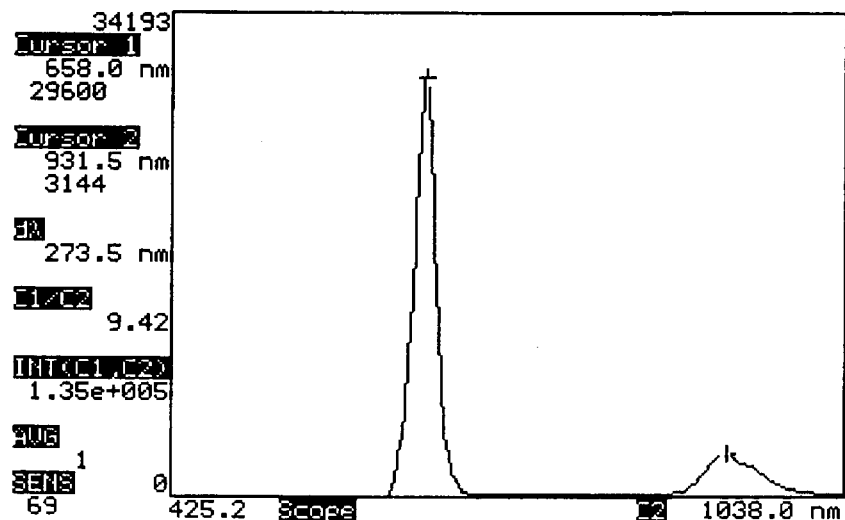
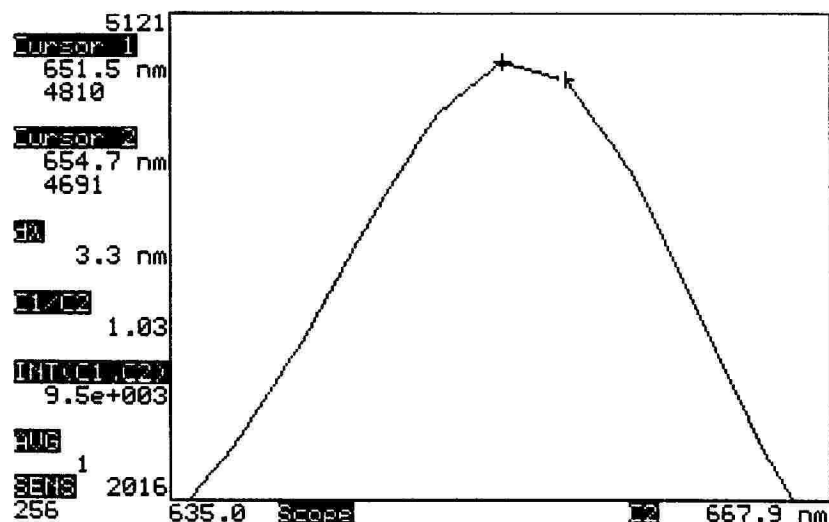




Spectrometer:	Prema SPM 9001
Manufacturer of probe:	UDT
Part number:	P867RA
Serial number:	8D06303
Cable length:	12 ft
Connector:	Hypertronics
Connects to:	Interface/extension cable
For use on:	Sensormedics
Tested on:	Sensormedics Sat-Trak
Red peak wavelength:	661 nm
Infra red peak wavelength:	940 nm
LED configuration:	3 lead

John



EMITTER				Ta = 23° C
IR	RED			
Peak Wavelength @ 20 mA	655.2 nm			
Radiant Power @ 20mA	3.1 mW			
Forward voltage @ 20 mA	1.8 V			
Reverse Voltage @ 10uA	> 5V			
Peak Wavelength @ 20 mA	942.7 nm			
Radiant Power @ 20mA	2 mW			
Forward voltage @ 20 mA	1.2 V			
Reverse Voltage @ 10uA	> 5 V			

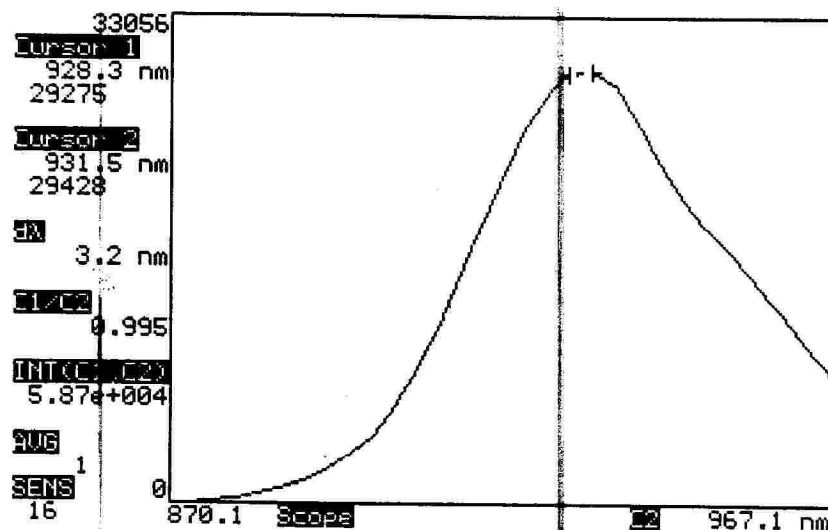
Spectrometer.	SPM 9001.
Manufacturer of Probe.	Viamed.
Type.	Finger.
Part No.	P867RA Prototype B.
Serial No.	9F22433.
Connector.	9 pin male, ohmeda type.
Connects to.	Monitor or extension cable.
For use on.	Ohmeda monitors.
Tested on.	Not as yet.
	Actual. Spec.
Red Peak wavelength (nm).	651.5 - 654.7nm 660. 656nm.
Infrared Peak Wavelength (nm).	928.3 - 931.5nm 930.
Emitter Configuration.	Common anode, 3 lead drive.
Carried out by.	S. Watmough.
Signed.	<i>S. Watmough</i>
Date.	16th Nov 99.

