

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

Brand: CORELITE

Report Number: P937497

Luminaire Tested: SQ4-FB-100U-050D-B35-1D-UNV-W2A-W-12

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937497
REPORT IS A COMBINATION OF REPORTS P933557 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-050D-B35-1D-UNV-W2A-W-12
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

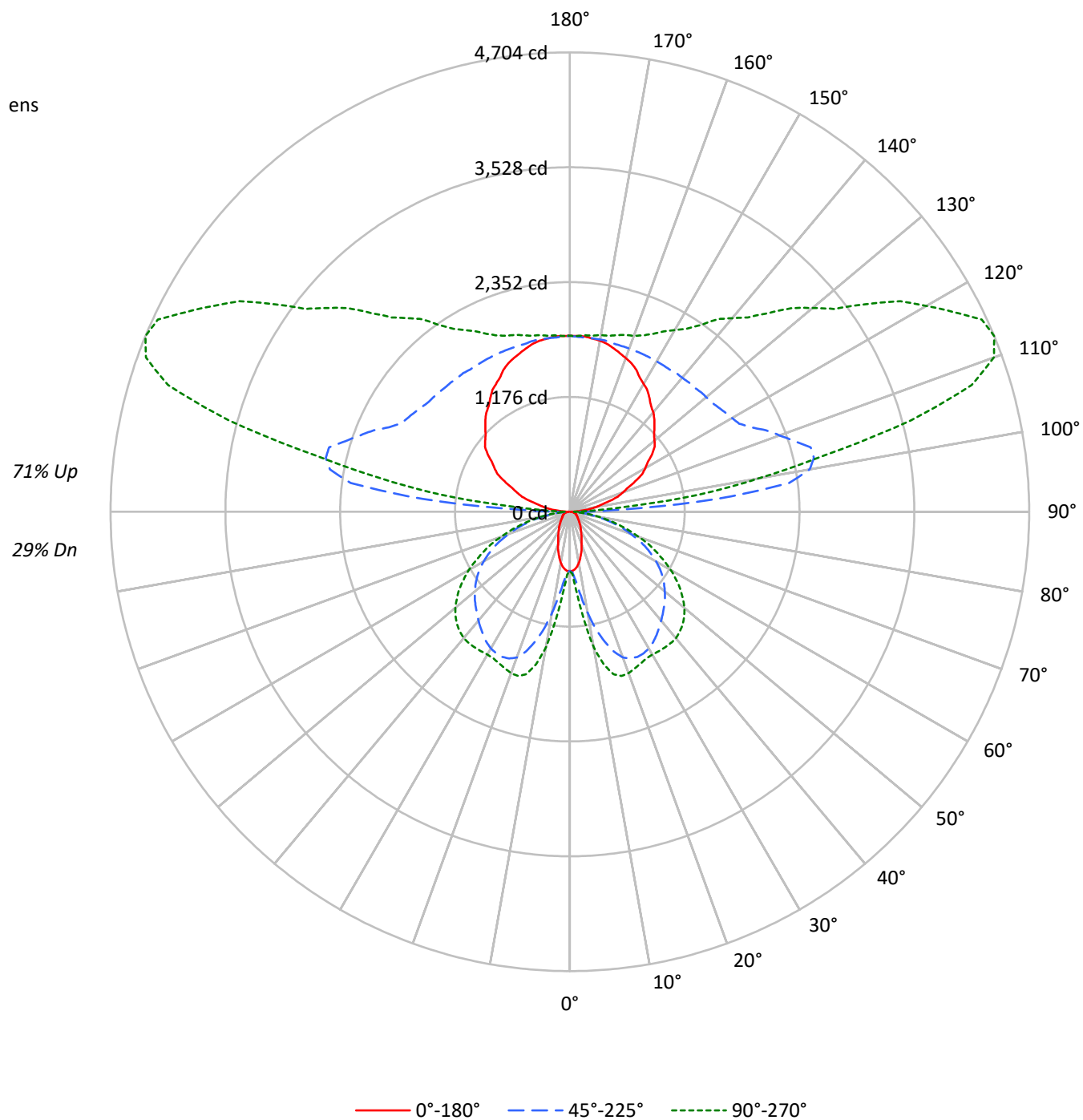
Lumens per Lamp: N/A
Luminaire Lumens: 16377.1 lumens
Efficiency: N/A
Efficacy: 132.5 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 12' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 123.6
Input Voltage (V): NR
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					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	102	102	102	102	91	91	91	91	71	71	71	53	53	53	37	37	37	37	37	29
1	93	88	84	81	83	79	76	73	62	60	58	46	45	44	32	31	30	30	30	23
2	84	77	71	66	75	69	64	59	54	50	47	40	38	36	28	26	25	25	25	19
3	76	67	60	54	68	60	54	49	47	43	39	35	32	30	24	22	21	21	21	16
4	70	59	51	45	62	53	46	41	42	37	33	31	28	25	21	19	18	18	18	13
5	64	52	44	38	57	47	40	35	37	32	28	28	24	21	19	17	15	15	15	11
6	58	47	39	33	52	42	35	30	33	28	24	25	21	18	17	15	13	13	13	10
7	54	42	34	28	48	38	31	26	30	25	21	22	19	16	15	13	11	11	11	8
8	50	38	30	25	44	34	27	23	27	22	18	20	17	14	14	12	10	10	10	7
9	46	34	27	22	41	31	24	20	24	20	16	18	15	12	13	11	9	9	9	7
10	43	31	24	19	38	28	22	18	22	18	14	17	14	11	12	10	8	8	8	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1876	1876	1876
5°	1833	2168	2521
10°	1663	3161	4179
15°	1414	4132	5047
20°	1152	4789	5143
25°	961	5012	5039
30°	811	5046	5029
35°	717	4963	5159
40°	626	4856	5294
45°	567	4777	5315
50°	520	4707	5227
55°	499	4603	4995
60°	511	4404	4629
65°	533	4099	4126
70°	568	3577	3486
75°	633	2918	2720
80°	697	2027	1833
85°	632	1077	938

