

**MOTOROLA SOLUTIONS**

TESTING CERT # 2518.05

**Exhibit 7B: SAR Test Report Photographs****Enterprise Mobility Solutions****EME Test Laboratory**

Motorola Solutions Malaysia Sdn Bhd (455657-H)

Customer Solution Center

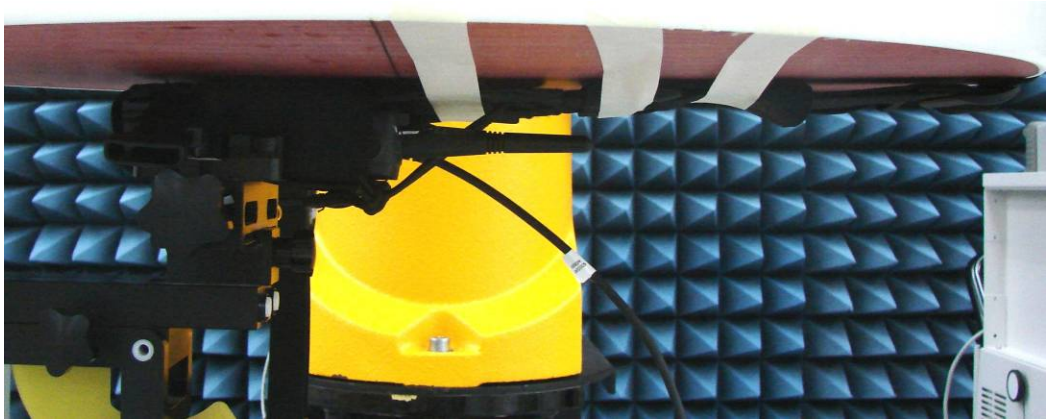
Plot 2, Bayan Lepas Technoplex Industrial Park,  
Mukim 12 SWD 11900 Bayan Lepas Penang, Malaysia.**Deanna Zakharia**  
**EMS EME Lab Senior Resource Manager,**  
**Laboratory Director****Approval Date: 4/17/2013**

**Report Revision History**

| <b>Date</b> | <b>Revision</b> | <b>Comments</b> |
|-------------|-----------------|-----------------|
| 04/09/2013  | O               | Initial release |

1.0 Highest SAR Test Position per body location

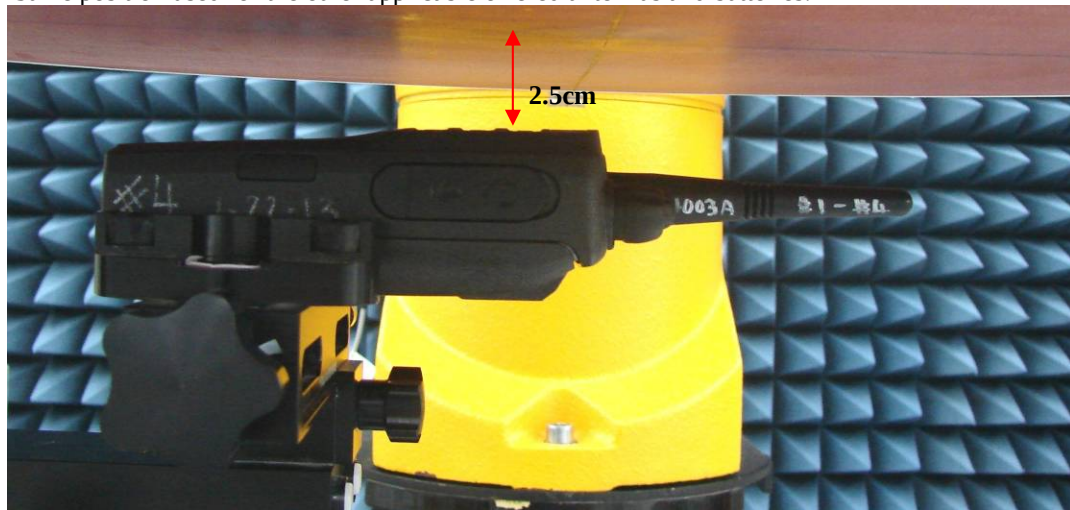
- 1.1 Body
- DUT w/ antenna PMAE4003A with offered battery PMNN4253AR, audio cable PMLN6539A and body worn HLN6602A against the phantom. Same position used for the other applicable offered audio accessories.