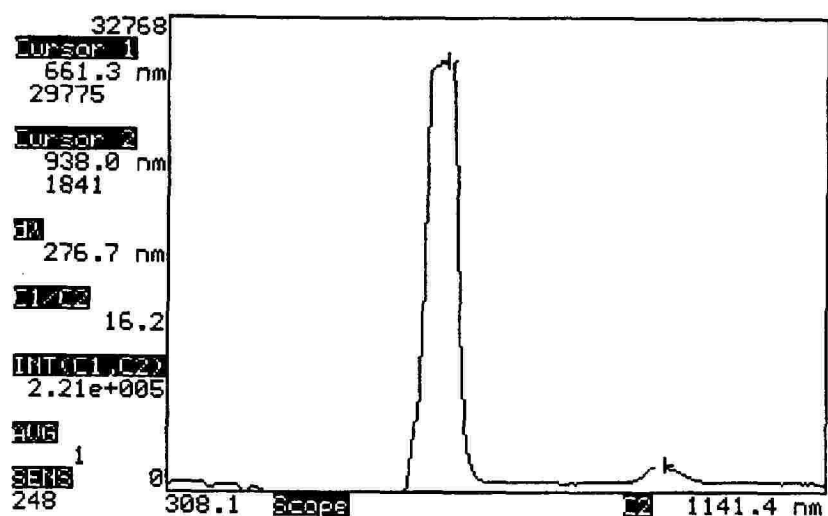
Notes.

FORWARD DIODE VOLT

RBO 1.497V

IR 1.194V





Spectrometer: Prema SPM 9001

Manufacturer of probe: UDT

Part number: P867RA modified - connector replaced

Serial number:

Cable length: 3 ft

Connector: Compushield

Connects to: Extension cable

For use on: Sensormedics

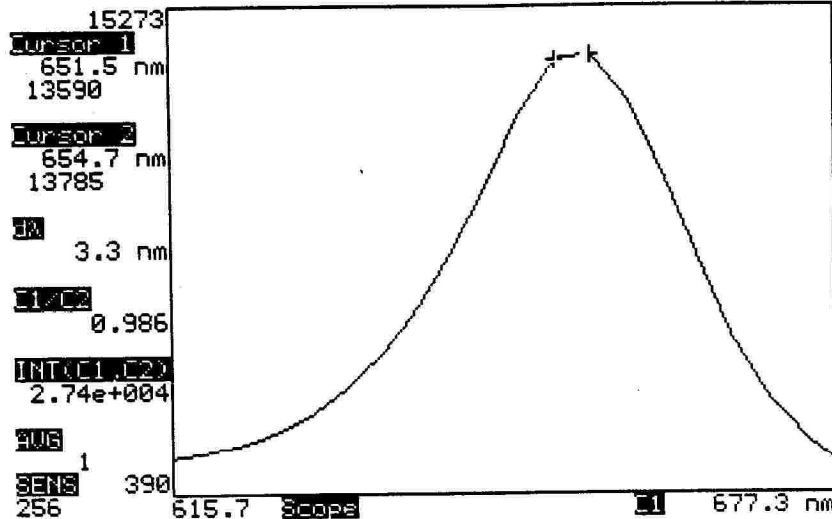
Tested on: Sensormedics Sat-Trak

Red peak wavelength: 661

Infra red peak wavelength: 940

LED configuration: 3 lead

Tan



IR		RED	
Peak Wavelength @ 20 mA	655.2 nm	Radiant Power @ 20mA	2.4 mW
Forward voltage @ 20 mA	1.8 V	Reverse Voltage @ 10uA	> 5V
Peak Wavelength @ 20 mA	942.7	Radiant Power @ 20mA	2.2 mW
Forward voltage @ 20 mA	1.2 V	Reverse Voltage @ 10uA	> 5 V

IR LED: 660nm (655nm)
Ta = 23°C

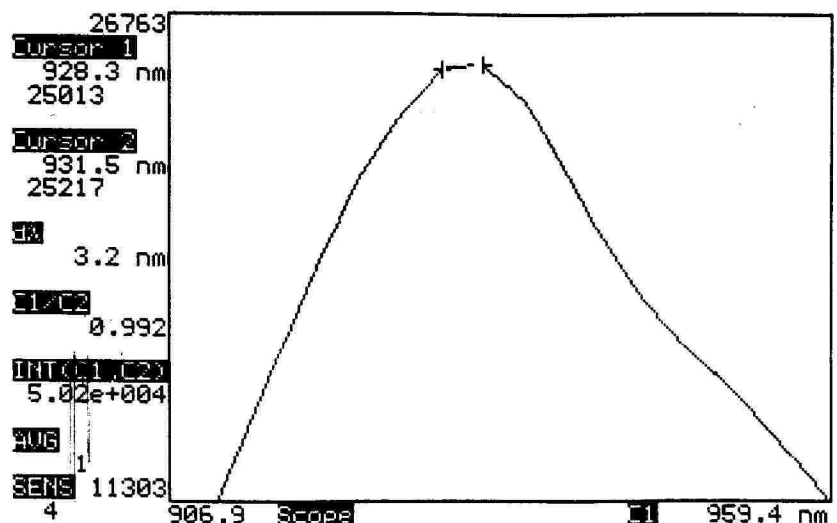
Spectrometer.	SPM 9001.
Manufacturer of Probe.	Viamed.
Type.	Finger.
Part No.	P867RA Prototype A.
Serial No.	9F22432.
Connector.	9 pin male, ohmeda type.
Connects to.	Monitor or extension cable.
For use on.	Ohmeda monitors.
Tested on.	Not as yet.
	Actual. Spec.
Red Peak wavelength (nm).	651.5 - 654.7nm 660. 656nm.
Infrared Peak Wavelength (nm).	928.3 - 931.5nm 930.
Emitter Configuration.	Common anode, 3 lead drive.
Carried out by.	Sj Watmough.
Signed.	<i>Sj Watmough</i>
Date.	16th Nov 99.