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 5315 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.4	0.5
10°-20°	347.6	2.1
20°-30°	608.1	3.7
30°-40°	782.8	4.8
40°-50°	874.3	5.3
50°-60°	837.4	5.1
60°-70°	663.6	4.1
70°-80°	390.2	2.4
80°-90°	115.3	0.7
90°-100°	878.2	5.4
100°-110°	2308.8	14.1
110°-120°	2394.0	14.6
120°-130°	1920.3	11.7
130°-140°	1506.8	9.2
140°-150°	1156.5	7.1
150°-160°	832.9	5.1
160°-170°	509.6	3.1
170°-180°	172.2	1.1
0°-30°	1034.2	6.3
0°-40°	1816.9	11.1
0°-60°	3528.6	21.5
0°-90°	4697.8	28.7
90°-120°	5581.1	34.1
90°-150°	10164.6	62.1
90°-180°	11679.0	71.3
0°-180°	16377.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	606	606	606	606	606	
5°	591	634	714	807	836	55
15°	443	817	1377	1669	1722	123
25°	283	926	1640	1712	1714	130
35°	191	885	1544	1632	1696	119
45°	131	706	1365	1564	1634	101
55°	94	448	1158	1345	1382	85
65°	74	238	860	967	981	73
75°	55	146	472	519	520	57
85°	20	45	117	129	131	21
90°	12	34	92	46	46	11
95°	116	455	1513	780	531	129
105°	416	630	2552	3875	3615	441
115°	739	897	2045	4078	4655	730
125°	1028	1152	1860	3143	3707	913
135°	1225	1348	1802	2537	2877	948
145°	1421	1511	1779	2164	2334	890
155°	1606	1650	1779	1953	2010	738
165°	1733	1756	1779	1849	1872	489
175°	1802	1802	1791	1814	1814	171
180°	1802	1802	1802	1802	1802	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	606.4	606.4	606.4	606.4	606.4	606.4	606.4	606.4	606.4	606.4	606.4
2.5°	606.4	606.4	610.3	612.2	616.1	618.0	622.0	625.9	637.6	639.5	643.4
5°	590.8	598.6	623.9	633.6	661.0	698.0	713.6	739.0	791.6	807.2	817.0
7.5°	567.3	584.9	647.3	662.9	731.2	828.7	869.6	924.2	1008.1	1048.9	1082.1
10°	530.3	567.3	678.5	715.6	826.7	974.9	1050.9	1126.9	1253.7	1310.3	1331.7
12.5°	489.3	549.8	711.6	762.3	922.2	1138.7	1230.3	1314.2	1458.4	1534.5	1546.1
15°	442.6	524.5	742.8	817.0	1023.7	1275.1	1376.6	1479.9	1614.5	1669.0	1682.7
17.5°	401.7	504.9	772.1	850.1	1101.7	1398.0	1501.3	1587.1	1696.3	1733.3	1743.1
20°	351.0	473.8	791.6	893.0	1183.5	1487.7	1587.1	1653.4	1727.5	1750.9	1754.8
22.5°	314.0	440.6	803.3	908.6	1238.1	1542.3	1626.1	1678.8	1729.5	1737.2	1739.2
25°	282.8	403.6	801.4	926.2	1284.9	1575.4	1639.7	1678.8	1708.0	1711.9	1711.9
27.5°	253.5	362.7	793.5	930.0	1320.0	1583.2	1633.9	1661.2	1674.8	1682.7	1682.7
30°	228.1	323.6	774.0	922.2	1335.6	1575.4	1616.4	1630.1	1643.6	1655.3	1661.2
