

Appendix C – Highest Test Plots

Date: 2024/3/7

NFC_PSK_Rear Face_0mm_Loop Ant

DUT: ZX80 PN7160 NFC Module

Communication System: UID 0, NFC (0); Frequency: 13.56 MHz; Duty Cycle: 1:1
 Medium parameters used (interpolated): $f = 13.56$ MHz; $\sigma = 0.731$ S/m; $\epsilon_r = 55.156$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section
 Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY5.2 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3677; ConvF(15.21, 15.21, 15.21) @ 13 MHz; Calibrated: 2023/7/20
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1253; Calibrated: 2023/12/7
- Phantom: ELI; Type: QD OVA 002 AA; Serial: 1175
- Measurement SW: DASYS2, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (81x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
 Maximum value of SAR (interpolated) = 0.0286 W/kg

Zoom Scan (6x6x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
 Reference Value = 0 V/m; Power Drift = 0.00 dB
 Peak SAR (extrapolated) = 0.0680 W/kg
SAR(1 g) = 0.017 W/kg; SAR(10 g) = 0.00593 W/kg (SAR corrected for target medium)
 Smallest distance from peaks to all points 3 dB below: Larger than measurement grid (> 20 mm)
 Ratio of SAR at M2 to SAR at M1 = 21.6%
 Maximum value of SAR (measured) = 0.0420 W/kg

