

REGISTRY OF RADIOACTIVE SEALED SOURCES AND DEVICES
SAFETY EVALUATION OF SEALED SOURCE

NO: NR-155-S-103-S

DATE: MAR 8 1983

PAGE 1 OF 1

SOURCE TYPE: Radioluminous Lamp

MODEL: 10556228

MANUFACTURER/DISTRIBUTOR:

Department of the Army
U.S. Army Armament Material
Readiness Command (DRSAR-SF) ---
Rock Island, IL 61299

MANUFACTURER/DISTRIBUTOR:

ISOTOPE: Hydrogen-3

MAXIMUM ACTIVITY: 0.8 curies

LEAK TEST FREQUENCY: See License No. 12-00722-06

PRINCIPAL USE: (R) Gas Sources, for use in the Model M113A1 panoramic telescope.

DIAGRAM: See Attachments 1 and 2.

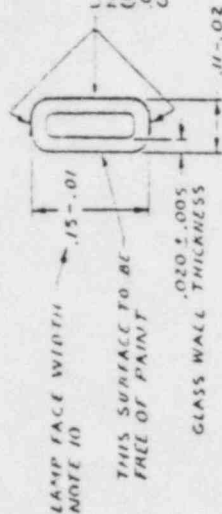
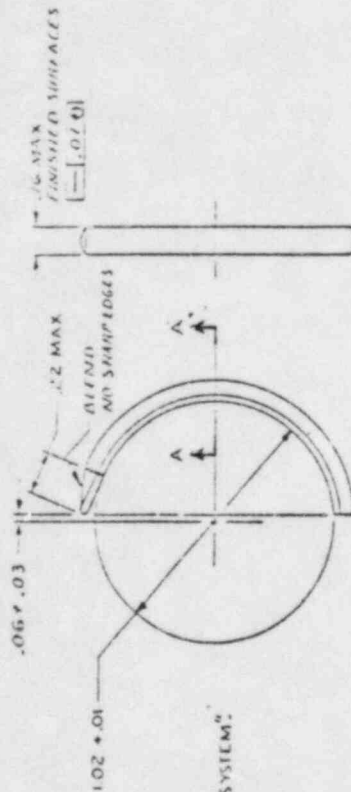
CUSTOM DEVICE: X YES NO

CUSTOM USER:

U.S. Department of Defense
8403020038 840209
PDR FOIA
HAMMITT84-74 PDR

REFERENCES: This registration document was formulated from information contained within U.S. Dept. of Army License No. 12-00722-06.

ISSUING AGENCY: U.S. Nuclear Regulatory Commission



LACQUER, ACRYLIC, COLOR WHITE
NO FIBERS, SPEC MIL-L-10352
(FIL LENGTH OF VIAL)
.005 MAX THICKNESS AS SHOWN
CAUTION: PAINT NOT TO EXTEND
INTO CORNER RADIUS.

SECTION A-A
SCALE: 10/1

SUGGESTED SOURCES OF SUPPLY	VENUE FOR PURCHASE
1-1000 PONTIAC LIGHTING LTD 10 WEST CHURCH PLAZA PONTIAC, MI 48302 CODE 1000000000000000	NOT AVAILABLE
2-1000 PONTIAC LIGHTING LTD 425 S. PLUMMER AVE TUCSON, AZ 85717 CODE 1000000000000000	NOT AVAILABLE
3-1000 PONTIAC LIGHTING LTD 4150 OLD CRAWFORD RD BLOOMINGDALE, IL 61705 CODE 1000000000000000	NOT AVAILABLE
4-1000 PONTIAC LIGHTING LTD WESTLAND GROUP NORTH WADE RD HAWES, MISSISSIPPI 39305 UNITED KINGDOM	NOT AVAILABLE

