

## Characteristics of the Panasonic UD-8xx series Thermoluminescent Dosimeters

		Element 1	Element 2	Element 3	Element 4
<b>UD-800A</b>	<b>Phosphor</b>	${}^n\text{Li}_2\text{B}_4\text{O}_7$	${}^n\text{Li}_2\text{B}_4\text{O}_7$	$\text{CaSO}_4$	$\text{CaSO}_4$
	<b>Front Filtration</b>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>
	<b>Rear Filtration</b>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>
	<b>Remarks</b>	Designed for calibration and quality control checks of Panasonic TLD readers.			

		Element 1	Element 2	Element 3	Element 4
<b>UD-801A</b>	<b>Phosphor</b>	${}^n\text{Li}_2\text{B}_4\text{O}_7$	${}^n\text{Li}_2\text{B}_4\text{O}_7$	$\text{CaSO}_4$	$\text{CaSO}_4$
	<b>Front Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Lead – 0.7 mm	Lead – 0.7 mm
	<b>Rear Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Lead – 0.7 mm	Lead – 0.7 mm
	<b>Remarks</b>	Designed for use with UD-874A badge holder. Not commonly used in the US			

### *UD-802 Series*

		Element 1	Element 2	Element 3	Element 4
<b>UD-802A</b>	<b>Phosphor</b>	${}^n\text{Li}_2\text{B}_4\text{O}_7$	${}^n\text{Li}_2\text{B}_4\text{O}_7$	$\text{CaSO}_4$	$\text{CaSO}_4$
	<b>Front Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Lead – 0.7 mm
	<b>Rear Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Lead – 0.7 mm
	<b>Remarks</b>	The most commonly used Panasonic dosimeter in the US - Use of natural LiBO makes neutron dosimetry possible if the appropriate energy correction factor for neutrons is known.			

		Element 1	Element 2	Element 3	Element 4
<b>UD-802A1</b>	<b>Phosphor</b>	${}^n\text{Li}_2\text{B}_4\text{O}_7$	${}^n\text{Li}_2\text{B}_4\text{O}_7$	$\text{CaSO}_4$	$\text{CaSO}_4$
	<b>Front Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Aluminum – 0.8 mm	Aluminum – 0.8 mm	Lead – 0.7 mm
	<b>Rear Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Aluminum – 0.8 mm	Aluminum – 0.8 mm	Lead – 0.7 mm
	<b>Remarks</b>	The most commonly used Panasonic dosimeter in the US - Use of natural LiBO makes neutron dosimetry possible if the appropriate energy correction factor for neutrons is known.			

		Element 1	Element 2	Element 3	Element 4
<b>UD-802A2</b>	<b>Phosphor</b>	${}^n\text{Li}_2\text{B}_4\text{O}_7$	${}^n\text{Li}_2\text{B}_4\text{O}_7$	$\text{CaSO}_4$	$\text{CaSO}_4$
	<b>Front Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Plastic – 75 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Lead – 0.7 mm
	<b>Rear Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Plastic – 75 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Lead – 0.7 mm
	<b>Remarks</b>	The most commonly used Panasonic dosimeter in the US - Use of natural LiBO makes neutron dosimetry possible if the appropriate energy correction factor for neutrons is known.			

### *UD-803 Series*

		Element 1	Element 2	Element 3	Element 4
<b>UD-803A</b>	<b>Phosphor</b>	${}^n\text{Li}_2\text{B}_4\text{O}_7$	${}^n\text{Li}_2\text{B}_4\text{O}_7$	NONE	NONE
	<b>Front Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>
	<b>Rear Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>
	<b>Remarks</b>	Two elements of LiBO with the same filtration as for UD-801 and UD-802. No CaSO elements. Intended as a simple dosimeter to measure beta particles and photons. Absence of CaSO elements precludes detailed information about the energy of photons striking the dosimeter. Sold in UK only			

		Element 1	Element 2	Element 3	Element 4
<b>UD-803A1</b>	<b>Phosphor</b>	${}^n\text{Li}_2\text{B}_4\text{O}_7$	${}^n\text{Li}_2\text{B}_4\text{O}_7$	NONE	NONE
	<b>Front Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Aluminum – 0.8 mm	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>
	<b>Rear Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Aluminum – 0.8 mm	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>
	<b>Remarks</b>	Two elements of LiBO with the same filtration as for UD-801 and UD-802. No CaSO elements. Intended as a simple dosimeter to measure beta particles and photons. Absence of CaSO elements precludes detailed information about the energy of photons striking the dosimeter.			

