


Test Method:	Spurious Case Radiated Emissions, 10 kHz to 40 GHz, Paragraph 87.139		
Customer:	Telephonics	Job No.	R-9105
Test Sample:	Airborne Radar Transmitter	FCC ID:	02IMCB-RT-1601
Model No.:	RT1601	Serial	T2001
Operating Mode	Continuously transmitting at 9.375 GHz, in "weather" mode.		
Test Specification	FCC Part 87, Paragraph 87.139, Emission Limitations		

Technician:	Peter Lananna <i>[Signature]</i>	Date:	July 18, 2002
Notes:	Test Distance: D=3 M; Limit in dBuV= $20 \log\{[(49.2 \times P)^{1/2} / D] \times 10^6\} - (43+10 \log P)$; P=Power in Watts Detector: Peak P=10KW		

Test Freq.	Antenna Pol./Height	EUT Orientation	Meter Reading	Correction Factor	Corrected Reading	Converted Reading	Limit
Mhz	(V/H) / Meters	Degrees	dBuV	dB	dBuV/m	uv/m	uv/m
.001							16,596
203.9	H/1.0	045	40.8	-7.8	33.0	44.7	
227.3	H/1.0	068	42.6	-6.8	35.8	61.6	
18748.0	V/1.0	180	25.4	32.2	57.6	758.6	
28130.0	V/1.0	180	24.4	35.4	59.9	977.2	
V							V
40000.0							16,596

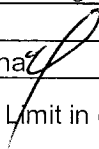
The EUT was scanned from 10 kHz to 40 GHz
 The emissions observed from the EUT do not exceed the specified limits.
 All emissions not recorded were more than 20dB below the specified limit.



Retlif Testing Laboratories

Retlif Job Number R-9105

Test Method:	Spurious Case Radiated Emissions, 10 kHz to 40 GHz, Paragraph 87.139		
Customer:	Telephonics	Job No.	R-9105
Test Sample:	Airborne Radar Transmitter	FCC ID:	02IMCB-RT-1601
Model No.:	RT1601	Serial	T2001
Operating Mode	Continuously transmitting at 9.375 GHz, in "search" mode.		
Test Specification	FCC Part 87, Paragraph 87.139, Emission Limitations		

Technician:	Peter Lananna 	Date:	July 18, 2002
Notes:	Test Distance: D=3 M; Limit in dBuV= 20 log{[(49.2 x P) ^{1/2} /D] x 10 ⁶ } - (43+10 log P); P=Power in Watts Detector: Peak P=10KW		

Test Freq.	Antenna Pol./Height	EUT Orientation	Meter Reading	Correction Factor	Corrected Reading	Converted Reading	Limit
Mhz	(V/H) / Meters	Degrees	dBuV	dB	dBuV/m	uv/m	uv/m
.001							16,596
203.9	H/1.0	090	38.9	-7.8	31.1	35.9	
227.3	H/1.0	068	42.8	-6.8	36.0	63.1	
18748.0	V/1.0	180	25.4	32.2	57.6	758.6	
28130.0	V/1.0	180	24.4	35.4	59.9	977.2	
V							V
40000.0							16,596

The EUT was scanned from 10 kHz to 40 GHz

The emissions observed from the EUT do not exceed the specified limits.

All emissions not recorded were more than 20dB below the specified limit.

	Retlif Testing Laboratories
	Retlif Job Number R-9105

RETLIF TESTING LABORATORIES

TABULAR DATA SHEET

TEST METHOD: Radiated Emissions, Spurious Case

CUSTOMER: Telephonics JOB No.: R-9105

TEST SAMPLE: Airborne Radar Transmitter
FCC ID: 02IMCB-RT-1601

MODEL No.: RT1601 SERIAL No.: T2001

TEST SPECIFICATION: FCC 2.1053 Field Strength Of Spurious Radiation
PARAGRAPH: 2.1053

OPERATING MODE: Continuously transmitting at 9.375GHz in Weather mode.

TECHNICIAN: Peter Lananna *[Signature]* DATE: July 25, 2002

NOTES: Limit (dBm) = P (dBm) - (43 + 10 log P) WEATHER MODE
P=10kW

CENTER FREQUENCY	Antenna Orientation	Analyzer Reading	Signal Generator Reading	Gain above Isotropic	Effective Radiated Power	LIMIT
GHz	V/H/Height	dBµV	dBm	dB(i)	dBm	dBm
0.00001						-13
0.2039	H/1.0-H	40.8	-71.0	2.2	-68.8	
0.2880	H/1.0-H	42.6	-61.0	2.2	-58.8	
18.7480	V/1.0-V	41.0	-56.1	23.4	-32.7	
28.1300	V/1.0-V	40.0	-51.5	23.7	-27.8	
40.0						V -13
The EUT was placed on a tabletop, and the radiated output level was measured with an antenna. After the level was maximized, the EUT was replaced with another antenna and a signal generator. The level of the generator was raised until it matched the level recorded from the EUT and this plus the antenna gain was considered to be the effective radiated power.						

RETLIF TESTING LABORATORIES

TABULAR DATA SHEET

TEST METHOD:	Radiated Emissions, Spurious Case	
CUSTOMER:	Telephonics	JOB No.: R-9105
TEST SAMPLE:	Airborne Radar Transmitter FCC ID: 02IMCB-RT-1601	
MODEL No.:	RT1601	SERIAL No.: T2001
TEST SPECIFICATION:	FCC 2.1053 Field Strength Of Spurious Radiation PARAGRAPH: 2.1053	
OPERATING MODE:	Continuously transmitting at 9.375GHz in Search mode.	
TECHNICIAN:	Peter Lananna	DATE: July 25, 2002
NOTES:	Limit (dBm) = P (dBm) - (43 + 10 log P) SEARCH MODE P=10kW	

CENTER FREQUENCY	Antenna Orientation	Analyzer Reading	Signal Generator Reading	Gain above Isotropic	Effective Radiated Power	LIMIT
GHz	V/H/Height	dB μ V	dBm	dB(i)	dBm	dBm
0.00001						-13
0.2039	H/1.0-H	40.8	-71.0	2.2	-68.8	
0.2880	H/1.0-H	42.8	-61.0	2.2	-58.8	
18.7480	V/1.0-V	41.0	-56.1	23.4	-32.7	
28.1300	V/1.0-V	40.0	-51.5	23.7	-27.8	
40.0						V -13

The EUT was placed on a tabletop, and the radiated output level was measured with an antenna. After the level was maximized, the EUT was replaced with another antenna and a signal generator. The level of the generator was raised until it matched the level recorded from the EUT and this plus the antenna gain was considered to be the effective radiated power.