



## Section 74.1204 Clearance to WEAG-FM Translator W292DE

Channel 292D - 106.3 MHz  
0.245 kW ERP - 136.8 m COR AMSL  
St. Augustine, Florida

**Bromo Communications, Inc.**

September 2022

# **§74.1204 Clearance to WEAG-FM**

## **Translator W292DE**

Channel 292D – 106.3 MHz

0.245 kW ERP – 136.8 m COR AMSL

St. Augustine, Florida

September 2022

## **FM Over Calculation**

09-13-2022      Terrain Data: GLOBE 30 Sec      FMOver Analysis

**WEAG-FM BMLH20000803ACB**

**W292DE (Proposed)**

Channel = 292A  
Max ERP = 2.7 kW  
RCAMSL = 196 m  
N. Lat. 29 55 50.90  
W. Lng. 82 06 15.40

Channel = 292D  
Max ERP = 0.245 kW  
RCAMSL = 136.8 m  
N. Lat. 29 51 01.90  
W. Lng. 81 19 48.30

Protected  
60 dBu

Interfering  
40 dBu

| Azimuth<br>(degrees) | ERP<br>(kW) | HAAT<br>(m) | Dist<br>(km) | Azimuth<br>(degrees) | ERP<br>(kW) | HAAT<br>(m) | Dist<br>(km) | Actual<br>(dBu) | IX<br>(km) |
|----------------------|-------------|-------------|--------------|----------------------|-------------|-------------|--------------|-----------------|------------|
| 037.0                | 002.7000    | 0136.5      | 027.1        | 297.8                | 000.2450    | 0122.3      | 065.8        | 33.37           |            |
| 038.0                | 002.7000    | 0136.5      | 027.1        | 297.7                | 000.2450    | 0122.3      | 065.3        | 33.52           |            |
| 039.0                | 002.7000    | 0136.3      | 027.0        | 297.6                | 000.2450    | 0122.4      | 064.8        | 33.67           |            |
| 040.0                | 002.7000    | 0136.1      | 027.0        | 297.5                | 000.2450    | 0122.4      | 064.4        | 33.81           |            |
| 041.0                | 002.7000    | 0136.0      | 027.0        | 297.4                | 000.2450    | 0122.4      | 063.9        | 33.96           |            |
| 042.0                | 002.7000    | 0135.9      | 027.0        | 297.3                | 000.2450    | 0122.4      | 063.5        | 34.11           |            |
| 043.0                | 002.7000    | 0136.1      | 027.0        | 297.2                | 000.2450    | 0122.4      | 063.0        | 34.27           |            |
| 044.0                | 002.7000    | 0136.3      | 027.0        | 297.1                | 000.2450    | 0122.4      | 062.5        | 34.42           |            |
| 045.0                | 002.7000    | 0136.7      | 027.1        | 297.0                | 000.2450    | 0122.4      | 062.1        | 34.58           |            |
| 046.0                | 002.7000    | 0137.1      | 027.1        | 296.9                | 000.2450    | 0122.4      | 061.6        | 34.74           |            |
| 047.0                | 002.7000    | 0137.5      | 027.1        | 296.8                | 000.2450    | 0122.4      | 061.2        | 34.90           |            |
| 048.0                | 002.7000    | 0137.7      | 027.2        | 296.6                | 000.2450    | 0122.5      | 060.7        | 35.06           |            |
