

# INTERFERENCE ANALYSIS FOR LICENSED KNPN-LD, SAINT JOSEPH, MO, CHANNEL 26, WITH RESPECT TO KMCI-TV

tvstudy v2.2.5 (4uoc83)  
Database: localhost, Study: knpn-Lic, Model: Longley-Rice  
Start: 2018.04.09 12:20:39

Study created: 2018.04.09 12:20:39

Study build station data: LMS TV 2018-04-09

Proposal: KNPN-LD D26 LD LIC SAINT JOSEPH, MO  
File number: BLDLTL20120426ACC  
Facility ID: 188056  
Station data: LMS TV 2018-04-09  
Record ID: 6fed1c18b08b481c9cfecf6212b6c0ea  
Country: U.S.

Stations potentially affected by proposal:

| IX  | Call    | Chan | Svc | Status | City, State          | File Number        | Distance |
|-----|---------|------|-----|--------|----------------------|--------------------|----------|
| No  | KCKS-LD | D25  | LD  | LIC    | KANSAS CITY, KS      | BLANK0000004587    | 73.7 km  |
| Yes | KMCI-TV | D25  | DT  | CP     | LAWRENCE, KS         | BLANK0000034675    | 89.7     |
| No  | K46FG-D | D25  | LD  | APP    | FALLS CITY, NE       | BLANK0000029188    | 87.5     |
| No  | NEW     | D26  | LD  | APP    | OTTUMWA, IA          | BNPDTL20101013AAAT | 246.9    |
| No  | K26JI-D | D26  | LD  | LIC    | SIBLEY, IA           | BLDTT20101213AAZ   | 411.9    |
| No  | WMBD-TV | D26  | DT  | CP     | PEORIA, IL           | BLANK0000027808    | 460.7    |
| No  | K26ML-D | D26  | LD  | CP     | CHAPMAN, KS          | BNPDTL20100514AHX  | 210.3    |
| No  | K26MP-D | D26  | LD  | CP     | RUSSELL, KS          | BNPDTL20100514AHK  | 357.9    |
| Yes | WROB-LD | D26  | LD  | LIC    | TOPEKA, KS           | BLDTL20140908AFA   | 119.7    |
| No  | KSAS-TV | D26  | DT  | LIC    | WICHITA, KS          | BLCDT20021120AAN   | 318.7    |
| No  | KXLT-TV | D26  | DT  | CP     | ROCHESTER, MN        | BLANK0000027876    | 473.3    |
| No  | K26KH-D | D26  | LD  | CP     | COLUMBIA, MO         | BNPDTL20090825BTX  | 232.0    |
| No  | K26KT-D | D26  | LD  | CP     | ELDON, MO            | BNPDTL20090825BVM  | 254.4    |
| No  | K26KU-D | D26  | LD  | CP     | MARSHALL, MO         | BNPDTL20090825BXR  | 170.5    |
| No  | K26KV-D | D26  | LD  | CP     | SEDALIA, MO          | BNPDTL20090825BWL  | 185.5    |
| No  | KPLR-TV | D26  | DT  | APP    | ST. LOUIS, MO        | BLANK0000050068    | 410.4    |
| No  | KPLR-TV | D26  | DT  | LIC    | ST. LOUIS, MO        | BLCDT20030812ABY   | 410.4    |
| No  | KLNE-TV | D26  | DT  | APP    | LEXINGTON, NE        | BLANK0000035902    | 399.1    |
| No  | KLNE-TV | D26  | DT  | LIC    | LEXINGTON, NE        | BLEDT20070625ABT   | 399.1    |
| No  | KFDY-LD | D26  | LD  | LIC    | LINCOLN, NE          | BLDTL20110908ACA   | 198.1    |
| Yes | KPTM    | D26  | DT  | CP     | OMAHA, NE            | BLANK0000033633    | 187.9    |
| No  | KSXC-LP | D26z | LD  | CP     | SOUTH SIOUX CITY, NE | BLANK0000010913    | 327.8    |
| No  | KOTV-DT | D26  | DT  | CP     | TULSA, OK            | BLANK0000028019    | 420.9    |
| Yes | KSNT    | D27  | DT  | LIC    | TOPEKA, KS           | BLCDT20090910ABY   | 109.1    |
| No  | KOHA-LD | D27  | LD  | APP    | OMAHA, NE            | BLANK0000027874    | 200.1    |

