



Antenna datasheet

Specification For Approval

Application	Wireless System
Model Name	CU-433H – ANT
Part No	
Issued Date	2024. 03. 18

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2. Specification

2.1. Electrical Specification

Item	Spec	Remarks
Center Frequency	433MHz	
Frequency Range	430MHz – 436MHz	
V.S.W.R	Less Than 3.0	
Peak Gain(dBi)	-10.4dBi (Max)	
Radiation pattern	Omni-directional	
Polarization	Linear Vertical	
Impedance	Nominal 50Ω	

2.2. Mechanical Specification

Item	Spec	Remarks
Dimensions(L)	16 mm x 10.5Turns	mm(Drawing reference)
Connector	Soldering	
Color	Black	
Operating Temperature	-45℃ ~ +85℃	
Weight	1g ± 0.2g	

2.3. Major Materials of Parts

Item	Type	Remarks
Element	SWC	
Plate	Cu	
Tube	POLYOLEFIN	Black

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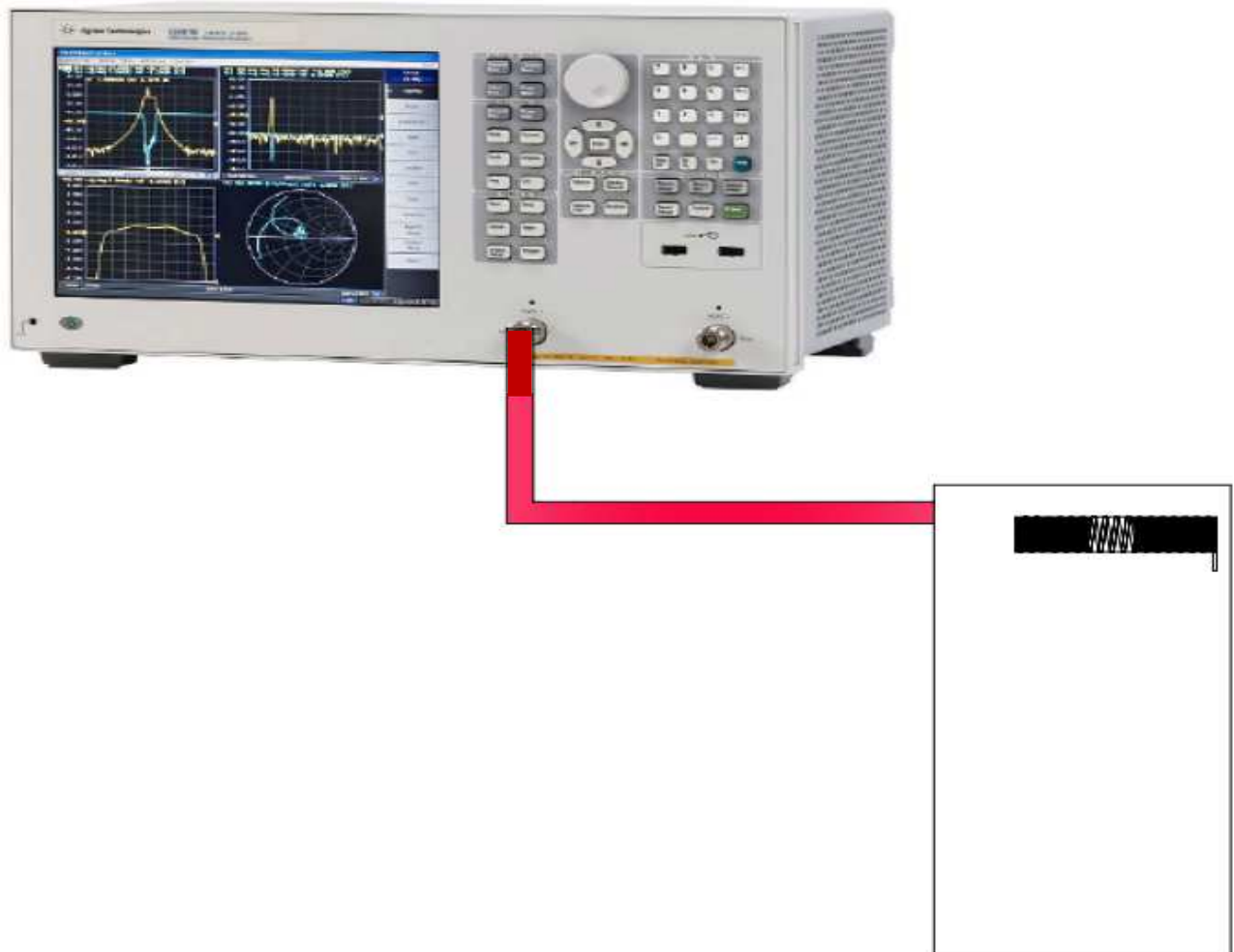
3. V.S.W.R Test

