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FCC 302-AM

APPLICATION FOR AM BROADCAST STATION LICENSE

(Please read instructions before filling out form.

FOR COMMISSION USE ONLY
FILE NO. BL-20111212CVV

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SECTION I- APPLICANT FEE INFORMATION

1. PAYOR NAME (Last, First, Middle Initial)

HOLY FAMILY COMMUNICATIONS

MAILING ADDRESS (Line 1) (Maximum 35 characters)
6325 SHERIDAN DR.

MAILING ADDRESS (Line 2) (Maximum 35 characters)

CITY	STATE OR COUNTRY (if foreign address)	ZIP CODE
WILLIAMSVILLE	NY	14221

TELEPHONE NUMBER (include area code)	CALL LETTERS	OTHER FCC IDENTIFIER (If applicable)
716.839.6117	WQOM	#21109

2. A. Is a fee submitted with this application? [✓] Yes [ ] No

B. If No, indicate reason for fee exemption (see 47 C.F.R. Section

[ ] Governmental Entity [ ] Noncommercial educational licensee [ ] Other (Please explain):

C. If Yes, provide the following information:

Enter in Column (A) the correct Fee Type Code for the service you are applying for. Fee Type Codes may be found in the "Mass Media Services Fee Filing Guide." Column (B) lists the Fee Multiple applicable for this application. Enter fee amount due in Column (C).

(A) FEE TYPE CODE	(B) FEE MULTIPLE	(C) FEE DUE FOR FEE TYPE CODE IN COLUMN (A)	FOR FCC USE ONLY
MOR	0001	$ 730.00	

To be used only when you are requesting concurrent actions which result in a requirement to list more than one Fee Type Code.

(A)	(B)	(C)	FOR FCC USE ONLY
MMR	0001	$ 635.00	

	TOTAL AMOUNT REMITTED WITH THIS APPLICATION	FOR FCC USE ONLY
ADD ALL AMOUNTS SHOWN IN COLUMN C, AND ENTER THE TOTAL HERE. THIS AMOUNT SHOULD EQUAL YOUR ENCLOSED REMITTANCE.	$ 1365.00	

SECTION II - APPLICANT INFORMATION		
1. NAME OF APPLICANT HOLY FAMILY COMMUNICATIONS		
MAILING ADDRESS 6325 SHERIDAN DR.		
CITY WILLIAMSVILLE	STATE NY	ZIP CODE 14221

2. This application is for:

☑ Commercial ☐ Noncommercial

☑ AM Directional ☐ AM Non-Directional

Call letters	Community of License	Construction Permit File No.	Modification of Construction Permit File No(s).	Expiration Date of Last Construction Permit
WQOM	NATICK, MA	BP-20100811ABC		1/14/2013

3. Is the station now operating pursuant to automatic program test authority in accordance with 47 C.F.R. Section 73.1620?

☐ Yes ☑ No

If No, explain in an Exhibit.

Exhibit No. See Engineering Report

4. Have all the terms, conditions, and obligations set forth in the above described construction permit been fully met?

☑ Yes ☐ No

If No, state exceptions in an Exhibit.

Exhibit No.

5. Apart from the changes already reported, has any cause or circumstance arisen since the grant of the underlying construction permit which would result in any statement or representation contained in the construction permit application to be now incorrect?

☐ Yes ☑ No

If Yes, explain in an Exhibit.

Exhibit No.

6. Has the permittee filed its Ownership Report (FCC Form 323) or ownership certification in accordance with 47 C.F.R. Section 73.3615(b)?

☑ Yes ☐ No

☐ Does not apply

If No, explain in an Exhibit.

Exhibit No.

7. Has an adverse finding been made or an adverse final action been taken by any court or administrative body with respect to the applicant or parties to the application in a civil or criminal proceeding, brought under the provisions of any law relating to the following: any felony; mass media related antitrust or unfair competition; fraudulent statements to another governmental unit; or discrimination?

☐ Yes ☑ No

If the answer is Yes, attach as an Exhibit a full disclosure of the persons and matters involved, including an identification of the court or administrative body and the proceeding (by dates and file numbers), and the disposition of the litigation. Where the requisite information has been earlier disclosed in connection with another application or as required by 47 U.S.C. Section 1.65(c), the applicant need only provide: (i) an identification of that previous submission by reference to the file number in the case of an application, the call letters of the station regarding which the application or Section 1.65 information was filed, and the date of filing; and (ii) the disposition of the previously reported matter.

Exhibit No.

8. Does the applicant, or any party to the application, have a petition on file to migrate to the expanded band (1605-1705 kHz) or a permit or license either in the existing band or expanded band that is held in combination (pursuant to the 5 year holding period allowed) with the AM facility proposed to be modified herein? ☐ Yes ☐ No

If Yes, provide particulars as an Exhibit. Exhibit No.

The APPLICANT hereby waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because use of the same, whether by license or otherwise, and requests and authorization in accordance with this application. (See Section 304 of the Communications Act of 1934, as amended).

The APPLICANT acknowledges that all the statements made in this application and attached exhibits are considered material representations and that all the exhibits are a material part hereof and are incorporated herein as set out in full in

CERTIFICATION

1. By checking Yes, the applicant certifies, that, in the case of an individual applicant, he or she is not subject to a denial of federal benefits that includes FCC benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. Section 862, or, in the case of a non-individual applicant (e.g., corporation, partnership or other unincorporated association), no party to the application is subject to a denial of federal benefits that includes FCC benefits pursuant to that section. For the definition of a "party" for these purposes, see 47 C.F.R. Section 1.2002(b). ☐ Yes ☐ No

2. Icer tify that the statements in this application are true, complete, and correct to the best of my knowledge and belief, and are made in good faith.

Name	Signature	
JAMES N. WRIGHT	James N Wright	
Title: President	Date: 12/2/11	Telephone Number: 716-839-6117

WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION

FCC NOTICE TO INDIVIDUALS REQUIRED BY THE PRIVACY ACT AND THE PAPERWORK REDUCTION ACT

The solicitation of personal information requested in this application is authorized by the Communications Act of 1934, as amended. The Commission will use the information provided in this form to determine whether grant of the application is in the public interest. In reaching that determination, or for law enforcement purposes, it may become necessary to refer personal information contained in this form to another government agency. In addition, all information provided in this form will be available for public inspection. If information requested on the form is not provided, the application may be returned without action having been taken upon it or its processing may be delayed while a request is made to provide the missing information. Your response is required to obtain the requested authorization.

Public reporting burden for this collection of information is estimated to average 639 hours and 53 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, can be sent to the Federal Communications Commission, Records Management Branch, Paperwork Reduction Project (3060-0627), Washington, D. C. 20554. Do NOT send completed forms to this address.

THE FOREGOING NOTICE IS REQUIRED BY THE PRIVACY ACT OF 1974, P.L. 93-579, DECEMBER 31, 1974, 5 U.S.C. 552a(e)(3), AND THE PAPERWORK REDUCTION ACT OF 1980, P.L. 96-511, DECEMBER 11, 1980, 44 U.S.C. 3507.

SECTION III - LICENSE APPLICATION ENGINEERING DATA

Name of Applicant
Holy Family Communications

PURPOSE OF AUTHORIZATION APPLIED FOR: (check one)

☒ Station License ☐ Direct Measurement of Power

1. Facilities authorized in construction permit

Call Sign	File No. of Construction Permit (if applicable)	Frequency (kHz)	Hours of Operation	Power in kilowatts	
				Night	Day
WQOM	BP-20100811ABC	1060	Unlimited	2.5	50

2. Station location

State	City or Town
Massachusetts	Natick

3. Transmitter location

State	County	City or Town	Street address (or other identification)
MA	Middlesex	Ashland	End of Sewell Street

4. Main studio location

State	County	City or Town	Street address (or other identification)
MA	Middlesex	Framingham	100 Mount Wayte Avenue

5. Remote control point location (specify only if authorized directional antenna)

State	County	City or Town	Street address (or other identification)
MA	Middlesex	Framingham	100 Mount Wayte Avenue

6. Has type-approved stereo generating equipment been installed? ☐ Yes ☒ No

7. Does the sampling system meet the requirements of 47 C.F.R. Section 73.68? ☒ Yes ☐ No

☐ Not Applicable

Attach as an Exhibit a detailed description of the sampling system as installed. Exhibit No. See Eng.

8. Operating constants:

RF common point or antenna current (in amperes) without modulation for night system	RF common point or antenna current (in amperes) without modulation for day system
7.35	32.5

Measured antenna or common point resistance (in ohms) at operating frequency		Measured antenna or common point reactance (in ohms) at operating frequency	
Night	Day	Night	Day
50	50	-5	-5

Antenna indications for directional operation

Towers	Antenna monitor Phase reading(s) in degrees		Antenna monitor sample current ratio(s)		Antenna base currents	
	Night	Day	Night	Day	Night	Day
1(W)	-108.2		0.260			
2(WC)	125.0	96.2	0.805	0.316		
3(C)	0.0	0.0	1.000	1.000		
4(EC)	-127.2	-107.2	0.640	0.724		
5(E)	127.5		0.204			

Manufacturer and type of antenna monitor: Potomac Instruments AM-1901-5

9. Description of antenna system (If directional antenna is used, the information requested below should be given for each element of the array. Use separate sheets if necessary.)

Type Radiator	Overall height in meters of radiator above base insulator, or above base, if grounded.	Overall height in meters above ground (without obstruction lighting)	Overall height in meters above ground (include obstruction lighting)	If antenna is either top loaded or sectionalized, describe fully in an Exhibit.
Vertical, steel, guyed, uniform cross section	162.5	163.7	164.6	Exhibit No. N/A

Excitation [X] Series [ ] Shunt

Geographic coordinates to nearest second. For directional antenna give coordinates of center of array. For single vertical radiator give tower location.

North Latitude	°	'	"	West Longitude	°	'	"
	42	14	50		71	25	31

If not fully described above, attach as an Exhibit further details and dimensions including any other antenna mounted on tower and associated isolation circuits. Exhibit No. N/A

Also, if necessary for a complete description, attach as an Exhibit a sketch of the details and dimensions of ground system. Exhibit No. N/A

10. In what respect, if any, does the apparatus constructed differ from that described in the application for construction permit or in the permit?

No changes

11. Give reasons for the change in antenna or common point resistance.

N/A

I certify that I represent the applicant in the capacity indicated below and that I have examined the foregoing statement of technical information and that it is true to the best of my knowledge and belief.

Name (Please Print or Type)	Signature (check appropriate box below)
Charles A. Hecht	Charles A. Hecht
Address (include ZIP Code)	Date
Charles A. Hecht & Associates, Inc. 16 Doe Run Pittstown, NJ 08867	October 26, 2011
	Telephone No. (Include Area Code) (908) 730-7959

[ ] Technical Director

[ ] Registered Professional Engineer

[ ] Chief Operator

[X] Technical Consultant

[ ] Other (specify)

CHARLES A. HECHT & ASSOCIATES, INC.
BROADCAST ENGINEERING CONSULTANTS

ENGINEERING REPORT COVERING

APPLICATION FOR LICENSE AND REQUEST FOR PROGRAM TEST AUTHORITY

ON BEHALF OF HOLY FAMILY COMMUNICATIONS

FOR STATION WQOM(AM) 1060 KILOHERTZ

NATICK, MASSACHUSETTS

OCTOBER 2011

ENGINEERING REPORT COVERING

APPLICATION FOR LICENSE AND REQUEST FOR PROGRAM TEST AUTHORITY

ON BEHALF OF HOLY FAMILY COMMUNICATIONS

FOR STATION WQOMAM) 1060 KILOHERTZ

NATICK, MASSACHUSETTS

SUMMARY

This engineering report is submitted on behalf of Holy Family Communications (hereinafter referred to as "Holy Family"), licensee of AM station WQOM Natick, Massachusetts in support of an application for license and request for program test authority for AM station WQOM. WQOM is presently licensed to operate on 1060 kilohertz with power of 40 kilowatts daytime, 22 kilowatts critical hours and 2.5 kilowatts nighttime. All operating modes are directional. WQOM is a two site operation with the nighttime facilities located at a separate site. This report will demonstrate that Holy Family has constructed WQOM in accordance with construction permit BMP-20100811ABC. A copy of the construction permit is enclosed at the rear of this report. The construction authorized in the permit is as follows: 1) Relocate the daytime operation to the nighttime site and increase power to 50 kilowatts employing a directional antenna system. 2) Delete the critical hours operating mode. 3) No changes were authorized for the nighttime operation.

In support thereof, contained in this report is a complete proof of performance for the daytime directional antenna system and a partial proof of performance for the nighttime directional antenna system with associated engineering exhibits and the Engineering section of Form 302-AM.

SYSTEM ADJUSTMENT

The WQOM directional antenna patterns were originally adjusted to theoretical computer modeled parameters that were based on the actual measured self-impedances of each of the three towers that comprise the WQOM directional system. Adjustments from theoretical were then made based upon analysis of sample field strength measurements to achieve pattern adjustment. All field strength measurements presented in this report were conducted under similar environmental conditions during the period of March 19, 2011 through April 18, 2011. Antenna adjustments were made by or under the direction of the undersigned.

PATTERN FIELD STRENGTH MEASUREMENTS

Field strength measurements were made on six radials in the non-directional mode and daytime directional modes. The radials were particularly selected to define the shape of the radiation pattern and meet the requirements of the construction permit. For the nighttime partial proof of performance, measurements were made on the six monitor point radials. The non-directional measurements were conducted with power of 12.5 kilowatts energizing Tower 3 (Center) with the other towers detuned.

For the complete daytime proof of performance, non-directional measurements were taken over a distance ranging from approximately 0.3 kilometers to approximately 16 kilometers on each of the six daytime radials. Daytime directional mode measurements on the daytime pattern radials were repeated beginning at a distance of approximately 3.2 kilometers. The non-directional measurements taken in support of the nighttime partial proof and corresponding directional measurements were conducted at a beginning distance of approximately 3.2 kilometers with the non-directional inverse distance field values obtained from Table 2.11 of the 2003 complete proof (BL-20031201BGH), mathematically corrected for 12.5 kilowatts. All measurements were made at intervals conforming as closely to the recommendations of the FCC rules as physical conditions permitted.

