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BV PHOTOMETRY OF THE BINARY STAR VW LMi

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| Name of the object: | | |
|---|--------------------------------|----------|
| VW LMi = HIP 54003 = HD 95660 | | |
| | | |
| Equatorial coordinates: | | Equinox: |
| $R.A.= 11^{h}02^{m}51^{s}9$ $DEC.= 30^{\circ}24'54''5$ | | 2000.0 |
| | | |
| Observatory and telescope: | | |
| Astronomical Institute of the Romanian Academy, 0.5-m $f/15$ Cassegrain reflector | | |
| | | |
| Detector: | EMI 9502B type photomultiplier | |
| T:14 () | D 117 | |
| Filter(s): | B and V | |
| Comparison star(s): | HD 95977, SAO 62390 | |
| Comparison star(s). IID 90911, DAO 02090 | | |
| Check star(s): | HD 94883 | |
| () | | |
| Transformed to a standard system: No | | |
| | | |
| Availability of the data: | | |
| Upon request | | |
| | | |
| Type of variability: | EW | |
| | | |

Remarks:

VW LMi (HIP 54003, HD 95660) was found to be a variable star by the Hipparcos/Tycho mission. The Variability Annex of the Hipparcos Catalogue (ESA 1997) reports VW LMi to have a period of 0d477547, with Hp magnitude ranging between 8.031 to 8.446. The star was classified as a W UMa eclipsing binary type. The spectral type is listed as F3V. Up to the present, no observations can be found in literature. Nine nights of data were obtained between 15 April 1999 and 9 May 2000. The filters used are in close accordance with the UBV Johnson system. From the light curves produced, four times of minimum light (one primary and three secondaries) were determinated. These times, given in Table 1, are calculated according to the method described by Kwee and van Woerden (1956). The phased light curves were obtained using the ephemeris

Min. I = HJD $2451635.3084 + 0.477547 \times E$.

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Table 1

Min HJD
2400000.0 +

Type
Epoch

51288.3670
Secondary -726.5
51617.3998
Secondary -37.5
51635.3084
Primary 0.

Secondary

75.5

51671.3594

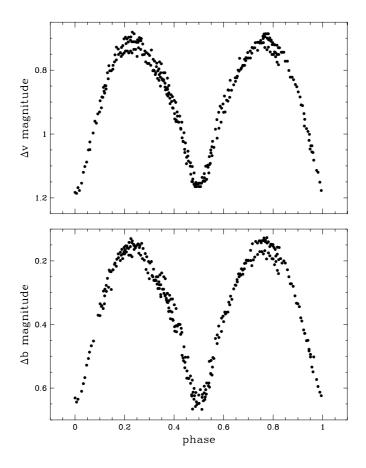


Figure 1.

References:

Kwee, K.K. and van Woerden, H, 1956, BAN, 12, 327 ESA, 1997, The Hipparcos Catalogue, ESA SP-1200