

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: P938500

Luminaire Tested: SQ4-FB-150U-100D-B35-1D-UNV-W2A-W-8

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938500
REPORT IS A COMBINATION OF REPORTS P933647 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-150U-100D-B35-1D-UNV-W2A-W-8
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

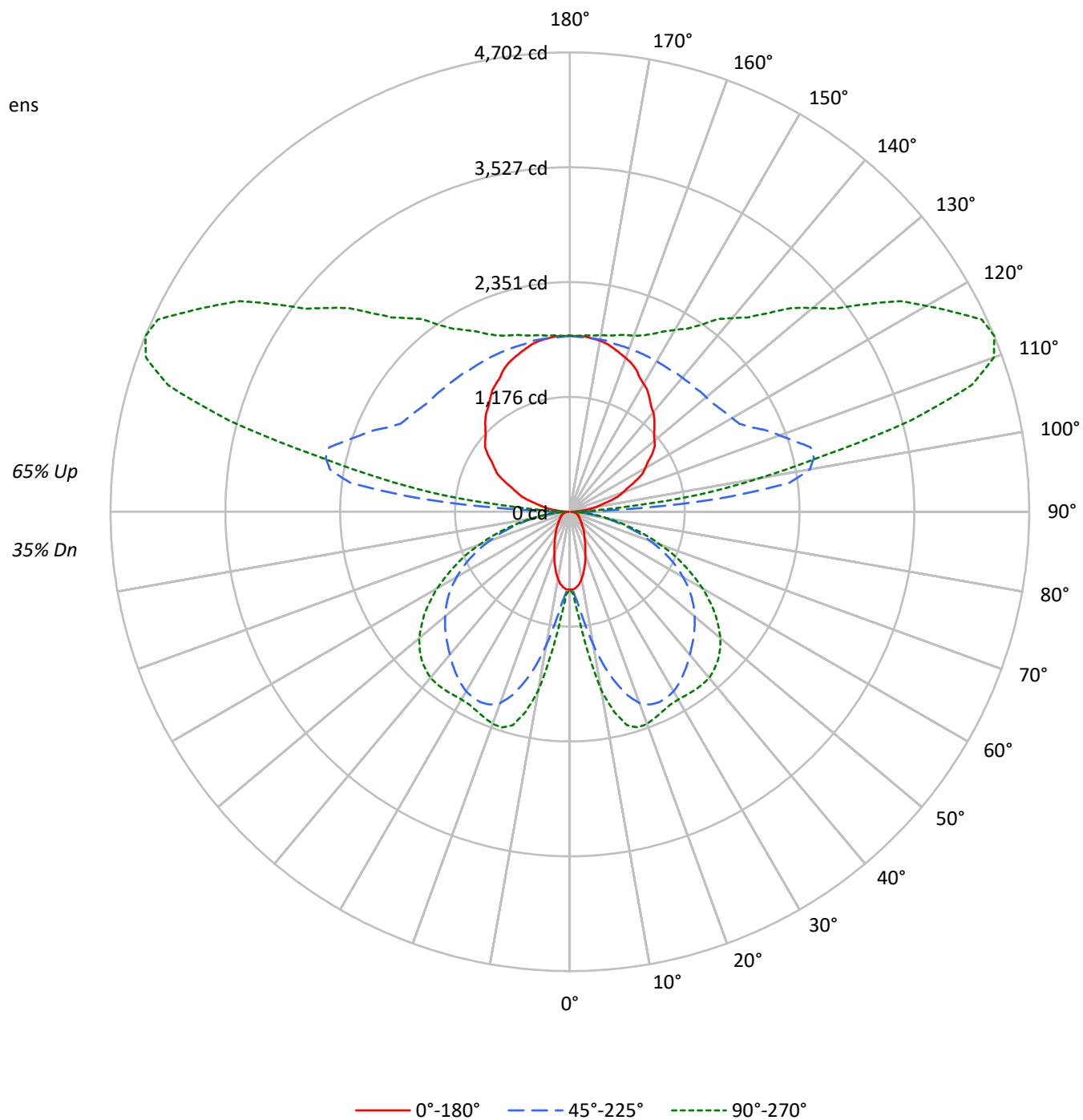
Lumens per Lamp: N/A
Luminaire Lumens: 17843.2 lumens
Efficiency: N/A
Efficacy: 123.2 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 144.8
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				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	103	103	103	103	93	93	93	93	75	75	75	58	58	58	42	42	42
1	94	90	86	82	85	81	78	75	65	63	60	50	49	47	36	35	35
2	85	78	72	66	77	70	65	61	56	53	49	43	41	39	32	30	29
3	77	68	61	55	69	61	55	50	49	45	41	38	35	32	28	26	24
4	71	60	52	46	63	54	47	42	43	38	34	34	30	27	24	22	20
5	64	53	45	39	58	48	41	36	39	33	29	30	26	23	22	19	17
6	59	47	39	33	53	43	36	30	34	29	25	27	23	20	19	17	15
7	54	42	34	29	49	38	31	26	31	26	22	24	20	17	18	15	13
8	50	38	30	25	45	35	28	23	28	23	19	22	18	15	16	13	11
9	47	35	27	22	42	31	25	20	26	20	17	20	16	14	15	12	10
10	43	31	24	20	39	29	22	18	23	18	15	18	15	12	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3695	3695	3695
5°	3610	4270	4967
10°	3274	6225	8234
15°	2783	8133	9943
20°	2266	9425	10133
25°	1890	9863	9927
30°	1594	9925	9908
35°	1409	9760	10164
40°	1228	9546	10429
45°	1112	9390	10470
50°	1020	9248	10296
55°	977	9041	9840
60°	1000	8645	9120
65°	1040	8041	8129
70°	1108	7012	6868
75°	1228	5717	5359
80°	1342	3964	3611
85°	1192	2104	1849

