



Cavell, Mertz & Associates

Cromwell Radio of Illinois - Mattoon Site  
39-28-51.6 N, 88-32-45.722-36.1W (NAD83)

**Micronet Communications, Inc.**

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

SUPPLEMENTAL SHOWING PART 101.103(D)

File Number: M1825604 3.70 GHz  
Licensee: THE CROMWELL GROUP, INC. OF ILLINOIS

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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:

Mattoon, IL

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:

10/02/2018 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:

Respectfully Submitted,



Jeremy Lewis  
Systems Engineer

Attached: 1 data sheet

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

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TECHNICAL CHARACTERISTICS OF RECEIVE ONLY EARTH STATION

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Company:	THE CROMWELL GROUP, INC. OF ILLINOIS		
Site Name, State:	Mattoon, IL		
Call Sign:			
Latitude	(NAD83)	39 28	51.6 N
Longitude	(NAD83)	88 22	36.1 W
Elevation AMSL	(ft/m)	732.94	223.40
Receive Frequency Range	(MHz)	3700-4200	
Transmit Frequency Range	(MHz)		
Range of Satellite Orbital Long.	(deg W)	60.00	160.00
Range of Azimuths from North	(deg)	139.65	258.07
Antenna Centerline	(ft/m)	6.56	2.00
Antenna Elevation Angles	(deg)	35.73	5.44

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Equipment Parameters Receive

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Antenna Gain, Main Beam	(dbI)	40.90
15 DB Half Beamwidth	(deg)	3.20

Antennas Receive: VIKING SATCOM 1374-990 (3.7 M)

Max Transmitter Power	(dbW/4KHz)	
Max EIRP Main Beam	(dbW/4KHz)	
Modulation / Emission Designator	DIGITAL	36M0G7W

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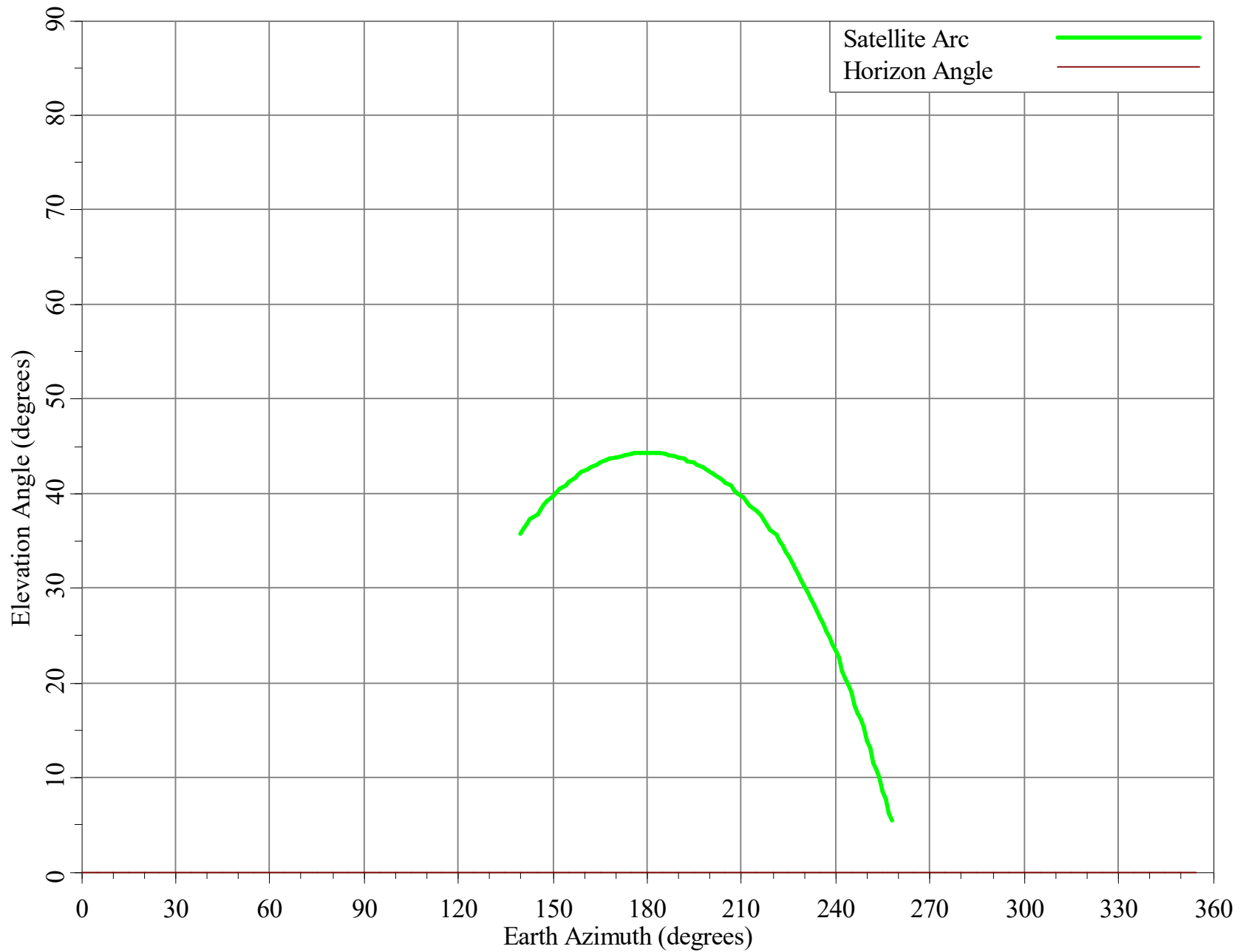
Coordination Parameters Receive

