# MR竞对覆盖评估体系

## 一、 网络质量覆盖评估

此用于评估全网网络质量情况，并通过整网、小区、大数据栅格三个维度进行评估分析。

## 1.整网粒度

**全网MR覆盖率：**全省分地市，武汉分区县整体MR覆盖率情况。

**指标定义：**全网MR覆盖率=所有小区MR RSRP≥-110dbm的采样点总数/采样点总数

**数据来源：**本次小区级数据来源于双套系统摸底数据，十堰由于摸底存在问题，采用软采数据。

2019年第三季度软采数据评估情况：

全省分地市情况：**黄石、鄂州、武汉**覆盖较好，**十堰、咸宁、襄阳**覆盖相对较差。

|  |  |  |  |
| --- | --- | --- | --- |
| 全网-指标 | 移动总点 | 移动弱点 | 全网移动覆盖率 |
| 黄石 | 1084891261.0 | 26546571.0 | 97.55% |
| 鄂州 | 844282304.0 | 23283749.0 | 97.24% |
| 武汉 | 7735971616.0 | 244654449.0 | 96.84% |
| 荆州 | 638367437.0 | 22917236.0 | 96.41% |
| 潜江 | 240724328.0 | 8918516.0 | 96.30% |
| 黄冈 | 2188071090.0 | 81594967.0 | 96.27% |
| 宜昌 | 610417196.0 | 23092255.0 | 96.22% |
| 随州 | 250676180.0 | 9521452.0 | 96.20% |
| 恩施 | 419900498.0 | 15986054.0 | 96.19% |
| 荆门 | 233634686.0 | 9395143.0 | 95.98% |
| 江汉 | 426016380.0 | 17380233.0 | 95.92% |
| 孝感 | 2200471358.0 | 89880616.0 | 95.92% |
| 天门 | 307629193.0 | 13618447.0 | 95.57% |
| 襄阳 | 749680775.0 | 34665625.0 | 95.38% |
| 咸宁 | 533751860.0 | 27328130.0 | 94.88% |
| 十堰 | 14333460.0 | 1058607.0 | 92.61% |
| 武汉中兴 | 6459262282.0 | 176549657.0 | 97.27% |
| 武汉华为 | 1276709334.0 | 68104792.0 | 94.67% |
| 全网 | 18526936473.0 | 672717647.0 | 96.37% |

武汉各区县中，**洪山、武昌、青山**覆盖较好，**新洲、黄陂、东西湖**覆盖相对较差。

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| --- | --- | --- | --- |
| 区域 | 移动总点 | 移动弱点 | 全网移动覆盖率 |
| 洪山 | 1326620984.0 | 25264620.0 | 98.10% |
| 武昌 | 1218869600.0 | 28610078.0 | 97.65% |
| 青山 | 936736612.0 | 25785419.0 | 97.25% |
| 东新 | 2312646735.0 | 73586067.0 | 96.82% |
| 江夏 | 664890508.0 | 24060144.0 | 96.38% |
| 江岸 | 193919415.0 | 7612365.0 | 96.07% |
| 硚口 | 135718190.0 | 5765954.0 | 95.75% |
| 江汉 | 177743536.0 | 7799626.0 | 95.61% |
| 汉阳 | 147388476.0 | 7513238.0 | 94.90% |
| 经开 | 130957808.0 | 6754728.0 | 94.84% |
| 蔡甸 | 88620955.0 | 4814886.0 | 94.57% |
| 东西湖 | 149210427.0 | 8278474.0 | 94.45% |
| 黄陂 | 164318087.0 | 11886133.0 | 92.77% |
| 新洲 | 84492901.0 | 6599753.0 | 92.19% |
| 武汉 | 7735971616.0 | 244654449.0 | 96.84% |

