

WLAN Antenna for TZ31181/TZ3118E

1. Platform Information :

Platform information					
Brand	ODM	****End product model name	Platform name	Platform Type (ex: regular NB, convertible PC, AIO...etc))	*SAR minimum separation (mm)
ASUS	IEC Computers	H7407IA	N1	Regular NB	4.81

2. Electrical Specification :

Ant.Part Number (Main&Aux parts)	Type	Highest Peak Gain with Cable Loss (dBi)		Cable loss (dB)		Connector Type	Cable length	Laptop/ Host Model
		2400~2500 MHz	5150~5850 MHz	2400~2500 MHz	5150~5850 MHz			
Main: Pulse P/N: TZ31181	PIFA	2.73	3.19	1.04	1.68	I-PEX MHF4-L	365mm	H7407IA
Aux: Pulse P/N: TZ3118E	PIFA	2.28	4.31	0.71	1.15	I-PEX MHF4-L	250mm	H7407IA

3. Antenna Information :

➤ Antenna Assembly Specifications

Antenna Information Section 1. Antenna Assembly Specifications									
1A Antenna Part Number	1B Manu-facture	1C Antenna Type	1D Cable Assembly Part Number and Information	Freq Range MHz	1E *Peak Gain W/ Cable loss (dBi)	1F Peak Gain w/o Cable Loss (dBi)	1G Max VSWR	1H Cable Loss (dB)	
TZ31181 Main/Rx1 Antenna	Pulse Electronics	PIFA	50 ohm Coaxial Length: 365 mm Diameter: 1.13 mm Low loss Connector: iPex	2400-2483.5	2.73 dBi, (peak)	3.77 dBi, (peak)	2 dBi, (peak)	1.04 dB, (peak)	
				5150-5250	3.04 dBi, (peak)	4.59 dBi, (peak)	3 dBi, (peak)	1.55 dB, (peak)	
				5250-5350	3.19 dBi, (peak)	4.79 dBi, (peak)	3 dBi, (peak)	1.60 dB, (peak)	
				5470-5725	3.04 dBi, (peak)	4.69 dBi, (peak)	3 dBi, (peak)	1.65 dB, (peak)	
				5725-5850	3.15 dBi, (peak)	4.83 dBi, (peak)	3 dBi, (peak)	1.68 dB, (peak)	
				5850-5895	3.15 dBi, (peak)	4.85 dBi, (peak)	3 dBi, (peak)	1.70 dB, (peak)	
				5925-6425	3.96 dBi, (peak)	5.73 dBi, (peak)	3 dBi, (peak)	1.77 dB, (peak)	
				6425-6525	3.96 dBi, (peak)	5.82 dBi, (peak)	3 dBi, (peak)	1.86 dB, (peak)	
				6525-6875	3.76 dBi, (peak)	5.68 dBi, (peak)	3 dBi, (peak)	1.92 dB, (peak)	
				6875-7125	2.51 dBi, (peak)	4.52 dBi, (peak)	3 dBi, (peak)	2.01 dB, (peak)	
1A Antenna Part Number	1B Manu-facture	1C Antenna Type	1D Cable Assembly Part Number and Information	Freq Range MHz	1E *Peak Gain W/ Cable loss (dBi)	1F Peak Gain w/o Cable Loss (dBi)	1G Max VSWR	1H Cable Loss (dB)	
TZ3118E Aux/Rx1 Antenna	Pulse Electronics	PIFA	50 ohm Coaxial Length: 250 mm Diameter: 1.13 mm Low loss Connector: iPex	2400-2483.5	2.28 dBi, (peak)	2.99 dBi, (peak)	2 dBi, (peak)	0.71 dB, (peak)	
				5150-5250	3.64 dBi, (peak)	4.71 dBi, (peak)	3 dBi, (peak)	1.07 dB, (peak)	
				5250-5350	4.08 dBi, (peak)	5.18 dBi, (peak)	3 dBi, (peak)	1.10 dB, (peak)	
				5470-5725	4.31 dBi, (peak)	5.44 dBi, (peak)	3 dBi, (peak)	1.13 dB, (peak)	
				5725-5850	2.80 dBi, (peak)	3.95 dBi, (peak)	3 dBi, (peak)	1.15 dB, (peak)	
				5850-5895	2.92 dBi, (peak)	4.08 dBi, (peak)	3 dBi, (peak)	1.16 dB, (peak)	
				5925-6425	4.60 dBi, (peak)	5.82 dBi, (peak)	3 dBi, (peak)	1.22 dB, (peak)	
				6425-6525	4.12 dBi, (peak)	5.40 dBi, (peak)	3 dBi, (peak)	1.28 dB, (peak)	
				6525-6875	4.01 dBi, (peak)	5.33 dBi, (peak)	3 dBi, (peak)	1.32 dB, (peak)	
				6875-7125	3.84 dBi, (peak)	5.22 dBi, (peak)	3 dBi, (peak)	1.38 dB, (peak)	

