DETAILED INTERFERENCE ANALYSIS REPORT

Transmit/Receive Earth Station

Prepared For
Amazon
Kileville, Ohio
Transmit/Receive Earth Station

April 12, 2018

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SECTION 1

INTRODUCTION

Transmit/Receive Earth Station

This report presents the results of a detailed interference analysis for the proposed S-band uplink earth station. The site was selected by Amazon and is located in Kileville, Ohio.

The analysis was performed for a 5.4 meter antenna. The long term interference objective at 2 GHz, was -154 dBW/4 kHz.

The earth station was analyzed for transmission of data traffic down to a minimum elevation of 5 degrees.

This detailed interference analysis is meant to provide an estimate of potential interference at this location, and to recommend a course of future action.

SECTION 2

REPORT CONTENTS AND PROCEDURES

Transmit/Receive Earth Station

This section describes the contents of the report for the proposed S-band transmit earth station.

Section 1 describes the site location, the antenna considered, and the system parameters considered in the detailed interference analysis. The analysis was undertaken to determine the potential for microwave interference for the transmit earth station at the site specified.

Initially, a computer analysis of this site was performed to determine the extent of potential interference on a line-of-sight (LOS) basis. This analysis considers the microwave environment with respect to the earth station and calculates predicted signal levels between these systems. Paths that exceed a given objective level are listed for further analysis. The objective levels present the maximum interference levels allowed between the earth station and the surrounding terrestrial microwave environment for the frequency band of interest.

To further analyze the effect of the predicted interference conflicts, terrain path profiles were prepared for the critical cases. This involves plotting the interference path on topographic maps, typically 7.5 minute series U.S.G.S. maps, to determine the terrain characteristics of the path. Once this has been accomplished, predicted over-the-horizon (O-H) losses are calculated using the techniques of the National Bureau of Standards Technical Note 101 (Revised).

These calculations give the amount of signal attenuation achieved due to terrain blockage.

Section 3 summarizes the results of the site analysis. This summary includes the number of cases that were considered, the interference cases that remain, and the proposed resolution of the interference problems.

Table 3.1-1 lists the Great Circle interference cases and the predicted O-H losses calculated on the various 2 GHz paths, respectively. If multiple analyses are considered, such as changes in satellite arc or antenna, the results are presented in Tables 3.1-1.1, 3.1-1.2, 3.2-1.1 3.2-1.2, etc.....

A brief explanation of the various columns shown in Table 3.1-1 follows:

PATH ID: This is the predicted interference path. The first site listed is the receiver at 2 GHz.

BAND: This shows the frequency plan of the interfering paths. The 2 GHz paths affect transmission of the uplink.

DIST: This is the distance from the earth station to the terrestrial station in kilometers.

AZ: This is the azimuth bearing in degrees (taken from True North), from the earth station toward the terrestrial station.

ES DISC: This is the earth station discrimination angle in degrees, towards the involved terrestrial facility.

ES GAIN: This is the gain of the earth station in dBi, at the calculated earth station discrimination angle.

LOS LOSS REQ'D: This is the amount of loss required in dB, on a line-of-sight basis, to meet the interference objective.

O-H LOSS: This is the calculated over-the-horizon (O-H) losses in dB, between the earth station and the involved terrestrial station. The 20 percent column represents losses for the long term objective. The 0.0025 and .01 percent columns present the losses for the short term objective at 18 GHz.

REVISED MARGIN: This is the difference between the LOS margin and the predicted O-H losses achieved due to terrain blockage. Sufficient attenuation is calculated for the paths, which show the word "CLEAR" in the revised margin. Cases showing a positive revised margin will require additional losses to meet the interference objective.

The information listed at the bottom of the table reflects the antennas, satellite arc, and interference objectives considered for the proposed site.

Section 4 presents conclusions and recommendations. It gives an overall description of the microwave environment and suggests a future course of action.

Table 5.1-1 contains the operational parameters for the proposed earth station.

Figure 5.1-1 indicates the location of the site analyzed. This location should be verified. **If it is not the desired site, Comsearch should be notified immediately so that the precise location can be analyzed.**

SECTION 3

SUMMARY AND RESULTS

The detailed interference analysis for the proposed earth station site to be located in Kileville, Ohio revealed that multiple potential interference conflicts exist in the 2 GHz band with TV Auxiliary Broadcast users. This is based on a search of the Comsearch database and of those 2 GHz paths that had been filed for license at the FCC. Table 3.1-1 provides a summary of all the cases considered in this analysis.

It should be noted however, these are only referenced sites from FCC licensing efforts and do not consider temporary mobile locations that local Auxiliary Broadcasters may use in their ENG operations. The local Broadcasters operate on distinct channel plans identified below.

Channel	(MHz)	(MHz)	(MHz)
1	2025.0	2037.4	12.4
2	2037.4	2049.5	12.1
3	2049.5	2061.6	12.1
4	2061.6	2073.7	12.1
5	2073.7	2085.8	12.1
6	2085.8	2097.9	12.1
7	2097.9	2110.0	12.1

Based on this information, the Kileville uplink may affect Broadcaster operation on all channels.

SECTION 4

CONCLUSIONS AND RECOMMENDATIONS

4.1 Conclusions

Based on the results of the detailed interference analysis, eight direct potential cases of interference were identified to fixed locations operating on receive channels that would be affected by the proposed uplink frequencies of 2025 - 2110 MHz. Potential interference conflicts to mobile ENG locations operated by local Auxiliary Broadcasters could present a problem depending on the areas of operation reported by the individual Broadcasters.

The initial contact with the local Broadcasters operating near the Kileville earth station facility during the frequency coordination of this site may identify additional areas of concern. Amazon may receive opposition from the local Broadcasters based on previous coordination efforts in this band and possible requests from the Broadcasters for on-site testing between the proposed earth station site and the areas identified by the local Broadcasters.

4.2 Recommendations

It is recommended that Amazon review the operating parameters of the proposed uplink and determine whether any modifications to transmit power, uplink frequency range or minimum elevation angle can be tolerated to lessen the impact on local 2 GHz Auxiliary Broadcast receiver locations.

It is also recommended that frequency coordination be initiated to allow for adequate time in resolving potential interference conflicts with local Broadcasters.

Table 4.1-1

Great Circle Interference Conflicts
04/11/2018

Earth Station Name KILEVILLE, OH
Owner Amazon Web Services
Latitude (DMS) (NAD83) 40 6 15.4 N
Longitude (DMS) (NAD83) 83 11 58.4 W
Ground Elevation (ft/m) 944.60 / 287.91 Amsl
Antenna Centerline (ft/m) 12.00 / 3.66 Agl
Antenna Model 5.4 meter
Objectives: Transmit -154.0 (dBW /4 kHz) Tx Power -3.0 (dBW/4 kHz)

	Terrestrial Path			Gnd	Edisct	Ges	FsLoss	Dist	Pr	Tpwr	Plan
	Latitude	Longitude	Call Sign	Acl	Tdisct	Gts	Tant	Az	Margin	LL	
	Owner						Loading				
	Freq/Pol										
1	LEVEQUE		OHWCMH STUDIO OH	227.10	38.8	10.0	125.8	23.1-93.3		0.0	BS
	39 57 44	83 0 8	RXONLY	172.00	331.8	25.5	2CRS4Q	133.1	60.7	0.0	
	NEXMID: **NEXSTAR BROADCASTING, INC.**					1	CH	FMV	RCN:		
	2008.0000B	**2025.0000B**	**2042.0000B**	**2059.0000B**	**2076.0000B**	**2093.0000B**					
	Status: L			Equipment: AB0199 Emission: 17M0F9W							
	OH LOSS 20% / 0.0025%:		0.00 / 0.00								
	Contact: Perry Sook, eryder@nexstar.tv, (972) 373-8800										
2	LEVEQUE		OHWCMH STUDIO OH	227.10	38.8	10.0	125.8	23.1-93.3		0.0	BS
	39 57 44	83 0 8	RXONLY	172.00	331.8	25.5	2CRS4Q	133.1	60.7	0.0	
	NEXMID: **NEXSTAR BROADCASTING, INC.**					1	CH	FMV	RCN:		
	1990.0000B										
	Status: L			Equipment: AB9515 Emission: 18M0F9W							
	OH LOSS 20% / 0.0025%:		0.00 / 0.00								
6	GERMANTOWN		OHLIMESTONE OH	289.60	151.1	10.0	138.4	98.6-108.8		0.0	NS
	39 44 2	84 14 53	RXONLY	243.80	4.5	22.5	2QUADN	245.7	45.2	0.0	
	ZWHITV: **Miami Valley Broadcasting Corporation**					672	CH	DIG	RCN: 16012705		
	2043.5000H										
	Status: L			Equipment: TEMV53 Emission: 12M0W7D							
	OH LOSS 20% / 0.0025%:		33.40 / 22.20								
	Contact: dave.thomas@coxinc.com **(937) 259-2111**										
16	GERMANTOWN		OHTEMPY LOC OH	289.60	151.1	10.0	138.4	98.6-111.4		0.0	BT
	39 44 2	84 14 53	RXONLY	283.50	338.1	20.0	2SILHN	245.7	42.6	0.0	
	ZWHITV: **Miami Valley Broadcasting Corporation**					DIGITAL	DIG	RCN:			
	2025.5000B										
	Status: L			Equipment: AB9931 Emission: 12M0W7D							
	OH LOSS 20% / 0.0025%:		32.80 / 21.60								
110	WESTERVILLE		OHTEMPY LOC OH	280.70	19.3	10.0	126.2	24.3-120.2		0.0	BT
	40 9 33	82 55 23	RXONLY	244.00	58.6	-1.0	22A20M	75.4	33.8	0.0	
	S14666: **WBNS TV, Inc.**					1	CH	FMV	RCN:		
	2025.5000B										
	Status: L			Equipment: AB9918 Emission: 12M0F8W							
	OH LOSS 20% / 0.0025%:		0.00 / 0.00								
	Contact: Marvin Hite, marvin.hite@10tv.com **(614) 460-3704**										
112	WESTERVILLE		OHTEMPY LOC OH	280.70	19.3	10.0	126.2	24.3-120.2		0.0	NS
	40 9 33	82 55 23	RXONLY	244.00	58.6	-1.0	22A20M	75.4	33.8	0.0	
	S14666: **WBNS TV, Inc.**					1	CH	DIG	RCN:		
	2109.5000B										
	Status: L			Equipment: AB9934 Emission: 25K0G1D							
	OH LOSS 20% / 0.0025%:		0.00 / 0.00								
125	WESTERVILLE		OHWCMH STUDIO OH	280.70	19.3	10.0	126.2	24.3-121.2		0.0	BS
	40 9 33	82 55 23	RXONLY	274.00	44.1	-2.0	2QUADN	75.4	32.8	0.0	
	NEXMID: **NEXSTAR BROADCASTING, INC.**					1	CH	FMV	RCN:		
	1990.0000B	**2008.0000B**	**2025.0000B**	**2042.0000B**	**2059.0000B**	**2076.0000B**					
	2093.0000B										
	Status: L			Equipment: AB0199 Emission: 17M0F9W							
	OH LOSS 20% / 0.0025%:		0.00 / 0.00								

