

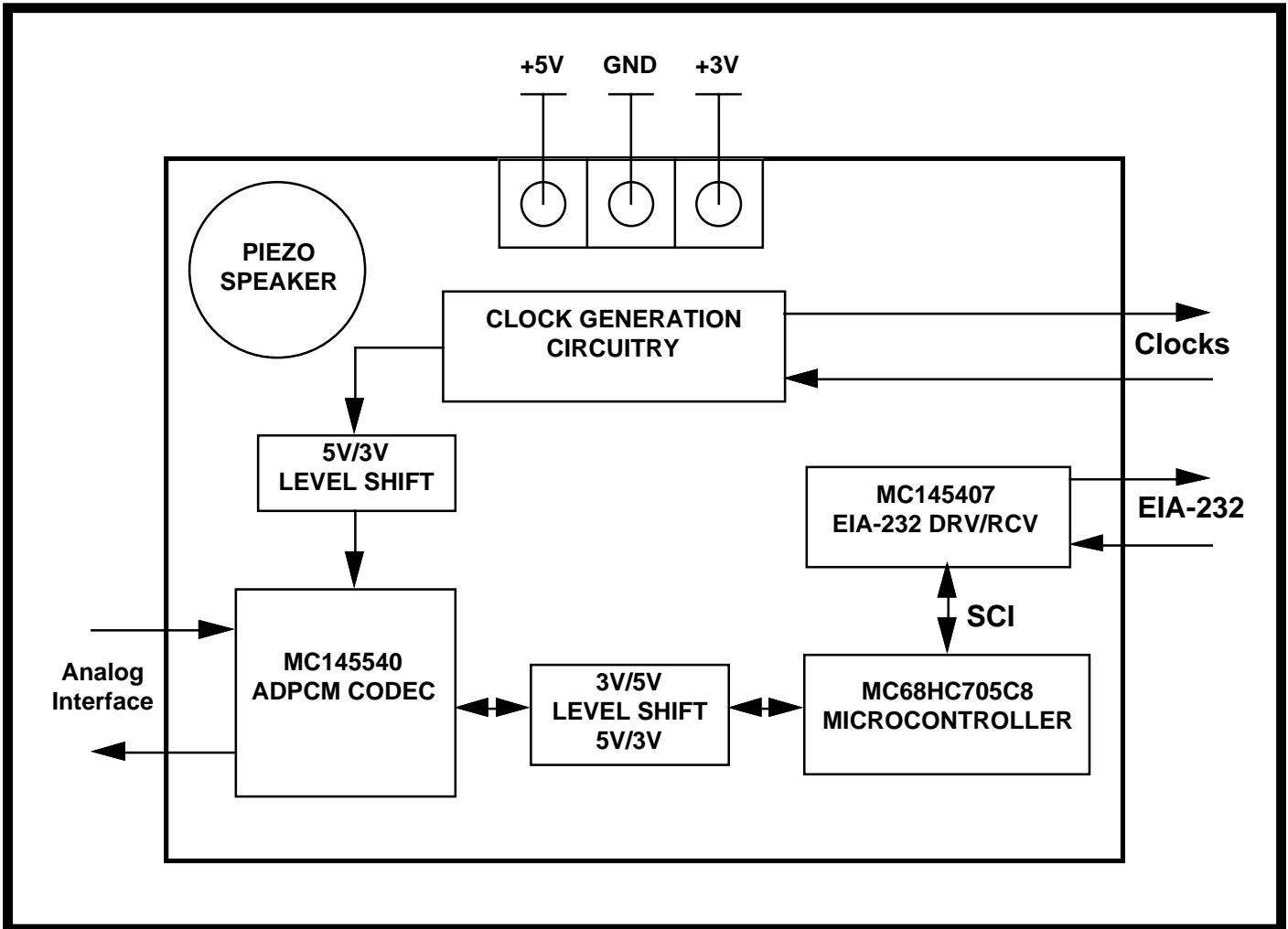
# MC145537EVK TYPICAL PERFORMANCE DATA

A-LAW 64kbps, 32kbps, 24kbps, 16 kbps

Mu-LAW 64kbps, 32kbps, 24kbps, 16 kbps

Data Assembled Using the HP3779 C/D PMAs, MC145537EVK SN 36543,  
 Tested 5-7-92, MDF

Freescale Semiconductor, Inc.



This document contains information on a new product. Specifications and information herein are subject to change without notice.



## A-LAW 64kbps

GAIN		A-A	4/52		
FREQUENCY	(kHz):	1.01			
LEVEL	(dBm0):	0.0			
RX FILTER:		1			
	(0=NONE 1=40Hz)				
LOWER LIMIT	(dB):	-0.50			
UPPER LIMIT	(dB):	0.50			
CHAN				MEASUREMENT RESULTS	*IF FAIL
				RESULT (dB):	0.01

IDLE CHAN NOISE PSOPH A-A		A-A	4/53		
UPPER LIMIT	(dBm0p):	-65.0			
CHAN				MEASUREMENT RESULTS	*IF FAIL
				RESULT:	-73.0

QUANT DIST		-noise	A-A	4/54		
CHAN:	LEVEL	(dBm0)	LOWER LIMIT	(dB)	MEASUREMENT RESULTS	*IF FAIL
	-55.0		12.6		RESULT (dB):	14.9
					TX LEVEL (dBm0):	-55.00
	-50.0		17.6		RESULT (dB):	19.8
					TX LEVEL (dBm0):	-50.02
	-45.0		22.6		RESULT (dB):	24.8
					TX LEVEL (dBm0):	-45.02
	-40.0		27.6		RESULT (dB):	30.0
					TX LEVEL (dBm0):	-39.95
	-34.0		32.2		RESULT (dB):	34.9
					TX LEVEL (dBm0):	-34.02
	-27.0		33.9		RESULT (dB):	37.8
					TX LEVEL (dBm0):	-27.04
	-25.0		33.9		RESULT (dB):	37.9
					TX LEVEL (dBm0):	-24.95
	-20.0		33.9		RESULT (dB):	38.3
					TX LEVEL (dBm0):	-19.99
	-15.0		33.9		RESULT (dB):	38.5
					TX LEVEL (dBm0):	-14.99
	-10.0		33.9		RESULT (dB):	38.3
					TX LEVEL (dBm0):	-10.03
	-6.0		33.9		RESULT (dB):	37.8
					TX LEVEL (dBm0):	-6.02
	-3.0		26.3		RESULT (dB):	30.4
					TX LEVEL (dBm0):	-3.00

