承認書

SPECIFICATION FOR APPROVAL

■樣品承認□新品承認□規格/材質變更承認

客戶名稱(Customer):	東荃科技股份有限公司		
客戶料號(Customer P/N):	5060-A077CH+500		
產品料號(Product No.):	A8-A006-00543		
產品品名(Product Name)：	PCB 2.4GHz~2.5GHz/5.15~5.85GHz 3.0dBi/4.0dBi 32mmx18mm T0.6 gray OD1.13 normal 60mm I-PEX plug		
文件編號(Approved No)：			
日期(Issued Date)：	2020 年 9 月 22 日		
客戶承認簽章 Customer Approval Signature	In Charge	Checked	Approval

天凱科技 2020.09.22 文件發行章

TSKY™ 天凱科技股份有限公司 TSKY CO., LTD.
新竹縣竹北市自強南路8號21F-2 Tel:03-5502626 Fax:03-5503131
21F-2,No.8,Ziqiang S.Rd., Jhubei City, Hsinchu County 30264,Taiwan (R.O.C.)

業務	核准	審核	主辦員

Contents

Item	Description	Page
1.	Cover	1
2.	Contents	2
3.	Specification	3
4.	Drawing	4
5.	Test Report	5~15
6.	SGS	16~125

Specification

- **Electrical Properties :**

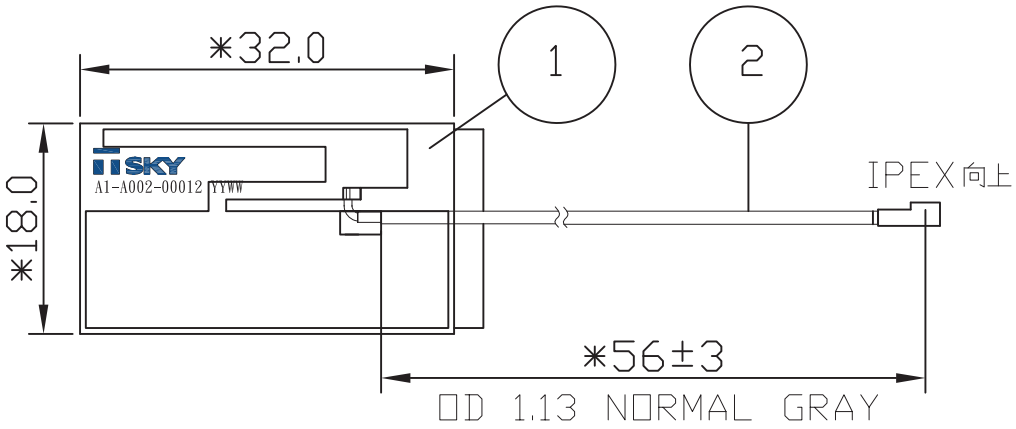
1. Frequency : 2400MHz-2500MHz / 5150MHz-5850MHz
2. Impedance : 50Ω
3. Return Loss : ≦ -10dB
4. Peak Gain : 3.0dBi / 4.0dBi

- **Physical Properties :**

1. Material : FR-4 T=0.6mm
2. Cable : OD1.13 NORMAL
3. Connector : I-PEX

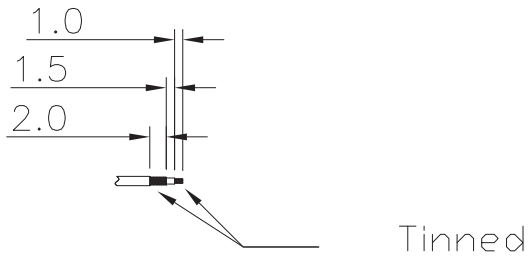
REV	ECN NO.	DRAWING	DESCRIPTION	APPROVED	DATE
A		Jane	初版發行	Kevin	2020/9/22

(TOP VIEW)

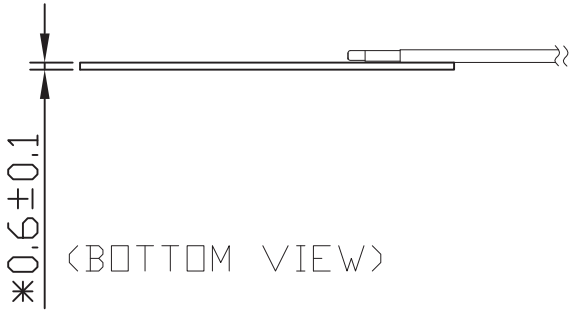


ELECTRICAL:
Frequency:2.4GHz~2.5GHz/5.15GHz~5.85GHz
Impedance:50Ω
Peak Gain: 3.0dBi/4.0dBi
Return Loss: ≤-10dB