32.5°	208.6	286.6	744.8	906.6	1337.5	1555.9	1585.2	1592.9	1612.4	1639.7	1649.5
35°	191.1	249.6	711.6	885.2	1325.9	1524.7	1544.2	1552.0	1591.0	1632.0	1645.6
37.5°	173.5	222.3	668.8	848.2	1308.2	1487.7	1501.3	1514.9	1575.4	1624.1	1639.7
40°	156.0	198.8	618.0	807.2	1281.0	1442.8	1454.6	1476.0	1555.9	1612.4	1628.0
42.5°	142.3	179.4	563.5	764.3	1245.9	1392.2	1409.7	1440.9	1532.5	1592.9	1610.5
45°	130.6	159.9	504.9	705.8	1201.1	1339.4	1364.8	1407.8	1505.2	1563.7	1579.3
47.5°	118.9	146.2	444.6	645.4	1152.3	1286.8	1320.0	1368.7	1468.1	1524.7	1538.4
50°	109.2	132.6	384.1	581.0	1099.6	1230.3	1269.3	1320.0	1421.4	1474.0	1491.6
52.5°	101.4	120.9	327.5	516.7	1039.3	1171.8	1216.7	1269.3	1364.8	1415.5	1427.2
55°	93.6	111.1	278.8	448.5	976.8	1109.4	1158.1	1208.8	1302.4	1345.4	1353.1
57.5°	89.7	103.3	237.9	384.1	910.6	1039.3	1093.8	1140.6	1228.3	1261.5	1269.3
60°	83.8	97.5	206.7	329.6	838.4	973.0	1019.8	1066.5	1140.6	1167.9	1173.7
62.5°	78.0	93.6	183.2	276.8	764.3	895.0	941.8	984.6	1047.0	1066.5	1074.3
65°	74.1	89.7	165.7	237.9	688.3	813.1	859.9	896.9	947.6	967.1	970.9
67.5°	70.2	85.8	152.0	204.7	612.2	731.2	766.3	801.4	840.3	859.9	861.8
70°	64.3	81.9	140.4	181.3	534.2	637.6	666.9	703.9	735.1	744.8	750.7
72.5°	60.5	76.1	132.6	163.8	454.3	547.9	575.2	596.6	623.9	633.6	633.6
75°	54.6	68.2	124.8	146.2	372.4	448.5	471.8	493.3	514.7	518.6	512.8
77.5°	48.7	60.5	107.3	122.9	290.5	354.8	374.3	386.0	403.6	407.5	409.4
80°	41.0	52.6	83.8	95.5	210.6	261.2	274.9	284.7	300.3	300.3	304.2
82.5°	31.2	41.0	60.5	68.2	142.3	179.4	191.1	196.9	206.7	206.7	206.7
85°	19.5	25.4	39.0	44.9	85.8	109.2	117.0	118.9	126.7	128.7	128.7
87.5°	9.8	13.7	25.4	27.3	44.9	56.6	56.6	60.5	60.5	58.5	56.6
90°	12.1	21.8	31.4	33.8	53.2	79.0	91.9	81.7	61.2	45.9	45.9
92.5°	48.4	130.5	212.8	233.3	328.1	454.4	517.5	453.6	325.7	229.7	220.6
95°	116.1	266.6	417.1	454.7	807.3	1277.5	1512.6	1349.8	1024.1	779.9	752.1
97.5°	200.7	333.4	466.2	499.4	1087.4	1871.4	2263.5	2160.6	1954.8	1800.4	1747.8
100°	266.0	386.3	506.7	536.8	1189.4	2059.4	2494.5	2502.1	2517.1	2528.3	2465.6
102.5°	321.6	433.9	546.2	574.3	1236.2	2118.6	2559.8	2690.9	2953.1	3149.8	3096.1
105°	416.0	511.1	606.2	629.9	1270.8	2125.3	2552.5	2846.5	3434.4	3875.3	3846.4
107.5°	512.7	601.4	690.0	712.2	1277.2	2030.6	2407.4	2817.5	3637.5	4252.6	4259.5
110°	578.0	658.0	738.1	758.1	1267.5	1946.8	2286.5	2744.9	3661.7	4349.3	4379.4

