



do the MAGIC+

# WIFI 6E PCB Dipole Antenna

2022/02/17

AcSiP  
AI7933CLD

# APPROVAL SHEET

信邦電子股份有限公司 Jiangyin Sinbon Electronics Co., Ltd.

承認序號 (APPROVAL SHEET NO.) :

品名規格 (DESCRIPTION) : WiFi 6E Dipole Antenna 檔案號碼 (FILE NO.) :

版次 (REV) : A

料號 (PART NO.) : IAHA202205004

工程師 (ENGINEER) : Jess

品保確認 (QC. CHK.) : Jane

工程確認 (ENG. CHK.) : Jess

發行日期 (RELEASED DATE) : 2022/02/17

生產廠區名稱 : 蘇州建合精密電子有限公司 Suzhou Jianho Precision Electronics Co., Ltd.

地址 : 蘇州市相城區渭塘鎮通成路118號

No. 118, Tongcheng Road, Weitang Town, Xiangcheng District, Suzhou City

# INDEX

<b>Index</b>	<b>P.3</b>
<b>2. Antenna Drawing</b>	<b>P.4</b>
<b>3. Antenna Photo</b>	<b>P.5</b>
<b>4. Antenna Related Data</b>	<b>P.6</b>
<b>5. Test Result</b>	<b>P.7</b>

### 3. Antenna Related Data

#### Frequency Range:

**4.1 WiFi Antenna : 2400 / 2500~5150 / 7200 MHz**

**4.2 Impedance : 50Ω**

**4.3 V.S.W.R :  $\leq 2$  @ 2400 / 2500~5150 / 7200 MHz**

**4.5 Polarization : Linear**

**4.6 Cable : Φ1.13mm Cable**

**4.7 Connector : RF Mini Plug**

**4.8 Antenna pattern : PCB Dipole Antenna**

#### Antenna-1

廠牌: SINBON

型號: IAHA202205004

型式: PCB Dipole Antenna

增益值 :

BT: 1.94dBi

WLAN 2.4G: 1.94dBi

WLAN 5G:

5150~5250MHz: 4.99dBi

5250~5350MHz: 4.99dBi

5470~5725MHz: 4.94dBi

5725~5850MHz: 4.75dBi

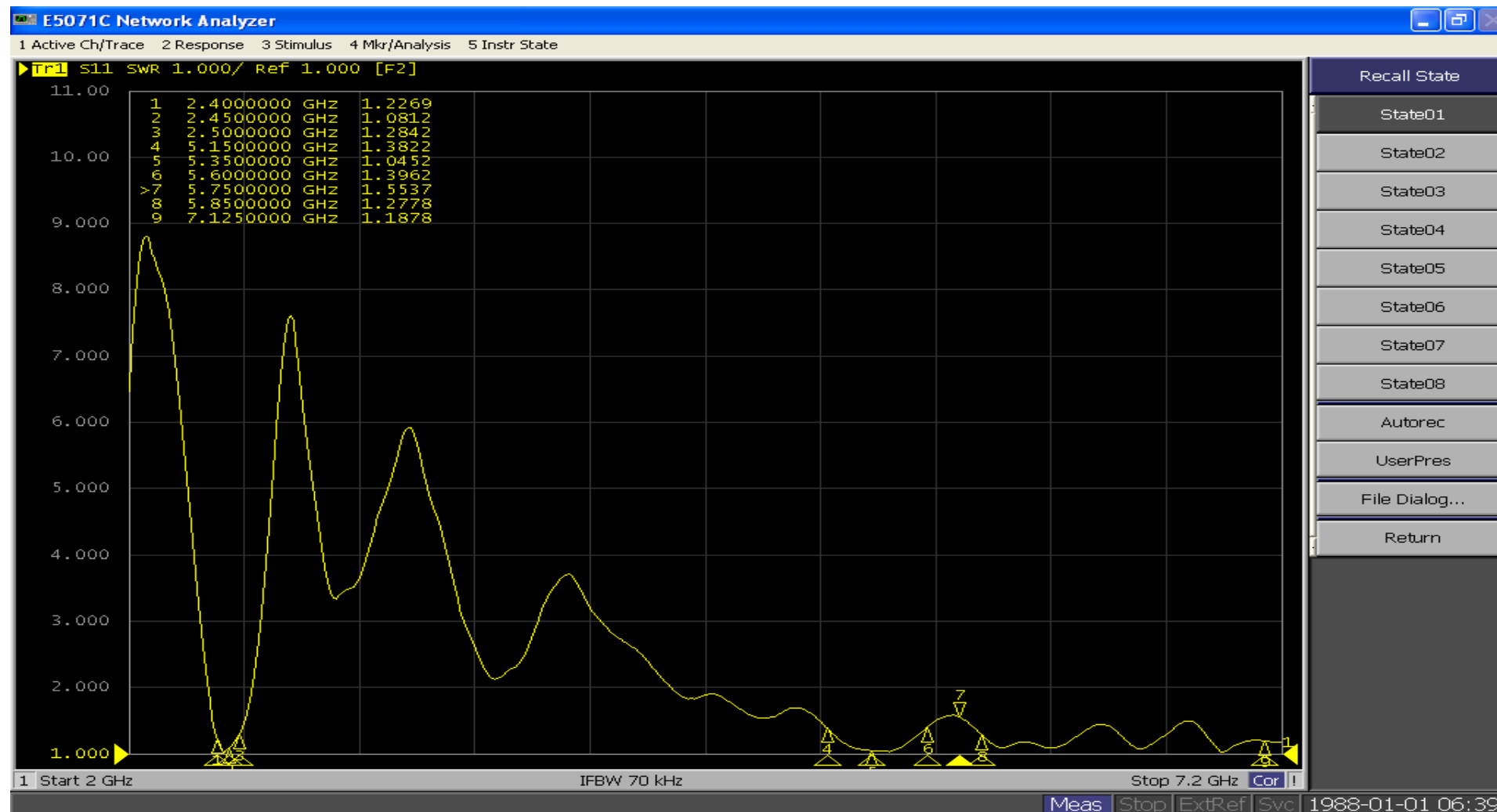
# 4. Test Result 3D

Frequency (MHz)	2400	2450	2500	5150	5250	5350	5470	5600	5725	5785	5850
Average Gain (dB)	-3.61	-3.33	-2.72	-2.63	-2.54	-2.18	-1.91	-2.34	-2.21	-2.55	-2.89
Peak Gain (dBi)	1.94	1.85	1.87	4.1	4.99	4.99	4.76	4.94	4.75	4.2	3.81
Efficiency (%)	43.55	46.45	53.47	54.62	55.74	60.56	64.46	58.41	60.16	55.54	51.36
Frequency (MHz)	5875	6000	6200	6400	6600	6800	7000	7200			
Average Gain (dB)	-2.93	-2.58	-2.06	-1.89	-1.67	-1.07	-0.35	-1.61			
Peak Gain (dBi)	3.38	3.95	5.35	6.3	7.14	5.71	6.63	6.03			
Efficiency (%)	50.97	55.27	62.21	64.7	68.14	78.08	92.22	68.97			

