Initial MOBY Results

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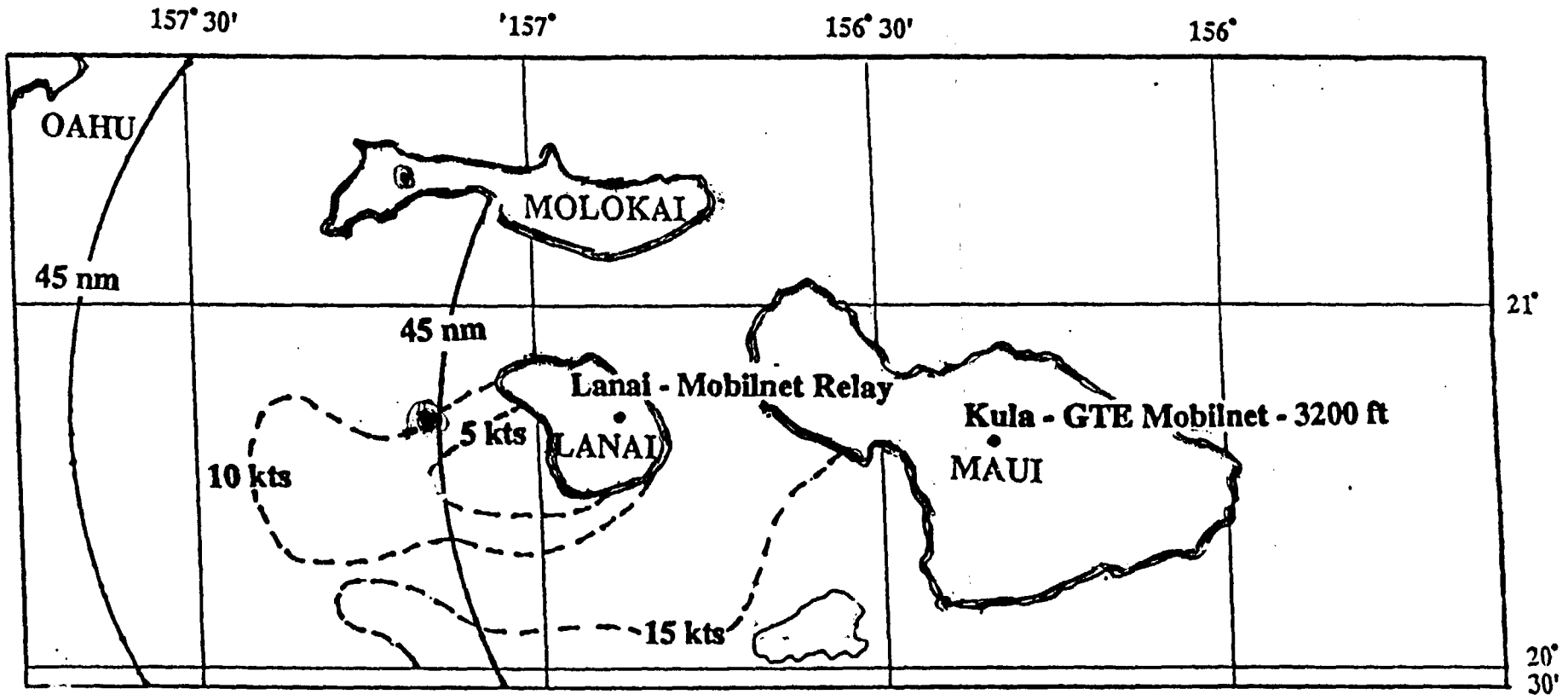
MODIS Team Meeting
May 4-6, 1994

MOBY - Major Objectives

1. Provide a continuous time-series of high spectral resolution water-leaving radiances for quality assessments of Ocean Color Flight Instruments.

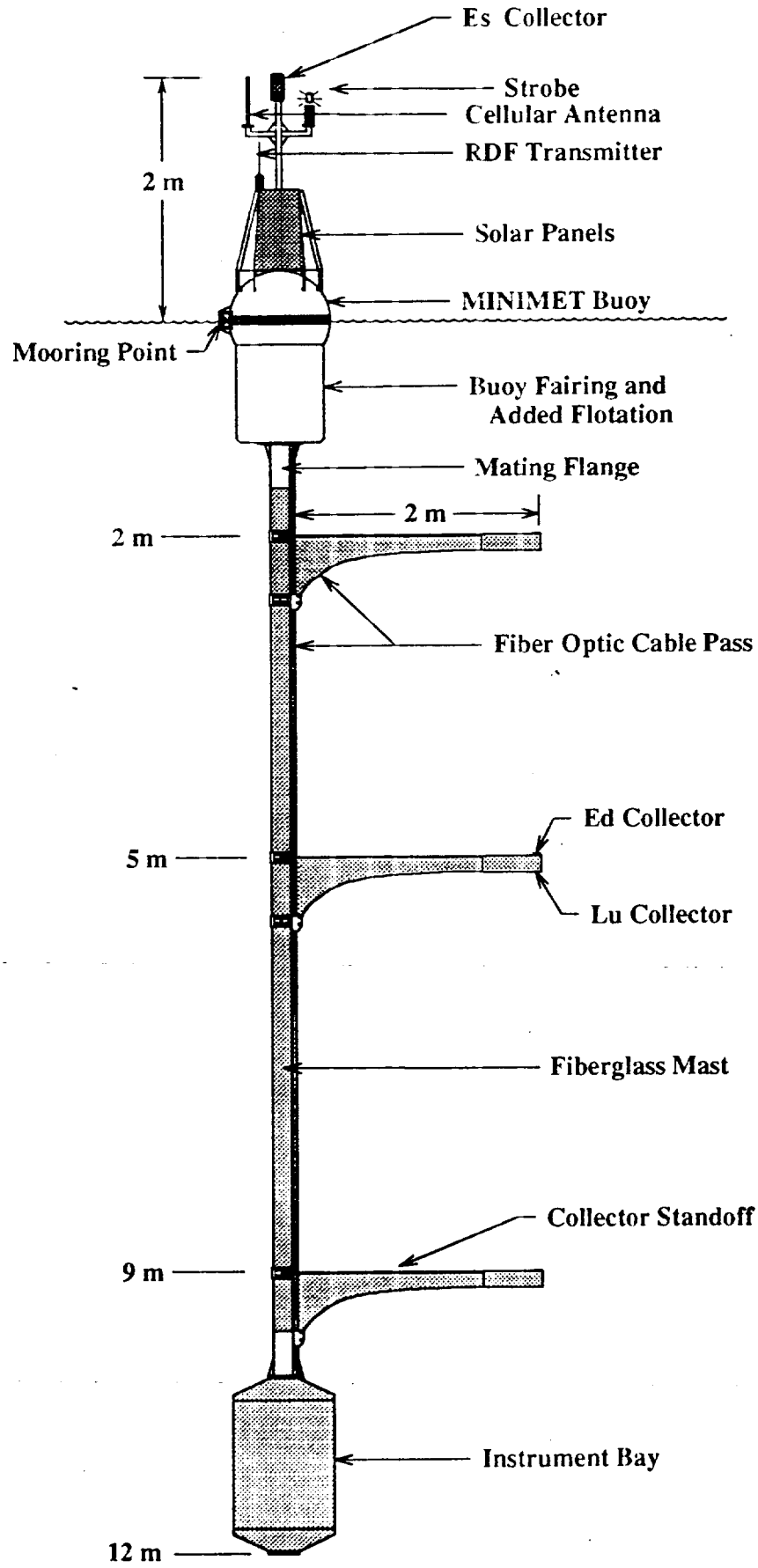
2. Characterize the bias of the derived pigment fields induced by the observational contraint of a sun synchronus orbit by optically measuring the temporal variability with the phytoplankton at various photoadaptive states.



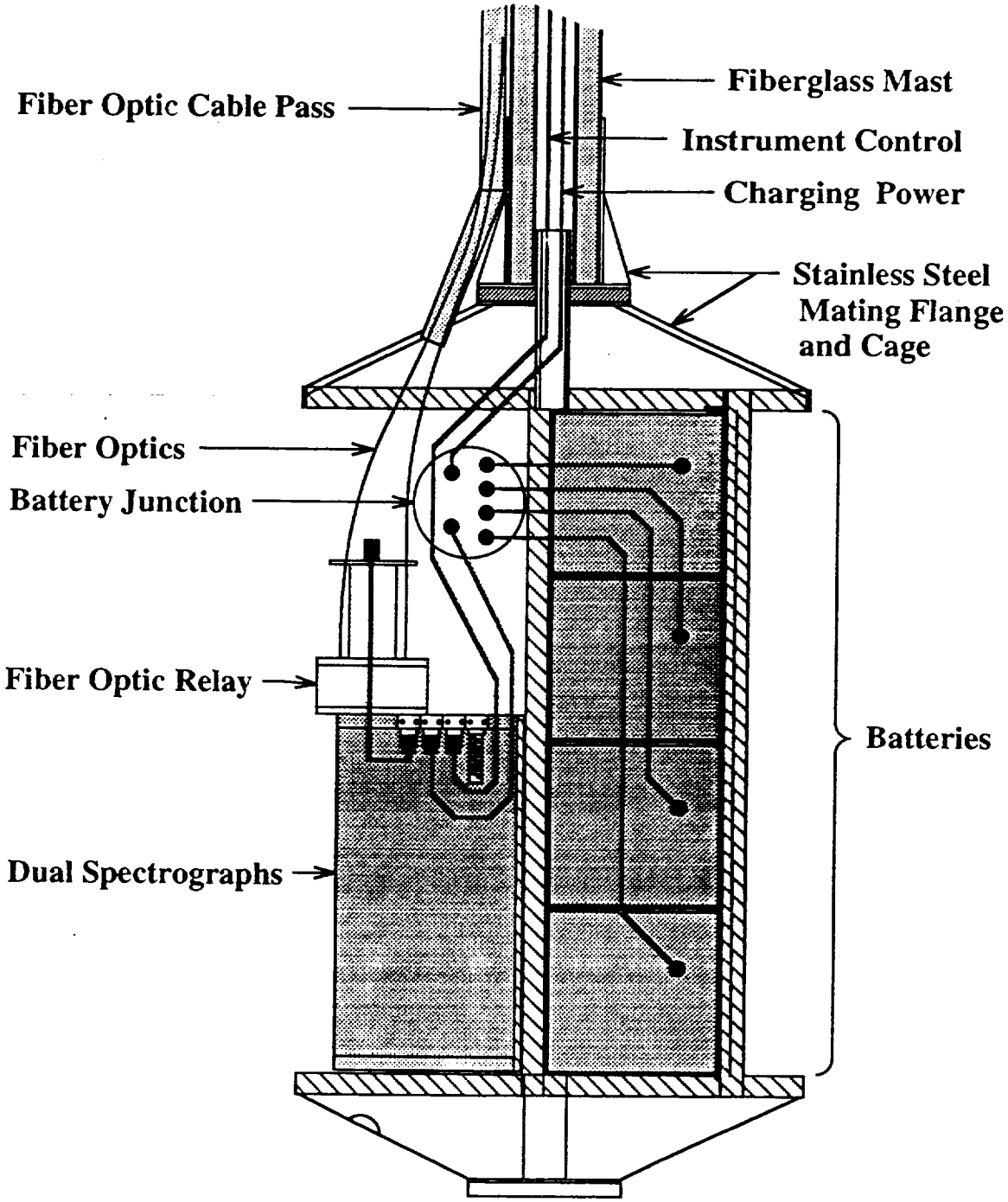
Moby 1 Deployment Site - Lanai

FIGURE 6.

