

Gandalf_Touch console Antenna **APPROVAL SHEET**

Customer Name: Wistron

Date:2023/01/09

Doc. Version: A01

OEM P/N	0ACNXL21007N		
Wistron P/N	025.90231.0001		
Description	Antennas Type : PCB Antenna for WLAN 802.11a/b/g/n/ac application Connector Type : IPEX NGFF Connector for 1.13 cable Cable Type : OD 1.13 RF Normal Cable Impedance : 50Ω Polarization : Linear Radiation pattern : Omni-directional		
Version			

Provided By Wistron NeWeb Corp	Reviewed By Wistron NeWeb Corp	Approved By Customer
		Justin Tseng Rober Ku Wesley Song

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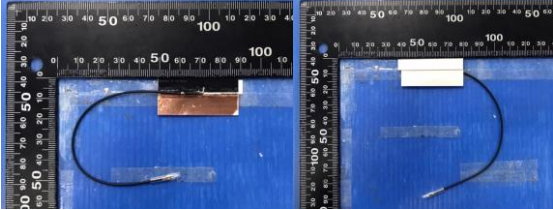
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1. Introduction

Antenna for 802.11 a/b/g/n/ac system

Antenna 3 (PCB)

1. Location: Back of the Touch console
2. Cable length of Antenna 3 : 105mm, Black

	Antenna 3	
Position	Back of the Touch console	
Antenna Type	PCB Antenna	
Cable	1.13 (Normal) x 105 mm, Black IPEX NGFF connector	
Photos	 <p style="text-align: center;">正面 背面</p>	
Position		
Antenna Type		
Cable		
Photos		

2. Revision History

Date	Version	Revision History
1108y22	1.0	MP

3. Product Specifications

3.1 Specifications of Antenna Design

3.1.1 VSWR

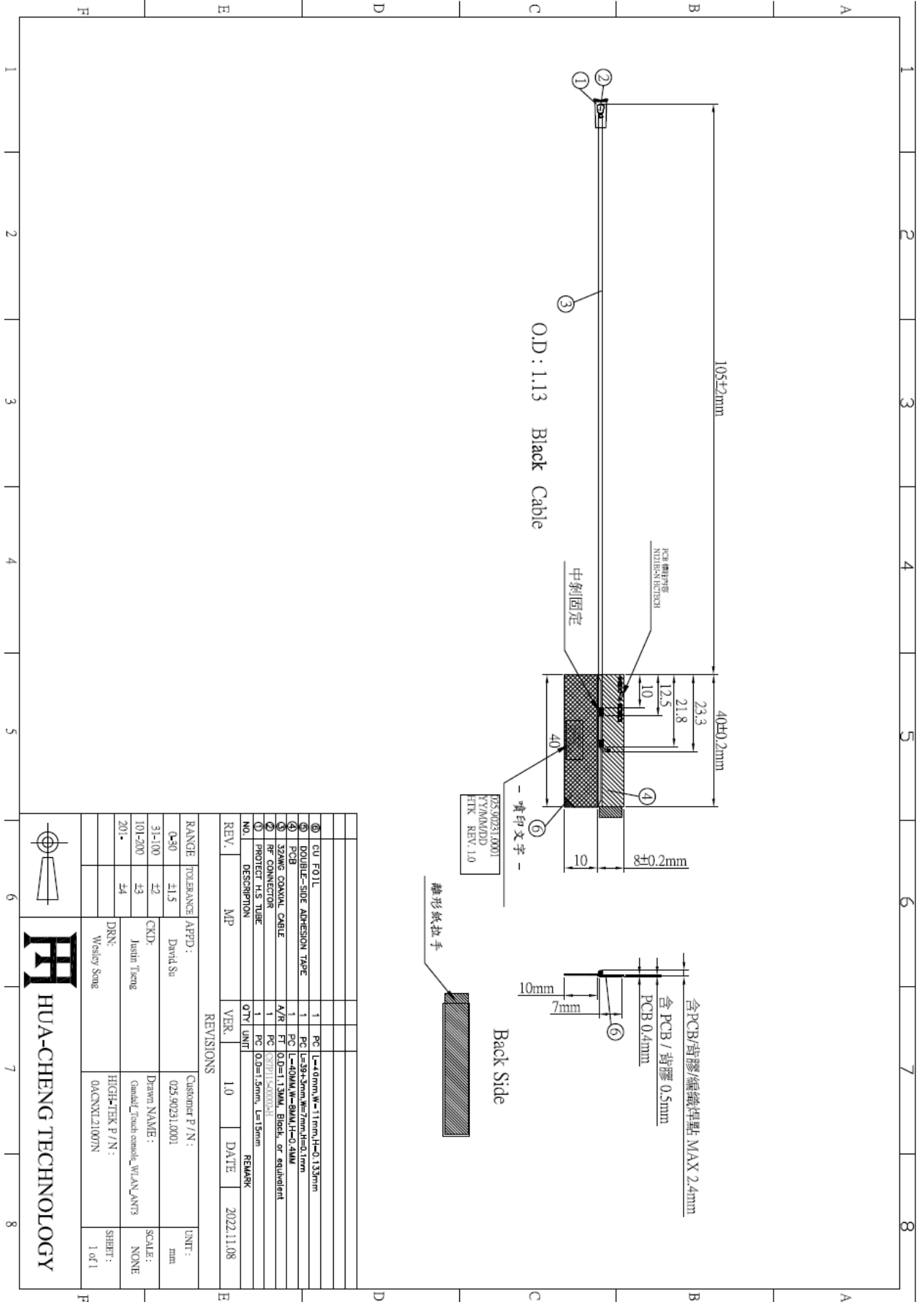
VSWR	2G4 ISM (2.400 GHz - 2.4835 GHz)			U-NII (5.150 GHz - 5.350 GHz)			HyperLAN (5.470 GHz - 5.85 GHz)				
	2.40 GHz	2.45GHz	2.50GHz	5.15 GHz	5.25GHz	5.35 GHz	5.47 GHz	5.5975 GHz	5.725 GHz	5.785 GHz	5.85 GHz
Antenna 3	1.14	1.45	2.09	1.98	1.72	1.33	1.64	1.37	1.45	1.86	1.91