Great Circle Interference Conflicts
04/11/2018

Earth Station Name KILEVILLE, OH
Owner Amazon Web Services
Latitude (DMS) (NAD83) 40 6 15.4 N
Longitude (DMS) (NAD83) 83 11 58.4 W
Ground Elevation (ft/m) 944.60 / 287.91 Amsl
Antenna Centerline (ft/m) 12.00 / 3.66 Agl
Antenna Model 5.4 meter
Objectives: Transmit -154.0 (dBW /4 kHz) Tx Power -3.0 (dBW/4 kHz)

	Terrestrial Path			Gnd	Edisct	Ges	FsLoss	Dist	Pr Tpwr Plan
	Latitude	Longitude	Call Sign	Acl	Tdisct	Gts	Tant	Az	Margin LL
	Owner						Loading		
	Freq/Pol								

190 RECEIVER 1 OHTEMPY LOC OH 219.50 40.9 10.0 124.9 20.8-127.0 0.0BS
39 58 16 83 1 40 RXONLY 278.40 200.4 -9.1 *22000 135.2 27.0 0.0
S14666: **WBNS TV, Inc.** 1 CH FMV RCN:
2025.0000B
Status: L Equipment: AB9934 Emission: 12M0F8W
OH LOSS 20% / 0.0025%: 0.00 / 0.00

220 RECEIVER 3 OHTEMPY LOC OH 216.40 40.5 10.0 125.0 21.1-128.0 0.0BT
39 58 13 83 1 27 RXONLY 215.00 198.7 -10.0 *21000 134.8 26.0 0.0
S14666: **WBNS TV, Inc.** 1 CH FMV RCN:
2025.5000B 2109.5000B
Status: L Equipment: AB9918 Emission: 12M0F8W
OH LOSS 20% / 0.0025%: 0.00 / 0.00

229 WILLIAMSPORTOHWCMH STUDIO OH 235.00 78.2 10.0 133.7 57.7-130.7 0.0BS
39 35 20 83 6 44 RXONLY 226.00 344.3 -4.0 2PMRC2 172.5 23.3 0.0
NEXMID: **NEXSTAR BROADCASTING, INC.** 1 CH FMV RCN:
1990.0000B 2008.0000B 2025.0000B 2042.0000B 2059.0000B 2076.0000B
2093.0000B
Status: L Equipment: AB0199 Emission: 17M0F9W
OH LOSS 20% / 0.0025%: 0.00 / 0.00

255 WCMH TOWER OHWCMH STUDIO OH 226.20 27.0 10.0 123.1 16.9-136.0 0.0BS
40 1 31 83 1 48 RXONLY 138.00 211.3 -19.9 23HQ15 121.2 18.0 0.0
NEXMID: **NEXSTAR BROADCASTING, INC.** 1 CH FMV RCN:
1990.0000B 2008.0000B 2025.0000B 2042.0000B 2059.0000B 2076.0000B
2093.0000B
Status: L Equipment: AB0199 Emission: 17M0F9W
OH LOSS 20% / 0.0025%: 0.00 / 0.00

Table 5.1-1

SATELLITE EARTH STATION
FREQUENCY COORDINATION DATA
04/11/2018

Company	Amazon Web Services	
Owner Code		AMAWEB
Earth Station Name, State		KILEVILLE, OH
Latitude (DMS) (NAD83)		40 6 15.4 N
Longitude (DMS) (NAD83)		83 11 58.4 W
Ground Elevation AMSL (ft/m)		944.60 / 287.91
Antenna Centerline AGL (ft/m)		12.00 / 3.66
Transmit Antenna Type:	FCC32	ViaSat 5.4 meter
2.0 GHz Gain (dBi) / Diameter (m)		39.2 / 5.4
3 dB / 15 dB Half Beamwidth		0.69 / 1.85
Operating Mode		TRANSMIT ONLY
Modulation		DIGITAL
Emission / Transmit Band (MHz)	1M00G7W - 10M0G7W	2025.0000 - 2110.0000
Max. Available RF Power	(dBW)/4 kHz)	-3.00
	(dBW)/MHz)	21.00
Max. EIRP	(dBW)/4 kHz)	36.20
	(dBW)/MHz)	60.20
Max. Permissible Interference Power		
2.0 GHz, 20% (dBW/4 kHz)		-154.0
2.0 GHz, 0.0025% (dBW/4 kHz)		-131.0
Low Earth Orbit Satellite		
Azimuth Range (Min/Max) Degrees		0.0 / 360.0
Minimum Elevation Angle Degrees		5.0
Radio Climate		A
Rain Zone		2
Max. Great Circle Coordination Distance (mi./km)		
2.0 GHz		193.9 / 312.0
Precipitation Scatter Contour Radius (mi./km)		
2.0 GHz		62.7 / 101.0

Note: Horizon is less than 0.2 degrees at all azimuths

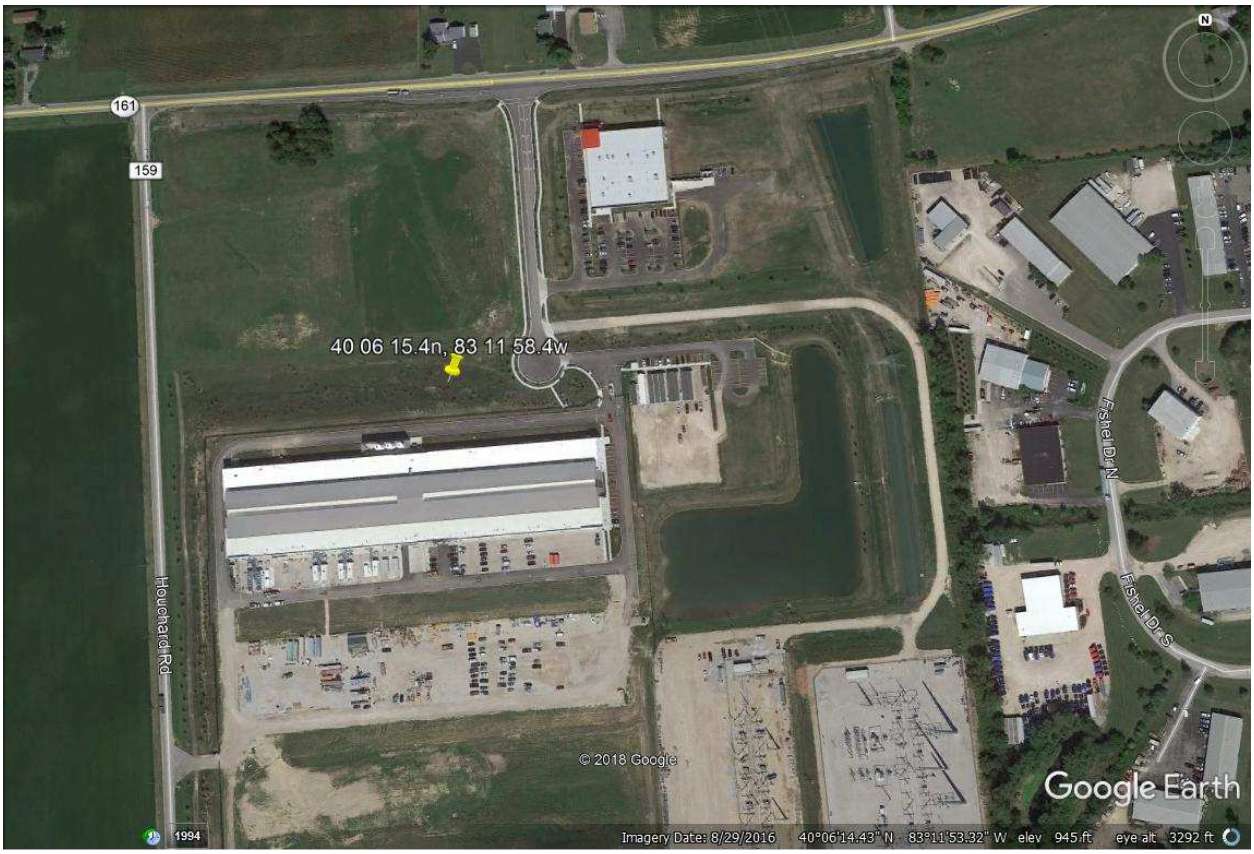
161
159
40 06 15.4n, 83 11 58.4w
Houchard Rd
Fishel Dr N
Fishel Dr S
© 2018 Google
Google Earth
1994
Imagery Date: 8/29/2016 40°06'14.43" N 83°11'53.32" W elev 945 ft eye alt 3292 ft