## A-LAW 64kbps (continued)

GAIN v LEVEL - noise A-A 4/55

REF LEVEL (dBm0):		-10.0			
LIMITS (dB)					
CHAN:	LEVEL (dBm0)	LOWER	UPPER	MEASUREMENT RESULTS	*IF FAIL
	-60.0	-1.00	1.00	RESULT (dB):	0.13
	-55.0	-0.50	0.50	RESULT (dB):	-0.05
	-50.0	-0.50	0.50	RESULT (dB):	-0.01
	-45.0	-0.50	0.50	RESULT (dB):	-0.02
	-40.0	-0.50	0.50	RESULT (dB):	0.01
	-35.0	-0.50	0.50	RESULT (dB):	0.01
	-30.0	-0.50	0.50	RESULT (dB):	0.03
	-25.0	-0.50	0.50	RESULT (dB):	0.01
	-20.0	-0.50	0.50	RESULT (dB):	0.02
	-15.0	-0.50	0.50	RESULT (dB):	0.02
	-10.0	-0.50	0.50	RESULT (dB):	0.01

GAIN v LEVEL - tone A-A 4/56

FREQUENCY (kHz):		0.81			
REF LEVEL (dBm0):		-10.0			
RX FILTER:		1 (0=NONE 1=40Hz 2=3kHz)			
LIMITS (dB)					
CHAN:	LEVEL (dBm0)	LOWER	UPPER	MEASUREMENT RESULTS	*IF FAIL
	-10.0	-0.50	0.50	RESULT (dB):	0.00
	-5.0	-0.50	0.50	RESULT (dB):	-0.01
	0.0	-0.50	0.50	RESULT (dB):	-0.06
	3.0	-0.50	0.50	RESULT (dB):	-0.32

QUANT DIST - tone A-A 4/57

FREQUENCY (kHz):		0.81			
CHAN:	LEVEL (dBm0)	LOWER LIMIT (dB)	MEASUREMENT RESULTS	*IF FAIL	
	-45.0	22.0	RESULT (dB):	26.9	
			TX LEVEL (dBm0):	-45.00	
	-40.0	27.0	RESULT (dB):	31.8	
			TX LEVEL (dBm0):	-40.01	
	-35.0	30.0	RESULT (dB):	36.7	
			TX LEVEL (dBm0):	-35.03	
	-30.0	33.0	RESULT (dB):	38.9	
			TX LEVEL (dBm0):	-30.04	
	-25.0	33.0	RESULT (dB):	39.8	
			TX LEVEL (dBm0):	-25.03	
	-20.0	33.0	RESULT (dB):	40.0	
			TX LEVEL (dBm0):	-20.04	
	-15.0	33.0	RESULT (dB):	41.2	
			TX LEVEL (dBm0):	-14.97	
	-10.0	33.0	RESULT (dB):	42.2	
			TX LEVEL (dBm0):	-9.98	
	-5.0	33.0	RESULT (dB):	40.0	
			TX LEVEL (dBm0):	-5.01	
	-0.0	33.0	RESULT (dB):	39.1	
			TX LEVEL (dBm0):	-0.02	

## A-LAW 64kbps (continued)

GAIN v FREQUENCY                      A-A              4/58

REF FREQUENCY (kHz):                      0.81  
 LEVEL (dBm0):                              0.0  
 RX FILTER:                                  1 (0=NONE 1=40Hz)

CHAN:	LEVEL (dBm0)	LIMITS (dB)		UPPERMEASUREMENT RESULTS *IF FAIL
		LOWER	UPPER	
	0.06	*****	-22.00	RESULT (dB): -28.76
	0.21	*****	0.50	RESULT (dB): -0.50
	0.31	-0.50	0.50	RESULT (dB): -0.01
	0.61	-0.50	0.50	RESULT (dB): -0.02
	0.91	-0.50	0.50	RESULT (dB): 0.01
	1.21	-0.50	0.50	RESULT (dB): 0.04
	1.51	-0.50	0.50	RESULT (dB): 0.09
	1.81	-0.50	0.50	RESULT (dB): 0.12
	2.11	-0.50	0.50	RESULT (dB): 0.09
	2.41	-0.50	0.50	RESULT (dB): -0.01
	2.71	-0.50	0.50	RESULT (dB): -0.12
	2.99	-0.50	0.50	RESULT (dB): -0.01
	3.39	-1.80	0.50	RESULT (dB): -0.94
	3.59	*****	0.50	RESULT (dB): -7.02
	3.98	*****	-28.00	RESULT (dB): -31.60

**A-LAW 32kbps**

GAIN		A-A	4/52		
FREQUENCY	(kHz):	1.01			
LEVEL	(dBm0):	0.0			
RX FILTER:		1			
	(0=NONE 1=40Hz)				
LOWER LIMIT	(dB):	-0.50			
UPPER LIMIT	(dB):	0.50			
CHAN				MEASUREMENT RESULTS	*IF FAIL
				RESULT (dB):	0.01

IDLE CHAN NOISE PSOPH A-A		A-A	4/53		
UPPER LIMIT	(dBm0p):	-65.0			
CHAN				MEASUREMENT RESULTS	*IF FAIL
				RESULT:	-73.5

QUANT DIST		-noise	A-A	4/54		
CHAN:	LEVEL	(dBm0)	LOWER LIMIT	(dB)	MEASUREMENT RESULTS	*IF FAIL
	-55.0		12.6		RESULT (dB):	14.8
					TX LEVEL (dBm0):	-55.00
	-50.0		17.6		RESULT (dB):	19.7
					TX LEVEL (dBm0):	-50.02
	-45.0		22.6		RESULT (dB):	24.6
					TX LEVEL (dBm0):	-45.02
	-40.0		27.6		RESULT (dB):	29.6
					TX LEVEL (dBm0):	-39.95
	-34.0		32.2		RESULT (dB):	34.0
					TX LEVEL (dBm0):	-34.02
	-27.0		33.9		RESULT (dB):	36.7
					TX LEVEL (dBm0):	-27.04
	-25.0		33.9		RESULT (dB):	36.8
					TX LEVEL (dBm0):	-24.95
	-20.0		33.9		RESULT (dB):	37.4
					TX LEVEL (dBm0):	-19.99
	-15.0		33.9		RESULT (dB):	37.6
					TX LEVEL (dBm0):	-15.00
	-10.0		33.9		RESULT (dB):	37.3
					TX LEVEL (dBm0):	-10.03
	-6.0		33.9		RESULT (dB):	36.7
					TX LEVEL (dBm0):	-6.02
	-3.0		26.3		RESULT (dB):	29.7
					TX LEVEL (dBm0):	-3.00