| Antenna kit # | Battery kit # | Separation Distances (mm)   |                  |                 |
|---------------|---------------|-----------------------------|------------------|-----------------|
|               |               | @ bottom surface of the DUT | @ antenna's base | @ antenna's tip |
| PMAE4003A     | PMNN4253AR    | 3                           | 22               | 27              |

**1.2 Face**

DUT w/ front side separated 2.5cm from phantom with antenna PMAE4003A and battery NNTN4497CR  
Same position used for the other applicable offered antennas and batteries.



| Antenna kit # | Battery kit # | Separation Distances (mm)   |                  |                 |
|---------------|---------------|-----------------------------|------------------|-----------------|
|               |               | @ bottom surface of the DUT | @ antenna's base | @ antenna's tip |
| NAE6483AR     | PMNN4254AR    | 33                          | 36               | 44              |
| PMAE4016A     | PMNN4254AR    | 33                          | 36               | 44              |
| NAE6522AR     | PMNN4254AR    | 33                          | 36               | 37              |
| PMAE4003A     | PMNN4254AR    | 33                          | 36               | 39              |
| PMAE4002A     | PMNN4254AR    | 33                          | 36               | 39              |
| NAE6521A      | PMNN4254AR    | 33                          | 36               | 37              |
| PMAE4003A     | PMNN4072A     | 33                          | 36               | 39              |
|               | NNTN4851A     | 33                          | 36               | 39              |
|               | NNTN4852A     | 33                          | 36               | 39              |
|               | NNTN4970A     | 33                          | 36               | 39              |
|               | NNTN4497CR    | 33                          | 36               | 39              |
|               | PMNN4251AR    | 33                          | 36               | 39              |
|               | PMNN4252AR    | 33                          | 36               | 39              |
|               | PMNN4253AR    | 33                          | 36               | 39              |

**1.3 Head**

Not applicable.

**1.4 Hand**

Not applicable.

## 2.0 Other SAR tested positions at the body

### 2.1 Body worn

DUT w/antenna NAE6522AR, battery PMNN4253AR, audio cable PMMN4013A and body worn RLN5644A against the phantom. Same position used for the other applicable offered antennas and batteries.



| Antenna kit # | Battery kit # | Separation Distances (mm)   |                  |                 |
|---------------|---------------|-----------------------------|------------------|-----------------|
|               |               | @ bottom surface of the DUT | @ antenna's base | @ antenna's tip |
| NAE6483AR     | NNTN4970A     | 2                           | 34               | 65              |
| PMAE4016A     | NNTN4970A     | 2                           | 34               | 65              |
| NAE6522AR     | NNTN4970A     | 2                           | 34               | 45              |
| PMAE4003A     | NNTN4970A     | 2                           | 34               | 50              |
| PMAE4002A     | NNTN4970A     | 2                           | 34               | 50              |
| NAE6521A      | NNTN4970A     | 2                           | 34               | 48              |
| NAE6522AR     | PMNN4072A     | 3                           | 34               | 43              |
|               | NNTN4851A     | 3                           | 34               | 43              |
|               | NNTN4852A     | 3                           | 37               | 45              |
|               | NNTN4497CR    | 3                           | 37               | 45              |
|               | PMNN4251AR    | 3                           | 37               | 45              |
|               | PMNN4252AR    | 3                           | 37               | 45              |
|               | PMNN4253AR    | 3                           | 37               | 45              |
|               | PMNN4254AR    | 3                           | 37               | 45              |

DUT w/antenna NAE6522AR, battery NNTN4970A, audio cable PMMN4013A and body worn HLN8255B against the phantom. Same position used for the other applicable offered antennas and batteries.



