

**MOTOROLA SOLUTIONS****MS ISO/IEC 17025  
TESTING  
SAMM No.0826****Exhibit 7B: SAR Test Report Photographs****Motorola Solutions Inc****EME Test Laboratory**

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

*Tiong***Tiong Nguk Ing****Deputy Technical Manager (Approved Signatory)****Approval Date: 6/22/2019****Tiong  
Nguk Ing**

Digitally signed  
by Tiong Nguk  
Ing  
Date: 2019.06.22  
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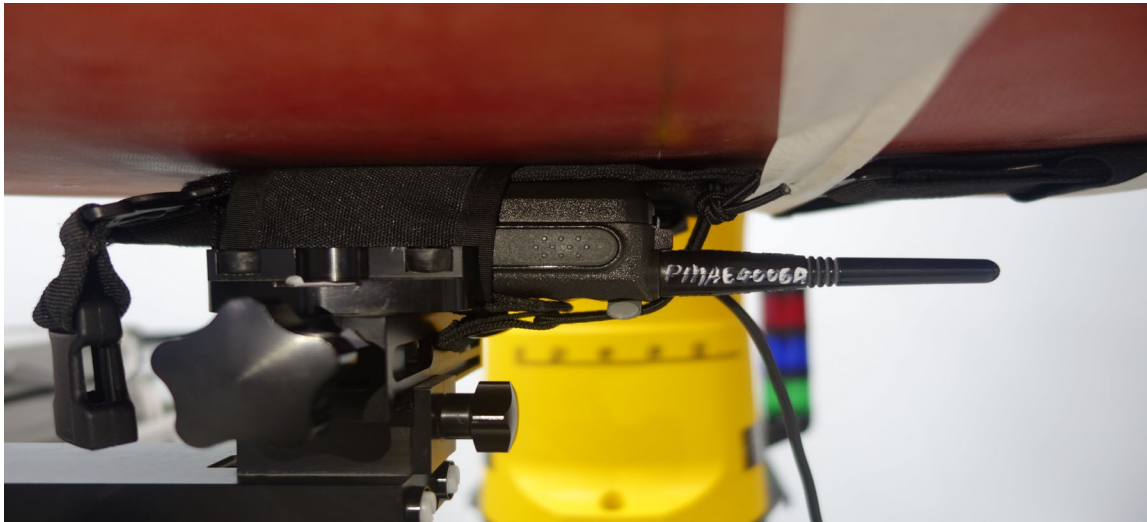
**Report Revision History**

| <b>Date</b> | <b>Revision</b> | <b>Comments</b> |
|-------------|-----------------|-----------------|
| 06/07/2019  | A               | Initial release |

1.0 Highest SAR Test Position per body location

1.1 Body

DUT w/ antenna PMAE4006A with offered battery PMNN4092A and body worn accessory RLN4570A positioned against the phantom with audio accessory PMMN4092A attached. Same position is used for the other applicable offered antennas, batteries and audio accessories.

