

**Micronet Communications, Inc.**

720 F Avenue, Suite 100  
Plano, Texas 75074  
972-422-7200

SUPPLEMENTAL SHOWING PART 101.103(D)

File Number: M1428602 5.93 GHz  
Licensee: MIDWEST INFORMATION SYSTEMS INC

Page 1

---

Pursuant to Parts 25.203 and 101.103(d) of the FCC Rules and Regulations, a frequency coordination study was conducted by Micronet Communications, Inc. for the following proposed earth station:

FARGO, ND

The results of the study indicate that no unacceptable interference will result with existing, proposed or prior coordinated radio facilities.

Coordination was performed with existing, proposed and prior coordinated carriers within coordination range on the following dates:

10/20/2014 Original PCN  
There were no unresolved interference objections.

The attached coordination data was forwarded on the latest date to the following parties within coordination range or their authorized coordination agents:

ALLETE INC DBA MINNESOTA POWER  
AT&T COMMUNICATIONS OF THE MIDWEST INC  
AT&T CORP  
BNSF RAILWAY COMPANY  
COMSEARCH INC  
FCSA SERVICES  
FORUM COMMUNICATIONS COMPANY  
MINNESOTA STATE OF  
MINNKOTA POWER COOPERATIVE INC  
NEW CINGULAR WIRELESS PCS - ND/SD/NE/IA  
NEW CINGULAR WIRELESS PCS LLC  
PRAIRIE PUBLIC BROADCASTING INC  
RADIO DYNAMICS  
RCC MINNESOTA INC

Respectfully Submitted,



Jeremy Boyce  
Systems Engineer

Attached: 1 data sheet

Micronet Communications, Inc.  
 720 F Avenue, Suite 100  
 Plano, Texas 75074  
 972-422-7200

File: M1428602

=====

TECHNICAL CHARACTERISTICS OF TRANSMIT RECEIVE EARTH STATION

=====

Company:	MIDWEST INFORMATION SYSTEMS INC		
Site Name, State:	FARGO, ND		
Call Sign:			
Latitude	(NAD83)	46 51	43.3 N
Longitude	(NAD83)	96 49	14.2 W
Elevation AMSL	(ft/m)	902.10	274.96
Receive Frequency Range	(MHz)	3700-4200	
Transmit Frequency Range	(MHz)	5925-6165/6215-6235/6275-6295/6335-6355/6395-6425	
Range of Satellite Orbital Long.	(deg W)	43.00	148.00
Range of Azimuths from North	(deg)	118.09	239.58
Antenna Centerline	(ft/m)	28.53	8.70
Antenna Elevation Angles	(deg)	15.44	17.09

Equipment Parameters		Receive	Transmit
Antenna Gain, Main Beam	(dbI)	42.00	46.00
15 DB Half Beamwidth	(deg)	2.40	1.80

Antennas            Receive: PRODELIN 1385 (3.8M)  
                       Transmit: GENERAL DYNAMICS 1385

Max Transmitter Power	(dbW/4KHz)	-14.20
Max EIRP Main Beam	(dbW/4KHz)	31.80
Modulation / Emission Designator	DIGITAL 200KG7W	

Coordination Parameters		Receive	Transmit
Max Greater Circle Distances	(km)	325.28	167.34
Max Rain Scatter Distances	(km)	412.78	100.00
Max Interference Power Long Term	(dbW)	-156.00	-154.00
Max Interference Power Short Term	(dbW)	-146.00	-130.80
Rain Zone / Radio Zone		2	A

Micronet Communications, Inc.  
 720 F Avenue, Suite 100  
 Plano, Texas 75074  
 972-422-7200

