7136 S Yale Ave
Suite 501
Tulsa, OK 74133

o 918.664.4581
f 918.664.3066

www.iHeartMedia.com
www.iHeartRadio.com
#iheartradio

December 10, 2020

*VIA EMAIL*

Ms. Marlene H. Dortch, Secretary
Federal Communications Commission
445 Twelfth Street, S.W.
Washington, DC 20554

RE: Clear Channel Broadcasting Licenses, Inc. (FRN No. 0001587971)
Application for New License on FCC Form 302-AM
WESC (AM), 660 kHz, Greenville, SC; Facility ID No. 4678

Dear Ms. Dortch:

On behalf of Clear Channel Broadcasting Licenses, Inc., the licensee of the above-referenced station, enclosed is copy of an application for New License submitted on FCC Form 302-AM.

Also enclosed is Form 159, Remittance Advice, with credit card payment of the $725.00 filing fee.

Please contact the undersigned with any communications concerning this application.

Respectfully submitted,
Clear Channel Broadcasting Licenses, Inc

By: _____
Stephen G. Davis
Senior Vice President, RE, Facilities & Corp Dev.

cc: Public Inspection File

# Online Payment Information

| | |
|---|---|
| Total Amount | $725.00 |
| Payer FRN | 0001587971 |
| Payer Name | Clear Channel Broadcasting Licenses, Inc. |
| Remittance ID | 3489197 |
| Treasury Tracking ID | 26QMD9JT |

Thank you for your payment!

Federal Communications Commission
Washington, D. C. 20554

Approved by OMB
3060-0627
Expires 01/31/98

FOR FCC USE ONLY

# FCC 302-AM
# APPLICATION FOR AM BROADCAST STATION LICENSE

(Please read instructions before filling out form.)

**FOR COMMISSION USE ONLY**

**FILE NO.**

## SECTION I - APPLICANT FEE INFORMATION

1. PAYOR NAME (Last, First, Middle Initial)

CLEAR CHANNEL BROADCASTING LICENSES, INC

MAILING ADDRESS (Line 1) (Maximum 35 characters)
7136 S YALE

MAILING ADDRESS (Line 2) (Maximum 35 characters)
SUITE 501

| CITY | STATE OR COUNTRY (if foreign address) | ZIP CODE |
|---|---|---|
| TULSA | OK | 74136 |

| TELEPHONE NUMBER (include area code) | CALL LETTERS | OTHER FCC IDENTIFIER (If applicable) |
|---|---|---|
| 918-664-4611 | WESC | 4678 |

2. A. Is a fee submitted with this application? [✔] Yes [ ] No

B. If No, indicate reason for fee exemption (see 47 C.F.R. Section

[ ] Governmental Entity [ ] Noncommercial educational licensee [ ] Other (Please explain):

C. If Yes, provide the following information:

Enter in Column (A) the correct Fee Type Code for the service you are applying for. Fee Type Codes may be found in the "Mass Media Services Fee Filing Guide." Column (B) lists the Fee Multiple applicable for this application. Enter fee amount due in Column (C).

| (A) FEE TYPE CODE | (B) FEE MULTIPLE | (C) FEE DUE FOR FEE TYPE CODE IN COLUMN (A) | FOR FCC USE ONLY |
|---|---|---|---|
| M M R | 0 0 0 1 | $ 725.00 | |

To be used only when you are requesting concurrent actions which result in a requirement to list more than one Fee Type Code.

| (A) | (B) | (C) | FOR FCC USE ONLY |
|---|---|---|---|
| | 0 0 0 1 | $ | |

ADD ALL AMOUNTS SHOWN IN COLUMN C,
AND ENTER THE TOTAL HERE.
THIS AMOUNT SHOULD EQUAL YOUR ENCLOSED REMITTANCE.

| TOTAL AMOUNT REMITTED WITH THIS APPLICATION | FOR FCC USE ONLY |
|---|---|
| $ 725.00 | |

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| SECTION II - APPLICANT INFORMATION | | |
|---|---|---|
| 1. NAME OF APPLICANT<br>CLEAR CHANNEL BROADCASTING LICENSES, INC | | |
| MAILING ADDRESS<br>7136 S YALE SUITE 501 | | |
| CITY<br>TULSA | STATE<br>OK | ZIP CODE<br>74136 |

2. This application is for:

☑ Commercial ☐ Noncommercial

☐ AM Directional ☑ AM Non-Directional

| Call letters | Community of License | Construction Permit File No. | Modification of Construction Permit File No(s). | Expiration Date of Last Construction Permit |
|---|---|---|---|---|
| WESC | GREENVILLE, SC | BP-20200212AAH | | |

3. Is the station now operating pursuant to automatic program test authority in accordance with 47 C.F.R. Section 73.1620?

☐ Yes ☑ No

If No, explain in an Exhibit.

Exhibit No. Tech Exhibit

4. Have all the terms, conditions, and obligations set forth in the above described construction permit been fully met?

☑ Yes ☐ No

If No, state exceptions in an Exhibit.

Exhibit No.

5. Apart from the changes already reported, has any cause or circumstance arisen since the grant of the underlying construction permit which would result in any statement or representation contained in the construction permit application to be now incorrect?

☐ Yes ☑ No

If Yes, explain in an Exhibit.

Exhibit No.

6. Has the permittee filed its Ownership Report (FCC Form 323) or ownership certification in accordance with 47 C.F.R. Section 73.3615(b)?

☑ Yes ☐ No

☐ Does not apply

If No, explain in an Exhibit.

Exhibit No.

7. Has an adverse finding been made or an adverse final action been taken by any court or administrative body with respect to the applicant or parties to the application in a civil or criminal proceeding, brought under the provisions of any law relating to the following: any felony; mass media related antitrust or unfair competition; fraudulent statements to another governmental unit; or discrimination?

☐ Yes ☑ No

If the answer is Yes, attach as an Exhibit a full disclosure of the persons and matters involved, including an identification of the court or administrative body and the proceeding (by dates and file numbers), and the disposition of the litigation. Where the requisite information has been earlier disclosed in connection with another application or as required by 47 U.S.C. Section 1.65(c), the applicant need only provide: (i) an identification of that previous submission by reference to the file number in the case of an application, the call letters of the station regarding which the application or Section 1.65 information was filed, and the date of filing; and (ii) the disposition of the previously reported matter.

Exhibit No.



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8. Does the applicant, or any party to the application, have a petition on file to migrate to the expanded band (1605-1705 kHz) or a permit or license either in the existing band or expanded band that is held in combination (pursuant to the 5 year holding period allowed) with the AM facility proposed to be modified herein?

☐ Yes ☑ No

If Yes, provide particulars as an Exhibit.

Exhibit No.

The APPLICANT hereby waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because use of the same, whether by license or otherwise, and requests and authorization in accordance with this application. (See Section 304 of the Communications Act of 1934, as amended).

