

AMENDMENT TO BPFT-20111026AGS
RADIO ASSIST MINISTRY, INC.
W248AQ FM TRANSLATOR
CH 224D - 92.7 MHZ - 0.250 KW
DETROIT, MICHIGAN
November 2011

EXHIBIT C

As indicated on Exhibit C1, the proposed operation of W248AQ on Channel 224D with an effective radiated power of 0.250 kilowatt at 89.0 meters (292.0 feet) above ground level with a directional antenna will not cause interference to any existing, applied for, or proposed facility. As noted on Exhibit C1, however, the proposed W248AQ on Channel 224D is inside the predicted 54 dBu contour of second adjacent stations WDRQ, Channel 226B, Detroit, Michigan and WMXD, Channel 222B, Detroit, Michigan. Due to the relationship between W248AQ on Channel 224D and WDRQ and WMXD, a 40 db ratio of the protected and interfering contours applies.

We have, therefore, calculated the level of signal of WDRQ at the proposed W248AQ site. A map showing the WDRQ contour at the W248AQ site is attached as Exhibit C2. The WDRQ contour at the W248AQ site is 79.3 dBu (50/50), and the corresponding interfering contour for W248AQ is 119.3 dBu (50/10). At its greatest distance, the interfering contour (119.3 dBu) of W248AQ extends 0.12 kilometer (394.0 feet) from the proposed W248AQ site. The proposed W248AQ antenna system is a Systems with Reliability ("SWR") Model FMEC/2 (two bay full wavelength spaced system). SWR has provided the vertical elevation pattern of the antenna system so that the actual power level at depression angles between 5° and 90° could be

calculated. Applying the actual relative field values and using a free space calculation, it was possible to calculate the actual distance to the interfering contour (F50/10) of the proposed W248AQ with regard to WDRQ.

As indicated on Exhibit C3, we calculated the elevation above the ground of the interference from the proposed W248AQ translator. The closest point above the ground that the interfering contour reaches is 51.7 meters (169.6 feet). This point occurs at a distance of 64.6 meters (211.9 feet) out from the base of the tower. As the interfering contour does not reach the ground, it will not impact reception of service from WDRQ in the area; therefore, the interference is considered to be over an unpopulated area. As such, it is believed that the proposed W248AQ facility on Channel 224D is in compliance with §74.1204(d) of the Commission's rules. If a waiver of the rule is needed, one is respectfully requested, based on the absence of any affected population in the interference area.

We calculated the level of signal of WMXD at the proposed W248AQ site. Exhibit C4 is a map showing that the WMXD contour at the W248AQ site. The WMXD contour at the W248AQ site is 77 dBu (50/50), and the corresponding interfering contour for W248AQ is 117 dBu (50/10). At its greatest distance, the interfering contour (117 dBu) of W248AQ extends 0.156 kilometer (511.8 feet) from the proposed W248AQ site. The proposed W248AQ antenna system is a Systems with Reliability ("SWR") Model FMEC/2 (two bay full wavelength spaced system). SWR has provided the vertical elevation pattern of the antenna system so that the actual power level at depression angles between 5° and 90° could be calculated. Applying the actual

relative field values, it was possible to calculate, using a free space calculation, the actual distance to the interfering contour (F50/10) of the proposed W248AQ with regard to WMXD.

As indicated on Exhibit C5, we calculated the elevation above the ground of the interference from the proposed W248AQ translator. The closest point above the ground that the interfering contour reaches is 40.4 meters (132.5 feet). This point occurs at a distance of 84.2 meters (276.2 feet) out from the base of the tower. As the interfering contour does not reach the ground, it will not impact reception of service from WMXD in the area; therefore, the interference is considered to be over an unpopulated area. As such, it is believed that the proposed W248AQ facility on Channel 224D is in compliance with §74.1204(d) of the Commission's rules. If a waiver of the rule is needed, one is respectfully requested, based on the absence of any population affected in the interference area.