A summary tabulation of measured daytime field strength data is included herein as Table 1. Detailed daytime field strength information is tabulated by radial in Tables 2-7 and follows Table 1 in this report. Detailed field strength information for the nighttime partial proof of performance is tabulated by radial in Tables 8-13. Figures 1-12 are graphs of the measured field strength data for the non-directional and daytime directional modes. A reference graph for the field strength measurement analysis curves used in this report is provided immediately following Figure 12.

The field strength measurements were performed by G. John Garrett, who has more than ten years experience in the taking of field intensity measurements for Commission filings. The field strength meter utilized for the measurements was as follows:

Make and Model	Serial Number	Calibration Date
Potomac Instruments FIM-4100	134	October 7, 2010

A GPS receiver was employed to enhance measurement location accuracy.

FIELD STRENGTH DATA ANALYSIS

Field strength measurements were analyzed in accordance with the best fit method outlined in Section 73.186 of the rules. To aid in data analysis where measurements could not be taken at intervals specified by the rules due to inaccessibility, additional measurements were taken at intervals closer than normally required where possible. The analysis of the measurement data indicates that the inverse distance field strength at a distance of one kilometer on the radials specified for monitoring purposes in the WQOM construction permit for the day and night patterns is below the maximum value permitted. In addition, the inverse distance field strength at a distance of one kilometer on each of the remaining measured radial azimuths is within the standard pattern radiation value authorized in the construction permit. Figures 13-14 are plots of the measured non-directional and daytime directional horizontal radiation patterns.

MONITOR POINTS

The WQOM construction permit, which is attached at the rear of this report, specifies three monitoring radials (90, 238 and 302 degrees true) for the daytime operation. The 90 degree true radial is the center of the main lobe of the pattern with a standard pattern field of 4831 mVm/km. Traditionally, the Commission does not require monitoring of this type of radial. Accordingly, Holy Family respectfully requests that monitoring of the 90 degree radial be deleted. Accessible monitor points have been selected for the 238 and 302 degree daytime monitoring radials. A description and color photograph of each monitor point is submitted with this report.

DIRECT MEASUREMENT OF POWER

For the purpose of determination of non-directional power, the impedance of Tower 3 was measured and found to be a resistance of 44 ohms and a reactance of –j 36.9 ohms. The other towers were detuned. A base current meter, inserted in the circuit immediately adjacent to this jack, was employed for measuring the non-directional base current. The operating current value was calculated to be 16.9 amperes for power of 12.5 kilowatts.

SAMPLE SYSTEM

The sample system installed for the existing, presently licensed nighttime operation is type approved and no changes were made. This system is also used for the daytime operation. Therefore, it can be safely concluded the sampling system for the WQOM daytime operation meets the type approval specifications of Section 73.68 of the Commission's rules.

CONCLUSION

The technical information and exhibits in this report demonstrate that the terms of the WQOM construction permit have been met. Therefore, Holy Family respectfully requests that program test authority and a license for the facilities authorized in the construction permit be granted.

DECLARATION

The foregoing was prepared by or under the immediate supervision of Charles A. Hecht of Charles A. Hecht & Associates, Inc., Pittstown, New Jersey, whose qualifications are a matter of record with the Federal Communications Commission. All statements herein are true and correct of his knowledge except such statements made on information and belief, and as to those statements, he believes them to be true and correct under the penalty of perjury.

Respectfully submitted,

/s/

Charles A. Hecht
Charles A. Hecht & Associates, Inc.
16 Doe Run
Pittstown, New Jersey 08867
(908) 730-7959
October 26, 2011

CHARLES A. HECHT & ASSOCIATES, INC.
BROADCAST ENGINEERING CONSULTANTS

TABLE 1

SUMMARY OF MEASURED DAYTIME FIELD STRENGTH DATA

HOLY FAMILY COMMUNICATIONS

WQOM 1060 KILOHERTZ

NATICK, MASSACHUSETTS

OCTOBER 2011

Radial Bearing	12.5 Kw ND Measured	50 Kw DA-D Measured	Standard Pattern
16	1470	3341	3407
90	1550	4750	4831
164	1370	3132	3407
238	1500	269	303*
270	1410	302	362*
302	1380	223	303*

*Maximum permissible value specified in WQOM construction permit BP-20100811ABC.

TABLE 2

FIELD STRENGTH MEASUREMENT ANALYSIS

DAY PATTERN

WQOM(AM) 1060 KILOHERTZ

OCTOBER 2011

RADIAL 16 DEGREES TRUE

Point Number	Distance Km	Date/Time Local	12.5 Kw ND mV/m	Date/Time Local	50 kw DA-D mV/m	Ratio DA-D/ND
		3/30/11				
1	1.45	1031	651			
2	1.58	1037	702			
3	1.65	1039	682			
4	2.67	1058	262			
5	2.62	1105	365			
6	2.53	1112	408			
7	2.49	1117	310			
8	2.76	1124	163			
9	3.05	1133	349			
10	3.18	1136	158			
		4/11/11		4/16/11		
11	3.58	1304	235	1341	482	2.051
12	3.88	1313	165	1344	349	2.115
13	4.30	1319	186	1346	398	2.140
14	4.71	1324	119	1348	257	2.157
15	5.14	1330	235	1352	508	2.161
16	5.69	1336	164	1355	354	2.157
17	6.18	1347	96.0	1400	221	2.307
18	7.00	1356	100	1405	231	2.312
19	7.53	1402	74.5	1410	168	2.254
20	7.60	1407	58.6	1415	124	2.119

CHARLES A. HECHT & ASSOCIATES, INC.
BROADCAST ENGINEERING CONSULTANTS

RADIAL 16 DEGREES TRUE

Point Number	Distance Km	Date/Time Local 4/11/11	12.5 Kw ND mV/m	Date/Time Local 4/16/11	50 kw DA-D mV/m	Ratio DA-D/ND
21	8.49	1412	49.5	1419	106	2.151
22	9.07	1425	63.8	1427	146	2.295
23	10.58	1441	31.4	1434	77.9	2.482
24	11.02	1458	22.4	1436	54.0	2.411
25	12.68	1505	23.8	1443	60.0	2.520
26	13.43	1519	20.9	1449	51.0	2.438
27	14.71	1530	18.2	1456	44.4	2.442
28	15.85	1546	10.0	1502	24.0	2.396

Average Ratio	2.273
ND Inverse Field	1470
Measured DA-D Inverse Field	3341
Standard Pattern	3407

TABLE 3

FIELD STRENGTH MEASUREMENT ANALYSIS

DAY PATTERN

WQOM(AM) 1060 KILOHERTZ

OCTOBER 2011

RADIAL 90 DEGREES TRUE

Point Number	Distance Km	Date/Time Local	12.5 Kw ND mV/m	Date/Time Local	50 kw DA-D mV/m	Ratio DA-D/ND
		3/30/11				
1	1.31	1157	590			
2	1.38	1201	541			
3	1.47	1205	463			
4	1.59	1214	321			
5	1.67	1218	334			
6	1.71	1220	291			
7	1.98	1226	224			
8	2.14	1235	138			
9	2.19	1242	209			
		4/10/11		4/16/11		
10	3.54	943	60.5	1247	192	3.174
11	4.56	949	36.4	1242	113	3.104
12	5.57	955	26.8	1236	80.0	2.981
13	7.04	1005	18.4	1225	57.0	3.103
14	7.82	1013	10.0	1219	31.1	3.124
15	8.08	1020	12.7	1215	38.6	3.051
16	8.23	1024	11.6	1212	35.9	3.108
17	8.38	1029	13.1	1207	39.3	3.002
18	8.71	1035	10.5	1202	33.0	3.151
19	9.94	1044	7.70	1154	24.1	3.130
20	10.37	1049	6.60	1150	18.1	2.742

RADIAL 90 DEGREES TRUE

Point Number	Distance Km	Date/Time Local 4/11/11	12.5 Kw ND mV/m	Date/Time Local 4/16/11	50 kw DA-D mV/m	Ratio DA-D/ND
21	10.82	1700	9.56	1145	29.6	3.097
22	11.50	1655	5.72	1137	16.9	2.955
23	12.13	1647	6.05	1129	18.5	3.058
24	12.45	1643	5.30	1122	16.5	3.112
25	14.49	1635	3.99	1111	12.3	3.080
26	15.97	1628	3.30	1043	10.3	3.121

Average Ratio	3.064
ND Inverse Field	1550
Measured DA-D Inverse Field	4750
Standard Pattern	4831

TABLE 4

FIELD STRENGTH MEASUREMENT ANALYSIS

DAY PATTERN

WQOM(AM) 1060 KILOHERTZ

OCTOBER 2011

RADIAL 164 DEGREES TRUE

Point Number	Distance Km	Date/Time Local	12.5 Kw ND mV/m	Date/Time Local	50 kw DA-D mV/m	Ratio DA-D/ND
		3/29/11				
1	0.278	1306	2690			
2	0.408	1310	1510			
3	0.479	1315	2440			
4	0.781	1322	1290			
5	0.963	1340	816			
6	0.979	1342	844			
7	1.16	1425	695			
8	1.46	1430	444			
9	1.72	1437	269			
		04/12/11		4/16/11		
10	2.76	1238	198	1614	421	2.127
11	3.38	1240	86.2	1624	198	2.297
12	3.40	1246	184	1626	404	2.196
13	4.05	1300	84.7	1628	192	2.264
14	4.60	1315	62.4	1631	132	2.122
15	4.82	1317	68.8	1633	156	2.265
16	5.63	1325	39.5	1637	97.1	2.459
17	6.34	1332	28.5	1640	72.7	2.548
18	7.54	1343	17.3	1645	45.0	2.592
19	8.07	1354	10.5	1649	24.6	2.349
				4/18/11		
20	8.20	1358	15.5	1451	34.9	2.255
21	9.21	1406	11.3	1453	24.7	2.177

RADIAL 164 DEGREES TRUE

Point Number	Distance Km	Date/Time Local 4/12/11	12.5 Kw ND mV/m	Date/Time Local 4/18/11	50 kw DA-D mV/m	Ratio DA-D/ND
22	10.14	1419	10.9	1459	24.4	2.235
23	10.70	1428	7.42	1506	16.6	2.238
24	12.55	1443	7.64	1509	17.7	2.316
25	13.69	1458	6.85	1514	15.8	2.308
26	14.12	1509	4.74	1524	10.7	2.256
27	14.69	1521	6.02	1530	13.3	2.210
28	15.86	1533	3.59	1534	7.98	2.222

Average Ratio	2.286
ND Inverse Field	1370
Measured DA-D Inverse Field	3132
Standard Pattern	3407

TABLE 5

FIELD STRENGTH MEASUREMENT ANALYSIS

DAY PATTERN

WQOM(AM) 1060 KILOHERTZ

OCTOBER 2011

RADIAL 238 DEGREES TRUE

Point Number	Distance Km	Date/Time Local	12.5 Kw ND mV/m	Date/Time Local	50 kw DA-D mV/m	Ratio DA-D/ND
		3/29/11				
1	0.38	942	1930			
2	0.62	948	1260			
3	1.18	955	674			
4	1.28	1002	669			
5	1.49	1007	630			
6	1.68	1011	355			
7	1.82	1015	449			
8	1.97	1022	370			
9	2.37	1024	222			
10	2.37	1030	268			
		4/6/11		4/15/11		
11	3.24	1518	156	1521	20.9	0.134
12 MP	4.05	1525	97.0	1527	15.4	0.159
13	4.75	1530	54.0	1531	6.11	0.113
14	5.68	1537	50.0	1536	7.50	0.150
		3/26/11				
15	6.16	1400	36.0	1547	6.15	0.171
16	6.82	1415	34.5	1552	5.92	0.172
17	7.66	1423	24.0	1600	4.18	0.174
18	8.47	1436	10.9	1605	2.02	0.185
19	10.29	1458	11.1	1611	1.85	0.167
20	10.61	1503	10.5	1615	2.09	0.199

CHARLES A. HECHT & ASSOCIATES, INC.
BROADCAST ENGINEERING CONSULTANTS

RADIAL 238 DEGREES TRUE

Point Number	Distance Km	Date/Time Local	12.5 Kw ND mV/m	Date/Time Local	50 kw DA-D mV/m	Ratio DA-D/ND
		3/26/11		4/15/11		
21	11.38	1521	10.6	1626	2.40	0.226
22	12.91	1530	6.40	1635	1.47	0.230
		3/26/11		4/18/11		
23	14.43	1544	6.30	1350	1.40	0.222
24	15.33	1549	5.50	1353	1.21	0.220
25	16.26	1556	2.90	1359	0.49	0.169

Average Ratio	0.179
ND Inverse Field	1500
Measured DA-D Inverse Field	269
Standard Pattern	303

TABLE 6

FIELD STRENGTH MEASUREMENT ANALYSIS

DAY PATTERN

WQOM(AM) 1060 KILOHERTZ

OCTOBER 2011

RADIAL 270 DEGREES TRUE

Point Number	Distance Km	Date/Time Local	12.5 Kw ND mV/m	Date/Time Local	50 kw DA-D mV/m	Ratio DA-D/ND
		3/25/11				
1	0.42	1624	2530			
2	0.48	1639	1400			
3	0.76	1633	1290			
4	0.85	1638	1180			
5	1.20	1643	732			
6	1.32	1645	644			
		3/29/11				
7	1.79	902	585			
8	2.11	907	466			
9	2.31	913	260			
				4/15/11		
10	2.58	919	238	1459	51.0	0.214
		3/25/11				
11	4.18	1346	63.0	1502	13.6	0.216
12	4.39	1304	98.0	1505	19.8	0.202
13	4.99	1357	67.5	1507	15.9	0.236
14	5.73	1406	53.8	1511	10.5	0.195
				4/18/11		
15	6.77	1415	32.0	1107	6.87	0.215
16	7.64	1430	17.6	1125	3.91	0.222
17	8.52	1442	13.0	1128	2.19	0.168
18	10.15	1459	9.10	1135	2.11	0.232
19	10.46	1506	8.80	1137	2.12	0.241

RADIAL 270 DEGREES TRUE

Point Number	Distance Km	Date/Time Local 3/25/11	12.5 Kw ND mV/m	Date/Time Local 4/18/11	50 kw DA-D mV/m	Ratio DA-D/ND
20	12.36	1522	6.40	1148	1.71	0.267
21	13.06	1533	7.00	1157	1.36	0.194
22	14.00	1537	5.19	1201	0.81	0.157
23	14.68	1542	5.50	1207	0.80	0.146
24	15.96	1548	3.60	1334	0.75	0.207

