





# HAMAMATSU

HAMAMATSU PHOTONICS K.K.

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| FINAL INSPECTION SHEET<br>検査成績書                                      |                    | 2021 / 07 / 28  |
|  |                    | HAMAMATSU PHOTONICS K.K.<br>SOLID STATE DIVISION<br>浜松ホトニクス株式会社 固体事業部 |
| Name   | Micro-Spectrometer | Approved by<br>責任者<br>Yosuke Matsune                                  |
| Type No.   | C12880MA           | Inspected by<br>検査員<br>Shinya Ohta                                    |
| NO.  | 946246             |   |
| Date Inspected:<br>検査日 : 2021/ 02/ 08 24.0 °C ~ 2021/ 02/ 09 24.0 °C |                    |   |

\*1) Wavelength resolution: Test conditions / Maximum value of FWHM at 340nm,400nm,450nm,500nm,550nm,600nm,,655nm,710nm,760nm,810nm,850nm wavelength  
波長分解能 : 検査条件 / 波長340nm, 400nm, 450nm, 500nm, 550nm, 600nm, , 655nm, 710nm, 760nm, 810nm, 850nmのFWHMの最大値

| Calibration coefficients Wavelength[nm]=A <sub>0</sub> +B <sub>1</sub> *pix+B <sub>2</sub> *pix <sup>2</sup> +B <sub>3</sub> *pix <sup>3</sup> +B <sub>4</sub> *pix <sup>4</sup> +B <sub>5</sub> *pix <sup>5</sup><br>波長変換係数 |                 |                 |                  |                  |                 |                  | 946246-2                           | Wavelength resolution *1)<br>波長分解能 |  |
|--|-----------------|-----------------|------------------|------------------|-----------------|------------------|------------------------------------|------------------------------------|--|
| Serial No.   | A <sub>0</sub>  | B <sub>1</sub>  | B <sub>2</sub>   | B <sub>3</sub>   | B <sub>4</sub>  | B <sub>5</sub>   | Standard for Shipment<br>出荷基準 [nm] | Result<br>測定値 [nm]                 |  |
|  |                 |                 |                  |                  |                 |                  | ≤15                                |                                    |  |
| 21A02870   | 3.062212928E+02 | 2.717515324E+00 | -1.299613267E-03 | -7.212476584E-06 | 9.588524324E-09 | 2.822416380E-12  |                                    | 8.9                                |  |
| 21A02871   | 3.096144195E+02 | 2.706833946E+00 | -1.195755481E-03 | -7.613175036E-06 | 9.816727094E-09 | 3.499167493E-12  |                                    | 8.9                                |  |
| 21A02873   | 3.061183205E+02 | 2.706109212E+00 | -1.190485263E-03 | -7.580038237E-06 | 9.391397073E-09 | 4.800045661E-12  |                                    | 9.4                                |  |
| 21A02874   | 3.102467135E+02 | 2.692888979E+00 | -9.775277686E-04 | -8.836651986E-06 | 1.231809225E-08 | 2.448350143E-12  |                                    | 8.8                                |  |
| 21A02875   | 3.086965198E+02 | 2.718912698E+00 | -1.434471882E-03 | -5.759067943E-06 | 3.250344320E-09 | 1.237572658E-11  |                                    | 9.0                                |  |
| 21A02876   | 3.088925230E+02 | 2.679588248E+00 | -6.719375694E-04 | -1.233061161E-05 | 2.815710469E-08 | -2.181982079E-11 |                                    | 9.1                                |  |
| 21A02877   | 3.098045173E+02 | 2.707021268E+00 | -1.183842211E-03 | -7.677216906E-06 | 9.986961637E-09 | 3.313224622E-12  |                                    | 9.0                                |  |
| 21A02878   | 3.097532380E+02 | 2.703189826E+00 | -1.152285986E-03 | -7.742482082E-06 | 9.614965945E-09 | 4.598195756E-12  |                                    | 9.0                                |  |