File: M1428602

=====

TECHNICAL CHARACTERISTICS OF TRANSMIT RECEIVE EARTH STATION

=====

Company: MIDWEST INFORMATION SYSTEMS INC  
 Site Name, State: FARGO, ND  
 Call Sign:  
 Latitude (NAD83) 46 51 43.3 N  
 Longitude (NAD83) 96 49 14.2 W  
 Elevation AMSL (ft/m) 902.10 274.96  
 Receive Frequency Range (MHz) 3700-4200  
 Transmit Frequency Range (MHz) 5925-6165/6215-6235/6275-  
 6295/6335-6355/6395-6425  
 Range of Satellite Orbital Long. (deg W) 43.00 148.00  
 Range of Azimuths from North (deg) 118.09 239.58  
 Antenna Centerline (ft/m) 28.53 8.70  
 Antenna Elevation Angles (deg) 15.44 17.09

-----

Equipment Parameters		Receive	Transmit
Antenna Gain, Main Beam	(dbI)	42.00	46.00
15 DB Half Beamwidth	(deg)	2.40	1.80

-----

Antennas            Receive: PRODELIN 1385 (3.8M)  
                      Transmit: GENERAL DYNAMICS 1385

Max Transmitter Power	(dbW/4KHz)		-14.20
Max EIRP Main Beam	(dbW/4KHz)		31.80
Modulation / Emission Designator	DIGITAL	200KG7W	

-----

Coordination Parameters		Receive	Transmit
Max Greater Circle Distances	(km)	325.28	167.34
Max Rain Scatter Distances	(km)	412.78	100.00
Max Interference Power Long Term	(dbW)	-156.00	-154.00
Max Interference Power Short Term	(dbW)	-146.00	-130.80
Rain Zone / Radio Zone		2	A

-----

MICRONET COMMUNICATIONS, INC.  
 10-13-2014

File: M1428602

page 1

=====

Horizon Angle	Horizon Gain	Final Contour	-	6.17 GHz TRANSMIT
---------------	--------------	---------------	---	-------------------

=====

Company: MIDWEST INFORMATION SYSTEMS INC

Site Name, State: FARGO, ND

Call Sign:

Latitude (NAD83) 46 51 43.3 N Longitude (NAD83) 96 49 14.2 W

North Azimuth (deg)	Horizon Angle (deg)	Horizon Gain (db)	Final Contour (km)	North Azimuth (deg)	Horizon Angle (deg)	Horizon Gain (db)	Final Contour (km)
0	0.00	-20.55	130.1	180	0.00	-10.00	138.6
5	0.00	-16.67	130.1	185	0.00	-10.00	139.1
10	0.00	-12.77	130.1	190	0.00	-10.00	139.9
15	0.00	-10.00	130.1	195	0.00	-9.37	141.0
20	0.00	-10.00	130.1	200	0.00	-8.05	142.6
25	0.00	-10.00	130.1	205	0.00	-6.40	144.4
30	0.00	-10.00	130.1	210	0.00	-4.85	146.7
35	0.00	-11.14	130.1	215	0.00	-4.27	150.2
40	0.00	-13.00	130.1	220	0.00	-3.62	154.3
45	0.00	-13.00	130.1	225	0.00	-2.92	159.2
50	0.00	-13.00	130.1	230	0.00	-2.20	164.3
55	0.00	-13.00	130.1	235	0.00	-1.71	167.3
60	0.00	-13.00	130.1	240	0.00	-1.56	166.9
65	0.00	-12.81	130.1	245	0.00	-1.77	163.3
70	0.00	-10.46	130.1	250	0.00	-2.31	157.9
75	0.00	-10.00	133.0	255	0.00	-3.09	152.0
80	0.00	-10.00	136.3	260	0.00	-4.04	146.5
85	0.00	-10.00	139.8	265	0.00	-5.30	142.2
90	0.00	-6.74	143.6	270	0.00	-9.48	138.4
95	0.01	-4.34	147.9	275	0.00	-10.00	134.9
100	0.00	-3.30	153.2	280	0.00	-10.00	131.7
105	0.00	-2.37	158.2	285	0.00	-10.00	130.1
110	0.00	-1.63	162.2	290	0.00	-11.74	130.1
115	0.00	-1.19	163.9	295	0.00	-13.00	130.1
120	0.00	-1.15	162.6	300	0.00	-13.00	130.1
125	0.00	-1.50	159.0	305	0.00	-13.00	130.1
130	0.00	-2.17	154.3	310	0.00	-13.00	130.1
135	0.00	-2.92	150.2	315	0.00	-13.00	130.1
140	0.00	-3.62	146.7	320	0.00	-12.21	130.1
145	0.00	-4.27	144.4	325	0.00	-10.16	130.1
150	0.00	-4.86	142.6	330	0.00	-10.00	130.1
155	0.00	-6.40	141.0	335	0.00	-10.00	130.1
160	0.00	-8.05	139.9	340	0.00	-10.00	130.1
165	0.00	-9.37	139.1	345	0.00	-10.59	130.1
170	0.00	-10.00	138.6	350	0.00	-14.45	130.1
175	0.00	-10.00	138.4	355	0.00	-18.31	130.1

