



上海威尔创未来通讯技术有限公司

Shanghai Welletronics Future Communication Technology Co., Ltd

UL2402-09 ZWAVE Antenna Datasheet

Customer	Anviz
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Customer Approve

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1. Project Brief

ANTENNA Required Bands

ZWAVE antenna	890Mhz~930Mhz
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2. Antenna Specification

Band	Frequency (Mhz)	Gain (dBi)
890 - 930 MHz	890	-0.96
	930	-0.59

3. Device Pictures





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4. Test Environment

Agilent E5071C VNA is used to test return loss. Satimo Starlab 3D near filed chamber is used to test antenna efficiency and radiation pattern.

The test coordinate system is shown in Figure1.

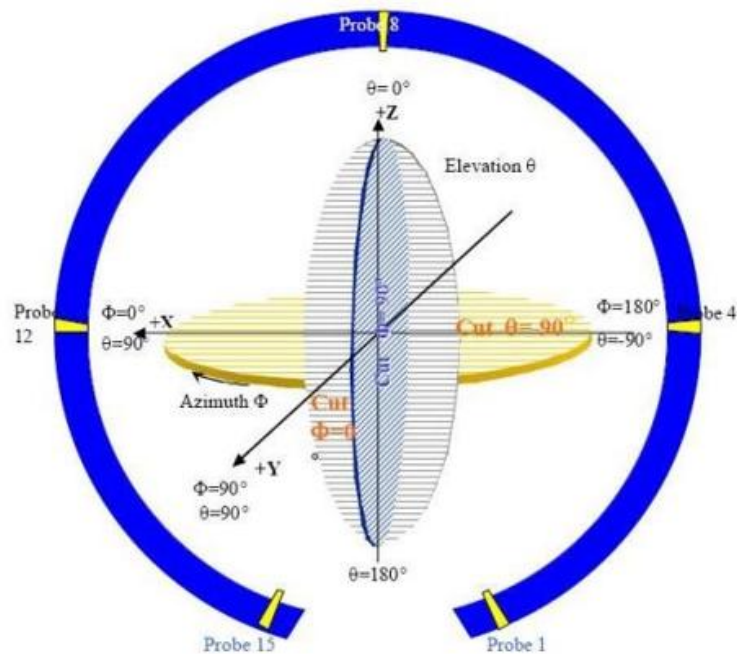


Figure1 Test Coordinate System of 3D Chamber



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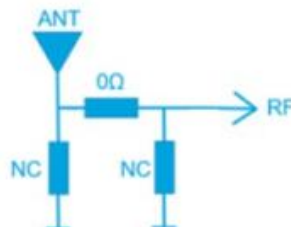
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5. Antenna Picture



6. Matching Network

In order to assure the best performance of the antenna, the matching will be evaluated in free space and in talk position. The antenna will comply with the Electrical Specification requirements, as set out below, while mounted on the handset containing the PCB. The handset and PCB are to be provided by the customer and should be representative of the latest design version of all parts. Any modifications in the handset or PCB can affect the performance of the antenna and should be discussed with Ethertronics to determine the effect of such changes on the antenna performance and delivery requirements.

