





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

# **Motorola Solutions Inc**

**EME Test Laboratory** 

Motorola Solutions Malaysia Sdn Bhd Plot 2A, Medan Bayan Lepas Mukim 12 SWD 11900 Bayan Lepas Penang, Malaysia.



Saw Sun Hock (Approval Signatory) Approved Date: 12/27/2023 FCC ID: AZ489FT7179 / IC: 109U-89FT7179 Report ID: P40897-EME-00009

# **Report Revision History**

Date	Revision	Comments
12/13/2023	A	Initial release

## 1.0 Highest SAR Test Position per body location

#### 1.1 Body

 $\overline{DUT}$  w/ antenna 85012070001 with offered battery NNTN8023C and body worn kit RLN4570A against the phantom without an audio accessory attached.



	Separation Distances (mm)		
	@ bottom surface		
Antenna kit #	of the DUT	@ antenna's base	@ antenna's tip
85012070001	13	17	20
85012069001	13	19	19

#### 1.2 Face

Front of DUT w/ antenna 85012069001 with offered battery NNTN8020B separated 2.5cm from the phantom without an audio accessory attached.



	Separation Distances (mm)		
	@ bottom surface		
Antenna kit #	of the DUT	@ antenna's base	@ antenna's tip
85012070001	29	38	41
85012069001	29	38	39

#### 1.3 Head - Right Ear Touch

DUT in touch position using offered antenna 85012069001 and battery NNTN8020B. Same position used for the other applicable offered antenna and batteries.



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

#### 2.1 Body worn

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



	Separation Distances (mm)		
Antenna kit #	@ bottom surface of the DUT	@ antenna's base	@ antenna's tip
85012070001	*10-11	*20-24	*22-27
85012069001	*10-11	*19-22	*20-24

<sup>(\*)</sup> 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.



	Separation Distances (mm)		
Antenna kit #	@ bottom surface of the DUT	@ antenna's base	@ antenna's tip
85012070001	*9-10	*27-30	*35-37
85012069001	*9-10	*27-30	*30-32

(\*) 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.



	Separation Distances (mm)		
Antenna kit #	@ bottom surface of the DUT	@ antenna's base	@ antenna's tip
85012070001	*27-28	*33-35	*33-37
85012069001	27	33	32

(\*) Depending on applicable offered battery

DUT w/ antenna 85012070001 with offered battery NNTN8020B and body worn PMLN5004B w/ GMLN5401A positioned against the phantom without an audio accessory attached. Same position used for the other applicable offered antenna and batteries.



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

(\*) Depending on applicable offered battery

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.



	Separation Distances (mm)		
Antenna kit #	@ bottom surface of the DUT	@ antenna's base	@ antenna's tip
85012070001	20	29	30
85012069001	*20-21	*38-30	*29-31

<sup>(\*)</sup> Depending on applicable offered battery

DUT w/ antenna 85012069001 with offered battery NNTN8020B and body worn PMLN5004B w/ GMDN0445AA positioned against the phantom without an audio accessory attached. Same position used



	Separation Distances (mm)		
Antenna kit #	@ bottom surface of the DUT	@ antenna's base	@ antenna's tip
85012070001	37	26	20
85012069001	*30-36	*25-31	*23-27

(\*) Depending on applicable offered battery

DUT w/ antenna 85012069001 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.



	Separation Distances (mm)		
Antenna kit #	@ bottom surface of the DUT	@ antenna's base	@ antenna's tip
85012070001	25	40	48
85012069001	*25-26	*40-43	*43-47

<sup>(\*)</sup> 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.



	Separation Distances (mm)		
Antenna kit #	@ bottom surface of the DUT	@ antenna's base	@ antenna's tip
85012070001	*10-11	*68-70	*86-100
85012069001	11	68	80

(\*) 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.



	Separation Distances (mm)		
Antenna kit #	@ bottom surface of the DUT	@ antenna's base	@ antenna's tip
85012070001	*31-32	*34-37	*31-34
85012069001	30	37	35

<sup>(\*)</sup> 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.



