

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: P564628

Luminaire Tested: **SQ4-PW1-050U-050D-840-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564628
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-050D-840-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

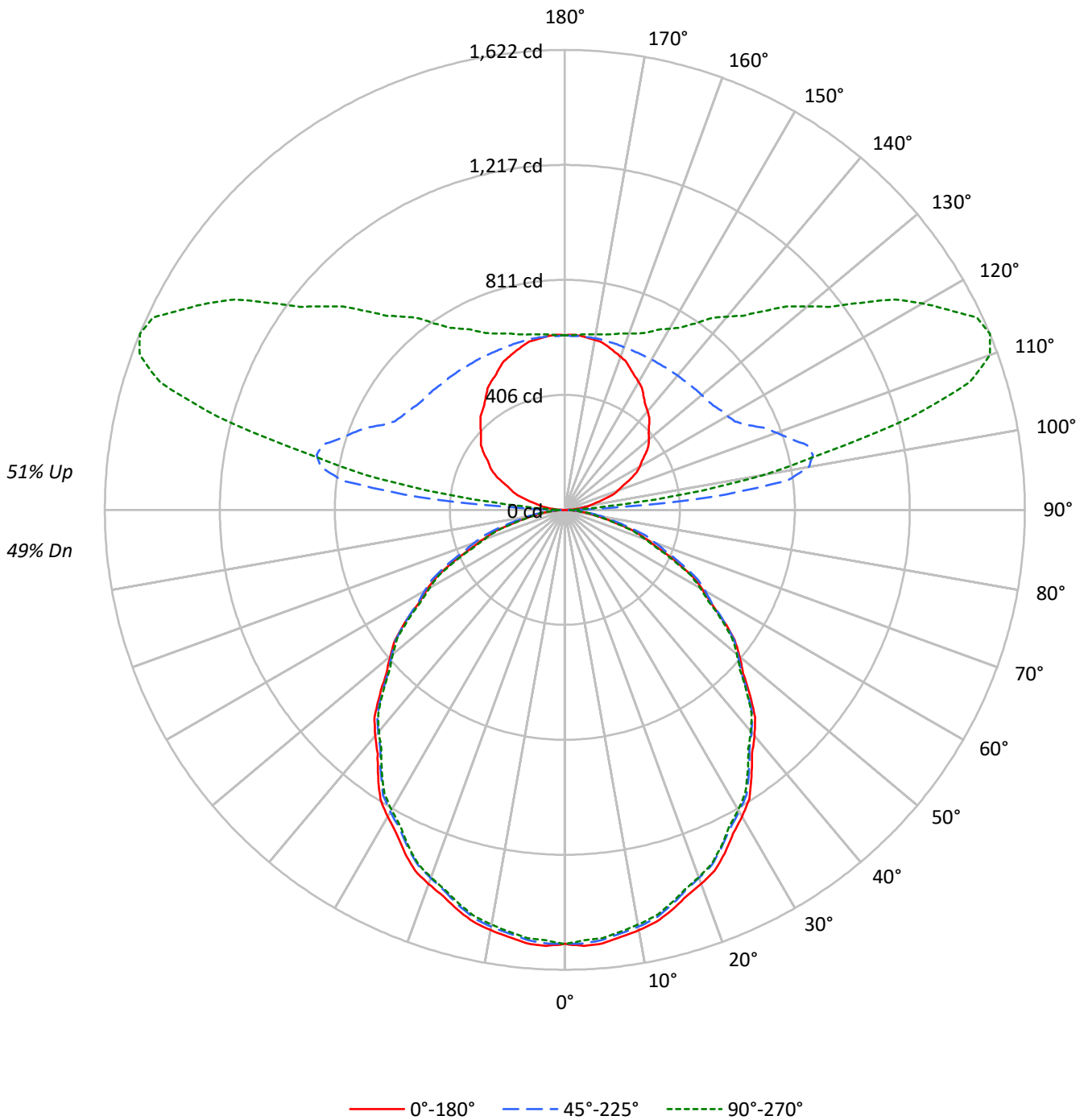
Lumens per Lamp: N/A
Luminaire Lumens: 7921.2 lumens
Efficiency: N/A
Efficacy: 134.5 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 58.9
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: P564628
CATALOG NUMBER: SQ4-PW1-050U-050D-840-1D-UNV-STD-W-8

