

# ANTENNA INFORMATION

OEM	Dell
ODM	Compal
Platform model name	P166G
Intel platform (ex: Yes, No or NA)	YES
Platform type (ex: regular NB, convertible PC, AIO...etc)	Convertible NB
SAR minimum separation (mm)	<b>NB mode : w/bumper: 3.52 mm</b> <b>NB mode : w/o bumper: 2.43 mm</b> <b>Tablet mode : 2mm</b>

Antenna manufacturer	Speed Wireless Technology CO.,LTD.	
Address	25F, No.95, Xinqu 6th St., Taoyuan Dist., Taoyuan City 33044, Taiwan.	
Antenna Part number	Main: F-0G-FH-6158-001-00	Aux: F-0G-FH-6158-001-00
Antenna type (ex: PIFA, Dipole...etc)	DC33002R23L(Compal)	DC33002R23L(Compal)
	<b>PIFA</b>	

NB mode Antenna Peak gain w/ cable loss (dBi)*										
	2.4GHz 2400-2483.5 MHz	5.2GHz 5150-5250MHz	5.3GHz 5250-5350MHz	5.6GHz 5470-5725MHz	5.8GHz 5725-5850MHz	5.9GHz 5850-5895MHz	6.2GHz 5925-6425MHz	6.5GHz 6425-6525MHz	6.7GHz 6525-6875MHz	7.0 GHz 6875-7125MHz
Main	2.87	2.91	2.88	4.1	4.1	3.5	4.74	4.12	4.89	4.91
Aux	2.77	3.47	3.65	1.51	2.72	2.79	3.64	4.02	4.31	4.67

TB mode Antenna Peak gain w/ cable loss (dBi)*										
	2.4GHz 2400-2483.5 MHz	5.2GHz 5150-5250MHz	5.3GHz 5250-5350MHz	5.6GHz 5470-5725MHz	5.8GHz 5725-5850MHz	5.9GHz 5850-5895MHz	6.2GHz 5925-6425MHz	6.5GHz 6425-6525MHz	6.7GHz 6525-6875MHz	7.0 GHz 6875-7125MHz
Main	-0.5	2.79	3.15	3.28	3.28	2.66	1.93	1.57	0.84	0.37
Aux	-1.2	2.29	2.74	2	1.38	1.64	2.24	1.18	3.38	2.74

Cable Assembly Part Number and Information					
	Cable PN	Cable length(cm)	Cable diameter(mm)	Impedance(ohm)	Connector type
Main	White 1.13SLLS SY113L/50-143	24.3	1.13	50	I-PEX MHF- 4L(20565-001R-13)
Aux	Black 1.13SLLS SY113L/50-118	25.5	1.13	50	I-PEX MHF- 4L(20565-001R-13)

\* 3D Antenna Peak Gain required being test in system basis.

