



JDS FITEL Inc.
570 West Hunt Club Road
Nepean, Ontario, K2G 5W8
CANADA

VCB Test Report



Customer : ALCATEL NETWORK SYSTEMS

Model no. : VCB-Z004

Serial no. : BC026146

<u>Parameter⁽¹⁾</u>	<u>Units</u>	<u>Measured value</u>	<u>Specification</u>
Insertion loss ⁽²⁾	dB	1.24	1.60 (max.)
Potentiometer readings			
V _{minimum}	%	7.04	--
V _{mon}	%	17.78	--
V _{maximum}	%	95.87	--
Attenuation range	dB	31.59	30 (min.)
Attenuation resolution	dB/step	0.08	0.10 (max.)
Backlash	dB	0.008	0.2 (max.)
Repeatability	dB	0.009	0.1 (max.)
Polarization Dependant Loss			
Device, min. loss to 6 dB	dB	0.05	0.10 (max.)
Device, 6 dB to 20 dB	dB	0.05	0.20 (max.)
Device, 20 dB to 30 dB	dB	0.11	0.30 (max.)
Input detector	dB	0.029	0.25 (max.)
Output detector	dB	0.022	0.20 (max.)
Return Loss			
In	dB	55	55 (min.)
Responsivity			
Input detector	mA/mW	0.032	0.03 to 0.05
Output detector	mA/mW	0.038	0.03 to 0.05
Tracking error			
Input detector	dB	0.010	0.1 (max.)
Output detector			
min. loss to 3 dB	dB	0.03	0.35 (max.)
3 dB to 20 dB	dB	0.06	0.20 (max.)
3 dB to 30 dB	dB	0.15	0.30 (max.)

- Notes : 1. Measurements taken at temperature of 23°C ± 3°C. Source wavelength : 1550 nm ± 5 nm.
2. Measured in averaged polarization state and excludes connector loss.

Operator :

B. Gashooyez

Date : August 13, 1999



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VCB Test Report



Customer : ALCATEL NETWORK SYSTEMS

Model no. : VCB-Z004

Serial no. : BC059640

<u>Parameter</u> ⁽¹⁾	<u>Units</u>	<u>Measured value</u>	<u>Specification</u>
Insertion loss ⁽²⁾	dB	1.12	1.60 (max.)
Potentiometer readings			
V _{minimum}	%	3.82	--
V _{mon}	%	13.70	--
V _{maximum}	%	90.75	--
Attenuation range	dB	32.49	30 (min.)
Attenuation resolution	dB/step	0.08	0.10 (max.)
Backlash	dB	0.032	0.2 (max.)
Repeatability	dB	0.030	0.1 (max.)
Polarization Dependant Loss			
Device, min. loss to 6 dB	dB	0.08	0.10 (max.)
Device, 6 dB to 20 dB	dB	0.08	0.20 (max.)
Device, 20 dB to 30 dB	dB	0.08	0.30 (max.)
Input detector	dB	0.040	0.25 (max.)
Output detector	dB	0.059	0.20 (max.)
Return Loss			
In	dB	56	55 (min.)
Responsivity			
Input detector	mA/mW	0.042	0.03 to 0.05
Output detector	mA/mW	0.035	0.03 to 0.05
Tracking error			
Input detector	dB	0.007	0.1 (max.)
Output detector			
min. loss to 3 dB	dB	0.17	0.35 (max.)
3 dB to 20 dB	dB	0.06	0.20 (max.)
3 dB to 30 dB	dB	0.15	0.30 (max.)

- Notes : 1. Measurements taken at temperature of 23°C ± 3°C. Source wavelength : 1550 nm ± 5 nm.
 2. Measured in averaged polarization state and excludes connector loss.

Operator : B. Zedkovsky

Date : August 13, 1999



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VCB Test Report



Customer : ALCATEL NETWORK SYSTEMS

Model no. : VCB-Z004

Serial no. : BC059642

<u>Parameter⁽¹⁾</u>	<u>Units</u>	<u>Measured value</u>	<u>Specification</u>
Insertion loss ⁽²⁾	dB	1.29	1.60 (max.)
Potentiometer readings			
V _{minimum}	%	3.35	--
V _{mon}	%	14.73	--
V _{maximum}	%	91.74	--
Attenuation range	dB	31.90	30 (min.)
Attenuation resolution	dB/step	0.08	0.10 (max.)
Backlash	dB	0.035	0.2 (max.)
Repeatability	dB	0.032	0.1 (max.)
Polarization Dependant Loss			
Device, min. loss to 6 dB	dB	0.08	0.10 (max.)
Device, 6 dB to 20 dB	dB	0.08	0.20 (max.)
Device, 20 dB to 30 dB	dB	0.08	0.30 (max.)
Input detector	dB	0.052	0.25 (max.)
Output detector	dB	0.040	0.20 (max.)
Return Loss			
In	dB	56	55 (min.)
Responsivity			
Input detector	mA/mW	0.043	0.03 to 0.05
Output detector	mA/mW	0.045	0.03 to 0.05
Tracking error			
Input detector	dB	0.004	0.1 (max.)
Output detector			
min. loss to 3 dB	dB	0.07	0.35 (max.)
3 dB to 20 dB	dB	0.10	0.20 (max.)
3 dB to 30 dB	dB	0.11	0.30 (max.)

Notes : 1. Measurements taken at temperature of 23°C ± 3°C. Source wavelength : 1550 nm ± 5 nm.
2. Measured in averaged polarization state and excludes connector loss.

Operator : B. Gadeony

Date : August 13, 1999



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VCB Test Report



Customer : ALCATEL NETWORK SYSTEMS

Model no. : VCB-Z004

Serial no. : BC059939

<u>Parameter⁽¹⁾</u>	<u>Units</u>	<u>Measured value</u>	<u>Specification</u>
Insertion loss ⁽²⁾	dB	1.31	1.60 (max.)
Potentiometer readings			
V _{minimum}	%	4.14	--
V _{mon}	%	15.88	--
V _{maximum}	%	95.57	--
Attenuation range	dB	31.07	30 (min.)
Attenuation resolution	dB/step	0.09	0.10 (max.)
Backlash	dB	0.026	0.2 (max.)
Repeatability	dB	0.015	0.1 (max.)
Polarization Dependant Loss			
Device, min. loss to 6 dB	dB	0.05	0.10 (max.)
Device, 6 dB to 20 dB	dB	0.06	0.20 (max.)
Device, 20 dB to 30 dB	dB	0.07	0.30 (max.)
Input detector	dB	0.027	0.25 (max.)
Output detector	dB	0.050	0.20 (max.)
Return Loss			
In	dB	57	55 (min.)
Responsivity			
Input detector	mA/mW	0.043	0.03 to 0.05
Output detector	mA/mW	0.036	0.03 to 0.05
Tracking error			
Input detector	dB	0.001	0.1 (max.)
Output detector			
min. loss to 3 dB	dB	0.11	0.35 (max.)
3 dB to 20 dB	dB	0.10	0.20 (max.)
3 dB to 30 dB	dB	0.17	0.30 (max.)

- Notes : 1. Measurements taken at temperature of 23°C ± 3°C. Source wavelength : 1550 nm ± 5 nm.
2. Measured in averaged polarization state and excludes connector loss.

Operator : P. Zadozys

Date : August 13, 1999