

ANTENNA INFORMATION

OEM	DELL
ODM	Compal Electronics, Inc.
Platform model name	P191G
Intel platform (ex: Yes, No or NA)	Yes
Platform type (ex: regular NB, convertible PC, AIO...etc)	Regular NB
SAR minimum separation (mm)	FCC (1g) 2.5mm (w/bumper) 2mm (w/o bumper)
	ISED (1g) 2.5mm (w/bumper) 2mm (w/o bumper)
	ISED (10g) 2.5mm (w/bumper) 2mm (w/o bumper)

Antenna manufacturer	Company name	Wistron NeWeb Corp.
	Address	20 Park Avenue II (or Yuanchiu 2nd Rd.), Hsinchu Science Park, Hsinchu 300, Taiwan
Test location	Company name	SPORTON INTERNATIONAL INC.
	Address	No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)
Test Personnel	Name(Full name)	Kent Wu
	E-mail	Kent.wu@wnc.com.tw
	Tel/Mobile	03-6667799
Testing date		2024/08/16

Antenna Part number	Main	81ELBE15.G01(DC33002Y30L)
	Aux	81ELBE15.G01(DC33002Y30L)
Antenna type (ex: PIFA, Dipole...etc)		PIFA

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	2.66	1.24	1.07	1.41	1.41	1.03	4.12	3.81	3.58	3.16
Aux	0.74	1.72	2.24	1.68	0.07	1.39	3.28	3.06	3.26	3.32

Cable Assembly Part Number and Information					
	Cable PN	Cable length(mm)	Cable diameter(mm)	Impedance(ohm)	Connector type
Main	SY113L/50-118	62	1.13	50	Ipex MHF4L
Aux	SY113L/50-118	137.5	1.13	50	Ipex MHF4L

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

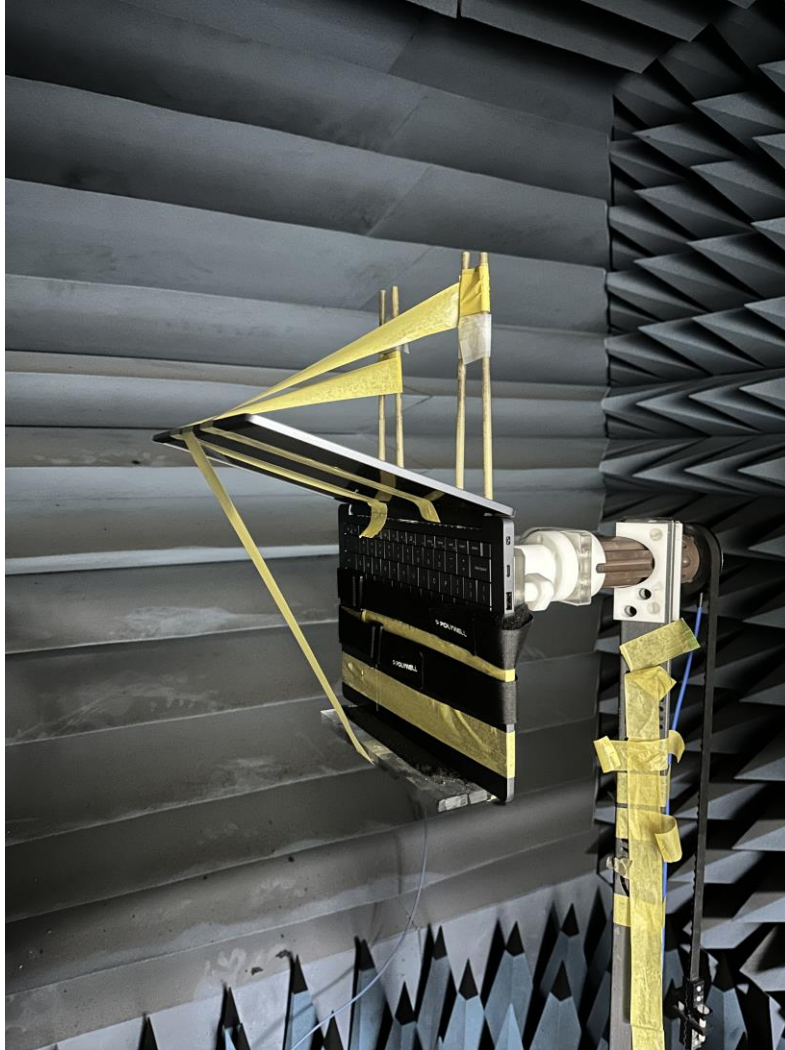
Table of Contents

Cover page.....	1
Annex A. Photographs	
A.1 Setup Photo.....	16
A.2 Test sample.....	17
Annex B. Antenna Location	
B.1 Antenna Host Platform Location Information.....	19
B.2 Antenna dimensional information for SAR evaluation.....	20

