

PRECLUSION STUDY  
NEW FM TRANSLATOR, GOLDEN, COLORADO, CH. 268D  
MARY MEDICUS  
FCC FORM 349  
APRIL 2013

The applicant does seek to make a minor amendment to the original application by specifying to “one step” channel change from the original channel of 270D to 268D. It will also increase its antenna height from 2244 meters to 2251 Meters Above Mean Sea Level. It will remain at the originally proposed transmitter site. It will also decrease its effective radiated power from 0.01 kilowatts (10 watts) to 0.002 kilowatts (2 watts) and modify its proposed directional antenna system.

This site is located 0.1 kilometers outside of the western edge of the Spectrum Limited Market Grid (ARB#20) Denver-Boulder, Colorado. This proposed operation is located within 39 kilometers of this market Grid, thus a LPFM preclusion study and “Site Test” is required.

Figure 10 is a LPFM “Preclusion” study conducted at the coordinates of the Denver-Boulder, CO market. It shows that channel 268, as well as 265, 266, 267, 269, 270, 271 would not be available in this market regardless of the minor modification of this application, since no Auction 83 translator applications were considered with this study (including this application). This application is located within a “Top-50” Spectrum limited Market, thus a “Top-50 Transmitter Site Test” was conducted. Figure 11 is a “Channel Finder” study conducted at the proposed transmitter site for the new FM translator at Golden, Colorado on channel 268D. As can be seen, there are no available channels at this site for a new proposed LPFM station, including the proposed channel 268D operation. Operation on channel 268 by a new LPFM is precluded by existing co-channel station, KJHM Strasburg, Colorado, facility ID 38629, and second adjacent channel stations, KOSI Denver, Colorado, facility ID 67844, channel 266C, and

KXWA Centennial, Colorado, facility ID 70822, channel 270C3. Figures 12, 13 and 14 are LPFM channel spacing studies conducted from the proposed translator site which show that channels 268, 269 and 267 would not be available for use at this site by an LPFM LP-100 station.

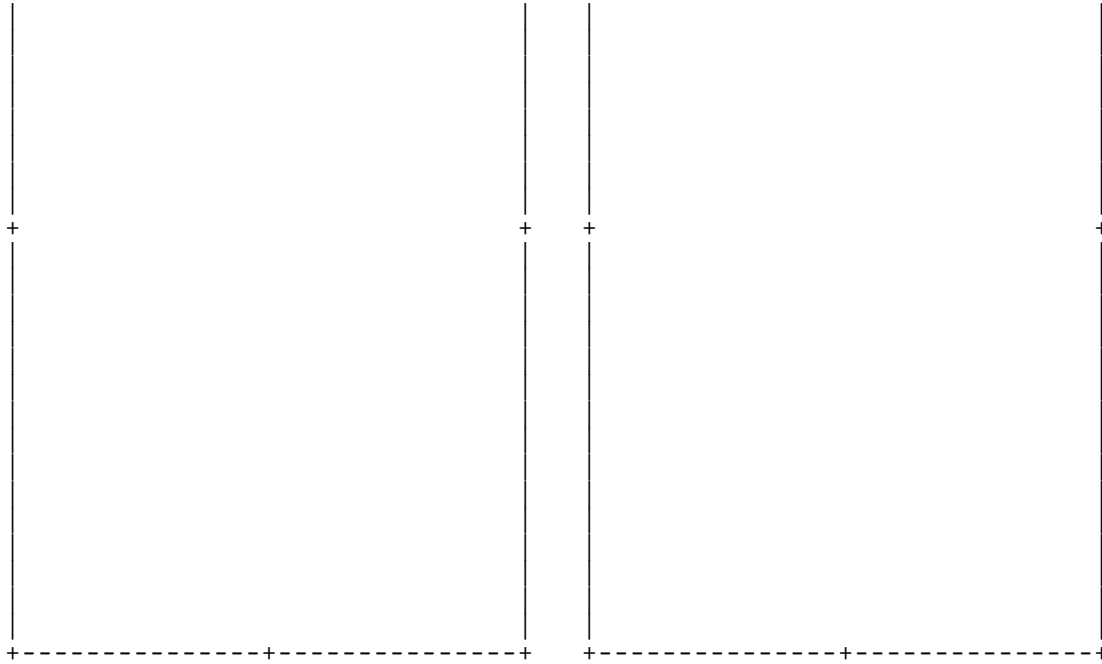
Thus it was concluded, that the new proposed FM translator operation at Golden, Colorado on channel 268D will not preclude any potential new LPFM operation within the protected market grid, or at the proposed site, which is within a 39 kilometer area outside of the Denver-Boulder, Colorado, spectrum limited market grid.

MI CRO\_DENVERC003230954  
DENVER PRECLUSION STUDY

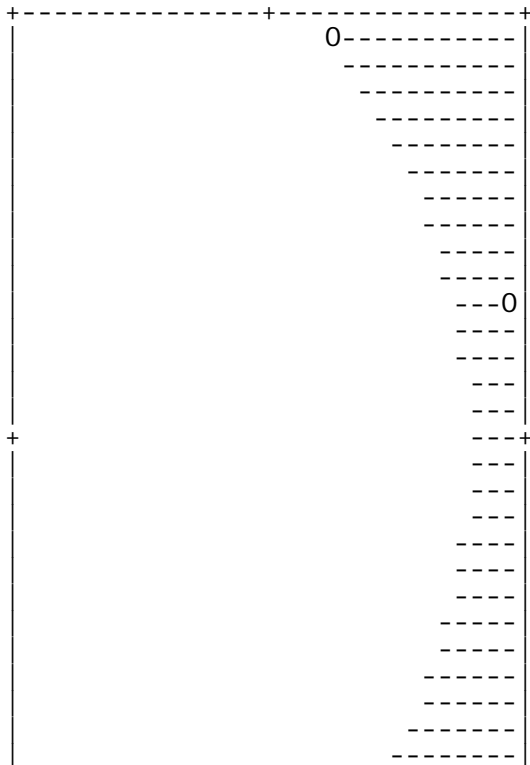
MI CRO\_DENVERC003230954  
DENVER PRECLUSION STUDY

Total	4212
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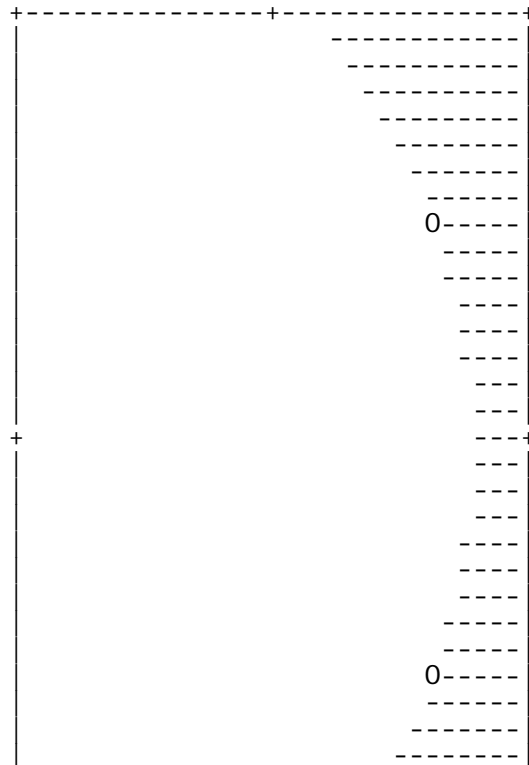
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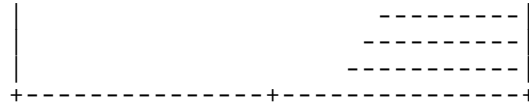
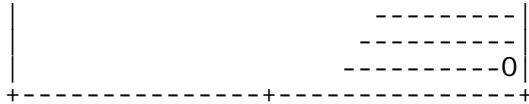
Point #027 at 39-55-21 104-44-03  
Point #646 at 39-54-21 105-04-03  
Denver, CO  
Latitude 39-44-21  
Longitude 104-59-03  
Least preclusive siting  
Availability of Channel 229 (X)



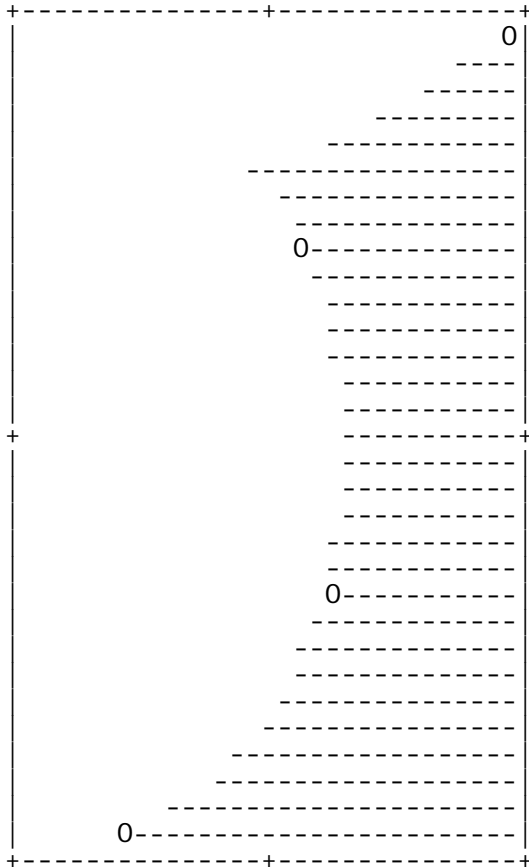
Point #492 at 39-55-21 104-59-03  
Denver, CO  
Latitude 39-44-21  
Longitude 104-59-03  
Most preclusive siting  
Availability of Channel 229 (X)



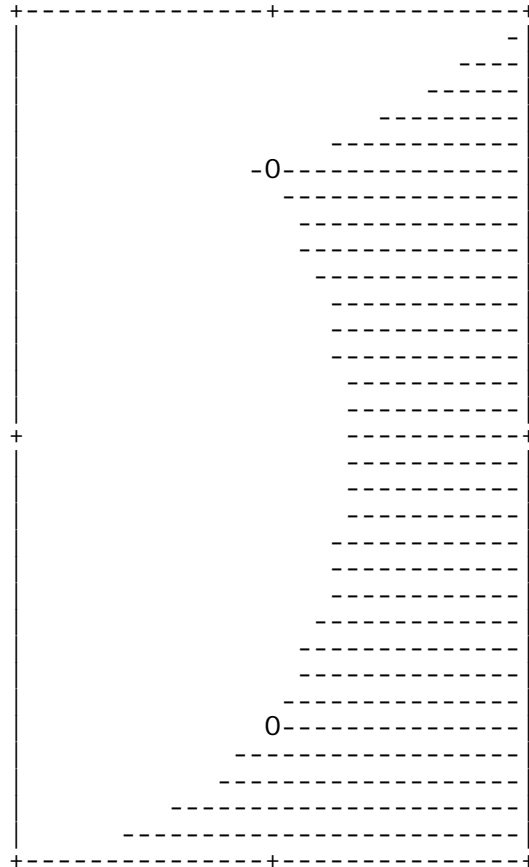
MI CRO\_DENVERC003230954



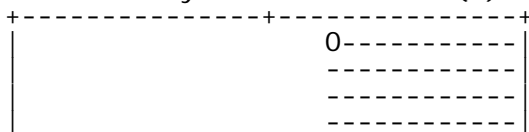
Poi nt #372 at 39-59-21 104-55-03  
 Poi nt #021 at 39-49-21 104-44-03  
 Poi nt #001 at 39-29-21 104-44-03  
 Denver, CO  
 Lati tude 39-44-21  
 Longi tude 104-59-03  
 Least preclusi ve si ti ng  
 Availabi lity of Channel 230 (X)



