

Flood Sources

The Eckert and Ziegler Isotope Products (EZIP) Co-57 Flood Source provides a uniform field of radiation for evaluation of Nuclear Medicine gamma camera performance, allowing detection and correction of any camera malfunction prior to diagnostic use. The typical useful life of the Co-57 flood source is approximately 2 years. The Co-57 flood sources are available in a variety of circular and rectangular dimensions, with activities to meet the standards established by the manufacturers of the gamma cameras.

Construction

EZIP's FeatherLite Co-57 flood sources consist of cobalt chloride uniformly dispersed onto a thin substrate which is then placed in an ABS encapsulation and ultrasonically welded. Perflexion flood sources consist of Co-57 uniformly dispersed in a polyurethane matrix within a flexible coated-fabric capsule.



FeatherLite™

FeatherLite weighs up to 60% less than other rigid flood sources. FeatherLite is even easier to handle, saving strain on your back. FeatherLite is now available for all popular cameras.

Quality

EZIP's manufacturing process ensures that Nuclear Medicine customers will receive the highest quality flood source available to perform quality control on gamma cameras.

Flood sources are scanned using a gamma camera. The camera images each flood source for parameters including differential and integral non-uniformity in accordance with ANSI N42.27. Visual checks are performed to detect any distortions of the active element and the outside capsule.

A leak test is performed on all sources prior to shipment.



C-Thru™

C-Thru's source holder is made of transparent, durable plastic. The radioactive area is clearly visible, enabling the C-Thru source to be easily positioned on the camera head.

Uniformity

EZIP's flood sources are manufactured according to the following specifications:

CV $\leq 1.0\%$
INU $\leq 3.6\%$

FLOOD SOURCES ARE AVAILABLE WITH AN OPTIONAL CASE. IF A CASE IS NOT REQUESTED, THE FLOOD SOURCE WILL BE SUPPLIED WITH A LEAD LINED CARDBOARD CONTAINER.



Perflexion™

The Perflexion flood source reduces bulk and weight with its unique flexible design and tungsten composite Wolfguard shield.

FeatherLite™

The lightest flood source

US Patent No. 6,787,786. Sealed Source and Device Registration No. CA0510S120S

Product Code	Active Dimensions		Overall Dimensions		Activity (mCi)	Activity (MBq)
MED3706	18.5" Diameter	470mm diameter	19" diameter	483mm diameter	5-20	185-740
MED3709	24.0" x 16.5"	610mm x 419mm	25.2" x 17.9"	683mm x 454mm	5-20	185-740
MED3722	10.9" x 10.9"	277mm x 277mm	11.9" x 11.9"	302mm x 302mm	5-20	185-740
MED3727	10.0" x 16.0"	254mm x 406mm	10.5" x 16.5"	267mm x 419mm	5-20	185-740

C-Thru™

The only transparent flood source

US Patent No. 7,172,799. Sealed Source and Device Registration No. MA-1059-S-359-S

Product Code	Active Dimensions		Overall Dimensions		Activity (mCi)	Activity (MBq)
CTRF10000 - 10003	24.4" x 16.5"	620mm x 420mm	27.5" x 21.2"	700mm x 538mm	5-20	185-740
CTRF10017-10019	16" x 10"	406mm x 254mm	17.5" x 14.5"	445mm x 368mm	5-20	185-740
CTRF10012	8.9" x 8.9"	226mm x 226mm	12.5" x 11.0"	318mm x 280mm	10	370
CTRF13770A *	15.2" x 9.1"	386mm x 231mm	15.7" x 9.8"	400mm x 250mm	10	370
CTRF10050-10053	18.5 diameter	470 mm diameter	21" diameter	534mm diameter	5-20	185-740

* Aluminum capsule, this is not a transparent flood source.

