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|---|---|---|---|--|
|  <b>MOTOROLA SOLUTIONS</b> |  | <br>MS ISO/IEC 17025<br>TESTING<br>SAMM No. 0826 |  | <br>CERTIFICATE 2518.05 |
|---|---|---|---|--|

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

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**Approval Date: 4/3/2022**

**Report Revision History**

| <b>Date</b> | <b>Revision</b> | <b>Comments</b>        |
|-------------|-----------------|------------------------|
| 02/26/2022  | A               | Initial release        |
| 04/03/2022  | B               | Change the cover photo |

1. Highest SAR Test Position

1.1 Body

DUT with antenna PMAE4022B with offered battery PMNN4801A and body worn RLN4570A against the phantom without an audio accessory attached. Same position used for the other applicable offered antenna and battery accessories.

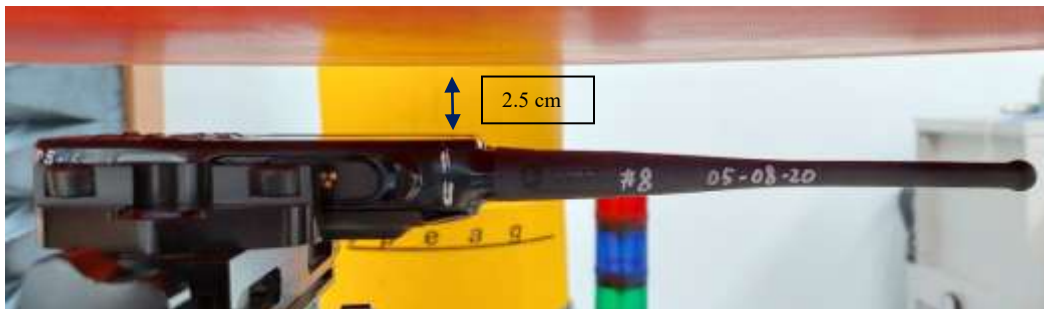


| Antenna kit # | Separation Distances (mm)   |                  |                 |
|---------------|-----------------------------|------------------|-----------------|
|               | @ bottom surface of the DUT | @ antenna's base | @ antenna's tip |
| PMAE4022B     | 0                           | *16-18           | *25-32          |
| PMAE4100A     | 0                           | *18-20           | *23-29          |
| AN000354A01   | 0                           | *18-20           | *23-29          |

(\*) Depending on applicable offered battery

1.2 Face

Front of DUT with antenna PMAE4022B with offered battery PMNN4801A separated 2.5cm from the phantom without an audio accessory attached.



| Antenna kit # | Separation Distances (mm)   |                  |                 |
|---------------|-----------------------------|------------------|-----------------|
|               | @ bottom surface of the DUT | @ antenna's base | @ antenna's tip |
| PMAE4022B     | 25                          | 30               | 37              |
| PMAE4100A     | 25                          | 30               | 31              |
| AN000354A01   | 25                          | 30               | 31              |

**1.3 Head**

DUT with antenna PMAE4022B with offered battery PMNN4802A was placed against the left head of the SAM phantom in the 15 degree tilt position.



**1.4 Hand**

Not applicable

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

**2.1 Body worn**

DUT with antenna PMAE4022B with offered battery PMNN4801A and body worn HLN6602A against the phantom without an audio accessory attached. Same position used for the other applicable offered antenna and battery accessories.



| Antenna kit # | Separation Distances (mm)   |                  |                 |
|---------------|-----------------------------|------------------|-----------------|
|               | @ bottom surface of the DUT | @ antenna's base | @ antenna's tip |
| PMAE4022B     | *5-7                        | *14-18           | *20-22          |
| PMAE4100A     | *5-7                        | *14-18           | *18-20          |
| AN000354A01   | *5-7                        | *14-18           | *18-20          |

(\*) Depending on applicable offered battery

DUT w/ antenna PMAE4022B with offered battery PMNN4801A and body worn PMLN5616B against the phantom without an audio accessory attached. Same position used with offered antenna, audio and battery accessories.



