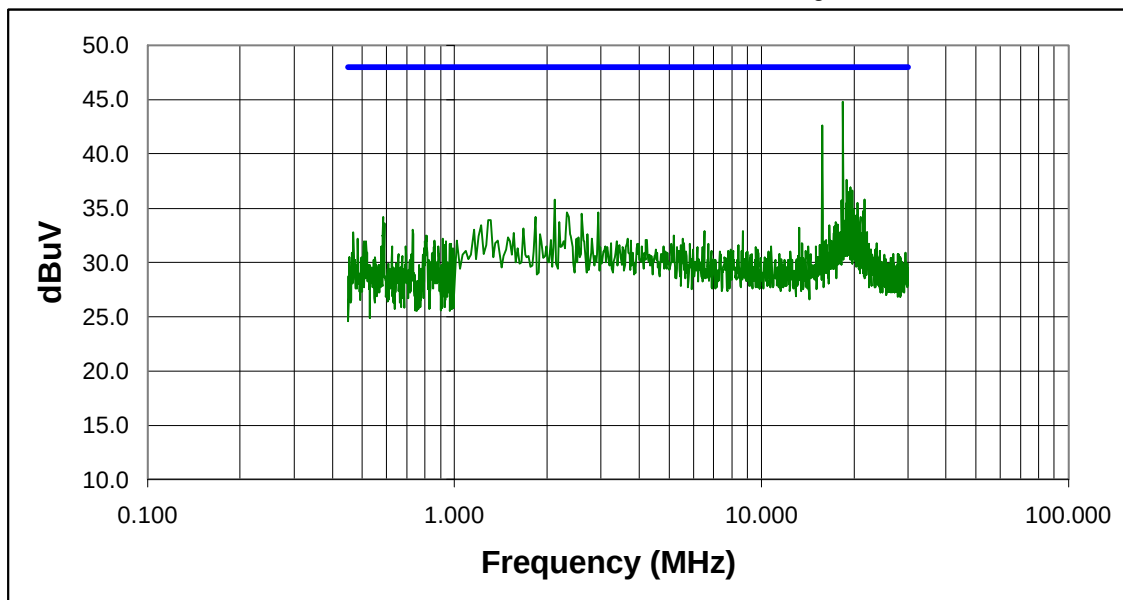


Northwest EMC, Inc., Radiated and Conducted Emissions Data Sheets				Rev 3.3 10/09/99
EUT: LCS-TX	Serial Number:	Job Number: CARD0016	Date: 01/24/00	
Manufacturer: Cardio Theater	Test Engineer: Greg Kiemel	Job Site: EV01		
Customer Reference Number:	Software: None	Power: 120VAC/60Hz		
Comments: High-band, 4 channels transmitting, 4 portable players providing audio inputs.				
		Temperature (°C): 21	% Humidity: 33.0	
Test System				
EUT	Tape Player (2)	Radio Receiver (2)		
Audio Tape Player	Antenna			
Test Equipment				
AAA	LIN			

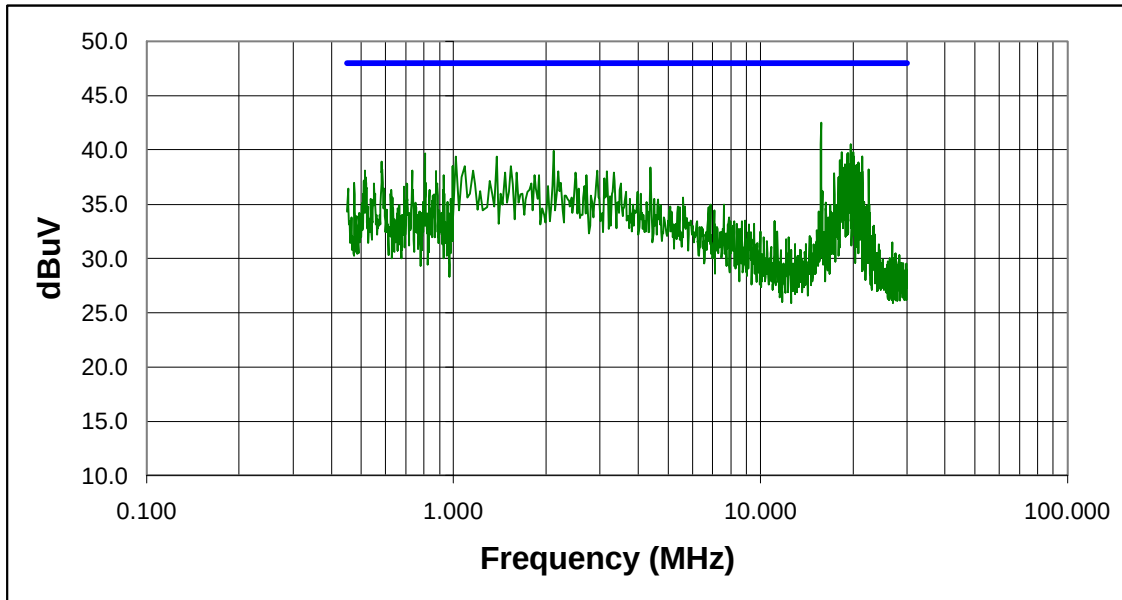
FCC Part 15 Class B Conducted Emissions Limits - High Line



