

# TVSTUDY ANALYSIS FOR PROPOSED KTLO-LD, COLORADO SPRINGS, COLORADO (CHANNEL 29)

tvstudy v2.2.5 (4uoc83)  
Database: localhost, Study: ktlo300, Model: Longley-Rice

Study build station data: LMS TV 2022-01-05

Proposal: KTLO300 D29 LD APP COLORADO SPRINGS, CO  
File number: ktlo300  
Facility ID: 64981  
Station data: User record  
Record ID: 4375  
Country: U.S.

Stations potentially affected by proposal:

| IX  | Call    | Chan | Svc | Status | City, State             | File Number       | Distance |
|-----|---------|------|-----|--------|-------------------------|-------------------|----------|
| No  | K28HI-D | D28  | LD  | LIC    | BRECKENRIDGE/DILLON, CO | BLANK0000068743   | 138.7 km |
| No  | K28KC-D | D28  | LD  | LIC    | CANON CITY, CO          | BLDTL20090708AAT  | 52.7     |
| No  | K28KU-D | D28  | LD  | LIC    | CRESTED BUTTE, CO       | BLDTL20121119AOU  | 184.9    |
| Yes | KTFD-TV | D28  | DT  | LIC    | DENVER, CO              | BLANK0000066076   | 106.1    |
| No  | K28PZ-D | D28  | LD  | LIC    | PARLIN, CO              | BLANK0000068626   | 163.7    |
| No  | KSPK-LD | D28  | LD  | LIC    | WALSENBURG, CO          | BLANK0000058258   | 133.5    |
| Yes | K28GE-D | D28+ | LD  | LIC    | WOODLAND PARK, CO       | BLANK0000040556   | 26.5     |
| No  | K28GE-D | N28+ | TX  | LIC    | WOODLAND PARK, CO       | BLTTL19991203AAV  | 26.6     |
| No  | K29NF-D | D29  | LD  | LIC    | ANTON, CO               | BLANK0000117518   | 171.8    |
| No  | K29ME-D | D29  | LD  | LIC    | Antonito, CO            | BLANK0000150631   | 242.1    |
| No  | K29CK-D | D29  | LD  | LIC    | CARBONDALE, CO          | BLDTT20091221AAU  | 228.5    |
| No  | K29GO-D | D29  | LD  | LIC    | CORTEZ, ETC, CO         | BLDTT20090522ABU  | 331.9    |
| No  | K29NG-D | D29  | LD  | LIC    | CRESTED BUTTE, CO       | BLANK0000068627   | 184.9    |
| No  | K29IT-D | D29  | LD  | LIC    | GATEVIEW, CO            | BLDTT20120106ABN  | 217.8    |
| No  | K29GI-D | D29  | LD  | LIC    | HOLYOKE, CO             | BLDTT20110613AAQ  | 282.7    |
| No  | K29HD-D | D29  | LD  | LIC    | IDALIA, CO              | BLDTT20081219AFG  | 226.2    |
| No  | K29HM-D | D29  | LD  | LIC    | LAKE GEORGE, CO         | BLDTT20101001ACF  | 63.3     |
| No  | K29JL-D | D29  | LD  | LIC    | LAS ANIMAS, CO          | BLDTT20110509ACV  | 184.6    |
| Yes | KDEN-TV | D29  | DT  | LIC    | LONGMONT, CO            | BLCDT20100317AAM  | 141.4    |
| No  | K29IU-D | D29  | LD  | LIC    | PARLIN, CO              | BLDTT20100713APD  | 163.7    |
| No  | K29JU-D | D29  | LD  | CP     | GARDEN CITY, KS         | BNPDTL20100108ADI | 363.8    |
| No  | KSTF    | D29  | DT  | CP     | SCOTTSBLUFF, NE         | BLANK0000036040   | 365.9    |
| No  | KSTF    | D29  | DT  | LIC    | SCOTTSBLUFF, NE         | BLANK0000001046   | 365.9    |
| No  | K50DY-D | D29  | LD  | CP     | CAPULIN, ETC., NM       | BLANK0000053999   | 250.7    |
| No  | KWEQ    | D29  | DT  | LIC    | SANTA FE, NM            | BLANK0000145522   | 426.5    |
| Yes | K30JM-D | D30  | LD  | LIC    | COLORADO SPRINGS, CO    | BLDTL20100430ACU  | 9.4      |
| No  | K30EJ-D | D30  | LD  | LIC    | CRESTED BUTTE, CO       | BLDTT20100301AAH  | 179.2    |
| No  | K30EJ-D | D30  | LD  | CP     | CRESTED BUTTE, CO       | BLANK0000153737   | 179.2    |
| No  | KZCO-LD | D30  | LD  | LIC    | DENVER, CO              | BLANK0000072463   | 105.8    |
| No  | KLPD-LD | D30  | LD  | CP     | DENVER, CO              | BLANK0000098095   | 129.8    |
| No  | KLPD-LD | D30  | LD  | LIC    | DENVER, CO              | BLANK0000107263   | 105.8    |
| No  | K30PY-D | D30  | LD  | LIC    | PARLIN, CO              | BLANK0000068628   | 163.7    |
| No  | KGWN-TV | D30  | DT  | LIC    | CHEYENNE, WY            | BLCDT20070327AEQ  | 252.9    |