The APPLICANT acknowledges that all the statements made in this application and attached exhibits are considered material representations and that all the exhibits are a material part hereof and are incorporated herein as set out in full in

## CERTIFICATION

1. By checking Yes, the applicant certifies, that, in the case of an individual applicant, he or she is not subject to a denial of federal benefits that includes FCC benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. Section 862, or, in the case of a non-individual applicant (e.g., corporation, partnership or other unincorporated association), no party to the application is subject to a denial of federal benefits that includes FCC benefits pursuant to that section. For the definition of a "party" for these purposes, see 47 C.F.R. Section 1.2002(b).

☑ Yes ☐ No

2. I certify that the statements in this application are true, complete, and correct to the best of my knowledge and belief, and are made in good faith.

| Name | Signature | |
|---|---|---|
| Stephen G Davis | | |
| Title | Date | Telephone Number |
| SVP, RE, Facilities & Corp Development | 12/10/2020 | 918-664-4581 |

**WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION**

FCC NOTICE TO INDIVIDUALS REQUIRED BY THE PRIVACY ACT AND THE PAPERWORK REDUCTION ACT

The solicitation of personal information requested in this application is authorized by the Communications Act of 1934, as amended. The Commission will use the information provided in this form to determine whether grant of the application is in the public interest. In reaching that determination, or for law enforcement purposes, it may become necessary to refer personal information contained in this form to another government agency. In addition, all information provided in this form will be available for public inspection. If information requested on the form is not provided, the application may be returned without action having been taken upon it or its processing may be delayed while a request is made to provide the missing information. Your response is required to obtain the requested authorization.

Public reporting burden for this collection of information is estimated to average 639 hours and 53 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, can be sent to the Federal Communications Commission, Records Management Branch, Paperwork Reduction Project (3060-0627), Washington, D. C. 20554. Do NOT send completed forms to this address.

THE FOREGOING NOTICE IS REQUIRED BY THE PRIVACY ACT OF 1974, P.L. 93-579, DECEMBER 31, 1974, 5 U.S.C. 552a(e)(3), AND THE PAPERWORK REDUCTION ACT OF 1980, P.L. 96-511, DECEMBER 11, 1980, 44 U.S.C. 3507.

**SECTION III - LICENSE APPLICATION ENGINEERING DATA**

Name of Applicant
CLEARCHANNEL BROADCASTING LICENSES, INC

PURPOSE OF AUTHORIZATION APPLIED FOR: (check one)

☑ Station License ☐ Direct Measurement of Power

1. Facilities authorized in construction permit

| Call Sign | File No. of Construction Permit (if applicable) | Frequency (kHz) | Hours of Operation | Power in kilowatts | |
|---|---|---|---|---|---|
| | | | | Night | Day |
| WESC | BP-20200212AAH | 660 | DAY | NA | 5.0 |

2. Station location

| State | City or Town |
|---|---|
| SOUTH CAROLINA | GREENVILLE |

3. Transmitter location

| State | County | City or Town | Street address (or other identification) |
|---|---|---|---|
| SC | GREENVILLE | GREENVILLE | 737 Saluda Lake Road |

4. Main studio location

| State | County | City or Town | Street address (or other identification) |
|---|---|---|---|
| SC | GREENVILLE | GREENVILLE | 101 N Main St, Suite 1000 |

5. Remote control point location (specify only if authorized directional antenna)

| State | County | City or Town | Street address (or other identification) |
|---|---|---|---|
| SC | GREENVILLE | GREENVILLE | 101 N Main St, Suite 1000 |

6. Has type-approved stereo generating equipment been installed? ☐ Yes ☑ No

7. Does the sampling system meet the requirements of 47 C.F.R. Section 73.68? ☐ Yes ☐ No ☑ Not Applicable

Attach as an Exhibit a detailed description of the sampling system as installed. Exhibit No.

8. Operating constants:

| RF common point or antenna current (in amperes) without modulation for night system | RF common point or antenna current (in amperes) without modulation for day system |
|---|---|
| NA | 8.53 |

| Measured antenna or common point resistance (in ohms) at operating frequency | | Measured antenna or common point reactance (in ohms) at operating frequency | |
|---|---|---|---|
| Night | Day | Night | Day |
| NA | 68.7 | NA | -j408.7 |

Antenna indications for directional operation

| Towers | Antenna monitor Phase reading(s) in degrees | | Antenna monitor sample current ratio(s) | | Antenna base currents | |
|---|---|---|---|---|---|---|
| | Night | Day | Night | Day | Night | Day |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Manufacturer and type of antenna monitor:

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**SECTION III - Page 2**

9. Description of antenna system ((f directional antenna is used, the information requested below should be given for each element of the array. Use separate sheets if necessary.)

| Type Radiator | Overall height in meters of radiator above base insulator, or above base, if grounded. | Overall height in meters above ground (without obstruction lighting) | Overall height in meters above ground (include obstruction lighting) | If antenna is either top loaded or sectionalized, describe fully in an Exhibit. |
|---|---|---|---|---|
| Triangular, uniform, guyed | 64.6 | 66.1 | 66.1 | Exhibit No. n/a |

Excitation ☑ Series ☐ Shunt

Geographic coordinates to nearest second. For directional antenna give coordinates of center of array. For single vertical radiator give tower location.

| North Latitude | 34 | o | 52 | ' | 6 | " | West Longitude | 82 | o | 28 | ' | 5 | " |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

If not fully described above, attach as an Exhibit further details and dimensions including any other antenna mounted on tower and associated isolation circuits. Exhibit No. NA

Also, if necessary for a complete description, attach as an Exhibit a sketch of the details and dimensions of ground system. Exhibit No. Tech Narrative

10. In what respect, if any, does the apparatus constructed differ from that described in the application for construction permit or in the permit?

none

11. Give reasons for the change in antenna or common point resistance.

Technical Narrative

I certify that I represent the applicant in the capacity indicated below and that I have examined the foregoing statement of technical information and that it is true to the best of my knowledge and belief.

| Name (Please Print or Type) | Signature (check appropriate box below) |
|---|---|
| Jacob Wyatt |  |
| Address (include ZIP Code)<br>113 West 4th St<br><br>Ogallala, NE 69153 | Date<br>11-30-2020<br>Telephone No. (Include Area Code)<br>308-289-1872 |

☑ Technical Director ☐ Registered Professional Engineer

☐ Chief Operator ☐ Technical Consultant

☐ Other (specify)



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# APPLICATION FOR LICENSE INFORMATION

RADIO STATION WESC

CLEAR CHANNEL BROADCASTING LICENSES, INC

GREENVILLE, SOUTH CAROLINA

FID 4678

660 KHZ 5.0KW NDD

November 30, 2020

APPLICATION FOR LICENSE INFORMATION
RADIO STATION WGVL
GREENVILLE, SOUTH CAROLINA

660 KHZ  5.0KW NDD

Table of Contents

EXECUTIVE SUMMARY

This engineering exhibit has been prepared in support of an application for licensing for radio station WESC-AM, Greenville South Carolina, Facility ID #4678. This exhibit satisfies special conditions six and seven as outlined on Construction Permit BP-20200212AAH for WESC-AM Greenville, South Carolina.

