

Technical Summary
Request for Special Temporary Authority
Engineering Exhibit

KKPX-TV – San Jose, CA

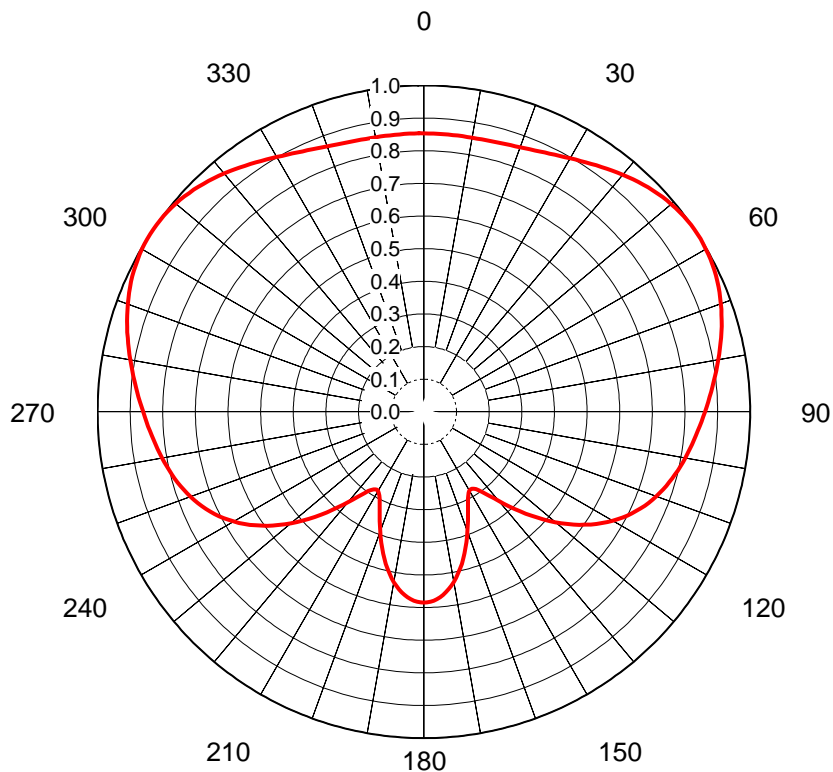
Facility ID: 22644

Licensee "ION MEDIA SAN JOSE LICENSE, INC" is currently licensed to operate on Pre-Repack DTV channel 41. The Antenna Structure Registration Number is 1205149 with a Latitude of 37° 41' 14.4" N+ and a Longitude of 122° 26' 05.3" W-. The station has been assigned DTV channel 33 with a Phase 8 deadline.

The purpose of this STA is to request authority to operate from an interim antenna while the Post-Repack antenna facilities are constructed. The interim facilities will be installed on the same tower structure and the contours will not exceed those of the current licensed facilities. The HAAT is 389.96 m (AGL 45.72 m) with an AMSL of 428.52 m. An ERP of 36.3 kW will be utilized. NOTE: Attached antenna specification requires manual rotation of 90°

RF Hazard (Environmental)

Compliance with RF Hazard (Environmental) is provided in the attached RF Hazard Statement.



AZIMUTH PATTERN Horizontal Polarization

Proposal No.

Date

13-Aug-19

Call Letters

KKPX

Channel

41

Frequency

635 MHz

Antenna Type

TFU-8WB-R C160

Gain

1.66 (2.21dB)

