

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: P564965

Luminaire Tested: **SQ4-PW1-100U-100D-930-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564965
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-100D-930-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

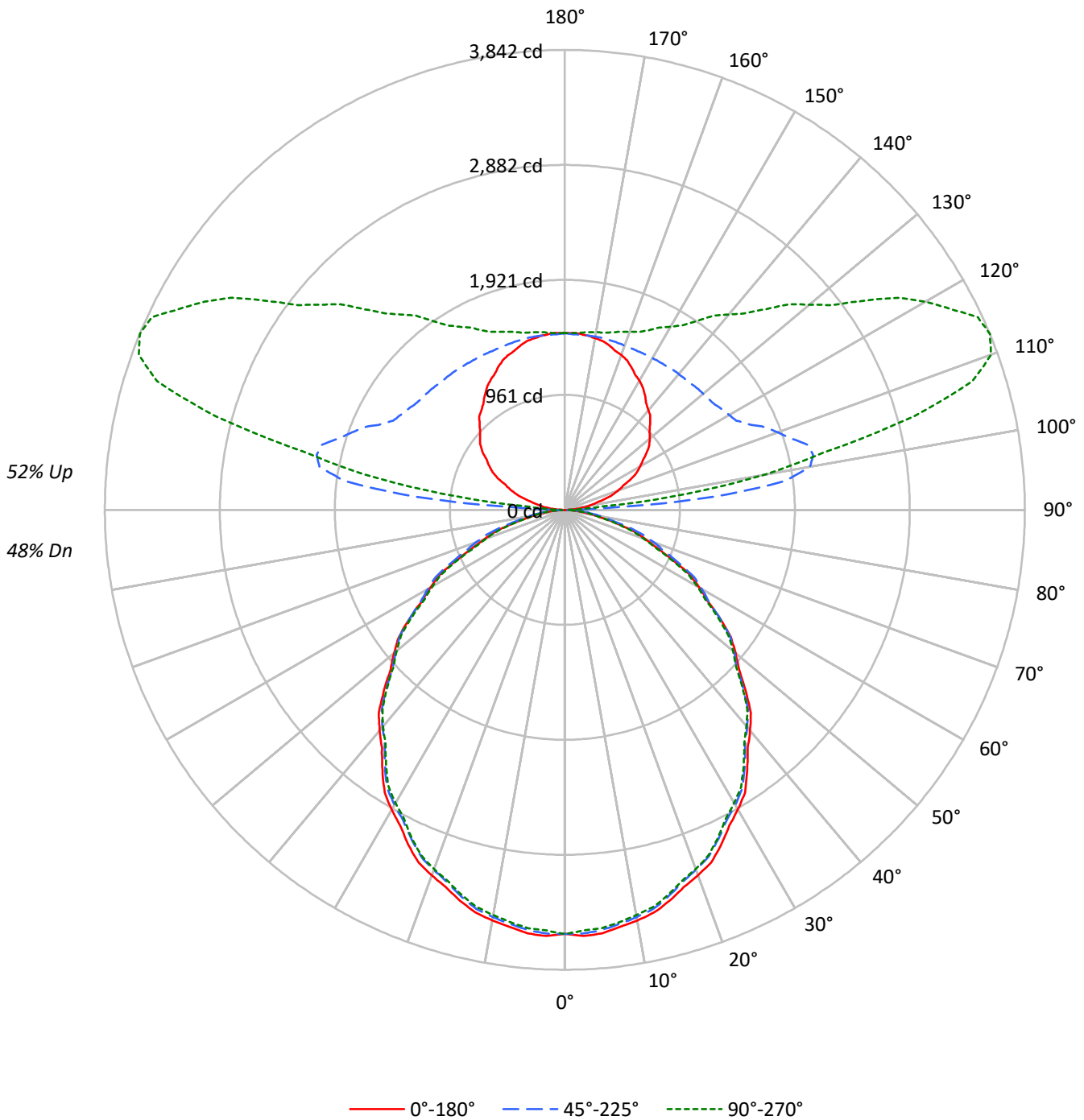
Lumens per Lamp: N/A
Luminaire Lumens: 18604.9 lumens
Efficiency: N/A
Efficacy: 102.1 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 182.2
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	107	107	107	107	98	98	98	98	82	82	82	68	68	68	55	55	55	48
1	98	93	89	86	90	86	83	80	72	70	68	60	58	57	49	47	46	41
2	89	82	75	70	82	75	70	66	64	60	56	53	50	48	43	41	39	35
3	81	72	64	59	74	66	60	55	56	51	47	47	43	40	38	36	33	29
4	74	63	56	50	68	59	52	47	50	45	40	42	38	35	34	31	29	25
5	68	57	48	43	62	52	45	40	45	39	35	37	33	30	31	28	25	22
6	63	51	43	37	58	47	40	35	40	35	30	34	30	26	28	25	22	19
7	58	46	38	32	53	43	35	30	36	31	27	31	26	23	25	22	20	17
8	54	42	34	29	49	39	32	27	33	28	24	28	24	21	23	20	18	15
9	50	38	30	25	46	35	29	24	30	25	21	26	22	19	21	18	16	14
10	47	35	28	23	43	32	26	22	28	23	19	24	20	17	20	17	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10896	10896	10896
5°	10966	10879	10831
10°	10878	10791	10732
15°	10763	10644	10604
20°	10635	10471	10451
25°	10486	10295	10263
30°	10264	10109	10043
35°	9973	9832	9774
40°	9662	9512	9474
45°	9286	9164	9123
50°	8901	8826	8767
55°	8486	8486	8352
60°	7968	8122	7833
65°	7292	7655	7110
70°	6427	7045	6259
75°	5490	6305	5341
80°	4256	5308	4313
85°	2752	4076	3634



