

# APPROVAL SHEET

Customer Name: **TPV**

Date: **2018/04/27**

Doc. Version: **1**

OEM P/N	<b>317GAAWA616WNC</b>
WNC P/N	<b>81.EK615.G56</b>
Description	<b>MINNETONKA, 43TV WIFI MAIN ANTENNA, EK6-TP1</b>
Version	<b>1A</b>

Provided By Wistron NeWeb Corp	Reviewed By Wistron NeWeb Corp	Approved By Customer
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# Index

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- 1. Introduction**
- 2. Revision History**
- 3. Product Specifications**
- 4. Antenna Performance**

## 1. Introduction

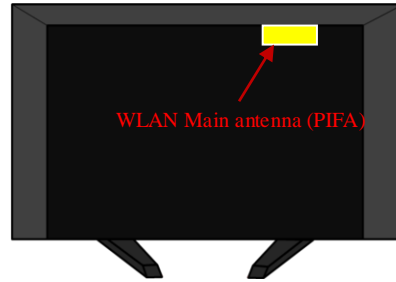
### Antenna for 802.11a+n+g system

#### WLAN MAIN antenna (PIFA)

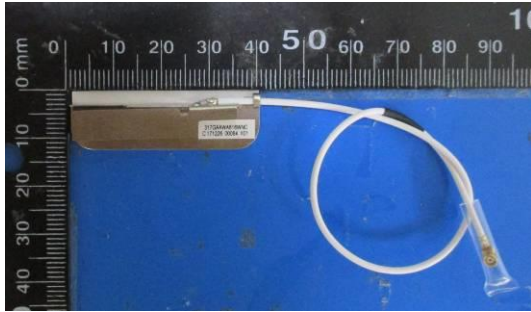
1. Location: Top Right of the TV Back Panel
2. Cable length : 184 mm, White (connector with  $\Phi$  1.37mm RF cable)



Front View



Back View

	WLAN MAIN Antenna
Position	Top Right of the TV Back Panel
Antenna Type	PIFA
Cable	Cable color : White, 1.37 (dia) x 184mm , RF connector
Weight	2.68 g
Photos	

## 2. Revision History

Date	Version	Revision History
04/27/18	1	New Release

## 3. Product Specifications

### 3.1 Specifications of Antenna Design

#### 3.1.1 VSWR

WLAN	IEEE 802.11 g/n			IEEE 802.11 a/n		
	2400MHz	2450MHz	2483MHz	5150MHz	5470MHz	5850MHz
VSWR	<2			<2		

#### 3.1.2 Efficiency

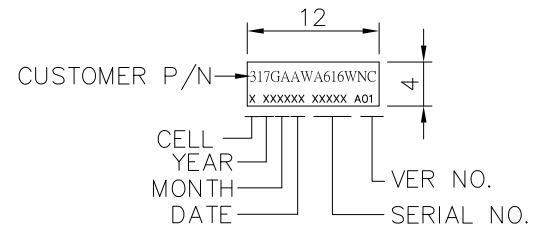
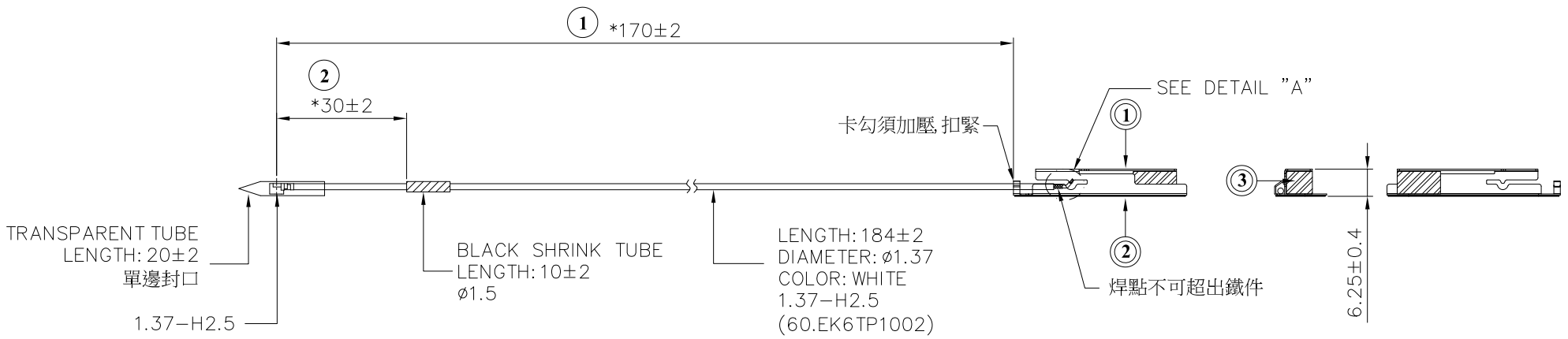
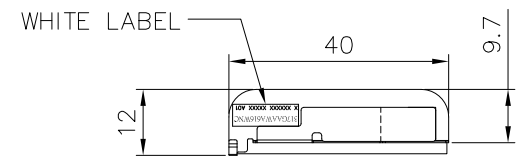
WLAN	IEEE 802.11 g/n			IEEE 802.11 a/n		
	2400MHz	2450MHz	2483MHz	5150MHz	5470MHz	5850MHz
Efficiency	>40%			>50%		

### 3.2 Mechanical Specifications

See the attached drawing.