3.1.1 Test method

① Network Analyzer Spec

Equipment	Model	Specification
Network Analyzer	HP8753ES	· Freq. Range : 300KHz ~ 6GHz
Calibration Kit	HP85032B	· DC ~ 6GHz (SMA-Type)

② Network Analyzer test method

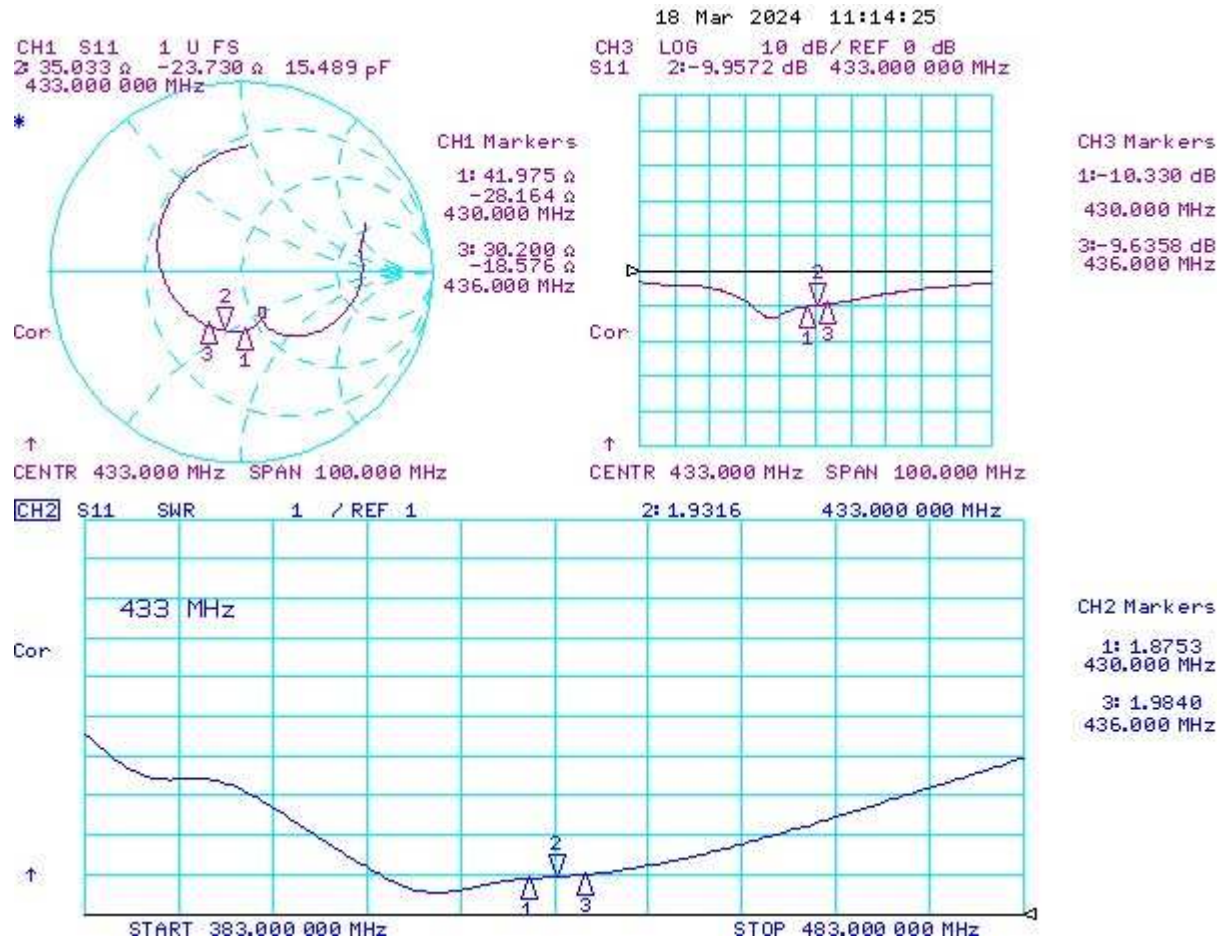


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3. Electrical Specification