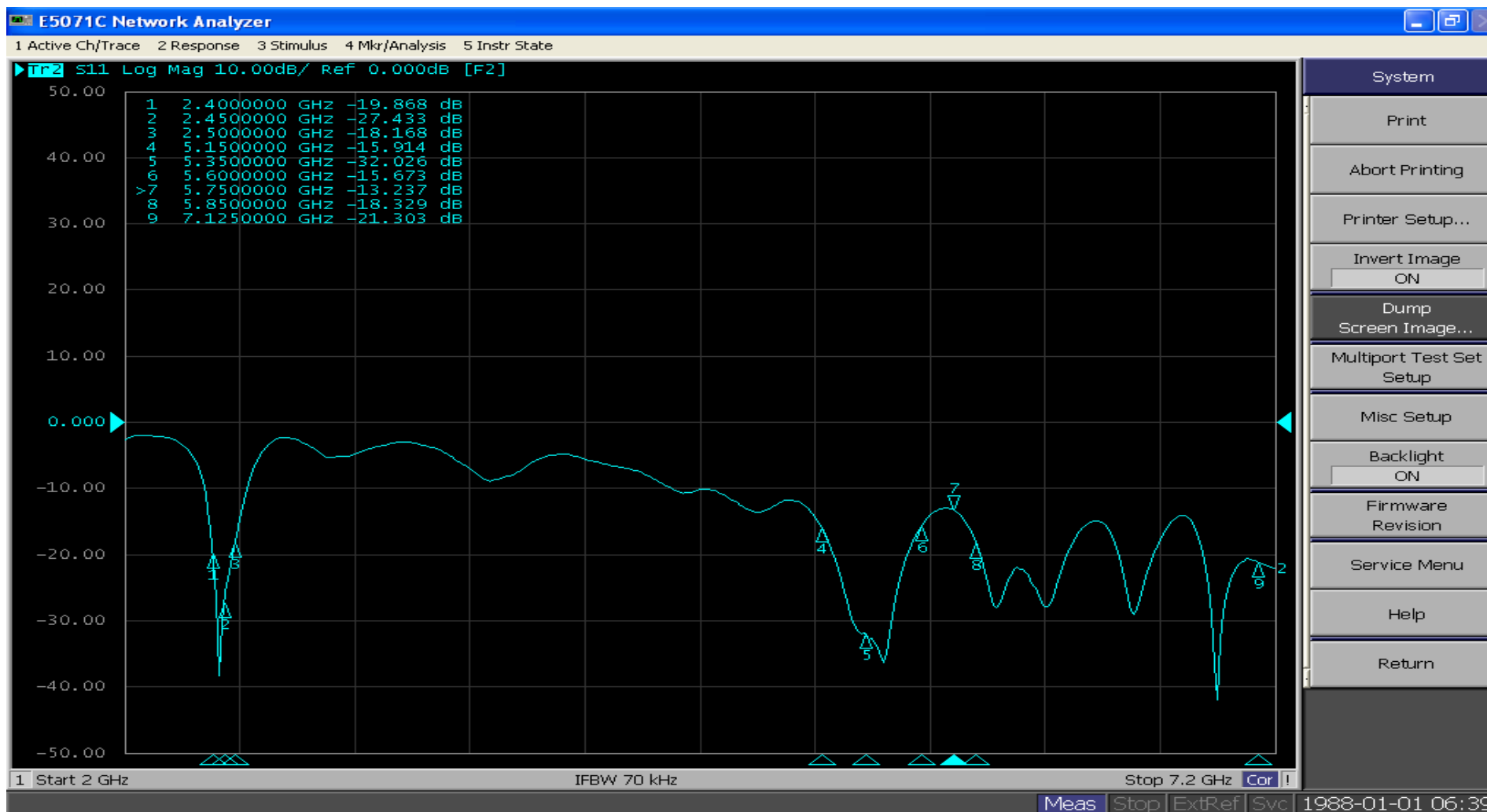
# 4.1 Test Result 2D

XY Plane	H+V	H-Pol	V-Pol	XZ Plane	H+V	H-Pol	V-Pol	YZ Plane	H+V	H-Pol	V-Pol
2400	0.37	-7.35	0.37	2400	1.2	1.19	-12.42	2400	1.48	-9.53	1.44
2450	0.97	-7.16	0.95	2450	0.2	0.19	-16.25	2450	0.97	-10.11	0.95
2500	1.21	-7.49	1.15	2500	0.54	0.51	-13.14	2500	1.01	-9.44	1.01
5150	2.07	-1.81	1.45	5150	3.71	3.56	-3.43	5150	2.49	-3.54	1.34
5250	1.6	-2.23	1.04	5250	4.99	4.15	-2.58	5250	3.24	-3.54	2.86
5350	-0.04	-3.16	-0.7	5350	4.47	3.63	-2.77	5350	3.97	-4.67	3.56
5470	1.16	-3.57	0.36	5470	4.3	3.58	-3.86	5470	4.71	-5.89	4.35
5600	0.91	-2.56	-0.68	5600	4.01	3.87	-1.79	5600	4.94	-3.67	4.29
5725	0.45	-0.56	-0.43	5725	4.73	4.62	-2.78	5725	4.41	-3.19	4.15
5785	1.29	-1.02	0.33	5785	3.99	3.58	-1.83	5785	3.52	-4.14	3.09
5850	-0.04	-1.78	-0.47	5850	3.19	2.85	-2.45	5850	2.81	-4.92	2.7
5875	0.67	-0.23	-0.41	5875	2.63	2.13	-1.83	5875	2.64	-3.71	1.5
6000	1.64	0.76	-0.15	6000	3.95	3.79	-2.52	6000	3.73	-4.64	3.46
6200	1.26	0.23	0.38	6200	4.17	4.15	-5.7	6200	4.92	-4.91	4.7
6400	-0.15	-0.78	-1.05	6400	6.27	6.27	-4.49	6400	6.17	-3.92	6.17
6600	0.77	0.55	-1.34	6600	5.11	5.11	-5.11	6600	6.18	-3.39	6.18
6800	3.35	-0.36	2.79	6800	4.92	4.8	-1	6800	3.35	-3.04	2.79
7000	3.46	2.9	0.51	7000	6.63	6.61	-4.96	7000	4.2	-0.03	2.63
7200	3.27	3.19	-1.31	7200	6.03	5.94	-4.43	7200	1.64	-4.65	1.08