## A-LAW 32kbps (continued)

GAIN v LEVEL - noise A-A 4/55

REF LEVEL (dBm0):		-10.0			
		LIMITS (dB)			
CHAN:	LEVEL (dBm0)	LOWER	UPPER	MEASUREMENT RESULTS	*IF FAIL
	-60.0	-1.00	1.00	RESULT (dB):	0.09
	-55.0	-0.50	0.50	RESULT (dB):	0.03
	-50.0	-0.50	0.50	RESULT (dB):	-0.04
	-45.0	-0.50	0.50	RESULT (dB):	0.04
	-40.0	-0.50	0.50	RESULT (dB):	0.03
	-35.0	-0.50	0.50	RESULT (dB):	0.02
	-30.0	-0.50	0.50	RESULT (dB):	0.02
	-25.0	-0.50	0.50	RESULT (dB):	0.03
	-20.0	-0.50	0.50	RESULT (dB):	0.03
	-15.0	-0.50	0.50	RESULT (dB):	0.03
	-10.0	-0.50	0.50	RESULT (dB):	0.02

GAIN v LEVEL - tone A-A 4/56

FREQUENCY (kHz):		0.81			
REF LEVEL (dBm0):		-10.0			
RX FILTER:		1 (0=NONE 1=40Hz 2=3kHz)			
		LIMITS (dB)			
CHAN:	LEVEL (dBm0)	LOWER	UPPER	MEASUREMENT RESULTS	*IF FAIL
	-10.0	-0.50	0.50	RESULT (dB):	0.00
	-5.0	-0.50	0.50	RESULT (dB):	0.00
	0.0	-0.50	0.50	RESULT (dB):	-0.05
	3.0	-0.50	0.50	RESULT (dB):	-0.33

QUANT DIST - tone A-A 4/57

FREQUENCY (kHz):		0.81			
CHAN:	LEVEL (dBm0)	LOWER LIMIT (dB)	MEASUREMENT RESULTS	*IF FAIL	
	-45.0	22.0	RESULT (dB):	26.9	
			TX LEVEL (dBm0):	-45.00	
	-40.0	27.0	RESULT (dB):	30.5	
			TX LEVEL (dBm0):	-40.01	
	-35.0	30.0	RESULT (dB):	33.1	
			TX LEVEL (dBm0):	-35.03	
	-30.0	33.0	RESULT (dB):	35.9	
			TX LEVEL (dBm0):	-30.04	
	-25.0	33.0	RESULT (dB):	36.7	
			TX LEVEL (dBm0):	-25.03	
	-20.0	33.0	RESULT (dB):	36.8	
			TX LEVEL (dBm0):	-20.04	
	-15.0	33.0	RESULT (dB):	37.0	
			TX LEVEL (dBm0):	-14.97	
	-10.0	33.0	RESULT (dB):	38.0	
			TX LEVEL (dBm0):	-9.98	
	-5.0	33.0	RESULT (dB):	37.0	
			TX LEVEL (dBm0):	-5.01	
	-0.0	33.0	RESULT (dB):	36.1	
			TX LEVEL (dBm0):	-0.02	



## A-LAW 24kbps

GAIN		A-A	4/52		
FREQUENCY	(kHz):	1.01			
LEVEL	(dBm0):	0.0			
RX FILTER:		1			
	(0=NONE 1=40Hz)				
LOWER LIMIT	(dB):	-0.50			
UPPER LIMIT	(dB):	0.50			
CHAN				MEASUREMENT RESULTS	*IF FAIL
				RESULT (dB):	0.03

IDLE CHAN NOISE PSOPH A-A		A-A	4/53		
UPPER LIMIT	(dBm0p):	-65.0			
CHAN				MEASUREMENT RESULTS	*IF FAIL
				RESULT:	-68.7

QUANT DIST		-noise	A-A	4/54		
CHAN:	LEVEL	(dBm0)	LOWER LIMIT	(dB)	MEASUREMENT RESULTS	*IF FAIL
	-55.0		12.6		RESULT (dB):	12.2
					TX LEVEL (dBm0):	-55.00
	-50.0		17.6		RESULT (dB):	16.3
					TX LEVEL (dBm0):	-50.02
	-45.0		22.6		RESULT (dB):	20.5
					TX LEVEL (dBm0):	-45.02
	-40.0		27.6		RESULT (dB):	24.7
					TX LEVEL (dBm0):	-39.95
	-34.0		32.2		RESULT (dB):	28.1
					TX LEVEL (dBm0):	-34.02
	-27.0		33.9		RESULT (dB):	31.2
					TX LEVEL (dBm0):	-27.04
	-25.0		33.9		RESULT (dB):	31.5
					TX LEVEL (dBm0):	-24.95
	-20.0		33.9		RESULT (dB):	32.5
					TX LEVEL (dBm0):	-19.99
	-15.0		33.9		RESULT (dB):	33.2
					TX LEVEL (dBm0):	-15.00
	-10.0		33.9		RESULT (dB):	33.2
					TX LEVEL (dBm0):	-10.03
	-6.0		33.9		RESULT (dB):	33.2
					TX LEVEL (dBm0):	-6.02
	-3.0		26.3		RESULT (dB):	29.3
					TX LEVEL (dBm0):	-3.00



## A-LAW 24kbps (continued)

GAIN v LEVEL - noise A-A 4/55

REF LEVEL (dBm0):		-10.0			
		LIMITS (dB)			
CHAN:	LEVEL (dBm0)	LOWER	UPPER	MEASUREMENT RESULTS	*IF FAIL
	-60.0	-1.00	1.00	RESULT (dB):	-0.15
	-55.0	-0.50	0.50	RESULT (dB):	-0.14
	-50.0	-0.50	0.50	RESULT (dB):	-0.05
	-45.0	-0.50	0.50	RESULT (dB):	-0.06
	-40.0	-0.50	0.50	RESULT (dB):	-0.04
	-35.0	-0.50	0.50	RESULT (dB):	-0.01
	-30.0	-0.50	0.50	RESULT (dB):	0.01
	-25.0	-0.50	0.50	RESULT (dB):	0.00
	-20.0	-0.50	0.50	RESULT (dB):	0.02
	-15.0	-0.50	0.50	RESULT (dB):	0.01
	-10.0	-0.50	0.50	RESULT (dB):	-0.01