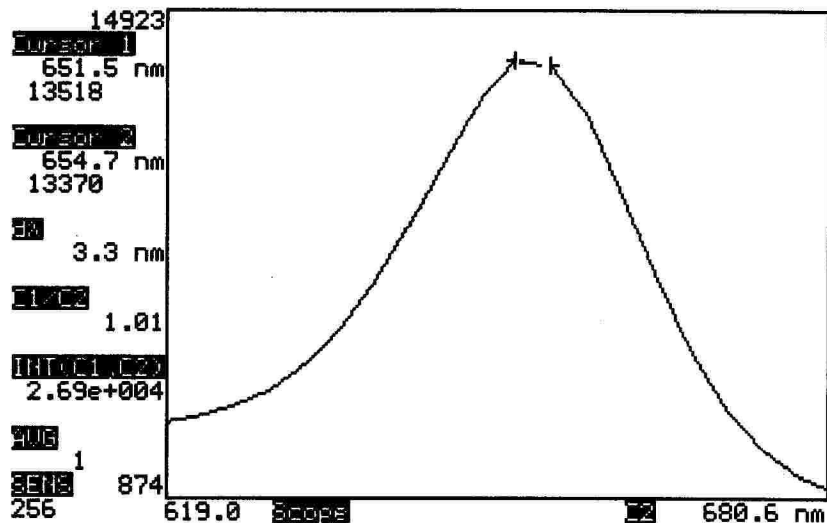
Notes.

FORWARD DIODE VOLTAGE

R30 1-496v

IR 1-194v





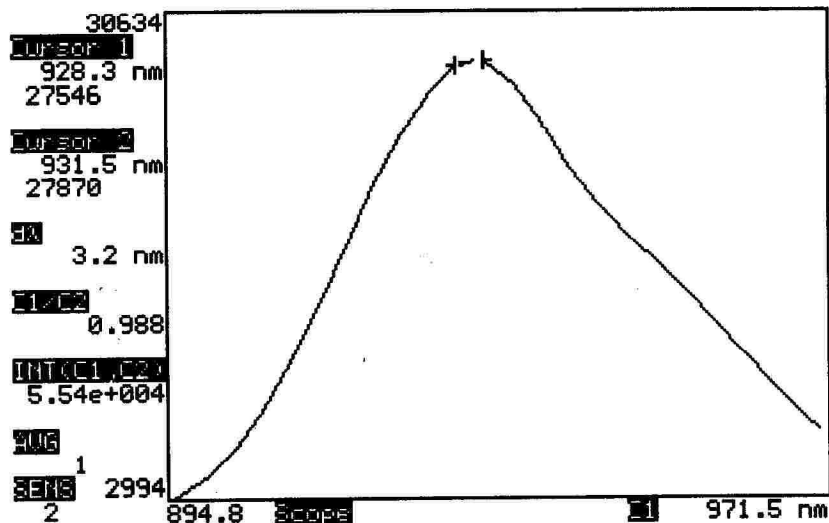
EMITTER		DEFINITION	Ta = 23° C
IR	RED		
Peak Wavelength @ 20 mA	656.7 nm		
Radiant Power @ 20mA	3.2 mW		
Forward voltage @ 20 mA	1.8 V		
Reverse Voltage @ 10uA	> 5V		
Peak Wavelength @ 20 mA	942.7		
Radiant Power @ 20mA	2.3 mW		
Forward voltage @ 20 mA	1.2 V		
Reverse Voltage @ 10uA	> 5 V		

Spectrometer.	SPM 9001.	
Manufacturer of LED.	UDT.	
Part No.	"Sample B".	
	Actual.	Spec.
Red Peak wavelength (nm).	651.5 - 654.7nm	656.
Infrared Peak Wavelength (nm).	928.3 - 931.5nm	940 (?).
Emitter Configuration.	Common anode, 3 lead drive.	
Carried out by.	8 Watmough	
Signed.	<i>[Signature]</i>	
Date.	16th Nov 99.	

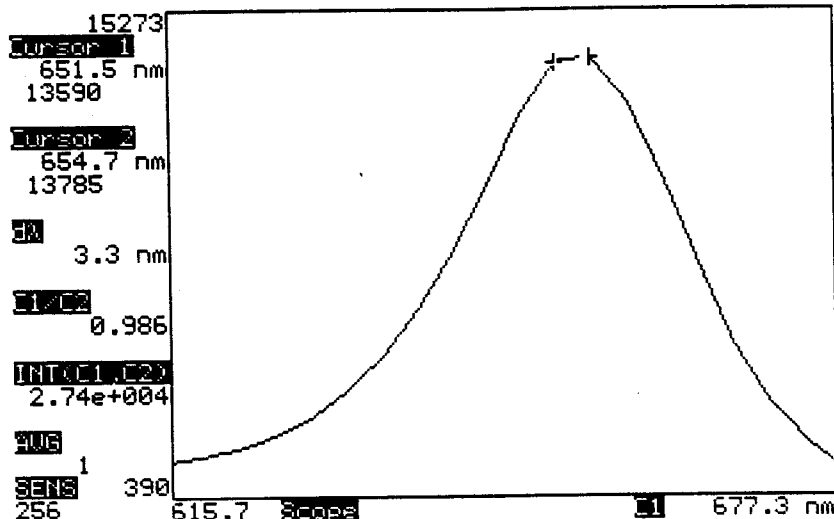
Notes.

$$V_F(\text{red}) = 1.491 \text{ V.}$$

$$V_F(\text{ir}) = 1.199 \text{ V.}$$



Tan



RED	
Peak Wavelength @ 20 mA	655.2 nm
Radiant Power @ 20mA	2.4 mW
Forward Voltage @ 20 mA	1.8 V
Reverse Voltage @ 10uA	> 5V
Peak Wavelength @ 20 mA	942.7
Radiant Power @ 20mA	2.2 mW
Forward Voltage @ 20 mA	1.2 V
Reverse Voltage @ 10uA	> 5 V