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	642.1	718.4	794.7	813.8	1268.0	1873.7	2176.5	2645.7	3583.9	4287.6	4333.9
115°	738.8	809.2	879.6	897.2	1279.7	1789.6	2044.7	2496.6	3400.5	4078.4	4142.5
117.5°	834.3	898.3	962.2	978.2	1303.5	1737.1	1954.0	2361.8	3177.6	3789.5	3860.5
120°	889.9	950.1	1010.4	1025.4	1322.9	1719.5	1917.7	2290.4	3035.8	3594.8	3663.9
122.5°	944.4	1005.1	1065.8	1081.0	1350.7	1710.2	1889.9	2225.5	2896.7	3400.1	3468.2
125°	1027.8	1083.1	1138.5	1152.3	1388.1	1702.5	1859.7	2144.8	2714.9	3142.6	3205.3
127.5°	1095.5	1151.4	1207.3	1221.2	1425.6	1698.1	1834.3	2079.1	2568.6	2935.8	2988.7
130°	1131.8	1192.0	1252.1	1267.2	1453.0	1700.8	1824.6	2042.6	2478.4	2805.3	2854.2
132.5°	1169.3	1229.5	1289.6	1304.7	1475.1	1702.4	1816.1	2011.2	2401.4	2694.0	2737.8
135°	1224.9	1279.7	1334.5	1348.2	1499.3	1700.9	1801.7	1965.0	2291.7	2536.7	2574.5
137.5°	1281.7	1336.0	1390.2	1403.8	1535.6	1711.4	1799.2	1937.3	2213.6	2420.8	2451.7
140°	1328.9	1378.9	1428.8	1441.3	1557.8	1713.1	1790.7	1910.0	2148.7	2327.6	2356.5
142.5°	1365.1	1411.3	1457.6	1469.1	1576.3	1719.2	1790.7	1895.6	2105.2	2262.3	2287.1
145°	1420.7	1461.1	1501.4	1511.4	1600.5	1719.3	1778.7	1864.4	2035.8	2164.4	2183.2
147.5°	1476.4	1515.6	1554.9	1564.6	1636.0	1731.1	1778.7	1846.1	1981.0	2082.2	2097.8
150°	1512.6	1548.1	1583.5	1592.5	1654.6	1737.3	1778.7	1835.7	1949.5	2035.0	2047.6
152.5°	1550.1	1577.0	1603.9	1610.6	1666.6	1741.3	1778.7	1827.3	1924.5	1997.5	2007.0
155°	1605.7	1625.6	1645.6	1650.5	1693.2	1750.2	1778.7	1817.4	1894.7	1952.7	1959.0
157.5°	1646.8	1666.2	1685.6	1690.4	1719.9	1759.1	1778.7	1808.7	1868.9	1914.1	1918.5
160°	1674.6	1689.7	1704.8	1708.5	1731.9	1763.1	1778.7	1804.5	1856.0	1894.7	1897.2
162.5°	1702.4	1713.7	1725.0	1727.8	1744.8	1767.4	1778.7	1800.4	1843.9	1876.6	1879.0
165°	1732.7	1742.8	1753.1	1755.6	1763.3	1773.6	1778.7	1794.3	1825.4	1848.8	1851.3
167.5°	1760.5	1765.3	1770.2	1771.4	1777.8	1786.4	1790.7	1801.0	1821.4	1836.7	1837.8
170°	1778.7	1783.5	1788.4	1789.5	1789.9	1790.4	1790.7	1801.0	1821.4	1836.7	1836.7
172.5°	1788.3	1789.4	1790.4	1790.7	1790.7	1790.7	1790.7	1798.8	1814.9	1827.0	1826.1
175°	1801.7	1801.7	1801.7	1801.7	1798.0	1793.1	1790.7	1795.8	1806.0	1813.7	1813.7
177.5°	1801.7	1801.7	1801.7	1801.7	1798.9	1795.1	1793.1	1797.2	1805.2	1811.3	1810.2
180°	1801.7	1801.7	1801.7	1801.7	1801.7	1801.7	1801.7	1801.7	1801.7	1801.7	1801.7