Average Ratio	0.214
ND Inverse Field	1410
Measured DA-D Inverse Field	302
Standard Pattern	362

TABLE 7

FIELD STRENGTH MEASUREMENT ANALYSIS

DAY PATTERN

WQOM(AM) 1060 KILOHERTZ

OCTOBER 2011

RADIAL 302 DEGREES TRUE

Point Number	Distance Km	Date/Time Local	12.5 Kw ND mV/m	Date/Time Local	50 kw DA-D mV/m	Ratio DA-D/ND
		3/29/11				
1	0.27	1059	2670			
2	0.52	1104	1870			
3	0.65	1135	1660			
4	0.76	1147	1260			
5	1.15	1201	868			
6	1.54	1206	525			
7	1.77	1211	547			
8	2.01	1217	385			
9	2.09	1220	380			
10	2.53	1232	194			
		4/10/11		4/15/11		
11 MP	3.20	1604	116	1433	22.9	0.197
12	3.70	1611	104	1435	25.2	0.242
13	4.15	1624	100	1439	18.9	0.189
14	4.51	1637	80.0	1444	13.0	0.163
		3/24/11				
15	4.99	1540	45.0	1448	9.52	0.212
				04/18/11		
16	6.83	1533	26.3	1030	4.42	0.168
17	7.21	1525	27.4	1026	4.68	0.171
18	8.33	1518	21.8	1022	2.36	0.108
19	9.36	1508	11.1	1018	1.95	0.176
20	9.96	1503	17.0	1015	2.26	0.133

CHARLES A. HECHT & ASSOCIATES, INC.
BROADCAST ENGINEERING CONSULTANTS

RADIAL 302 DEGREES TRUE

Point Number	Distance Km	Date/Time Local 3/24/11	12.5 Kw ND mV/m	Date/Time Local 4/18/11	50 kw DA-D mV/m	Ratio DA-D/ND
21	10.29	1453	12.1	1010	1.15	0.095
22	10.98	1448	11.5	1006	1.59	0.138
23	11.57	1442	11.8	1002	1.51	0.128
24	12.86	1436	5.60	958	0.83	0.148
25	13.73	1425	8.20	956	1.43	0.174
26	16.24	1412	7.60	950	1.12	0.147

Average Ratio	0.162
ND Inverse Field	1380
Measured DA-D Inverse Field	223
Standard Pattern	303

TABLE 8

FIELD STRENGTH MEASUREMENT ANALYSIS

NIGHT PATTERN

WQOM(AM) 1060 KILOHERTZ

OCTOBER 2011

RADIAL 184.5 DEGREES TRUE

Point Number	Distance Km	Date/Time Local	12.5 Kw ND mV/m	Date/Time Local	2.5 kw DA-N mV/m	Ratio DA-N/ND
		3/19/11		4/7/11		
1	2.99	1313	130	1602	2.47	0.019
2 MP	3.59	1315	90.0	1606	2.83	0.031
3	4.98	1324	52.0	1619	1.92	0.037
		3/22/11		4/9/11		
4	5.10	1214	55.0	1328	1.84	0.033
5	5.60	1224	40.0	1337	1.45	0.036
6	6.65	1230	42.0	1342	1.65	0.039
7	7.50	1237	26.0	1349	0.84	0.032
8	8.40	1245	25.0	1354	0.49	0.020
9	8.96	1251	17.4	1402	0.16	0.009
10	10.21	1304	12.5	1410	0.22	0.018
11	11.49	1308	10.4	1418	0.27	0.026
12	12.89	1314	9.00	1427	0.24	0.027
13	13.79	1325	9.00	1435	0.10	0.011

Average Ratio	0.027
2004 ND Inverse Field	1297
Measured DA-N Inverse Field	34.6
Standard Pattern	39.6

TABLE 9

FIELD STRENGTH MEASUREMENT ANALYSIS

NIGHT PATTERN

WQOM(AM) 1060 KILOHERTZ

OCTOBER 2011

RADIAL 210 DEGREES TRUE

Point Number	Distance Km	Date/Time Local	12.5 Kw ND mV/m	Date/Time Local	2.5 kw DA-N mV/m	Ratio DA-N/ND
		3/19/11		4/8/11		
1	3.21	1641	104	1648	0.66	0.006
2 MP	3.63	1635	100	1638	0.19	0.002
3	4.19	1626	42.0	1623	0.37	0.009
4	5.26	1621	27.5	1612	0.46	0.017
		3/22/11		4/9/11		
5	5.55	1533	36.5	1603	0.59	0.016
6	6.22	1527	37.0	1557	0.54	0.015
7	6.79	1520	20.3	1554	0.33	0.016
8	7.67	1515	20.2	1549	0.17	0.008
9	8.53	1509	12.4	1553	0.15	0.012
10	9.45	1458	14.0	1538	0.16	0.011

Average Ratio	0.011
2004 ND Inverse Field	1207
Measured DA-N Inverse Field	13.6
Standard Pattern	20.4

TABLE 10

FIELD STRENGTH MEASUREMENT ANALYSIS

NIGHT PATTERN

WQOM(AM) 1060 KILOHERTZ

OCTOBER 2011

RADIAL 236.5 DEGREES TRUE

Point Number	Distance Km	Date/Time Local	12.5 Kw ND mV/m	Date/Time Local	2.5 kw DA-N mV/m	Ratio DA-N/ND
		3/19/11		4/8/11		
1	3.24	1359	150	1533	1.44	0.010
2 MP	4.03	1402	92.0	1541	0.87	0.009
3	4.58	1414	35.0	1549	0.37	0.010
4	5.67	1420	38.5	1602	0.52	0.014
		3/22/11		4/9/11		
5	6.17	1545	35.8	1615	0.28	0.008
6	6.82	1532	38.0	1621	0.32	0.008
7	7.67	1559	19.0	1626	0.20	0.010
8	8.53	1605	18.9	1632	0.22	0.012
9	9.74	1613	13.4	1638	0.11	0.008
10	10.42	1619	10.7	1644	0.11	0.010

Average Ratio	0.010
2004 ND Inverse Field	1118
Measured DA-N Inverse Field	11.2
Standard Pattern	21.1

TABLE 11

FIELD STRENGTH MEASUREMENT ANALYSIS

NIGHT PATTERN

WQOM(AM) 1060 KILOHERTZ

OCTOBER 2011

RADIAL 303.5 DEGREES TRUE

Point Number	Distance Km	Date/Time Local	12.5 Kw ND mV/m	Date/Time Local	2.5 kw DA-N mV/m	Ratio DA-N/ND
		3/19/11		4/8/11		
1 MP	3.24	1440	168	1514	0.46	0.003
2	3.97	1446	96.0	1504	0.43	0.004
3	4.27	1450	111	1450	0.49	0.004
4	4.59	1453	51.0	1437	0.25	0.005
		3/23/11		4/11/11		
5	7.04	1359	20.5	1015	0.39	0.019
6	7.26	1408	21.0	1019	0.37	0.018
7	7.41	1411	20.9	1023	0.48	0.023
8	7.62	1421	25.9	1027	0.55	0.021
9	8.37	1426	18.0	1033	0.46	0.025
10	9.20	1436	14.5	1042	0.30	0.020

Average Ratio	0.014
2004 ND Inverse Field	1073
Measured DA-N Inverse Field	14.6
Standard Pattern	21.0

TABLE 12

FIELD STRENGTH MEASUREMENT ANALYSIS

NIGHT PATTERN

WQOM(AM) 1060 KILOHERTZ

OCTOBER 2011

RADIAL 330 DEGREES TRUE

Point Number	Distance Km	Date/Time Local	12.5 Kw ND mV/m	Date/Time Local	2.5 kw DA-N mV/m	Ratio DA-N/ND
		3/19/11		4/8/11		
1	3.86	1520	148	1319	4.38	0.030
2 MP	4.35	1516	79.0	1307	1.68	0.021
3	4.44	1511	77.0	1300	1.80	0.023
4	4.68	1508	64.0	1252	1.83	0.029
5	5.59	1505	66.0	1247	1.98	0.030
		3/23/11		4/11/11		
6	7.11	1555	32.0	1122	1.42	0.044
7	7.82	1547	42.0	1119	2.21	0.053
8	8.32	1541	40.0	1116	1.91	0.048
9	9.61	1532	24.0	1112	0.97	0.040
10	10.64	1511	22.7	1105	1.07	0.047
11	12.47	1502	10.5	1058	0.37	0.035

Average Ratio	0.035
2004 ND Inverse Field	1252
Measured DA-N Inverse Field	44.2
Standard Pattern	63.0

TABLE 13

FIELD STRENGTH MEASUREMENT ANALYSIS

NIGHT PATTERN

WQOM(AM) 1060 KILOHERTZ

OCTOBER 2011

RADIAL 355.5 DEGREES TRUE

Point Number	Distance Km	Date/Time Local	12.5 Kw ND mV/m	Date/Time Local	2.5 kw DA-N mV/m	Ratio DA-N/ND
		03/19/11		04/08/11		
1	3.23	1527	285	1150	5.62	0.020
2	3.51	1530	255	1156	10.6	0.042
3 MP	4.75	1536	202	1211	2.59	0.013
4	5.38	1544	118	1222	2.86	0.024
5	5.61	1547	115	1228	1.71	0.015
		3/24/11		4/11/11		
6	6.07	1157	110	1131	1.93	0.018
7	6.35	1208	111	1135	0.34	0.003
8	7.36	1218	94.0	1140	1.65	0.018
9	7.61	1228	63.0	1143	0.98	0.015
10	8.57	1236	58.0	1148	0.52	0.009
11	9.59	1304	43.5	1154	0.74	0.017

Average Ratio	0.019
2004 ND Inverse Field	1342
Measured DA-N Inverse Field	24.9
Standard Pattern	45.6

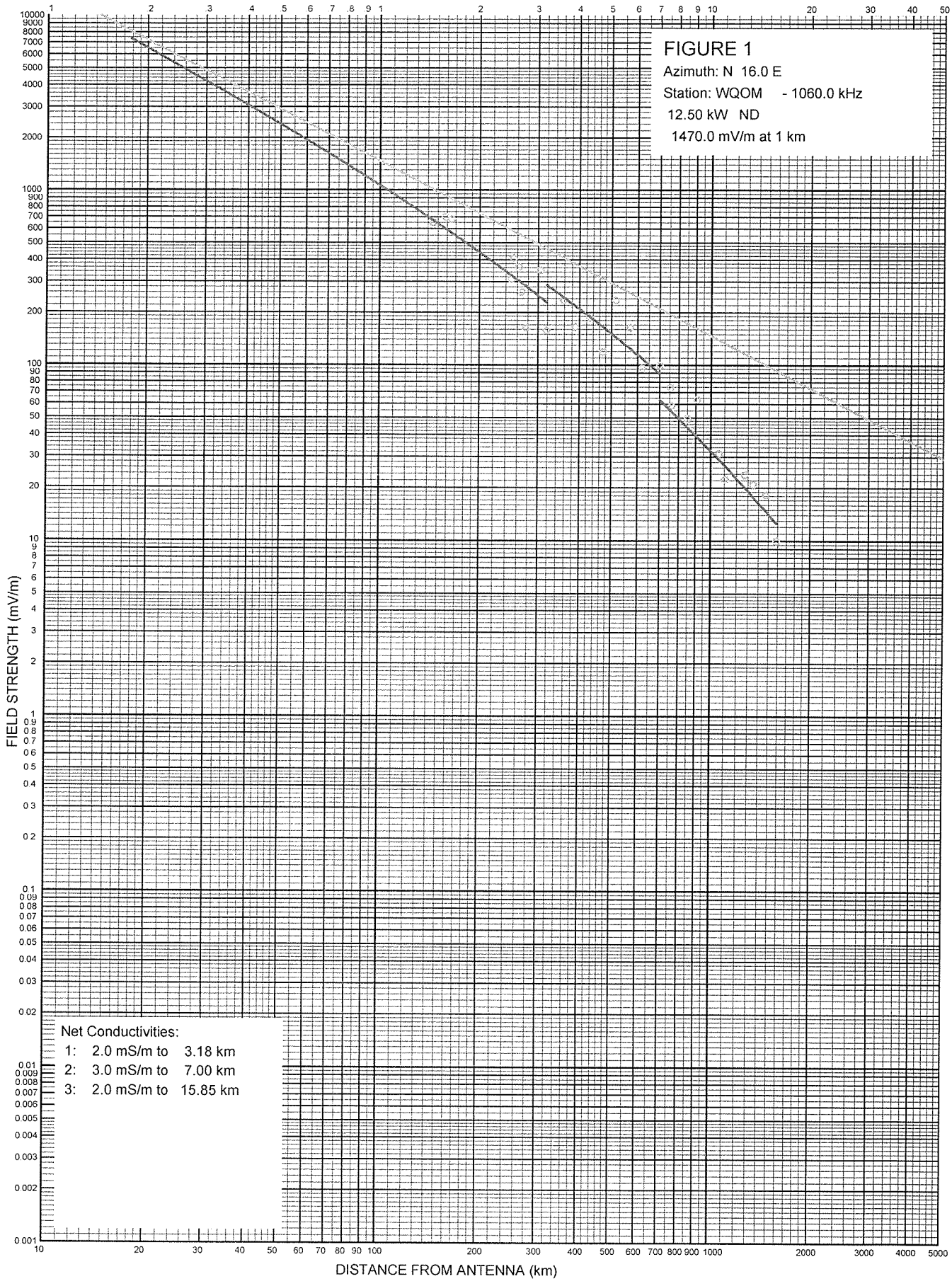


FIGURE 1
Azimuth: N 16.0 E
Station: WQOM - 1060.0 kHz
12.50 kW ND
1470.0 mV/m at 1 km
Net Conductivities:
1: 2.0 mS/m to 3.18 km
2: 3.0 mS/m to 7.00 km
3: 2.0 mS/m to 15.85 km
FIELD STRENGTH (mV/m)
DISTANCE FROM ANTENNA (km)