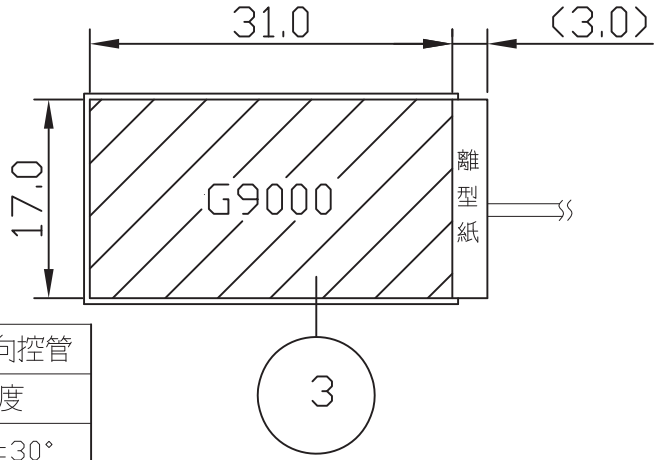
MECHANICAL:
Cable: OD1.13 NORMAL GRAY L=60mm



(FRONT VIEW)



(BOTTOM VIEW)



NOTE:
1.文字顏色為白色
2.*為重點量測尺寸
3.I-PEX方向請按照圖面所示
4.YYWW為date code,會隨著生產週期產生序號

天凱科技
2020.09.22
圖面發行章

I-PEX方向控管	
線長	角度
1~150	±30°
151以上	±50°

NO.	PART NO.	DESCRIPTION	Q'TY	REV.
3	A2-A001-00043	31x17mm G9000 雙面背膠	1	A
2	A0-A002-00160	RF CABLE OD1.13 NORMAL GRAY 60mm IPEX PLUG+2(編)-1.5(絕)-1(芯)	1	A
1	A1-A002-00012	PCB ANT FR-4 L32 W18 T0.6mm 單面OSP雙面黑漆 FOR A8-A006-00543	1	A

TOLERANCE UNLESS OTHERWISE SPECIFIED			
DIMENSION		ANGLES	
.X±	0.2	X.°±	0.5
.XX±	0.1		
.XXX±	0.05		

TSKY CO., LTD.

CONFIDENTIAL	FINISH:		
	SIZE: A4	UNIT: mm	SCALE: 1 : 1
DRAWING	DESIGNED	CONCURRED	APPROVED
Jane			Kevin

INITIAL MODEL:

PART NAME
PCB 2.4GHz~2.5GHz/5.15~5.85GHz
3.0dBi/4.0dBi 32mmx18mm T0.6 gray
OD1.13 normal 60mm I-PEX plug