Frequency (MHz)	Meter Reading (dBuV)	Detector	Correction Factor (dB)	Adjusted Level (dBuV)	Specification Limit (dBuV)	Margin (dB)
18.417	23.6	Peak	21.2	44.8	48.0	-3.2
15.779	21.5	Peak	21.1	42.6	48.0	-5.4
18.945	16.4	Peak	21.2	37.6	48.0	-10.4
19.497	15.7	Peak	21.2	36.9	48.0	-11.1
19.447	15.4	Peak	21.2	36.6	48.0	-11.4
19.749	15.4	Peak	21.2	36.6	48.0	-11.4
19.171	15.3	Peak	21.2	36.5	48.0	-11.5
2.126	15.1	Peak	20.7	35.8	48.0	-12.2
21.676	14.6	Peak	21.2	35.8	48.0	-12.2
18.291	14.5	Peak	21.2	35.7	48.0	-12.3
20.559	14.3	Peak	21.2	35.5	48.0	-12.5
19.950	13.7	Peak	21.2	34.9	48.0	-13.1
21.473	13.5	Peak	21.2	34.7	48.0	-13.3
21.447	13.5	Peak	21.2	34.7	48.0	-13.3
2.941	13.8	Peak	20.8	34.6	48.0	-13.4
2.330	13.9	Peak	20.7	34.6	48.0	-13.4
2.602	13.8	Peak	20.7	34.5	48.0	-13.5
19.322	13.2	Peak	21.2	34.4	48.0	-13.6
20.280	13.1	Peak	21.2	34.3	48.0	-13.7
0.585	14.2	Peak	20.0	34.2	48.0	-13.8

Northwest EMC, Inc., Radiated and Conducted Emissions Data Sheets				Rev 3.3 10/09/99
EUT: LCS-TX	Serial Number:	Job Number: CARD0016	Date: 01/24/00	
Manufacturer: Cardio Theater	Test Engineer: Greg Kiemel	Job Site: EV01		
Customer Reference Number:	Software: None	Power: 120VAC/60Hz		
Comments: High-band, 4 channels transmitting, 4 portable players providing audio inputs.				
		Temperature (°C): 21	% Humidity: 33.0	
Test System				
EUT	Tape Player (2)	Radio Receiver (2)		
Audio Tape Player	Antenna			
Test Equipment				
AAA	LIN			