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	606.4	606.4
2.5°	647.3	643.4
5°	832.6	836.4
7.5°	1121.1	1119.2
10°	1394.1	1411.6
12.5°	1592.9	1596.8
15°	1713.9	1721.6
17.5°	1760.7	1762.6
20°	1762.6	1758.7
22.5°	1741.1	1737.2
25°	1715.8	1713.9
27.5°	1692.4	1694.4
30°	1682.7	1688.5
32.5°	1682.7	1692.4
35°	1686.5	1696.3
37.5°	1684.6	1696.3
40°	1676.8	1690.4
42.5°	1655.3	1665.1
45°	1622.2	1633.9
47.5°	1579.3	1587.1
50°	1524.7	1532.5
52.5°	1456.5	1458.4
55°	1374.6	1382.4
57.5°	1286.8	1288.8
60°	1189.4	1195.2
62.5°	1086.1	1086.1
65°	976.8	980.7
67.5°	863.8	873.5
70°	748.7	750.7
72.5°	635.7	635.7
75°	518.6	520.5
77.5°	407.5	407.5
80°	302.2	304.2
82.5°	208.6	212.5
85°	130.6	130.6
87.5°	60.5	54.6
90°	45.9	45.9
92.5°	184.0	147.5
95°	641.5	530.8
97.5°	1537.1	1326.5
100°	2214.6	1963.7
102.5°	2881.1	2666.2
105°	3730.8	3615.3
107.5°	4287.5	4315.4
110°	4499.7	4620.2

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	4518.7	4703.6
115°	4398.9	4655.2
117.5°	4144.8	4429.1
120°	3940.1	4216.3
122.5°	3740.6	4013.1
125°	3456.2	3707.2
127.5°	3200.5	3412.2
130°	3049.7	3245.4
132.5°	2913.0	3088.2
135°	2725.5	2876.6
137.5°	2575.2	2698.9
140°	2472.1	2587.6
142.5°	2386.6	2486.0
145°	2258.4	2333.6
147.5°	2160.1	2222.4
150°	2098.2	2148.7
152.5°	2045.2	2083.4
155°	1984.3	2009.6
157.5°	1936.3	1954.0
160°	1907.5	1917.7
162.5°	1888.7	1898.4
165°	1861.5	1871.7
167.5°	1842.1	1846.3
170°	1836.7	1836.7
172.5°	1822.3	1818.5
175°	1813.7	1813.7
177.5°	1805.9	1801.7
180°	1801.7	1801.7

(END OF REPORT)