

RADIATED EMISSIONS



Test Report #: WC600852 Run 3 Test Area: LTS

EUT Model #: 50000879-xx Rev 1P Date: 2/16/2006

EUT Serial #: _____ EUT Power: 12 DC via p/s Temperature: 20.0 °C

Test Method: EN55022 B Air Pressure: 99.0 kPa

Customer: Digi International Rel. Humidity: 20.0 %

EUT Description: Digi Connect Wi-EM

Notes: Updated to use an alternate external PCB antenna.

Data File Name: 0852-1-RE.dat

Page: 1 of 4

List of measurements for run #: 3

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	POL / HGT / AZ (m)(DEG)	DELTA1 FCC B >1GHz 3m	DELTA2 FCC B >1G 3 M
Noise floor						
3.0 GHz	37.7 Pk	4.91 / 29.9 / 27.3 / 0.0	45.21	V / 1.00 / 0	-8.79*	-28.79
3.0 GHz	29.58 Av	4.91 / 29.9 / 27.3 / 0.0	37.09	V / 1.00 / 0	-16.91	n/a
3.0 GHz	35.9 Pk	4.91 / 29.9 / 27.3 / 0.0	43.41	H / 1.00 / 0	-10.59*	-30.59
3.0 GHz	29.6 Av	4.91 / 29.9 / 27.3 / 0.0	37.11	H / 1.00 / 0	-16.89	n/a
Noise floor						
1.5 GHz	54.0 Pk	3.74 / 25.0 / 49.82 / 0.42	33.34	H / 1.00 / 0	-20.66*	-40.66
1.5 GHz	48.69 Av	3.74 / 25.0 / 49.82 / 0.42	28.03	H / 1.00 / 0	-25.97	n/a
1.5 GHz	53.95 Pk	3.74 / 25.0 / 49.82 / 0.42	33.29	V / 1.00 / 0	-20.71*	-40.71
1.5 GHz	47.52 Av	3.74 / 25.0 / 49.82 / 0.42	26.86	V / 1.00 / 0	-27.14	n/a
Noise floor						
4.864 GHz	54.05 Pk	6.21 / 32.58 / 45.0 / 0.57	48.41	V / 1.00 / 300	-5.59*	-25.59
4.864 GHz	46.87 Av	6.21 / 32.58 / 45.0 / 0.57	41.23	V / 1.00 / 300	-12.77	n/a
4.864 GHz	56.2 Pk	6.21 / 32.58 / 45.0 / 0.57	50.56	H / 1.00 / 300	-3.44*	-23.44
4.864 GHz	44.39 Av	6.21 / 32.58 / 45.0 / 0.57	38.75	H / 1.00 / 300	-15.25	n/a
Noise floor						
5.0 GHz	43.6 Pk	6.31 / 32.76 / 44.64 / 0.61	38.64	H / 1.00 / 300	-15.36*	-35.36
5.0 GHz	38.88 Av	6.31 / 32.76 / 44.64 / 0.61	33.92	H / 1.00 / 300	-20.08	n/a
5.0 GHz	45.8 Pk	6.31 / 32.76 / 44.64 / 0.61	40.84	V / 1.00 / 300	-13.16*	-33.16
5.0 GHz	38.86 Av	6.31 / 32.76 / 44.64 / 0.61	33.9	V / 1.00 / 300	-20.1	n/a
Noise floor						
7.296 GHz	45.85 Pk	8.05 / 35.77 / 46.0 / 0.89	44.57	V / 1.00 / 300	-9.43*	-29.43

Tested by: Michael Schultz

Printed

Signature

Reviewed by: J. T. Schneider

Printed

Signature

RADIATED EMISSIONS



Test Report #: WC600852 Run 3 Test Area: LTS

EUT Model #: 50000879-xx Rev 1P Date: 2/16/2006

EUT Serial #: _____ EUT Power: 12 DC via p/s Temperature: 20.0 °C

Test Method: EN55022 B Air Pressure: 99.0 kPa

Customer: Digi International Rel. Humidity: 20.0 %

EUT Description: Digi Connect Wi-EM

Notes: Updated to use an alternate external PCB antenna.