| Antenna kit # | Battery kit # | Separation Distances (mm)   |                  |                 |
|---------------|---------------|-----------------------------|------------------|-----------------|
|               |               | @ bottom surface of the DUT | @ antenna's base | @ antenna's tip |
| NAE6483AR     | NNTN4970A     | 8                           | 33               | 56              |
| PMAE4016A     | NNTN4970A     | 8                           | 33               | 56              |
| NAE6522AR     | NNTN4970A     | 8                           | 33               | 40              |
| PMAE4003A     | NNTN4970A     | 8                           | 33               | 45              |
| PMAE4002A     | NNTN4970A     | 8                           | 33               | 45              |
| NAE6521A      | NNTN4970A     | 8                           | 33               | 40              |
| NAE6522AR     | PMNN4072A     | 8                           | 33               | 38              |
|               | NNTN4851A     | 8                           | 33               | 38              |
|               | NNTN4852A     | 8                           | 33               | 38              |
|               | NNTN4497CR    | 8                           | 34               | 40              |
|               | PMNN4251AR    | 8                           | 34               | 40              |
|               | PMNN4252AR    | 8                           | 34               | 40              |
|               | PMNN4253AR    | 8                           | 33               | 40              |
|               | PMNN4254AR    | 8                           | 34               | 40              |



DUT w/antenna NAE6522AR, battery NNTN4851A, audio cable PMMN4013A and body worn RLN5383A against the phantom. Same position used for the other applicable offered antennas and batteries.



| Antenna kit # | Battery kit # | Separation Distances (mm)   |                  |                 |
|---------------|---------------|-----------------------------|------------------|-----------------|
|               |               | @ bottom surface of the DUT | @ antenna's base | @ antenna's tip |
| NAE6483AR     | NNTN4970A     | 2                           | 61               | 110             |
| PMAE4016A     | NNTN4970A     | 2                           | 61               | 110             |
| NAE6522AR     | NNTN4970A     | 2                           | 61               | 82              |
| PMAE4003A     | NNTN4970A     | 2                           | 61               | 84              |
| PMAE4002A     | NNTN4970A     | 2                           | 61               | 84              |
| NAE6521A      | NNTN4970A     | 2                           | 61               | 82              |
| NAE6522AR     | PMNN4072A     | 2                           | 61               | 82              |
|               | NNTN4851A     | 2                           | 61               | 82              |
|               | NNTN4852A     | 2                           | 61               | 77              |
|               | NNTN4497CR    | 2                           | 61               | 77              |
|               | PMNN4251AR    | 2                           | 61               | 77              |
|               | PMNN4252AR    | 2                           | 61               | 77              |
|               | PMNN4253AR    | 2                           | 61               | 77              |
|               | PMNN4254AR    | 2                           | 61               | 77              |

DUT w/antenna NAE6522AR, battery NNTN4970A, audio cable PMMN4013A and body worn HLN9701B against the phantom. Same position used for the other applicable offered antennas and batteries.



| Antenna kit # | Battery kit # | Separation Distances (mm)   |                  |                 |
|---------------|---------------|-----------------------------|------------------|-----------------|
|               |               | @ bottom surface of the DUT | @ antenna's base | @ antenna's tip |
| NAE6483AR     | NNTN4970A     | 0                           | 34               | 50              |
| PMAE4016A     | NNTN4970A     | 0                           | 34               | 50              |
| NAE6522AR     | NNTN4970A     | 0                           | 34               | 37              |
| PMAE4003A     | NNTN4970A     | 0                           | 34               | 43              |
| PMAE4002A     | NNTN4970A     | 0                           | 34               | 43              |
| NAE6521A      | NNTN4970A     | 0                           | 34               | 43              |
| NAE6522AR     | PMNN4072A     | 0                           | 34               | 37              |
|               | NNTN4851A     | 0                           | 34               | 37              |
|               | NNTN4852A     | 0                           | 34               | 37              |
|               | NNTN4497CR    | 0                           | 34               | 37              |
|               | PMNN4251AR    | 0                           | 34               | 37              |
|               | PMNN4252AR    | 0                           | 34               | 37              |
|               | PMNN4253AR    | 0                           | 34               | 37              |
|               | PMNN4254AR    | 0                           | 34               | 37              |



DUT w/antenna PMAE4003A, battery NNTN4851A, audio cable PMMN4013A and body worn RLN5385B against the phantom. Same position used for the other applicable offered antennas and batteries.



