

### **Antenna Requirements**

### FCC Part 15.203

### Of Direct Sequence Spread Spectrum System

UNIDEN America Corporation Cordless Phone TRU5885(xx)/UC789BH

## Section e

 $\label{eq:approx} APREL \ Project \ No.: UESB-TRU5885\text{-}cordless \ phone-3907$ 

51 Spectrum Way Nepean ON K2R 1E6 Tel: (613) 820-2730 Fax: (613) 820-4161 email: info@aprel.com



Test <i>:</i>	Antenna Requirements
Ref.:	FCC Part 15.207
Criteria:	An intentional radiator antenna shall be designed to ensure that no antenna other than that furnished by the applicant can be used with the device. The use of a permanently attached antenna or of an antenna that used an unique coupling to the intentional radiator shall be sufficient to comply with this requirement.
Result:	The Uniden cordless telephone unit complies with the requirement of 15.203. The antenna is a permanently attached antenna.
Conclusion:	There are no provisions for connection to an external antenna. The unit meets the Antenna requirements of 15.203
Condition:	See Criteria
Set-up:	N/A
Equipment:	N/A



## Radiated Spurious Emissions & Restricted Bands FCC Part 15.247 (C), 15.205

### Of Direct Sequence Spread Spectrum System

UNIDEN America Corporation Cordless Phone TRU5885(xx)/UC789BH

## Section f

APREL Project No.: UESB-TRU5885-cordless phone-3907

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### Test: Spurious Emissions & Restricted Bands

*Ref.:* FCC Part 15.247 (c), 15.205

*Criteria:* 1) In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in § 15.209(a) is not required.

2) **Restricted Bands**: In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.209(a) (see § 15.205(c)).

- *Condition:* Radiated Test
- *Set-up:* See Figure f1
- *Equipment:* See Appendix A
- *Methodology:* The preliminary radiated emission measurement was performed according to the description of ANSI C63.4 1992 Sec.8.3.1.1 in a semi anechoic shielded room in order to determine the characteristic frequencies of the radiation.

Based on this information, measurements were performed in the open area test site at these characteristic frequencies. APREL Open Area Test Site is calibrated to ANSI C63.4-1992 and is filed with FCC. The test site is characteristically flat, free of reflecting structures. All reflecting objects, including test personnel, lie outside the perimeter of the ellipse (defined in ANSI C63.4-1992) or below the ground plane level. The horizontal and vertical site attenuation measurements are within  $\pm 4$  dB of the theoretical site attenuation of an ideal site. The DUI was placed on a turntable positioned 3 meters away from the receiving antenna, which in turn was connected to the spectrum analyzer. The DUI was operated in a manner that produced the highest emissions.

For each identified characteristic frequency, the received signal was maximized by appropriate positioning of the turntable and the height of the receiving antenna. The height of the antenna was adjusted between 1 m and 4 m in height above the ground plane. The turntable was rotated



 $360^{\circ}$  from a remote control to maximize the emissions. The process was repeated for both horizontal and vertical polarization. All cables were arranged for maximum emission.

Radiated RF emission levels measured were identified as having been emitted by the DUI. Measurements were performed using the spectrum analyzer employing a CISPR quasi-peak detector function and 120 kHz bandwidth on frequencies from 30 MHz to 960 MHz, and for frequencies above 960 MHz employing an average detector function and 1 MHz resolution bandwidth. All measurements were performed at discrete frequencies.

Special attention was made for the EUT's harmonic and spurious radiated emission in the restricted bands of operation. The EUT was tested in the frequency band of 9kHz to the tenth harmonic of the fundamental frequency of the base and handset units. CISPR quasi peak detector below 1GHz was used while above 1GHz average measurements was used using RBW of 1MHz, VBW 10Hz and linearly polarized horn antenna. In addition, peak measurements were performed to ensure that the peak levels did not exceed 20dB of the average limit. All out of band emissions, other than those created by the spreading sequence data sequence and the carrier modulation must not exceed the limits in the following table per FCC §15.209, Radiated Emission limits, general requirements.