# S11 VAWR WIFI MAIN Antenna

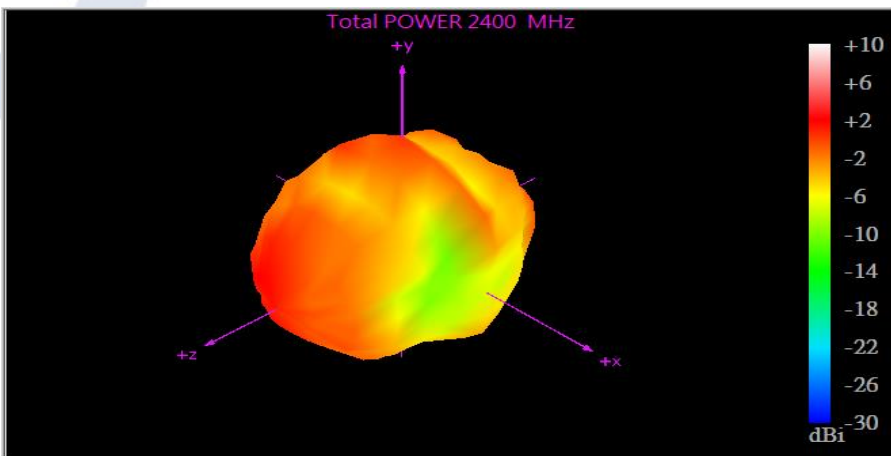


# S11 RL WIFI MAIN Antenna

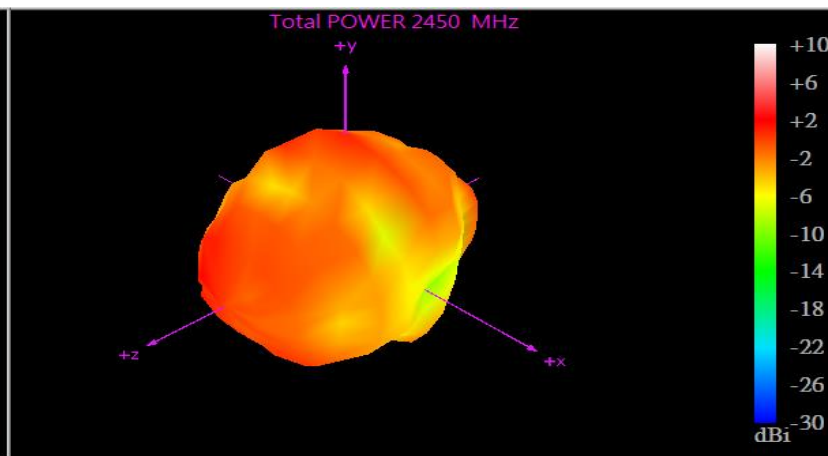




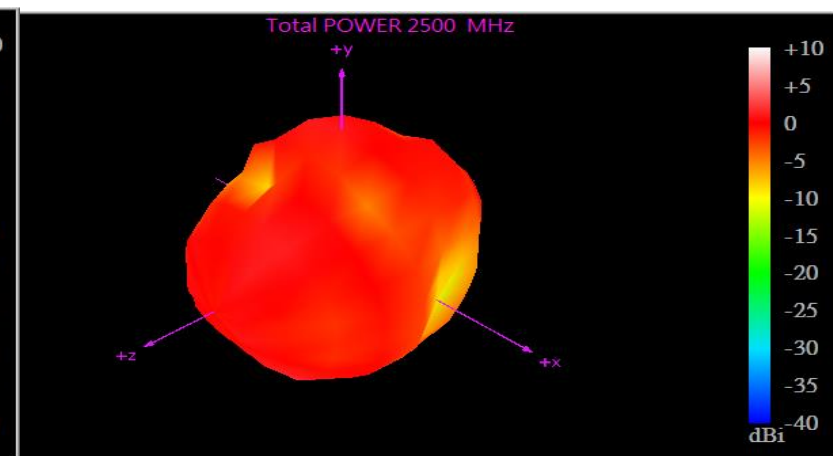
### 3D Pattern



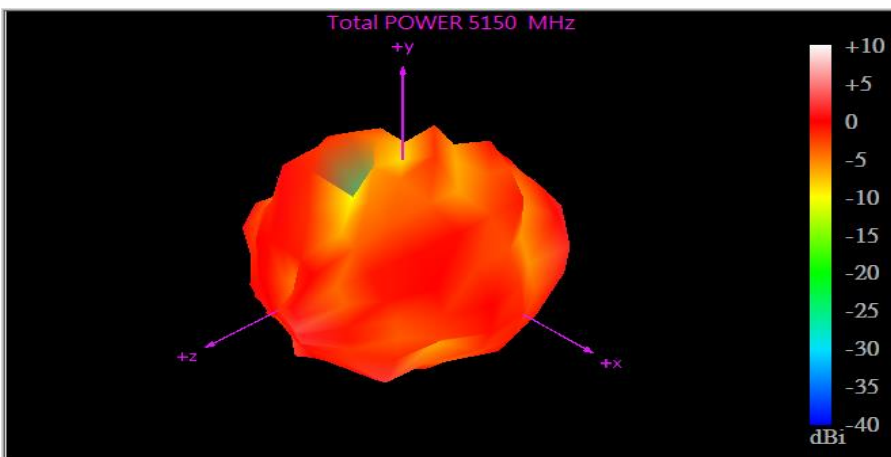