Figure 5.1-1

Table
Interference Case Summary
Kileville, Ohio

Case #	Path ID		Band (GHz)	Distance (km)	Azimuth (°)	ES Disc (°)	ES Gain (dBi)	LOS Loss Required (dB)	OH Loss 20% (dB)	OH Loss 0.01% (dB)	Revised Margin 20% (dB)	Revised Margin 0.01% (dB)
1	LEVEQUE	WCMH STUDIO	2.0	23.1	133.1	38.8	10.0	60.7	0.0	0.0	60.7	37.7
2	LEVEQUE	WCMH STUDIO	2.0	23.1	133.1	38.8	10.0	60.7	0.0	0.0	60.7	37.7
3	LEVEQUE	WCMH STUDIO	2.0	23.1	133.1	38.8	10.0	60.7	0.0	0.0	60.7	37.7
4	LEVEQUE	WCMH STUDIO	2.0	23.1	133.1	38.8	10.0	60.7	0.0	0.0	60.7	37.7
5	TEMPY RX	TEMPY LOC	2.0	53.3	223.9	129.5	10.0	49.0	150.9	99.2	CLEAR	CLEAR
6	GERMANTOWN	LIMESTONE	2.0	98.6	245.7	151.1	10.0	45.2	33.4	22.2	11.8	CLEAR
7	TEMPY RX	TEMPY LOC	2.0	170.3	4.3	90.1	10.0	43.9	120.1	82.6	CLEAR	CLEAR
8	TEMPY RX	TEMPY LOC	2.0	170.3	4.3	90.1	10.0	43.9	120.1	82.6	CLEAR	CLEAR
9	TEMPY RX	TEMPY LOC	2.0	170.3	4.3	90.1	10.0	43.9	120.1	82.6	CLEAR	CLEAR
10	TEMPY RX	TEMPY LOC	2.0	170.3	4.3	90.1	10.0	43.9	120.1	82.6	CLEAR	CLEAR
11	TEMPY RX	TEMPY LOC	2.0	170.3	4.3	90.1	10.0	43.9	120.1	82.6	CLEAR	CLEAR
12	TEMPY RX	TEMPY LOC	2.0	170.3	4.3	90.1	10.0	43.9	120.1	82.6	CLEAR	CLEAR
13	TEMPY RX	TEMPY LOC	2.0	98.4	99.1	6.0	10.0	43.7	129.3	81.8	CLEAR	CLEAR
14	TEMPY RX	TEMPY LOC	2.0	176.2	259.0	164.3	10.0	43.3	135.8	97.3	CLEAR	CLEAR
15	TEMPY RX	TEMPY LOC	2.0	176.2	259.0	164.3	10.0	43.3	135.8	97.3	CLEAR	CLEAR
16	GERMANTOWN	TEMPY LOC	2.0	98.6	245.7	151.1	10.0	42.6	32.8	21.6	9.8	CLEAR
17	WDTNTV STDIO	TEMPY LOC	2.0	100.0	245.0	150.4	10.0	42.5	75.3	29.4	CLEAR	CLEAR
18	WDTNTV STDIO	TEMPY LOC	2.0	100.0	245.0	150.4	10.0	42.5	75.3	29.4	CLEAR	CLEAR
19	TEMPY RX	TEMPY LOC	2.0	109.5	179.8	85.4	10.0	41.7	94.6	42.7	CLEAR	CLEAR
20	TEMPY RX	TEMPY LOC	2.0	109.5	179.8	85.4	10.0	41.7	94.6	42.7	CLEAR	CLEAR
21	TEMPY RX	TEMPY LOC	2.0	160.4	257.9	163.2	10.0	41.4	137.9	99.5	CLEAR	CLEAR
22	TEMPY RX	TEMPY LOC	2.0	160.4	257.9	163.2	10.0	41.4	137.9	99.5	CLEAR	CLEAR
23	TEMPY RX	TEMPY LOC	2.0	53.3	223.9	129.5	10.0	41.0	97.3	79.2	CLEAR	CLEAR
24	TEMPY RX	TEMPY LOC	2.0	53.3	223.9	129.5	10.0	41.0	97.3	79.2	CLEAR	CLEAR
25	TEMPY RX	TEMPY LOC	2.0	111.9	357.2	97.2	10.0	40.5	122.4	78.9	CLEAR	CLEAR
26	TEMPY RX	TEMPY LOC	2.0	111.9	357.2	97.2	10.0	40.5	122.4	78.9	CLEAR	CLEAR
27	TEMPY RX	TEMPY LOC	2.0	111.9	357.2	97.2	10.0	40.5	122.4	78.9	CLEAR	CLEAR
28	TEMPY RX	TEMPY LOC	2.0	111.9	357.2	97.2	10.0	40.5	122.4	78.9	CLEAR	CLEAR
29	TEMPY RX	TEMPY LOC	2.0	111.9	357.2	97.2	10.0	40.5	122.4	78.9	CLEAR	CLEAR
30	TEMPY RX	TEMPY LOC	2.0	111.9	357.2	97.2	10.0	40.5	122.4	78.9	CLEAR	CLEAR
31	AKRON	TEMPY LOC	2.0	182.8	52.4	42.1	10.0	40.3	48.8	8.6	CLEAR	8.7
32	AKRON	TEMPY LOC	2.0	182.8	52.4	42.1	10.0	40.3	48.8	8.6	CLEAR	8.7
33	TEMPY RX	TEMPY LOC	2.0	236.9	166.7	72.4	10.0	40.0	153.9	119.3	CLEAR	CLEAR
34	TEMPY RX	TEMPY LOC	2.0	236.9	166.7	72.4	10.0	40.0	153.9	119.3	CLEAR	CLEAR

Antenna Type: ViaSat 5.4 meter
Uplink Power: -3.0 dBW/4 kHz
Satellite Arc: Min Elevation 5 degrees
Objectives: Long Term: -154.0 dBW/4 kHz Short Term: -131.0 dBW/4 kHz

Table
Interference Case Summary
Kileville, Ohio

Case #	Path ID		Band (GHz)	Distance (km)	Azimuth (°)	ES Disc (°)	ES Gain (dBi)	LOS Loss Required (dB)	OH Loss 20% (dB)	OH Loss 0.01% (dB)	Revised Margin 20% (dB)	Revised Margin 0.01% (dB)
35	TEMPY RX	TEMPY LOC	2.0	236.9	166.7	72.4	10.0	40.0	153.9	119.3	CLEAR	CLEAR
36	PARMA 1	TEMPY LOC	2.0	188.8	41.0	53.5	10.0	40.0	48.3	6.8	CLEAR	10.2
37	PARMA 1	TEMPY LOC	2.0	188.8	41.0	53.5	10.0	40.0	48.3	6.8	CLEAR	10.2
38	TEMPY LOC	TEMPY LOC	2.0	267.4	11.9	82.5	10.0	40.0	132.7	99.7	CLEAR	CLEAR
39	TEMPY LOC	TEMPY LOC	2.0	267.4	11.9	82.5	10.0	40.0	132.7	99.7	CLEAR	CLEAR
40	TEMPY LOC	TEMPY LOC	2.0	267.4	11.9	82.5	10.0	40.0	132.7	99.7	CLEAR	CLEAR
41	TEMPY LOC	TEMPY LOC	2.0	267.4	11.9	82.5	10.0	40.0	132.7	99.7	CLEAR	CLEAR
42	TEMPY RX	TEMPY LOC	2.0	135.6	57.3	37.3	10.0	39.9	134.8	93.6	CLEAR	CLEAR
43	WINTON PL	TEMPY LOC	2.0	195.3	37.4	57.1	10.0	39.7	52.1	13.9	CLEAR	2.8
44	WINTON PL	TEMPY LOC	2.0	195.3	37.4	57.1	10.0	39.7	52.1	13.9	CLEAR	2.8
45	KEY BANK E	TEMPY LOC	2.0	200.5	38.8	55.6	10.0	39.5	49.3	8.9	CLEAR	7.6
46	KEY BANK E	TEMPY LOC	2.0	200.5	38.8	55.6	10.0	39.5	49.3	8.9	CLEAR	7.6
47	BASELINE RD	TEMPY LOC	2.0	280.1	337.1	117.2	10.0	39.1	57.6	22.3	CLEAR	CLEAR
48	BASELINE RD	TEMPY LOC	2.0	280.1	337.1	117.2	10.0	39.1	57.6	22.3	CLEAR	CLEAR
49	BASELINE RD	TEMPY LOC	2.0	280.1	337.1	117.2	10.0	39.1	57.6	22.3	CLEAR	CLEAR
50	BASELINE RD	TEMPY LOC	2.0	280.1	337.1	117.2	10.0	39.1	57.6	22.3	CLEAR	CLEAR
51	BASELINE RD	TEMPY LOC	2.0	280.1	337.1	117.2	10.0	39.1	57.6	22.3	CLEAR	CLEAR
52	TEMPY RX	TEMPY LOC	2.0	156.9	315.3	139.0	10.0	38.6	78.8	35.0	CLEAR	CLEAR
53	TEMPY RX	TEMPY LOC	2.0	156.9	315.3	139.0	10.0	38.6	78.8	35.0	CLEAR	CLEAR
54	TEMPY RX	TEMPY LOC	2.0	156.9	315.3	139.0	10.0	38.6	78.8	35.0	CLEAR	CLEAR
55	TEMPY RX	TEMPY LOC	2.0	156.9	315.3	139.0	10.0	38.6	78.8	35.0	CLEAR	CLEAR
56	TEMPY RX	TEMPY LOC	2.0	156.9	315.3	139.0	10.0	38.6	80.4	36.7	CLEAR	CLEAR
57	TEMPY RX	TEMPY LOC	2.0	156.9	315.3	139.0	10.0	38.6	80.4	36.7	CLEAR	CLEAR
58	WQED/RM2	TEMPY LOC	2.0	277.8	81.1	13.7	10.0	38.4	56.2	20.9	CLEAR	CLEAR
59	WQED/RM2	TEMPY LOC	2.0	277.8	81.1	13.7	10.0	38.4	56.2	20.9	CLEAR	CLEAR
60	TEMPY RX	TEMPY LOC	2.0	72.2	350.8	103.6	10.0	38.3	128.2	76.5	CLEAR	CLEAR
61	TEMPY RX	TEMPY LOC	2.0	163.2	120.3	26.2	10.0	38.3	131.6	93.4	CLEAR	CLEAR
62	TEMPY RX	TEMPY LOC	2.0	233.5	190.0	95.6	10.0	38.1	52.2	15.1	CLEAR	0.0
63	TEMPY RX	TEMPY LOC	2.0	233.5	190.0	95.6	10.0	38.1	52.2	15.1	CLEAR	0.0
64	TEMPY RX	TEMPY LOC	2.0	168.8	322.9	131.4	10.0	38.0	127.5	89.8	CLEAR	CLEAR
65	TEMPY RX	TEMPY LOC	2.0	168.8	322.9	131.4	10.0	38.0	127.5	89.8	CLEAR	CLEAR
66	TEMPY RX	TEMPY LOC	2.0	172.8	6.9	87.5	10.0	37.8	120.4	83.0	CLEAR	CLEAR
67	WUPW XMTR	TEMPY LOC	2.0	173.6	353.2	101.1	10.0	37.7	47.4	3.6	CLEAR	11.1
68	WUPW XMTR	TEMPY LOC	2.0	173.6	353.2	101.1	10.0	37.7	47.4	3.6	CLEAR	11.1

Antenna Type: ViaSat 5.4 meter
Uplink Power: -3.0 dBW/4 kHz
Satellite Arc: Min Elevation 5 degrees
Objectives: Long Term: -154.0 dBW/4 kHz Short Term: -131.0 dBW/4 kHz