		<b>Element 1</b>	<b>Element 2</b>	<b>Element 3</b>	<b>Element 4</b>
<b>UD-804A</b>	<b>Phosphor</b>	NONE	CaSO <sub>4</sub>	CaSO <sub>4</sub>	CaSO <sub>4</sub>
	<b>Front Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Lead – 0.7 mm	Lead – 0.7 mm	Lead – 0.7 mm
	<b>Rear Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Lead – 0.7 mm	Lead – 0.7 mm	Lead – 0.7 mm
	<b>Remarks</b>	Intended for environmental measurements. Contains no first element. Remaining three elements are replicate CaSO <sub>4</sub> . Can measure low doses (about 10 mR/month). Addition of an element 1 of Li <sub>2</sub> B <sub>4</sub> O <sub>7</sub> with 14 mg/cm <sup>2</sup> makes environmental beta measurement possible. When E1 is added, the dosimeter is designated as a UD-814			

		<b>Element 1</b>	<b>Element 2</b>	<b>Element 3</b>	<b>Element 4</b>
<b>UD-805A</b>	<b>Phosphor</b>	<sup>n</sup> Li <sub>2</sub> B <sub>4</sub> O <sub>7</sub>	CaSO <sub>4</sub>	NONE	NONE
	<b>Front Filtration</b>	Plastic – 160 mg/cm <sup>2</sup>	Lead – 0.7 mm	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>
	<b>Rear Filtration</b>	Plastic – 160 mg/cm <sup>2</sup>	Lead – 0.7 mm	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>
	<b>Remarks</b>	Intended as a simple monitor of X-rays and gamma rays. Has only two elements.			

### *UD-806 Series*

		<b>Element 1</b>	<b>Element 2</b>	<b>Element 3</b>	<b>Element 4</b>
<b>UD-806A</b>	<b>Phosphor</b>	<sup>n</sup> Li <sub>2</sub> B <sub>4</sub> O <sub>7</sub>	<sup>n</sup> Li <sub>2</sub> B <sub>4</sub> O <sub>7</sub>	<sup>n</sup> Li <sub>2</sub> B <sub>4</sub> O <sub>7</sub>	<sup>n</sup> Li <sub>2</sub> B <sub>4</sub> O <sub>7</sub>
	<b>Front Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>
	<b>Rear Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>
	<b>Remarks</b>	Four elements of LiBO			
<b>UD-806A2</b>	<b>Phosphor</b>	<sup>n</sup> Li <sub>2</sub> B <sub>4</sub> O <sub>7</sub>	<sup>n</sup> Li <sub>2</sub> B <sub>4</sub> O <sub>7</sub>	<sup>n</sup> Li <sub>2</sub> B <sub>4</sub> O <sub>7</sub>	<sup>n</sup> Li <sub>2</sub> B <sub>4</sub> O <sub>7</sub>
	<b>Front Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Plastic – 75 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>
	<b>Rear Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Plastic – 75 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>
	<b>Remarks</b>	Four elements of LiBO with attenuation selected to correspond to depths in tissue. Works well except for low-energy photons (below about 50 keV) and for beta particles. Underresponds to photons below about 50 keV by about 20%. Not thin enough to respond exactly like tissue for beta particles, but will give a dose correct to within about a factor of two when irradiated to beta particles from 0.2 to 2.0 MeV if calibrated to one energy of beta particles.			

### *UD-807 Extremity Dosimeter*

		<b>Element 1</b>	<b>Element 2</b>	<b>Element 3</b>	<b>Element 4</b>
<b>UD-807</b>	<b>Phosphor</b>	<sup>n</sup> Li <sub>2</sub> B <sub>4</sub> O <sub>7</sub>	NONE	NONE	NONE
	<b>Front Filtration</b>				
	<b>Rear Filtration</b>				
	<b>Remarks</b>	A single element of LiBO not set in a regular Panasonic dosimeter. Used for extremity monitoring. Must be manually inserted into a special dosimeter in order to be read by the UD-702 manual TLD reader or by the UD-710, UD-716, or UD-7900 automatic TLD readers.			

		<b>Element 1</b>	<b>Element 2</b>	<b>Element 3</b>	<b>Element 4</b>
<b>UD-808A</b>	<b>Phosphor</b>	<sup>7</sup> Li <sup>11</sup> B <sub>4</sub> O <sub>7</sub>	<sup>7</sup> Li <sup>11</sup> B <sub>4</sub> O <sub>7</sub>	CaSO <sub>4</sub>	<sup>7</sup> Li <sup>11</sup> B <sub>4</sub> O <sub>7</sub>
	<b>Front Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Plastic – 60 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>
	<b>Rear Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Plastic – 60 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>

	<b>Remarks</b>	Intended for use together with the UD-809. Measures beta particles and photons, but is insensitive to neutrons. An algorithm must be used to separate photons from neutrons in the UD-809.
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### *UD-809 Neutron Dosimeter*