	Separation Distances (mm)		
Antenna kit #	@ bottom surface of the DUT	@ antenna's base	@ antenna's tip
85012070001	24	35	38
85012069001	*24-25	*35-36	*35-38

(\*) 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.



	Separation Distances (mm)		
Antenna kit #	@ bottom surface of the DUT	@ antenna's base	@ antenna's tip
85012070001	6	*29-32	*39-41
85012069001	6	*29-32	*33-35

<sup>(\*)</sup> Depending on applicable offered battery

DUT w/ antenna 85012070001 with offered battery NNTN8020B and body worn RLN4815A positioned against the phantom without an audio accessory attached. Same position used for the other applicable offered antenna and batteries.



	Separation Distances (mm)		
Antenna kit #	@ bottom surface of the DUT	@ antenna's base	@ antenna's tip
85012070001	22	*40-41	*46-47
85012069001	22	40	42

(\*) Depending on applicable offered battery

DUT w/ antenna 85012070001 with offered battery NNTN8020B and body worn PMLN8025A w/ PMLN7961A positioned against the phantom without an audio accessory attached. Same position used for the other applicable offered antenna and batteries.



	Separation Distances (mm)		
Antenna kit #	@ bottom surface of the DUT	@ antenna's base	@ antenna's tip
85012070001	*23-25	*28-33	*27-32
85012069001	24	27	27

<sup>(\*)</sup> Depending on applicable offered battery

DUT w/ antenna 85012070001 with offered battery NNTN8020B and body worn PMLN8025A w/ GMLN5401A positioned against the phantom without an audio accessory attached. Same position used for the other applicable offered antenna and batteries.



	Separation Distances (mm)		
Antenna kit #	@ bottom surface of the DUT	@ antenna's base	@ antenna's tip
85012070001	20	28	30
85012069001	*18-23	*28-32	*29-33

(\*) Depending on applicable offered battery

DUT w/ antenna 85012070001 with offered battery NNTN8020B and body worn PMLN8025A w/ GMDN0386A positioned against the phantom without an audio accessory attached. Same position used for the other applicable offered antenna and batteries.



	Separation Distances (mm)		
Antenna kit #	@ bottom surface of the DUT	@ antenna's base	@ antenna's tip
85012070001	10	*37-40	*30-32
85012069001	10	*30-32	*32-35

(\*) Depending on applicable offered battery

DUT w/ antenna 85012070001 with offered battery NNTN8020B and body worn PMLN8025A w/ GMDN0445AA positioned against the phantom without an audio accessory attached. Same position used for the other applicable offered antenna and batteries.



	Separation Distances (mm)		
Antenna kit #	@ bottom surface of the DUT	@ antenna's base	@ antenna's tip
85012070001	29	24	20
85012069001	*29-30	*24-27	*22-25

(\*) Depending on applicable offered battery

DUT w/ antenna 85012070001 with offered battery NNTN8020B and body worn PMLN8025A w/ GMDN0445AC positioned against the phantom without an audio accessory attached. Same position used for the other applicable offered antenna and batteries.



	Separation Distances (mm)		
Antenna kit #	@ bottom surface of the DUT	@ antenna's base	@ antenna's tip
85012070001	18	43	56
85012069001	*18-19	*43-46	*48-53

<sup>(\*)</sup> Depending on applicable offered battery

DUT w/ antenna 85012070001 with offered battery NNTN8020B and body worn PMLN8025A w/ GMDN0566AC positioned against the phantom without an audio accessory attached. Same position used for the other applicable offered antenna and batteries.



	Separation Distances (mm)		
Antenna kit #	@ bottom surface of the DUT	@ antenna's base	@ antenna's tip
85012070001	5	*67-70	*100-102
85012069001	5	67	82

(\*) Depending on applicable offered battery

DUT w/ antenna 85012070001 with offered battery NNTN8020B and body worn PMLN8025A w/ GMDN0547A positioned against the phantom without an audio accessory attached. Same position used for the other applicable offered antenna and batteries.



