

Test Method:		FCC Part 15 Subpart C Radiated Emissions, Fundamental & Harmonic Emissions					
Customer:		Quantum Industries			Job No.		R-8568-1
Test Sample:		433.92MHz AM Pulsed Transmitter			Paragraph:		15.231
Model No.:		FW10			FCC ID:		CEXFW10
Operating Mode:		Continuously Transmitting a 433.92MHz Signal					
Technician:		Peter Lananna			Date:		June 2, 2000
Notes:		Test Distance: 3 Meters					
-		Detector: Peak, Unless otherwise specified					
Test Freq.	Antenna Pol./Height	EUT Orientation	Meter Reading	Correction Factor	Corrected Reading	Converted Reading	Peak Limit
MHz	(V/H)/Meters	X / Y / Z	dBuV	dB	dBuV/m	uV/m	uV/m
433.9	H / 1.0	X	88.0	-2.2	85.8	19498.4	110000
	H / 1.0	Y	92.9	-2.2	90.7	34276.8	
	H / 1.0	Z	89.6	-2.2	87.4	23442.3	
	V / 1.0	X	91.6	-2.2	89.4	29512.1	
	V / 2.0	Y	93.9	-2.2	91.7	38459.2	
433.9	V / 2.0	Z	90.7	-2.2	88.5	26607.3	110000
867.8	H / 1.0	X	47.9	6.1	54.0	501.2	11000
	H / 1.0	Y	40.0	6.1	46.1	201.8*	
	H / 1.0	Z	47.3	6.1	53.4	467.7	
	V / 1.5	X	51.5	6.1	57.6	758.6	
	V / 1.0	Y	40.0	6.1	46.1	201.8*	
867.8	V / 1.5	Z	50.9	6.1	57.0	707.9	11000
1301.7	H / 1.0	X	48.8	-5.3	43.5	149.6	500
	H / 1.0	Y	51.1	-5.3	45.8	195.0	
	H / 1.0	Z	53.7	-5.3	48.4	263.0	
	V / 2.0	X	51.1	-5.3	45.8	195.0	
	V / 1.5	Y	47.9	-5.3	42.6	134.9	
1301.7	V / 1.5	Z	48.8	-5.3	43.5	149.6	500
1735.6	H / 1.0	X	39.0	-3.1	35.9	62.4*	11000
	H / 1.0	Y	39.0	-3.1	35.9	62.4*	
	H / 1.0	Z	39.0	-3.1	35.9	62.4*	
	V / 1.0	X	39.0	-3.1	35.9	62.4*	
	V / 1.0	Y	39.0	-3.1	35.9	62.4*	
1735.6	V / 1.0	Z	39.0	-3.1	35.9	62.4*	11000
2169.5	H / 1.0	X	39.0	-1.6	37.4	74.1*	11000
	H / 1.0	Y	39.0	-1.6	37.4	74.1*	
	H / 1.0	Z	39.0	-1.6	37.4	74.1*	
	V / 1.0	X	39.0	-1.6	37.4	74.1*	
	V / 1.0	Y	39.0	-1.6	37.4	74.1*	
2169.5	V / 1.0	Z	39.0	-1.6	37.4	74.1*	11000
	The frequency range was scanned from 30 MHz to 4.5 GHz. All emissions not recorded were more						
	Than 10 dB below the specified limit. Emissions from the EUT do not exceed the specified limits.						