Calculated

Pattern Number **WB-C160-41 Hpol**

| Deg | Value | Deg | Value | Deg | Value | Deg | Value | Deg | Value | Deg | Value | Deg | Value | Deg | Value | Deg | Value | Deg | Value |
|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|
| 0 | 0.853 | 36 | 0.927 | 72 | 0.959 | 108 | 0.771 | 144 | 0.303 | 180 | 0.585 | 216 | 0.307 | 252 | 0.774 | 288 | 0.956 | 324 | 0.932 |
| 1 | 0.853 | 37 | 0.933 | 73 | 0.954 | 109 | 0.765 | 145 | 0.294 | 181 | 0.584 | 217 | 0.318 | 253 | 0.780 | 289 | 0.961 | 325 | 0.927 |
| 2 | 0.853 | 38 | 0.938 | 74 | 0.949 | 110 | 0.758 | 146 | 0.286 | 182 | 0.583 | 218 | 0.332 | 254 | 0.785 | 290 | 0.966 | 326 | 0.922 |
| 3 | 0.853 | 39 | 0.943 | 75 | 0.944 | 111 | 0.751 | 147 | 0.281 | 183 | 0.580 | 219 | 0.346 | 255 | 0.791 | 291 | 0.970 | 327 | 0.916 |
| 4 | 0.853 | 40 | 0.948 | 76 | 0.939 | 112 | 0.744 | 148 | 0.278 | 184 | 0.576 | 220 | 0.361 | 256 | 0.796 | 292 | 0.974 | 328 | 0.911 |
| 5 | 0.853 | 41 | 0.953 | 77 | 0.933 | 113 | 0.736 | 149 | 0.277 | 185 | 0.571 | 221 | 0.377 | 257 | 0.801 | 293 | 0.978 | 329 | 0.906 |
| 6 | 0.853 | 42 | 0.958 | 78 | 0.928 | 114 | 0.728 | 150 | 0.279 | 186 | 0.565 | 222 | 0.394 | 258 | 0.806 | 294 | 0.982 | 330 | 0.902 |
| 7 | 0.853 | 43 | 0.963 | 79 | 0.922 | 115 | 0.719 | 151 | 0.283 | 187 | 0.557 | 223 | 0.411 | 259 | 0.810 | 295 | 0.985 | 331 | 0.897 |
| 8 | 0.853 | 44 | 0.968 | 80 | 0.916 | 116 | 0.710 | 152 | 0.289 | 188 | 0.549 | 224 | 0.428 | 260 | 0.815 | 296 | 0.988 | 332 | 0.893 |
| 9 | 0.853 | 45 | 0.972 | 81 | 0.911 | 117 | 0.700 | 153 | 0.298 | 189 | 0.540 | 225 | 0.446 | 261 | 0.819 | 297 | 0.991 | 333 | 0.888 |
| 10 | 0.853 | 46 | 0.976 | 82 | 0.905 | 118 | 0.690 | 154 | 0.308 | 190 | 0.530 | 226 | 0.463 | 262 | 0.824 | 298 | 0.994 | 334 | 0.884 |
| 11 | 0.853 | 47 | 0.980 | 83 | 0.899 | 119 | 0.679 | 155 | 0.319 | 191 | 0.519 | 227 | 0.481 | 263 | 0.828 | 299 | 0.996 | 335 | 0.881 |
| 12 | 0.853 | 48 | 0.984 | 84 | 0.894 | 120 | 0.668 | 156 | 0.332 | 192 | 0.507 | 228 | 0.498 | 264 | 0.833 | 300 | 0.997 | 336 | 0.877 |
| 13 | 0.854 | 49 | 0.987 | 85 | 0.888 | 121 | 0.656 | 157 | 0.346 | 193 | 0.494 | 229 | 0.515 | 265 | 0.837 | 301 | 0.999 | 337 | 0.874 |
| 14 | 0.855 | 50 | 0.990 | 86 | 0.883 | 122 | 0.644 | 158 | 0.360 | 194 | 0.481 | 230 | 0.532 | 266 | 0.842 | 302 | 0.999 | 338 | 0.871 |
| 15 | 0.855 | 51 | 0.993 | 87 | 0.877 | 123 | 0.631 | 159 | 0.375 | 195 | 0.467 | 231 | 0.548 | 267 | 0.846 | 303 | 1.000 | 339 | 0.868 |
| 16 | 0.856 | 52 | 0.995 | 88 | 0.872 | 124 | 0.618 | 160 | 0.391 | 196 | 0.453 | 232 | 0.564 | 268 | 0.851 | 304 | 1.000 | 340 | 0.866 |
