



## Appendix B. SAR Measurement Plots

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Test Laboratory: HUAWEI SAR/HAC Lab

**HAC\_ER3DV6\_H1611-GSM850-251CH****DUT: H1611; Type: Smart Phone; Serial: SAR1**

Communication System: UID 10021 - DAB, GSM-FDD (TDMA, GMSK); Frequency: 848.8 MHz; Duty Cycle: 1:8.6896

Medium parameters used:  $\sigma = 0$  S/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Phantom section: RF Section

DASY Configuration:

- ⌘ Probe: ER3DV6 - SN2441; ConvF(1, 1, 1); Calibrated: 2015-11-25;
- ⌘ Sensor-Surface: (Fix Surface), z = 8.7
- ⌘ Electronics: DAE4 Sn851; Calibrated: 2015-7-20
- ⌘ Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA; Serial: 1053
- ⌘ DASY52 52.8.8(1222);

**Device E-Field measurement (E-field scan for ANSI C63.19-2011 compliance)/E Scan - ER3D: 15 mm from Probe Center to the Device/Hearing Aid Compatibility Test****(101x101x1):** Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 65.54 V/m; Power Drift = -0.01 dB

Applied MIF = 3.63 dB

RF audio interference level = 38.21 dBV/m

Emission category: **M4**

MIF scaled E-field

<b>Grid 1 M4</b> <b>36.42 dBV/m</b>	<b>Grid 2 M4</b> <b>37.7 dBV/m</b>	<b>Grid 3 M4</b> <b>37.66 dBV/m</b>
<b>Grid 4 M4</b> <b>36.73 dBV/m</b>	<b>Grid 5 M4</b> <b>38.21 dBV/m</b>	<b>Grid 6 M4</b> <b>38.19 dBV/m</b>
<b>Grid 7 M4</b> <b>37.15 dBV/m</b>	<b>Grid 8 M4</b> <b>38.37 dBV/m</b>	<b>Grid 9 M4</b> <b>38.35 dBV/m</b>

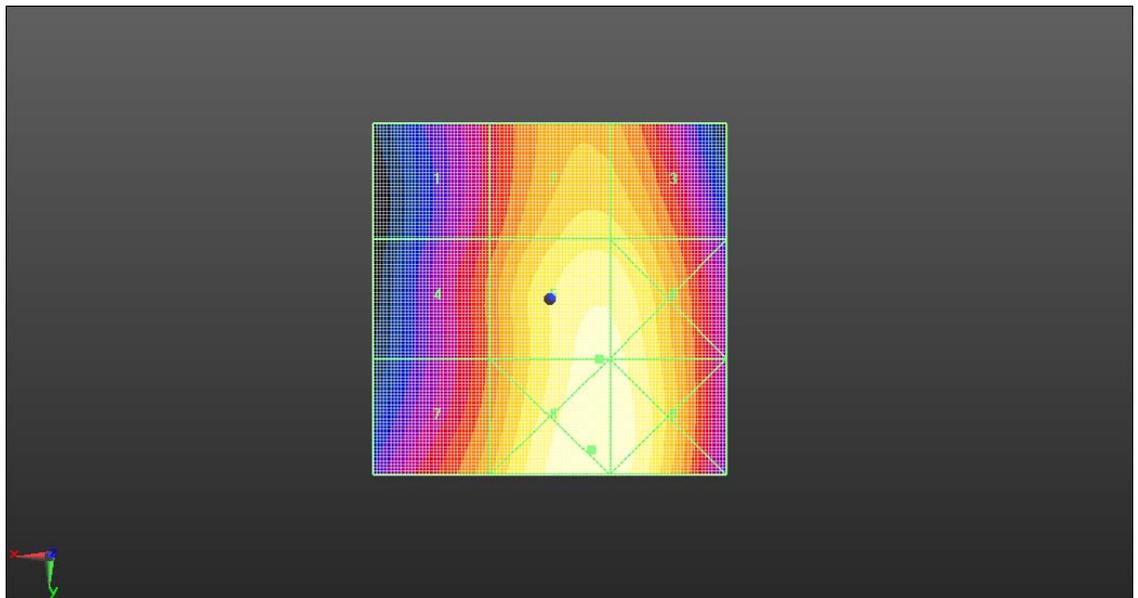
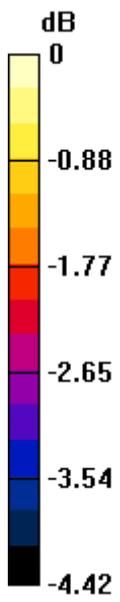
Category	Limits for E-Field Emissions < 960MHz	Limits for E-Field Emissions > 960MHz
M1	50 dBV/m - 55 dB V/m	40 dBV/m - 45 dB V/m
M2	45 dBV/m - 50 dB V/m	35 dBV/m - 40 dB V/m
M3	40 dBV/m - 45 dB V/m	30 dBV/m - 35 dB V/m
M4	<40 dBV/m	<30 dBV/m