2400 MHz



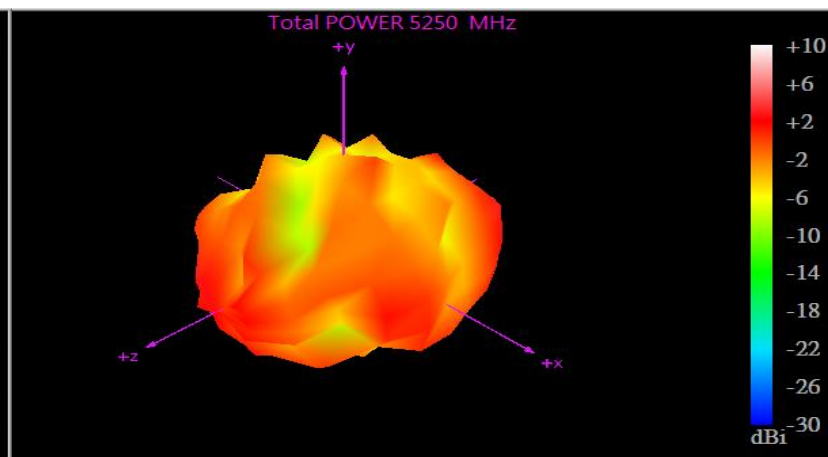
2450 MHz



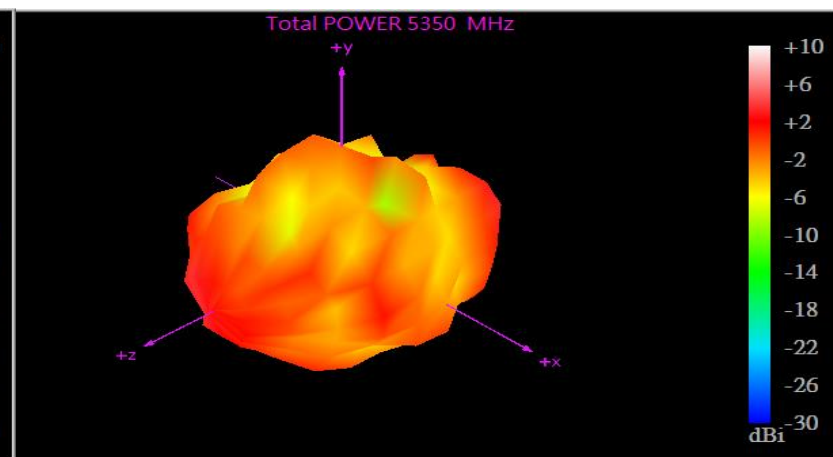
2500 MHz



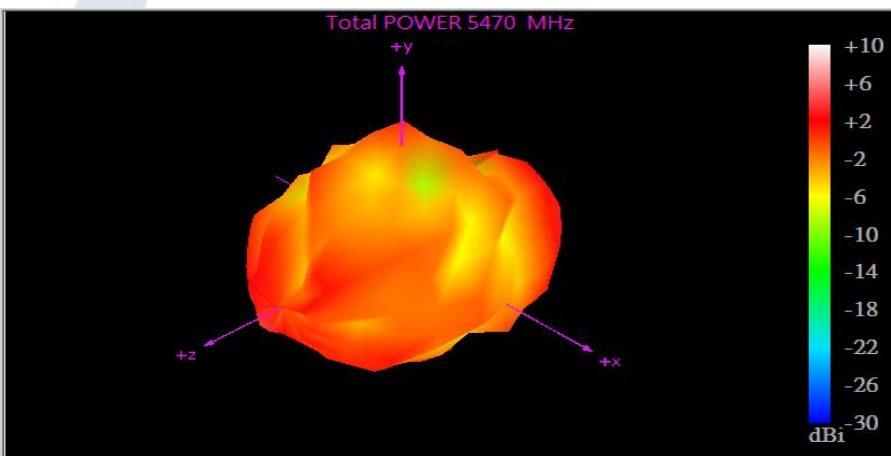
5150 MHz



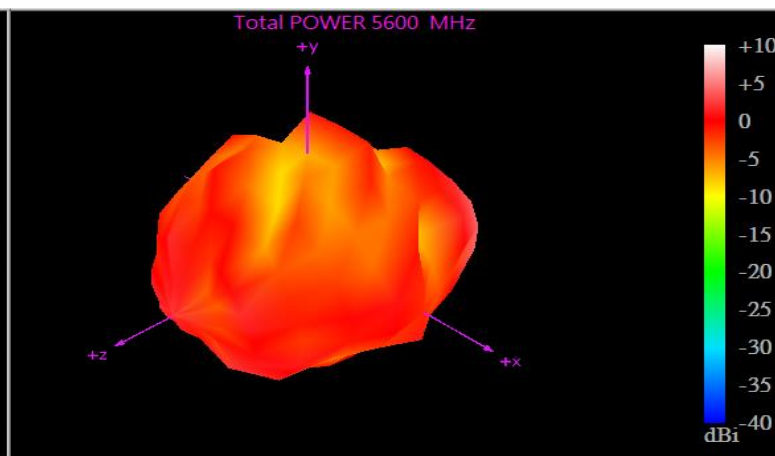
