

KZUL-FM 283C3
Lake Havasu City, AZ
Proposed Minor Modification
Of Licensed Facility

The instant application is being contingently and contemporaneously filed with a 301 Application submitted by KAJM Camp Verde, Arizona (FCC Facility ID #52818). As such, the KAJM application relies on the instant KZUL-FM application being granted in order to comply with Section 73.207 and Section 73.203. In the instant application, KZUL-FM proposes to substitute Channel 283C3 for Channel 283C2 using allotment reference coordinates at the U.S. Census designated community reference coordinates for Lake Havasu City, AZ, and propose its antenna site on Channel 283C3 to be located at its current location in order to accommodate an upgrade for KAJM from Channel 282C0 to Channel 282C at its contingently proposed site.

KZUL-FM, by this application, proposes to modify its currently permitted facilities to specify a new channel using the following parameters:

| | |
|------------------------|--------------------------------|
| Channel: | 283 |
| Class: | C3 |
| Antenna Coordinates: | N34-33-06, W114-11-37 (NAD 27) |
| Reference Coordinates: | N34-29-02, W114-19-17 (NAD 27) |
| ASRN: | Not Applicable |
| Tower Height AMSL: | 30 m |
| COR AMSL: | 1441 m |
| COR AGL: | 10 m |
| COR HAAT: | 814 m |
| ERP: | 0.23 kW |
| Directional Antenna: | NO |

The instant application proposes a one-step downgrade for KZUL-FM from Channel 283C2 to Channel 283C3. As such, a fully spaced reference coordinate in accordance with Section 73.207 must be provided. The applicant has selected the following coordinates co-

located with Lake Havasu City's community reference coordinates accordance with Note 1 to Section 73.3573 for the one-step channel change:

KZUL-FM 73.207 Reference Coordinates: N34-29-02, W114-19-17 (NAD 27)

Exhibit 1 is a channel spacings study from these reference coordinates demonstrating that the proposed facility is fully spaced towards all applications, authorizations, and permits pursuant to Section 73.207. Exhibit 2 is a city-grade contour map from the proposed reference site easily demonstrating requisite coverage of Lake Havasu City, AZ.

As can be seen in the Antenna Site Contour Map in Exhibit 3, KZUL-FM's community of license, Lake Havasu City, AZ, lies entirely within the F(50,50) 70 dBu city-grade contour. Exhibit 4 is an antenna site channel spacings study demonstrating that the proposed facility is fully spaced towards all applications, authorizations, and permits pursuant to Section 73.207 with the exception of the contingently proposed antenna site for KAJM. In order to address the shortspacing towards KAJM, the applicant requests Section 73.215 Contour protection processing towards this station.

KZUL-FM can request 73.215 Contour Protection towards the KAJM application as it complies with the minimum separation requirements towards the first adjacent station at its proposed antenna site. The channel spacings study shows that the proposed KZUL-FM 283C3 Antenna Location is spaced 171.7 kilometers from the proposed KAJM antenna site. In order to be eligible for 73.215 Contour Protection, the minimum "C to C3" spacings for first adjacent stations must be at least 165 kilometers. The proposed KZUL-FM 283C3 Antenna Location satisfies this requirement by 6.7 kilometers.

Using the facilities proposed herein, KZUL-FM 283C3 complies with the Contour Protection requirements of Part 73.215 towards the proposed KAJM antenna site. The attached overlap tabulation studies in Exhibits 5 and 6 demonstrate that this application complies with the Contour Protection Requirements of Section 73.215.

In reviewing the attached studies, it should be noted that since KAJM, itself, proposes using Section 73.215 Contour Protection the “actual” KAJM facilities shall be examined (41 kW at 852 m HAAT).

Using the KZUL-FM 283C3 technical parameters proposed in this application, Exhibit 5 demonstrates that the proposed F(50,50) 60 dBu Contour for KZUL-FM does not overlap the F(50,10) 54 dBu Interfering Contour of the contingently proposed KAJM facility. Likewise, Exhibit 6 demonstrates that the F(50,50) 60 dBu Contour for the contingently proposed KAJM facility does not overlap the F(50,10) 54 dBu Interfering Contour of the instantly proposed KZUL-FM application on 283C3.

Due to the fact that several existing and proposed emitters are located at or near the site, the applicant agrees to conduct a Radiofrequency Electromagnetic Field survey at the site upon construction to ensure that any areas at ground level that exceed the Commission’s exposure guideline values are appropriately marked and fenced. The results of the survey will be provided with the application for license. When it becomes necessary for workers to ascend the tower, appropriate measures, such as reduction or shut down of power if necessary, shall be taken to ensure that the human exposure to radiofrequency radiation will not exceed the FCC guidelines. The proposed facility is located on its currently licensed tower and is, thus, exempt from environmental processing because the facility would not be located at a location specified in Section 1.1307(a)(1)-(8) of the Commission's Rules.

Exhibit 1

KZUL-FM 283C3 Lake Havasu City, AZ Allotment Site Channel Study

REFERENCE

34 29 02.0 N.

114 19 17.0 W.

CLASS = C3 Int = C

Current Spacings

DISPLAY DATES

DATA 03-24-07

SEARCH 03-24-07

----- Channel 283 - 104.5 MHz -----

| Call | Channel | Location | | Azi | Dist | FCC | Margin |
|------|---------|----------|--|-----|------|-----|--------|
|------|---------|----------|--|-----|------|-----|--------|

| | | | | | | | | |
|---------|-----|-------|------------------|----|------|-------|-------|---------|
| KZUL-FM | LIC | 283C2 | Lake Havasu City | AZ | 57.2 | 13.93 | 177.0 | -163.07 |
|---------|-----|-------|------------------|----|------|-------|-------|---------|

Of No Concern:

KZUL-FM's currently licensed facilities.

| | | | | | | | | |
|------|-----|------|------------|----|------|--------|-------|------|
| KAJM | PRO | 282C | Camp Verde | AZ | 98.2 | 181.99 | 176.0 | 5.99 |
|------|-----|------|------------|----|------|--------|-------|------|

Of Note:

KAJM's contingently proposed allotment reference coordinates for its one-step upgrade to Channel 282C at Camp Verde, AZ.