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 10470 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.0	0.6
10°-20°	456.6	2.6
20°-30°	798.6	4.5
30°-40°	1028.1	5.8
40°-50°	1148.3	6.4
50°-60°	1099.8	6.2
60°-70°	871.6	4.9
70°-80°	512.5	2.9
80°-90°	149.3	0.8
90°-100°	877.9	4.9
100°-110°	2308.1	12.9
110°-120°	2393.2	13.4
120°-130°	1919.7	10.8
130°-140°	1506.3	8.4
140°-150°	1156.1	6.5
150°-160°	832.6	4.7
160°-170°	509.4	2.9
170°-180°	172.1	1.0
0°-30°	1358.2	7.6
0°-40°	2386.3	13.4
0°-60°	4634.4	26.0
0°-90°	6167.8	34.6
90°-120°	5579.2	31.3
90°-150°	10161.3	56.9
90°-180°	11675.0	65.4
0°-180°	17843.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	796	796	796	796	796	
5°	776	832	937	1060	1099	72
15°	581	1073	1808	2192	2261	162
25°	371	1216	2154	2248	2251	171
35°	251	1163	2028	2143	2228	157
45°	172	927	1793	2054	2146	133
55°	123	589	1521	1767	1816	112
65°	97	312	1129	1270	1288	96
75°	72	192	620	681	684	75
85°	26	59	154	169	172	27
90°	12	34	92	46	46	12
95°	116	454	1512	780	531	129
105°	416	630	2552	3874	3614	441
115°	739	897	2044	4077	4654	729
125°	1027	1152	1859	3142	3706	912
135°	1224	1348	1801	2536	2876	947
145°	1420	1511	1778	2164	2333	890
155°	1605	1650	1778	1952	2009	738
165°	1732	1755	1778	1848	1871	489
175°	1801	1801	1790	1813	1813	171
180°	1801	1801	1801	1801	1801	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	796.4	796.4	796.4	796.4	796.4	796.4	796.4	796.4	796.4	796.4	796.4
2.5°	796.4	796.4	801.6	804.1	809.2	811.7	816.9	822.0	837.4	839.9	845.1
5°	775.9	786.1	819.5	832.3	868.1	916.8	937.2	970.6	1039.6	1060.2	1073.0
7.5°	745.2	768.2	850.2	870.6	960.3	1088.3	1142.1	1213.8	1323.9	1377.7	1421.2
10°	696.5	745.2	891.2	939.8	1085.8	1280.3	1380.2	1480.1	1646.5	1720.8	1748.9
12.5°	642.7	722.1	934.7	1001.3	1211.2	1495.5	1615.8	1726.0	1915.4	2015.3	2030.6
15°	581.3	688.9	975.7	1073.0	1344.4	1674.7	1807.9	1943.6	2120.3	2192.0	2209.9
17.5°	527.5	663.3	1014.1	1116.5	1446.8	1836.1	1971.8	2084.4	2227.8	2276.5	2289.4
20°	461.0	622.3	1039.6	1172.8	1554.4	1953.9	2084.4	2171.5	2268.8	2299.5	2304.7
22.5°	412.3	578.7	1055.0	1193.3	1626.1	2025.6	2135.7	2204.8	2271.4	2281.6	2284.2
25°	371.3	530.0	1052.4	1216.4	1687.5	2069.1	2153.6	2204.8	2243.2	2248.4	2248.4
27.5°	332.9	476.3	1042.3	1221.5	1733.6	2079.4	2145.9	2181.8	2199.7	2209.9	2209.9
30°	299.6	425.1	1016.6	1211.2	1754.1	2069.1	2122.9	2140.8	2158.7	2174.0	2181.8