	*=Noise Floor Measurements (Minimum system sensitivity)						



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Notes:		Test Distance: 3 Meters Detector: Peak, unless otherwise specified						
Test Freq.	Antenna Pol./Height	EUT Orientation	Meter Reading	Correction Factor	Corrected Reading	Converted Reading	Peak Limit	
MHz	(V/H)-Meters	X / Y / Z	dBuV	dB	dBuV/m	uV/m	uV/m	
2603.4	H / 1.0	X	39.0	0.6	39.6	95.5*	11000	
	H / 1.0	Y	39.0	0.6	39.6	95.5*		
	H / 1.0	Z	39.0	0.6	39.6	95.5*		
	V / 1.0	X	39.0	0.6	39.6	95.5*		
	V / 1.0	Y	39.0	0.6	39.6	95.5*		
2603.4	V / 1.0	Z	39.0	0.6	39.6	95.5*	11000	
3037.3	H / 1.0	X	39.0	3.1	42.1	127.4*	11000	
	H / 1.0	Y	39.0	3.1	42.1	127.4*		
	H / 1.0	Z	39.0	3.1	42.1	127.4*		
	V / 1.0	X	39.0	3.1	42.1	127.4*		
	V / 1.0	Y	39.0	3.1	42.1	127.4*		
3037.3	V / 1.0	Z	39.0	3.1	42.1	127.4*	11000	
3471.2	H / 1.0	X	39.0	7.1	46.1	201.8*	11000	
	H / 1.0	Y	39.0	7.1	46.1	201.8*		
	H / 1.0	Z	39.0	7.1	46.1	201.8*		
	V / 1.0	X	39.0	7.1	46.1	201.8*		
	V / 1.0	Y	39.0	7.1	46.1	201.8*		
3471.2	V / 1.0	Z	39.0	7.1	46.1	201.8*	11000	
3905.1	H / 1.0	X	39.0	8.9	47.9	248.3*	500	
	H / 1.0	Y	39.0	8.9	47.9	248.3*		
	H / 1.0	Z	39.0	8.9	47.9	248.3*		
	V / 1.0	X	39.0	8.9	47.9	248.3*		
	V / 1.0	Y	39.0	8.9	47.9	248.3*		
3905.1	V / 1.0	Z	39.0	8.9	47.9	248.3*	500	
4339.2	H / 1.0	X	39.0	9.8	48.8	275.4*	500	
	H / 1.0	Y	39.0	9.8	48.8	275.4*		
	H / 1.0	Z	39.0	9.8	48.8	275.4*		
	V / 1.0	X	39.0	9.8	48.8	275.4*		
	V / 1.0	Y	39.0	9.8	48.8	275.4*		
4339.2	V / 1.0	Z	39.0	9.8	48.8	275.4*	500	
	The frequency range was scanned from 30 MHz to 4.5 GHz. All emissions not recorded were more							
	Than 10 dB below the specified limit. Emissions from the EUT do not exceed the specified limits.							
	*=Noise Floor Measurements (Minimum system sensitivity)							



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Operating Mode:		Continuously Transmitting a 433.92MHz Signal						
Technician:		Peter Lananna			Date:		June 2, 2000	
Notes:		Test Distance: 3 Meters			Duty Cycle: .05%			
		Detector: Peak, unless otherwise specified			Duty Cycle Correction: - 46.0dB			
Test Freq.	Antenna Pol./Height	EUT Orientation	Peak Reading	Correction Factor	Corrected Reading	Converted Reading	Avg. Limit	
MHz	(V/H)-Meters	X / Y / Z	dBuV	dB	dBuV/m	uV/m	uV/m	
433.9	H / 1.0	X	85.8	-46.0	39.8	97.7	11000	
	H / 1.0	Y	90.7	-46.0	44.7	171.8		
	H / 1.0	Z	87.4	-46.0	41.4	117.5		
	V / 1.0	X	89.4	-46.0	43.4	147.9		
	V / 2.0	Y	91.7	-46.0	45.7	192.8		
433.9	V / 2.0	Z	88.5	-46.0	42.5	133.4	11000	
867.8	H / 1.0	X	54.0	-46.0	8.0	2.5	1100	