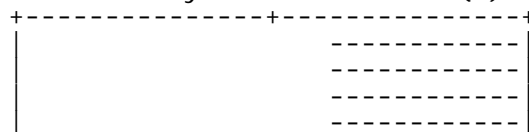
Poi nt #162 at 39-35-21 104-49-03  
 Poi nt #179 at 39-52-21 104-49-03  
 Denver, CO  
 Lati tude 39-44-21  
 Longi tude 104-59-03  
 Most preclusi ve si ti ng  
 Availabi lity of Channel 230 (X)



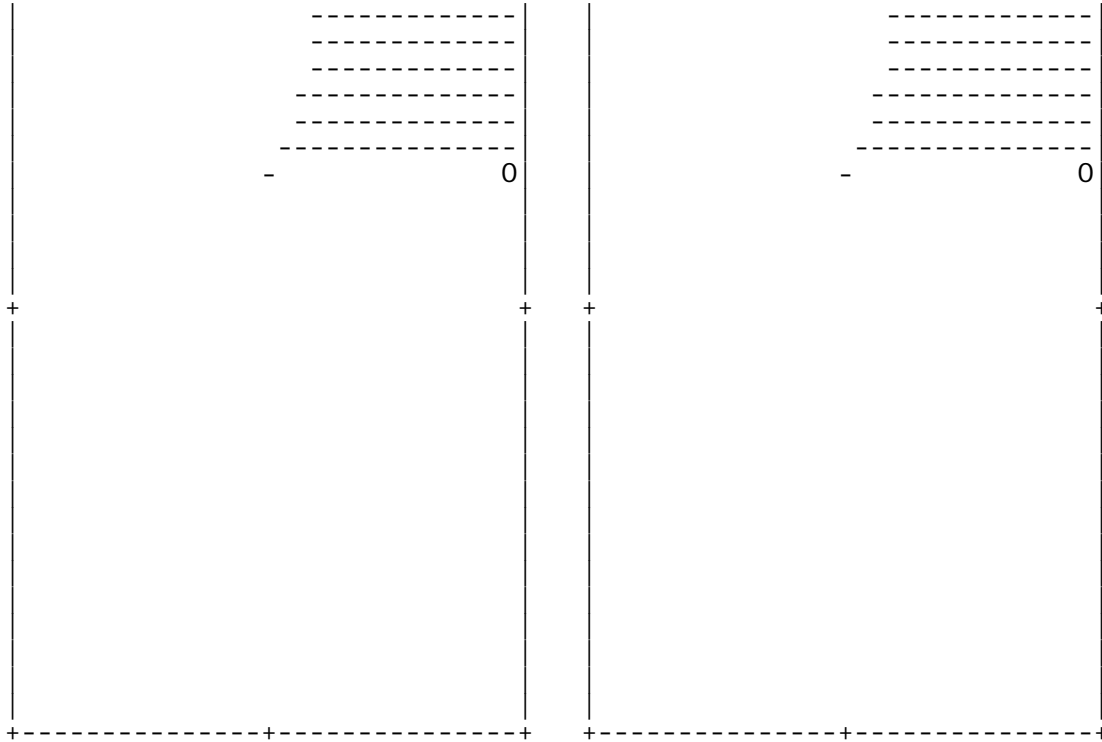
Poi nt #031 at 39-59-21 104-44-03  
 Poi nt #426 at 39-51-21 104-57-03  
 Poi nt #745 at 39-29-21 105-08-03  
 Poi nt #351 at 39-38-21 104-55-03  
 Denver, CO  
 Lati tude 39-44-21  
 Longi tude 104-59-03  
 Least preclusi ve si ti ng  
 Availabi lity of Channel 231 (X)



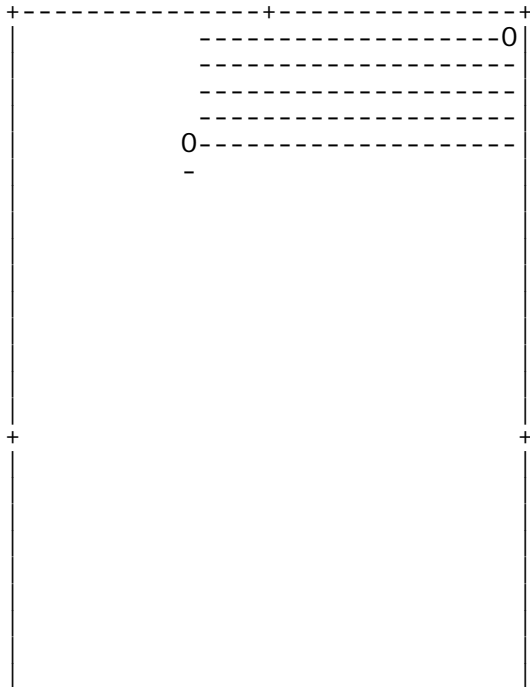
Poi nt #470 at 39-33-21 104-59-03  
 Poi nt #491 at 39-54-21 104-59-03  
 Denver, CO  
 Lati tude 39-44-21  
 Longi tude 104-59-03  
 Most preclusi ve si ti ng  
 Availabi lity of Channel 231 (X)



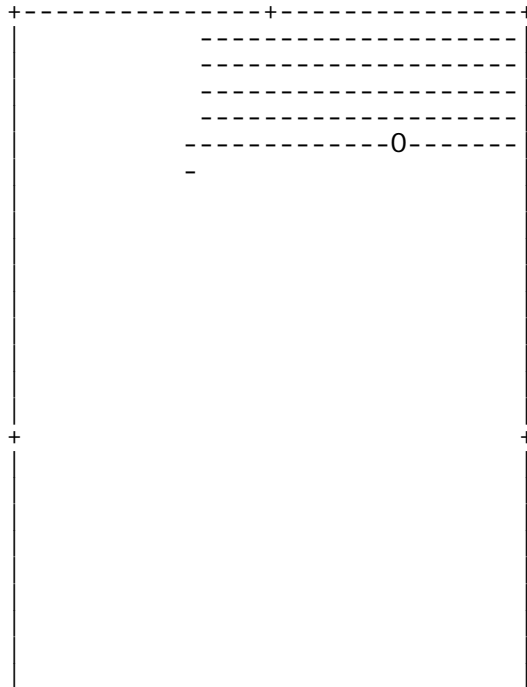
MI CRO\_DENVERC003230954



Point #372 at 39-59-21 104-55-03  
 Point #021 at 39-49-21 104-44-03  
 Denver, CO  
 Latitude 39-44-21  
 Longitude 104-59-03  
 Least preclusive siting  
 Availability of Channel 232 (X)



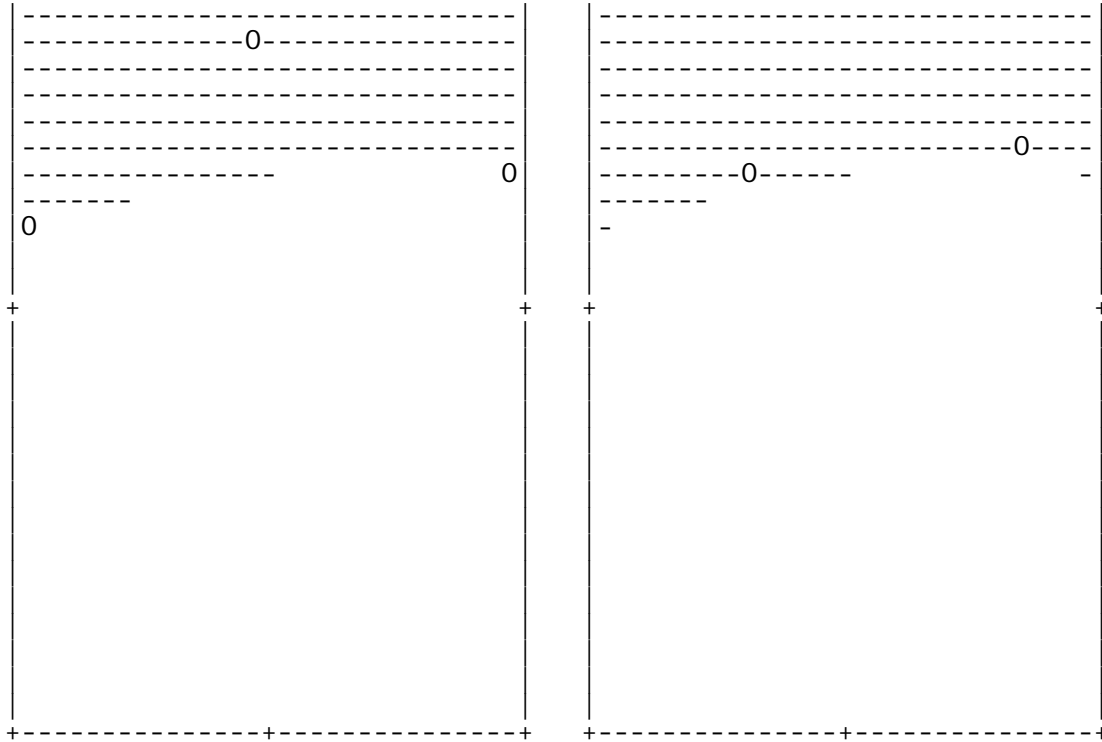
Point #021 at 39-49-21 104-44-03  
 Denver, CO  
 Latitude 39-44-21  
 Longitude 104-59-03  
 Most preclusive siting  
 Availability of Channel 232 (X)



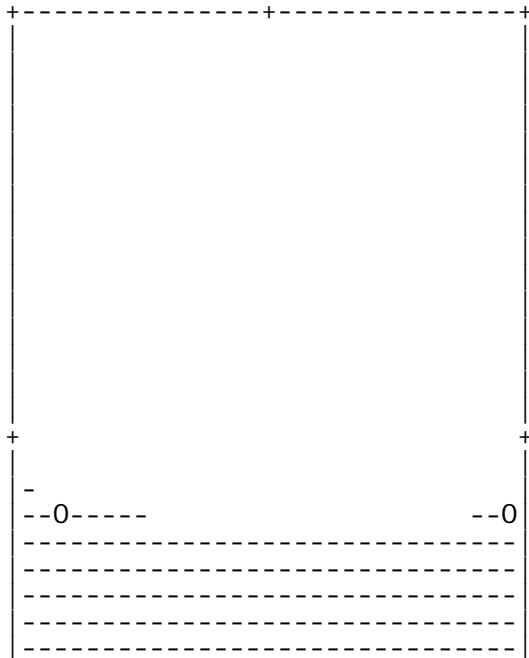
Two empty rectangular boxes, each with a dashed horizontal line at the bottom and a solid vertical line on the left and right sides, intended for drawing.