| | | | | | | | | |
|------|-----|------|-------|----|-------|-------|------|-------|
| RADD | ADD | 280B | Essex | CA | 303.1 | 81.37 | 71.0 | 10.37 |
|------|-----|------|-------|----|-------|-------|------|-------|

| | | | | | | | | |
|------|-----|------|-------|----|-------|-------|------|-------|
| RDEL | DEL | 280B | Essex | CA | 288.5 | 89.05 | 71.0 | 18.05 |
|------|-----|------|-------|----|-------|-------|------|-------|

| | | | | | | | | |
|----------|-----|------|-------|----|-------|-------|------|-------|
| 950921MK | VAC | 280B | Essex | CA | 288.6 | 89.37 | 71.0 | 18.37 |
|----------|-----|------|-------|----|-------|-------|------|-------|

| | | | | | | | | |
|--------|-----|-------|-----------|----|-------|-------|------|-------|
| AL0234 | VAC | 286C2 | Ehrenberg | AZ | 179.9 | 75.85 | 56.0 | 19.85 |
|--------|-----|-------|-----------|----|-------|-------|------|-------|

| | | | | | | | | |
|------|-------|-------|------------|----|------|--------|-------|-------|
| KAJM | CP -N | 282C0 | Camp Verde | AZ | 98.3 | 183.46 | 163.0 | 20.46 |
|------|-------|-------|------------|----|------|--------|-------|-------|

| | | | | | | | | |
|------|-----|------|-----------------|----|-------|--------|-------|-------|
| KCYE | LIC | 282C | North Las Vegas | NV | 327.3 | 196.53 | 176.0 | 20.53 |
|------|-----|------|-----------------|----|-------|--------|-------|-------|

| | | | | | | | | |
|---------|-----|-------|---------|----|-------|--------|-------|-------|
| KCEC-FM | LIC | 283C2 | Wellton | AZ | 180.4 | 200.87 | 177.0 | 23.87 |
|---------|-----|-------|---------|----|-------|--------|-------|-------|

| | | | | | | | | |
|------|-----|-------|--------|----|-------|-------|------|-------|
| KRIT | LIC | 230C3 | Parker | AZ | 176.7 | 38.02 | 14.0 | 24.02 |
|------|-----|-------|--------|----|-------|-------|------|-------|

| | | | | | | | | |
|------|-----|-------|----------|----|-------|-------|------|-------|
| RADD | ADD | 285C2 | Laughlin | NV | 335.6 | 93.79 | 56.0 | 37.79 |
|------|-----|-------|----------|----|-------|-------|------|-------|

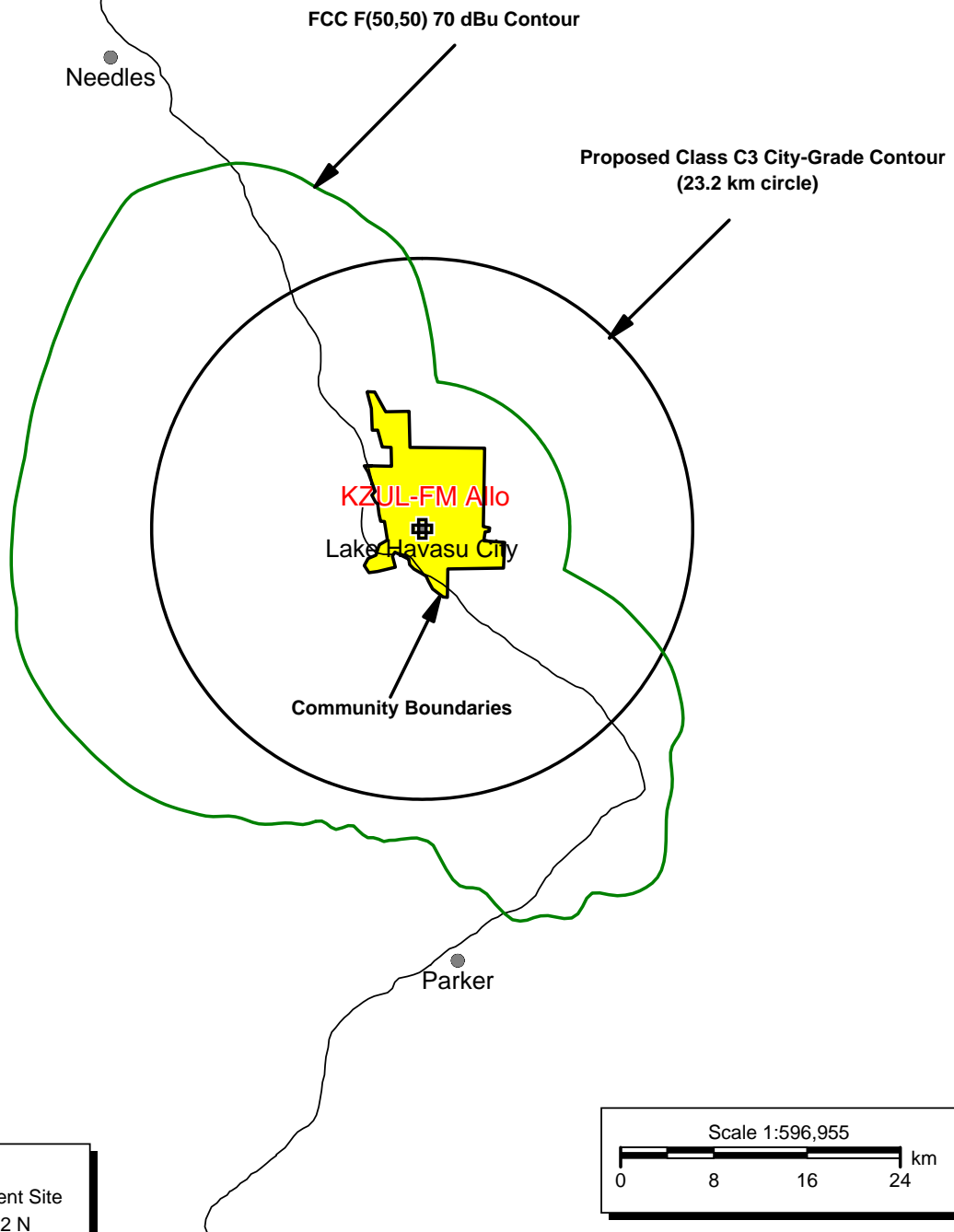
| | | | | | | | | |
|--------|-----|------|---------------|----|-------|-------|------|-------|
| AP8665 | APP | 229A | Mohave Valley | AZ | 340.3 | 57.12 | 12.0 | 45.12 |
|--------|-----|------|---------------|----|-------|-------|------|-------|

| | | | | | | | | |
|--------|-----|------|-------------|----|-------|-------|------|-------|
| AP9338 | APP | 285A | Cal-nev-ari | NV | 335.6 | 93.79 | 42.0 | 51.79 |
|--------|-----|------|-------------|----|-------|-------|------|-------|

| | | | | | | | | |
|------|-----|------|------|----|-------|--------|-------|-------|
| RADD | ADD | 284C | Mesa | AZ | 120.2 | 235.97 | 176.0 | 59.97 |
|------|-----|------|------|----|-------|--------|-------|-------|