		<b>Element 1</b>	<b>Element 2</b>	<b>Element 3</b>	<b>Element 4</b>
<b>UD-809A</b>	<b>Phosphor</b>	${}^7\text{Li}_2{}^{11}\text{B}_4\text{O}_7$	${}^6\text{Li}_2{}^{10}\text{B}_4\text{O}_7$	${}^6\text{Li}_2{}^{10}\text{B}_4\text{O}_7$	${}^6\text{Li}_2{}^{10}\text{B}_4\text{O}_7$
	<b>Front Filtration</b>	Cadmium – 0.7 mm	Cadmium – 0.7 mm	Tin – 0.7 mm	Cadmium – 0.7 mm
	<b>Rear Filtration</b>	Cadmium – 0.7 mm	Cadmium – 0.7 mm	Cadmium – 0.7 mm	Cadmium – 0.7 mm
	<b>Remarks</b>	A primary neutron dosimeter, intended to be used with the UD-808. An algorithm is used to determine the contribution of thermal, epithermal, and fast neutrons.			

### *UD-810 Series*

		<b>Element 1</b>	<b>Element 2</b>	<b>Element 3</b>	<b>Element 4</b>
<b>UD-810A1</b>	<b>Phosphor</b>	${}^7\text{Li}_2{}^{11}\text{B}_4\text{O}_7$	${}^7\text{Li}_2{}^{11}\text{B}_4\text{O}_7$	${}^6\text{Li}_2{}^{10}\text{B}_4\text{O}_7$	CaSO <sub>4</sub>
	<b>Front Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>
	<b>Rear Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>
	<b>Remarks</b>	A specially designed dosimeter not intended for general use.			
<b>UD-810A2</b>	<b>Phosphor</b>	${}^7\text{Li}_2{}^{11}\text{B}_4\text{O}_7$	${}^7\text{Li}_2{}^{11}\text{B}_4\text{O}_7$	${}^6\text{Li}_2{}^{10}\text{B}_4\text{O}_7$	CaSO <sub>4</sub>
	<b>Front Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>
	<b>Rear Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>
	<b>Remarks</b>	A specially designed dosimeter not intended for general use.			

		<b>Element 1</b>	<b>Element 2</b>	<b>Element 3</b>	<b>Element 4</b>
<b>UD-811</b>	<b>Phosphor</b>	NONE	NONE	CaSO <sub>4</sub>	CaSO <sub>4</sub>
	<b>Front Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Lead – 0.7 mm	Lead – 0.7 mm
	<b>Rear Filtration</b>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>
	<b>Remarks</b>	A dosimeter intended to monitor X-rays and gamma rays and to be read in the UD-720 access control system. This dosimeter contains no elements in positions 1 and 2 and two replicate elements of CaSO in positions 3 and			

### *UD-812-A Series*

		<b>Element 1</b>	<b>Element 2</b>	<b>Element 3</b>	<b>Element 4</b>
<b>UD-812-A2</b>	<b>Phosphor</b>	${}^7\text{Li}_2{}^{11}\text{B}_4\text{O}_7$	${}^7\text{Li}_2{}^{11}\text{B}_4\text{O}_7$	${}^7\text{Li}_2{}^{11}\text{B}_4\text{O}_7$	${}^7\text{Li}_2{}^{11}\text{B}_4\text{O}_7$
	<b>Front Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Plastic – 60 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>
	<b>Rear Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Plastic – 60 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>
	<b>Remarks</b>	Not a standard Panasonic dosimeter. Available for special design and use.			
<b>UD-812-A5</b>	<b>Phosphor</b>	${}^7\text{Li}_2{}^{11}\text{B}_4\text{O}_7$	${}^7\text{Li}_2{}^{11}\text{B}_4\text{O}_7$	CaSO <sub>4</sub>	CaSO <sub>4</sub>
	<b>Front Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Lead – 0.7 mm
	<b>Rear Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Lead – 0.7 mm
	<b>Remarks</b>	Not a standard Panasonic dosimeter. Available for special design and use.			
<b>UD-812-A7</b>	<b>Phosphor</b>	CaSO <sub>4</sub>	CaSO <sub>4</sub>	CaSO <sub>4</sub>	CaSO <sub>4</sub>
	<b>Front Filtration</b>	Lead – 0.7 mm	Lead – 0.7 mm	Lead – 0.7 mm	Lead – 0.7 mm
	<b>Rear Filtration</b>	Lead – 0.7 mm	Lead – 0.7 mm	Lead – 0.7 mm	Lead – 0.7 mm
	<b>Remarks</b>	Not a standard Panasonic dosimeter. Available for special design and use.			

