Mn/DOT LED 12 and 8 Inch Ball
Traffic Control Signal Indication Specification
Vehicle Signal Faces
04/22/2016

Requirements:

1. Shall meet Institute of Transportation Engineers, Vehicle Traffic Control Signal Heads: Light Emitting Diode (LED) Circular Signal Supplement:
   Dated June 27, 2005

2. Shall have a color matched tinted lens.

3. Shall meet the requirements of Sec 2.1.6 NEMA TS-2-2003, 300V, 2500W

4. Shall meet the requirements of Sec 2.1.6 NEMA TS-2-2003, 600V, 10 microfarads

5. Shall meet the requirements of IEC 1000-4-5 & ANSI/IEEE C62.41.2-2002, 3kV, 2 ohms

6. Shall meet the requirements of IEC 1000-4-12 & ANSI/IEEE C62.41.2-2002, 6 kV, 30 ohms

Specification Compliance Requirements:

1. The manufacturer shall submit a complete set of test results from an independent test lab certifying that the modules meet the above requirements.

2. The manufacture must have the modules certified and listed by Intertek Testing Laboratories LED certification program as meeting the requirements of the ITE specification stated above.

   Information regarding the “LED traffic signal module certification program” from Intertek may be found by following the link below.
   http://www.intertek-etlsemko.com
Connectors:

The LED signal module shall have spade lug connectors for terminating the power leads for the module to the signal head termination block. The screw size for the termination block is #8-32.

Random Testing:

The Minnesota Department of Transportation reserves the right at its own expense to perform random sample testing on all shipments. Random sample testing will be completed within 60 days, and as soon as possible, after delivery. Mn/DOT shall determine the sampling parameters to be used for the random testing. If the units tested fail random testing the units will be removed from the MN/DOT qualified products list for signals.

Warranty:

Manufacturer shall provide a written warranty which provides for repair or replacement of modules that fail to function as intended due to workmanship or material defects within the first 60 months from date of installation. Modules which exhibit luminous intensities less than the minimum as specified in the ITE specifications as indicated above, within the first 60 months from date of installation shall be replaced or repaired at no charge to The Minnesota Department of Transportation.

Product Modifications:

Once the LED signal indication has been accepted by MnDOT as meeting the requirements of this specification and placed on the MnDOT APL no substitution of materials or modification of the LED signal indication module will be allowed unless the manufacturer has received written permission from MnDOT allowing the substitution or change. Failure to comply with this requirement will result in the listed product being removed from the MnDOT Approved Products List.