| 17 | 0.858 | 53 | 0.997 | 89 | 0.867 | 125 | 0.604 | 161 | 0.406 | 197 | 0.438 | 233 | 0.579 | 269 | 0.856 | 305 | 1.000 | 341 | 0.864 |
| 18 | 0.859 | 54 | 0.998 | 90 | 0.862 | 126 | 0.589 | 162 | 0.422 | 198 | 0.422 | 234 | 0.594 | 270 | 0.861 | 306 | 0.999 | 342 | 0.862 |
| 19 | 0.861 | 55 | 0.999 | 91 | 0.857 | 127 | 0.574 | 163 | 0.437 | 199 | 0.407 | 235 | 0.609 | 271 | 0.866 | 307 | 0.998 | 343 | 0.860 |
| 20 | 0.863 | 56 | 1.000 | 92 | 0.852 | 128 | 0.559 | 164 | 0.452 | 200 | 0.392 | 236 | 0.623 | 272 | 0.871 | 308 | 0.996 | 344 | 0.859 |
| 21 | 0.865 | 57 | 1.000 | 93 | 0.847 | 129 | 0.543 | 165 | 0.466 | 201 | 0.376 | 237 | 0.636 | 273 | 0.876 | 309 | 0.995 | 345 | 0.858 |
| 22 | 0.867 | 58 | 1.000 | 94 | 0.842 | 130 | 0.527 | 166 | 0.480 | 202 | 0.361 | 238 | 0.649 | 274 | 0.881 | 310 | 0.992 | 346 | 0.857 |
| 23 | 0.870 | 59 | 0.999 | 95 | 0.837 | 131 | 0.510 | 167 | 0.494 | 203 | 0.347 | 239 | 0.661 | 275 | 0.886 | 311 | 0.990 | 347 | 0.856 |
| 24 | 0.873 | 60 | 0.998 | 96 | 0.832 | 132 | 0.493 | 168 | 0.506 | 204 | 0.333 | 240 | 0.673 | 276 | 0.892 | 312 | 0.987 | 348 | 0.855 |
| 25 | 0.877 | 61 | 0.997 | 97 | 0.828 | 133 | 0.476 | 169 | 0.518 | 205 | 0.320 | 241 | 0.684 | 277 | 0.897 | 313 | 0.983 | 349 | 0.855 |
| 26 | 0.880 | 62 | 0.995 | 98 | 0.823 | 134 | 0.459 | 170 | 0.529 | 206 | 0.309 | 242 | 0.694 | 278 | 0.902 | 314 | 0.980 | 350 | 0.854 |
| 27 | 0.884 | 63 | 0.993 | 99 | 0.818 | 135 | 0.441 | 171 | 0.539 | 207 | 0.299 | 243 | 0.704 | 279 | 0.908 | 315 | 0.976 | 351 | 0.854 |
| 28 | 0.888 | 64 | 0.990 | 100 | 0.814 | 136 | 0.424 | 172 | 0.549 | 208 | 0.291 | 244 | 0.714 | 280 | 0.913 | 316 | 0.972 | 352 | 0.854 |
| 29 | 0.892 | 65 | 0.988 | 101 | 0.809 | 137 | 0.407 | 173 | 0.557 | 209 | 0.284 | 245 | 0.723 | 281 | 0.919 | 317 | 0.967 | 353 | 0.854 |
| 30 | 0.897 | 66 | 0.984 | 102 | 0.804 | 138 | 0.390 | 174 | 0.564 | 210 | 0.281 | 246 | 0.731 | 282 | 0.925 | 318 | 0.963 | 354 | 0.854 |
| 31 | 0.902 | 67 | 0.981 | 103 | 0.799 | 139 | 0.373 | 175 | 0.570 | 211 | 0.279 | 247 | 0.740 | 283 | 0.930 | 319 | 0.958 | 355 | 0.854 |
| 32 | 0.907 | 68 | 0.977 | 104 | 0.794 | 140 | 0.357 | 176 | 0.575 | 212 | 0.280 | 248 | 0.747 | 284 | 0.935 | 320 | 0.953 | 356 | 0.853 |
| 33 | 0.912 | 69 | 0.973 | 105 | 0.788 | 141 | 0.342 | 177 | 0.580 | 213 | 0.283 | 249 | 0.754 | 285 | 0.941 | 321 | 0.948 | 357 | 0.853 |
| 34 | 0.917 | 70 | 0.969 | 106 | 0.783 | 142 | 0.328 | 178 | 0.582 | 214 | 0.289 | 250 | 0.761 | 286 | 0.946 | 322 | 0.943 | 358 | 0.853 |
| 35 | 0.922 | 71 | 0.964 | 107 | 0.777 | 143 | 0.315 | 179 | 0.584 | 215 | 0.297 | 251 | 0.768 | 287 | 0.951 | 323 | 0.937 | 359 | 0.853 |