PART NO. A8-A006-00543 | REV. A | SHT. 1/1

Zunidata Seven-inch Tablet Wi-Fi Antenna Test Report

Created : 2019-08-28

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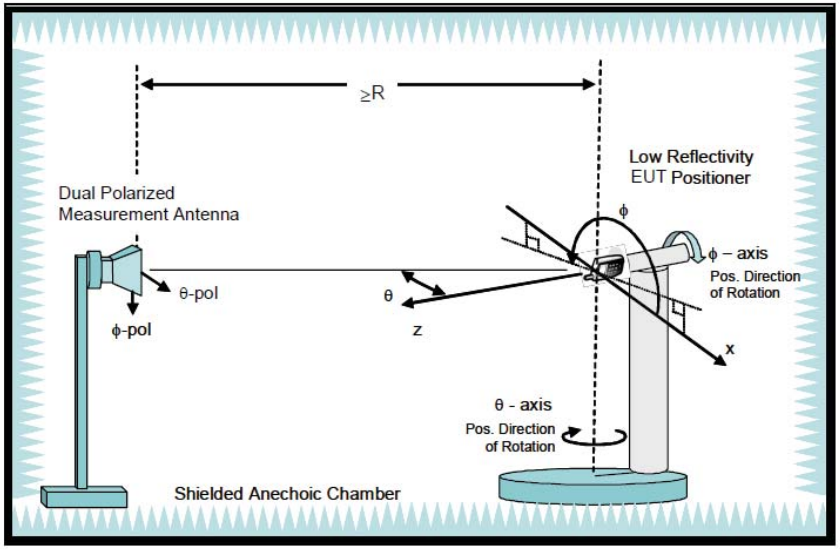
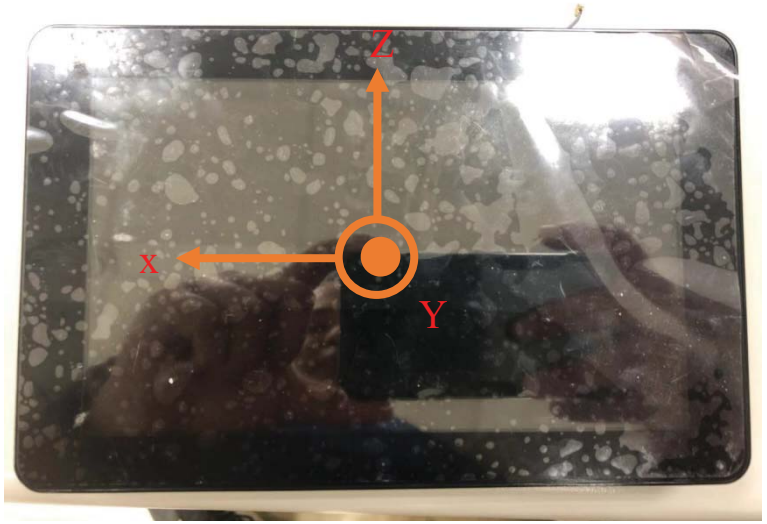
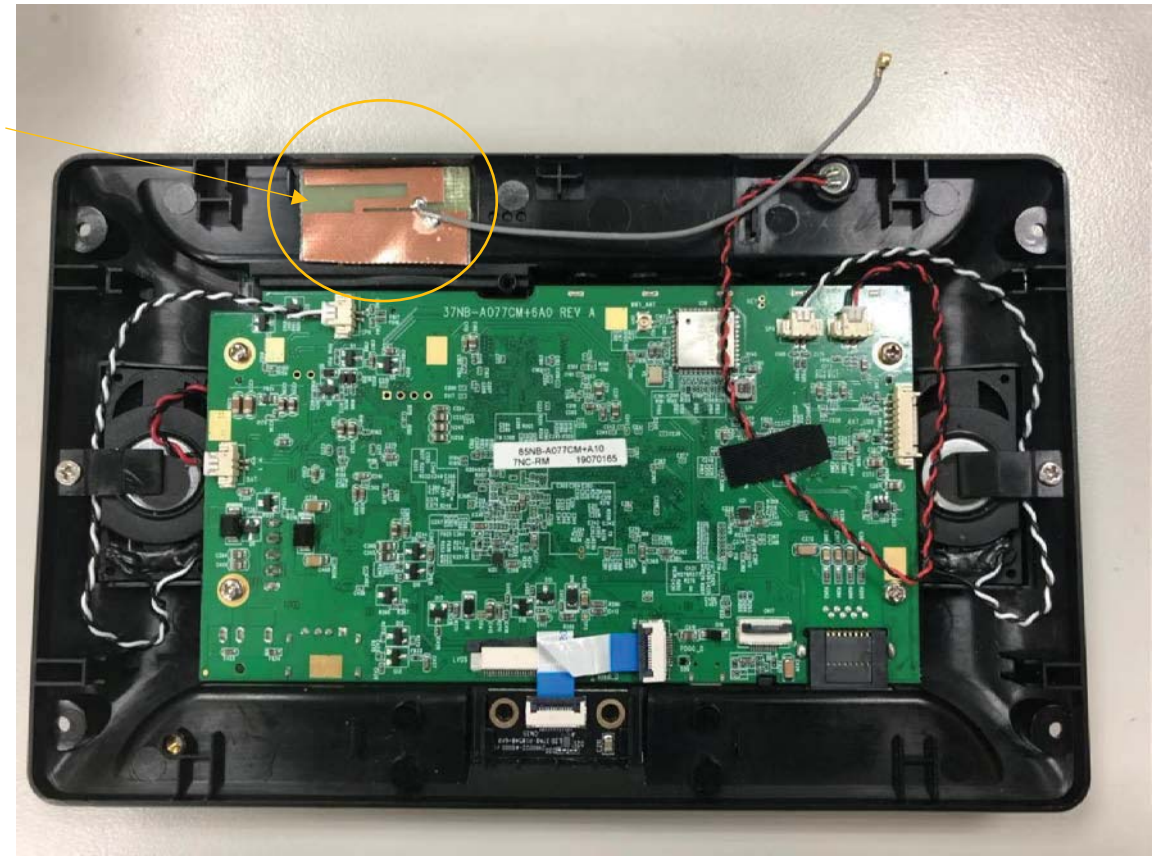
Antenna Coordinate System Definition