Table
Interference Case Summary
Kileville, Ohio

Case #	Path ID		Band (GHz)	Distance (km)	Azimuth (°)	ES Disc (°)	ES Gain (dBi)	LOS Loss Required (dB)	OH Loss 20% (dB)	OH Loss 0.01% (dB)	Revised Margin 20% (dB)	Revised Margin 0.01% (dB)
69	OCF BLDG	TEMPY LOC	2.0	174.0	350.8	103.6	10.0	37.7	50.4	9.3	CLEAR	5.4
70	OCF BLDG	TEMPY LOC	2.0	174.0	350.8	103.6	10.0	37.7	50.4	9.3	CLEAR	5.4
71	TEMPY RX	TEMPY LOC	2.0	285.2	83.7	11.3	10.0	37.4	138.0	104.6	CLEAR	CLEAR
72	TEMPY RX	TEMPY LOC	2.0	285.2	83.7	11.3	10.0	37.4	138.0	104.6	CLEAR	CLEAR
73	WHEELING	TEMPY LOC	2.0	285.2	83.7	11.3	10.0	37.4	97.0	61.9	CLEAR	CLEAR
74	WHEELING	TEMPY LOC	2.0	285.2	83.7	11.3	10.0	37.4	97.0	61.9	CLEAR	CLEAR
75	WDTNTV STDIO	TEMPY LOC	2.0	100.0	245.0	150.4	10.0	36.0	75.3	29.4	CLEAR	CLEAR
76	WDTNTV STDIO	TEMPY LOC	2.0	100.0	245.0	150.4	10.0	36.0	75.3	29.4	CLEAR	CLEAR
77	WDTNTV STDIO	TEMPY LOC	2.0	100.0	245.0	150.4	10.0	36.0	75.3	29.4	CLEAR	CLEAR
78	WDTNTV STDIO	TEMPY LOC	2.0	100.0	245.0	150.4	10.0	36.0	75.3	29.4	CLEAR	CLEAR
79	WDTNTV STDIO	TEMPY LOC	2.0	100.0	245.0	150.4	10.0	36.0	75.3	29.4	CLEAR	CLEAR
80	TEMPY RX	TEMPY LOC	2.0	98.4	99.1	6.0	10.0	35.7	129.3	81.8	CLEAR	CLEAR
81	TEMPY LOC	TEMPY LOC	2.0	160.4	257.5	162.7	10.0	35.4	55.7	17.3	CLEAR	CLEAR
82	TEMPY LOC	TEMPY LOC	2.0	160.4	257.5	162.7	10.0	35.4	55.7	17.3	CLEAR	CLEAR
83	TEMPY RX	TEMPY LOC	2.0	257.6	56.1	38.4	10.0	35.3	159.5	126.1	CLEAR	CLEAR
84	PORTSMOUTH	TEMPY LOC	2.0	144.3	161.2	66.9	10.0	35.1	45.3	2.0	CLEAR	10.1
85	LEVEQUE	TEMPY LOC	2.0	23.1	133.1	38.8	10.0	34.8	37.6	17.6	CLEAR	CLEAR
86	LEVEQUE	TEMPY LOC	2.0	23.1	133.1	38.8	10.0	34.8	37.6	17.6	CLEAR	CLEAR
87	TEMPY RX	TEMPY LOC	2.0	248.9	140.8	46.5	10.0	34.6	149.4	115.1	CLEAR	CLEAR
88	TEMPY RX	TEMPY LOC	2.0	248.9	140.8	46.5	10.0	34.6	149.4	115.1	CLEAR	CLEAR
89	TEMPY RX	TEMPY LOC	2.0	248.9	140.8	46.5	10.0	34.6	149.4	115.1	CLEAR	CLEAR
90	TEMPY RX	TEMPY LOC	2.0	248.9	140.8	46.5	10.0	34.6	149.4	115.1	CLEAR	CLEAR
91	TEMPY RX	TEMPY LOC	2.0	248.9	140.8	46.5	10.0	34.6	149.4	115.1	CLEAR	CLEAR
92	TEMPY RX	TEMPY LOC	2.0	248.9	140.8	46.5	10.0	34.6	149.4	115.1	CLEAR	CLEAR
93	TEMPY RX	TEMPY LOC	2.0	259.8	217.3	122.9	10.0	34.2	109.0	75.8	CLEAR	CLEAR
94	TEMPY RX	TEMPY LOC	2.0	259.8	217.3	122.9	10.0	34.2	109.0	75.8	CLEAR	CLEAR
95	TEMPY RX	TEMPY LOC	2.0	260.3	56.1	38.4	10.0	34.2	158.9	125.8	CLEAR	CLEAR
96	TEMPY RX	TEMPY LOC	2.0	260.3	56.1	38.4	10.0	34.2	158.9	125.8	CLEAR	CLEAR
97	TEMPY RX	TEMPY LOC	2.0	260.3	56.1	38.4	10.0	34.2	158.9	125.8	CLEAR	CLEAR
98	TEMPY RX	TEMPY LOC	2.0	260.3	56.1	38.4	10.0	34.2	158.9	125.8	CLEAR	CLEAR
99	TEMPY RX	TEMPY LOC	2.0	260.3	56.1	38.4	10.0	34.2	158.9	125.8	CLEAR	CLEAR
100	TEMPY RX	TEMPY LOC	2.0	260.3	0.5	93.9	10.0	34.2	60.8	25.0	CLEAR	CLEAR
101	TEMPY RX	TEMPY LOC	2.0	260.3	0.5	93.9	10.0	34.2	60.8	25.0	CLEAR	CLEAR
102	TEMPY RX	TEMPY LOC	2.0	260.3	0.5	93.9	10.0	34.2	60.8	25.0	CLEAR	CLEAR

Antenna Type: ViaSat 5.4 meter
Uplink Power: -3.0 dBW/4 kHz
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Table
Interference Case Summary
Kileville, Ohio

Case #	Path ID		Band (GHz)	Distance (km)	Azimuth (°)	ES Disc (°)	ES Gain (dBi)	LOS Loss Required (dB)	OH Loss 20% (dB)	OH Loss 0.01% (dB)	Revised Margin 20% (dB)	Revised Margin 0.01% (dB)
103	TEMPY RX	TEMPY LOC	2.0	260.3	0.5	93.9	10.0	34.2	60.8	25.0	CLEAR	CLEAR
104	TEMPY RX	TEMPY LOC	2.0	261.3	352.9	101.5	10.0	34.2	161.0	127.9	CLEAR	CLEAR
105	TEMPY RX	TEMPY LOC	2.0	261.3	352.9	101.5	10.0	34.2	161.0	127.9	CLEAR	CLEAR
106	TEMPY RX	TEMPY LOC	2.0	261.3	352.9	101.5	10.0	34.2	161.0	127.9	CLEAR	CLEAR
107	TEMPY RX	TEMPY LOC	2.0	119.7	195.0	100.5	10.0	33.9	128.4	85.7	CLEAR	CLEAR
108	TEMPY RX	TEMPY LOC	2.0	119.7	195.0	100.5	10.0	33.9	128.4	85.7	CLEAR	CLEAR
109	WESTERVILLE	TEMPY LOC	2.0	24.3	75.4	19.3	10.0	33.8	0.0	0.0	33.8	10.8
110	WESTERVILLE	TEMPY LOC	2.0	24.3	75.4	19.3	10.0	33.8	0.0	0.0	33.8	10.8
111	WESTERVILLE	TEMPY LOC	2.0	24.3	75.4	19.3	10.0	33.8	0.0	0.0	33.8	10.8
112	WESTERVILLE	TEMPY LOC	2.0	24.3	75.4	19.3	10.0	33.8	0.0	0.0	33.8	10.8
113	TEMPY RX	TEMPY LOC	2.0	246.7	68.8	25.8	10.0	33.7	159.8	125.3	CLEAR	CLEAR
114	TEMPY RX	TEMPY LOC	2.0	289.8	131.4	37.2	10.0	33.3	231.6	199.4	CLEAR	CLEAR
115	TEMPY RX	TEMPY LOC	2.0	289.8	131.4	37.2	10.0	33.3	231.6	199.4	CLEAR	CLEAR
116	KNOBS	TEMPY LOC	2.0	299.9	230.5	136.0	10.0	33.0	61.7	30.6	CLEAR	CLEAR
117	BANK	TEMPY LOC	2.0	301.8	228.0	133.5	10.0	32.9	64.1	34.1	CLEAR	CLEAR
118	BANK	TEMPY LOC	2.0	301.8	228.0	133.5	10.0	32.9	64.1	34.1	CLEAR	CLEAR
119	BANK	TEMPY LOC	2.0	301.8	228.0	133.5	10.0	32.9	64.1	34.1	CLEAR	CLEAR
120	ENG02	TEMPY LOC	2.0	302.0	227.7	133.2	10.0	32.9	62.5	29.9	CLEAR	CLEAR
121	ENG02	TEMPY LOC	2.0	302.0	227.7	133.2	10.0	32.9	62.5	29.9	CLEAR	CLEAR
122	TEMPY RX	TEMPY LOC	2.0	135.6	57.3	37.3	10.0	32.9	134.8	93.6	CLEAR	CLEAR
123	TEMPY RX	TEMPY LOC	2.0	135.6	57.3	37.3	10.0	32.9	134.8	93.6	CLEAR	CLEAR
124	TEMPY RX	TEMPY LOC	2.0	135.6	57.3	37.3	10.0	32.9	134.8	93.6	CLEAR	CLEAR
125	WESTERVILLE	WCMH STUDIO	2.0	24.3	75.4	19.3	10.0	32.8	0.0	0.0	32.8	9.8
126	WESTERVILLE	WCMH STUDIO	2.0	24.3	75.4	19.3	10.0	32.8	0.0	0.0	32.8	9.8
127	WESTERVILLE	WCMH STUDIO	2.0	24.3	75.4	19.3	10.0	32.8	0.0	0.0	32.8	9.8
128	BARKERS RDG	TEMPY LOC	2.0	196.1	154.2	59.8	10.0	32.5	52.0	14.3	CLEAR	CLEAR
129	HUNTINGTON	TEMPY LOC	2.0	198.2	160.6	66.3	10.0	32.4	65.6	29.3	CLEAR	CLEAR
130	HUNTINGTON	TEMPY LOC	2.0	198.2	160.6	66.3	10.0	32.4	65.6	29.3	CLEAR	CLEAR
131	TEMPY RX	TEMPY LOC	2.0	150.1	317.3	137.0	10.0	32.0	124.3	84.8	CLEAR	CLEAR
132	TEMPY RX	TEMPY LOC	2.0	130.3	328.1	126.2	10.0	31.2	124.6	82.9	CLEAR	CLEAR
133	GARFIELD TWR	TEMPY LOC	2.0	233.7	144.7	50.4	10.0	30.9	55.1	19.2	CLEAR	CLEAR
134	TEMPY RX	TEMPY LOC	2.0	240.0	196.0	101.5	10.0	30.9	153.9	119.6	CLEAR	CLEAR
135	TEMPY RX	TEMPY LOC	2.0	240.0	196.0	101.5	10.0	30.9	153.9	119.6	CLEAR	CLEAR
136	TEMPY RX	TEMPY LOC	2.0	240.0	196.0	101.5	10.0	30.9	153.9	119.6	CLEAR	CLEAR

Antenna Type: ViaSat 5.4 meter
Uplink Power: -3.0 dBW/4 kHz
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Table
Interference Case Summary
Kileville, Ohio

