

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: P937801

Luminaire Tested: SQ4-FB-100U-125D-B40-1D-UNV-W2A-W-12

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937801
REPORT IS A COMBINATION OF REPORTS P933560 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-125D-B40-1D-UNV-W2A-W-12
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

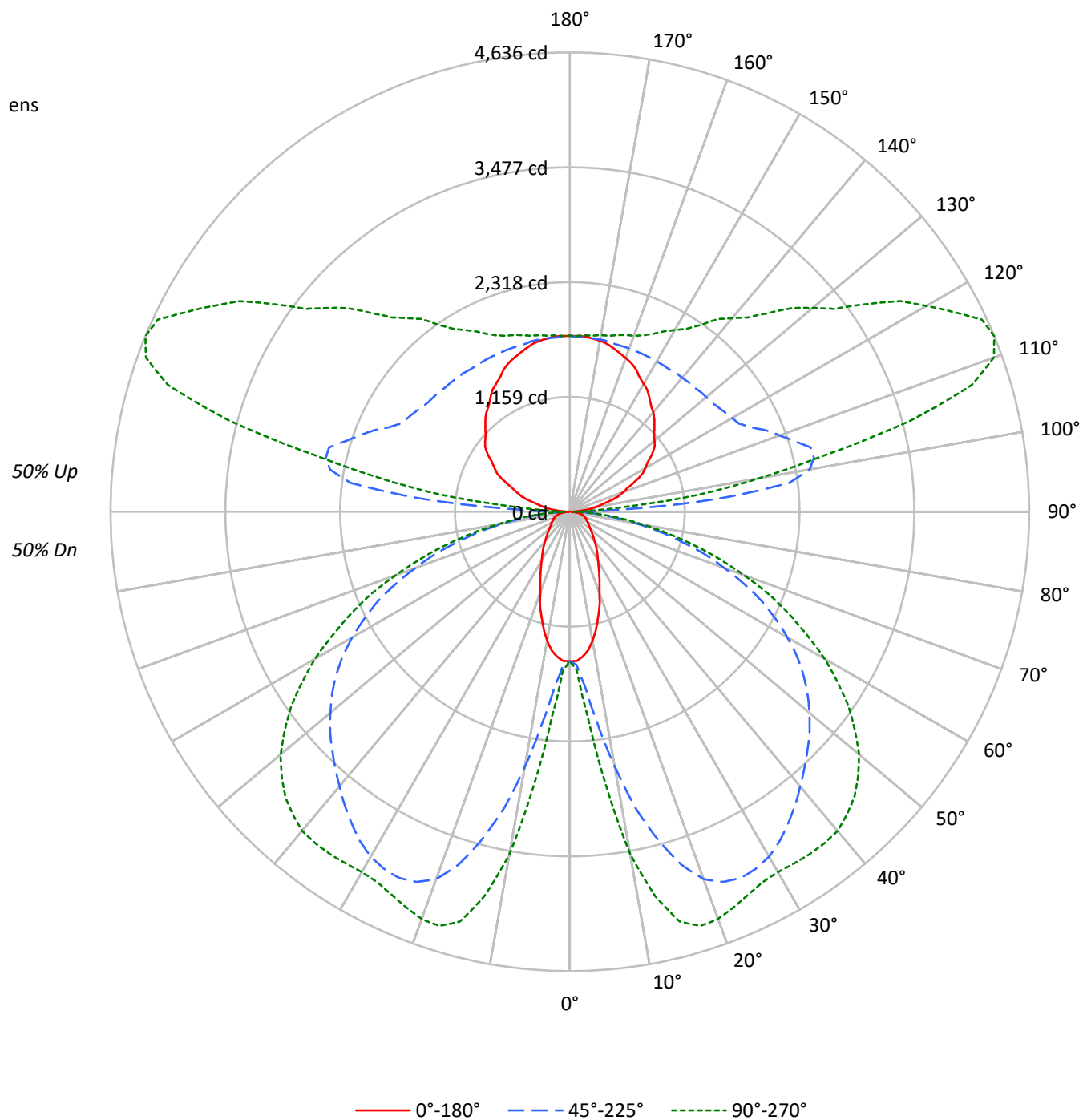
Lumens per Lamp: N/A
Luminaire Lumens: 23181.7 lumens
Efficiency: N/A
Efficacy: 112.3 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 12' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 206.4
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	107	107	107	107	99	99	99	99	84	84	84	69	69	69	56	56	56
1	97	93	89	85	90	86	82	79	72	70	67	60	58	57	49	48	47
2	88	80	74	68	81	74	69	64	63	59	55	52	49	46	42	40	38
3	80	70	62	56	73	65	58	53	55	50	45	46	42	39	37	34	32
4	73	62	53	47	67	57	50	44	48	43	38	40	36	32	33	30	27
5	67	54	46	40	61	50	43	37	43	37	32	36	31	28	29	26	23
6	61	49	40	34	56	45	37	32	38	32	28	32	27	24	26	23	20
7	56	44	35	30	52	40	33	28	34	29	24	29	24	21	24	20	17
8	52	39	31	26	48	37	29	24	31	25	21	26	22	18	22	18	15
9	48	36	28	23	44	33	26	21	28	23	19	24	19	16	20	16	14
10	45	33	25	20	41	30	24	19	26	21	17	22	18	15	18	15	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4664	4664	4664
5°	4558	5392	6269
10°	4136	7861	10393
15°	3516	10273	12549
20°	2864	11908	12789
25°	2390	12464	12529
30°	2016	12546	12506
35°	1784	12341	12829
40°	1555	12074	13163
45°	1409	11879	13215
50°	1294	11704	12996
55°	1240	11448	12420
60°	1271	10950	11511
65°	1324	10191	10261
70°	1415	8893	8668
75°	1573	7258	6765
80°	1731	5039	4559
85°	1572	2678	2333

