



MS ISO/IEC 17025  
TESTING  
SAMM No.0826

**Exhibit 7B: SAR Test Report Photographs**

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*Tiong*

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Approval Date: 10/4/2018

**Report Revision History**

<b>Date</b>	<b>Revision</b>	<b>Comments</b>
10/02/2018	A	Initial release

**1.0 Highest SAR Test Position per body location**

**1.1 Body**

DUT w/ antenna 85012070001 with offered battery NNTN8020B and body worn kit RLN4570A against the phantom without an audio accessory attached. Same position used for the other applicable offered antenna, batteries and audio accessories.



Antenna kit #	Separation Distances (mm)		
	@ bottom surface of the DUT	@ antenna's base	@ antenna's tip
85012070001	0	*17-18	*20-22
85012069001	0	*17-18	*18-20

(\*) Depending on applicable offered battery

**1.2 Face**

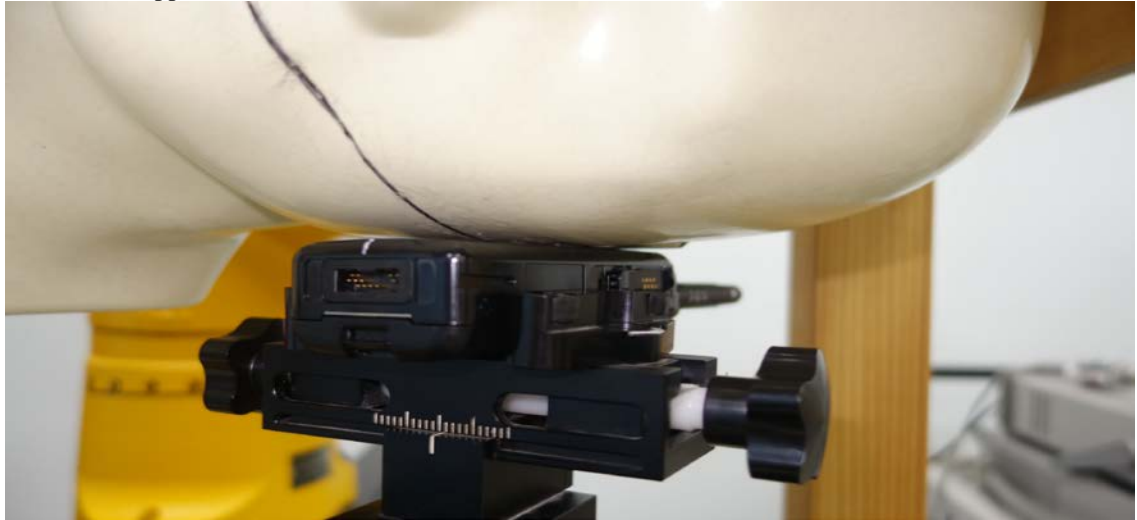
Back of DUT w/ antenna 85012070001 with offered battery NNTN8023C separated 2.5cm from the phantom without an audio accessory attached. Same position used for the other applicable offered antenna and batteries.



Antenna kit #	Separation Distances (mm)		
	@ bottom surface of the DUT	@ antenna's base	@ antenna's tip
85012070001	25	38	40
85012069001	25	38	39

**1.3 Head – Left ear touch**

DUT in touch position using offered antenna 85012070001 and battery NNTN8023C. Same position used for the other applicable offered antenna and batteries.



**1.4 Hand**

Not applicable

**2.0 Other SAR tested positions at the body**

**2.1 Body worn**

DUT w/ antenna 85012070001 with offered battery NNTN8020B and body worn PMLN5004B w/GMDN0386A positioned against the phantom without an audio accessory attached. Same position used for the other applicable offered antenna and batteries.



Antenna kit #	Separation Distances (mm)		
	@ bottom surface of the DUT	@ antenna's base	@ antenna's tip
85012070001	*18-20	*26-28	*28-30
85012069001	18	26	30

(\*) Depending on applicable offered battery

DUT w/ antenna 85012070001 with offered battery NNTN8020B and body worn PMLN5004B w/GMDN0445AA positioned against the phantom without an audio accessory attached. Same position used for the other applicable offered antenna and batteries.



Antenna kit #	Separation Distances (mm)		
	@ bottom surface of the DUT	@ antenna's base	@ antenna's tip
85012070001	37	*28-30	*18-22
85012069001	37	28	22

(\*) Depending on applicable offered battery

DUT w/ antenna 85012070001 with offered battery NNTN8020B and body worn PMLN5004B w/GMDN0497A positioned against the phantom without an audio accessory attached. Same position used for the other applicable offered antenna and batteries.



Antenna kit #	Separation Distances (mm)		
	@ bottom surface of the DUT	@ antenna's base	@ antenna's tip
85012070001	*22-23	*30-32	*32-35
85012069001	23	30	32

(\*) Depending on applicable offered battery

DUT w/ antenna 85012070001 with offered battery NNTN8020B and body worn PMLN5004B w/GMDN0547A positioned against the phantom without an audio accessory attached. Same position used for the other applicable offered antenna and batteries.