		<b>Element 1</b>	<b>Element 2</b>	<b>Element 3</b>	<b>Element 4</b>
<b>UD-812-A8</b>	<b>Phosphor</b>	CaSO <sub>4</sub>	CaSO <sub>4</sub>	<sup>7</sup> Li <sub>2</sub> <sup>11</sup> B <sub>4</sub> O <sub>7</sub>	<sup>7</sup> Li <sub>2</sub> <sup>11</sup> B <sub>4</sub> O <sub>7</sub>
	<b>Front Filtration</b>	Lead – 0.7 mm	Lead – 0.7 mm	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>
	<b>Rear Filtration</b>	Lead – 0.7 mm	Lead – 0.7 mm	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>
	<b>Remarks</b>	Not a standard Panasonic dosimeter. Available for special design and use.			
		<b>Element 1</b>	<b>Element 2</b>	<b>Element 3</b>	<b>Element 4</b>
<b>UD-812-A9</b>	<b>Phosphor</b>	<sup>7</sup> Li <sub>2</sub> <sup>11</sup> B <sub>4</sub> O <sub>7</sub>	<sup>7</sup> Li <sub>2</sub> <sup>11</sup> B <sub>4</sub> O <sub>7</sub>	<sup>7</sup> Li <sub>2</sub> <sup>11</sup> B <sub>4</sub> O <sub>7</sub>	<sup>7</sup> Li <sub>2</sub> <sup>11</sup> B <sub>4</sub> O <sub>7</sub>
	<b>Front Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Plastic – 60 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>
	<b>Rear Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Plastic – 60 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>
	<b>Remarks</b>	Not a standard Panasonic dosimeter. Available for special design and use.			
		<b>Element 1</b>	<b>Element 2</b>	<b>Element 3</b>	<b>Element 4</b>
<b>UD-812-A10</b>	<b>Phosphor</b>	<sup>6</sup> Li <sub>2</sub> <sup>10</sup> B <sub>4</sub> O <sub>7</sub>	<sup>7</sup> Li <sub>2</sub> <sup>11</sup> B <sub>4</sub> O <sub>7</sub>	<sup>6</sup> Li <sub>2</sub> <sup>10</sup> B <sub>4</sub> O <sub>7</sub>	<sup>7</sup> Li <sub>2</sub> <sup>11</sup> B <sub>4</sub> O <sub>7</sub>
	<b>Front Filtration</b>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>
	<b>Rear Filtration</b>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>
	<b>Remarks</b>	Not a standard Panasonic dosimeter. Available for special design and use.			
		<b>Element 1</b>	<b>Element 2</b>	<b>Element 3</b>	<b>Element 4</b>
<b>UD-812-A11</b>	<b>Phosphor</b>	CaSO <sub>4</sub>	CaSO <sub>4</sub>	CaSO <sub>4</sub>	CaSO <sub>4</sub>
	<b>Front Filtration</b>	Lead/Tin 0.7 mm	Lead/Tin 0.7 mm	Lead/Tin 0.7 mm	Lead/Tin 0.7 mm
	<b>Rear Filtration</b>	Lead/Tin 0.7 mm	Lead/Tin 0.7 mm	Lead/Tin 0.7 mm	Lead/Tin 0.7 mm
	<b>Remarks</b>	Not a standard Panasonic dosimeter. Available for special design and use.			
		<b>Element 1</b>	<b>Element 2</b>	<b>Element 3</b>	<b>Element 4</b>
<b>UD-812-A14</b>	<b>Phosphor</b>	CaSO <sub>4</sub>	CaSO <sub>4</sub>	CaSO <sub>4</sub>	CaSO <sub>4</sub>
	<b>Front Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Lead - 0.7 mm
	<b>Rear Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Lead - 0.7 mm
	<b>Remarks</b>	Not a standard Panasonic dosimeter. Available for special design and use.			
		<b>Element 1</b>	<b>Element 2</b>	<b>Element 3</b>	<b>Element 4</b>
<b>UD-812-A15</b>	<b>Phosphor</b>	CaSO <sub>4</sub>	CaSO <sub>4</sub>	CaSO <sub>4</sub>	<sup>7</sup> Li <sub>2</sub> <sup>11</sup> B <sub>4</sub> O <sub>7</sub>
	<b>Front Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Plastic – 60 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>
	<b>Rear Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Plastic – 60 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>
	<b>Remarks</b>	Not a standard Panasonic dosimeter. Available for special design and use.			