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 13215 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	195.0	0.8
10°-20°	864.4	3.7
20°-30°	1512.0	6.5
30°-40°	1946.4	8.4
40°-50°	2174.1	9.4
50°-60°	2082.3	9.0
60°-70°	1650.2	7.1
70°-80°	970.4	4.2
80°-90°	276.3	1.2
90°-100°	865.5	3.7
100°-110°	2275.5	9.8
110°-120°	2359.4	10.2
120°-130°	1892.6	8.2
130°-140°	1485.0	6.4
140°-150°	1139.8	4.9
150°-160°	820.8	3.5
160°-170°	502.2	2.2
170°-180°	169.7	0.7
0°-30°	2571.5	11.1
0°-40°	4517.9	19.5
0°-60°	8774.2	37.8
0°-90°	11671.2	50.3
90°-120°	5500.5	23.7
90°-150°	10017.8	43.2
90°-180°	11511.0	49.7
0°-180°	23181.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1508	1508	1508	1508	1508	
5°	1469	1576	1774	2007	2080	136
15°	1100	2031	3423	4150	4281	306
25°	703	2303	4077	4257	4262	324
35°	475	2201	3840	4058	4218	297
45°	325	1755	3394	3888	4063	251
55°	233	1115	2880	3345	3437	212
65°	184	592	2138	2405	2439	183
75°	136	364	1173	1290	1294	142
85°	48	112	291	320	325	51
90°	12	33	90	45	45	13
95°	114	448	1491	769	523	127
105°	410	621	2516	3819	3563	435
115°	728	884	2015	4020	4588	719
125°	1013	1136	1833	3097	3654	899
135°	1207	1329	1776	2500	2835	934
145°	1400	1490	1753	2133	2300	877
155°	1582	1627	1753	1924	1981	727
165°	1708	1730	1753	1822	1845	482
175°	1776	1776	1765	1788	1788	169
180°	1776	1776	1776	1776	1776	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1507.8	1507.8	1507.8	1507.8	1507.8	1507.8	1507.8	1507.8	1507.8	1507.8	1507.8
2.5°	1507.8	1507.8	1517.5	1522.4	1532.0	1536.9	1546.6	1556.3	1585.4	1590.3	1599.9
5°	1469.0	1488.4	1551.4	1575.7	1643.6	1735.7	1774.5	1837.5	1968.4	2007.2	2031.4
7.5°	1410.8	1454.5	1609.7	1648.4	1818.1	2060.5	2162.3	2298.1	2506.6	2608.4	2690.8
10°	1318.8	1410.8	1687.2	1779.3	2055.6	2424.1	2613.2	2802.3	3117.4	3258.0	3311.4
12.5°	1217.0	1367.2	1769.6	1895.7	2293.2	2831.4	3059.2	3267.7	3626.5	3815.6	3844.6
15°	1100.5	1304.1	1847.2	2031.4	2545.4	3170.8	3422.8	3679.8	4014.3	4150.1	4184.0
17.5°	998.7	1255.7	1919.9	2113.8	2739.2	3476.2	3733.2	3946.4	4217.9	4310.1	4334.4
20°	872.7	1178.1	1968.4	2220.5	2942.9	3699.2	3946.4	4111.3	4295.6	4353.7	4363.4
22.5°	780.5	1095.7	1997.5	2259.2	3078.6	3835.0	4043.5	4174.3	4300.4	4319.8	4324.6
25°	703.0	1003.6	1992.6	2302.9	3195.0	3917.4	4077.4	4174.3	4247.1	4256.7	4256.7
27.5°	630.3	901.8	1973.2	2312.6	3282.2	3936.8	4062.9	4130.7	4164.7	4184.0	4184.0
30°	567.3	804.8	1924.7	2293.2	3321.0	3917.4	4019.2	4053.1	4087.1	4116.1	4130.7