Exhibit 2

283C3 Allotment Site City-Grade Coverage Map

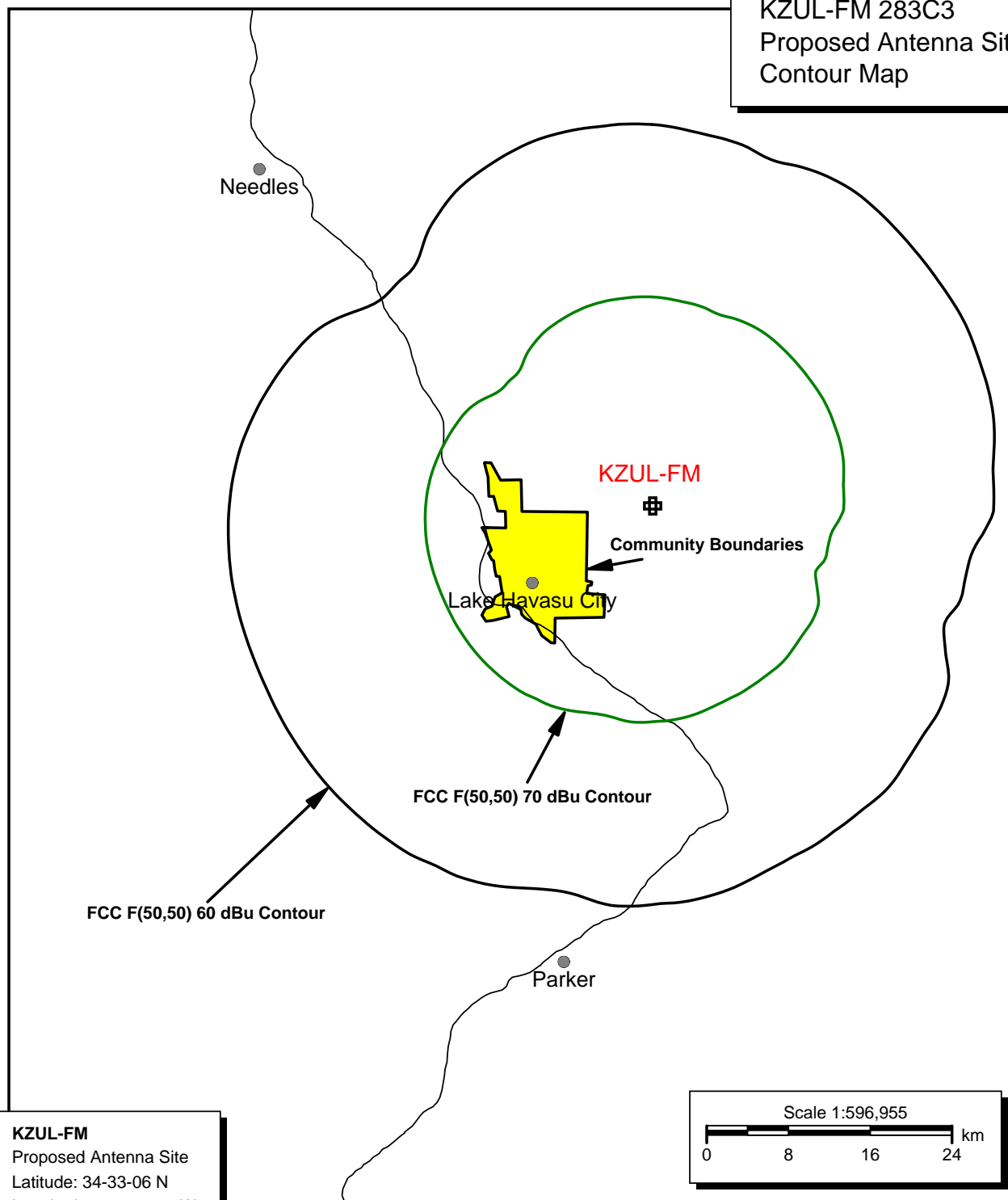


KZUL-FM Allo

Proposed Allotment Site
Latitude: 34-29-02 N
Longitude: 114-19-17 W
ERP: 25.00 kW
HAAT: 100.0 m
Channel: 283 C3
Frequency: 104.5 MHz
AMSL Height: 442.76 m
Elevation: 224.72 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: None

Exhibit 3

KZUL-FM 283C3 Proposed Antenna Site Contour Map



KZUL-FM

Proposed Antenna Site
Latitude: 34-33-06 N
Longitude: 114-11-37 W
ERP: 0.23 kW
HAAT: 814.0 m
Channel: 283 C3
Frequency: 104.5 MHz
AMSL Height: 1441 m
Elevation: 1431 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: None

KZUL-FM 283C3 Lake Havasu City, AZ
Antenna Site Channel Study

| | | |
|-------------------------------------|--------------------|-----------------|
| REFERENCE | CLASS = C3 Int = C | DISPLAY DATES |
| 34 33 06.0 N. | Current | DATA 03-24-07 |
| 114 11 37.0 W. | Spacings | SEARCH 03-24-07 |
| ----- Channel 283 - 104.5 MHz ----- | | |

| Call | Channel | Location | Azi | Dist | FCC | Margin |
|---|---------|------------------|-----|-------|--------|---------------|
| KZUL-FM LIC | 283C2 | Lake Havasu City | AZ | 0.0 | 0.00 | 177.0 -177.00 |
| Of No Concern: | | | | | | |
| Currently licensed KZUL-FM facility. | | | | | | |
| KZUL-FM PRO | 283C3 | Lake Havasu City | AZ | 237.3 | 13.93 | 153.0 -139.07 |
| Of Note: | | | | | | |
| Allotment Reference Coordinates for KZUL-FM's one-step downgrade to Channel 283C3. | | | | | | |
| KAJM PRO | 282C | Camp Verde | AZ | 99.7 | 170.30 | 176.0 -5.70 |
| Of Concern: | | | | | | |
| KZUL-FM requests Section 73.215 Contour Protection Processing towards the contingently proposed antenna site for KAJM 282C. | | | | | | |
| KAJM PRO | 282C | Camp Verde | AZ | 101.4 | 171.70 | 176.0 -4.30 |
| Of Note: | | | | | | |
| Contingently proposed Allotment Reference Coordinates for KAJM's one-step upgrade to Channel 282C. | | | | | | |
| KAJM CP -N | 282C0 | Camp Verde | AZ | 101.4 | 173.18 | 163.0 10.18 |
| RADD ADD | 280B | Essex | CA | 294.8 | 88.04 | 71.0 17.04 |
| KCYE LIC | 282C | North Las Vegas | NV | 323.3 | 197.05 | 176.0 21.05 |
| RDEL DEL | 280B | Essex | CA | 282.2 | 98.41 | 71.0 27.41 |
| 950921MK VAC | 280B | Essex | CA | 282.4 | 98.70 | 71.0 27.70 |
| AL0234 VAC | 286C2 | Ehrenberg | AZ | 188.0 | 84.18 | 56.0 28.18 |
| KCEC-FM LIC | 283C2 | Wellton | AZ | 183.7 | 208.81 | 177.0 31.81 |
| KRIT LIC | 230C3 | Parker | AZ | 191.8 | 46.46 | 14.0 32.46 |
| RADD ADD | 285C2 | Laughlin | NV | 327.1 | 92.84 | 56.0 36.84 |
| AP8665 APP | 229A | Mohave Valley | AZ | 326.3 | 55.68 | 12.0 43.68 |
| AP9338 APP | 285A | Cal-nev-ari | NV | 327.1 | 92.84 | 42.0 50.84 |
| RADD ADD | 284C | Mesa | AZ | 123.3 | 229.92 | 176.0 53.92 |

Exhibit 5

FMOVTEMP

03-24-2007 30 Sec. Terrain Data

KZUL-FM PROPOSED
Channel = 283C3
Max ERP = 0.23 kW
RCAMSL = 1441 M
N. Lat = 34 33 06
W. Lng = 114 11 37