| Antenna kit # | Battery kit # | Separation Distances (mm)   |                  |                 |
|---------------|---------------|-----------------------------|------------------|-----------------|
|               |               | @ bottom surface of the DUT | @ antenna's base | @ antenna's tip |
| NAE6483AR     | NNTN4970A     | 8                           | 60               | 107             |
| PMAE4016A     | NNTN4970A     | 8                           | 60               | 107             |
| NAE6522AR     | NNTN4970A     | 8                           | 60               | 75              |
| PMAE4003A     | NNTN4970A     | 8                           | 60               | 85              |
| PMAE4002A     | NNTN4970A     | 8                           | 60               | 85              |
| NAE6521A      | NNTN4970A     | 8                           | 60               | 75              |
| PMAE4003A     | PMNN4072A     | 8                           | 60               | 85              |
|               | NNTN4851A     | 8                           | 60               | 85              |
|               | NNTN4852A     | 8                           | 60               | 85              |
|               | NNTN4497CR    | 8                           | 60               | 85              |
|               | PMNN4251AR    | 8                           | 60               | 85              |
|               | PMNN4252AR    | 8                           | 60               | 85              |
|               | PMNN4253AR    | 8                           | 60               | 85              |
|               | PMNN4254AR    | 8                           | 60               | 85              |

DUT w/antenna NAE6522AR, battery PMNN4253AR, audio cable PMMN4013A and body worn RLN4815A against the phantom. Same position used for the other applicable offered antennas and batteries.



| Antenna kit # | Battery kit # | Separation Distances (mm)   |                  |                 |
|---------------|---------------|-----------------------------|------------------|-----------------|
|               |               | @ bottom surface of the DUT | @ antenna's base | @ antenna's tip |
| NAE6483AR     | NNTN4970A     | 8                           | 40               | 60              |
| PMAE4016A     | NNTN4970A     | 8                           | 40               | 60              |
| NAE6522AR     | NNTN4970A     | 8                           | 40               | 43              |
| PMAE4003A     | NNTN4970A     | 8                           | 40               | 47              |
| PMAE4002A     | NNTN4970A     | 8                           | 40               | 47              |
| NAE6521A      | NNTN4970A     | 8                           | 40               | 43              |
| NAE6522AR     | PMNN4072A     | 8                           | 40               | 43              |
|               | NNTN4851A     | 8                           | 41               | 44              |
|               | NNTN4852A     | 8                           | 41               | 44              |
|               | NNTN4497CR    | 8                           | 40               | 43              |
|               | PMNN4251AR    | 8                           | 40               | 43              |
|               | PMNN4252AR    | 8                           | 41               | 44              |
|               | PMNN4253AR    | 8                           | 40               | 43              |
|               | PMNN4254AR    | 8                           | 41               | 44              |

DUT w/antenna PMAE4003A, battery NNTN4851A, audio cable PMMN4013A and body worn RLN5383B/NTN5243A with fixed belt loop against the phantom. Same position used for the other applicable offered antennas and batteries.



| Antenna kit # | Battery kit # | Separation Distances (mm)   |                  |                 |
|---------------|---------------|-----------------------------|------------------|-----------------|
|               |               | @ bottom surface of the DUT | @ antenna's base | @ antenna's tip |
| NAE6483AR     | NNTN4970A     | 2                           | 61               | 110             |
| PMAE4016A     | NNTN4970A     | 2                           | 61               | 110             |
| NAE6522AR     | NNTN4970A     | 2                           | 61               | 82              |
| PMAE4003A     | NNTN4970A     | 2                           | 61               | 84              |
| PMAE4002A     | NNTN4970A     | 2                           | 61               | 84              |
| NAE6521A      | NNTN4970A     | 2                           | 61               | 82              |
| PMAE4003A     | PMNN4072A     | 2                           | 61               | 84              |
|               | NNTN4851A     | 2                           | 62               | 87              |
|               | NNTN4852A     | 2                           | 62               | 87              |
|               | NNTN4497CR    | 2                           | 62               | 87              |
|               | PMNN4251AR    | 2                           | 62               | 87              |
|               | PMNN4252AR    | 2                           | 62               | 87              |
|               | PMNN4253AR    | 2                           | 61               | 84              |
|               | PMNN4254AR    | 2                           | 62               | 87              |