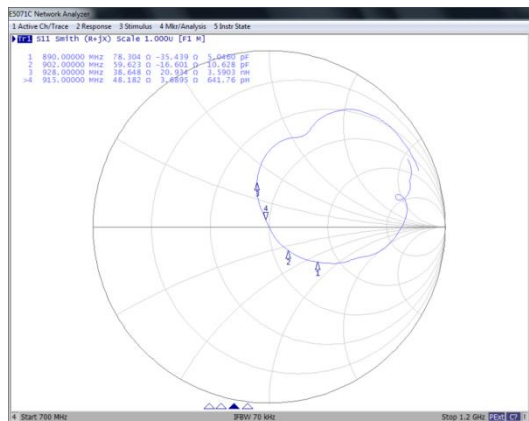
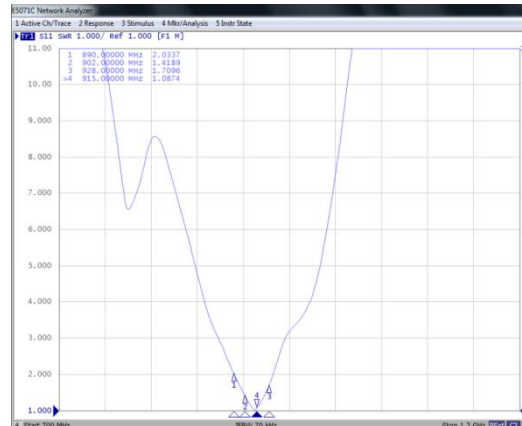
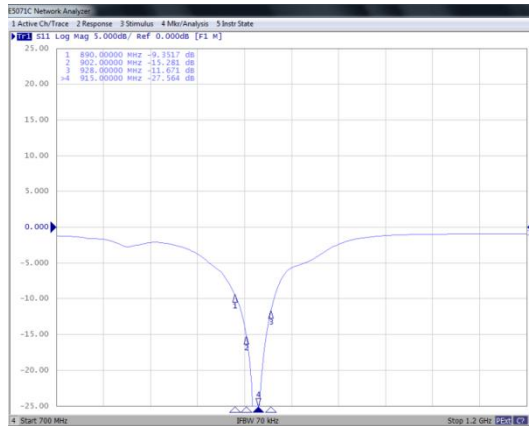




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7. Return Loss, VSWR, Smith, Chart



8. Efficiency

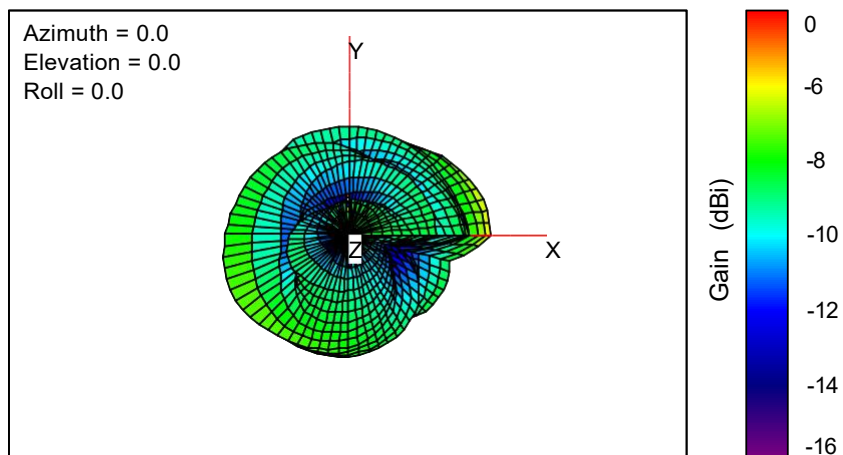
Frequency	Gain (dBi)	Efficiency (%)
890	-0.96	30.15
895	-0.15	30.59
900	-0.77	30.9
905	-0.47	32.07
910	-0.39	31.85
915	-0.3	32.55
920	-0.24	32.53
925	-0.46	30.9
930	-0.59	30.6
AVG	-0.48	31.35