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EXHIBIT C1

Interference Review for W248AQ Detroit, Michigan on Channel 224D
Using Proposed Site as Reference

REFERENCE CH# 224D - 92.7 MHz, Pwr= 0.25 kW DA, HAAT= 95.2 M, COR= 277.4 M DISPLAY DATES
42 30 40.7 N. Average Protected F(50-50)= 12.6 km DATA 11-22-11
82 57 34.2 W. Standard Directional SEARCH 11-23-11

CH CITY	CALL	TYPE STATE	ANT	AZI. <--	DIST FILE #	LAT. LNG.	Pwr (kW) HAAT (M)	INT (km) COR (M)	PRO (km) LICENSEE	*IN* (Overlap in km)	*OUT*
226B Detroit	WDRQ	LIC DCN MI		257.4 77.2	20.3 BLH19860613KB	42 28 16.0 83 12 03.0	26.500 204	6.0 412	66.1 Radio License Holding I, L	2.4	-47.3*<
222B Detroit	WMXD	LIC ZCN MI		199.4 19.4	21.1 BLH19970303KA	42 19 55.0 83 02 42.0	45.000 146	5.6 331	62.9 Amfm Radio Licenses, L.L.C	10.8	-42.1*<
224B1 Leamington	CJSP	OPE DEN ON		149.5 329.8	64.6 20070228CAN	42 00 35.0 82 33 45.0	4.000 145	84.3 324	39.0	-23.6*<	7.3
224A Flint	WDZZ-FM	LIC CX MI		314.9 134.4	84.0 BLH20090513AEU	43 02 29.0 83 41 28.0	3.000 100	73.9 332	22.9 Cumulus Licensing Llc	-2.1<	19.3
278B Detroit	WMUZ«	LIC CN MI		237.5 57.3	27.6 BLH19851223KG	42 22 40.0 83 14 32.0	50.000 142	58.3 336	63.7 Wmuz Radio, Inc.	15.0R	12.6M
223B Toledo	WVKS	LIC CN OH		205.9 25.5	120.8 BMLH19961008KA	41 31 55.0 83 35 37.0	50.000 146	79.5 340	66.3 Citicasters Licenses, Inc.	35.3	42.7
225A1 Chatham	AL4535«		ON	100.5 281.1	64.9	42 24 08.0 82 11 03.0	0.250 100	19.9 278	18.0	28.0R	36.9M
225A1 Chatham	NEW«	OPE HN ON		100.5 281.1	64.9	42 24 08.0 82 11 03.0	0.250 65	16.2 247	15.8	28.0R	36.9M
223A Marlette	WBGV	LIC C MI		359.4 179.4	86.1 BLH19990621KC	43 17 10.0 82 58 17.0	3.000 100	36.5 342	24.2 Gb Broadcasting Company	37.1	43.4
224B London	CJBXFM«	OPE HN ON		71.9 253.2	161.2	42 56 40.0 81 04 48.0	50.000 121	133.5 389	60.5	112.0R	49.2M

Terrain database is NGDC 30 SEC, R= 73.215 qualifying spacings or FCC minimum spacings in KM, M= Margin in KM
Contour distances are on direct line to and from reference station. Reference Zone= East Zone, Co to 3rd
adjacent.

Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, _= Omni), Polarization (C,H,V,E), Beamtilt(Y,N,X)
"-"affixed to 'IN' or 'OUT' values = site inside protected contour.

« = Station meets FCC minimum distance spacing for its class.

< = Contour Overlap

W248AQ - Detroit, MI - PROPOSED

Latitude: 42-30-40.70 N / Longitude: 082-57-34.20 W
ERP: 0.25 kW - Ch: 224 - 92.7 MHz
AMSL Height: 277.4 m
Horiz. Pattern: Directional

WDRQ - Detroit, MI - BLH19860613KB

Latitude: 42-28-16 N / Longitude: 083-12-03 W
ERP: 26.50 kW - Ch: 226 - 93.1 MHz
AMSL Height: 412.0 m
Horiz. Pattern: Directional

GRAHAM BROCK, INC.

BROADCAST TECHNICAL CONSULTANTS

W248AQ

■ W248AQ 119.3 dBu 50/10 - Proposed
■ WDRQ 79.3 dBu 50/50

EXHIBIT C2
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W248AQ FM TRANSLATOR
CH 224D - 92.7 MHz - 0.250 KW
DETROIT, MICHIGAN
November 2011

Scale 1:24,000

0 0.33 0.67 1.0 km

Interference to: WDRQ
 Contour at tower: 79.3 dBu - FCC 50/50
 Interference Ratio: 40 db

CALL: W248AQ
 POWER (Watts): 250
 ANTENNA AGL (m): 89
 Desired Contour (dBu - FCC 50/10) 119.3

Directional Antenna SWR FMEC/2
 Azimuth: Worst Case
 Relative field: 1.000
 ERP (Watts) at Azimuth: 250