MICRONET COMMUNICATIONS, INC.  
 10-13-2014

File: M1428602

page 2

=====  
 Horizon Angle    Horizon Gain    Final Contour    -    3.95 GHz RECEIVE  
 =====

Company:    MIDWEST INFORMATION SYSTEMS INC

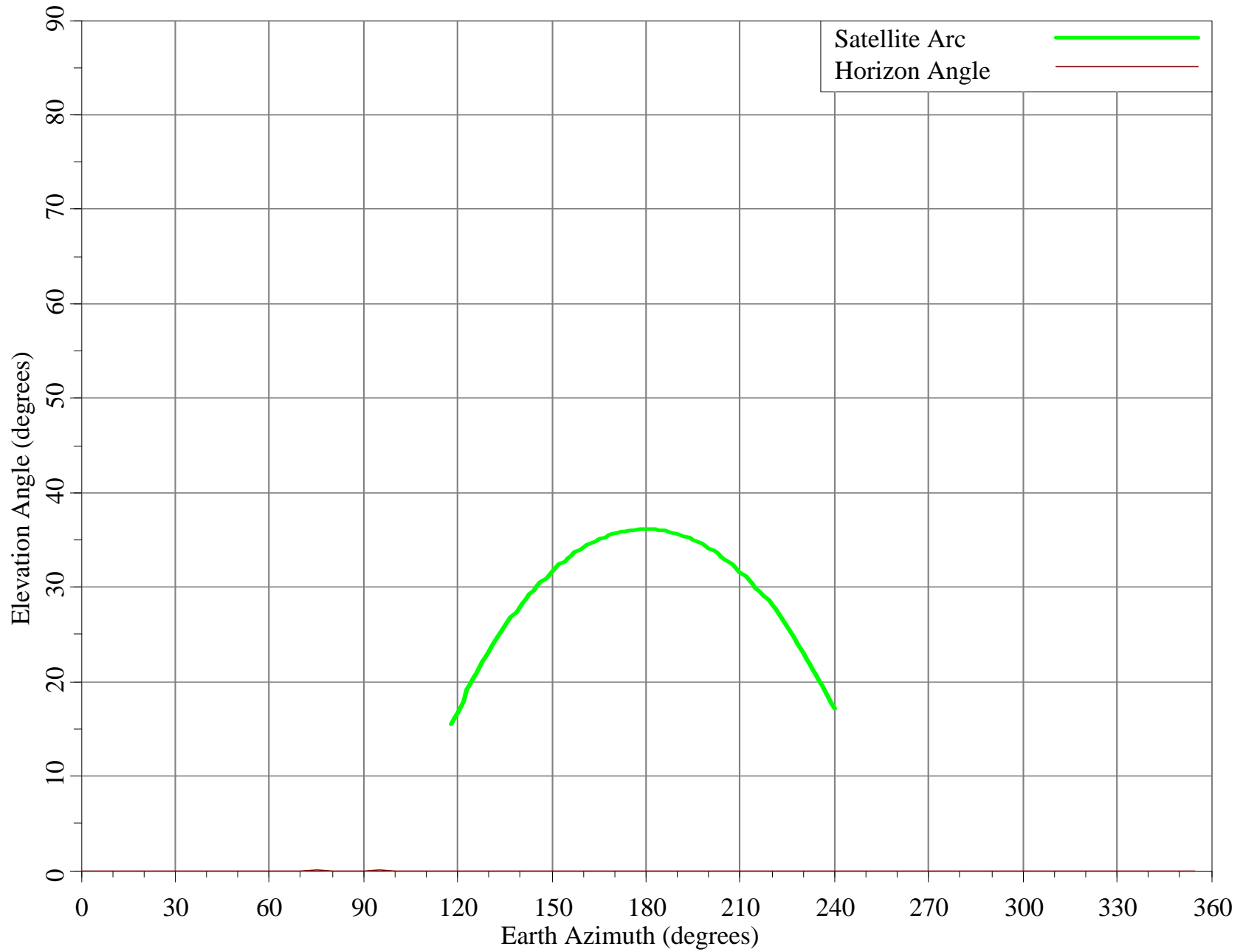
Site Name, State:                                FARGO, ND