[illegible]

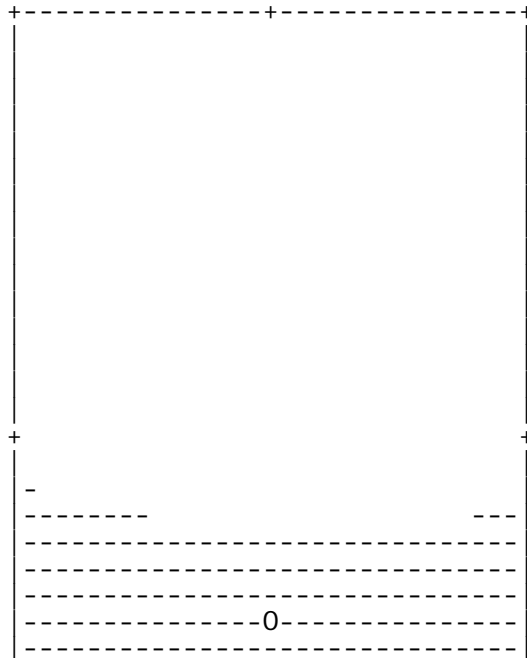
MI CRO\_DENVERC003230954



Poi nt #021 at 39-49-21 104-44-03  
 Poi nt #949 at 39-47-21 105-14-03  
 Poi nt #522 at 39-54-21 105-00-03  
 Denver, CO  
 Lati tude 39-44-21  
 Longi tude 104-59-03  
 Least precl usi ve si ti ng  
 Availabi lity of Channel 241 (X)



Poi nt #672 at 39-49-21 105-05-03  
 Poi nt #146 at 39-50-21 104-48-03  
 Denver, CO  
 Lati tude 39-44-21  
 Longi tude 104-59-03  
 Most precl usi ve si ti ng  
 Availabi lity of Channel 241 (X)





MI CRO\_DENVERC003230954

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Point #013 at 39-41-21 104-44-03  
 Point #440 at 39-34-21 104-58-03  
 Point #881 at 39-41-21 105-12-03  
 Denver, CO  
 Latitude 39-44-21  
 Longitude 104-59-03  
 Least preclusive siting  
 Availability of Channel 245 (X)

Point #474 at 39-37-21 104-59-03  
 Point #933 at 39-31-21 105-14-03  
 Denver, CO  
 Latitude 39-44-21  
 Longitude 104-59-03  
 Most preclusive siting  
 Availability of Channel 245 (X)

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-0-----	-0-----

Point #306 at 39-55-21 104-53-03  
 Denver, CO  
 Latitude 39-44-21  
 Longitude 104-59-03  
 Least preclusive siting  
 Availability of Channel 249 (X)

Point #306 at 39-55-21 104-53-03  
 Denver, CO  
 Latitude 39-44-21  
 Longitude 104-59-03  
 Most preclusive siting  
 Availability of Channel 249 (X)

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[illegible]

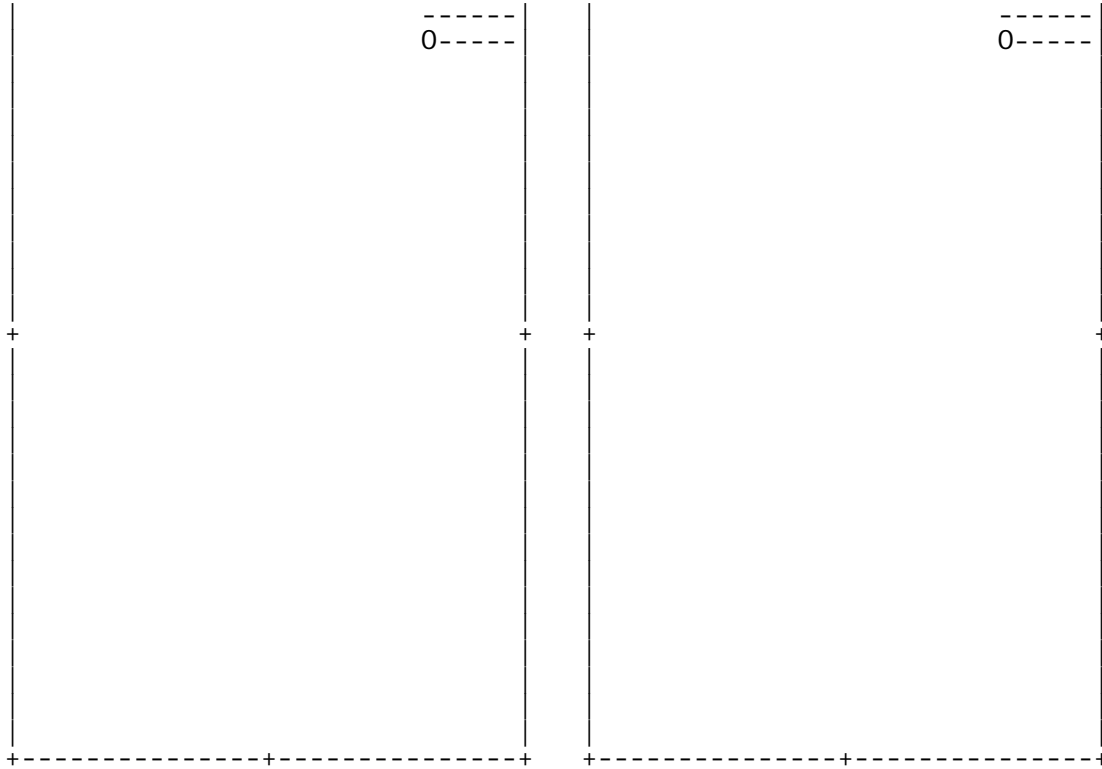
The diagram shows a rectangular region defined by dashed lines. Inside the rectangle, there are several horizontal dashed lines. A central point is labeled '0'. The diagram is part of a larger grid with dashed lines and '+' markers at the corners.

[illegible]

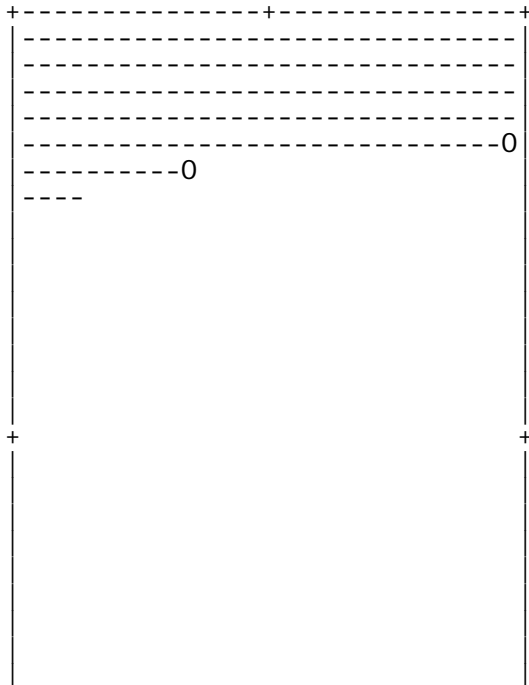
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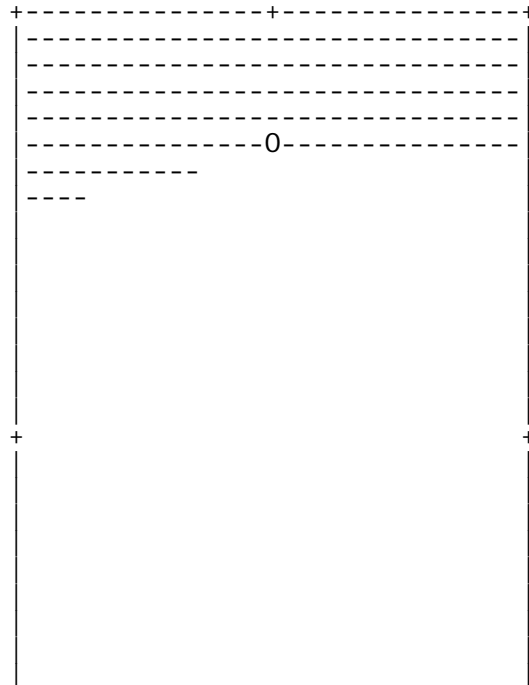
MI CRO\_DENVERC003230954



Point #182 at 39-55-21 104-49-03  
Denver, CO  
Latitude 39-44-21  
Longitude 104-59-03  
Least preclusive siting  
Availability of Channel 264 (X)



Point #182 at 39-55-21 104-49-03  
Denver, CO  
Latitude 39-44-21  
Longitude 104-59-03  
Most preclusive siting  
Availability of Channel 264 (X)

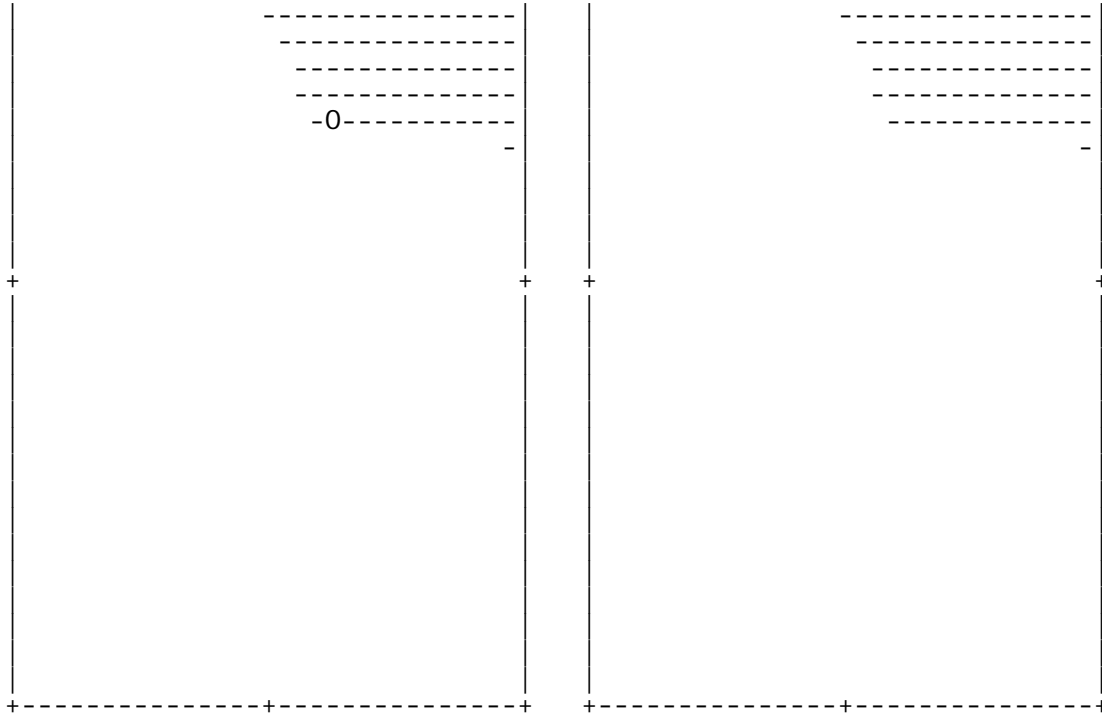


Two empty rectangular boxes, each with a dashed horizontal line at the bottom and a solid vertical line on the left and right sides, intended for drawing.