PART NUMBER BLOCK		CUSTOMER P/N BLOCK		CONFIRM ANTENNA SPEC.	
PART NUMBER	REV	PART NUMBER	REV	APPROVED	DATE
57.EK615.056	1	317GAAWA616WNC	A01	YANG SHUN LIU	05/09/18

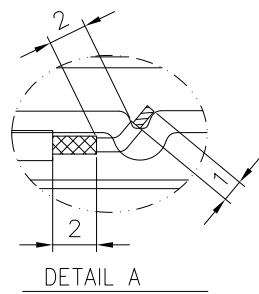
REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
	1	RELEASE TO FILE	05/09/18	VINCENT CC LIN



"\*"ARE THE CRITICAL DIMENSIONS

3	3T.EK6TP.001	BUFFER, BT-43, EVA60, EK6-TP1	EA	1
2	3T.EK6TP.003	PLATE, AL FOIL, BT-43, EK6-TP1	EA	1
1	3S.EK6TP.009	ANTENNA, SUS-1, BT-43, EK6-TP1	EA	1
ITEM	PART NO.	DESCRIPTION	UNIT	QTY

ONLY ME PARTS REFERENCE



DETAIL OF LABEL  
SCALE: 2/1

81.EK615.G56	EK6-TP1
NEXT ASSY	USED ON
APPLICATION	

UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN mm AND TOLERANCES ARE:

INTEGER DIMENSIONS	±0.2	ANGULAR DIMENSIONS	±1°
1 PLACE DECIMAL	±0.1	HOLES UNDER $\phi$ 5.00	±0.05
2 PLACE DECIMALS	±0.05		

MATERIAL: NA  
FINISH: NA

THIRD ANGLE PROJECTION	DRAWN	STACY CHANG	05/09/18
	ENGR	YANG SHUN LIU	05/09/18
	APVD	VINCENT CC LIN	05/09/18

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DWG TITLE  
MINNETONKA, 43TV WIFI MAIN ANTENNA, EK6-TP1

SIZE	DWG NO.	REV
A3	57.EK615.056	1

SCALE 1/1 SHEET 1 OF 1

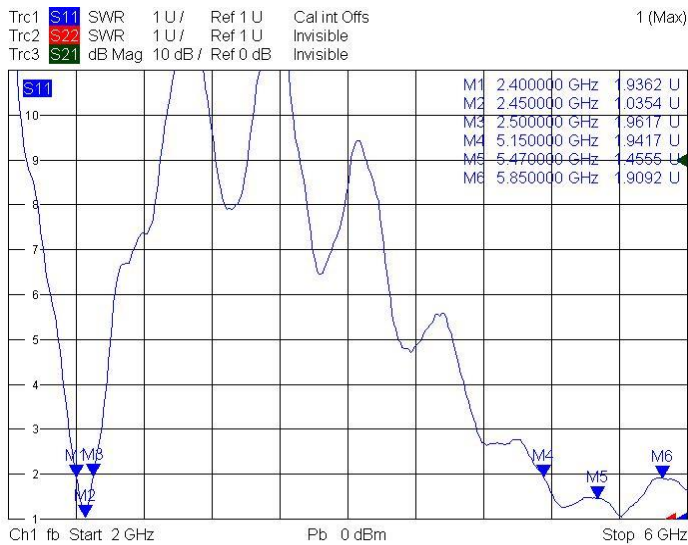
### 3.3 Antenna Material List

Items	Description
Antenna	3S.EK6TP.004ST
Cable	Φ1.37 Cable(White)
Connector	IPEX
Adhesive	王佳 TT219
BUFFER	EVA60

## 4. Antenna Performance

### 4.1 VSWR

#### Main



## 4.2 Efficiency data

### Main

Freq(GHz)	Efficiency(%)	Efficiency(dB)
2400	43.86	-3.58
2450	55.97	-2.52
2500	46.58	-3.32
5150	59.51	-2.25
5250	63.96	-1.94
5350	66.42	-1.78
5470	65.08	-1.87
5600	65.93	-1.81
5725	66.16	-1.79
5785	60.52	-2.18
5850	60.57	-2.18

## 4.3 Peak Gain

Frequency (MHz)	Gain (dBi)
2400	1.97
2450	1.32
2500	0.41
5150	2.93
5250	3.17
5350	3.83
5470	3.06
5600	2.76
5725	2.67
5785	2.29
5850	2.39