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D26  
Mask: Full Service  
Latitude: 39 45 0.00 N (NAD83)  
Longitude: 94 50 26.00 W  
Height AMSL: 358.0 m  
HAAT: 0.0 m  
Peak ERP: 15.0 kW  
Antenna: Omnidirectional  
Elev Pattn: Generic  
Elec Tilt: 0.75

50.0 dBu contour:

| Azimuth | ERP     | HAAT   | Distance |
|---------|---------|--------|----------|
| 0.0 deg | 15.0 kW | 63.3 m | 38.7 km  |
| 45.0    | 15.0    | 76.9   | 40.8     |
| 90.0    | 15.0    | 82.8   | 41.7     |
| 135.0   | 15.0    | 68.7   | 39.5     |
| 180.0   | 15.0    | 35.9   | 32.0     |
| 225.0   | 15.0    | 112.8  | 45.3     |
| 270.0   | 15.0    | 86.4   | 42.2     |
| 315.0   | 15.0    | 92.6   | 43.0     |

# INTERFERENCE ANALYSIS FOR LICENSED KNPN-LD, SAINT JOSEPH, MO, CHANNEL 26, WITH RESPECT TO KMCI-TV

Database HAAT does not agree with computed HAAT  
Database HAAT: 0 m    Computed HAAT: 77 m

Distance to Canadian border: 958.2 km

Distance to Mexican border: 1259.7 km

Conditions at FCC monitoring station: Grand Island NE  
Bearing: 294.4 degrees    Distance: 330.7 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:  
Bearing: 276.2 degrees    Distance: 885.5 km

Study cell size: 1.00 km  
Profile point spacing: 1.00 km

Maximum new IX to full-service and Class A: 0.50%  
Maximum new IX to LPTV: 2.00%

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Interference to BLANK0000034675 CP scenario 1

**\*\*IX: 2.67% interference caused**

|             | Call    | Chan | Svc | Status | City, State        | File Number      | Distance |
|-------------|---------|------|-----|--------|--------------------|------------------|----------|
| Desired:    | KMCI-TV | D25  | DT  | CP     | LAWRENCE, KS       | BLANK0000034675  |          |
| Undesireds: | KNPN-LD | D26  | LD  | LIC    | SAINT JOSEPH, MO   | BLDTL20120426ACC | 89.7 km  |
|             | KCTV    | D24  | DT  | LIC    | KANSAS CITY, MO    | BLCDT20110405ABD | 11.1     |
|             | KXNW    | D25  | DT  | CP     | EUREKA SPRINGS, AR | BLANK0000034210  | 289.8    |
|             | KFDF-CD | D25  | DC  | CP     | FORT SMITH, AR     | BLANK0000034445  | 392.7    |

|                    | Service area |           | Terrain-limited |           | IX-free, before |                   | IX-free, after |                  | Percent New IX   |
|--------------------|--------------|-----------|-----------------|-----------|-----------------|-------------------|----------------|------------------|------------------|
|                    | 31291.7      | 2,423,221 | 31100.5         | 2,420,836 | 30917.5         | 2,417,782         | 30572.3        | 2,353,197        | 1.12 <b>2.67</b> |
| Undesired          |              |           |                 | Total IX  |                 | Unique IX, before |                | Unique IX, after |                  |
| KNPN-LD D26 LD LIC |              |           | 350.2           | 64,654    |                 |                   | 345.2          | 64,585           |                  |
| KCTV D24 DT LIC    |              |           | 175.0           | 3,036     |                 | 175.0    3,036    | 170.0          | 2,967            |                  |
| KXNW D25 DT CP     |              |           | 8.1             | 18        |                 | 8.1    18         | 8.1            | 18               |                  |

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