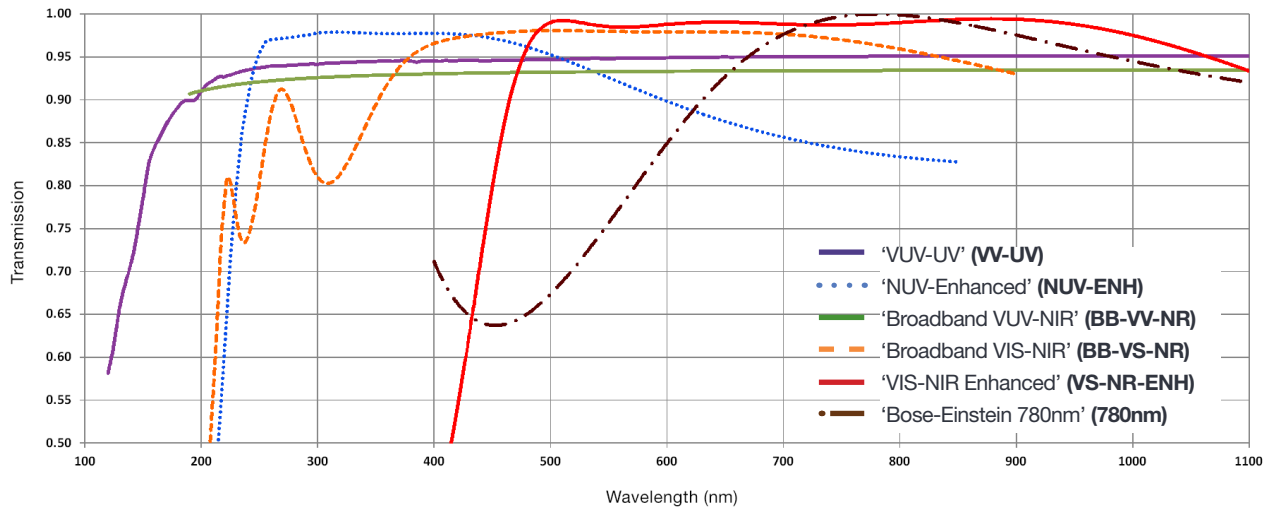
Selecting a window for your camera



Camera Windows
Figure 1: Transmission Efficiency Characteristics

The standard camera window (S) has been selected to satisfy most applications. However, other options (O) are readily available without requiring a Customer Special Request (CSR). This document provides a summary of how to select the correct optional camera window and associated part code for your camera type. Refer to the Technical Note *Camera Windows: Optimizing for Different Spectral Regions* for further technical information.

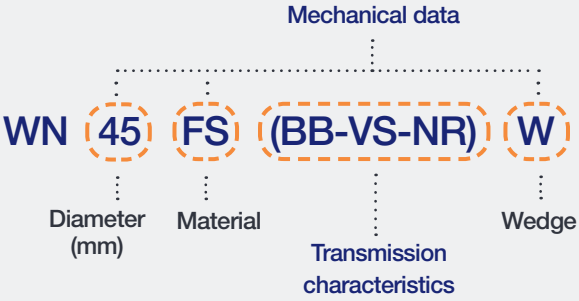
Camera window code format

Camera Window codes are constructed using subsets of codes that relate to their **Mechanical data** and their **Transmission characteristics**.

This example provides an outline of the code **WN45FS(BB-VS-NR)W**

Mechanical data: WN45FS(*****)W
(45) 45 mm diameter, (FS) fused Silica, (W) wedged

Transmission characteristics (BB-VS-NR)
'Broadband VIS-NIR'



Step 1 Confirm mechanical data code for your camera type

Confirm the **Mechanical Data** code that applies to your camera type. These are defined below in Table 1.

Camera Type	iXon, Clara, iKon-M	iKon-L	Neo	Sona, Marana	Newton, iDus, iVac	Newton-xx-DD, iDus-LDC-DD
Mechanical specifications code	**WN35FS**(*****)y or **WN35MF**(*****)**U**	**WN60FS**(*****)**U** or **WN60MF**(*****)**U**	**WN45F**S(*****)y	**WN50FS**(****)U	**WN45FS**(*****)y or **WN45MF**(*****)**U**	**WN49FS**(VS-NR-ENH)**W(1)** or **WN45FS**(*****)y or **WN45MF**(*****)**U**

Table 1: Mechanical specifications code for each camera window by camera type
'y' denotes wedge or unwedged option (see Table 2), **'U'** denotes unwedged, **'(*****)'** transmission characteristic code.