Data File Name: 0852-1-RE.dat Page: 2 of 4

List of measurements for run #: 3

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	POL / HGT / AZ (m)(DEG)	DELTA1 FCC B >1GHz 3m	DELTA2 FCC B >1G 3 M
7.296 GHz	41.17 Av	8.05 / 35.77 / 46.0 / 0.89	39.89	V / 1.00 / 300	-14.11	n/a
7.296 GHz	46.95 Pk	8.05 / 35.77 / 46.0 / 0.89	45.67	H / 1.00 / 300	-8.33*	-28.33
7.296 GHz	41.21 Av	8.05 / 35.77 / 46.0 / 0.89	39.93	H / 1.00 / 300	-14.07	n/a
9.728 GHz	47.15 Pk	9.91 / 37.74 / 44.98 / 0.58	50.4	H / 1.00 / 300	-3.6*	-23.6
9.728 GHz	40.64 Av	9.91 / 37.74 / 44.98 / 0.58	43.89	H / 1.00 / 300	-10.11	n/a
9.728 GHz	44.6 Pk	9.91 / 37.74 / 44.98 / 0.58	47.85	V / 1.00 / 300	-6.15*	-26.15
9.728 GHz	40.66 Av	9.91 / 37.74 / 44.98 / 0.58	43.91	V / 1.00 / 300	-10.09	n/a
Noise floor						
9.0 GHz	44.15 Pk	9.63 / 37.3 / 44.57 / 0.55	47.06	V / 1.00 / 300	-6.94*	-26.94
9.0 GHz	40.56 Av	9.63 / 37.3 / 44.57 / 0.55	43.47	V / 1.00 / 300	-10.53	n/a
9.0 GHz	47.5 Pk	9.63 / 37.3 / 44.57 / 0.55	50.41	H / 1.00 / 300	-3.59*	-23.59
9.0 GHz	40.84 Av	9.63 / 37.3 / 44.57 / 0.55	43.75	H / 1.00 / 300	-10.25	n/a
Scan complete for middle channel to 25 GHz						

Tested by: Michael Schultz

Printed

Signature

Reviewed by: J. T. Schneider

Printed

Signature

RADIATED EMISSIONS



Test Report #: WC600852 Run 3 Test Area: LTS

EUT Model #: 50000879-xx Rev 1P Date: 2/16/2006

EUT Serial #: _____ EUT Power: 12 DC via p/s Temperature: 20.0 °C

Test Method: EN55022 B Air Pressure: 99.0 kPa

Customer: Digi International Rel. Humidity: 20.0 %

EUT Description: Digi Connect Wi-EM

Notes: Updated to use an alternate external PCB antenna.

Data File Name: 0852-1-RE.dat Page: 3 of 4

Measurement summary for limit1: FCC B >1GHz 3m (Av)

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	POL / HGT / AZ (m)(DEG)	DELTA1 FCC B >1GHz 3m
9.728 GHz	40.66 Av	9.91 / 37.74 / 44.98 / 0.58	43.91	V / 1.00 / 300	-10.09
9.0 GHz	40.84 Av	9.63 / 37.3 / 44.57 / 0.55	43.75	H / 1.00 / 300	-10.25
4.864 GHz	46.87 Av	6.21 / 32.58 / 45.0 / 0.57	41.23	V / 1.00 / 300	-12.77
7.296 GHz	41.21 Av	8.05 / 35.77 / 46.0 / 0.89	39.93	H / 1.00 / 300	-14.07
3.0 GHz	29.6 Av	4.91 / 29.9 / 27.3 / 0.0	37.11	H / 1.00 / 0	-16.89
5.0 GHz	38.88 Av	6.31 / 32.76 / 44.64 / 0.61	33.92	H / 1.00 / 300	-20.08
1.5 GHz	48.69 Av	3.74 / 25.0 / 49.82 / 0.42	28.03	H / 1.00 / 0	-25.97

Tested by: Michael Schultz

Printed

Signature

Reviewed by: J. T. Schneider

Printed

Signature

RADIATED EMISSIONS



Test Report #: WC600852 Run 3 Test Area: LTS
EUT Model #: 50000879-xx Rev 1P Date: 2/16/2006
EUT Serial #: _____ EUT Power: 12 DC via p/s Temperature: 20.0 °C
Test Method: EN55022 B Air Pressure: 99.0 kPa
Customer: Digi International Rel. Humidity: 20.0 %
EUT Description: Digi Connect Wi-EM

Notes: Updated to use an alternate external PCB antenna.

Data File Name: 0852-1-RE.dat Page: 4 of 4

Measurement summary for limit2: FCC B >1G 3 M (Pk)

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	POL / HGT / AZ (m)(DEG)	DELTA2 FCC B >1G 3 M
4.864 GHz	56.2 Pk	6.21 / 32.58 / 45.0 / 0.57	50.56	H / 1.00 / 300	-23.44
9.0 GHz	47.5 Pk	9.63 / 37.3 / 44.57 / 0.55	50.41	H / 1.00 / 300	-23.59
9.728 GHz	47.15 Pk	9.91 / 37.74 / 44.98 / 0.58	50.4	H / 1.00 / 300	-23.6
7.296 GHz	46.95 Pk	8.05 / 35.77 / 46.0 / 0.89	45.67	H / 1.00 / 300	-28.33
3.0 GHz	37.7 Pk	4.91 / 29.9 / 27.3 / 0.0	45.21	V / 1.00 / 0	-28.79
5.0 GHz	45.8 Pk	6.31 / 32.76 / 44.64 / 0.61	40.84	V / 1.00 / 300	-33.16
1.5 GHz	54.0 Pk	3.74 / 25.0 / 49.82 / 0.42	33.34	H / 1.00 / 0	-40.66

Tested by: Michael Schultz

Printed

Signature

Reviewed by: J. T. Schneider

Printed

Signature