

Radiated Emissions Test of Harmonics

6/22/2000

Client Name: NUTEK CORPORATION

Mike Zhu

EUT Name: TRANSMITTER, M/N: APS2K4 LC

Site: 1m

FCCID: ELVAT/D

M 2

Fo=434Mhz

Freq. (Mhz)	Level (dBuV)	AF (dB)	CL (dB)	AMP (dB)	DIST (dB)	Total (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Pol
1302pk	69.2	24.7	2.96	-31.25	-10.45	55.16	74	-18.84	V
1302av	52.1	24.7	2.96	-31.25	-10.45	38.06	54	-15.94	V
1736pk	66.4	26.0	3.44	-31.25	-10.45	54.14	74	-19.86	V
1736av	51.6	26.0	3.44	-31.25	-10.45	39.34	54	-14.66	V
2170pk	49.4	28.0	3.90	-31.25	-10.45	39.60	74	-34.40	H
2170av	37.9	28.0	3.90	-31.25	-10.45	28.10	54	-25.90	H
2604pk	52.7	29.4	4.20	-31.25	-10.45	44.60	74	-29.40	V
2604av	43.9	29.4	4.20	-31.25	-10.45	35.80	54	-18.20	V
3038pk	45.8	31.0	4.40	-31.25	-10.45	39.50	74	-34.50	H
3038av	32.1	31.0	4.40	-31.25	-10.45	25.80	54	-28.20	H
3472pk	42.2	33.0	4.96	-31.25	-10.45	38.46	74	-35.54	V
3472av	30.6	33.0	4.96	-31.25	-10.45	26.86	54	-27.14	V
3906pk	42.1	32.5	5.48	-31.25	-10.45	38.38	74	-38.62	V
3906av	30.2	32.5	5.48	-31.25	-10.45	26.48	54	-27.52	V
4340pk	41.1	32.5	5.84	-31.25	-10.45	37.74	74	-36.26	V
4340av	29.7	32.5	5.84	-31.25	-10.45	26.34	54	-27.66	V

DIST: 3ft measurement distance, -10.45dB

Analyzer: HP 8593EM, cal due: 5/25/2001

Antenna: EMCO 3115,S/N: 2238, cal due: 9/24/2002

Preamp:HP8449B, cal due: 4/12/2001

Analyzer BW settings:

	Peak	Ave
Res	1Mhz	1Mhz
Vid	1Mhz	10HZ

Compliance Engineering Services Inc.

Report No. : 00T0304

Date : 06/20/2000

Time : 11:09

Test Engr : MIKE ZHU

>> 3 M RADIATED EMISSION DATA <<

Company : NUTEK CORPORATION

Equipment Under Test : TRANSMITTER, M/N: APS2K4LC

Test Configuration : EUT ONLY

Type of Test : FCC 15.231

Mode of Operation : NORMAL

	Freq.	dBuV-PK	dBuV-AVE	CF(dB)	dBuV-AVE	FCC-B	EUT-B	Note
OPTION :								
V/Z:								
	433.87	85.5	75.2	-6.5	68.7	80.1	-11.4	Vertical
	867.53	53.6	43.3	-0.1	43.2	60.1	-16.9	Vertical
V/Y:								
	433.65	70.4	60.1	-6.5	53.6	80.1	-26.5	Vertical
	867.27	50.6	40.3	-0.1	40.2	60.1	-19.9	Vertical
V/X:								
	433.63	73.1	62.8	-6.5	56.3	80.1	-23.8	Vertical
	867.29	49.8	39.5	-0.1	39.4	60.1	-20.7	Vertical
H/X:								
	433.62	84.7	74.4	-6.1	68.3	80.1	-11.8	Horizontal
	867.24	53.3	43.0	1.0	44.0	60.1	-16.1	Horizontal
H/Y:								
	433.61	84.8	74.5	-6.1	68.4	80.1	-11.7	Horizontal
	867.21	52.2	41.9	1.0	42.9	60.1	-17.2	Horizontal
H/Z:								
	433.55	85.2	74.9	-6.1	68.8	80.1	-11.3	Horizontal
	867.20	50.8	40.5	1.0	41.5	60.1	-18.6	Horizontal
UNLOCK:								
H/X:								
	433.64	85.5	75.2	-6.3	68.9	80.1	-11.3	Horizontal
	867.34	53.0	42.7	0.5	43.2	60.1	-16.9	Horizontal
H/Y:								
	433.47	85.6	75.3	-6.3	69.0	80.1	-11.2	Horizontal
	867.27	51.8	41.5	0.5	42.0	60.1	-18.1	Horizontal
H/Z:								
	433.58	84.4	74.1	-6.3	67.8	80.1	-12.4	Horizontal
	867.31	49.7	39.4	0.5	39.9	60.1	-20.2	Horizontal