Ta = 23° C

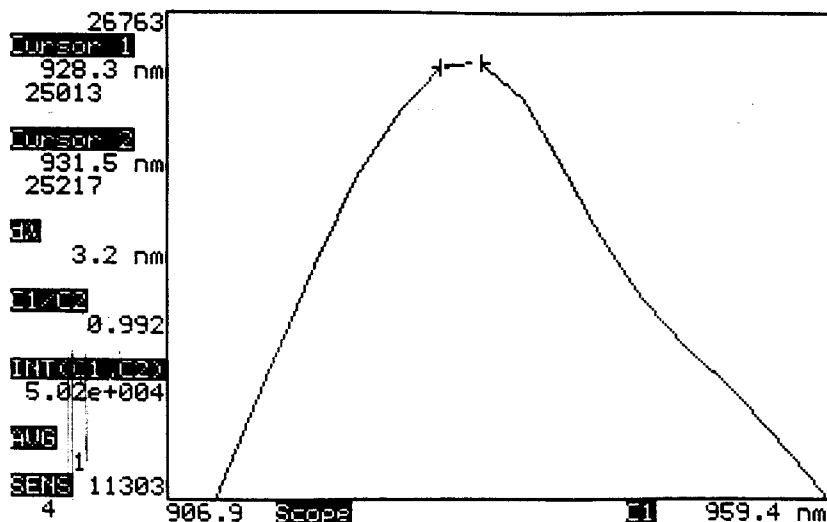
Spectrometer.	SPM 9001.
Manufacturer of Probe.	Viamed.
Type.	Finger.
Part No.	P867RA Prototype A.
Serial No.	9F22432.
Connector.	9 pin male. ohmeda type.
Connects to.	Monitor or extension cable.
For use on.	Ohmeda monitors.
Tested on.	Not as yet.
	Actual. Spec.
Red Peak wavelength (nm).	651.5 - 654.7nm 660. 656nm.
Infrared Peak Wavelength (nm).	928.3 - 931.5nm 930.
Emitter Configuration.	Common anode, 3 lead drive.
Carried out by.	S Watmough.
Signed.	<i>S Watmough</i>
Date.	16th Nov 99.

Notes.

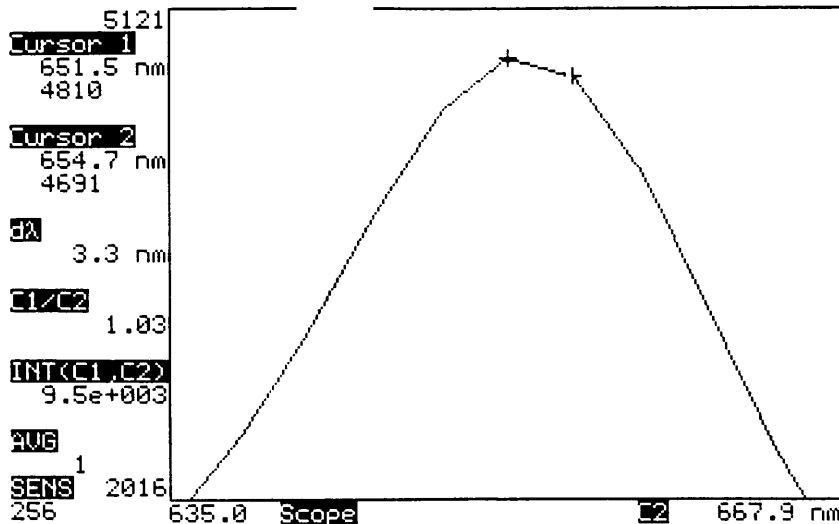
FORWARD DIODE VOLTAGE

RED 1.496V

IR 1.194V



John



E M I T T E R					
I R			R E D		
Reverse Voltage @ 10uA	Forward Voltage @ 20 mA	Radiant Power @ 20mA	Peak Wavelength @ 20 mA	Radiant Power @ 20mA	Peak Wavelength @ 20 mA
>5 V	1.2 V	2 mW	942.7 nm	1.8 V	655.2 nm
Ta = 23° C					

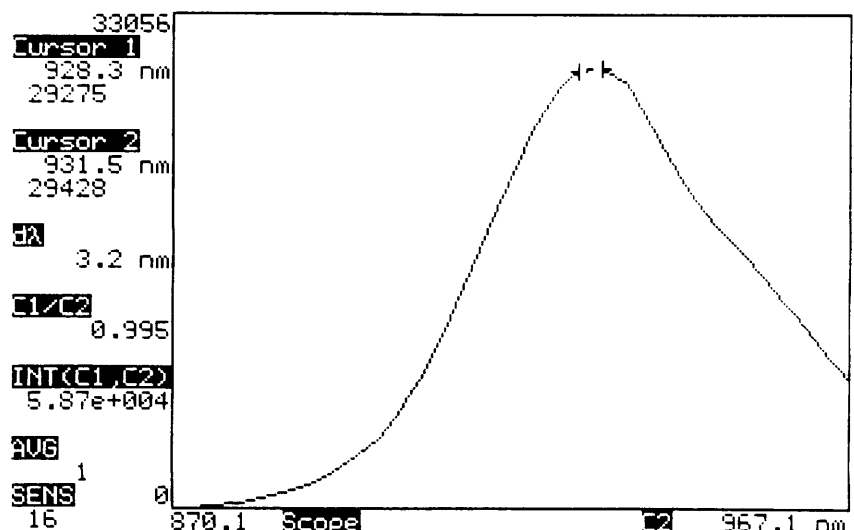
Spectrometer.	SPM 9001.	
Manufacturer of Probe.	Viamed.	
Type.	Finger.	
Part No.	P867RA Prototype B.	
Serial No.	9F22433.	
Connector.	9 pin male. ohmeda type.	
Connects to.	Monitor or extension cable.	
For use on.	Ohmeda monitors.	
Tested on.	Not as yet.	
	Actual.	Spec.
Red Peak wavelength (nm).	651.5 - 654.7nm	660. 656nm.
Infrared Peak Wavelength (nm).	928.3 - 931.5nm	930.
Emitter Configuration.	Common anode. 3 lead drive.	
Carried out by.	S. Watmough.	
Signed.	<i>S. Watmough</i>	
Date.	16th Nov 99.	