Protected
60 dBu

KAJM PROPOSED
Channel = 282C
Max ERP = 41 kW
RCAMSL = 2385 M
N. Lat = 341403.0
W. Lng = 1122158.0

Interfering
54 dBu

| Azi muth (degrees) | ERP (kW) | HAAT (m) | Di st (km) | Azi muth (degrees) | ERP (kW) | HAAT (m) | Di st (km) | Actual (dBu) |
|-----------------------|-------------|-------------|---------------|-----------------------|-------------|-------------|---------------|-----------------|
| 048.0 | 000.2300 | 0743.1 | 035.7 | 293.2 | 041.0000 | 1000.1 | 153.2 | 50.1 |
| 049.0 | 000.2300 | 0741.7 | 035.7 | 293.1 | 041.0000 | 1000.1 | 152.6 | 50.2 |
| 050.0 | 000.2300 | 0740.4 | 035.6 | 293.0 | 041.0000 | 1000.1 | 152.1 | 50.4 |
| 051.0 | 000.2300 | 0739.0 | 035.6 | 292.9 | 041.0000 | 1000.1 | 151.6 | 50.5 |
| 052.0 | 000.2300 | 0737.8 | 035.5 | 292.7 | 041.0000 | 1000.1 | 151.1 | 50.6 |
| 053.0 | 000.2300 | 0736.9 | 035.5 | 292.6 | 041.0000 | 1000.1 | 150.5 | 50.8 |
| 054.0 | 000.2300 | 0736.2 | 035.5 | 292.5 | 041.0000 | 1006.6 | 150.0 | 51.0 |
| 055.0 | 000.2300 | 0735.7 | 035.5 | 292.3 | 041.0000 | 1006.6 | 149.5 | 51.1 |
| 056.0 | 000.2300 | 0735.2 | 035.5 | 292.2 | 041.0000 | 1006.6 | 149.0 | 51.2 |
| 057.0 | 000.2300 | 0734.5 | 035.5 | 292.1 | 041.0000 | 1006.6 | 148.5 | 51.3 |
| 058.0 | 000.2300 | 0733.7 | 035.4 | 291.9 | 041.0000 | 1006.6 | 148.0 | 51.5 |
| 059.0 | 000.2300 | 0732.7 | 035.4 | 291.7 | 041.0000 | 1006.6 | 147.6 | 51.6 |
| 060.0 | 000.2300 | 0731.3 | 035.4 | 291.6 | 041.0000 | 1006.6 | 147.1 | 51.7 |
| 061.0 | 000.2300 | 0729.4 | 035.3 | 291.4 | 041.0000 | 1011.4 | 146.7 | 51.9 |
| 062.0 | 000.2300 | 0727.1 | 035.2 | 291.2 | 041.0000 | 1011.4 | 146.3 | 52.0 |
| 063.0 | 000.2300 | 0724.6 | 035.2 | 291.1 | 041.0000 | 1011.4 | 145.8 | 52.1 |
| 064.0 | 000.2300 | 0722.1 | 035.1 | 290.9 | 041.0000 | 1011.4 | 145.5 | 52.2 |
| 065.0 | 000.2300 | 0719.7 | 035.0 | 290.7 | 041.0000 | 1011.4 | 145.1 | 52.3 |
| 066.0 | 000.2300 | 0717.6 | 035.0 | 290.5 | 041.0000 | 1013.4 | 144.7 | 52.4 |
| 067.0 | 000.2300 | 0715.7 | 034.9 | 290.3 | 041.0000 | 1013.4 | 144.3 | 52.5 |
| 068.0 | 000.2300 | 0714.1 | 034.9 | 290.1 | 041.0000 | 1013.4 | 143.9 | 52.6 |
| 069.0 | 000.2300 | 0712.6 | 034.8 | 289.9 | 041.0000 | 1013.4 | 143.6 | 52.7 |
| 070.0 | 000.2300 | 0711.2 | 034.8 | 289.7 | 041.0000 | 1013.4 | 143.2 | 52.8 |
| 071.0 | 000.2300 | 0709.6 | 034.7 | 289.5 | 041.0000 | 1013.4 | 142.9 | 52.9 |
| 072.0 | 000.2300 | 0707.7 | 034.7 | 289.3 | 041.0000 | 1013.7 | 142.6 | 53.0 |
| 073.0 | 000.2300 | 0705.5 | 034.6 | 289.1 | 041.0000 | 1013.7 | 142.3 | 53.1 |
| 074.0 | 000.2300 | 0703.2 | 034.6 | 288.9 | 041.0000 | 1013.7 | 142.0 | 53.1 |
| 075.0 | 000.2300 | 0700.5 | 034.5 | 288.6 | 041.0000 | 1013.7 | 141.7 | 53.2 |
| 076.0 | 000.2300 | 0697.4 | 034.4 | 288.4 | 041.0000 | 1013.6 | 141.5 | 53.3 |
| 077.0 | 000.2300 | 0693.9 | 034.3 | 288.2 | 041.0000 | 1013.6 | 141.3 | 53.3 |
| 078.0 | 000.2300 | 0690.0 | 034.2 | 287.9 | 041.0000 | 1013.6 | 141.1 | 53.4 |
| 079.0 | 000.2300 | 0685.7 | 034.1 | 287.7 | 041.0000 | 1013.6 | 140.9 | 53.4 |
| 080.0 | 000.2300 | 0681.4 | 033.9 | 287.5 | 041.0000 | 1013.9 | 140.7 | 53.5 |
| 081.0 | 000.2300 | 0677.0 | 033.8 | 287.2 | 041.0000 | 1013.9 | 140.6 | 53.5 |
| 082.0 | 000.2300 | 0672.8 | 033.7 | 287.0 | 041.0000 | 1013.9 | 140.5 | 53.5 |
| 083.0 | 000.2300 | 0668.9 | 033.6 | 286.8 | 041.0000 | 1013.9 | 140.3 | 53.6 |
| 084.0 | 000.2300 | 0665.7 | 033.5 | 286.5 | 041.0000 | 1013.9 | 140.2 | 53.6 |
| 085.0 | 000.2300 | 0664.6 | 033.4 | 286.3 | 041.0000 | 1014.8 | 140.0 | 53.7 |
| 086.0 | 000.2300 | 0663.8 | 033.4 | 286.1 | 041.0000 | 1014.8 | 139.8 | 53.7 |
| 087.0 | 000.2300 | 0663.5 | 033.4 | 285.8 | 041.0000 | 1014.8 | 139.7 | 53.8 |
| 088.0 | 000.2300 | 0663.0 | 033.4 | 285.6 | 041.0000 | 1014.8 | 139.5 | 53.8 |
| 089.0 | 000.2300 | 0662.4 | 033.4 | 285.4 | 041.0000 | 1015.0 | 139.4 | 53.8 |
| 090.0 | 000.2300 | 0661.7 | 033.4 | 285.1 | 041.0000 | 1015.0 | 139.2 | 53.9 |
| 091.0 | 000.2300 | 0660.9 | 033.3 | 284.9 | 041.0000 | 1015.0 | 139.1 | 53.9 |
| 092.0 | 000.2300 | 0655.2 | 033.2 | 284.6 | 041.0000 | 1015.0 | 139.2 | 53.9 |
| 093.0 | 000.2300 | 0646.6 | 032.9 | 284.4 | 041.0000 | 1015.7 | 139.3 | 53.9 |
| 094.0 | 000.2300 | 0637.8 | 032.7 | 284.1 | 041.0000 | 1015.7 | 139.4 | 53.8 |
| 095.0 | 000.2300 | 0628.7 | 032.4 | 283.9 | 041.0000 | 1015.7 | 139.6 | 53.8 |
| 096.0 | 000.2300 | 0618.4 | 032.1 | 283.6 | 041.0000 | 1015.7 | 139.9 | 53.7 |
| 097.0 | 000.2300 | 0609.6 | 031.8 | 283.4 | 041.0000 | 1015.5 | 140.0 | 53.7 |
| 098.0 | 000.2300 | 0602.9 | 031.6 | 283.2 | 041.0000 | 1015.5 | 140.2 | 53.6 |
| 099.0 | 000.2300 | 0598.2 | 031.5 | 282.9 | 041.0000 | 1015.5 | 140.3 | 53.6 |
| 100.0 | 000.2300 | 0595.5 | 031.4 | 282.7 | 041.0000 | 1015.5 | 140.3 | 53.6 |