### *UD-813-A Series*

		<b>Element 1</b>	<b>Element 2</b>	<b>Element 3</b>	<b>Element 4</b>
<b>UD-813-A1</b>	<b>Phosphor</b>	<sup>7</sup> Li <sub>2</sub> <sup>11</sup> B <sub>4</sub> O <sub>7</sub>	<sup>7</sup> Li <sub>2</sub> <sup>11</sup> B <sub>4</sub> O <sub>7</sub>	<sup>n</sup> Li <sub>2</sub> B <sub>4</sub> O <sub>7</sub>	CaSO <sub>4</sub>
	<b>Front Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Lead - 0.7 mm
	<b>Rear Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Lead - 0.7 mm
	<b>Remarks</b>	Not a standard Panasonic dosimeter. Available for special design and use.			
		<b>Element 1</b>	<b>Element 2</b>	<b>Element 3</b>	<b>Element 4</b>
<b>UD-813-A2</b>	<b>Phosphor</b>	<sup>7</sup> Li <sub>2</sub> <sup>11</sup> B <sub>4</sub> O <sub>7</sub>	<sup>7</sup> Li <sub>2</sub> <sup>11</sup> B <sub>4</sub> O <sub>7</sub>	<sup>7</sup> Li <sub>2</sub> <sup>11</sup> B <sub>4</sub> O <sub>7</sub>	<sup>7</sup> Li <sub>2</sub> <sup>11</sup> B <sub>4</sub> O <sub>7</sub>
	<b>Front Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>
	<b>Rear Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>
	<b>Remarks</b>	Not a standard Panasonic dosimeter. Available for special design and use.			
		<b>Element 1</b>	<b>Element 2</b>	<b>Element 3</b>	<b>Element 4</b>
<b>UD-813-A3</b>	<b>Phosphor</b>	<sup>7</sup> Li <sub>2</sub> <sup>11</sup> B <sub>4</sub> O <sub>7</sub>	<sup>7</sup> Li <sub>2</sub> <sup>11</sup> B <sub>4</sub> O <sub>7</sub>	NONE	NONE
	<b>Front Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>
	<b>Rear Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>
	<b>Remarks</b>	Not a standard Panasonic dosimeter. Available for special design and use.			
		<b>Element 1</b>	<b>Element 2</b>	<b>Element 3</b>	<b>Element 4</b>
<b>UD-813-A4</b>	<b>Phosphor</b>	<sup>6</sup> Li <sub>2</sub> <sup>10</sup> B <sub>4</sub> O <sub>7</sub>	<sup>6</sup> Li <sub>2</sub> <sup>10</sup> B <sub>4</sub> O <sub>7</sub>	<sup>7</sup> Li <sub>2</sub> <sup>11</sup> B <sub>4</sub> O <sub>7</sub>	<sup>7</sup> Li <sub>2</sub> <sup>11</sup> B <sub>4</sub> O <sub>7</sub>
	<b>Front Filtration</b>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>
	<b>Rear Filtration</b>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>