**Cursor:**

Total = 38.37 dBV/m

E Category: M4

Location: -6, 21.5, 8.7 mm



0 dB = 82.93 V/m = 38.37 dBV/m

Test Laboratory: HUAWEI SAR/HAC Lab

**HAC\_ER3DV6\_H1611-GSM850-190CH****DUT: H1611; Type: Smart Phone; Serial: SAR1**

Communication System: UID 10021 - DAB, GSM-FDD (TDMA, GMSK); Frequency: 836.6 MHz; Duty Cycle: 1:8.6896

Medium parameters used:  $\sigma = 0$  S/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Phantom section: RF Section

DASY Configuration:

- ⌵ Probe: ER3DV6 - SN2441; ConvF(1, 1, 1); Calibrated: 2015-11-25;
- ⌵ Sensor-Surface: (Fix Surface), z = 8.7
- ⌵ Electronics: DAE4 Sn851; Calibrated: 2015-7-20
- ⌵ Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA; Serial: 1053
- ⌵ DASY52 52.8.8(1222);

**Device E-Field measurement (E-field scan for ANSI C63.19-2011 compliance)/E Scan - ER3D: 15 mm from Probe Center to the Device/Hearing Aid Compatibility Test****(101x101x1):** Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 58.24 V/m; Power Drift = 0.02 dB

Applied MIF = 3.63 dB

RF audio interference level = 37.24 dBV/m

**Emission category: M4**

MIF scaled E-field

<b>Grid 1 M4</b> <b>35.3 dBV/m</b>	<b>Grid 2 M4</b> <b>36.66 dBV/m</b>	<b>Grid 3 M4</b> <b>36.65 dBV/m</b>
<b>Grid 4 M4</b> <b>35.64 dBV/m</b>	<b>Grid 5 M4</b> <b>37.24 dBV/m</b>	<b>Grid 6 M4</b> <b>37.21 dBV/m</b>
<b>Grid 7 M4</b> <b>36.19 dBV/m</b>	<b>Grid 8 M4</b> <b>37.42 dBV/m</b>	<b>Grid 9 M4</b> <b>37.4 dBV/m</b>

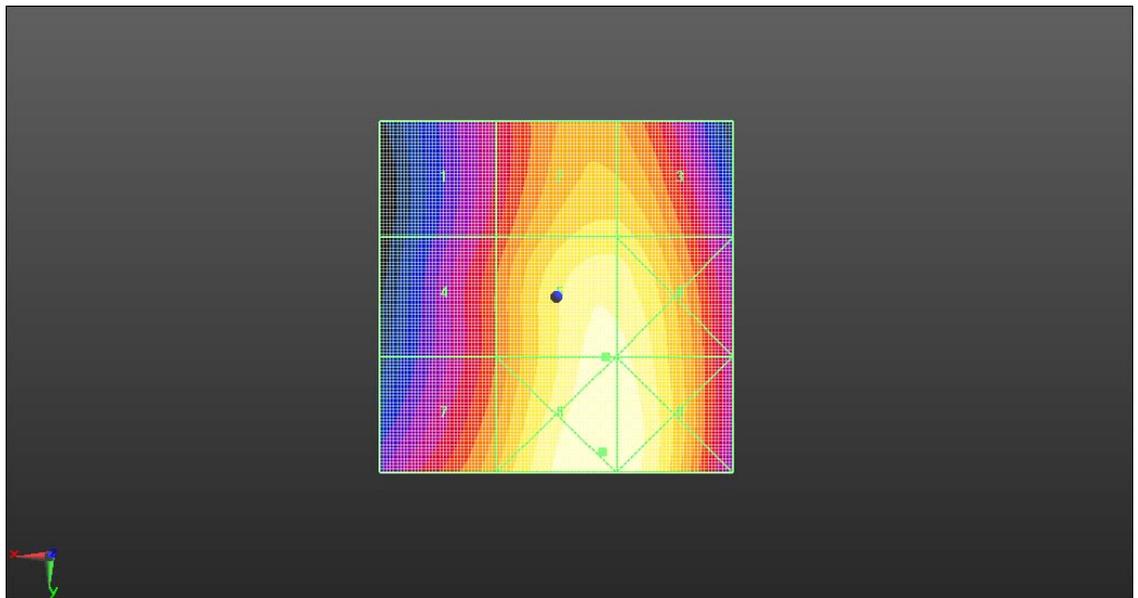
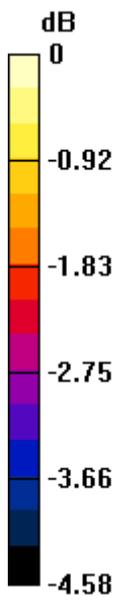
Category	Limits for E-Field Emissions < 960MHz	Limits for E-Field Emissions > 960MHz
M1	50 dBV/m - 55 dB V/m	40 dBV/m - 45 dB V/m
M2	45 dBV/m - 50 dB V/m	35 dBV/m - 40 dB V/m
M3	40 dBV/m - 45 dB V/m	30 dBV/m - 35 dB V/m
M4	<40 dBV/m	<30 dBV/m