32.5°	518.8	712.7	1852.0	2254.5	3325.9	3868.9	3941.7	3961.1	4009.5	4077.4	4101.6
35°	475.1	620.6	1769.6	2201.1	3296.9	3791.4	3839.8	3859.3	3956.2	4058.0	4091.9
37.5°	431.5	552.7	1662.9	2109.0	3253.2	3699.2	3733.2	3767.1	3917.4	4038.6	4077.4
40°	387.8	494.5	1536.9	2007.2	3185.3	3587.7	3616.8	3670.2	3868.9	4009.5	4048.2
42.5°	353.9	446.1	1401.2	1900.5	3098.0	3461.7	3505.3	3582.9	3810.7	3961.1	4004.7
45°	324.8	397.6	1255.7	1755.1	2986.5	3330.8	3393.8	3500.5	3742.8	3888.3	3927.1
47.5°	295.8	363.7	1105.4	1604.8	2865.3	3199.8	3282.2	3403.4	3650.8	3791.4	3825.3
50°	271.5	329.7	955.1	1444.8	2734.5	3059.2	3156.2	3282.2	3534.4	3665.3	3708.9
52.5°	252.1	300.6	814.5	1284.8	2584.1	2913.8	3025.3	3156.2	3393.8	3519.8	3548.9
55°	232.7	276.4	693.3	1115.1	2428.9	2758.6	2879.9	3006.0	3238.6	3345.3	3364.7
57.5°	223.0	257.0	591.5	955.1	2264.1	2584.1	2719.8	2836.3	3054.4	3136.8	3156.2
60°	208.5	242.4	513.9	819.4	2084.8	2419.3	2535.6	2652.0	2836.3	2904.1	2918.7
62.5°	194.0	232.7	455.7	688.5	1900.5	2225.3	2341.7	2448.3	2603.5	2652.0	2671.4
65°	184.2	223.0	412.1	591.5	1711.5	2021.7	2138.1	2230.2	2356.3	2404.7	2414.4
67.5°	174.6	213.3	378.2	509.1	1522.4	1818.1	1905.3	1992.6	2089.6	2138.1	2142.9
70°	160.0	203.6	349.1	450.9	1328.4	1585.4	1658.1	1750.2	1827.8	1852.0	1866.5
72.5°	150.3	189.1	329.7	407.2	1129.7	1362.4	1430.2	1483.6	1551.4	1575.7	1575.7
75°	135.7	169.7	310.3	363.7	926.0	1115.1	1173.3	1226.6	1279.9	1289.6	1275.1
77.5°	121.2	150.3	266.6	305.4	722.4	882.4	930.8	960.0	1003.6	1013.3	1018.1
80°	101.8	130.9	208.5	237.6	523.6	649.7	683.6	707.8	746.6	746.6	756.4
82.5°	77.5	101.8	150.3	169.7	353.9	446.1	475.1	489.6	513.9	513.9	513.9
85°	48.5	63.0	96.9	111.5	213.3	271.5	290.9	295.8	315.2	320.0	320.0
87.5°	24.3	33.9	63.0	67.9	111.5	140.6	140.6	150.3	150.3	145.4	140.6
90°	11.9	21.5	30.9	33.3	52.4	77.8	90.5	80.5	60.4	45.3	45.3
92.5°	47.7	128.6	209.7	230.0	323.4	447.8	510.1	447.0	321.0	226.4	217.5
95°	114.4	262.7	411.0	448.1	795.6	1259.1	1490.8	1330.3	1009.3	768.6	741.3
97.5°	197.8	328.6	459.5	492.2	1071.7	1844.4	2230.8	2129.4	1926.5	1774.4	1722.5
100°	262.1	380.8	499.4	529.1	1172.2	2029.7	2458.5	2465.9	2480.7	2491.8	2430.0
102.5°	317.0	427.6	538.3	566.0	1218.3	2088.0	2522.8	2652.0	2910.5	3104.3	3051.3
105°	410.0	503.7	597.4	620.8	1252.5	2094.6	2515.7	2805.4	3384.8	3819.3	3790.9
107.5°	505.3	592.7	680.1	701.9	1258.8	2001.3	2372.6	2776.8	3585.0	4191.1	4198.0
110°	569.7	648.5	727.4	747.2	1249.2	1918.7	2253.4	2705.2	3608.8	4286.4	4316.1