Per the construction permit, WESC employs the use of tower #3 (ASR 1044160) of the WGVL AM antenna array for daytime only operation at five kilowatts. During daytime operation, WGVL is also non-directional and utilizes tower #2 (ASR 1044159) of the four towers. Appropriately designed and configured filters were installed at the base of Tower 3 that rejects 1440khz (WGVL) energy from being present at the output of the 660khz (WESC) transmitter. As well, a complimentary set of filters was installed at Tower 2 to prevent the 660khz (WESC) energy from being present at the output of the 1440khz (WGVL) transmitter. Item 1, Spurious and Harmonic Measurements, shows that all combinations of WESC and WGVL energy has suppressed more than prescribed limits.

Pursuant to Section 1.30002, a moment method analysis was conducted utilizing methodology specified in section 73.151c to satisfy special condition seven. Modeled tower heights were derived from moment method calculations shown in the technical exhibit for WGVL application for license and adjusted accordingly for frequency. Tower radius was confirmed by physical measurement. Components were added to the existing 1440 kilohertz detuning networks at towers one and four to create a pole at 660 kilohertz while maintaining a detune at 1440khz. The very nature of the pass/reject filter would present a pole on tower 2. Effectively all towers would be floated at 660khz and were presented as such in the model. Item 2, Moment Method Computer Model, illustrates that the WESC pattern has an overall variation of less than .2db which far exceeds the 2db limit set forth in 1.3002(a).

Please refer any questions regarding this report to:

Jacob A Wyatt
Jakewyatt@iheartmedia.com
308-289-1872

**Spurious and Harmonic Measurements**
**WESC, Facility ID Number 4678, Greenville, SC**
**and**
**WGVL, Facility ID Number 59821, Greenville, SC**

Spurious Emission Observations

With both WESC and WGVL (1440 KHz) operating at full power, a Potomac Instruments model PI-4100 field strength meter and a Rigol model DSA815 Spectrum Analyzer with a Chris Scott & Associates model LP-3 shielded loop antenna were utilized to search for spurious emissions at a location 1.01 kilometers from the transmitter site. The location was at the northern edge of the Truth Missionary Baptist Church parking lot, at NAD83 GPS coordinates 34° 51' 36.3" N, 82° 28' 19.2" W. With WESC and WGVL operating at full power, their field strengths were observed to be 480 mV/m and 350 mV/m, respectively, at this point. Specific observations were recorded as listed in Table 1, of intermodulation product and harmonic frequencies falling within the frequency range of the field strength meter that was employed for the measurements. The measurements confirm that any spurious emissions from the collocated stations are below the levels specified by section 73.44 of the FCC rules.

Randall L. Mullinax
Senior RF Engineer
iHeartMedia

| Table 1 - WESC and WGVL Harmonic and Intermodulation Measurements | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| DESCRIPTION | FREQ. (kHz) | MEASURED LEVEL (mV/m) | REF. LEVEL 660 KHz (mV/m) | ATTEN. dB (Below 660 kHz Ref.) | REQUIRED ATTEN. dB (Below 660 kHz Ref.) | REF. LEVEL 1440 kHz (mV/m) | ATTEN. dB (Below 1440 kHz Ref.) | REQUIRED ATTEN. dB (Below 1440 kHz Ref.) |
| | | | | | | | | |
| FUNDAMENTAL | 660 | 480 | 480 | 0.0 | 0.0 | N/A | N/A | N/A |
| FUNDAMENTAL | 1440 | 350 | N/A | N/A | N/A | 350 | 0 | 0.0 |
| 1440-660 | 780 | 0.353 | 480 | 62.7 | 80.0 | 350 | 59.9 | 80.0 |
| (2 X 1440) - (3 X 660) | 900 | 0.026 | 480 | 85.3 | 80.0 | 350 | 82.6 | 80.0 |
| 2 X 660 | 1320 | 0.064 | 480 | 77.5 | 80.0 | N/A | N/A | N/A |
| (2 X 1440) - (2 X 660) | 1560 | 0.015 | 480 | 90.1 | 80.0 | 350 | 87.4 | 80.0 |
| 3 X 660 | 1980 | 0.017 | 480 | 89.0 | 80.0 | N/A | N/A | N/A |
| 660 + 1440 | 2100 | 0.015 | 480 | 90.1 | 80.0 | 350 | 87.4 | 80.0 |
| (2 X 1440) - 660 | 2220 | 0.025 | 480 | 85.7 | 80.0 | 350 | 82.9 | 80.0 |
| (3 X 1440) - (3 X 660) | 2340 | 0.022 | 480 | 86.8 | 80.0 | 350 | 84.0 | 80.0 |
| 4 X 660 | 2640 | 0.013 | 480 | 91.3 | 80.0 | N/A | N/A | N/A |
| 1440 + (2 X 660) | 2760 | 0.015 | 480 | 90.1 | 80.0 | 350 | 87.4 | 80.0 |
| 2 X 1440 | 2880 | 0.016 | N/A | N/A | N/A | 350 | 86.8 | 80.0 |
| (3 x 1440) - (2 X 660) | 3000 | 0.010 | 480 | 93.6 | 80.0 | 350 | 90.9 | 80.0 |
| 5 X 660 | 3300 | 0.010 | 480 | 93.6 | 80.0 | N/A | N/A | N/A |
| 1440 + (3 X 660) | 3420 | 0.009 | 480 | 94.5 | 80.0 | 350 | 91.8 | 80.0 |
| (2 x 1440) + 660 | 3540 | 0.014 | 480 | 90.7 | 80.0 | 350 | 88.0 | 80.0 |
| (3 X 1440) - 660 | 3660 | 0.009 | 480 | 94.5 | 80.0 | 350 | 91.8 | 80.0 |
| 6 X 660 | 3960 | 0.009 | 480 | 94.5 | 80.0 | N/A | N/A | N/A |
| (2 X 1440) + (2 X 660) | 4200 | 0.009 | 480 | 94.5 | 80.0 | 350 | 91.8 | 80.0 |
| 3 X 1440 | 4320 | 0.010 | N/A | N/A | N/A | 350 | 90.9 | 80.0 |
| 7 X 660 | 4620 | 0.009 | 480 | 94.5 | 80.0 | N/A | N/A | N/A |
| (2 X 1440) + (3 X 660) | 4860 | 0.010 | 480 | 93.6 | 80.0 | 350 | 90.9 | 80.0 |
| (3 X 1440) + 660 | 4980 | 0.009 | 480 | 94.5 | 80.0 | 350 | 91.8 | 80.0 |
| | | | | | | | | |
| Point Located at 34° 51' 36.3"N, 82° 28' 19.2" W - 1.01 km from WESC/WGVL site. | | | | | | | | |
| Measurement taken by Randall L. Mullinax between 10:30 and 11:10 on November 18, 2020 | | | | | | | | |
| Measurements were made with a Potomac Instruments PI-4100, S/N 133, Calibrated on May 6, 2019 | | | | | | | | |
| Measurements were conducted with WESC and WGVL both operating with antenna input power of 5.0 kW. | | | | | | | | |
| The signal on 780 kHz was identified as WWOL, Forest City, NC - the amplitude did not change when the WESC and WGVL transmitters were turned off. | | | | | | | | |
| The signal on 1320 kHz was identified as WAGY, Forest City, NC - the amplitude did not change when the WESC transmitter was turned off. | | | | | | | | |