**Cursor:**

Total = 37.42 dBV/m

E Category: M4

Location: -6.5, 22, 8.7 mm



0 dB = 74.28 V/m = 37.42 dBV/m

Test Laboratory: HUAWEI SAR/HAC Lab

**HAC\_ER3DV6\_H1611-GSM850-128CH****DUT: H1611; Type: Smart Phone; Serial: SAR1**

Communication System: UID 10021 - DAB, GSM-FDD (TDMA, GMSK); Frequency: 824.2 MHz; Duty Cycle: 1:8.6896

Medium parameters used:  $\sigma = 0$  S/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Phantom section: RF Section

DASY Configuration:

- ⌘ Probe: ER3DV6 - SN2441; ConvF(1, 1, 1); Calibrated: 2015-11-25;
- ⌘ Sensor-Surface: (Fix Surface), z = 8.7
- ⌘ Electronics: DAE4 Sn851; Calibrated: 2015-7-20
- ⌘ Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA; Serial: 1053
- ⌘ DASY52 52.8.8(1222);

**Device E-Field measurement (E-field scan for ANSI C63.19-2011 compliance)/E Scan - ER3D: 15 mm from Probe Center to the Device/Hearing Aid Compatibility Test****(101x101x1)**: Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 49.99 V/m; Power Drift = 0.04 dB

Applied MIF = 3.63 dB

RF audio interference level = 35.88 dBV/m

Emission category: **M4**

MIF scaled E-field

Grid 1 <b>M4</b> <b>33.96 dBV/m</b>	Grid 2 <b>M4</b> <b>35.36 dBV/m</b>	Grid 3 <b>M4</b> <b>35.32 dBV/m</b>
Grid 4 <b>M4</b> <b>34.26 dBV/m</b>	Grid 5 <b>M4</b> <b>35.88 dBV/m</b>	Grid 6 <b>M4</b> <b>35.87 dBV/m</b>
Grid 7 <b>M4</b> <b>34.8 dBV/m</b>	Grid 8 <b>M4</b> <b>36.06 dBV/m</b>	Grid 9 <b>M4</b> <b>36.04 dBV/m</b>