Frequency (MHz)	Field Strength (µV/m)	Field Strength (dBµV/m)	Measurement Distance
			(meters)
0.009 - 0.490	$2400/F_{(kHz)}$	$20 \cdot \log_{10}(2400/F_{kHz})$	300
0.490 - 1.705	$24000/F_{(kHz)}$	$20 \cdot \log_{10}(24000/F_{kHz})$	30
1.705 - 30.00	30	29.5	30
30.0 - 88.0	100	40.0	3
88.0 - 216.0	150	43.5	3
216 - 960	200	46.0	3
Above 960	500	54.0	3

Table f.1: Radiated Emission Limits per §15.209

Note: The emissions from an intentional radiator shall not exceed the field strength levels specified in the above table.



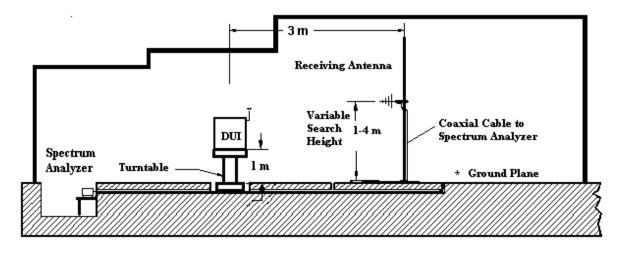


Figure f1.a Test set up for the Field Strength of Spurious Radiation Measurement in OATS (Not to scale)



Fig. f.b APREL's OATS (Open Area Test Site)



#### Test Results: Test data is tabulated in Tables f.1 to f6

# Table f.2.aUniden - Handset without headsetRadiated Emissions from TransmitterChannel: 18, Distance: 3.0 mPolarization: VERTICAL

Polarization: VERTICAL							
Frequency	Reading	Correction	<b>Field-strength</b>	Limit	Margin		
(MHz)	(dBmV)	( <b>dB</b> )	(dBmV/m)	(dBm//m)	( <b>dB</b> )		
37.280	31.33	-10.8	20.5	40.0	19.5		
55.840	29.85	-15.4	14.5	40.0	25.5		
61.560	30.41	-16.8	13.7	40.0	26.3		
63.660	31.53	-17.1	14.5	40.0	25.5		
65.760	36.70	-17.4	19.3	40.0	20.7		
67.800	40.59	-17.7	22.9	40.0	17.1		
69.900	43.01	-18.0	25.0	40.0	15.0		
71.940	42.46	-18.0	24.5	40.0	15.5		
74.040	44.39	-17.9	26.5	40.0	13.5		
76.080	40.48	-17.8	22.7	40.0	17.3		
78.180	44.45	-17.8	26.7	40.0	13.3		
80.220	45.18	-17.7	27.5	40.0	12.5		
82.320	47.44	-17.4	30.1	40.0	9.9		
84.360	42.14	-17.2	25.0	40.0	15.0		
86.460	45.96	-17.1	28.9	40.0	11.1		
88.500	33.11	-16.9	16.2	43.5	27.3		
90.180	31.97	-16.5	15.5	43.5	28.0		
92.280	26.40	-16.1	10.3	43.5	33.2		
104.760	28.32	-14.7	13.6	43.5	29.9		
108.900	27.59	-14.5	13.1	43.5	30.4		
111.000	28.37	-14.2	14.1	43.5	29.4		
113.040	29.48	-14.1	15.4	43.5	28.1		
115.140	29.15	-13.9	15.3	43.5	28.2		
117.180	29.32	-13.7	15.6	43.5	27.9		
119.280	31.51	-13.6	17.9	43.5	25.6		
120.960	34.43	-13.5	20.9	43.5	22.6		
123.000	29.76	-13.2	16.6	43.5	26.9		

- 1. All spurious signals in the restricted bands specified in §15.205 were below the limits listed in Table 1.
- 2. There was no fundamental signals observed within the restricted bands specified in §15.205.
- 3. All harmonics and spurious signals were at least 20 dB below the highest emission level within the authorized band as measured with a 100 kHz resolution bandwith.
- 4. The spectrum was scanned from 9kHz to 10<sup>th</sup> harmonic and the worst-case emissions are reported
- 5. There was no harmonics found on frequencies above the fundamental signal frequency.



