



Foxconn Interconnect Technology

Provide Interconnect to Enhance Communication for a Better Life.

# Door Bell Antenna Evaluation Report

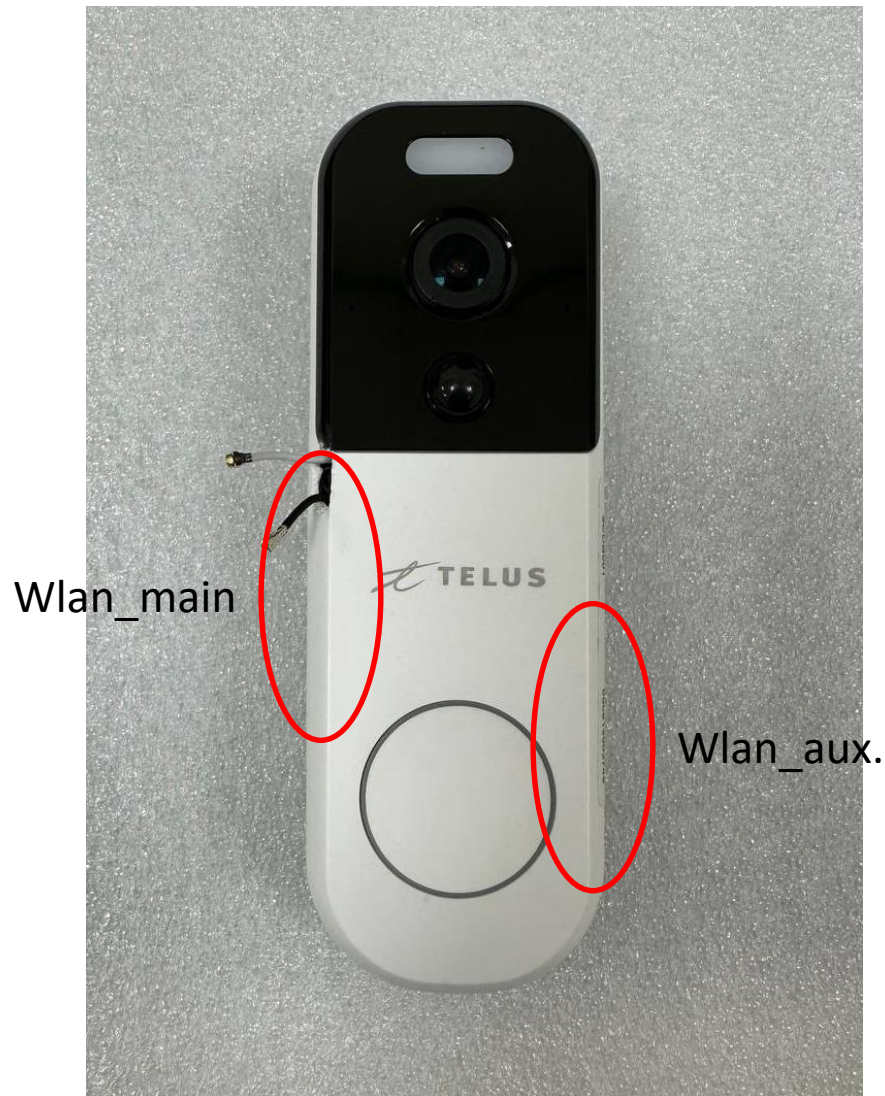
Prepared by: Ian Chen

FIT, 2024/ 01/18

# Antenna Specification

Antenna Electrical Properties		
Antenna Type	Wlan-Main	Wlan-Aux
Frequency Range	2.4+5GHz	2.4+5GHz
Efficiency(%)	30%	30%
Peak Gain(dBi)	4	4
Average Gain(dB)	-5	-5
VSWR	3	3
Polarization	Liner	
Impedance	50 $\Omega$	

