

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: P519415

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

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519415
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G2-2009-966-13)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-WB-100U-100D-930-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

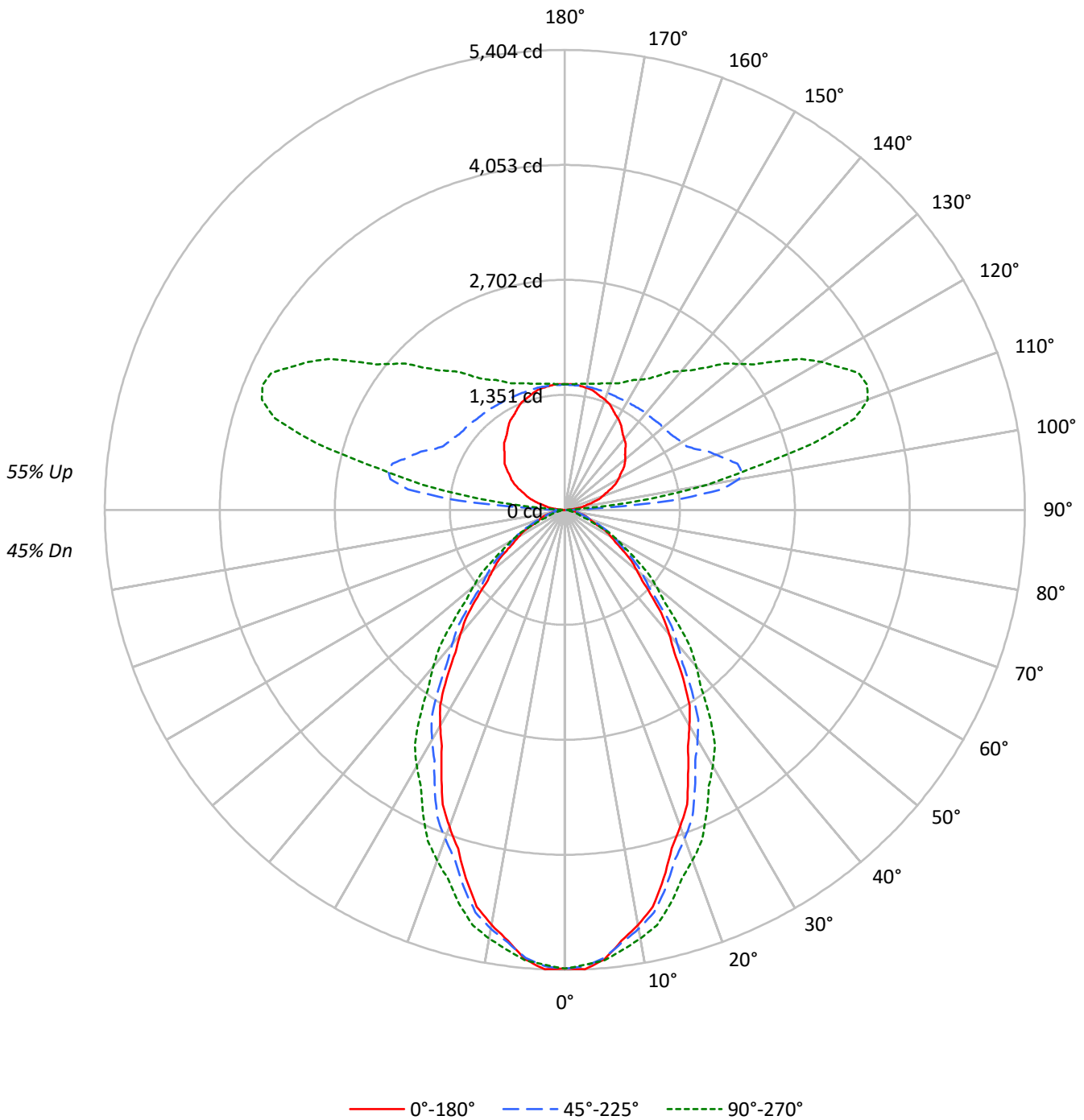
Lumens per Lamp: N/A
Luminaire Lumens: 17446.1 lumens
Efficiency: N/A
Efficacy: 95.8 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