DUT w/antenna PMAE4016A, battery PMNN4072A, audio cable PMMN4013A and body worn HLN9701B/NTN5243A with fixed belt loop against the phantom. Same position used for the other applicable offered antennas and batteries.



| Antenna kit # | Battery kit # | Separation Distances (mm)   |                  |                 |
|---------------|---------------|-----------------------------|------------------|-----------------|
|               |               | @ bottom surface of the DUT | @ antenna's base | @ antenna's tip |
| NAE6483AR     | NNTN4970A     | 0                           | 34               | 50              |
| PMAE4016A     | NNTN4970A     | 0                           | 34               | 50              |
| NAE6522AR     | NNTN4970A     | 0                           | 34               | 37              |
| PMAE4003A     | NNTN4970A     | 0                           | 34               | 43              |
| PMAE4002A     | NNTN4970A     | 0                           | 34               | 43              |
| NAE6521A      | NNTN4970A     | 0                           | 34               | 43              |
| PMAE4016A     | PMNN4072A     | 0                           | 34               | 50              |
|               | NNTN4851A     | 0                           | 34               | 50              |
|               | NNTN4852A     | 0                           | 34               | 50              |
|               | NNTN4497CR    | 0                           | 34               | 50              |
|               | PMNN4251AR    | 0                           | 34               | 50              |
|               | PMNN4252AR    | 0                           | 34               | 50              |
|               | PMNN4253AR    | 0                           | 34               | 50              |
|               | PMNN4254AR    | 0                           | 34               | 50              |



DUT w/antenna NAE6522AR, battery PMNN4072A, audio cable PMMN4013A and body worn RLN5385B/NTN5243A without fixed belt loop against the phantom. Same position used for the other applicable offered antennas and batteries.



| Antenna kit # | Battery kit # | Separation Distances (mm)   |                  |                 |
|---------------|---------------|-----------------------------|------------------|-----------------|
|               |               | @ bottom surface of the DUT | @ antenna's base | @ antenna's tip |
| NAE6483AR     | NNTN4970A     | 0                           | 51               | 97              |
| PMAE4016A     | NNTN4970A     | 0                           | 51               | 97              |
| NAE6522AR     | NNTN4970A     | 0                           | 51               | 67              |
| PMAE4003A     | NNTN4970A     | 0                           | 50               | 76              |
| PMAE4002A     | NNTN4970A     | 0                           | 50               | 76              |
| NAE6521A      | NNTN4970A     | 0                           | 50               | 76              |
| NAE6522AR     | PMNN4072A     | 0                           | 52               | 69              |
|               | NNTN4851A     | 0                           | 52               | 69              |
|               | NNTN4852A     | 0                           | 54               | 70              |
|               | NNTN4497CR    | 0                           | 54               | 70              |
|               | PMNN4251AR    | 0                           | 54               | 70              |
|               | PMNN4252AR    | 0                           | 54               | 70              |
|               | PMNN4253AR    | 0                           | 50               | 67              |
|               | PMNN4254AR    | 0                           | 50               | 67              |



**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**  
Not applicable.

**4.2 Left ear tilt**  
Not applicable.

**4.3 Right ear touch**  
Not applicable.

**4.4 Right ear tilt**  
Not applicable.

**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 offered accessories. Refer to Part 1 of 2, section 7.0 for more details.

6.1 Antenna dimension and photo(s):

| No. | Antenna Kit # | Physical Length (cm) | Electrical Length |
|-----|---------------|----------------------|-------------------|
| 1   | NAE6522AR     | 7.5                  | 1/4 wave          |
| 2   | NAE6521A      | 8                    | 1/4 wave          |
| 3   | PMAE4002A     | 9                    | 1/4 wave          |
| 4   | PMAE4003A     | 9                    | 1/4 wave          |
| 5   | NAE6483AR     | 17                   | 1/4 wave          |
| 6   | PMAE4016A     | 17                   | 1/4 wave          |