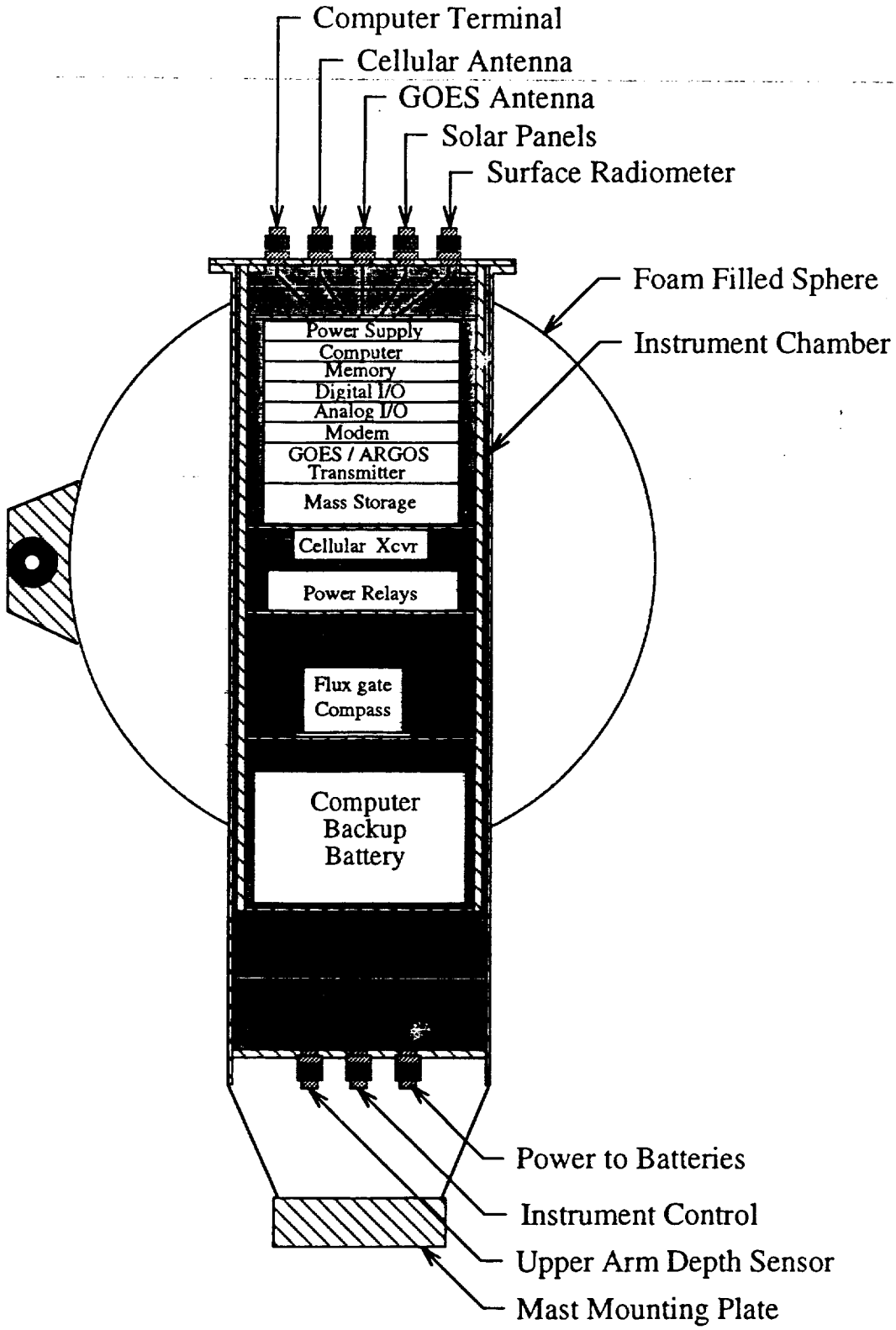
MARINE OPTICAL BUOY



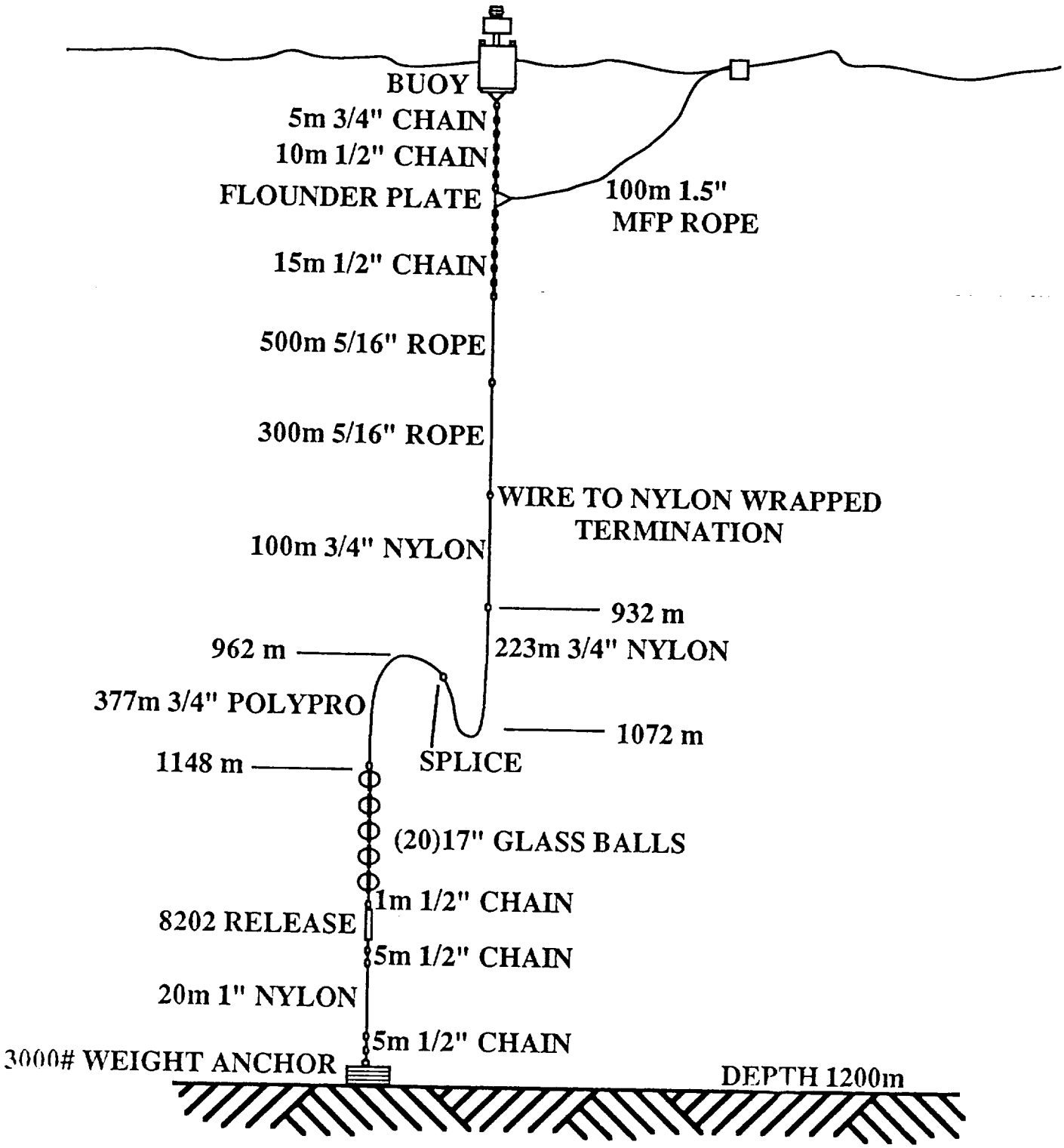
Subsurface Instrument Bay



SURFACE BUOY INSTRUMENTATION



MOBY PROTOTYPE MOORING
LANAI HAWAII - OCT. 1993



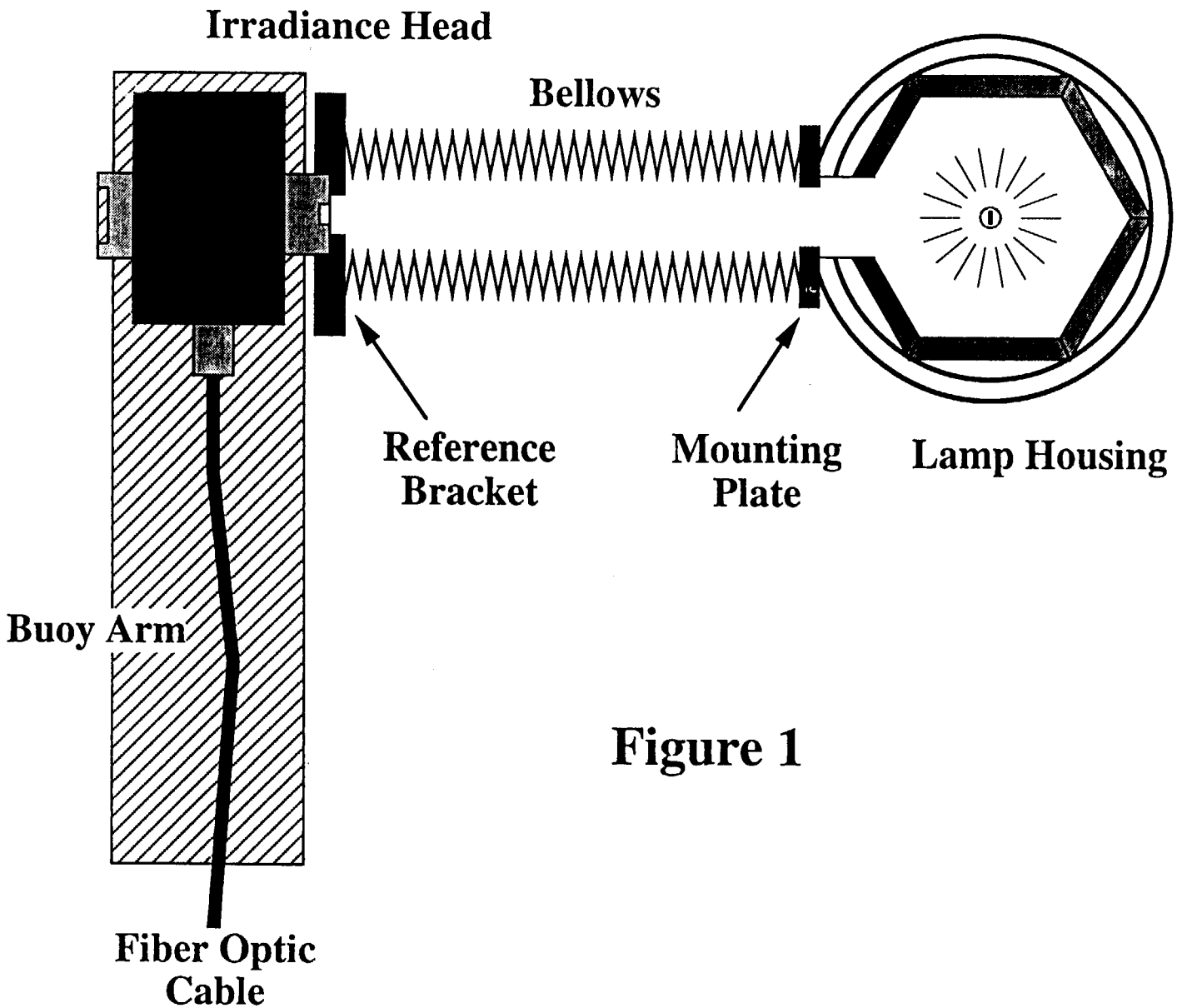

Irradiance Head
Bellows
Reference Bracket
Mounting Plate
Lamp Housing
Buoy Arm
Fiber Optic Cable