DEPRESSION ANGLE	ANTENNA RELATIVE FIELD FROM MFG	ERP (WATTS)	dBk	DISTANCE TO INTERFERING CONTOUR (m)	HORIZONTAL DISTANCE FROM TOWER (m)	VERTICAL DISTANCE FROM GROUND (m)
0	1.000	250.0	-6.02	119.9	119.9	89.0
5	0.987	243.5	-6.13	118.4	117.9	78.7
10	0.950	225.6	-6.47	113.9	112.2	69.2
15	0.890	198.0	-7.03	106.7	103.1	61.4
20	0.812	164.8	-7.83	97.4	91.5	55.7
25	0.721	130.0	-8.86	86.5	78.4	52.5
30	0.622	96.7	-10.14	74.6	64.6	51.7
35	0.520	67.6	-11.70	62.4	51.1	53.2
40	0.420	44.1	-13.56	50.4	38.6	56.6
45	0.327	26.7	-15.73	39.2	27.7	61.3
50	0.244	14.9	-18.27	29.3	18.8	66.6
55	0.173	7.5	-21.26	20.7	11.9	72.0
60	0.115	3.3	-24.81	13.8	6.9	77.1
65	0.070	1.2	-29.12	8.4	3.5	81.4
70	0.039	0.4	-34.20	4.7	1.6	84.6
75	0.018	0.1	-40.92	2.2	0.6	86.9
80	0.006	0.0	-50.46	0.7	0.1	88.3
85	0.001	0.0	-66.02	0.1	0.0	88.9
90	0.001	0.0	-66.02	0.1	0.0	88.9

WORST CASE HEIGHT AGL (m)

51.7

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W248AQ - Detroit, MI - PROPOSED