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	632.8	708.0	783.2	802.0	1249.7	1846.6	2145.0	2607.4	3532.2	4225.7	4271.2
115°	728.1	797.5	866.9	884.2	1261.2	1763.8	2015.1	2460.6	3351.4	4019.5	4082.6
117.5°	822.3	885.3	948.3	964.1	1284.7	1712.0	1925.8	2327.7	3131.7	3734.7	3804.7
120°	877.1	936.4	995.8	1010.6	1303.8	1694.6	1890.0	2257.3	2991.9	3542.9	3611.0
122.5°	930.7	990.6	1050.4	1065.4	1331.2	1685.5	1862.6	2193.3	2854.9	3351.0	3418.1
125°	1013.0	1067.5	1122.0	1135.7	1368.0	1677.9	1832.8	2113.8	2675.7	3097.2	3158.9
127.5°	1079.6	1134.7	1189.8	1203.6	1405.0	1673.5	1807.8	2049.0	2531.5	2893.4	2945.5
130°	1115.4	1174.7	1234.1	1248.9	1432.0	1676.2	1798.3	2013.0	2442.6	2764.7	2813.0
132.5°	1152.4	1211.7	1271.0	1285.8	1453.8	1677.8	1789.9	1982.1	2366.7	2655.1	2698.3
135°	1207.2	1261.2	1315.2	1328.7	1477.7	1676.3	1775.6	1936.6	2258.6	2500.1	2537.3
137.5°	1263.2	1316.7	1370.1	1383.5	1513.4	1686.6	1773.2	1909.3	2181.6	2385.8	2416.2
140°	1309.7	1359.0	1408.1	1420.5	1535.3	1688.3	1764.8	1882.4	2117.6	2294.0	2322.5
142.5°	1345.4	1391.0	1436.5	1447.9	1553.5	1694.4	1764.8	1868.2	2074.7	2229.6	2254.1
145°	1400.2	1439.9	1479.7	1489.6	1577.4	1694.5	1753.0	1837.4	2006.4	2133.1	2151.6
147.5°	1455.0	1493.7	1532.4	1542.0	1612.3	1706.1	1753.0	1819.5	1952.4	2052.1	2067.5
150°	1490.8	1525.7	1560.7	1569.4	1630.7	1712.2	1753.0	1809.2	1921.4	2005.6	2018.0
152.5°	1527.7	1554.2	1580.7	1587.3	1642.5	1716.1	1753.0	1800.9	1896.7	1968.6	1978.0
155°	1582.5	1602.1	1621.8	1626.7	1668.8	1724.9	1753.0	1791.1	1867.3	1924.5	1930.7
157.5°	1623.0	1642.1	1661.2	1666.0	1695.0	1733.7	1753.0	1782.6	1841.9	1886.4	1890.8
160°	1650.4	1665.3	1680.1	1683.9	1706.9	1737.6	1753.0	1778.4	1829.2	1867.3	1869.8
162.5°	1677.8	1688.9	1700.1	1702.9	1719.6	1741.8	1753.0	1774.4	1817.3	1849.5	1851.8
165°	1707.6	1717.7	1727.8	1730.3	1737.8	1747.9	1753.0	1768.4	1799.0	1822.0	1824.5
167.5°	1735.0	1739.8	1744.6	1745.8	1752.1	1760.6	1764.8	1775.0	1795.1	1810.2	1811.3
170°	1753.0	1757.8	1762.5	1763.7	1764.1	1764.6	1764.8	1775.0	1795.1	1810.2	1810.2
172.5°	1762.5	1763.5	1764.6	1764.8	1764.8	1764.8	1764.8	1772.8	1788.7	1800.7	1799.7
175°	1775.6	1775.6	1775.6	1775.6	1772.0	1767.2	1764.8	1769.9	1779.9	1787.5	1787.5
177.5°	1775.6	1775.6	1775.6	1775.6	1772.9	1769.1	1767.2	1771.2	1779.2	1785.1	1784.0
180°	1775.6	1775.6	1775.6	1775.6	1775.6	1775.6	1775.6	1775.6	1775.6	1775.6	1775.6

