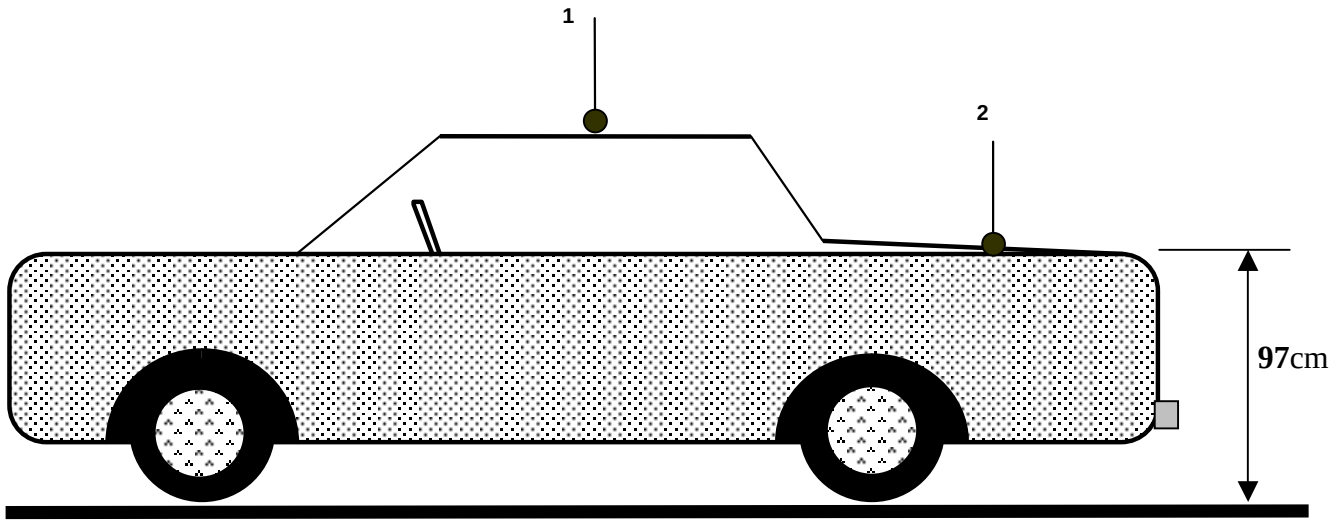
CGISS EME Response to FCC email Correspondence dated 9/10/03
Correspondence Number 25709

