

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: P938100

Luminaire Tested: SQ4-FB-125U-100D-B35-1D-UNV-W2A-W-8

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938100
REPORT IS A COMBINATION OF REPORTS P933615 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-125U-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

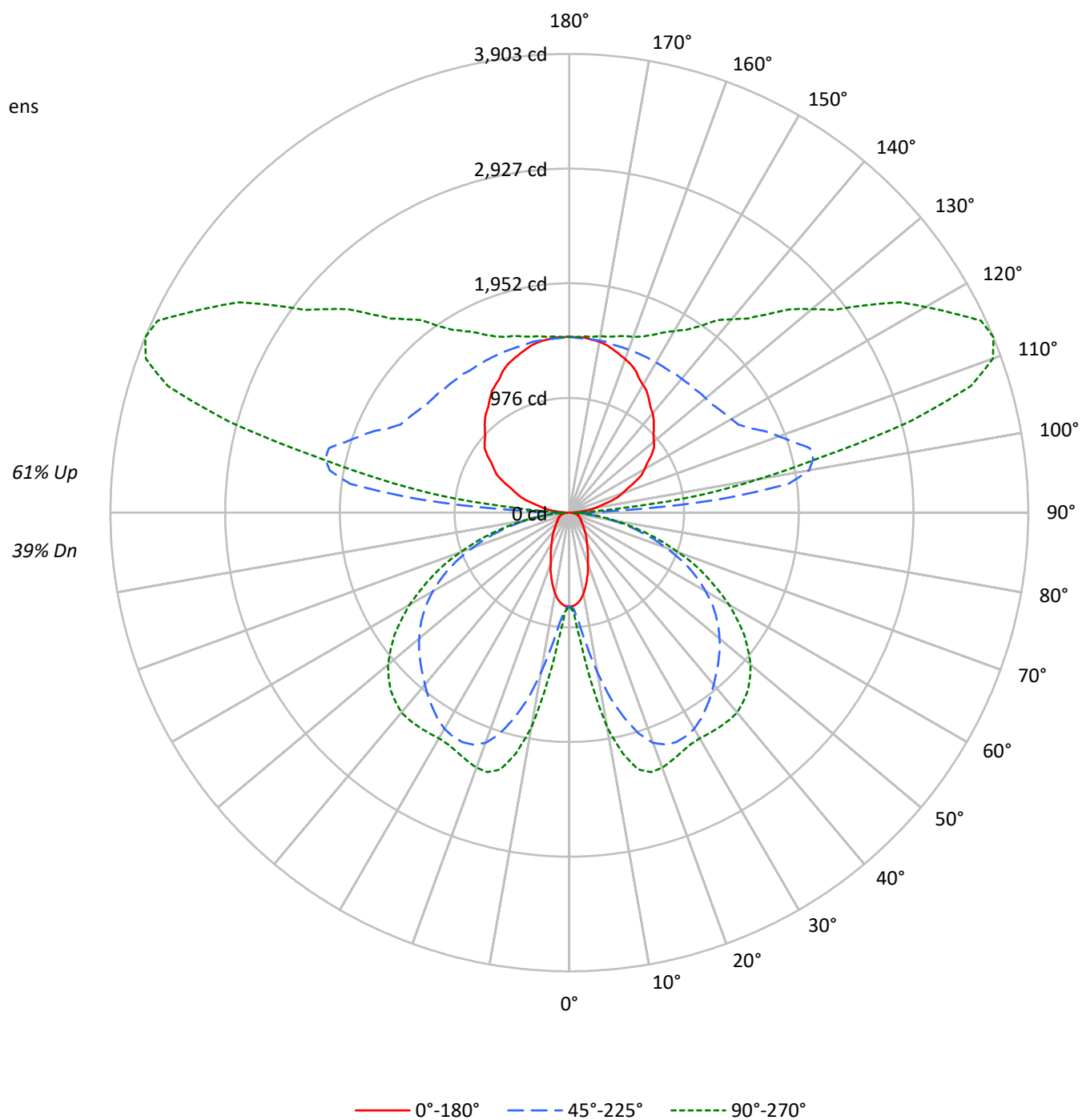
Lumens per Lamp: N/A
Luminaire Lumens: 15858.7 lumens
Efficiency: N/A
Efficacy: 123.1 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 128.8
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					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	104	104	104	104	95	95	95	95	77	77	77	61	61	61	46	46	46	39		
1	95	90	86	83	86	82	79	76	67	65	62	53	51	50	40	39	38	32		
2	86	78	72	67	78	71	66	61	58	54	51	46	43	41	35	33	31	26		
3	78	68	61	55	71	62	56	51	51	46	42	40	37	34	30	28	26	21		
4	71	60	52	46	64	55	48	42	45	40	35	35	32	29	27	24	22	18		
5	65	53	45	39	59	49	41	36	40	34	30	31	27	24	24	21	19	15		
6	60	47	39	33	54	43	36	31	35	30	26	28	24	21	21	18	16	13		
7	55	43	35	29	50	39	32	27	32	26	23	25	21	18	19	16	14	11		
8	51	38	31	25	46	35	28	23	29	24	20	23	19	16	18	15	13	10		
9	47	35	27	22	43	32	25	21	26	21	17	21	17	14	16	13	11	9		
10	44	32	25	20	40	29	23	18	24	19	16	19	15	13	15	12	10	8		