GEOMETRY
Wire coordinates in degrees; other dimensions in meters
Environment: perfect ground

| wire | caps | Distance | Angle | Z | radius | segs |
|---|---|---|---|---|---|---|
| 1 | none | 0 | 0 | 0 | .1698 | 15 |
| | | 0 | 0 | 54.4 | | |
| 2 | none | 41.25 | 111.5 | 0 | .1698 | 15 |
| | | 41.25 | 111.5 | 55.96 | | |
| 3 | none | 82.5 | 111.5 | 0 | .1698 | 15 |
| | | 82.5 | 111.5 | 55.37 | | |
| 4 | none | 123.75 | 111.5 | 0 | .1698 | 15 |
| | | 123.75 | 111.5 | 54.91 | | |

Number of wires = 4
current nodes = 60

| | minimum | | maximum | |
|---|---|---|---|---|
| Individual wires | wire | value | wire | value |
| segment length | 1 | 3.62667 | 2 | 3.73067 |
| radius | 1 | .1698 | 1 | .1698 |

ELECTRICAL DESCRIPTION
Frequencies (MHz)

| | frequency | | no. of | segment length (wavelengths) | |
|---|---|---|---|---|---|
| no. | lowest | step | steps | minimum | maximum |
| 1 | .66 | 0 | 1 | .0100741 | .010363 |

Sources

| source | node | sector | magnitude | phase | type |
|---|---|---|---|---|---|
| 1 | 31 | 1 | 1. | 0 | voltage |

Lumped loads

| load | node | resistance (ohms) | reactance (ohms) | inductance (mH) | capacitance (uF) | passive circuit |
|---|---|---|---|---|---|---|
| 1 | 16 | 0 | -10,000. | 0 | 0 | 0 |
| 2 | 1 | 0 | -10,000. | 0 | 0 | 0 |
| 3 | 46 | 0 | -10,000. | 0 | 0 | 0 |

RADIATION PATTERN rms
geographic coordinate system

Radial distance (meters) = 1,000.
Frequency = .66 MHz
Input power = 5,000. watts
Efficiency = 100. %

| elevation angle | azimuth angle | E-theta mag (mv/m) | phase (deg) | E-phi mag (mv/m) | phase |
|---|---|---|---|---|---|
| 0 | 0 | 683.688 | 144. | 0 | 0 |
| 0 | 1. | 683.504 | 145.4 | 0 | 0 |
| 0 | 2. | 683.32 | 146.7 | 0 | 0 |
| 0 | 3. | 683.136 | 148.1 | 0 | 0 |
| 0 | 4. | 682.952 | 149.5 | 0 | 0 |
| 0 | 5. | 682.768 | 150.8 | 0 | 0 |
| 0 | 6. | 682.584 | 152.2 | 0 | 0 |
| 0 | 7. | 682.401 | 153.6 | 0 | 0 |
| 0 | 8. | 682.219 | 155. | 0 | 0 |
| 0 | 9. | 682.038 | 156.4 | 0 | 0 |
| 0 | 10. | 681.857 | 157.8 | 0 | 0 |
| 0 | 11. | 681.679 | 159.2 | 0 | 0 |
| 0 | 12. | 681.502 | 160.6 | 0 | 0 |
| 0 | 13. | 681.326 | 162.1 | 0 | 0 |
| 0 | 14. | 681.152 | 163.5 | 0 | 0 |
| 0 | 15. | 680.98 | 164.9 | 0 | 0 |
| 0 | 16. | 680.81 | 166.4 | 0 | 0 |
| 0 | 17. | 680.643 | 167.8 | 0 | 0 |
| 0 | 18. | 680.478 | 169.3 | 0 | 0 |
| 0 | 19. | 680.317 | 170.7 | 0 | 0 |
| 0 | 20. | 680.157 | 172.1 | 0 | 0 |
| 0 | 21. | 680. | 173.6 | 0 | 0 |
| 0 | 22. | 679.848 | 175. | 0 | 0 |
| 0 | 23. | 679.697 | 176.5 | 0 | 0 |
| 0 | 24. | 679.552 | 177.9 | 0 | 0 |
| 0 | 25. | 679.408 | 179.4 | 0 | 0 |
| 0 | 26. | 679.269 | 180.8 | 0 | 0 |
| 0 | 27. | 679.133 | 182.3 | 0 | 0 |
| 0 | 28. | 679.001 | 183.7 | 0 | 0 |
| 0 | 29. | 678.874 | 185.2 | 0 | 0 |
| 0 | 30. | 678.75 | 186.6 | 0 | 0 |
| 0 | 31. | 678.631 | 188. | 0 | 0 |
| 0 | 32. | 678.516 | 189.5 | 0 | 0 |
| 0 | 33. | 678.405 | 190.9 | 0 | 0 |
| 0 | 34. | 678.298 | 192.3 | 0 | 0 |
| 0 | 35. | 678.196 | 193.7 | 0 | 0 |
| 0 | 36. | 678.099 | 195.1 | 0 | 0 |
| 0 | 37. | 678.006 | 196.5 | 0 | 0 |
| 0 | 38. | 677.918 | 197.9 | 0 | 0 |
| 0 | 39. | 677.835 | 199.3 | 0 | 0 |
| 0 | 40. | 677.755 | 200.7 | 0 | 0 |
| 0 | 41. | 677.681 | 202.1 | 0 | 0 |
| 0 | 42. | 677.612 | 203.5 | 0 | 0 |
| 0 | 43. | 677.547 | 204.8 | 0 | 0 |
| 0 | 44. | 677.486 | 206.2 | 0 | 0 |
| 0 | 45. | 677.43 | 207.5 | 0 | 0 |
| 0 | 46. | 677.378 | 208.9 | 0 | 0 |
| 0 | 47. | 677.332 | 210.2 | 0 | 0 |

