

TIMCO ENGINEERING INC.

849 NW State Road 45
Newberry, Florida 32669
<http://www.timcoengr.com>
888.472.2424 F 352.472.2030 email: tei@timcoengr.com



Test Report

Product Name: ROUTER

FCC ID: KINSL9201

Applicant:

**P-COM, INC.
7020 PROFESSIONAL PARKWAY EAST
SARASOTA FL 34240-8415**

Date Receipt: AUGUST 25, 2004

Date Tested: SEPTEMBER 22, 2004

APPLICANT: P-COM, INC
FCC ID: KINSL9201
REPORT #: P\P-COM_KIN\1378UT4\1378UT4TestReport.doc

COVER PAGE

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EXHIBITS INCLUDED:

REQUEST FOR CONFIDENTIALITY LETTER
BLOCK DIAGRAM
SCHEMATICS
USERS MANUAL
LABEL SAMPLE
LABEL LOCATION
EXTERNAL PHOTOGRAPHS
INTERNAL PHOTOGRAPHS
OPERATIONAL DESCRIPTION
TEST SET UP PHOTOGRAPHS

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SEPTEMBER 22, 2004

Federal Communications Commission
Authorization and Evaluation Division
7435 Oakland Mills Road
Columbia, MD 21046

SUBJECT: P-COM, INC.

FCC ID: KINSL9201

To Whom It May Concern:

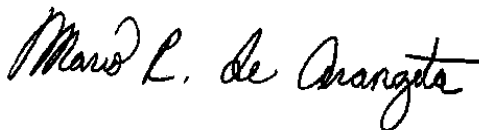
The attached report is for a wireless lan device with both DSSS and OFDM modulations. The device operates only in the 2.4 GHz ISM band. The assembly, made up of the Bridge/Radio (FCC ID:KINSL9201, 50 to 300 feet of special ethernet/power cable, and an integrated 8 dBi omni antenna. P-Com sells only professionally installed equipment. This unit has output power control via software and is not user selectable or accessible. The following table shows the power output verses channel availability.

9201	2.4 GHz	OFDM	1, 2, 10, & 11	8 dBi omni	22 mW	13.4 dBm
9201	2.4	DSSS	1, 2, 10, & 11	8 dBi omni	26	14.2
9201	2.4	OFDM	3 through 9	8 dBi omni	50	17.0
9201	2.4	DSSS	3 through 9	8 dBi omni	50	17.0

P-COM, INC. purchases a standard antenna from the manufacturer. The antenna is intended to be used outside.

Should you have any questions or require any further information with regards to this, please feel free to contact me.

Sincerely,



Mario R. de Aranzeta C.E.T.

MRD/sh
Encl.

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EMC Equipment List

Device	Manufacturer	Model	Serial Number	Cal/Char Date
3/10-Meter OATS	TEI	N/A	N/A	Listed 3/27/04
3-Meter OATS	TEI	N/A	N/A	Listed 1/13/03
Biconnical Antenna	Eaton	94455-1	1057	CAL 3/18/03
Biconnical Antenna	Eaton	94455-1	1096	CAL 10/1/01
Biconnical Antenna	Electro-Metrics	BIA-25	1171	CAL 4/26/01
Double-Ridged Horn Antenna	Electro-Metrics	RGA-180	2319	CAL 2/17/03
LISN	Electro-Metrics	ANS-25/2	2604	CAL 10/9/01
LISN	Electro-Metrics	EM-7820	2682	CAL 3/12/03
Log-Periodic Antenna	Eaton	96005	1243	CAL 5/8/03

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TEST PROCEDURE

GENERAL: This report shall NOT be reproduced except in full without the written approval of TIMCO ENGINEERING, INC.

POWER LINE CONDUCTED INTERFERENCE: The procedure used was ANSI STANDARD C63.4-1992 using a 50uH LISN. Both lines were observed with the UUT transmitting. The bandwidth of the spectrum analyzer was 10kHz with an appropriate sweep speed. The ambient temperature of the UUT was 76°F with a humidity of 55%.

BANDWIDTH 6.0dB: The measurements were made with the spectrum analyzer's resolution bandwidth (RBW)=1 MHz and the video bandwidth (VBW) =3 MHz and the span set as shown on plot.

POWER OUTPUT: The RF power output was measured at the antenna feed point using a peak power meter.

ANTENNA CONDUCTED EMISSIONS: The RBW=100 kHz, VBW=300 kHz and the span set to 10 MHz and the spectrum was scanned from 30 MHz to the 10th Harmonic of the fundamental. Above 1GHz the resolution bandwidth was 1 MHz and the VBW =3 MHz and the span to 50 MHz.

RADIATION INTERFERENCE: The test procedure used was ANSI STANDARD C63.4-2000 using a Agilent spectrum analyzer with a pre-selector. The bandwidth (RBW) of the spectrum analyzer was 100 kHz up to 1 GHz and 1 MHz above 1 GHz with an appropriate sweep speed. The VBW above 1 GHz was = 3 MHz. The analyzer was calibrated in dB above a micro volt at the output of the antenna. The ambient temperature of the UUT was 76°F with a humidity of 55%.

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APPLICANT: P-COM, INC.
FCC ID: KINSL9201
NAME OF TEST: POWER LINE CONDUCTED INTERFERENCE
RULES PART NO.: 15.207(a)

REQUIREMENTS:	QUASI - PEAK	AVERAGE
.15 - 0.5 MHz	66-56 dBuV	56-46 dBuV
0.5 - 5.0	56	46
5.0 - 30.	60	50

TEST PROCEDURE: ANSI STANDARD C63.4-2000. The spectrum was scanned from 0.15 to 30 MHz.

TEST DATA:

THE PLOTS ON THE FOLLOWING PAGES REPRESENT THE EMISSIONS TAKEN FOR THIS DEVICE.

TEST RESULTS: Both lines were observed. The measurements indicate that the unit DOES meet the FCC requirements for this class of equipment.

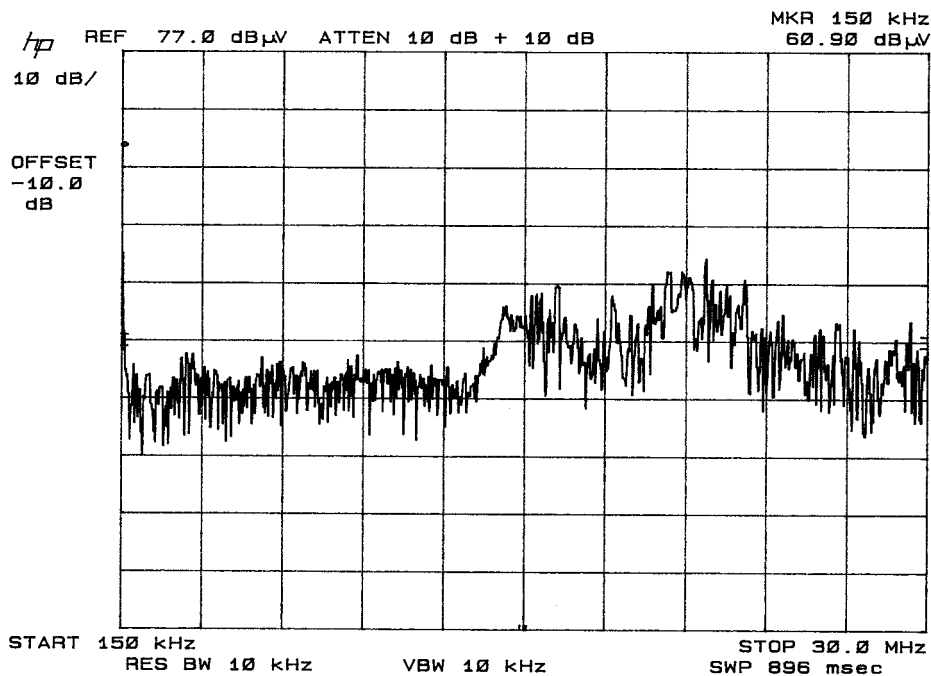
TIMCO ENGINEERING INC.