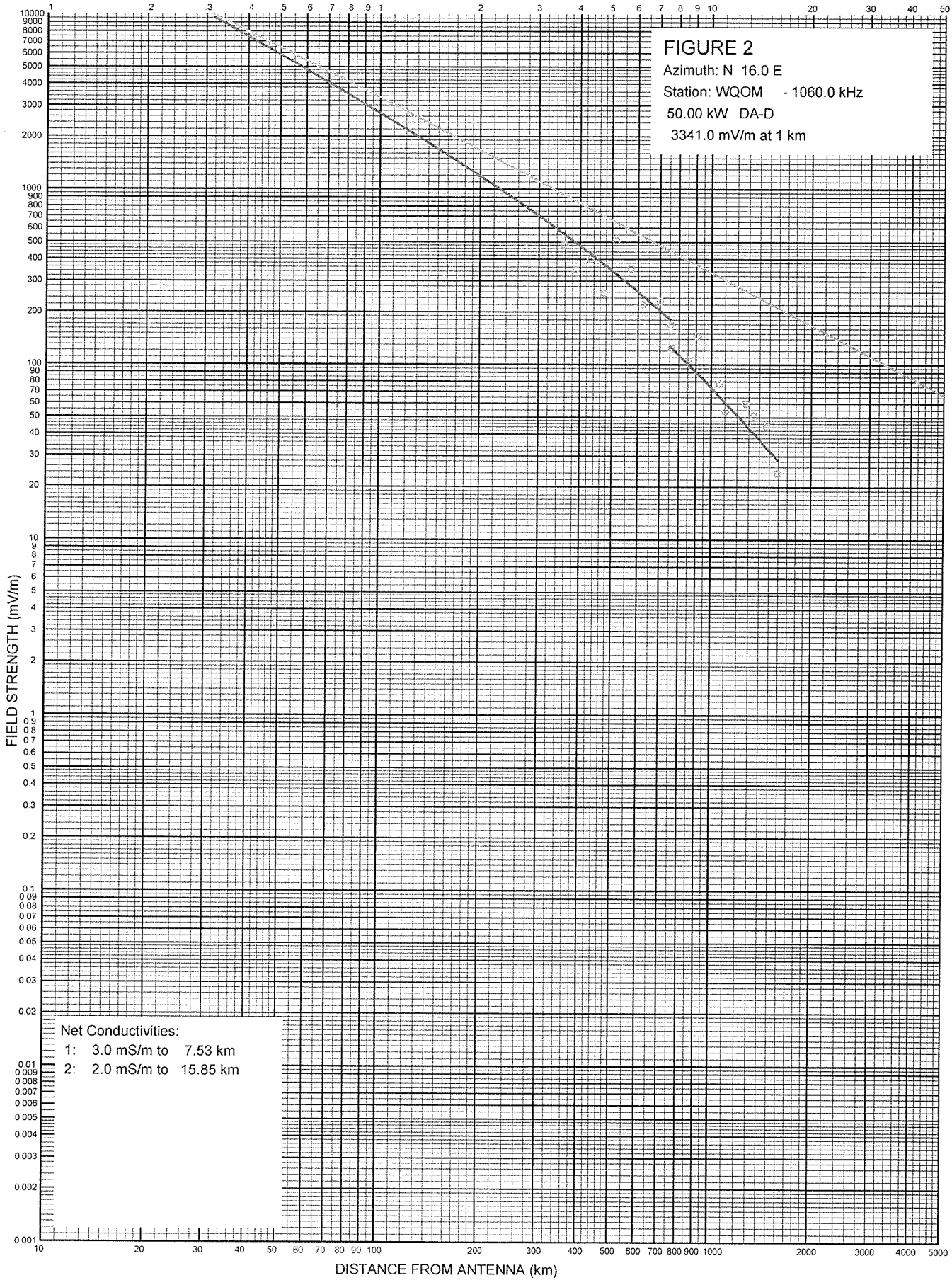


FIGURE 2
Azimuth: N 16.0 E
Station: WQOM - 1060.0 kHz
50.00 kW DA-D
3341.0 mV/m at 1 km
Net Conductivities:
1: 3.0 mS/m to 7.53 km
2: 2.0 mS/m to 15.85 km
FIELD STRENGTH (mV/m)
DISTANCE FROM ANTENNA (km)

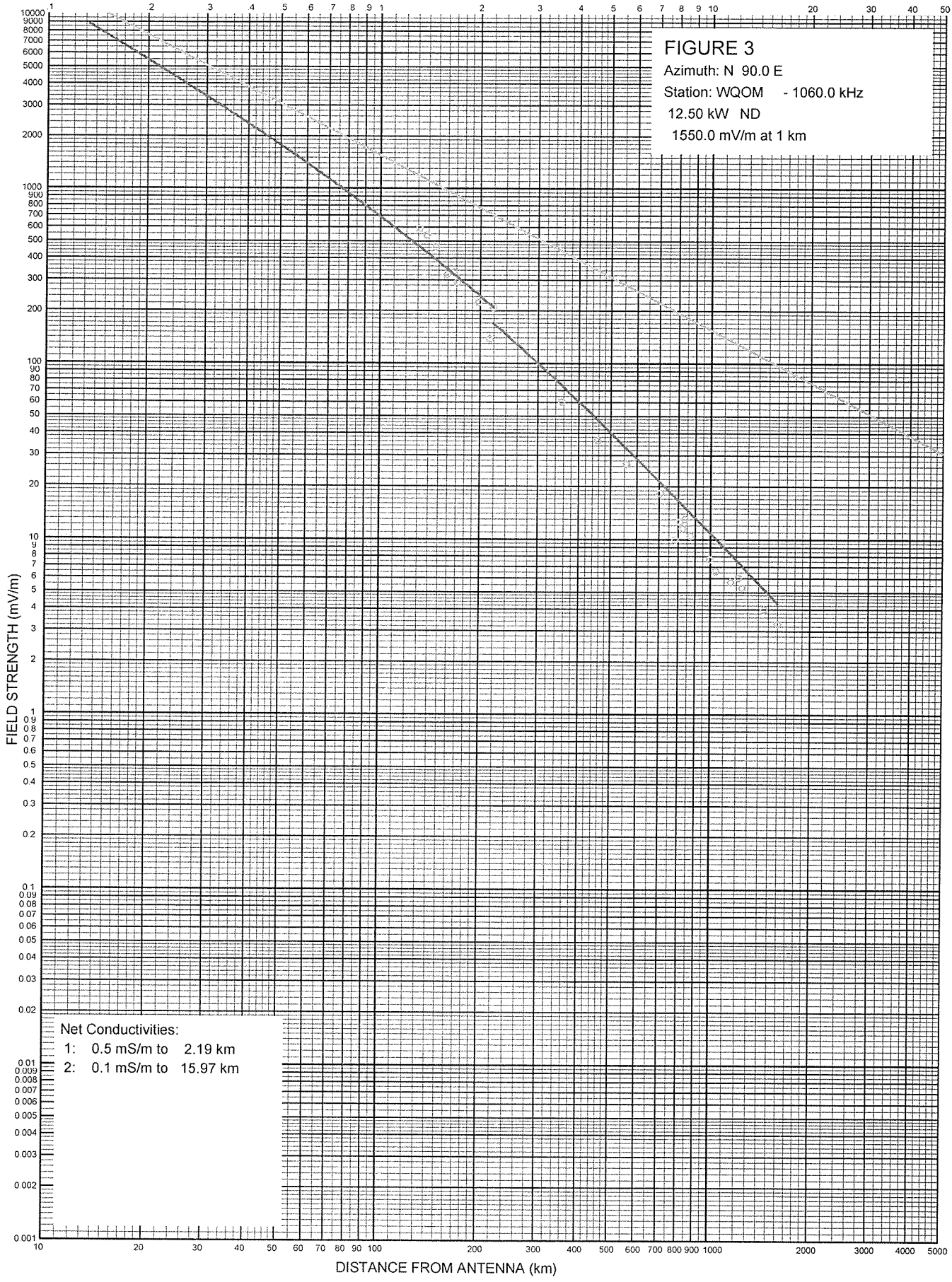


FIGURE 3
Azimuth: N 90.0 E
Station: WQOM - 1060.0 kHz
12.50 kW ND
1550.0 mV/m at 1 km
Net Conductivities:
1: 0.5 mS/m to 2.19 km
2: 0.1 mS/m to 15.97 km
FIELD STRENGTH (mV/m)
DISTANCE FROM ANTENNA (km)

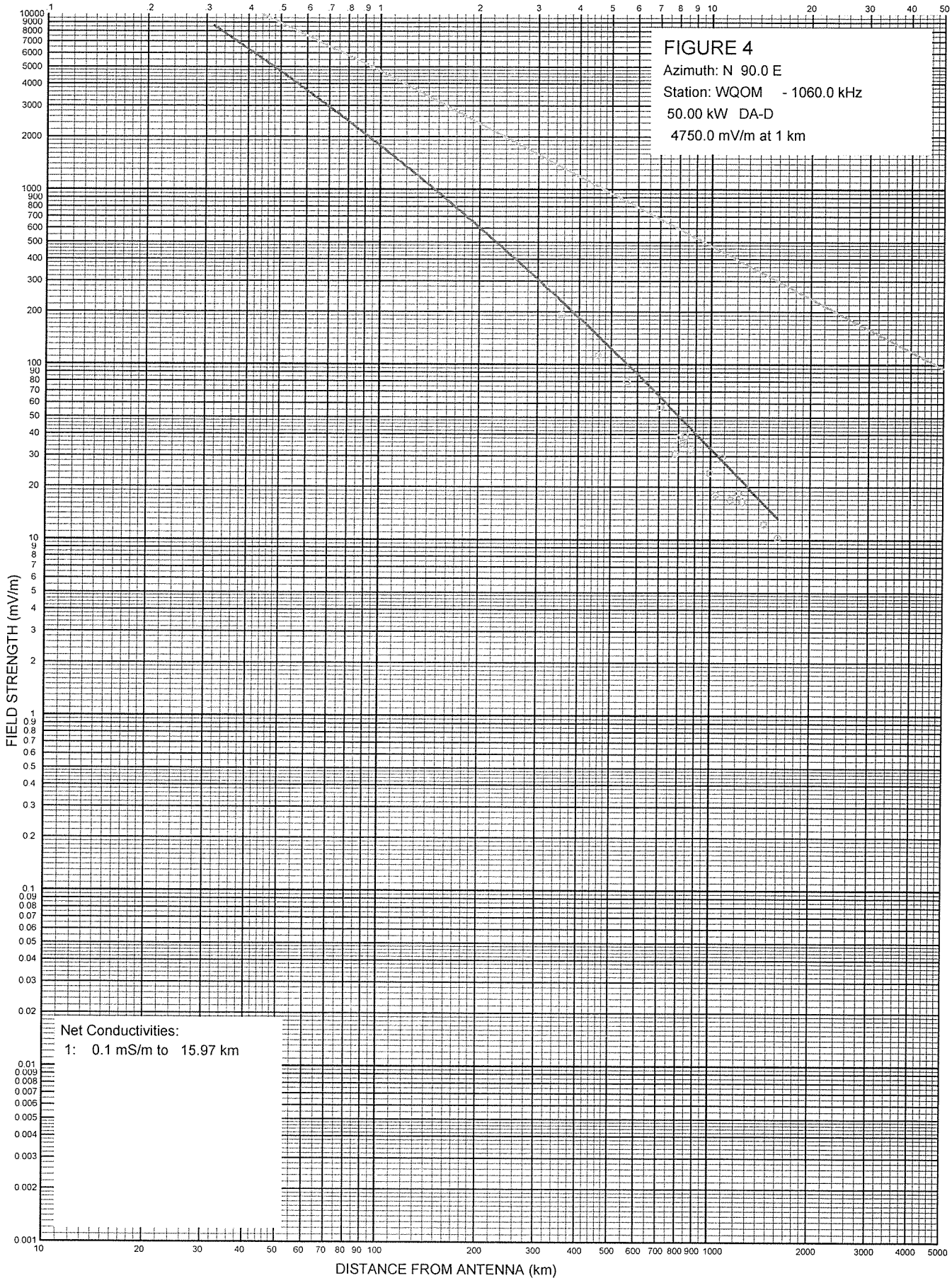


FIGURE 4
Azimuth: N 90.0 E
Station: WQOM - 1060.0 kHz
50.00 kW DA-D
4750.0 mV/m at 1 km
Net Conductivities:
1: 0.1 mS/m to 15.97 km
FIELD STRENGTH (mV/m)
DISTANCE FROM ANTENNA (km)

