
30°	1450.3	1425.7	1428.3	1412.8	1418.9
32.5°	1405.1	1383.1	1384.5	1369.0	1375.1
35°	1332.8	1314.4	1314.0	1301.6	1306.2
37.5°	1258.9	1242.6	1240.1	1232.9	1234.1
40°	1207.5	1193.7	1188.7	1184.0	1184.0
42.5°	1153.6	1141.1	1136.1	1132.6	1131.4
45°	1071.2	1062.1	1057.1	1054.0	1052.4
47.5°	989.8	981.2	977.0	974.7	973.2
50°	933.4	927.3	925.6	920.9	919.3
52.5°	877.0	873.4	871.7	865.7	864.2
55°	794.0	792.5	794.0	783.0	781.5
57.5°	707.6	710.0	715.1	700.3	696.6
60°	650.0	656.1	662.5	645.1	639.0
62.5°	591.1	600.9	609.9	589.9	581.4
65°	502.7	518.0	527.8	507.0	490.2
67.5°	417.5	436.5	448.2	425.9	406.9
70°	358.6	380.1	393.1	370.7	349.3
72.5°	307.3	331.2	341.7	320.6	299.1
75°	231.8	253.2	266.2	248.5	225.5
77.5°	164.4	184.7	195.5	180.0	161.0
80°	120.6	142.0	150.3	137.5	122.2
82.5°	85.5	103.3	109.0	101.2	90.8
85°	39.2	51.4	57.9	54.7	51.7
87.5°	10.3	19.8	26.0	26.6	27.9
90°	1.6	6.1	10.9	14.1	14.1
92.5°	14.1	63.8	110.8	47.6	40.3
95°	34.3	127.5	405.9	176.7	118.7
97.5°	56.8	140.8	622.3	484.1	340.0
100°	71.8	149.7	688.5	697.9	563.6
102.5°	86.8	158.5	706.0	863.1	744.7
105°	112.4	175.0	696.3	1060.2	997.6
107.5°	138.9	194.2	656.0	1161.9	1179.3
110°	157.7	208.1	626.0	1182.0	1256.8

TEST NUMBER: P564656

CATALOG NUMBER: SQ4-PW1-050U-075D-930-1D-UNV-STD-W-8

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	173.9	221.8	596.1	1165.3	1278.0
115°	199.8	242.6	557.3	1108.8	1263.0
117.5°	224.2	265.1	532.7	1028.7	1202.4
120°	240.4	280.1	521.4	975.0	1147.5
122.5°	254.2	293.8	513.9	921.1	1087.5
125°	274.8	312.9	504.3	849.6	1002.3
127.5°	293.2	331.0	499.0	795.4	926.4
130°	304.4	341.1	496.5	761.4	878.9
132.5°	315.7	352.3	494.0	732.4	836.5
135°	331.0	367.6	490.2	692.1	780.6
137.5°	347.5	380.8	488.3	656.5	730.9
140°	357.5	389.6	487.1	633.8	701.0
142.5°	367.5	397.1	485.8	616.1	672.2
145°	382.5	410.0	484.0	588.0	632.3
147.5°	399.4	422.9	482.4	565.9	600.7
150°	410.6	430.4	482.4	553.3	580.8
152.5°	419.3	436.7	481.2	541.9	564.5
155°	432.4	447.7	480.8	528.0	543.3
157.5°	445.3	457.2	480.8	518.6	530.2
160°	452.7	463.4	480.8	512.3	521.4
162.5°	460.2	468.5	482.1	507.2	513.9
165°	468.4	474.5	482.4	502.7	504.3
167.5°	476.8	479.8	484.0	497.4	498.6
170°	479.3	482.3	484.0	494.9	494.9
172.5°	481.8	483.6	484.0	492.4	492.4
175°	485.5	487.1	484.0	490.2	488.7
177.5°	486.8	486.8	483.0	488.0	485.5
180°	485.5	485.5	485.5	485.5	485.5

(END OF REPORT)