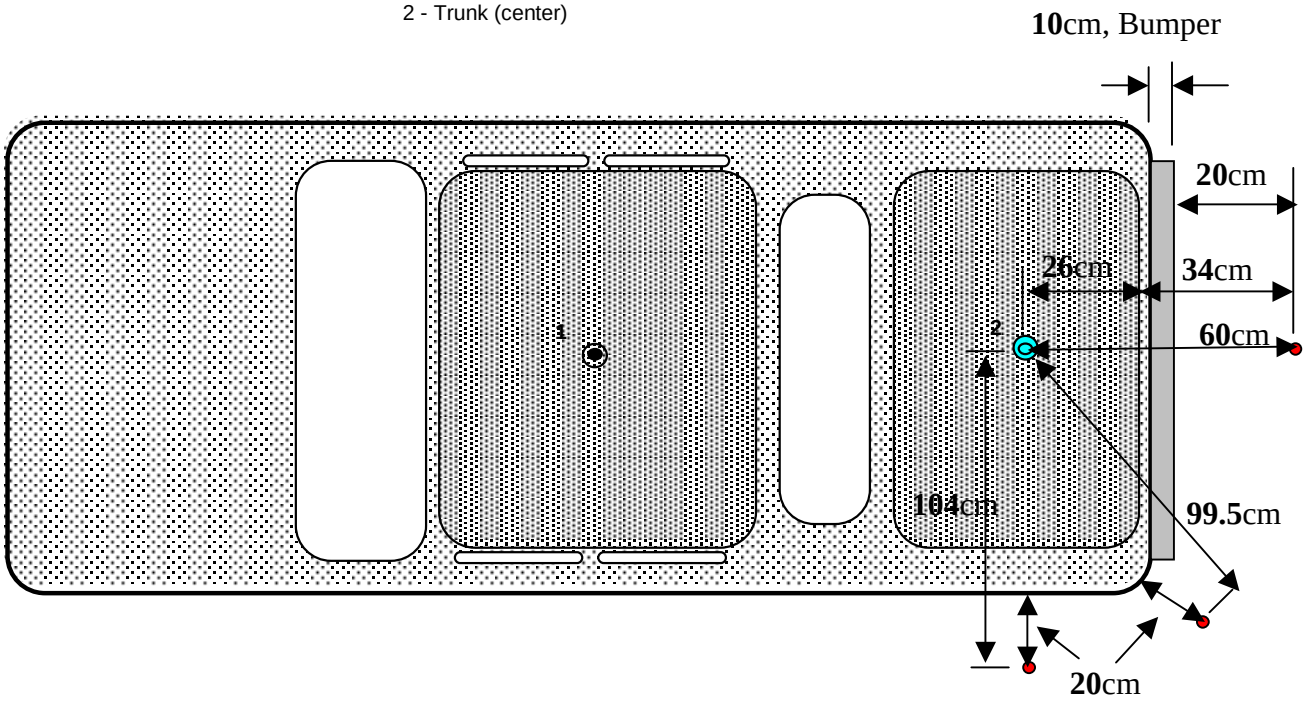
1.) Not clear how 45 deg position and test distance is defined - diagonal from antenna position, from trunk corner, or what. Top-view sketch showing positions and distances for trunk rear (60cm), side (104cm), and diagonal (99.5cm) positions would be helpful, including bumper to test line dimensions. Please include such info in future filings, including bumper distance.

R2.) Pease reference the illustration below showing the antenna position with test location distances identified.

Antenna Location Drawing with Trunk Test Locations Identified



1 - Roof (center)
2 - Trunk (center)



Note: Trunk Test Locations

Q2.) Is cal. info complete, or are there more pages to cal. report?

R2.) Please see below the additional calibration certificate pages.

DATE 06-May-2003 RELEASE # 835740
REL HUMIDITY 26% TEMP 25 DEG. C

NARDA MICROWAVE - EAST

MODEL # 8722B
SERIAL # 13001

Recal Probe - Date of Previous Probe Data = 03/28/2002

FREQ MHZ	PRE-CAL DATA	FINAL CAL DATA	ELLIPSE RATIO, dB	FINAL CORR. FACTOR	DEVIATION DELTA DB	PREVIOUS FINAL CORR
.30	0.72	0.77	+/- 0.40	1.30	-2.58	* 0.77
3.00	1.24	1.33	+/- 0.21	0.75	-0.43	0.73
10.00	0.86	0.92	+/- 0.20	1.08	-0.04	1.15
30.00	0.70	0.75	+/- 0.09	1.34	+0.06	1.46
100.00	1.23	1.32	+/- 0.14	0.76	-0.04	0.80
300.00	0.91	0.98	+/- 0.14	1.02	+0.38	1.20
750.00	1.16	1.24	+/- 0.19	0.80	-0.35	0.80
1000.00	1.25	1.34	+/- 0.24	0.75	-0.67	0.69
1700.00	0.97	1.04	+/- 0.45	0.96	+1.09	1.33
2450.00	1.09	0.99	+/- 0.40	1.01	+1.16	1.20
4000.00	1.03	0.93	+/- 0.21	1.07	+1.35	1.33
8200.00	1.21	1.09	+/- 0.69	0.91	+1.08	1.06
10000.00	1.16	1.05	+/- 0.63	0.96	+0.90	1.07
18000.00	1.38	1.25	+/- 0.83	0.80	+0.18	0.75
26500.00	1.25	1.13	+/- 0.98	0.89	+0.45	0.89
40000.00	0.89	0.80	+/- 0.92	1.25	+0.06	1.15