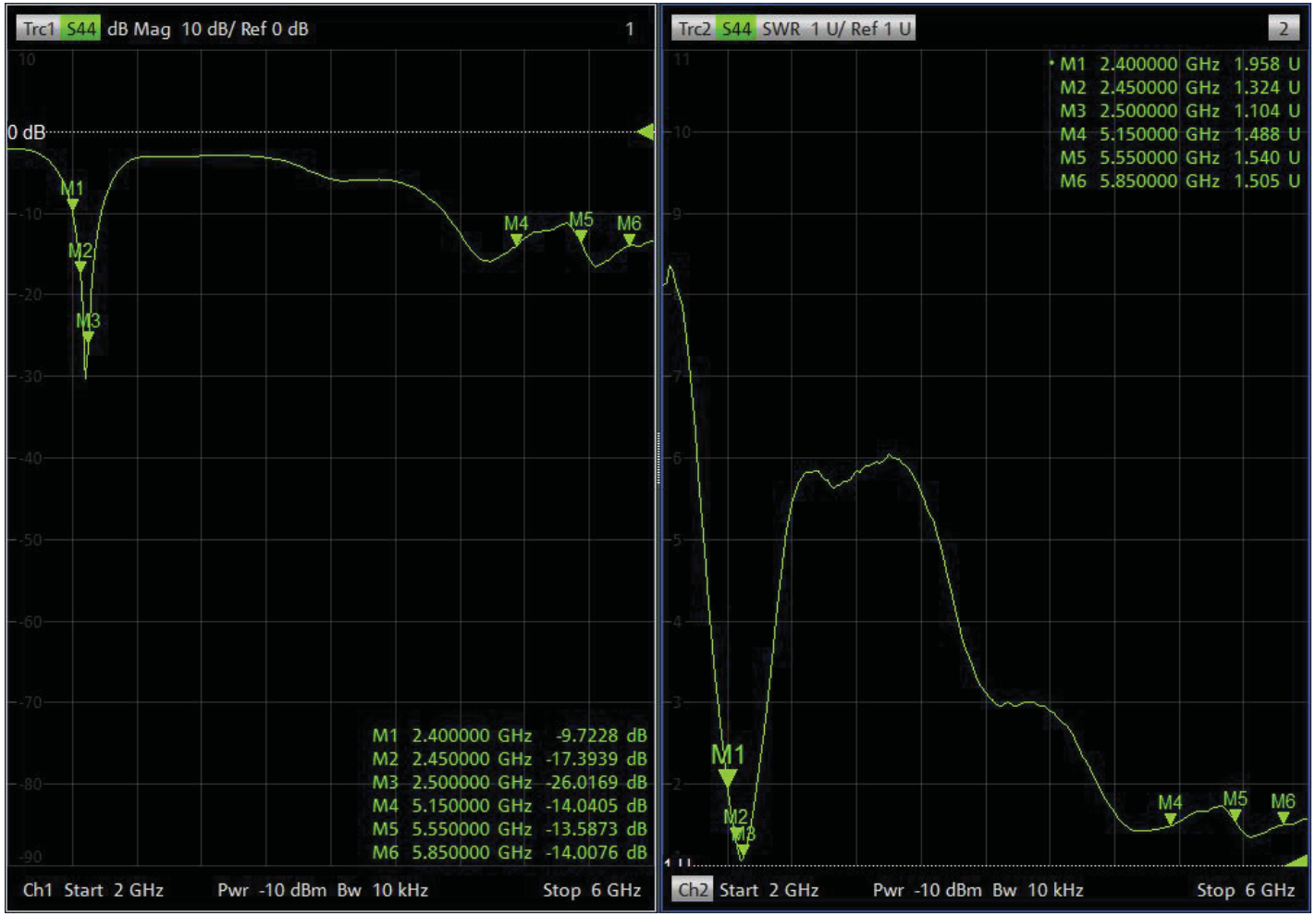


Antenna Coordinate System Definition

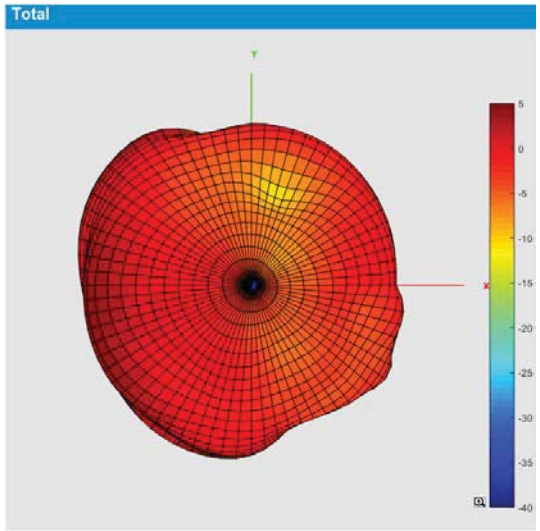
Antenna

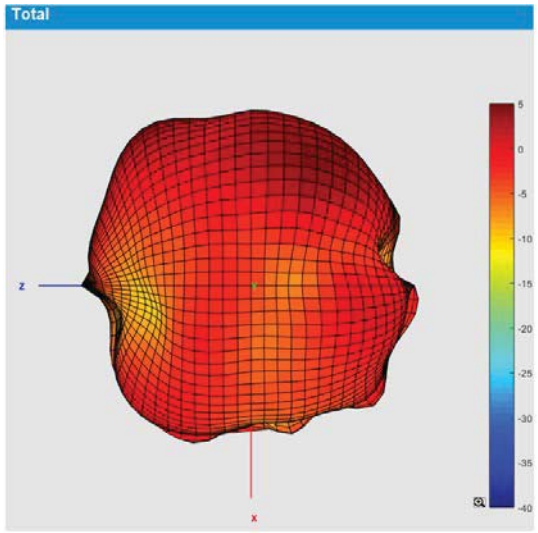


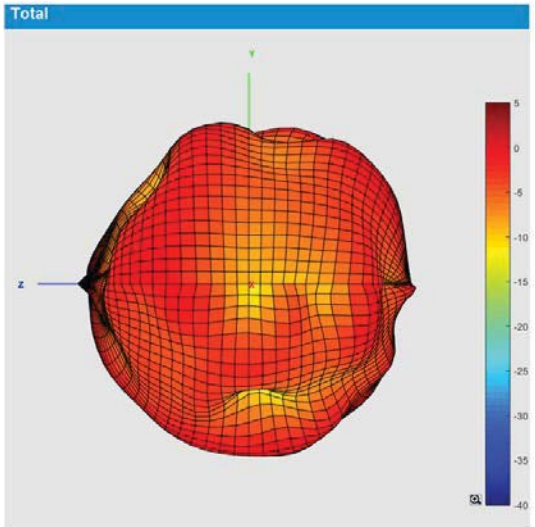
Return Loss and VSWR



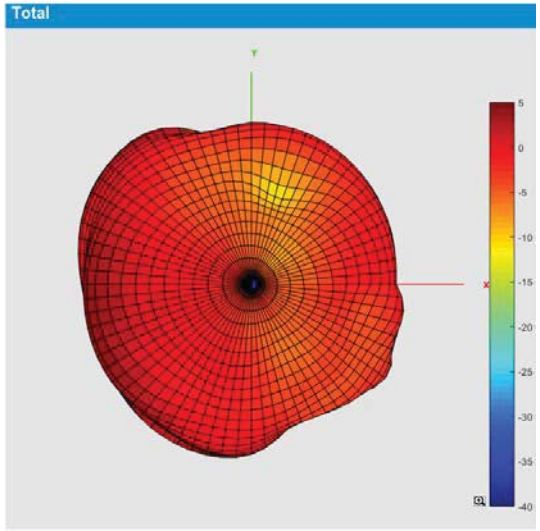
3D Radiation Pattern@2400MHz

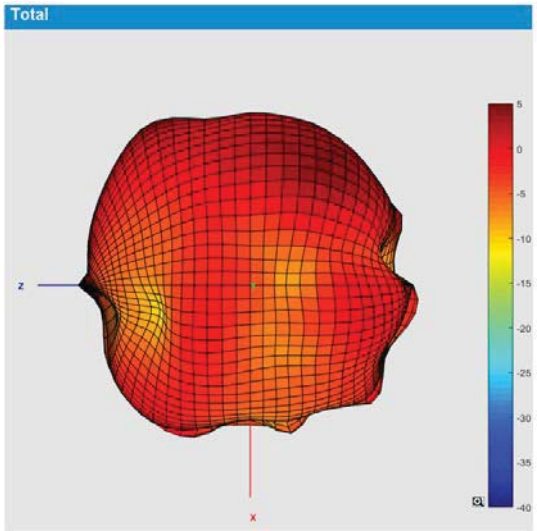