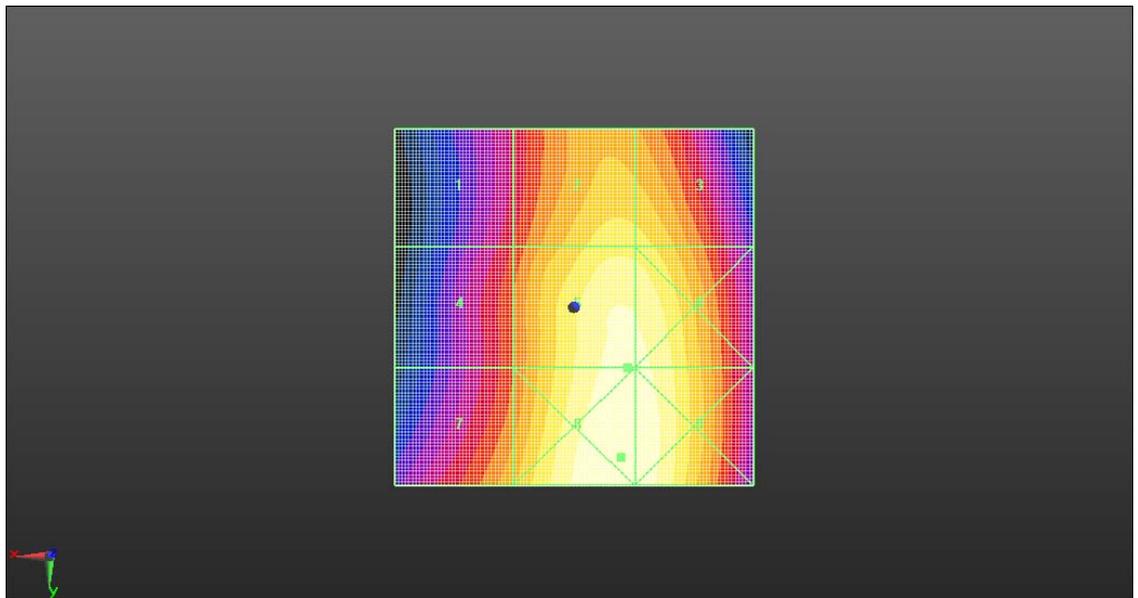
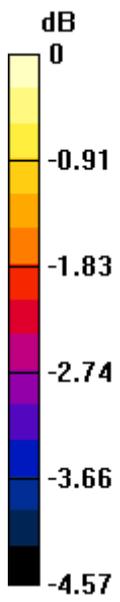
Category	Limits for E-Field Emissions < 960MHz	Limits for E-Field Emissions > 960MHz
M1	50 dBV/m - 55 dB V/m	40 dBV/m - 45 dB V/m
M2	45 dBV/m - 50 dB V/m	35 dBV/m - 40 dB V/m
M3	40 dBV/m - 45 dB V/m	30 dBV/m - 35 dB V/m
M4	<40 dBV/m	<30 dBV/m

**Cursor:**

Total = 36.06 dBV/m

E Category: M4

Location: -6.5, 21, 8.7 mm



0 dB = 63.51 V/m = 36.06 dBV/m

Test Laboratory: HUAWEI SAR/HAC Lab

**HAC\_ER3DV6\_H1611-GSM1900-810CH****DUT: H1611; Type: Smart Phone; Serial: SAR1**

Communication System: UID 10021 - DAB, GSM-FDD (TDMA, GMSK); Frequency: 1909.8 MHz; Duty Cycle: 1:8.6896

Medium parameters used:  $\sigma = 0$  S/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Phantom section: RF Section

DASY Configuration:

- ⌘ Probe: ER3DV6 - SN2441; ConvF(1, 1, 1); Calibrated: 2015-11-25;
- ⌘ Sensor-Surface: (Fix Surface), z = 8.7
- ⌘ Electronics: DAE4 Sn851; Calibrated: 2015-7-20
- ⌘ Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA; Serial: 1053
- ⌘ DASY52 52.8.8(1222);

**Device E-Field measurement (E-field scan for ANSI C63.19-2011 compliance)/E Scan - ER3D: 15 mm from Probe Center to the Device/Hearing Aid Compatibility Test****(101x101x1)**: Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 10.41 V/m; Power Drift = 0.01 dB

Applied MIF = 3.63 dB

RF audio interference level = 24.39 dBV/m

Emission category: **M4**

MIF scaled E-field

<b>Grid 1 M4</b> <b>23.04 dBV/m</b>	<b>Grid 2 M4</b> <b>24.29 dBV/m</b>	<b>Grid 3 M4</b> <b>24.2 dBV/m</b>
<b>Grid 4 M4</b> <b>20.59 dBV/m</b>	<b>Grid 5 M4</b> <b>24.39 dBV/m</b>	<b>Grid 6 M4</b> <b>24.42 dBV/m</b>
<b>Grid 7 M4</b> <b>24.08 dBV/m</b>	<b>Grid 8 M4</b> <b>26.92 dBV/m</b>	<b>Grid 9 M4</b> <b>26.92 dBV/m</b>