Annex A. Photographs

A.1 Setup Photo

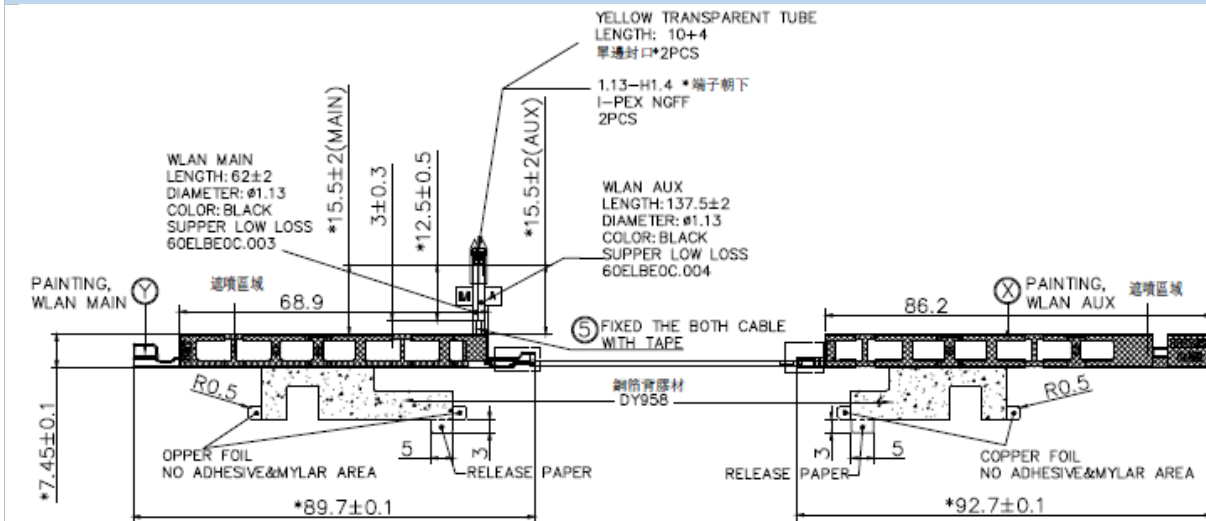
<insert test diagram here for test site utilized>



