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彩色显像管的地磁屏蔽(Ⅰ)

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摘 要：为提高彩色显像管质量,减小地磁场影响,针对目前彩色显像管生产中需借助高斯房模拟销售区域地磁场对彩色显像管预调的局限性,研究了1种经济有效的屏蔽地磁场影响的新装置.采用先进的彩色显像管性能测试仪,在相同条件下与现行屏蔽方式就屏蔽效果进行了测试与对比,结果表明:该装置可抑制地磁场对彩色显像管的干扰,提高彩色显像管地磁场裕度;可省略彩色显像管生产中模拟和调整地磁场的工序,具有降低生产成本、增进效益的实用价值.

关键字：地磁场;彩色显像管;屏蔽;着屏偏移;地磁场裕度

The geomagnetic shielding on the color picture tube

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Abstract: In order to improve the quality of the color picture tube and reduce the influence of geomagnetic field on the color picture tube, usuallythe color picture tube is pre-adjusted tomeet the demand by usinggauss-roomto stimulate gomagnetic field of market area during the manufacture of the color picture tube. A kind of new equipment that economically and effectively shields the influence of geomagnetic field is put forward through studing the concerned disciplines electron optics, electromagnetic shieldingtheory and magnetic material,etc. An advanced testerof the color picture tube is used to compare the shielding result of the new equipmentwith that of current shielding equipment in the same condition. It is proved that this new equipment is more effective and practicable. This new equipment can restrain the influence of geomagnetic field and increase the geomagnetic tolerance of the color picture tube.

Key words:geomagnetic field; color picture tube; shield; misregister; geomagnetic tolerance

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