849 NW State Road 45

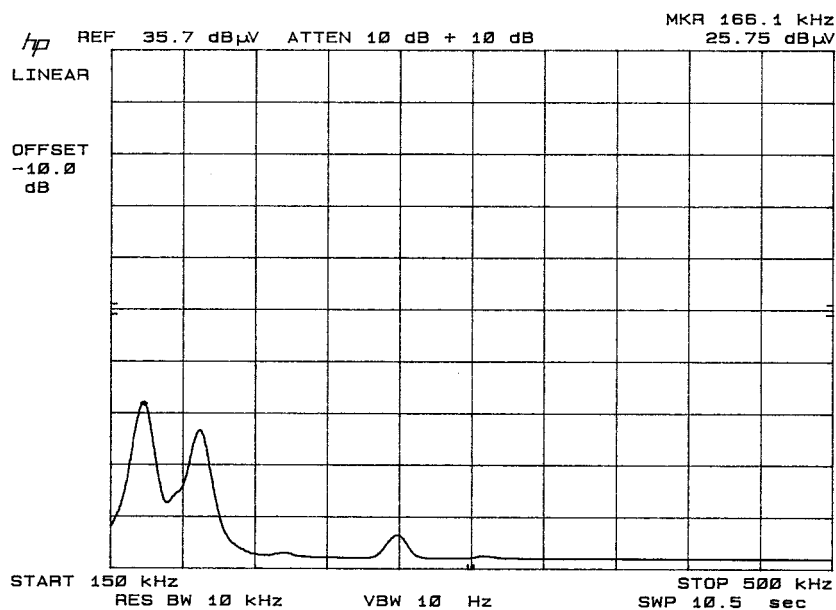
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L1 Peak



L1 Average

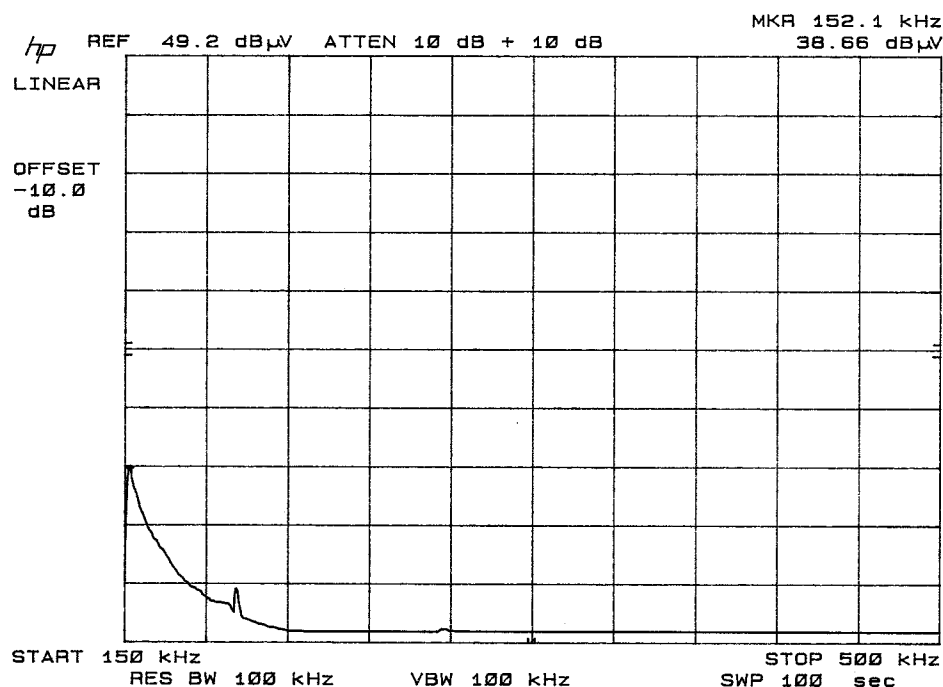
APPLICANT: P-COM, INC

FCC ID: KINSL9201

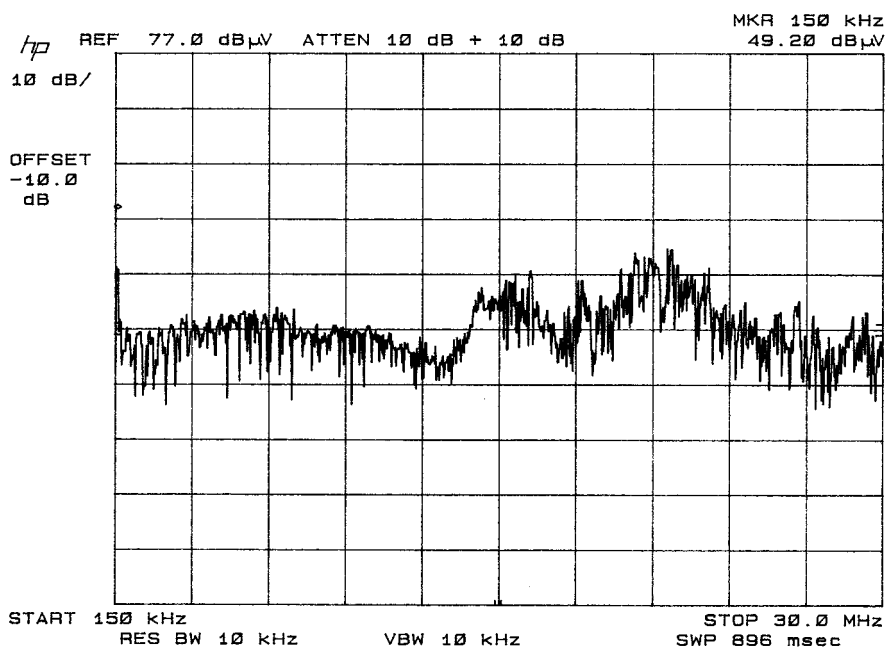
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L1 Quasi-peak



L2 Peak

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APPLICANT: P-COM, INC.
FCC ID: KINSL9201
NAME OF TEST: RADIATION INTERFERENCE
RULES PART NO.: 15.109(a) and 15.209
REQUIREMENTS: CARRIER FREQUENCY WILL NOT EXCEED 2400/F (kHz) AT 300 METERS

OUT-OF-BAND EMISSIONS SHALL NOT EXCEED THE LEVEL OF THE FUNDAMENTAL.

9 to 490 KHz:	2400/F (kHz) uV/m @ 300 METERS
490 to 1705 KHz:	24000/F (kHz) uV/m @ 30 METERS
1705 to 30 MHz:	29.54 dBuV/M @ 30 METERS
30 to 88 MHz:	40.00 dBuV/M @ 3 METERS
88 to 216 MHz:	43.50 dBuV/M
216 to 960 MHz:	46.02 dBuV/M
ABOVE 960 MHz:	54.00 dBuV/M

TEST

CONFIGURATION: DELL LAPTOP MODEL: PP07L

TEST DATA:

Emission Frequency MHz	Meter Reading dBuV	Ant. Polarity	Coax Loss dB	Correction Factor dB	Field Strength dBuV/m	Margin dB
50.40	20.6	H	0.97	11.46	33.03	6.97
30.60	22.7	H	0.81	13.54	37.05	2.95
30.60	25.0	V	0.81	12.12	37.93	2.07
40.80	20.4	H	0.89	13.47	34.76	5.24
43.80	20.3	V	0.92	11.62	32.84	7.16
50.70	23.4	V	0.98	10.58	34.96	5.04
58.70	26.0	H	1.05	8.17	35.22	4.78
60.80	25.3	H	1.06	7.25	33.61	6.39
62.20	26.8	H	1.08	6.63	34.51	5.49
64.80	29.8	V	1.10	5.98	36.88	3.12
68.30	31.7	H	1.13	5.20	38.03	1.97
69.60	29.0	H	1.14	5.12	35.26	4.74
71.70	30.6	H	1.16	5.61	37.37	2.63
71.70	33.0	V	1.16	5.78	39.94	0.06
79.90	30.7	H	1.23	8.07	40.00	0.00
83.30	26.4	V	1.26	9.39	37.05	2.95
110.80	23.7	V	1.48	10.82	36.00	7.50
137.70	19.7	H	1.66	14.29	35.65	7.85
137.70	20.0	H	1.66	14.29	35.95	7.55
138.40	22.5	H	1.67	14.41	38.58	4.92

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REQUIREMENTS: CARRIER FREQUENCY WILL NOT EXCEED 2400/F (kHz) AT 300 METERS

OUT-OF-BAND EMISSIONS SHALL NOT EXCEED THE LEVEL OF THE FUNDAMENTAL.

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490 to 1705 KHz:	24000/F (kHz) uV/m @ 30 METERS
1705 to 30 MHz:	29.54 dBuV/M @ 30 METERS
30 to 88 MHz:	40.00 dBuV/M @ 3 METERS
88 to 216 MHz:	43.50 dBuV/M
216 to 960 MHz:	46.02 dBuV/M
ABOVE 960 MHz:	54.00 dBuV/M

TEST

CONFIGURATION: DELL LAPTOP MODEL: PP07L

TEST DATA (CONTINUED):

Emission Frequency MHz	Meter Reading dBuV	Ant. Polarity	Coax Loss dB	Correction Factor dB	Field Strength dBuV/m	Margin dB
143.30	17.3	V	1.70	16.23	35.23	8.27
148.10	20.5	H	1.74	15.69	37.93	5.57
151.50	20.9	H	1.76	15.89	38.55	4.95
159.60	20.6	H	1.82	16.10	38.52	4.98
175.40	18.3	H	1.93	14.24	34.47	9.03
190.30	15.5	V	2.03	14.68	32.21	11.29
200.00	14.4	V	2.10	12.10	28.60	14.90
200.00	16.1	H	2.10	12.00	30.20	13.30
223.50	16.0	H	2.22	11.93	30.15	15.85
250.00	13.8	V	2.35	12.50	28.65	17.35
250.00	16.0	H	2.35	12.80	31.15	14.85
270.00	20.0	H	2.45	13.60	36.05	9.95
399.50	20.5	V	3.10	15.90	39.50	6.50
433.30	18.0	H	3.23	16.97	38.20	7.80
452.90	18.0	H	3.31	18.65	39.96	6.04
465.00	16.0	H	3.36	17.45	36.81	9.19
533.30	18.0	H	3.60	18.77	40.37	5.63
537.30	15.7	V	3.61	18.13	37.44	8.56
566.70	12.6	V	3.70	18.73	35.03	10.97

The spectrum was scanned from 30 MHz to 1000 MHz.