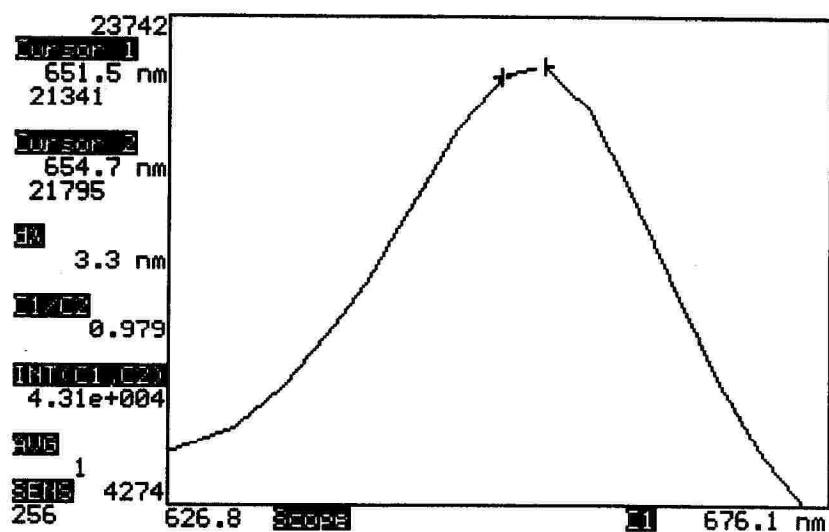
Notes.

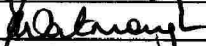
FORWARD DIODE VOLT

RRO 1.497v

IR 1.194v





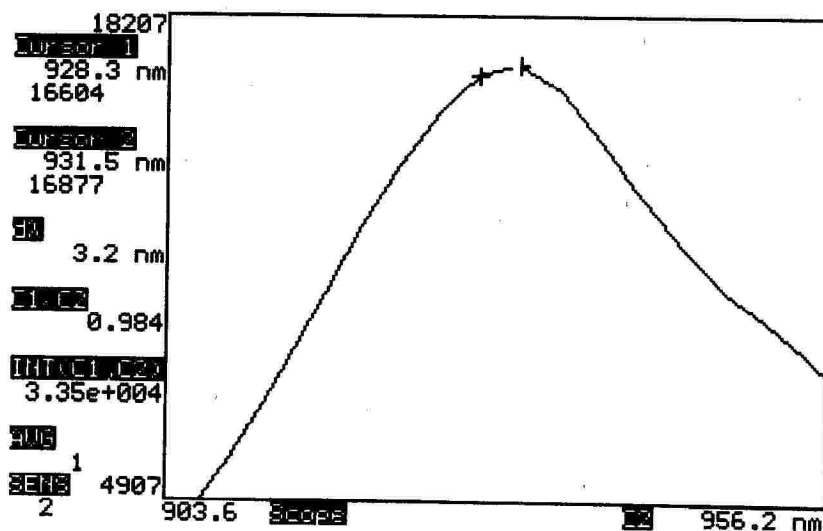
Spectrometer.	SPM 9001.	
Manufacturer of LED.	UDT.	
Part No.	"Sample A".	
	Actual.	Spec.
Red Peak wavelength (nm).	651.5 - 654.7nm	656.
Infrared Peak Wavelength (nm).	928.3 - 931.5nm	940 (?).
Emitter Configuration.	Common anode, 3 lead drive.	
Carried out by.	J Watmough.	
Signed.		
Date.	16th Nov 99.	

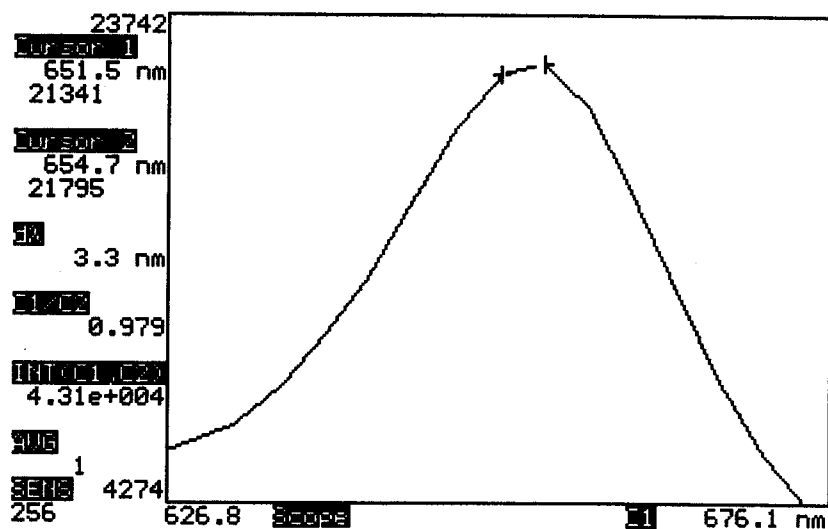
Notes.

$$V_f (\text{red}) = 1.500 \text{ V.}$$

$$V_f (\text{IR}) = 1.199 \text{ V.}$$

Ta = 23° C		
LED CHARACTERISTICS		
Peak Wavelength @ 20 mA	656.7 nm	
Radiant Power @ 20mA	2.7 mW	
Forward voltage @ 20 mA	1.8 V	
Reverse Voltage @ 10uA	> 5V	
Peak Wavelength @ 20 mA	942.7	
Radiant Power @ 20mA	2.4 mW	
Forward voltage @ 20 mA	1.2 V	
Reverse Voltage @ 10uA	>5 V	