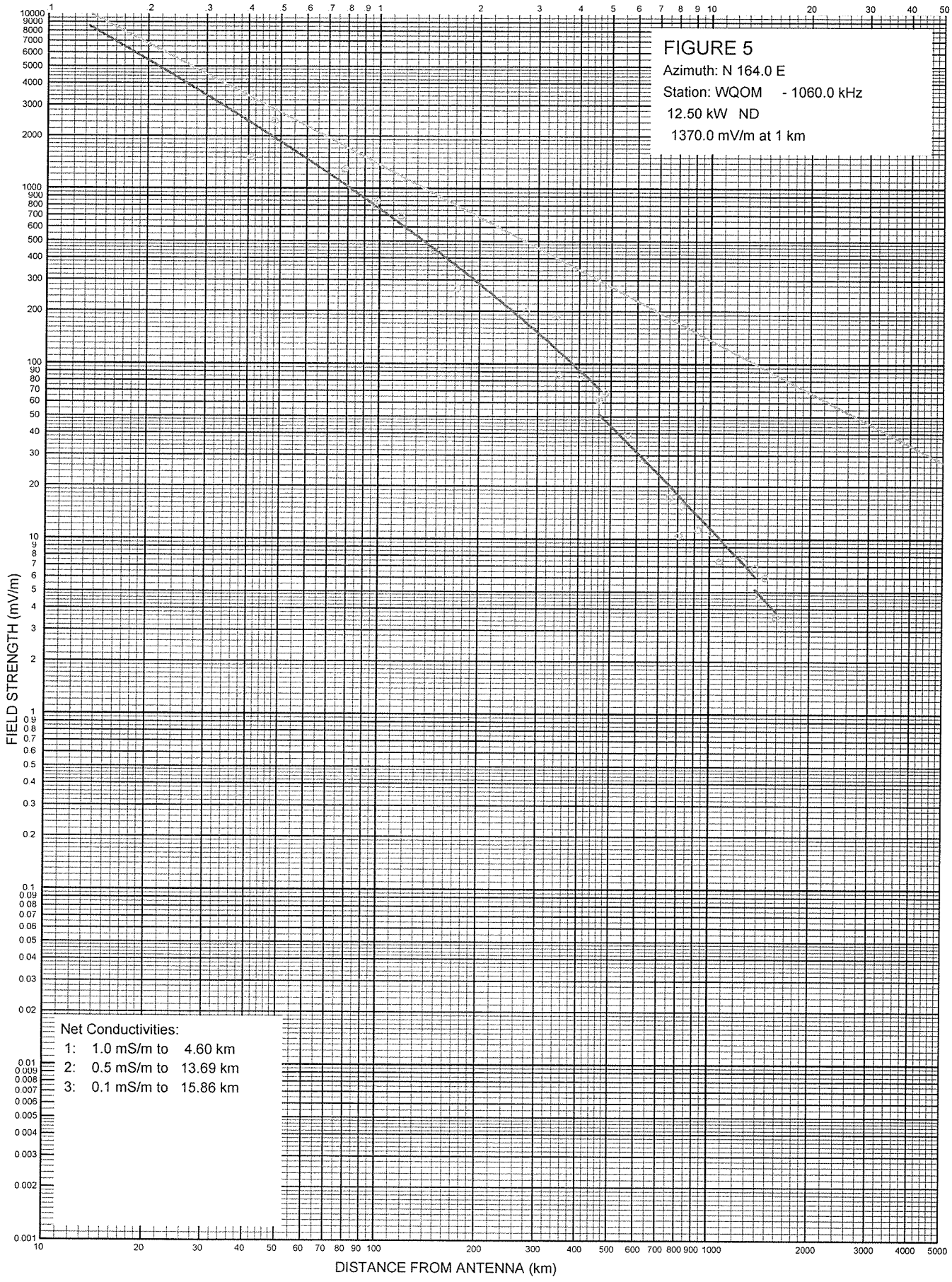


FIGURE 5
Azimuth: N 164.0 E
Station: WQOM - 1060.0 kHz
12.50 kW ND
1370.0 mV/m at 1 km
FIELD STRENGTH (mV/m)
DISTANCE FROM ANTENNA (km)
Net Conductivities:
1: 1.0 mS/m to 4.60 km
2: 0.5 mS/m to 13.69 km
3: 0.1 mS/m to 15.86 km

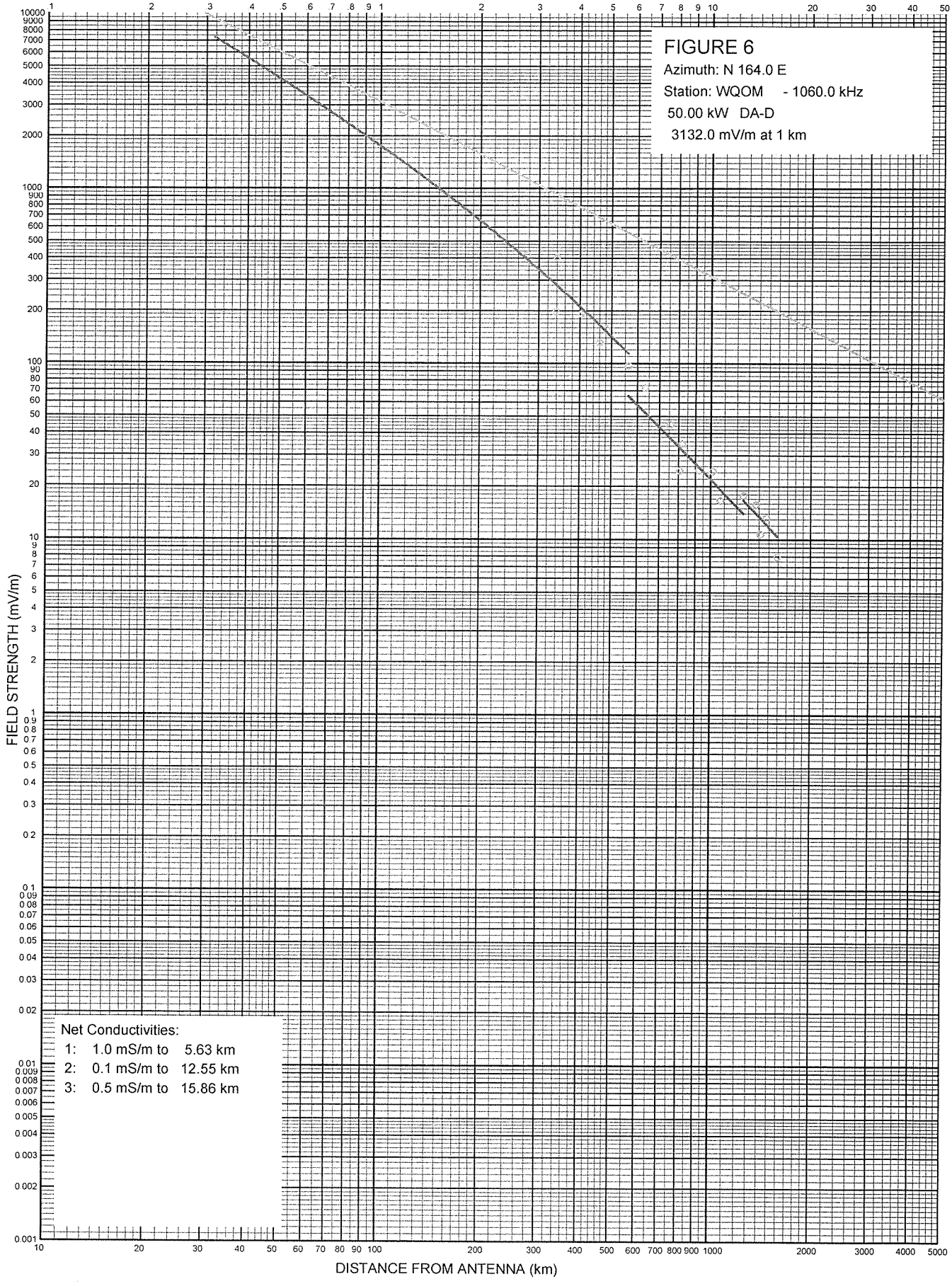


FIGURE 6
Azimuth: N 164.0 E
Station: WQOM - 1060.0 kHz
50.00 kW DA-D
3132.0 mV/m at 1 km
Net Conductivities:
1: 1.0 mS/m to 5.63 km
2: 0.1 mS/m to 12.55 km
3: 0.5 mS/m to 15.86 km
FIELD STRENGTH (mV/m)
DISTANCE FROM ANTENNA (km)

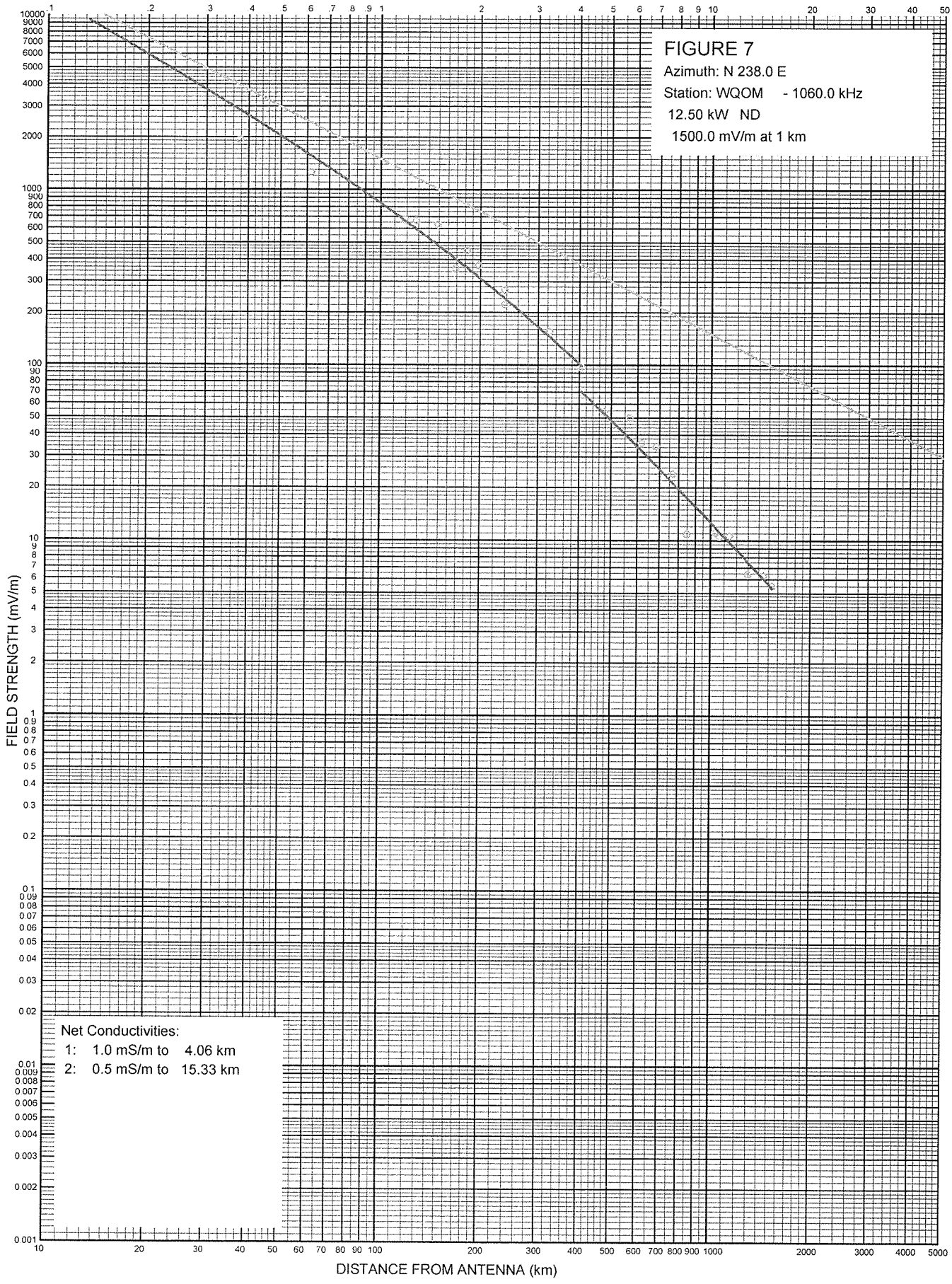


FIGURE 7
Azimuth: N 238.0 E
Station: WQOM - 1060.0 kHz
12.50 kW ND
1500.0 mV/m at 1 km
FIELD STRENGTH (mV/m)
DISTANCE FROM ANTENNA (km)
Net Conductivities:
1: 1.0 mS/m to 4.06 km
2: 0.5 mS/m to 15.33 km

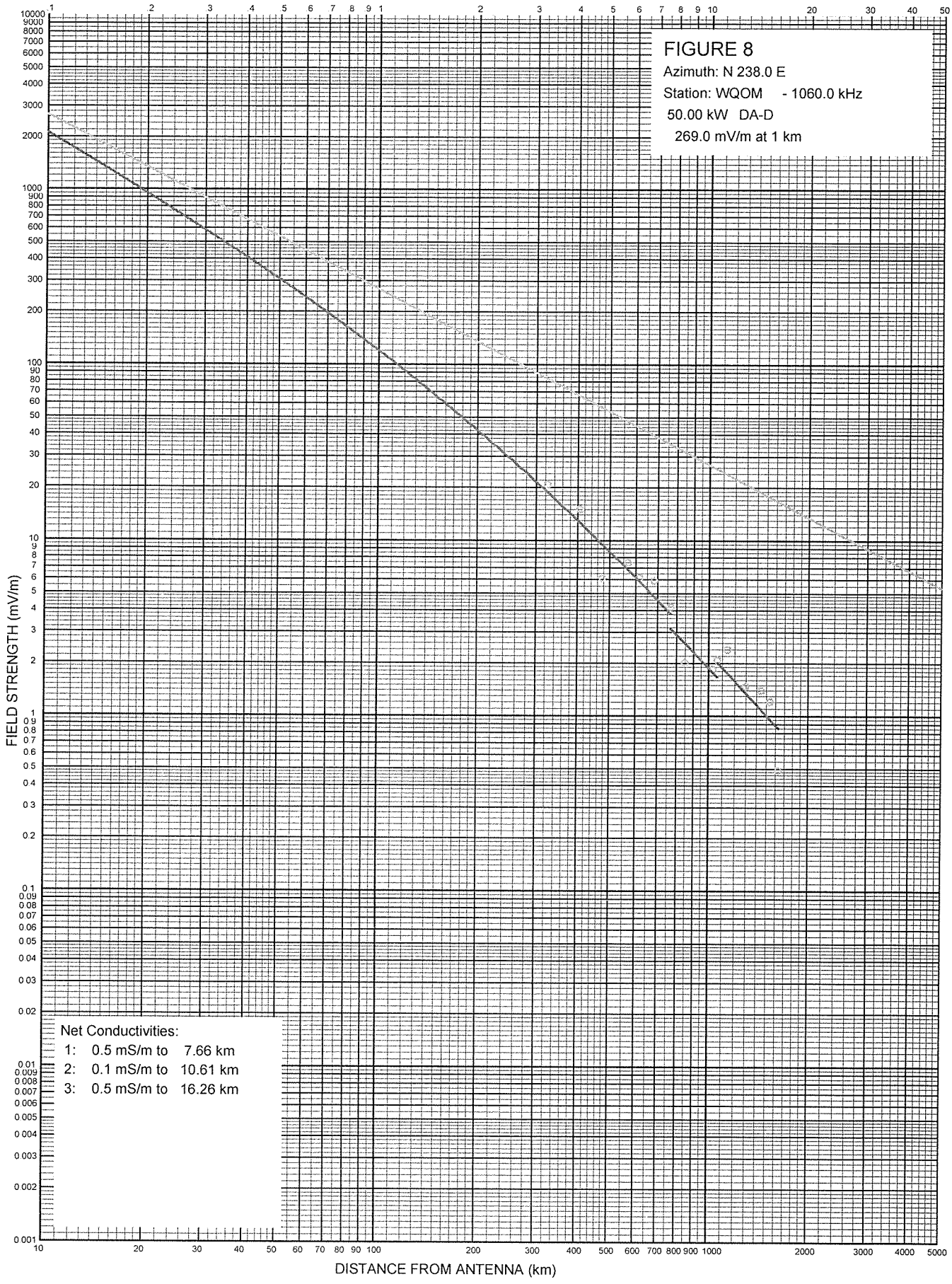


FIGURE 8
Azimuth: N 238.0 E
Station: WQOM - 1060.0 kHz
50.00 kW DA-D
269.0 mV/m at 1 km
FIELD STRENGTH (mV/m)
DISTANCE FROM ANTENNA (km)
Net Conductivities:
1: 0.5 mS/m to 7.66 km
2: 0.1 mS/m to 10.61 km
3: 0.5 mS/m to 16.26 km