SAMPLE CALCULATION: FSdBuV/m = MR (dBuV) + ACFdB.

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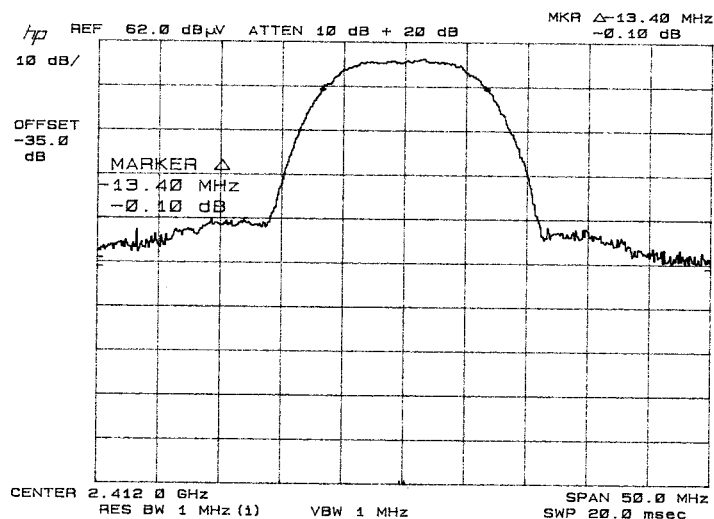
NAME OF TEST: 6.0 dB BANDWIDTH

RULES PART NO.: 15.247(a)(2)

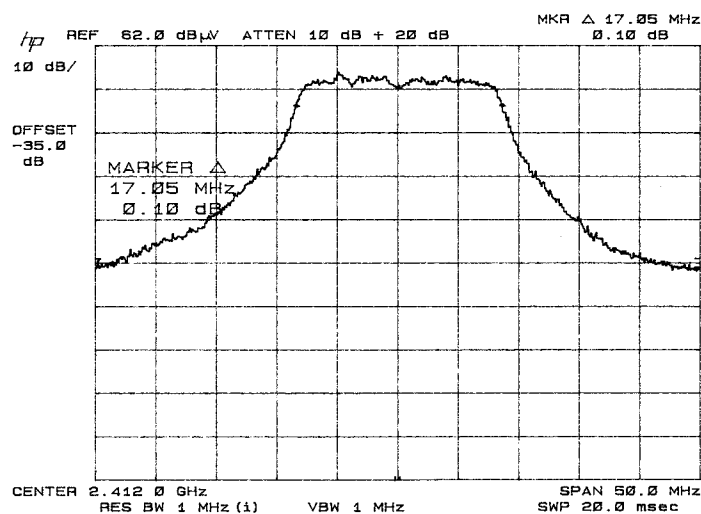
REQUIREMENTS: The 6.0 dB bandwidth must be greater than 500 kHz.

MEASUREMENT

DATA: See the following plots



DSSS



OFDM

APPLICANT: P-COM, INC

FCC ID: KINSL9201

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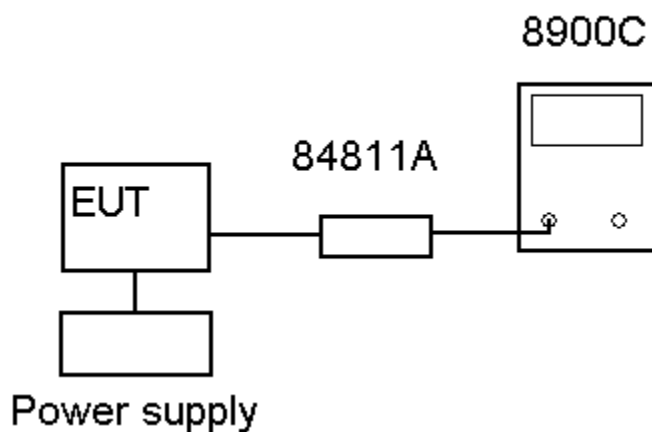
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NAME OF TEST: POWER OUTPUT

RULES PART NO.: 15.247(b) 1 Watt or +30 dBm

MEASUREMENT:

15.247(c) Method of Measuring RF Power output: The Peak power Sensor was connected in place of the antenna.



26mW		DSSS
freq	dBm	mW
2412	14.15	26
2437	13.62	23
2462	13.42	22
22 mW		OFDM
freq	dBm	mW
2412	13.42	22
2437	13.01	20
2462	12.55	18
50 mW		DSSS
freq	dBm	mW
2412	16.99	50
2437	16.63	46
2462	16.23	42
50 mW		OFDM
freq	dBm	mW
2412	16.99	50
2437	16.53	45
2462	16.23	42

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NAME OF TEST: SPURIOUS EMISSIONS AT ANTENNA TERMINALS

REQUIREMENTS: Emissions must be at least 20 dB down from the highest emission level within the authorized band as measured with a 100 kHz RBW.

TEST DATA:

22 mW OFDM									
	Freq. MHz	dBuV	dBm	dBc		Freq. MHz	dBuV	dBm	dBc
ch 1	2412	103.2	-3.8	-3.8	ch 6	2437	102.8	-4.2	-4.2
	4824	38.0	-69.0	65.2		4874	31.0	-76.0	71.8
	7236	31.2	-75.8	72.0		7311	42.7	-64.3	60.1
	2016	53.3	-53.7	49.9		2016	52.7	-54.3	50.1
	2688	51.4	-55.6	51.8		2688	50.4	-56.6	52.4
ch 12	2462	102.5	-4.5	-4.5					
	4924	31.5	-75.5	71.0					
	7386	39.1	-67.9	63.4					
	2016	51.6	-55.4	50.9					
	2688	50.4	-56.6	52.1					
26 mW DSSS									
	Freq. MHz	dBuV	dBm	dBc		Freq. MHz	dBuV		dBc
ch 1	2412	110	3	3	ch 6	2437	109.7	2.7	2.7
	4824	51.3	-55.7	58.7		4874	50.5	-56.5	59.2
	7236	51.4	-55.6	58.6		7311	51.5	-55.5	58.2
	2016	53.2	-53.8	56.8		2016	54.0	-53.0	55.7
	2688	52.5	-54.5	57.5		2688	52.2	-54.8	57.5
ch 11	2462	109.0	2.0	2.0					
	4924	53.1	-53.9	55.9					
	7386	54.4	-52.6	54.6					
	2016	54.0	-53.0	55.0					
	2688	52.3	-54.7	56.7					

NOTE: THE SPECTRUM WAS SCANNED TO THE TENTH HARMONIC.

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NAME OF TEST: SPURIOUS EMISSIONS AT ANTENNA TERMINALS

REQUIREMENTS: Emissions must be at least 20 dB down from the highest emission level within the authorized band as measured with a 100 kHz RBW.

TEST DATA:

50 mW DSSS					50 mW DSSS				
	Freq. MHz	dBuV	dBm	dBc		Freq. MHz	dBuV	dBm	dBc
ch 3	2422	115.1	8.1	8.1	ch 6	2437	113.0	6.0	6.0
	4844	60.6	-46.4	54.5		4874	49.6	-57.4	63.4
	7266	56.4	-50.6	58.7		7311	62.4	-44.6	50.6
	9688	43.2	-63.8	71.9		9748	41.5	-65.5	71.5
	2016	49.8	-57.2	65.3		2016	49.6	-57.4	63.4
	2688	49.4	-57.6	65.7		2688	51.2	-55.8	61.8
ch 9	2452	113.8	6.8	6.8					
	4904	54.3	-52.7	59.5					
	7356	57.7	-49.3	56.1					
	9808	40.9	-66.1	72.9					
	2016	50.2	-56.8	63.6					
	2688	52.4	-54.6	61.4					
50 mW OFDM					50 mW OFDM				
	Freq. MHz	dBuV	dBm	dBc		Freq. MHz	dBuV	dBm	dBc
ch 3	2422	117.4	10.4	10.4	ch 6	2437	116.7	9.7	9.7
	4844	55.2	-51.8	62.2		4874	52.9	-54.1	63.8
	7266	61.6	-45.4	55.8		7311	62.6	-44.4	54.1
	2016	56.6	-50.4	60.8		2016	56.8	-50.2	59.9
	2688	55.2	-51.8	62.2		2688	56.1	-50.9	60.6
ch 9	2452	116.6	9.6	9.6					
	4904	55.3	-51.7	61.3					
	7356	64.9	-42.1	51.7					
	2016	57.0	-50.0	59.6					
	2688	565.0	458.0	-448.4					

NOTE: THE SPECTRUM WAS SCANNED TO THE TENTH HARMONIC.