Exhibit 5

| FMOVTEMP | | | | | | | | | |
|----------|----------|--------|-------|-------|----------|--------|-------|------|--|
| 101.0 | 000.2300 | 0594.5 | 031.4 | 282.5 | 041.0000 | 1013.5 | 140.4 | 53.6 | |
| 102.0 | 000.2300 | 0593.6 | 031.4 | 282.3 | 041.0000 | 1013.5 | 140.4 | 53.6 | |
| 103.0 | 000.2300 | 0593.8 | 031.4 | 282.0 | 041.0000 | 1013.5 | 140.4 | 53.6 | |
| 104.0 | 000.2300 | 0594.4 | 031.4 | 281.8 | 041.0000 | 1013.5 | 140.4 | 53.6 | |
| 105.0 | 000.2300 | 0596.0 | 031.4 | 281.6 | 041.0000 | 1013.5 | 140.4 | 53.6 | |
| 106.0 | 000.2300 | 0597.6 | 031.5 | 281.4 | 041.0000 | 1012.7 | 140.4 | 53.5 | |
| 107.0 | 000.2300 | 0597.0 | 031.5 | 281.1 | 041.0000 | 1012.7 | 140.5 | 53.5 | |
| 108.0 | 000.2300 | 0594.2 | 031.4 | 280.9 | 041.0000 | 1012.7 | 140.6 | 53.5 | |
| 109.0 | 000.2300 | 0587.2 | 031.2 | 280.7 | 041.0000 | 1012.7 | 140.9 | 53.4 | |
| 110.0 | 000.2300 | 0579.4 | 031.0 | 280.5 | 041.0000 | 1012.7 | 141.2 | 53.3 | |
| 111.0 | 000.2300 | 0573.8 | 030.8 | 280.3 | 041.0000 | 1011.7 | 141.5 | 53.3 | |
| 112.0 | 000.2300 | 0572.2 | 030.8 | 280.1 | 041.0000 | 1011.7 | 141.6 | 53.2 | |
| 113.0 | 000.2300 | 0577.1 | 030.9 | 279.9 | 041.0000 | 1011.7 | 141.6 | 53.2 | |
| 114.0 | 000.2300 | 0586.4 | 031.2 | 279.6 | 041.0000 | 1011.7 | 141.5 | 53.2 | |
| 115.0 | 000.2300 | 0597.1 | 031.5 | 279.4 | 041.0000 | 1011.6 | 141.4 | 53.3 | |
| 116.0 | 000.2300 | 0608.6 | 031.8 | 279.1 | 041.0000 | 1011.6 | 141.2 | 53.3 | |
| 117.0 | 000.2300 | 0620.8 | 032.2 | 278.9 | 041.0000 | 1011.6 | 141.1 | 53.4 | |
| 118.0 | 000.2300 | 0634.8 | 032.6 | 278.6 | 041.0000 | 1011.6 | 140.9 | 53.4 | |
| 119.0 | 000.2300 | 0649.9 | 033.0 | 278.3 | 041.0000 | 1012.3 | 140.6 | 53.5 | |
| 120.0 | 000.2300 | 0663.7 | 033.4 | 278.0 | 041.0000 | 1012.3 | 140.5 | 53.5 | |
| 121.0 | 000.2300 | 0673.8 | 033.7 | 277.8 | 041.0000 | 1012.3 | 140.5 | 53.5 | |
| 122.0 | 000.2300 | 0681.3 | 033.9 | 277.5 | 041.0000 | 1012.3 | 140.5 | 53.5 | |
| 123.0 | 000.2300 | 0687.0 | 034.1 | 277.3 | 041.0000 | 1010.9 | 140.6 | 53.5 | |
| 124.0 | 000.2300 | 0692.0 | 034.2 | 277.0 | 041.0000 | 1010.9 | 140.8 | 53.4 | |
| 125.0 | 000.2300 | 0696.4 | 034.4 | 276.8 | 041.0000 | 1010.9 | 140.9 | 53.4 | |
| 126.0 | 000.2300 | 0699.9 | 034.5 | 276.5 | 041.0000 | 1010.9 | 141.2 | 53.3 | |
| 127.0 | 000.2300 | 0702.2 | 034.5 | 276.3 | 041.0000 | 1008.9 | 141.4 | 53.2 | |
| 128.0 | 000.2300 | 0703.5 | 034.6 | 276.1 | 041.0000 | 1008.9 | 141.7 | 53.2 | |
| 129.0 | 000.2300 | 0704.6 | 034.6 | 275.9 | 041.0000 | 1008.9 | 142.0 | 53.1 | |
| 130.0 | 000.2300 | 0706.2 | 034.6 | 275.7 | 041.0000 | 1008.9 | 142.3 | 53.0 | |
| 131.0 | 000.2300 | 0708.9 | 034.7 | 275.5 | 041.0000 | 1007.5 | 142.6 | 52.9 | |
| 132.0 | 000.2300 | 0712.5 | 034.8 | 275.2 | 041.0000 | 1007.5 | 142.9 | 52.8 | |
| 133.0 | 000.2300 | 0716.5 | 034.9 | 275.0 | 041.0000 | 1007.5 | 143.2 | 52.8 | |
| 134.0 | 000.2300 | 0720.7 | 035.1 | 274.8 | 041.0000 | 1007.5 | 143.5 | 52.7 | |
| 135.0 | 000.2300 | 0725.2 | 035.2 | 274.6 | 041.0000 | 1007.5 | 143.8 | 52.6 | |
| 136.0 | 000.2300 | 0730.2 | 035.3 | 274.4 | 041.0000 | 1006.4 | 144.1 | 52.5 | |
| 137.0 | 000.2300 | 0735.7 | 035.5 | 274.1 | 041.0000 | 1006.4 | 144.4 | 52.4 | |
| 138.0 | 000.2300 | 0741.2 | 035.6 | 273.9 | 041.0000 | 1006.4 | 144.7 | 52.3 | |
| 139.0 | 000.2300 | 0746.0 | 035.8 | 273.7 | 041.0000 | 1006.4 | 145.1 | 52.3 | |
| 140.0 | 000.2300 | 0750.0 | 035.9 | 273.5 | 041.0000 | 1006.4 | 145.4 | 52.2 | |
| 141.0 | 000.2300 | 0752.8 | 036.0 | 273.3 | 041.0000 | 1004.6 | 145.9 | 52.0 | |
| 142.0 | 000.2300 | 0754.6 | 036.0 | 273.1 | 041.0000 | 1004.6 | 146.3 | 51.9 | |
| 143.0 | 000.2300 | 0755.4 | 036.0 | 273.0 | 041.0000 | 1004.6 | 146.8 | 51.8 | |
| 144.0 | 000.2300 | 0755.9 | 036.1 | 272.8 | 041.0000 | 1004.6 | 147.3 | 51.7 | |
| 145.0 | 000.2300 | 0756.6 | 036.1 | 272.7 | 041.0000 | 1004.6 | 147.7 | 51.5 | |
| 146.0 | 000.2300 | 0758.1 | 036.1 | 272.5 | 041.0000 | 1004.6 | 148.2 | 51.4 | |
| 147.0 | 000.2300 | 0760.3 | 036.2 | 272.3 | 041.0000 | 1003.1 | 148.7 | 51.3 | |
| 148.0 | 000.2300 | 0762.8 | 036.2 | 272.2 | 041.0000 | 1003.1 | 149.2 | 51.1 | |
| 149.0 | 000.2300 | 0765.1 | 036.3 | 272.0 | 041.0000 | 1003.1 | 149.7 | 51.0 | |
| 150.0 | 000.2300 | 0767.1 | 036.4 | 271.9 | 041.0000 | 1003.1 | 150.2 | 50.9 | |
| 151.0 | 000.2300 | 0769.5 | 036.4 | 271.7 | 041.0000 | 1003.1 | 150.7 | 50.8 | |