	<b>Remarks</b>	Not a standard Panasonic dosimeter. Available for special design and use.			
		<b>Element 1</b>	<b>Element 2</b>	<b>Element 3</b>	<b>Element 4</b>
<b>UD-813-A5</b>	<b>Phosphor</b>	${}^7\text{Li}_2{}^{11}\text{B}_4\text{O}_7$	${}^7\text{Li}_2{}^{11}\text{B}_4\text{O}_7$	$\text{CaSO}_4$	$\text{CaSO}_4$
	<b>Front Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Plastic – 75 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Lead - 0.7 mm
	<b>Rear Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Plastic – 75 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Lead - 0.7 mm
	<b>Remarks</b>	Not a standard Panasonic dosimeter. Available for special design and use.			
		<b>Element 1</b>	<b>Element 2</b>	<b>Element 3</b>	<b>Element 4</b>
<b>UD-813-A6</b>	<b>Phosphor</b>	${}^6\text{Li}_2{}^{10}\text{B}_4\text{O}_7$	${}^7\text{Li}_2{}^{11}\text{B}_4\text{O}_7$	${}^7\text{Li}_2{}^{11}\text{B}_4\text{O}_7$	${}^6\text{Li}_2{}^{10}\text{B}_4\text{O}_7$
	<b>Front Filtration</b>	Plastic – 75 mg/cm <sup>2</sup>	Plastic – 75 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>
	<b>Rear Filtration</b>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>
	<b>Remarks</b>	Not a standard Panasonic dosimeter. Available for special design and use.			
		<b>Element 1</b>	<b>Element 2</b>	<b>Element 3</b>	<b>Element 4</b>
<b>UD-813-A7</b>	<b>Phosphor</b>	${}^6\text{Li}_2{}^{10}\text{B}_4\text{O}_7$	${}^7\text{Li}_2{}^{11}\text{B}_4\text{O}_7$	${}^6\text{Li}_2{}^{10}\text{B}_4\text{O}_7$	${}^6\text{Li}_2{}^{10}\text{B}_4\text{O}_7$
	<b>Front Filtration</b>	Cadmium – 0.7 mm	Cadmium – 0.7 mm	Tin – 0.7 mm	Cadmium – 0.7 mm
	<b>Rear Filtration</b>	Cadmium – 0.7 mm	Cadmium – 0.7 mm	Cadmium – 0.7 mm	Tin – 0.7 mm
	<b>Remarks</b>	Not a standard Panasonic dosimeter. Available for special design and use.			
		<b>Element 1</b>	<b>Element 2</b>	<b>Element 3</b>	<b>Element 4</b>
<b>UD-813-A8</b>	<b>Phosphor</b>	${}^6\text{Li}_2{}^{10}\text{B}_4\text{O}_7$	${}^7\text{Li}_2{}^{11}\text{B}_4\text{O}_7$	${}^6\text{Li}_2{}^{10}\text{B}_4\text{O}_7$	${}^6\text{Li}_2{}^{10}\text{B}_4\text{O}_7$
	<b>Front Filtration</b>	Cadmium – 0.7 mm	Cadmium – 0.7 mm	Cadmium – 0.7 mm	Tin – 0.7 mm
	<b>Rear Filtration</b>	Cadmium – 0.7 mm	Cadmium – 0.7 mm	Tin – 0.7 mm	Cadmium – 0.7 mm
	<b>Remarks</b>	Not a standard Panasonic dosimeter. Available for special design and use.			
		<b>Element 1</b>	<b>Element 2</b>	<b>Element 3</b>	<b>Element 4</b>
<b>UD-813-A9</b>	<b>Phosphor</b>	${}^n\text{Li}_2\text{B}_4\text{O}_7$	${}^n\text{Li}_2\text{B}_4\text{O}_7$	$\text{CaSO}_4$	${}^n\text{Li}_2\text{B}_4\text{O}_7$
	<b>Front Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 75 mg/cm <sup>2</sup>
	<b>Rear Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>
	<b>Remarks</b>	Not a standard Panasonic dosimeter. Available for special design and use.			
	<b>Remarks</b>	Not a standard Panasonic dosimeter. Available for special design and use.			
		<b>Element 1</b>	<b>Element 2</b>	<b>Element 3</b>	<b>Element 4</b>
<b>UD-813-A11</b>	<b>Phosphor</b>	${}^6\text{Li}_2{}^{10}\text{B}_4\text{O}_7$	${}^7\text{Li}_2{}^{11}\text{B}_4\text{O}_7$	${}^6\text{Li}_2{}^{10}\text{B}_4\text{O}_7$	${}^7\text{Li}_2{}^{11}\text{B}_4\text{O}_7$
	<b>Front Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Plastic – 14 mg/cm <sup>2</sup>	Cadmium – 0.7 mm	Cadmium – 0.7 mm
	<b>Rear Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Plastic – 14 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>
	<b>Remarks</b>	Not a standard Panasonic dosimeter. Available for special design and use.			
		<b>Element 1</b>	<b>Element 2</b>	<b>Element 3</b>	<b>Element 4</b>
<b>UD-813-A12</b>	<b>Phosphor</b>	${}^6\text{Li}_2{}^{10}\text{B}_4\text{O}_7$	${}^7\text{Li}_2{}^{11}\text{B}_4\text{O}_7$	${}^n\text{Li}_2\text{B}_4\text{O}_7$	$\text{CaSO}_4$
	<b>Front Filtration</b>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>
	<b>Rear Filtration</b>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>
	<b>Remarks</b>	Not a standard Panasonic dosimeter. Available for special design and use.			
		<b>Element 1</b>	<b>Element 2</b>	<b>Element 3</b>	<b>Element 4</b>
<b>UD-813-A13</b>	<b>Phosphor</b>	${}^7\text{Li}_2{}^{11}\text{B}_4\text{O}_7$	${}^6\text{Li}_2{}^{10}\text{B}_4\text{O}_7$	${}^6\text{Li}_2{}^{10}\text{B}_4\text{O}_7$	${}^6\text{Li}_2{}^{10}\text{B}_4\text{O}_7$
	<b>Front Filtration</b>	Cadmium – 0.7 mm	Tin – 0.7 mm	Cadmium – 0.7 mm	Cadmium – 0.7 mm
	<b>Rear Filtration</b>	Cadmium – 0.7 mm	Cadmium – 0.7 mm	Tin – 0.7 mm	Tin – 0.7 mm
	<b>Remarks</b>	Not a standard Panasonic dosimeter. Available for special design and use.			
		<b>Element 1</b>	<b>Element 2</b>	<b>Element 3</b>	<b>Element 4</b>
<b>UD-813-A14</b>	<b>Phosphor</b>	${}^n\text{Li}_2\text{B}_4\text{O}_7$	${}^n\text{Li}_2\text{B}_4\text{O}_7$	$\text{CaSO}_4$	${}^n\text{Li}_2\text{B}_4\text{O}_7$
	<b>Front Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>
	<b>Rear Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>
	<b>Remarks</b>	Not a standard Panasonic dosimeter. Available for special design and use.			