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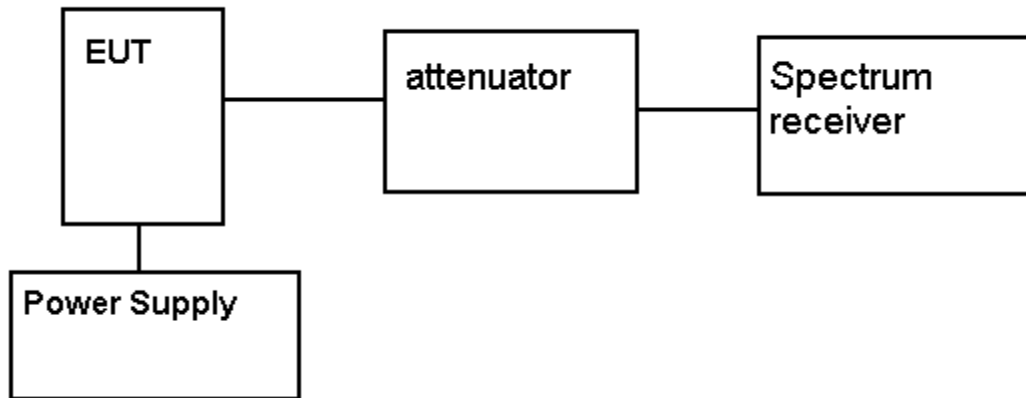
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15.247(c)

Method of Measuring RF Conducted Spurious Emissions



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15.247(c), 15.205 & 15.209(b) Field strength of spurious emissions:

REQUIREMENTS:

FIELD STRENGTH of Fundamental: 902-928 MHz 2.4-2.4835 GHz	FIELD STRENGTH of Harmonics 127.37 dBuV/m 54 dBuV/m @3m	S15.209 30 - 88 MHz 40 dBuV/m @3M 88 -216 MHz 43.5 216 -960 MHz 46 ABOVE 960 MHz 54 dBuV/m
--	--	--

EMISSIONS RADIATED OUTSIDE OF THE SPECIFIED FREQUENCY BANDS, EXCEPT FOR HARMONICS, SHALL BE ATTENUATED BY AT LEAST 20 dB BELOW THE LEVEL OF THE FUNDAMENTAL OR TO THE GENERAL RADIATED EMISSION LIMITS IN 15.209, WHICHEVER IS THE LESSER ATTENUATION.

REQUIREMENTS FOR EMISSIONS THAT FALL IN A RESTRICTED BAND:

FIELD STRENGTH LIMITS FOR PEAK READINGS: 74 dBuV/m
FIELD STRENGTH LIMITS FOR AVERAGE READINGS: 54 dBuV/m

TEST DATA: 1378CUT4 20 mW OFDM Ch 1, 6, and 11

Tuned Frequency MHz	Emission Frequency MHz		Meter Reading dBuV	Ant. Polarity	Coax Loss dB	Correction Factor dB	Field Strength dBuV/m	Margin dB
2,412.0	2,412.00		76.6	V	3.19	29.28	109.07	18.30
2,412.0	2,688.00	R	19.8	V	3.38	29.81	52.99	AV 1.01
2,412.0	2,688.00	R	31.0	V	3.38	29.81	64.19	PK 9.81
2,437.0	2,437.00		76.4	V	3.21	29.31	108.92	18.45
2,437.0	2,688.00	R	19.9	V	3.38	29.81	53.09	AV 0.91
2,437.0	2,688.00	R	31.3	V	3.38	29.81	64.49	PK 9.51
2,462.0	2,462.00		75.5	V	3.22	29.35	108.07	19.30
2,462.0	2,688.00	R	19.8	V	3.38	29.81	52.99	AV 1.01
2,462.0	2,688.00	R	32.0	V	3.38	29.81	65.19	PK 8.81

TEST DATA: 1378DUT4 26 mW DSSS Ch 1, 6, and 11

Tuned Frequency MHz	Emission Frequency MHz		Meter Reading dBuV	Ant. Polarity	Coax Loss dB	Correction Factor dB	Field Strength dBuV/m	Margin dB
2,412.0	2,412.00		78.1	V	3.19	29.28	110.57	16.80
2,412.0	2,016.00		11.5	V	2.91	28.72	43.13	47.44
2,412.0	2,688.00	R	16.3	V	3.38	29.81	49.49	PK 4.51
2,437.0	2,437.00		77.2	V	3.21	29.31	109.72	17.65
2,437.0	2,016.00		12.0	V	2.91	28.72	43.63	46.09
2,437.0	2,688.00	R	16.6	V	3.38	29.81	49.79	PK 4.21
2,462.0	2,462.00		76.7	V	3.22	29.35	109.27	18.10
2,462.0	2,016.00		13.1	V	2.91	28.72	44.73	44.54
2,462.0	2,688.00	R	17.6	V	3.38	29.81	50.79	PK 3.21

Harmonics were checked through the 10th harmonic

APPLICANT: P-COM, INC

FCC ID: KINSL9201

REPORT #: P\P-COM_KIN\1378UT4\1378UT4TestReport.doc

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15.247(c), 15.205 & 15.209(b) Field strength of spurious emissions:

REQUIREMENTS:

FIELD STRENGTH of Fundamental: 902-928 MHz	FIELD STRENGTH of Harmonics 127.37 dBuV/m 54 dBuV/m @3m	S15.209 30 - 88 MHz 40 dBuV/m @3M 88 -216 MHz 43.5 216 -960 MHz 46 ABOVE 960 MHz 54 dBuV/m
--	--	--

EMISSIONS RADIATED OUTSIDE OF THE SPECIFIED FREQUENCY BANDS, EXCEPT FOR HARMONICS, SHALL BE ATTENUATED BY AT LEAST 20 dB BELOW THE LEVEL OF THE FUNDAMENTAL OR TO THE GENERAL RADIATED EMISSION LIMITS IN 15.209, WHICHEVER IS THE LESSER ATTENUATION.

REQUIREMENTS FOR EMISSIONS THAT FALL IN A RESTRICTED BAND:

FIELD STRENGTH LIMITS FOR PEAK READINGS: 74 dBuV/m
FIELD STRENGTH LIMITS FOR AVERAGE READINGS: 54 dBuV/m

TEST DATA: 1378AUT4 50 mW OFDM ch 3,6, and 9

Tuned Frequency MHz	Emission Frequency MHz		Meter Reading dBuV	Ant. Polarity	Coax Loss dB	Correction Factor dB	Field Strength dBuV/m	Margin dB
2,422.0	2,422.00		78.2	V	3.20	29.29	110.69	16.68
2,422.0	2,688.00	R	20.0	V	3.38	29.81	53.19	AV 0.81
2,422.0	2,688.00	R	33.0	V	3.38	29.81	66.19	PK 7.81
2,437.0	2,437.00		81.0	V	3.21	29.31	113.52	13.85
2,437.0	2,688.00	R	19.3	V	3.38	29.81	52.49	AV 1.51
2,437.0	2,688.00	R	32.0	V	3.38	29.81	65.19	PK 8.81
2,452.0	2,452.00		78.3	V	3.22	29.33	110.85	16.52
2,462.0	2,688.00	R	19.5	V	3.38	29.81	52.69	AV 1.31
2,462.0	2,688.00	R	32.0	V	3.38	29.81	65.19	PK 8.81

TEST DATA: 1378EUT4 50 mW DSSS ch 3,6, and 9

Tuned Frequency MHz	Emission Frequency MHz		Meter Reading dBuV	Ant. Polarity	Coax Loss dB	Correction Factor dB	Field Strength dBuV/m	Margin dB
2,422.0	2,422.00		85.6	V	3.20	29.29	118.09	9.28
2,422.0	2,688.00	R	19.8	V	3.38	29.81	52.99	AV 1.01
2,422.0	2,688.00	R	26.0	V	3.38	29.81	59.19	PK 14.81
2,422.0	4,844.00	R	-0.6	V	4.92	34.10	38.42	AV 15.58
2,422.0	4,844.00	R	9.1	V	4.92	34.10	48.12	PK 25.88
2,437.0	2,437.00		84.7	V	3.21	29.31	117.22	10.15
2,437.0	2,688.00	R	19.9	V	3.38	29.81	53.09	AV 0.91
2,437.0	2,688.00	R	25.8	V	3.38	29.81	58.99	PK 15.01
2,437.0	4,874.00	R	-1.0	V	4.94	34.20	38.14	AV 15.86
2,437.0	4,874.00	R	9.0	V	4.94	34.20	48.14	PK 25.86
2,452.0	4,904.00	R	-1.4	V	4.95	34.29	37.84	AV 16.16
2,452.0	4,904.00	R	9.0	V	4.95	34.29	48.24	PK 25.76

Harmonics were checked through the 10th harmonic

APPLICANT: P-COM, INC

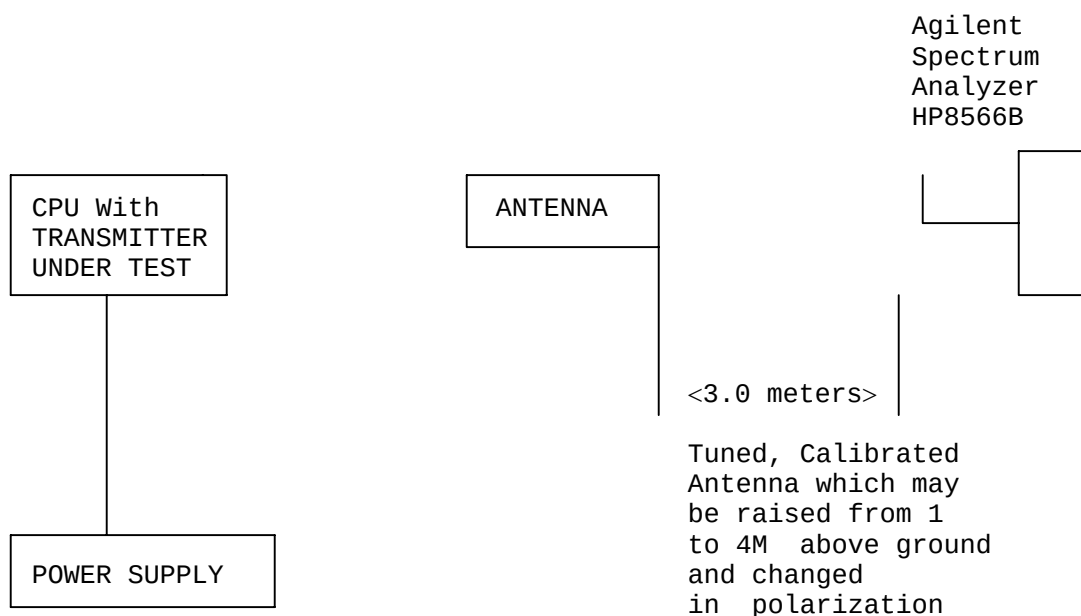
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REPORT #: P\P-COM_KIN\1378UT4\1378UT4TestReport.doc

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Method of Measuring Radiated Spurious Emissions



Equipment placed 80 cm above ground on a rotatable platform.