Perflexion™

The only flexible flood source

US Patent No. 7,233,012. Sealed Source and Device Registration No. CA0406S180S

Product Code	Active Dimensions		Overall Dimensions		Activity (mCi)	Activity (MBq)
PF16R	16" x 10.5"	406 mm x 266 mm	17.4" x 11.9"	442 mm x 302 mm	5-20	185-740
PF18C	18.5" diameter	470 mm diameter	20" diameter	508 mm diameter	5-20	185-740
PF24R	24" x 16.5"	610 mm x 419 mm	25.4" x 17.9"	645 mm x 454 mm	5-20	185-740

* Other sizes and activities available. Please contact EZIP for information.



Application Guide

Co-57 Flood Sources

Camera Manufacturer	Camera Model	SPECT or PLANAR	Source Type	Head Size	Recommended Nominal Activity	Perflexion™	Feather Lite™	NES	C-Thru™
Digirad	2020tc	SPECT	Square	8" x 8"	10mCi	PF09R-057-10M	MED3722	N/A	CTRF10012
	Spect PAK	SPECT	Square	9" x 9"	10mCi	PF09R-057-10M	MED3722	N/A	N/A
	Cardius / Ergo	SPECT	Square	8" x 6"	10mCi	N/A	MED3722	N/A	CTRF10012
Dilon	6800	SPECT	Rectangular	8" x 6"	5mCi	PF09R-057-5M	MED3722	N/A	CTRF10012
Elsint	SP4	SPECT	Circular	15.75"	10mCi Max	PF18C-057-10M	MED3706	NES392	CTRF10050
	SP6	SPECT	Rectangular	21.25" x 15.75"	10mCi Max	PF24R-057-10M	MED3709	NES8400	CTRF10000
	Helix	SPECT	Rectangular	21.25" x 15.75"	10mCi Max	PF24R-057-10M	MED3709	NES8400	CTRF10000
	Cardial	SPECT	Rectangular	15.75" x 10"	10mCi Max	PF16R-057-10M	MED3727	NES8510	CTRF10017
	Varicam	SPECT	Rectangular	21.25" x 15.75"	10mCi Max	PF24R-057-10M	MED3709	NES8400	CTRF10000
	GE Healthcare	300 AM	Planar	Circular	10"	3mCi	N/A	MED3700	NES298
Maxi 2		Planar	Circular	15"	5mCi	PF18C-057-5M	MED3706	NES391	CTRF10051
Maxi 37		Planar	Circular	15"	5mCi	PF18C-057-5M	MED3706	NES391	CTRF10051
5000 Series		SPECT	Circular	24"	10mCi	N/A	MED3708	NES8012	N/A
Discovery VH		SPECT	Rectangular	20" x 14"	10mCi	PF24R-057-10M	MED3709	NES8400	CTRF10000
Discovery 530 _c		SPECT	Rectangular	14.6" x 7.4"	10mCi	N/A	MED3743	N/A	N/A
Hawkeye		SPECT	Rectangular	20" x 14"	10mCi	PF24R-057-10M	MED3709	NES8400	CTRF10000