Figure 1

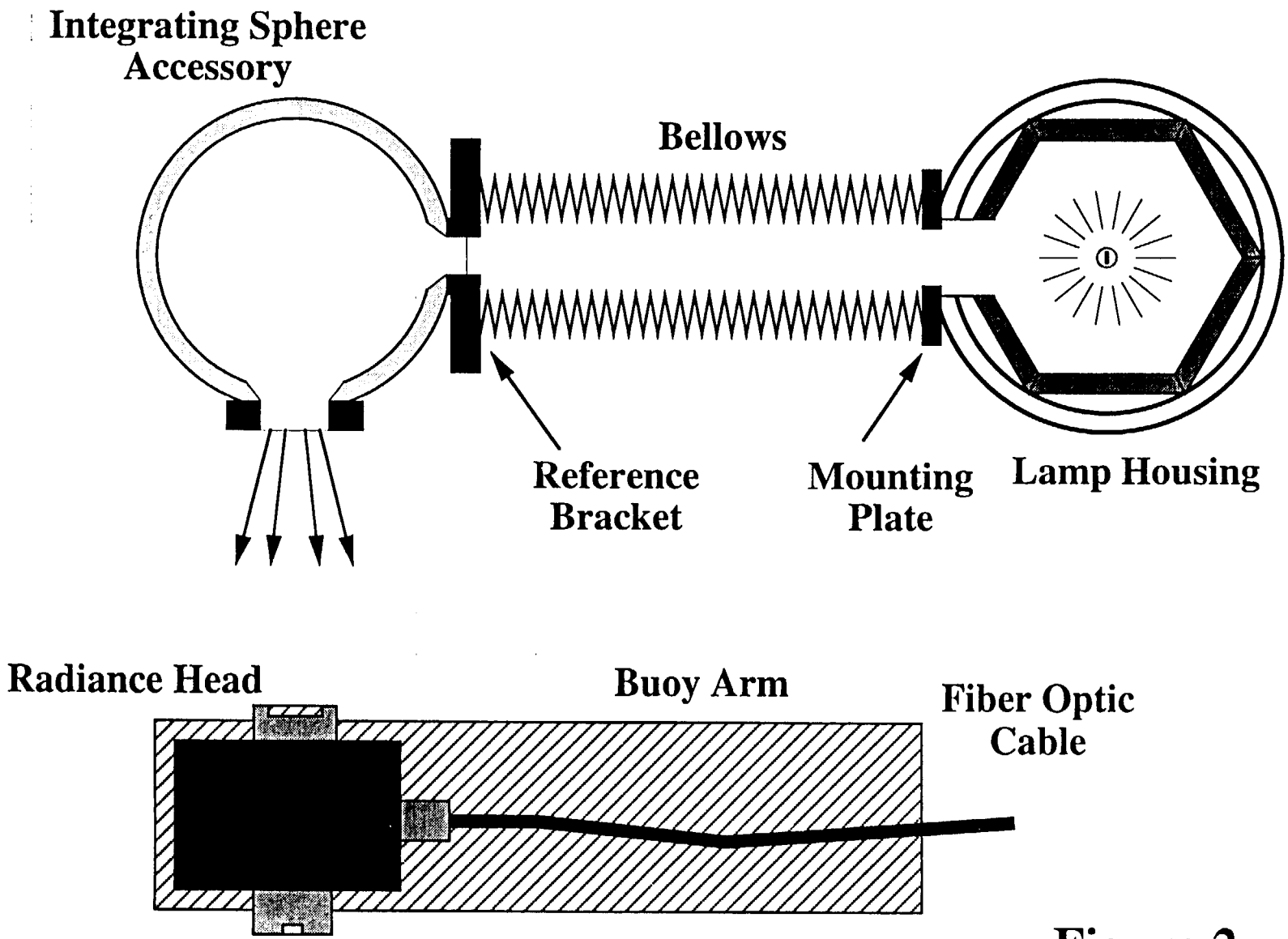

Integrating Sphere Accessory
Bellows
Reference Bracket
Mounting Plate
Lamp Housing
Radiance Head
Buoy Arm
Fiber Optic Cable

Figure 2

Figure 3
SXR radiance comparison of NOAA sources

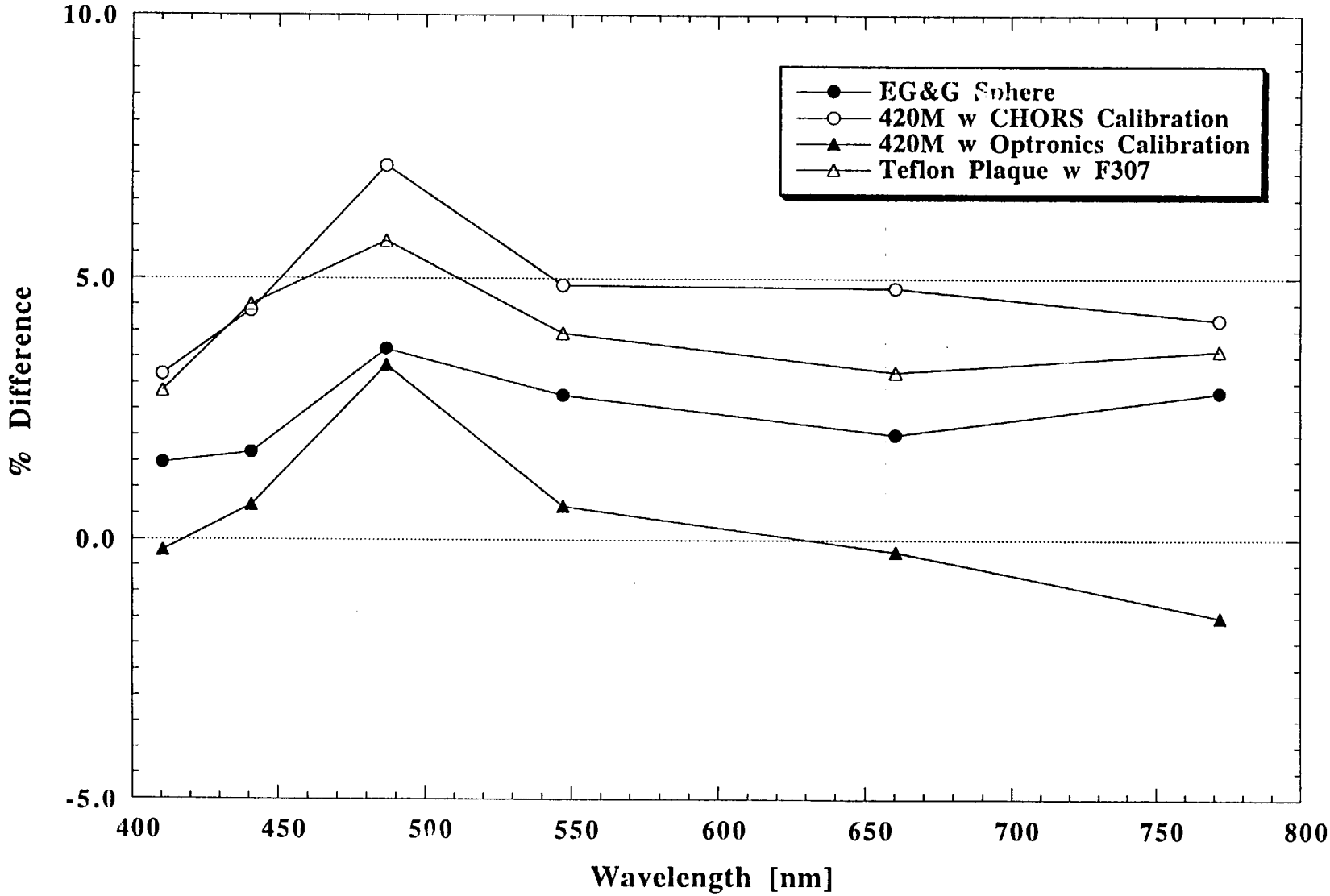
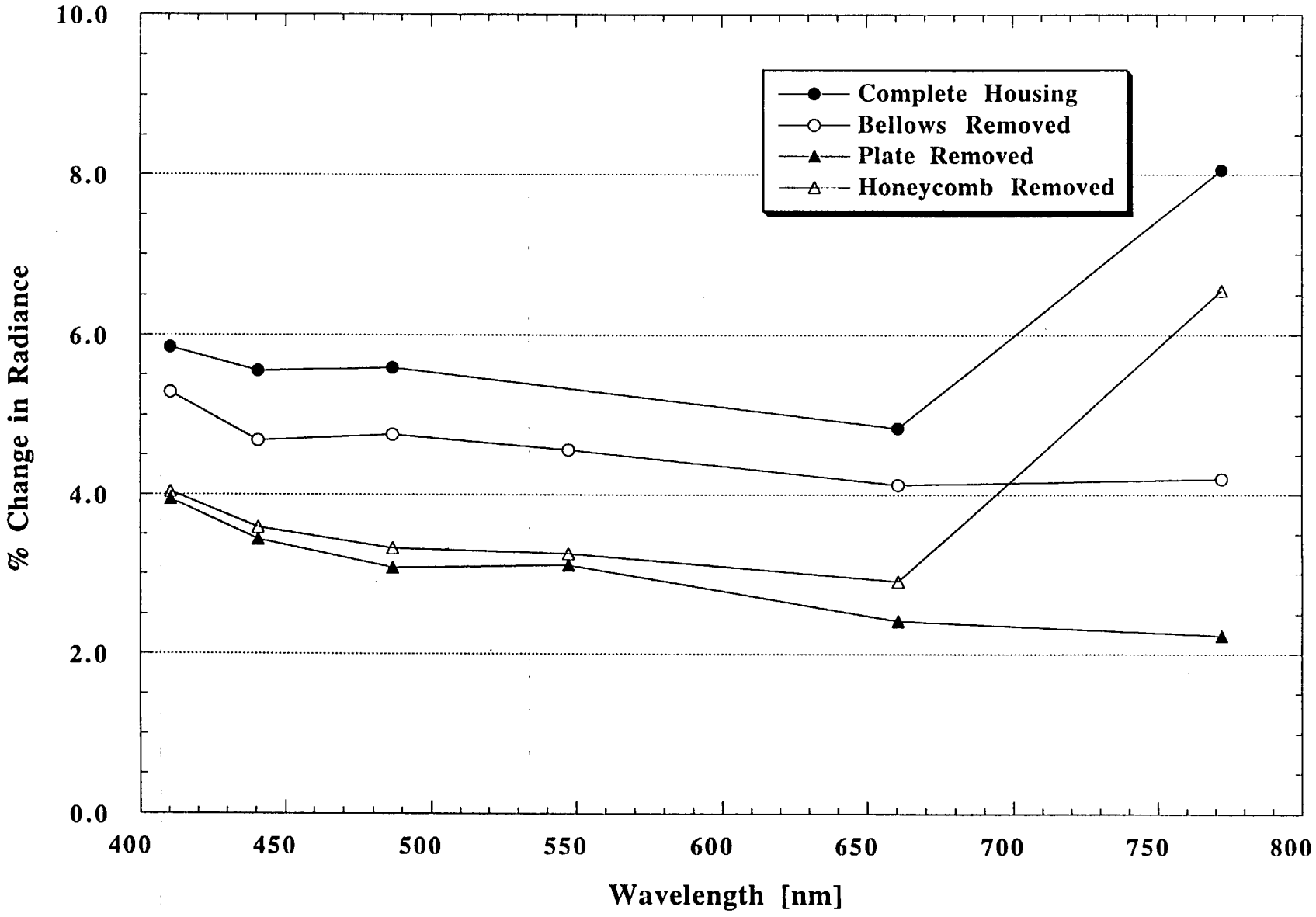