3.1.2 Average gain and peak gain

Antenna Gain		2G4 ISM (2.400 GHz - 2.4835 GHz)			U-NII (5.150 GHz - 5.350 GHz)			HyperLAN (5.470 GHz - 5.85 GHz)				
		2.40 GHz	2.45 GHz	2.50GHz	5.15 GHz	5.25 GHz	5.35 GHz	5.47 GHz	5.5975 GHz	5.725 GHz	5.785 GHz	5.85 GHz
Antenna 3	Peak dBi	-1.12	-1.46	-1.57	2.48	2.76	2.61	2.67	2.78	1.18	1.58	1.86
	Avg dB	-2.94	-3.22	-3.49	-3.39	-3.48	-3.34	-3.21	-3.07	-3.23	-3.53	-3.49

3.2 Mechanical Specifications

Antenna 3:

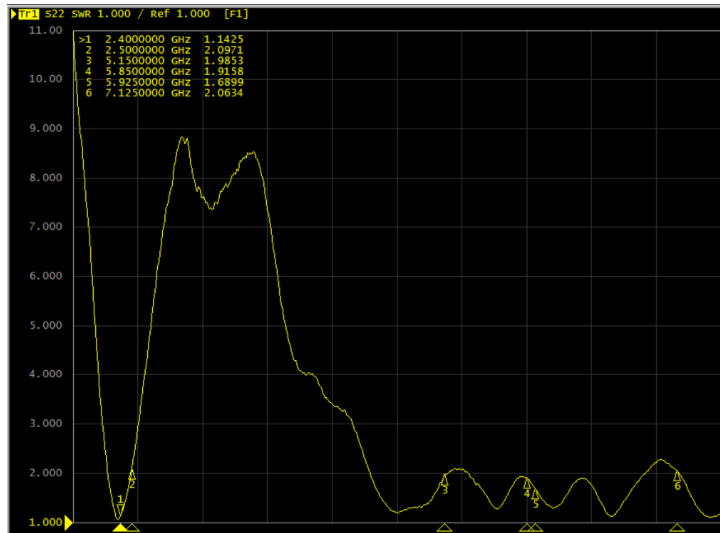


3.3 Antenna Material List

Antenna 3
<ol style="list-style-type: none"> 1. PCB 2. Coaxial cable and IPEX NGFF connector 3. Double-Side Adhesion Tape 4. Cu Foil