| 049.0                | 002.7000    | 0137.9      | 027.2        | 296.5                | 000.2450    | 0122.5      | 060.3        | 35.22           |            |
| 050.0                | 002.7000    | 0138.0      | 027.2        | 296.3                | 000.2450    | 0122.5      | 059.8        | 35.38           |            |
| 051.0                | 002.7000    | 0138.0      | 027.2        | 296.1                | 000.2450    | 0122.5      | 059.4        | 35.54           |            |
| 052.0                | 002.7000    | 0138.0      | 027.2        | 295.9                | 000.2450    | 0122.6      | 059.0        | 35.70           |            |
| 053.0                | 002.7000    | 0137.9      | 027.2        | 295.7                | 000.2450    | 0122.6      | 058.6        | 35.85           |            |
| 054.0                | 002.7000    | 0137.7      | 027.2        | 295.4                | 000.2450    | 0122.6      | 058.2        | 36.01           |            |
| 055.0                | 002.7000    | 0137.3      | 027.1        | 295.2                | 000.2450    | 0122.7      | 057.8        | 36.16           |            |
| 056.0                | 002.7000    | 0136.9      | 027.1        | 294.9                | 000.2450    | 0122.7      | 057.4        | 36.31           |            |
| 057.0                | 002.7000    | 0136.5      | 027.1        | 294.6                | 000.2450    | 0122.7      | 057.0        | 36.45           |            |
| 058.0                | 002.7000    | 0136.2      | 027.0        | 294.4                | 000.2450    | 0122.8      | 056.6        | 36.60           |            |
| 059.0                | 002.7000    | 0136.2      | 027.0        | 294.1                | 000.2450    | 0122.8      | 056.2        | 36.75           |            |
| 060.0                | 002.7000    | 0136.4      | 027.0        | 293.8                | 000.2450    | 0122.9      | 055.8        | 36.90           |            |
| 061.0                | 002.7000    | 0136.7      | 027.1        | 293.5                | 000.2450    | 0122.9      | 055.4        | 37.06           |            |
| 062.0                | 002.7000    | 0137.2      | 027.1        | 293.3                | 000.2450    | 0123.0      | 055.0        | 37.21           |            |
| 063.0                | 002.7000    | 0137.7      | 027.2        | 293.0                | 000.2450    | 0123.0      | 054.7        | 37.37           |            |
| 064.0                | 002.7000    | 0138.3      | 027.2        | 292.7                | 000.2450    | 0123.0      | 054.3        | 37.52           |            |
| 065.0                | 002.7000    | 0139.0      | 027.3        | 292.4                | 000.2450    | 0123.1      | 053.9        | 37.67           |            |
| 066.0                | 002.7000    | 0139.6      | 027.3        | 292.1                | 000.2450    | 0123.1      | 053.5        | 37.82           |            |