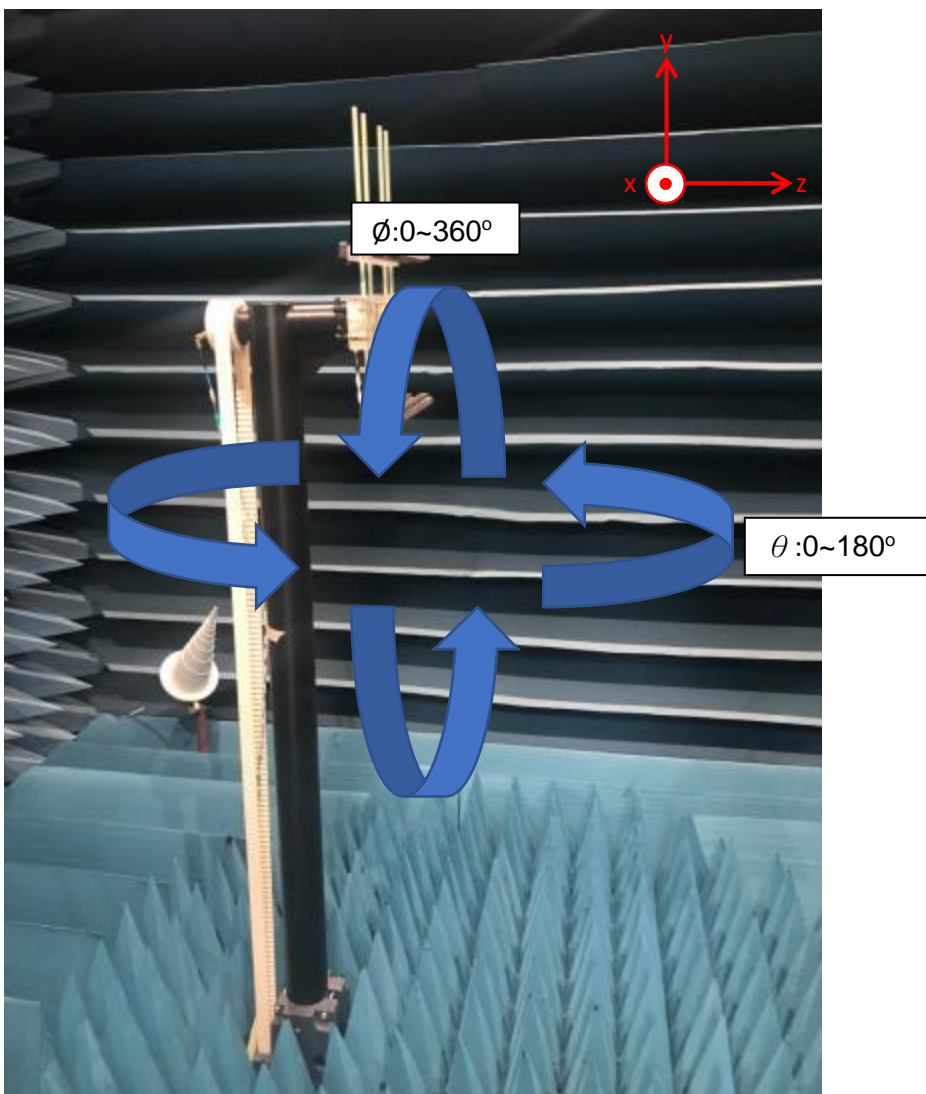
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# Annex A. Photographs

## A.1 Setup Photo

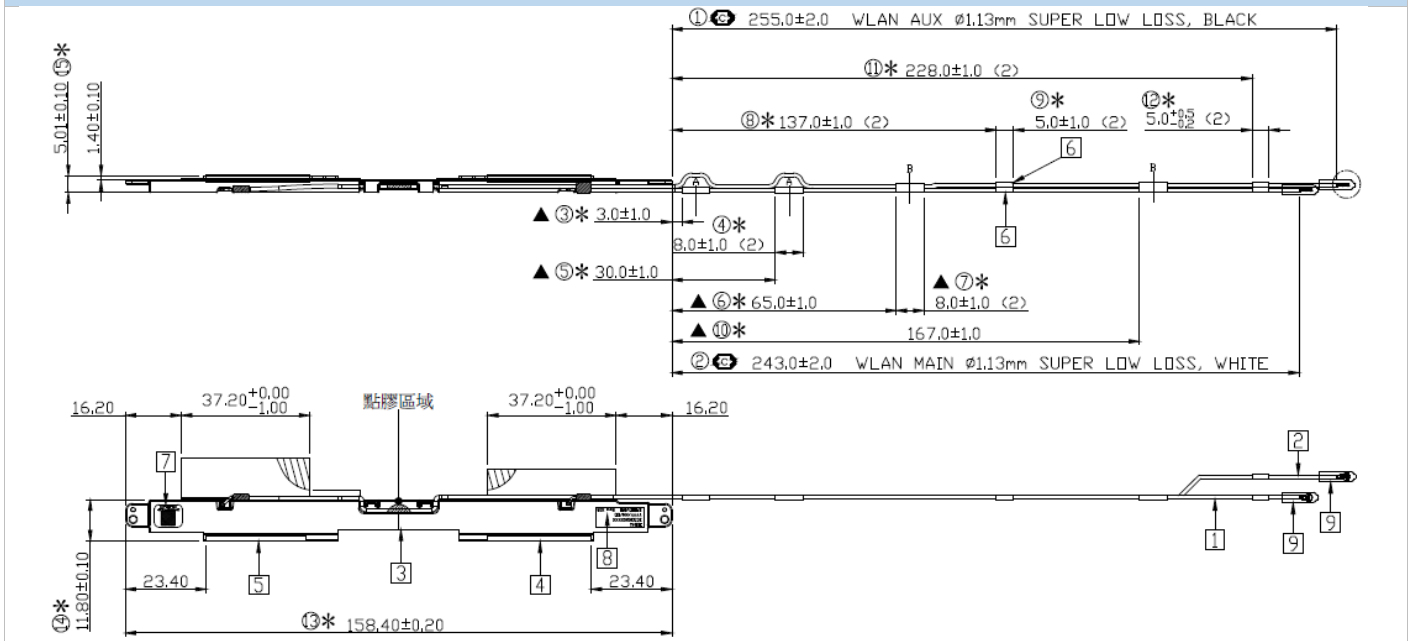
Test Conditions
NB under test placed on a non-conductive structure at sufficient height to be in the 'quiet zone' of the chamber
The NB under test must be fully populated with a power, motherboard, hard drive, disk drives, etc... The purpose is to characterize the antennas on a fully populated customer deliverable unit.
NB's panel should be parallel with XY-plane and face to Y-axle, see diagram below.



