



Marine Safety Information Bulletin

Commandant (CG-5PC)
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U.S. Coast Guard
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Newly published technical standard addresses LED radio interference to maritime VHF radio and AIS

USCG [Marine Safety Alert 13-18](#) advised mariners of poor reception on VHF frequencies used for radiotelephone and automatic identification systems (AIS) when in the vicinity of light emitting diode (LED) lighting on-board ships (including navigation lights and deck lights). Consequentially, the Radio Technical Commission for Maritime Services (RTCM), a 501(c)(3) international non-profit scientific, professional and educational organization established to address problems such as this, was asked to investigate this problem and develop a solution. Consequently, RTCM in cooperation with the Coast Guard researched numerous electromagnetic compatibility (EMC) standards and performed exhaustive EMC tests of various LED navigation and other above deck lighting.

On 13 April 2022, RTCM adopted RTCM Standard 13700.0 *Electromagnetic Compatibility Requirements for Light Emitting Diode (LED) Devices and other Electrical and Electronic Equipment in the Vicinity of Shipboard Antennas for the Protection of On-Board Receivers*. RTCM Standard 13700.0 is designed to protect GMDSS MF/HF and mobile satellite receivers, maritime VHF, AIS and GNSS receivers from deck-mounted electrical equipment, especially equipment installed near antennas. The USCG is confident that LED lighting or other equipment meeting this standard will not cause interference to these systems.

The Coast Guard urges manufacturers, installers and users of LED navigation lights, deck lights and other above-deck lighting, as well as other electrical equipment installed in the vicinity of shipboard antennas, to consider use of this standard.

Questions concerning this notice may be forwarded to Coast Guard Spectrum Management and Communications Policy Division (CG-672) at HQS-SMB-CG-672@USCG.MIL or to the [Coast Guard Navigation Center's "Contact Us" page](#) by selecting "Maritime Telecommunications" as subject.

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