4 Antenna Performance

4.1 VSWR



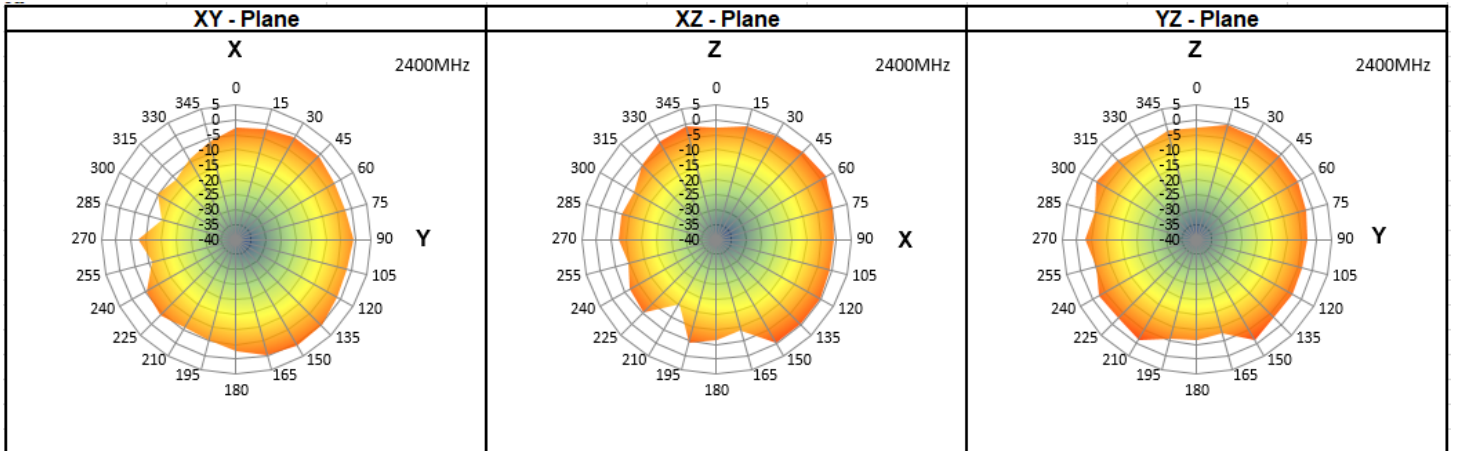
4.2 Peak Gain and Average Gain

Frequency	Antenna 3 Gain Data				
	2D		3D		
	H-peak gain(dBi)	V-peak gain(dBi)	Peak gain(dBi)	Average gain(dBi)	Efficiency(%)
2400 MHz	-2.82	-2.81	-1.12	-2.94	50.76
2450 MHz	-3.35	-2.91	-1.46	-3.22	47.66
2500 MHz	-3.67	-2.75	-1.57	-3.49	44.73
5150 MHz	-3.62	-3.78	2.48	-3.39	45.85
5250 MHz	-3.08	-3.13	2.76	-3.48	44.92
5350 MHz	-3.25	-3.08	2.61	-3.34	46.32
5470 MHz	-4.39	-3.1	2.67	-3.21	47.76
5600 MHz	-4.35	-2.09	2.78	-3.07	49.34
5725 MHz	-4.27	-2.81	1.18	-3.23	47.49
5785 MHz	-3.5	-2.36	1.58	-3.53	44.35
5850 MHz	-3.28	-2.91	1.86	-3.49	44.80