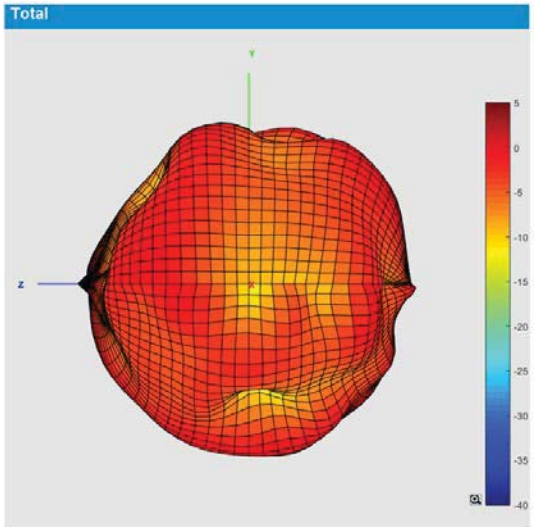




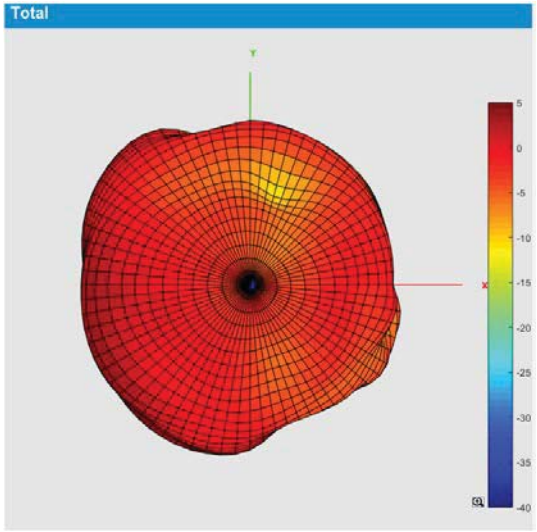
3D Radiation Pattern@2450MHz

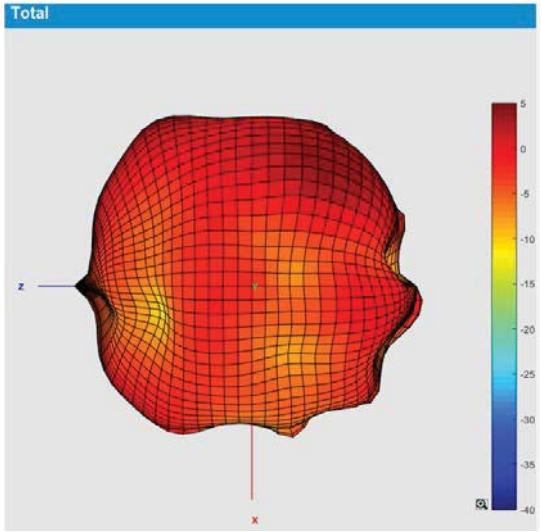


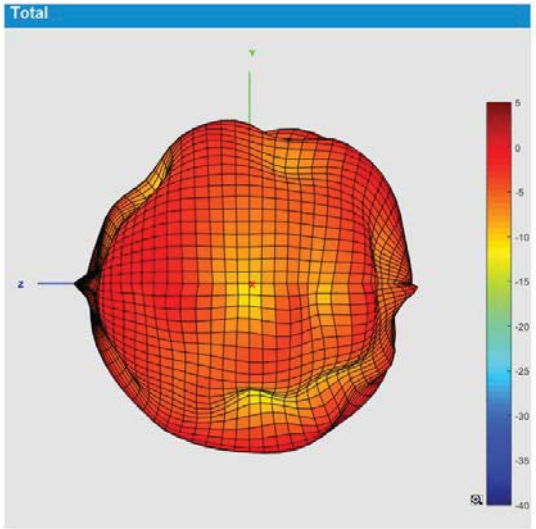




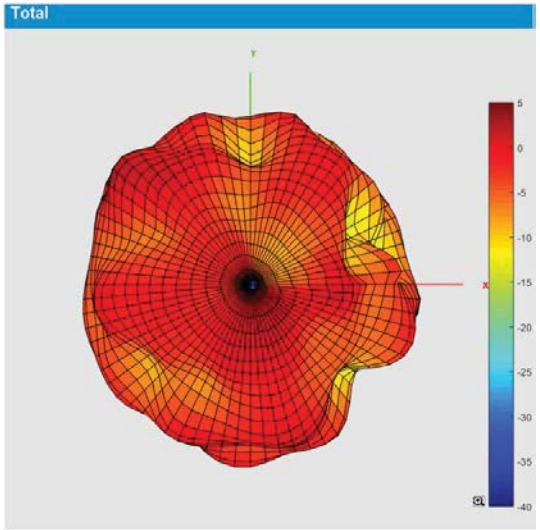
3D Radiation Pattern@2500MHz

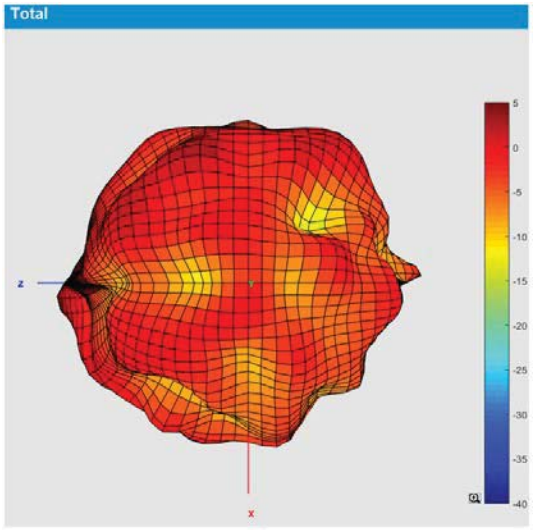


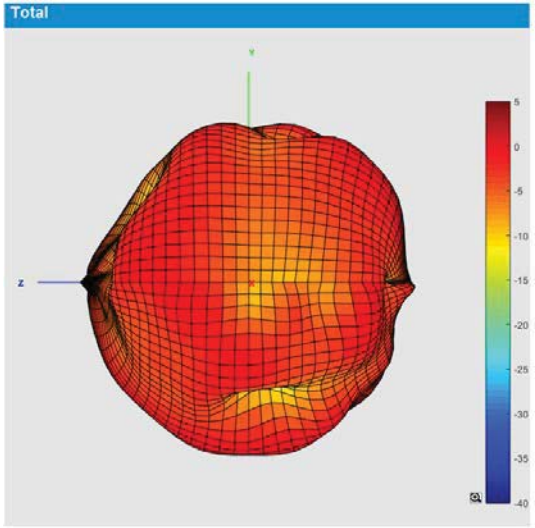