| | | | | | |
|---|---|---|---|---|---|
| 0 | 48. | 677.289 | 211.5 | 0 | 0 |
| 0 | 49. | 677.25 | 212.8 | 0 | 0 |
| 0 | 50. | 677.216 | 214.1 | 0 | 0 |
| 0 | 51. | 677.187 | 215.4 | 0 | 0 |
| 0 | 52. | 677.162 | 216.6 | 0 | 0 |
| 0 | 53. | 677.14 | 217.9 | 0 | 0 |
| 0 | 54. | 677.122 | 219.1 | 0 | 0 |
| 0 | 55. | 677.109 | 220.3 | 0 | 0 |
| 0 | 56. | 677.099 | 221.6 | 0 | 0 |
| 0 | 57. | 677.093 | 222.8 | 0 | 0 |
| 0 | 58. | 677.09 | 223.9 | 0 | 0 |
| 0 | 59. | 677.091 | 225.1 | 0 | 0 |
| 0 | 60. | 677.094 | 226.3 | 0 | 0 |
| 0 | 61. | 677.101 | 227.4 | 0 | 0 |
| 0 | 62. | 677.112 | 228.5 | 0 | 0 |
| 0 | 63. | 677.124 | 229.6 | 0 | 0 |
| 0 | 64. | 677.141 | 230.7 | 0 | 0 |
| 0 | 65. | 677.158 | 231.8 | 0 | 0 |
| 0 | 66. | 677.18 | 232.8 | 0 | 0 |
| 0 | 67. | 677.203 | 233.9 | 0 | 0 |
| 0 | 68. | 677.228 | 234.9 | 0 | 0 |
| 0 | 69. | 677.255 | 235.9 | 0 | 0 |
| 0 | 70. | 677.284 | 236.9 | 0 | 0 |
| 0 | 71. | 677.315 | 237.8 | 0 | 0 |
| 0 | 72. | 677.347 | 238.8 | 0 | 0 |
| 0 | 73. | 677.38 | 239.7 | 0 | 0 |
| 0 | 74. | 677.415 | 240.6 | 0 | 0 |
| 0 | 75. | 677.452 | 241.5 | 0 | 0 |
| 0 | 76. | 677.489 | 242.3 | 0 | 0 |
| 0 | 77. | 677.527 | 243.2 | 0 | 0 |
| 0 | 78. | 677.565 | 244. | 0 | 0 |
| 0 | 79. | 677.605 | 244.8 | 0 | 0 |
| 0 | 80. | 677.644 | 245.6 | 0 | 0 |
| 0 | 81. | 677.683 | 246.3 | 0 | 0 |
| 0 | 82. | 677.724 | 247.1 | 0 | 0 |
| 0 | 83. | 677.764 | 247.8 | 0 | 0 |
| 0 | 84. | 677.804 | 248.5 | 0 | 0 |
| 0 | 85. | 677.843 | 249.1 | 0 | 0 |
| 0 | 86. | 677.882 | 249.8 | 0 | 0 |
| 0 | 87. | 677.921 | 250.4 | 0 | 0 |
| 0 | 88. | 677.959 | 251. | 0 | 0 |
| 0 | 89. | 677.996 | 251.5 | 0 | 0 |
| 0 | 90. | 678.033 | 252.1 | 0 | 0 |
| 0 | 91. | 678.069 | 252.6 | 0 | 0 |
| 0 | 92. | 678.103 | 253.1 | 0 | 0 |
| 0 | 93. | 678.137 | 253.6 | 0 | 0 |
| 0 | 94. | 678.169 | 254.1 | 0 | 0 |
| 0 | 95. | 678.199 | 254.5 | 0 | 0 |
| 0 | 96. | 678.229 | 254.9 | 0 | 0 |
| 0 | 97. | 678.257 | 255.3 | 0 | 0 |
| 0 | 98. | 678.283 | 255.6 | 0 | 0 |
| 0 | 99. | 678.309 | 256. | 0 | 0 |
| 0 | 100. | 678.332 | 256.3 | 0 | 0 |
| 0 | 101. | 678.353 | 256.5 | 0 | 0 |
| 0 | 102. | 678.373 | 256.8 | 0 | 0 |
| 0 | 103. | 678.391 | 257. | 0 | 0 |
| 0 | 104. | 678.407 | 257.2 | 0 | 0 |

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|---|---|---|---|---|---|
| 0 | 105. | 678.422 | 257.4 | 0 | 0 |
| 0 | 106. | 678.433 | 257.6 | 0 | 0 |
| 0 | 107. | 678.443 | 257.7 | 0 | 0 |
| 0 | 108. | 678.451 | 257.8 | 0 | 0 |
| 0 | 109. | 678.458 | 257.9 | 0 | 0 |
| 0 | 110. | 678.462 | 257.9 | 0 | 0 |
| 0 | 111. | 678.464 | 257.9 | 0 | 0 |
| 0 | 112. | 678.464 | 257.9 | 0 | 0 |
| 0 | 113. | 678.462 | 257.9 | 0 | 0 |
| 0 | 114. | 678.458 | 257.9 | 0 | 0 |
| 0 | 115. | 678.451 | 257.8 | 0 | 0 |
| 0 | 116. | 678.443 | 257.7 | 0 | 0 |
| 0 | 117. | 678.433 | 257.6 | 0 | 0 |
| 0 | 118. | 678.422 | 257.4 | 0 | 0 |
| 0 | 119. | 678.407 | 257.2 | 0 | 0 |
| 0 | 120. | 678.391 | 257. | 0 | 0 |
| 0 | 121. | 678.373 | 256.8 | 0 | 0 |
| 0 | 122. | 678.353 | 256.5 | 0 | 0 |
| 0 | 123. | 678.332 | 256.3 | 0 | 0 |
| 0 | 124. | 678.308 | 256. | 0 | 0 |
| 0 | 125. | 678.283 | 255.6 | 0 | 0 |
| 0 | 126. | 678.257 | 255.3 | 0 | 0 |
| 0 | 127. | 678.229 | 254.9 | 0 | 0 |
| 0 | 128. | 678.199 | 254.5 | 0 | 0 |
| 0 | 129. | 678.169 | 254.1 | 0 | 0 |
| 0 | 130. | 678.137 | 253.6 | 0 | 0 |
| 0 | 131. | 678.103 | 253.1 | 0 | 0 |
| 0 | 132. | 678.069 | 252.6 | 0 | 0 |
| 0 | 133. | 678.033 | 252.1 | 0 | 0 |
| 0 | 134. | 677.996 | 251.5 | 0 | 0 |
| 0 | 135. | 677.959 | 251. | 0 | 0 |
| 0 | 136. | 677.921 | 250.4 | 0 | 0 |
| 0 | 137. | 677.882 | 249.8 | 0 | 0 |
| 0 | 138. | 677.843 | 249.1 | 0 | 0 |
| 0 | 139. | 677.804 | 248.5 | 0 | 0 |
| 0 | 140. | 677.764 | 247.8 | 0 | 0 |
| 0 | 141. | 677.724 | 247.1 | 0 | 0 |
| 0 | 142. | 677.684 | 246.3 | 0 | 0 |
| 0 | 143. | 677.643 | 245.6 | 0 | 0 |
| 0 | 144. | 677.605 | 244.8 | 0 | 0 |
| 0 | 145. | 677.565 | 244. | 0 | 0 |
| 0 | 146. | 677.527 | 243.2 | 0 | 0 |
| 0 | 147. | 677.489 | 242.3 | 0 | 0 |
| 0 | 148. | 677.452 | 241.5 | 0 | 0 |
| 0 | 149. | 677.415 | 240.6 | 0 | 0 |
| 0 | 150. | 677.38 | 239.7 | 0 | 0 |
| 0 | 151. | 677.347 | 238.8 | 0 | 0 |
| 0 | 152. | 677.315 | 237.8 | 0 | 0 |
| 0 | 153. | 677.284 | 236.9 | 0 | 0 |
| 0 | 154. | 677.255 | 235.9 | 0 | 0 |
| 0 | 155. | 677.228 | 234.9 | 0 | 0 |
| 0 | 156. | 677.202 | 233.9 | 0 | 0 |
| 0 | 157. | 677.18 | 232.8 | 0 | 0 |
| 0 | 158. | 677.158 | 231.8 | 0 | 0 |
| 0 | 159. | 677.141 | 230.7 | 0 | 0 |
| 0 | 160. | 677.124 | 229.6 | 0 | 0 |
| 0 | 161. | 677.112 | 228.5 | 0 | 0 |