	H / 1.0	Y	46.1	-46.0	0.1	1.0*		
	H / 1.0	Z	53.4	-46.0	7.4	2.3		
	V / 1.5	X	57.6	-46.0	11.6	3.8		
	V / 1.0	Y	46.1	-46.0	0.1	1.0*		
867.8	V / 1.5	Z	57.0	-46.0	11.0	3.5	1100	
1301.7	H / 1.0	X	43.5	-46.0	-2.5	0.7	500	
	H / 1.0	Y	45.8	-46.0	-0.2	1.0		
	H / 1.0	Z	48.4	-46.0	2.4	1.3		
	V / 2.0	X	45.8	-46.0	-0.2	1.0		
	V / 1.5	Y	42.6	-46.0	-3.4	0.7		
1301.7	V / 1.5	Z	43.5	-46.0	-2.5	0.7	500	
1735.6	H / 1.0	X	35.9	-46.0	-10.1	0.3*	1100	
	H / 1.0	Y	35.9	-46.0	-10.1	0.3*		
	H / 1.0	Z	35.9	-46.0	-10.1	0.3*		
	V / 1.0	X	35.9	-46.0	-10.1	0.3*		
	V / 1.0	Y	35.9	-46.0	-10.1	0.3*		
1735.6	V / 1.0	Z	35.9	-46.0	-10.1	0.3*	1100	
2169.5	H / 1.0	X	37.4	-46.0	-8.6	0.4*	1100	
	H / 1.0	Y	37.4	-46.0	-8.6	0.4*		
	H / 1.0	Z	37.4	-46.0	-8.6	0.4*		
	V / 1.0	X	37.4	-46.0	-8.6	0.4*		
	V / 1.0	Y	37.4	-46.0	-8.6	0.4*		
2169.5	V / 1.0	Z	37.4	-46.0	-8.6	0.4*	1100	
	The frequency range was scanned from 30 MHz to 4.5 GHz. All emissions not recorded were more							
	Than 10 dB below the specified limit. Emissions from the EUT do not exceed the specified limits.							
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Notes:		Test Distance: 3 Meters			Duty Cycle: .05%			
		Detector: Peak, unless otherwise specified			Duty Cycle Correction: -46.0 dB			
Test Freq.	Antenna Pol./Height	EUT Orientation	Peak Reading	Correction Factor	Corrected Reading	Converted Reading	Avg. Limit	
MHz	(V/H)-Meters	X / Y / Z	dBuV	dB	dBuV/m	uV/m	uV/m	
2603.4	H / 1.0	X	39.6	-46.0	-6.4	0.5	1100	
	H / 1.0	Y	39.6	-46.0	-6.4	0.5		
	H / 1.0	Z	39.6	-46.0	-6.4	0.5		
	V / 1.0	X	39.6	-46.0	-6.4	0.5		
	V / 1.0	Y	39.6	-46.0	-6.4	0.5		
2603.4	V / 1.0	Z	39.6	-46.0	-6.4	0.5	1100	
3037.3	H / 1.0	X	42.1	-46.0	-3.9	0.6	1100	
	H / 1.0	Y	42.1	-46.0	-3.9	0.6		
	H / 1.0	Z	42.1	-46.0	-3.9	0.6		
	V / 1.0	X	42.1	-46.0	-3.9	0.6		
	V / 1.0	Y	42.1	-46.0	-3.9	0.6		
3037.3	V / 1.0	Z	42.1	-46.0	-3.9	0.6	1100	
3471.2	H / 1.0	X	46.1	-46.0	0.1	1.0	1100	
	H / 1.0	Y	46.1	-46.0	0.1	1.0		
	H / 1.0	Z	46.1	-46.0	0.1	1.0		
	V / 1.0	X	46.1	-46.0	0.1	1.0		
	V / 1.0	Y	46.1	-46.0	0.1	1.0		
3471.2	V / 1.0	Z	46.1	-46.0	0.1	1.0	1100	
3905.1	H / 1.0	X	47.9	-46.0	1.9	1.2	500	
	H / 1.0	Y	47.9	-46.0	1.9	1.2		
	H / 1.0	Z	47.9	-46.0	1.9	1.2		
	V / 1.0	X	47.9	-46.0	1.9	1.2		
	V / 1.0	Y	47.9	-46.0	1.9	1.2		
3905.1	V / 1.0	Z	47.9	-46.0	1.9	1.2	500	
4339.2	H / 1.0	X	48.8	-46.0	2.8	1.4	500	
	H / 1.0	Y	48.8	-46.0	2.8	1.4		
	H / 1.0	Z	48.8	-46.0	2.8	1.4		
	V / 1.0	X	48.8	-46.0	2.8	1.4		
	V / 1.0	Y	48.8	-46.0	2.8	1.4		
4339.2	V / 1.0	Z	48.8	-46.0	2.8	1.4	500	
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