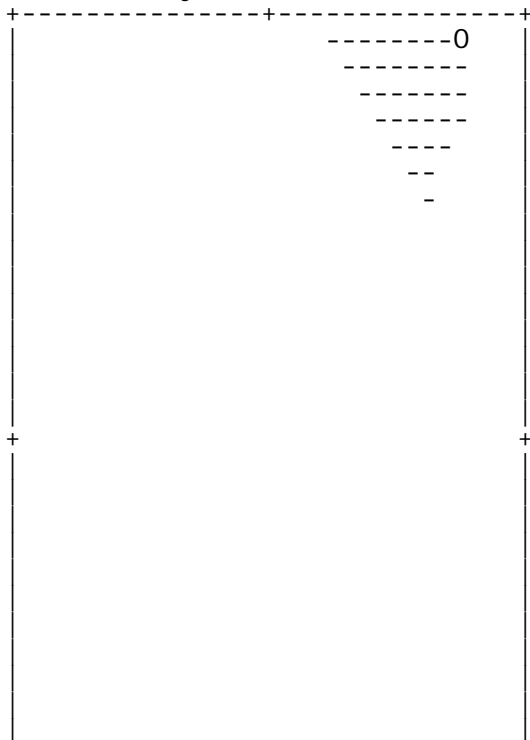
A square diagram with dashed lines and tick marks. The top and bottom edges have three tick marks each. The left and right edges have two tick marks each. A label  $-0$  is positioned near the top-right corner.

[illegible]

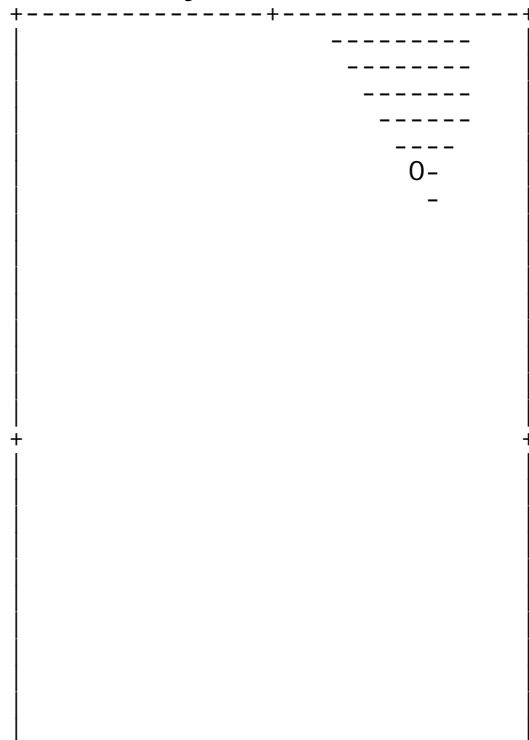

MI CRO\_DENVERC003230954



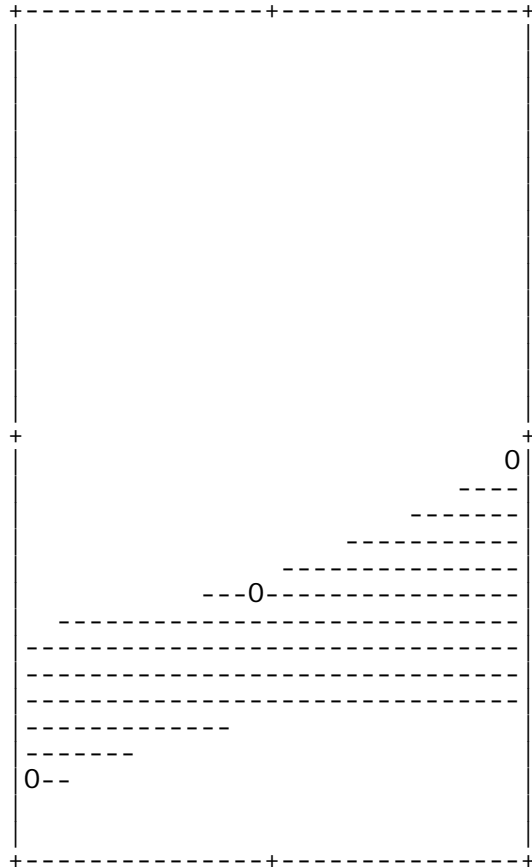
Point #363 at 39-50-21 104-55-03  
Denver, CO  
Latitude 39-44-21  
Longitude 104-59-03  
Least preclusive siting  
Availability of Channel 276 (X)



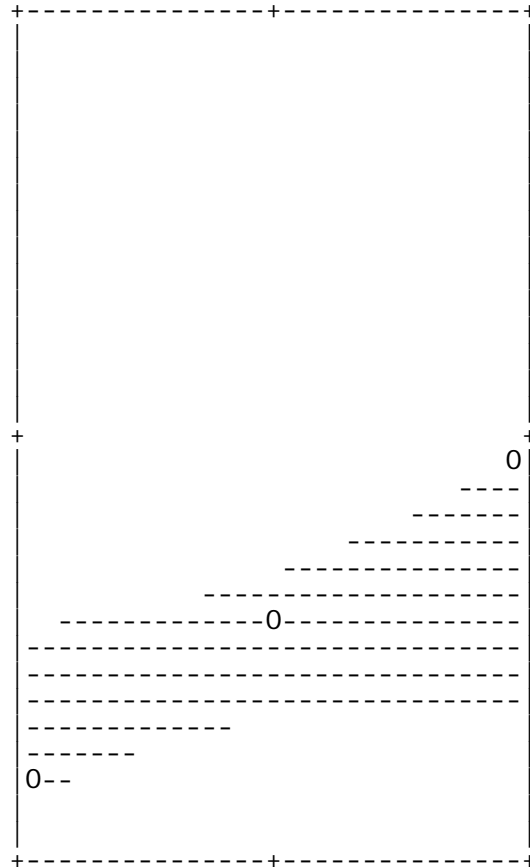
Denver, CO  
Latitude 39-44-21  
Longitude 104-59-03  
Most preclusive siting  
Availability of Channel 276 (X)



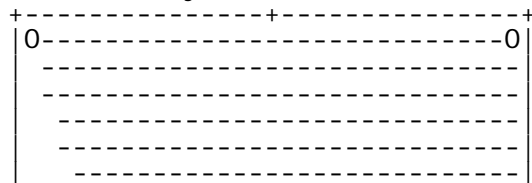

Point #124 at 39-59-21 104-47-03  
 Denver, CO  
 Latitude 39-44-21  
 Longitude 104-59-03  
 Least preclusive siting  
 Availability of Channel 280 (X)



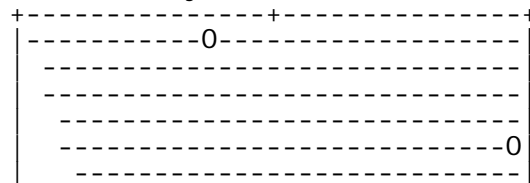
Point #212 at 39-54-21 104-50-03  
 Denver, CO  
 Latitude 39-44-21  
 Longitude 104-59-03  
 Most preclusive siting  
 Availability of Channel 280 (X)

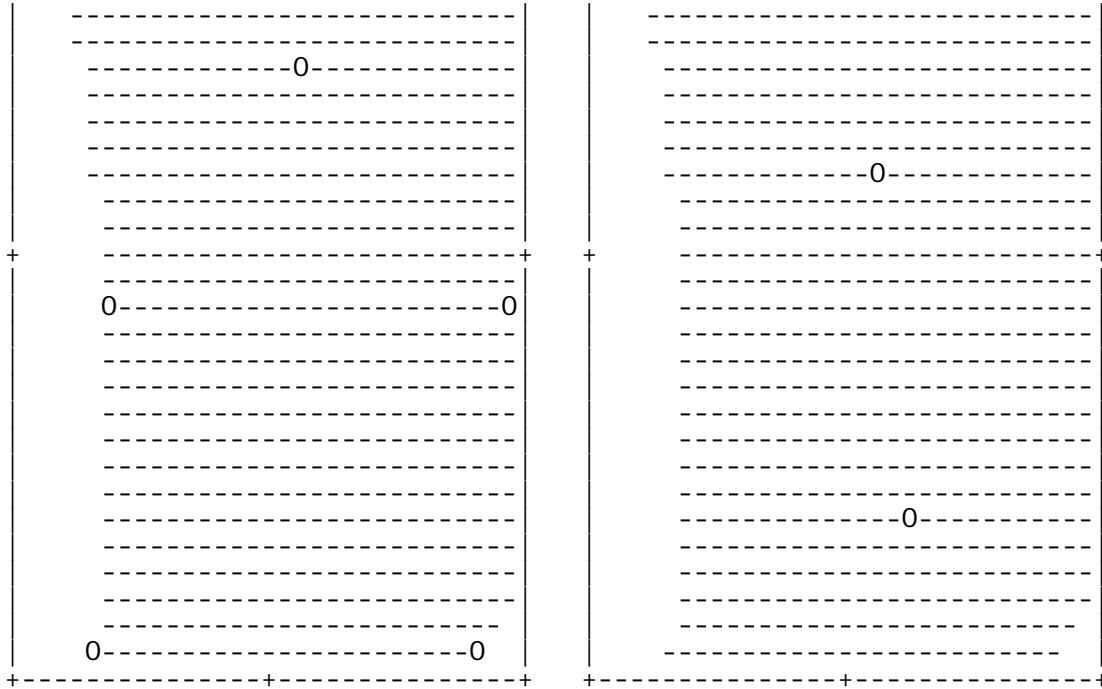


Point #933 at 39-31-21 105-14-03  
 Point #015 at 39-43-21 104-44-03  
 Point #506 at 39-38-21 105-00-03  
 Denver, CO  
 Latitude 39-44-21  
 Longitude 104-59-03  
 Least preclusive siting  
 Availability of Channel 284 (X)