| Azi muth<br>(degrees) | ERP<br>(kW) | HAAT<br>(m) | Di st<br>(km) | Azi muth<br>(degrees) | ERP<br>(kW) | HAAT<br>(m) | Di st<br>(km) | Actual<br>(dBu) | I X<br>(km) |
|-----------------------|-------------|-------------|---------------|-----------------------|-------------|-------------|---------------|-----------------|-------------|
| 067.0                 | 002.7000    | 0140.1      | 027.4         | 291.8                 | 000.2450    | 0123.2      | 053.1         | 37.97           |             |
| 068.0                 | 002.7000    | 0140.5      | 027.4         | 291.4                 | 000.2450    | 0123.3      | 052.8         | 38.11           |             |
| 069.0                 | 002.7000    | 0140.6      | 027.4         | 291.0                 | 000.2450    | 0123.3      | 052.4         | 38.24           |             |
| 070.0                 | 002.7000    | 0140.6      | 027.4         | 290.6                 | 000.2450    | 0123.3      | 052.1         | 38.37           |             |
| 071.0                 | 002.7000    | 0140.5      | 027.4         | 290.2                 | 000.2450    | 0123.4      | 051.8         | 38.49           |             |
| 072.0                 | 002.7000    | 0140.4      | 027.4         | 289.8                 | 000.2450    | 0123.4      | 051.5         | 38.60           |             |
| 073.0                 | 002.7000    | 0140.3      | 027.4         | 289.4                 | 000.2450    | 0123.4      | 051.3         | 38.71           |             |
| 074.0                 | 002.7000    | 0140.2      | 027.4         | 288.9                 | 000.2450    | 0123.4      | 051.0         | 38.81           |             |
| 075.0                 | 002.7000    | 0140.0      | 027.4         | 288.5                 | 000.2450    | 0123.3      | 050.7         | 38.91           |             |
| 076.0                 | 002.7000    | 0139.6      | 027.3         | 288.0                 | 000.2450    | 0123.3      | 050.5         | 38.99           |             |
| 077.0                 | 002.7000    | 0139.0      | 027.3         | 287.5                 | 000.2450    | 0123.2      | 050.3         | 39.07           |             |
| 078.0                 | 002.7000    | 0138.4      | 027.2         | 287.0                 | 000.2450    | 0123.2      | 050.1         | 39.14           |             |
| 079.0                 | 002.7000    | 0137.6      | 027.2         | 286.5                 | 000.2450    | 0123.1      | 050.0         | 39.20           |             |
| 080.0                 | 002.7000    | 0136.8      | 027.1         | 286.0                 | 000.2450    | 0123.1      | 049.8         | 39.26           |             |
| 081.0                 | 002.7000    | 0136.4      | 027.0         | 285.5                 | 000.2450    | 0123.1      | 049.6         | 39.32           |             |
| 082.0                 | 002.7000    | 0136.3      | 027.0         | 284.9                 | 000.2450    | 0123.1      | 049.5         | 39.39           |             |
| 083.0                 | 002.7000    | 0136.3      | 027.0         | 284.4                 | 000.2450    | 0123.1      | 049.3         | 39.46           |             |
| 084.0                 | 002.7000    | 0136.4      | 027.0         | 283.9                 | 000.2450    | 0123.1      | 049.1         | 39.53           |             |
| 085.0                 | 002.7000    | 0136.4      | 027.0         | 283.4                 | 000.2450    | 0123.1      | 049.0         | 39.59           |             |
| 086.0                 | 002.7000    | 0136.4      | 027.0         | 282.9                 | 000.2450    | 0123.2      | 048.8         | 39.65           |             |
| 087.0                 | 002.7000    | 0136.6      | 027.1         | 282.3                 | 000.2450    | 0123.2      | 048.7         | 39.71           |             |
| 088.0                 | 002.7000    | 0137.0      | 027.1         | 281.8                 | 000.2450    | 0123.3      | 048.5         | 39.77           |             |
| 089.0                 | 002.7000    | 0137.4      | 027.1         | 281.3                 | 000.2450    | 0123.4      | 048.4         | 39.82           |             |
| 090.0                 | 002.7000    | 0137.8      | 027.2         | 280.7                 | 000.2450    | 0123.5      | 048.3         | 39.88           |             |
| 091.0                 | 002.7000    | 0137.9      | 027.2         | 280.2                 | 000.2450    | 0123.6      | 048.2         | 39.92           |             |
| 092.0                 | 002.7000    | 0137.7      | 027.2         | 279.6                 | 000.2450    | 0123.8      | 048.1         | 39.95           |             |
| 093.0                 | 002.7000    | 0137.4      | 027.1         | 279.1                 | 000.2450    | 0123.9      | 048.1         | 39.97           |             |
| 094.0                 | 002.7000    | 0137.1      | 027.1         | 278.5                 | 000.2450    | 0124.1      | 048.1         | 39.98           |             |
| 095.0                 | 002.7000    | 0136.7      | 027.1         | 277.9                 | 000.2450    | 0124.2      | 048.1         | 39.98           |             |