**UD-814 Series**

		<b>Element 1</b>	<b>Element 2</b>	<b>Element 3</b>	<b>Element 4</b>
<b>UD-814-A1</b>	<b>Phosphor</b>	<sup>n</sup> Li <sub>2</sub> B <sub>4</sub> O <sub>7</sub>	CaSO <sub>4</sub>	CaSO <sub>4</sub>	CaSO <sub>4</sub>
	<b>Front Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Lead – 0.7 mm	Lead – 0.7 mm	Lead – 0.7 mm
	<b>Rear Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Lead – 0.7 mm	Lead – 0.7 mm	Lead – 0.7 mm
	<b>Remarks</b>	Not a standard Panasonic dosimeter. Available for special design and use. Often used like the UD-804 environmental dosimeter except with the addition of a LiBO element in position 1, encapsulated in 14 mg/cm <sup>2</sup> plastic to enable monitoring for beta particles in the environment.			
		<b>Element 1</b>	<b>Element 2</b>	<b>Element 3</b>	<b>Element 4</b>
<b>UD-814-A3</b>	<b>Phosphor</b>	CaSO <sub>4</sub>	CaSO <sub>4</sub>	CaSO <sub>4</sub>	CaSO <sub>4</sub>
	<b>Front Filtration</b>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>
	<b>Rear Filtration</b>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>
	<b>Remarks</b>	Not a standard Panasonic dosimeter. Available for special design and use. Often used like the UD-804 environmental dosimeter except with the addition of a LiBO element in position 1, encapsulated in 14 mg/cm <sup>2</sup> plastic to enable monitoring for beta particles in the environment.			
		<b>Element 1</b>	<b>Element 2</b>	<b>Element 3</b>	<b>Element 4</b>
<b>UD-814-A4</b>	<b>Phosphor</b>	<sup>n</sup> Li <sub>2</sub> B <sub>4</sub> O <sub>7</sub>	<sup>n</sup> Li <sub>2</sub> B <sub>4</sub> O <sub>7</sub>	CaSO <sub>4</sub>	<sup>n</sup> Li <sub>2</sub> B <sub>4</sub> O <sub>7</sub>
	<b>Front Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Plastic – 60 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>
	<b>Rear Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Plastic – 60 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>
	<b>Remarks</b>	Not a standard Panasonic dosimeter. Available for special design and use. Often used like the UD-804 environmental dosimeter except with the addition of a LiBO element in position 1, encapsulated in 14 mg/cm <sup>2</sup> plastic to enable monitoring for beta particles in the environment.			
		<b>Element 1</b>	<b>Element 2</b>	<b>Element 3</b>	<b>Element 4</b>
<b>UD-814-A5</b>	<b>Phosphor</b>	<sup>6</sup> Li <sup>10</sup> B <sub>4</sub> O <sub>7</sub>	<sup>7</sup> Li <sup>11</sup> B <sub>4</sub> O <sub>7</sub>	<sup>7</sup> Li <sup>11</sup> B <sub>4</sub> O <sub>7</sub>	<sup>6</sup> Li <sup>10</sup> B <sub>4</sub> O <sub>7</sub>
	<b>Front Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Plastic – 14 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>
	<b>Rear Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Plastic – 14 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>
	<b>Remarks</b>	Not a standard Panasonic dosimeter. Available for special design and use. Often used like the UD-804 environmental dosimeter except with the addition of a LiBO element in position 1, encapsulated in 14 mg/cm <sup>2</sup> plastic to enable monitoring for beta particles in the environment.			
		<b>Element 1</b>	<b>Element 2</b>	<b>Element 3</b>	<b>Element 4</b>
<b>UD-814-A6</b>	<b>Phosphor</b>	<sup>7</sup> Li <sup>11</sup> B <sub>4</sub> O <sub>7</sub>	<sup>7</sup> Li <sup>11</sup> B <sub>4</sub> O <sub>7</sub>	<sup>7</sup> Li <sup>11</sup> B <sub>4</sub> O <sub>7</sub>	CaSO <sub>4</sub>
	<b>Front Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Lead – 0.7 mm
	<b>Rear Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Lead – 0.7 mm
	<b>Remarks</b>	Not a standard Panasonic dosimeter. Available for special design and use. Often used like the UD-804 environmental dosimeter except with the addition of a LiBO element in position 1, encapsulated in 14 mg/cm <sup>2</sup> plastic to enable monitoring for beta particles in the environment.			
		<b>Element 1</b>	<b>Element 2</b>	<b>Element 3</b>	<b>Element 4</b>
<b>UD-814-A7</b>	<b>Phosphor</b>	<sup>n</sup> Li <sub>2</sub> B <sub>4</sub> O <sub>7</sub>	CaSO <sub>4</sub>	CaSO <sub>4</sub>	CaSO <sub>4</sub>
	<b>Front Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Lead / Tin 0.7 mm	Lead / Tin 0.7 mm	Lead / Tin 0.7 mm
	<b>Rear Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Lead / Tin 0.7 mm	Lead / Tin 0.7 mm	Lead / Tin 0.7 mm
	<b>Remarks</b>	Not a standard Panasonic dosimeter. Available for special design and use. Often used like the UD-804 environmental dosimeter except with the addition of a LiBO element in position 1, encapsulated in 14 mg/cm <sup>2</sup> plastic to enable monitoring for beta particles in the environment.			
		<b>Element 1</b>	<b>Element 2</b>	<b>Element 3</b>	<b>Element 4</b>
<b>UD-814-A8</b>	<b>Phosphor</b>	<sup>7</sup> Li <sup>11</sup> B <sub>4</sub> O <sub>7</sub>	<sup>7</sup> Li <sup>11</sup> B <sub>4</sub> O <sub>7</sub>	CaSO <sub>4</sub>	CaSO <sub>4</sub>
	<b>Front Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Lead – 0.7 mm	Lead – 0.7 mm
	<b>Rear Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Lead – 0.7 mm	Lead – 0.7 mm