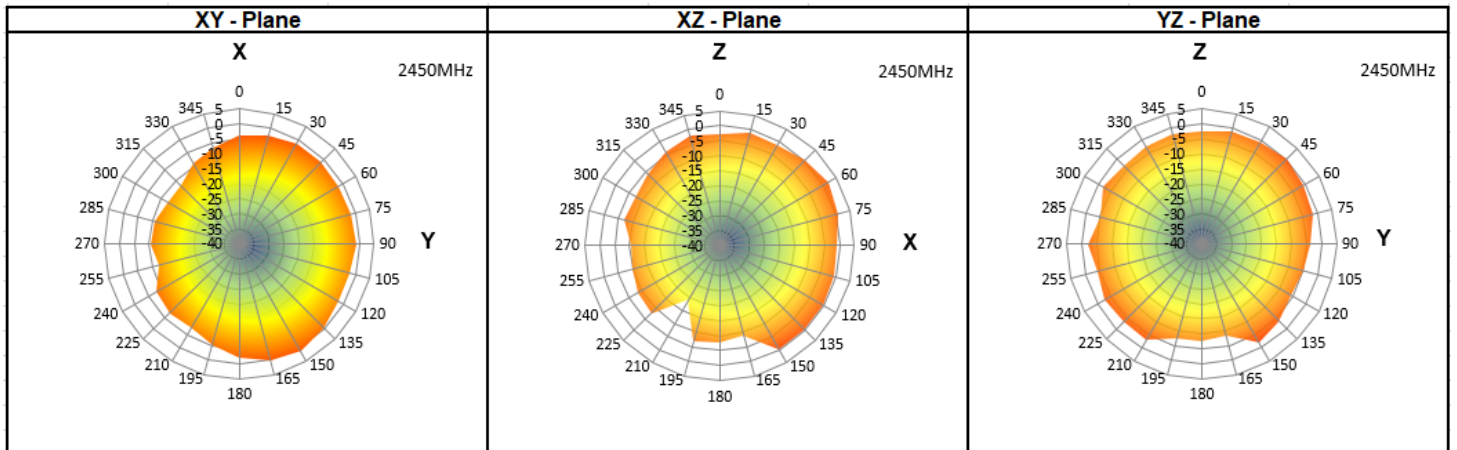
4.3 Antenna 2D Pattern

Antenna 3

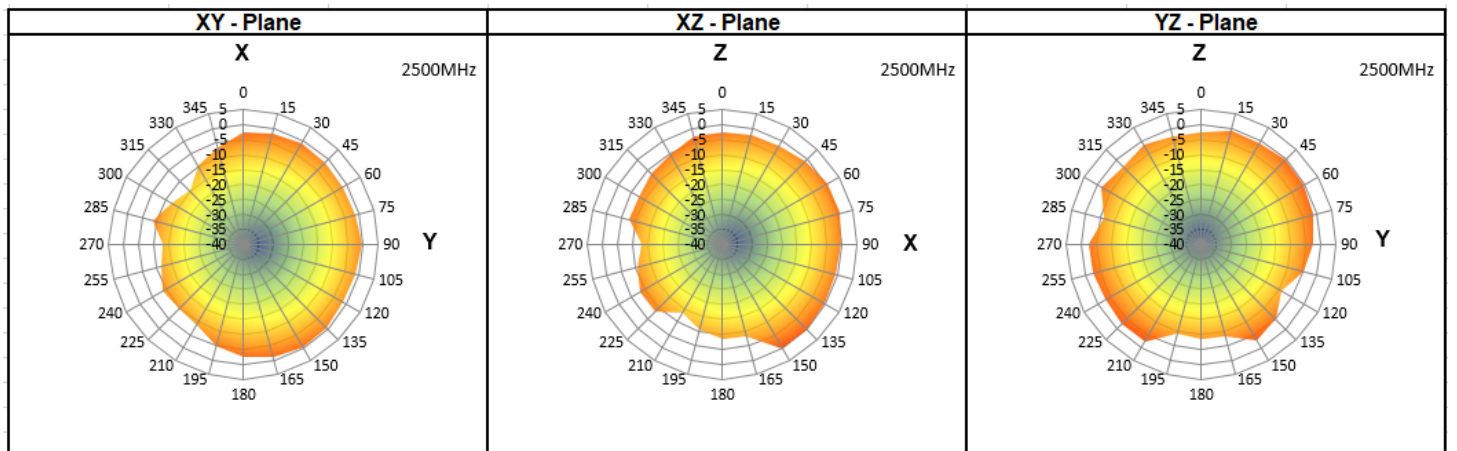
2400 MHz