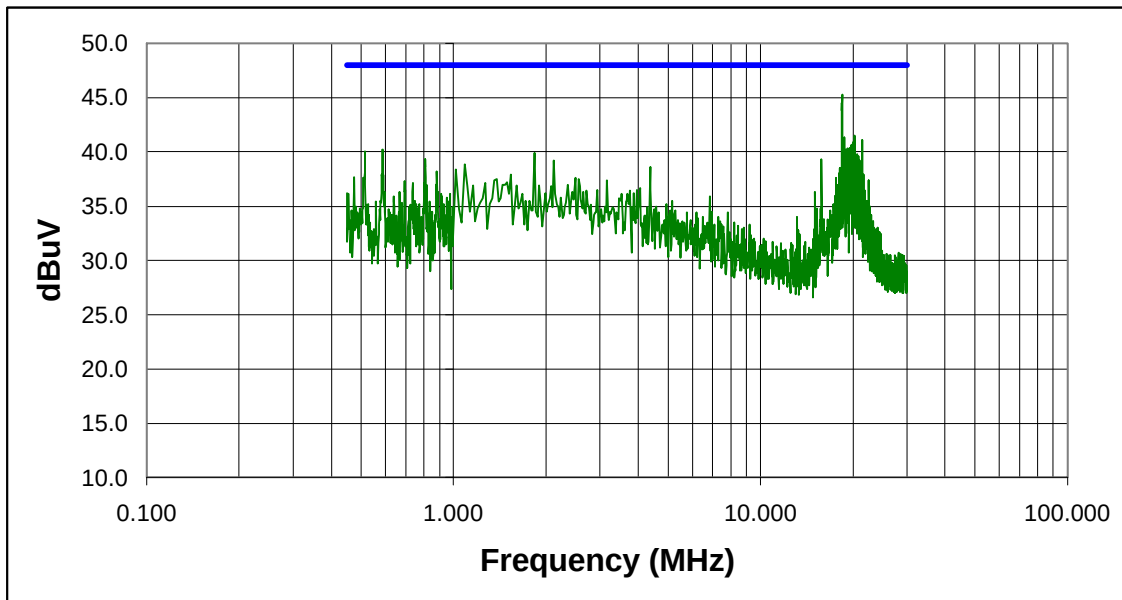
FCC Part 15 Class B Conducted Emissions Limits - Low Line



Frequency (MHz)	Meter Reading (dBuV)	Detector	Correction Factor (dB)	Adjusted Level (dBuV)	Specification Limit (dBuV)	Margin (dB)
15.779	21.4	Peak	21.1	42.5	48.0	-5.5
19.673	19.3	Peak	21.2	40.5	48.0	-7.5
2.126	19.2	Peak	20.7	39.9	48.0	-8.1
20.128	18.6	Peak	21.2	39.8	48.0	-8.2
18.367	18.6	Peak	21.2	39.8	48.0	-8.2
19.171	18.5	Peak	21.2	39.7	48.0	-8.3
0.806	19.7	Peak	20.0	39.7	48.0	-8.3
19.296	18.5	Peak	21.2	39.7	48.0	-8.3
19.950	18.2	Peak	21.2	39.4	48.0	-8.6
1.380	18.8	Peak	20.6	39.4	48.0	-8.6
1.018	18.9	Peak	20.5	39.4	48.0	-8.6
20.204	18.2	Peak	21.2	39.4	48.0	-8.6
21.473	18.2	Peak	21.2	39.4	48.0	-8.6
19.749	18.0	Peak	21.2	39.2	48.0	-8.8
18.141	17.8	Peak	21.2	39.0	48.0	-9.0
0.582	18.9	Peak	20.0	38.9	48.0	-9.1
20.864	17.6	Peak	21.2	38.8	48.0	-9.2
18.869	17.5	Peak	21.2	38.7	48.0	-9.3
19.372	17.5	Peak	21.2	38.7	48.0	-9.3
21.016	17.5	Peak	21.2	38.7	48.0	-9.3

Northwest EMC, Inc., Radiated and Conducted Emissions Data Sheets				Rev 3.3 10/09/99
EUT: LCS-TX	Serial Number:	Job Number: CARD0016	Date: 01/24/00	
Manufacturer: Cardio Theater	Test Engineer: Greg Kiemel	Job Site: EV01		
Customer Reference Number:	Software: None	Power: 120VAC/60Hz		
Comments: Low-band, 4 channels transmitting, 4 portable players providing audio inputs.				
		Temperature (°C): 21	% Humidity: 33.0	
Test System				
EUT	Tape Player (2)	Radio Receiver (2)		
Audio Tape Player	Antenna			
Test Equipment				
AAA	LIN			