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



TEST NUMBER: P519415
CATALOG NUMBER: SQ4-WB-100U-100D-930-1D-UNV-STD-W-12

Luminous Intensity Polar Plot





TEST NUMBER: P519415

CATALOG NUMBER: SQ4-WB-100U-100D-930-1D-UNV-STD-W-12

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	106	106	106	106	97	97	97	97	81	81	81	65	65	65	52	52	52	45
1	98	94	90	87	89	86	83	81	72	70	68	59	58	56	47	46	46	40
2	90	83	78	73	82	77	72	68	64	61	58	53	51	49	43	41	40	35
3	83	74	67	62	76	68	63	58	58	54	50	48	45	43	39	37	35	31
4	76	66	59	54	70	61	55	50	52	47	44	44	40	37	36	33	31	28
5	70	60	52	47	65	55	49	44	47	42	39	40	36	33	33	30	28	25
6	65	54	46	41	60	50	44	39	43	38	34	36	33	30	30	27	25	22
7	61	49	42	36	56	46	39	34	39	34	31	33	30	27	28	25	23	20
8	56	45	38	33	52	42	35	31	36	31	28	31	27	24	26	23	21	19
9	53	41	34	29	49	39	32	28	33	28	25	29	25	22	24	21	19	17
10	49	38	31	27	46	36	29	25	31	26	23	27	23	20	22	20	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16578	16578	16578
5°	16371	16313	16408
10°	15467	15608	15970
15°	14278	14610	15265
20°	12966	13454	14344
25°	11630	12264	13364
30°	10399	11079	12347
35°	9093	9750	11145
40°	7654	8261	9648
45°	6316	6862	8055
50°	5273	5749	6711
55°	4477	4933	5542
60°	3826	4277	4423
65°	3047	3598	2857
70°	2701	2807	1744
75°	2501	2277	1068
80°	2304	2095	921
85°	2085	1920	752



TEST NUMBER: P519415

CATALOG NUMBER: SQ4-WB-100U-100D-930-1D-UNV-STD-W-12

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	494.4	2.8
10°-20°	1286.1	7.4
20°-30°	1665.8	9.5
30°-40°	1631.3	9.4
40°-50°	1248.6	7.2
50°-60°	832.0	4.8
60°-70°	454.0	2.6
70°-80°	189.2	1.1
80°-90°	56.6	0.3
90°-100°	691.1	4.0
100°-110°	1907.8	10.9
110°-120°	1967.5	11.3
120°-130°	1581.1	9.1
130°-140°	1242.6	7.1
140°-150°	953.0	5.5
150°-160°	684.9	3.9
160°-170°	418.9	2.4
170°-180°	141.2	0.8
0°-30°	3446.3	19.8
0°-40°	5077.6	29.1
0°-60°	7158.2	41.0
0°-90°	7858.1	45.0
90°-120°	4566.4	26.2
90°-150°	8343.0	47.8
90°-180°	9588.0	55.0
0°-180°	17446.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5391	5391	5391	5391	5391	
5°	5303	5250	5284	5296	5315	493
15°	4485	4468	4589	4714	4794	1252
25°	3427	3437	3614	3772	3938	1576
35°	2422	2434	2597	2772	2968	1506
45°	1452	1480	1578	1697	1852	1133
55°	835	870	920	955	1034	757
65°	419	453	494	432	393	435
75°	210	210	192	132	90	225
85°	59	59	54	35	21	64
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	

TEST NUMBER: P519415

CATALOG NUMBER: SQ4-WB-100U-100D-930-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5390.6	5390.6	5390.6	5390.6	5390.6
2.5°	5403.8	5355.7	5367.9	5367.5	5352.7
5°	5303.0	5249.8	5284.1	5296.4	5314.9
7.5°	5106.2	5066.0	5128.5	5174.7	5212.2
10°	4953.0	4918.3	4997.9	5065.2	5113.8
12.5°	4775.1	4746.0	4844.6	4935.0	4998.4
15°	4484.6	4468.5	4588.7	4713.6	4794.5
17.5°	4173.8	4166.0	4303.9	4449.6	4553.2
20°	3961.9	3959.6	4110.9	4262.7	4382.9
22.5°	3748.1	3753.2	3912.2	4070.0	4207.0
25°	3427.3	3436.6	3614.2	3771.7	3938.3
27.5°	3130.7	3134.9	3318.5	3484.8	3662.5
30°	2928.3	2939.8	3119.9	3292.0	3477.0
32.5°	2725.8	2739.2	2915.5	3093.4	3282.1
35°	2422.1	2433.6	2597.1	2771.9	2968.5
37.5°	2108.9	2124.6	2269.8	2435.0	2628.3
40°	1906.4	1929.6	2057.8	2213.5	2403.2
42.5°	1711.5	1740.2	1859.1	2006.8	2178.0
45°	1452.3	1480.1	1577.7	1697.1	1852.0
47.5°	1229.0	1260.9	1335.9	1438.8	1571.0
50°	1102.2	1132.3	1201.6	1277.7	1402.6
52.5°	990.6	1020.7	1082.4	1141.1	1247.5
55°	835.0	869.6	920.1	955.0	1033.6
57.5°	707.2	740.5	780.6	796.3	843.9
60°	622.1	659.1	695.4	693.6	719.1
62.5°	544.5	575.9	612.1	587.1	588.5
65°	418.7	453.4	494.4	432.0	392.6
67.5°	338.2	345.6	387.9	301.2	254.5
70°	300.4	300.4	312.2	233.3	194.0
72.5°	264.4	264.4	253.6	189.7	148.5
75°	210.5	210.5	191.6	131.5	89.9
77.5°	162.3	160.4	146.6	98.1	65.3
80°	130.1	130.1	118.3	77.5	52.0
82.5°	101.7	101.7	91.8	60.5	38.8
85°	59.1	59.1	54.4	35.2	21.3
87.5°	21.8	22.7	22.7	15.6	14.2
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



TEST NUMBER: P519415

CATALOG NUMBER: SQ4-WB-100U-100D-930-1D-UNV-STD-W-12

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)