A.2 Test sample

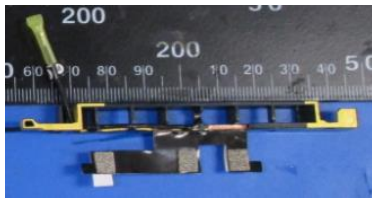
Main Antenna

Antenna Drawing



Antenna Photo

Front



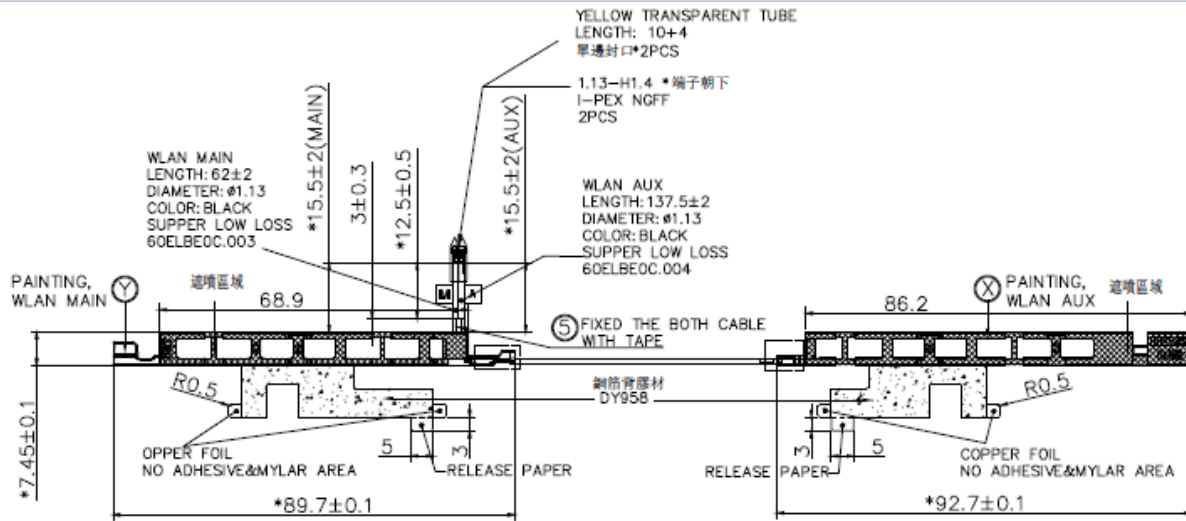
Back



Note: antenna photo should include L type ruler

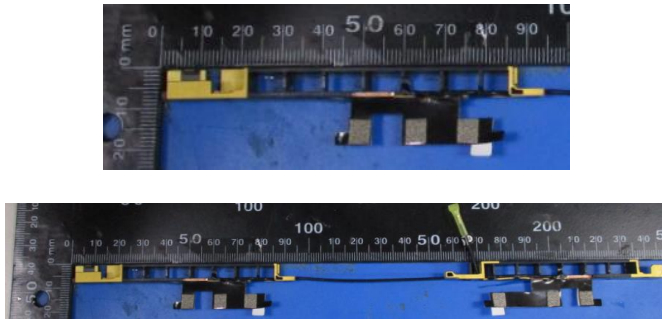
Aux Antenna

Antenna Drawing

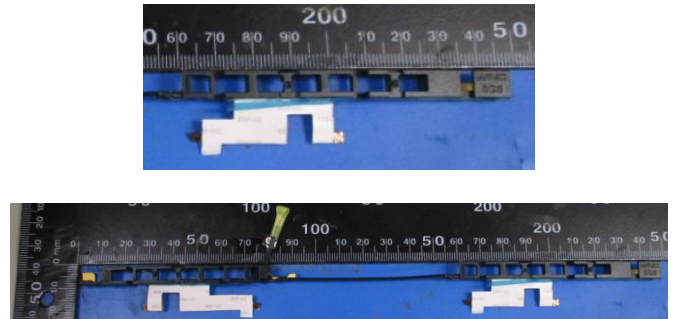


Antenna Photo

Front



Back



Note: antenna photo should include L type ruler

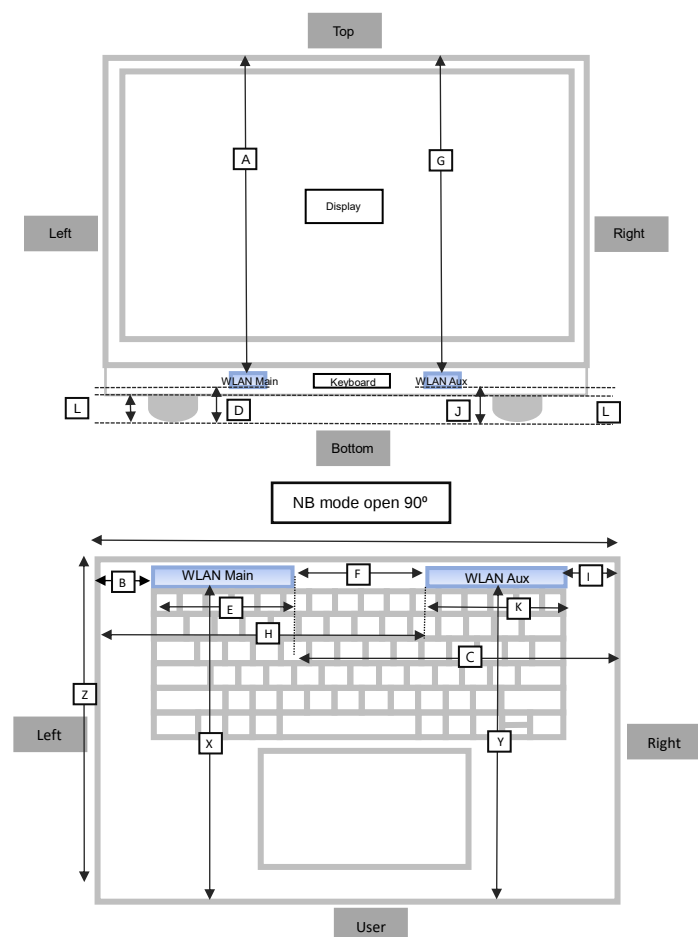
Annex B. Antenna Location

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.