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	1507.8	1507.8
2.5°	1609.7	1599.9
5°	2070.2	2079.9
7.5°	2787.7	2782.9
10°	3466.5	3510.1
12.5°	3961.1	3970.7
15°	4261.6	4281.0
17.5°	4378.0	4382.8
20°	4382.8	4373.1
22.5°	4329.5	4319.8
25°	4266.5	4261.6
27.5°	4208.3	4213.2
30°	4184.0	4198.6
32.5°	4184.0	4208.3
35°	4193.7	4217.9
37.5°	4188.9	4217.9
40°	4169.5	4203.4
42.5°	4116.1	4140.4
45°	4033.7	4062.9
47.5°	3927.1	3946.4
50°	3791.4	3810.7
52.5°	3621.6	3626.5
55°	3418.0	3437.4
57.5°	3199.8	3204.7
60°	2957.4	2972.0
62.5°	2700.5	2700.5
65°	2428.9	2438.7
67.5°	2147.8	2172.1
70°	1861.8	1866.5
72.5°	1580.5	1580.5
75°	1289.6	1294.5
77.5°	1013.3	1013.3
80°	751.5	756.4
82.5°	518.8	528.5
85°	324.8	324.8
87.5°	150.3	135.7
90°	45.3	45.3
92.5°	181.4	145.4
95°	632.2	523.1
97.5°	1514.9	1307.3
100°	2182.7	1935.3
102.5°	2839.5	2627.7
105°	3676.9	3563.1
107.5°	4225.6	4253.1
110°	4434.7	4553.4



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	4453.5	4635.7
115°	4335.3	4587.9
117.5°	4084.9	4365.1
120°	3883.1	4155.4
122.5°	3686.6	3955.1
125°	3406.3	3653.6
127.5°	3154.3	3362.9
130°	3005.7	3198.5
132.5°	2870.9	3043.6
135°	2686.1	2835.0
137.5°	2538.0	2659.9
140°	2436.4	2550.2
142.5°	2352.1	2450.1
145°	2225.8	2299.9
147.5°	2128.9	2190.3
150°	2067.9	2117.6
152.5°	2015.6	2053.2
155°	1955.6	1980.6
157.5°	1908.3	1925.8
160°	1879.9	1890.0
162.5°	1861.4	1870.9
165°	1834.7	1844.7
167.5°	1815.5	1819.7
170°	1810.2	1810.2
172.5°	1796.0	1792.2
175°	1787.5	1787.5
177.5°	1779.8	1775.6
180°	1775.6	1775.6

(END OF REPORT)