Jerome Manarchuck

From: Clarence Beverage <cbeverage@commtechrf.com>
Sent: Wednesday, January 16, 2013 10:45 AM
To: Jerome Manarchuck
Cc: Lahey, Alisa R.; Ken Eklund
Subject: KPQ-AM Wenatchee, Washington MoM Lic. BMML-20120620ACR
Attachments: Incoming Calibration for Cherry Creek radio.pdf

Hello Jerry,

My apology for the delay in getting this information to you. Could we have your recommendation as to how you would like us to proceed given the following:

- The reference field strength readings all fall within the range of 10.5 mV/m – 440 mV/m.
- The incoming calibration correction k1 is 0.99. The k2 factor ranges from 0.99 to 1.03 and the k3 factors are 1.0 for the 100-1,000 mV/m range and 1.01 for the 10-100 mV/m range.

Applying these correction factors to the submitted readings would not meaningfully change the values in my opinion and would lie within the overall 2% accuracy variation between meters.

Is this submission sufficient to allow you to go forward and complete application processing? If not we can file an amendment correcting the measured values to reflect the incoming correction factors.

Thank you very much for your time and guidance.

Clarence

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Potomac Instruments, inc.

7309 Grove Road Unit D / Frederick, MD 21704 / Voice: 301.696.5550 / Fax: 301.696.5553 / Web: www.pi-usa.com

FIM- 41
Serial Number: 699
Test Frequency: 560 kHz

Test Number: 2724
Date: 27 December 2012
Battery Check Readings: 6.6 VDC

Incoming Calibration Report

Absolute Accuracy: In an induction field of 218 mV/M, this FIM read 220 mV/M.
Correction Factor K_1: 0.99

Meter Linearity: (K_2)

Scale Division	Reading	Correction Factor
1.1	1.08	1.02
2.2	**REF**	1.00
3.3	3.28	1.01
4.4	4.45	0.99
5.5	5.40	1.02
6.6	6.50	1.02
7.7	7.50	1.03
8.8	8.60	1.02
9.9	9.60	1.03

Full Scale Range Step Accuracy: (K_3)

Range Step	Expected Reading	Measured Reading	Ratio	Range	Correction Factor
1V/10V	2.00 V	2.06 V	0.97	10V	0.97
1V/100mV	20.0 mV	19.9 mV	1.01	1V	1.00
100mV/10mV	2.00 mV	2.04 mV	0.98	100mV	1.01
10mV/1mV	0.200 mV	0.190 mV	1.05	10mV	0.99
1mV/100µV	20.0 µV	18.0 µV	1.11	1mV	1.04
				100µV	1.15

Potomac Instruments, inc. hereby attests that the above product was tested as recieved in accordance with applicable procedures established by this firm as the original equipment manufacturer of this device. Potomac Instruments' calibrating field is maintained equal to the National Institute of Standards and Technologies standard field within an accuracy of ±1.0%.

The overall correction factor, K, is given by $K=K_1*K_2*K_3$. Where K_2 is selected for the major scale division nearest to the uncorrected meter reading and K_3 is selected for the appropriate attenuator range setting.

Technician Zachary Babendreier

27 December 2012
Date

State of Maryland

Personally appeared before me this 31 th day of Dec, 2012, ***Zachary Babendreier***, who testified under oath that the above calibration was made by either himself or under his direction and that the statements in the above certificate are true to the best of his knowledge and belief.

MARCELLA R. LALIBERTE NOTARY PUBLIC MY COMMISSION EXPIRES 12/17/2016 FREDERICK COUNTY, MD

Notary Public