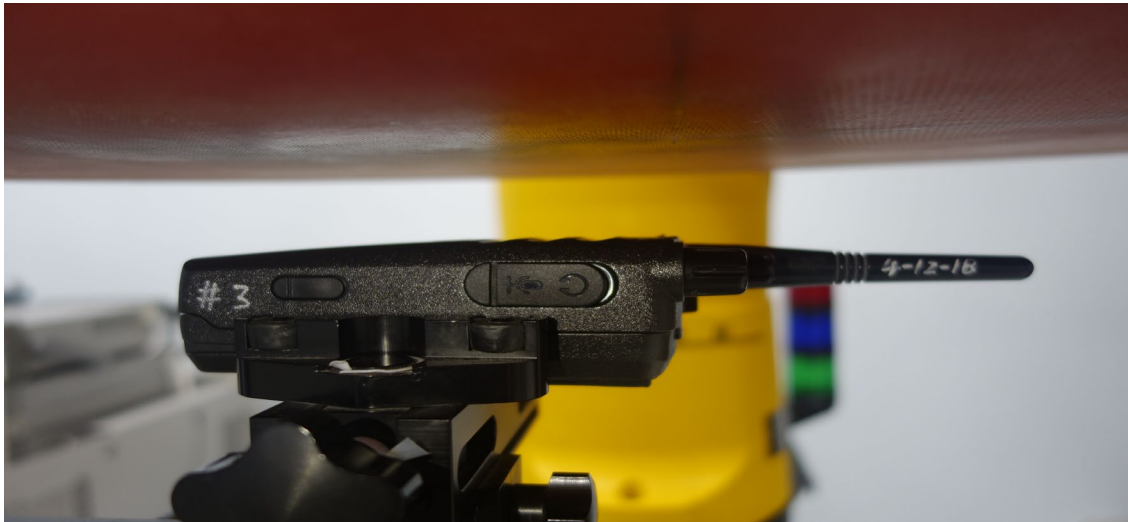


| Antenna   | Separation Distances (mm)   |                  |                 |
|-----------|-----------------------------|------------------|-----------------|
|           | @ bottom surface of the DUT | @ antenna's base | @ antenna's tip |
| PMAE4002A | 0                           | 30               | 35              |
| PMAE4003A | 0                           | 30               | 35              |
| PMAE4006A | 0                           | 30-34*           | 35-39*          |
| PMAE4016A | 0                           | 30               | 35              |

(\*) Depending on applicable offered battery

1.2 Face

Front of DUT w/ antenna PMAE4006A and offered battery PMNN4476A positioned at 2.5cm separation from the phantom without an audio accessory attached. Same position is used for the other applicable offered antennas and batteries.

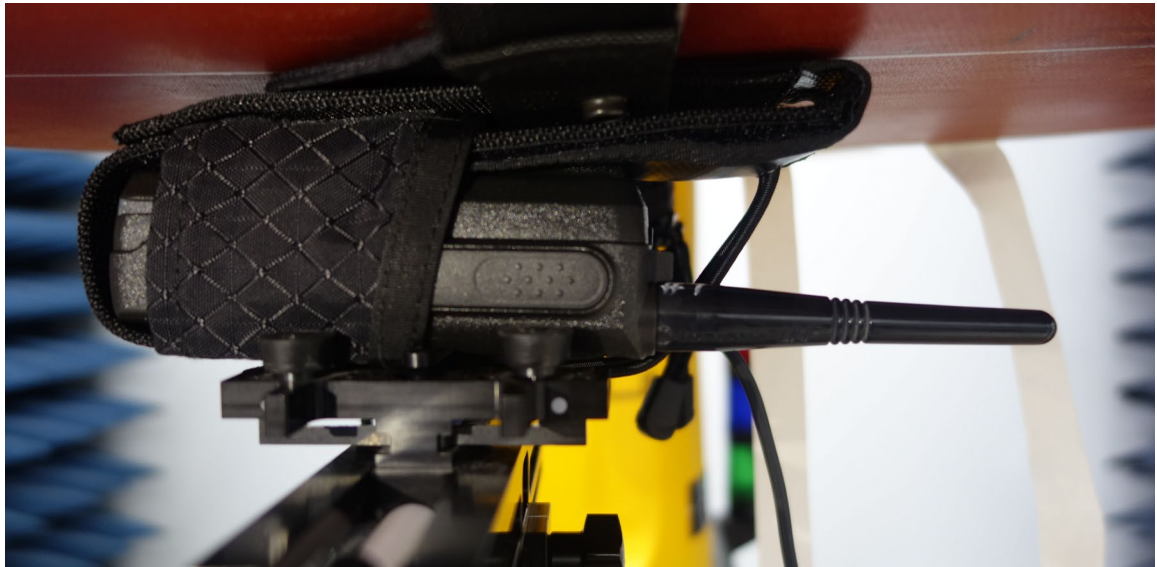


| Antenna   | Separation Distances (mm)   |                  |                 |
|-----------|-----------------------------|------------------|-----------------|
|           | @ bottom surface of the DUT | @ antenna's base | @ antenna's tip |
| PMAE4002A | 29                          | 28               | 35              |
| PMAE4003A | 29                          | 28               | 35              |
| PMAE4006A | 29                          | 28               | 35              |
| PMAE4016A | 29                          | 28               | 46              |