Step 2 Select the required transmission characteristics and code

Select the **Transmission Characteristics** you require using Figures 1 & 2, and Table 2 on page 2.

Step 3 Ordering

- The standard window is supplied by default unless another window option is selected.
- To order an alternative option, enter your camera window code as a separate line entry on the purchase order (PO).
- Due care should be taken to match the window to the specific camera (Table 1) and the required transmission characteristic (see Figures 1 & 2 and Table 2).
- In the unlikely case where a special specification is required, this can be done via the Customer Special Request (CSR) Process.

Imaging Cameras

Product (Description) (Code)	'VUV-UV' Code - '(VV-UV)U'	'NUV-Enhanced' Code - '(NUV-ENH)U'	'Broadband VUV-NIR' Wedged Code - '(BB-VV-NR)W'	'Broadband VUV-NIR' Unwedged Code - '(BB-VV-NR)U'	'Broadband VIS-NIR' Wedged Code - '(BB-VS-NR)W'	'Broadband VIS-NIR' Unwedged Code - '(BB-VS-NR)U'	'VIS-NIR Enhanced' Code - '(VS-NR-ENH)W'	'Bose-Einstein 780nm' Code - '(780nm)W'
IKON-L								
DW936N-#BV	CSR	CSR	n/a	O	n/a	S	CSR	n/a
DZ936N-#BV	CSR	CSR	n/a	O	n/a	S	CSR	n/a
DW936N-#FI	n/a	n/a	n/a	S	n/a	O	CSR	n/a
DZ936N-#FI	n/a	n/a	n/a	S	n/a	O	CSR	n/a
DW936N-BR-DD	CSR	n/a	n/a	O	n/a	S	CSR	CSR
DZ936N-BR-DD	CSR	n/a	n/a	O	n/a	S	CSR	CSR
DW936N-BEX2-DD	CSR	n/a	n/a	S	n/a	O	CSR	CSR
DW936N-BEX2-DD	CSR	n/a	n/a	S	n/a	O	CSR	CSR
DW936N-BU2	O	O	n/a	S	n/a	n/a	n/a	n/a
DZ936N-BU2	O	O	n/a	S	n/a	n/a	n/a	n/a
IXON								
DU-888U3-CS0-#BV	CSR	CSR	O	O	S	O	O	n/a
DU-897U-CS0-#BV	CSR	CSR	O	O	S	O	O	n/a
DU-888U3-CS0-UVB	O	O	O	S	CSR	CSR	CSR	n/a
DU-897U-CS0-UVB	O	O	O	S	CSR	CSR	CSR	n/a
DU-888U3-CS0-#EX	O	O	S	O	O	O	O	n/a
DU-897U-CS0-#EX	O	O	S	O	O	O	O	n/a
DU-888U3-CS0-BVF	CSR	CSR	O	O	S	O	O	O
DU-897U-CS0-BVF	CSR	CSR	O	O	S	O	O	O
DU-888U3-CS0-EXF	O	O	S	O	O	O	O	O
DU-897U-CS0-EXF	O	CSR	S	O	O	O	O	O
DU-888U3-CS0-#BB	n/a	O^{SP}	S	O	n/a	n/a	n/a	n/a
IXON-L-888	CSR	CSR	O	O	S	O	O	n/a
IXON-L-897	CSR	CSR	O	O	S	O	O	n/a
IKON-M								
DU912P-BV	CSR	CSR	O	O	S	O	O	n/a
DU934P-BR-DD	CSR	n/a	S	O	O	O	O	O
DU934P-BEX2-DD	CSR	n/a	S	O	O	O	O	O
DU934P-BU2	O	O	O	S	n/a	n/a	n/a	O
DU934P-BV	CSR	CSR	O	O	S	O	O	n/a
DU934P-FI	n/a	n/a	O	S	O	O	O	n/a
NEO								
NEO-5.5-CL3	CSR	CSR	O	O	O	S#	n/a	CSR
NEO-5.5-CL3-F	CSR	CSR	O	O	O	S#	n/a	CSR
ZYLA								
ZYLA-4.2P-CL10	n/a	CSR	CSR	CSR	n/a	S#	n/a	n/a
ZYLA-4.2P-CL10-W	n/a	CSR	CSR	CSR	n/a	S#	n/a	n/a
ZYLA-4.2P-USB3	n/a	CSR	CSR	CSR	n/a	S#	n/a	n/a
ZYLA-4.2P-USB3-W	n/a	CSR	CSR	CSR	n/a	S#	n/a	n/a
ZYLA-4.2P-CL10-S	n/a	CSR	CSR	CSR	n/a	S#	n/a	n/a
ZYLA-4.2P-USB3-S	n/a	CSR	CSR	CSR	n/a	S#	n/a	n/a
ZYLA-5.5-CL10	n/a	CSR	CSR	CSR	n/a	S#	n/a	n/a
ZYLA-5.5-CL3	n/a	CSR	CSR	CSR	n/a	S#	n/a	n/a
ZYLA-5.5-USB3	n/a	CSR	CSR	CSR	n/a	S#	n/a	n/a
ZYLA-5.5-USB3-W	n/a	CSR	CSR	CSR	n/a	S#	n/a	n/a
ZYLA-5.5-CL10-S	n/a	CSR	CSR	CSR	n/a	S#	n/a	n/a
ZYLA-5.5-USB3-S	n/a	CSR	CSR	CSR	n/a	S#	n/a	n/a