Call Sign:

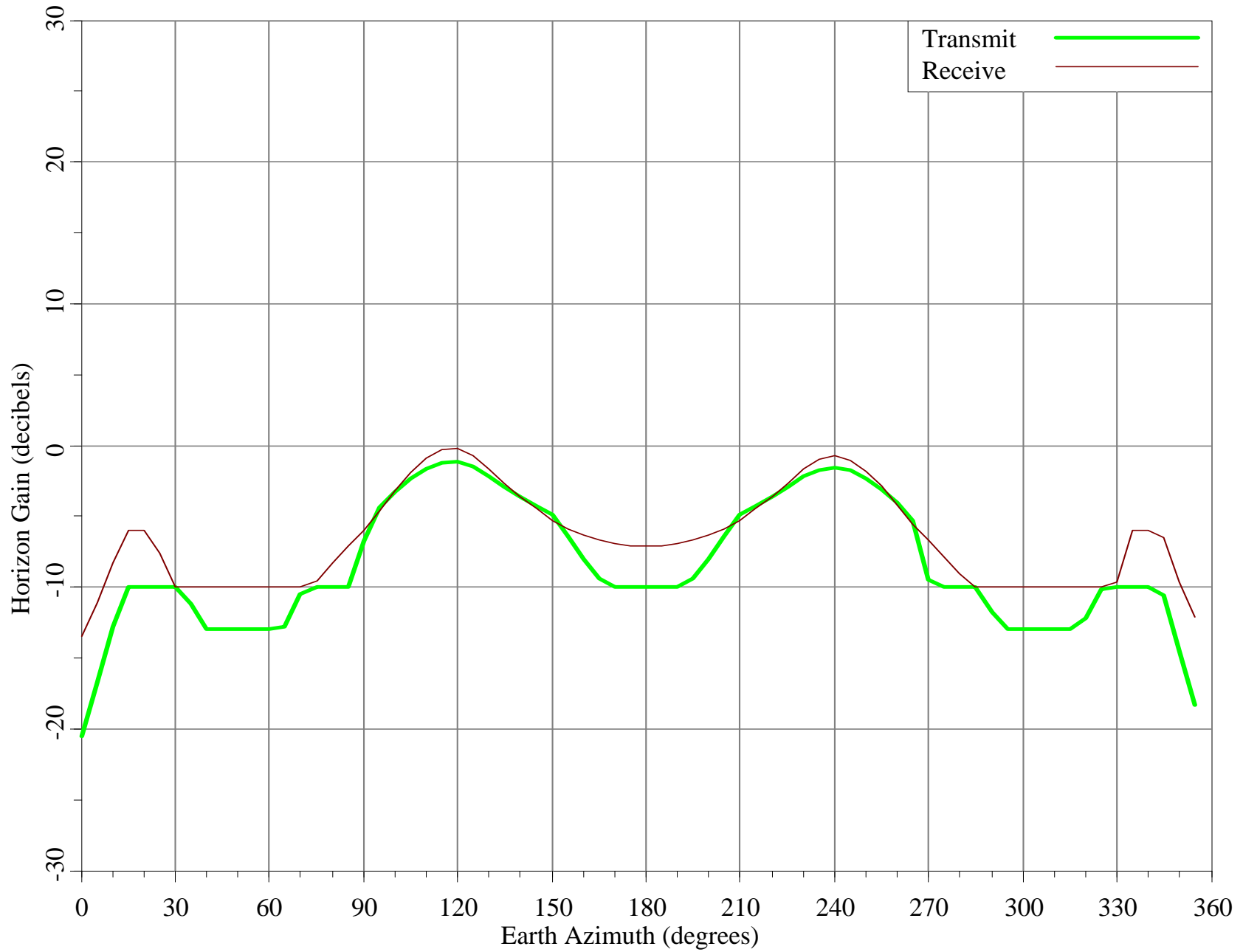
Latitude (NAD83) 46 51 43.3 N                Longitude (NAD83) 96 49 14.2 W