## A.2 Test sample

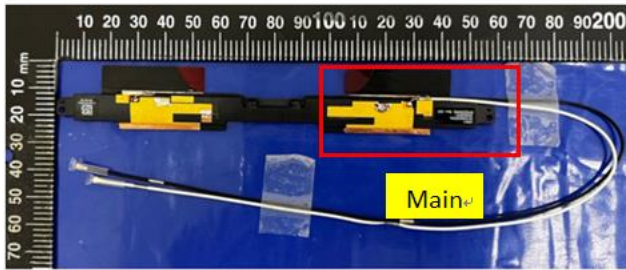
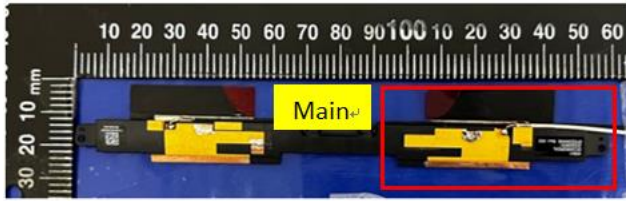
### Main Antenna

#### Antenna Drawing

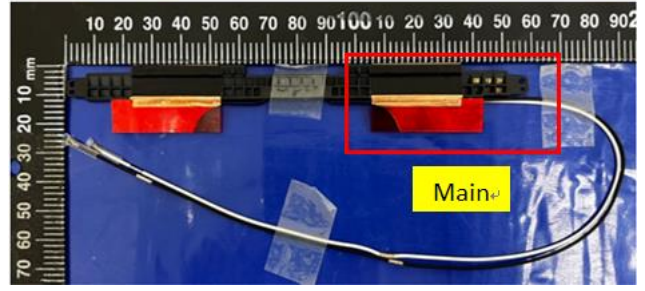
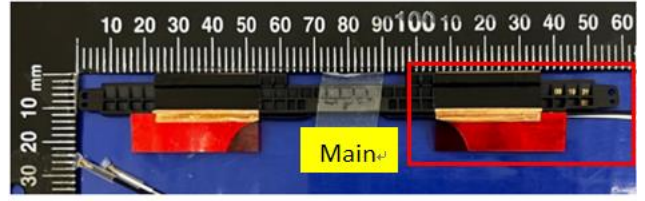