## Table f.2.b Uniden - Handset without headset Radiated Emissions from Transmitter Channel: 18, Distance: 3.0 m Relariation: VERTICAL

Polarization: VERTICAL						
Frequency	Reading	Correction	Field-strength	Limit	Margin	
(MHz)	(dBmV)	( <b>dB</b> )	(dBmV/m)	(dBmV/m)	( <b>dB</b> )	
125.100	34.49	-12.7	21.7	43.5	21.8	
127.200	37.42	-12.3	25.1	43.5	18.4	
129.300	38.60	-11.9	26.7	43.5	16.8	
131.340	34.14	-11.8	22.4	43.5	21.1	
133.440	37.19	-11.3	25.9	43.5	17.6	
135.480	31.39	-10.8	20.6	43.5	22.9	
137.580	32.91	-10.3	22.6	43.5	20.9	
139.620	31.04	-9.8	21.2	43.5	22.3	
153.780	27.76	-7.6	20.1	43.5	23.4	
160.020	30.32	-6.8	23.5	43.5	20.0	
166.200	35.13	-7.4	27.8	43.5	15.7	
170.340	31.09	-7.9	23.2	43.5	20.3	
172.440	29.37	-8.2	21.2	43.5	22.3	
192.780	27.61	-7.2	20.4	43.5	23.1	
196.920	29.32	-10.9	18.4	43.5	25.1	
268.740	28.73	-6.5	22.3	46.0	23.7	
276.720	28.40	-5.7	22.7	46.0	23.3	
280.860	28.51	-5.7	22.8	46.0	23.2	
285.000	25.98	-5.6	20.3	46.0	25.7	
289.140	28.90	-5.6	23.3	46.0	22.7	
293.280	28.90	-5.6	23.4	46.0	22.6	
301.140	28.77	-5.5	23.3	46.0	22.7	
307.440	26.60	-5.4	21.2	46.0	24.8	
1606.740	20.85	28.1	48.9	54.0	5.1	
5788.766	73.36	34.3	107.7	-	-	

- 1. All spurious signals in the restricted bands specified in §15.205 were below the limits listed in Table 1.
- 2. There was no fundamental signals observed within the restricted bands specified in §15.205.
- 3. All harmonics and spurious signals were at least 20 dB below the highest emission level within the authorized band as measured with a 100 kHz resolution bandwith.
- 4. The spectrum was scanned from 9kHz to 10<sup>th</sup> harmonic and the worst-case emissions are reported
- 5. There was no harmonics found on frequencies above the fundamental signal frequency.



#### Table f.3.

#### Uniden - Handset without headset Radiated Emissions from Transmitter Channel: 18, Distance: 3.0 m Polarization: HORIZONTAL

Polarization: HORIZONTAL						
Frequency	Reading	Correction	Field-strength	Limit	Margin	
(MHz)	(dBmV)	( <b>dB</b> )	(dB <b>ml</b> V/m)	(dB <b>ml</b> /m)	( <b>dB</b> )	
61.560	27.54	-16.8	10.8	40.0	29.2	
63.660	26.38	-17.1	9.3	40.0	30.7	
65.760	29.91	-17.4	12.5	40.0	27.5	
67.800	35.49	-17.7	17.8	40.0	22.2	
69.900	33.11	-18.0	15.1	40.0	24.9	
71.940	33.98	-18.0	16.0	40.0	24.0	
74.040	35.12	-17.9	17.2	40.0	22.8	
76.080	32.65	-17.8	14.9	40.0	25.1	
78.180	38.66	-17.8	20.9	40.0	19.1	
80.220	40.17	-17.7	22.5	40.0	17.5	
82.320	28.19	-17.4	10.8	40.0	29.2	
84.420	27.64	-17.2	10.5	40.0	29.5	
86.460	38.07	-17.1	21.0	40.0	19.0	
88.500	27.83	-16.9	10.9	43.5	32.6	
90.180	29.95	-16.5	13.5	43.5	30.0	
117.180	30.83	-13.7	17.1	43.5	26.4	
120.960	30.17	-13.5	16.7	43.5	26.8	
125.100	28.08	-12.7	15.3	43.5	28.2	
127.200	32.98	-12.3	20.6	43.5	22.9	
129.300	32.05	-11.9	20.2	43.5	23.3	
131.340	29.07	-11.8	17.3	43.5	26.2	
133.440	32.09	-11.3	20.8	43.5	22.7	
166.200	32.17	-7.4	24.8	43.5	18.7	
170.340	28.19	-7.9	20.3	43.5	23.2	
172.440	27.51	-8.2	19.3	43.5	24.2	
186.600	26.38	-7.7	18.6	43.5	24.9	
190.740	26.23	-7.4	18.9	43.5	24.6	
192.840	25.82	-7.2	18.6	43.5	24.9	
196.920	24.47	-10.9	13.6	43.5	29.9	
233.880	26.88	-8.6	18.3	46.0	27.7	
1606.900	19.10	28.1	47.2	54.0	6.9	
5788.926	43.80	34.3	78.1	-	-	