Latitude: 42-30-40.70 N / Longitude: 082-57-34.20 W

ERP: 0.25 kW - Ch: 224 - 92.7 MHz

AMSL Height: 277.4 m

Horiz. Pattern: Directional

WMXD - Detroit, MI - BLH19970303KA

Latitude: 42-19-55 N / Longitude: 083-02-42 W

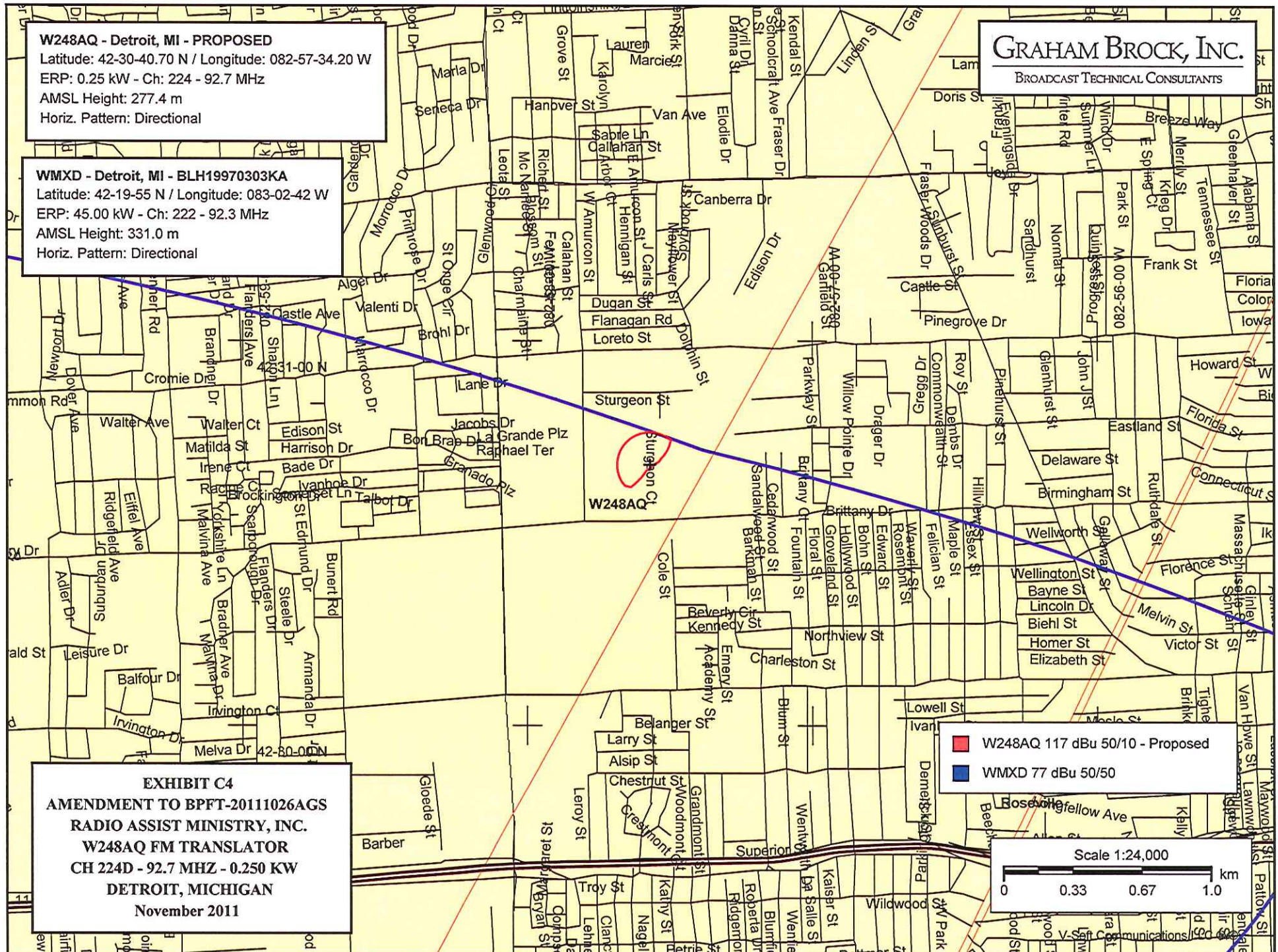
ERP: 45.00 kW - Ch: 222 - 92.3 MHz

AMSL Height: 331.0 m

Horiz. Pattern: Directional

GRAHAM BROCK, INC.

BROADCAST TECHNICAL CONSULTANTS



Interference to: WMXD
 Contour at tower: 77 dBu - FCC 50/50
 Interference Ratio: 40 db

CALL: W248AQ
 POWER (Watts): 250
 ANTENNA AGL (m): 89
 Desired Contour (dBu - FCC 50/10) 117

Directional Antenna SWR FMEC/2
 Azimuth: Worst Case
 Relative field: 1.000
 ERP (Watts) at Azimuth: 250

DEPRESSION ANGLE	ANTENNA RELATIVE FIELD FROM MFG	ERP (WATTS)	dBk	DISTANCE TO INTERFERING CONTOUR (m)	HORIZONTAL DISTANCE FROM TOWER (m)	VERTICAL DISTANCE FROM GROUND (m)
0	1.000	250.0	-6.02	156.3	156.3	89.0
5	0.987	243.5	-6.13	154.3	153.7	75.6
10	0.950	225.6	-6.47	148.5	146.2	63.2
15	0.890	198.0	-7.03	139.1	134.4	53.0
20	0.812	164.8	-7.83	126.9	119.3	45.6
25	0.721	130.0	-8.86	112.7	102.1	41.4
30	0.622	96.7	-10.14	97.2	84.2	40.4
35	0.520	67.6	-11.70	81.3	66.6	42.4
40	0.420	44.1	-13.56	65.6	50.3	46.8
45	0.327	26.7	-15.73	51.1	36.1	52.9
50	0.244	14.9	-18.27	38.1	24.5	59.8
55	0.173	7.5	-21.26	27.0	15.5	66.8
60	0.115	3.3	-24.81	18.0	9.0	73.4
65	0.070	1.2	-29.12	10.9	4.6	79.1
70	0.039	0.4	-34.20	6.1	2.1	83.3
75	0.018	0.1	-40.92	2.8	0.7	86.3
80	0.006	0.0	-50.46	0.9	0.2	88.1
85	0.001	0.0	-66.02	0.2	0.0	88.8
90	0.001	0.0	-66.02	0.2	0.0	88.8

WORST CASE HEIGHT AGL (m)

40.4

EXHIBIT C5
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EXHIBIT C6

North Latitude: 42° 30' 40.7" - Tabulated Protected and Interfering Contours Data
West Longitude: 82° 57' 34.2" - W248AQ FM Translator - Detroit, Michigan