Luminous Intensity Polar Plot





TEST NUMBER: P564628

CATALOG NUMBER: SQ4-PW1-050U-050D-840-1D-UNV-STD-W-8

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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	55	55	55	49
1	98	93	90	86	90	86	83	80	73	70	68	60	59	57	49	48	47	42
2	89	82	76	70	82	75	70	66	64	60	57	53	50	48	43	41	40	35
3	81	72	65	59	75	66	60	55	56	52	48	47	44	41	38	36	34	30
4	74	64	56	50	68	59	52	47	50	45	41	42	38	35	34	32	29	26
5	68	57	49	43	63	53	45	40	45	39	35	38	33	30	31	28	25	22
6	63	51	43	37	58	47	40	35	40	35	31	34	30	26	28	25	22	19
7	58	46	38	32	53	43	36	31	37	31	27	31	27	23	26	22	20	17
8	54	42	34	29	50	39	32	27	33	28	24	28	24	21	24	20	18	15
9	50	38	31	26	46	35	29	24	31	25	21	26	22	19	22	19	16	14
10	47	35	28	23	43	33	26	22	28	23	19	24	20	17	20	17	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7062	7062	7062
5°	7108	7052	7020
10°	7051	6994	6956
15°	6976	6899	6873
20°	6893	6787	6774
25°	6797	6673	6653
30°	6653	6552	6509
35°	6464	6373	6335
40°	6262	6165	6141
45°	6019	5939	5913
50°	5769	5721	5682
55°	5500	5500	5413
60°	5164	5264	5077
65°	4726	4961	4609
70°	4166	4566	4057
75°	3558	4087	3461
80°	2760	3440	2795
85°	1784	2641	2355



TEST NUMBER: P564628

CATALOG NUMBER: SQ4-PW1-050U-050D-840-1D-UNV-STD-W-8

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.2	1.8
10°-20°	407.0	5.1
20°-30°	603.7	7.6
30°-40°	706.4	8.9
40°-50°	703.2	8.9
50°-60°	607.3	7.7
60°-70°	437.1	5.5
70°-80°	229.2	2.9
80°-90°	59.2	0.7
90°-100°	295.8	3.7
100°-110°	803.7	10.1
110°-120°	826.3	10.4
120°-130°	660.7	8.3
130°-140°	519.1	6.6
140°-150°	398.0	5.0
150°-160°	286.2	3.6
160°-170°	175.1	2.2
170°-180°	59.0	0.7
0°-30°	1154.8	14.6
0°-40°	1861.2	23.5
0°-60°	3171.7	40.0
0°-90°	3897.2	49.2
90°-120°	1925.8	24.3
90°-150°	3503.7	44.2
90°-180°	4024.0	50.8
0°-180°	7921.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1531	1531	1531	1531	1531	
5°	1535	1518	1523	1519	1516	145
15°	1461	1442	1444	1442	1439	412
25°	1335	1313	1311	1303	1307	614
35°	1148	1132	1132	1121	1125	718
45°	923	915	910	908	906	712
55°	684	682	684	674	673	610
65°	433	446	454	437	422	429
75°	200	218	229	214	194	214
85°	34	44	50	47	44	45
90°	2	8	14	18	18	4
95°	44	162	515	224	151	46
105°	143	222	884	1346	1266	152
115°	254	308	707	1407	1603	250
125°	349	397	640	1078	1272	311
135°	420	467	622	878	991	325
145°	486	520	614	746	803	305
155°	549	568	610	670	690	253
165°	594	602	612	638	640	168
175°	616	618	614	622	620	59
180°	616	616	616	616	616	