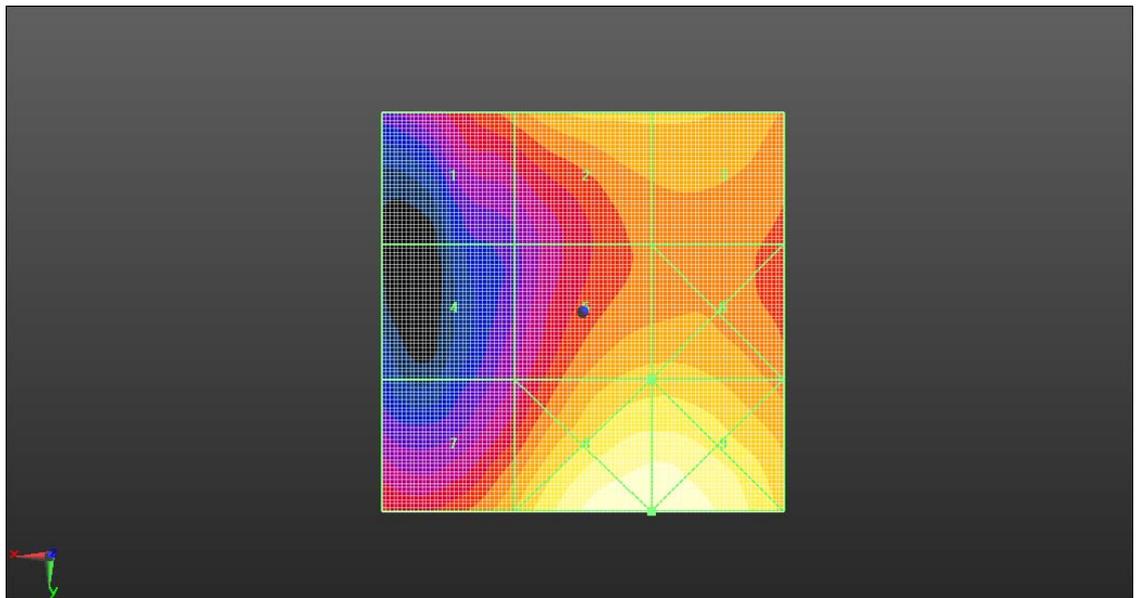
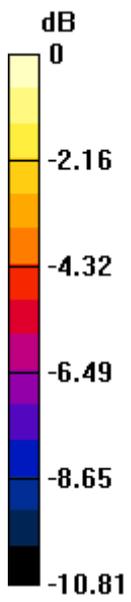
Category	Limits for E-Field Emissions < 960MHz	Limits for E-Field Emissions > 960MHz
M1	50 dBV/m - 55 dB V/m	40 dBV/m - 45 dB V/m
M2	45 dBV/m - 50 dB V/m	35 dBV/m - 40 dB V/m
M3	40 dBV/m - 45 dB V/m	30 dBV/m - 35 dB V/m
M4	<40 dBV/m	<30 dBV/m

**Cursor:**

Total = 26.92 dBV/m

E Category: M4

Location: -8.5, 25, 8.7 mm



0 dB = 22.18 V/m = 26.92 dBV/m

Test Laboratory: HUAWEI SAR/HAC Lab

**HAC\_ER3DV6\_H1611-GSM1900-661CH****DUT: H1611; Type: Smart Phone; Serial: SAR1**

Communication System: UID 10021 - DAB, GSM-FDD (TDMA, GMSK); Frequency: 1880 MHz; Duty Cycle: 1:8.6896

Medium parameters used:  $\sigma = 0$  S/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Phantom section: RF Section

DASY Configuration:

- ⌘ Probe: ER3DV6 - SN2441; ConvF(1, 1, 1); Calibrated: 2015-11-25;
- ⌘ Sensor-Surface: (Fix Surface), z = 8.7
- ⌘ Electronics: DAE4 Sn851; Calibrated: 2015-7-20
- ⌘ Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA; Serial: 1053
- ⌘ DASY52 52.8.8(1222);

**Device E-Field measurement (E-field scan for ANSI C63.19-2011 compliance)/E Scan - ER3D: 15 mm from Probe Center to the Device/Hearing Aid Compatibility Test****(101x101x1):** Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 11.87 V/m; Power Drift = -0.03 dB