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ELEVATION PATTERN

Proposal No.

Date **13-Aug-19**

Call Letters **KKPX**

Channel **41**

Frequency **635 MHz**

Antenna Type **TFU-8WB-R C160**

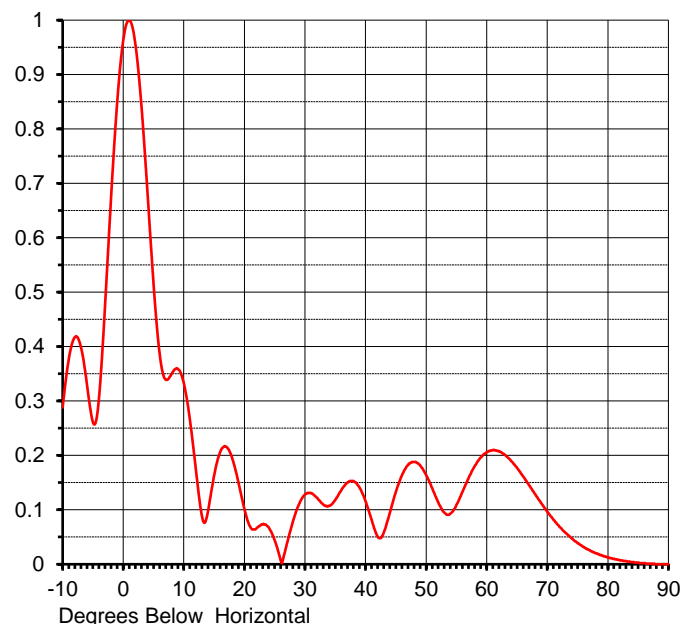
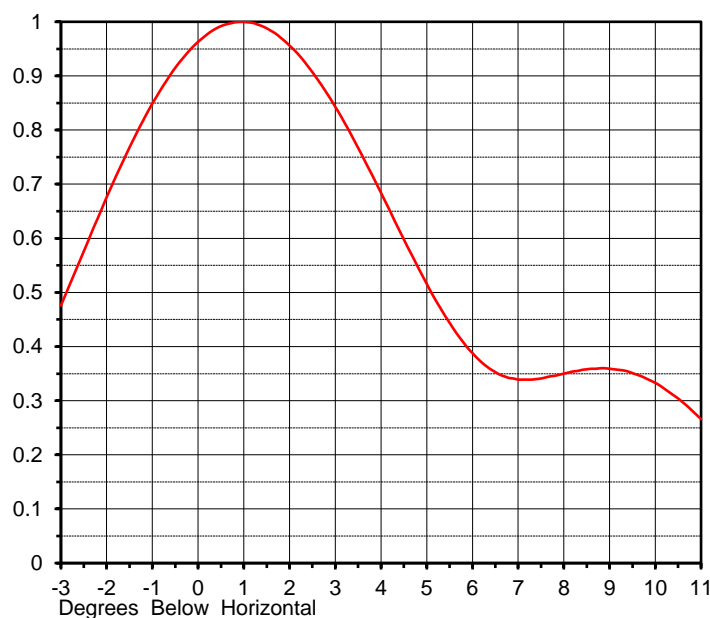
RMS Directivity at Main Lobe **7.8 (8.90 dB)**