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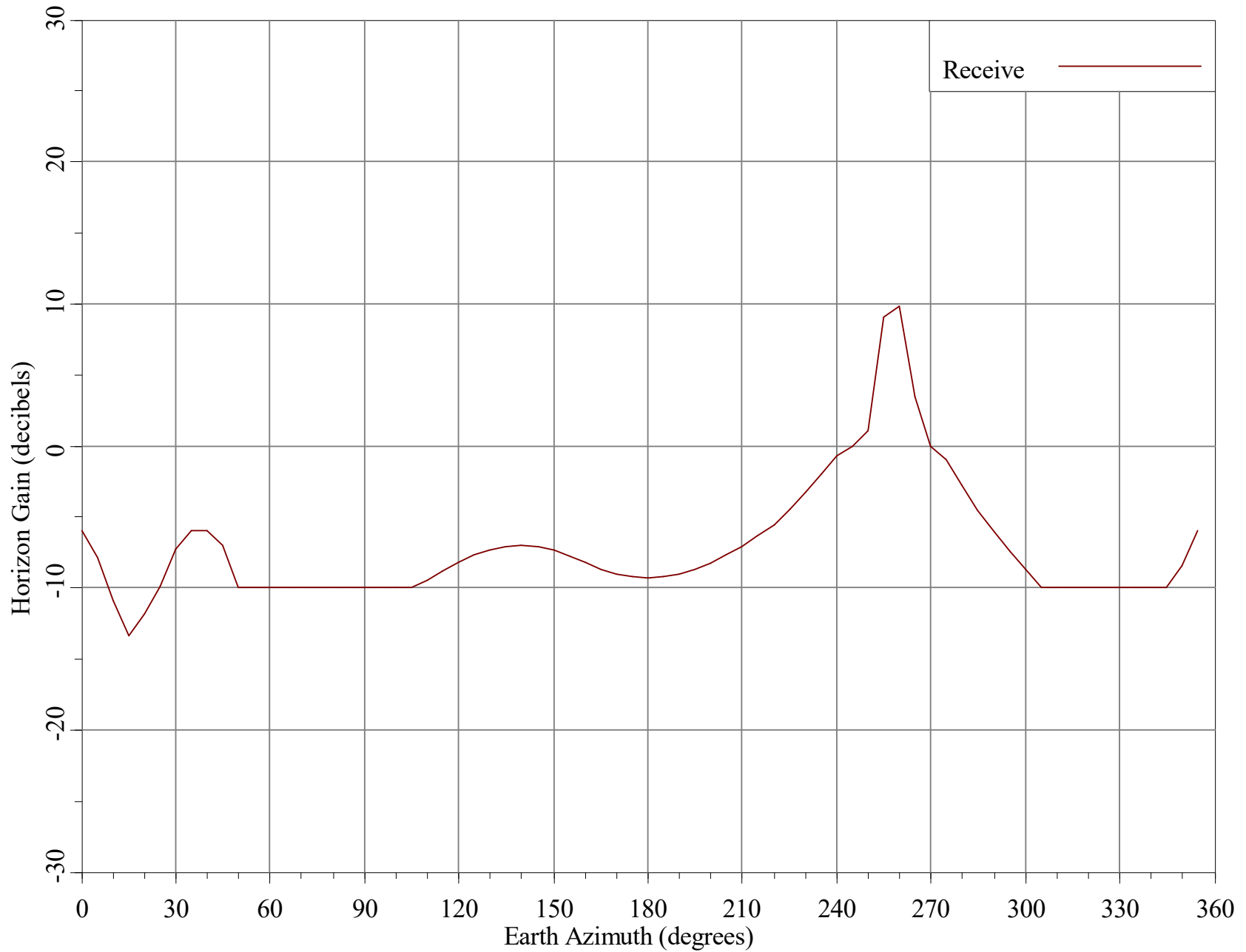
Max Greater Circle Distances	(km)	506.10	
Max Rain Scatter Distances	(km)	579.00	
Max Interference Power Long Term	(dbW)	-158.60	
Max Interference Power Short Term	(dbW)	-149.90	
Rain Zone / Radio Zone		2	A