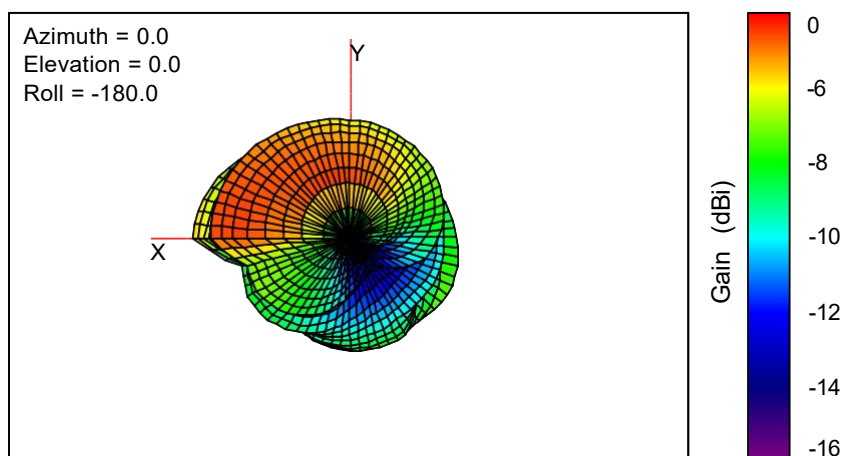
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Total



Total



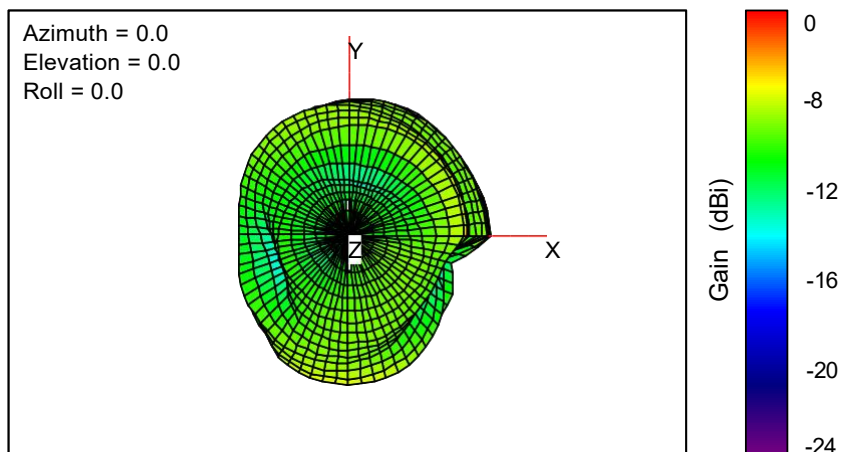
Free Space for 890MHz



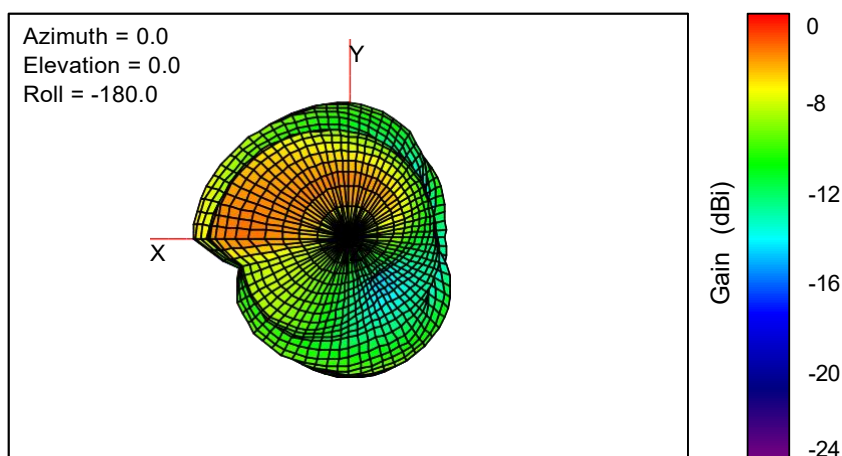
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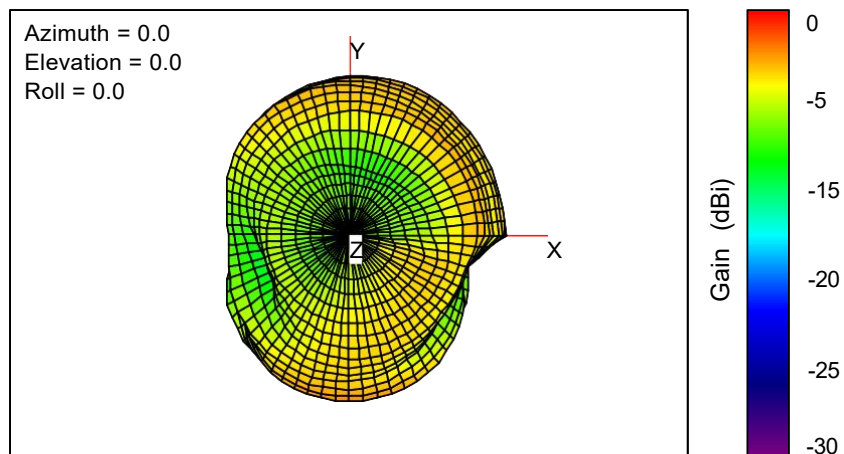
Free Space for 900MHz