### Antenna Photo

Front



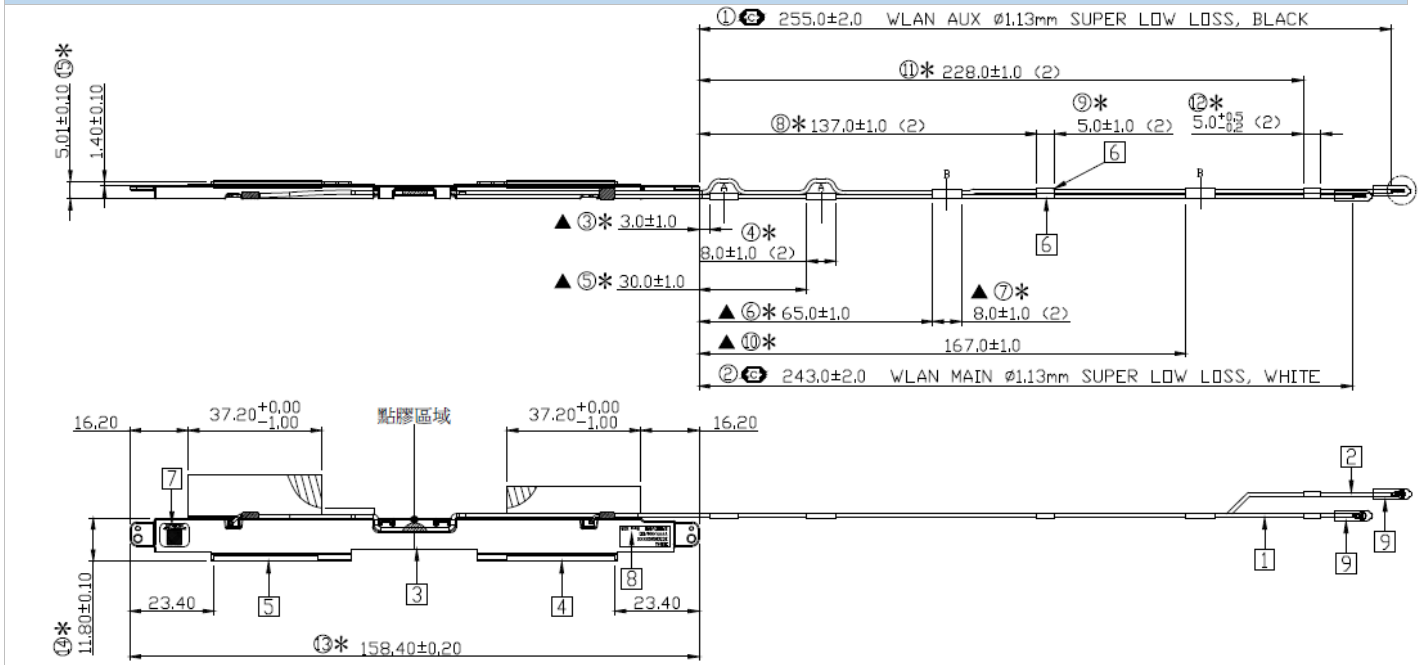
Back



**Note: antenna photo should include L type ruler**

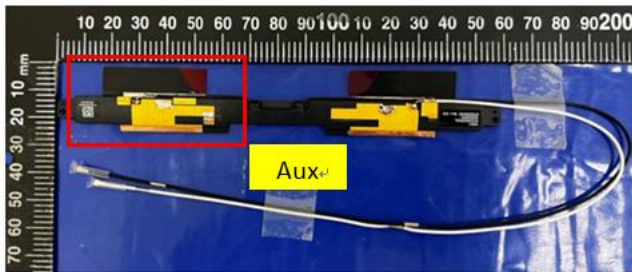
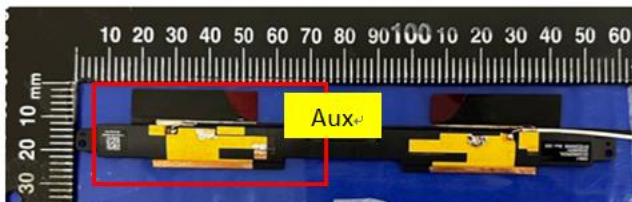
## Aux Antenna

### Antenna Drawing

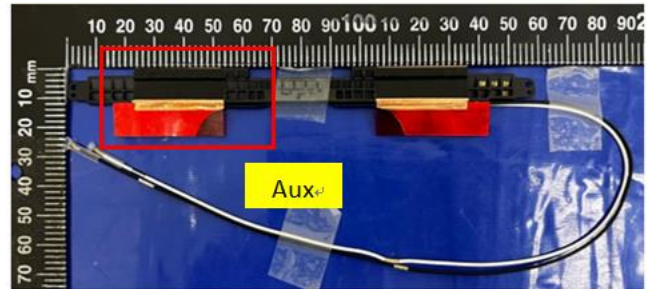
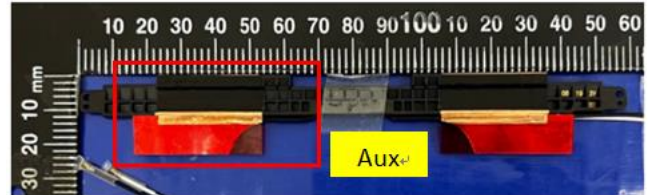