TEST NUMBER: P564628

CATALOG NUMBER: SQ4-PW1-050U-050D-840-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1530.9	1530.9	1530.9	1530.9	1530.9
2.5°	1539.5	1526.8	1530.9	1527.4	1520.1
5°	1534.9	1517.8	1522.8	1518.7	1516.0
7.5°	1519.3	1503.4	1507.1	1502.8	1501.2
10°	1505.2	1489.4	1493.1	1487.6	1485.0
12.5°	1489.0	1472.2	1475.8	1470.4	1468.8
15°	1460.7	1442.3	1444.5	1441.8	1439.1
17.5°	1427.8	1409.1	1409.5	1405.1	1404.6
20°	1404.1	1384.3	1382.5	1377.2	1379.8
22.5°	1378.2	1357.3	1355.5	1348.0	1351.7
25°	1335.3	1312.9	1311.0	1303.0	1307.0
27.5°	1285.6	1263.5	1263.5	1252.3	1256.5
30°	1249.0	1227.9	1230.1	1216.7	1222.0
32.5°	1210.1	1191.1	1192.3	1178.9	1184.2
35°	1147.8	1132.0	1131.6	1120.9	1124.9
37.5°	1084.1	1070.2	1068.0	1061.8	1062.8
40°	1039.9	1028.0	1023.7	1019.7	1019.7
42.5°	993.5	982.7	978.4	975.4	974.4
45°	922.6	914.6	910.4	907.7	906.4
47.5°	852.4	845.0	841.4	839.4	838.1
50°	803.9	798.6	797.1	793.0	791.7
52.5°	755.3	752.1	750.7	745.6	744.3
55°	683.8	682.5	683.8	674.4	673.0
57.5°	609.4	611.5	615.8	603.1	599.9
60°	559.7	565.0	570.5	555.6	550.3
62.5°	509.0	517.5	525.2	508.0	500.7
65°	433.0	446.1	454.5	436.7	422.2
67.5°	359.6	375.9	386.0	366.8	350.4
70°	308.9	327.3	338.5	319.2	300.8
72.5°	264.6	285.2	294.3	276.1	257.6
75°	199.6	218.1	229.3	214.0	194.2
77.5°	141.6	159.0	168.3	155.0	138.7
80°	103.9	122.3	129.5	118.4	105.2
82.5°	73.6	88.9	93.9	87.2	78.2
85°	33.7	44.3	49.9	47.1	44.5
87.5°	9.0	17.6	23.3	24.1	25.1
90°	2.0	7.8	13.9	17.8	17.8
92.5°	17.8	81.0	140.7	60.4	51.1
95°	43.6	161.8	515.2	224.2	150.6
97.5°	72.1	178.7	789.9	614.5	431.6
100°	91.2	190.0	873.9	885.9	715.4
102.5°	110.2	201.2	896.1	1095.6	945.2
105°	142.7	222.1	883.8	1345.7	1266.3
107.5°	176.4	246.5	832.7	1474.8	1496.9
110°	200.1	264.1	794.6	1500.3	1595.2



TEST NUMBER: P564628

CATALOG NUMBER: SQ4-PW1-050U-050D-840-1D-UNV-STD-W-8

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	220.8	281.6	756.6	1479.2	1622.2
115°	253.6	307.9	707.4	1407.4	1603.1
117.5°	284.6	336.5	676.1	1305.8	1526.3
120°	305.2	355.5	661.9	1237.6	1456.5
122.5°	322.6	373.0	652.4	1169.2	1380.4
125°	348.8	397.2	640.1	1078.4	1272.2
127.5°	372.2	420.2	633.3	1009.7	1175.9
130°	386.4	432.9	630.2	966.5	1115.7
132.5°	400.7	447.2	627.0	929.6	1061.8
135°	420.1	466.6	622.2	878.4	990.8
137.5°	441.1	483.4	619.9	833.2	927.8
140°	453.8	494.5	618.3	804.5	889.8
142.5°	466.5	504.1	616.7	782.0	853.3
145°	485.5	520.4	614.3	746.4	802.6
147.5°	506.9	536.7	612.3	718.4	762.5
150°	521.2	546.4	612.3	702.3	737.2
152.5°	532.3	554.4	610.7	687.9	716.6
155°	548.9	568.3	610.3	670.2	689.6
157.5°	565.2	580.3	610.3	658.2	673.0
160°	574.7	588.2	610.3	650.2	661.9
162.5°	584.2	594.6	611.9	643.8	652.4
165°	594.5	602.2	612.3	638.1	640.1
167.5°	605.2	609.1	614.3	631.4	632.9
170°	608.4	612.2	614.3	628.2	628.2
172.5°	611.5	613.9	614.3	625.0	625.0
175°	616.3	618.2	614.3	622.2	620.3
177.5°	617.9	617.9	613.1	619.4	616.3
180°	616.3	616.3	616.3	616.3	616.3

(END OF REPORT)