

ANTENNA INFORMATION

OEM	Lenovo	
ODM	Wistron	
Platform model name	Lenovo 13w 2-in-1 Gen 3	
Intel platform (ex: Yes, No or NA)	Yes	
Platform type (ex: regular NB, convertible PC, AIO...etc)	convertible NB	
SAR minimum separation (mm)	FCC (1g)	2.7
	ISED (1g)	2.7
	ISED (10g)	2.7

Antenna manufacturer	Company name	HONGBO WIRELESS COMMUNICATION TECHNOLOGY Co., Ltd
	Address	4F., No. 143, Xinhua 1st Rd., Neihu Dist., Taipei City 114758, Taiwan
Test location	Company name	HONGBO WIRELESS COMMUNICATION TECHNOLOGY Co., Ltd
	Address	4F., No. 143, Xinhua 1st Rd., Neihu Dist., Taipei City 114758, Taiwan
Test Personnel	Name(Full name)	Andy Tseng
	E-mail	andytseng@hong-bo.com.tw
	Tel/Mobile	+886-2- 27926009
Testing date	2024/10/04	

Antenna Part number	Main	025.902HT.0001
	Aux	025.902HU.0001
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	1.46	0.6	0.6	2.08	2.18	1.83	2.27	1.9	2.16	1.99
Aux	1.65	2.24	1.1	1.78	1.43	1.43	2.24	1.09	2.12	2.17

Cable Assembly Part Number and Information					
	Cable PN	Cable length(mm)	Cable diameter(mm)	Impedance(ohm)	Connector type
Main	SY113/50-120	120	1.13	50	彩美 958-C413-CM-B-QU-AO & I-PEX 20565-001R-13
Aux	SY113/50-055	216.5	1.13	50	彩美 958-C413-CM-B-QU-AO & I-PEX 20565-001R-13

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

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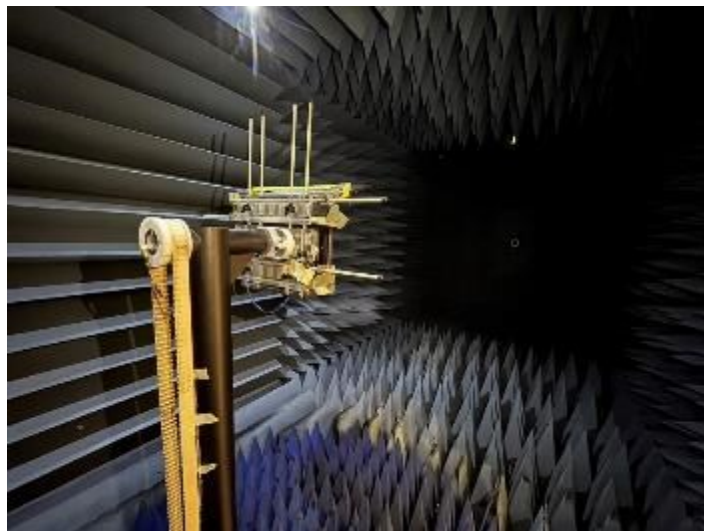
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Annex A. Photographs