North Azimuth (deg)	Horizon Angle (deg)	Horizon Gain (db)	Final Contour (km)	North Azimuth (deg)	Horizon Angle (deg)	Horizon Gain (db)	Final Contour (km)
0	0.00	-13.50	247.3	180	0.00	-7.12	264.5
5	0.00	-11.10	247.3	185	0.00	-7.07	265.5
10	0.00	-8.28	247.3	190	0.00	-6.91	267.1
15	0.00	-6.00	247.3	195	0.00	-6.66	269.5
20	0.00	-6.00	247.3	200	0.00	-6.31	272.5
25	0.00	-7.62	247.3	205	0.00	-5.87	276.7
30	0.00	-10.00	247.3	210	0.00	-5.30	282.6
35	0.00	-10.00	247.3	215	0.00	-4.49	289.7
40	0.00	-10.00	247.3	220	0.00	-3.60	298.2
45	0.00	-10.00	247.3	225	0.00	-2.64	308.4
50	0.00	-10.00	247.3	230	0.00	-1.65	319.1
55	0.00	-10.00	247.3	235	0.00	-0.98	325.3
60	0.00	-10.00	247.3	240	0.00	-0.76	324.4
65	0.00	-10.00	247.3	245	0.00	-1.06	316.8
70	0.00	-10.00	247.4	250	0.00	-1.81	305.6
75	0.00	-9.54	253.3	255	0.00	-2.88	293.5
80	0.00	-8.32	259.8	260	0.00	-4.17	281.9
85	0.00	-7.12	266.9	265	0.00	-5.58	271.9
90	0.00	-5.96	274.7	270	0.00	-6.69	264.1
95	0.01	-4.59	285.1	275	0.00	-7.84	257.1
100	0.00	-3.16	296.0	280	0.00	-9.02	250.7
105	0.00	-1.88	306.4	285	0.00	-10.00	247.3
110	0.00	-0.87	314.6	290	0.00	-10.00	247.3
115	0.00	-0.27	318.1	295	0.00	-10.00	247.3
120	0.00	-0.20	315.6	300	0.00	-10.00	247.3
125	0.00	-0.69	308.0	305	0.00	-10.00	247.3
130	0.00	-1.61	298.2	310	0.00	-10.00	247.3
135	0.00	-2.64	289.7	315	0.00	-10.00	247.3
140	0.00	-3.60	282.6	320	0.00	-10.00	247.3
145	0.00	-4.49	276.7	325	0.00	-10.00	247.3
150	0.00	-5.30	272.5	330	0.00	-9.68	247.3
155	0.00	-5.87	269.5	335	0.00	-6.00	247.3
160	0.00	-6.31	267.1	340	0.00	-6.00	247.3
165	0.00	-6.66	265.5	345	0.00	-6.48	247.3
170	0.00	-6.91	264.5	350	0.00	-9.65	247.3
175	0.00	-7.07	264.2	355	0.00	-12.11	247.3