Left-Right; 1 to 6



6.2 Body worn accessories:



DUT Back View  
RLN5644A Spring Action 2 Inch Belt loop



DUT Side View  
RLN5644A Spring Action 2 Inch Belt loop



DUT Back View  
HLN8255B Spring Action 3 Inch Belt clip



DUT Side View  
HLN8255B Spring Action 3 Inch Belt clip



**DUT Back View**  
RLN5383A ND Leather case with  
Belt loop and D-rings



**DUT Side View**  
RLN5383A ND Leather case with  
Belt loop and D-rings



**DUT Front View**  
RLN5383A ND Leather case with  
Belt loop and D-rings SWFKP



**DUT Back View**  
RLN5385B ND Leather case with  
3 Inch Swivel Belt loop



**DUT Side View**  
RLN5385B ND Leather case with  
3 Inch Swivel Belt loop



**DUT Front View**  
RLN5385B ND Leather case with  
3 Inch Swivel Belt loop



**DUT Back View**  
HLN9701B Nylon case with belt loop & D-rings Belt loop



**DUT Side View**  
HLN9701B Nylon case with belt loop & D-rings Belt loop



**DUT Front View**  
HLN9701B Nylon case with belt loop & D-rings Belt loop



**HLN6602A Nylon Chest Pack**



**HLN9701B with NTN5243A Carry strap**



**RLN4815A Radio Pack**



### 6.3 Battery accessories:



Left-Right; Back, front and side views: NNTN4497CR



Left-Right; Back, front and side views: NNTN4851A



Left-Right; Back, front and side views: NNTN4852A



Left-Right; Back, front and side views: NNTN4970A



Left-Right; Back, front and side views: NNTN4072A



Left-Right; Back, front and side views: PMNN4251AR



Left-Right; Back, front and side views: PMNN4252AR



Left-Right; Back, front and side views: PMNN4253AR



Left-Right; Back, front and side views: PMNN4254AR



6.4 Audio accessories:



**PMMN4013A RSM**



**PMMN4092A RSM (Mag One)**



**PMLN6531A EarReceiver with In-Line Mic/PTT/VOX switch (Mag One)**



**PMLN6537A Earset with Boom Mic and In-Line PTT/VOX switch (Mag One)**



**PMLN6538A Lightweight Headset with Swivel Boom Microphone**



**PMLN6539A Medium Weight Over-The-Head Dual Muff Headset**



**PMLN6540A Heavy-Duty Noise Cancelling Boom Mic Headset**



**PMLN6541A Lightweight Temple Transducer Headset**



**PMLN6530A 2-Wire Surveillance Kit (Black) with Clear Acoustic Earpiece (less expensive-Palm Garden)**



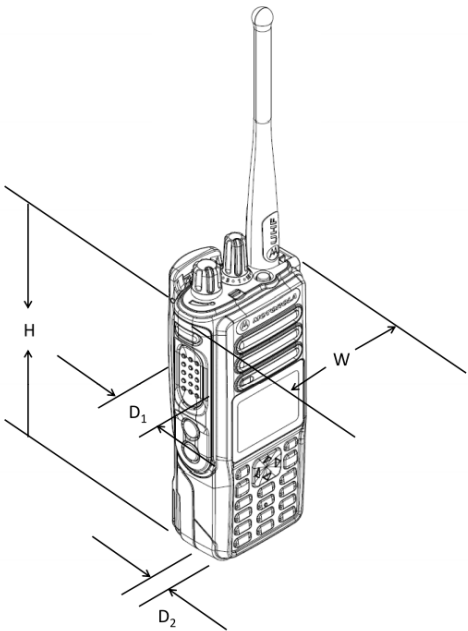
**PMMN4013A RSM with RLN4941A Receive only Earpiece w/translucent tube & eartip**



6.5 DUT Dimensions

|                               | Height<br>(mm) | Width<br>(mm) | Depth<br>(mm) |
|-------------------------------|----------------|---------------|---------------|
| Radio only (w/o battery)      | 127.7          | 61.5          | 22            |
| Radio with battery PMNN4253AR | 127.7          | 61.5          | 39            |

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



Note: H = Height; W = Width; D<sub>1</sub> = Depth w/ battery; D<sub>2</sub> = Depth w/o battery