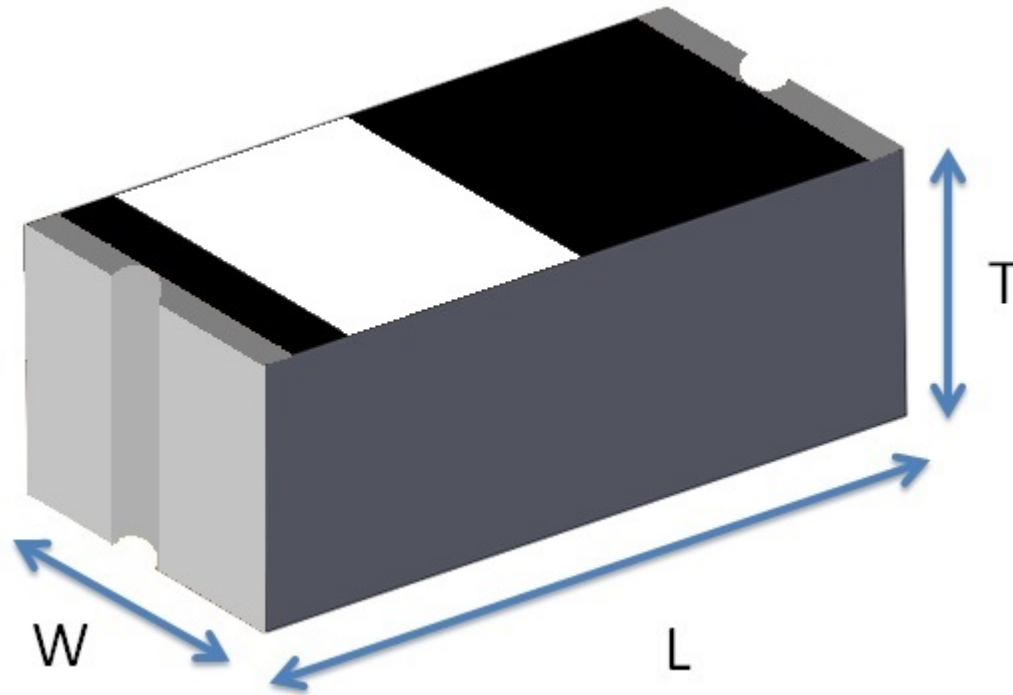


SR100 Antenna Test Report

Customer	健云互联
Project	SR100
Antenna BAND	BT
Product Description	2012-X5
Product No	V1.0

Product Overview & Dimension



	Dimension (mm)
L	3.23 ± 0.20
W	1.66 ± 0.20
T	1.23 ± 0.20

This report is to measure the performance of BT antenna for **RS01Z**. The antenna operating frequency at (2400-2500MHZ) , All test data are showed as below.

Content

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3. Antenna Matching Network
4. Test Result
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 - 4.4 2D Pattern
 - 4.5 OTA Data
 - 4.6 BT Boot measured
5. Antenna Assembly & environmental processing