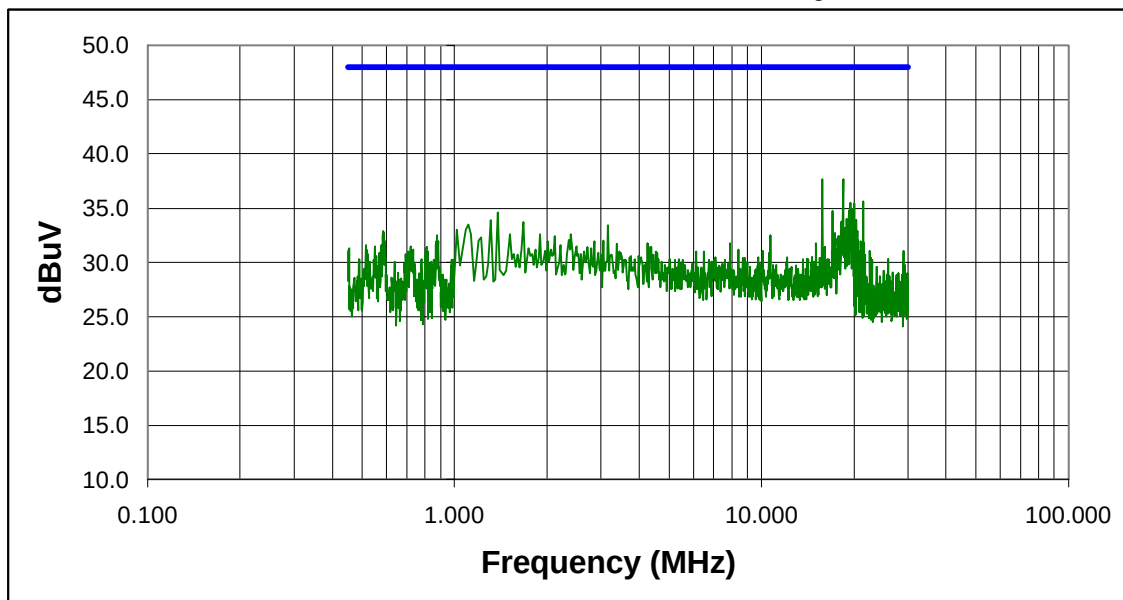
FCC Part 15 Class B Conducted Emissions Limits - Low Line



Frequency (MHz)	Meter Reading (dBuV)	Detector	Correction Factor (dB)	Adjusted Level (dBuV)	Specification Limit (dBuV)	Margin (dB)
18.442	24.1	Peak	21.2	45.3	48.0	-2.7
20.280	20.3	Peak	21.2	41.5	48.0	-6.5
18.719	20.1	Peak	21.2	41.3	48.0	-6.7
21.447	19.9	Peak	21.2	41.1	48.0	-6.9
20.001	19.7	Peak	21.2	40.9	48.0	-7.1
19.749	19.4	Peak	21.2	40.6	48.0	-7.4
19.171	19.1	Peak	21.2	40.3	48.0	-7.7
19.523	19.1	Peak	21.2	40.3	48.0	-7.7
0.586	20.2	Peak	20.0	40.2	48.0	-7.8
18.945	19.0	Peak	21.2	40.2	48.0	-7.8
0.588	20.2	Peak	20.0	40.2	48.0	-7.8
0.515	20.0	Peak	20.0	40.0	48.0	-8.0
1.832	19.3	Peak	20.6	39.9	48.0	-8.1
19.673	18.7	Peak	21.2	39.9	48.0	-8.1
19.874	18.7	Peak	21.2	39.9	48.0	-8.1
20.584	18.6	Peak	21.2	39.8	48.0	-8.2
20.508	18.5	Peak	21.2	39.7	48.0	-8.3
20.864	18.4	Peak	21.2	39.6	48.0	-8.4
15.804	18.2	Peak	21.1	39.3	48.0	-8.7
0.810	19.3	Peak	20.0	39.3	48.0	-8.7

Northwest EMC, Inc., Radiated and Conducted Emissions Data Sheets				Rev 3.3 10/09/99
EUT: LCS-TX	Serial Number:	Job Number: CARD0016	Date: 01/24/00	
Manufacturer: Cardio Theater	Test Engineer: Greg Kiemel	Job Site: EV01		
Customer Reference Number:	Software: None	Power: 120VAC/60Hz		
Comments: Low-band, 4 channels transmitting, 4 portable players providing audio inputs.				
		Temperature (°C): 21	% Humidity: 33.0	
Test System				
EUT	Tape Player (2)	Radio Receiver (2)		
Audio Tape Player	Antenna			
Test Equipment				
AAA	LIN			