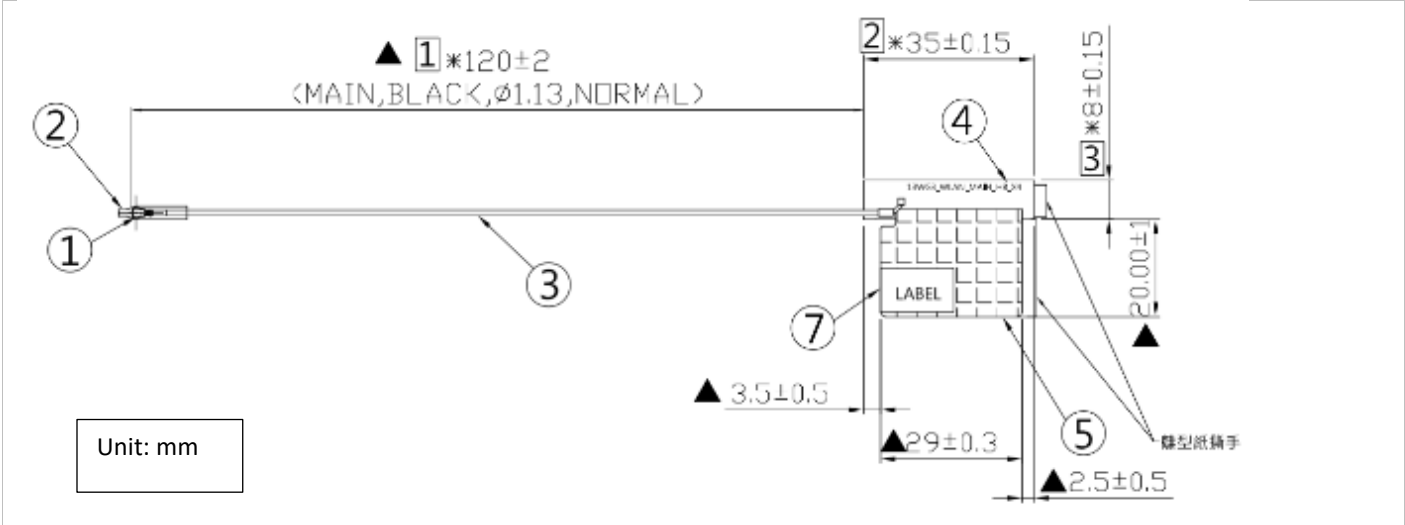
A.1 Setup Photo



A.2 Test sample

Main Antenna

Antenna Drawing

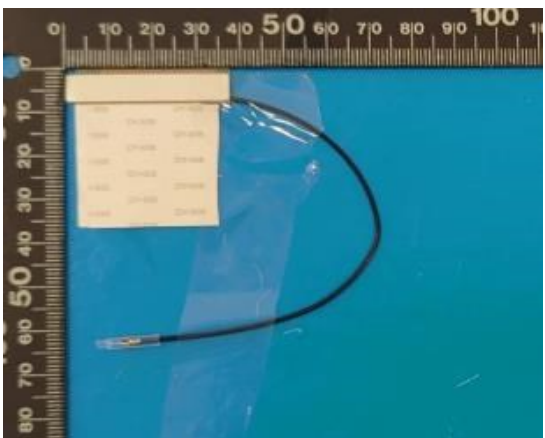
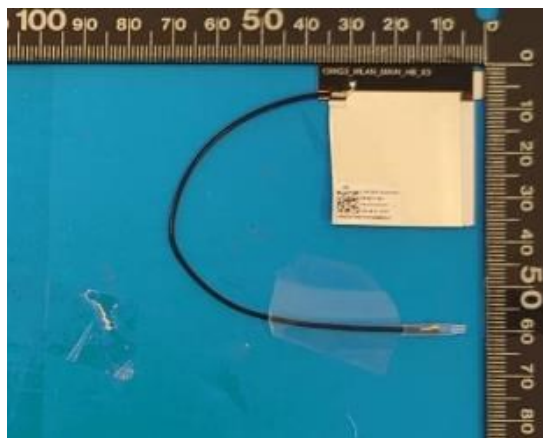
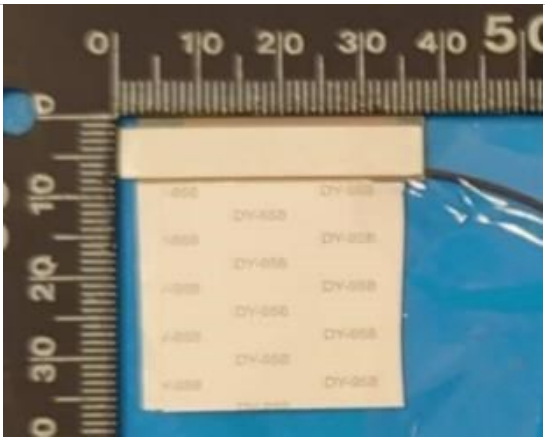


Antenna Photo

Front

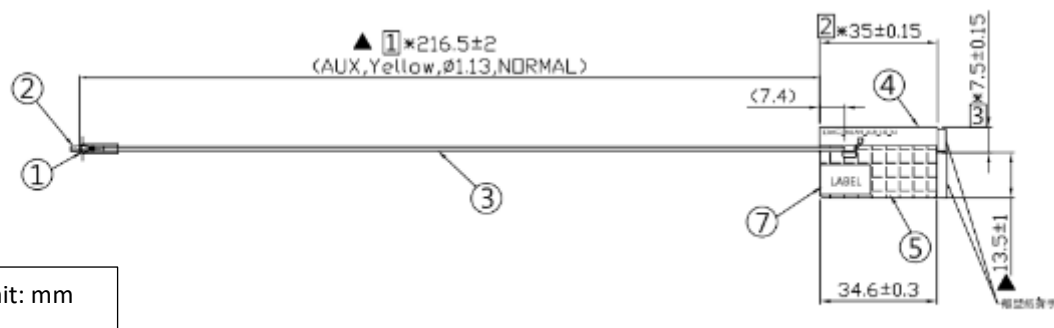


Back



Aux Antenna

Antenna Drawing

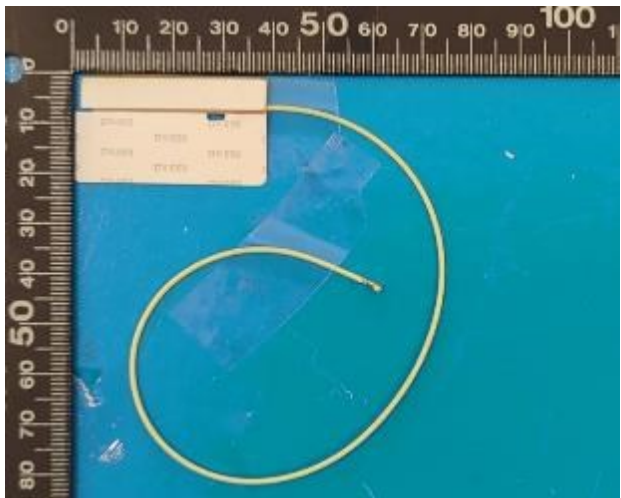
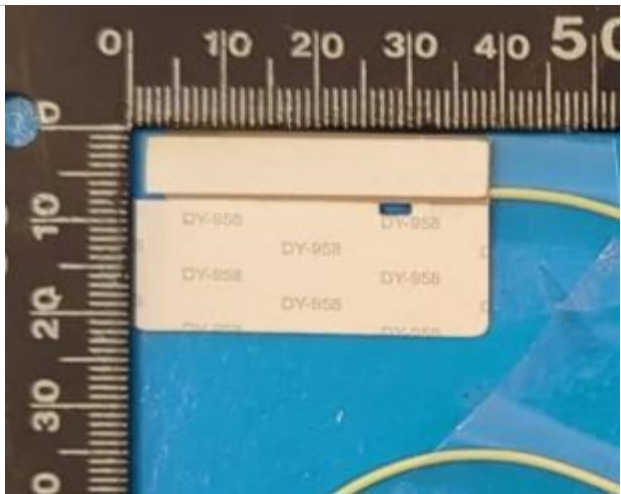