GAIN v LEVEL - tone A-A 4/56

FREQUENCY (kHz):		0.81			
REF LEVEL (dBm0):		-10.0			
RX FILTER:		1 (0=NONE 1=40Hz 2=3kHz)			
		LIMITS (dB)			
CHAN:	LEVEL (dBm0)	LOWER	UPPER	MEASUREMENT RESULTS	*IF FAIL
	-10.0	-0.50	0.50	RESULT (dB):	-0.01
	-5.0	-0.50	0.50	RESULT (dB):	0.01
	0.0	-0.50	0.50	RESULT (dB):	-0.05
	3.0	-0.50	0.50	RESULT (dB):	-0.35

QUANT DIST - tone A-A 4/57

FREQUENCY (kHz):		0.81			
CHAN:	LEVEL (dBm0)	LOWER LIMIT (dB)	MEASUREMENT RESULTS	*IF FAIL	
	-45.0	22.0	RESULT (dB):	21.9	*Lower
			TX LEVEL (dBm0):	-45.00	
	-40.0	27.0	RESULT (dB):	25.9	*Lower
			TX LEVEL (dBm0):	-40.1	
	-35.0	30.0	RESULT (dB):	28.3	*Lower
			TX LEVEL (dBm0):	35.03	
	-30.0	33.0	RESULT (dB):	29.0	*Lower
			TX LEVEL (dBm0):	-30.04	
	-25.0	33.0	RESULT (dB):	28.9	*Lower
			TX LEVEL (dBm0):	-25.03	
	-20.0	33.0	RESULT (dB):	29.3	*Lower
			TX LEVEL (dBm0):	-20.04	
	-15.0	33.0	RESULT (dB):	29.7	*Lower
			TX LEVEL (dBm0):	-14.97	
	-10.0	33.0	RESULT (dB):	30.6	*Lower
			TX LEVEL (dBm0):	-9.98	
	-5.0	33.0	RESULT (dB):	20.2	*Lower
			TX LEVEL (dBm0):	-5.01	
	-0.0	33.0	RESULT (dB):	29.7	*Lower
			TX LEVEL (dBm0):	-0.02	



## A-LAW CCITT G.726 16kbps

GAIN		A-A	4/52		
-----					
FREQUENCY	(kHz):	1.01			
LEVEL	(dBm0):	0.0			
RX FILTER:		1			
	(0=NONE 1=40Hz)				
LOWER LIMIT	(dB):	-0.50			
UPPER LIMIT	(dB):	0.50			
CHAN				MEASUREMENT RESULTS	*IF FAIL
-----					
				RESULT (dB):	0.01

IDLE CHAN NOISE PSOPH A-A		4/53			
-----					
-----					
UPPER LIMIT	(dBm0p):	-65.0			
CHAN				MEASUREMENT RESULTS	*IF FAIL
-----					
				RESULT:	-68.4

QUANT DIST		-noise	A-A	4/54		
-----						
-----						
CHAN:	LEVEL	(dBm0)	LOWER LIMIT	(dB)	MEASUREMENT RESULTS	*IF FAIL
-----						
	-55.0		12.6		RESULT (dB):	8.8 *Lower
					TX LEVEL (dBm0):	-55.00
	-50.0		17.6		RESULT (dB):	12.0 *Lower
					TX LEVEL (dBm0):	-50.02
	-45.0		22.6		RESULT (dB):	14.4 *Lower
					TX LEVEL (dBm0):	-45.02
	-40.0		27.6		RESULT (dB):	16.7 *Lower
					TX LEVEL (dBm0):	-39.95
	-34.0		32.2		RESULT (dB):	18.5 *Lower
					TX LEVEL (dBm0):	-34.02
	-27.0		33.9		RESULT (dB):	20.6 *Lower
					TX LEVEL (dBm0):	-27.04
	-25.0		33.9		RESULT (dB):	20.9 *Lower
					TX LEVEL (dBm0):	-24.95
	-20.0		33.9		RESULT (dB):	22.2 *Lower
					TX LEVEL (dBm0):	-19.99
	-15.0		33.9		RESULT (dB):	23.3 *Lower
					TX LEVEL (dBm0):	-15.00
	-10.0		33.9		RESULT (dB):	24.1 *Lower
					TX LEVEL (dBm0):	-10.03
	-6.0		33.9		RESULT (dB):	24.4 *Lower
					TX LEVEL (dBm0):	-6.02
	-3.0		26.3		RESULT (dB):	24.2 *Lower
					TX LEVEL (dBm0):	-3.00

## A-LAW CCITT G.726 16kbps (Continued)

GAIN v LEVEL - noise A-A 4/55

REF LEVEL (dBm0):		LIMITS (dB)			
-10.0		LOWER	UPPER	MEASUREMENT RESULTS	*IF FAIL
CHAN:	LEVEL (dBm0)				
	-60.0	-1.00	1.00	RESULT (dB):	-0.13
	-55.0	-0.50	0.50	RESULT (dB):	-0.23
	-50.0	-0.50	0.50	RESULT (dB):	-0.29
	-45.0	-0.50	0.50	RESULT (dB):	-0.22
	-40.0	-0.50	0.50	RESULT (dB):	-0.10
	-35.0	-0.50	0.50	RESULT (dB):	-0.03
	-30.0	-0.50	0.50	RESULT (dB):	0.05
	-25.0	-0.50	0.50	RESULT (dB):	0.05
	-20.0	-0.50	0.50	RESULT (dB):	0.07
	-15.0	-0.50	0.50	RESULT (dB):	0.00
	-10.0	-0.50	0.50	RESULT (dB):	0.04

GAIN v LEVEL - tone A-A 4/56

FREQUENCY (kHz):		LIMITS (dB)			
0.81		LOWER	UPPER	MEASUREMENT RESULTS	*IF FAIL
REF LEVEL (dBm0):					
-10.0					
RX FILTER:		(0=NONE 1=40Hz 2=3kHz)			
CHAN:	LEVEL (dBm0)				
	-10.0	-0.50	0.50	RESULT (dB):	0.01
	-5.0	-0.50	0.50	RESULT (dB):	0.01
	0.0	-0.50	0.50	RESULT (dB):	-0.10
	3.0	-0.50	0.50	RESULT (dB):	-0.39