Non-directional AM stations within 0.8 km:  
KRDO 1240 L ND2 D COLORADO SPRINGS, CO BL20010212ABO  
KRDO 1240 L ND2 N COLORADO SPRINGS, CO BL20010212ABO

KTLO-LD transmitting antenna to be mounted on  
the AM antenna tower for KRDO (1240 kHz).

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D29  
Mask: Full Service  
Latitude: 38 49 43.00 N (NAD83)  
Longitude: 104 50 22.00 W  
Height AMSL: 1913.2 m  
HAAT: -243.0 m  
Peak ERP: 14.0 kW  
Antenna: SCA-4DR-16-2HW (ID 20732) 90.0 deg  
Elev Pattn: Generic

50.2 dBu contour:

| Azimuth | ERP     | HAAT    | Distance |
|---------|---------|---------|----------|
| 0.0 deg | 7.06 kW | -30.0 m | 26.7 km  |

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|       |       |        |      |
|-------|-------|--------|------|
| 45.0  | 12.3  | -59.9  | 29.2 |
| 90.0  | 14.0  | 43.5   | 33.6 |
| 135.0 | 12.9  | 151.7  | 47.0 |
| 180.0 | 7.16  | -47.2  | 26.7 |
| 225.0 | 0.006 | -751.6 | 4.9  |
| 270.0 | 0.006 | -826.9 | 4.9  |
| 315.0 | 0.006 | -427.2 | 4.9  |

Distance to Canadian border: 1130.5 km

Distance to Mexican border: 797.8 km

Conditions at FCC monitoring station: Grand Island NE  
Bearing: 64.9 degrees Distance: 594.1 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:  
Bearing: 346.6 degrees Distance: 151.4 km  
ERP: 3.54 kW Field strength: -7.5 dBu, 0.0 mV/m

Study cell size: 0.50 km (Higher resolution cell size requested.)

Profile point spacing: 0.05 km (Higher resolution terrain profile point spacing requested.)

Maximum new IX to full-service and Class A: 0.50%

Maximum new IX to LPTV: 2.00%

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Interference to BLANK0000066076 LIC scenario 1

|                    | Call         | Chan            | Svc      | Status          | City, State          | File Number      | Distance         |
|--------------------|--------------|-----------------|----------|-----------------|----------------------|------------------|------------------|
| Desired:           | KTFD-TV      | D28             | DT       | LIC             | DENVER, CO           | BLANK0000066076  |                  |
| Undesireds:        | KTLO300      | D29             | LD       | APP             | COLORADO SPRINGS, CO | ktlo300          | 106.1 km         |
|                    | KVSN-DT      | D27             | DT       | LIC             | PUEBLO, CO           | BLANK0000074846  | 114.4            |
|                    | KLWY         | D27             | DT       | LIC             | CHEYENNE, WY         | BLCDT20090227AAD | 149.3            |
|                    | KDEN-TV      | D29             | DT       | LIC             | LONGMONT, CO         | BLCDT20100317AAM | 49.8             |
| -----              |              |                 |          |                 |                      |                  |                  |
|                    | Service area | Terrain-limited |          | IX-free, before |                      | IX-free, after   | Percent New IX   |
|                    | 19846.5      | 3,210,761       | 18376.3  | 3,181,572       | 17838.2              | 3,116,890        | 0.00 0.00        |
| -----              |              |                 |          |                 |                      |                  |                  |
| Undesired          |              |                 | Total IX |                 | Unique IX, before    |                  | Unique IX, after |
| KTLO300 D29 LD APP |              |                 | 5.7      | 3,128           |                      |                  | 0.0 0            |
| KVSN-DT D27 DT LIC |              |                 | 57.9     | 11,765          | 57.9                 | 11,765           | 52.2 8,637       |
| KLWY D27 DT LIC    |              |                 | 0.7      | 0               | 0.2                  | 0                | 0.2 0            |
| KDEN-TV D29 DT LIC |              |                 | 480.0    | 52,917          | 479.5                | 52,917           | 479.5 52,917     |