| Antenna kit # | Separation Distances (mm)   |                  |                 |
|---------------|-----------------------------|------------------|-----------------|
|               | @ bottom surface of the DUT | @ antenna's base | @ antenna's tip |
| PMAE4022B     | 9                           | *26-31           | *50-57          |
| PMAE4100A     | 9                           | *26-31           | *39-46          |
| AN000354A01   | 9                           | *26-31           | *39-46          |

(\*) Depending on applicable offered battery

DUT w/ antenna PMAE4100A with offered battery PMNN4801A and body worn PMLN8181A against the phantom without an audio accessory attached. Same position used with offered antenna, audio and battery accessories.



| Antenna kit # | Separation Distances (mm)   |                  |                 |
|---------------|-----------------------------|------------------|-----------------|
|               | @ bottom surface of the DUT | @ antenna's base | @ antenna's tip |
| PMAE4100A     | 15                          | *24-28           | *36-48          |
| PMAE4022B     | 15                          | *24-28           | *42-54          |
| AN000354A01   | 15                          | *24-28           | *36-48          |

(\*) Depending on applicable offered battery

DUT w/ antenna PMAE4100A with offered battery PMNN4801A and body worn PMLN8184A w/o bell loop w/ NTN5243A against the phantom without an audio accessory attached. Same position used with offered antenna, audio and battery accessories.



| Antenna kit # | Separation Distances (mm)   |                  |                 |
|---------------|-----------------------------|------------------|-----------------|
|               | @ bottom surface of the DUT | @ antenna's base | @ antenna's tip |
| PMAE4100A     | 0                           | *45-47           | *80-82          |
| PMAE4022B     | 0                           | *45-47           | *96-98          |
| AN000354A01   | 0                           | *45-47           | *80-82          |

(\*) Depending on applicable offered battery

DUT w/ antenna PMAE4022B with offered battery PMNN4801A and body worn PMLN8185A w/ PMLN5004B w/ GMDN0386A against the phantom without an audio accessory attached. Same position used with offered antenna, audio and battery accessories.



| Antenna kit # | Separation Distances (mm)   |                  |                 |
|---------------|-----------------------------|------------------|-----------------|
|               | @ bottom surface of the DUT | @ antenna's base | @ antenna's tip |
| PMAE4022B     | 20                          | *28-33           | *42-49          |
| PMAE4100A     | 20                          | *28-33           | *38-45          |
| AN000354A01   | 20                          | *28-33           | *38-45          |

(\*) Depending on applicable offered battery

DUT w/ antenna PMAE4022B with offered battery PMNN4801A and body worn PMLN8185A w/ PMLN5004B w/ GMDN0445AA against the phantom without an audio accessory attached. Same position used with offered antenna, audio and battery accessories.



| Antenna kit # | Separation Distances (mm)   |                  |                 |
|---------------|-----------------------------|------------------|-----------------|
|               | @ bottom surface of the DUT | @ antenna's base | @ antenna's tip |
| PMAE4022B     | *35-40                      | *30-34           | *32-30          |
| PMAE4100A     | *36-41                      | *27-31           | *29-27          |
| AN000354A01   | *36-41                      | *27-31           | *29-27          |

(\* ) Depending on applicable offered battery

DUT w/ antenna PMAE4022B with offered battery PMNN4801A and body worn PMLN8185A w/ PMLN5004B w/ GMDN0445AC against the phantom without an audio accessory attached. Same position used with offered antenna, audio and battery accessories.



| Antenna kit # | Separation Distances (mm)   |                  |                 |
|---------------|-----------------------------|------------------|-----------------|
|               | @ bottom surface of the DUT | @ antenna's base | @ antenna's tip |
| PMAE4022B     | 20                          | *42-47           | *57-65          |
| PMAE4100A     | 20                          | *42-47           | *53-61          |
| AN000354A01   | 20                          | *42-47           | *53-61          |