Point #474 at 39-37-21 104-59-03  
 Point #015 at 39-43-21 104-44-03  
 Point #933 at 39-31-21 105-14-03  
 Denver, CO  
 Latitude 39-44-21  
 Longitude 104-59-03  
 Most preclusive siting  
 Availability of Channel 284 (X)

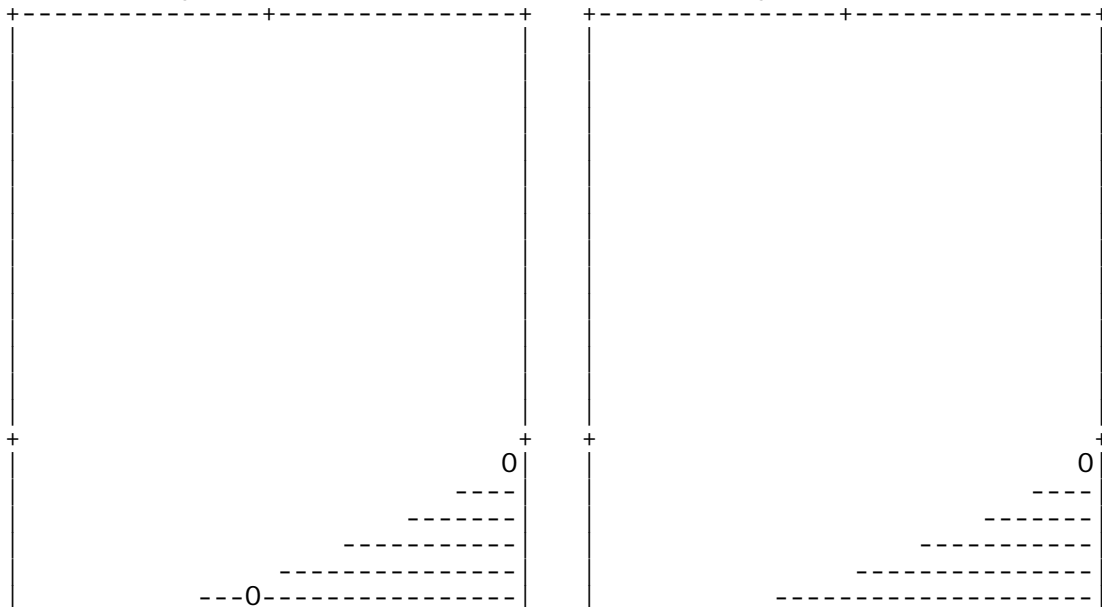




Point #961 at 39-59-21 105-14-03  
 Point #031 at 39-59-21 104-44-03  
 Point #807 at 39-29-21 105-10-03  
 Point #063 at 39-29-21 104-46-03  
 Point #014 at 39-42-21 104-44-03  
 Point #789 at 39-42-21 105-09-03  
 Point #426 at 39-51-21 104-57-03  
 Denver, CO  
 Latitude 39-44-21  
 Longitude 104-59-03  
 Least preclusive siting  
 Availability of Channel 288 (X)

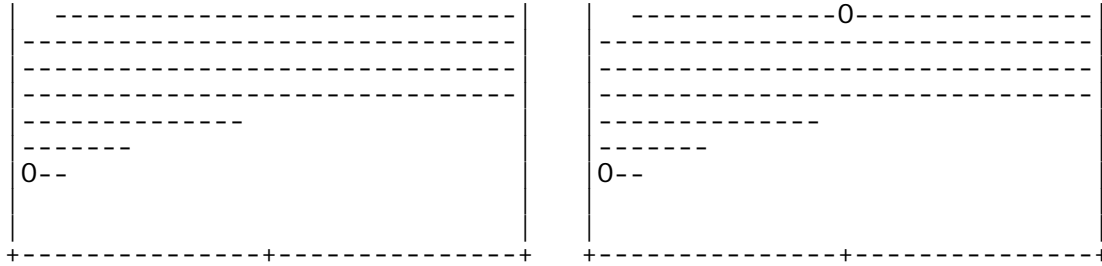
Point #422 at 39-47-21 104-57-03  
 Point #347 at 39-34-21 104-55-03  
 Point #620 at 39-59-21 105-03-03  
 Point #027 at 39-55-21 104-44-03

Denver, CO  
 Latitude 39-44-21  
 Longitude 104-59-03  
 Most preclusive siting  
 Availability of Channel 288 (X)

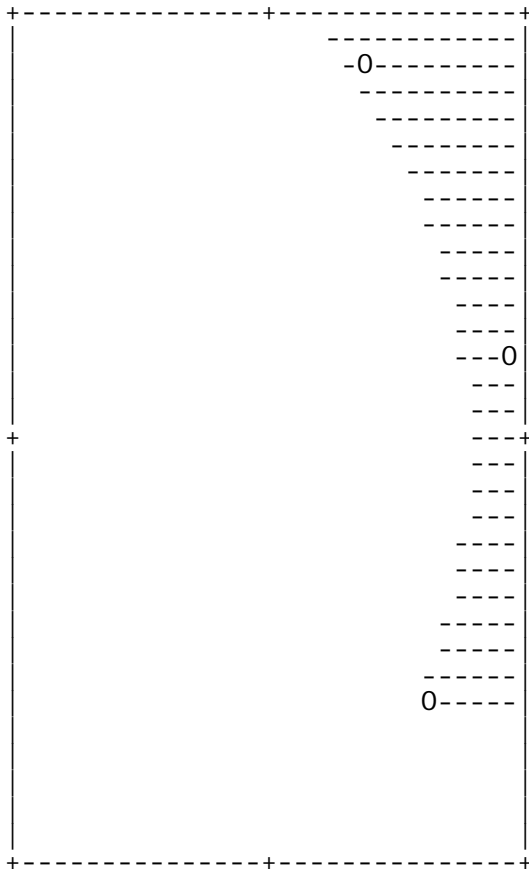




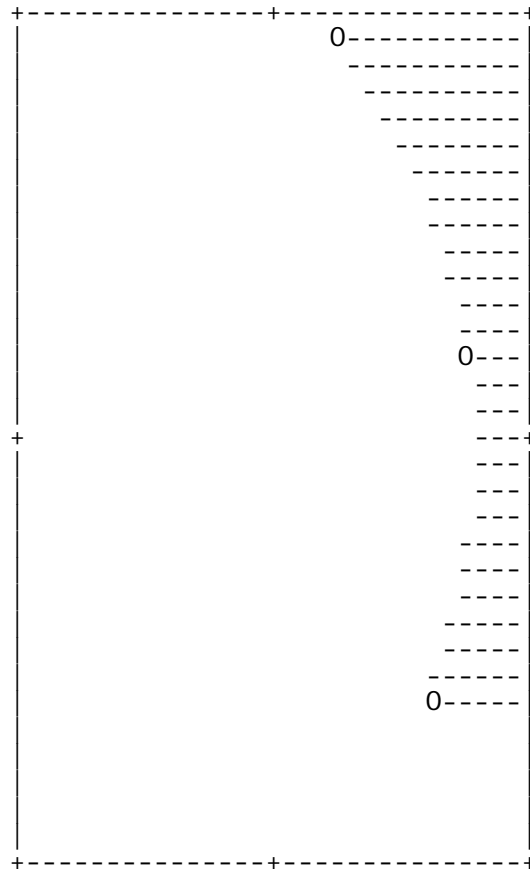
MI CRO\_DENVERC003230954



Point #933 at 39-31-21 105-14-03  
 Point #015 at 39-43-21 104-44-03  
 Point #506 at 39-38-21 105-00-03  
 Denver, CO  
 Latitude 39-44-21  
 Longitude 104-59-03  
 Least preclusive siting  
 Availability of Channel 292 (X)



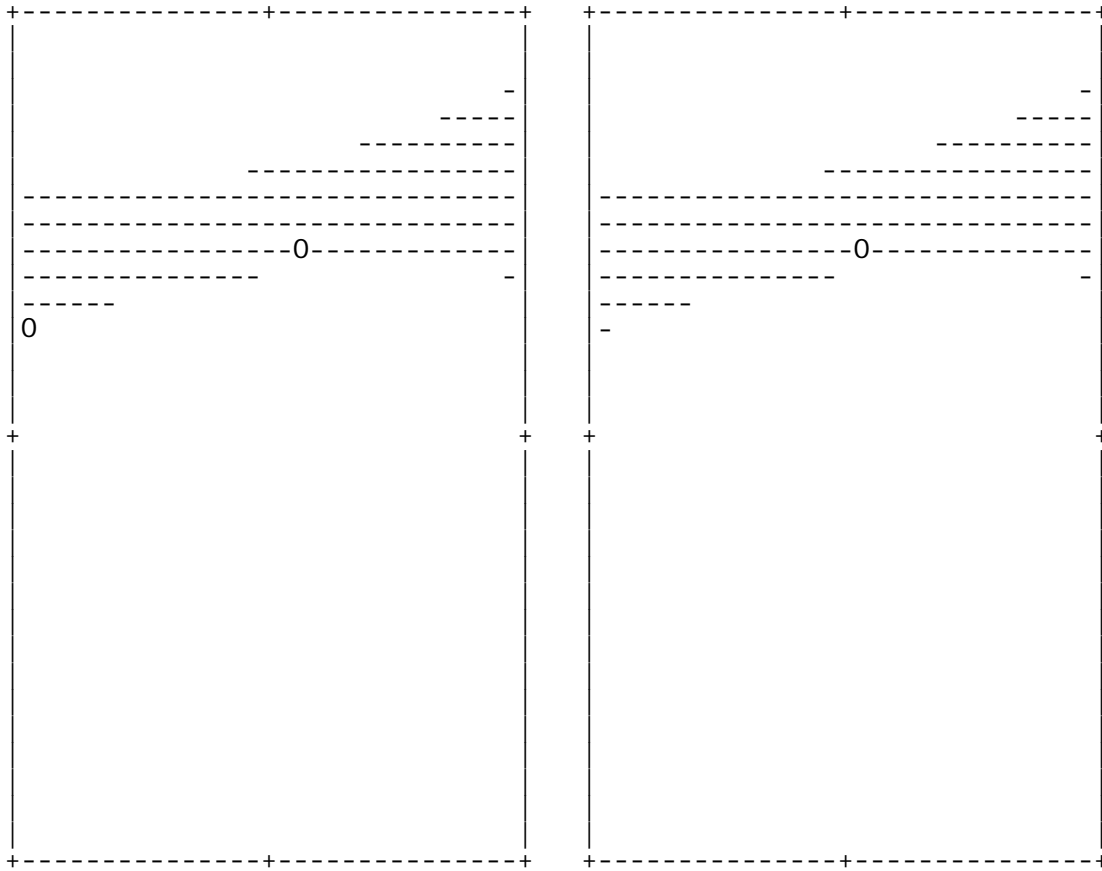
Point #474 at 39-37-21 104-59-03  
 Point #015 at 39-43-21 104-44-03  
 Point #933 at 39-31-21 105-14-03  
 Denver, CO  
 Latitude 39-44-21  
 Longitude 104-59-03  
 Most preclusive siting  
 Availability of Channel 292 (X)