Figure 4
EG&G Housing Tests



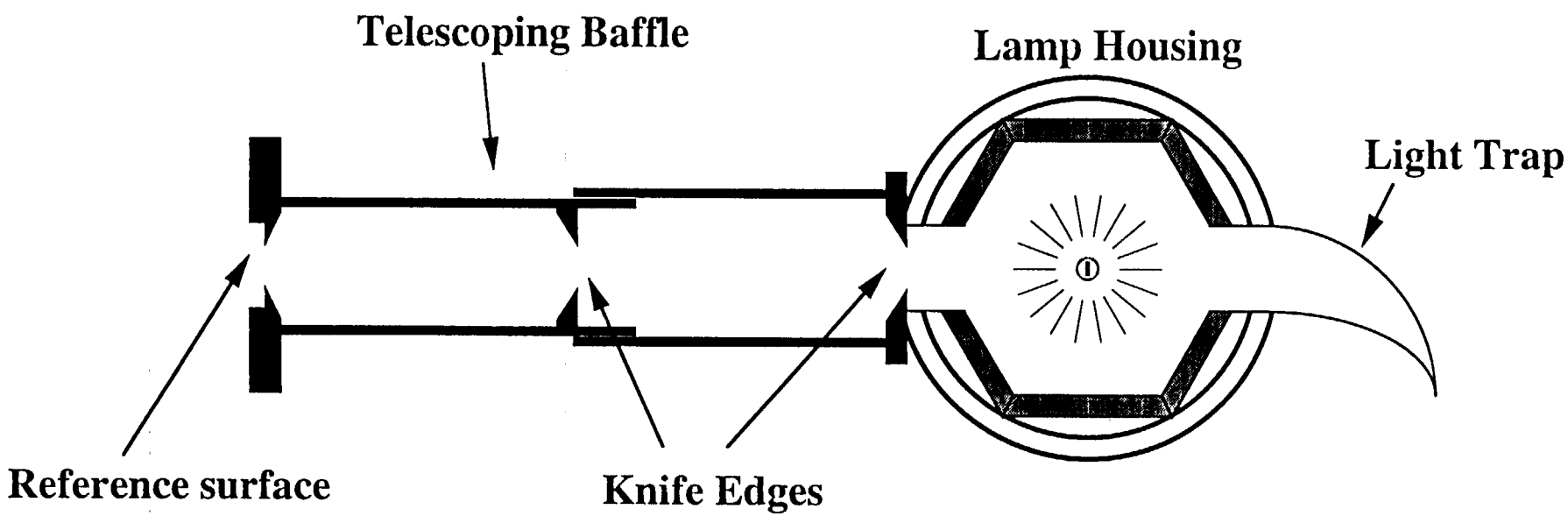
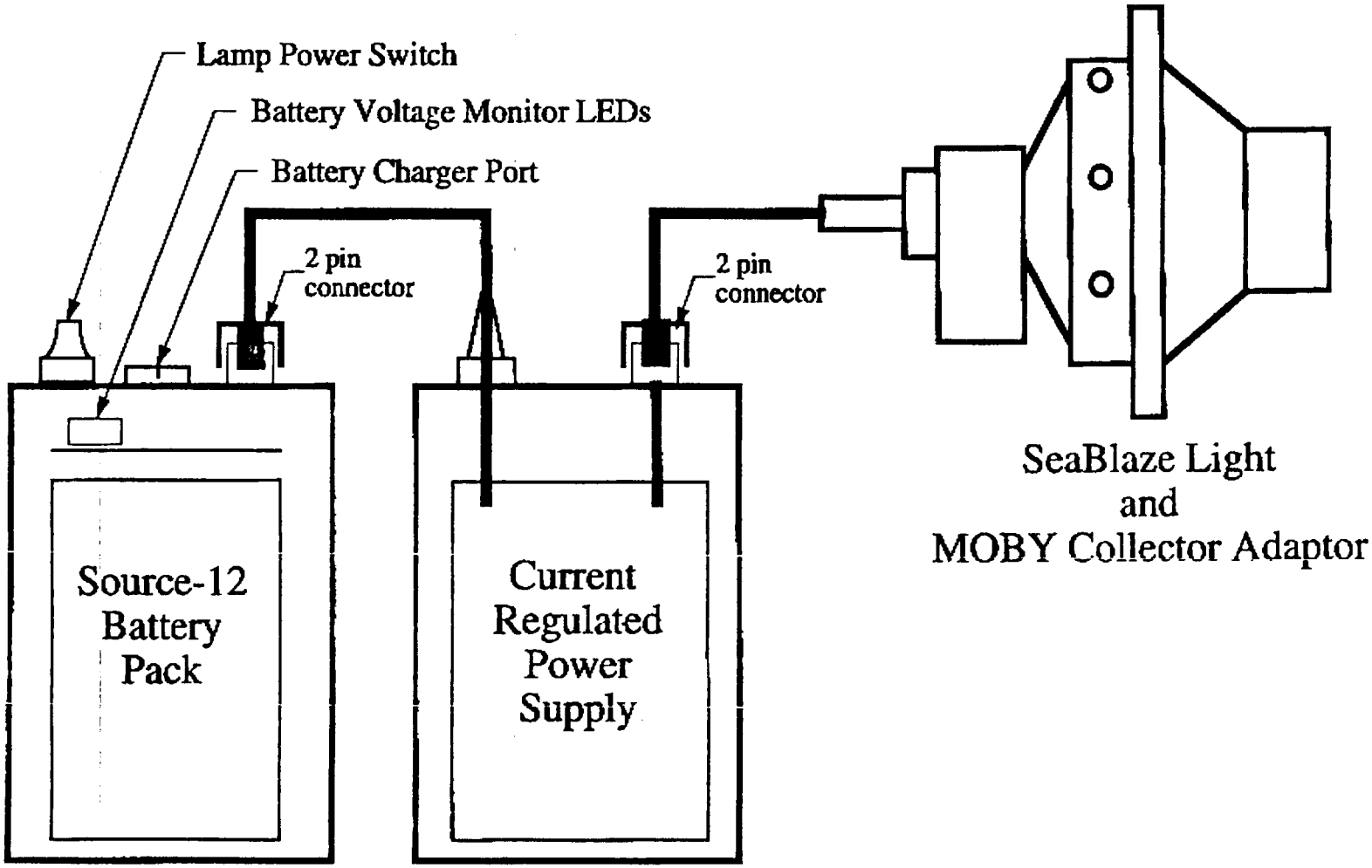