3.1.2 V.S.W.R

DATA



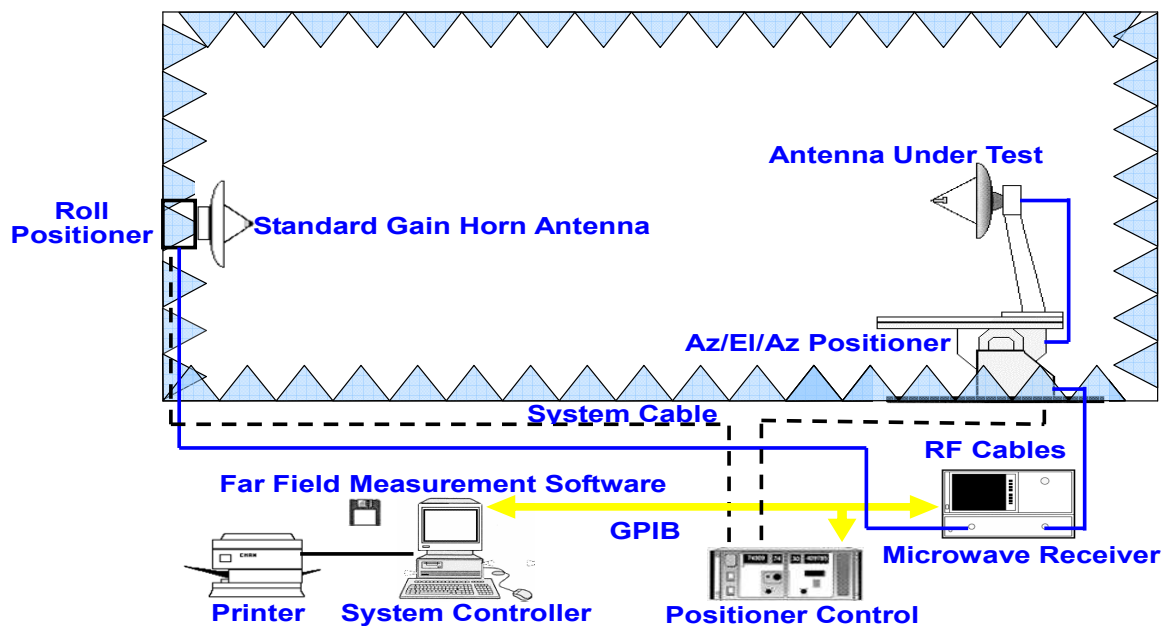
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3.2.1 Gain & Beam Pattern Test

① Chamber Spec

Section	Specification
Chamber Size	6(L)m X 3(W)m X 3(H)m
Frequency Range	400MHz – 6GHz (Far Field)
Quiet Zone	1m X 1 m @ 1GHz
Type	Rectangular
Antenna weight	< 50 kg