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|---|---|---|---|---|---|
| 0 | 162. | 677.101 | 227.4 | 0 | 0 |
| 0 | 163. | 677.094 | 226.3 | 0 | 0 |
| 0 | 164. | 677.09 | 225.1 | 0 | 0 |
| 0 | 165. | 677.09 | 223.9 | 0 | 0 |
| 0 | 166. | 677.093 | 222.8 | 0 | 0 |
| 0 | 167. | 677.099 | 221.6 | 0 | 0 |
| 0 | 168. | 677.109 | 220.3 | 0 | 0 |
| 0 | 169. | 677.122 | 219.1 | 0 | 0 |
| 0 | 170. | 677.14 | 217.9 | 0 | 0 |
| 0 | 171. | 677.162 | 216.6 | 0 | 0 |
| 0 | 172. | 677.187 | 215.4 | 0 | 0 |
| 0 | 173. | 677.216 | 214.1 | 0 | 0 |
| 0 | 174. | 677.25 | 212.8 | 0 | 0 |
| 0 | 175. | 677.289 | 211.5 | 0 | 0 |
| 0 | 176. | 677.332 | 210.2 | 0 | 0 |
| 0 | 177. | 677.378 | 208.9 | 0 | 0 |
| 0 | 178. | 677.43 | 207.5 | 0 | 0 |
| 0 | 179. | 677.486 | 206.2 | 0 | 0 |
| 0 | 180. | 677.547 | 204.8 | 0 | 0 |
| 0 | 181. | 677.611 | 203.5 | 0 | 0 |
| 0 | 182. | 677.681 | 202.1 | 0 | 0 |
| 0 | 183. | 677.756 | 200.7 | 0 | 0 |
| 0 | 184. | 677.835 | 199.3 | 0 | 0 |
| 0 | 185. | 677.918 | 197.9 | 0 | 0 |
| 0 | 186. | 678.007 | 196.5 | 0 | 0 |
| 0 | 187. | 678.099 | 195.1 | 0 | 0 |
| 0 | 188. | 678.196 | 193.7 | 0 | 0 |
| 0 | 189. | 678.298 | 192.3 | 0 | 0 |
| 0 | 190. | 678.405 | 190.9 | 0 | 0 |
| 0 | 191. | 678.516 | 189.5 | 0 | 0 |
| 0 | 192. | 678.631 | 188. | 0 | 0 |
| 0 | 193. | 678.75 | 186.6 | 0 | 0 |
| 0 | 194. | 678.874 | 185.2 | 0 | 0 |
| 0 | 195. | 679.001 | 183.7 | 0 | 0 |
| 0 | 196. | 679.133 | 182.3 | 0 | 0 |
| 0 | 197. | 679.269 | 180.8 | 0 | 0 |
| 0 | 198. | 679.408 | 179.4 | 0 | 0 |
| 0 | 199. | 679.552 | 177.9 | 0 | 0 |
| 0 | 200. | 679.697 | 176.5 | 0 | 0 |
| 0 | 201. | 679.848 | 175. | 0 | 0 |
| 0 | 202. | 680. | 173.6 | 0 | 0 |
| 0 | 203. | 680.157 | 172.1 | 0 | 0 |
| 0 | 204. | 680.317 | 170.7 | 0 | 0 |
| 0 | 205. | 680.478 | 169.3 | 0 | 0 |
| 0 | 206. | 680.643 | 167.8 | 0 | 0 |
| 0 | 207. | 680.81 | 166.4 | 0 | 0 |
| 0 | 208. | 680.98 | 164.9 | 0 | 0 |
| 0 | 209. | 681.152 | 163.5 | 0 | 0 |
| 0 | 210. | 681.326 | 162.1 | 0 | 0 |
| 0 | 211. | 681.502 | 160.6 | 0 | 0 |
| 0 | 212. | 681.679 | 159.2 | 0 | 0 |
| 0 | 213. | 681.858 | 157.8 | 0 | 0 |
| 0 | 214. | 682.038 | 156.4 | 0 | 0 |
| 0 | 215. | 682.219 | 155. | 0 | 0 |
| 0 | 216. | 682.401 | 153.6 | 0 | 0 |
| 0 | 217. | 682.584 | 152.2 | 0 | 0 |
| 0 | 218. | 682.768 | 150.8 | 0 | 0 |

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|---|---|---|---|---|---|
| 0 | 219. | 682.952 | 149.5 | 0 | 0 |
| 0 | 220. | 683.135 | 148.1 | 0 | 0 |
| 0 | 221. | 683.32 | 146.7 | 0 | 0 |
| 0 | 222. | 683.504 | 145.4 | 0 | 0 |
| 0 | 223. | 683.688 | 144. | 0 | 0 |
| 0 | 224. | 683.871 | 142.7 | 0 | 0 |
| 0 | 225. | 684.054 | 141.4 | 0 | 0 |
| 0 | 226. | 684.236 | 140.1 | 0 | 0 |
| 0 | 227. | 684.417 | 138.8 | 0 | 0 |
| 0 | 228. | 684.597 | 137.5 | 0 | 0 |
| 0 | 229. | 684.776 | 136.2 | 0 | 0 |
| 0 | 230. | 684.953 | 134.9 | 0 | 0 |
| 0 | 231. | 685.129 | 133.7 | 0 | 0 |
| 0 | 232. | 685.303 | 132.5 | 0 | 0 |
| 0 | 233. | 685.476 | 131.2 | 0 | 0 |
| 0 | 234. | 685.647 | 130. | 0 | 0 |
| 0 | 235. | 685.816 | 128.8 | 0 | 0 |
| 0 | 236. | 685.982 | 127.6 | 0 | 0 |
| 0 | 237. | 686.146 | 126.5 | 0 | 0 |
| 0 | 238. | 686.308 | 125.3 | 0 | 0 |
| 0 | 239. | 686.468 | 124.2 | 0 | 0 |
| 0 | 240. | 686.625 | 123. | 0 | 0 |
| 0 | 241. | 686.78 | 121.9 | 0 | 0 |
| 0 | 242. | 686.931 | 120.8 | 0 | 0 |
| 0 | 243. | 687.08 | 119.8 | 0 | 0 |
| 0 | 244. | 687.227 | 118.7 | 0 | 0 |
| 0 | 245. | 687.37 | 117.7 | 0 | 0 |
| 0 | 246. | 687.51 | 116.6 | 0 | 0 |
| 0 | 247. | 687.648 | 115.6 | 0 | 0 |
| 0 | 248. | 687.782 | 114.6 | 0 | 0 |
| 0 | 249. | 687.914 | 113.7 | 0 | 0 |
| 0 | 250. | 688.042 | 112.7 | 0 | 0 |
| 0 | 251. | 688.168 | 111.8 | 0 | 0 |
| 0 | 252. | 688.29 | 110.9 | 0 | 0 |
| 0 | 253. | 688.409 | 110. | 0 | 0 |
| 0 | 254. | 688.525 | 109.1 | 0 | 0 |
| 0 | 255. | 688.637 | 108.2 | 0 | 0 |
| 0 | 256. | 688.747 | 107.4 | 0 | 0 |
| 0 | 257. | 688.852 | 106.6 | 0 | 0 |
| 0 | 258. | 688.956 | 105.8 | 0 | 0 |
| 0 | 259. | 689.055 | 105. | 0 | 0 |
| 0 | 260. | 689.151 | 104.3 | 0 | 0 |
| 0 | 261. | 689.245 | 103.5 | 0 | 0 |
| 0 | 262. | 689.334 | 102.8 | 0 | 0 |
| 0 | 263. | 689.421 | 102.1 | 0 | 0 |
| 0 | 264. | 689.504 | 101.5 | 0 | 0 |
| 0 | 265. | 689.585 | 100.8 | 0 | 0 |
| 0 | 266. | 689.662 | 100.2 | 0 | 0 |
| 0 | 267. | 689.736 | 99.6 | 0 | 0 |
| 0 | 268. | 689.806 | 99. | 0 | 0 |
| 0 | 269. | 689.874 | 98.5 | 0 | 0 |
| 0 | 270. | 689.938 | 97.9 | 0 | 0 |
| 0 | 271. | 689.999 | 97.4 | 0 | 0 |
| 0 | 272. | 690.058 | 96.9 | 0 | 0 |
| 0 | 273. | 690.112 | 96.5 | 0 | 0 |
| 0 | 274. | 690.165 | 96. | 0 | 0 |
| 0 | 275. | 690.214 | 95.6 | 0 | 0 |