M2

V/X:
433.66 77.9 67.6 -6.5 61.1 80.1 -19.0 Vertical
867.38 46.7 36.4 -0.1 36.3 60.1 -23.8 Vertical

V/Y:
433.69 86.2 75.9 -6.5 69.4 80.1 -10.7 Vertical
867.20 50.9 40.6 -0.1 40.5 60.1 -19.6 Vertical

V/Z:
433.61 86.8 76.5 -6.5 70.0 80.1 -10.1 Vertical
867.44 49.2 38.9 -0.1 38.8 60.1 -21.3 Vertical

LOCK:

V/X:
433.64 76.9 66.6 -6.5 60.1 80.1 -20.0 Vertical
867.30 47.2 36.9 -0.1 36.8 60.1 -23.3 Vertical

V/Y:
433.65 86.4 76.1 -6.5 69.6 80.1 -10.5 Vertical
867.32 51.1 40.8 -0.1 40.7 60.1 -19.4 Vertical

Compliance Engineering Services Inc.

Report No. : 00T0304

Date : 06/20/2000

Time : 14:18

>> 3 M RADIATED EMISSION DATA <<

Test Engr : MIKE ZHU

Company : NUTЕК CORPORATION
 Equipment Under Test : TRANSMITTER , M/N: APS2K4LC
 Test Configuration : EUT ONLY
 Type of Test : FCC 15.231
 Mode of Operation : NORMAL

MZ

	Freq.	dBuV-PK	dBuV-AVE	CF(dB)	dBuV-AVE	FCC-B	EUT-B	Note
V/Z:								
	433.63	86.0	75.7	-6.5	69.2	80.1	-10.9	Vertical
	867.43	48.4	38.1	-0.1	38.0	60.1	-22.1	Vertical
H/X								
	433.65	86.0	75.7	-6.3	69.4	80.1	-10.8	Horizontal
	867.30	51.7	41.4	0.5	41.9	60.1	-18.2	Horizontal
H/Y:								
	433.62	84.8	74.5	-6.3	68.2	80.1	-12.0	Horizontal
	867.21	51.9	41.6	0.5	42.1	60.1	-18.0	Horizontal
H/Z:								
	433.50	84.0	73.7	-6.3	67.4	80.1	-12.8	Horizontal
	867.18	52.5	42.2	0.5	42.7	60.1	-17.4	Horizontal
TRUNK:								
H/X:								
	433.59	84.6	74.3	-6.3	68.0	80.1	-12.2	Horizontal
	867.33	51.6	41.3	0.5	41.8	60.1	-18.3	Horizontal
H/Y:								
	433.60	84.9	74.6	-6.3	68.3	80.1	-11.9	Horizontal
	867.33	51.0	40.7	0.5	41.2	60.1	-18.9	Horizontal
H/Z:								
	433.63	84.4	74.1	-6.3	67.8	80.1	-12.4	Horizontal
	867.14	50.9	40.6	0.5	41.1	60.1	-19.0	Horizontal
V/X:								
	433.65	75.0	64.7	-6.5	58.2	80.1	-21.9	Vertical
	867.33	48.4	38.1	-0.1	38.0	60.1	-22.1	Vertical
V/Y:								
	433.66	87.2	76.9	-6.5	70.4	80.1	-9.7	Vertical
	867.32	49.5	39.2	-0.1	39.1	60.1	-21.0	Vertical
V/Z:								

5

433.65	86.1	75.8	-6.5	69.3	80.1	-10.8	Vertical
867.30	49.4	39.1	-0.1	39.0	60.1	-21.1	Vertical

ABOVE DATA TAKEN BY USING DUTY CYCLE=30.5%

Total # of data 48

V.1.0a

m2