QUANT DIST - tone A-A 4/57

FREQUENCY (kHz):		LIMITS (dB)			
0.81		LOWER	LIMIT	MEASUREMENT RESULTS	*IF FAIL
CHAN:	LEVEL (dBm0)				
	-45.0	22.0		RESULT (dB):	16.9
				TX LEVEL (dBm0):	-45.00
	-40.0	27.0		RESULT (dB):	18.5
				TX LEVEL (dBm0):	-40.01
	-35.0	30.0		RESULT (dB):	20.9
				TX LEVEL (dBm0):	-35.04
	-30.0	33.0		RESULT (dB):	22.2
				TX LEVEL (dBm0):	-30.04
	-25.0	33.0		RESULT (dB):	24.0
				TX LEVEL (dBm0):	-25.03
	-20.0	33.0		RESULT (dB):	24.5
				TX LEVEL (dBm0):	-20.04
	-15.0	33.0		RESULT (dB):	26.1
				TX LEVEL (dBm0):	-14.97
	-10.0	33.0		RESULT (dB):	27.2
				TX LEVEL (dBm0):	-9.98
	-5.0	33.0		RESULT (dB):	27.1
				TX LEVEL (dBm0):	-5.01
	-0.0	33.0		RESULT (dB):	26.9
				TX LEVEL (dBm0):	-0.02



## A-LAW Motorola 16kbps

GAIN		A-A	4/52		
-----					
FREQUENCY	(kHz):	1.01			
LEVEL	(dBm0):	0.0			
RX FILTER:		1			
	(0=NONE 1=40Hz)				
LOWER LIMIT	(dB):	-0.50			
UPPER LIMIT	(dB):	0.50			
CHAN				MEASUREMENT RESULTS	*IF FAIL
-----					
				RESULT (dB):	0.01

IDLE CHAN NOISE PSOPH A-A		A-A	4/53		
-----					
-----					
UPPER LIMIT	(dBm0p):	-65.0			
CHAN				MEASUREMENT RESULTS	*IF FAIL
-----					
				RESULT:	-68.2

QUANT DIST		-noise	A-A	4/54		
-----						
-----						
CHAN:	LEVEL	(dBm0)	LOWER LIMIT	(dB)	MEASUREMENT RESULTS	*IF FAIL
	-55.0		12.6		RESULT (dB):	8.5 *Lower
					TX LEVEL (dBm0):	-55.00
	-50.0		17.6		RESULT (dB):	11.9 *Lower
					TX LEVEL (dBm0):	-50.02
	-45.0		22.6		RESULT (dB):	14.8 *Lower
					TX LEVEL (dBm0):	-45.02
	-40.0		27.6		RESULT (dB):	17.5 *Lower
					TX LEVEL (dBm0):	-39.95
	-34.0		32.2		RESULT (dB):	19.3 *Lower
					TX LEVEL (dBm0):	-34.02
	-27.0		33.9		RESULT (dB):	21.8 *Lower
					TX LEVEL (dBm0):	-27.04
	-25.0		33.9		RESULT (dB):	23.0 *Lower
					TX LEVEL (dBm0):	-24.95
	-20.0		33.9		RESULT (dB):	24.3 *Lower
					TX LEVEL (dBm0):	-19.99
	-15.0		33.9		RESULT (dB):	25.6 *Lower
					TX LEVEL (dBm0):	-15.00
	-10.0		33.9		RESULT (dB):	26.8 *Lower
					TX LEVEL (dBm0):	-10.03
	-6.0		33.9		RESULT (dB):	27.0 *Lower
					TX LEVEL (dBm0):	-6.02
	-3.0		26.3		RESULT (dB):	25.7 *Lower
					TX LEVEL (dBm0):	-3.00

## A-LAW Motorola 16kbps (Continued)

GAIN v LEVEL - noise A-A 4/55

REF LEVEL (dBm0):		-10.0			
		LIMITS (dB)			
CHAN:	LEVEL (dBm0)	LOWER	UPPER	MEASUREMENT RESULTS	*IF FAIL
	-60.0	-1.00	1.00	RESULT (dB):	0.05
	-55.0	-0.50	0.50	RESULT (dB):	-0.11
	-50.0	-0.50	0.50	RESULT (dB):	-0.07
	-45.0	-0.50	0.50	RESULT (dB):	-0.22
	-40.0	-0.50	0.50	RESULT (dB):	-0.21
	-35.0	-0.50	0.50	RESULT (dB):	0.00
	-30.0	-0.50	0.50	RESULT (dB):	-0.04
	-25.0	-0.50	0.50	RESULT (dB):	-0.03
	-20.0	-0.50	0.50	RESULT (dB):	0.02
	-15.0	-0.50	0.50	RESULT (dB):	0.01
	-10.0	-0.50	0.50	RESULT (dB):	0.03

GAIN v LEVEL - tone A-A 4/56

FREQUENCY (kHz):		0.81			
REF LEVEL (dBm0):		-10.0			
RX FILTER:		1 (0=NONE 1=40Hz 2=3kHz)			
		LIMITS (dB)			
CHAN:	LEVEL (dBm0)	LOWER	UPPER	MEASUREMENT RESULTS	*IF FAIL
	-10.0	-0.50	0.50	RESULT (dB):	0.02
	-5.0	-0.50	0.50	RESULT (dB):	-0.01
	0.0	-0.50	0.50	RESULT (dB):	-0.05
	3.0	-0.50	0.50	RESULT (dB):	-0.30

QUANT DIST - tone A-A 4/57

FREQUENCY (kHz):		0.81			
CHAN:	LEVEL (dBm0)	LOWER LIMIT (dB)	MEASUREMENT RESULTS	*IF FAIL	
	-45.0	22.0	RESULT (dB):	15.0	*Lower
			TX LEVEL (dBm0):	-45.00	
	-40.0	27.0	RESULT (dB):	18.2	*Lower
			TX LEVEL (dBm0):	-40.01	
	-35.0	30.0	RESULT (dB):	20.9	*Lower
			TX LEVEL (dBm0):	-35.04	
	-30.0	33.0	RESULT (dB):	23.3	*Lower
			TX LEVEL (dBm0):	-30.04	
	-25.0	33.0	RESULT (dB):	25.0	*Lower
			TX LEVEL (dBm0):	-25.03	
	-20.0	33.0	RESULT (dB):	26.8	*Lower
			TX LEVEL (dBm0):	-20.04	
	-15.0	33.0	RESULT (dB):	27.8	*Lower
			TX LEVEL (dBm0):	-14.97	
	-10.0	33.0	RESULT (dB):	28.0	*Lower
			TX LEVEL (dBm0):	-9.98	
	-5.0	33.0	RESULT (dB):	27.2	*Lower
			TX LEVEL (dBm0):	-5.01	
	-0.0	33.0	RESULT (dB):	26.0	*Lower
			TX LEVEL (dBm0):	-0.02	