- 1. All spurious signals in the restricted bands specified in §15.205 were below the limits listed in Table 1.
- 2. There was no fundamental signals observed within the restricted bands specified in §15.205.
- 3. All harmonics and spurious signals were at least 20 dB below the highest emission level within the authorized band as measured with a 100 kHz resolution bandwith.
- 4. The spectrum was scanned from 9kHz to 10<sup>th</sup> harmonic and the worst-case emissions are reported
- 5. There was no harmonics found on frequencies above the fundamental signal frequency.



# Table f.4.aUniden - Handset with HeadsetRadiated Emissions from TransmitterChannel: 18, Distance: 3.0 mPolarization: VERTICAL

Polarization: VERTICAL						
Frequency	Reading	Correction	Field-strength	Limit	Margin	
(MHz)	(dBmV)	( <b>dB</b> )	(dB <b>mV</b> /m)	(dBmV/m)	$(\mathbf{d}\mathbf{B})$	
37.280	33.47	-10.8	22.6	40.0	17.4	
55.840	31.64	-15.4	16.3	40.0	23.7	
61.560	33.01	-16.8	16.2	40.0	23.8	
63.660	32.87	-17.1	15.8	40.0	24.2	
65.760	37.10	-17.4	19.7	40.0	20.3	
67.800	42.72	-17.7	25.0	40.0	15.0	
69.900	44.13	-18.0	26.1	40.0	13.9	
71.940	43.05	-18.0	25.1	40.0	14.9	
74.040	46.13	-17.9	28.2	40.0	11.8	
76.080	40.80	-17.8	23.0	40.0	17.0	
78.180	47.40	-17.8	29.6	40.0	10.4	
80.220	47.90	-17.7	30.2	40.0	9.8	
82.320	50.25	-17.4	32.9	40.0	7.1	
84.360	44.11	-17.2	26.9	40.0	13.1	
86.460	48.96	-17.1	31.9	40.0	8.1	
88.500	35.44	-16.9	18.6	43.5	24.9	
90.180	32.31	-16.5	15.8	43.5	27.7	
92.280	29.24	-16.1	13.1	43.5	30.4	
104.760	29.00	-14.7	14.3	43.5	29.2	
108.900	29.54	-14.5	15.1	43.5	28.4	
111.000	31.30	-14.2	17.1	43.5	26.4	
113.040	29.75	-14.1	15.7	43.5	27.8	
115.140	31.91	-13.9	18.0	43.5	25.5	
117.180	31.77	-13.7	18.1	43.5	25.4	
119.280	31.56	-13.6	17.9	43.5	25.6	
120.960	35.22	-13.5	21.7	43.5	21.8	
123.000	30.14	-13.2	17.0	43.5	26.5	

- 1. All spurious signals in the restricted bands specified in §15.205 were below the limits listed in Table 1.
- 2. There was no fundamental signals observed within the restricted bands specified in §15.205.
- 3. All harmonics and spurious signals were at least 20 dB below the highest emission level within the authorized band as measured with a 100 kHz resolution bandwith.
- 4. The spectrum was scanned from 9kHz to 10<sup>th</sup> harmonic and the worst-case emissions are reported
- 5. There was no harmonics found on frequencies above the fundamental signal frequency.