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	333.6	1.8
10°-20°	941.9	5.1
20°-30°	1397.1	7.5
30°-40°	1634.8	8.8
40°-50°	1627.5	8.7
50°-60°	1405.4	7.6
60°-70°	1011.6	5.4
70°-80°	530.5	2.9
80°-90°	134.6	0.7
90°-100°	691.1	3.7
100°-110°	1907.8	10.3
110°-120°	1967.5	10.6
120°-130°	1581.1	8.5
130°-140°	1242.6	6.7
140°-150°	953.0	5.1
150°-160°	684.9	3.7
160°-170°	418.9	2.3
170°-180°	141.2	0.8
0°-30°	2672.6	14.4
0°-40°	4307.3	23.2
0°-60°	7340.2	39.5
0°-90°	9016.9	48.5
90°-120°	4566.4	24.5
90°-150°	8343.0	44.8
90°-180°	9588.0	51.5
0°-180°	18604.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3543	3543	3543	3543	3543	
5°	3552	3512	3524	3515	3508	336
15°	3380	3338	3343	3337	3330	953
25°	3090	3038	3034	3016	3025	1421
35°	2656	2620	2619	2594	2603	1661
45°	2135	2117	2107	2101	2098	1647
55°	1583	1580	1583	1561	1558	1412
65°	1002	1032	1052	1011	977	993
75°	462	505	531	495	450	495
85°	78	102	116	109	103	103
90°	5	9	19	21	24	10
95°	102	374	1254	515	335	109
105°	340	525	2099	3204	3017	362
115°	609	736	1690	3347	3806	599
125°	836	951	1532	2593	3043	744
135°	1006	1114	1490	2100	2368	778
145°	1166	1247	1471	1788	1924	730
155°	1315	1359	1459	1604	1655	606
165°	1424	1442	1466	1523	1535	401
175°	1476	1478	1469	1490	1485	140
180°	1476	1476	1476	1476	1476	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3542.8	3542.8	3542.8	3542.8	3542.8
2.5°	3562.8	3533.5	3542.8	3534.9	3517.8
5°	3552.2	3512.5	3524.1	3514.6	3508.5
7.5°	3516.0	3479.3	3487.9	3477.8	3474.1
10°	3483.5	3446.9	3455.4	3442.8	3436.7
12.5°	3446.0	3407.0	3415.5	3402.9	3399.2
15°	3380.5	3337.8	3343.0	3336.7	3330.5
17.5°	3304.3	3261.0	3261.9	3251.9	3250.6
20°	3249.4	3203.6	3199.4	3187.1	3193.2
22.5°	3189.5	3141.2	3137.0	3119.7	3128.3
25°	3090.2	3038.3	3034.0	3015.5	3024.6
27.5°	2975.3	2924.1	2924.1	2898.1	2907.9
30°	2890.4	2841.6	2846.7	2815.8	2828.0
32.5°	2800.5	2756.6	2759.3	2728.4	2740.6
35°	2656.3	2619.7	2618.9	2594.1	2603.3
37.5°	2509.0	2476.6	2471.5	2457.2	2459.7
40°	2406.6	2379.1	2369.2	2359.8	2359.8
42.5°	2299.2	2274.2	2264.3	2257.4	2254.9
45°	2135.0	2116.7	2107.0	2100.6	2097.6
47.5°	1972.7	1955.6	1947.1	1942.7	1939.6