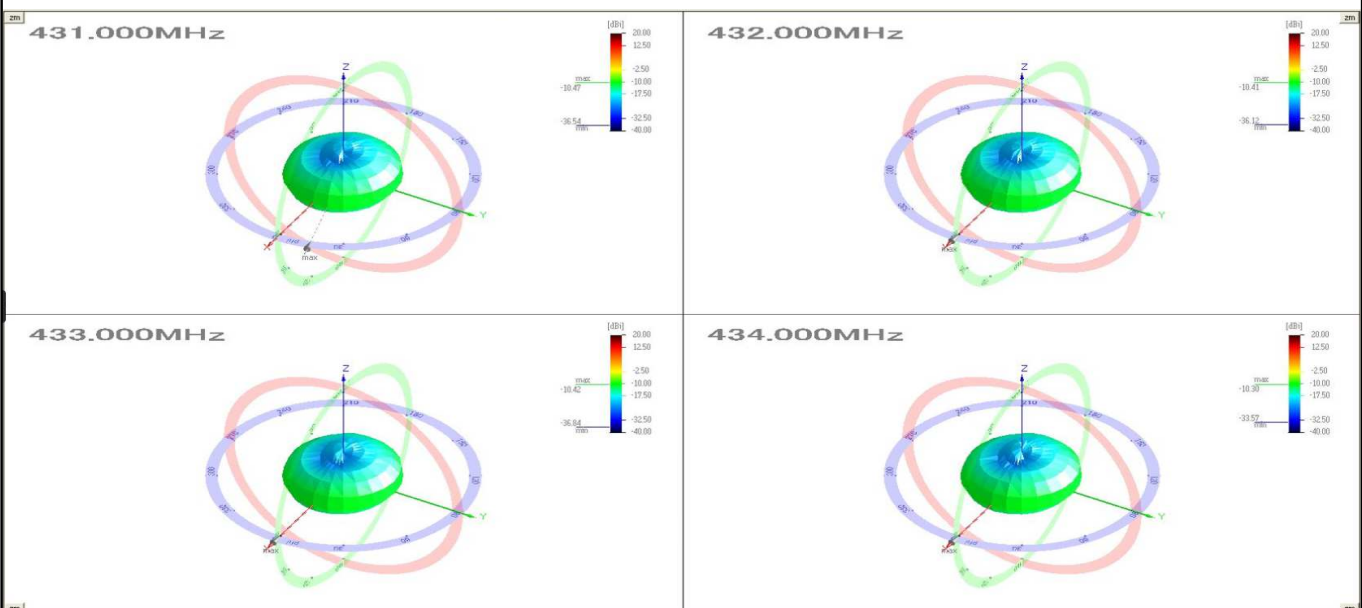
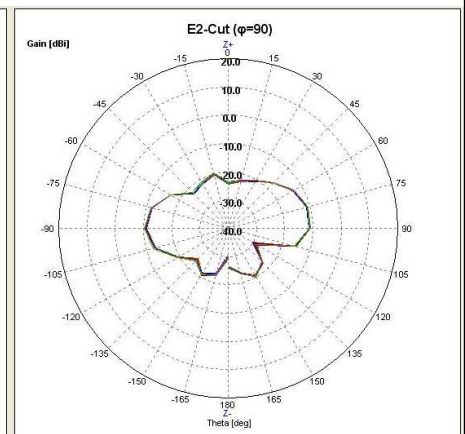
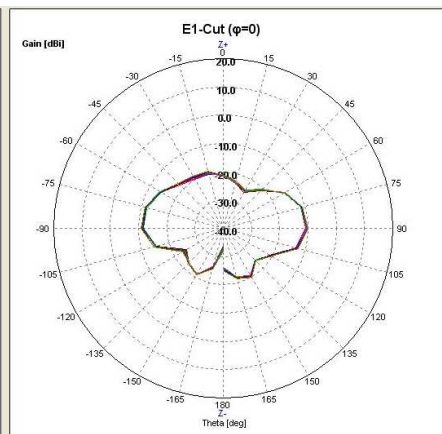
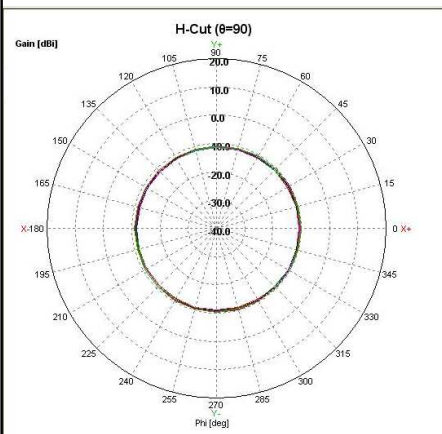
② Chamber Test method



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3.2.2 Gain & Beam Pattern

No.	Freq.	PwrSum					H($\theta=90$)			
		Eff.[%]	Avg.[dBi]	Peak[dBi]	θ [deg]	ϕ [deg]	Avg.[dBi]	Peak[dBi]	ϕ [deg]	BW[deg]
1	427.000	3.03	-15.18	-10.72	90.00	330.00	-11.24	-10.72	330.00	999.00
2	428.000	3.08	-15.11	-10.61	90.00	15.00	-11.15	-10.61	15.00	999.00
3	429.000	3.11	-15.07	-10.59	90.00	345.00	-11.11	-10.59	345.00	999.00
4	430.000	3.13	-15.04	-10.53	90.00	0.00	-11.09	-10.53	360.00	999.00
5	431.000	3.15	-15.02	-10.47	90.00	15.00	-11.03	-10.47	15.00	999.00
6	432.000	3.18	-14.98	-10.41	90.00	0.00	-11.01	-10.41	360.00	999.00
7	433.000	3.22	-14.92	-10.42	90.00	0.00	-10.94	-10.42	360.00	999.00
8	434.000	3.28	-14.84	-10.30	90.00	0.00	-10.84	-10.30	360.00	999.00
9	435.000	3.35	-14.75	-10.23	90.00	0.00	-10.76	-10.23	360.00	999.00
10	436.000	3.43	-14.65	-10.08	90.00	0.00	-10.65	-10.08	360.00	999.00
11	437.000	3.48	-14.58	-10.09	90.00	0.00	-10.58	-10.09	360.00	999.00
12	438.000	3.50	-14.56	-10.03	90.00	15.00	-10.55	-10.03	15.00	999.00



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4. Drawing

