DEPARTMENT OF TRANSPORTATION

National Highway Traffic Safety Administration

[Docket No. NHTSA-2020-0115; Notice 1]

Harbor Freight Tools, Receipt of Petition for Decision of Inconsequential Noncompliance

AGENCY: National Highway Traffic Safety Administration (NHTSA), Department of Transportation (DOT).

ACTION: Receipt of petition.

SUMMARY: Harbor Freight Tools (HFT) has determined that certain Kenway 12V Magnetic Towing Light Kits and Submersible LED Trailer Lights manufactured by Jinhua Eagle King Tools Co., Ltd. do not fully comply with Federal Motor Vehicle Safety Standard (FMVSS) No. 108, Lamps, Reflective Devices, and Associated Equipment. HFT filed a noncompliance report dated October 26, 2020, and subsequently petitioned NHTSA on November 23, 2020, for a decision that the subject noncompliance is inconsequential as it relates to motor vehicle safety. This notice announces receipt of HFT’s petition.

DATES: Send comments on or before [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: Interested persons are invited to submit written data, views, and arguments on this petition. Comments must refer to the docket and notice number cited in the title of this notice and submitted by any of the following methods:

- Mail: Send comments by mail addressed to the U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, S.E., Washington, DC 20590.
- Hand Delivery: Deliver comments by hand to the U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, S.E., Washington, DC 20590.
• Electronically: Submit comments electronically by logging onto the Federal Docket Management System (FDMS) website at https://www.regulations.gov/. Follow the online instructions for submitting comments.

• Comments may also be faxed to (202) 493-2251.

Comments must be written in the English language and be no greater than 15 pages in length, although there is no limit to the length of necessary attachments to the comments. If comments are submitted in hard copy form, please ensure that two copies are provided. If you wish to receive confirmation that comments you have submitted by mail were received, please enclose a stamped, self-addressed postcard with the comments. Note that all comments received will be posted without change to https://www.regulations.gov, including any personal information provided.

All comments and supporting materials received before the close of business on the closing date indicated above will be filed in the docket and will be considered. All comments and supporting materials received after the closing date will also be filed and will be considered to the fullest extent possible.

When the petition is granted or denied, notice of the decision will also be published in the Federal Register pursuant to the authority indicated at the end of this notice.

All comments, background documentation, and supporting materials submitted to the docket may be viewed by anyone at the address and times given above. The documents may also be viewed on the internet at https://www.regulations.gov by following the online instructions for accessing the docket. The docket ID number for this petition is shown in the heading of this notice.

DOT’s complete Privacy Act Statement is available for review in a Federal Register notice published on April 11, 2000 (65 FR 19477–78).
I. Overview:

HFT has determined that certain Kenway 12V Magnetic LED Towing Light Kits and Submersible Trailer Lights manufactured by Jinhua Eagle King Tools Co., Ltd., do not fully comply with the requirements of FMVSS No. 108, *Lamps, Reflective Devices, and Associated Equipment* (49 CFR 571.108). HFT filed a noncompliance report dated October 26, 2020, pursuant to 49 CFR part 573, *Defect and Noncompliance Responsibility and Reports*. HFT subsequently petitioned NHTSA on November 23, 2020, for an exemption from the notification and remedy requirements of 49 U.S.C. chapter 301 on the basis that this noncompliance is inconsequential as it relates to motor vehicle safety, pursuant to 49 U.S.C. 30118(d) and 30120(h) and 49 CFR part 556, *Exemption for Inconsequential Defect or Noncompliance*.

This notice of receipt of HFT’s petition is published under 49 U.S.C. 30118 and 30120 and does not represent any Agency decision or other exercise of judgment concerning the merits of the petition.

II. Equipment Involved:

Jinhua Eagle King Tools Co., Ltd manufactured the Kenway 12V Magnetic LED Towing Light Kits between November 13, 2019 and December 22, 2019 and the Kenway 12V Submersible Trailer Lights between July 1, 2019 and July 9, 2019. Approximately 3,832 units, in total, are potentially involved.