	Separation Distances (mm)		
Antenna kit #	@ bottom surface of the DUT	@ antenna's base	@ antenna's tip
85012070001	25	31	30
85012069001	*24-25	*31-33	*31-32

<sup>(\*)</sup> Depending on applicable offered battery

DUT w/ antenna 85012070001 with offered battery NNTN8020B and body worn PMLN8025A w/ WALN4307A positioned against the phantom without an audio accessory attached. Same position used for the other applicable offered antenna and batteries.



	Separation Distances (mm)		
Antenna kit #	@ bottom surface of the DUT	@ antenna's base	@ antenna's tip
85012070001	*17-18	*33-35	*37-42
85012069001	18	33	35

(\*) Depending on applicable offered battery

DUT w/ antenna 85012070001 with offered battery NNTN8020B and body worn PMLN5885B w/ NTN5243A positioned against the phantom without an audio accessory attached. Same position used for the other applicable offered antenna and batteries.



	Separation Distances (mm)		
Antenna kit #	@ bottom surface of the DUT	@ antenna's base	@ antenna's tip
85012070001	0	*45-49	*64-68
85012069001	0	45	53

(\*) Depending on applicable offered battery

DUT w/ antenna 85012070001 with offered battery NNTN8020B and body worn PMLN5887B w/ NTN5243A positioned against the phantom without an audio accessory attached. Same position used for the other applicable offered antenna and batteries.



	Separation Distances (mm)			
Antenna kit #	@ bottom surface of the DUT	@ antenna's base	@ antenna's tip	
85012070001	0	49	64	
85012069001	0	*49-50	*56-58	

(\*) 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

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



## 4.2 Left ear tilt

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



# 4.3 Right ear touch

Refer to section 1.3.

## 4.4 Right ear tilt

DUT in touch position using offered antenna 85012070001and 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.
- **Right side**Not applicable.
- **Top side**Not applicable.
- **5.4 Bottom side** Not applicable.
- **Back side**Not applicable.

#### FCC ID: AZ489FT7179 / IC: 109U-89FT7179

## 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	
85012070001	70	½ wave	
85012069001	37	½ wave	



Left to Right: 85012070001, 85012069001

## 6.2 Body worn accessories



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



PMLN5004B w/ GMLN5401A with DUT: Front, side and back views (left to right)



PMLN5004B w/ GMDN0386A with DUT: Front, side and back views (left to right)



PMLN5004B w/ GMDN0445AA with DUT: Front, side and back views (left to right)



PMLN5004B w/ GMDN0445AC 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/ GMDN0547A with DUT: Front, side and back views (left to right)



PMLN5004B w/ WALN4307A with DUT: Front, side and back views (left to right)



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



**RLN4815A with DUT** 



PMLN8025A w/ PMLN7961A with DUT: Front, side and back views (left to right)



PMLN8025A w/ GMLN5401A with DUT: Front, side and back views (left to right)



PMLN8025A w/ GMDN0386A with DUT: Front, side and back views (left to right)



PMLN8025A w/ GMDN0445AA with DUT: Front, side and back views (left to right)



PMLN8025A w/ GMDN0445AC with DUT: Front, side and back views (left to right)



PMLN8025A w/ GMDN0566AC with DUT: Front, side and back views (left to right)



PMLN8025A w/ GMDN0547A with DUT: Front, side and back views (left to right)



PMLN8025A w/ WALN4307A with DUT: Front, side and back views (left to right)



PMLN5885B w/ NTN5243A with DUT: Front, side and back views (left to right)



PMLN5887B w/ NTN5243A with DUT: Front, side and back views (left to right)



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







RLN4570A

## 6.3 Battery accessories:



Front View: NNTN8020B, NNTN8023C, PMNN4522A



Side View: NNTN8020B, NNTN8023C, PMNN4522A

#### 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 = (Width @ Top) / (Width @ PTT)

D2 = (Depth @ Bottom) / (Depth @ PTT)