## Table f.4.b Uniden - Handset with Headset Radiated Emissions from Transmitter Channel: 18, Distance: 3.0 m Palariation: VEDTICAL

Polarization: VERTICAL						
Frequency	Reading	Correction	Field-strength	Limit	Margin	
(MHz)	(dB <b>ml</b> V)	( <b>dB</b> )	(dB <b>mV</b> /m)	(dB <b>ml</b> /m)	( <b>dB</b> )	
125.100	34.75	-12.7	22.0	43.5	21.5	
127.200	37.71	-12.3	25.4	43.5	18.1	
129.300	40.51	-11.9	28.7	43.5	14.8	
131.340	36.92	-11.8	25.2	43.5	18.3	
133.440	39.49	-11.3	28.2	43.5	15.3	
135.480	33.93	-10.8	23.1	43.5	20.4	
137.580	34.56	-10.3	24.2	43.5	19.3	
139.620	32.58	-9.8	22.8	43.5	20.7	
153.780	30.20	-7.6	22.6	43.5	20.9	
160.020	30.76	-6.8	23.9	43.5	19.6	
166.200	35.56	-7.4	28.2	43.5	15.3	
170.340	32.20	-7.9	24.3	43.5	19.2	
172.440	29.81	-8.2	21.6	43.5	21.9	
192.780	29.09	-7.2	21.9	43.5	21.6	
196.920	31.33	-10.9	20.4	43.5	23.1	
268.740	29.00	-6.5	22.5	46.0	23.5	
276.720	28.79	-5.7	23.1	46.0	22.9	
280.860	30.12	-5.7	24.4	46.0	21.6	
285.000	28.13	-5.6	22.5	46.0	23.5	
289.140	30.92	-5.6	25.3	46.0	20.7	
293.280	29.46	-5.6	23.9	46.0	22.1	
301.140	29.00	-5.5	23.5	46.0	22.5	
307.440	28.37	-5.4	23.0	46.0	23.0	
1606.740	21.60	28.1	49.7	54.0	4.4	
5788.766	73.71	34.3	108.0	-	-	

- 1. All spurious signals in the restricted bands specified in §15.205 were below the limits listed in Table 1.
- 2. There was no fundamental signals observe d within the restricted bands specified in §15.205.
- 3. All harmonics and spurious signals were at least 20 dB below the highest emission level within the authorized band as measured with a 100 kHz resolution bandwith.
- 4. The spectrum was scanned from 9kHz to 10<sup>th</sup> harmonic and the worst-case emissions are reported
- 5. There was no harmonics found on frequencies above the fundamental signal frequency.



# Table f.5.Uniden - Handset with HeadsetRadiated Emissions from TransmitterChannel: 18, Distance: 3.0 mPolarization: HORIZONTAL

	Polarization: HORIZONTAL						
Frequency	Reading	Correction	Field-strength	Limit	Margin		
(MHz)	(dBmV)	( <b>dB</b> )	(dB <b>ml</b> V/m)	(dBmV/m)	( <b>dB</b> )		
61.560	29.56	-16.8	12.8	40.0	27.2		
63.660	28.71	-17.1	11.7	40.0	28.3		
65.760	31.25	-17.4	13.9	40.0	26.1		
67.800	37.48	-17.7	19.8	40.0	20.2		
69.900	35.91	-18.0	17.9	40.0	22.1		
71.940	34.55	-18.0	16.6	40.0	23.4		
74.040	37.40	-17.9	19.5	40.0	20.5		
76.080	34.34	-17.8	16.6	40.0	23.4		
78.180	41.08	-17.8	23.3	40.0	16.7		
80.220	40.18	-17.7	22.5	40.0	17.5		
82.320	30.42	-17.4	13.0	40.0	27.0		
84.420	28.03	-17.2	10.9	40.0	29.1		
86.460	38.76	-17.1	21.7	40.0	18.3		
88.500	30.16	-16.9	13.3	43.5	30.2		
90.180	30.80	-16.5	14.3	43.5	29.2		
117.180	31.04	-13.7	17.3	43.5	26.2		
120.960	30.60	-13.5	17.1	43.5	26.4		
125.100	29.83	-12.7	17.1	43.5	26.4		
127.200	33.08	-12.3	20.7	43.5	22.8		
129.300	34.93	-11.9	23.1	43.5	20.4		
131.340	31.50	-11.8	19.7	43.5	23.8		
133.440	32.19	-11.3	20.9	43.5	22.6		
166.200	33.20	-7.4	25.8	43.5	17.7		
170.340	30.01	-7.9	22.1	43.5	21.4		
172.440	29.58	-8.2	21.4	43.5	22.1		
186.600	27.80	-7.7	20.1	43.5	23.4		
190.740	27.01	-7.4	19.6	43.5	23.9		
192.840	28.70	-7.2	21.5	43.5	22.0		
196.920	27.27	-10.9	16.4	43.5	27.1		
233.880	27.30	-8.6	18.7	46.0	27.3		
1606.900	20.70	28.1	48.8	54.0	5.3		
5788.926	44.20	34.3	78.5	-	-		