**MU-LAW 64kbps**

GAIN		A-A	4/52		
-----					
FREQUENCY	(kHz):	1.01			
LEVEL	(dBm0):	0.0			
RX FILTER:		1			
	(0=NONE 1=40Hz)				
LOWER LIMIT	(dB):	-0.50			
UPPER LIMIT	(dB):	0.50			
CHAN				MEASUREMENT RESULTS	*IF FAIL
-----					
				RESULT (dB):	0.01

IDLE CHAN NOISE C-MES		A-A	4/53		
-----					
UPPER LIMIT	(dBmCO):	23.0			
CHAN				MEASUREMENT RESULTS	*IF FAIL
-----					
				RESULT:	14.5

QUANT DIST		-tone	A-A	4/54		
-----						
FREQUENCY	(KHZ):	1.01				
CHAN:	LEVEL (dBm0)	LOWER LIMIT (dB)	MEASUREMENT RESULTS	*IF FAIL		
-----						
	-45.0	22.0	RESULT (dB):	29.0		
			TX LEVEL (dBm0):	-45.00		
	-40.0	27.0	RESULT (dB):	33.3		
			TX LEVEL (dBm0):	-40.01		
	-35.0	30.0	RESULT (dB):	35.8		
			TX LEVEL (dBm0):	-35.04		
	-30.0	33.0	RESULT (dB):	38.4		
			TX LEVEL (dBm0):	-29.95		
	-25.0	33.0	RESULT (dB):	39.6		
			TX LEVEL (dBm0):	-25.04		
	-20.0	33.0	RESULT (dB):	40.0		
			TX LEVEL (dBm0):	-19.95		
	-15.0	33.0	RESULT (dB):	41.6		
			TX LEVEL (dBm0):	-14.97		
	-10.0	33.0	RESULT (dB):	42.1		
			TX LEVEL (dBm0):	-9.97		
	-5.0	33.0	RESULT (dB):	40.8		
			TX LEVEL (dBm0):	-5.01		
	0.0	33.0	RESULT (dB):	39.4		
			TX LEVEL (dBm0):	-0.01		



## MU-LAW 32kbps

GAIN		A-A	4/52		
-----					
FREQUENCY	(kHz):	1.01			
LEVEL	(dBm0):	0.0			
RX FILTER:		1			
	(0=NONE 1=40Hz)				
LOWER LIMIT	(dB):	-0.50			
UPPER LIMIT	(dB):	0.50			
CHAN				MEASUREMENT RESULTS	*IF FAIL
-----					
				RESULT (dB):	0.01

IDLE CHAN NOISE C-MES A-A		4/53			
-----					
UPPER LIMIT	(dBmCO):	23.0			
CHAN				MEASUREMENT RESULTS	*IF FAIL
-----					
				RESULT:	15.0

QUANT DIST		-tone	A-A	4/54		
-----						
FREQUENCY (kHz):		1.01				
CHAN:	LEVEL (dBm0)	LOWER LIMIT (dB)	MEASUREMENT RESULTS	*IF FAIL		
-----						
	-45.0	22.0	RESULT (dB):	26.5		
			TX LEVEL (dBm0):	-45.00		
	-40.0	27.0	RESULT (dB):	30.3		
			TX LEVEL (dBm0):	-40.01		
	-35.0	30.0	RESULT (dB):	32.9		
			TX LEVEL (dBm0):	-35.04		
	-30.0	33.0	RESULT (dB):	36.3		
			TX LEVEL (dBm0):	-29.95		
	-25.0	33.0	RESULT (dB):	37.0		
			TX LEVEL (dBm0):	-25.04		
	-20.0	33.0	RESULT (dB):	36.5		
			TX LEVEL (dBm0):	-19.95		
	-15.0	33.0	RESULT (dB):	37.6		
			TX LEVEL (dBm0):	-14.97		
	-10.0	33.0	RESULT (dB):	38.2		
			TX LEVEL (dBm0):	-9.97		
	-5.0	33.0	RESULT (dB):	37.6		
			TX LEVEL (dBm0):	-5.01		
	0.0	33.0	RESULT (dB):	36.0		
			TX LEVEL (dBm0):	-0.01		

## MU-LAW 32kbps (Continued)

GAIN v LEVEL - tone A-A 4/55

---

FREQUENCY (kHz): 1.01  
 REF LEVEL (dBm0): -10.0  
 RX FILTER: 1  
 (0=NONE 1=40Hz 2=3kHz)

LIMITS (dB)

CHAN:	LEVEL (dBm0)	LOWER	UPPER	MEASUREMENT RESULTS	*IF FAIL
	-55.0	-3.00	3.00	RESULT (dB):	-0.34
	-50.0	-1.00	1.00	RESULT (dB):	-0.17
	-45.0	-1.00	1.00	RESULT (dB):	-0.11
	-40.0	-0.50	0.50	RESULT (dB):	-0.03
	-35.0	-0.50	0.50	RESULT (dB):	0.00
	-30.0	-0.50	0.50	RESULT (dB):	-0.01
	-25.0	-0.50	0.50	RESULT (dB):	0.01
	-20.0	-0.50	0.50	RESULT (dB):	-0.03
	-15.0	-0.50	0.50	RESULT (dB):	0.04
	-10.0	-0.50	0.50	RESULT (dB):	0.01
	-5.0	-0.50	0.50	RESULT (dB):	0.02
	0.0	-0.50	0.50	RESULT (dB):	-0.04
	3.0	-0.50	0.50	RESULT (dB):	-0.31

GAIN v FREQUENCY A-A 4/56

---

FREQUENCY (kHz): 1.01  
 REF LEVEL (dBm0): 0.0  
 RX FILTER: 1  
 (0=NONE 1=40Hz)

LIMITS (dB)