| 096.0                 | 002.7000    | 0136.1      | 027.0         | 277.4                 | 000.2450    | 0124.3      | 048.1         | 39.98           |             |
| 097.0                 | 002.7000    | 0135.8      | 027.0         | 276.8                 | 000.2450    | 0124.4      | 048.2         | 39.97           |             |
| 098.0                 | 002.7000    | 0135.6      | 027.0         | 276.2                 | 000.2450    | 0124.4      | 048.2         | 39.96           |             |
| 099.0                 | 002.7000    | 0135.6      | 027.0         | 275.7                 | 000.2450    | 0124.5      | 048.2         | 39.95           |             |
| 100.0                 | 002.7000    | 0135.6      | 027.0         | 275.1                 | 000.2450    | 0124.5      | 048.3         | 39.94           |             |
| 101.0                 | 002.7000    | 0135.6      | 027.0         | 274.6                 | 000.2450    | 0124.4      | 048.3         | 39.92           |             |
| 102.0                 | 002.7000    | 0135.8      | 027.0         | 274.0                 | 000.2450    | 0124.3      | 048.3         | 39.90           |             |
| 103.0                 | 002.7000    | 0136.2      | 027.0         | 273.5                 | 000.2450    | 0124.2      | 048.4         | 39.88           |             |
| 104.0                 | 002.7000    | 0136.9      | 027.1         | 272.9                 | 000.2450    | 0124.1      | 048.4         | 39.86           |             |
| 105.0                 | 002.7000    | 0137.6      | 027.1         | 272.3                 | 000.2450    | 0124.0      | 048.5         | 39.83           |             |
| 106.0                 | 002.7000    | 0138.3      | 027.2         | 271.8                 | 000.2450    | 0123.8      | 048.5         | 39.80           |             |
| 107.0                 | 002.7000    | 0138.9      | 027.3         | 271.2                 | 000.2450    | 0123.7      | 048.6         | 39.77           |             |
| 108.0                 | 002.7000    | 0139.0      | 027.3         | 270.7                 | 000.2450    | 0123.8      | 048.7         | 39.72           |             |
| 109.0                 | 002.7000    | 0138.6      | 027.2         | 270.2                 | 000.2450    | 0123.9      | 048.9         | 39.65           |             |
| 110.0                 | 002.7000    | 0137.7      | 027.2         | 269.7                 | 000.2450    | 0123.9      | 049.1         | 39.57           |             |
| 111.0                 | 002.7000    | 0136.7      | 027.1         | 269.2                 | 000.2450    | 0124.0      | 049.4         | 39.47           |             |
| 112.0                 | 002.7000    | 0135.8      | 027.0         | 268.7                 | 000.2450    | 0124.0      | 049.6         | 39.38           |             |
| 113.0                 | 002.7000    | 0134.9      | 026.9         | 268.3                 | 000.2450    | 0124.1      | 049.9         | 39.28           |             |
| 114.0                 | 002.7000    | 0134.0      | 026.9         | 267.8                 | 000.2450    | 0124.1      | 050.2         | 39.17           |             |
| 115.0                 | 002.7000    | 0133.2      | 026.8         | 267.4                 | 000.2450    | 0124.0      | 050.4         | 39.06           |             |
| 116.0                 | 002.7000    | 0132.6      | 026.7         | 266.9                 | 000.2450    | 0124.0      | 050.7         | 38.95           |             |
| 117.0                 | 002.7000    | 0132.0      | 026.7         | 266.5                 | 000.2450    | 0124.0      | 051.0         | 38.84           |             |
| 118.0                 | 002.7000    | 0131.4      | 026.6         | 266.1                 | 000.2450    | 0124.0      | 051.3         | 38.73           |             |
| 119.0                 | 002.7000    | 0130.8      | 026.6         | 265.7                 | 000.2450    | 0124.1      | 051.6         | 38.62           |             |
| 120.0                 | 002.7000    | 0130.2      | 026.5         | 265.3                 | 000.2450    | 0124.1      | 051.9         | 38.50           |             |
| 121.0                 | 002.7000    | 0129.7      | 026.5         | 264.9                 | 000.2450    | 0124.1      | 052.2         | 38.39           |             |
| 122.0                 | 002.7000    | 0129.3      | 026.5         | 264.5                 | 000.2450    | 0124.2      | 052.5         | 38.27           |             |
| 123.0                 | 002.7000    | 0129.1      | 026.4         | 264.2                 | 000.2450    | 0124.3      | 052.8         | 38.16           |             |
| 124.0                 | 002.7000    | 0129.2      | 026.4         | 263.8                 | 000.2450    | 0124.3      | 053.1         | 38.05           |             |
| 125.0                 | 002.7000    | 0129.6      | 026.5         | 263.4                 | 000.2450    | 0124.4      | 053.4         | 37.94           |             |