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Interference to BLANK0000040556 LIC scenario 1

|                    | Call         | Chan            | Svc      | Status          | City, State           | File Number     | Distance                |
|--------------------|--------------|-----------------|----------|-----------------|-----------------------|-----------------|-------------------------|
| Desired:           | K28GE-D      | D28+            | LD       | LIC             | WOODLAND PARK, CO     | BLANK0000040556 |                         |
| Undesireds:        | KTLO300      | D29             | LD       | APP             | COLORADO SPRINGS, CO  | ktlo300         | 26.5 km                 |
|                    | KAVC-LD      | D27             | LD       | LIC             | Denver, CO            | BLANK0000122035 | 124.6                   |
|                    | KTFD-TV      | D28             | DT       | LIC             | DENVER, CO            | BLANK0000066076 | 84.2                    |
|                    | K28ER-D      | D28+            | LD       | LIC             | DULCE & LUMBERTON, NM | BLANK0000152595 | 278.0                   |
| -----              |              |                 |          |                 |                       |                 |                         |
|                    | Service area | Terrain-limited |          | IX-free, before |                       | IX-free, after  | Percent New IX          |
|                    | 1236.0       | 83,194          | 1143.2   | 56,289          | 1140.2                | 56,289          | 1140.0 56,187 0.02 0.18 |
| -----              |              |                 |          |                 |                       |                 |                         |
| Undesired          |              |                 | Total IX |                 | Unique IX, before     |                 | Unique IX, after        |
| KTLO300 D29 LD APP |              |                 | 0.2      | 102             |                       |                 | 0.2 102                 |
| KTFD-TV D28 DT LIC |              |                 | 3.0      | 0               | 3.0                   | 0               | 3.0 0                   |

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Interference to BLCDT20100317AAM LIC scenario 1

|          | Call    | Chan | Svc | Status | City, State  | File Number      | Distance |
|----------|---------|------|-----|--------|--------------|------------------|----------|
| Desired: | KDEN-TV | D29  | DT  | LIC    | LONGMONT, CO | BLCDT20100317AAM |          |

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|             |              |                 |         |                 |                      |                  |                             |
|-------------|--------------|-----------------|---------|-----------------|----------------------|------------------|-----------------------------|
| Undesireds: | KTLO300      | D29             | LD      | APP             | COLORADO SPRINGS, CO | ktlo300          | 141.4 km                    |
|             | KTFD-TV      | D28             | DT      | LIC             | DENVER, CO           | BLANK0000066076  | 49.8                        |
|             | KSTF         | D29             | DT      | CP              | SCOTTSBLUFF, NE      | BLANK0000036040  | 234.8                       |
|             | KGWN-TV      | D30             | DT      | LIC             | CHEYENNE, WY         | BLCDT20070327AEQ | 111.6                       |
| <hr/>       |              |                 |         |                 |                      |                  |                             |
|             | Service area | Terrain-limited |         | IX-free, before |                      | IX-free, after   | Percent New IX              |
|             | 24382.8      | 3,376,599       | 23397.7 | 3,353,776       | 23225.4              | 3,336,216        | 23225.2 3,336,216 0.00 0.00 |

|                    |          |        |                   |        |                  |        |
|--------------------|----------|--------|-------------------|--------|------------------|--------|
| Undesired          | Total IX |        | Unique IX, before |        | Unique IX, after |        |
| KTLO300 D29 LD APP | 0.2      | 0      |                   |        | 0.2              | 0      |
| KTFD-TV D28 DT LIC | 108.7    | 17,177 | 108.7             | 17,177 | 108.7            | 17,177 |
| KSTF D29 DT CP     | 14.9     | 183    | 12.7              | 183    | 12.7             | 183    |
| KGWN-TV D30 DT LIC | 50.9     | 200    | 48.7              | 200    | 48.7             | 200    |