RMS Directivity at Horizontal **7.2 (8.57 dB)**

Calculated

Beam Tilt **1.05 deg**

Pattern Number **08W078105-41**



| Angle | Field | Angle | Field | Angle | Field | Angle | Field | Angle | Field |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| -10.0 | 0.288 | 10.0 | 0.333 | 30.0 | 0.128 | 50.0 | 0.164 | 70.0 | 0.097 |
| -9.0 | 0.376 | 11.0 | 0.266 | 31.0 | 0.131 | 51.0 | 0.140 | 71.0 | 0.082 |
| -8.0 | 0.417 | 12.0 | 0.173 | 32.0 | 0.122 | 52.0 | 0.114 | 72.0 | 0.069 |
| -7.0 | 0.400 | 13.0 | 0.088 | 33.0 | 0.110 | 53.0 | 0.095 | 73.0 | 0.058 |
| -6.0 | 0.331 | 14.0 | 0.098 | 34.0 | 0.107 | 54.0 | 0.093 | 74.0 | 0.048 |
| -5.0 | 0.261 | 15.0 | 0.163 | 35.0 | 0.118 | 55.0 | 0.109 | 75.0 | 0.039 |
| -4.0 | 0.306 | 16.0 | 0.206 | 36.0 | 0.136 | 56.0 | 0.133 | 76.0 | 0.032 |
| -3.0 | 0.476 | 17.0 | 0.216 | 37.0 | 0.150 | 57.0 | 0.158 | 77.0 | 0.026 |
| -2.0 | 0.676 | 18.0 | 0.194 | 38.0 | 0.153 | 58.0 | 0.180 | 78.0 | 0.020 |
| -1.0 | 0.849 | 19.0 | 0.151 | 39.0 | 0.141 | 59.0 | 0.196 | 79.0 | 0.016 |
| 0.0 | 0.963 | 20.0 | 0.102 | 40.0 | 0.116 | 60.0 | 0.206 | 80.0 | 0.013 |
| 1.0 | 1.000 | 21.0 | 0.068 | 41.0 | 0.082 | 61.0 | 0.210 | 81.0 | 0.010 |
| 2.0 | 0.956 | 22.0 | 0.066 | 42.0 | 0.051 | 62.0 | 0.208 | 82.0 | 0.007 |
| 3.0 | 0.843 | 23.0 | 0.073 | 43.0 | 0.058 | 63.0 | 0.201 | 83.0 | 0.006 |
| 4.0 | 0.684 | 24.0 | 0.068 | 44.0 | 0.094 | 64.0 | 0.190 | 84.0 | 0.004 |
| 5.0 | 0.516 | 25.0 | 0.044 | 45.0 | 0.133 | 65.0 | 0.177 | 85.0 | 0.003 |
| 6.0 | 0.388 | 26.0 | 0.007 | 46.0 | 0.163 | 66.0 | 0.162 | 86.0 | 0.002 |
| 7.0 | 0.339 | 27.0 | 0.037 | 47.0 | 0.182 | 67.0 | 0.145 | 87.0 | 0.001 |
| 8.0 | 0.350 | 28.0 | 0.078 | 48.0 | 0.188 | 68.0 | 0.129 | 88.0 | 0.000 |
| 9.0 | 0.359 | 29.0 | 0.110 | 49.0 | 0.182 | 69.0 | 0.112 | 89.0 | 0.000 |
| | | | | | | | | 90.0 | 0.000 |

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KKPX-STA
Latitude: 37-41-14.40 N
Longitude: 122-26-05.30 W
ERP: 36.30 kW
Channel: 41
Frequency: 635.0 MHz
AGL: 45.72 m
HAAT: 389.96 m
AMSL: 428.52 m
Horiz. Pattern: Directional
Vert. Pattern: Yes
Elec Tilt: 1.05
Prop Model: None