Telescoping Baffle
Lamp Housing
Light Trap
Reference surface
Knife Edges

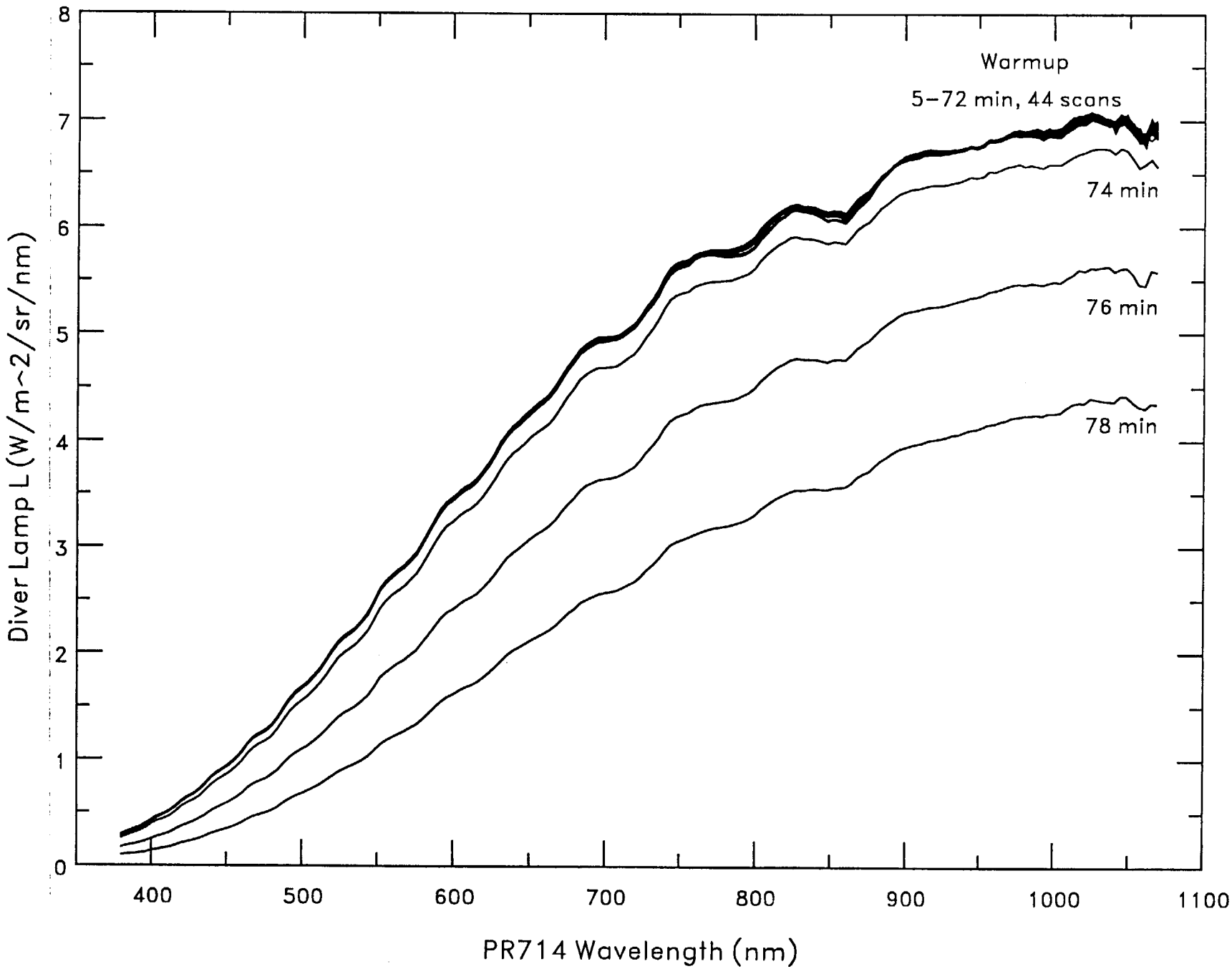
Figure 5



Moss Landing Marine Laboratories

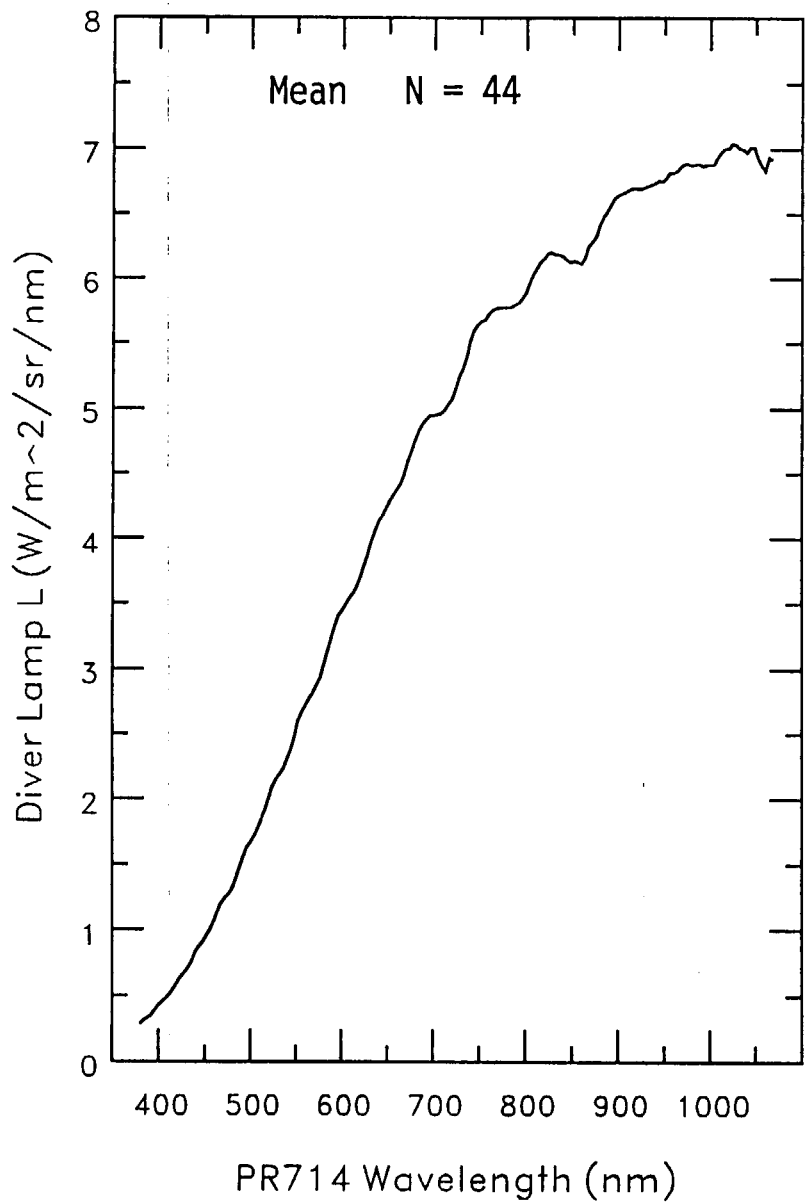
Underwater Calibration Lamp Assembly

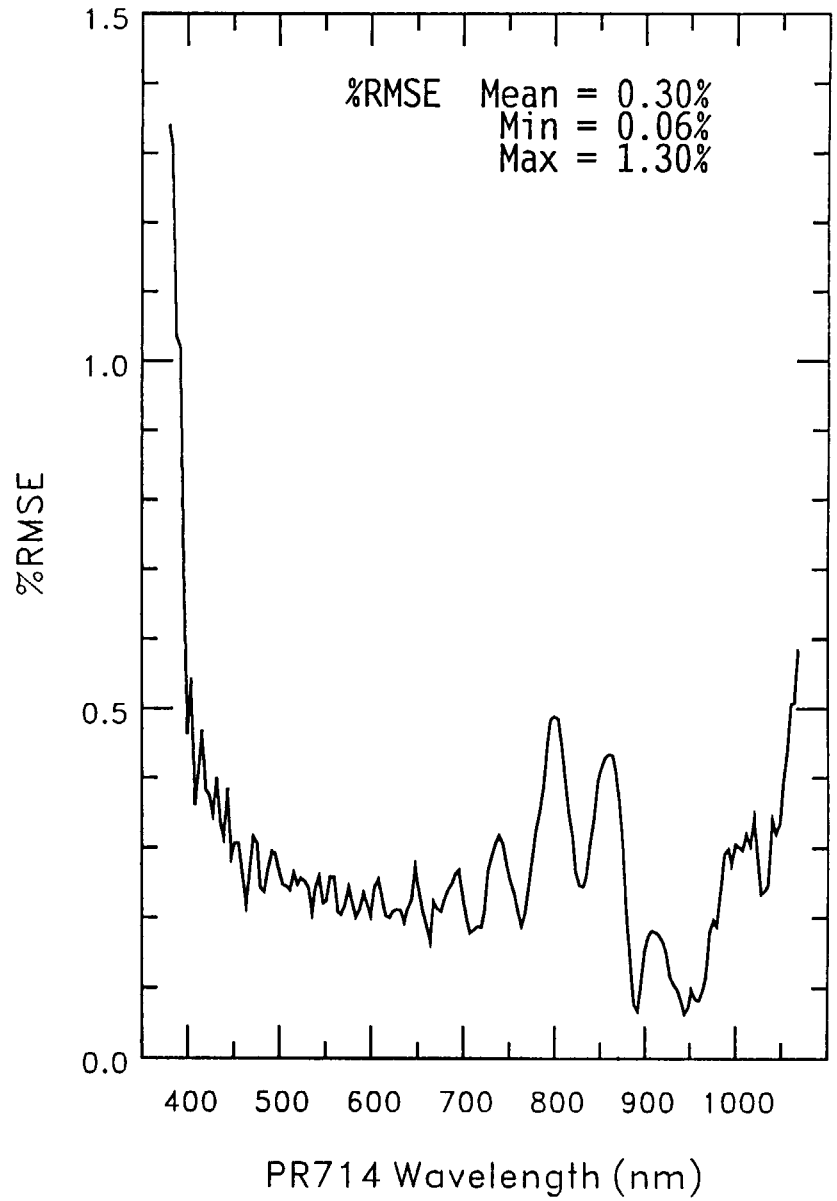
Mark Y. 19 April 1994



DIVER←LAMP←STABILITY←COMPILED

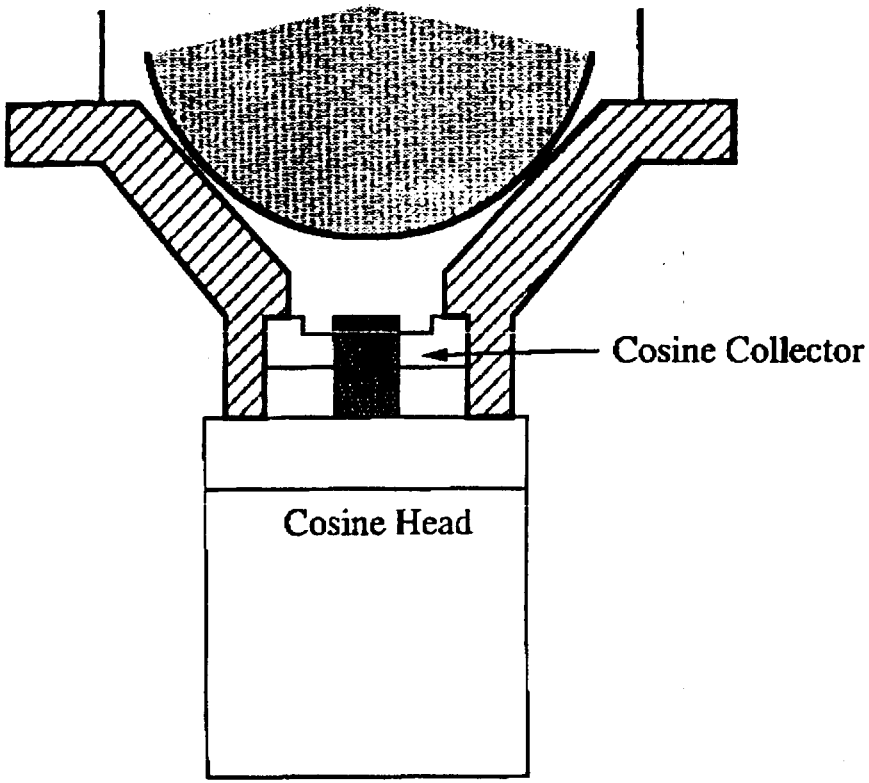