Antenna kit #	Separation Distances (mm)		
	@ bottom surface of the DUT	@ antenna's base	@ antenna's tip
85012070001	33	*31-35	*27-30
85012069001	33	31	29

(\*) Depending on applicable offered battery

DUT w/ antenna 85012070001 with offered battery NNTN8020B and body worn PMLN5004B w/GMDN0566AC positioned against the phantom without an audio accessory attached. Same position used for the other applicable offered antenna and batteries.



Antenna kit #	Separation Distances (mm)		
	@ bottom surface of the DUT	@ antenna's base	@ antenna's tip
85012070001	*8-10	*60-62	*87-90
85012069001	10	60	75

(\*) Depending on applicable offered battery

DUT w/ antenna 85012070001 with offered battery NNTN8020B and body worn HLN6602A positioned against the phantom without an audio accessory attached. Same position used for the other applicable offered antenna and batteries.



Antenna kit #	Separation Distances (mm)		
	@ bottom surface of the DUT	@ antenna's base	@ antenna's tip
85012070001	*3-5	*15-17	*17-20
85012069001	*3-5	*15-17	*16-19

(\*) Depending on applicable offered battery

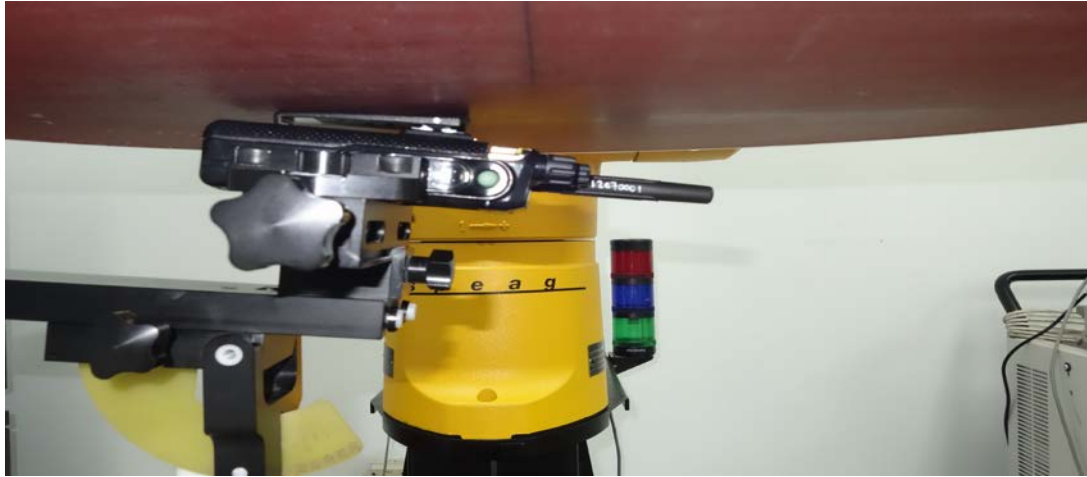
DUT w/ antenna 85012070001 with offered battery NNTN8020B and body worn HLN9714A positioned against the phantom without an audio accessory attached. Same position used for the other applicable offered antenna and batteries.



Antenna kit #	Separation Distances (mm)		
	@ bottom surface of the DUT	@ antenna's base	@ antenna's tip
85012070001	8	*24-26	*32-35
85012069001	8	*24-26	*30-32

(\*) Depending on applicable offered battery

DUT w/ antenna 85012070001 with offered battery NNTN8020B and body worn PMLN5616B positioned against the phantom without an audio accessory attached. Same position used for the other applicable offered antenna and batteries.



Antenna kit #	Separation Distances (mm)		
	@ bottom surface of the DUT	@ antenna's base	@ antenna's tip
85012070001	*5-6	*28-30	*32-35
85012069001	*5-6	*28-30	*38-40

(\*) Depending on applicable offered battery

DUT w/ antenna 85012070001 with offered battery NNTN8020B and body worn PMLN5885B positioned against the phantom without an audio accessory attached. Same position used for the other applicable offered antenna and batteries.



Antenna kit #	Separation Distances (mm)		
	@ bottom surface of the DUT	@ antenna's base	@ antenna's tip
85012070001	15	*65-68	*85-88
85012069001	15	65	75

(\*) Depending on applicable offered battery



DUT w/ antenna 85012070001 with offered battery NNTN8020B and body worn PMLN5887B positioned against the phantom without an audio accessory attached. Same position used for the other applicable offered antenna and batteries.



Antenna kit #	Separation Distances (mm)		
	@ bottom surface of the DUT	@ antenna's base	@ antenna's tip
85012070001	*16-18	*65-67	*80-82
85012069001	18	65	75

(\*) Depending on applicable offered battery

DUT w/ antenna 85012070001 with offered battery NNTN8020B and body worn PMLN5004B w/PMLN7961A positioned against the phantom without an audio accessory attached. Same position used for the other applicable offered antenna and batteries.