## 2.小区粒度

**MR覆盖问题小区占比：**全省分地市，武汉分区县MR覆盖问题小区占比情况

**指标定义：**MR覆盖问题小区占比=（小区级MR覆盖率<90%或MR竞对黑点有效小区）/总小区数

**数据来源：**本次小区级数据来源于双套系统摸底数据，十堰由于摸底存在问题，采用软采数据。

全省分地市情况：**黄石、鄂州、十堰**覆盖较好，MR问题小区较少。**咸宁、随州、黄冈**覆盖相对较差，MR问题小区较多。

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 地市 | 总小区数 | 黑点小区数 | 弱覆盖小区数 | 问题小区数 | 问题小区占比 |
| 黄石 | 9829.0 | 357.0 | 677.0 | 810.0 | 8.24% |
| 鄂州 | 4901.0 | 204.0 | 366.0 | 431.0 | 8.79% |
| 十堰 | 5719.0 | 289.0 | 400.0 | 523.0 | 9.14% |
| 荆州 | 20412.0 | 425.0 | 2152.0 | 2272.0 | 11.13% |
| 潜江 | 3116.0 | 171.0 | 322.0 | 373.0 | 11.97% |
| 宜昌 | 19589.0 | 606.0 | 2334.0 | 2545.0 | 12.99% |
| 武汉 | 55873.0 | 3602.0 | 6005.0 | 8108.0 | 14.51% |
| 江汉 | 3544.0 | 306.0 | 480.0 | 565.0 | 15.94% |
| 孝感 | 13209.0 | 998.0 | 2057.0 | 2249.0 | 17.03% |
| 襄阳 | 21299.0 | 1065.0 | 3314.0 | 3686.0 | 17.31% |
| 恩施 | 12909.0 | 642.0 | 2239.0 | 2349.0 | 18.20% |
| 天门 | 3134.0 | 224.0 | 523.0 | 574.0 | 18.32% |
| 荆门 | 11029.0 | 409.0 | 1939.0 | 2065.0 | 18.72% |
| 黄冈 | 16629.0 | 1295.0 | 2813.0 | 3185.0 | 19.15% |
| 随州 | 9011.0 | 395.0 | 1616.0 | 1750.0 | 19.42% |
| 咸宁 | 9312.0 | 634.0 | 1772.0 | 1960.0 | 21.05% |
| 武汉中兴 | 24255.0 | 952.0 | 1400.0 | 1772.0 | 7.31% |
| 武汉华为 | 31618.0 | 2650.0 | 4605.0 | 6336.0 | 20.04% |
| 全网 | 220951.0 | 11690.0 | 29312.0 | 33772.0 | 15.28% |

武汉各区县中，**洪山、武昌、青山**覆盖较好，MR问题小区较少。**新洲、黄陂、东西湖**覆盖相对较差，MR问题小区较多。

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| --- | --- | --- | --- | --- | --- |
| 区县 | 总小区数 | 黑点小区数 | 弱覆盖小区数 | 问题小区数 | 问题小区占比 |
| 洪山 | 4250.0 | 78.0 | 132.0 | 165.0 | 3.88% |
| 武昌 | 4157.0 | 100.0 | 150.0 | 208.0 | 5.00% |
| 青山 | 4711.0 | 189.0 | 209.0 | 285.0 | 6.05% |
| 东新 | 7805.0 | 446.0 | 539.0 | 726.0 | 9.30% |
| 江岸 | 4402.0 | 335.0 | 353.0 | 609.0 | 13.83% |
| 江夏 | 3497.0 | 220.0 | 459.0 | 513.0 | 14.67% |
| 硚口 | 3057.0 | 243.0 | 285.0 | 455.0 | 14.88% |
| 江汉 | 4354.0 | 431.0 | 412.0 | 753.0 | 17.29% |
| 汉阳 | 3486.0 | 217.0 | 467.0 | 607.0 | 17.41% |
| 蔡甸 | 2137.0 | 95.0 | 344.0 | 395.0 | 18.48% |
| 经开 | 3858.0 | 299.0 | 515.0 | 714.0 | 18.51% |
| 东西湖 | 3348.0 | 246.0 | 499.0 | 657.0 | 19.62% |
| 黄陂 | 4563.0 | 534.0 | 1052.0 | 1353.0 | 29.65% |
| 新洲 | 2219.0 | 163.0 | 581.0 | 659.0 | 29.70% |
| 武汉 | 55873.0 | 3602.0 | 6005.0 | 8108.0 | 14.51% |

## 3.大数据栅格粒度

**1)大数据MR问题栅格占比:**全省分地市，武汉分区县大数据问题栅格占比情况

**指标定义：**大数据MR问题栅格占比=大数据问题栅格数/总有效栅格数

大数据问题栅格：有效栅格MR覆盖率小于93.6%(此处门限定义为目标网设定全网达到96%的换算值)