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Interference to BLDL20100430ACU LIC scenario 1

|             |              |                 |        |                 |                      |                  |                          |
|-------------|--------------|-----------------|--------|-----------------|----------------------|------------------|--------------------------|
| Desired:    | Call         | Chan            | Svc    | Status          | City, State          | File Number      | Distance                 |
|             | K30JM-D      | D30             | LD     | LIC             | COLORADO SPRINGS, CO | BLDDL20100430ACU |                          |
| Undesireds: | KTLO300      | D29             | LD     | APP             | COLORADO SPRINGS, CO | ktlo300          | 9.4 km                   |
|             | K38MK-D      | D30             | LD     | CP              | CHEYENNE WELLS, CO   | BLANK0000071831  | 200.4                    |
|             | K30EJ-D      | D30             | LD     | LIC             | CRESTED BUTTE, CO    | BLDIT20100301AAH | 177.6                    |
|             | KZCO-LD      | D30             | LD     | LIC             | DENVER, CO           | BLANK0000072463  | 114.0                    |
|             | KLPD-LD      | D30             | LD     | CP              | DENVER, CO           | BLANK0000098095  | 138.3                    |
|             | KGWN-TV      | D30             | DT     | LIC             | CHEYENNE, WY         | BLCDT20070327AEQ | 262.0                    |
|             | KTVD         | D31             | DT     | LIC             | DENVER, CO           | BLANK0000080552  | 114.0                    |
| <hr/>       |              |                 |        |                 |                      |                  |                          |
|             | Service area | Terrain-limited |        | IX-free, before |                      | IX-free, after   | Percent New IX           |
|             | 7643.6       | 765,535         | 7139.9 | 757,632         | 6998.6               | 756,490          | 6988.1 741,492 0.15 1.98 |

|                    |          |        |                   |     |                  |        |
|--------------------|----------|--------|-------------------|-----|------------------|--------|
| Undesired          | Total IX |        | Unique IX, before |     | Unique IX, after |        |
| KTLO300 D29 LD APP | 10.5     | 14,998 |                   |     | 10.5             | 14,998 |
| KZCO-LD D30 LD LIC | 121.9    | 1,032  | 38.8              | 527 | 38.8             | 527    |
| KGWN-TV D30 DT LIC | 99.6     | 597    | 18.1              | 110 | 18.1             | 110    |
| KTVD D31 DT LIC    | 33.3     | 86     | 0.5               | 0   | 0.5              | 0      |

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Interference to proposal scenario 1  
7.87% interference received

|             |              |                 |        |         |                      |                  |            |
|-------------|--------------|-----------------|--------|---------|----------------------|------------------|------------|
| Desired:    | Call         | Chan            | Svc    | Status  | City, State          | File Number      | Distance   |
|             | KTLO300      | D29             | LD     | APP     | COLORADO SPRINGS, CO | ktlo300          |            |
| Undesireds: | K28GE-D      | D28+            | LD     | LIC     | WOODLAND PARK, CO    | BLANK0000040556  | 26.5 km    |
|             | KDEN-TV      | D29             | DT     | LIC     | LONGMONT, CO         | BLCDT20100317AAM | 141.4      |
|             | K30JM-D      | D30             | LD     | LIC     | COLORADO SPRINGS, CO | BLDDL20100430ACU | 9.4        |
| <hr/>       |              |                 |        |         |                      |                  |            |
|             | Service area | Terrain-limited |        | IX-free |                      | Percent IX       |            |
|             | 2260.8       | 572,510         | 2042.4 | 569,621 | 1481.6               | 524,797          | 27.46 7.87 |

|                    |          |        |           |        |                |      |
|--------------------|----------|--------|-----------|--------|----------------|------|
| Undesired          | Total IX |        | Unique IX |        | Prct Unique IX |      |
| KDEN-TV D29 DT LIC | 38.3     | 305    | 4.2       | 76     | 0.21           | 0.01 |
| K30JM-D D30 LD LIC | 556.6    | 44,748 | 522.6     | 44,519 | 25.59          | 7.82 |

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