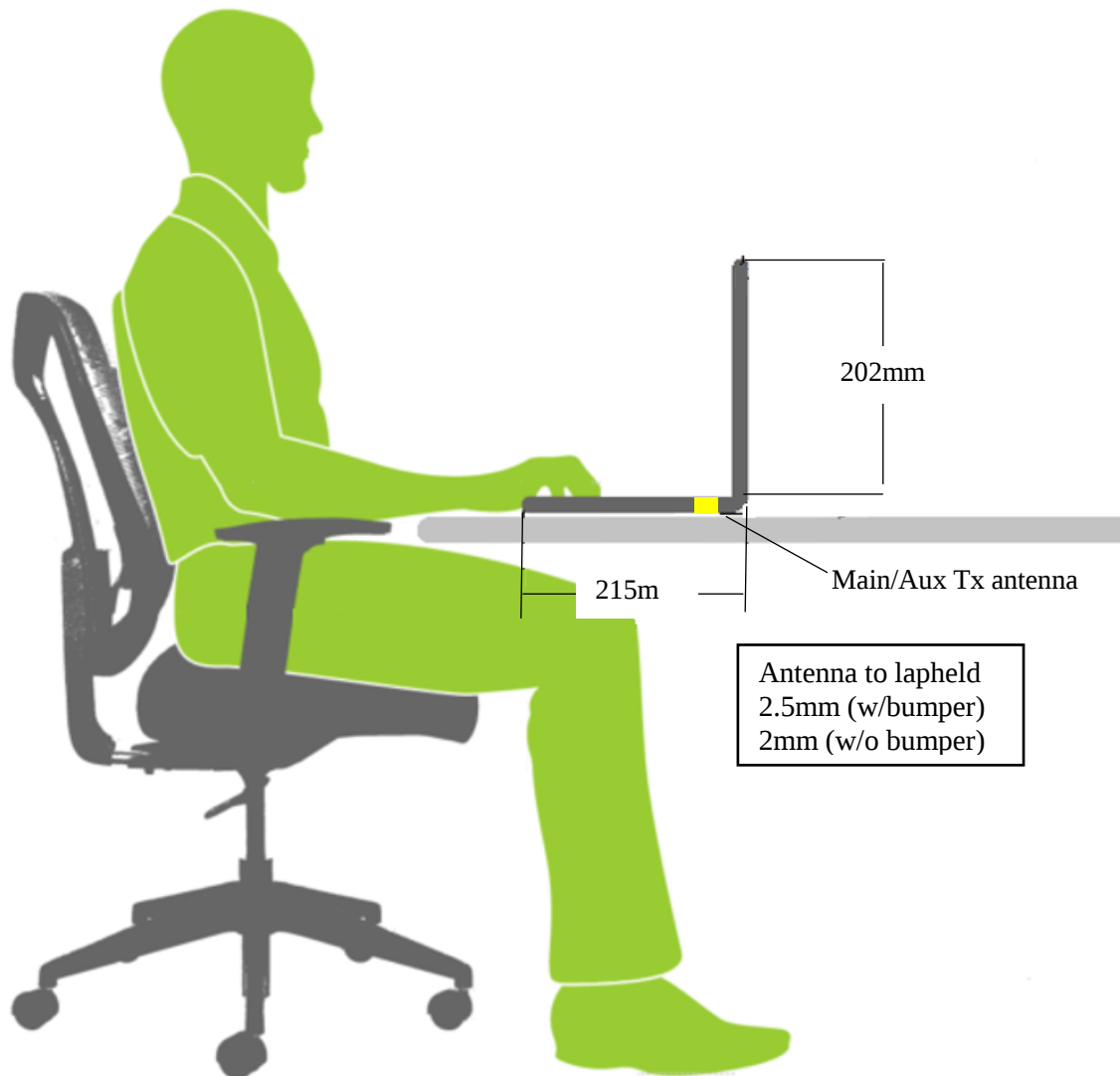
Minimum Separation Distance			
Item	Antenna	Position	Distance (mm)
A	WLAN-Main	To top	202
B	WLAN-Main	To left	22
C	WLAN-Main	To right	190
D	WLAN-Main	To bottom	2.5
E	WLAN-Main	Main antenna length	92
F	Main-Aux	Main to Aux	60
G	WLAN-Aux	To top	202
H	WLAN-Aux	To left	177
I	WLAN-Aux	To right	32
J	WLAN-Aux	To bottom	2.5
K	WLAN-Aux	Aux antenna length	97
L	NB	Bumper thickness	2
X	WLAN-Main	To user	188
Y	WLAN-Aux	To user	188
Z	NB	Keyboard depth	4