METHOD OF MEASUREMENT: The procedure used was ANSI STANDARD C63.4-2000 & the FCC/OET Guidance on Measurements for Direct Sequence Spread Spectrum Systems – Public Notice 54797 Dated July 12, 1995. Measurements were made at the open field test site of TIMCO ENGINEERING INC. located at 849 N.W. State Road 45, Newberry, FL 32669.

APPLICANT: P-COM, INC

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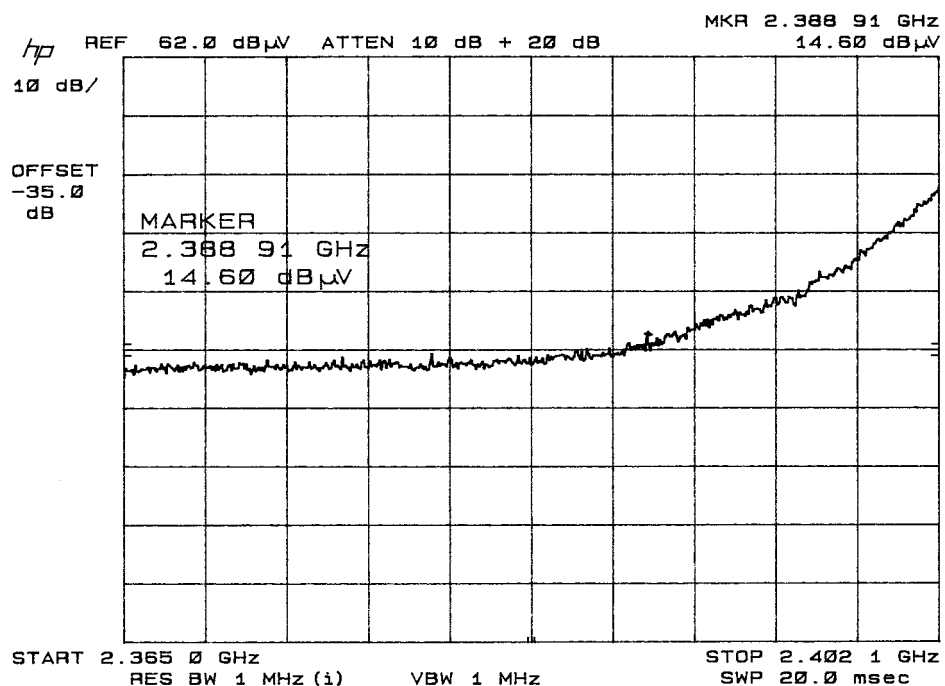
APPLICANT: P-COM, INC.

FCC ID: KINSL9201

NAME OF TEST: RADIATED SPURIOUS EMISSIONS INTO ADJACENT RESTRICTED BAND

REQUIREMENTS: Emissions that fall in the restricted bands (15.205). These emissions must be less than or equal to 500 uV/m (54 dBuV/m).

TEST PROCEDURE: An in band field strength measurement of the fundamental Emission using the RBW and detector function required by C63.4-2000 and FCC Rules. The procedure was repeated with an average detector and a plot made. The calculated field strength in the adjacent restricted band is presented below.



22 mW power output with OFDM modulation and an 8 dBi ant.

CHANNEL 1

FREQUENCY: 2412 MHz Peak:

+14.60 dBuV from plot

+20.00 dB Atte

+29.25 dB ACF antenna factor

+ 3.17 dB CL coax loss

67.02 dBuV

APPLICANT: P-COM, INC

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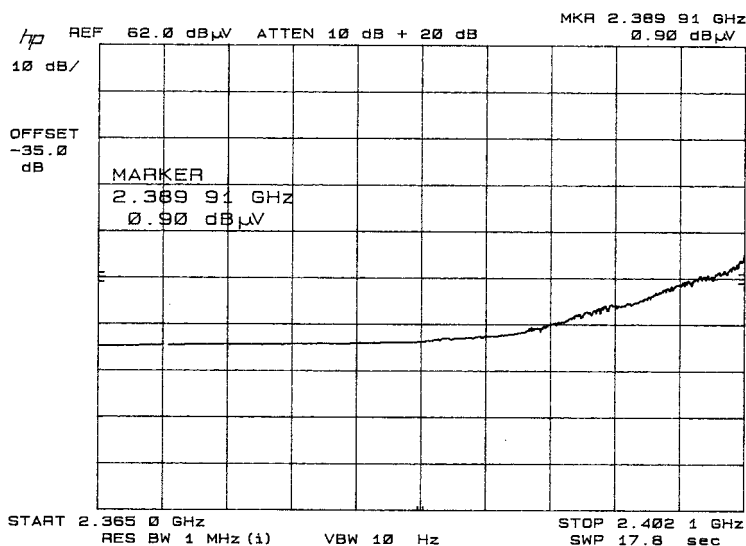
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22 mW power output with OFDM modulation and an 8 dBi ant.

CHANNEL 1

FREQUENCY: 2412 MHz Average:

+ 0.90 dBuV from plot

+20.00 dB Attn

+29.25 dB ACF

+ 3.17 dB CL

53.32 dBuV

CHANNEL 11

FREQUENCY: 2462 MHz Peak:

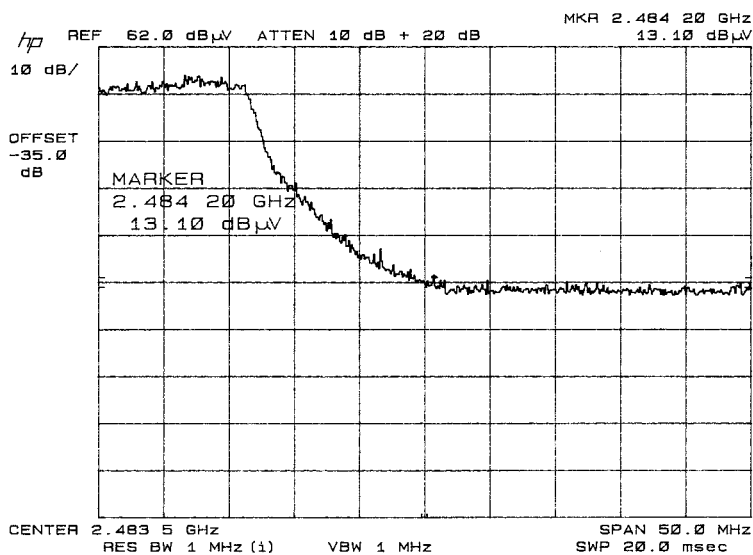
+13.10 dBuV from plot

+20.00 dB Attn

+29.30 dB ACF

+ 3.24 dB CL

65.72 dBuV



22 mW power output with OFDM modulation and an 8 dBi ant.