NOAA 03 May 94



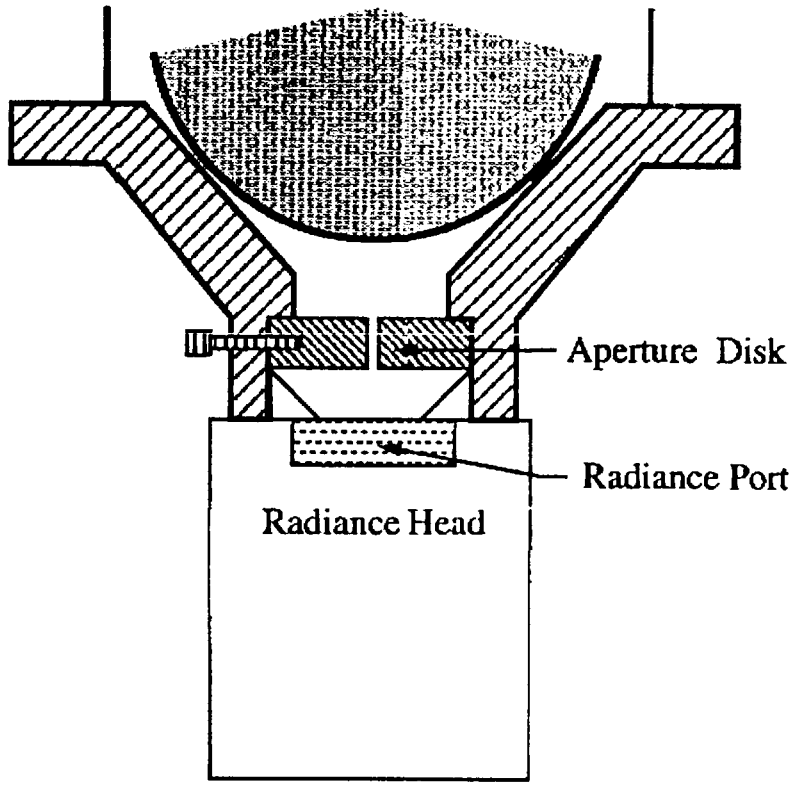


DIVER←LAMP←STABILITY←COMPILED

NOAA/MLML (MF) 03 May 94



MOBY Cosine Collector Setup

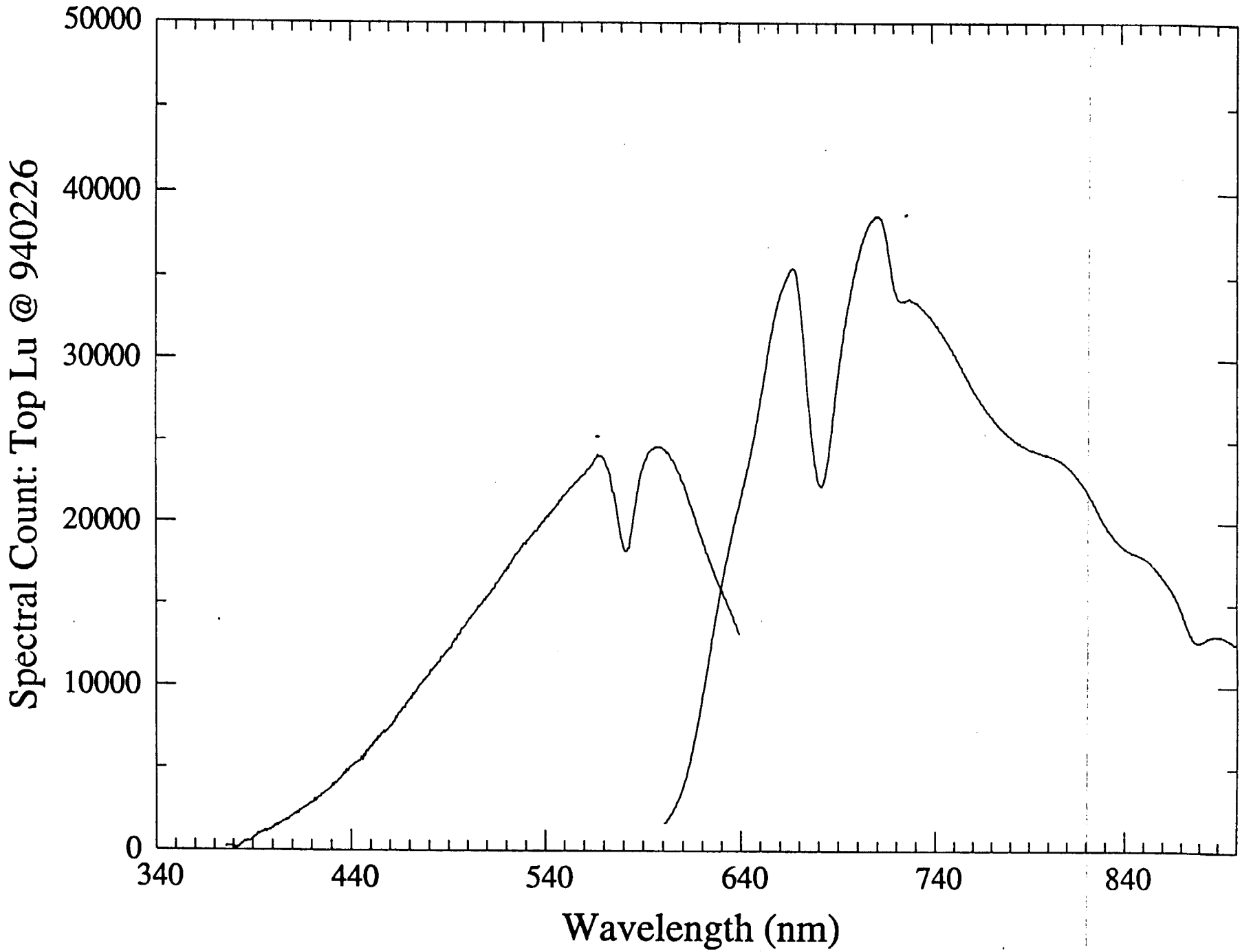


MOBY Radiance Collector Setup

Moss Landing Marine Laboratories

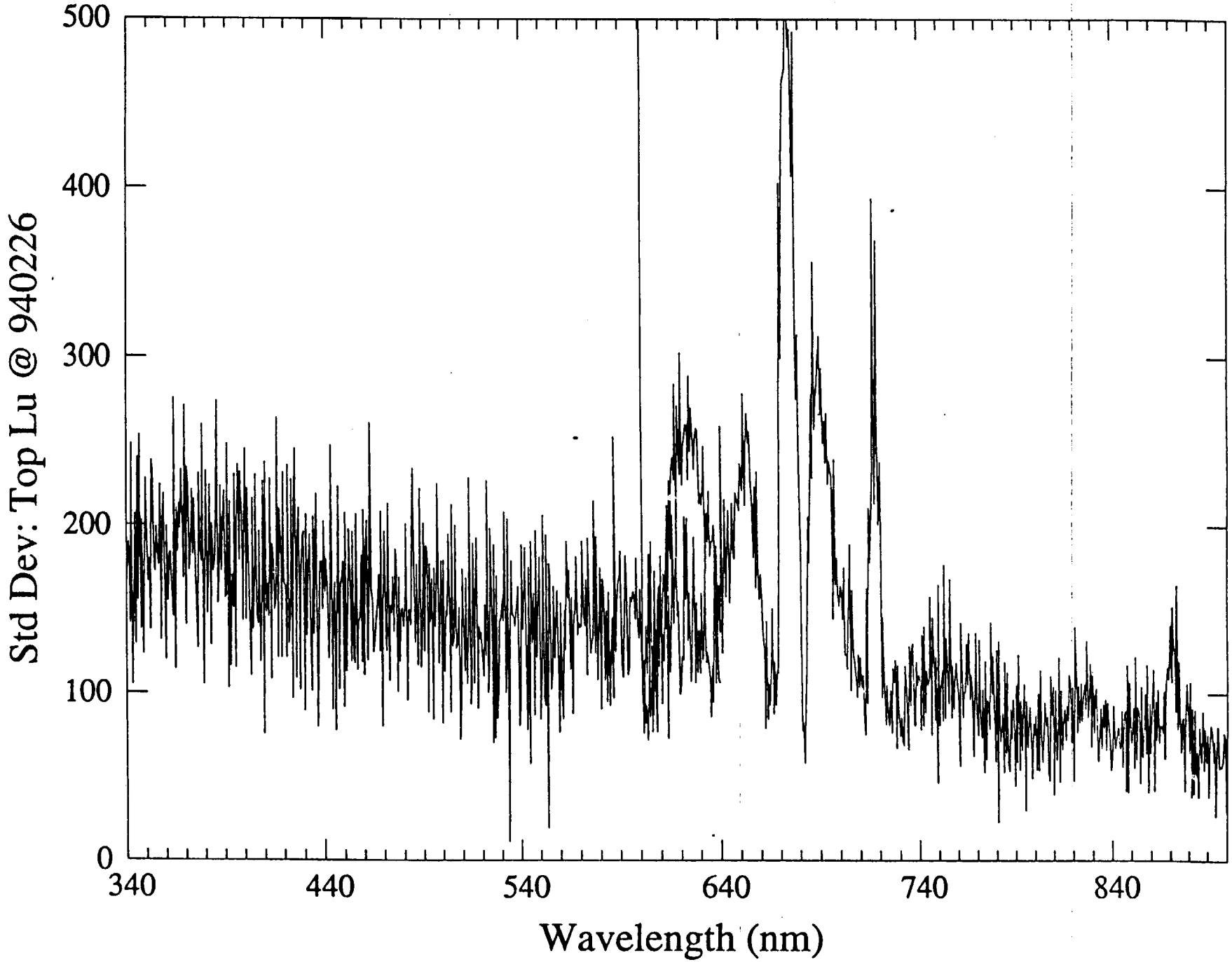
Underwater Calibration Lamp
Alignment Jig Setups