32.5°	274.0	376.5	978.2	1190.7	1756.7	2043.5	2081.9	2092.2	2117.7	2153.6	2166.4
35°	251.0	327.8	934.7	1162.6	1741.3	2002.5	2028.1	2038.4	2089.6	2143.3	2161.3
37.5°	227.9	292.0	878.3	1114.0	1718.2	1953.9	1971.8	1989.7	2069.1	2133.1	2153.6
40°	204.8	261.2	811.7	1060.2	1682.4	1895.0	1910.3	1938.5	2043.5	2117.7	2138.2
42.5°	186.9	235.6	740.0	1003.8	1636.4	1828.4	1851.5	1892.4	2012.7	2092.2	2115.2
45°	171.6	210.0	663.3	926.9	1577.4	1759.2	1792.6	1848.9	1976.9	2053.7	2074.2
47.5°	156.2	192.1	583.8	847.6	1513.4	1690.1	1733.6	1797.7	1928.2	2002.5	2020.5
50°	143.4	174.1	504.5	763.1	1444.3	1615.8	1667.1	1733.6	1866.8	1936.0	1958.9
52.5°	133.1	158.7	430.2	678.6	1364.8	1539.0	1597.9	1667.1	1792.6	1859.1	1874.4
55°	122.9	145.9	366.2	589.0	1283.0	1457.1	1521.0	1587.7	1710.6	1766.9	1777.1
57.5°	117.8	135.8	312.4	504.5	1195.8	1364.8	1436.5	1498.1	1613.3	1656.8	1667.1
60°	110.1	128.0	271.4	432.8	1101.2	1277.8	1339.3	1400.7	1498.1	1533.9	1541.6
62.5°	102.4	122.9	240.7	363.7	1003.8	1175.4	1236.8	1293.2	1375.1	1400.7	1411.0
65°	97.3	117.8	217.6	312.4	904.0	1067.8	1129.3	1177.9	1244.5	1270.2	1275.3
67.5°	92.2	112.7	199.7	268.9	804.1	960.3	1006.4	1052.4	1103.7	1129.3	1131.9
70°	84.5	107.6	184.4	238.2	701.7	837.4	875.8	924.4	965.4	978.2	985.9
72.5°	79.4	99.9	174.1	215.1	596.6	719.6	755.4	783.6	819.5	832.3	832.3
75°	71.7	89.6	163.9	192.1	489.2	589.0	619.7	647.9	676.1	681.2	673.5
77.5°	64.1	79.4	140.8	161.3	381.6	466.1	491.7	507.0	530.0	535.2	537.8
80°	53.8	69.2	110.1	125.5	276.6	343.1	361.0	373.8	394.4	394.4	399.5
82.5°	41.0	53.8	79.4	89.6	186.9	235.6	251.0	258.6	271.4	271.4	271.4
85°	25.6	33.3	51.3	58.9	112.7	143.4	153.7	156.2	166.5	169.0	169.0
87.5°	12.8	17.9	33.3	35.9	58.9	74.2	74.2	79.4	79.4	76.8	74.2
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	328.0	454.3	517.3	453.4	325.6	229.7	220.5
95°	116.1	266.5	416.9	454.5	807.0	1277.0	1512.1	1349.3	1023.8	779.7	751.9
97.5°	200.7	333.3	466.1	499.2	1087.1	1870.9	2262.8	2159.9	1954.2	1799.8	1747.2
100°	265.9	386.2	506.6	536.7	1189.1	2058.7	2493.6	2501.2	2516.2	2527.4	2464.7
102.5°	321.5	433.8	546.0	574.1	1235.8	2117.8	2558.9	2690.0	2952.2	3148.8	3095.1
105°	415.8	510.9	606.0	629.8	1270.4	2124.5	2551.7	2845.6	3433.3	3874.1	3845.2
107.5°	512.5	601.2	689.7	711.9	1276.9	2030.1	2406.6	2816.5	3636.4	4251.2	4258.2
110°	577.8	657.9	737.9	757.9	1267.2	1946.2	2285.8	2744.0	3660.5	4347.9	4377.9