Case #	Path ID		Band (GHz)	Distance (km)	Azimuth (°)	ES Disc (°)	ES Gain (dBi)	LOS Loss Required (dB)	OH Loss 20% (dB)	OH Loss 0.01% (dB)	Revised Margin 20% (dB)	Revised Margin 0.01% (dB)
137	TEMPY RX	TEMPY LOC	2.0	240.0	196.0	101.5	10.0	30.9	153.9	119.6	CLEAR	CLEAR
138	TEMPY RX	TEMPY LOC	2.0	240.0	196.0	101.5	10.0	30.9	153.9	119.6	CLEAR	CLEAR
139	TEMPY RX	TEMPY LOC	2.0	240.0	196.0	101.5	10.0	30.9	153.9	119.6	CLEAR	CLEAR
140	TEMPY RX	TEMPY LOC	2.0	240.0	196.0	101.5	10.0	30.9	153.9	119.6	CLEAR	CLEAR
141	TEMPY RX	TEMPY LOC	2.0	240.0	196.0	101.5	10.0	30.9	153.9	119.6	CLEAR	CLEAR
142	TEMPY RX	TEMPY LOC	2.0	240.0	196.0	101.5	10.0	30.9	153.9	119.6	CLEAR	CLEAR
143	TEMPY RX	TEMPY LOC	2.0	240.0	196.0	101.5	10.0	30.9	153.9	119.6	CLEAR	CLEAR
144	TEMPY RX	TEMPY LOC	2.0	240.0	196.0	101.5	10.0	30.9	153.9	119.6	CLEAR	CLEAR
145	TEMPY RX	TEMPY LOC	2.0	240.0	196.0	101.5	10.0	30.9	153.9	119.6	CLEAR	CLEAR
146	TEMPY RX	TEMPY LOC	2.0	240.0	196.0	101.5	10.0	30.9	153.9	119.6	CLEAR	CLEAR
147	TEMPY RX	TEMPY LOC	2.0	240.0	196.0	101.5	10.0	30.9	153.9	119.6	CLEAR	CLEAR
148	TEMPY RX	TEMPY LOC	2.0	240.0	196.0	101.5	10.0	30.9	153.9	119.6	CLEAR	CLEAR
149	PARMA	AKRON	2.0	191.2	41.4	53.1	10.0	30.9	48.8	8.0	CLEAR	CLEAR
150	PARMA	AKRON	2.0	191.2	41.4	53.1	10.0	30.9	48.8	8.0	CLEAR	CLEAR
151	PARMA	AKRON	2.0	191.2	41.4	53.1	10.0	30.9	48.8	8.0	CLEAR	CLEAR
152	CHARLESTON	TEMPY LOC	2.0	236.0	144.8	50.5	10.0	30.9	66.5	31.8	CLEAR	CLEAR
153	TEMPY RX	TEMPY LOC	2.0	269.1	220.8	126.3	10.0	29.9	145.4	112.4	CLEAR	CLEAR
154	STUDIO	TEMPY LOC	2.0	201.2	39.0	55.5	10.0	29.4	52.7	15.2	CLEAR	CLEAR
155	STUDIO	TEMPY LOC	2.0	201.2	39.0	55.5	10.0	29.4	52.7	15.2	CLEAR	CLEAR
156	WTOL STUDIO	TEMPY LOC	2.0	174.3	351.2	103.1	10.0	28.7	52.8	14.5	CLEAR	CLEAR
157	WTOL STUDIO	TEMPY LOC	2.0	174.4	350.9	103.4	10.0	28.7	52.8	14.6	CLEAR	CLEAR
158	TEMPY LOC	TEMPY LOC	2.0	255.5	220.9	126.4	10.0	28.4	58.2	24.4	CLEAR	CLEAR
159	TEMPY LOC	TEMPY LOC	2.0	255.5	220.9	126.4	10.0	28.4	58.2	24.4	CLEAR	CLEAR
160	TEMPY LOC	TEMPY LOC	2.0	255.5	220.9	126.4	10.0	28.4	58.2	24.4	CLEAR	CLEAR
161	TEMPY LOC	TEMPY LOC	2.0	255.5	220.9	126.4	10.0	28.4	58.2	24.4	CLEAR	CLEAR
162	TEMPY LOC	TEMPY LOC	2.0	255.5	220.9	126.4	10.0	28.4	58.2	24.4	CLEAR	CLEAR
163	TEMPY RX	TEMPY LOC	2.0	259.5	218.1	123.6	10.0	28.2	60.9	27.4	CLEAR	CLEAR
164	TEMPY RX	TEMPY LOC	2.0	259.5	218.1	123.6	10.0	28.2	60.9	27.4	CLEAR	CLEAR
165	TEMPY RX	TEMPY LOC	2.0	259.5	218.1	123.6	10.0	28.2	60.9	27.4	CLEAR	CLEAR
166	TEMPY RX	TEMPY LOC	2.0	259.5	218.1	123.6	10.0	28.2	60.9	27.4	CLEAR	CLEAR
167	TEMPY RX	TEMPY LOC	2.0	259.5	218.1	123.6	10.0	28.2	60.9	27.4	CLEAR	CLEAR
168	TEMPY RX	TEMPY LOC	2.0	259.5	218.1	123.6	10.0	28.2	60.9	27.4	CLEAR	CLEAR
169	TEMPY RX	TEMPY LOC	2.0	259.5	218.1	123.6	10.0	28.2	60.9	27.4	CLEAR	CLEAR
170	TEMPY RX	TEMPY LOC	2.0	248.1	135.2	40.9	10.0	27.6	88.3	54.3	CLEAR	CLEAR

Antenna Type: ViaSat 5.4 meter
Uplink Power: -3.0 dBW/4 kHz
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Table
Interference Case Summary
Kileville, Ohio

Case #	Path ID		Band (GHz)	Distance (km)	Azimuth (°)	ES Disc (°)	ES Gain (dBi)	LOS Loss Required (dB)	OH Loss 20% (dB)	OH Loss 0.01% (dB)	Revised Margin 20% (dB)	Revised Margin 0.01% (dB)
171	TEMPY RX	TEMPY LOC	2.0	248.1	135.2	40.9	10.0	27.6	88.3	54.3	CLEAR	CLEAR
172	TEMPY RX	TEMPY LOC	2.0	248.1	135.2	40.9	10.0	27.6	88.3	54.3	CLEAR	CLEAR
173	TEMPY RX	TEMPY LOC	2.0	248.1	135.2	40.9	10.0	27.6	88.3	54.3	CLEAR	CLEAR
174	TEMPY RX	TEMPY LOC	2.0	248.1	135.2	40.9	10.0	27.6	88.3	54.3	CLEAR	CLEAR
175	WASHINGTON	TEMPY LOC	2.0	248.8	87.1	8.2	10.0	27.6	53.8	17.7	CLEAR	CLEAR
176	WASHINGTON	TEMPY LOC	2.0	248.8	87.1	8.2	10.0	27.6	53.8	17.7	CLEAR	CLEAR
177	WASHINGTON	TEMPY LOC	2.0	248.8	87.1	8.2	10.0	27.6	53.8	17.6	CLEAR	CLEAR
178	WASHINGTON	TEMPY LOC	2.0	248.8	87.1	8.2	10.0	27.6	53.8	17.6	CLEAR	CLEAR
179	BEAVER	TEMPY LOC	2.0	253.9	73.5	21.1	10.0	27.4	54.4	18.3	CLEAR	CLEAR
180	BEAVER	TEMPY LOC	2.0	253.9	73.5	21.1	10.0	27.4	54.4	18.3	CLEAR	CLEAR
181	BEAVER	TEMPY LOC	2.0	253.9	73.5	21.1	10.0	27.4	54.9	19.0	CLEAR	CLEAR
182	BEAVER	TEMPY LOC	2.0	253.9	73.5	21.1	10.0	27.4	54.9	19.0	CLEAR	CLEAR
183	TEMPY RX	TEMPY LOC	2.0	256.9	300.1	154.1	10.0	27.3	146.9	113.5	CLEAR	CLEAR
184	TEMPY RX	TEMPY LOC	2.0	261.1	52.0	42.5	10.0	27.2	158.0	124.9	CLEAR	CLEAR
185	TEMPY RX	TEMPY LOC	2.0	261.1	52.0	42.5	10.0	27.2	158.0	124.9	CLEAR	CLEAR
186	TEMPY RX	TEMPY LOC	2.0	261.1	52.0	42.5	10.0	27.2	158.0	124.9	CLEAR	CLEAR
187	TEMPY RX	TEMPY LOC	2.0	264.4	52.5	42.0	10.0	27.1	165.6	132.6	CLEAR	CLEAR
188	TEMPY RX	TEMPY LOC	2.0	264.4	52.5	42.0	10.0	27.1	165.6	132.6	CLEAR	CLEAR
189	TEMPY RX	TEMPY LOC	2.0	264.4	52.5	42.0	10.0	27.1	165.6	132.6	CLEAR	CLEAR
190	RECEIVER 1	TEMPY LOC	2.0	20.8	135.2	40.9	10.0	27.0	0.0	0.0	27.0	4.0
191	RECEIVER 1	TEMPY LOC	2.0	20.8	135.2	40.9	10.0	27.0	0.0	0.0	27.0	4.0
192	RECEIVER 1	TEMPY LOC	2.0	20.8	135.2	40.9	10.0	27.0	0.0	0.0	27.0	4.0
193	RECEIVER 1	TEMPY LOC	2.0	20.8	135.2	40.9	10.0	27.0	0.0	0.0	27.0	4.0
194	TEMPY RX	TEMPY LOC	2.0	268.0	90.0	5.6	10.0	27.0	165.5	132.3	CLEAR	CLEAR
195	TEMPY RX	TEMPY LOC	2.0	268.0	90.0	5.6	10.0	27.0	165.5	132.3	CLEAR	CLEAR
196	TEMPY RX	TEMPY LOC	2.0	268.0	90.0	5.6	10.0	27.0	165.5	132.3	CLEAR	CLEAR
197	TEMPY RX	TEMPY LOC	2.0	268.0	90.0	5.6	10.0	27.0	165.5	132.3	CLEAR	CLEAR
198	MT WASHINGTO	TEMPY LOC	2.0	272.5	81.1	13.8	10.0	26.8	56.9	21.9	CLEAR	CLEAR
199	MT WASHINGTO	TEMPY LOC	2.0	272.5	81.1	13.8	10.0	26.8	56.9	21.9	CLEAR	CLEAR
200	TEMPY RX	TEMPY LOC	2.0	276.5	307.4	146.8	10.0	26.7	149.2	116.5	CLEAR	CLEAR
201	TEMPY RX	TEMPY LOC	2.0	285.2	83.7	11.3	10.0	26.4	98.2	63.2	CLEAR	CLEAR
202	TEMPY RX	TEMPY LOC	2.0	285.2	83.7	11.3	10.0	26.4	98.2	63.2	CLEAR	CLEAR
203	TEMPY RX	TEMPY LOC	2.0	285.2	83.7	11.3	10.0	26.4	98.2	63.2	CLEAR	CLEAR
204	WHEELING	TEMPY LOC	2.0	285.2	83.7	11.3	10.0	26.4	98.2	63.2	CLEAR	CLEAR