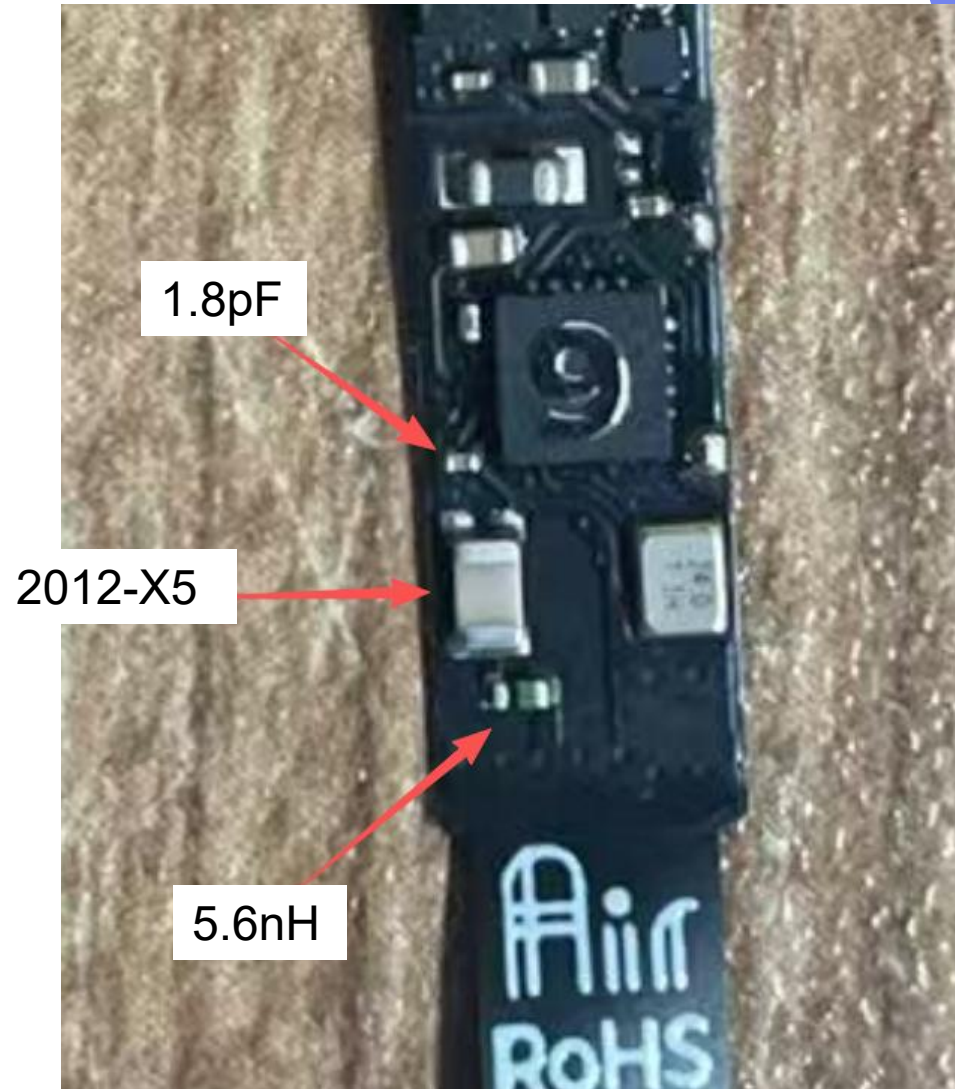
2. Test System

Sequence Number	Test Item	equipment
S parameter	VSWR	Agilent 5071C & HP 8753
OTA Test	TRP&TIS	CMW500 & CMW270 ETS& FT SG24
Gain & Efficiency	Gain & Efficiency	ETS&FT SG24 Agilent 5071C