➤ 3D Antenna Peak Gain Table

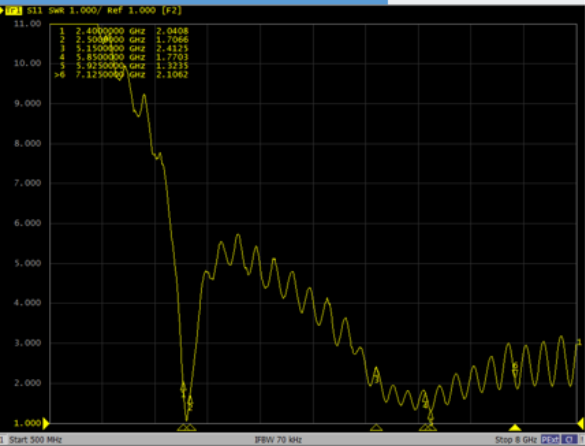
Clamshell mode				
Gain table	Main Source		Second Source	
	Main Antenna	Aux Antenna	Tx1 Antenna	Tx2 Antenna
Frequency (MHz)	Total	Total	Total	Total
2400	2.42	2.28		
2450	2.73	1.85		
2500	1.32	1.12		
5150	2.3	3.55		
5250	3.04	3.64		
5350	3.19	4.08		
5470	2.86	4.11		
5600	2.66	4.31		
5725	3.04	2.8		
5785	3.15	2.74		
5850	2.91	2.92		
5925	3.65	3.34		
6000	3.87	4.46		
6125	2.94	4.6		
6225	3.61	4.56		
6325	3.46	4.43		
6425	3.96	4.12		
6525	3.76	4.01		
6625	3.71	3.75		
6725	3.33	3.68		
6875	2.51	3.84		
6925	2.13	3.77		
7000	2.32	3.53		
7125	2.41	3.49		