CHAN:	LEVEL (dBm0)	LOWER	UPPER	MEASUREMENT RESULTS	*IF FAIL
	0.06	*****	-22.00	RESULT (dB):	-28.77
	0.21	*****	0.50	RESULT (dB):	-0.50
	0.31	-0.50	0.50	RESULT (dB):	-0.02
	0.61	-0.50	0.50	RESULT (dB):	-0.02
	0.91	-0.50	0.50	RESULT (dB):	0.01
	1.21	-0.50	0.50	RESULT (dB):	0.04
	1.51	-0.50	0.50	RESULT (dB):	0.07
	1.81	-0.50	0.50	RESULT (dB):	0.11
	2.11	-0.50	0.50	RESULT (dB):	0.08
	2.41	-0.50	0.50	RESULT (dB):	-0.01
	2.71	-0.50	0.50	RESULT (dB):	-0.12
	2.99	-0.50	0.50	RESULT (dB):	-0.02
	3.39	-1.80	0.50	RESULT (dB):	-0.95
	3.59	*****	0.50	RESULT (dB):	-7.05
	3.98	*****	-28.00	RESULT (dB):	-31.67

## MU-LAW 24kbps

GAIN		A-A	4/52		
-----					
FREQUENCY	(kHz):	1.01			
LEVEL	(dBm0):	0.0			
RX FILTER:		1			
	(0=NONE 1=40Hz)				
LOWER LIMIT	(dB):	-0.50			
UPPER LIMIT	(dB):	0.50			
CHAN				MEASUREMENT RESULTS	*IF FAIL
-----					
				RESULT (dB):	0.04

IDLE CHAN NOISE C-MES A-A		4/53			
-----					
UPPER LIMIT	(dBmC0):	23.0			
CHAN				MEASUREMENT RESULTS	*IF FAIL
-----					
				RESULT:	19.2

QUANT DIST		-tone	A-A	4/54		
-----						
FREQUENCY (kHz):		1.01				
CHAN:	LEVEL (dBm0)	LOWER LIMIT (dB)	MEASUREMENT RESULTS	*IF FAIL		
-----						
	-45.0	22.0	RESULT (dB):	23.3		
			TX LEVEL (dBm0):	-45.00		
	-40.0	27.0	RESULT (dB):	26.5	*Lower	
			TX LEVEL (dBm0):	-40.00		
	-35.0	30.0	RESULT (dB):	28.5	*Lower	
			TX LEVEL (dBm0):	-35.04		
	-30.0	33.0	RESULT (dB):	28.8	*Lower	
			TX LEVEL (dBm0):	-29.95		
	-25.0	33.0	RESULT (dB):	28.8	*Lower	
			TX LEVEL (dBm0):	-25.04		
	-20.0	33.0	RESULT (dB):	29.1	*Lower	
			TX LEVEL (dBm0):	-19.95		
	-15.0	33.0	RESULT (dB):	29.8	*Lower	
			TX LEVEL (dBm0):	-14.97		
	-10.0	33.0	RESULT (dB):	30.5	*Lower	
			TX LEVEL (dBm0):	-9.97		
	-5.0	33.0	RESULT (dB):	30.3	*Lower	
			TX LEVEL (dBm0):	-5.01		
	0.0	33.0	RESULT (dB):	30.1	*Lower	
			TX LEVEL (dBm0):	-0.01		



## MU-LAW CCITT G.726 16kbps

GAIN		A-A	4/52		
FREQUENCY	(kHz):	1.01			
LEVEL	(dBm0):	0.0			
RX FILTER:		1			
	(0=NONE 1=40Hz)				
LOWER LIMIT	(dB):	-0.50			
UPPER LIMIT	(dB):	0.50			
CHAN				MEASUREMENT RESULTS	*IF FAIL
				RESULT (dB):	0.02

IDLE CHAN NOISE C-MES		A-A	4/53		
UPPER LIMIT	(dBmC0):	23.0			
CHAN				MEASUREMENT RESULTS	*IF FAIL
				RESULT:	21.3

QUANT DIST		-tone	A-A	4/54		
FREQUENCY	(kHz):	1.01				
CHAN:	LEVEL (dBm0)	LOWER LIMIT (dB)		MEASUREMENT RESULTS		*IF FAIL
	-45.0	22.0		RESULT (dB):	17.1	*Lower
				TX LEVEL (dBm0):	-45.00	
	-40.0	27.0		RESULT (dB):	18.9	*Lower
				TX LEVEL (dBm0):	-40.00	
	-35.0	30.0		RESULT (dB):	21.0	*Lower
				TX LEVEL (dBm0):	-35.04	
	-30.0	33.0		RESULT (dB):	22.8	*Lower
				TX LEVEL (dBm0):	-29.95	
	-25.0	33.0		RESULT (dB):	23.6	*Lower
				TX LEVEL (dBm0):	-25.04	
	-20.0	33.0		RESULT (dB):	25.3	*Lower
				TX LEVEL (dBm0):	-19.95	
	-15.0	33.0		RESULT (dB):	26.1	*Lower
				TX LEVEL (dBm0):	-14.97	
	-10.0	33.0		RESULT (dB):	26.4	*Lower
				TX LEVEL (dBm0):	-9.97	
	-5.0	33.0		RESULT (dB):	27.6	*Lower
				TX LEVEL (dBm0):	-5.01	
	0.0	33.0		RESULT (dB):	28.0	*Lower
				TX LEVEL (dBm0):	-0.01	

## MU-LAW CCITT G.726 16kbps (Continued)

GAIN v LEVEL - tone A-A 4/55

---

FREQUENCY (kHz): 1.01  
 REF LEVEL (dBm0): -10.0  
 RX FILTER: 1  
 (0=NONE 1=40Hz 2=3kHz)

LIMITS (dB)

CHAN:	LEVEL (dBm0)	LOWER	UPPER	MEASUREMENT RESULTS	*IF FAIL
	-55.0	-3.00	3.00	RESULT (dB):	-0.23
	-50.0	-1.00	1.00	RESULT (dB):	-0.24
	-45.0	-1.00	1.00	RESULT (dB):	-0.12
	-40.0	-0.50	0.50	RESULT (dB):	-0.09
	-35.0	-0.50	0.50	RESULT (dB):	-0.04
	-30.0	-0.50	0.50	RESULT (dB):	-0.06
	-25.0	-0.50	0.50	RESULT (dB):	0.04
	-20.0	-0.50	0.50	RESULT (dB):	-0.03
	-15.0	-0.50	0.50	RESULT (dB):	0.06
	-10.0	-0.50	0.50	RESULT (dB):	-0.05
	-5.0	-0.50	0.50	RESULT (dB):	-0.05
	0.0	-0.50	0.50	RESULT (dB):	-0.09
	3.0	-0.50	0.50	RESULT (dB):	-0.40