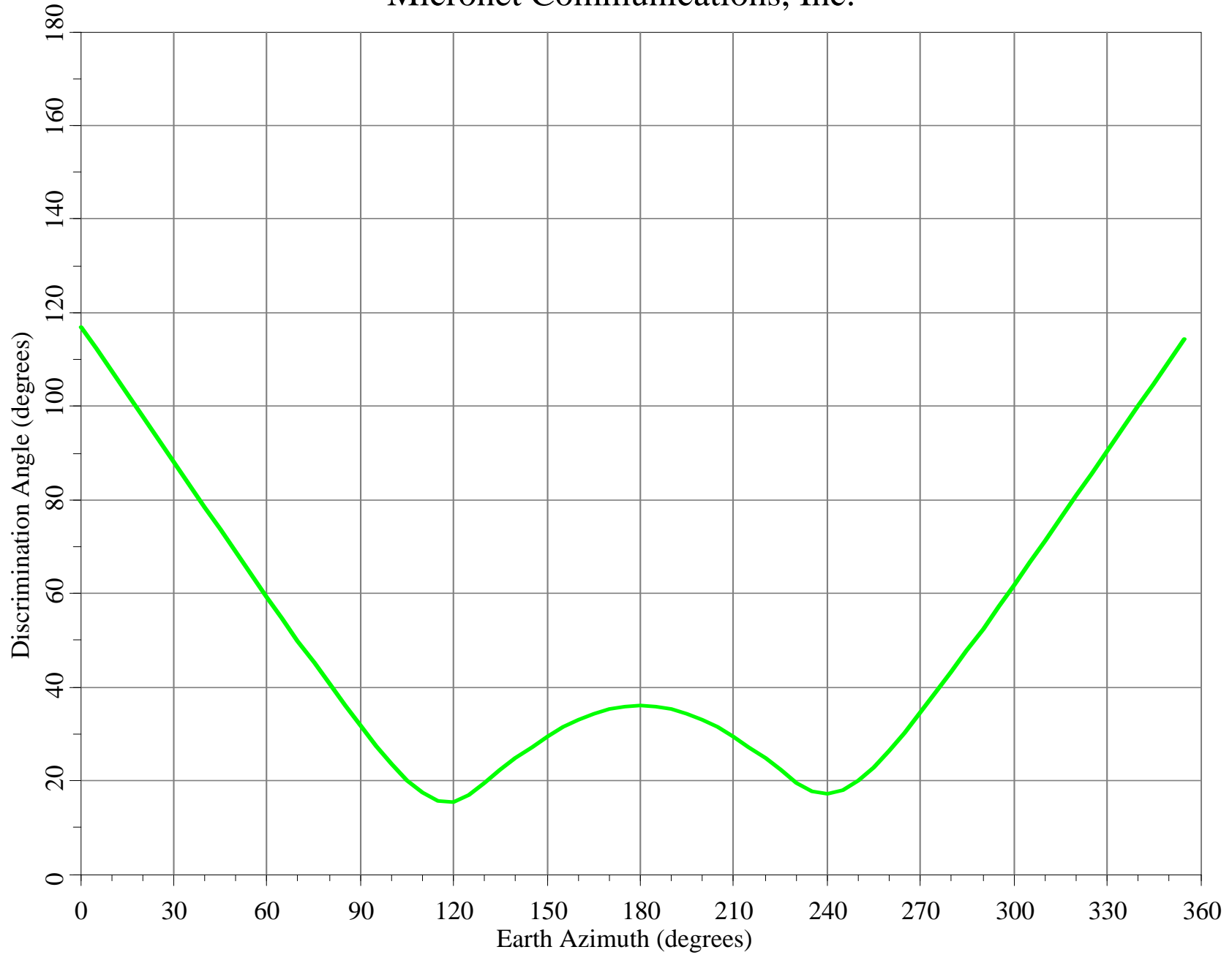
# Horizon Angle & Satellite Arc for FARGO, ND Micronet Communications, Inc.



# Horizon Gain for FARGO, ND Micronet Communications, Inc.



Minimum Discrimination Angles for FARGO, ND  
Micronet Communications, Inc.





# Final Contour & Rain Scatter for FARGO, ND - Transmit



SCALE - 1:10000000 1 inch = 157.8 miles

# Final Contour & Rain Scatter for FARGO, ND - Receive

SCALE - 1:10000000 1 inch = 157.8 miles

