## TABLE OF CONTENTS

APPLICANT: SIEMENS AG

FCC ID: KR55WK48705

TEST REPORT CONTAINING:

PAGE 1.....RADIATION INTERFERENCE TEST DATA

**EXHIBIT ATTACHMENTS:** 

EXHIBIT 1.....POWER OF ATTORNEY LETTER

EXHIBIT 2-9.....TEST EQUIPMENT

EXHIBIT 10.....DUTY CYCLE PLOT

EXHIBIT 11.....OCCUPIED BANDWIDTH TEST DATA

EXHIBIT 12.....BLOCK DIAGRAM

EXHIBIT 13.....SCHEMATIC

EXHIBIT 14A-14B....PART LIST

EXHIBIT 15A-15E....INSTRUCTION MANUEL

EXHIBIT 16.....FCCID LABEL

EXHIBIT 17.....SKETCH OF FCC ID LABEL LOCATION

EXHIBIT 18......TOP VIEW EXTERNAL PHOTO EXHIBIT 19.....FRONT VIEW EXTERNAL PHOTO

EXHIBIT 20.....REAR VIEW EXTERNAL PHOTO

EXHIBIT 21..... COMPONENT SIDE INTERNAL PHOTO

EXHIBIT 22.......COPPER SIDE INTERNAL PHOTO EXHIBIT 23......INTERNAL PHOTO - NO BOARDS

EXHIBIT 24.....INTERNAL PHOTO- NO BOARDS

APPLICANT: SIEMENS AG FCC ID: KR55WK48705

REPORT #: F:\CUS\S\SIEMENS\SIE210A9.RPT

PAGE: TABLE OF CONTENTS LIST

APPLICANT: SIEMENS AG

FCC ID: KR55WK48705

NAME OF TEST: RADIATION INTERFERENCE

RULES PART NO.: 15.231

## REQUIREMENTS:

Fundamental Frequency	Field Strength of Fundamental	Field Strength of Harmonics and Spurious			
MHz	dBuV	Emissions (dBuV/m @ 3m)			
40.66 to 40.70	67.04	47.04			
70 to 130	61.94	41.94			
130 to 174	61.94 to 71.48	41.94 to 51.48			
174 to 260	71.48	51.48			
260 to 470	71.48 to 81.94	51.48 to 61.94			
470 and above	81.94	61.94			

THE LIMIT FOR AVERAGE FIELD STRENGTH dBuV/m FOR THE FUNDAMENTAL FREQUENCY= 75.62 dBuV/m dBuV/m. NO FUNDAMENTAL IS ALLOWED IN THE RESTRICTED BANDS.

THE LIMIT FOR AVERAGE FIELD STRENGTH dbuV/m FOR THE HARMONICS AND SPURIOUS FREQUENCIES =  $61.94\ dbuV/m$  dbuV/m. SPURIOUS IN THE RESTRICTED BANDS MUST BE LESS THAN 54dbuV/m OR 15.209.

## TEST DATA:

				PEAK	AVERAGE		
EMISSION	METER	COAX		FIELD	FIELD		
FREQ.	READING	LOSS	ACF	STRNGTH	STRNGTH	MARGIN	
MHz	@ 3m dBuV	dВ	dВ	dBuV/m	dBuV/m	dВ	ANT.
315.00	58.44	1.40	15.16	75.00	75.00	0.62	V
630.17	35.63	1.60	20.76	57.99	57.99	3.95	H
945.26	33.82	2.90	24.26	60.98	60.98	0.96	H
1260.34	23.96	1.00	25.04	50.00	50.00	11.94	H
1575.43R	12.70	1.00	26.30	40.00	40.00	14.00	H
1890.51	11.42	1.01	27.56	40.00	40.00	21.94	H

SAMPLE CALCULATION OF LIMIT @ 303 MHz:

(470 - 260) Mhz = 210 MHz

(12500 - 3750)uV/m = 8750 uV/m

8750uV/m/210MHz = 41.67 uV/m/MHz

(303-260)MHz = 43 MHz

43 MHz \* 41.67 uV/m/MHz = 1791.81 uV/m

(1791.81 + 3750)uV/m = 5541.81 uV/m limit @ 303 MHz

The transmitter ceases transmitting when the button is released.

TEST RESULTS: The unit DOES NOT meet the FCC requirements.

PERFORMED BY:\_S. S. SANDERS\_\_\_\_\_ DATE TESTED: DATE

APPLICANT: SIEMENS AG FCC ID: KR55WK48705

REPORT #: F:\CUS\S\SIEMENS\SIE210A9.RPT

PAGE #: 1

APPLICANT: SIEMENS AG

FCC ID: KR55WK48705

## CALCULATION OF DUTY CYCLE:

The period of the pulse train is determined by observing it on an oscilloscope or a spectrum analyzer with zero(0) frequency span. A plot is then made of the pulse train with a sweep time of 100milliseconds. This sweep determines the duration of the pulse train, which in this case is milliseconds. This sweep allows the determination of the number of and type of pulses, i.e. long & short. Plots are then made showing the duration of each type of pulse and its duration. From the 100millisecond Plot the number of a given type of pulse is then multiplied by the duration of that type pulse. This allows the calculation of the amount of time the UUT is on within 100milliseconds. If the pulse train is longer than 100milliseconds then this number is multiplied by 100 to determine the percentage ON TIME. the pulse train is less than 100milliseconds the total on-time is divided by the length of the pulse train and then multiplied by 100 to determine the percentage ON TIME. In this case there were pulses milliseconds long and pulses 7.92milliseconds long for a total 100milliseconds time within on either 100milliseconds or the pulse train. The average field strength is determined by multiplying the peak field strength by the percent on time. In this case the percentage ON time was 100%percent.

APPLICANT: SIEMENS AG FCC ID: KR55WK48705

REPORT #: F:\CUS\S\SIEMENS\SIE210A9.RPT

PAGE #: 4