| 21A02879   | 3.045823045E+02 | 2.716690790E+00 | -1.266911539E-03 | -7.425500450E-06 | 9.737186400E-09 | 3.592953651E-12  |                                    | 9.1                                |  |
| 21A02880   | 3.037263631E+02 | 2.712530625E+00 | -1.190700680E-03 | -7.922824859E-06 | 1.184405500E-08 | -6.939650622E-14 |                                    | 9.0                                |  |
| 21A02881   | 3.101039260E+02 | 2.700997375E+00 | -1.030818058E-03 | -9.532749986E-06 | 1.827551834E-08 | -9.089063719E-12 |                                    | 9.1                                |  |
| 21A02882   | 2.987657967E+02 | 2.707977024E+00 | -1.073509168E-03 | -8.967317189E-06 | 1.571378264E-08 | -4.916239507E-12 |                                    | 8.9                                |  |
| 21A02883   | 3.050889626E+02 | 2.697809674E+00 | -1.015861915E-03 | -9.038897146E-06 | 1.490172102E-08 | -2.846371919E-12 |                                    | 9.0                                |  |
| 21A02884   | 3.027733566E+02 | 2.729434736E+00 | -1.407358710E-03 | -6.424566559E-06 | 6.701201711E-09 | 6.772319539E-12  |                                    | 8.8                                |  |
| 21A02885   | 3.020947830E+02 | 2.719283463E+00 | -1.205038190E-03 | -8.100413541E-06 | 1.270090407E-08 | -1.052822481E-12 |                                    | 9.4                                |  |
| 21A02886   | 3.054796185E+02 | 2.670427251E+00 | -4.919695340E-04 | -1.310598022E-05 | 2.899058211E-08 | -2.091619714E-11 |                                    | 9.3                                |  |
| 21A02887   | 3.063844940E+02 | 2.694329641E+00 | -9.938307037E-04 | -9.179152956E-06 | 1.516812679E-08 | -2.775804905E-12 |                                    | 8.9                                |  |
| 21A02888   | 3.045959386E+02 | 2.710099940E+00 | -1.281081436E-03 | -6.789399837E-06 | 6.613286283E-09 | 8.234189916E-12  |                                    | 8.9                                |  |
| 21A02889   | 3.105102755E+02 | 2.721879360E+00 | -1.483250810E-03 | -5.484711920E-06 | 2.140173524E-09 | 1.409723004E-11  |                                    | 8.8                                |  |
| 21A02890   | 3.025394670E+02 | 2.704723149E+00 | -1.107763468E-03 | -8.622902050E-06 | 1.425680725E-08 | -2.663961928E-12 |                                    | 9.6                                |  |
| 21A02891   | 3.090821400E+02 | 2.708800812E+00 | -1.315708840E-03 | -6.645724454E-06 | 5.901080985E-09 | 9.821516187E-12  |                                    | 9.2                                |  |
| 21A02892   | 3.065822161E+02 | 2.718765946E+00 | -1.346992375E-03 | -6.666437058E-06 | 6.951403263E-09 | 7.131311264E-12  |                                    | 9.1                                |  |
| 21A02893   | 3.023134627E+02 | 2.721944834E+00 | -1.395959553E-03 | -6.083701142E-06 | 4.539314722E-09 | 1.046853502E-11  |                                    | 9.5                                |  |
| 21A02894   | 3.019057267E+02 | 2.712937936E+00 | -1.194593845E-03 | -7.847564966E-06 | 1.098988989E-08 | 2.101853419E-12  |                                    | 8.9                                |  |
| 21A02895   | 2.993425174E+02 | 2.709721168E+00 | -1.109208006E-03 | -8.580959963E-06 | 1.382047614E-08 | -1.77979925E-12  |                                    | 9.2                                |  |