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	2.9
20°-30°	798.6	5.0
30°-40°	1028.1	6.5
40°-50°	1148.3	7.2
50°-60°	1099.8	6.9
60°-70°	871.6	5.5
70°-80°	512.5	3.2
80°-90°	148.1	0.9
90°-100°	728.8	4.6
100°-110°	1916.0	12.1
110°-120°	1986.7	12.5
120°-130°	1593.6	10.0
130°-140°	1250.4	7.9
140°-150°	959.7	6.1
150°-160°	691.2	4.4
160°-170°	422.9	2.7
170°-180°	142.9	0.9
0°-30°	1358.2	8.6
0°-40°	2386.3	15.0
0°-60°	4634.4	29.2
0°-90°	6166.6	38.9
90°-120°	4631.5	29.2
90°-150°	8435.1	53.2
90°-180°	9692.0	61.1
0°-180°	15858.7	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°	10	28	76	38	38	10
95°	96	377	1255	647	440	107
105°	345	523	2118	3216	3000	366
115°	613	744	1697	3384	3863	606
125°	853	956	1543	2608	3076	757
135°	1016	1119	1495	2105	2387	786
145°	1179	1254	1476	1796	1936	739
155°	1333	1370	1476	1621	1668	612
165°	1438	1457	1476	1534	1553	406
175°	1495	1495	1486	1505	1505	142
180°	1495	1495	1495	1495	1495	

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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°	10.1	18.1	26.1	28.1	44.2	65.6	76.3	67.7	50.8	38.1	38.1
92.5°	40.1	108.3	176.6	193.7	272.3	377.0	429.5	376.4	270.3	190.6	183.0
95°	96.3	221.2	346.1	377.3	670.0	1060.2	1255.2	1120.2	849.9	647.2	624.2
97.5°	166.6	276.7	386.9	414.4	902.4	1553.1	1878.4	1793.0	1622.2	1494.1	1450.4
100°	220.7	320.6	420.5	445.5	987.0	1709.0	2070.1	2076.3	2088.8	2098.2	2046.1
102.5°	266.9	360.1	453.3	476.7	1025.9	1758.2	2124.2	2233.1	2450.7	2613.9	2569.3
105°	345.2	424.1	503.0	522.8	1054.6	1763.7	2118.2	2362.1	2850.0	3215.9	3192.0
107.5°	425.5	499.0	572.6	591.0	1059.9	1685.2	1997.8	2338.1	3018.6	3529.0	3534.8
110°	479.7	546.1	612.6	629.2	1051.9	1615.6	1897.5	2277.9	3038.7	3609.2	3634.2