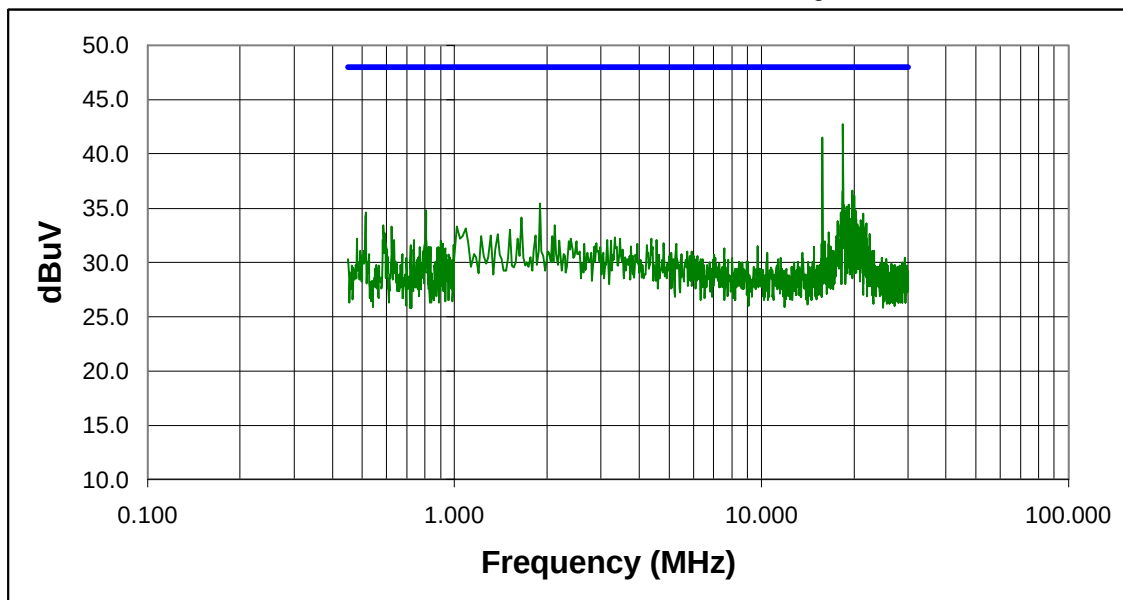
FCC Part 15 Class B Conducted Emissions Limits - High Line



Frequency (MHz)	Meter Reading (dBuV)	Detector	Correction Factor (dB)	Adjusted Level (dBuV)	Specification Limit (dBuV)	Margin (dB)
15.779	16.6	Peak	21.1	37.7	48.0	-10.3
18.442	16.5	Peak	21.2	37.7	48.0	-10.3
21.473	14.4	Peak	21.2	35.6	48.0	-12.4
19.523	14.3	Peak	21.2	35.5	48.0	-12.5
20.052	14.2	Peak	21.2	35.4	48.0	-12.6
19.673	13.7	Peak	21.2	34.9	48.0	-13.1
19.824	13.7	Peak	21.2	34.9	48.0	-13.1
19.472	13.7	Peak	21.2	34.9	48.0	-13.1
19.246	13.6	Peak	21.2	34.8	48.0	-13.2
17.060	13.5	Peak	21.2	34.7	48.0	-13.3
1.380	14.0	Peak	20.6	34.6	48.0	-13.4
18.945	12.8	Peak	21.2	34.0	48.0	-14.0
20.356	12.7	Peak	21.2	33.9	48.0	-14.1
18.191	12.6	Peak	21.2	33.8	48.0	-14.2
1.674	13.1	Peak	20.6	33.7	48.0	-14.3
1.108	13.0	Peak	20.5	33.5	48.0	-14.5
3.167	12.6	Peak	20.8	33.4	48.0	-14.6
19.095	12.2	Peak	21.2	33.4	48.0	-14.6
18.794	12.0	Peak	21.2	33.2	48.0	-14.8
18.668	11.9	Peak	21.2	33.1	48.0	-14.9

Northwest EMC, Inc., Radiated and Conducted Emissions Data Sheets				Rev 3.3 10/09/99
EUT: LCS-TX	Serial Number:	Job Number: CARD0016	Date: 01/24/00	
Manufacturer: Cardio Theater	Test Engineer: Greg Kiemel	Job Site: EV01		
Customer Reference Number:	Software: None	Power: 120VAC/60Hz		
Comments: Mid-band, 4 channels transmitting, 4 portable players providing audio inputs.				
		Temperature (°C): 21	% Humidity: 33.0	
Test System				
EUT	Tape Player (2)	Radio Receiver (2)		
Audio Tape Player	Antenna			
Test Equipment				
AAA	LIN			