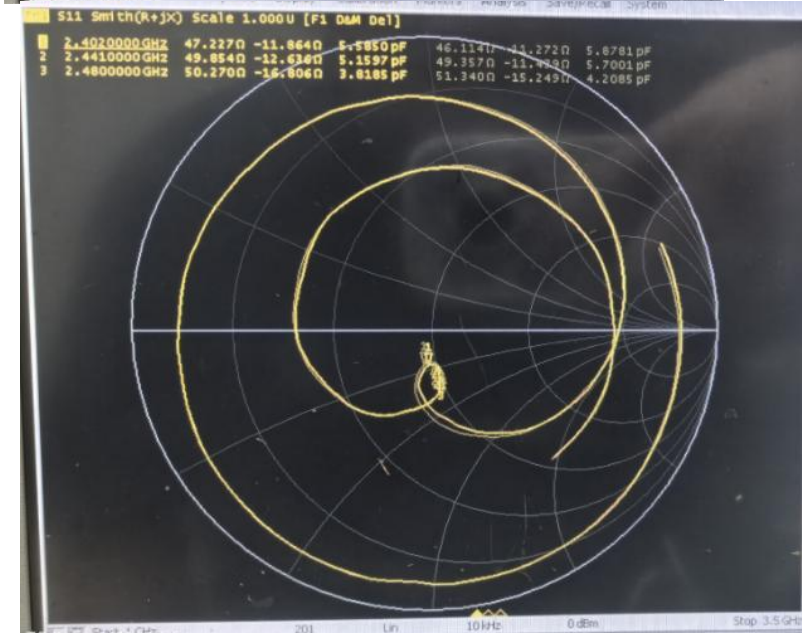
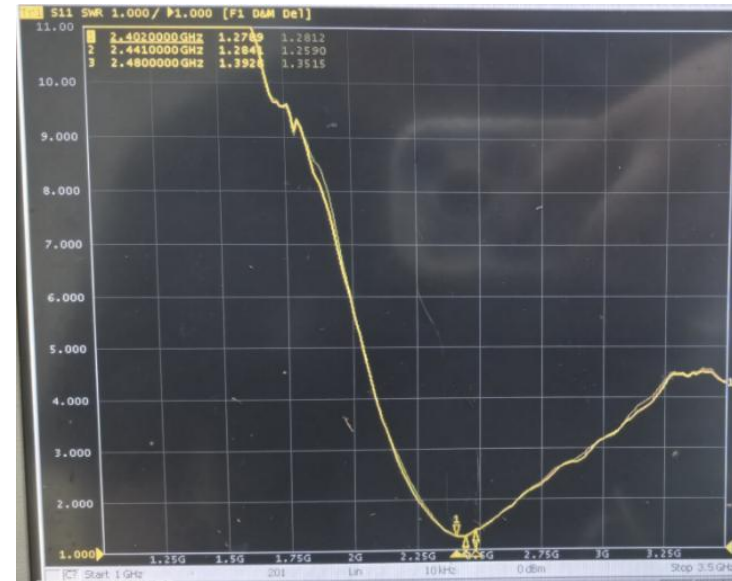
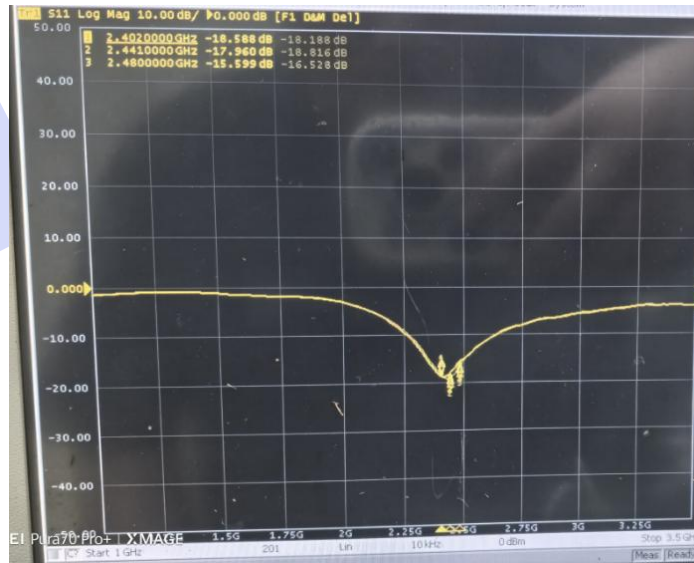


Diagram illustrating the sensor layout and coordinate system for a circular robot. The robot is positioned at the center, and the coordinate system is defined with $+Z$ (up), $+X$ (left), and $+Y$ (down). The angular range is marked from $\text{Theta} = 0^\circ$ to $\text{Theta} = 165^\circ$ in increments of 15° . The diagram shows the robot's orientation (indicated by a red arrow labeled Phi) and the sensor's field of view (indicated by a red arrow labeled Theta).