DSTi/Dsi		SPECT	Rectangular	12.99" x 14"	10mCi	N/A	MED3713	NES8480	N/A
Maxxus		SPECT	Rectangular	21" x 16"	10mCi	PF24R-057-10M	MED3709	NES8400	CTRF10000
Starcam XRT		SPECT	Rectangular	21" x 16"	10mCi	PF24R-057-10M	MED3709	NES8400	CTRF10000
Starcam XCT		SPECT	Circular	15.4"	10mCi	PF18C-057-10M	MED3706	NES392	CTRF10050
Starcam ACT		SPECT	Circular	15.4"	10mCi	PF18C-057-10M	MED3706	NES392	CTRF10050
Optima		SPECT	Rectangular	14" x 9"	7.5mCi	PF16R-057-7.5M	MED3727	NES8507	CTRF10017
Millenium MPS		SPECT	Square	14" x 14"	10mCi	N/A	MED3713	NES8480	N/A
Millenium MPR, VG		SPECT	Rectangular	15.75" x 21.75"	10mCi	PF24R-057-10M	MED3709	NES8400	CTRF10000
Millenium MG		SPECT	Rectangular	14" x 20"	10mCi	PF24R-057-10M	MED3709	NES8400	CTRF10000
Neurocam		SPECT	Rectangular	7.9" x 6.7"	10mCi	PF09R-057-10M	MED3722	N/A	CTRF10012
Myosight		SPECT	Rectangular	20" x 14"	10mCi	PF24R-057-10M	MED3709	NES8400	CTRF10000
Infinia		SPECT	Rectangular	21.25" x 15.75"	10mCi	PF24R-057-10M	MED3709	NES8400	CTRF10000
Ventri		SPECT	Rectangular	14.6" x 7.4"	10mCi	PF16R-057-10M	MED3727	NES8510	CTRF10017
IS ²	SR (Single Head Rect.)	SPECT	Rectangular	20" x 14.8"	10mCi	PF24R-057-10M	MED3709	NES8400	CTRF10000
	Pulse CDC / DCC	SPECT	Rectangular	15" x 10.2"	10mCi	PF16R-057-10M	MED3727	NES8400	CTRF10017
	SC (Single Head Circ.)	SPECT	Circular	15"	10 mCi	PF18C-057-10M	MED3706	NES8510	CTRF10050
Mediso Medical	CardioSpect SC	SPECT	Rectangular	20.8" x 15.3"	10mCi	PF24R-057-10M	MED3709	NES8400	CTRF10000
	CardioSpect SR	SPECT	Rectangular	20.8" x 15.3"	10mCi	PF24R-057-10M	MED3709	NES8400	CTRF10000
	CardioSpect D90	SPECT	Rectangular	14.5" x 9"	10mCi	N/A	N/A	N/A	CTRF13770A
	CardioSpect VMAX	SPECT	Rectangular	20.8" x 15.3"	10mCi	PF24R-057-10M	MED3709	NES8400	CTRF10000
	NeuroSpect Quad	SPECT	Rectangular	9" x 8"	10mCi	N/A	N/A	N/A	CTRF13770A
Philips Healthcare	ARC 3000	Planar	Circular	15"	10mCi	PF18C-057-10M	MED3706	NES392	CTRF10050
	Genesys	SPECT	Rectangular	20" x 15"	10mCi Max	PF24R-057-10M	MED3709	NES8400	CTRF10000