Antenna Type: ViaSat 5.4 meter
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Table
Interference Case Summary
Kileville, Ohio

Case #	Path ID		Band (GHz)	Distance (km)	Azimuth (°)	ES Disc (°)	ES Gain (dBi)	LOS Loss Required (dB)	OH Loss 20% (dB)	OH Loss 0.01% (dB)	Revised Margin 20% (dB)	Revised Margin 0.01% (dB)
205	WHEELING	TEMPY LOC	2.0	285.2	83.7	11.3	10.0	26.4	98.2	63.2	CLEAR	CLEAR
206	TEMPY RX	TEMPY LOC	2.0	286.9	313.7	140.6	10.0	26.4	151.1	118.5	CLEAR	CLEAR
207	TEMPY RX	TEMPY LOC	2.0	286.9	313.7	140.6	10.0	26.4	151.1	118.5	CLEAR	CLEAR
208	TEMPY RX	TEMPY LOC	2.0	286.9	313.7	140.6	10.0	26.4	151.1	118.5	CLEAR	CLEAR
209	TEMPY RX	TEMPY LOC	2.0	286.9	313.7	140.6	10.0	26.4	151.1	118.5	CLEAR	CLEAR
210	TEMPY RX	TEMPY LOC	2.0	286.9	313.7	140.6	10.0	26.4	151.1	118.5	CLEAR	CLEAR
211	TEMPY RX	TEMPY LOC	2.0	289.8	131.4	37.2	10.0	26.3	231.6	199.4	CLEAR	CLEAR
212	TEMPY RX	TEMPY LOC	2.0	289.8	131.4	37.2	10.0	26.3	231.6	199.4	CLEAR	CLEAR
213	TEMPY RX	TEMPY LOC	2.0	289.8	131.4	37.2	10.0	26.3	231.6	199.4	CLEAR	CLEAR
214	TEMPY RX	TEMPY LOC	2.0	290.5	131.5	37.2	10.0	26.3	248.6	216.4	CLEAR	CLEAR
215	TEMPY RX	TEMPY LOC	2.0	290.5	131.5	37.2	10.0	26.3	248.6	216.4	CLEAR	CLEAR
216	TEMPY RX	TEMPY LOC	2.0	292.2	307.8	146.5	10.0	26.2	148.8	117.2	CLEAR	CLEAR
217	BUTLER	TEMPY LOC	2.0	295.2	71.9	22.7	10.0	26.1	57.7	23.3	CLEAR	CLEAR
218	BUTLER	TEMPY LOC	2.0	295.2	71.9	22.7	10.0	26.1	57.7	23.3	CLEAR	CLEAR
219	RECEIVER 3	TEMPY LOC	2.0	21.1	134.8	40.5	10.0	26.0	0.0	0.0	26.0	3.0
220	RECEIVER 3	TEMPY LOC	2.0	21.1	134.8	40.5	10.0	26.0	0.0	0.0	26.0	3.0
221	RECEIVER 3	TEMPY LOC	2.0	21.1	134.8	40.5	10.0	26.0	0.0	0.0	26.0	3.0
222	RECEIVER 3	TEMPY LOC	2.0	21.1	134.8	40.5	10.0	26.0	0.0	0.0	26.0	3.0
223	TEMPY RX	TEMPY LOC	2.0	302.4	338.4	115.9	10.0	25.9	63.9	29.7	CLEAR	CLEAR
224	TEMPY RX	TEMPY LOC	2.0	302.4	338.4	115.9	10.0	25.9	63.9	29.7	CLEAR	CLEAR
225	PUBLIC SQ	TEMPY LOC	2.0	249.9	54.8	39.7	10.0	25.6	150.6	116.8	CLEAR	CLEAR
226	PUBLIC SQ	TEMPY LOC	2.0	249.9	54.8	39.7	10.0	25.6	150.6	116.8	CLEAR	CLEAR
227	WLKY-TV NTSC	TEMPY LOC	2.0	298.0	230.6	136.1	10.0	24.0	56.6	21.7	CLEAR	CLEAR
228	WLKY-TV NTSC	TEMPY LOC	2.0	298.0	230.6	136.1	10.0	24.0	56.6	21.7	CLEAR	CLEAR
229	WILLIAMSPORT	WCMH STUDIO	2.0	57.7	172.5	78.2	10.0	23.3	0.0	0.0	23.3	0.3
230	WILLIAMSPORT	WCMH STUDIO	2.0	57.7	172.5	78.2	10.0	23.3	0.0	0.0	23.3	0.3
231	WILLIAMSPORT	WCMH STUDIO	2.0	57.7	172.5	78.2	10.0	23.3	0.0	0.0	23.3	0.3
232	TEMPY RX	TEMPY LOC	2.0	168.3	5.0	89.4	10.0	22.5	119.9	82.2	CLEAR	CLEAR
233	TEMPY RX	TEMPY LOC	2.0	168.3	5.0	89.4	10.0	22.5	119.9	82.2	CLEAR	CLEAR
234	TEMPY RX	TEMPY LOC	2.0	297.0	326.6	127.7	10.0	21.1	143.2	110.4	CLEAR	CLEAR
235	TEMPY RX	TEMPY LOC	2.0	297.0	326.6	127.7	10.0	21.1	143.2	110.4	CLEAR	CLEAR
236	TEMPY RX	TEMPY LOC	2.0	297.0	326.6	127.7	10.0	21.1	143.2	110.4	CLEAR	CLEAR
237	TEMPY RX	TEMPY LOC	2.0	301.1	313.6	140.7	10.0	20.9	146.0	113.0	CLEAR	CLEAR
238	TEMPY RX	TEMPY LOC	2.0	301.1	313.6	140.7	10.0	20.9	146.0	113.0	CLEAR	CLEAR

Antenna Type: ViaSat 5.4 meter
Uplink Power: -3.0 dBW/4 kHz
Satellite Arc: Min Elevation 5 degrees
Objectives: Long Term: -154.0 dBW/4 kHz Short Term: -131.0 dBW/4 kHz

Table
Interference Case Summary
Kileville, Ohio

Case #	Path ID		Band (GHz)	Distance (km)	Azimuth (°)	ES Disc (°)	ES Gain (dBi)	LOS Loss Required (dB)	OH Loss 20% (dB)	OH Loss 0.01% (dB)	Revised Margin 20% (dB)	Revised Margin 0.01% (dB)
239	TEMPY RX	TEMPY LOC	2.0	301.1	313.6	140.7	10.0	20.9	146.0	113.0	CLEAR	CLEAR
240	TEMPY RX	TEMPY LOC	2.0	107.8	160.7	66.3	10.0	20.5	66.7	22.2	CLEAR	CLEAR
241	TEMPY RX	TEMPY LOC	2.0	107.8	160.7	66.3	10.0	20.5	66.7	22.2	CLEAR	CLEAR
242	TEMPY RX	TEMPY LOC	2.0	107.8	160.7	66.3	10.0	20.5	66.7	22.2	CLEAR	CLEAR
243	CLIFTY RD	FRANKFORT	2.0	255.7	215.3	120.8	10.0	20.4	58.5	23.9	CLEAR	CLEAR
244	CLIFTY RD	FRANKFORT	2.0	255.7	215.3	120.8	10.0	20.4	58.5	23.9	CLEAR	CLEAR
245	RICE AVENUE	TOWN SQUARE	2.0	106.7	312.4	141.8	10.0	19.3	46.7	-1.2	CLEAR	CLEAR
246	TEMPY RX	TEMPY LOC	2.0	114.8	196.5	102.1	10.0	18.8	127.9	84.8	CLEAR	CLEAR
247	TEMPY RX	TEMPY LOC	2.0	114.8	196.5	102.1	10.0	18.8	127.9	84.8	CLEAR	CLEAR
248	TEMPY RX	TEMPY LOC	2.0	114.8	196.5	102.1	10.0	18.8	127.9	84.8	CLEAR	CLEAR
249	TEMPY RX	TEMPY LOC	2.0	114.8	196.5	102.1	10.0	18.8	127.9	84.8	CLEAR	CLEAR
250	TEMPY RX	TEMPY LOC	2.0	114.8	196.5	102.1	10.0	18.8	127.9	84.8	CLEAR	CLEAR
251	WKYT STUDIO	CLIFTY ROAD	2.0	251.8	204.8	110.4	10.0	18.5	51.8	15.5	CLEAR	CLEAR
252	WKYT STUDIO	CLIFTY ROAD	2.0	251.8	204.8	110.4	10.0	18.5	51.8	15.5	CLEAR	CLEAR
253	TEMPY RX	TEMPY LOC	2.0	119.7	195.0	100.5	10.0	18.5	128.4	85.7	CLEAR	CLEAR
254	TEMPY RX	TEMPY LOC	2.0	119.7	195.0	100.5	10.0	18.5	128.4	85.7	CLEAR	CLEAR
255	WCMH TOWER	WCMH STUDIO	2.0	16.9	121.2	27.0	10.0	18.0	0.0	0.0	18.0	CLEAR
256	WCMH TOWER	WCMH STUDIO	2.0	16.9	121.2	27.0	10.0	18.0	0.0	0.0	18.0	CLEAR
257	WCMH TOWER	WCMH STUDIO	2.0	16.9	121.2	27.0	10.0	18.0	0.0	0.0	18.0	CLEAR
258	TEMPY RX	TEMPY LOC	2.0	107.8	160.7	66.3	10.0	17.9	66.7	22.2	CLEAR	CLEAR
259	TEMPY RX	TEMPY LOC	2.0	158.6	225.8	131.3	10.0	17.5	65.3	22.1	CLEAR	CLEAR
260	TSL-1	TEMPY LOC	2.0	113.1	195.4	101.0	10.0	17.4	36.0	-4.0	CLEAR	CLEAR
261	TSL-1	TEMPY LOC	2.0	113.1	195.4	101.0	10.0	17.4	36.0	-4.0	CLEAR	CLEAR
262	TEMPY RX	TEMPY LOC	2.0	135.6	208.6	114.1	10.0	16.9	132.6	91.1	CLEAR	CLEAR
263	TEMPY RX	TEMPY LOC	2.0	135.0	235.6	141.0	10.0	16.6	117.9	75.0	CLEAR	CLEAR
264	FURNACE MTN	WKYT STUDIO	2.0	262.9	192.8	98.4	10.0	16.1	54.1	18.2	CLEAR	CLEAR
265	FURNACE MTN	WKYT STUDIO	2.0	262.9	192.8	98.4	10.0	16.1	54.1	18.2	CLEAR	CLEAR
266	FURNACE MTN	WKYT STUDIO	2.0	262.9	192.8	98.4	10.0	16.1	54.1	18.2	CLEAR	CLEAR
267	TEMPYLOC	TEMPYLOC	2.0	132.9	213.3	118.9	10.0	16.0	129.7	87.9	CLEAR	CLEAR
268	TEMPYLOC	TEMPYLOC	2.0	132.9	213.3	118.9	10.0	16.0	129.7	87.9	CLEAR	CLEAR
269	TEMPYLOC	TEMPYLOC	2.0	132.9	213.3	118.9	10.0	16.0	129.7	87.9	CLEAR	CLEAR
270	TEMPYLOC	TEMPYLOC	2.0	132.9	213.3	118.9	10.0	16.0	129.7	87.9	CLEAR	CLEAR
271	TEMPY RX	TEMPY LOC	2.0	172.8	6.9	87.5	10.0	16.0	120.4	83.0	CLEAR	CLEAR
272	TEMPY RX	TEMPY LOC	2.0	172.8	6.9	87.5	10.0	16.0	120.4	83.0	CLEAR	CLEAR