5250 MHz



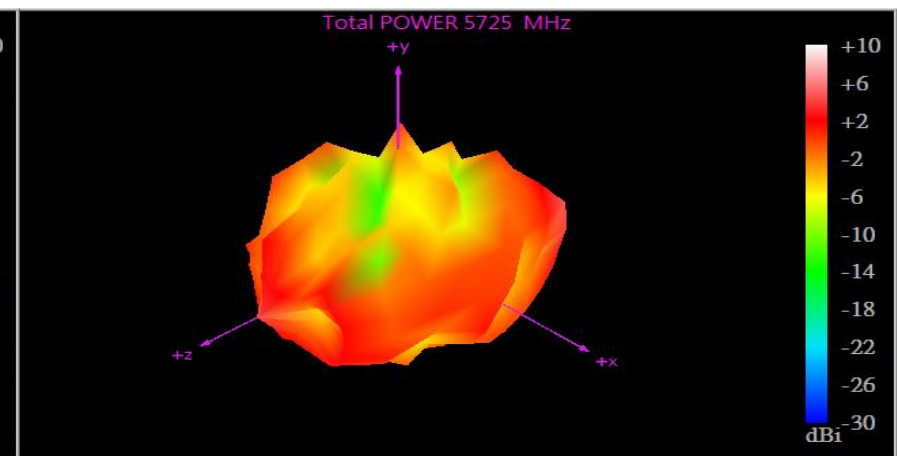
5350 MHz



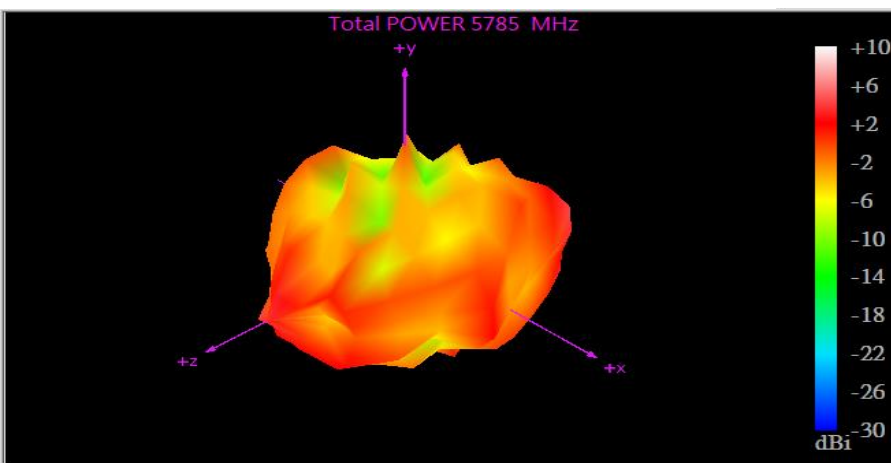
5470 MHz



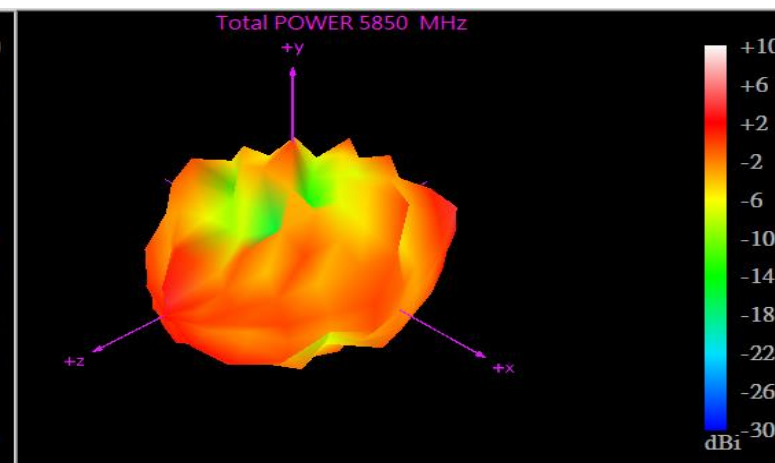
5600 MHz



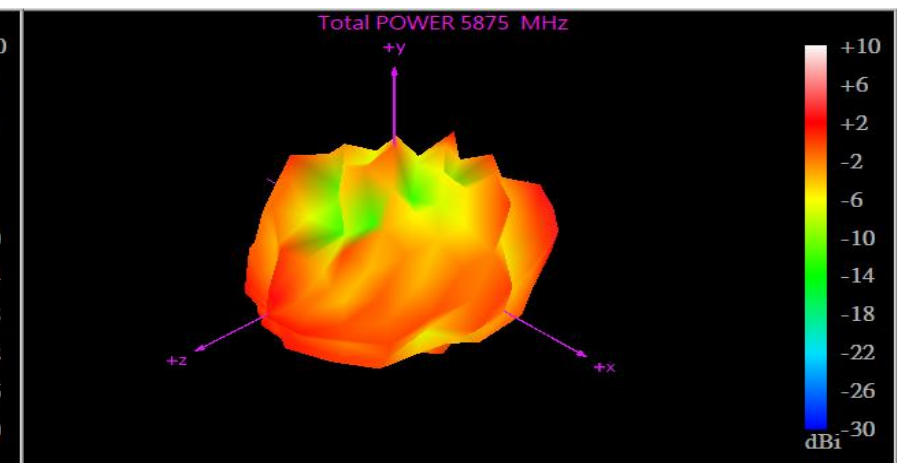