Mark Y. 20 April 1994



MOBYCAL_RATIO

MLML/NOAA 27 Feb 94



MOBYCAL_RATIO

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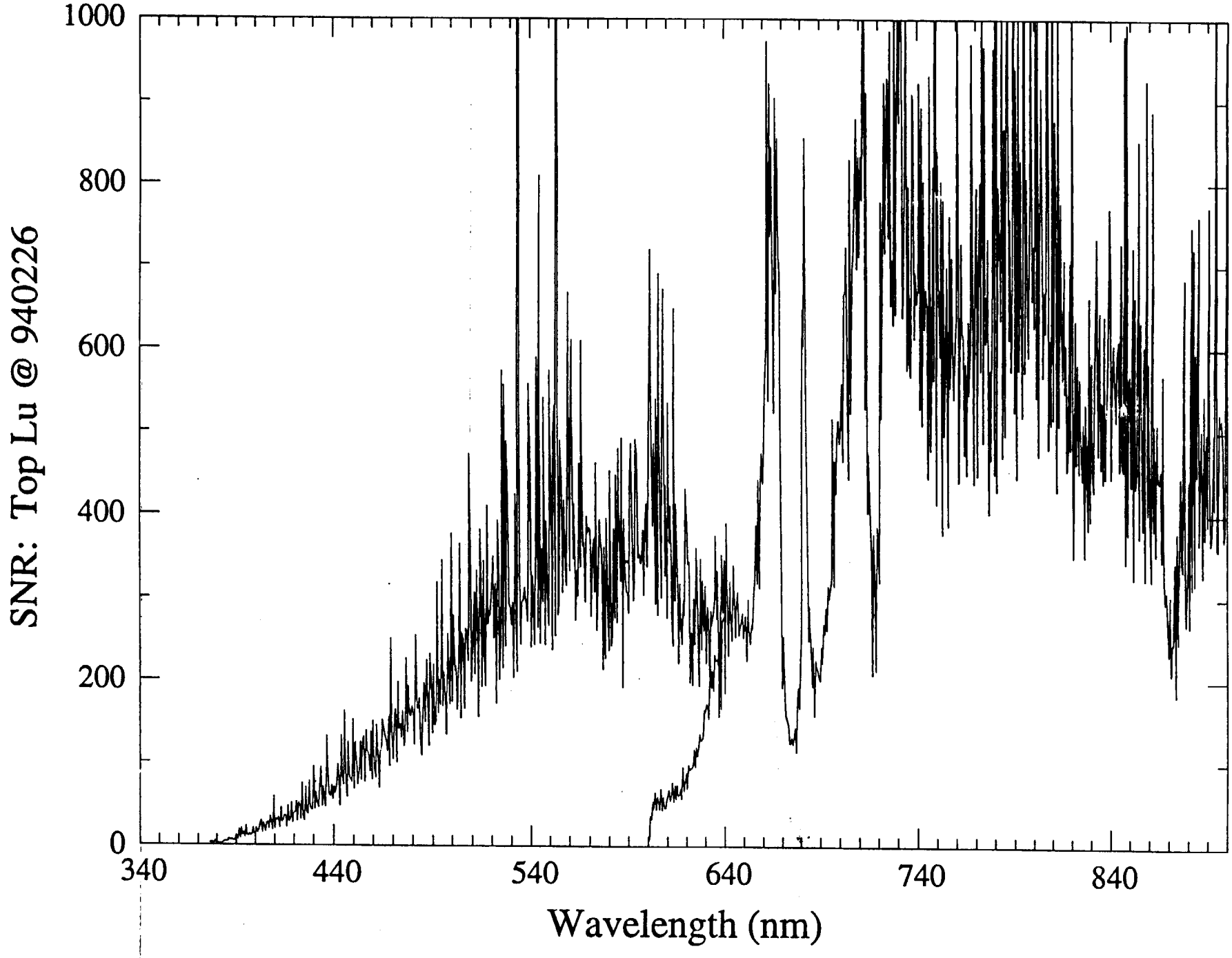

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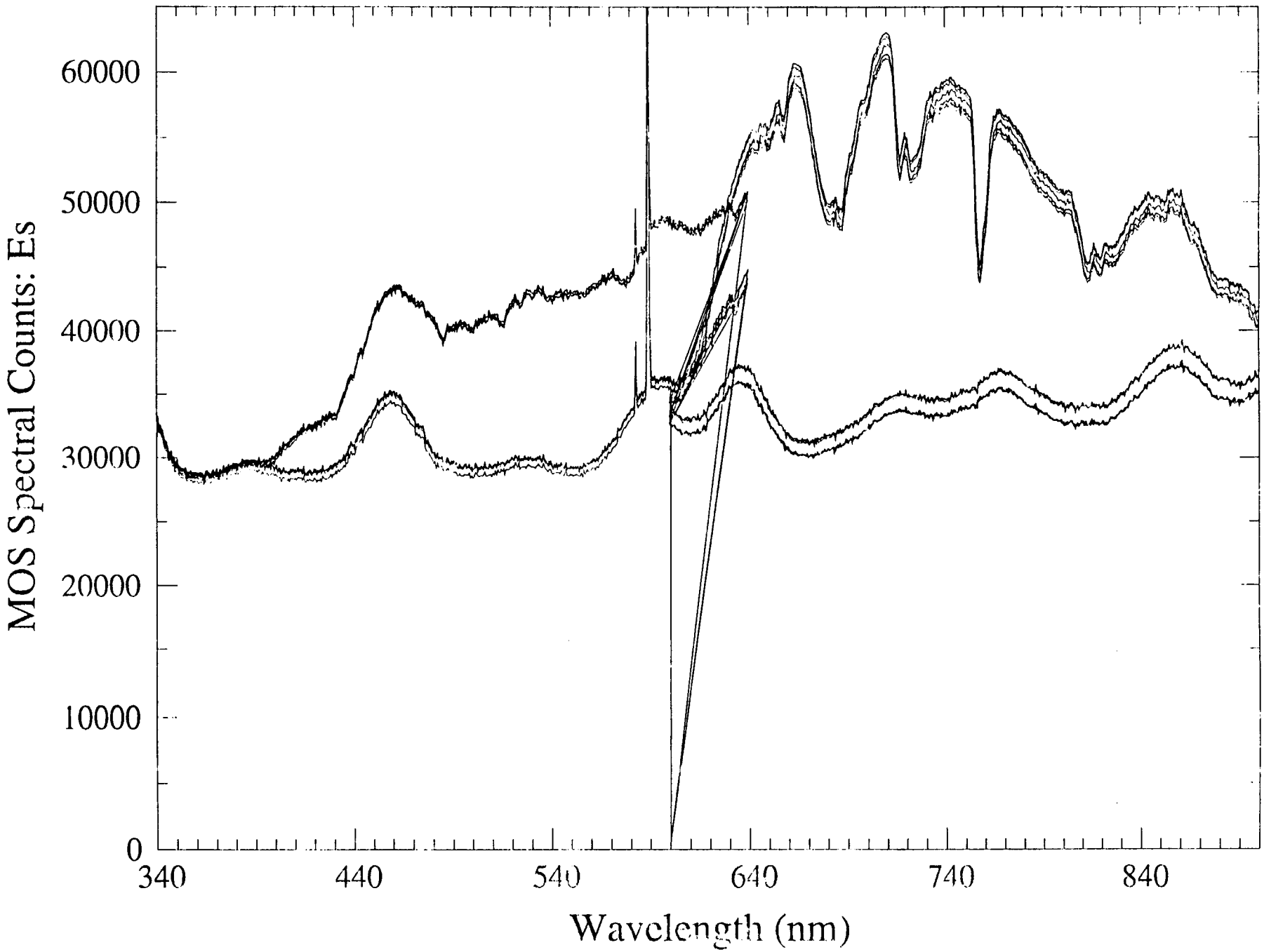

MOBY_940225

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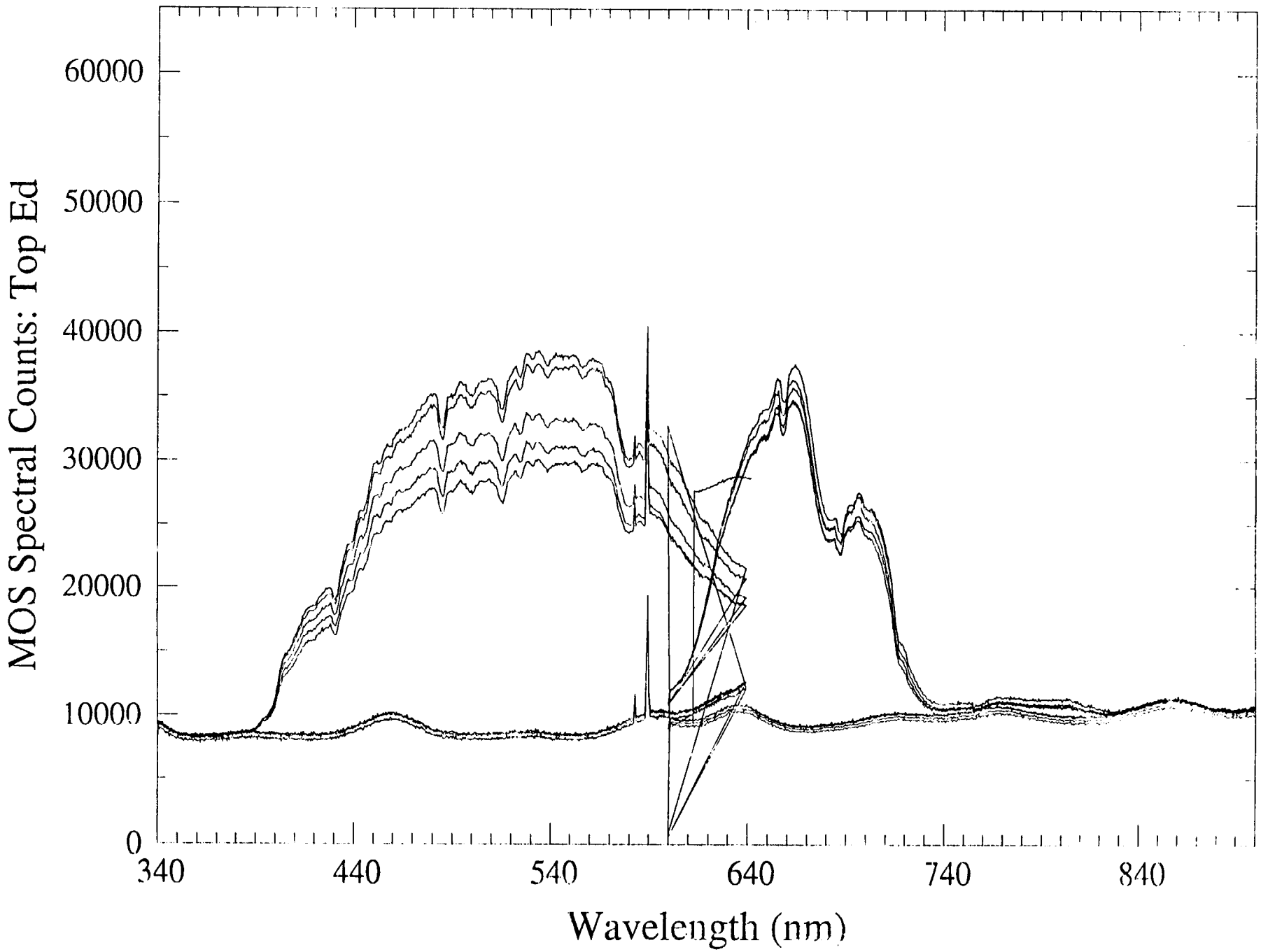