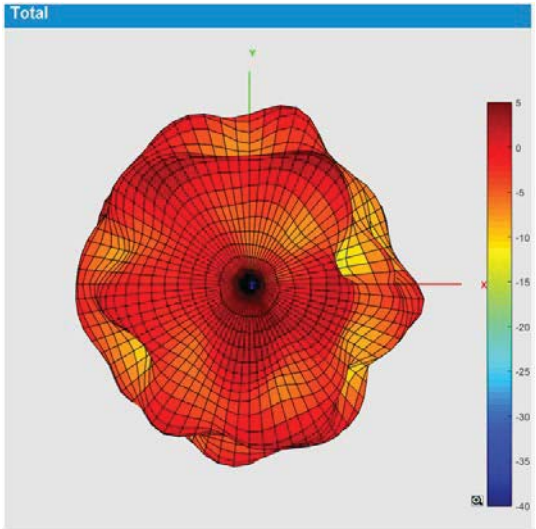
3D Radiation Pattern@5150MHz

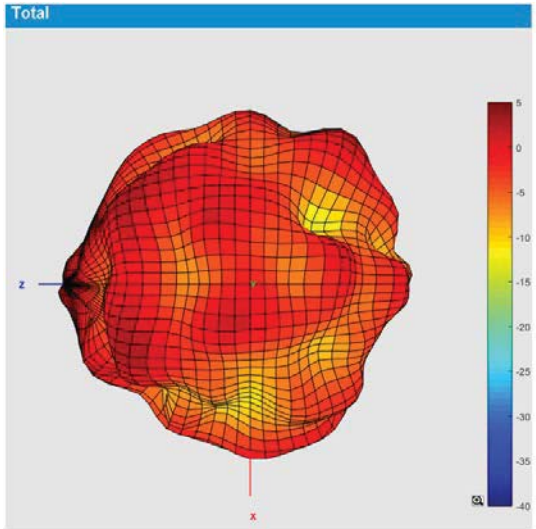


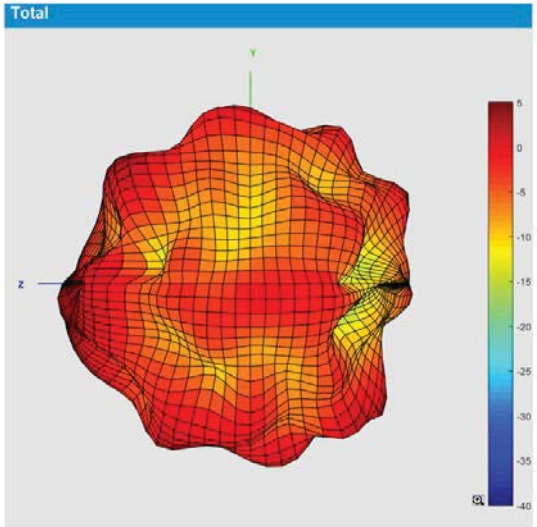




3D Radiation Pattern@5550MHz







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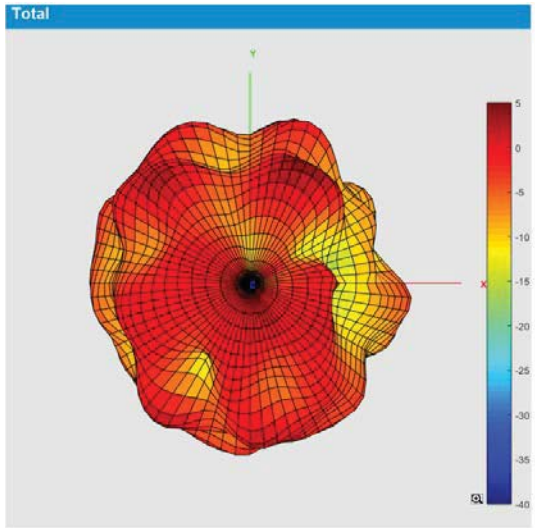
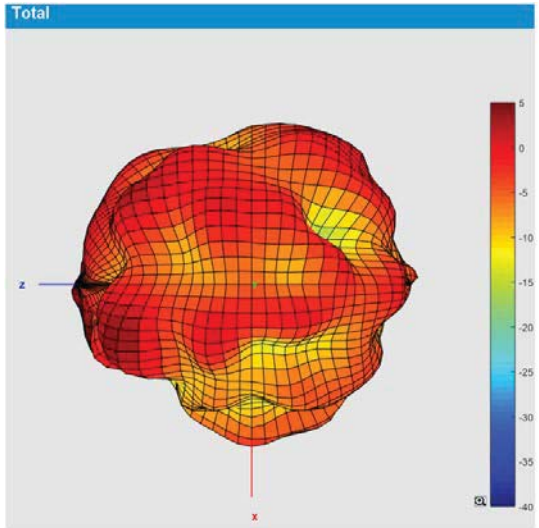
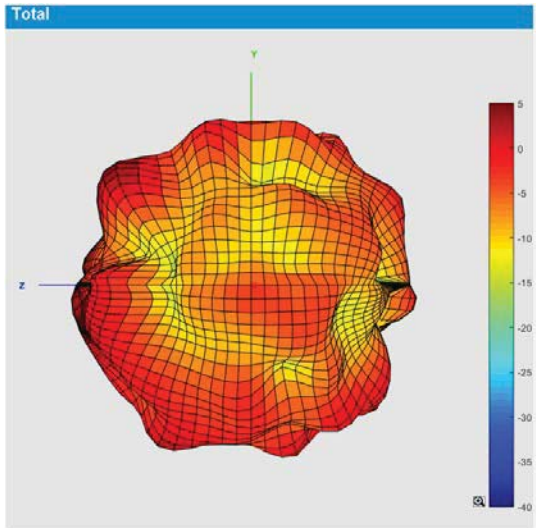
3D Radiation Pattern@5850MHz







Antenna Gain and Efficiency

Frequency(MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Directivity (dBi)	5.8	5.77	5.78	5.78	5.78	5.78	5.82	5.84	5.86	5.93	5.97
Efficiency (dB)	-1.43	-1.62	-1.76	-1.71	-1.83	-1.64	-1.63	-1.9	-1.87	-1.76	-1.99
Efficiency (%)	71.94	68.87	66.68	67.45	65.61	68.55	68.71	64.57	65.01	66.68	63.24
Gain (dBi)	4.37	4.15	4.02	4.07	3.95	4.14	4.19	3.94	3.99	4.17	3.98

Frequency(MHz)	5150	5250	5350	5450	5550	5650	5750	5850
Directivity (dBi)	5.6	5.6	5.02	5.69	5.87	5.72	6.04	7.06
Efficiency (dB)	-2.34	-2.89	-2.77	-1.74	-2.05	-1.1	-1.87	-2.94
Efficiency (%)	58.34	51.40	52.84	66.99	62.37	77.62	65.01	50.82
Gain (dBi)	3.26	2.71	2.25	3.95	3.82	4.62	4.17	4.12