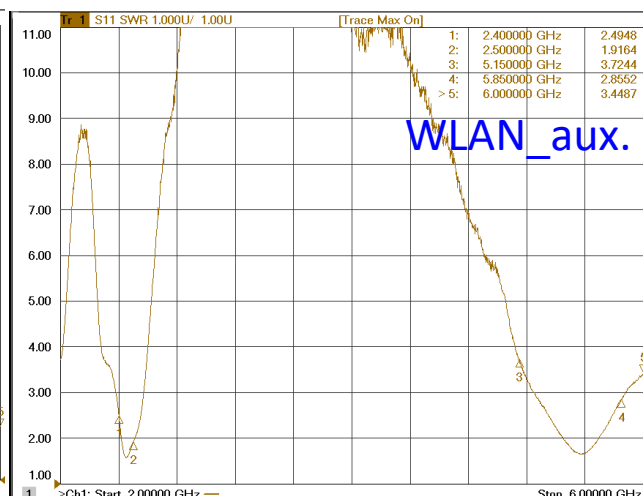
# Antenna Model



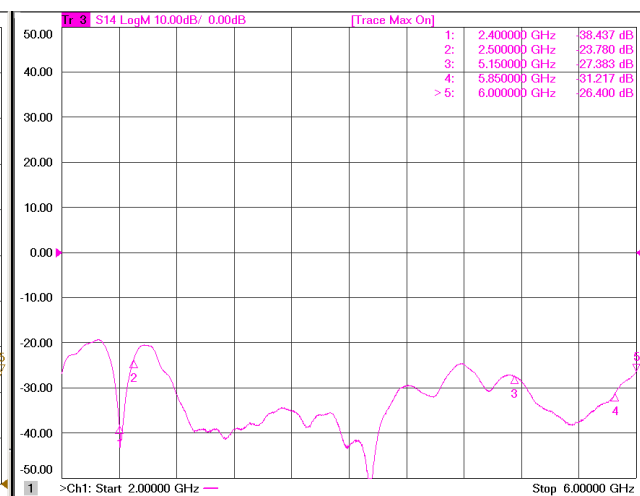
# Antenna Performance

# Antenna Test Result

## VSWR



## Isolation



## Efficiency

### WLAN\_main

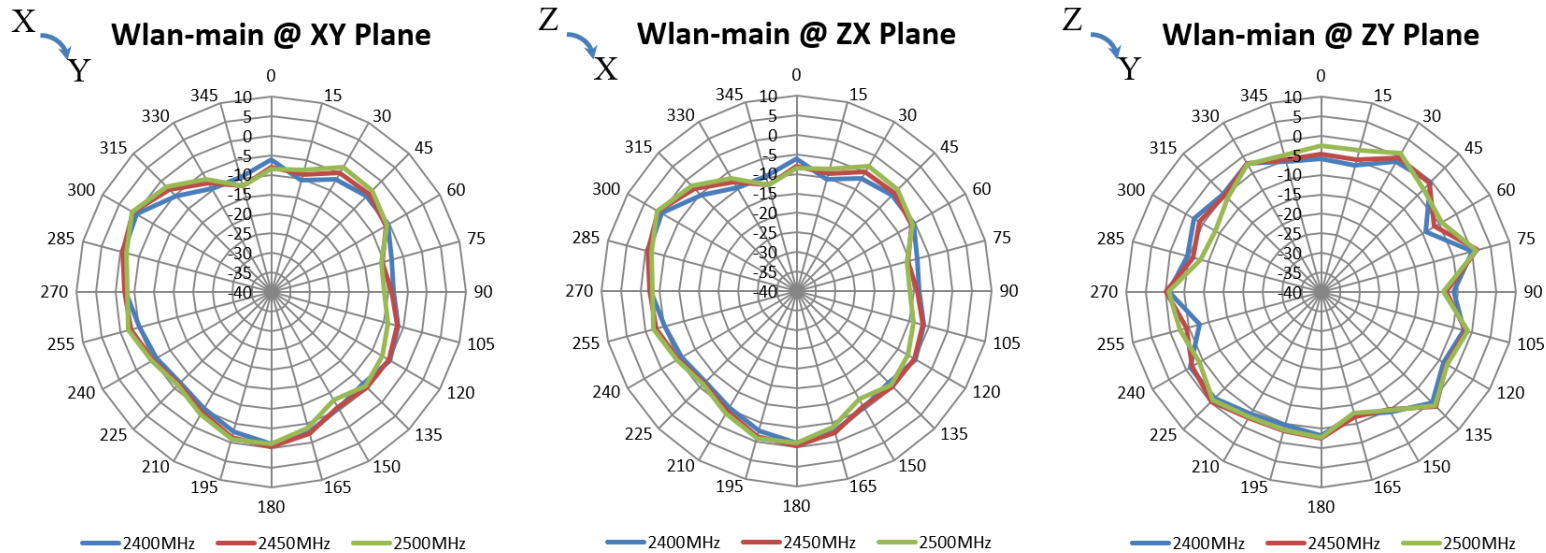
Frequency	2400	2450	2500	5150	5250	5350	5470	5600	5725	5785	5850
Peak EIRP (dBm)	1.65	2.55	2.06	3.75	3.39	3.22	3.58	3.63	3.06	3.01	3.31
Efficiency (%)	42.79	51.50	50.92	45.80	44.22	44.83	47.64	54.50	55.44	59.46	54.49
Average Gain (dB)	-3.69	-2.88	-2.93	-3.39	-3.54	-3.48	-3.22	-2.64	-2.56	-2.26	-2.64