Spectroscopy Cameras

Product (Description) (Code)	'VUV-UV' Code - '(VV-UV)U'	'NUV-Enhanced' Code - '(NUV-ENH)U'	'Broadband VUV-NIR' Wedged Code - '(BB-VV-NR)W'	'Broadband VUV-NIR' Unwedged Code - '(BB-VV-NR)U'	'Broadband VIS-NIR' Wedged Code - '(BB-VS-NR)W'	'Broadband VIS-NIR' Unwedged Code - '(BB-VS-NR)U'	'VIS-NIR Enhanced' Code - '(VS-NR-ENH)W'	'Bose-Einstein 780nm' Code - '(780nm)W'
IDUS								
DU401A-BR-DD	CSR	CSR	O	O	O	O	S**	n/a
DU416A-LDC-DD	CSR	CSR	O	O	O	O	S**	n/a
DV416A-LDC-DD	CSR	CSR	O	O	O	O	S**	n/a
DU420A-BR-DD	CSR	CSR	O	O	O	O	S**	n/a
DU420A-BEX2-DD	CSR	CSR	S	O	O	O	O	n/a
DU401A-BVF	CSR	O	O	S	O	O	O	n/a
DU420A-BVF	CSR	O	O	S	O	O	O	n/a
DV401A-BVF	CSR	O	O	S	O	O	O	n/a
DV420A-BVF	CSR	O	O	S	O	O	O	n/a
DU401A-FI	n/a	n/a	O	S	O	O	O	n/a
DV401A-FI	n/a	n/a	O	S	O	O	O	n/a
DU420A-BU	O	O	O	S	O	O	CSR	n/a
DV420A-BU	O	O	O	S	O	O	CSR	n/a
DU420A-BU2	O	O	O	S	CSR	CSR	n/a	n/a
DV420A-BU2	O	O	O	S	CSR	CSR	n/a	n/a
DU420A-OE	CSR	O	O	S	O	O	O	n/a
DV420A-OE	CSR	O	O	S	O	O	O	n/a
DU490A-1.7	n/a	n/a	O	S	n/a	n/a	CSR	n/a
DU490A-2.2	n/a	n/a	O	S	n/a	n/a	CSR	n/a
DU491A-1.7	n/a	n/a	O	S	n/a	n/a	CSR	n/a
DU491A-2.2	n/a	n/a	O	S	n/a	n/a	CSR	n/a
DU492A-1.7	n/a	n/a	O	S	n/a	n/a	CSR	n/a
DU492A-2.2	n/a	n/a	O	S	n/a	n/a	CSR	n/a
IVAC								
DR-324B-FI-RES	n/a	n/a	O	S	n/a	n/a	n/a	n/a
DR-316B-LDC-DD-RES	CSR	CSR	O	O	O	O	S**	n/a
NEWTON								
DU920P-BR-DD	CSR	CSR	O	O	O	O	S**	CSR
DU920P-BEX2-DD	CSR	CSR	S	O	O	O	O	CSR
DU920P-UV-BR-DD	CSR	CSR	O	O	O	O	S**	CSR
DU920P-BU	O	O	O	S	O	O	CSR	CSR
DU940P-BU	O	O	O	S	O	O	CSR	CSR
DU920P-BU2	O	O	O	S	CSR	CSR	n/a	CSR
DU940P-BU2	O	O	O	S	CSR	CSR	n/a	CSR
DU920P-BVF	CSR	O	O	S	O	O	O	CSR
DU940P-BV	CSR	O	O	S	O	O	O	CSR
DU970P-BVF	CSR	O	O	S	O	O	O	CSR
DU971P-BV	CSR	O	O	S	O	O	O	CSR
DU920P-OE	CSR	O	O	S	O	O	O	CSR
DU940P-FI	n/a	n/a	O	S	O	O	O	CSR
DU970P-FI	n/a	n/a	O	S	O	O	O	CSR
DU971P-FI	n/a	n/a	O	S	O	O	O	CSR
DU940P-UV	CSR	O	O	S	O	O	O	CSR
DU970P-UV	CSR	O	O	S	O	O	O	CSR
DU971P-UV	CSR	O	O	S	O	O	O	CSR
DU970P-UVB	CSR	O	O	S	O	O	O	CSR
DU971P-UVB	CSR	O	O	S	O	O	O	CSR