Applied MIF = 3.63 dB

RF audio interference level = 26.15 dBV/m

Emission category: **M4**

MIF scaled E-field

<b>Grid 1 M4</b> <b>21.3 dBV/m</b>	<b>Grid 2 M4</b> <b>25.02 dBV/m</b>	<b>Grid 3 M4</b> <b>26.15 dBV/m</b>
<b>Grid 4 M4</b> <b>23.63 dBV/m</b>	<b>Grid 5 M4</b> <b>25.74 dBV/m</b>	<b>Grid 6 M4</b> <b>25.74 dBV/m</b>
<b>Grid 7 M4</b> <b>26.73 dBV/m</b>	<b>Grid 8 M4</b> <b>28.49 dBV/m</b>	<b>Grid 9 M4</b> <b>28.41 dBV/m</b>

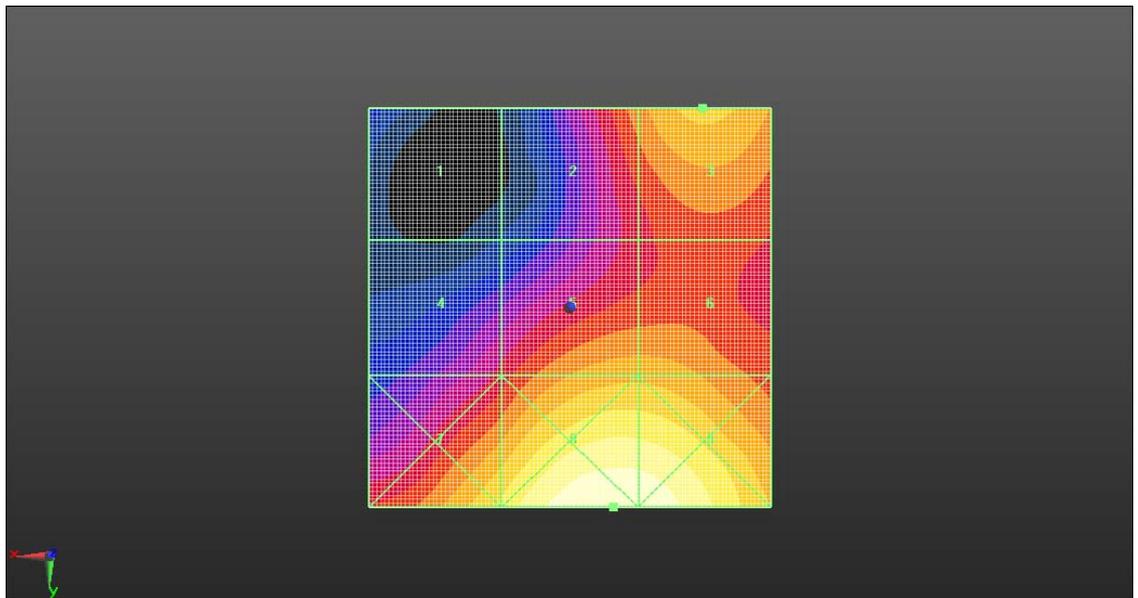
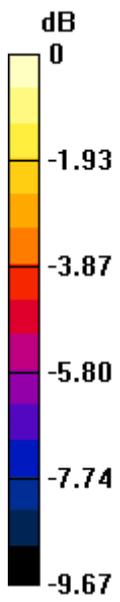
Category	Limits for E-Field Emissions < 960MHz	Limits for E-Field Emissions > 960MHz
M1	50 dBV/m - 55 dB V/m	40 dBV/m - 45 dB V/m
M2	45 dBV/m - 50 dB V/m	35 dBV/m - 40 dB V/m
M3	40 dBV/m - 45 dB V/m	30 dBV/m - 35 dB V/m
M4	<40 dBV/m	<30 dBV/m

**Cursor:**

Total = 28.49 dBV/m

E Category: M4

Location: -5.5, 25, 8.7 mm



0 dB = 26.57 V/m = 28.49 dBV/m

Test Laboratory: HUAWEI SAR/HAC Lab

**HAC\_ER3DV6\_H1611-GSM1900-512CH****DUT: H1611; Type: Smart Phone; Serial: SAR1**

Communication System: UID 10021 - DAB, GSM-FDD (TDMA, GMSK); Frequency: 1850.2 MHz; Duty Cycle: 1:8.6896

Medium parameters used:  $\sigma = 0$  S/m,  $\epsilon_r = 1$ ;  $\rho = 0$  kg/m<sup>3</sup>

Phantom section: RF Section

DASY Configuration:

- ⌘ Probe: ER3DV6 - SN2441; ConvF(1, 1, 1); Calibrated: 2015-11-25;
- ⌘ Sensor-Surface: (Fix Surface), z = 8.7
- ⌘ Electronics: DAE4 Sn851; Calibrated: 2015-7-20
- ⌘ Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA; Serial: 1053
- ⌘ DASY52 52.8.8(1222);