### WLAN\_aux.

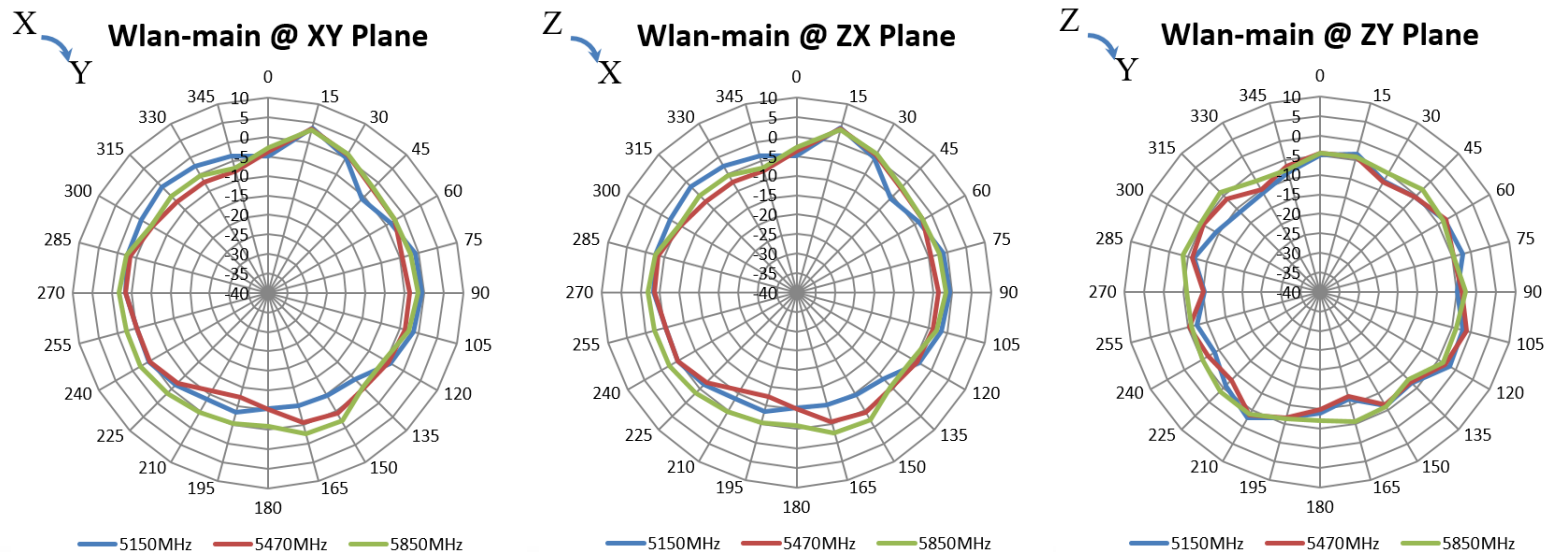
Frequency	2400	2450	2500	5150	5250	5350	5470	5600	5725	5785	5850
Peak EIRP (dBm)	3.67	3.48	3.53	3.89	3.38	3.40	3.00	3.96	3.89	3.50	3.15
Efficiency (%)	45.16	46.56	39.97	43.72	44.40	46.73	55.79	63.33	59.55	54.10	47.45
Average Gain (dB)	-3.45	-3.32	-3.98	-3.59	-3.53	-3.30	-2.53	-1.98	-2.25	-2.67	-3.24