LOW FREQUENCY MULTIPLIER = 1.073 HIGH FREQUENCY MULTIPLIER = 0.905
FREQ. DEV. (3-40000 MHZ) = 2.549 DB
FREQ. DEV. (0.3-40000 MHZ) = 2.55 DB
MAX. ELLIPSE RATIO (0.3-40000 MHZ) = +/- 0.98 DB
PRE-CAL DATA REFLECTS THE MEAN ELLIPSE RATIO OF PROBE AS RECEIVED BY NARDA CALIBRATION DEPARTMENT, OR IS THE INITIAL, UN-ADJUSTED RATIO.
(PRE-CAL x OLD CORR. FACTOR) - 1 = DEVIATION FROM PREVIOUS (OLD) CALIBRATION DATA. NOTE: NOT APPLICABLE FOR NEW PROBES.
FINAL CAL DATA IS THE RATIO OF THE DISPLAYED TO THE APPLIED FIELD STRENGTH.
FINAL CORR. FACTOR IS THE RECIPROCAL OF FINAL CAL DATA.
FINAL CORR. FACTOR MULTIPLIED BY THE DISPLAYED FIELD STRENGTH READING GIVES THE ACTUAL ("CORRECTED") FIELD STRENGTH.
ELLIPSE RATIO IS EXPRESSED IN dB DEVIATION FROM THE MEAN DATA
NMI Uncertainty = +/- 0.5db. ATP # = 502120 REV J

TESTED V.M. Q.A. APPROVAL

narda
microwave-east
an L3 communications company

DATE 21-Mar-2003
REL HUMIDITY 37%

RELEASE # R33484
TEMP 24 DEG. C

NARDA MICROWAVE - EAST

MODEL # 8731
SERIAL # 03006

FREQ MHZ	PRE-CAL DATA	FINAL CAL DATA	ELLIPSE RATIO, dB	FINAL CORR FACTOR
10.00	0.97	0.92	+/- 0.02	1.09
13.56	1.01	0.96	+/- 0.02	1.05
27.12	1.03	0.97	+/- 0.02	1.03
40.68	1.02	0.97	+/- 0.02	1.04
50.00	1.02	0.97	+/- 0.04	1.03
75.00	1.02	0.97	+/- 0.02	1.04
100.00	1.02	0.97	+/- 0.04	1.03
150.00	1.08	1.02	+/- 0.02	0.98
200.00	1.10	1.05	+/- 0.08	0.96
250.00	1.10	1.04	+/- 0.06	0.96
300.00	1.12	1.06	+/- 0.18	0.94

MULTIPLIER = 0.951
FREQ. DEV. (13-200 MHZ) = 0.392 DB
FREQ. DEV. (10-300 MHZ) = 0.63 DB
MAX. ELLIPSE RATIO (10-300 MHZ) = +/- 0.18 DB
ORIGINAL RESISTANCE = 619 OHMS
FINAL RESISTANCE = 589 OHMS
THERMOCOUPLE OUTPUT AT FULL SCALE POWER DENSITY = V = 105.09 mV

PRE-CAL DATA REFLECTS THE MEAN ELLIPSE RATIO OF PROBE AS RECEIVED BY NARDA CALIBRATION DEPARTMENT, OR IS THE INITIAL, UN-ADJUSTED RATIO. (PRE-CAL x OLD CORR. FACTOR) - 1 = DEVIATION FROM PREVIOUS (OLD) CALIBRATION DATA. NOTE: NOT APPLICABLE FOR NEW PROBES. FINAL CAL DATA IS THE RATIO OF THE DISPLAYED TO THE APPLIED FIELD STRENGTH. FINAL CORR. FACTOR IS THE RECIPROCAL OF FINAL CAL DATA. FINAL CORR. FACTOR MULTIPLIED BY THE DISPLAYED FIELD STRENGTH READING GIVES THE ACTUAL ("CORRECTED") FIELD STRENGTH.

ELLIPSE RATIO IS EXPRESSED IN dB DEVIATION FROM THE MEAN DATA
RMS Uncertainty = +/- 0.5db. ATP # = 503195 REV D

TESTER L.V Q.A. APPROVAL