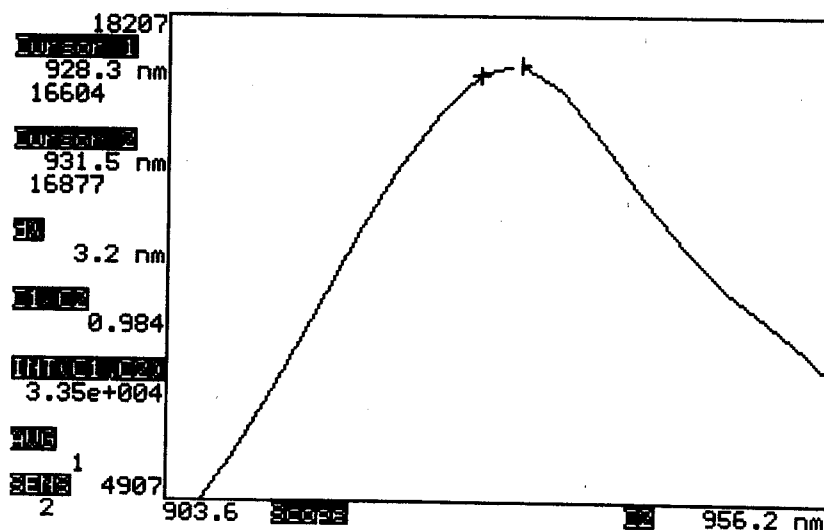
Spectrometer.	SPM 9001.
Manufacturer of LED.	UDT.
Part No.	"Sample A".
	Actual. Spec.
Red Peak wavelength (nm).	651.5 - 654.7nm 656.
Infrared Peak Wavelength (nm).	928.3 - 931.5nm 940 (?).
Emitter Configuration.	Common anode, 3 lead drive.
Carried out by.	8 Watmough.
Signed.	<i>Watmough</i>
Date.	16th Nov 99.

Notes.

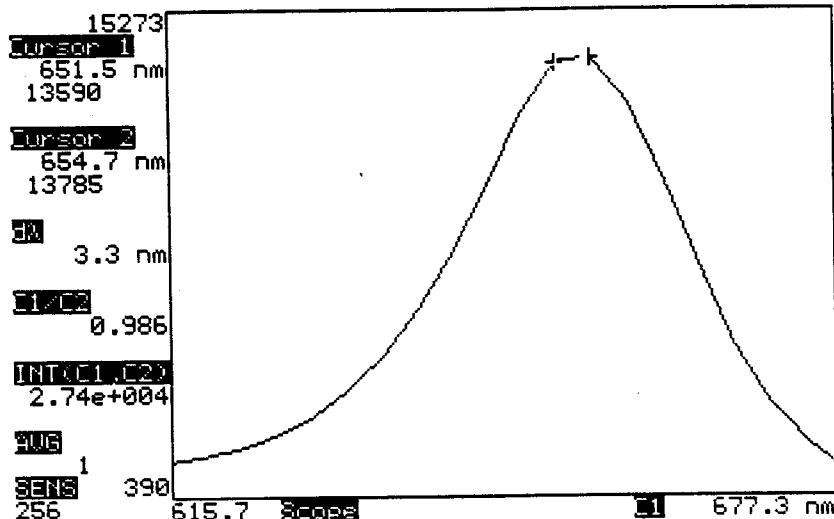
$$V_f(\text{red}) = 1.500\text{V}.$$

$$V_f(\text{IR}) = 1.199\text{V}.$$

Ta = 23° C		
LED Characteristics		
Peak Wavelength @ 20 mA	656.7 nm	
Radiant Power @ 20mA	2.7 mW	
Forward voltage @ 20 mA	1.8 V	
Reverse Voltage @ 10uA	> 5V	
Peak Wavelength @ 20 mA	942.7	
Radiant Power @ 20mA	2.4 mW	
Forward voltage @ 20 mA	1.2 V	
Reverse Voltage @ 10uA	>5 V	



Tan



RED	
Peak Wavelength @ 20 mA	655.2 nm
Radiant Power @ 20mA	2.4 mW
Forward voltage @ 20 mA	1.8 V
Reverse Voltage @ 10uA	> 5V
Peak Wavelength @ 20 mA	942.7
Radiant Power @ 20mA	2.2 mW
Forward voltage @ 20 mA	1.2 V
Reverse Voltage @ 10uA	> 5 V

Ta = 23° C

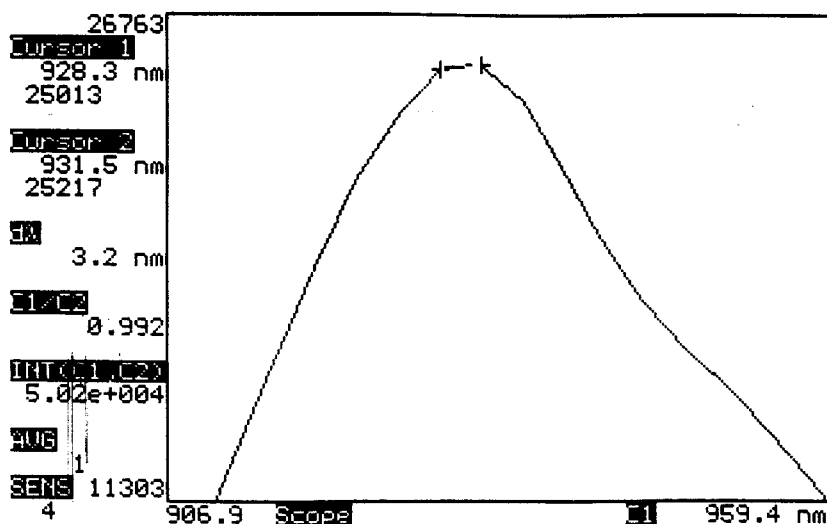
Spectrometer.	SPM 9001.
Manufacturer of Probe.	Viamed.
Type.	Finger.
Part No.	P867RA Prototype A.
Serial No.	9F22432.
Connector.	9 pin male. ohmeda type.
Connects to.	Monitor or extension cable.
For use on.	Ohmeda monitors.
Tested on.	Not as yet.
	Actual. Spec.
Red Peak wavelength (nm).	651.5 - 654.7nm 660. 656nm.
Infrared Peak Wavelength (nm).	928.3 - 931.5nm 930.
Emitter Configuration.	Common anode, 3 lead drive.
Carried out by.	S Watmough.
Signed.	<i>S Watmough</i>
Date.	16th Nov 99.