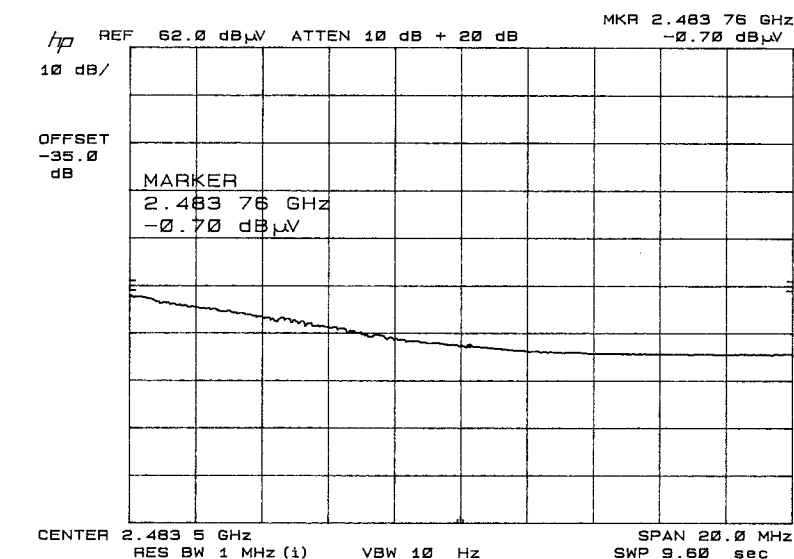
APPLICANT: P-COM, INC

FCC ID: KINSL9201

REPORT #: P\P-COM_KIN\1378UT4\1378UT4TestReport.doc

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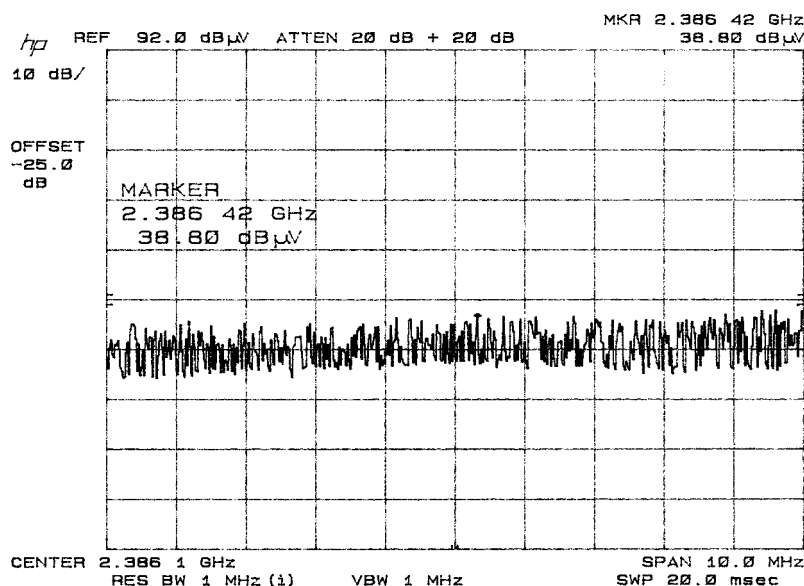
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22 mW power output with OFDM modulation and an 8 dBi ant.

CHANNEL 11
FREQUENCY: 2462 MHz Average:
- 0.70 dBuV from plot
+20.00 dB Attn
+29.38 dB ACF
+ 3.24 dB CL
51.92 dBuV

CHANNEL 1
FREQUENCY: 2412 MHz Peak
+38.80 dBuV from plot
+20.00 dB Attn
+29.25 dB ACF
+ 3.17 dB CL
71.22 dBuV

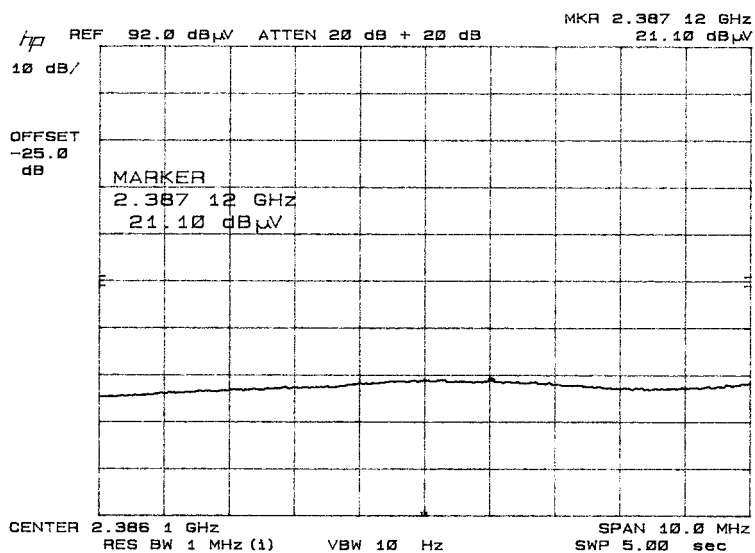


26 mW DSSS w 8 dBi antenna

APPLICANT: P-COM, INC
FCC ID: KINSL9201
REPORT #: P\P-COM_KIN\1378UT4\1378UT4TestReport.doc

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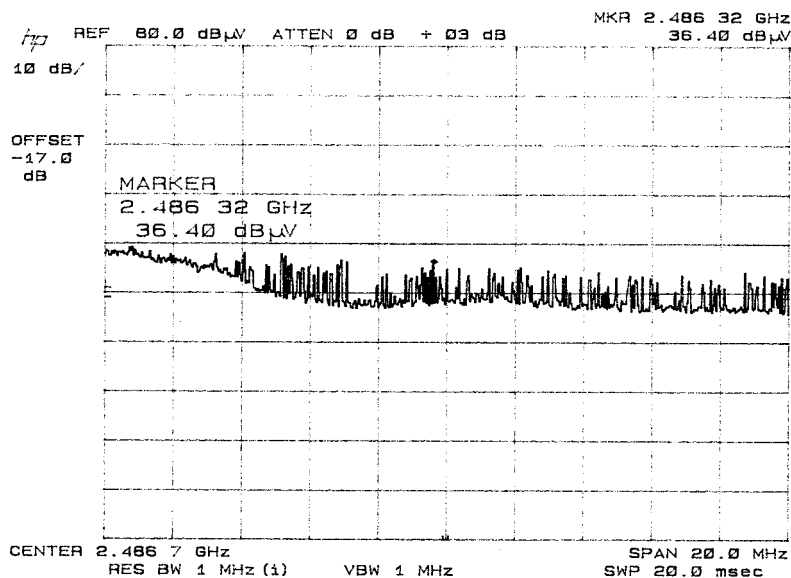
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26 mW DSSS w 8 dBi antenna

CHANNEL 1
FREQUENCY: 2412 MHz Average:
+21.10 dBuV from plot
+29.25 dB ACF
+ 3.17 dB CL
53.52 dBuV

CHANNEL 11
FREQUENCY: 2462 MHz Peak
+36.40 dBuV from plot
+29.38 dB ACF
+ 3.24 dB CL
69.02 dBuV

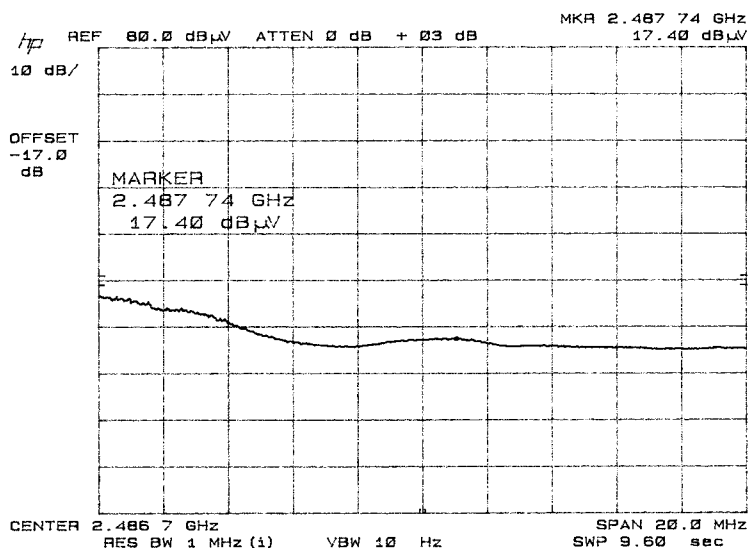


26 mW DSSS w 8 dBi antenna

APPLICANT: P-COM, INC
FCC ID: KINSL9201
REPORT #: P\P-COM_KIN\1378UT4\1378UT4TestReport.doc

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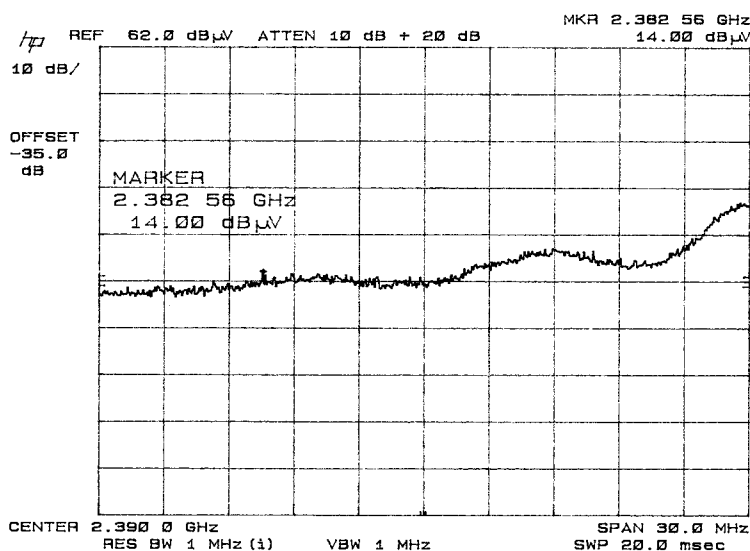
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ch 1 (2412 MHz)26 mW DSSS w 8 dBi antenna

CHANNEL 11
FREQUENCY: 2462 MHz Average:
+17.40 dBuV from plot
+29.38 dB ACF
+ 3.24 dB CL
50.02 dBuV