# Antenna Test Result \_Wlan-main

## Radiation Pattern (2400 ~ 2500MHz)



## Radiation Pattern (5150 ~ 5850MHz)

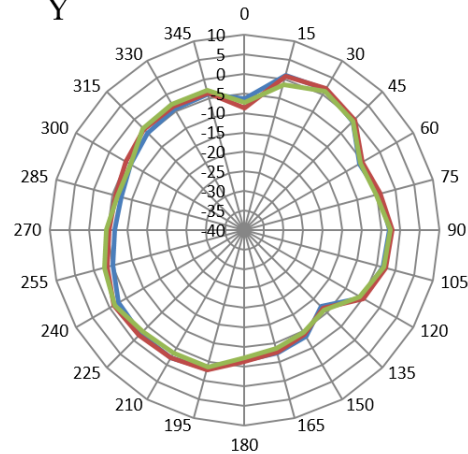




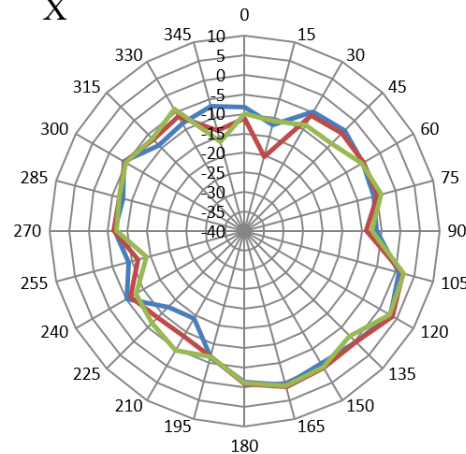
# Antenna Test Result \_Wlan-aux

## Radiation Pattern (2400 ~ 2500MHz)

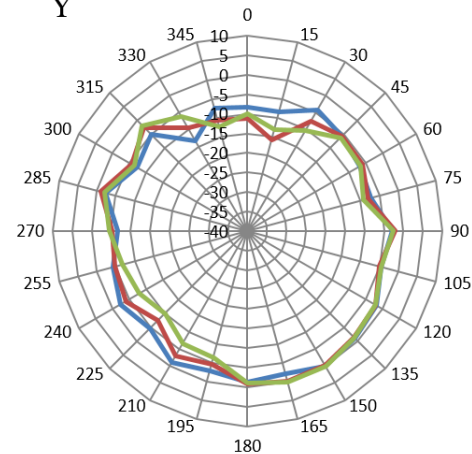
Wlan-aux @ XY Plane



Wlan-aux @ ZX Plane



Wlan-aux @ ZY Plane



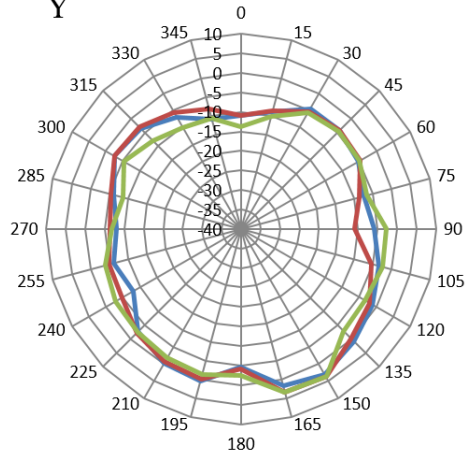
— 2400MHz — 2450MHz — 2500MHz

— 2400MHz — 2450MHz — 2500MHz

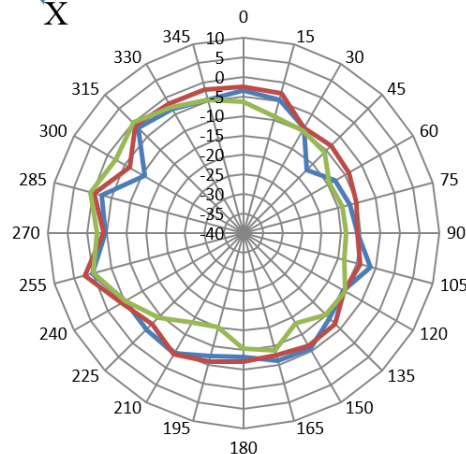
— 2400MHz — 2450MHz — 2500MHz

## Radiation Pattern (5150 ~ 5850MHz)

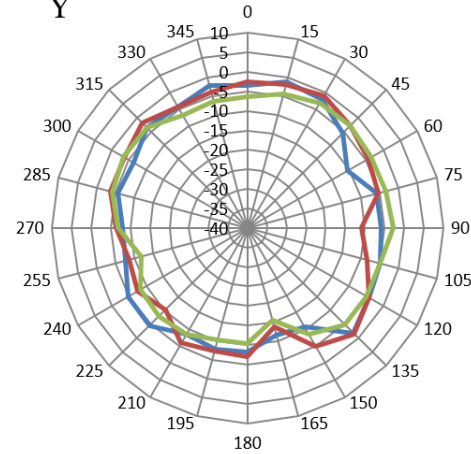
Wlan-aux @ XY Plane



Wlan-aux @ ZX Plane



Wlan-aux @ ZY Plane



— 5150MHz — 5470MHz — 5850MHz

— 5150MHz — 5470MHz — 5850MHz

— 5150MHz — 5470MHz — 5850MHz

Antenna type : dipole

Antenna vender : Foxconn interconnect technology limited  
New Taipei City, No. 66-1, Zhongshan Rd, Tucheng District, Taiwan,

Wlan-main : ANTP2M1-CZZ21-EH

Wlan-aux : ANTP2M1-CZZ22-EH





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**THANK YOU!**