50°	1860.4	1848.2	1844.8	1835.3	1832.3
52.5°	1748.0	1740.7	1737.4	1725.4	1722.4
55°	1582.6	1579.5	1582.6	1560.6	1557.6
57.5°	1410.3	1415.1	1425.2	1395.7	1388.4
60°	1295.4	1307.6	1320.4	1285.7	1273.5
62.5°	1178.0	1197.6	1215.5	1175.8	1158.7
65°	1002.0	1032.5	1051.9	1010.6	977.0
67.5°	832.2	870.0	893.3	848.8	810.9
70°	714.8	757.5	783.5	738.8	696.1
72.5°	612.4	660.0	681.1	638.9	596.2
75°	462.0	504.7	530.6	495.3	449.5
77.5°	327.7	368.0	389.6	358.7	320.9
80°	240.3	283.1	299.7	274.0	243.5
82.5°	170.4	205.8	217.3	201.8	181.0
85°	78.0	102.5	115.5	109.1	103.0
87.5°	20.9	38.9	51.2	51.8	54.7
90°	4.7	9.3	18.9	21.3	23.6
92.5°	42.5	176.4	315.4	115.1	89.7
95°	101.5	373.9	1253.7	515.3	335.3
97.5°	168.1	418.8	1857.2	1429.9	1035.6
100°	217.2	445.8	2080.1	2094.8	1702.3
102.5°	264.4	476.4	2123.5	2588.2	2216.1
105°	340.0	524.7	2099.0	3204.4	3017.4
107.5°	420.3	584.6	1981.9	3501.6	3569.9
110°	476.9	624.7	1891.2	3565.5	3787.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	527.9	670.1	1806.2	3515.0	3841.9
115°	609.1	736.1	1690.5	3346.6	3806.0
117.5°	680.0	806.5	1614.5	3109.6	3632.2
120°	727.2	851.9	1584.3	2949.1	3475.5
122.5°	772.5	891.7	1559.7	2799.3	3297.9
125°	835.8	951.2	1532.3	2593.2	3043.4
127.5°	889.6	1005.1	1516.3	2419.0	2807.3
130°	925.5	1041.0	1508.7	2312.4	2665.6
132.5°	959.5	1069.4	1501.2	2222.9	2542.8
135°	1005.8	1114.3	1489.8	2100.3	2368.1
137.5°	1057.7	1156.6	1484.2	1997.4	2226.0
140°	1086.1	1183.0	1480.4	1928.8	2129.7
142.5°	1118.2	1207.8	1476.6	1867.8	2044.7
145°	1166.4	1247.2	1470.9	1788.0	1924.3
147.5°	1212.6	1283.3	1465.7	1720.8	1826.5
150°	1246.6	1304.3	1463.8	1680.6	1766.1
152.5°	1273.1	1327.1	1462.0	1646.3	1717.0
155°	1315.1	1359.0	1459.1	1604.3	1655.1
157.5°	1353.8	1387.5	1459.6	1573.7	1608.3
160°	1376.5	1406.5	1461.5	1556.5	1581.9
162.5°	1395.4	1421.7	1463.4	1541.3	1561.1
165°	1423.7	1442.2	1466.2	1523.1	1534.7
167.5°	1445.4	1456.5	1468.6	1512.1	1515.8
170°	1456.8	1466.0	1468.6	1506.3	1506.3
172.5°	1466.2	1471.7	1468.6	1498.7	1496.9
175°	1475.7	1478.0	1468.6	1489.7	1485.1
177.5°	1479.4	1477.6	1468.1	1481.2	1477.5
180°	1475.7	1475.7	1475.7	1475.7	1475.7

(END OF REPORT)