Match network parameters

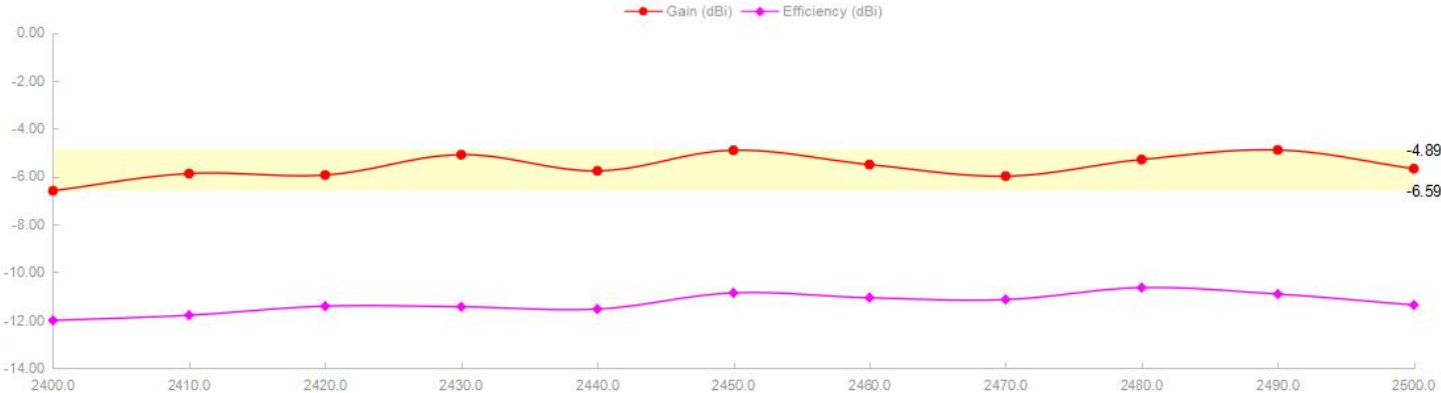
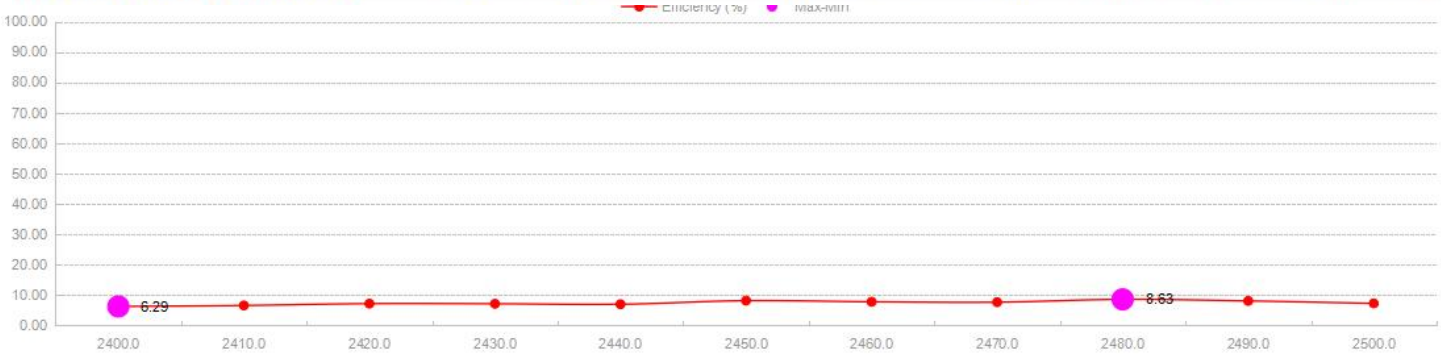


S11



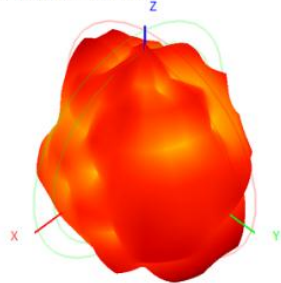
Frequency (MHz)	2400	2450	2500
Smith	47.22	49.85	50.27
Log mag	-18.58	-17.96	-15.59
VSWR	1.27	1.28	1.39

Frequency ID	1	2	3	4	5	6	7	8	9	10	11
Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
Efficiency (dBi)	-12.01	-11.79	-11.41	-11.44	-11.54	-10.86	-11.06	-11.14	-10.64	-10.91	-11.37
Gain (dBi)	-6.59	-5.88	-5.94	-5.09	-5.76	-4.90	-5.50	-5.98	-5.29	-4.89	-5.67
Efficiency (%)	6.29	6.62	7.22	7.18	7.02	8.20	7.83	7.70	8.63	8.11	7.30
Directivity (dB)	5.42	5.92	5.48	6.35	5.77	5.96	5.56	5.15	5.35	6.02	5.69
Peak Gain Position (Theta)	135.00	135.00	120.00	120.00	120.00	120.00	105.00	120.00	120.00	120.00	120.00
Peak Gain Position (Phi)	195.00	165.00	60.00	60.00	75.00	180.00	165.00	210.00	60.00	210.00	180.00
Efficiency ThetaPol (%)	3.03	3.26	3.37	3.44	3.27	3.91	3.86	4.07	4.57	4.24	3.78
Efficiency PhiPol (%)	3.26	3.35	3.85	3.74	3.75	4.29	3.97	3.62	4.05	3.87	3.52
Upper Hem. Efficiency (%)	3.12	3.15	3.44	3.16	3.03	3.54	3.37	3.47	4.14	3.84	3.49
Lower Hem. Efficiency (%)	3.17	3.47	3.78	4.01	3.99	4.66	4.45	4.22	4.49	4.27	3.81