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| 21A02896 | 3.080809009E+02 | 2.693882912E+00 | -1.002227191E-03 | -9.172513188E-06 | 1.536682453E-08 | -3.323593936E-12 | 9.0 |
| 21A02897 | 3.111759680E+02 | 2.700643747E+00 | -9.545795517E-04 | -1.013648258E-05 | 2.026458729E-08 | -1.184108713E-11 | 9.4 |
| 21A02898 | 3.058921925E+02 | 2.706344872E+00 | -1.112111242E-03 | -8.497522831E-06 | 1.335615727E-08 | -1.259043460E-12 | 8.7 |
| 21A02899 | 3.034843650E+02 | 2.708771973E+00 | -1.107433109E-03 | -8.609260268E-06 | 1.429484478E-08 | -3.370785806E-12 | 9.0 |
| 21A02900 | 3.084707264E+02 | 2.701425639E+00 | -1.039610450E-03 | -9.254199601E-06 | 1.622724184E-08 | -4.824007556E-12 | 9.0 |
| 21A02901 | 3.107190490E+02 | 2.708787498E+00 | -1.245581374E-03 | -7.481183958E-06 | 1.004926983E-08 | 2.618046174E-12  | 9.0 |
| 21A02902 | 3.070114716E+02 | 2.714986345E+00 | -1.203685796E-03 | -7.874395940E-06 | 1.143140329E-08 | 7.910720588E-13  | 8.7 |
| 21A02903 | 3.023583509E+02 | 2.697760583E+00 | -9.089954714E-04 | -1.000628572E-05 | 1.825654791E-08 | -6.986979190E-12 | 8.9 |
| 21A02904 | 3.072876218E+02 | 2.723095221E+00 | -1.437547815E-03 | -5.955204465E-06 | 4.570153667E-09 | 9.873349835E-12  | 9.5 |
| 21A02905 | 3.085466147E+02 | 2.708977342E+00 | -1.169271452E-03 | -8.234771892E-06 | 1.284779886E-08 | -9.959273659E-13 | 9.0 |
| 21A02906 | 3.119501152E+02 | 2.711550566E+00 | -1.387319658E-03 | -6.101351344E-06 | 4.641836345E-09 | 1.021508487E-11  | 8.6 |
| 21A02907 | 3.031556377E+02 | 2.733264053E+00 | -1.532854291E-03 | -5.177385752E-06 | 1.526374115E-09 | 1.430515548E-11  | 9.1 |
| 21A02908 | 3.057529059E+02 | 2.702905217E+00 | -1.085324430E-03 | -8.498750712E-06 | 1.306599639E-08 | -7.112428610E-13 | 9.4 |
| 21A02909 | 3.100187431E+02 | 2.709507335E+00 | -1.340352492E-03 | -6.537751908E-06 | 6.359796451E-09 | 7.779642384E-12  | 9.0 |
| 21A02910 | 3.117606360E+02 | 2.704487725E+00 | -1.104973544E-03 | -8.659113281E-06 | 1.404294723E-08 | -2.220851248E-12 | 9.5 |
| 21A02912 | 3.056846964E+02 | 2.710188145E+00 | -1.121969889E-03 | -8.499573334E-06 | 1.353697333E-08 | -1.774977262E-12 | 9.0 |
| 21A02913 | 3.083436296E+02 | 2.694586181E+00 | -9.791226605E-04 | -9.016518203E-06 | 1.370177282E-08 | -2.361576494E-13 | 9.1 |
| 21A02914 | 3.070244982E+02 | 2.683491328E+00 | -8.531260147E-04 | -1.019277651E-05 | 1.871453707E-08 | -7.619461194E-12 | 9.2 |
| 21A02915 | 3.071974424E+02 | 2.708809767E+00 | -1.236318870E-03 | -7.037721800E-06 | 6.807071386E-09 | 8.824622322E-12  | 9.2 |
| 21A02916 | 3.015976944E+02 | 2.711818497E+00 | -1.149159494E-03 | -8.223261050E-06 | 1.283039916E-08 | -1.290756660E-12 | 9.1 |
| 21A02917 | 3.051864875E+02 | 2.712794597E+00 | -1.291085390E-03 | -6.685187359E-06 | 6.392934791E-09 | 7.952436576E-12  | 9.9 |
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