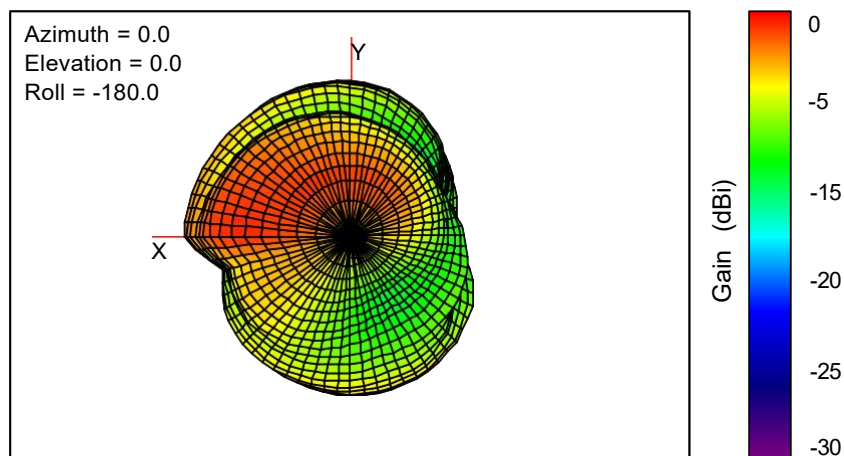
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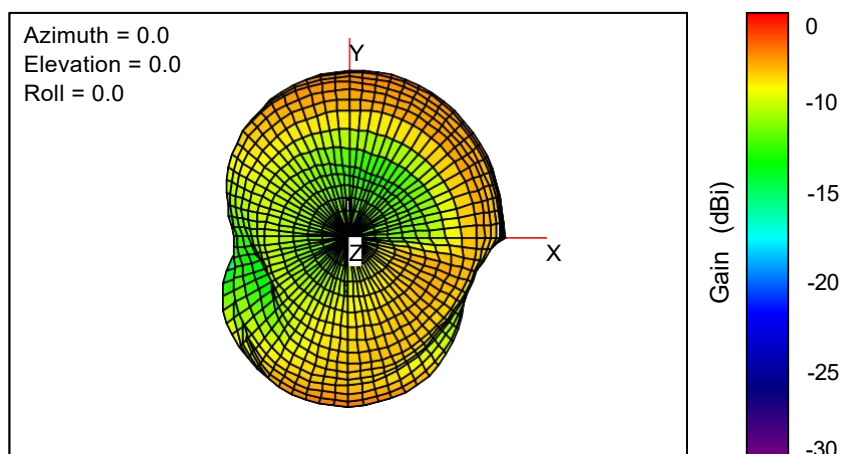
Free Space for 910MHz