Antenna Photo

Front



Back



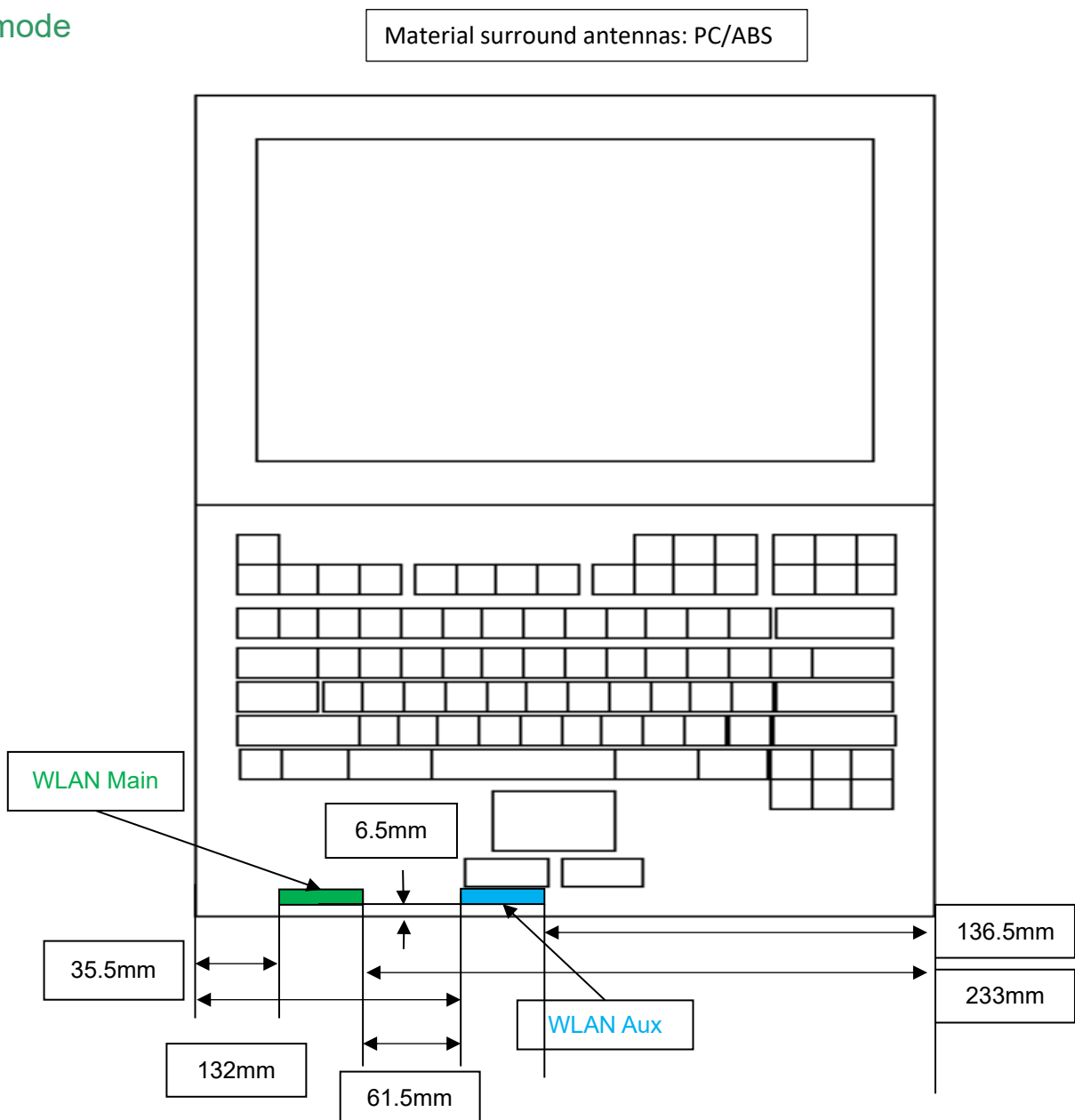
Annex B. Antenna Location

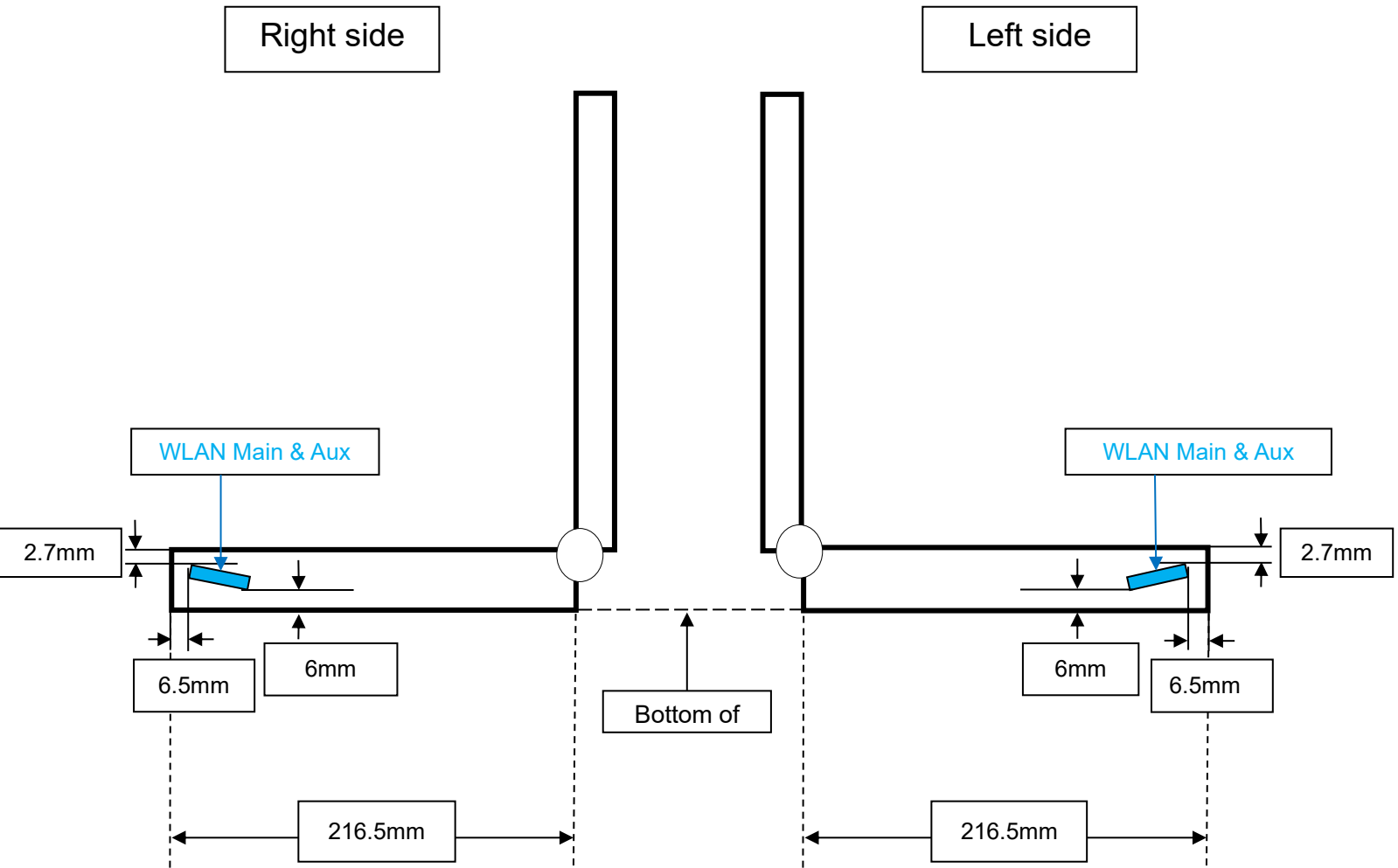
B.1 Antenna Host Platform Location Information

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.