FMOVTEMP

03-24-2007 30 Sec. Terrain Data

KAJM PROPOSED
 Channel = 282C
 Max ERP = 41 kW
 RCAMSL = 2385 M
 N. Lat = 341403.0
 W. Lng = 1122158.0

KZUL-FM PROPOSED
 Channel = 283C3
 Max ERP = 0.23 kW
 RCAMSL = 1441 M
 N. Lat = 34 33 06
 W. Lng = 114 11 37

Protected
 60 dBu

Interfering
 54 dBu

| Azi muth (degrees) | ERP (kW) | HAAT (m) | Di st (km) | Azi muth (degrees) | ERP (kW) | HAAT (m) | Di st (km) | Actual (dBu) |
|-----------------------|-------------|-------------|---------------|-----------------------|-------------|-------------|---------------|-----------------|
| 222.0 | 041.0000 | 0886.0 | 092.3 | 134.0 | 000.2300 | 0720.7 | 148.9 | 25.9 |
| 223.0 | 041.0000 | 0889.4 | 092.4 | 134.0 | 000.2300 | 0720.7 | 147.4 | 26.3 |
| 224.0 | 041.0000 | 0891.8 | 092.5 | 134.1 | 000.2300 | 0720.7 | 145.8 | 26.7 |
| 225.0 | 041.0000 | 0894.5 | 092.5 | 134.1 | 000.2300 | 0720.7 | 144.2 | 27.2 |
| 226.0 | 041.0000 | 0899.1 | 092.6 | 134.1 | 000.2300 | 0720.7 | 142.5 | 27.6 |
| 227.0 | 041.0000 | 0905.5 | 092.8 | 134.2 | 000.2300 | 0720.7 | 140.9 | 28.0 |
| 228.0 | 041.0000 | 0912.7 | 093.0 | 134.2 | 000.2300 | 0720.7 | 139.3 | 28.4 |
| 229.0 | 041.0000 | 0920.3 | 093.2 | 134.3 | 000.2300 | 0720.7 | 137.6 | 28.9 |
| 230.0 | 041.0000 | 0928.1 | 093.4 | 134.3 | 000.2300 | 0720.7 | 136.0 | 29.3 |
| 231.0 | 041.0000 | 0935.7 | 093.6 | 134.3 | 000.2300 | 0720.7 | 134.3 | 29.8 |
| 232.0 | 041.0000 | 0943.0 | 093.7 | 134.3 | 000.2300 | 0720.7 | 132.7 | 30.2 |
| 233.0 | 041.0000 | 0949.9 | 093.9 | 134.3 | 000.2300 | 0720.7 | 131.0 | 30.7 |
| 234.0 | 041.0000 | 0955.9 | 094.0 | 134.2 | 000.2300 | 0720.7 | 129.4 | 31.1 |
| 235.0 | 041.0000 | 0960.9 | 094.2 | 134.2 | 000.2300 | 0720.7 | 127.7 | 31.6 |
| 236.0 | 041.0000 | 0964.9 | 094.3 | 134.1 | 000.2300 | 0720.7 | 126.1 | 32.0 |
| 237.0 | 041.0000 | 0968.9 | 094.4 | 134.0 | 000.2300 | 0720.7 | 124.5 | 32.5 |
| 238.0 | 041.0000 | 0973.5 | 094.5 | 133.8 | 000.2300 | 0720.7 | 122.8 | 32.9 |
| 239.0 | 041.0000 | 0978.7 | 094.6 | 133.7 | 000.2300 | 0720.7 | 121.2 | 33.4 |
| 240.0 | 041.0000 | 0984.1 | 094.7 | 133.6 | 000.2300 | 0720.7 | 119.6 | 33.8 |
| 241.0 | 041.0000 | 0988.4 | 094.8 | 133.4 | 000.2300 | 0716.5 | 117.9 | 34.2 |
| 242.0 | 041.0000 | 0990.5 | 094.9 | 133.1 | 000.2300 | 0716.5 | 116.3 | 34.7 |
| 243.0 | 041.0000 | 0990.0 | 094.8 | 132.9 | 000.2300 | 0716.5 | 114.8 | 35.1 |
| 244.0 | 041.0000 | 0987.2 | 094.8 | 132.6 | 000.2300 | 0716.5 | 113.2 | 35.5 |
| 245.0 | 041.0000 | 0984.2 | 094.7 | 132.2 | 000.2300 | 0712.5 | 111.7 | 35.9 |
| 246.0 | 041.0000 | 0983.1 | 094.7 | 131.9 | 000.2300 | 0712.5 | 110.2 | 36.3 |
| 247.0 | 041.0000 | 0984.0 | 094.7 | 131.5 | 000.2300 | 0712.5 | 108.7 | 36.7 |
| 248.0 | 041.0000 | 0985.7 | 094.7 | 131.2 | 000.2300 | 0708.9 | 107.2 | 37.1 |
| 249.0 | 041.0000 | 0986.0 | 094.8 | 130.8 | 000.2300 | 0708.9 | 105.7 | 37.5 |
| 250.0 | 041.0000 | 0985.5 | 094.7 | 130.3 | 000.2300 | 0706.2 | 104.2 | 37.9 |
| 251.0 | 041.0000 | 0984.2 | 094.7 | 129.9 | 000.2300 | 0706.2 | 102.8 | 38.3 |
| 252.0 | 041.0000 | 0984.6 | 094.7 | 129.4 | 000.2300 | 0704.6 | 101.4 | 38.7 |
| 253.0 | 041.0000 | 0989.5 | 094.8 | 128.9 | 000.2300 | 0704.6 | 099.9 | 39.1 |
| 254.0 | 041.0000 | 0997.7 | 095.0 | 128.5 | 000.2300 | 0703.5 | 098.5 | 39.5 |
| 255.0 | 041.0000 | 1006.1 | 095.2 | 128.0 | 000.2300 | 0703.5 | 097.0 | 39.9 |
| 256.0 | 041.0000 | 1012.9 | 095.4 | 127.5 | 000.2300 | 0702.2 | 095.6 | 40.3 |
| 257.0 | 041.0000 | 1013.4 | 095.4 | 126.9 | 000.2300 | 0702.2 | 094.3 | 40.7 |
| 258.0 | 041.0000 | 1010.5 | 095.3 | 126.2 | 000.2300 | 0699.9 | 093.0 | 41.1 |
| 259.0 | 041.0000 | 1006.9 | 095.2 | 125.4 | 000.2300 | 0696.4 | 091.9 | 41.4 |
| 260.0 | 041.0000 | 1003.2 | 095.1 | 124.7 | 000.2300 | 0696.4 | 090.7 | 41.7 |
| 261.0 | 041.0000 | 1001.2 | 095.1 | 123.9 | 000.2300 | 0692.0 | 089.6 | 42.0 |
| 262.0 | 041.0000 | 1001.2 | 095.1 | 123.1 | 000.2300 | 0687.0 | 088.5 | 42.3 |
| 263.0 | 041.0000 | 1001.2 | 095.1 | 122.3 | 000.2300 | 0681.3 | 087.4 | 42.6 |
| 264.0 | 041.0000 | 1000.8 | 095.1 | 121.4 | 000.2300 | 0673.8 | 086.3 | 42.8 |
| 265.0 | 041.0000 | 1000.0 | 095.1 | 120.5 | 000.2300 | 0673.8 | 085.3 | 43.1 |
| 266.0 | 041.0000 | 0999.5 | 095.1 | 119.6 | 000.2300 | 0663.7 | 084.4 | 43.2 |
| 267.0 | 041.0000 | 0998.9 | 095.0 | 118.7 | 000.2300 | 0649.9 | 083.5 | 43.3 |
| 268.0 | 041.0000 | 0998.0 | 095.0 | 117.7 | 000.2300 | 0634.8 | 082.7 | 43.3 |
| 269.0 | 041.0000 | 0997.7 | 095.0 | 116.7 | 000.2300 | 0620.8 | 081.8 | 43.4 |
| 270.0 | 041.0000 | 0999.8 | 095.1 | 115.6 | 000.2300 | 0608.6 | 081.0 | 43.4 |
| 271.0 | 041.0000 | 1001.5 | 095.1 | 114.6 | 000.2300 | 0597.1 | 080.3 | 43.5 |
| 272.0 | 041.0000 | 1003.1 | 095.1 | 113.5 | 000.2300 | 0577.1 | 079.6 | 43.3 |
| 273.0 | 041.0000 | 1004.6 | 095.2 | 112.4 | 000.2300 | 0572.2 | 079.0 | 43.4 |
| 274.0 | 041.0000 | 1006.4 | 095.2 | 111.2 | 000.2300 | 0573.8 | 078.4 | 43.6 |