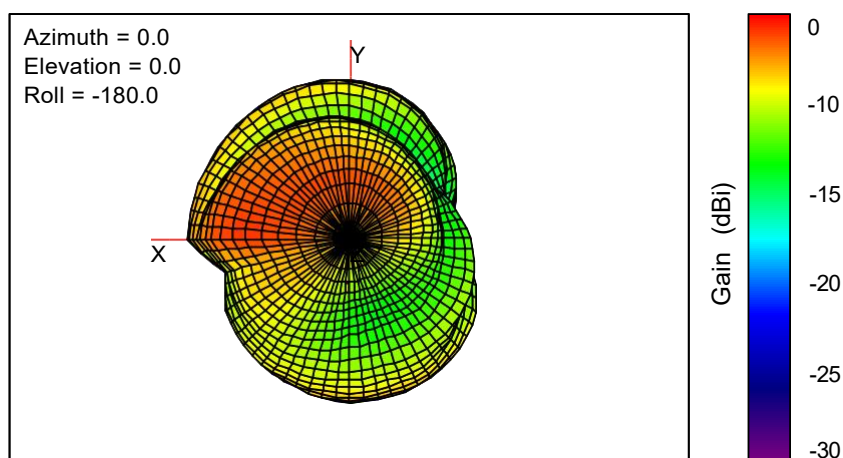
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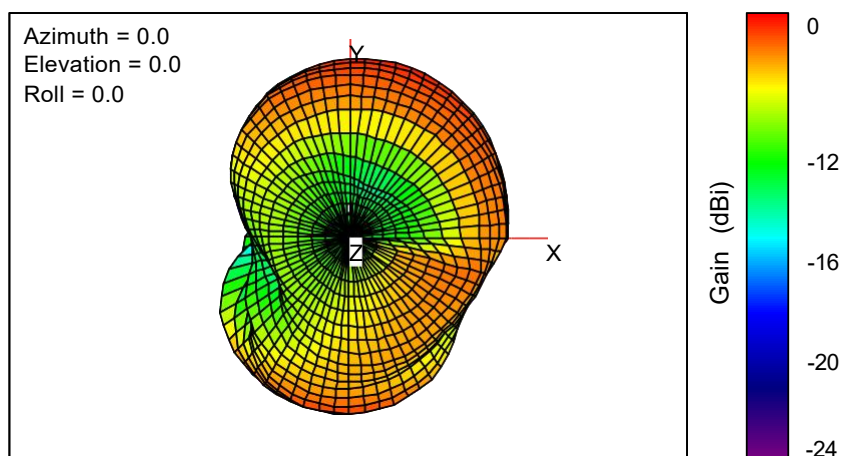
Free Space for 920MHz



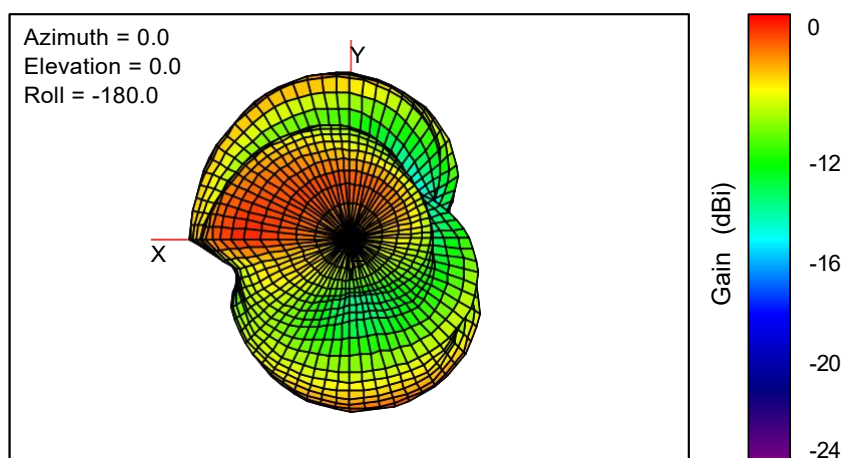
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Total



Total



Free Space for 930MHz



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9. Drawing