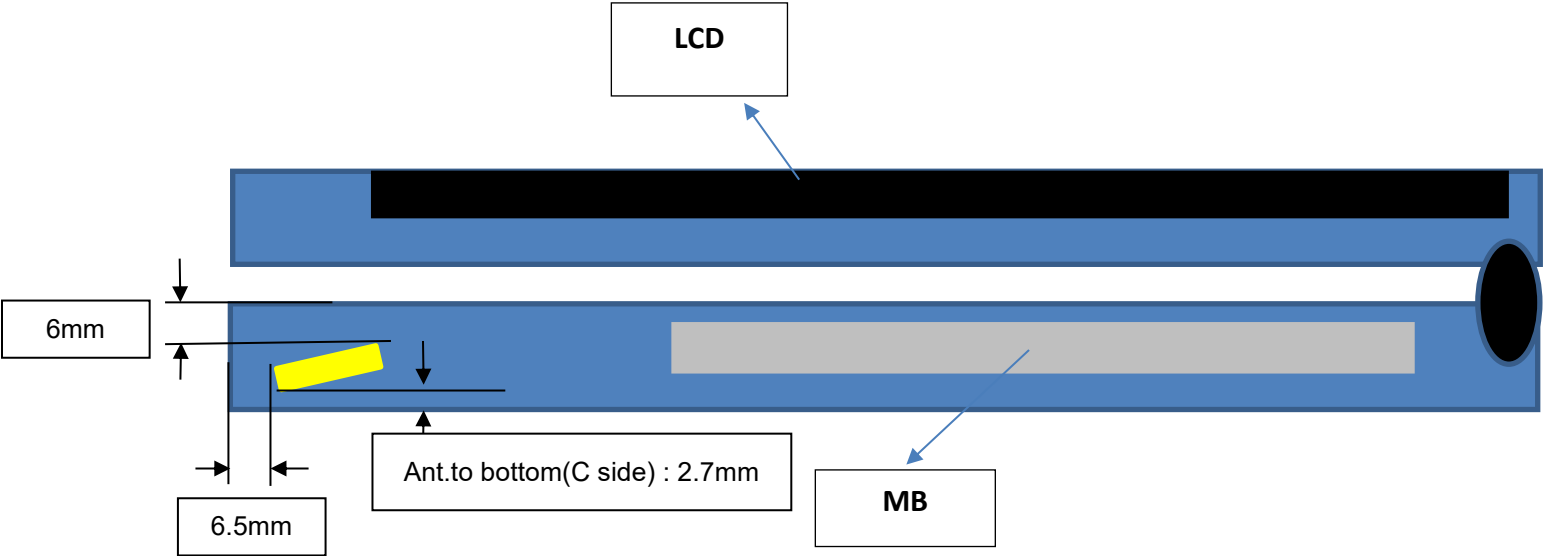
Laptop mode



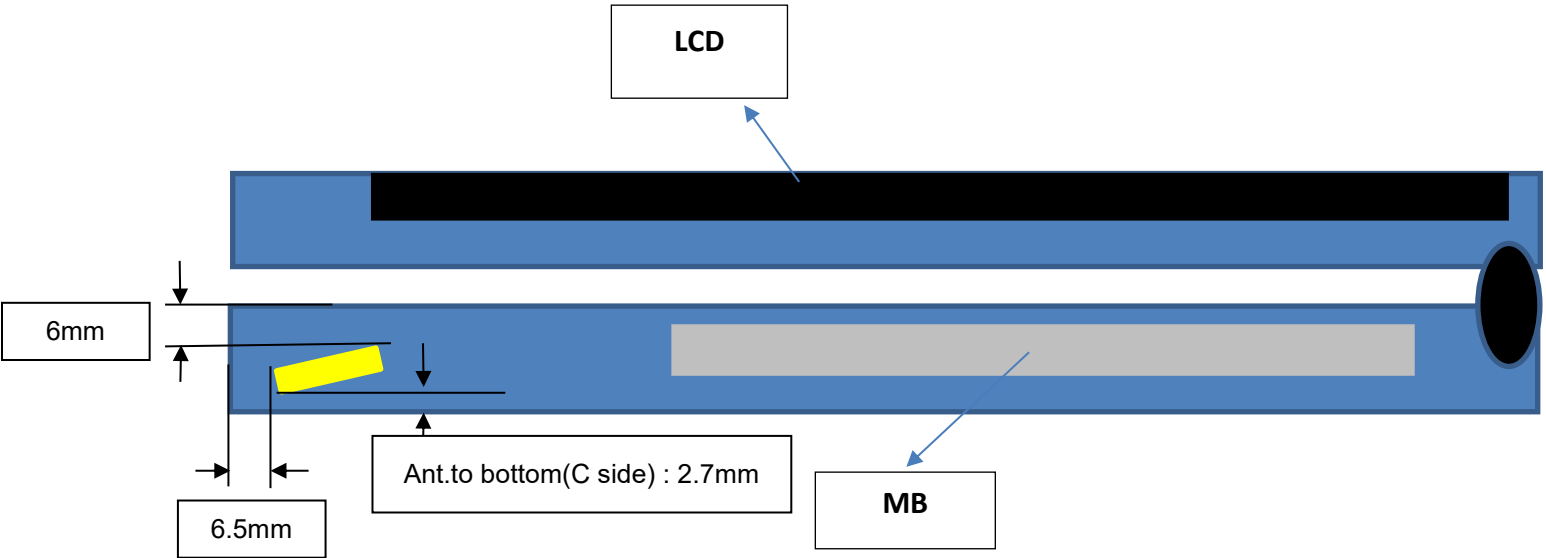


Tablet mode:

WLAN Main Tx1



WLAN Aux Tx1



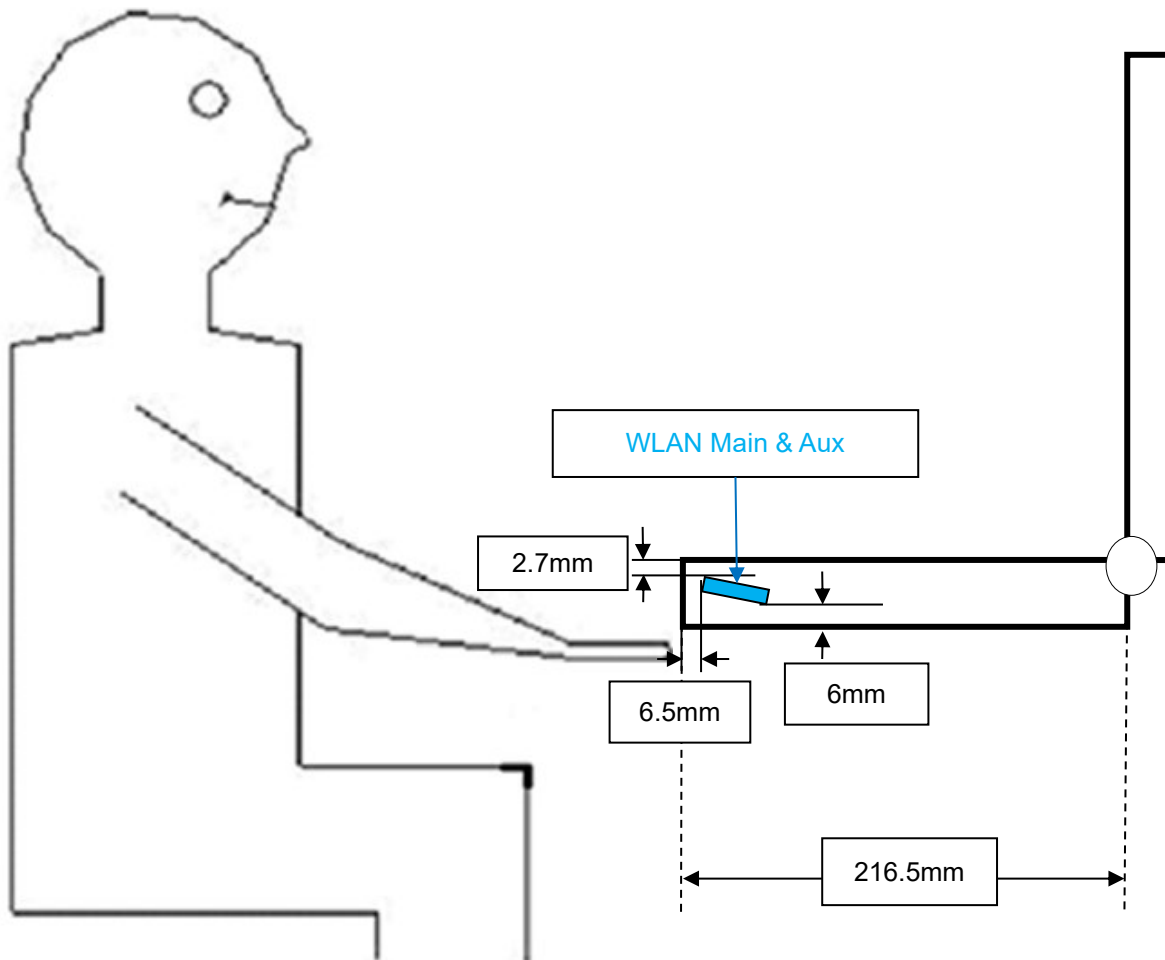
B.2 Antenna dimensional information for SAR evaluation