Antenna kit #	Separation Distances (mm)		
	@ bottom surface of the DUT	@ antenna's base	@ antenna's tip
85012070001	28	32	30
85012069001	*28-30	*31-34	*29-32

(\*) Depending on applicable offered battery

DUT w/ antenna 85012070001 with offered battery NNTN8020B and body worn PMLN5004B w/ GMDN0445AC positioned against the phantom without an audio accessory attached. Same position used for the other applicable offered antenna and batteries.



Antenna kit #	Separation Distances (mm)		
	@ bottom surface of the DUT	@ antenna's base	@ antenna's tip
85012070001	*22-24	*44-46	*55-57
85012069001	24	44	50

(\*) Depending on applicable offered battery

DUT w/ antenna 85012070001 with offered battery NNTN8020B and body worn PMLN5004B w/WALN4307A positioned against the phantom without an audio accessory attached. Same position used for the other applicable offered antenna and batteries.



Antenna kit #	Separation Distances (mm)		
	@ bottom surface of the DUT	@ antenna's base	@ antenna's tip
85012070001	*22-24	*32-35	*35-38
85012069001	24	32	35

(\*) Depending on applicable offered battery

**2.2 Front Side against phantom**  
Not applicable.

**2.3 Back side against phantom**  
Not applicable.

**2.4 Front 2.5cm separation**  
Not applicable

**2.5 Antenna 2.5cm separation**  
Not applicable

**2.6 Back 2.5cm separation**  
Not applicable

**3.0 Other SAR tested positions at the face**

**3.1 Back of DUT at 2.5cm separation**  
Not applicable

**3.2 Front of DUT at 2.5cm separation**  
Refer to section 1.2

**4.0 Other SAR tested positions at the head**

**4.1 Left ear touch**  
Refer to section 1.3

**4.2 Left ear tilt**

DUT in tilt position using offered antenna 85012070001 and battery PMNN4522A. Same position used for the other applicable offered antenna and batteries.



**4.3 Right ear touch**

DUT in touch position using offered antenna 85012070001 and battery NNTN8023C. Same position used for the other applicable offered antenna and batteries.



**4.4 Right ear tilt**

DUT in tilt position using offered antenna 85012070001 and battery PMNN4522A. Same position used for the other applicable offered antenna and batteries.



**5.0 Other SAR tested positions at the hand**

- 5.1 Left side**  
Not applicable.
- 5.2 Right side**  
Not applicable.
- 5.3 Top side**  
Not applicable.
- 5.4 Bottom side**  
Not applicable.
- 5.5 Back side**  
Not applicable.

**6.0 DUT and Accessory Photos**

The purpose of these photos is to illustrate the tested accessories. Refer to Part 1 of 2, section 7.0 for additional details on the offered accessories.

**6.1 Antenna dimension and photo(s):**

Antenna Kit #	Physical Length (mm)	Electrical Length
85012069001	3.7	1/2 wave
85012070001	7.0	1/2 wave



**Antennas: 85012069001 (left) & 85012070001 (right)**

6.2 Body worn accessories



HLN9714A with DUT: Front, side and back views (left to right)



PMLN5004B w/GMDN0566AC with DUT: Front, side and back views (left to right)



PMLN5004B w/PMLN7961A with DUT: Front, side and back views (left to right)



PMLN5004A w/GMDN0386A with DUT: Front, side and back views (left to right)





PMLN5004A w/GMDN0445AA with DUT: Front, side and back views (left to right)



PMLN5004A w/GMDN0445AC with DUT: Front, side and back views (left to right)



PMLN5004A w/GMDN0497A with DUT: Front, side and back views (left to right)



PMLN5004A w/GMDN0547A with DUT: Front, side and back views (left to right)



PMLN5004A w/WALN4307A with DUT: Front, side and back views (left to right)



PMLN5616B with DUT: Front, side and back views (left to right)



**PMLN5885B with DUT: Front, side and back views (left to right)**



**PMLN5887B with DUT: Front, side and back views (left to right)**



HLN6602A



RLN4570A

6.3 Battery accessories:



Front View: NNTN8020B, NNTN8023C & PMNN4522A (left to right)



Side View: NNTN8020B, NNTN8023C & PMNN4522A (left to right)



Back View: NNTN8020B, NNTN8023C & PMNN4522A (left to right)

6.4 Audio accessories:



PMMN4072A

6.5 DUT Dimensions

	Height (mm)	Width (mm)	Depth (mm)
Radio only (w/o battery)	124	57	23
Radio with battery NNTN8020B	124	57	34
Radio with battery NNTN8023C	124	57	37
Radio with battery PMNN4522A	124	57	37

For illustration purposes only - the following figure reflects the location of the device’s dimensions.



Note: H = Height; W = Width; D = Depth

$$W1 = (\text{Width @ Top}) / (\text{Width @ PTT})$$

$$D2 = (\text{Depth @ Bottom}) / (\text{Depth @ PTT})$$