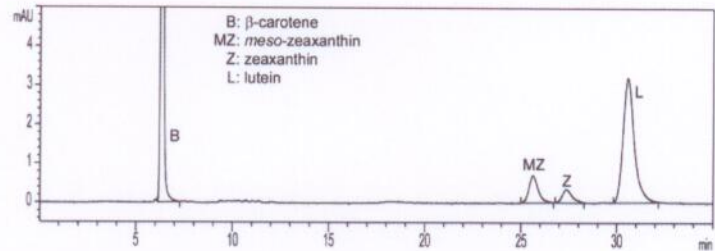


**Report Issued to:** MacuHealth LLC™(USA)  
**Product name:** Vision Sharp  
**Lot number:** S18G055 (bottle 2)  
**Expiry date:** Nov/20 (19 months to expiry)  
**Date received:** 2019.03.28  
**Analysis ID:** 190022



Analyte	Declared (mg/capsule)	Measured (mg/capsule ± U <sub>95%</sub> ) <sup>a</sup>	% Achieved (95% confidence)	Result <sup>b</sup>
Lutein	5.00	5.29 ± 0.15	106 ( 103 - 109 )	Exceeds
Zeaxanthin	1.00	0.74 ± 0.01	74 ( 73 - 75 )	Fail
Meso -zeaxanthin	0.00	1.21 ± 0.02	N/a	Fail

<sup>(a)</sup> U<sub>95%</sub> = 1.96 Standard Deviation. NIST 1297 (1993)

<sup>(b)</sup> % Achieved (95% confidence) is equal (pass), below (fail) or above (excess) to 100%

Quality Control	Specification <sup>c</sup>	Value	Result
Accuracy <sup>d</sup>	85 - 115%	101.81 %	Conform
Precision <sup>e</sup>	RSD <sup>d</sup> < 15%	0.63 %	Conform

<sup>(c)</sup> European Medicines Agency (EMA). Guideline on Bioanalytical Method Validation (2011)

<sup>(d)</sup> Closeness (Relative Standard Deviation, RSD) of determined concentration of lutein control sample to nominal lutein concentration

<sup>(e)</sup> Within-run variability (RSD) of lutein peak area in control sample

## Method:

Technique: HPLC-DAD, column Daicel Chiralpak® IA-3  
Reference: Prado-Cabrero et al. Eur Food Res Technol, 242, 599-608 (2016)  
Conditions: Isocratic run with hexane:isopropanol (90:10, v/v), flow rate of 0.5 mL min<sup>-1</sup>. Column temperature 25°C.  
Capsules analyzed: 3

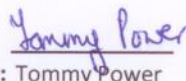
## Report Summary

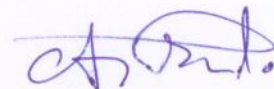
Zeaxanthin is below declared amount, and it contains undeclared *meso*-zeaxanthin.

This supplement contains β-carotene, which is declared in the bottle (22.02 mg per daily serving).

2019.04.01

Analysis Date

  
Analyzed By: Tommy Power



Authorize Alfonso Prado-Cabrero, PhD

This report provides technical results for a specific sample and the report shall not be altered, modified, supplemented or abstracted in any manner. Any violation of these conditions renders the report and its results void.