➤ Antenna VSWR data

Antenna VSWR data

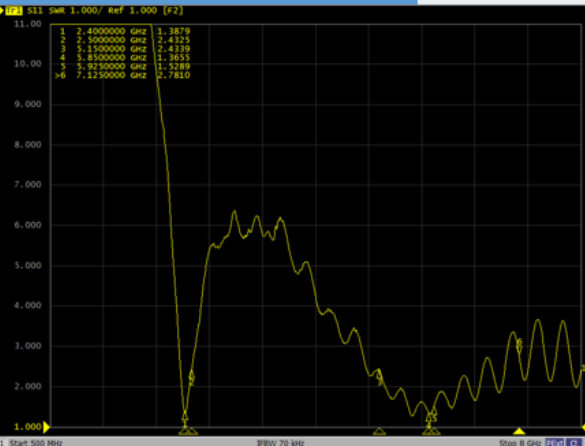
Main/Ant

1



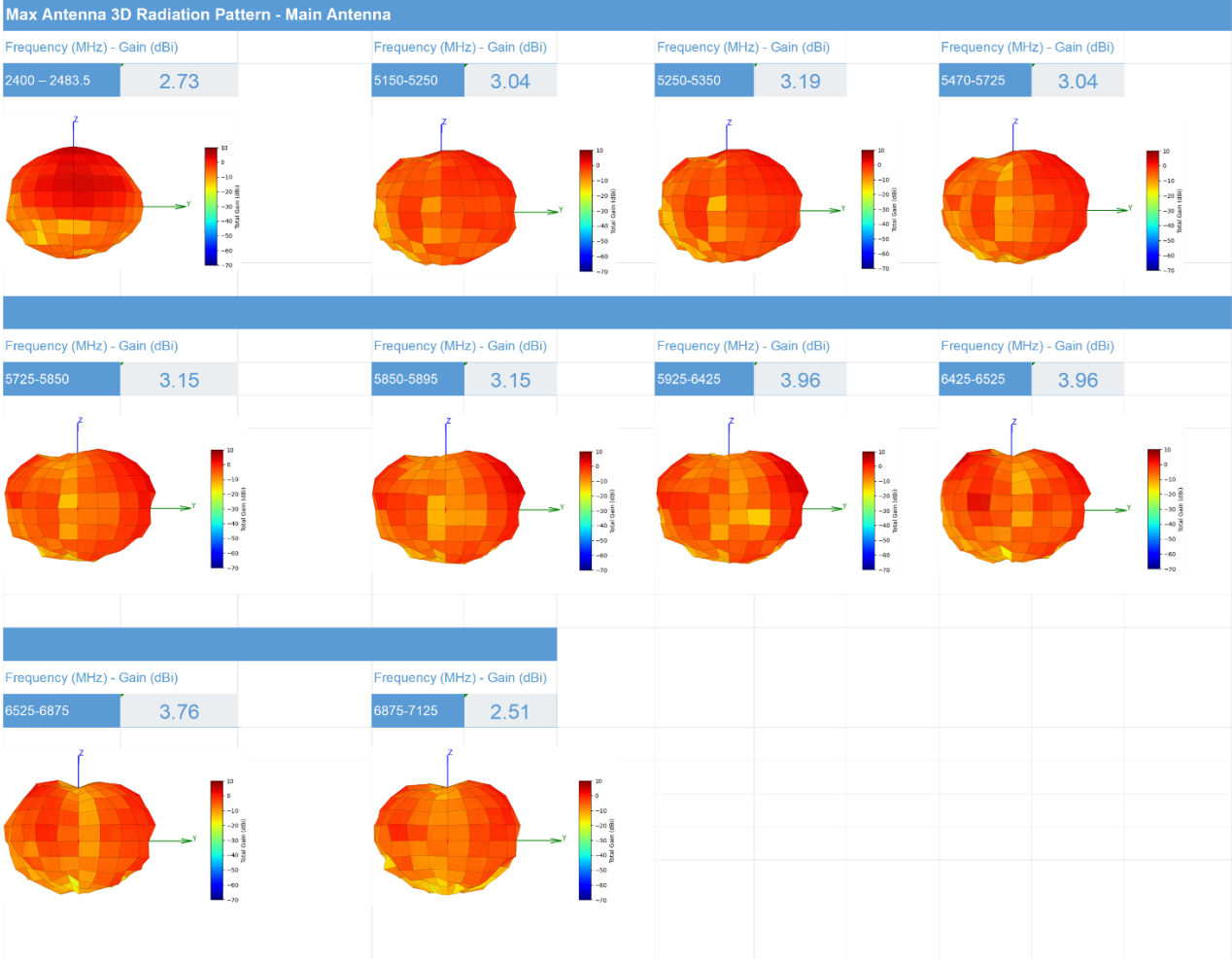
Aux/Ant

2

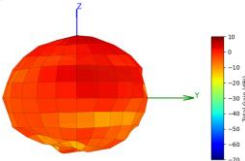
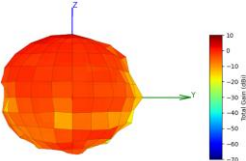
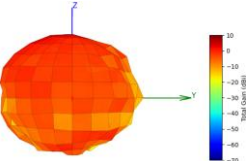
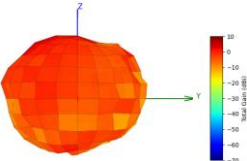
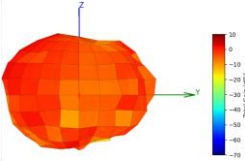
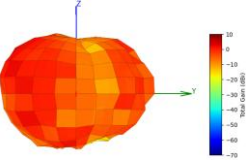
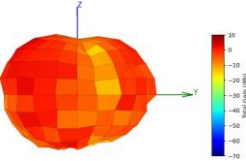
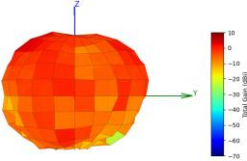
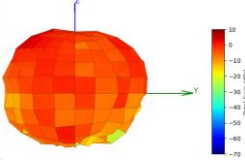
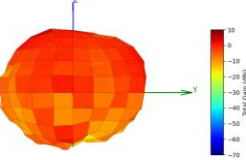


➤ Max Antenna 3D Radiation Pattern

Main:



Aux:

Max Antenna 3D Radiation Pattern - Aux Antenna															
Frequency (MHz) - Gain (dBi)				Frequency (MHz) - Gain (dBi)				Frequency (MHz) - Gain (dBi)				Frequency (MHz) - Gain (dBi)			
2400 - 2483.5		2.28		5150-5250		3.64		5250-5350		4.08		5470-5725		4.31	
															
Frequency (MHz) - Gain (dBi)				Frequency (MHz) - Gain (dBi)				Frequency (MHz) - Gain (dBi)				Frequency (MHz) - Gain (dBi)			
5725-5850		2.80		5850-5895		2.92		5925-6425		4.60		6425-6525		4.12	
															
Frequency (MHz) - Gain (dBi)				Frequency (MHz) - Gain (dBi)											
6525-6875		4.01		6875-7125		3.84									
															

4. Antenna Host Platform Location Information

➤ **Antenna on the panel section**

