Conformance of Watchfire Signs to OAAA/ISA Lighting Guidelines

The Outdoor Advertising Association of America (OAAA) and the International Sign Association (ISA) have recommended criteria for brightness standards for outdoor LED signs. Watchfire by Time-O-Matic has validated that all products can comply with these guidelines.

The guidelines highlight the importance of ensuring appropriate brightness settings. Energy conservation, community goodwill, and extending the life expectancy of the displays are all goals of the criteria.

All Watchfire signs incorporate a sunrise/sunset calculation algorithm that uses the sign's latitude and longitude coordinates to correctly dim the sign at dusk and brighten it at dawn in several steps. An additional photocell option is available that will also allow the sign to dim in response to severe overcast weather during the day.

LED sign brightness is usually specified in NITs or candelas per square meter. The instruments for measuring NITs are expensive and not commonly available to sign companies or communities. The new guidelines offer a means to specify the sign brightness using a foot-candle meter, which is relatively inexpensive and more available.

Watchfire signs ship with the night brightness settings between 500-750NITs depending on model. The day maximum brightness is between 7500 and 11000 NITs depending on model. During normal operation an average of 30-40% of the pixels are on, so normal brightness is less than half of the maximum on average.

The Brightness guidelines specify that the signs will not be brighter than 0.3 foot candles than the ambient light levels at night at a specified distance. The distance depends on the size of the sign. Since the specification is relative to conditions, the brightness of the surrounding area is taken into consideration.

In most cases, the default settings on Watchfire signs meet these guidelines. Areas with little or no ambient lighting may require additional manual dimming. This is a simple setting that can be made at the factory or in the field to any sign manufactured by Watchfire past or present. The settings are password-protected. The user cannot change the setting without assistance from Time-O-Matic Support.

The default day settings of Watchfire signs also fall under the guidelines which indicate that 7500-10000 NITs is needed to overcome the full sunlight. Watchfire models that ship with higher day settings can be adjusted down if necessary.

The detailed ISA specification and measurement method may be downloaded from the ISA website at this link:

http://www.signs.org/IndustryResources/TechnicalRegulatoryResources/BrightnessGuideforElectronicMessageCenters/tabid/745/Default.aspx

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version: 051409