Point #161 at 39-34-21 104-49-03  
 Point #019 at 39-47-21 104-44-03  
 Point #309 at 39-58-21 104-53-03  
 Denver, CO  
 Latitude 39-44-21  
 Longitude 104-59-03  
 Least preclusive siting  
 Availability of Channel 300 (X)

Point #112 at 39-47-21 104-47-03  
 Point #161 at 39-34-21 104-49-03  
 Point #372 at 39-59-21 104-55-03  
 Denver, CO  
 Latitude 39-44-21  
 Longitude 104-59-03  
 Most preclusive siting  
 Availability of Channel 300 (X)

MI CRO\_DENVERC003230954



Poi nt #950 at 39-48-21 105-14-03  
 Poi nt #426 at 39-51-21 104-57-03

Poi nt #457 at 39-51-21 104-58-03

## FIGURE 11 - LPFM STUDY CONDUCTED AT PROPOSED SITE


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## Audio Division

## Low Power FM (LPFM) Channel Finder

(202)-418-2700

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[FCC site map](#)

Sun Mar 31 12:37:03 2013

EXCLUDES second-adjacent channel spacings  
EXCLUDES intermediate frequency (I.F.) spacings

Input options:

Latitude, Longitude: 39° 43' 46", 105 14' 8"

Google Map: [5.6 km radius \(approximate 60 dBu service contour coverage\)](#)

**FAIL.** The requested latitude and longitude do not meet the LPFM spacing requirements on ANY channel.

The channel(s) shown are blocked by the station(s) below.  
The column Rules contains the required spacing, in kilometers.  
Try the suggested location (latitude,longitude), at the approximate offset (km; heading N, S, E, or W) from your proposed location.

## LPFM

Chn	Blocker	Chn	Adj	Lat.	Long.	Dist.	Rule	Possible Site	Try Moving
237		US236	1st	38.75104.86	113.9	120		<a href="#">39 46 49 105 15 19</a>	N 5.7 W 1.7 km
241		US241	co-	40.68104.94	108.5	111		<a href="#">39 42 31 105 14 30</a>	S 2.3 W 0.5 km
250		US251	1st	38.74104.86	114.1	120		<a href="#">39 46 44 105 15 16</a>	N 5.5 W 1.6 km
250	USAj\	249	1st	39.89105.42	24.0	28		<a href="#">39 42 08 105 12 19</a>	S 3.0 E 2.6 km
256		US255	1st	38.75104.86	113.9	120		<a href="#">39 46 50 105 15 19</a>	N 5.7 W 1.7 km
256		US256	co-	40.64104.82	107.4	111		<a href="#">39 41 58 105 14 56</a>	S 3.3 W 1.2 km
300		US247	IF	39.91105.29	21.0	28		<a href="#">39 40 05 105 13 00</a>	S 6.8 E 1.6 km
300		US300	co-	38.74104.86	114.0	122		<a href="#">39 47 51 105 15 42</a>	N 7.6 W 2.2 km

## New LPFM Channel Finder Analysis?

NAD 27 Coordinates (degrees, minutes, seconds latitude and longitude)

FM Station Latitude

FM Station Longitude

     
☒ Results only☐ Show List of Stations Considered

## Special search options:

*Second adjacent channels:* An LPFM application must satisfy minimum distance separation requirements to stations operating on and applications proposing operations on second-adjacent

channels. The *Local Community Radio Act* authorizes the Commission to waive the second-adjacent channel protection requirement and the Commission has under consideration proposed waiver standards.

☒ *Consider*   ☐ *Don't consider*   *Second-adjacent channel spacings*

*Intermediate Frequency (I.F.) channels:* An LPFM application must satisfy minimum distance separation requirements to stations operating on and applications proposing operations on intermediate frequency (IF) channels. The Commission has under consideration a proposal to eliminate this requirement for LPFM applications proposing operations at less than 100 watts effective radiated power.

☒ *Consider*   ☐ *Don't consider*   *I.F. channel spacings*

Submit the Data

Clear the Form

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If you would like more information pertaining to the Media Bureau, please call: (202) 418-7200.

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Commission  
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Washington, DC 20554

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225-5322)

TTY: 1-888-TELL-FCC (1-888-  
835-5322)

Fax: 1-866-418-0232

E- [fccinfo@fcc.gov](mailto:fccinfo@fcc.gov)  
mail:

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- [Website Policies & Notices](#)  
- [Required Browser Plug-ins](#)  
- [Freedom of Information Act](#)

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Current Spacings to 3rd Adj.

Call	CH#	Type	Location		Azi	D-KM	FCC	Margin
KOSI	266C	LIC-D	Denver	CO	246.8	0.07	93.0	-92.4
KJHM	268C	LIC-N	Strasburg	CO	78.3	110.19	130.0	-19.3
K269CL	269D	LIC-D	Evergreen	CO	202.1	12.71	28.0	-14.8
KXWA	270C3	LIC-N	Centennial	CO	157.3	41.43	40.0	1.9
KJHM-FM1	268D	LIC-D	Commerce City	CO	100.9	31.57	24.0	8.1
K269AE	269D	LIC-?	Boulder	CO	3.7	25.71	15.0	11.2
KSKE-FM	269C1	LIC-Z	Eagle	CO	270.9	134.18	100.0	34.7
KSMT	271A	LIC-Z	Breckenridge	CO	249.3	73.02	29.0	44.5
KRKY-FM	271A	LIC	Estes Park	CO	341.0	74.19	29.0	45.7
K269EQ.C	268D	CP -D	Loveland	CO	3.0	84.96	39.0	46.5
KRKY-FM3	271D	CP -D	Longmont	CO	12.4	52.24	6.0	46.7
K270AL	270D	LIC-D	Granby	CO	300.2	69.26	8.0	61.8
K269EQ	269D	LIC	Loveland	CO	3.0	84.96	21.0	64.5
KXCL.C	269A	CP -N	Rock Creek Park	CO	158.4	120.53	56.0	65.0
629897	267D	APP	Woodland Park	CO	170.2	83.65	15.0	69.2
K271BN	271D	LIC-D	Estes Park	CO	28.7	89.87	14.0	76.4
KRKY-FM2	271D	LIC-D	Fort Collins	CO	3.0	84.96	6.0	79.5

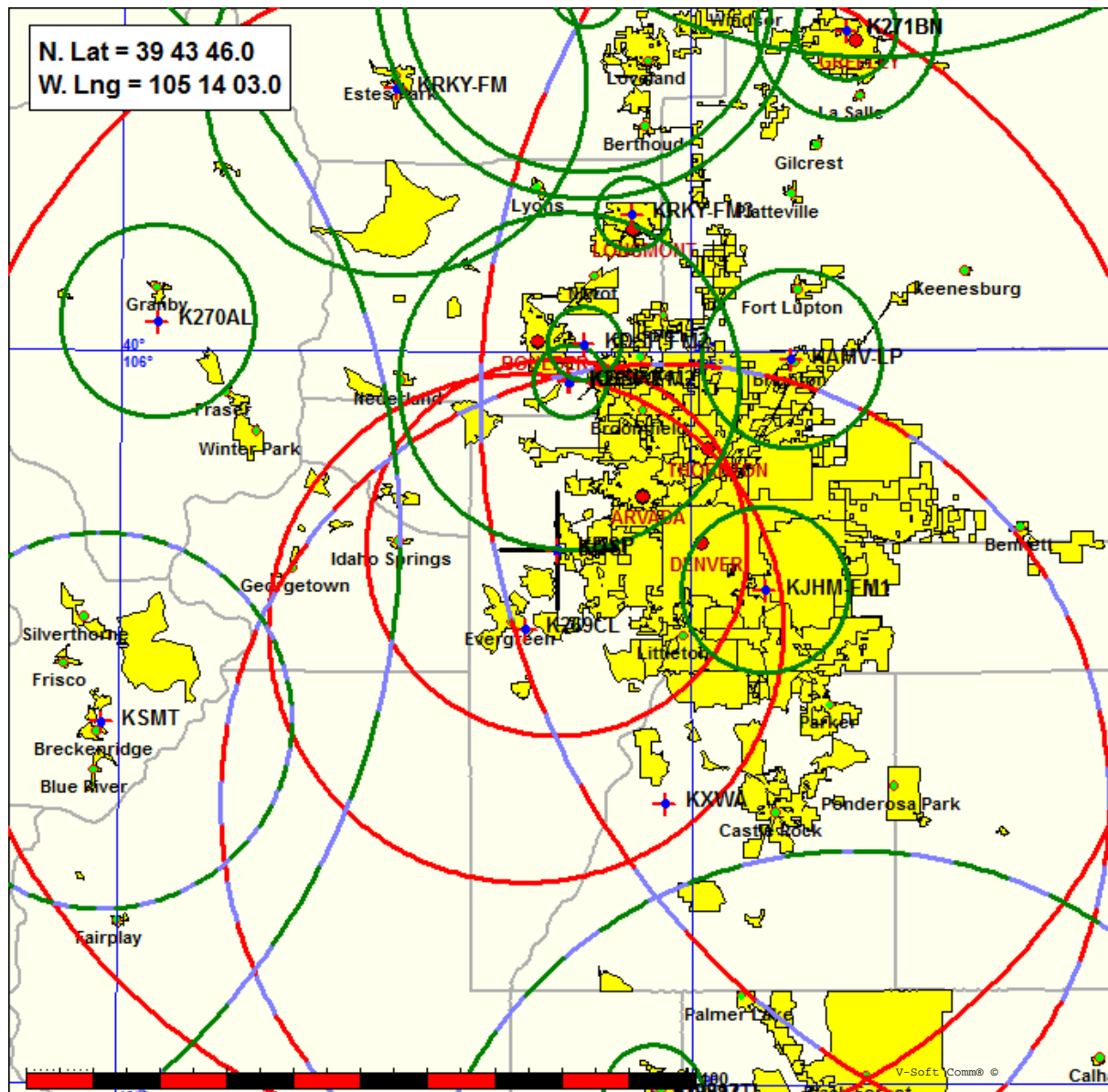
						Page # 2		
Call	CH#	Type	Location		Azi	D-KM	FCC	Margin
-----								
K271BN.C	271D	CP -D	Estes Park	CO	28.7	89.87	8.0	82.4
K253AH.A	271D	APP	Colorado Springs	CO	162.9	111.32	8.0	103.8
KIGN	270C2	LIC	Burns	WY	17.1	161.37	53.0	108.9
K265DS	265D	LIC-D	Eagle	CO	271.0	134.30	21.0	113.8
K268BJ	268D	LIC	Aspen	CO	247.9	147.12	32.0	115.6
KXCL	269A	LIC	Westcliffe	CO	186.1	177.91	56.0	122.4
NEW.C	265A	CP -N	Dotsero	CO	267.8	152.11	29.0	123.6
KFEZ	267C1	LIC	Walsenburg	CO	163.0	225.00	100.0	125.5
K266AK	266D	LIC	Aspen	CO	247.9	147.11	14.0	133.6
K268BX	268D	LIC	Cheyenne	WY	15.6	165.13	32.0	133.6
K266BB	266D	LIC	Fort Morgan	CO	67.0	142.11	8.0	134.6
K268BX.C	268D	CP	Cheyenne	WY	13.0	160.41	26.0	134.9
K266AM	266D	LIC-D	Gypsum	CO	267.8	152.15	14.0	138.7
AU9359555	265C2	VAC	Gunnison	CO	231.7	197.45	53.0	145.0
K269FU	269D	LIC	Laramie	WY	354.0	167.88	21.0	147.4
K271BK	271D	LIC-D	Basalt	CO	255.9	165.13	14.0	151.6
KOZY-FM	267C0	LIC	Bridgeport	NE	26.3	262.73	111.0	152.2
K265CS	265D	LIC-D	Carbondale	CO	260.2	187.10	21.0	166.6
KSKE-FM1	269D	LIC-D	Glenwood Springs	CO	264.7	179.72	13.0	167.2
1544902	270D	APP	Crested Butte	CO	239.0	175.92	8.0	168.4
647857	270D	APP-D	Crested Butte	CO	239.0	175.92	8.0	168.4
K267AB	267D	LIC-D	Gunnison	CO	227.6	197.11	28.0	169.6
K272DB.C	271D	CP -D	Redstone	CO	252.9	179.09	8.0	171.6
KNEC	265C3	LIC	Yuma	CO	80.8	213.97	40.0	174.5
1544893	266D	APP	Craig	CO	297.3	196.51	14.0	183.0
633940	266D	APP-D	Craig	CO	297.3	196.51	14.0	183.0
KBDY	271C2	LIC-N	Hanna	WY	333.2	237.96	53.0	185.5
KZEW	269A	LIC	Wheatland	WY	5.3	258.34	56.0	202.8
K268BL	268D	LIC	Battlement Mesa	CO	263.1	236.92	26.0	211.4
KDBN	266A	LIC	Parachute	CO	263.3	241.52	29.0	213.0
AL9051	270C2	VAC	Olathe	CO	243.0	268.26	53.0	215.8
1435397	270C2	RSV-A	Olathe	CO	243.0	268.26	53.0	215.8
K271BA	271D	LIC	Rifle	CO	265.6	234.05	14.0	220.6
KGJX.C	268C2	CP	Fruita	CO	257.4	311.31	91.0	220.8
637903	265D	APP	Craig	CO	283.6	236.36	14.0	222.9
1432033	270C2	APP-D	Olathe	CO	243.7	275.92	53.0	223.4
K271AE	271D	LIC	Cedaredge	CO	250.9	247.29	8.0	239.8
K267AZ	267D	LIC	Cedaredge, Etc.	CO	247.3	254.40	15.0	239.9
1545951	267D	APP	Lake City	CO	223.8	264.36	21.0	243.9
K270AM	270D	LIC	Julesburg	CO	60.3	257.72	14.0	244.2
KPNY	271C1	LIC	Alliance	NE	33.1	319.43	73.0	246.9
647745	266D	APP-D	Lake City	CO	223.8	264.36	14.0	250.9
K269DO	269D	LIC	Scottsbluff	NE	28.7	269.16	15.0	254.7
KIQX	267C1	LIC	Durango	CO	221.1	359.41	100.0	259.9
K269EG	269D	LIC-D	Rawlins	WY	324.0	282.89	21.0	262.4
R12441	269C1	ADD	Ogallala	NE	64.5	362.47	100.0	263.0
K268CE	268D	LIC	Lamar	CO	128.1	291.02	26.0	265.5
K268CE	268D	LIC	Lamar	CO	128.1	291.02	26.0	265.5