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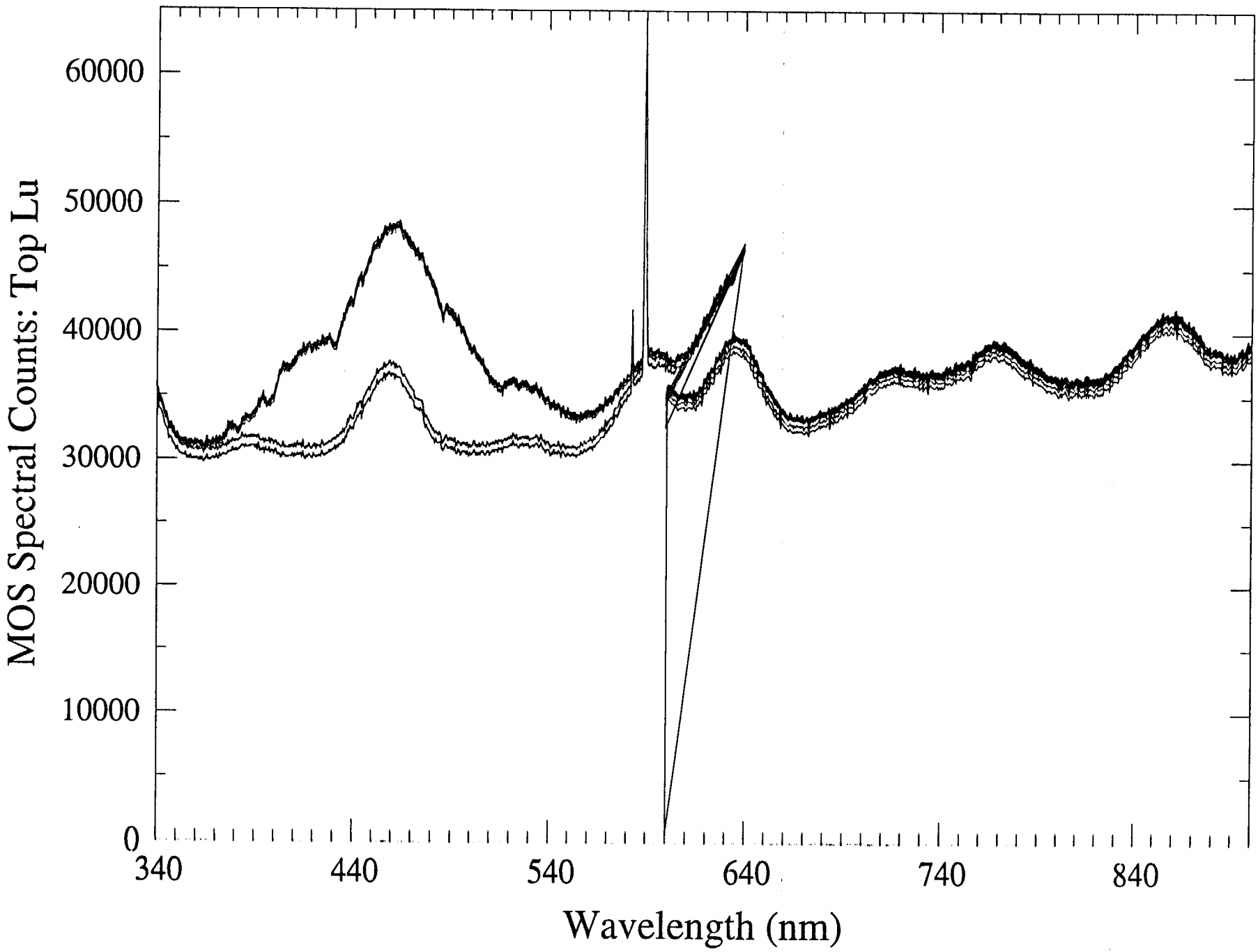

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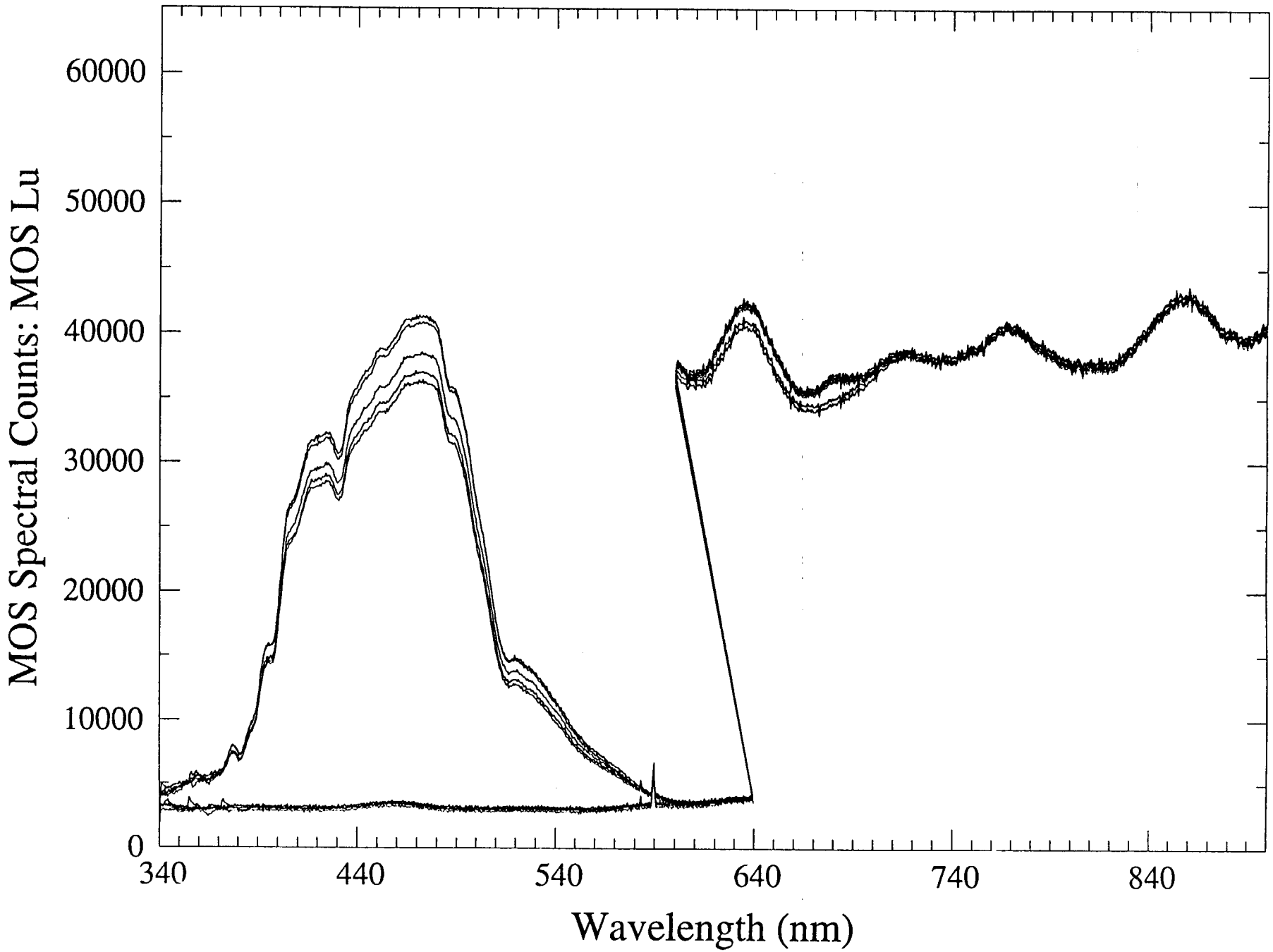


MOBY_940225

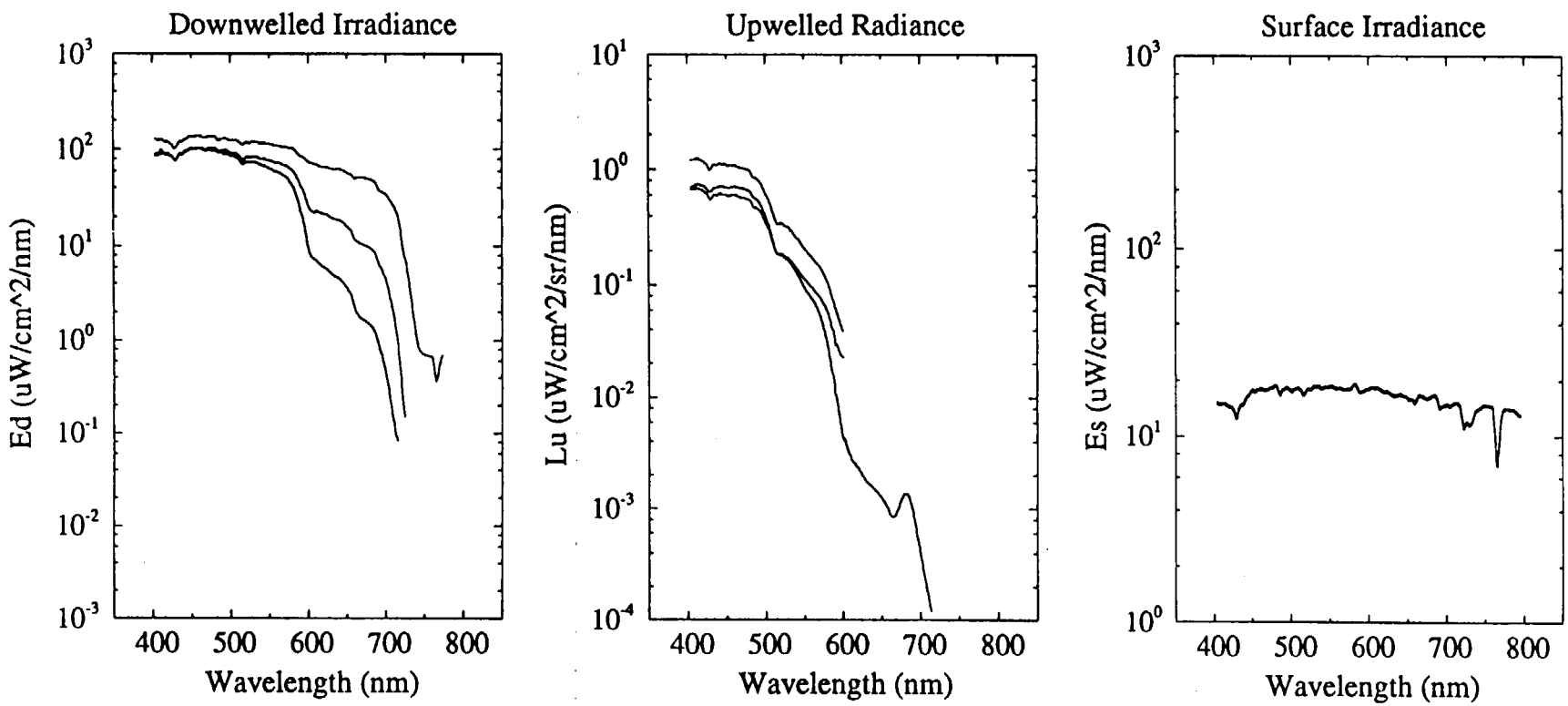
MLML/NOAA 26 Feb 94

MODIS Marine Optical Buoy Experiment NOAA/MLML

Hawaii Time Series Experiment
STATION: Lanai - L1

Top = 2 m
Mid = 5 m
Bot = 10 m

POSITION: 20°49.0 N 157°11.5 W
DATE: 22:00 (GMT) 25 Feb 1994



MLML (MF) 29 Apr 94