### Antenna Photo

#### Front



#### Back



Note: antenna photo should include L type ruler

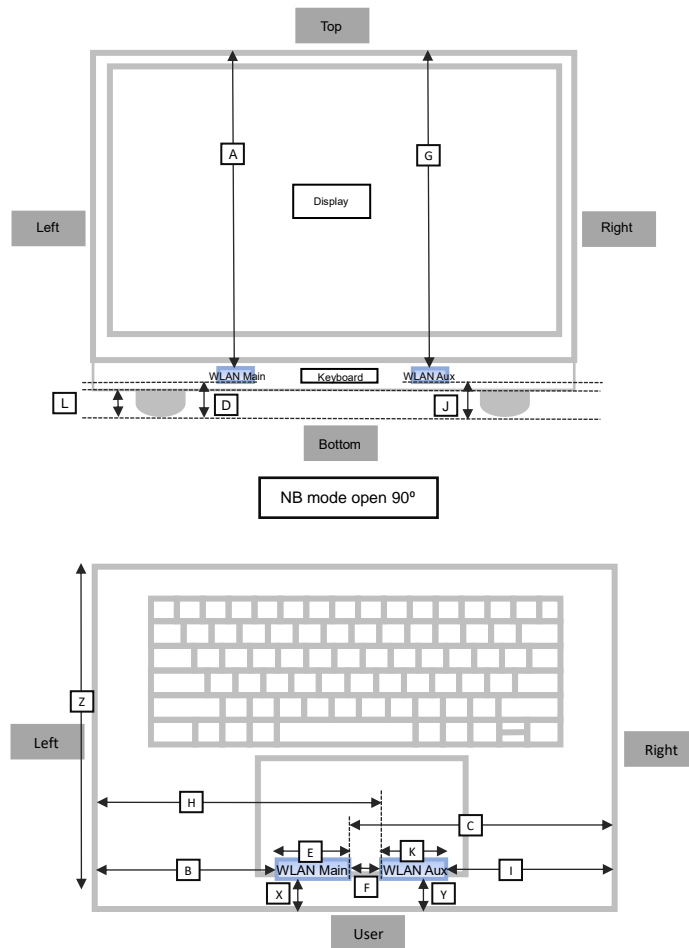
# Annex B. Antenna Location

## B.1 Antenna Host Platform Location Information

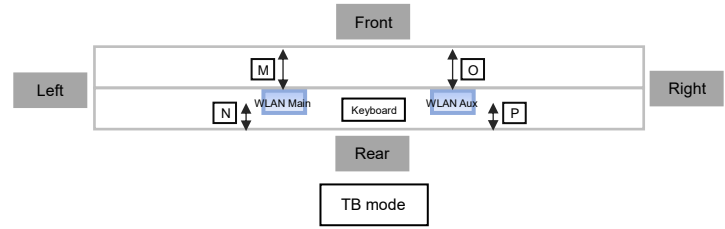
Include a dimensioned photo(s) or dimensioned drawing(s) of Main and Aux antenna placements (measurements are not required for receive-only antenna).

Any antenna that transmits must show dimensions to bottom of laptop. Provide a description of the materials that are used for supporting or surrounding transmit antennas; for example, non-conductive plastics vs. conductive coated plastic or metallic materials.

Minimum Separation Distance			
Item	Antenna	Position	Distance (mm)
A	WLAN-Main	To top	320
B	WLAN-Main	To left	98
C	WLAN-Main	To right	177
D	WLAN-Main	To bottom	8
E	WLAN-Main	Main antenna length	45
F	Main-Aux	Main to Aux	45
G	WLAN-Aux	To top	320
H	WLAN-Aux	To left	176
I	WLAN-Aux	To right	103
J	WLAN-Aux	To bottom	8
K	WLAN-Aux	Aux antenna length	45
L	NB	Bumper thickness	3
X	WLAN-Main	To user	17
Y	WLAN-Aux	To user	17
Z	NB	Keyboard depth	210



Minimum Separation Distance			
Item	Antenna	Position	Distance (mm)
M	WLAN-Main	To front	5
N	WLAN-Main	To rear	2.5
O	WLAN-Aux	To front	5
P	WLAN-Aux	To rear	2.5



## B.2 Antenna dimensional information for SAR evaluation

Include a dimensioned photo(s) or dimensioned drawing(s) showing the distance (mm) between the transmit antennas and the user. For notebook/laptop hosts show lapheld position (example below). For tablet hosts show all orientations including lapheld, primary & secondary portrait, primary & secondary landscape positions. Include a description of any proximity sensors or power throttling implementations that limit or exclude use of host orientation.