5725 MHz



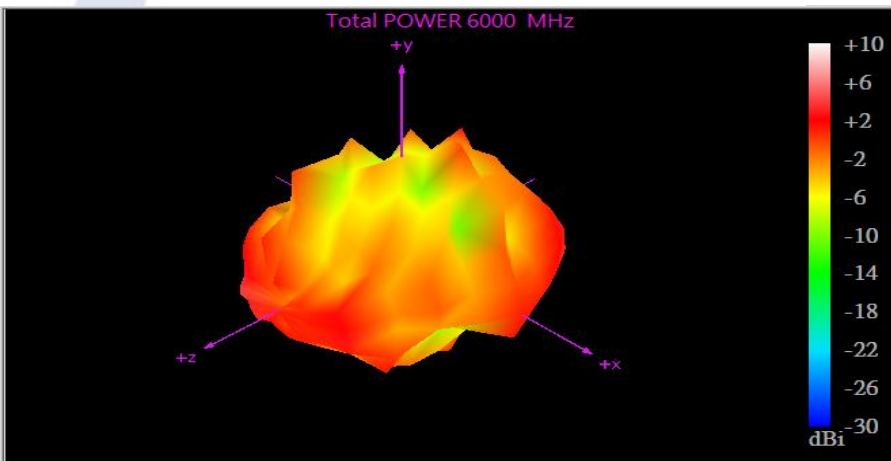
5785 MHz



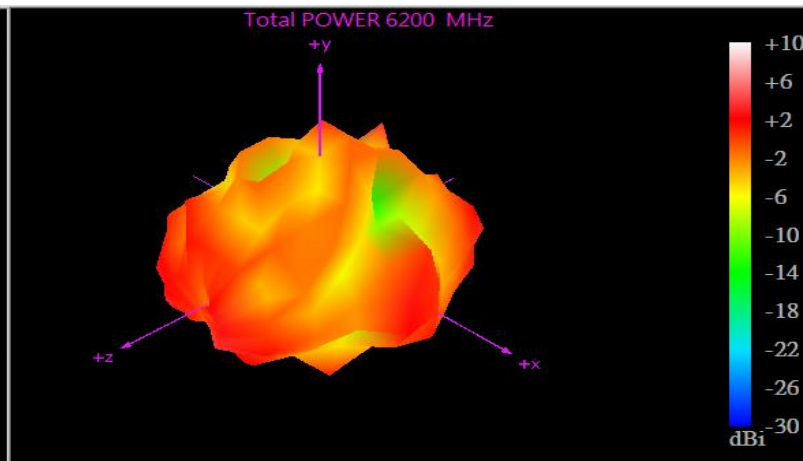
5850 MHz



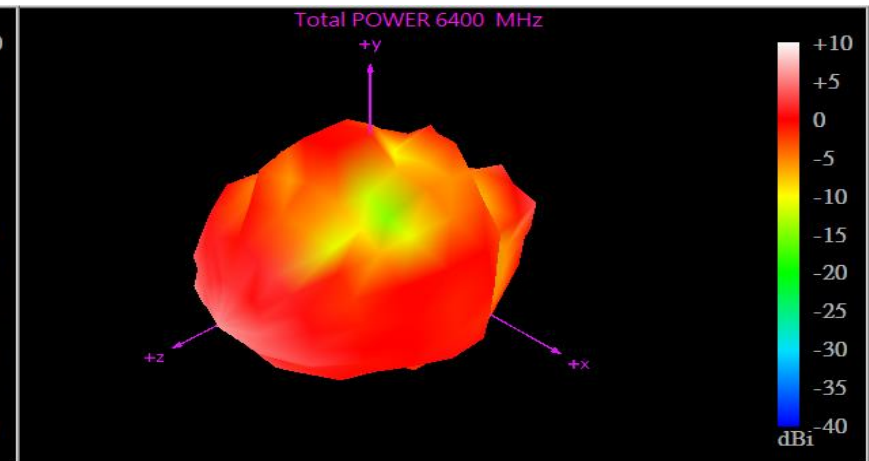
5875 MHz



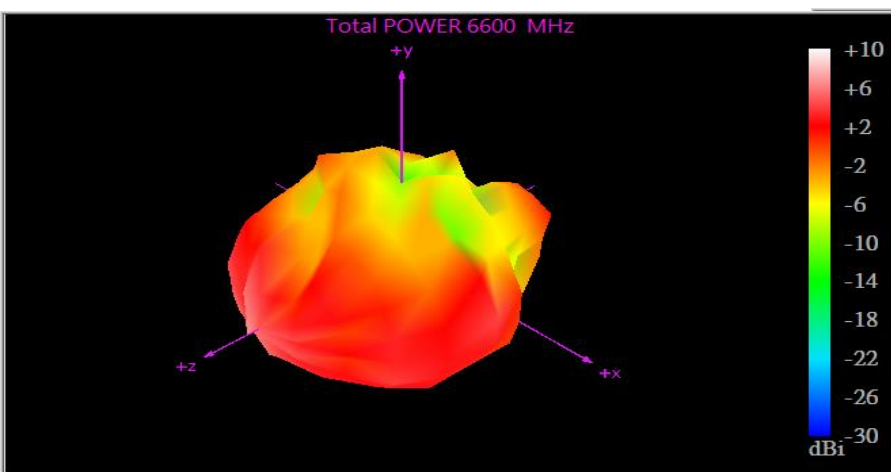
6000 MHz