III. Noncompliance:

HFT explains that the noncompliance is that the subject trailer lighting kits are equipped with turn signal, stop lamp, and tail lamps that exceeds the maximum and/or minimum photometric intensity output requirements, as required by FMVSS No. 108.

IV. Rule Requirements:
Paragraphs S7.1.2, S7.1.2.13, S7.1.2.13.1, S7.2, S7.2.13, S7.3, S7.3.13, and S7.3.13.1 of FMVSS No. 108 include the requirements relevant to this petition. Each rear turn signal lamp must be designed to conform to the photometry requirements of Table VII, when tested according to the procedure of paragraph S14.2.1, for the number of lamp compartments or individual lamps, the type of vehicle it is installed on, and the lamp color as specified by S7.1.2.2. Each tail lamp must be designed to conform to the photometry requirements of Table VIII, when tested according to the procedure of S14.2.1. Each stop lamp must be designed to conform to the photometry requirements of Table IX, when tested according to the procedure of paragraph S14.2.1, for the number of lamp compartments or individual lamps and the type of vehicle it is installed on. Table VII specifies the various minimum and maximum photometric intensity requirements for rear turn signal lamps at specified test points. Table VIII specifies the various minimum and maximum photometric intensity requirements for tail lamps at specified test points. Table IX specifies the various minimum and maximum photometric intensity requirements for stop lamps at specified test points.

V. Summary of HFT’s Petition:

The following views and arguments presented in this section, “V. Summary of HFT’s Petition,” are the views and arguments provided by HFT. They have not been evaluated by the Agency and do not reflect the views of the Agency. HFT describes the subject noncompliance and contends that the noncompliance is inconsequential as it relates to motor vehicle safety.

In support of its petition, HFT submitted the following reasoning:

1. HFT contends that the subject trailer light kits deviate only by small margins at certain points and not by a degree that is sufficient enough to be noticeable to other road users or create an increased safety risk.

2. HFT explains that the trailer light kits are combination lamps with turn signal, stop lamp and tail lamp functions and that use light emitting diodes (LEDs) as their light source. HFT explains that it engaged Calcoast to conduct comprehensive compliance
monitoring of its trailer light products. In certain individual units, portions of the LEDs used in specific production batches have candela values that were either marginally below and/or were slightly above the luminous intensity output provided for in FMVSS No. 108. HFT states that the deviation from the photometry requirements is slight and all but one case falls within 25% of the required output. Thus, HFT claims, the actual performance of HFT’s lamps compared to compliant lamps would not be perceptible to the human eye and therefore would not create an enhanced risk to safety. A description of each of the products and associated test results from Calcost are set out below.

a. Submersible LED Trailer Lights – Part Number 64274
   i. HFT’s submersible trailer light kit consists of a pair of replacement trailer lamps to be used on trailers less than 80 inches in overall width. The LED lamps used in the kit, function as a combination lamp with three lighted sections.
   ii. In this case, a total of six tests were conducted on samples from the same production batch produced in calendar week 27. Four of the samples meet all of the FMVSS No. 108 requirements to which they were tested. Two individual test samples fell below the required candela values for turn signals and stop lamps only in Zone 3.
   iii. The minimum candela value for Zone 3 for a lamp with three lighted sections is 520 cd. For these two test samples, one sample measured 466.33 cd in Zone 3 and the other sample measured 497.39 cd in Zone 3 – a deviation of 4.5% and 10.4%, respectively. In each case, all of the individual test points that make up Zone 3 were at least 60% of the required candela value and in many cases, were more than 90% of the value for the individual test point.
iv. Overall, HFT says that in each case, although Zone 3 fell below the minimum candela value, it nevertheless fulfilled 89.6% – 95.6% of the requirement for the zone. In other words, the zone itself was only 10.4% and 4.4% lower than the minimum required candela value. In addition, none of the individual test points fell below 60% of the specified candela value for the test point. Because all of the test points within the zone are compliant, this accounts for the minimal effects on the photometric output of the zone overall.