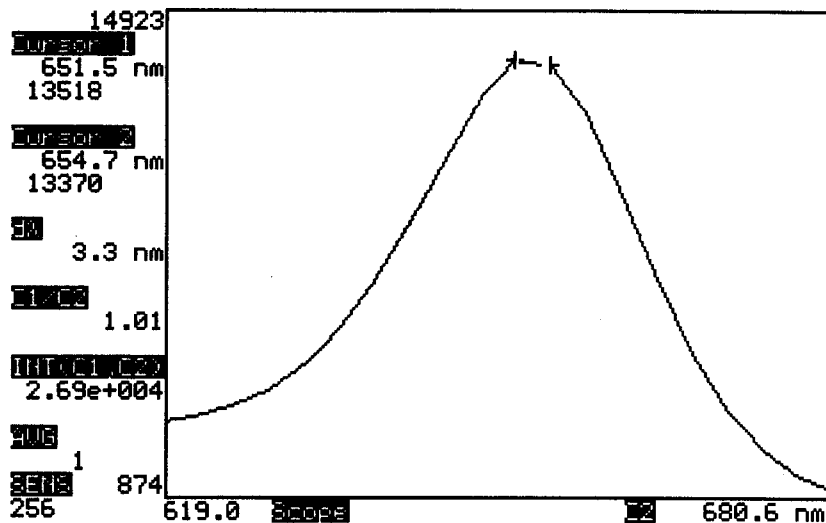
Notes.

FORWARD DIODE VOLTAGE

RED 1.496V

IR 1.194V





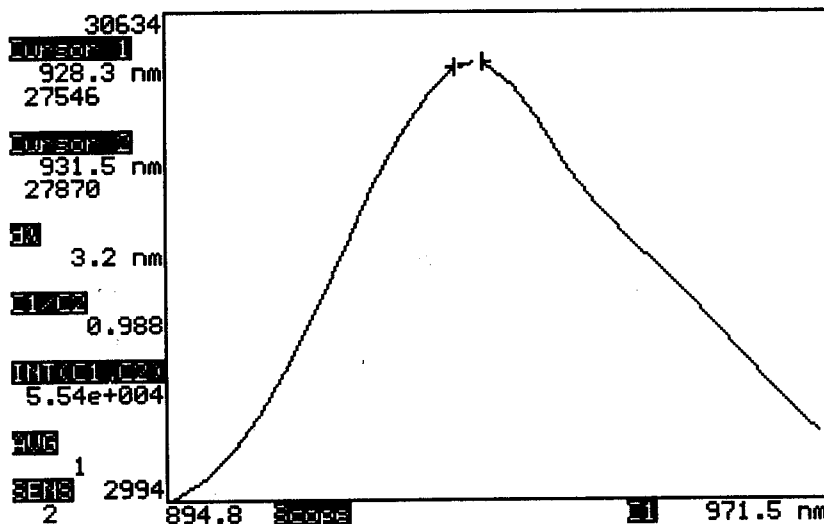
E M I T T E R		Ta = 23° C
I R	R E D	
Peak Wavelength @ 20 mA	656.7 nm	
Radiant Power @ 20mA	3.2 mW	
Forward voltage @ 20 mA	1.8 V	
Reverse Voltage @ 10uA	> 5V	
Peak Wavelength @ 20 mA	942.7	
Radiant Power @ 20mA	2.3 mW	
Forward voltage @ 20 mA	1.2 V	
Reverse Voltage @ 10uA	> 5 V	

Spectrometer.	SPM 9001.	
Manufacturer of LED.	UDT.	
Part No.	"Sample B".	
	Actual.	Spec.
Red Peak wavelength (nm).	651.5 - 654.7nm	656.
Infrared Peak Wavelength (nm).	928.3 - 931.5nm	940 (?)
Emitter Configuration.	Common anode, 3 lead drive.	
Carried out by.	S. Watmough	
Signed.	<i>S. Watmough</i>	
Date.	16th Nov 99.	

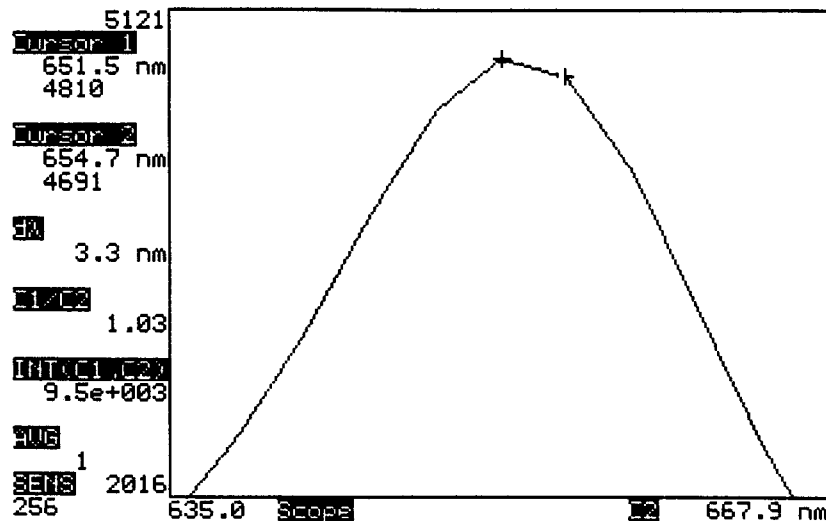
Notes.

$$V_F(\text{red}) = 1.491 \text{ V.}$$

$$V_F(\text{ir}) = 1.199 \text{ V.}$$



John



EMITTER	
IR	RED
Peak Wavelength @ 20 mA	655.2 nm
Radiant Power @ 20mA	3.1 mW
Forward voltage @ 20 mA	1.8 V
Reverse Voltage @ 10uA	> 5V
Peak Wavelength @ 20 mA	942.7 nm
Radiant Power @ 20mA	2 mW
Forward voltage @ 20 mA	1.2 V
Reverse Voltage @ 10uA	> 5 V