| FMOVTEMP | | | | | | | | | |
|----------|----------|--------|-------|-------|----------|--------|-------|------|--|
| 275.0 | 041.0000 | 1007.5 | 095.2 | 110.1 | 000.2300 | 0579.4 | 077.9 | 43.9 | |
| 276.0 | 041.0000 | 1008.9 | 095.3 | 108.9 | 000.2300 | 0587.2 | 077.5 | 44.2 | |
| 277.0 | 041.0000 | 1010.9 | 095.3 | 107.7 | 000.2300 | 0594.2 | 077.1 | 44.5 | |
| 278.0 | 041.0000 | 1012.3 | 095.4 | 106.5 | 000.2300 | 0597.6 | 076.7 | 44.6 | |
| 279.0 | 041.0000 | 1011.6 | 095.3 | 105.2 | 000.2300 | 0596.0 | 076.5 | 44.7 | |
| 280.0 | 041.0000 | 1011.7 | 095.3 | 104.0 | 000.2300 | 0594.4 | 076.3 | 44.7 | |
| 281.0 | 041.0000 | 1012.7 | 095.4 | 102.7 | 000.2300 | 0593.8 | 076.2 | 44.7 | |
| 282.0 | 041.0000 | 1013.5 | 095.4 | 101.5 | 000.2300 | 0594.5 | 076.2 | 44.7 | |
| 283.0 | 041.0000 | 1015.5 | 095.4 | 100.2 | 000.2300 | 0595.5 | 076.1 | 44.8 | |
| 284.0 | 041.0000 | 1015.7 | 095.4 | 099.0 | 000.2300 | 0598.2 | 076.2 | 44.8 | |
| 285.0 | 041.0000 | 1015.0 | 095.4 | 097.7 | 000.2300 | 0602.9 | 076.4 | 44.8 | |
| 286.0 | 041.0000 | 1014.8 | 095.4 | 096.5 | 000.2300 | 0618.4 | 076.6 | 45.0 | |
| 287.0 | 041.0000 | 1013.9 | 095.4 | 095.3 | 000.2300 | 0628.7 | 076.9 | 45.0 | |
| 288.0 | 041.0000 | 1013.6 | 095.4 | 094.0 | 000.2300 | 0637.8 | 077.3 | 45.1 | |
| 289.0 | 041.0000 | 1013.7 | 095.4 | 092.8 | 000.2300 | 0646.6 | 077.7 | 45.1 | |
| 290.0 | 041.0000 | 1013.4 | 095.4 | 091.7 | 000.2300 | 0655.2 | 078.2 | 45.1 | |
| 291.0 | 041.0000 | 1011.4 | 095.3 | 090.5 | 000.2300 | 0660.9 | 078.8 | 45.0 | |
| 292.0 | 041.0000 | 1006.6 | 095.2 | 089.4 | 000.2300 | 0662.4 | 079.5 | 44.8 | |
| 293.0 | 041.0000 | 1000.1 | 095.1 | 088.4 | 000.2300 | 0663.0 | 080.2 | 44.5 | |
| 294.0 | 041.0000 | 0993.2 | 094.9 | 087.3 | 000.2300 | 0663.5 | 081.1 | 44.3 | |
| 295.0 | 041.0000 | 0986.7 | 094.8 | 086.4 | 000.2300 | 0663.8 | 082.0 | 44.0 | |
| 296.0 | 041.0000 | 0980.5 | 094.6 | 085.4 | 000.2300 | 0664.6 | 082.9 | 43.7 | |
| 297.0 | 041.0000 | 0975.6 | 094.5 | 084.5 | 000.2300 | 0665.7 | 083.8 | 43.5 | |
| 298.0 | 041.0000 | 0972.8 | 094.4 | 083.5 | 000.2300 | 0665.7 | 084.8 | 43.2 | |
| 299.0 | 041.0000 | 0972.6 | 094.4 | 082.6 | 000.2300 | 0668.9 | 085.7 | 42.9 | |
| 300.0 | 041.0000 | 0973.6 | 094.5 | 081.7 | 000.2300 | 0672.8 | 086.7 | 42.7 | |
| 301.0 | 041.0000 | 0974.6 | 094.5 | 080.9 | 000.2300 | 0677.0 | 087.7 | 42.4 | |
| 302.0 | 041.0000 | 0974.5 | 094.5 | 080.1 | 000.2300 | 0681.4 | 088.7 | 42.1 | |
| 303.0 | 041.0000 | 0973.1 | 094.5 | 079.3 | 000.2300 | 0685.7 | 089.9 | 41.8 | |
| 304.0 | 041.0000 | 0971.1 | 094.4 | 078.5 | 000.2300 | 0685.7 | 091.0 | 41.5 | |
| 305.0 | 041.0000 | 0968.6 | 094.4 | 077.8 | 000.2300 | 0690.0 | 092.2 | 41.2 | |
| 306.0 | 041.0000 | 0965.2 | 094.3 | 077.2 | 000.2300 | 0693.9 | 093.5 | 40.8 | |
| 307.0 | 041.0000 | 0960.1 | 094.1 | 076.6 | 000.2300 | 0693.9 | 094.8 | 40.4 | |