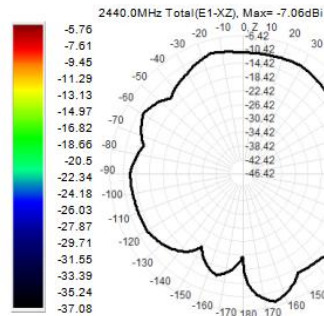
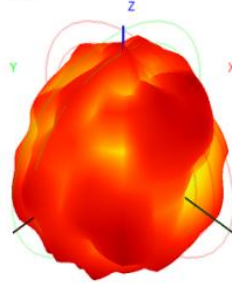


3D Pattern

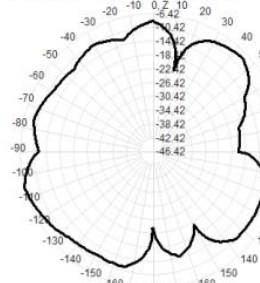
2440.0MHz Total, Eff: 7.0%



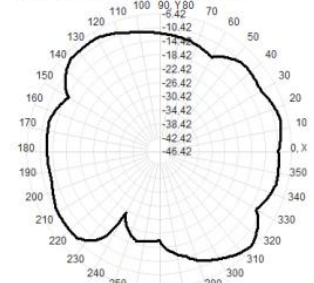
Back View



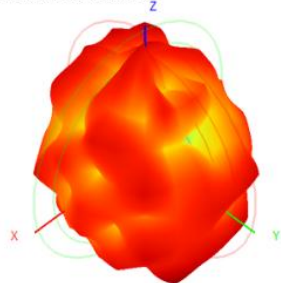
2440.0MHz Total(E2-YZ), Max=-6.42dBi



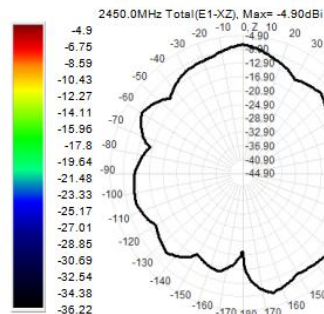
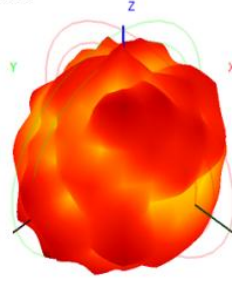
Total(H-XY), Max=-7.50dBi, CirD=18.70



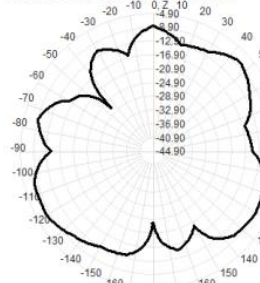
2450.0MHz Total, Eff: 8.2%



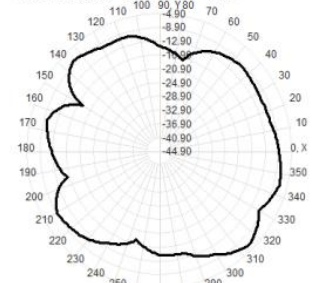
Back View



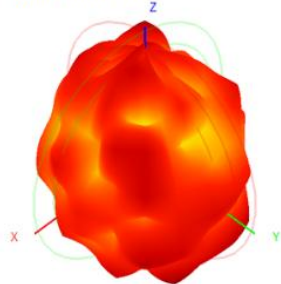
2450.0MHz Total(E2-YZ), Max=-7.97dBi



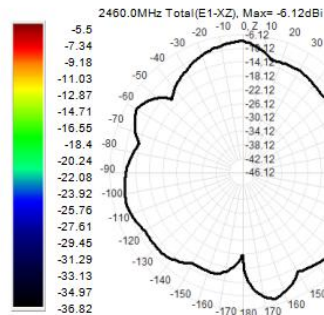
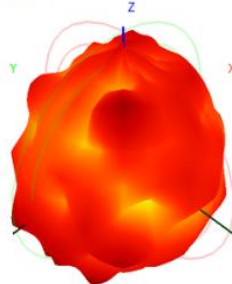
Total(H-XY), Max=-6.62dBi, CirD=11.90