(\* ) Depending on applicable offered battery

DUT w/ antenna PMAE4022B with offered battery PMNN4801A and body worn PMLN8185A w/ PMLN5004B w/ GMDN0566AC against the phantom without an audio accessory attached. Same position used with offered antenna, audio and battery accessories.



| Antenna kit # | Separation Distances (mm)   |                  |                 |
|---------------|-----------------------------|------------------|-----------------|
|               | @ bottom surface of the DUT | @ antenna's base | @ antenna's tip |
| PMAE4022B     | *15-20                      | *51-57           | *93-98          |
| PMAE4100A     | *15-20                      | *51-57           | *75-80          |
| AN000354A01   | *15-20                      | *51-57           | *75-80          |

(\*) Depending on applicable offered battery

DUT w/ antenna PMAE4022B with offered battery PMNN4801A and body worn PMLN8185A w/ PMLN5004B w/ WALN4307A against the phantom without an audio accessory attached. Same position used with offered antenna, audio and battery accessories.



| Antenna kit # | Separation Distances (mm)   |                  |                 |
|---------------|-----------------------------|------------------|-----------------|
|               | @ bottom surface of the DUT | @ antenna's base | @ antenna's tip |
| PMAE4022B     | *25-30                      | *33-38           | *40-42          |
| PMAE4100A     | *25-30                      | *33-38           | *37-39          |
| AN000354A01   | *25-30                      | *33-38           | *37-39          |

(\*) Depending on applicable offered battery



DUT w/ antenna PMAE4022B with offered battery PMNN4801A and body worn PMLN8185A w/ PMLN8025A w/ GMDN0386A against the phantom without an audio accessory attached. Same position used with offered antenna, audio and battery accessories.



| Antenna kit # | Separation Distances (mm)   |                  |                 |
|---------------|-----------------------------|------------------|-----------------|
|               | @ bottom surface of the DUT | @ antenna's base | @ antenna's tip |
| PMAE4022B     | *10-15                      | *28-32           | *54-59          |
| PMAE4100A     | *10-15                      | *28-32           | *48-53          |
| AN000354A01   | *10-15                      | *28-32           | *48-53          |

(\* ) Depending on applicable offered battery

DUT w/ antenna PMAE4022B with offered battery PMNN4801A and body worn PMLN8185A w/ PMLN8025A w/ GMDN0445AA against the phantom without an audio accessory attached. Same position used with offered antenna, audio and battery accessories.



| Antenna kit # | Separation Distances (mm)   |                  |                 |
|---------------|-----------------------------|------------------|-----------------|
|               | @ bottom surface of the DUT | @ antenna's base | @ antenna's tip |
| PMAE4022B     | *31-32                      | *25-31           | *22-34          |
| PMAE4100A     | 24                          | 25               | 24              |
| AN000354A01   | 24                          | 25               | 24              |

(\* ) Depending on applicable offered battery

DUT w/ antenna PMAE4022B with offered battery PMNN4801A and body worn PMLN8185A w/ PMLN8025A w/ GMDN0445AC against the phantom without an audio accessory attached. Same position used with offered antenna, audio and battery accessories.



| Antenna kit # | Separation Distances (mm)   |                  |                 |
|---------------|-----------------------------|------------------|-----------------|
|               | @ bottom surface of the DUT | @ antenna's base | @ antenna's tip |
| PMAE4022B     | 15                          | *40-45           | *60-68          |
| PMAE4100A     | 15                          | *40-45           | *52-60          |
| AN000354A01   | 15                          | *40-45           | *52-60          |

(\*) Depending on applicable offered battery

DUT w/ antenna PMAE4022B with offered battery PMNN4801A and body worn PMLN8185A w/ PMLN8025A w/ GMDN0566AC against the phantom without an audio accessory attached. Same position used with offered antenna, audio and battery accessories.



| Antenna kit # | Separation Distances (mm)   |                  |                 |
|---------------|-----------------------------|------------------|-----------------|
|               | @ bottom surface of the DUT | @ antenna's base | @ antenna's tip |
| PMAE4022B     | 3                           | *55-62           | *110-118        |
| PMAE4100A     | 3                           | *55-62           | *88-96          |
| AN000354A01   | 3                           | *55-62           | *88-96          |