SPECIFICATION CONTROL DRAWING
PART NO 1055622B

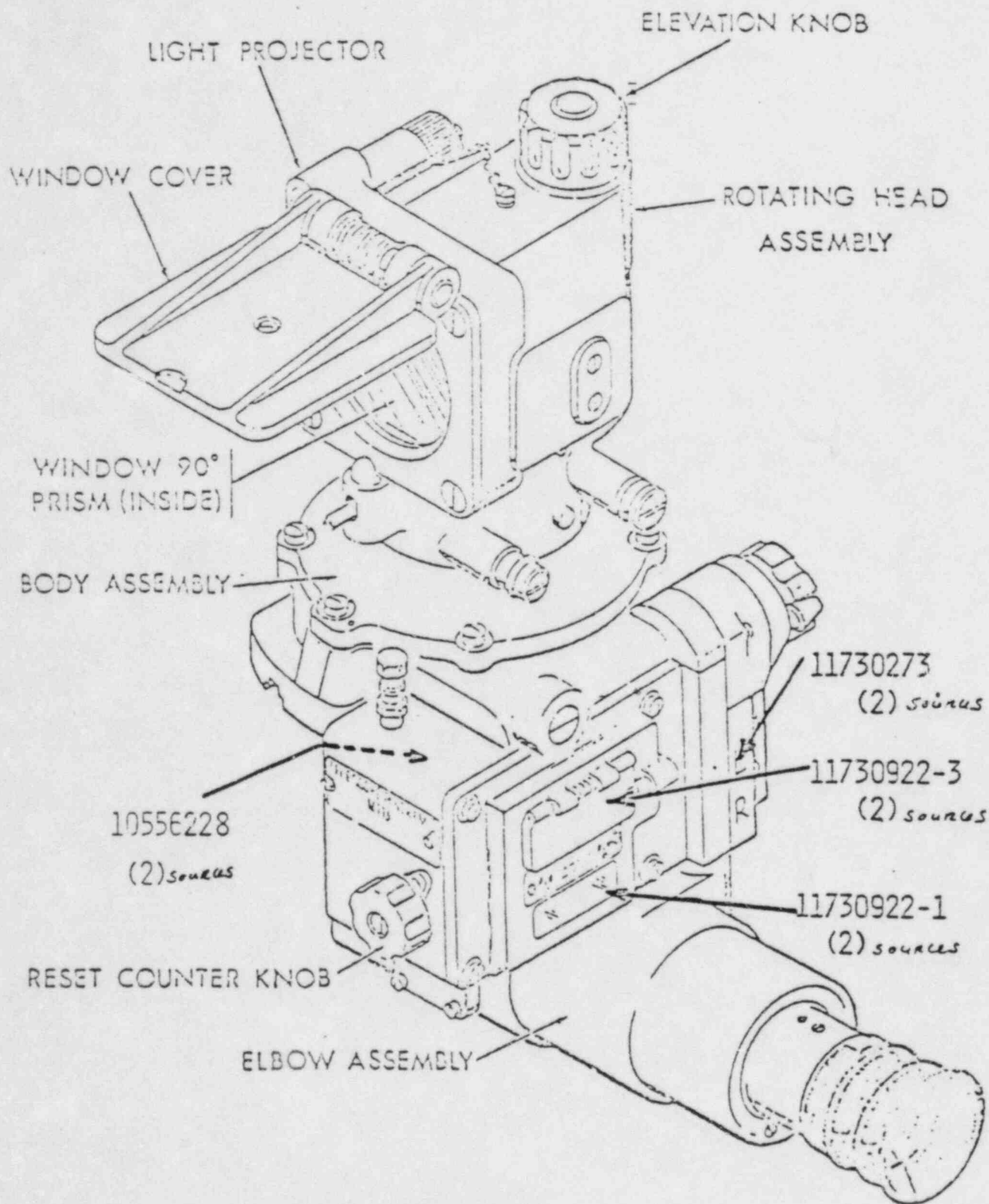
LAMP, RADIOLUMINOUS

D 19200 1055622B

- NOTE 5:-
REQUIREMENTS:
1- MARKING, LABELING AND SHIPPING OF PACKAGES
AND CONTAINERS SHALL BE IN ACCORDANCE WITH
DIA 4145.8 "RADIOACTIVE COMMODITIES IN THE DOD SUPPLY SYSTEM."
2- THERE SHALL BE NO EVIDENCE OF PHYSICAL FAILURE
SUCH AS FRACTURING OF LIGHT LOSS DUE TO
EXPOSING THE LIGHT SOURCE TO -80° AND +160° F
FOR A PERIOD OF EIGHT HOURS AT EACH TEMPERATURE.
3- SUBSEQUENT TO SUBMERGING THE LIGHT SOURCE IN
WATER FOR 4 HOURS AT ROOM TEMPERATURE,
RADIOACTIVE CONTENT OF THE WATER SHALL NOT
EXCEED .005 MICROCURIE.
4- INITIAL BRIGHTNESS: BRIGHTNESS 25 DAYS AFTER MANUFACTURE
SHALL BE 520 MICROLAMBERTS MINIMUM. THIS BRIGHTNESS SHALL
BE CONSIDERED INITIAL BRIGHTNESS.
5- DECAY RATE: INITIAL BRIGHTNESS SHALL NOT DECAY MORE THAN
SIX (6) % MEASURED 90 DAYS AFTER THE INITIAL BRIGHTNESS READING.
6- VIAL TO BE FILLED WITH 99% PURE (LESS THAN 1% TRITIUM OXIDE)
TRITIUM (H₃); 0.80 CURIE MAX.
7- COLOR OF PHOSPHOR: GREEN SPECTRAL PEAK 5250 Å ± 50 Å,
1/2 PEAK WIDTH 700 Å ± 50 Å.
8- MINIMUM LIGHTED AREA 0.17 IN².
9- THE MICROLAMBERT UNITS SHOULD BE ESTABLISHED BY A
METHOD TRACEABLE TO THE ARMY METROLOGY
CALIBRATION CENTER REDSTONE ARSENAL, ALABAMA.
10- BRIGHTNESS MEASUREMENT SHALL BE MADE ON THE
CENTER OF THE LAMP WITH A CIRCULAR APERTURE
BETWEEN 50% AND 75 % OF LAMP FACE WIDTH.
11- VIAL MATERIAL: GLASS, TYPE I, CLASS A, SPEC DD-G-541.

IDENTIFICATION OF THE "SUGGESTED SOURCE(S) OF SUPPLY"
HEREON IS NOT TO BE CONSTRUED AS A GUARANTEE OF PRESENT
OR CONTINUED AVAILABILITY AS A SOURCE OF SUPPLY FOR
THE ITEM(S).

SOURCE USED ON:
M113A1 Pantel



Panoramic Telescope M113A1 (1240-150-6636)
Radioactive (Left Front View)