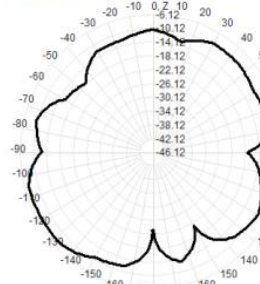
2460.0MHz Total, Eff: 7.8%



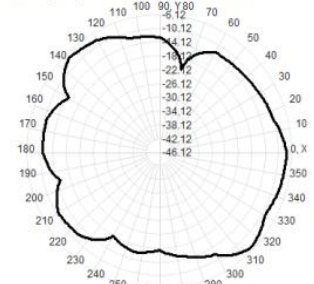
Back View

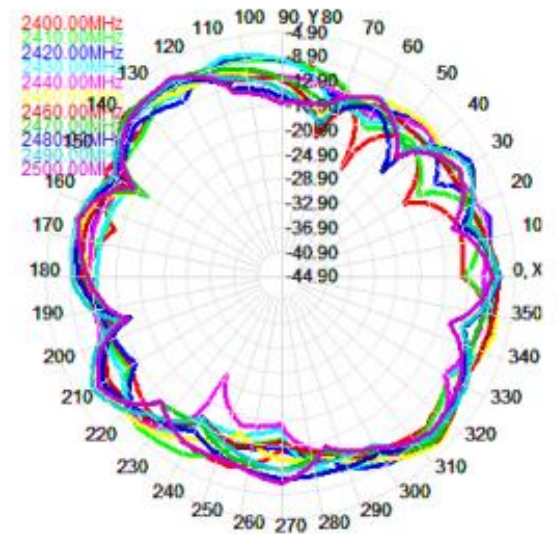
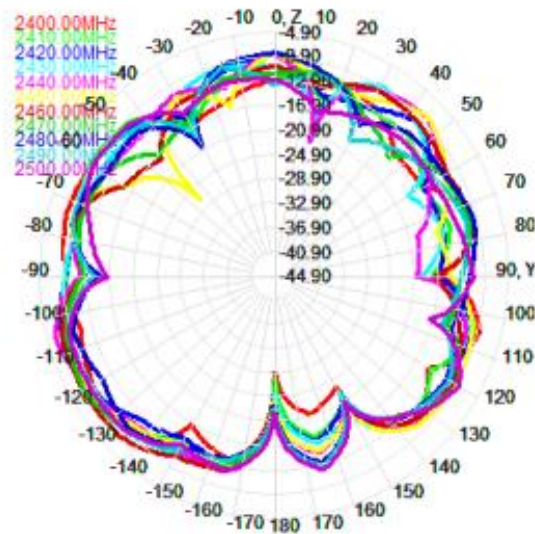
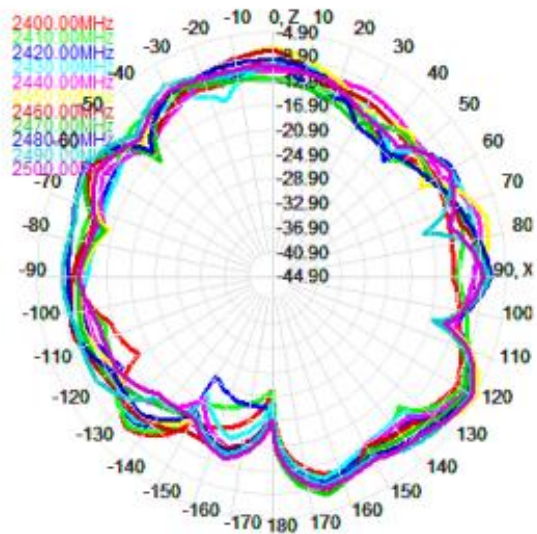


2460.0MHz Total(E2-YZ), Max=-7.49dBi



Total(H-XY), Max=-7.07dBi, CirD=14.35





Thanks for your comment!

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