- 1. All spurious signals in the restricted bands specified in §15.205 were below the limits listed in Table 1.
- 2. There was no fundamental signals observed within the restricted bands specified in §15.205.
- 3. All harmonics and spurious signals were at least 20 dB below the highest emission level within the authorized band as measured with a 100 kHz resolution bandwith.
- 4. The spectrum was scanned from 9kHz to 10<sup>th</sup> harmonic and the worst-case emissions are reported
- 5. There was no harmonics found on frequencies above the fundamental signal frequency.



#### Table f.6. Uniden – Base Unit

**Radiated Emissions from Transmitter** 

Channel: 18, Distance: 3.0 m Polarization: VERTICAL

Polarization: VERTICAL						
Frequency	Reading	Correction	Field-strength	Limit	Margin	
(MHz)	(dBmV)	( <b>dB</b> )	(dB <b>ml</b> /m)	(dBmV/m)	( <b>dB</b> )	
30.840	37.10	-10.6	26.5	40.0	13.5	
31.120	38.44	-10.6	27.8	40.0	12.2	
37.500	44.20	-10.8	33.4	40.0	6.6	
37.720	45.49	-10.8	34.6	40.0	5.4	
52.620	48.60	-14.5	34.1	40.0	5.9	
65.640	44.70	-17.4	27.3	40.0	12.7	
74.040	38.30	-17.8	20.5	40.0	19.5	
78.000	37.29	-17.8	19.5	40.0	20.5	
81.240	34.73	-17.7	17.0	40.0	23.0	
86.460	32.23	-17.1	15.2	40.0	24.8	
90.960	25.70	-16.5	9.2	43.5	34.3	
98.520	24.41	-15.2	9.2	43.5	34.3	
111.000	23.89	-14.0	9.9	43.5	33.6	
203.100	27.10	-10.6	16.5	43.5	27.0	
215.220	25.71	-9.5	16.2	43.5	27.3	
381.240	24.25	-3.4	20.8	46.0	25.2	
393.360	25.25	-2.2	23.0	46.0	23.0	
405.780	25.35	-1.5	23.9	46.0	22.1	
412.080	25.01	-1.4	23.6	46.0	22.4	
1000.260	15.60	25.8	41.4	54.0	12.6	
5788.300	63.10	34.3	97.4	-	-	

- 1. All spurious signals in the restricted bands specified in §15.205 were below the limits listed in Table 1.
- 2. There was no fundamental signals observed within the restricted bands specified in §15.205.
- 3. All harmonics and spurious signals were at least 20 dB below the highest emission level within the authorized band as measured with a 100 kHz resolution bandwith.
- 4. The spectrum was scanned from 9kHz to 10<sup>th</sup> harmonic and the worst-case emissions are reported
- 5. There was no harmonics found on frequencies above the fundamental signal frequency.