Antenna Type: ViaSat 5.4 meter
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Interference Case Summary
Kileville, Ohio

Case #	Path ID		Band (GHz)	Distance (km)	Azimuth (°)	ES Disc (°)	ES Gain (dBi)	LOS Loss Required (dB)	OH Loss 20% (dB)	OH Loss 0.01% (dB)	Revised Margin 20% (dB)	Revised Margin 0.01% (dB)
273	TEMPY RX	TEMPY LOC	2.0	172.8	6.9	87.5	10.0	16.0	120.4	83.0	CLEAR	CLEAR
274	TEMPY RX	TEMPY LOC	2.0	172.8	6.9	87.5	10.0	16.0	120.4	83.0	CLEAR	CLEAR
275	WUPW LIVE	WUPW MOBILE	2.0	173.6	353.2	101.1	10.0	15.5	47.4	3.6	CLEAR	CLEAR
276	WUPW LIVE	WUPW MOBILE	2.0	173.6	353.2	101.1	10.0	15.5	47.4	3.6	CLEAR	CLEAR
277	TEMPY RX	TEMPY LOC	2.0	150.1	317.3	137.0	10.0	15.5	124.3	84.8	CLEAR	CLEAR
278	TEMPY RX	TEMPY LOC	2.0	150.1	317.3	137.0	10.0	15.5	124.3	84.8	CLEAR	CLEAR
279	TEMPY RX	TEMPY LOC	2.0	150.1	317.3	137.0	10.0	15.5	124.3	84.8	CLEAR	CLEAR
280	TEMPY RX	TEMPY LOC	2.0	150.1	317.3	137.0	10.0	15.5	124.3	84.8	CLEAR	CLEAR
281	TEMPY RX	TEMPY LOC	2.0	150.1	317.3	137.0	10.0	15.5	124.3	84.8	CLEAR	CLEAR
282	WUPW LIVE 2	WUPW MOBILE	2.0	174.3	350.9	103.5	10.0	15.4	52.1	13.3	CLEAR	CLEAR
283	WUPW LIVE 2	WUPW MOBILE	2.0	174.3	350.9	103.5	10.0	15.4	52.1	13.3	CLEAR	CLEAR
284	TSL-2	TEMPY LOC	2.0	156.6	226.7	132.2	10.0	14.6	46.9	4.7	CLEAR	CLEAR
285	TSL-2	TEMPY LOC	2.0	156.6	226.7	132.2	10.0	14.6	46.9	4.7	CLEAR	CLEAR
286	WKYT STUDIO	FURNACE MTN	2.0	251.8	204.8	110.4	10.0	14.1	54.4	18.8	CLEAR	CLEAR
287	WKYT STUDIO	FURNACE MTN	2.0	251.8	204.8	110.4	10.0	14.1	54.4	18.8	CLEAR	CLEAR
288	WKYT STUDIO	FURNACE MTN	2.0	251.8	204.8	110.4	10.0	14.1	54.4	18.8	CLEAR	CLEAR
289	WTOL XMTR	TEMPY LOC	2.0	174.8	355.1	99.3	10.0	13.7	48.1	5.1	CLEAR	CLEAR
290	WTOL XMTR	TEMPY LOC	2.0	174.8	355.1	99.3	10.0	13.7	48.1	5.1	CLEAR	CLEAR
291	VETO ROAD	LAFAYETTE HO	2.0	163.2	120.3	26.2	10.0	13.5	40.7	-2.3	CLEAR	CLEAR
292	TEMPY RX	TEMPY LOC	2.0	160.3	257.6	162.9	10.0	13.4	139.2	100.9	CLEAR	CLEAR
293	TEMPY RX	TEMPY LOC	2.0	160.3	257.6	162.9	10.0	13.4	139.2	100.9	CLEAR	CLEAR
294	TEMPY RX	TEMPY LOC	2.0	160.3	257.6	162.9	10.0	13.4	139.2	100.9	CLEAR	CLEAR
295	TEMPY RX	TEMPY LOC	2.0	160.3	257.6	162.9	10.0	13.4	139.2	100.9	CLEAR	CLEAR
296	BARKERS RIDG	LAIDLEY BLDG	2.0	197.0	154.0	59.6	10.0	13.2	45.7	3.9	CLEAR	CLEAR
297	PARMA 2	TEMPY LOC	2.0	188.8	41.0	53.5	10.0	13.0	48.2	6.6	CLEAR	CLEAR
298	PARMA 2	TEMPY LOC	2.0	188.8	41.0	53.5	10.0	13.0	48.2	6.6	CLEAR	CLEAR
299	TEMPY RX	TEMPY LOC	2.0	264.3	6.1	88.3	10.0	12.3	132.3	99.3	CLEAR	CLEAR
300	TEMPY RX	TEMPY LOC	2.0	264.3	6.1	88.3	10.0	12.3	132.3	99.3	CLEAR	CLEAR
301	TEMPY RX	TEMPY LOC	2.0	264.3	6.1	88.3	10.0	12.3	132.3	99.3	CLEAR	CLEAR
302	TEMPY RX	TEMPY LOC	2.0	264.3	6.1	88.3	10.0	12.3	132.3	99.3	CLEAR	CLEAR
303	TEMPY RX	TEMPY LOC	2.0	264.3	6.1	88.3	10.0	12.3	132.3	99.3	CLEAR	CLEAR
304	BARKERS RIDG	LAIDLEY BLDG	2.0	197.0	154.0	59.6	10.0	12.2	45.7	3.9	CLEAR	CLEAR
305	BARKERS RIDG	LAIDLEY BLDG	2.0	197.0	154.0	59.6	10.0	12.2	45.7	3.9	CLEAR	CLEAR
306	ENG	TEMPY LOC	2.0	264.2	359.9	94.5	10.0	12.1	54.9	18.9	CLEAR	CLEAR

Antenna Type: ViaSat 5.4 meter
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Table
Interference Case Summary
Kileville, Ohio

Case #	Path ID		Band (GHz)	Distance (km)	Azimuth (°)	ES Disc (°)	ES Gain (dBi)	LOS Loss Required (dB)	OH Loss 20% (dB)	OH Loss 0.01% (dB)	Revised Margin 20% (dB)	Revised Margin 0.01% (dB)
307	ENG	TEMPY LOC	2.0	264.2	359.9	94.5	10.0	12.1	54.9	18.9	CLEAR	CLEAR
308	ENG	TEMPY LOC	2.0	264.2	359.9	94.5	10.0	12.1	55.0	19.0	CLEAR	CLEAR
309	ENG	TEMPY LOC	2.0	264.2	359.9	94.5	10.0	12.1	55.0	19.0	CLEAR	CLEAR
310	TEMPY LOC	TEMPY LOC	2.0	226.8	318.1	136.2	10.0	11.9	154.1	119.0	CLEAR	CLEAR
311	TEMPY LOC	TEMPY LOC	2.0	226.8	318.1	136.2	10.0	11.9	154.1	119.0	CLEAR	CLEAR
312	TEMPY LOC	TEMPY LOC	2.0	226.8	318.1	136.2	10.0	11.9	154.1	119.0	CLEAR	CLEAR
313	TEMPY LOC	TEMPY LOC	2.0	226.8	318.1	136.2	10.0	11.9	154.1	119.0	CLEAR	CLEAR
314	TEMPY LOC	TEMPY LOC	2.0	226.8	318.1	136.2	10.0	11.9	154.1	119.0	CLEAR	CLEAR
315	TEMPY LOC	TEMPY LOC	2.0	226.8	318.1	136.2	10.0	11.9	154.1	119.0	CLEAR	CLEAR
316	ANN ARBOR	TEMPY LOC	2.0	245.7	349.5	104.9	10.0	11.7	55.6	19.8	CLEAR	CLEAR
317	ANN ARBOR	TEMPY LOC	2.0	245.7	349.5	104.9	10.0	11.7	55.6	19.8	CLEAR	CLEAR
318	CNB	TEMPY LOC	2.0	247.5	2.9	91.5	10.0	11.5	54.8	18.7	CLEAR	CLEAR
319	CNB	TEMPY LOC	2.0	247.5	2.9	91.5	10.0	11.5	54.8	18.7	CLEAR	CLEAR
320	CNB	TEMPY LOC	2.0	247.5	2.9	91.5	10.0	11.5	54.8	18.8	CLEAR	CLEAR
321	CNB	TEMPY LOC	2.0	247.5	2.9	91.5	10.0	11.5	54.9	18.8	CLEAR	CLEAR
322	TEMPY RX	TEMPY LOC	2.0	239.1	315.1	139.2	10.0	10.9	82.6	45.9	CLEAR	CLEAR
323	TEMPY RX	TEMPY LOC	2.0	239.1	315.1	139.2	10.0	10.9	82.6	45.9	CLEAR	CLEAR
324	TEMPY RX	TEMPY LOC	2.0	239.1	315.1	139.2	10.0	10.9	82.6	45.9	CLEAR	CLEAR
325	TEMPY RX	TEMPY LOC	2.0	241.5	2.7	91.6	10.0	10.9	130.7	96.4	CLEAR	CLEAR
326	TEMPY RX	TEMPY LOC	2.0	241.5	2.7	91.6	10.0	10.9	130.7	96.4	CLEAR	CLEAR
327	TEMPY RX	TEMPY LOC	2.0	241.5	2.7	91.6	10.0	10.9	130.7	96.4	CLEAR	CLEAR
328	TEMPY RX	TEMPY LOC	2.0	241.5	2.7	91.6	10.0	10.9	130.7	96.4	CLEAR	CLEAR
329	TEMPY RX	TEMPY LOC	2.0	245.3	213.5	119.1	10.0	10.7	107.1	71.0	CLEAR	CLEAR
330	TEMPY RX	TEMPY LOC	2.0	245.3	213.5	119.1	10.0	10.7	107.1	71.0	CLEAR	CLEAR
331	TEMPY RX	TEMPY LOC	2.0	245.3	213.5	119.1	10.0	10.7	107.1	71.0	CLEAR	CLEAR
332	TEMPY RX	TEMPY LOC	2.0	245.3	213.5	119.1	10.0	10.7	107.1	71.0	CLEAR	CLEAR
333	TEMPY RX	TEMPY LOC	2.0	245.3	213.5	119.1	10.0	10.7	107.1	71.0	CLEAR	CLEAR
334	TEMPY LOC	TEMPY LOC	2.0	302.8	353.4	100.9	10.0	10.6	161.8	132.2	CLEAR	CLEAR
335	TEMPY LOC	TEMPY LOC	2.0	302.8	353.4	100.9	10.0	10.6	161.8	132.2	CLEAR	CLEAR
336	TEMPY LOC	TEMPY LOC	2.0	302.8	353.4	100.9	10.0	10.6	161.8	132.2	CLEAR	CLEAR
337	TEMPY LOC	TEMPY LOC	2.0	302.8	353.4	100.9	10.0	10.6	161.8	132.2	CLEAR	CLEAR
338	TEMPY LOC	TEMPY LOC	2.0	302.8	353.4	100.9	10.0	10.6	161.8	132.2	CLEAR	CLEAR
339	WLKY-TV DTV	TEMPY LOC	2.0	297.8	230.5	136.0	10.0	10.6	56.4	21.4	CLEAR	CLEAR
340	WLKY-TV DTV	TEMPY LOC	2.0	297.8	230.5	136.0	10.0	10.6	56.4	21.4	CLEAR	CLEAR