**Device E-Field measurement (E-field scan for ANSI C63.19-2011 compliance)/E Scan - ER3D: 15 mm from Probe Center to the Device/Hearing Aid Compatibility Test****(101x101x1)**: Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 9.887 V/m; Power Drift = -0.08 dB

Applied MIF = 3.63 dB

RF audio interference level = 27.59 dBV/m

Emission category: **M4**

MIF scaled E-field

<b>Grid 1 M4</b> <b>21.03 dBV/m</b>	<b>Grid 2 M4</b> <b>26.59 dBV/m</b>	<b>Grid 3 M4</b> <b>27.59 dBV/m</b>
<b>Grid 4 M4</b> <b>22.71 dBV/m</b>	<b>Grid 5 M4</b> <b>24.79 dBV/m</b>	<b>Grid 6 M4</b> <b>25.55 dBV/m</b>
<b>Grid 7 M4</b> <b>26.48 dBV/m</b>	<b>Grid 8 M4</b> <b>27.79 dBV/m</b>	<b>Grid 9 M4</b> <b>27.68 dBV/m</b>

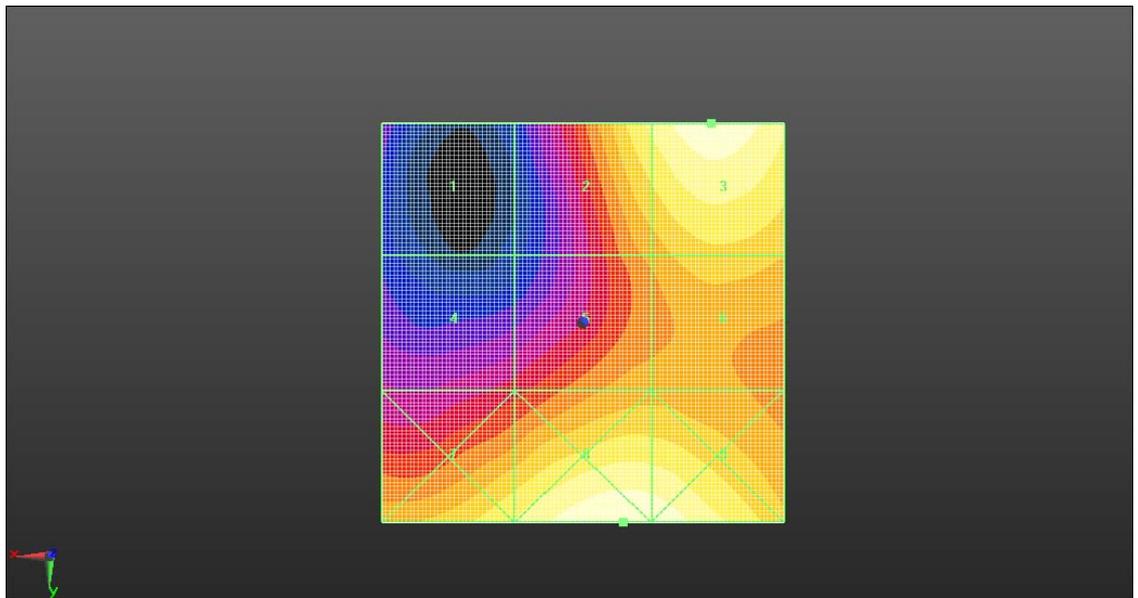
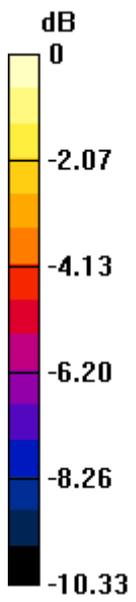
Category	Limits for E-Field Emissions < 960MHz	Limits for E-Field Emissions > 960MHz
M1	50 dBV/m - 55 dB V/m	40 dBV/m - 45 dB V/m
M2	45 dBV/m - 50 dB V/m	35 dBV/m - 40 dB V/m
M3	40 dBV/m - 45 dB V/m	30 dBV/m - 35 dB V/m
M4	<40 dBV/m	<30 dBV/m

**Cursor:**

Total = 27.79 dBV/m

E Category: M4

Location: -5, 25, 8.7 mm



0 dB = 24.53 V/m = 27.79 dBV/m