v. Further, HFT claims that the lamps met the photometric requirements for all other testing zones and met all other requirements of FMVSS No. 108 to which they were tested.

b. Magnetic Trailer Light Kit – Part Number 64282

i. The second product at issue is a 12V magnetic LED trailer light kit each trailer light kit consists of a pair of lamps that are intended to be magnetically attached to the rear of a trailer and that are wired to the towing vehicle’s tail lamps. Each lamp is a combination lamp that functions as a turn signal, stop lamp and tail lamp with three lighted sections.

ii. A total of 13 sets of lamps were tested for this product and the Calcoast test results indicate that individual units within two separate production batches (calendar week 46 and calendar week 52) had individual test units that did not meet the photometry requirements for stop lamps, turn signals and tail lamps.

iii. For this product, the noncompliance occurred at certain individual test points, not at the zone level. HFT states that the lamps met the
photometric requirements at all other test points and met all other requirements of FMVSS No. 108 to which they were tested.

iv. For the magnetic trailer light kit produced in calendar week 46, two samples measured slightly higher candela values for a single test point when evaluated under the photometric intensity values for turn signals and stop lamps. Where the maximum candela value is 420 cd, in one sample a single test point (1.0U/ 0.7R) measured 579.81 cd after one minute (an exceedance of 27.6%) and in the other sample a single test point (0.7D/ 0.3L) measured 426.87 cd after one minute (an exceedance of 1.7%). However, HFT claims, the overall photometric requirements for all of the test zones were met.

v. In addition, there were slight exceedances of the tail lamp photometry provisions. In one sample, a single test point slightly exceeded the tail lamp maximum output of 25 candelas, where one sample measured 25.7 cd at the H-V point and in another sample a single test point (at 1.0U/0.9R) measured 31.87 cd. This is a range of 2.7% - 21.5% above the maximum candela value. All of the overall photometric requirements for each of the zones were met.

vi. Separately, a batch of magnetic trailer light kits produced in week 52 was evaluated. In that case, one exemplar unit had a single test point (0.5D/1.3L) that measured 440 cd after one minute, an exceedance of 4.6% and above the 420 cd maximum value for any test point. Again, all of the overall photometric requirements for each of the zones were met.

vii. Further, HFT states, for the magnetic trailer light kits there is no increased risk of glare to oncoming motorists because the photometric
exceedances are minimal and in all cases, below the threshold metric of 25% so that the differences are not perceptible to other drivers.¹

3. HFT says that historically, NHTSA has granted inconsequentiality petitions when the noncompliance is imperceptible or nearly imperceptible to vehicle occupants or surrounding traffic. HFT states that when the photometric intensity level is within 25% above or below the boundary limit, the difference in the light being emitted is typically not perceptible to other drivers. This objective metric has been applied to various types of lighting sources, including turn signal lighting.² NHTSA has also applied this reasoning to noncompliances with particular zones, not just individual test points.³ In each of the samples, HFT states that the deviation is well within 25% of the required values. The plot diagram at Attachment 7⁴ provides a visual depiction of the relationship between the two outlier values to the 520 cd minimum for the Zone 3 test results for the submersible trailer light kits tested by Calcoast. The plot diagram at Attachment 8 gives a visual depiction of the relationship between the outlier values and the photometric requirements for the magnetic trailer light kits.

