2.16 Radiated Emissions for Digital Device & Receiver (47 CFR 15.109a)

Radiated emissions were evaluated from 30 to 14500 MHz while the EUT was placed into a Receive mode of operation. Measurements were made with the analyzer's bandwidth set to 120 kHz measurements made less than 1 GHz and 1 MHz for measurements made greater than or equal to 1 GHz. The results for less than 1 GHz are shown in Table 8.

TABLE 8a. RADIATED EMISSIONS DATA
(Digital Device & Receiver)

CLASS B

Measurements 30 MHz – 1 GHz

Radiated Emissions									
Test By:	**Test:**	Radiated Emissions Data (Digital Device & Receiver)			**Client:**		Nivis, L.L.C.		
	Project:	06-0105		**Class:**	**Configuration:**		P9-06 w/ dual band		
Frequency	**Test Data**	**AF**	**Test Data**	**AF+CA-AMP**	**Results**	**Limits**	**Distance /**	**Margin**	**PK = n**
(MHz)	**(dBm)**	**Table**	**(dBuV)**	**(dB)**	**(uV/m)**	**(uV/m)**	**Polarity**	**(dB)**	**/ QP**
228.40	-82.5	2lp3mv	24.5	13.9	83.2	200.0	3m./VERT	**7.6**	**PK = n**
256.70	-80.8	2lp3mv	26.2	15.7	123.8	200.0	3m./VERT	**4.2**	**PK = n**
319.8	-83.5	2lp3mv	23.5	18.2	121.7	200.0	3m./VERT	**4.3**	**PK = n**
787.7	-90.3	2lp3mv	16.7	26.2	139.2	200.0	3m./VERT	**3.1**	**PK = n**

SAMPLE CALCULATIONS:

RESULTS uV/m @ 3m
Antilog ((-82.5 + 13.9 + 107)/20) = 83.2
CONVERSION FROM dBm TO dBuV = 107 dB
Margin in dB = 20/ log (43.3 / 200.0) = 13.3 dB

Test Date: May 31, 2006

Tested by
Signature:  **Name: Austin Thompson**

TABLE 8b. RADIATED EMISSIONS DATA
(Digital Device & Receiver)

CLASS B

Measurements 1 GHz – 5 GHz (PEAK)

Frequency (MHz)	Receiver Reading (dBm) @3m	Correction Factor (dB)	Corrected Reading (uV/m)	FCC Limit (uV/m) @3m	Margin Below FCC Limit (dB) @3m
No Emissions seen within 20 dB of the Limit.					

Test Date: May 31, 2006

Tested by
Signature:  **Name: Austin Thompson**

TABLE 8c. RADIATED EMISSIONS DATA
(Digital Device & Receiver)

CLASS B

Measurements 1 GHz – 5 GHz (AVERAGE)

Frequency (MHz)	Receiver Reading (dBm) @3m	Correction Factor (dB)	Corrected Reading (uV/m)	FCC Limit (uV/m) @3m	Margin Below FCC Limit (dB) @3m
No Emissions seen within 20 dB of the Limit.					

Test Date: May 31, 2006

Tested by Signature:  **Name: Austin Thompson**

2.17 Power Line Conducted Emissions for Digital Device and Receiver FCC Section 15.107

The conducted voltage measurements have been carried out in accordance with FCC Section 15.107, with a spectrum analyzer connected to a LISN and the EUT placed into an idle condition or a continuous mode of receive. Similar results were seen as compared to the EUT in a transmit mode of operation. **Therefore, please refer to the results as shown in Table 8.**

2.18 Channel Separation

The transmitter was placed into a typical frequency hopping mode of operation. Using an RBW and UBW of 30 kHz, the delta between 2 peaks was measured and the distance between them was noted. Characteristics of the time of occupancy are shown in Figure 9 and Table 9.

TABLE 9

CHANNEL SEPARATION

Channel Separation
338 kHz

Figure 10.
Channel Separation FCC Section 15.247(a)(1)(ii)