# Horizon Angle & Satellite Arc for Mattoon, IL

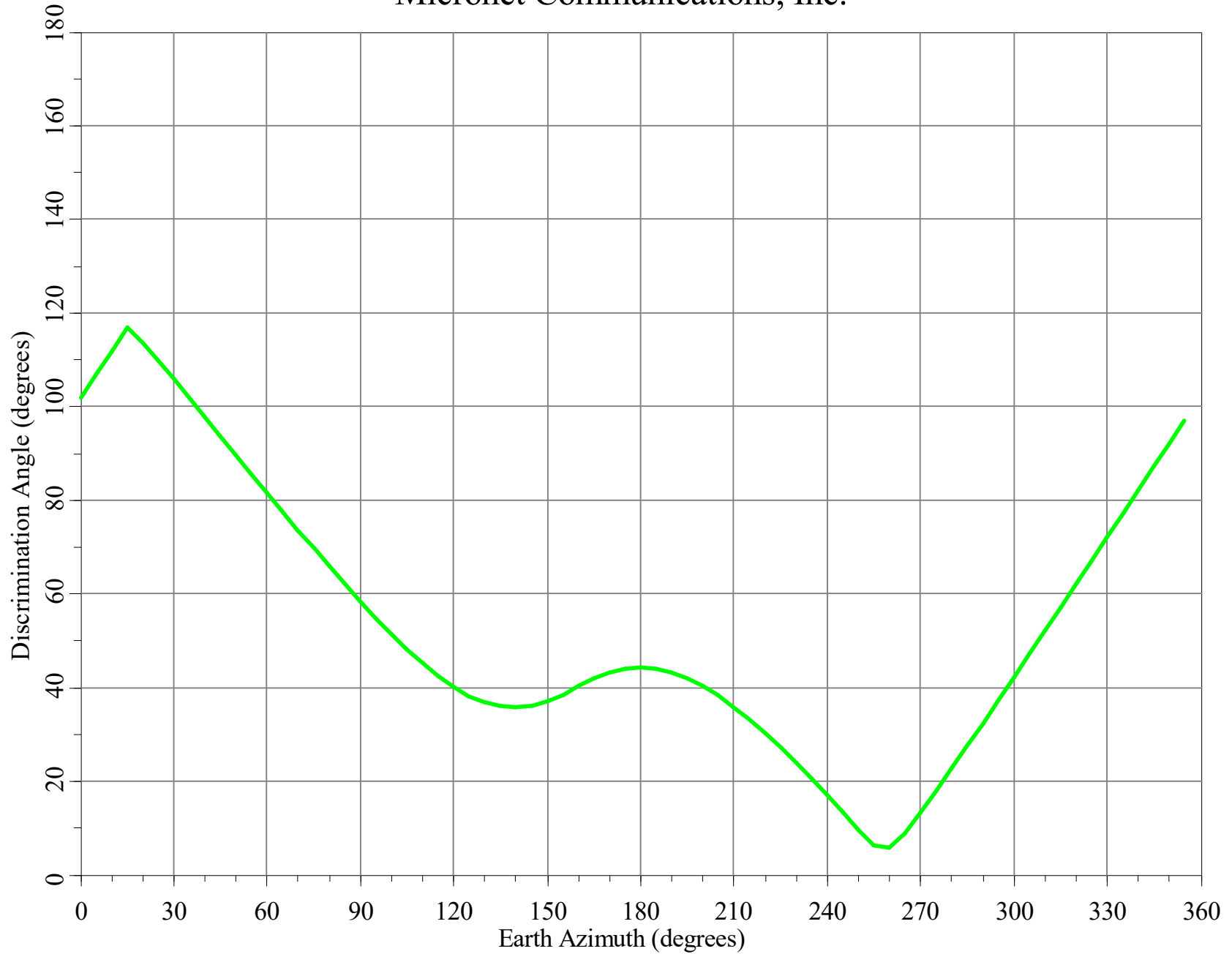
Micronet Communications, Inc.



# Horizon Gain for Mattoon, IL Micronet Communications, Inc.



Minimum Discrimination Angles for Mattoon, IL  
Micronet Communications, Inc.



# Final Contour & Rain Scatter for Mattoon, IL - Receive