	<b>Remarks</b>	Not a standard Panasonic dosimeter. Available for special design and use. Often used like the UD-804 environmental dosimeter except with the addition of a LiBO element in position 1, encapsulated in 14 mg/cm <sup>2</sup> plastic to enable monitoring for beta particles in the environment.			
		<b>Element 1</b>	<b>Element 2</b>	<b>Element 3</b>	<b>Element 4</b>
<b>UD-814-A9</b>	<b>Phosphor</b>	<sup>7</sup> Li <sup>11</sup> B <sub>4</sub> O <sub>7</sub>	<sup>7</sup> Li <sup>11</sup> B <sub>4</sub> O <sub>7</sub>	<sup>7</sup> Li <sup>11</sup> B <sub>4</sub> O <sub>7</sub>	<sup>6</sup> Li <sup>10</sup> B <sub>4</sub> O <sub>7</sub>
	<b>Front Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>
	<b>Rear Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>
	<b>Remarks</b>	Not a standard Panasonic dosimeter. Available for special design and use. Often used like the UD-804 environmental dosimeter except with the addition of a LiBO element in position 1, encapsulated in 14 mg/cm <sup>2</sup> plastic to enable monitoring for beta particles in the environment.			
		<b>Element 1</b>	<b>Element 2</b>	<b>Element 3</b>	<b>Element 4</b>
<b>UD-814-A10</b>	<b>Phosphor</b>	<sup>7</sup> Li <sup>11</sup> B <sub>4</sub> O <sub>7</sub>	<sup>7</sup> Li <sup>11</sup> B <sub>4</sub> O <sub>7</sub>	<sup>7</sup> Li <sup>11</sup> B <sub>4</sub> O <sub>7</sub>	<sup>7</sup> Li <sup>11</sup> B <sub>4</sub> O <sub>7</sub>
	<b>Front Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>
	<b>Rear Filtration</b>	Plastic – 14 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>
	<b>Remarks</b>	Not a standard Panasonic dosimeter. Available for special design and use. Often used like the UD-804 environmental dosimeter except with the addition of a LiBO element in position 1, encapsulated in 14 mg/cm <sup>2</sup> plastic to enable monitoring for beta particles in the environment.			

		<b>Element 1</b>	<b>Element 2</b>	<b>Element 3</b>	<b>Element 4</b>
<b>UD-815</b>	<b>Phosphor</b>	NONE	NONE	CaSO <sub>4</sub>	CaSO <sub>4</sub>
	<b>Front Filtration</b>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>
	<b>Rear Filtration</b>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>	Plastic – 160 mg/cm <sup>2</sup>
	<b>Remarks</b>	Originally intended for automatic calibration of the UD-710 automatic TLD reader. The design of this dosimeter is similar to the design of the UD-811 dosimeter except for encapsulation. Most users prefer to use the same type dosimeter for calibration as is used for routine monitoring of personnel and/or the environment.			