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	641.9	718.1	794.4	813.5	1267.5	1873.0	2175.7	2644.7	3582.7	4286.2	4332.4
115°	738.6	808.9	879.3	896.9	1279.3	1789.1	2044.0	2495.8	3399.3	4077.1	4141.1
117.5°	834.0	898.0	961.9	977.9	1303.0	1736.5	1953.3	2361.1	3176.6	3788.2	3859.2
120°	889.6	949.8	1010.0	1025.0	1322.4	1718.8	1917.1	2289.7	3034.8	3593.6	3662.6
122.5°	944.0	1004.8	1065.4	1080.6	1350.2	1709.6	1889.3	2224.7	2895.8	3399.0	3467.1
125°	1027.4	1082.8	1138.1	1151.9	1387.6	1701.9	1859.0	2144.0	2714.0	3141.5	3204.2
127.5°	1095.2	1151.0	1206.9	1220.8	1425.1	1697.5	1833.6	2078.3	2567.8	2934.8	2987.7
130°	1131.4	1191.6	1251.8	1266.8	1452.5	1700.1	1823.9	2041.8	2477.5	2804.3	2853.2
132.5°	1168.9	1229.1	1289.3	1304.3	1474.7	1702.0	1815.5	2010.5	2400.5	2693.0	2736.8
135°	1224.4	1279.3	1334.1	1347.8	1498.8	1700.3	1801.0	1964.4	2291.0	2536.0	2573.7
137.5°	1281.3	1335.6	1389.7	1403.3	1535.1	1710.8	1798.7	1936.7	2212.8	2419.9	2450.8
140°	1328.4	1378.4	1428.3	1440.8	1557.3	1712.5	1790.1	1909.4	2148.0	2326.9	2355.7
142.5°	1364.6	1410.9	1457.1	1468.6	1575.8	1718.7	1790.1	1894.9	2104.4	2261.5	2286.4
145°	1420.3	1460.6	1500.9	1511.0	1600.0	1718.7	1778.0	1863.7	2035.1	2163.7	2182.5
147.5°	1475.9	1515.1	1554.4	1564.2	1635.5	1730.5	1778.0	1845.5	1980.2	2081.4	2097.0
150°	1512.1	1547.6	1583.1	1591.9	1653.9	1736.6	1778.0	1835.0	1948.9	2034.3	2046.9
152.5°	1549.6	1576.5	1603.4	1610.1	1666.1	1740.7	1778.0	1826.7	1923.9	1996.8	2006.3
155°	1605.2	1625.1	1645.0	1649.9	1692.6	1749.5	1778.0	1816.7	1894.1	1952.1	1958.4
157.5°	1646.3	1665.7	1685.0	1689.8	1719.2	1758.4	1778.0	1808.2	1868.3	1913.5	1917.9
160°	1674.1	1689.2	1704.2	1708.0	1731.3	1762.4	1778.0	1803.8	1855.4	1894.1	1896.6
162.5°	1702.0	1713.2	1724.5	1727.3	1744.2	1766.8	1778.0	1799.8	1843.3	1876.0	1878.4
165°	1732.1	1742.3	1752.5	1755.1	1762.7	1772.9	1778.0	1793.6	1824.8	1848.2	1850.7
167.5°	1759.9	1764.7	1769.6	1770.8	1777.2	1785.9	1790.1	1800.3	1820.8	1836.1	1837.1
170°	1778.0	1782.9	1787.7	1789.0	1789.4	1789.8	1790.1	1800.3	1820.8	1836.1	1836.1
172.5°	1787.7	1788.8	1789.8	1790.1	1790.1	1790.1	1790.1	1798.2	1814.3	1826.4	1825.4
175°	1801.0	1801.0	1801.0	1801.0	1797.4	1792.6	1790.1	1795.3	1805.4	1813.1	1813.1
177.5°	1801.0	1801.0	1801.0	1801.0	1798.2	1794.4	1792.6	1796.6	1804.7	1810.7	1809.6
180°	1801.0	1801.0	1801.0	1801.0	1801.0	1801.0	1801.0	1801.0	1801.0	1801.0	1801.0