总有效栅格数：栅格采样点数大于100

全省分地市情况：**荆州、荆门、宜昌**覆盖较好，MR弱覆盖栅格较少。**黄冈、天门、江汉**覆盖相对较差，MR弱覆盖栅格较多。

注：大数据问题栅格标准是栅格覆盖率小于93.6%，故此处指标较高。

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| --- | --- | --- | --- | --- |
| 19年9月 | 总栅格 | 大于100采样点 | 弱覆盖栅格数量 | 大数据弱覆盖栅格占比 |
| 荆州 | 17987.0 | 479.0 | 69.0 | 14.41% |
| 荆门 | 212900.0 | 38159.0 | 6621.0 | 17.35% |
| 宜昌 | 329050.0 | 73981.0 | 19954.0 | 26.97% |
| 随州 | 189961.0 | 44059.0 | 11968.0 | 27.16% |
| 襄阳 | 709892.0 | 202800.0 | 70029.0 | 34.53% |
| 恩施 | 258106.0 | 41465.0 | 15495.0 | 37.37% |
| 咸宁 | 187005.0 | 34156.0 | 18037.0 | 52.81% |
| 黄石 | 154987.0 | 99528.0 | 56981.0 | 57.25% |
| 武汉 | 488445.0 | 277306.0 | 167319.0 | 60.34% |
| 潜江 | 83759.0 | 45252.0 | 28840.0 | 63.73% |
| 鄂州 | 77605.0 | 47373.0 | 30202.0 | 63.75% |
| 十堰 | 11410.0 | 5760.0 | 3744.0 | 65.00% |
| 孝感 | 305990.0 | 208452.0 | 139391.0 | 66.87% |
| 江汉 | 86851.0 | 47215.0 | 31625.0 | 66.98% |
| 天门 | 106887.0 | 57587.0 | 41020.0 | 71.23% |
| 黄冈 | 474928.0 | 261801.0 | 198189.0 | 75.70% |
| 全网 | 3695763.0 | 1485373.0 | 839484.0 | 56.52% |

武汉各区县中，**青山、蔡甸、武昌**覆盖较好，MR弱覆盖栅格较少。**江夏、黄陂、新洲**覆盖相对较差，MR弱覆盖栅格较多。

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| --- | --- | --- | --- | --- |
| 19年9月 | 总栅格 | 大于100采样点 | 弱覆盖栅格数量 | 大数据弱覆盖栅格占比 |
| 青山 | 23041.0 | 17041.0 | 8212.0 | 48.19% |
| 蔡甸 | 53949.0 | 28792.0 | 14684.0 | 51.00% |
| 武昌 | 4939.0 | 4922.0 | 2563.0 | 52.07% |
| 硚口 | 3879.0 | 3742.0 | 1991.0 | 53.21% |
| 东西湖 | 32227.0 | 20522.0 | 11021.0 | 53.70% |
| 经开 | 29051.0 | 16568.0 | 8967.0 | 54.12% |
| 江岸 | 6765.0 | 6369.0 | 3539.0 | 55.57% |
| 洪山 | 10068.0 | 9379.0 | 5345.0 | 56.99% |
| 东新 | 30269.0 | 24797.0 | 14291.0 | 57.63% |
| 汉阳 | 7348.0 | 6805.0 | 4030.0 | 59.22% |
| 江汉 | 4013.0 | 3799.0 | 2285.0 | 60.15% |
| 新洲 | 79428.0 | 37865.0 | 23115.0 | 61.05% |
| 黄陂 | 114156.0 | 52439.0 | 32871.0 | 62.68% |
| 江夏 | 75702.0 | 39157.0 | 31069.0 | 79.34% |
| 武汉 | 488445.0 | 277306.0 | 167319.0 | 60.34% |