CHANNEL 3
FREQUENCY: 2422 MHz Peak
+14.00 dBuV from plot
+20.00 dB Attn
+29.25 dB ACF
+ 3.17 dB CL
66.42 dBuV



ch 3 (2422 MHz)DSSS 50 mW 8 dBi antenna

APPLICANT: P-COM, INC
FCC ID: KINSL9201
REPORT #: P\P-COM_KIN\1378UT4\1378UT4TestReport.doc

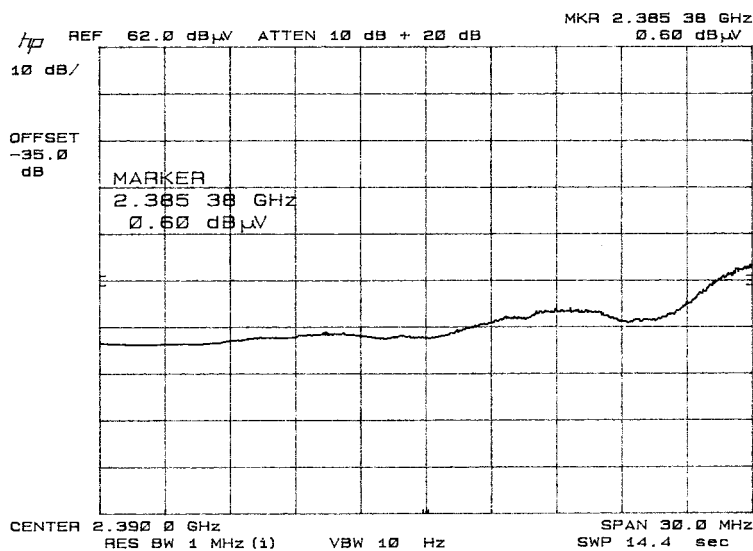
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ch 3 (2422 MHz)DSSS 50 mW 8 dBi antenna

CHANNEL 3

FREQUENCY: 2422 MHz Average

+ 0.60 dBuV from plot

+20.00 dB Attn

+29.25 dB ACF

+ 3.17 dB CL

53.02 dBuV

CHANNEL 9

FREQUENCY: 2452 MHz Peak

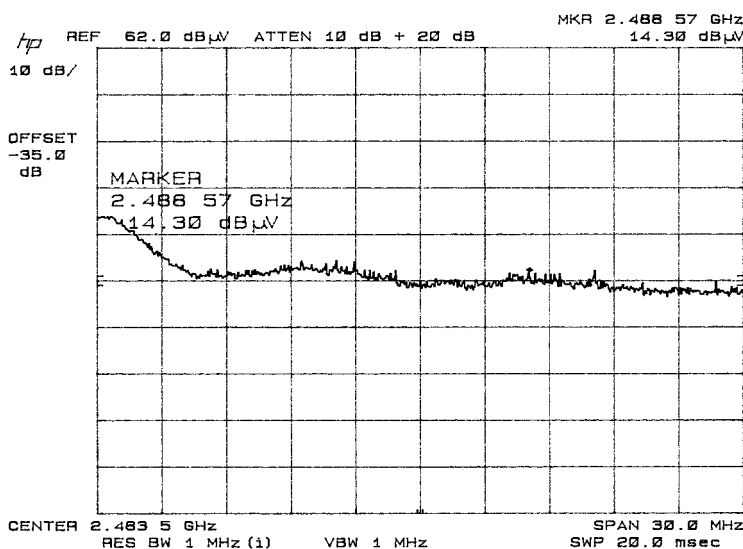
+14.30 dBuV from plot

+20.00 dB Attn

+29.38 dB ACF

+ 3.24 dB CL

66.92 dBuV



ch 9 (2452 MHz)DSSS 50 mW 8 dBi antenna

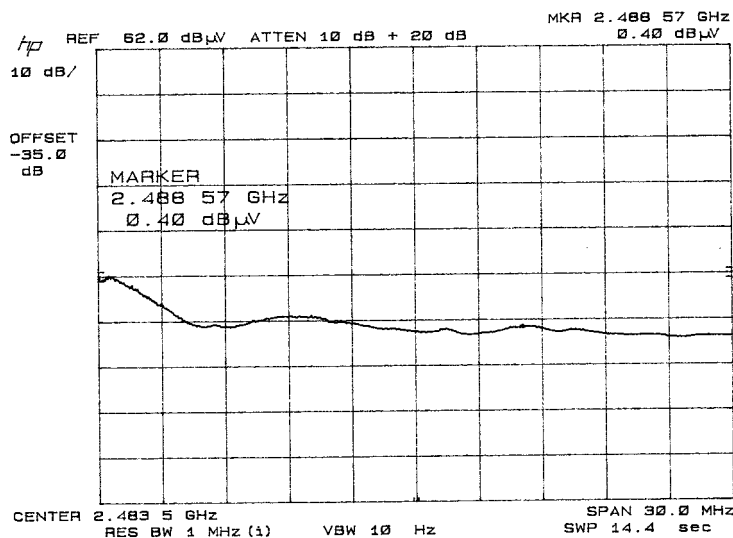
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FCC ID: KINSL9201

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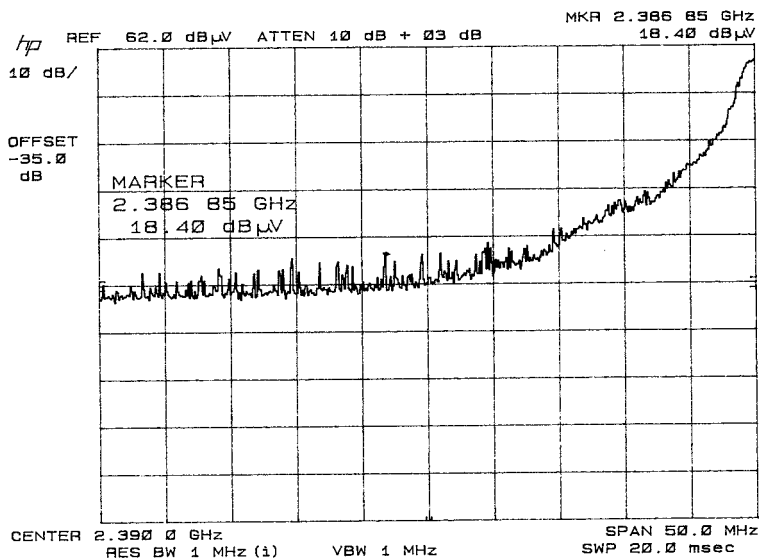
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ch 9 (2452 MHz)DSSS 50 mW 8 dBi antenna

CHANNEL 9
FREQUENCY: 2452 MHz Peak
+ 0.40 dBuV from plot
+20.00 dB Attn
+29.38 dB ACF
+ 3.24 dB CL
53.02 dBuV

CHANNEL 3
FREQUENCY: 2422 MHz Peak
+18.40 dBuV from plot
+20.00 dB Attn
+29.25 dB ACF
+ 3.17 dB CL
70.82 dBuV

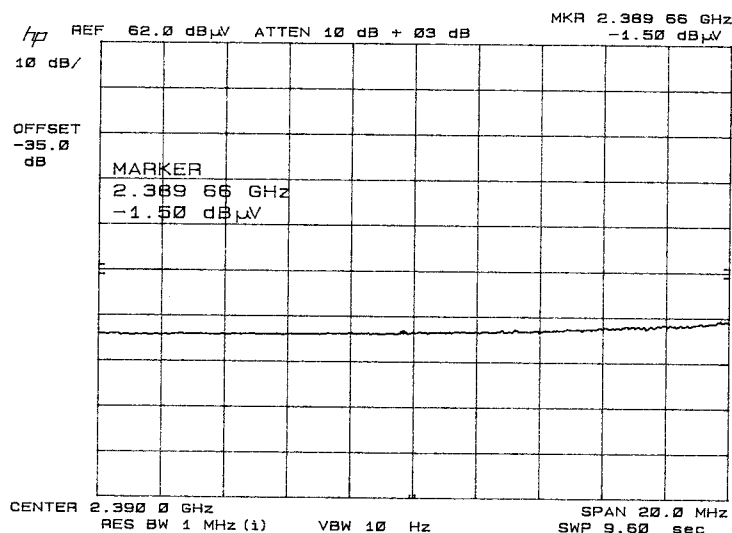


ch 3 2422 50 mW OFDM

APPLICANT: P-COM, INC
FCC ID: KINSL9201
REPORT #: P\P-COM_KIN\1378UT4\1378UT4TestReport.doc

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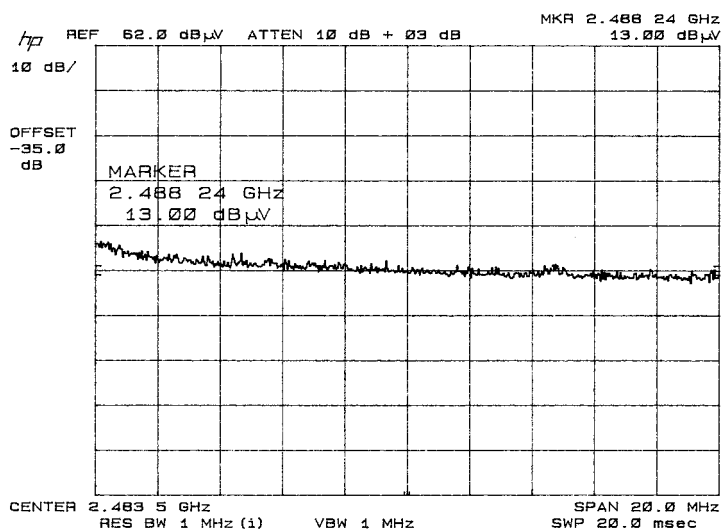
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ch 3 2422 50 mW OFDM