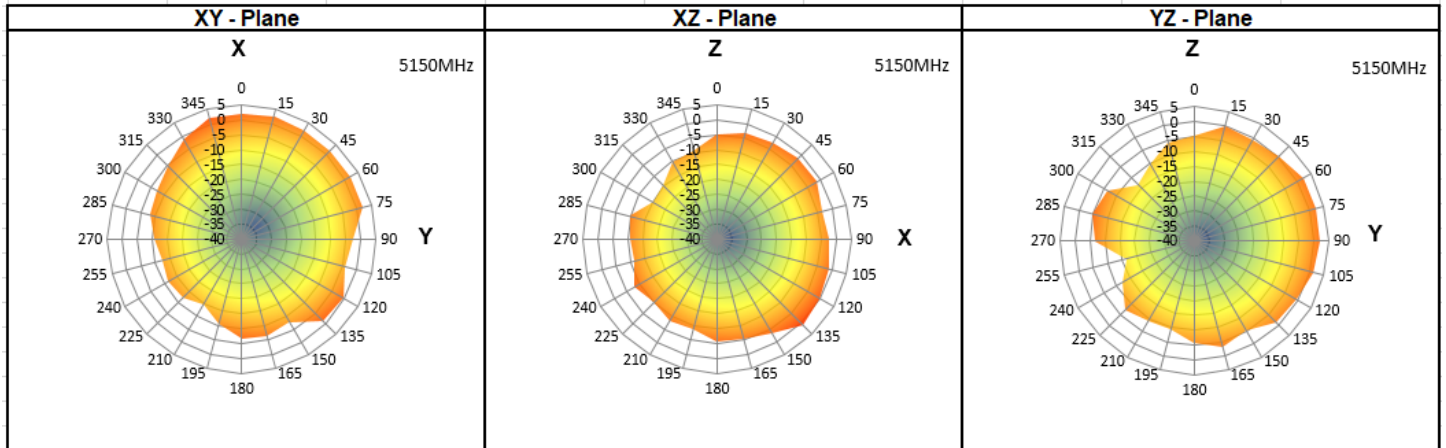
2450 MHz



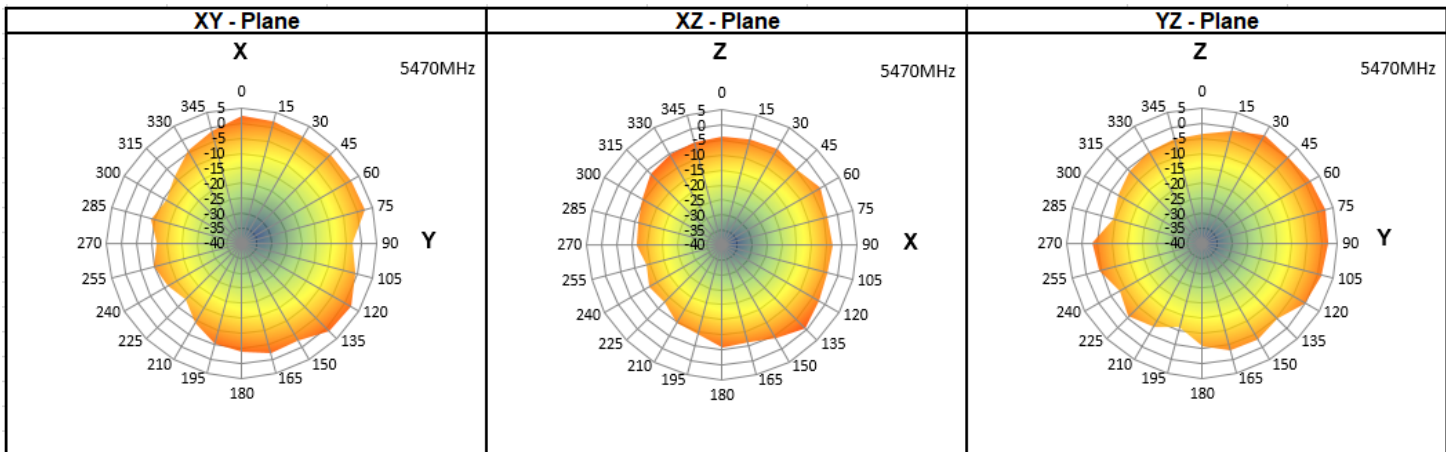
2500 MHz



5150 MHz



5470 MHz



5850 MHz

