

October 28, 2004

Mr. Drew Rosenberg Itron P.O. Box 1735 2401 North State Street Waseca, MN 56093

Phone: (507) 837-5264 Fax: (507) 837-5200

RE: EMC Testing and Report Intertek Job Number: 3067472

Total Number of Pages: 3 (Including this one)

Dear Mr. Rosenberg:

On October 25, 2004, we performed EMC testing on the Sleeve Repeater SPI-0001-001 REV.3 and the Pole Mount Repeater SPI-0005-001 REV.3 at our Intertek Oakdale Testing Facility. We tested your equipment to the following EMC Standard: CFR 47 §15.209. We found the equipment with no modifications to be compliant with the requirements of the above standard. Please see the attached tables for your test results.

Thank you again for allowing us to serve you. We look forward to working with your company again.

sincerely, Insti Kurkouski

Reed Billings EMC Engineer

Attachments

CC: Justin Heyl - Intertek Oakdale





Radiated Emissions

Date:

10/25/2004

Company:

Itron

Model:

Pole Mount Repeater SPI-0005-001 REV.3

Test Engineer:

Reed Billings

Standard:

CFR 47: §15.209

Note:

The table shows the worst case radiated emissions

All measurements were taken using a CISPR Quasi-peak detector

Measurements were taken at 3m distance

Table # 1

Antenna	Antenna	Frequency	QP Reading	Ant Factor	Net at 3m.	Distance	30m limit	Margin
Polarity	Ht (m)	MHz	dBμV/m	dB/m	dBμV/m	Factor (-20dB)	dBμV/m	dB
V	1.0	8.00	4.2	19.1	23.3	3.3	30	-26.7
V	1.0	12.01	4.7	10.6	15.3	-4.7	30	-34.7
Н	1.0	15.98	7.9	1.4	9.3	-10.7	30	-40.7
V	1.0	19.99	4.8	6.4	11.2	-8.8	30	-38.8
Н	1.0	23.97	3.8	11.8	15.6	-4.4	30	-34.4
V	1.0	29.98	3.5	18.1	21.6	1.6	30	-28.4

Test Equipment:

DESCRIPTION	SERIAL NO.	LAST CAL	CAL DUE	USED	
HP85462A Receiver RF Section	3325A00106	8/4/2004	8/4/2005	Х	
HP85460A RF Filter Section	3330A00109	8/4/2004	8/4/2005	х	
A.H. Systems 18" Loop Antenna	2383	3/4/2004	3/4/2005	x	

Comments: Limits are shown at 3m with Distance Factor conversion.



Radiated Emissions

Date:

10/25/2004

Company:

Itron

Model:

Sleeve Repeater SPI-0001-001 REV.3

Test Engineer:

Reed Billings

Standard:

CFR 47: §15.209

Note:

The table shows the worst case radiated emissions

All measurements were taken using a CISPR Quasi-peak detector

Measurements were taken at 3m distance

Table # 2

Antenna	Antenna	Frequency	QP Reading	Ant Factor	Net at 3m.	Distance	30m limit	Margin
Polarity	Ht (m)	MHz	dBμV/m	dB/m	dBμV/m	Factor (-20dB)	dBμV/m	dB
V	1.0	8.00	4.2	19.1	23.3	3.3	30	-26.7
Н	1.0	12.01	4.6	10.6	15.2	-4.8	30	-34.8
Н	1.0	15.98	7.9	1.4	9.3	-10.7	30	-40.7
V	1.0	19.99	4.7	6.4	11.1	-8.9	30	-38.9
Н	1.0	23.97	3.9	11.8	15.7	-4.3	30	-34.3
V	1.0	29.98	3.6	18.1	21.7	1.7	30	-28.3

Test Equipment:

DESCRIPTION	SERIAL NO.	LAST CAL	CAL DUE	USED
HP85462A Receiver RF Section	3325A00106	8/4/2004	8/4/2005	x
HP85460A RF Filter Section	3330A00109	8/4/2004	8/4/2005	Х
A.H. Systems 18" Loop Antenna	2383	3/4/2004	3/4/2005	Х

Comments: Limits are shown at 3m with Distance Factor conversion.