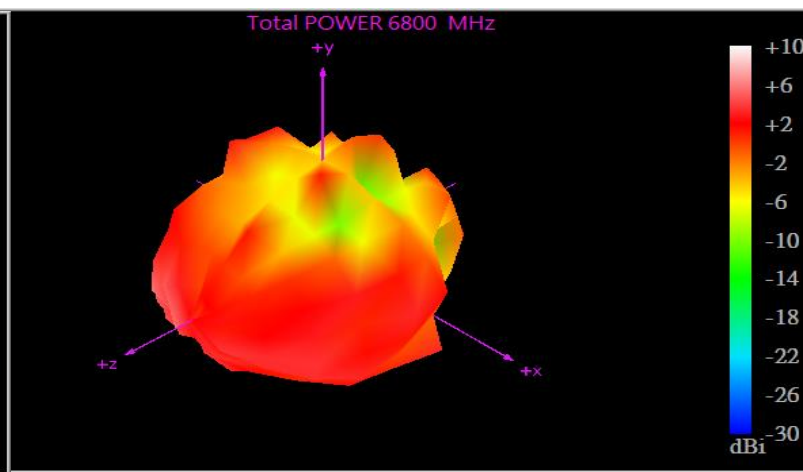
6200 MHz



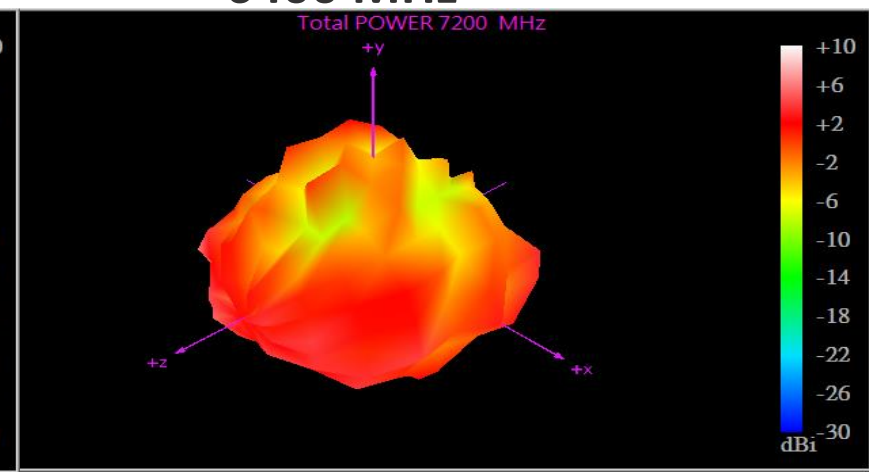
6400 MHz



6600 MHz



6800 MHz



7200 MHz



**thank you**

*danke děkuji ありがとう merci gracias  
grazie kiitos תודה köszöni tak tack*