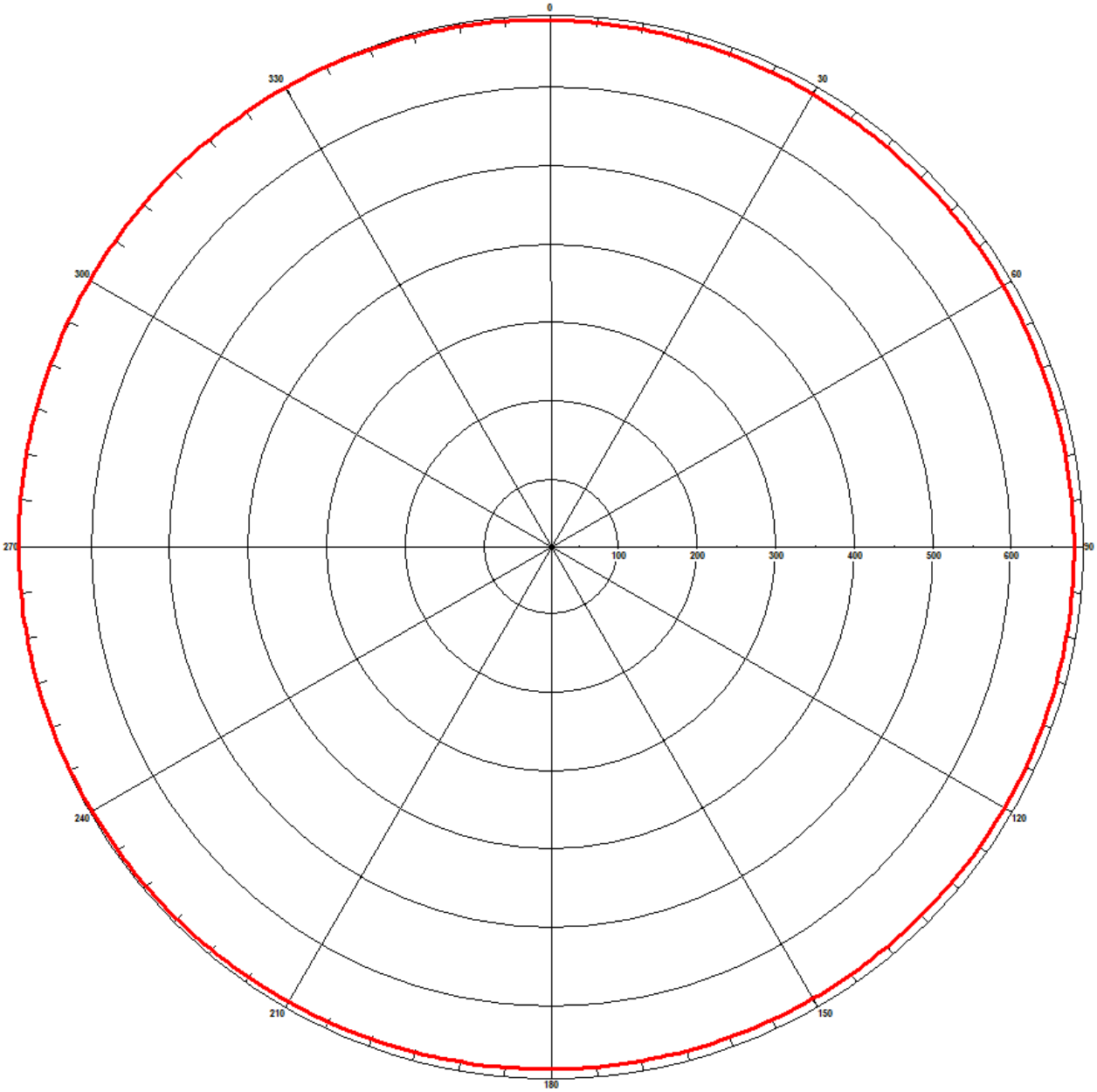
| | | | | | |
|---|---|---|---|---|---|
| 0 | 276. | 690.26 | 95.2 | 0 | 0 |
| 0 | 277. | 690.303 | 94.9 | 0 | 0 |
| 0 | 278. | 690.343 | 94.5 | 0 | 0 |
| 0 | 279. | 690.38 | 94.2 | 0 | 0 |
| 0 | 280. | 690.415 | 93.9 | 0 | 0 |
| 0 | 281. | 690.446 | 93.6 | 0 | 0 |
| 0 | 282. | 690.475 | 93.4 | 0 | 0 |
| 0 | 283. | 690.5 | 93.2 | 0 | 0 |
| 0 | 284. | 690.523 | 93. | 0 | 0 |
| 0 | 285. | 690.542 | 92.8 | 0 | 0 |
| 0 | 286. | 690.559 | 92.7 | 0 | 0 |
| 0 | 287. | 690.574 | 92.5 | 0 | 0 |
| 0 | 288. | 690.585 | 92.4 | 0 | 0 |
| 0 | 289. | 690.593 | 92.4 | 0 | 0 |
| 0 | 290. | 690.599 | 92.3 | 0 | 0 |
| 0 | 291. | 690.602 | 92.3 | 0 | 0 |
| 0 | 292. | 690.602 | 92.3 | 0 | 0 |
| 0 | 293. | 690.599 | 92.3 | 0 | 0 |
| 0 | 294. | 690.593 | 92.4 | 0 | 0 |
| 0 | 295. | 690.585 | 92.4 | 0 | 0 |
| 0 | 296. | 690.574 | 92.5 | 0 | 0 |
| 0 | 297. | 690.559 | 92.7 | 0 | 0 |
| 0 | 298. | 690.542 | 92.8 | 0 | 0 |
| 0 | 299. | 690.523 | 93. | 0 | 0 |
| 0 | 300. | 690.5 | 93.2 | 0 | 0 |
| 0 | 301. | 690.475 | 93.4 | 0 | 0 |
| 0 | 302. | 690.446 | 93.6 | 0 | 0 |
| 0 | 303. | 690.415 | 93.9 | 0 | 0 |
| 0 | 304. | 690.38 | 94.2 | 0 | 0 |
| 0 | 305. | 690.343 | 94.5 | 0 | 0 |
| 0 | 306. | 690.303 | 94.9 | 0 | 0 |
| 0 | 307. | 690.26 | 95.2 | 0 | 0 |
| 0 | 308. | 690.214 | 95.6 | 0 | 0 |
| 0 | 309. | 690.165 | 96. | 0 | 0 |
| 0 | 310. | 690.112 | 96.5 | 0 | 0 |
| 0 | 311. | 690.058 | 96.9 | 0 | 0 |
| 0 | 312. | 689.999 | 97.4 | 0 | 0 |
| 0 | 313. | 689.938 | 97.9 | 0 | 0 |
| 0 | 314. | 689.874 | 98.5 | 0 | 0 |
| 0 | 315. | 689.806 | 99. | 0 | 0 |
| 0 | 316. | 689.736 | 99.6 | 0 | 0 |
| 0 | 317. | 689.662 | 100.2 | 0 | 0 |
| 0 | 318. | 689.585 | 100.8 | 0 | 0 |
| 0 | 319. | 689.504 | 101.5 | 0 | 0 |
| 0 | 320. | 689.421 | 102.1 | 0 | 0 |
| 0 | 321. | 689.333 | 102.8 | 0 | 0 |
| 0 | 322. | 689.245 | 103.5 | 0 | 0 |
| 0 | 323. | 689.151 | 104.3 | 0 | 0 |
| 0 | 324. | 689.055 | 105. | 0 | 0 |
| 0 | 325. | 688.956 | 105.8 | 0 | 0 |
| 0 | 326. | 688.852 | 106.6 | 0 | 0 |
| 0 | 327. | 688.747 | 107.4 | 0 | 0 |
| 0 | 328. | 688.637 | 108.2 | 0 | 0 |
| 0 | 329. | 688.525 | 109.1 | 0 | 0 |
| 0 | 330. | 688.409 | 110. | 0 | 0 |
| 0 | 331. | 688.29 | 110.9 | 0 | 0 |
| 0 | 332. | 688.168 | 111.8 | 0 | 0 |