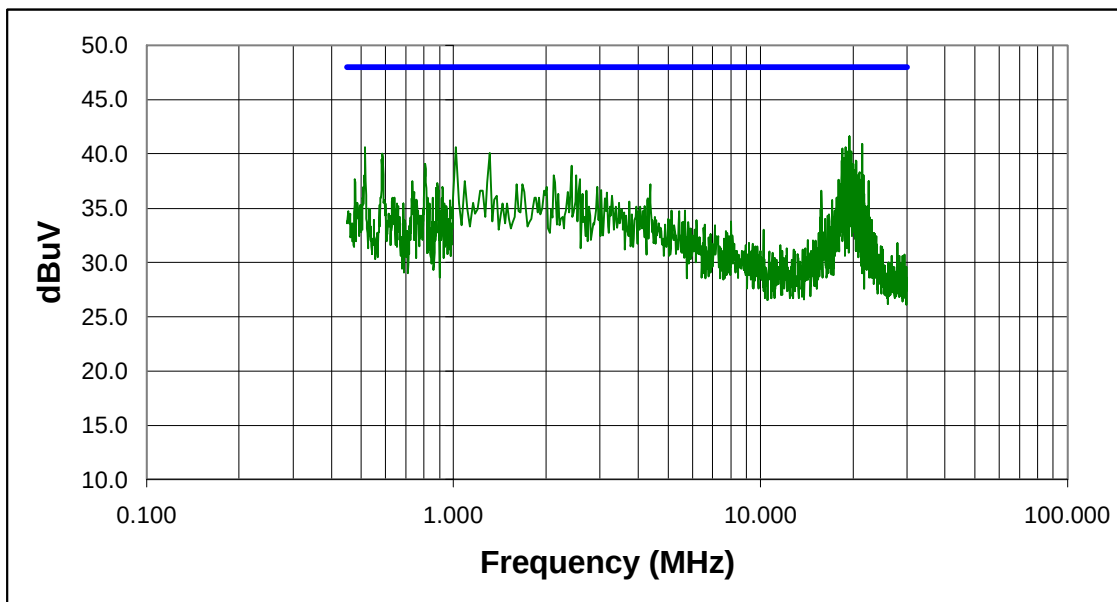
FCC Part 15 Class B Conducted Emissions Limits - High Line



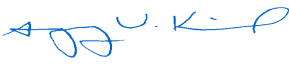
Frequency (MHz)	Meter Reading (dBuV)	Detector	Correction Factor (dB)	Adjusted Level (dBuV)	Specification Limit (dBuV)	Margin (dB)
18.417	21.5	Peak	21.2	42.7	48.0	-5.3
15.804	20.4	Peak	21.1	41.5	48.0	-6.5
19.799	15.4	Peak	21.2	36.6	48.0	-11.4
20.052	14.9	Peak	21.2	36.1	48.0	-11.9
1.900	14.7	Peak	20.7	35.4	48.0	-12.6
19.246	14.1	Peak	21.2	35.3	48.0	-12.7
19.221	14.1	Peak	21.2	35.3	48.0	-12.7
18.518	14.1	Peak	21.2	35.3	48.0	-12.7
18.945	13.9	Peak	21.2	35.1	48.0	-12.9
20.280	13.6	Peak	21.2	34.8	48.0	-13.2
0.808	14.8	Peak	20.0	34.8	48.0	-13.2
18.668	13.5	Peak	21.2	34.7	48.0	-13.3
0.513	14.6	Peak	20.0	34.6	48.0	-13.4
18.116	13.4	Peak	21.2	34.6	48.0	-13.4
21.447	13.3	Peak	21.2	34.5	48.0	-13.5
19.020	13.3	Peak	21.2	34.5	48.0	-13.5
1.651	13.5	Peak	20.6	34.1	48.0	-13.9
19.472	12.8	Peak	21.2	34.0	48.0	-14.0
20.407	12.8	Peak	21.2	34.0	48.0	-14.0
21.092	12.7	Peak	21.2	33.9	48.0	-14.1