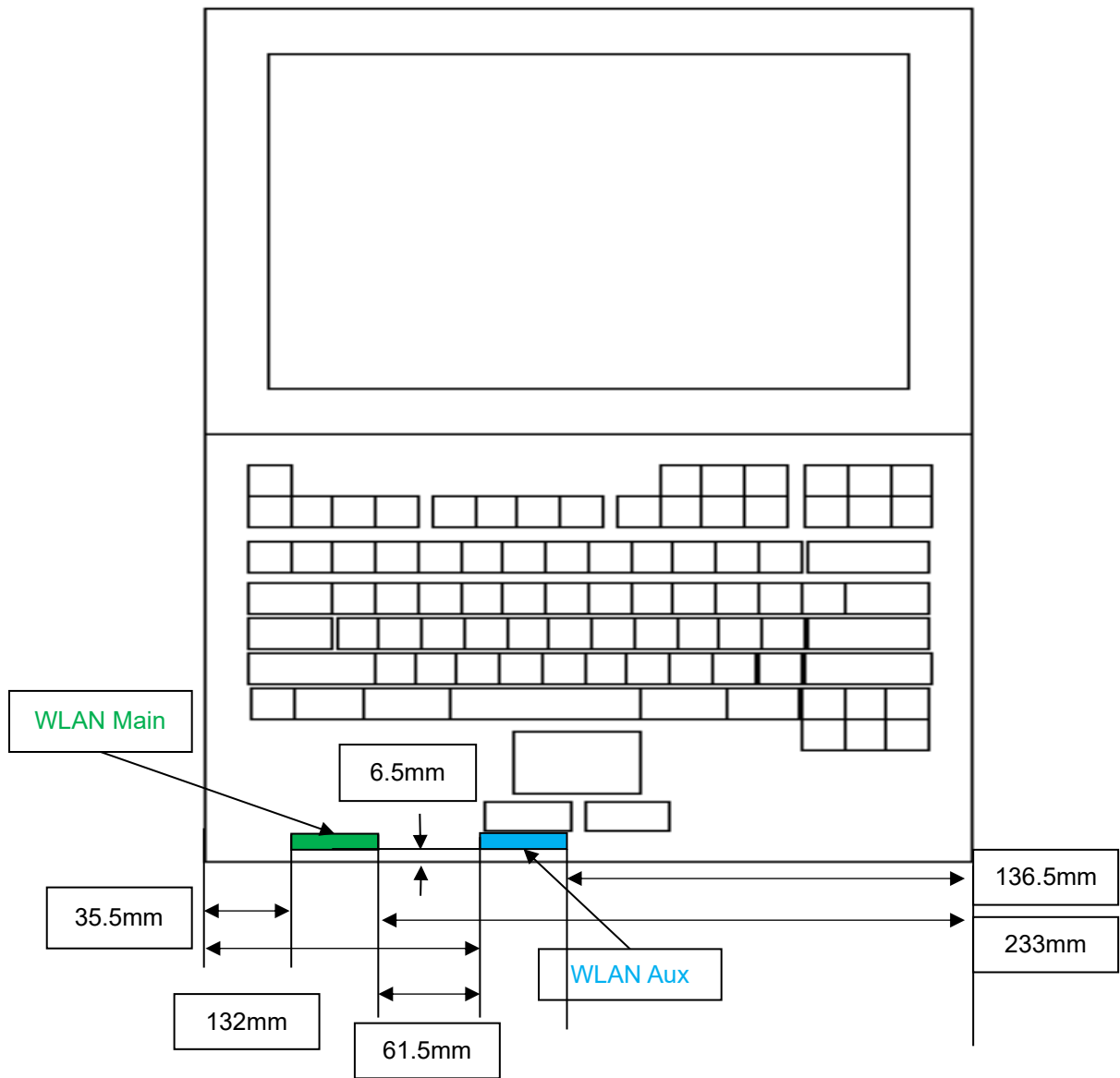
Include a dimensioned photo(s) or dimensioned drawing(s) showing the distance (mm) between the transmit antennas and the user. For notebook/laptop hosts show lapheld position (example below). For tablet hosts show all orientations including lapheld, primary & secondary portrait, primary & secondary landscape 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

Laptop mode:

Material surround antennas: PC/ABS

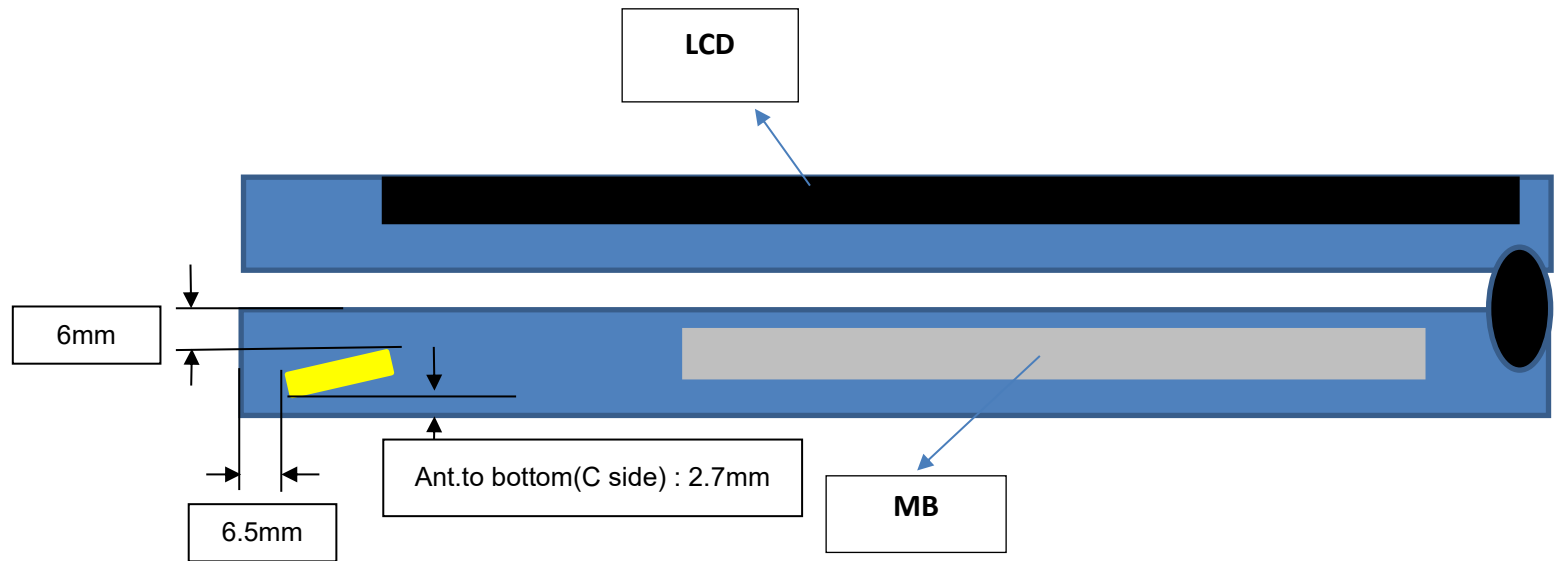




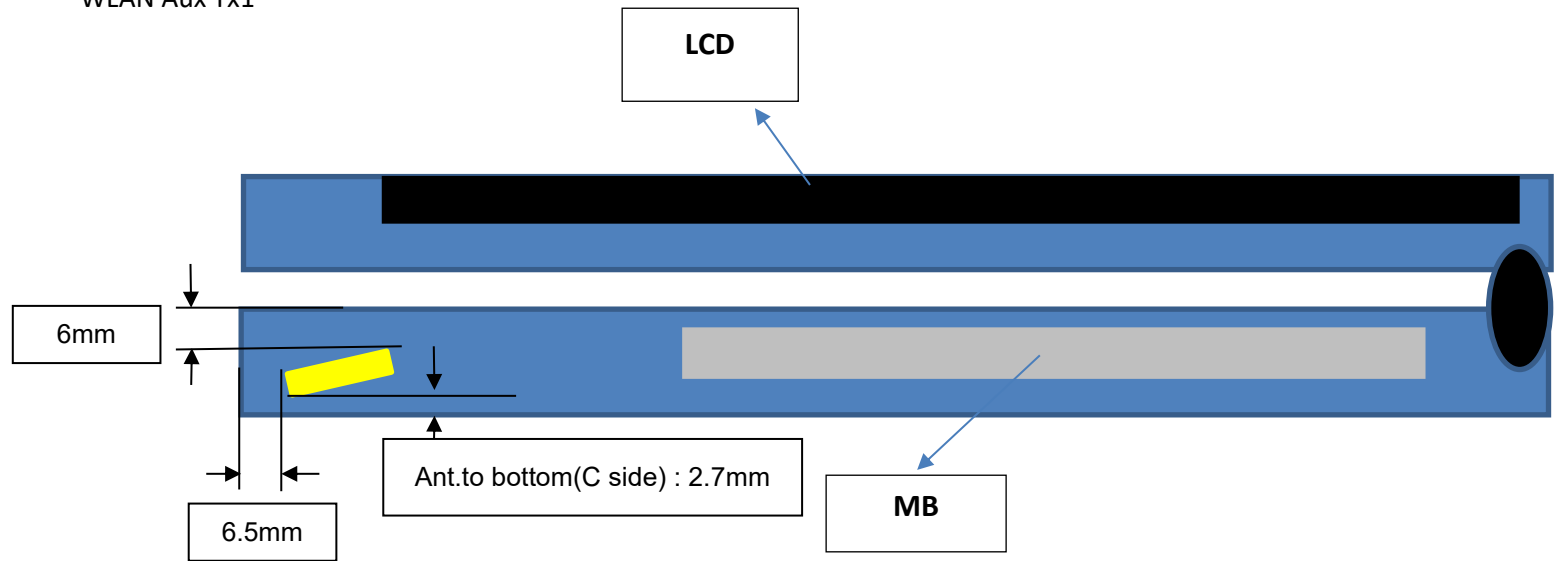
Measuring Surface	Antenna	Separation Distance(antenna-to-Surface)(mm)	1g or 10g SAR
Bottom Side	Main	6	1g (FCC/ISED)
	Aux	6	1g (FCC/ISED)
Front Edge	Main	6.5	1g (ISED)
	Aux	6.5	1g (ISED)
Left Edge	Main	35.5	10g (ISED)
	Aux	132	10g (ISED)
Right Edge	Main	233	10g (ISED)
	Aux	136.5	10g (ISED)
Top side of Keyboard	Main	2.7	10g (ISED)
	Aux	2.7	10g (ISED)