GAIN v FREQUENCY A-A 4/56

---

FREQUENCY (kHz): 1.01  
 LEVEL (dBm0): 0.0  
 RX FILTER: 1 (0=NONE 1=40Hz)

LIMITS (dB)

CHAN:	LEVEL (dBm0)	LOWER	UPPER	MEASUREMENT RESULTS	*IF FAIL
	0.06	*****	-22.00	RESULT (dB):	-28.77
	0.21	*****	0.50	RESULT (dB):	-0.51
	0.31	-0.50	0.50	RESULT (dB):	-0.03
	0.61	-0.50	0.50	RESULT (dB):	-0.03
	0.91	-0.50	0.50	RESULT (dB):	0.02
	1.21	-0.50	0.50	RESULT (dB):	0.05
	1.51	-0.50	0.50	RESULT (dB):	0.10
	1.81	-0.50	0.50	RESULT (dB):	0.12
	2.11	-0.50	0.50	RESULT (dB):	0.08
	2.41	-0.50	0.50	RESULT (dB):	-0.03
	2.71	-0.50	0.50	RESULT (dB):	-0.14
	2.99	-0.50	0.50	RESULT (dB):	0.04
	3.39	-1.80	0.50	RESULT (dB):	-0.94
	3.59	*****	0.50	RESULT (dB):	-7.03
	3.98	*****	-28.00	RESULT (dB):	-31.63



**MU-LAW Motorola 16kbps**

GAIN A-A 4/52

FREQUENCY (kHz):		1.01		
LEVEL (dBm0):		0.0		
RX FILTER:		1		
		(0=NONE 1=40Hz)		
LOWER LIMIT (dB):		-0.50		
UPPER LIMIT (dB):		0.50		
CHAN	MEASUREMENT RESULTS			*IF FAIL
		RESULT (dB):	-0.02	

IDLE CHAN NOISE C-MES A-A 4/53

UPPER LIMIT (dBmC0):		23.0		
CHAN	MEASUREMENT RESULTS			*IF FAIL
		RESULT:	21.4	

QUANT DIST -tone A-A 4/54

FREQUENCY (kHz):		1.01		
CHAN:	LEVEL (dBm0)	LOWER LIMIT (dB)	MEASUREMENT RESULTS	*IF FAIL
	-45.0	22.0	RESULT (dB): 15.7	*Lower
			TX LEVEL (dBm0): -45.00	
	-40.0	27.0	RESULT (dB): 18.3	*Lower
			TX LEVEL (dBm0): -40.00	
	-35.0	30.0	RESULT (dB): 20.7	*Lower
			TX LEVEL (dBm0): -35.04	
	-30.0	33.0	RESULT (dB): 23.6	*Lower
			TX LEVEL (dBm0): -29.95	
	-25.0	33.0	RESULT (dB): 25.2	*Lower
			TX LEVEL (dBm0): -25.04	
	-20.0	33.0	RESULT (dB): 26.6	*Lower
			TX LEVEL (dBm0): -19.95	
	-15.0	33.0	RESULT (dB): 27.6	*Lower
			TX LEVEL (dBm0): -14.97	
	-10.0	33.0	RESULT (dB): 27.9	*Lower
			TX LEVEL (dBm0): -9.97	
	-5.0	33.0	RESULT (dB): 26.8	*Lower
			TX LEVEL (dBm0): -5.01	
	0.0	33.0	RESULT (dB): 26.6	*Lower
			TX LEVEL (dBm0): -0.01	

## MU-LAW Motorola 16kbps (Continued)

GAIN v LEVEL - tone A-A 4/55

---

FREQUENCY (kHz): 1.01  
 REF LEVEL (dBm0): -10.0  
 RX FILTER: 1  
 (0=NONE 1=40Hz 2=3kHz)

LIMITS (dB)

CHAN:	LEVEL (dBm0)	LOWER	UPPER	MEASUREMENT RESULTS	*IF FAIL
	-55.0	-3.00	3.00	RESULT (dB):	-0.23
	-50.0	-1.00	1.00	RESULT (dB):	-0.24
	-45.0	-1.00	1.00	RESULT (dB):	-0.12
	-40.0	-0.50	0.50	RESULT (dB):	-0.09
	-35.0	-0.50	0.50	RESULT (dB):	-0.04
	-30.0	-0.50	0.50	RESULT (dB):	-0.06
	-25.0	-0.50	0.50	RESULT (dB):	0.04
	-20.0	-0.50	0.50	RESULT (dB):	-0.03
	-15.0	-0.50	0.50	RESULT (dB):	0.06
	-10.0	-0.50	0.50	RESULT (dB):	0.05
	-5.0	-0.50	0.50	RESULT (dB):	0.04
	0.0	-0.50	0.50	RESULT (dB):	0.04
	3.0	-0.50	0.50	RESULT (dB):	-0.31

GAIN v FREQUENCY A-A 4/56

---

FREQUENCY (kHz): 1.01  
 LEVEL (dBm0): 0.0  
 RX FILTER: 1  
 (0=NONE 1=40Hz)

LIMITS (dB)

CHAN:	LEVEL (dBm0)	LOWER	UPPER	MEASUREMENT RESULTS	*IF FAIL
	0.06	*****	-22.00	RESULT (dB):	-28.79
	0.21	*****	0.50	RESULT (dB):	-0.51
	0.31	-0.50	0.50	RESULT (dB):	-0.02
	0.61	-0.50	0.50	RESULT (dB):	0.00
	0.91	-0.50	0.50	RESULT (dB):	0.04
	1.21	-0.50	0.50	RESULT (dB):	0.02
	1.51	-0.50	0.50	RESULT (dB):	0.04
	1.81	-0.50	0.50	RESULT (dB):	0.02
	2.11	-0.50	0.50	RESULT (dB):	-0.02
	2.41	-0.50	0.50	RESULT (dB):	-0.10
	2.71	-0.50	0.50	RESULT (dB):	-0.17
	2.99	-0.50	0.50	RESULT (dB):	-0.03
	3.39	-1.80	0.50	RESULT (dB):	-0.94
	3.59	*****	0.50	RESULT (dB):	-7.03
	3.98	*****	-28.00	RESULT (dB):	-31.65