**2)严重弱覆盖栅格占比：**全省分地市，武汉分区县大数据问题栅格占比情况

**指标定义：**大数据严重弱覆盖栅格占比=大数据严重问题栅格数/总有效栅格数大数据严重问题栅格：有效栅格MR覆盖率小于70%.

全省分地市情况：**荆州、荆门、宜昌**覆盖较好，MR弱覆盖栅格较少。**黄冈、十堰、孝感**覆盖相对较差，MR弱覆盖栅格较多。

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| --- | --- | --- | --- | --- |
| 19年9月 | 总栅格 | 大于100采样点 | 严重弱覆盖栅格数量 | 严重弱覆盖栅格占比 |
| 荆州 | 17987.0 | 479.0 | 2.0 | 0.42% |
| 荆门 | 212900.0 | 38159.0 | 1874.0 | 4.91% |
| 宜昌 | 329050.0 | 73981.0 | 5786.0 | 7.82% |
| 随州 | 189961.0 | 44059.0 | 4399.0 | 9.98% |
| 襄阳 | 709892.0 | 202800.0 | 30651.0 | 15.11% |
| 潜江 | 83759.0 | 45252.0 | 7060.0 | 15.60% |
| 咸宁 | 187005.0 | 34156.0 | 5747.0 | 16.83% |
| 恩施 | 258106.0 | 41465.0 | 7629.0 | 18.40% |
| 鄂州 | 77605.0 | 47373.0 | 9790.0 | 20.67% |
| 黄石 | 154987.0 | 99528.0 | 20969.0 | 21.07% |
| 江汉 | 86851.0 | 47215.0 | 12300.0 | 26.05% |
| 武汉 | 488445.0 | 277306.0 | 78763.0 | 28.40% |
| 天门 | 106887.0 | 57587.0 | 17810.0 | 30.93% |
| 孝感 | 305990.0 | 208452.0 | 71288.0 | 34.20% |
| 十堰 | 11410.0 | 5760.0 | 2084.0 | 36.18% |
| 黄冈 | 474928.0 | 261801.0 | 101431.0 | 38.74% |
| 全网 | 3695763.0 | 1485373.0 | 377583.0 | 25.42% |

武汉各区县中，**武昌、洪山、硚口**覆盖较好，MR严重弱覆盖栅格较少。**江夏、黄陂、新洲**覆盖相对较差，MR严重弱覆盖栅格较多。

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| --- | --- | --- | --- | --- |
| 19年9月 | 总栅格 | 大于100采样点 | 严重弱覆盖栅格数量 | 严重弱覆盖栅格占比 |
| 武昌 | 4939.0 | 4922.0 | 215.0 | 4.37% |
| 洪山 | 10068.0 | 9379.0 | 1169.0 | 12.46% |
| 硚口 | 3879.0 | 3742.0 | 474.0 | 12.67% |
| 青山 | 23041.0 | 17041.0 | 2410.0 | 14.14% |
| 东新 | 30269.0 | 24797.0 | 3538.0 | 14.27% |
| 江汉 | 4013.0 | 3799.0 | 563.0 | 14.82% |
| 江岸 | 6765.0 | 6369.0 | 970.0 | 15.23% |
| 汉阳 | 7348.0 | 6805.0 | 1304.0 | 19.16% |
| 蔡甸 | 53949.0 | 28792.0 | 7406.0 | 25.72% |
| 经开 | 29051.0 | 16568.0 | 4264.0 | 25.74% |
| 东西湖 | 32227.0 | 20522.0 | 5449.0 | 26.55% |
| 新洲 | 79428.0 | 37865.0 | 12884.0 | 34.03% |
| 黄陂 | 114156.0 | 52439.0 | 19478.0 | 37.14% |
| 江夏 | 75702.0 | 39157.0 | 16747.0 | 42.77% |
| 武汉 | 488445.0 | 277306.0 | 78763.0 | 28.40% |

## 二、 整体评估

各指标项分值见分值列：地市指标按指标情况线性取值。

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 维度 | 子维度 | 指标项 | 分值 | 基准值 | 挑战值 |
| 网络质量覆盖评估 | 全网 | 全网MR覆盖率 | 20 | 0% | 100% |
| 网络质量覆盖评估 | 小区 | MR覆盖问题小区占比 | 10 | 100% | 0% |
| 网络质量覆盖评估 | 大数据栅格 | 大数据MR问题栅格占比 | 10 | 100% | 0% |
| 网络质量覆盖评估 | 大数据栅格 | 严重弱覆盖栅格占比 | 60 | 100% | 0% |