RSV-R, reserved, needs protection, RSV-A, allocation, does not if a CP or LIC has been granted.  
All separation margins include rounding  
(Reference station has protected zone issue);

# CH 269 L1 101.7 MHz

Current Spacings to 3rd Adj.

FIGURE 13 - LPFM SPACING STUDY FROM PROPOSED SITE, CH 269  
NEW FM TRANSLATOR, GOLDEN, CO, CH. 268D



Data Date:03-30-13 Job Date:03-31-13

Call	CH#	Type	Location		Azi	D-KM	FCC	Margin
KOSI	266C	LIC-D	Denver	CO	246.8	0.07	93.0	-92.4
KDSP	272A	LIC-D	Greenwood Villag	CO	337.5	0.43	29.0	-28.1
K269CL	269D	LIC-D	Evergreen	CO	202.1	12.71	39.0	-25.8
KXWA	270C3	LIC-N	Centennial	CO	157.3	41.43	67.0	-25.1
KJHM	268C	LIC-N	Strasburg	CO	78.3	110.19	120.0	-9.3
K269AE	269D	LIC-?	Boulder	CO	3.7	25.71	26.0	0.21
KJHM-FM1	268D	LIC-D	Commerce City	CO	100.9	31.57	13.0	19.1
KDSP-FM2	272D	CP -D	Boulder	CO	4.1	25.69	6.0	20.2
KSKE-FM	269C1	LIC-Z	Eagle	CO	270.9	134.18	111.0	23.7
KDSP-FM2	272D	LIC-D	Boulder	CO	7.2	31.61	6.0	26.1
KAMV-LP	270L1	LIC	Brighton	CO	50.3	45.43	14.0	31.9
KSMT	271A	LIC-Z	Breckenridge	CO	249.3	73.02	29.0	44.5
KRKY-FM	271A	LIC	Estes Park	CO	341.0	74.19	29.0	45.7
KRKY-FM3	271D	CP -D	Longmont	CO	12.4	52.24	6.0	46.7
K269EQ	269D	LIC	Loveland	CO	3.0	84.96	32.0	53.5
KXCL.C	269A	CP -N	Rock Creek Park	CO	158.4	120.53	67.0	54.0
K270AL	270D	LIC-D	Granby	CO	300.2	69.26	15.0	54.8

Call	CH#	Type	Location		Azi	D-KM	FCC	Margin
<hr/>								
K269EQ.C	268D	CP -D	Loveland	CO	3.0	84.96	28.0	57.5
970912TI	272D	APP	Woodland Park	CO	170.2	83.65	8.0	76.2
629897	267D	APP	Woodland Park	CO	170.2	83.65	8.0	76.2
K271BN	271D	LIC-D	Estes Park	CO	28.7	89.87	14.0	76.4
KRKY-FM2	271D	LIC-D	Fort Collins	CO	3.0	84.96	6.0	79.5
KIGN	270C2	LIC	Burns	WY	17.1	161.37	80.0	81.9
K271BN.C	271D	CP -D	Estes Park	CO	28.7	89.87	8.0	82.4
K253AH.A	271D	APP	Colorado Springs	CO	162.9	111.32	8.0	103.8
KXCL	269A	LIC	Westcliffe	CO	186.1	177.91	67.0	111.4
KIIQ.C	272A	CP	Limon	CO	111.3	142.40	29.0	113.9
K272AF	272D	LIC	Eagle	CO	270.7	134.23	14.0	120.7
K268BJ	268D	LIC	Aspen	CO	247.9	147.12	21.0	126.6
K266AK	266D	LIC	Aspen	CO	247.9	147.11	14.0	133.6
K266BB	266D	LIC	Fort Morgan	CO	67.0	142.11	8.0	134.6
K269FU	269D	LIC	Laramie	WY	354.0	167.88	32.0	136.4
K266AM	266D	LIC-D	Gypsum	CO	267.8	152.15	14.0	138.7
K268BX	268D	LIC	Cheyenne	WY	15.6	165.13	21.0	144.6
K272DE	272D	LIC-D	Steamboat Spring	CO	301.0	158.82	14.0	145.3
K268BX.C	268D	CP	Cheyenne	WY	13.0	160.41	15.0	145.9
K271BK	271D	LIC-D	Basalt	CO	255.9	165.13	14.0	151.6
KFEZ	267C1	LIC	Walsenburg	CO	163.0	225.00	73.0	152.5
KSKE-FM1	269D	LIC-D	Glenwood Springs	CO	264.7	179.72	24.0	156.2
1544902	270D	APP	Crested Butte	CO	239.0	175.92	15.0	161.4
647857	270D	APP-D	Crested Butte	CO	239.0	175.92	15.0	161.4
KSPK-FM	272C1	LIC	Walsenburg	CO	171.2	236.07	73.0	163.6
KVLE-FM	272A	LIC	Gunnison	CO	229.0	195.29	29.0	166.8
K272DB	272D	LIC	Redstone	CO	252.8	179.08	8.0	171.6
K272DB.C	271D	CP -D	Redstone	CO	252.9	179.09	8.0	171.6
K272AI	272D	LIC-D	Glenwood Springs	CO	264.7	179.67	8.0	172.2
K267AB	267D	LIC-D	Gunnison	CO	227.6	197.11	21.0	176.6
KOZY-FM	267C0	LIC	Bridgeport	NE	26.3	262.73	84.0	179.2
1544893	266D	APP	Craig	CO	297.3	196.51	14.0	183.0
633940	266D	APP-D	Craig	CO	297.3	196.51	14.0	183.0
KBDY	271C2	LIC-N	Hanna	WY	333.2	237.96	53.0	185.5
1435397	270C2	RSV-A	Olathe	CO	243.0	268.26	80.0	188.8
AL9051	270C2	VAC	Olathe	CO	243.0	268.26	80.0	188.8
KZEW	269A	LIC	Wheatland	WY	5.3	258.34	67.0	191.8
1432033	270C2	APP-D	Olathe	CO	243.7	275.92	80.0	196.4
KPNY.C	272C	CP	Alliance	NE	37.1	297.03	93.0	204.5
KDBN	266A	LIC	Parachute	CO	263.3	241.52	29.0	213.0
K271BA	271D	LIC	Rifle	CO	265.6	234.05	14.0	220.6
K268BL	268D	LIC	Battlement Mesa	CO	263.1	236.92	15.0	222.4
KGJX.C	268C2	CP	Fruita	CO	257.4	311.31	80.0	231.8
K270AM	270D	LIC	Julesburg	CO	60.3	257.72	21.0	237.2
K271AE	271D	LIC	Cedaredge	CO	250.9	247.29	8.0	239.8
K269DO	269D	LIC	Scottsbluff	NE	28.7	269.16	26.0	243.7
K267AZ	267D	LIC	Cedaredge, Etc.	CO	247.3	254.40	8.0	246.9
KPNY	271C1	LIC	Alliance	NE	33.1	319.43	73.0	246.9
647745	266D	APP-D	Lake City	CO	223.8	264.36	14.0	250.9
1545951	267D	APP	Lake City	CO	223.8	264.36	14.0	250.9
K269EG	269D	LIC-D	Rawlins	WY	324.0	282.89	32.0	251.4



