TFD Array Response TFD Array Response TFD Array Response Difference Between EW & NS Dipoles Difference Between EW & NS Dipoles Difference Between EW & NS Dipoles Beam Steering: NS -15°, EW 0° Beam Steering: NS -15°, EW 15° Beam Steering: NS -15°, EW 30° 24 MHz 1 dB Contours 24 MHz 1 dB Contours 24 MHz 1 dB Contours Red = Jupiter Track 20 Jan 2015 Red = Jupiter Track 20 Jan 2015 Red = Jupiter Track 20 Jan 2015 Green = HPBW, Max Gain = -0.9 dB Relative Green = HPBW, Max Gain = −1.4 dB Relative Green = HPBW, Max Gain = -3.1 dB Relative North-South Direction (deg) Direction (deg) North-South 20 30 40 50 10 50 60 10 20 30 40 60 10 20 30 40 50 East-West Direction (deg) East-West Direction (deg) East-West Direction (deg) **TFD Array Response TFD Array Response TFD Array Response** Difference Between EW & NS Dipoles Difference Between EW & NS Dipoles Difference Between EW & NS Dipoles Beam Steering: NS -10°, EW 30° Beam Steering: NS -10°, EW 45° Beam Steering: NS -10°, EW 60° 24 MHz 1 dB Contours 24 MHz 1 dB Contours 24 MHz 1 dB Contours Red = Jupiter Track 20 Jan 2015 Red = Jupiter Track 20 Jan 2015 Red = Jupiter Track 20 Jan 2015 Green = HPBW, Max Gain = -2.6 dB Relative Green = HPBW, Max Gain = -5.2 dB Relative Green = HPBW, Max Gain = -7.9 dB Relative North-South Direction (deg) North-South Direction (deg) North-South Direction (deg)

30

East-West Direction (deg)

50

10

10

30

East-West Direction (deg)

40

50

10

30

East-West Direction (deg)