HAAT and Distance to Contour, - NGDC 30 Second Terrain Database

Azi.	AV EL	HAAT	ERP kW	dBk	Field	19.3-F1	117-F1	100-F1	94-F1	60-F5	54-F1	34-F1
000	183.0	94.4	0.2500	-6.02	1.000	0.12	0.16	1.11	1.59	12.51	18.55	59.11
010	183.0	94.4	0.2500	-6.02	1.000	0.12	0.16	1.11	1.59	12.51	18.55	59.11
020	183.0	94.4	0.2500	-6.02	1.000	0.12	0.16	1.11	1.59	12.51	18.55	59.11
030	183.0	94.4	0.2500	-6.02	1.000	0.12	0.16	1.11	1.59	12.51	18.55	59.11
040	181.1	96.3	0.2500	-6.02	1.000	0.12	0.16	1.11	1.59	12.63	18.77	59.48
050	177.0	100.4	0.1225	-9.12	0.700	0.08	0.11	0.78	1.55	10.85	15.51	51.91
060	174.0	103.4	0.0400	-13.98	0.400	0.05	0.06	0.44	0.89	8.35	11.72	40.14
070	173.1	104.3	0.0225	-16.48	0.300	0.04	0.05	0.33	0.66	7.27	10.25	34.71
080	172.4	105.0	0.0056	-22.50	0.150	0.02	0.02	0.17	0.33	5.19	7.28	24.38
090	172.1	105.3	0.0025	-26.02	0.100	0.01	0.02	0.11	0.22	4.17	6.00	19.77
100	172.0	105.4	0.0016	-27.96	0.080	0.01	0.01	0.09	0.18	3.70	5.37	17.41
110	171.7	105.7	0.0016	-27.96	0.080	0.01	0.01	0.09	0.18	3.70	5.37	17.44
120	171.6	105.8	0.0016	-27.96	0.080	0.01	0.01	0.09	0.18	3.70	5.38	17.45
130	171.7	105.7	0.0016	-27.96	0.080	0.01	0.01	0.09	0.18	3.70	5.37	17.44
140	172.2	105.2	0.0016	-27.96	0.080	0.01	0.01	0.09	0.18	3.69	5.36	17.39
150	173.0	104.4	0.0020	-26.94	0.090	0.01	0.01	0.10	0.20	3.92	5.67	18.55
160	173.6	103.8	0.0020	-26.94	0.090	0.01	0.01	0.10	0.20	3.91	5.65	18.49
170	175.3	102.1	0.0020	-26.94	0.090	0.01	0.01	0.10	0.20	3.88	5.61	18.31
180	181.8	95.6	0.0025	-26.02	0.100	0.01	0.02	0.11	0.22	3.97	5.71	18.69
190	185.8	91.6	0.0039	-24.08	0.125	0.02	0.02	0.14	0.28	4.37	6.22	20.60
200	189.1	88.3	0.0056	-22.50	0.150	0.02	0.02	0.17	0.33	4.73	6.66	22.19
210	189.9	87.5	0.0225	-16.48	0.300	0.04	0.05	0.33	0.66	6.64	9.40	31.34
220	191.2	86.2	0.2500	-6.02	1.000	0.12	0.16	1.11	1.54	11.98	17.56	57.44
230	191.7	85.7	0.2500	-6.02	1.000	0.12	0.16	1.11	1.54	11.95	17.50	57.34
240	190.9	86.5	0.2500	-6.02	1.000	0.12	0.16	1.11	1.54	12.00	17.59	57.51
250	190.9	86.5	0.2500	-6.02	1.000	0.12	0.16	1.11	1.54	12.00	17.60	57.51
260	191.2	86.2	0.2500	-6.02	1.000	0.12	0.16	1.11	1.54	11.98	17.56	57.45
270	190.4	87.0	0.2500	-6.02	1.000	0.12	0.16	1.11	1.55	12.03	17.66	57.62
280	189.7	87.7	0.2500	-6.02	1.000	0.12	0.16	1.11	1.55	12.07	17.74	57.75
290	189.4	88.0	0.2500	-6.02	1.000	0.12	0.16	1.11	1.55	12.10	17.78	57.83
300	189.8	87.6	0.2500	-6.02	1.000	0.12	0.16	1.11	1.55	12.07	17.73	57.74
310	188.8	88.6	0.2500	-6.02	1.000	0.12	0.16	1.11	1.55	12.14	17.86	57.96
320	188.0	89.4	0.2500	-6.02	1.000	0.12	0.16	1.11	1.56	12.19	17.95	58.12
330	187.5	89.9	0.2500	-6.02	1.000	0.12	0.16	1.11	1.56	12.22	18.01	58.22
340	185.8	91.6	0.2500	-6.02	1.000	0.12	0.16	1.11	1.57	12.33	18.22	58.57
350	185.0	92.4	0.2500	-6.02	1.000	0.12	0.16	1.11	1.57	12.38	18.31	58.72

AMSL= 277.4