#### Table f.7.a

#### Uniden – Base Unit Radiated Emissions from Transmitter Channel: 18, Distance: 3.0 m Polarization: HORIZONTAL

FOIAITZAUOII; HOKIZONTAL						
Frequency	Reading	Correction	<b>Field-strength</b>	Limit	Margin	
(MHz)	(dBmV)	( <b>dB</b> )	(dB <b>ml</b> /m)	(dBmV/m)	( <b>dB</b> )	
38.460	34.87	-10.9	24.0	40.0	16.0	
41.040	35.93	-10.9	25.0	40.0	15.0	
52.200	48.51	-14.4	34.2	40.0	5.8	
61.500	39.77	-17.0	22.8	40.0	17.2	
64.920	42.10	-17.4	24.7	40.0	15.3	
74.040	34.37	-17.9	16.5	40.0	23.5	
75.780	34.70	-17.8	16.9	40.0	23.1	
86.460	29.74	-16.9	12.8	40.0	27.2	
98.520	28.32	-15.2	13.1	43.5	30.4	
123.000	32.63	-13.1	19.5	43.5	24.0	
135.480	28.58	-10.8	17.8	43.5	25.7	
147.900	28.36	-8.3	20.0	43.5	23.5	
159.960	26.16	-6.8	19.3	43.5	24.2	
166.200	24.67	-7.3	17.3	43.5	26.2	
172.440	25.77	-8.2	17.6	43.5	25.9	
178.620	27.55	-8.2	19.3	43.5	24.2	
184.500	30.56	-7.8	22.8	43.5	20.7	
190.740	31.55	-7.4	24.2	43.5	19.3	
196.920	26.54	-6.9	19.6	43.5	23.9	
203.160	36.67	-10.6	26.1	43.5	17.4	
209.340	28.81	-10.0	18.8	43.5	24.7	
215.220	32.75	-9.6	23.2	43.5	20.3	
227.640	34.52	-8.6	25.9	46.0	20.1	
240.120	29.88	-8.5	21.4	46.0	24.6	
252.180	29.85	-8.1	21.8	46.0	24.2	
264.600	30.21	-6.8	23.4	46.0	22.6	
270.360	26.50	-6.2	20.3	46.0	25.7	
276.660	32.01	-5.7	26.3	46.0	19.7	

- 1. All spurious signals in the restricted bands specified in §15.205 were below the limits listed in Table 1.
- 2. There was no fundamental signals observed within the restricted bands specified in §15.205.
- 3. All harmonics and spurious signals were at least 20 dB below the highest emission level within the authorized band as measured with a 100 kHz resolution bandwith.
- 4. The spectrum was scanned from 9kHz to 10<sup>th</sup> harmonic and the worst-case emissions are reported
- 5. There was no harmonics found on frequencies above the fundamental signal frequency.



#### Table f.7.b

#### Uniden - Base Unit **Radiated Emissions from Transmitter** Channel: 18, Distance: 3.0 m Polarization: HORIZONTAL

Frequency (MHz)	Reading (dBµ¥)	Correction (dB)	Field-strength (dBµV/m)	Limit (dBµ.V/m)	Margin (dB)
282.900	29.69	-5.7	24.0	46.0	22.0
289.140	31.44	-5.6	25.8	46.0	20.2
295.320	29.87	-5.5	24.3	46.0	21.7
301.140	29.74	-5.5	24.3	46.0	21.7
307.380	30.20	-5.4	24.8	46.0	21.2
313.620	28.62	-5.3	23.3	46.0	22.7
319.860	29.03	-5.3	23.7	46.0	22.3
325.040	25.66	-5.2	20.4	46.0	25.6
331.880	28.11	-5.2	23.0	46.0	23.0
344.400	29.57	-5.0	24.5	46.0	21.5
356.760	32.87	-4.7	28.2	46.0	17.8
368.880	33.55	-4.2	29.3	46.0	16.7
375.060	27.01	-4.0	23.0	46.0	23.0
381.300	37.10	-3.4	33.7	46.0	12.3
387.540	30.91	-2.8	28.1	46.0	17.9
393.360	36.71	-2.2	34.5	46.0	11.5
399.600	29.56	-1.6	28.1	46.0	17.9
405.840	33.51	-1.5	32.0	46.0	14.0
412.020	32.09	-1.4	30.7	46.0	15.3
418.250	33.31	-1.2	32.1	46.0	13.9
424.080	32.32	-1.1	31.2	46.0	14.8
430.320	31.32	-1.0	30.3	46.0	15.7
436.560	32.01	-0.8	31.2	46.0	14.8
442.740	27.84	-0.7	27.2	46.0	18.8
448.980	28.44	-0.5	27.9	46.0	18.1
461.040	28.38	0.0	28.3	46.0	17.7
473.460	26.00	0.5	26.5	46.0	19.5
5788.310	48.70	34.3	83.0	-	-

Notes:

- 1. All spurious signals in the restricted bands specified in §15.205 were below the limits listed in Table 1.
- 2. There was no fundamental signals observed within the restricted bands specified in §15.205.
- 3. All harmonics and spurious signals were at least 2.0 dB below the highest emission level within the authorized band as measured with a 100 kHz resolution bandwith.
- 4. The spectrum was scanned from 9kHz to 10 th harmonic and the worst-case emissions are reported
- 5. There was no harmonics found on frequencies above the fundamental signal frequency.

Test performed by: Kulker Rolenan Date: June, 2002

Conclusion: The unit complies with the requirements.