| 308.0 | 041.0000 | 0953.1 | 094.0 | 076.0 | 000.2300 | 0697.4 | 096.2 | 40.1 | |
| 309.0 | 041.0000 | 0945.3 | 093.8 | 075.5 | 000.2300 | 0697.4 | 097.6 | 39.7 | |
| 310.0 | 041.0000 | 0938.3 | 093.6 | 075.0 | 000.2300 | 0700.5 | 099.0 | 39.3 | |
| 311.0 | 041.0000 | 0933.3 | 093.5 | 074.6 | 000.2300 | 0700.5 | 100.4 | 38.9 | |
| 312.0 | 041.0000 | 0929.7 | 093.4 | 074.1 | 000.2300 | 0703.2 | 101.8 | 38.5 | |
| 313.0 | 041.0000 | 0925.0 | 093.3 | 073.6 | 000.2300 | 0703.2 | 103.2 | 38.1 | |
| 314.0 | 041.0000 | 0917.1 | 093.1 | 073.3 | 000.2300 | 0705.5 | 104.7 | 37.7 | |
| 315.0 | 041.0000 | 0906.6 | 092.8 | 073.0 | 000.2300 | 0705.5 | 106.3 | 37.3 | |
| 316.0 | 041.0000 | 0896.2 | 092.6 | 072.7 | 000.2300 | 0705.5 | 107.8 | 36.9 | |
| 317.0 | 041.0000 | 0887.9 | 092.3 | 072.4 | 000.2300 | 0707.7 | 109.4 | 36.5 | |
| 318.0 | 041.0000 | 0881.9 | 092.2 | 072.1 | 000.2300 | 0707.7 | 110.9 | 36.1 | |
| 319.0 | 041.0000 | 0876.4 | 092.0 | 071.9 | 000.2300 | 0707.7 | 112.4 | 35.7 | |
| 320.0 | 041.0000 | 0868.2 | 091.8 | 071.6 | 000.2300 | 0707.7 | 114.0 | 35.2 | |
| 321.0 | 041.0000 | 0855.7 | 091.4 | 071.5 | 000.2300 | 0707.7 | 115.6 | 34.8 | |
| 322.0 | 041.0000 | 0841.0 | 091.0 | 071.4 | 000.2300 | 0709.6 | 117.2 | 34.3 | |
| 323.0 | 041.0000 | 0828.1 | 090.6 | 071.4 | 000.2300 | 0709.6 | 118.8 | 33.9 | |
| 324.0 | 041.0000 | 0818.9 | 090.3 | 071.2 | 000.2300 | 0709.6 | 120.4 | 33.4 | |
| 325.0 | 041.0000 | 0812.5 | 090.1 | 071.1 | 000.2300 | 0709.6 | 122.0 | 33.0 | |
| 326.0 | 041.0000 | 0805.1 | 089.9 | 071.0 | 000.2300 | 0709.6 | 123.5 | 32.6 | |
| 327.0 | 041.0000 | 0795.1 | 089.6 | 070.9 | 000.2300 | 0709.6 | 125.1 | 32.1 | |
| 328.0 | 041.0000 | 0783.7 | 089.2 | 070.9 | 000.2300 | 0709.6 | 126.7 | 31.7 | |
| 329.0 | 041.0000 | 0772.6 | 088.9 | 070.9 | 000.2300 | 0709.6 | 128.3 | 31.3 | |
| 330.0 | 041.0000 | 0760.5 | 088.5 | 071.0 | 000.2300 | 0709.6 | 129.9 | 30.8 | |
| 331.0 | 041.0000 | 0745.6 | 088.0 | 071.0 | 000.2300 | 0709.6 | 131.5 | 30.4 | |
| 332.0 | 041.0000 | 0729.3 | 087.4 | 071.1 | 000.2300 | 0709.6 | 133.1 | 30.0 | |
| 333.0 | 041.0000 | 0714.8 | 086.9 | 071.2 | 000.2300 | 0709.6 | 134.7 | 29.5 | |
| 334.0 | 041.0000 | 0703.0 | 086.5 | 071.3 | 000.2300 | 0709.6 | 136.2 | 29.1 | |
| 335.0 | 041.0000 | 0691.7 | 086.1 | 071.4 | 000.2300 | 0709.6 | 137.8 | 28.7 | |
| 336.0 | 041.0000 | 0681.0 | 085.8 | 071.5 | 000.2300 | 0709.6 | 139.3 | 28.3 | |
| 337.0 | 041.0000 | 0671.2 | 085.4 | 071.6 | 000.2300 | 0707.7 | 140.8 | 27.9 | |
| 338.0 | 041.0000 | 0661.5 | 085.1 | 071.6 | 000.2300 | 0707.7 | 142.3 | 27.5 | |
| 339.0 | 041.0000 | 0651.6 | 084.7 | 071.7 | 000.2300 | 0707.7 | 143.8 | 27.1 | |
| 340.0 | 041.0000 | 0642.4 | 084.4 | 071.8 | 000.2300 | 0707.7 | 145.3 | 26.7 | |
| 341.0 | 041.0000 | 0635.9 | 084.1 | 071.9 | 000.2300 | 0707.7 | 146.8 | 26.3 | |
| 342.0 | 041.0000 | 0630.1 | 083.9 | 072.0 | 000.2300 | 0707.7 | 148.3 | 25.9 | |