B.2 Antenna dimensional information for SAR evaluation

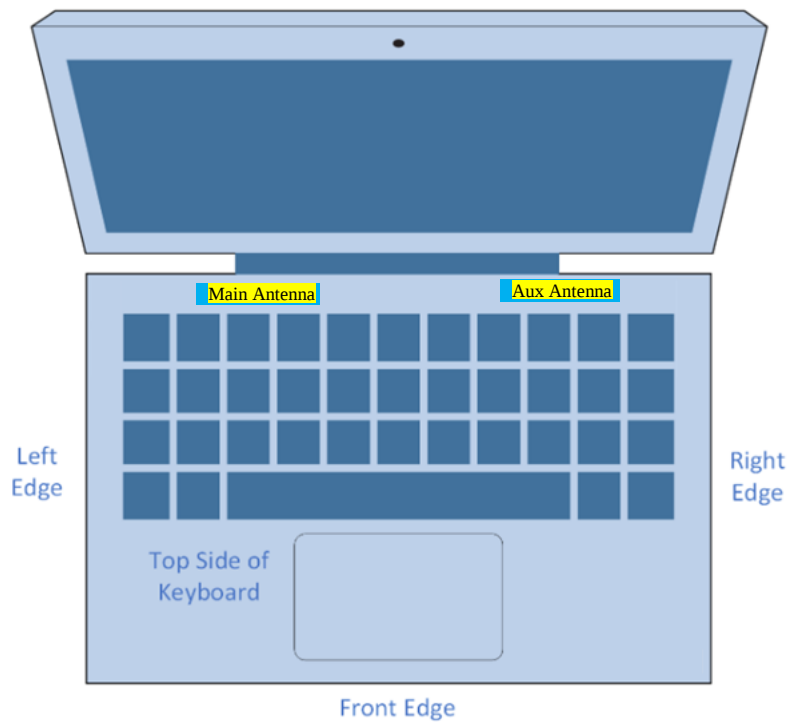
Include a dimensioned photo(s) or dimensioned drawing(s) showing the distance (mm) between the transmit antennas and the user. For notebook/laptop hosts show lapheld position (example below). For tablet hosts show all orientations including lapheld, primary & secondary portrait, primary & secondary landscape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

Antennas on the panel section



Measuring Surface	Antenna	Separation Distance(antenna-to- Surface)(mm)	1g SAR
Bottom Side	Main	198mm	FCC/ISED
	Aux	198mm	FCC/ISED

Antennas on the keyboard section



Measuring Surface	Antenna	Separation Distance(antenna-to-Surface)(mm)	1g or 10g SAR
Bottom Side	Main	2.5	1g (FCC/ISED)
	Aux	2.5	1g (FCC/ISED)
Front Edge	Main	190	1g (ISED)
	Aux	190	1g (ISED)
Left Edge	Main	22	10g (ISED)
	Aux	177	10g (ISED)
Right Edge	Main	187	10g (ISED)
	Aux	32	10g (ISED)
Top side of Keyboard	Main	2mm	10g (ISED)
	Aux	2mm	10g (ISED)