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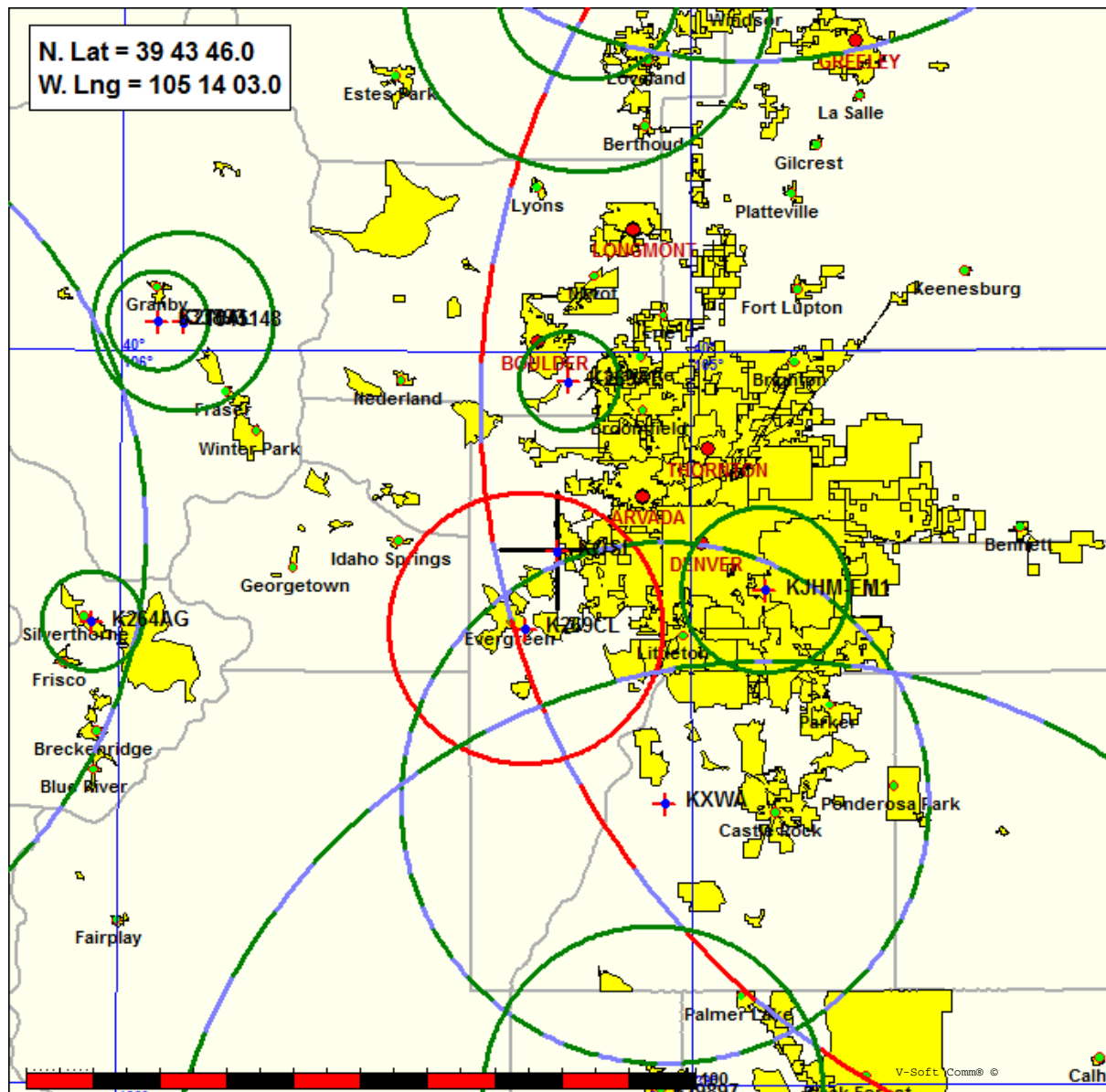
Call	CH#	Type	Location		Azi	D-KM	FCC	Margin
R12441	269C1	ADD	Ogallala	NE	64.5	362.47	111.0	252.0
K269AB	269D	LIC-D	Nucla	CO	239.4	301.32	39.0	262.8
K269AB	269D	LIC-D	Nucla	CO	239.4	301.32	39.0	262.8

RSV-R, reserved, needs protection, RSV-A, allocation, does not if a CP or LIC has been granted.  
 All separation margins include rounding  
 (Reference station has protected zone issue);

# CH 267 L1 101.3 MHz

Current Spacings to 3rd Adj.

FIGURE 14 - LPFM SPACING STUDY FROM PROPOSED SITE, CH 267  
NEW FM TRANSLATOR, GOLDEN, CO, CH. 268D



Data Date:03-30-13 Job Date:03-31-13								
Call	CH#	Type	Location		Azi	D-KM	FCC	Margin
KOSI	266C	LIC-D	Denver	CO	246.8	0.07	120.0	-119.4
KJHM	268C	LIC-N	Strasburg	CO	78.3	110.19	120.0	-9.3
K269CL	269D	LIC-D	Evergreen	CO	202.1	12.71	21.0	-7.8
KXWA	270C3	LIC-N	Centennial	CO	157.3	41.43	40.0	1.9
K269AE	269D	LIC-?	Boulder	CO	3.7	25.71	8.0	18.2
KJHM-FM1	268D	LIC-D	Commerce City	CO	100.9	31.57	13.0	19.1
KGFT	264C	LIC-Z	Pueblo	CO	163.5	113.91	93.0	21.4
1545148	264D	APP	Granby	CO	301.7	65.90	14.0	52.4
K269EQ.C	268D	CP -D	Loveland	CO	3.0	84.96	28.0	57.5
629897	267D	APP	Woodland Park	CO	170.2	83.65	26.0	58.2
KSKE-FM	269C1	LIC-Z	Eagle	CO	270.9	134.18	73.0	61.7
633893	264D	APP-D	Granby	CO	300.2	69.26	8.0	61.8
K270AL	270D	LIC-D	Granby	CO	300.2	69.26	8.0	61.8
K264AG	264D	LIC	Dillon	CO	261.3	70.53	8.0	63.0
K269EQ	269D	LIC	Loveland	CO	3.0	84.96	14.0	71.5
KOLZ	264C1	LIC-N	Cheyenne	WY	11.1	149.34	73.0	76.8
KXCL.C	269A	CP -N	Rock Creek Park	CO	158.4	120.53	29.0	92.0

						Page # 2		
Call	CH#	Type	Location		Azi	D-KM	FCC	Margin
<hr/>								
KIGN	270C2	LIC	Burns	WY	17.1	161.37	53.0	108.9
K265DS	265D	LIC-D	Eagle	CO	271.0	134.30	21.0	113.8
KFEZ	267C1	LIC	Walsenburg	CO	163.0	225.00	111.0	114.5
NEW.C	265A	CP -N	Dotsero	CO	267.8	152.11	29.0	123.6
K266AK	266D	LIC	Aspen	CO	247.9	147.11	21.0	126.6
K268BJ	268D	LIC	Aspen	CO	247.9	147.12	21.0	126.6
K266BB	266D	LIC	Fort Morgan	CO	67.0	142.11	15.0	127.6
K266AM	266D	LIC-D	Gypsum	CO	267.8	152.15	21.0	131.7
KOZY-FM	267C0	LIC	Bridgeport	NE	26.3	262.73	122.0	141.2
K268BX	268D	LIC	Cheyenne	WY	15.6	165.13	21.0	144.6
AU9359555	265C2	VAC	Gunnison	CO	231.7	197.45	53.0	145.0
K268BX.C	268D	CP	Cheyenne	WY	13.0	160.41	15.0	145.9
KXCL	269A	LIC	Westcliffe	CO	186.1	177.91	29.0	149.4
K269FU	269D	LIC	Laramie	WY	354.0	167.88	14.0	154.4
K267AB	267D	LIC-D	Gunnison	CO	227.6	197.11	39.0	158.6
K265CS	265D	LIC-D	Carbondale	CO	260.2	187.10	21.0	166.6
1544902	270D	APP	Crested Butte	CO	239.0	175.92	8.0	168.4
647857	270D	APP-D	Crested Butte	CO	239.0	175.92	8.0	168.4
KSKE-FM1	269D	LIC-D	Glenwood Springs	CO	264.7	179.72	6.0	174.2
KNEC	265C3	LIC	Yuma	CO	80.8	213.97	40.0	174.5
1544893	266D	APP	Craig	CO	297.3	196.51	21.0	176.0
633940	266D	APP-D	Craig	CO	297.3	196.51	21.0	176.0
KDBN	266A	LIC	Parachute	CO	263.3	241.52	56.0	186.0
KSBP-LP	266L1	LIC	Parachute	CO	261.2	224.82	14.0	211.3
AL9051	270C2	VAC	Olathe	CO	243.0	268.26	53.0	215.8
1435397	270C2	RSV-A	Olathe	CO	243.0	268.26	53.0	215.8
K268BL	268D	LIC	Battlement Mesa	CO	263.1	236.92	15.0	222.4
637903	265D	APP	Craig	CO	283.6	236.36	14.0	222.9
1432033	270C2	APP-D	Olathe	CO	243.7	275.92	53.0	223.4
K267AZ	267D	LIC	Cedaredge, Etc.	CO	247.3	254.40	26.0	228.9
KZEW	269A	LIC	Wheatland	WY	5.3	258.34	29.0	229.8
KGJX.C	268C2	CP	Fruita	CO	257.4	311.31	80.0	231.8
1545951	267D	APP	Lake City	CO	223.8	264.36	32.0	232.9
KMOZ-FM	264C1	LIC	Grand Junction	CO	257.4	311.23	73.0	238.7
647745	266D	APP-D	Lake City	CO	223.8	264.36	21.0	243.9
K270AM	270D	LIC	Julesburg	CO	60.3	257.72	14.0	244.2
KIQX	267C1	LIC	Durango	CO	221.1	359.41	111.0	248.9
K269DO	269D	LIC	Scottsbluff	NE	28.7	269.16	8.0	261.7
K269EG	269D	LIC-D	Rawlins	WY	324.0	282.89	14.0	269.4
K269EG	269D	LIC-D	Rawlins	WY	324.0	282.89	14.0	269.4

RSV-R, reserved, needs protection, RSV-A, allocation, does not if a CP or LIC has been granted.  
All separation margins include rounding  
(Reference station has protected zone issue);