(\*) Depending on applicable offered battery

DUT w/ antenna PMAE4022B with offered battery PMNN4801A and body worn PMLN8185A w/ PMLN8025A w/ WALN4307 against the phantom without an audio accessory attached. Same position used with offered antenna, audio and battery accessories.



| Antenna kit # | Separation Distances (mm)   |                  |                 |
|---------------|-----------------------------|------------------|-----------------|
|               | @ bottom surface of the DUT | @ antenna's base | @ antenna's tip |
| PMAE4022B     | *12-13                      | *31-36           | *45-49          |
| PMAE4100A     | *11-12                      | *31-36           | *38-42          |
| AN000354A01   | *11-12                      | *31-36           | *38-42          |

(\* ) Depending on applicable offered battery

DUT w/ antenna PMAE4022B with offered battery PMNN4801A and body worn RLN4815A against the phantom without an audio accessory attached. Same position used with offered antenna, audio and battery accessories.



| Antenna kit # | Separation Distances (mm)   |                  |                 |
|---------------|-----------------------------|------------------|-----------------|
|               | @ bottom surface of the DUT | @ antenna's base | @ antenna's tip |
| PMAE4022B     | 7                           | 38               | 54              |
| PMAE4100A     | 7                           | 38               | 49              |
| AN000354A01   | 7                           | 38               | 49              |

**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**

DUT w/ antenna PMAE4022B with offered battery PMNN4801A separated 2.5cm from the phantom without an audio accessory attached. Same position used with offered battery accessories.



| Antenna kit # | Separation Distances (mm)   |                  |                 |
|---------------|-----------------------------|------------------|-----------------|
|               | @ bottom surface of the DUT | @ antenna's base | @ antenna's tip |
| PMAE4022B     | *27-30                      | *38-43           | *46-51          |
| PMAE4100A     | *27-30                      | *38-43           | *45-50          |
| AN000354A01   | *27-30                      | *38-43           | *45-50          |

(\*) Depending on applicable offered battery

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

**4.1 Left ear touch**

DUT with antenna PMAE4022B with offered battery PMNN4802A was placed against the left head of the SAM phantom in the cheek touch position.



**4.2 Left ear tilt**  
Refer to Highest SAR test position.

**4.3 Right ear touch**  
DUT with antenna PMAE4022B with offered battery PMNN4802A was placed against the left head of the SAM phantom in the cheek touch position.



**4.4 Right ear tilt**

DUT with antenna PMAE4022B with offered battery PMNN4802A was placed against the left head of the SAM phantom in the 15 degree position.



**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 |
|---------------|----------------------|-------------------|
| PMAE4022B     | 150                  | ¼ wave            |
| PMAE4100A     | 90                   | ¼ wave            |
| AN000354A01   | 60                   | ¼ wave            |



Left to Right: PMAE4022B, PMAE4100A and AN000354A01

6.2 Body worn accessories



PMLN8181A



PMLN8184A w/o belt loop  
w/NTN5243A



RLN4570A



RLN4815A





**PMLN5616B**



**HLN6602A**



**PMLN8185A  
w/PMLN8025A  
w/GMDN0386A**



**PMLN8185A  
w/PMLN8025A  
w/GMDN0445AA**



**PMLN8185A  
w/PMLN8025A  
w/GMDN0445AC**



PMLN8185A  
w/PMLN8025A  
w/GMDN0566AC



PMLN8185A  
w/PMLN8025A  
w/WALN4307



PMLN5004B

6.3 Battery accessories:



PMNN4801A



PMNN4802A

6.4 Audio accessories:



PMLN4128A

6.5 DUT Dimensions

|                              | Height (mm) | Width (mm) | Depth (mm) |
|------------------------------|-------------|------------|------------|
| Radio only (w/o battery)     | 120         | 54         | 30         |
| Radio with battery PMNN4801A | 120         | 54         | 31         |
| Radio with battery PMNN4802A | 120         | 54         | 35         |

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



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

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

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