Northwest EMC, Inc., Radiated and Conducted Emissions Data Sheets				Rev 3.3 10/09/99
EUT: LCS-TX	Serial Number:	Job Number: CARD0016	Date: 01/24/00	
Manufacturer: Cardio Theater	Test Engineer: Greg Kiemel	Job Site: EV01		
Customer Reference Number:	Software: None	Power: 120VAC/60Hz		
Comments: Mid-band, 4 channels transmitting, 4 portable players providing audio inputs.				
		Temperature (°C): 21	% Humidity: 33.0	
Test System				
EUT	Tape Player (2)	Radio Receiver (2)		
Audio Tape Player	Antenna			
Test Equipment				
AAA	LIN			

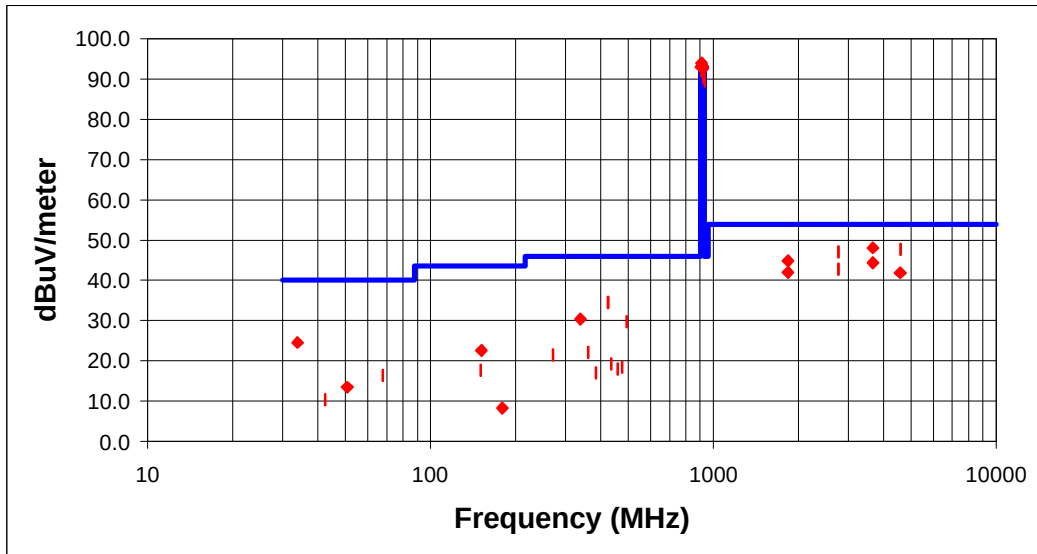
FCC Part 15 Class B Conducted Emissions Limits - Low Line



Frequency (MHz)	Meter Reading (dBuV)	Detector	Correction Factor (dB)	Adjusted Level (dBuV)	Specification Limit (dBuV)	Margin (dB)
19.548	20.4	Peak	21.2	41.6	48.0	-6.4
21.447	19.7	Peak	21.2	40.9	48.0	-7.1
18.945	19.4	Peak	21.2	40.6	48.0	-7.4
0.516	20.6	Peak	20.0	40.6	48.0	-7.4
1.018	20.1	Peak	20.5	40.6	48.0	-7.4
18.442	19.3	Peak	21.2	40.5	48.0	-7.5
19.322	19.0	Peak	21.2	40.2	48.0	-7.8
19.171	19.0	Peak	21.2	40.2	48.0	-7.8
19.824	19.0	Peak	21.2	40.2	48.0	-7.8
1.312	19.5	Peak	20.6	40.1	48.0	-7.9
0.586	20.0	Peak	20.0	40.0	48.0	-8.0
18.794	18.4	Peak	21.2	39.6	48.0	-8.4
20.483	18.2	Peak	21.2	39.4	48.0	-8.6
0.806	19.1	Peak	20.0	39.1	48.0	-8.9
20.128	17.9	Peak	21.2	39.1	48.0	-8.9
0.809	19.0	Peak	20.0	39.0	48.0	-9.0
2.421	18.2	Peak	20.7	38.9	48.0	-9.1
19.020	17.6	Peak	21.2	38.8	48.0	-9.2
20.204	17.3	Peak	21.2	38.5	48.0	-9.5
21.041	17.1	Peak	21.2	38.3	48.0	-9.7