## 2.0 Other SAR tested positions at the body

### 2.1 Body worn

DUT with antenna PMAE4006A, offered battery PMNN4092A, audio accessory PMMN4092A, and body worn accessory RLN4815A positioned against the phantom. Same position is used for the other applicable offered antennas and batteries.



| Antenna   | Separation Distances (mm)   |                  |                 |
|-----------|-----------------------------|------------------|-----------------|
|           | @ bottom surface of the DUT | @ antenna's base | @ antenna's tip |
| PMAE4002A | 22                          | 48               | 55              |
| PMAE4003A | 22                          | 48               | 55              |
| PMAE4006A | 22                          | 48               | 55              |
| PMAE4016A | 22-24*                      | 48-52*           | 55-59*          |

(\*) Depending on applicable offered battery

DUT w/ antenna PMAE4006A with offered battery PMNN4092A, audio accessory PMMN4092A and body worn accessory PMLN7075A w/ NTN5243A positioned against the phantom. Same position is used with for the other applicable offered antennas and batteries.



| Antenna   | Separation Distances (mm)   |                  |                 |
|-----------|-----------------------------|------------------|-----------------|
|           | @ bottom surface of the DUT | @ antenna's base | @ antenna's tip |
| PMAE4002A | 10                          | 48               | 62              |
| PMAE4003A | 10                          | 8                | 62              |
| PMAE4006A | 10-12*                      | 43-52*           | 62-66*          |
| PMAE4016A | 10                          | 48               | 69              |

(\*) Depending on applicable offered battery

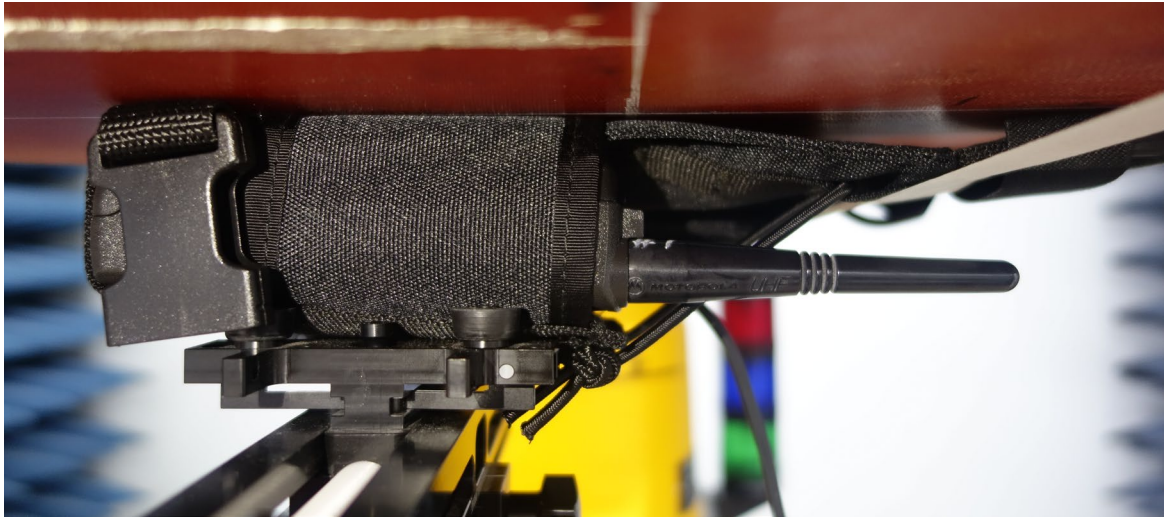
DUT w/ antenna PMAE4006A with offered battery PMNN4092A, audio accessory PMMN4092A and body worn accessory HLN9844A positioned against the phantom. Same position is used with for the other applicable offered antennas and batteries.