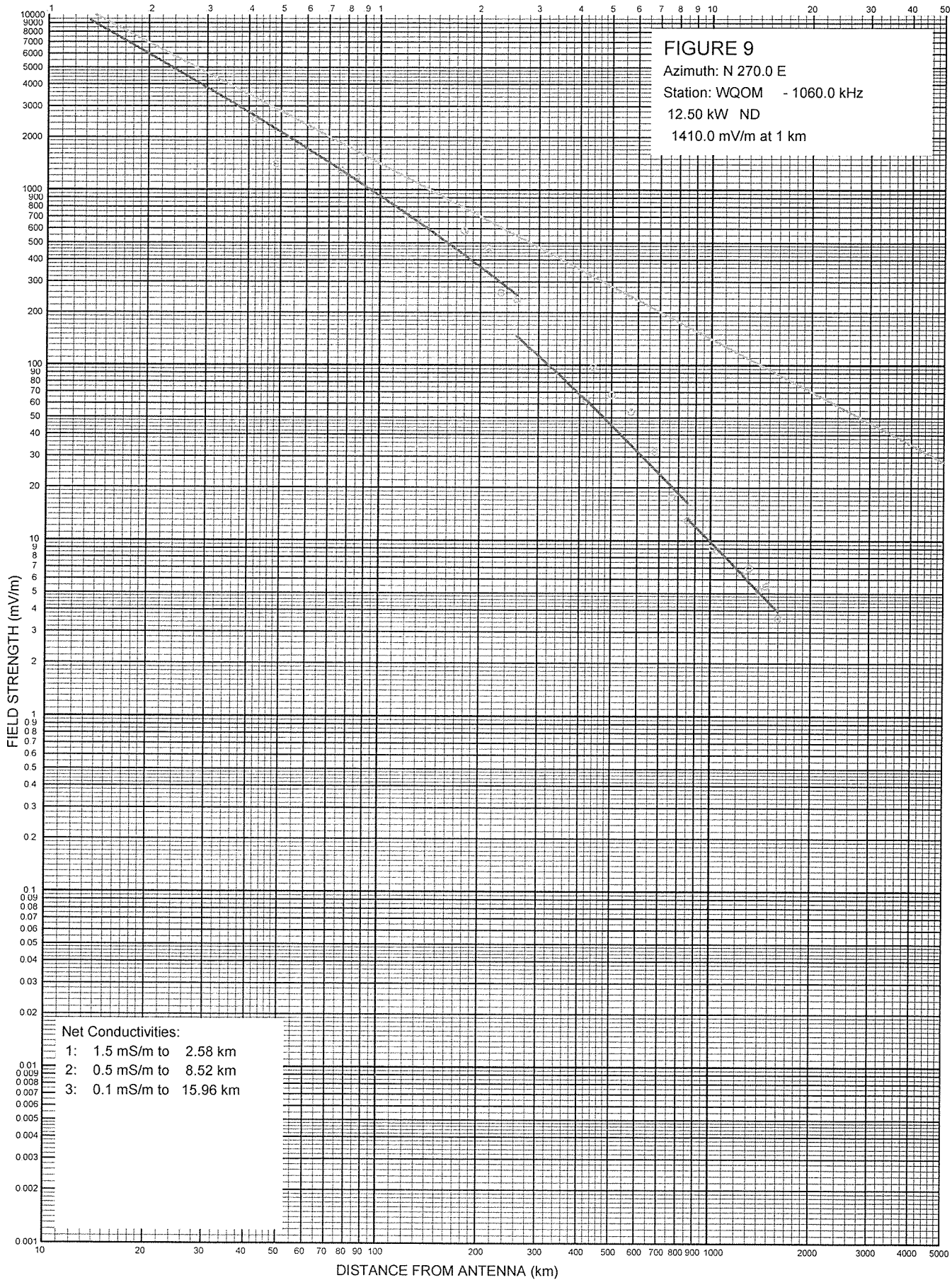


FIGURE 9
Azimuth: N 270.0 E
Station: WQOM - 1060.0 kHz
12.50 kW ND
1410.0 mV/m at 1 km
FIELD STRENGTH (mV/m)
DISTANCE FROM ANTENNA (km)
Net Conductivities:
1: 1.5 mS/m to 2.58 km
2: 0.5 mS/m to 8.52 km
3: 0.1 mS/m to 15.96 km

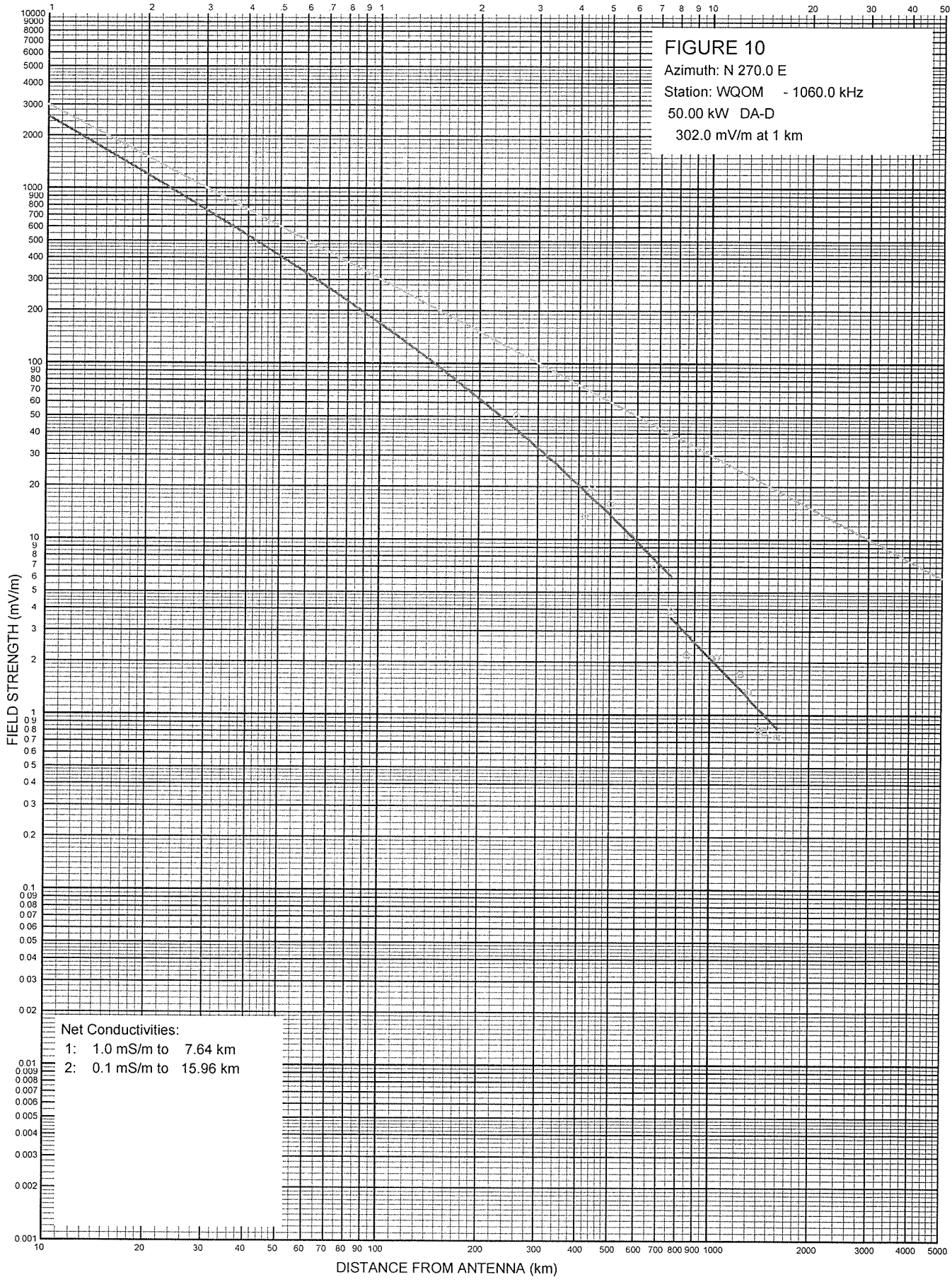


FIGURE 10
Azimuth: N 270.0 E
Station: WQOM - 1060.0 kHz
50.00 kW DA-D
302.0 mV/m at 1 km
Net Conductivities:
1: 1.0 mS/m to 7.64 km
2: 0.1 mS/m to 15.96 km
FIELD STRENGTH (mV/m)
DISTANCE FROM ANTENNA (km)

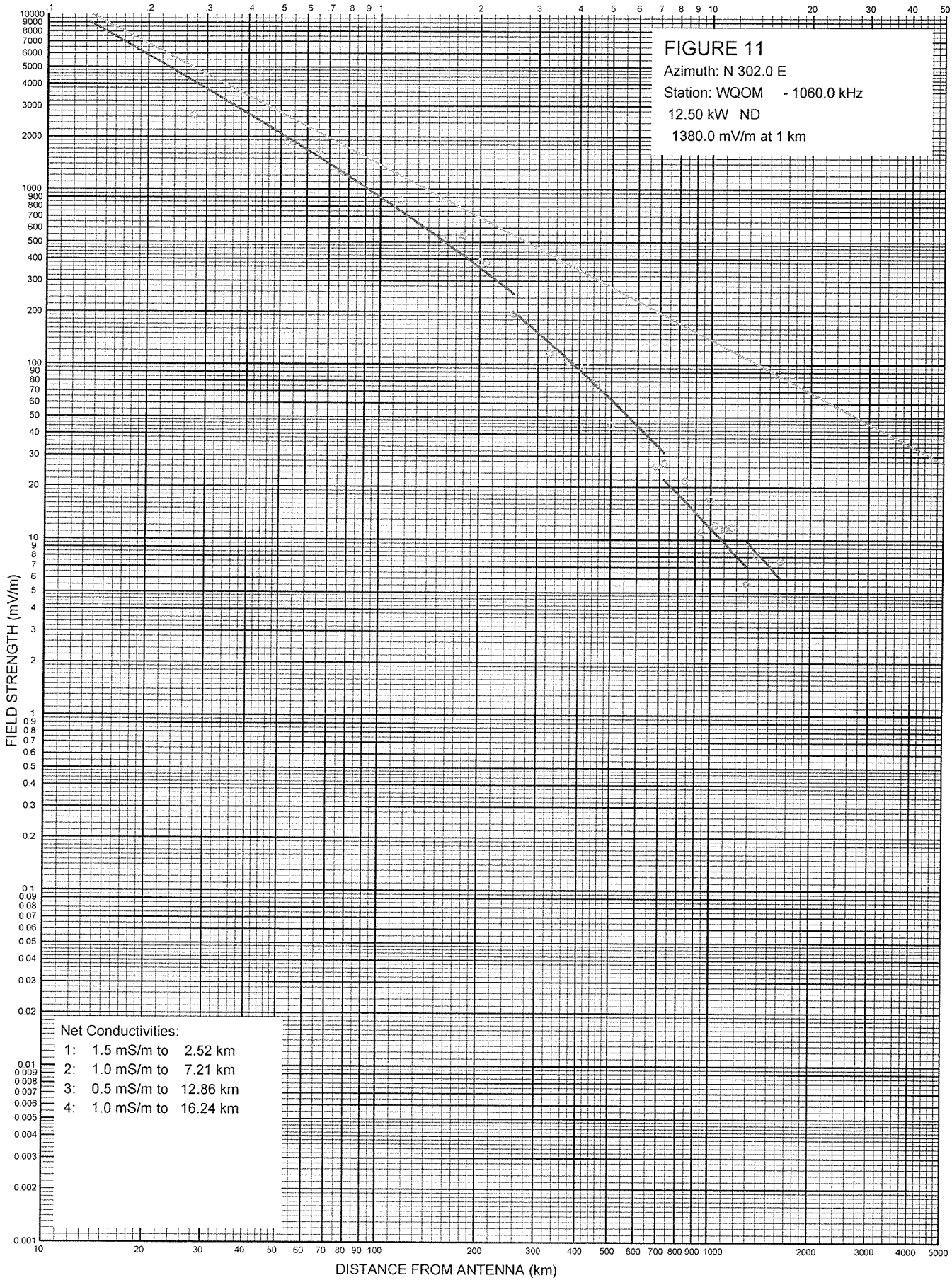


FIGURE 11
Azimuth: N 302.0 E
Station: WQOM - 1060.0 kHz
12.50 kW ND
1380.0 mV/m at 1 km
FIELD STRENGTH (mV/m)
DISTANCE FROM ANTENNA (km)
Net Conductivities:
1: 1.5 mS/m to 2.52 km
2: 1.0 mS/m to 7.21 km
3: 0.5 mS/m to 12.86 km
4: 1.0 mS/m to 16.24 km