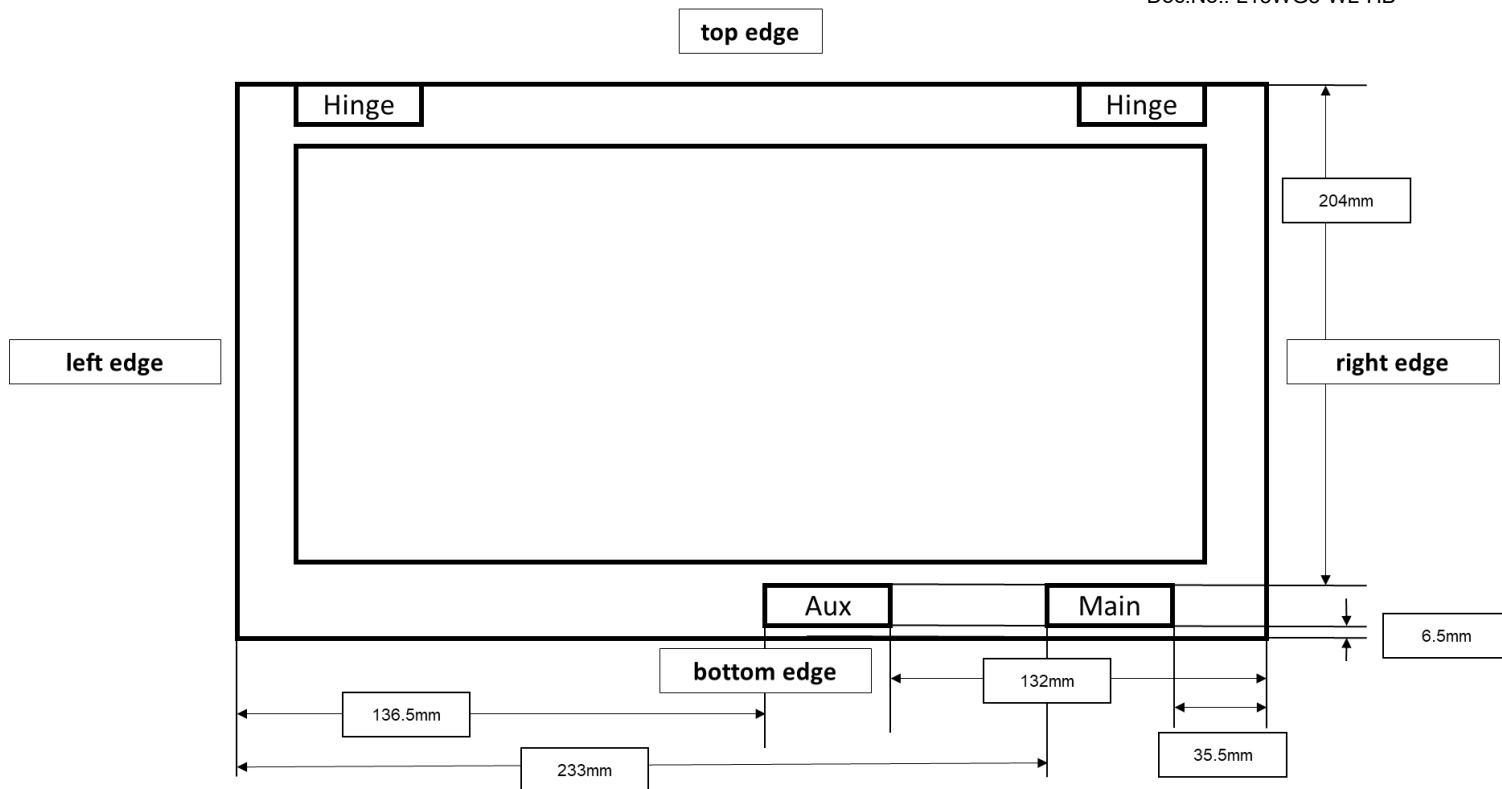
Tablet model:

WLAN Main Tx1



WLAN Aux Tx1





Measuring Surface	Antenna	Separation Distance(antenna-to- Surface)(mm)	1g SAR
Bottom Side of Tablet mode	Main	2.7	FCC/ISED
	Aux	2.7	FCC/ISED
top edge of Tablet mode	Main	204	FCC/ISED
	Aux	204	FCC/ISED
bottom edge of Tablet mode	Main	6.5	FCC/ISED
	Aux	6.5	FCC/ISED
left edge of Tablet mode	Main	233	FCC/ISED
	Aux	136.5	FCC/ISED
right edge of Tablet mode	Main	35.5	FCC/ISED
	Aux	132	FCC/ISED