Table 2 part 1: Summary of the window options for each camera.
Notes: **S**: standard window offered, **S****: standard window has 1^0 wedge and 49.5 mm diameter, **O**: options available, **CSR**: possible via CSR process, **n/a**: not applicable. Standard wedge is 0.5^0 unless specified otherwise. O^{SP}: Special option with wedge.

Continued on next page

iKon-XL Cameras

Product (Description) (Code)	'VUV-UV' Code - '(VV-UV)U'	'NUV-Enhanced' Code - '(NUV-ENH)U'	'Broadband VUV-NIR' Wedged Code - '(BB-VV-NR)W'	'Broadband VUV-NIR' Unwedged Code - '(BB-VV-NR)U'	'Broadband VIS-NIR' Wedged Code - '(BB-VS-NR)W'	'Broadband VIS-NIR' Unwedged (#) Code - '(BB-VS-NR)U'	'VIS-NIR Enhanced' Code - '(VS-NR-ENH)W'	'Bose-Einstein 780nm' Code - '(780nm)W'
IKON-XL								
XL-EA02-C0 (iKon XL 230 BB)	CSR	CSR	CSR	CSR	CSR	S#	CSR	n/a
XL-EA02-CS (iKon XL 230 BB)	CSR	CSR	CSR	CSR	CSR	S#	CSR	n/a
XL-EA02-D0 (iKon XL 230 BB)	CSR	CSR	CSR	CSR	CSR	S#	CSR	n/a
XL-EA02-DS (iKon XL 230 BB)	CSR	CSR	CSR	CSR	CSR	S#	CSR	n/a
XL-EA01-C0 (iKon XL 230 BV)	CSR	CSR	CSR	CSR	CSR	S#	CSR	n/a
XL-EA01-CS (iKon XL 230 BV)	CSR	CSR	CSR	CSR	CSR	S#	CSR	n/a
XL-EA01-D0 (iKon XL 230 BV)	CSR	CSR	CSR	CSR	CSR	S#	CSR	n/a
XL-EA01-DS (iKon XL 230 BV)	CSR	CSR	CSR	CSR	CSR	S#	CSR	n/a
XL-EA04-C0 (iKon XL 231 BB)	CSR	CSR	CSR	CSR	CSR	S#	CSR	n/a
XL-EA04-CS (iKon XL 231 BB)	CSR	CSR	CSR	CSR	CSR	S#	CSR	n/a
XL-EA04-D0 (iKon XL 231 BB)	CSR	CSR	CSR	CSR	CSR	S#	CSR	n/a
XL-EA04-DS (iKon XL 231 BB)	CSR	CSR	CSR	CSR	CSR	S#	CSR	n/a
XL-EA05-C0 (iKon XL 231 BEX2)	CSR	CSR	CSR	CSR	CSR	S#	CSR	n/a
XL-EA05-CS (iKon XL 231 BEX2)	CSR	CSR	CSR	CSR	CSR	S#	CSR	n/a
XL-EA05-D0 (iKon XL 231 BEX2)	CSR	CSR	CSR	CSR	CSR	S#	CSR	n/a
XL-EA05-DS (iKon XL 231 BEX2)	CSR	CSR	CSR	CSR	CSR	S#	CSR	n/a
XL-EA07-C0 (iKon XL 231 BEX2-DD)	CSR	CSR	CSR	CSR	CSR	S#	CSR	n/a
XL-EA07-CS (iKon XL 231 BEX2-DD)	CSR	CSR	CSR	CSR	CSR	S#	CSR	n/a
XL-EA07-D0 (iKon XL 231 BEX2-DD)	CSR	CSR	CSR	CSR	CSR	S#	CSR	n/a
XL-EA07-DS (iKon XL 231 BEX2-DD)	CSR	CSR	CSR	CSR	CSR	S#	CSR	n/a
XL-EA06-C0 (iKon XL 231 BR-DD)	CSR	CSR	CSR	CSR	CSR	S#	CSR	n/a
XL-EA06-CS (iKon XL 231 BR-DD)	CSR	CSR	CSR	CSR	CSR	S#	CSR	n/a
XL-EA06-D0 (iKon XL 231 BR-DD)	CSR	CSR	CSR	CSR	CSR	S#	CSR	n/a
XL-EA06-DS (iKon XL 231 BR-DD)	CSR	CSR	CSR	CSR	CSR	S#	CSR	n/a
XL-EA03-C0 (iKon XL 231 BV)	CSR	CSR	CSR	CSR	CSR	S#	CSR	n/a
XL-EA03-CS (iKon XL 231 BV)	CSR	CSR	CSR	CSR	CSR	S#	CSR	n/a
XL-EA03-D0 (iKon XL 231 BV)	CSR	CSR	CSR	CSR	CSR	S#	CSR	n/a
XL-EA03-DS (iKon XL 231 BV)	CSR	CSR	CSR	CSR	CSR	S#	CSR	n/a