| | | | | | |
|---|---|---|---|---|---|
| 0 | 333. | 688.042 | 112.7 | 0 | 0 |
| 0 | 334. | 687.914 | 113.7 | 0 | 0 |
| 0 | 335. | 687.783 | 114.6 | 0 | 0 |
| 0 | 336. | 687.648 | 115.6 | 0 | 0 |
| 0 | 337. | 687.51 | 116.6 | 0 | 0 |
| 0 | 338. | 687.37 | 117.7 | 0 | 0 |
| 0 | 339. | 687.227 | 118.7 | 0 | 0 |
| 0 | 340. | 687.08 | 119.8 | 0 | 0 |
| 0 | 341. | 686.931 | 120.8 | 0 | 0 |
| 0 | 342. | 686.779 | 121.9 | 0 | 0 |
| 0 | 343. | 686.625 | 123. | 0 | 0 |
| 0 | 344. | 686.468 | 124.2 | 0 | 0 |
| 0 | 345. | 686.308 | 125.3 | 0 | 0 |
| 0 | 346. | 686.146 | 126.5 | 0 | 0 |
| 0 | 347. | 685.982 | 127.6 | 0 | 0 |
| 0 | 348. | 685.815 | 128.8 | 0 | 0 |
| 0 | 349. | 685.647 | 130. | 0 | 0 |
| 0 | 350. | 685.476 | 131.2 | 0 | 0 |
| 0 | 351. | 685.303 | 132.5 | 0 | 0 |
| 0 | 352. | 685.129 | 133.7 | 0 | 0 |
| 0 | 353. | 684.953 | 134.9 | 0 | 0 |
| 0 | 354. | 684.776 | 136.2 | 0 | 0 |
| 0 | 355. | 684.597 | 137.5 | 0 | 0 |
| 0 | 356. | 684.417 | 138.8 | 0 | 0 |
| 0 | 357. | 684.236 | 140.1 | 0 | 0 |
| 0 | 358. | 684.054 | 141.4 | 0 | 0 |
| 0 | 359. | 683.871 | 142.7 | 0 | 0 |
| 0 | 360. | 683.688 | 144. | 0 | 0 |

# WESC 660kHz

**5kW NDD 1km**

C:\Users\ccroga1jaw\Documents\MiniNEC Files\WGVL\WESC Day 11-30-2020, 10:16:12
Geographic coordinates: E-theta magnitude rms, mv/m, elevation = 0 degrees
minimum = 13.5, maximum = 691., dynamic range = 677.09, scale = 1
Maximum gain: 690.6 rms, mv/m at 292. deg
.66 MHz



Item 3

RFR Compliance

Operation of WESC at 5 kW daytime will not result in exposure of workers or the general public to RF radiation in excess of levels specified in 47CFR 1.1310. Fences have been installed around all tower bases to comply with the minimum distance which exceeds the distances specified in OET Bulletin 65 for this frequency, calculated power levels in the towers and tower height to prevent electric and magnetic exposure greater than permissible levels. These fences limit access by the general public. If it becomes necessary for workers to enter the tower base areas for maintenance, the station will either reduce power or cease operation to provide RFR safety for the workers.

Item 4

Ground System Description

WESC will utilize the existing ground system of WGVL: No changes were made to the ground system which consists of 120, 58.5 meter equally spaced, buried copper wire radials, plus expanded mesh copper screens at the base of each tower. Radials shortened and bonded to copper strap where they would overlap between towers.

# Diplex Agreement

This agreement is entered into this _7th_ day of December, 2020 by Capstar TX, LLC, the licensee of WGVL, Facility ID No. 59821 and Clear Channel Broadcasting, Inc., licensee of WESC, Facility ID No. 4678 (the stations).

## Agreed

As the stations share a common broadcast antenna system (diplexed) and that such operation requires common filters, traps, and other equipment to prevent interaction, intermodulation and / or the generation of spurious radiation products which may be caused by common usage of the same antenna system by the stations, this agreement is to affix responsibility of each station with regard to the installation and maintenance of such equipment.

As the stations are presently under common ownership the assignment of responsibility is moot at this time. In the event of the stations no longer being under common control as may occur in the transfer of one or more of the stations, the licensees will negotiate an agreement with the parties involved affixing that responsibility appropriately.

## Counterparts

In witness whereof, Capstar TX, LLC and Clear Channel Broadcasting Licenses, Inc., licensees of the stations, have signed this agreement as of the day and year first above written.

- Capstar TX, LLC, licensee of WGVL(AM).
- Clear Channel Broadcasting Licenses, Inc, licensee of WESC(AM)

Stephen G Davis, SVP Engineering

**Program Test Authority – WESC (AM)**

The licensee respectfully requests program test authority to operate at five kilowatts as indicated on the construction permit.