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	532.9	596.1	659.5	675.3	1052.2	1554.9	1806.1	2195.5	2974.1	3558.1	3596.4
115°	613.1	671.5	729.9	744.5	1061.9	1485.2	1696.8	2071.8	2821.9	3384.5	3437.7
117.5°	692.4	745.5	798.5	811.7	1081.7	1441.6	1621.5	1960.0	2636.9	3144.7	3203.7
120°	738.5	788.5	838.4	850.9	1097.7	1426.9	1591.4	1900.7	2519.2	2983.2	3040.4
122.5°	783.6	834.0	884.4	897.0	1120.7	1419.1	1568.3	1846.8	2403.9	2821.6	2878.1
125°	852.9	898.8	944.8	956.2	1151.9	1412.8	1543.2	1779.9	2253.0	2607.9	2659.9
127.5°	909.1	955.5	1001.8	1013.5	1183.1	1409.1	1522.2	1725.3	2131.6	2436.3	2480.2
130°	939.2	989.2	1039.1	1051.6	1205.7	1411.3	1514.2	1695.0	2056.7	2327.9	2368.5
132.5°	970.3	1020.3	1070.2	1082.7	1224.1	1412.8	1507.1	1669.0	1992.7	2235.6	2271.9
135°	1016.5	1061.9	1107.5	1118.8	1244.2	1411.4	1495.1	1630.6	1901.8	2105.2	2136.5
137.5°	1063.6	1108.6	1153.7	1164.9	1274.3	1420.2	1493.0	1607.7	1836.9	2008.8	2034.5
140°	1102.7	1144.2	1185.7	1196.0	1292.7	1421.6	1486.1	1585.1	1783.1	1931.6	1955.5
142.5°	1132.9	1171.2	1209.5	1219.1	1308.1	1426.8	1486.1	1573.0	1746.9	1877.3	1898.0
145°	1179.0	1212.4	1245.9	1254.3	1328.2	1426.8	1476.0	1547.1	1689.5	1796.1	1811.7
147.5°	1225.2	1257.8	1290.3	1298.5	1357.7	1436.5	1476.0	1532.0	1643.9	1727.9	1740.8
150°	1255.2	1284.7	1314.2	1321.5	1373.0	1441.7	1476.0	1523.3	1617.8	1688.8	1699.2
152.5°	1286.3	1308.6	1330.9	1336.5	1383.1	1445.0	1476.0	1516.4	1597.1	1657.7	1665.6
155°	1332.6	1349.0	1365.5	1369.7	1405.1	1452.3	1476.0	1508.2	1572.4	1620.6	1625.8
157.5°	1366.7	1382.7	1398.8	1402.7	1427.1	1459.7	1476.0	1501.0	1550.9	1588.4	1592.1
160°	1389.7	1402.2	1414.7	1417.8	1437.2	1463.1	1476.0	1497.4	1540.2	1572.3	1574.4
162.5°	1412.8	1422.1	1431.5	1433.8	1447.9	1466.6	1476.0	1494.0	1530.1	1557.3	1559.3
165°	1437.9	1446.4	1454.9	1457.0	1463.3	1471.7	1476.0	1489.0	1514.8	1534.2	1536.3
167.5°	1461.0	1464.9	1469.0	1470.0	1475.3	1482.5	1486.1	1494.5	1511.4	1524.1	1525.0
170°	1476.0	1480.1	1484.1	1485.1	1485.4	1485.9	1486.1	1494.5	1511.4	1524.1	1524.1
172.5°	1484.0	1484.9	1485.9	1486.1	1486.1	1486.1	1486.1	1492.7	1506.1	1516.2	1515.4
175°	1495.1	1495.1	1495.1	1495.1	1492.1	1488.1	1486.1	1490.3	1498.8	1505.1	1505.1
177.5°	1495.1	1495.1	1495.1	1495.1	1492.7	1489.6	1488.1	1491.4	1498.1	1503.1	1502.2
180°	1495.1	1495.1	1495.1	1495.1	1495.1	1495.1	1495.1	1495.1	1495.1	1495.1	1495.1

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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°	38.1	38.1
92.5°	152.7	122.4
95°	532.4	440.5
97.5°	1275.6	1100.8
100°	1837.8	1629.6
102.5°	2390.9	2212.5
105°	3096.1	3000.2
107.5°	3558.0	3581.1
110°	3734.1	3834.0

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	3749.8	3903.2
115°	3650.4	3863.1
117.5°	3439.6	3675.5
120°	3269.7	3498.9
122.5°	3104.3	3330.4
125°	2868.2	3076.5
127.5°	2655.9	2831.6
130°	2530.8	2693.1
132.5°	2417.4	2562.7
135°	2261.8	2387.1
137.5°	2137.0	2239.6
140°	2051.5	2147.3
142.5°	1980.4	2063.0
145°	1874.1	1936.5
147.5°	1792.6	1844.3
150°	1741.2	1783.1
152.5°	1697.2	1728.9
155°	1646.7	1667.6
157.5°	1606.8	1621.5
160°	1582.9	1591.4
162.5°	1567.4	1575.4
165°	1544.8	1553.3
167.5°	1528.6	1532.2
170°	1524.1	1524.1
172.5°	1512.2	1509.1
175°	1505.1	1505.1
177.5°	1498.7	1495.1
180°	1495.1	1495.1

(END OF REPORT)