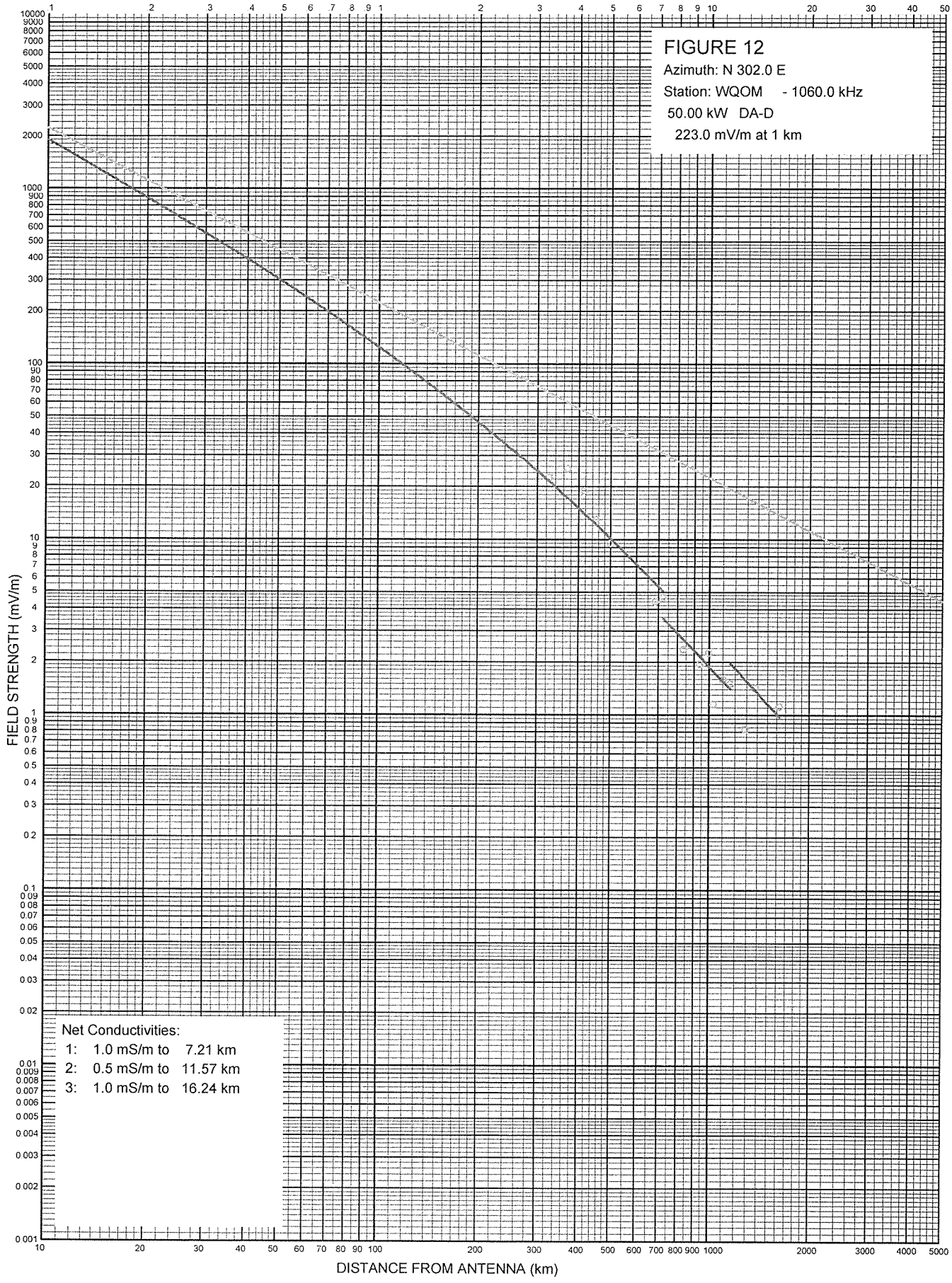


FIGURE 12
Azimuth: N 302.0 E
Station: WQOM - 1060.0 kHz
50.00 kW DA-D
223.0 mV/m at 1 km
Net Conductivities:
1: 1.0 mS/m to 7.21 km
2: 0.5 mS/m to 11.57 km
3: 1.0 mS/m to 16.24 km
FIELD STRENGTH (mV/m)
DISTANCE FROM ANTENNA (km)

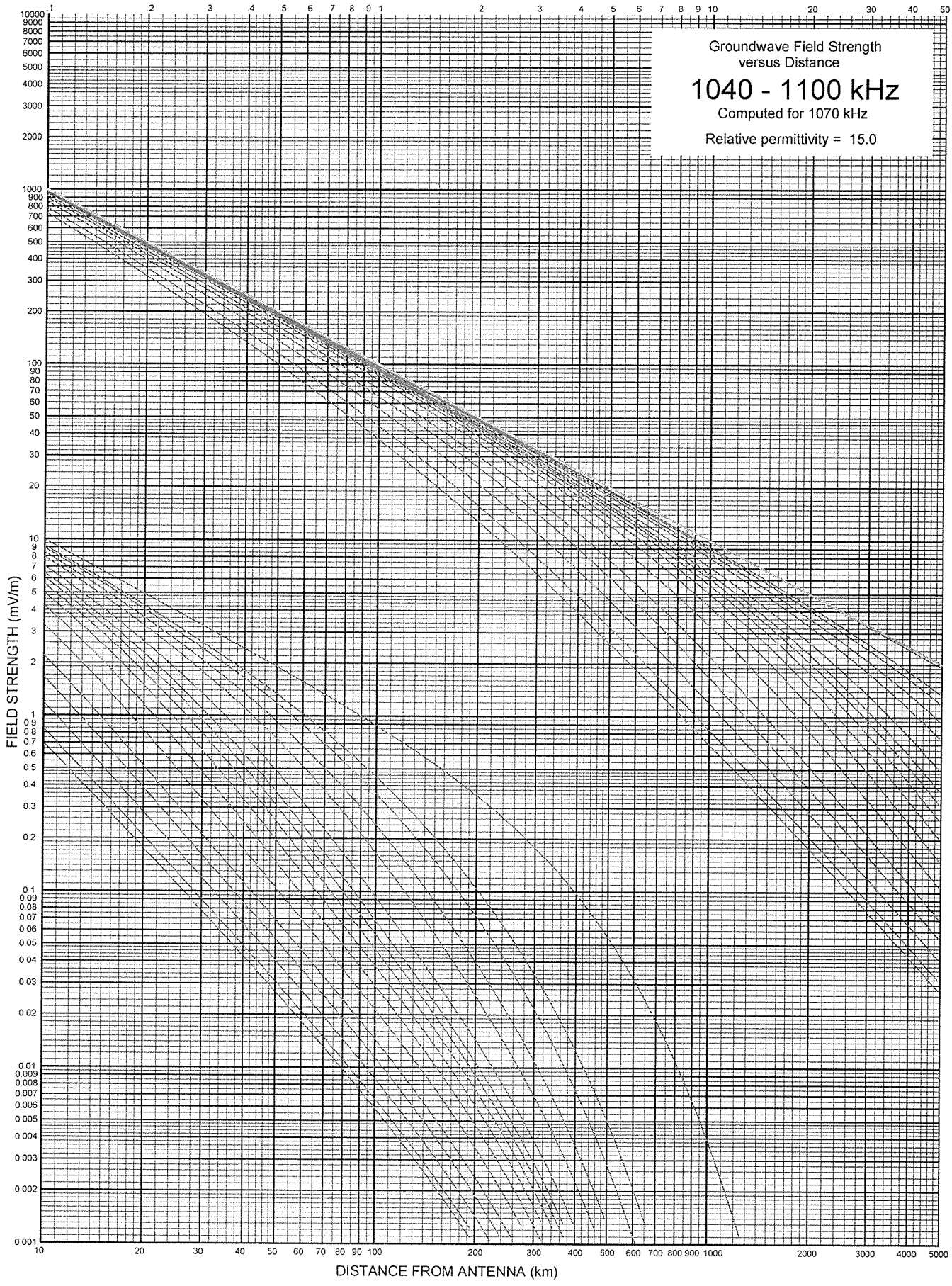
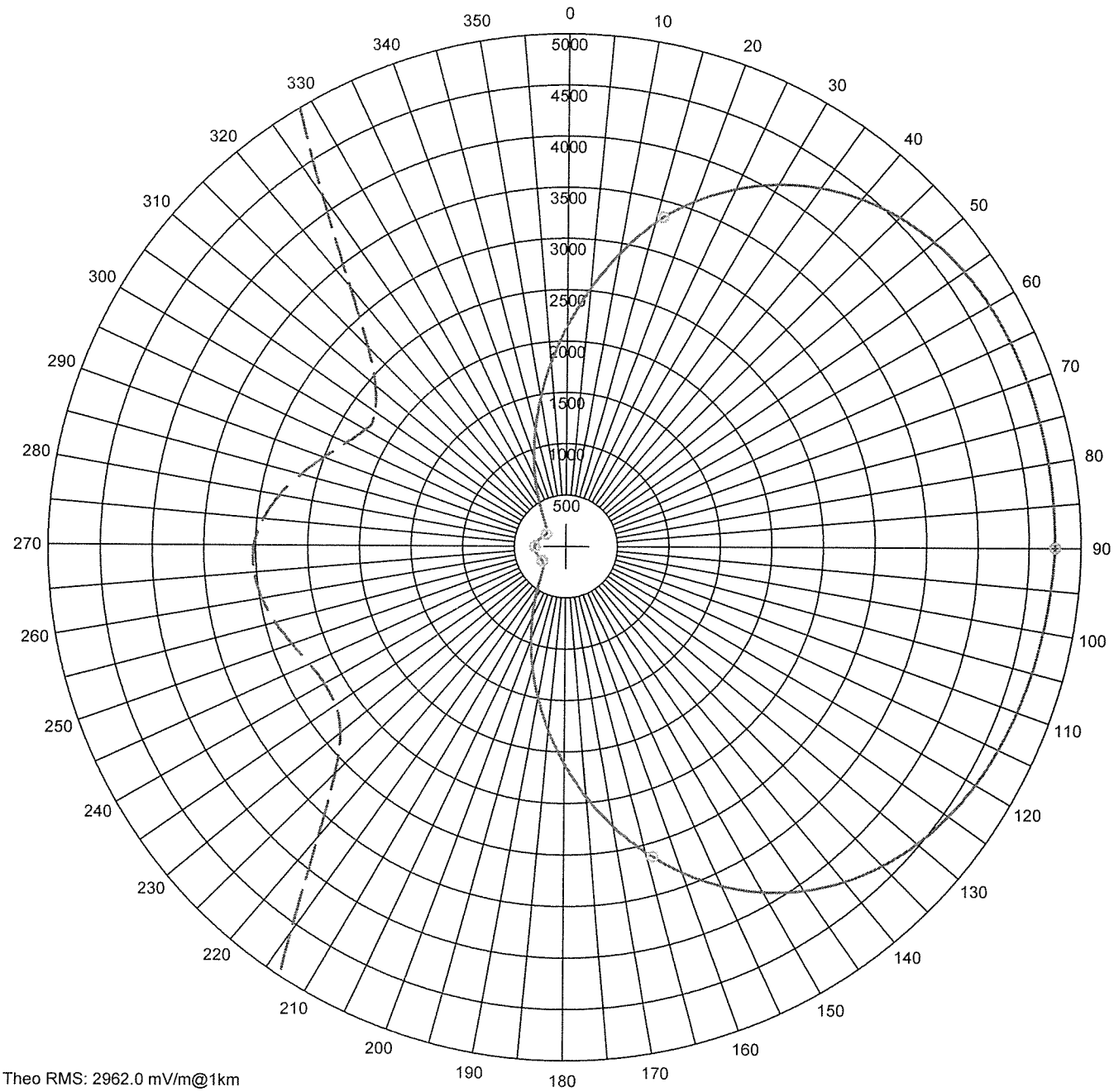

Groundwave Field Strength
versus Distance
1040 - 1100 kHz
Computed for 1070 kHz
Relative permittivity = 15.0
FIELD STRENGTH (mV/m)
DISTANCE FROM ANTENNA (km)

FIGURE 14: MEASURED DIRECTIONAL DAY



Theo RMS: 2962.0 mV/m@1km
Std RMS: 3111.01 mV/m@1km
Meas RMS: 2995.764 mV/m@1km
Q: 71.674 mV/m@1km

Horizontal Plane Standard Pattern

Pattern (mV/m @ 1km)
Meas Pat (mV/m@1km)
Pattern X10
Meas Pat X10

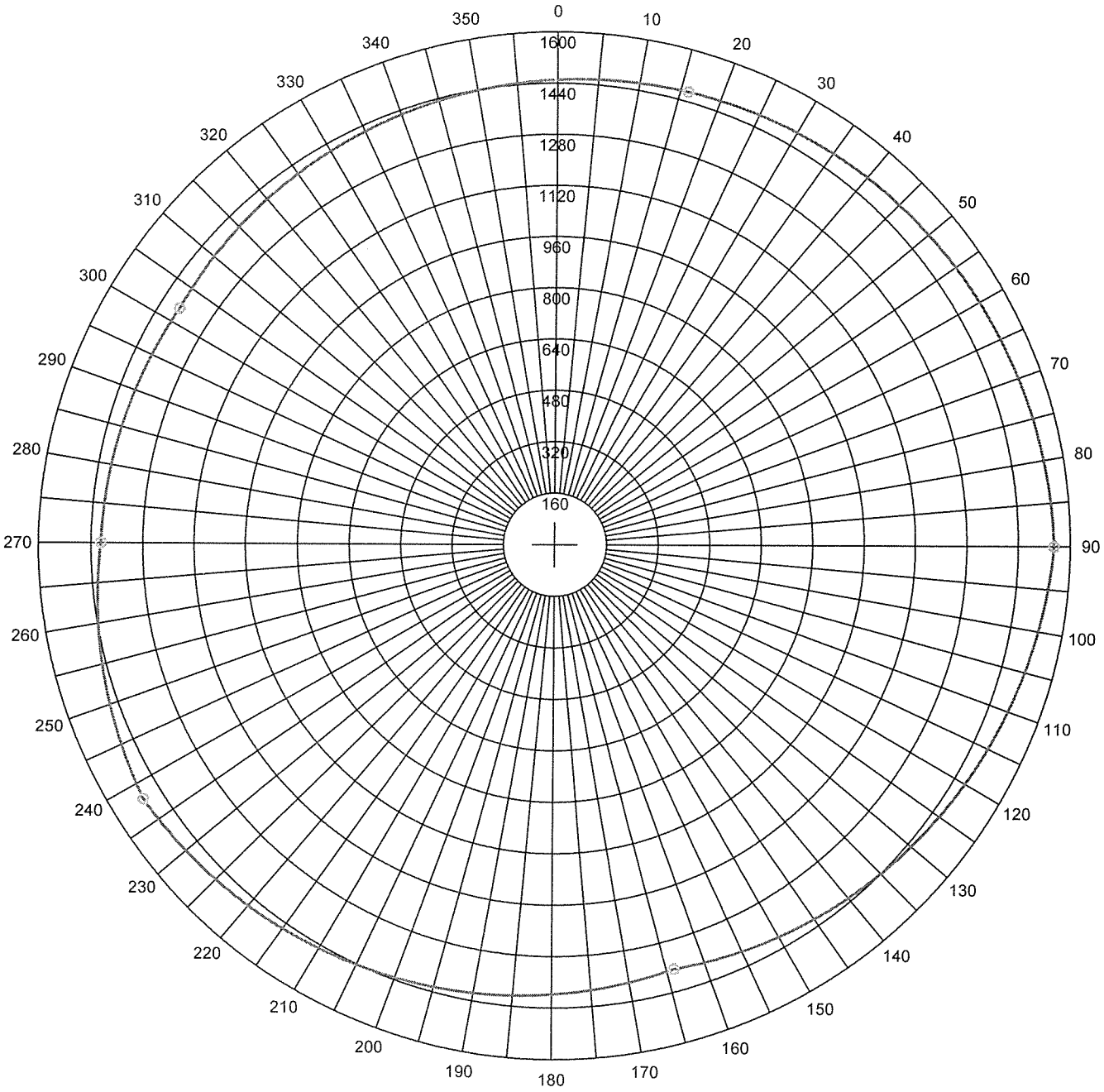
#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Swtch	TL Swtch	A (deg)	B (deg)	C (deg)	D (deg)
1	0.400	190.3	0.0	0.0	205.5	0	0	0.0	0.0	0.0	0.0
2	1.240	95.2	100.0	90.0	205.5	0	0	0.0	0.0	0.0	0.0
3	1.000	0.0	200.0	90.0	205.5	0	0	0.0	0.0	0.0	0.0