最后依据地市每项得分的总和得到地市总得分，排序情况如下：**荆州、荆门、宜昌**得分最高。**黄冈、十堰、孝感**得分最低。武分排名12。

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 地市 | 全网MR覆盖率 | 得分1 | 问题小区占比 | 得分2 | 大数据MR问题栅格占比 | 得分3 | 严重弱覆盖栅格占比 | 得分4 | 总得分 |
| 荆州 | 96.41% | 19.28 | 11.13% | 8.89 | 14.41% | 8.56 | 0.42% | 59.75 | 96.48 |
| 荆门 | 95.98% | 19.2 | 18.72% | 8.13 | 17.35% | 8.26 | 4.91% | 57.05 | 92.64 |
| 宜昌 | 96.22% | 19.24 | 12.99% | 8.7 | 26.97% | 7.3 | 7.82% | 55.31 | 90.56 |
| 随州 | 96.20% | 19.24 | 19.42% | 8.06 | 27.16% | 7.28 | 9.98% | 54.01 | 88.59 |
| 襄阳 | 95.38% | 19.08 | 17.31% | 8.27 | 34.53% | 6.55 | 15.11% | 50.93 | 84.83 |
| 恩施 | 96.19% | 19.24 | 18.20% | 8.18 | 37.37% | 6.26 | 18.40% | 48.96 | 82.64 |
| 潜江 | 96.30% | 19.26 | 11.97% | 8.8 | 63.73% | 3.63 | 15.60% | 50.64 | 82.33 |
| 咸宁 | 94.88% | 18.98 | 21.05% | 7.9 | 52.81% | 4.72 | 16.83% | 49.9 | 81.49 |
| 黄石 | 97.55% | 19.51 | 8.24% | 9.18 | 57.25% | 4.28 | 21.07% | 47.36 | 80.32 |
| 鄂州 | 97.24% | 19.45 | 8.79% | 9.12 | 63.75% | 3.62 | 20.67% | 47.6 | 79.79 |
| 江汉 | 95.92% | 19.18 | 15.94% | 8.41 | 66.98% | 3.3 | 26.05% | 44.37 | 75.26 |
| 武汉 | 96.84% | 19.37 | 14.51% | 8.55 | 60.34% | 3.97 | 28.40% | 42.96 | 74.84 |
| 天门 | 95.57% | 19.11 | 18.32% | 8.17 | 71.23% | 2.88 | 30.93% | 41.44 | 71.6 |
| 孝感 | 95.92% | 19.18 | 17.03% | 8.3 | 66.87% | 3.31 | 34.20% | 39.48 | 70.27 |
| 十堰 | 92.61% | 18.52 | 9.14% | 9.09 | 65.00% | 3.5 | 36.18% | 38.29 | 69.4 |
| 黄冈 | 96.27% | 19.25 | 19.15% | 8.09 | 75.70% | 2.43 | 38.74% | 36.76 | 66.53 |
| 全网 | 96.37% | 19.27 | 15.28% | 8.47 | 56.52% | 4.35 | 25.42% | 44.75 | 76.84 |

依据武汉区县的每项得分总和得到各区县的总得分，排序如下：**武昌、洪山、青山**得分最高。**江夏、黄陂、新洲**得分最低。

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 区域 | 全网移动覆盖率 | 得分1 | 问题小区占比 | 得分2 | 大数据MR问题栅格占比 | 得分3 | 严重弱覆盖栅格占比 | 得分4 | 总得分 |
| 武昌 | 97.65% | 19.53 | 5.00% | 9.5 | 52.07% | 4.79 | 4.37% | 57.38 | 91.2 |
| 洪山 | 98.10% | 19.62 | 3.88% | 9.61 | 56.99% | 4.3 | 12.46% | 52.52 | 86.06 |
| 青山 | 97.25% | 19.45 | 6.05% | 9.4 | 48.19% | 5.18 | 14.14% | 51.52 | 85.54 |
| 硚口 | 95.75% | 19.15 | 14.88% | 8.51 | 53.21% | 4.68 | 12.67% | 52.4 | 84.74 |
| 东新 | 96.82% | 19.36 | 9.30% | 9.07 | 57.63% | 4.24 | 14.27% | 51.44 | 84.11 |
| 江岸 | 96.07% | 19.21 | 13.83% | 8.62 | 55.57% | 4.44 | 15.23% | 50.86 | 83.14 |
| 江汉 | 95.61% | 19.12 | 17.29% | 8.27 | 60.15% | 3.99 | 14.82% | 51.11 | 82.49 |
| 汉阳 | 94.90% | 18.98 | 17.41% | 8.26 | 59.22% | 4.08 | 19.16% | 48.5 | 79.82 |
| 蔡甸 | 94.57% | 18.91 | 18.48% | 8.15 | 51.00% | 4.9 | 25.72% | 44.57 | 76.53 |
| 经开 | 94.84% | 18.97 | 18.51% | 8.15 | 54.12% | 4.59 | 25.74% | 44.56 | 76.26 |
| 东西湖 | 94.45% | 18.89 | 19.62% | 8.04 | 53.70% | 4.63 | 26.55% | 44.07 | 75.63 |
| 新洲 | 92.19% | 18.44 | 29.70% | 7.03 | 61.05% | 3.89 | 34.03% | 39.58 | 68.94 |
| 黄陂 | 92.77% | 18.55 | 29.65% | 7.04 | 62.68% | 3.73 | 37.14% | 37.72 | 67.04 |
| 江夏 | 96.38% | 19.28 | 14.67% | 8.53 | 79.34% | 2.07 | 42.77% | 34.34 | 64.21 |
| 武汉 | 96.84% | 19.37 | 14.51% | 8.55 | 60.34% | 3.97 | 28.40% | 42.96 | 74.84 |