| Antenna   | Separation Distances (mm)   |                  |                 |
|-----------|-----------------------------|------------------|-----------------|
|           | @ bottom surface of the DUT | @ antenna's base | @ antenna's tip |
| PMAE4002A | 5                           | 40               | 53              |
| PMAE4003A | 5                           | 40               | 53              |
| PMAE4006A | 5                           | 40-46*           | 53-55*          |
| PMAE4016A | 5                           | 40               | 61              |

(\*) Depending on applicable offered battery

DUT w/ antenna PMAE4006A with offered battery PMNN4476A, audio accessory PMMN4092A and body worn accessory HLN6602A positioned against the phantom. Same position is used with for the other applicable offered antennas and batteries.



| Antenna   | Separation Distances (mm)   |                  |                 |
|-----------|-----------------------------|------------------|-----------------|
|           | @ bottom surface of the DUT | @ antenna's base | @ antenna's tip |
| PMAE4002A | 8                           | 30               | 35              |
| PMAE4003A | 8                           | 30               | 35              |
| PMAE4006A | 8-10*                       | 30-34*           | 35-39*          |
| PMAE4016A | 8                           | 30               | 35              |

(\*) Depending on applicable offered battery

3.0 Other SAR tested positions at the face

3.1 Back of DUT at 2.5cm separation

NA

3.2 Front of DUT at 2.5cm separation

Refer to Section 1.2

4.0 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.

4.1 Antenna dimension and photo(s):

| Antenna   | Physical Length (mm) | Electrical Length |
|-----------|----------------------|-------------------|
| PMAE4002A | 90                   | 1/2 wave          |
| PMAE4003A | 90                   | 1/4 wave          |
| PMAE4006A | 90                   | 1/4 wave          |
| PMAE4016A | 170                  | 1/4 wave          |



Left to Right: PMAE4002A, PMAE4003A, PMAE4006A, PMAE4016A

#### 4.2 Body worn accessories



RLN4815A



RLN4570A



**HLN6602A**



**HLN9844A back view (left) & side view (right)**



PMLN7075A front view (left), side view (centre) & back view (right)



NTN5243A

#### 4.3 Battery accessories:



PMNN4476A front view (left), side view (centre) & back view (right)



PMNN4092A front view (left), side view (centre) & back view (right)



PMNN4081B front view (left), side view (centre) & back view (right)



PMNN4080A front view (left), side view (centre) & back view (right)

4.4 Audio accessories:



PMMN4092A



PMMN4013A w/ RLN4941A



PMLN6854A



PMLN6541A



PMLN6538A



PMLN6537A



PMLN6532A



PMLN6531A

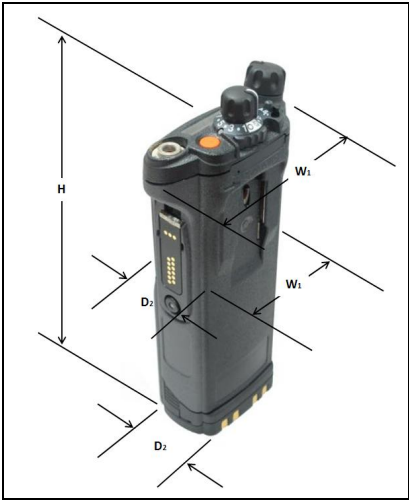


PMLN6530A

4.5 DUT Dimensions

|                              | Height<br>(mm) | Width<br>(mm) | Depth<br>(mm) |
|------------------------------|----------------|---------------|---------------|
| Radio only (w/o battery)     | 120            | 60            | 24            |
| Radio with battery PMNN4080A | 120            | 60            | 48            |
| Radio with battery PMNN4081B | 120            | 60            | 44            |
| Radio with battery PMNN4092A | 120            | 60            | 44            |
| Radio with battery PMNN4476A | 120            | 60            | 42            |

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



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

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

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