Table 2 part 2: Summary of the window options for each camera.

Notes: **S#:** Standard window on Zyla, Neo and iKon-XL- refer to the ***Transmission Efficiency Characteristics*** curve below, **O**: options available, **O^{USP}**: special unwedged window, **CSR**: possible via CSR process, **n/a**: not applicable.

Sona and Marana Cameras

SONA								
SONA-2BV11	CSR	CSR	CSR	CSR	CSR	S#	CSR	n/a
SONA-4BV11	CSR	CSR	CSR	CSR	CSR	S#	CSR	n/a
MARANA								
MARANA-4BV11	CSR	CSR	CSR	O	CSR	S#	O^{USP}	CSR
MARANA-4BU11	CSR	CSR	CSR	S	CSR	CSR	CSR	CSR

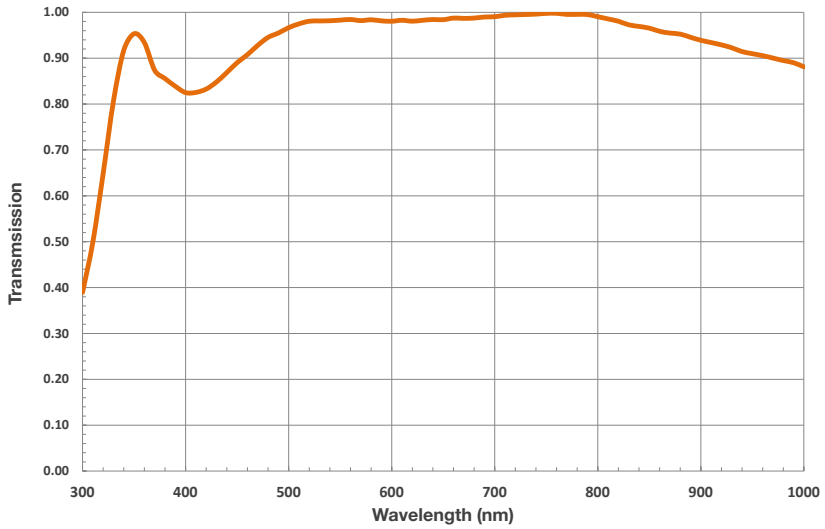


Figure 2: Transmission Efficiency Characteristics of the Standard "S#" window coating used in the Zyla, Neo, Sona, Marana and iKon-XL models