Call: WQOM
Freq: 1060 kHz
NATICK, MA, US
Lat: 42-14-50 N
Lng: 071-25-31 W
Power: 50.0 kW
Theo RMS: 2962.00 mV/m @ 1km

CHARLES A. HECHT & ASSOCIATES

OCTOBER 2011

FIGURE 13: MEASURED 12.5 KW NON-DIRECTIONAL



Theo RMS: 1487.431 mV/m@1km
Meas RMS: 1452.536 mV/m@1km

Horizontal Plane Theoretical Pattern

Pattern (mV/m @ 1km)
Meas Pat (mV/m@1km)
Pattern X10
Meas Pat X10

#	Field Ratio	Phase (deg)	Spacing (deg)	Orient (deg)	Height (deg)	Ref Swtch	TL Swtch	A (deg)	B (deg)	C (deg)	D (deg)
1	1.000	0.0	0.0	0.0	205.5	0	0	0.0	0.0	0.0	0.0

Call: WQOM
Freq: 1060 kHz
NATICK, MA, US
Lat: 42-14-50 N
Lng: 071-25-31 W
Power: 12.5 kW
Theo RMS: 420.71 mV/m @ 1km

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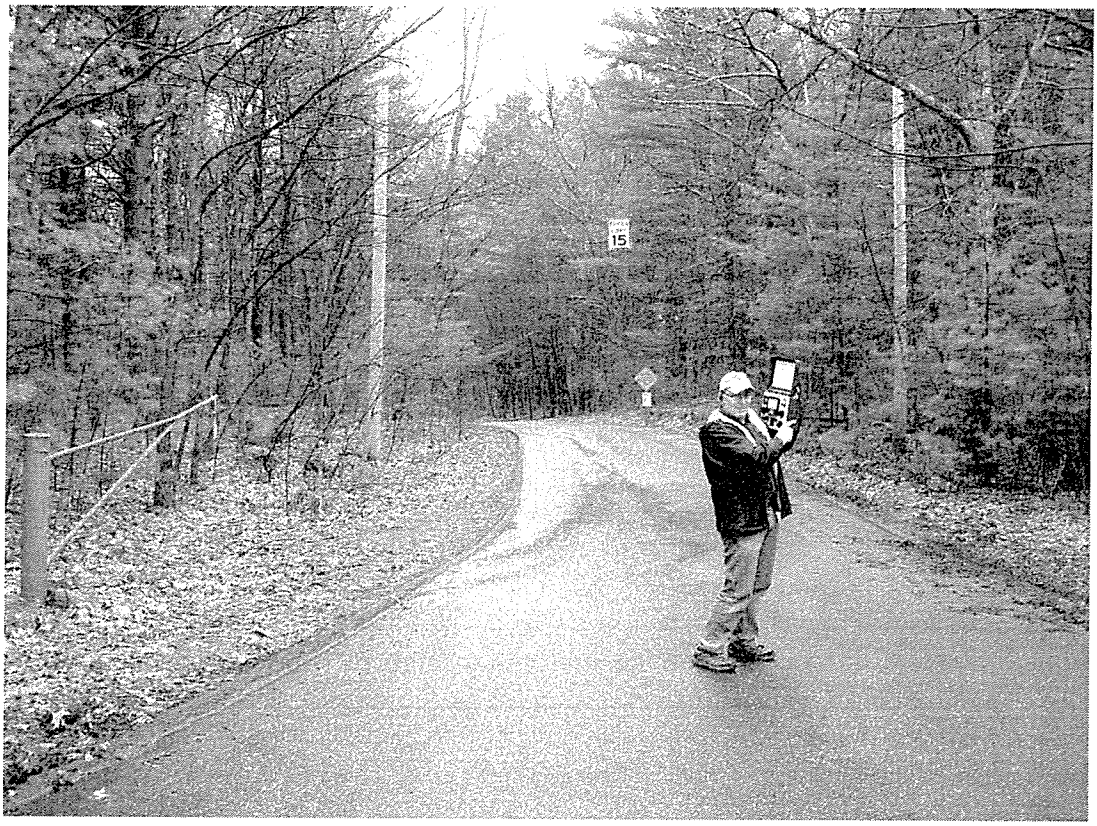
WQOM 238 DEGREES TRUE DAY MONITOR POINT



Direction of 238 Degrees True – The point is located in the center of the drive at a gate to the Metrowest YMCA Outdoor Center and Day Camp on East Street. This location is point number 12 of the proof. The distance from the transmitter is 4.05 kilometers.

WQOM 302 DEGREES TRUE DAY MONITOR POINT

Direction of 302 Degrees True – The point is located between 132 and 136 Concord Street on the sidewalk 30 feet east of fire hydrant. This location is point number 11 of the proof. The distance from the transmitter is 3.20 kilometers.

United States of America

FEDERAL COMMUNICATIONS COMMISSION

AM BROADCAST STATION CONSTRUCTION PERMIT

Authorizing Official:

Official Mailing Address:

HOLY FAMILY COMMUNICATIONS
6325 SHERIDAN DR.
WILLIAMSVILLE NY 14221

Son Nguyen
Supervisory Engineer
Audio Division
Media Bureau

Grant Date: November 04, 2010

The authority granted herein has no effect on the expiration date of the underlying construction permit.

Facility Id: 21109

Call Sign: WQOM

Permit File Number: BMP-20100811ABC

Permit to change daytime pattern.

Subject to the provisions of the Communications Act of 1934, as amended, subsequent acts and treaties, and all regulations heretofore or hereafter made by this Commission, and further subject to the conditions set forth in this permit, the permittee is hereby authorized to construct the radio transmitting apparatus herein described. Installation and adjustment of equipment not specifically set forth herein shall be in accordance with representations contained in the permittee's application for construction permit except for such modifications as are presently permitted, without application, by the Commission's Rules.

Commission rules which became effective on February 16, 1999, have a bearing on this construction permit. See Report & Order, Streamlining of Mass Media Applications, MM Docket No. 98-43, 13 FCC RCD 23056, Para. 77-90 (November 25, 1998); 63 Fed. Reg. 70039 (December 18, 1998). Pursuant to these rules, this construction permit will be subject to automatic forfeiture unless construction is complete and an application for license to cover is filed prior to expiration. See Section 73.3598.

Equipment and program tests shall be conducted only pursuant to Sections 73.1610 and 73.1620 of the Commission's Rules.

Hours of Operation: Unlimited

Average hours of sunrise and sunset:
Local Standard Time (Non-Advanced)

Jan.	7:15 AM	4:45 PM	Jul.	4:15 AM	7:15 PM
Feb.	6:45 AM	5:15 PM	Aug.	4:45 AM	6:45 PM
Mar.	6:00 AM	5:45 PM	Sep.	5:30 AM	6:00 PM
Apr.	5:00 AM	6:30 PM	Oct.	6:00 AM	5:00 PM
May	4:30 AM	7:00 PM	Nov.	6:30 AM	4:30 PM
Jun.	4:15 AM	7:30 PM	Dec.	7:00 AM	4:15 PM

Name of Permittee: HOLY FAMILY COMMUNICATIONS

Station Location: NATICK, MA

Frequency (kHz): 1060

Station Class: B

Antenna Coordinates:

		Day			
Latitude:	N	42 Deg	14 Min	50 Sec	
Longitude:	W	71 Deg	25 Min	31 Sec	

		Night			
Latitude:	N	42 Deg	14 Min	50 Sec	
Longitude:	W	71 Deg	25 Min	31 Sec	

Transmitter(s): Type Accepted. See Sections 73.1660, 73.1665 and 73.1670 of the Commission's Rules.

Nominal Power (kW): Day: 50.0 Night: 2.5

Antenna Mode: Day: DA Night: DA

(DA=Directional Antenna, ND=Non-directional Antenna; CH=Critical Hours)

Antenna Registration Number(s):

Day:

Tower No.	ASRN	Overall Height (m)
1	1058483	
2	1058484	
3	1058485	

Night:

Tower No.	ASRN	Overall Height (m)
1	1058482	
2	1058483	
3	1058484	
4	1058485	
5	1058486	

Callsign: WQOM Permit No.: BMP-20100811ABC

DESCRIPTION OF DIRECTIONAL ANTENNA SYSTEM

Theoretical RMS (mV/m/km): Day: 2962 Night: 680.1

Standard RMS (mV/m/km): Day: 3111

Augmented RMS (mV/m/km): Night: 714.6

Q Factor: Day: Night:

Theoretical Parameters:

Day Directional Antenna:

Tower No.	Field Ratio	Phasing (Deg.)	Spacing (Deg.)	Orientation (Deg.)	Tower Ref Switch *	Height (Deg.)
1	0.4000	190.300	0.0000	0.000	0	205.5
2	1.2400	95.200	100.0000	90.000	0	205.5
3	1.0000	0.000	200.0000	90.000	0	205.5

* Tower Reference Switch
0 = Spacing and orientation from reference tower
1 = Spacing and orientation from previous tower

Theoretical Parameters:

Night Directional Antenna:

Tower No.	Field Ratio	Phasing (Deg.)	Spacing (Deg.)	Orientation (Deg.)	Tower Ref Switch *	Height (Deg.)
1	0.2790	234.500	0.0000	0.000	0	205.5
2	0.8030	117.900	100.0000	90.000	0	205.5
3	1.0000	0.000	200.0000	90.000	0	205.5
4	0.6550	242.900	300.0000	90.000	0	205.5
5	0.1950	128.000	400.0000	90.000	0	202.5

* Tower Reference Switch
0 = Spacing and orientation from reference tower
1 = Spacing and orientation from previous tower

Augmentation Parameters:

Aug No.	Central Azimuth (Deg. T)	Span (Deg.)	Radiation at Central Azimuth (mV/m @ 1 km)
1	184.5	51.0	39.60
2	210.0	46.0	20.40
3	236.5	28.0	21.10
4	303.5	53.0	21.00
5	330.0	26.0	63.00
6	355.5	51.0	45.60

Inverse Distance Field Strength:
The inverse distance field strength at a distance of one kilometer from the above antenna in the directions specified shall not exceed the following values:

Day:

Azimuth:	Radiation:	
90	4830.98	mV/m
238	302.75	mV/m
302	302.75	mV/m

Special operating conditions or restrictions:

1 The permittee must submit a proof of performance as set forth in either Section 73.151(a) or 73.151(c) of the rules before program tests are authorized.
A proof of performance based on field strength measurements, per Section 73.151(a), shall include a complete nondirectional proof of performance, in addition to a complete proof on the (day) directional antenna system. The nondirectional and directional field strength measurements must be made under similar environmental conditions. The proof(s) of performance submitted to the Commission must contain all of the data specified in Section 73.186 of the rules.
Permittees who elect to submit a moment method proof of performance, as set forth in Section 73.151(c), must use series-fed radiators. In addition, the sampling system must be constructed as described in Section 73.151(c) (2) (i).

2 Permittee shall install a type accepted transmitter, or submit application (FCC Form 301) along with data prescribed in Section 73.1660(b) should non-type accepted transmitter be proposed.

3 A license application (FCC Form 302) to cover this construction permit must be filed with the Commission pursuant to Section 73.3536 of the Rules before the permit expires.

4 Licensee shall be responsible for satisfying all reasonable complaints of blanketing interference within the 1 V/m contour as required by Section 73.88 of the Commission's rules.

Special operating conditions or restrictions:

5 ***NOTE TO PERMITTEE***
Notwithstanding the grant of this construction permit or the expiration date specified herein, your station's license will automatically expire as a matter of law on 9/15/2011 if the station has not resumed broadcasting before that time. See Pub. Law No. 104-104, 110 Stat. 56, Section 403(1) (1996) and Order, Silent Station Authorizations, FCC 96-218 (released May 17, 1996). See also Public Notice, Expedited Processing of Applications Filed By Silent Stations, DA 96-818 (May 22, 1996).

Upon resumption of broadcasting, the licensee must notify the Commission by letter addressed to:

Office of the Secretary
Federal Communications Commission
445 12th Street, SW, Washington, DC 20554
ATTN: Chief, Audio Division, Media Bureau

This notice will be in addition to an application for a license to cover this permit.

6 Daytime antenna system consists of towers #2, #3, and #4 referenced in that order. Ground system consists of 120 equally spaced, buried, copper radials about the base of each tower, each 114.3 meters in length except where terminated by property boundaries or where intersecting radials are shortened and bonded to a transverse copper strap midway between adjacent towers.

*** END OF AUTHORIZATION ***