Ta = 23°C

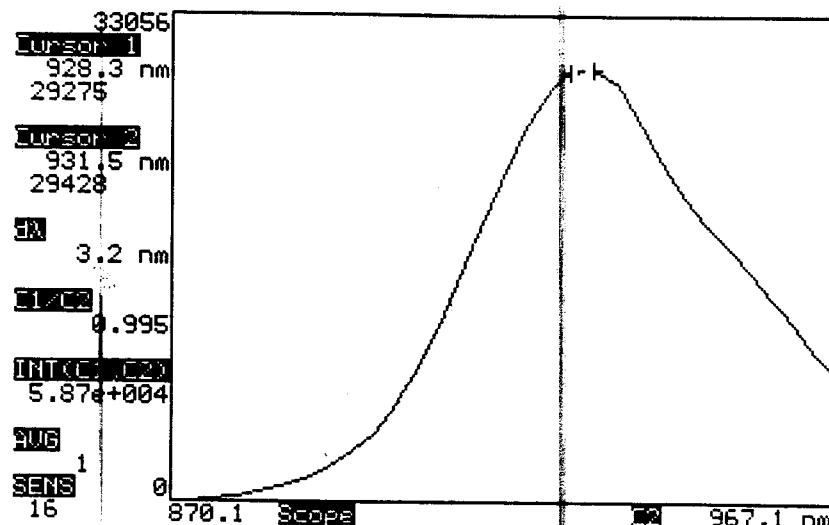
Spectrometer.	SPM 9001.
Manufacturer of Probe.	Viamed.
Type.	Finger.
Part No.	P867RA Prototype B.
Serial No.	9F22433.
Connector.	9 pin male, ohmeda type.
Connects to.	Monitor or extension cable.
For use on.	Ohmeda monitors.
Tested on.	Not as yet.
	Actual. Spec.
Red Peak wavelength (nm).	651.5 - 654.7nm 660. 656nm.
Infrared Peak Wavelength (nm).	928.3 - 931.5nm 930.
Emitter Configuration.	Common anode, 3 lead drive.
Carried out by.	S. Watmough.
Signed.	<i>S. Watmough</i>
Date.	16th Nov 99.

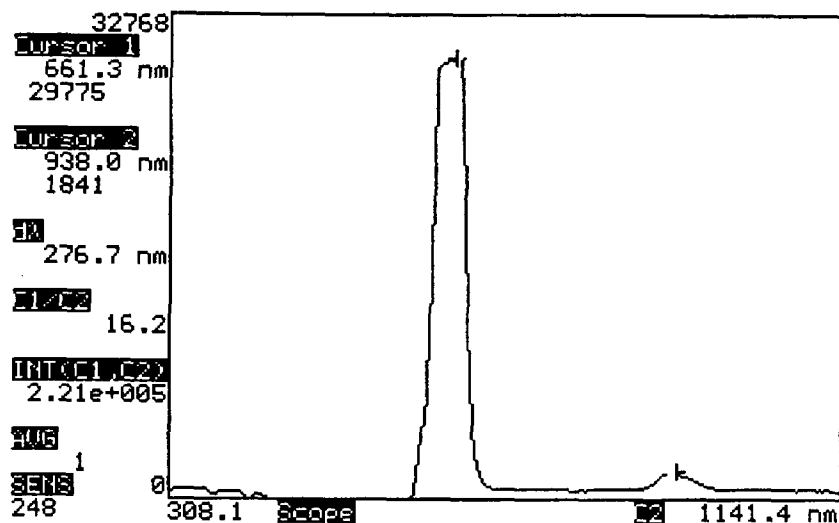
Notes.

FORWARD DIODE VOLT

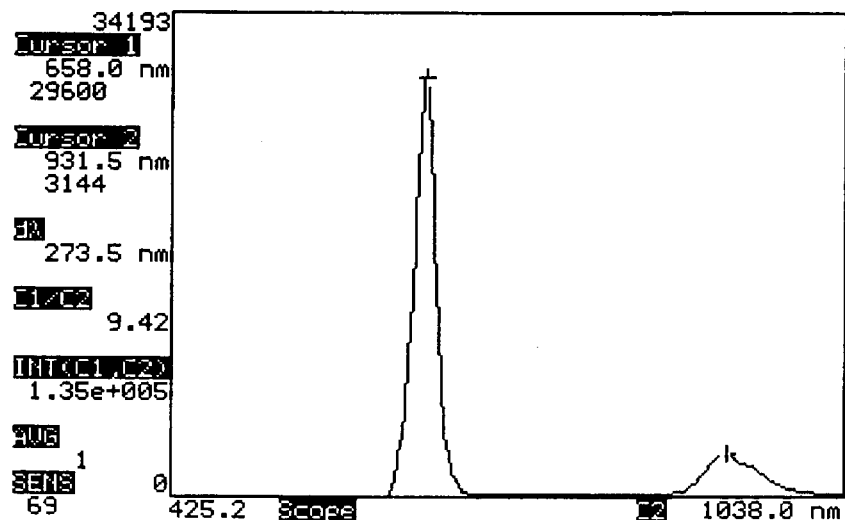
RBO 1.497V

IR 1.194V





Spectrometer:	Prema SPM 9001
Manufacturer of probe:	UDT
Part number:	P867RA modified - connector replaced
Serial number:	
Cable length:	3 ft
Connector:	Compushield
Connects to:	Extension cable
For use on:	Sensormedics
Tested on:	Sensormedics Sat-Trak
Red peak wavelength:	661
Infra red peak wavelength:	*940
LED configuration:	3 lead



Spectrometer: Prema SPM 9001

Manufacturer of probe: UDT
 Part number: P867RA
 Serial number: 8D06303
 Cable length: 12 ft
 Connector: Hypertronics
 Connects to: Interface/extension cable

For use on: Sensormedics
 Tested on: Sensormedics Sat-Trak

Red peak wavelength: 661 nm
 Infra red peak wavelength: 940 nm

LED configuration: 3 lead