4. HFT states that an alternative basis on which to grant the petition is the performance exceedances of each of the other surrounding zones. Zones 1, 2, 4 and 5 all exceeded the minimum candela value for their respective zone by wide margins (e.g. from a range of 27% - 44% higher than the minimum candela value for the zone for one sample and 26% - 37% higher than the minimum candela value for each zone for the

¹ See Grant of Petition for Determination of Inconsequential Noncompliance; Hella, Inc. 55 FR 37601, September 21, 1990.
³ See General Motors Corporation; Grant of Application for Decision of Inconsequential Noncompliance; 61 FR 1663, January 22, 1996
⁴ HFT’s petition and the attachments can be found in full at https://www.regulations.gov by following the online instructions for accessing the docket. The docket ID number for this petition is shown in the heading of this notice.
other sample). Thus, HFT claims the minor discrepancy in one zone is offset by the substantial (and compliant) exceedances in the remaining zones. Taking the performance of the lamp as a whole, and because drivers view the output of lamps as a whole rather than at individual points within the lamp, the additional light from the other zones would compensate for the deviation in Zone 3. HFT states that this rationale is consistent with the agency’s findings in other similar petitions which concluded that enhanced photometric values in other areas of the same lamp could effectively minimize a minor deviation in one portion of the lamp.\(^5\)

5. Separately, HFT also states that NHTSA has recognized the inherent challenges to manufacture all lamps so that each and every test point within the lamp meets the minimum criteria. HFT claims that is the case here. When HFT commissioned Calcoast to review and confirm the performance of these lighting products, it tested a total of 24 sets of lamps produced over a seven month/year period. Of that universe, there were just two samples of submersible trailer light kits that had slightly reduced photometric values and three samples of the magnetic trailer light kit that experienced minimal exceedances. HFT claims that this indicates that the LED lamps were in fact designed to comply with FMVSS No. 108 and that the results of the monitoring testing indicate an isolated number of random failures, not a systemic lapse in production processes. NHTSA has stated that it will not consider a lamp to be noncompliant if its failure to meet a test point is random and occasional.\(^6\) Thus, historically, there has never been an absolute requirement that every motor vehicle lighting device meet every single photometric test point to comply with FMVSS No. 108.

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\(^5\) See General Motors Corporation; Grant of Application for Decision of Inconsequential Noncompliance; 61 FR 1663, January 22, 1996; see also BMW of North America, LLC, Grant of Petition for Decision of Inconsequential Noncompliance; 82 FR 55484, November 21, 2017.

\(^6\) See Federal Motor Vehicle Safety Standards; Lamps, Reflective Devices, and Associated Equipment; 83 FR 51766, October 12, 2018
6. Finally, HFT has reviewed its systems and has not received any reports or complaints about the levels of brightness for these trailer lighting kits. The lack of reports or indications that the subject trailer lights are either too bright or too dim supports the conclusion that the condition is undetectable to road users such as drivers following a vehicle equipped with either of the lighting products. HFT is providing copies of the relevant Calcoast test reports with this petition at Attachment 2 for the submersible trailer light kits and at Attachments 3 and 4 for the magnetic trailer light kits.

HFT concludes that the subject noncompliance is inconsequential as it relates to motor vehicle safety and that its petition to be exempted from providing notification of the noncompliance, as required by 49 U.S.C. 30118, and a remedy for the noncompliance, as required by 49 U.S.C. 30120, should be granted.

HFT’s complete petition and all supporting documents are available by logging onto the FDMS website at https://www.regulations.gov and by following the online search instructions to locate the docket number as listed in the title of this notice.

NHTSA notes that the statutory provisions (49 U.S.C. 30118(d) and 30120(h)) that permit manufacturers to file petitions for a determination of inconsequentiality allow NHTSA to exempt manufacturers only from the duties found in sections 30118 and 30120, respectively, to notify owners, purchasers, and dealers of a defect or noncompliance and to remedy the defect or noncompliance. Therefore, any decision on this petition only applies to the subject equipment that HFT no longer controlled at the time it determined that the noncompliance existed. However, any decision on this petition does not relieve equipment distributors and dealers of the prohibitions on the sale, offer for sale, or introduction or delivery for introduction into interstate commerce of the noncompliant equipment under their control after HFT notified them that the subject noncompliance existed.

(Authority: 49 U.S.C. 30118, 30120: delegations of authority at 49 CFR 1.95 and 501.8)

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Director, Office of Vehicle Safety Compliance.

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