Antenna Type: ViaSat 5.4 meter
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Kileville, Ohio

Case #	Path ID		Band (GHz)	Distance (km)	Azimuth (°)	ES Disc (°)	ES Gain (dBi)	LOS Loss Required (dB)	OH Loss 20% (dB)	OH Loss 0.01% (dB)	Revised Margin 20% (dB)	Revised Margin 0.01% (dB)
341	TEMPY RX	TEMPY LOC	2.0	239.3	280.2	173.2	10.0	10.2	145.3	110.8	CLEAR	CLEAR
342	TEMPY RX	TEMPY LOC	2.0	239.3	280.2	173.2	10.0	10.2	145.3	110.8	CLEAR	CLEAR
343	TEMPY RX	TEMPY LOC	2.0	239.3	280.2	173.2	10.0	10.2	145.3	110.8	CLEAR	CLEAR
344	TEMPY RX	TEMPY LOC	2.0	239.3	280.2	173.2	10.0	10.2	145.3	110.8	CLEAR	CLEAR
345	TEMPY RX	TEMPY LOC	2.0	239.3	280.2	173.2	10.0	10.2	145.3	110.8	CLEAR	CLEAR
346	TEMPY RX	TEMPY LOC	2.0	264.4	358.0	96.4	10.0	10.1	58.4	22.7	CLEAR	CLEAR
347	TEMPY RX	TEMPY LOC	2.0	264.4	358.0	96.4	10.0	10.1	58.4	22.7	CLEAR	CLEAR
348	TEMPY RX	TEMPY LOC	2.0	264.4	358.0	96.4	10.0	10.1	58.4	22.7	CLEAR	CLEAR
349	ENG04	TEMPY LOC	2.0	265.2	227.1	132.6	10.0	10.0	51.6	14.6	CLEAR	CLEAR
350	ENG04	TEMPY LOC	2.0	265.2	227.1	132.6	10.0	10.0	51.6	14.6	CLEAR	CLEAR
351	TEMPY RX	TEMPY LOC	2.0	267.4	11.9	82.5	10.0	10.0	132.7	99.7	CLEAR	CLEAR
352	TEMPY RX	TEMPY LOC	2.0	267.4	11.9	82.5	10.0	10.0	132.7	99.7	CLEAR	CLEAR
353	TEMPY RX	TEMPY LOC	2.0	267.4	11.9	82.5	10.0	10.0	132.7	99.7	CLEAR	CLEAR
354	TEMPY RX	TEMPY LOC	2.0	267.4	11.9	82.5	10.0	10.0	132.7	99.7	CLEAR	CLEAR
355	TEMPY RX	TEMPY LOC	2.0	267.4	11.9	82.5	10.0	10.0	132.7	99.7	CLEAR	CLEAR
356	TEMPY RX	TEMPY LOC	2.0	267.4	11.9	82.5	10.0	10.0	132.7	99.7	CLEAR	CLEAR
357	TEMPY RX	TEMPY LOC	2.0	267.4	11.9	82.5	10.0	10.0	132.7	99.7	CLEAR	CLEAR
358	TEMPY RX	TEMPY LOC	2.0	267.4	11.9	82.5	10.0	10.0	132.7	99.7	CLEAR	CLEAR
359	TEMPY RX	TEMPY LOC	2.0	267.4	11.9	82.5	10.0	10.0	132.7	99.7	CLEAR	CLEAR
360	TEMPY RX	TEMPY LOC	2.0	267.4	11.9	82.5	10.0	10.0	132.7	99.7	CLEAR	CLEAR
361	TEMPY RX	TEMPY LOC	2.0	267.4	11.9	82.5	10.0	10.0	132.7	99.7	CLEAR	CLEAR
362	TEMPY RX	TEMPY LOC	2.0	267.4	11.9	82.5	10.0	10.0	132.7	99.7	CLEAR	CLEAR
363	FURNACE MTN	WYMT TWR	2.0	262.9	192.8	98.4	10.0	10.0	55.8	20.1	CLEAR	CLEAR
364	FURNACE MTN	WYMT TWR	2.0	262.9	192.8	98.4	10.0	10.0	55.8	20.1	CLEAR	CLEAR
365	FURNACE MTN	WYMT TWR	2.0	262.9	192.8	98.4	10.0	10.0	55.8	20.1	CLEAR	CLEAR
366	TEMPY RX	TEMPY LOC	2.0	279.2	12.3	82.1	10.0	9.6	134.3	101.6	CLEAR	CLEAR
367	TEMPY RX	TEMPY LOC	2.0	279.2	12.3	82.1	10.0	9.6	134.3	101.6	CLEAR	CLEAR
368	TEMPY RX	TEMPY LOC	2.0	279.2	12.3	82.1	10.0	9.6	134.3	101.6	CLEAR	CLEAR
369	TEMPY RX	TEMPY LOC	2.0	290.5	131.5	37.2	10.0	9.3	248.6	216.4	CLEAR	CLEAR
370	ENG03	TEMPY LOC	2.0	297.8	230.5	136.0	10.0	9.0	56.4	21.4	CLEAR	CLEAR
371	ENG03	TEMPY LOC	2.0	297.8	230.5	136.0	10.0	9.0	56.4	21.4	CLEAR	CLEAR
372	TEMPY RX	TEMPY LOC	2.0	301.7	67.4	27.2	10.0	8.9	193.2	161.7	CLEAR	CLEAR
373	TEMPY RX	TEMPY LOC	2.0	301.7	67.4	27.2	10.0	8.9	193.2	161.7	CLEAR	CLEAR
374	TEMPY RX	TEMPY LOC	2.0	301.7	67.4	27.2	10.0	8.9	193.2	161.7	CLEAR	CLEAR

Antenna Type: ViaSat 5.4 meter
Uplink Power: -3.0 dBW/4 kHz
Satellite Arc: Min Elevation 5 degrees
Objectives: Long Term: -154.0 dBW/4 kHz Short Term: -131.0 dBW/4 kHz

Table
Interference Case Summary
Kileville, Ohio

Case #	Path ID		Band (GHz)	Distance (km)	Azimuth (°)	ES Disc (°)	ES Gain (dBi)	LOS Loss Required (dB)	OH Loss 20% (dB)	OH Loss 0.01% (dB)	Revised Margin 20% (dB)	Revised Margin 0.01% (dB)
375	BRIDGEPORT	WHEELING	2.0	208.3	90.7	5.3	10.0	8.7	142.9	105.9	CLEAR	CLEAR
376	BRIDGEPORT	WHEELING	2.0	208.3	90.7	5.3	10.0	8.7	142.9	105.9	CLEAR	CLEAR
377	BRIDGEPORT	WHEELING	2.0	208.3	90.7	5.3	10.0	8.7	142.9	105.9	CLEAR	CLEAR
378	STUDIO	TEMPY LOC	2.0	306.4	339.0	115.3	10.0	8.1	64.3	32.6	CLEAR	CLEAR
379	STUDIO	TEMPY LOC	2.0	306.4	339.0	115.3	10.0	8.1	64.3	32.6	CLEAR	CLEAR
380	STUDIO	TEMPY LOC	2.0	306.4	339.0	115.3	10.0	8.1	64.3	32.6	CLEAR	CLEAR
381	STUDIO	TEMPY LOC	2.0	306.4	339.0	115.3	10.0	8.1	64.3	32.6	CLEAR	CLEAR
382	STUDIO	TEMPY LOC	2.0	306.4	339.0	115.3	10.0	8.1	64.3	32.6	CLEAR	CLEAR
383	STUDIO	TEMPY LOC	2.0	306.4	339.0	115.3	10.0	8.1	64.3	32.6	CLEAR	CLEAR
384	STUDIO	TEMPY LOC	2.0	306.4	339.0	115.3	10.0	8.1	64.3	32.6	CLEAR	CLEAR
385	KETTERING	TEMPY LOC	2.0	92.9	246.1	151.5	10.0	7.3	38.6	27.5	CLEAR	CLEAR
386	PARKWAY N	TEMPY LOC	2.0	273.9	79.9	14.9	10.0	0.8	156.8	123.1	CLEAR	CLEAR
387	ENG01	TEMPY LOC	2.0	301.6	227.9	133.5	10.0	-0.1	60.2	27.0	CLEAR	CLEAR

Antenna Type: ViaSat 5.4 meter
Uplink Power: -3.0 dBW/4 kHz
Satellite Arc: Min Elevation 5 degrees
Objectives: Long Term: -154.0 dBW/4 kHz Short Term: -131.0 dBW/4 kHz