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	796.4	796.4
2.5°	850.2	845.1
5°	1093.4	1098.6
7.5°	1472.4	1469.9
10°	1830.9	1854.0
12.5°	2092.2	2097.3
15°	2250.9	2261.2
17.5°	2312.3	2314.9
20°	2314.9	2309.8
22.5°	2286.7	2281.6
25°	2253.5	2250.9
27.5°	2222.7	2225.3
30°	2209.9	2217.7
32.5°	2209.9	2222.7
35°	2215.0	2227.8
37.5°	2212.5	2227.8
40°	2202.2	2220.2
42.5°	2174.0	2186.8
45°	2130.5	2145.9
47.5°	2074.2	2084.4
50°	2002.5	2012.7
52.5°	1912.9	1915.4
55°	1805.3	1815.6
57.5°	1690.1	1692.6
60°	1562.0	1569.8
62.5°	1426.4	1426.4
65°	1283.0	1288.1
67.5°	1134.4	1147.2
70°	983.3	985.9
72.5°	834.8	834.8
75°	681.2	683.7
77.5°	535.2	535.2
80°	396.9	399.5
82.5°	274.0	279.2
85°	171.6	171.6
87.5°	79.4	71.7
90°	45.9	45.9
92.5°	184.0	147.5
95°	641.3	530.6
97.5°	1536.5	1326.0
100°	2213.9	1963.0
102.5°	2880.2	2665.3
105°	3729.7	3614.2
107.5°	4286.1	4314.0
110°	4498.3	4618.6

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	4517.2	4702.0
115°	4397.4	4653.6
117.5°	4143.4	4427.7
120°	3938.8	4214.9
122.5°	3739.5	4011.9
125°	3455.2	3706.0
127.5°	3199.4	3411.1
130°	3048.8	3244.3
132.5°	2911.9	3087.1
135°	2724.6	2875.6
137.5°	2574.3	2697.9
140°	2471.2	2586.7
142.5°	2385.8	2485.2
145°	2257.7	2332.9
147.5°	2159.3	2221.6
150°	2097.5	2148.0
152.5°	2044.5	2082.7
155°	1983.7	2008.9
157.5°	1935.6	1953.3
160°	1906.9	1917.1
162.5°	1888.0	1897.7
165°	1861.0	1871.1
167.5°	1841.5	1845.8
170°	1836.1	1836.1
172.5°	1821.7	1817.9
175°	1813.1	1813.1
177.5°	1805.2	1801.0
180°	1801.0	1801.0

(END OF REPORT)