| Azi muth<br>(degrees) | ERP<br>(kW) | HAAT<br>(m) | Di st<br>(km) | Azi muth<br>(degrees) | ERP<br>(kW) | HAAT<br>(m) | Di st<br>(km) | Actual<br>(dBu) | I X<br>(km) |
|-----------------------|-------------|-------------|---------------|-----------------------|-------------|-------------|---------------|-----------------|-------------|
| 126.0                 | 002.7000    | 0130.3      | 026.5         | 263.0                 | 000.2450    | 0124.4      | 053.6         | 37.84           |             |
| 127.0                 | 002.7000    | 0131.3      | 026.6         | 262.6                 | 000.2450    | 0124.4      | 053.9         | 37.73           |             |
| 128.0                 | 002.7000    | 0132.4      | 026.7         | 262.1                 | 000.2450    | 0124.3      | 054.2         | 37.62           |             |
| 129.0                 | 002.7000    | 0133.3      | 026.8         | 261.7                 | 000.2450    | 0124.2      | 054.5         | 37.51           |             |
| 130.0                 | 002.7000    | 0134.0      | 026.8         | 261.4                 | 000.2450    | 0124.1      | 054.8         | 37.38           |             |
| 131.0                 | 002.7000    | 0134.4      | 026.9         | 261.0                 | 000.2450    | 0124.0      | 055.1         | 37.25           |             |
| 132.0                 | 002.7000    | 0134.7      | 026.9         | 260.7                 | 000.2450    | 0123.9      | 055.4         | 37.11           |             |
| 133.0                 | 002.7000    | 0135.0      | 026.9         | 260.4                 | 000.2450    | 0123.8      | 055.8         | 36.96           |             |
| 134.0                 | 002.7000    | 0135.3      | 027.0         | 260.1                 | 000.2450    | 0123.7      | 056.2         | 36.82           |             |
| 135.0                 | 002.7000    | 0135.5      | 027.0         | 259.8                 | 000.2450    | 0123.6      | 056.5         | 36.67           |             |
| 136.0                 | 002.7000    | 0135.5      | 027.0         | 259.5                 | 000.2450    | 0123.5      | 056.9         | 36.51           |             |
| 137.0                 | 002.7000    | 0135.1      | 026.9         | 259.3                 | 000.2450    | 0123.4      | 057.4         | 36.36           |             |
| 138.0                 | 002.7000    | 0134.5      | 026.9         | 259.1                 | 000.2450    | 0123.4      | 057.8         | 36.19           |             |
| 139.0                 | 002.7000    | 0133.9      | 026.8         | 258.9                 | 000.2450    | 0123.4      | 058.2         | 36.03           |             |
| 140.0                 | 002.7000    | 0133.9      | 026.8         | 258.7                 | 000.2450    | 0123.3      | 058.6         | 35.88           |             |
| 141.0                 | 002.7000    | 0134.3      | 026.9         | 258.4                 | 000.2450    | 0123.3      | 059.0         | 35.73           |             |
| 142.0                 | 002.7000    | 0135.2      | 026.9         | 258.2                 | 000.2450    | 0123.3      | 059.4         | 35.58           |             |
| 143.0                 | 002.7000    | 0136.2      | 027.0         | 257.9                 | 000.2450    | 0123.2      | 059.8         | 35.44           |             |
| 144.0                 | 002.7000    | 0137.1      | 027.1         | 257.7                 | 000.2450    | 0123.2      | 060.2         | 35.29           |             |
| 145.0                 | 002.7000    | 0137.7      | 027.2         | 257.4                 | 000.2450    | 0123.2      | 060.6         | 35.14           |             |
| 146.0                 | 002.7000    | 0138.2      | 027.2         | 257.2                 | 000.2450    | 0123.2      | 061.0         | 34.99           |             |
| 147.0                 | 002.7000    | 0139.0      | 027.3         | 257.0                 | 000.2450    | 0123.2      | 061.5         | 34.84           |             |
| 148.0                 | 002.7000    | 0140.0      | 027.4         | 256.8                 | 000.2450    | 0123.2      | 061.9         | 34.69           |             |
| 149.0                 | 002.7000    | 0140.8      | 027.4         | 256.6                 | 000.2450    | 0123.2      | 062.3         | 34.54           |             |
| 150.0                 | 002.7000    | 0141.5      | 027.5         | 256.4                 | 000.2450    | 0123.2      | 062.8         | 34.39           |             |
| 151.0                 | 002.7000    | 0142.3      | 027.5         | 256.3                 | 000.2450    | 0123.2      | 063.2         | 34.24           |             |
| 152.0                 | 002.7000    | 0143.0      | 027.6         | 256.1                 | 000.2450    | 0123.2      | 063.7         | 34.09           |             |
| 153.0                 | 002.7000    | 0143.2      | 027.6         | 256.0                 | 000.2450    | 0123.2      | 064.1         | 33.94           |             |
| 154.0                 | 002.7000    | 0142.9      | 027.6         | 255.9                 | 000.2450    | 0123.2      | 064.6         | 33.79           |             |
| 155.0                 | 002.7000    | 0142.7      | 027.6         | 255.9                 | 000.2450    | 0123.2      | 065.1         | 33.63           |             |
| 156.0                 | 002.7000    | 0142.8      | 027.6         | 255.8                 | 000.2450    | 0123.2      | 065.6         | 33.48           |             |

At no point on the WEAG-FM 60 dBu (protected) contour does the proposed W292DE deliver more than 40 dBu (interfering).