Northwest EMC, Inc., Radiated and Conducted Emissions Data Sheets			
EUT:	Serial Number:	Job Number:	Date:
LCS-TX		CARD0017	01-24-2000 & 01-31-2000
Manufacturer:	Test Engineer:	Job Site:	
Cardio Theater	Greg Kiemel	EV01	
Customer Reference Number:	Software:	Power:	
	None	120VAC/60Hz	
Comments: Transmit frequency set to High, Mid, and Low bands, 4 channels transmitting, 4 portable players providing audio inputs.			
		Temperature (°C):	% Humidity:
		21	33.0
Test System			
EUT	Radio Receiver (2)	Tape Player	
Audio Tape Player	Antenna		
Test Equipment			

FCC 15.249 Radiated Emissions Limits 902 - 928 Band



Frequency (MHz)	Meter Reading (dBuV)	Detector	Antenna Factor (dB/m)	Antenna Polarity	Preamplifier Gain (dB)	Cable Loss (dB)	Table Azimuth (degrees)	Antenna Height (meters)	Adjusted Level (dBuV/m)	Spec. Limit (dB)	Margin (dB)	Comment
906.994	68.8	QP	23.4	VLPA	0.0	1.7	360.0	1.1	93.9	94.0	-0.1	Low Band
919.416	68.0	PK	23.5	VBIC	0.0	1.7	49.0	1.0	93.2	94.0	-0.8	Mid Band
904.395	68.1	QP	23.3	VLPA	0.0	1.7	352.0	1.1	93.1	94.0	-0.9	Low Band
905.792	67.8	QP	23.3	VLPA	0.0	1.7	357.0	1.1	92.8	94.0	-1.2	Low Band
917.993	67.7	PK	23.4	VBIC	0.0	1.7	43.0	1.0	92.8	94.0	-1.2	Mid Band
916.194	67.6	PK	23.4	VBIC	0.0	1.7	44.0	1.0	92.7	94.0	-1.3	Mid Band
917.390	67.5	PK	23.4	VBIC	0.0	1.7	43.0	1.0	92.6	94.0	-1.4	Mid Band
923.594	67.3	QP	23.5	VLPA	0.0	1.7	252.0	1.0	92.5	94.0	-1.5	High Band
903.609	66.9	PK	23.3	VLPA	0.0	1.7	39.0	1.1	91.9	94.0	-2.1	Low Band
924.400	66.2	PK	23.5	VLPA	0.0	1.7	284.0	1.1	91.4	94.0	-2.6	High Band
922.000	65.2	PK	23.5	VLPA	0.0	1.7	293.0	1.1	90.4	94.0	-3.6	High Band
926.200	64.2	PK	23.5	VLPA	0.0	1.7	286.0	1.1	89.4	94.0	-4.6	High Band
3672.087	44.8	PK	33.2	VHRN	33.5	3.6	323.0	1.7	48.1	54.0	-5.9	Mid Band
4581.100	42.8	PK	34.9	VHRN	34.3	4.3	0.0	1.1	47.7	54.0	-6.3	Mid Band
2752.312	46.1	PK	31.3	HHRN	33.4	3.0	21.0	2.2	47.0	54.0	-7.0	Mid Band
1834.821	46.9	PK	28.6	VHRN	33.1	2.4	144.0	1.1	44.8	54.0	-9.2	Mid Band
3672.087	41.1	AV	33.2	VHRN	33.5	3.6	323.0	1.7	44.4	54.0	-9.6	Mid Band
2752.312	41.9	AV	31.3	HHRN	33.4	3.0	0.0	2.2	42.8	54.0	-11.2	Mid Band
423.527	48.3	PK	16.5	HLPA	31.4	1.1	43.0	1.0	34.5	46.0	-11.5	High Band
423.513	48.3	PK	16.5	HLPA	31.4	1.1	26.0	1.0	34.5	46.0	-11.5	Low Band
1834.821	44.2	AV	28.6	VHRN	33.1	2.4	144.0	1.1	42.1	54.0	-12.0	Mid Band
4581.100	37.0	AV	34.9	VHRN	34.3	4.3	-1.0	1.1	41.9	54.0	-12.1	Mid Band
33.880	45.5	PK	10.5	VBIC	31.8	0.4	250.0	1.5	24.6	40.0	-15.4	Mid Band
338.807	45.7	PK	15.0	HLPA	31.3	1.0	311.0	1.0	30.4	46.0	-15.6	Mid Band