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Philips Healthcare	Brightview	SPECT	Rectangular	20.25" x 16"	10mCi Max	PF24RW-057-10M	N/A	NES8610	CTRF10021
	Argus	SPECT	Rectangular	20" x 15"	10mCi Max	PF24R-057-10M	MED3709	NES8400	CTRF10000
	Solus, Cardial, or Vertex	SPECT	Rectangular	20" x 15"	10mCi Max	PF24R-057-10M	MED3709	NES8400	CTRF10000
	Forte	SPECT	Rectangular	20 x 15"	10mCi	PF24R-057-10M	MED3709	NES8400	CTRF10000
	Cirrus	SPECT	Circular	15"	10mCi	PF18C-057-10M	MED3706	NES392	CTRF10050
	Cardio MD	SPECT	Rectangular	9.2" x 15.4"	10mCi Max	PF16R-057-10M	MED3727	NES8510	CTRF10017
	Cardio 60	SPECT	Rectangular	20" x 15"	10mCi Max	PF24R-057-10M	MED3709	NES8400	CTRF10000
	Precedence	SPECT/CT	Rectangular	20" x 15"	10mCi	PF24R-057-10M	MED3709	NES8400	CTRF10000
	Skylight	SPECT	Rectangular	20" x 14"	10mCi	PF24R-057-10M	MED3709	NES8400	CTRF10000
	Philips Healthcare	Dynamo	Planar	Circular	10"	3mCi	N/A	MED3700	NES297
411		Planar	Circular	11"	5mCi	N/A	MED3700	NES297	N/A
412		Planar	Circular	12"	5mCi	N/A	MED3700	NES297	N/A
415		Planar	Circular	15"	5mCi	PF18C-057-5M	MED3706	NES391	CTRF10051
Prism 1000		SPECT	Rectangular	20" x 15"	10mCi	PF24R-057-10M	MED3709	NES8400	CTRF10000
Prism 2000		SPECT	Rectangular	20 x 15"	10mCi	PF24R-057-10M	MED3709	NES8400	CTRF10000
Prism 3000		SPECT	Rectangular	15.7" x 9.4"	10mCi	PF16R-057-10M	MED3727	NES8510	CTRF10017
SX300		SPECT	Rectangular	14" x 14"	10mCi	N/A	MED3725	NES8480	N/A
Axis / Irix		SPECT	Rectangular	21" x 15.5"	10mCi	PF24R-057-10M	MED3709	NES8400	N/A
Siemens Medical		Multispect 2	SPECT	Square	21.25" x 15"	10mCi	PF24R-057-10M	MED3709	NES8400
Solutions	Multispect 3	SPECT	Rectangular	16" x 12"	10mCi	N/A	MED3713	NES8480	N/A
	3700, 7500 Orbiter Series	SPECT	Circular	15.25"	10mCi	PF18C-057-10M	MED3706	NES392	CTRF10050
	Body Scan	SPECT	Rectangular	23.5" x 15.75"	10mCi	PF24R-057-10M	MED3709	NES8400	CTRF10000
	Diacam	SPECT	Rectangular	21.25" x 15"	10mCi	PF24R-057-10M	MED3709	NES8400	CTRF10000
	3700, 7500 Orbiter Series	SPECT	Rectangular	21.25" x 15"	10mCi	PF24R-057-10M	MED3709	NES8400	CTRF10000
	c.cam	SPECT	Rectangular	14" x 8.4"	10mCi	PF16R-057-10M	MED3727	NES8510	CTRF10017
	Symbia	SPECT	Rectangular	21.23" x 15"	10mCi	PF24R-057-10M	MED3709	NES8400	CTRF10000
	e.cam	SPECT	Rectangular	21.25" x 15"	10mCi	PF24R-057-10M	MED3709	NES8400	CTRF10000
SMV (Sopha Medical)	DST	SPECT	Rectangular	11.7" x 15.8"	10mCi	N/A	MED3713	NES8480	N/A
	DSX	SPECT	Rectangular	21.3" x 15.75"	10mCi	PF24R-057-10M	MED3709	NES8400	CTRF10000
	DS7	SPECT	Circular	15.75"	10mCi	PF18C-057-10M	MED3706	NES392	CTRF10050
	Bodytrac	SPECT	Rectangular	21.3" x 15.75"	10mCi	PF24R-057-10M	MED3709	NES8400	CTRF10000
	DSTXL	SPECT	Rectangular	21.3" x 15.75"	10mCi	PF24R-057-10M	MED3709	NES8400	CTRF10000
	Vision FX Series	SPECT	Rectangular	20" x 15"	10mCi	PF24R-057-10M	MED3709	NES8400	CTRF10000
Toshiba America	GCA7100A & 7200	SPECT	Rectangular	21.5" x 19"	10mCi	PF24R-057-10M	MED3709	NES8400	CTRF10000
	GCA 9300	SPECT	Rectangular	16.1" x 8.3"	10mCi	PF16R-057-10M	MED3727	NES8510	CTRF10017
	GCA901, 901A	SPECT	Rectangular	20.1" x 14.5"	10mCi	PF24R-057-10M	MED3709	NES8400	CTRF10000
	GCA901WB	SPECT	Rectangular	20.1" x 14.6"	10mCi	PF24R-057-10M	MED3709	NES8400	CTRF10000
	GCA602, 602A	SPECT	Circular	13.75"	5mCi	N/A	MED3700	NES297	N/A
	GCa601A	SPECT	Circular	13.75"	5mCi	N/A	MED3700	NES297	N/A
	t.cam	SPECT	Rectangular	21.25" x 15"	10mCi	PF24R-057-10M	MED3709	NES8400	CTRF10000