CHANNEL 3
FREQUENCY: 2422 MHz Average
- 1.50 dBuV from plot
+20.00 dB Attn
+29.25 dB ACF
+ 3.17 dB CL
50.92 dBuV

CHANNEL 9
FREQUENCY: 2452 MHz Peak
+13.00 dBuV from plot
+20.00 dB Attn
+29.38 dB ACF
+ 3.24 dB CL
+65.62 dBuV



ch 9 2452 MHz 50 mW OFDM

APPLICANT: P-COM, INC
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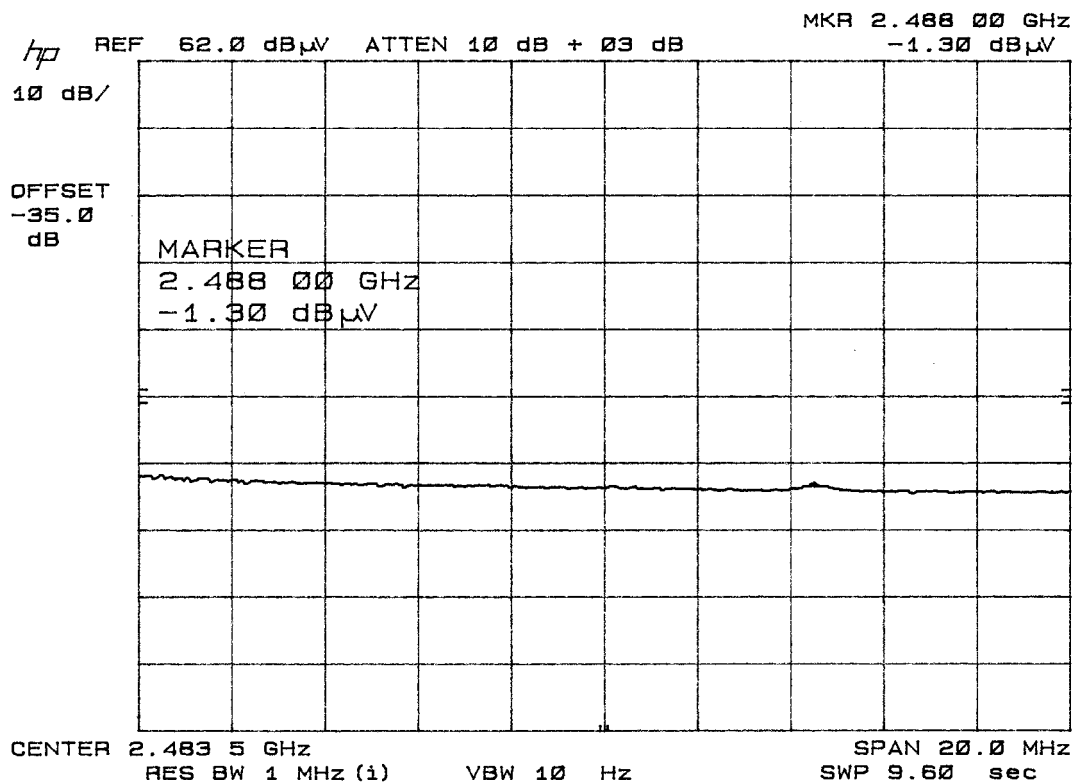
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ch 9 2452 MHz 50 mW OFDM

CHANNEL 9

FREQUENCY: 2452 MHz Peak:

- 1.30 dBuV from plot

+20.00 dB Attn

+29.38 dB ACF

+ 3.24 dB CL

51.32 dBuV

ok

APPLICANT: P-COM, INC

FCC ID: KINSL9201

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APPLICANT: P-COM, INC.

FCC ID: KINSL9201

NAME OF TEST: POWER SPECTRAL DENSITY

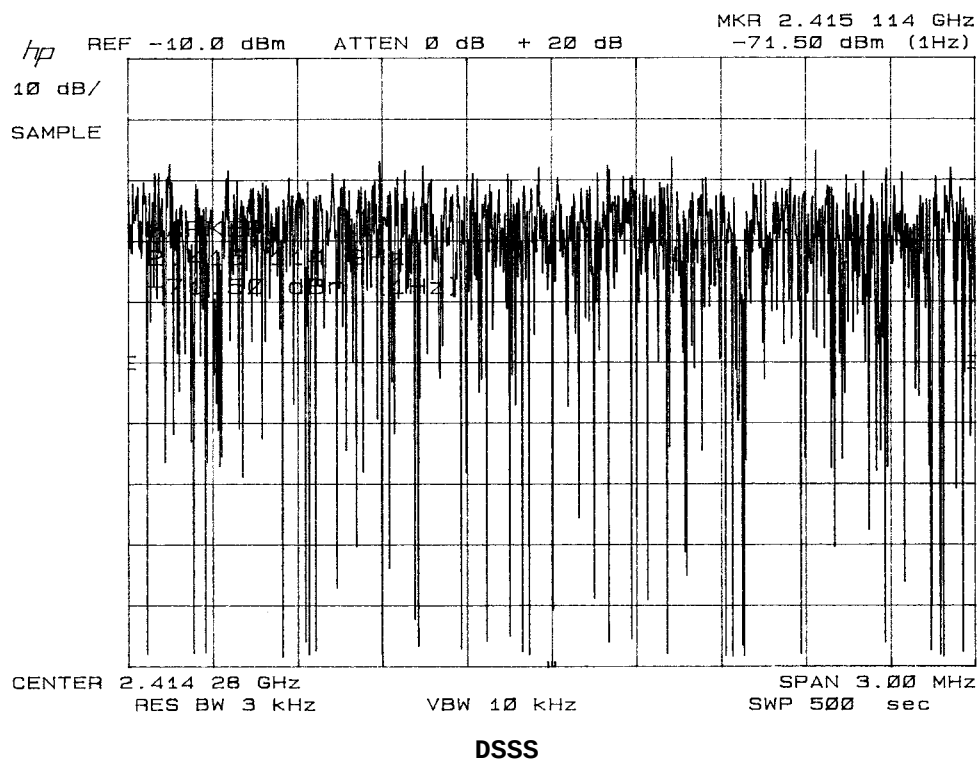
RULES PART NO.: 15.247(d)

REQUIREMENTS: The peak level measured must be no greater than +8.0 dBm.

DATA: SEE THE FOLLOWING PLOTS

The level at 2415 MHz was -61.50 dBm. Power output set to 50 mW.

+10 dB Attn.
+35 dB Correction Factor to 1 MHz
+45 dB
-71.5 dBm from plot
-26.5 dBm



APPLICANT: P-COM, INC

FCC ID: KINSL9201

REPORT #: P\P-COM_KIN\1378UT4\1378UT4TestReport.doc

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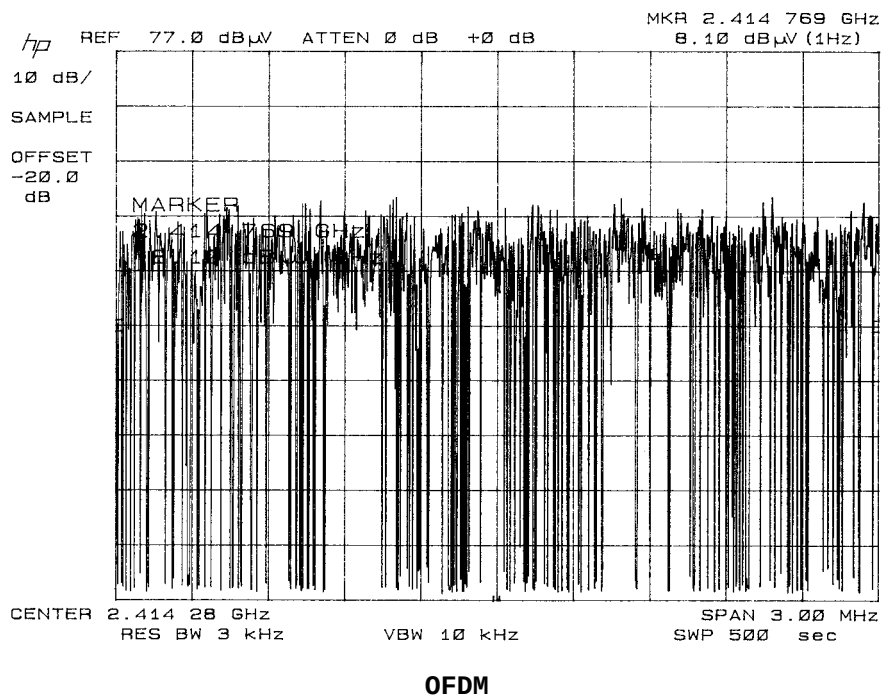
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The level at 2415 MHz was 48.1 dBuV. Power output set to 50 mW.

+40 dB	Attn.
+35 dB	Correction Factor to 1 MHz
+75 dB	
+ 8.1 dBuV from plot	
83.1 dBuV	
-107 dB convert factor to dBm	
-23.9 dBm	



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