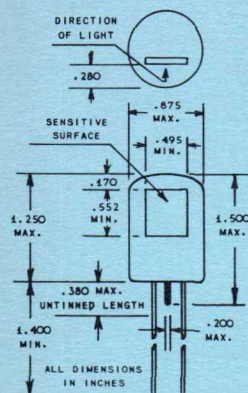


TUNG-SOL

PHOTOCONDUCTIVE CELL



FOR LIGHT CONTROLLED
RELAY OPERATIONS

2 FLEXIBLE
LEADS
TINNED
DIA. .018"±.003"

ANY MOUNTING POSITION

THE 8217 IS A SIDE ILLUMINATED CADMIUM SULPHIDE PHOTOCONDUCTIVE NON-POLARIZED CELL, HERMETICALLY SEALED IN A GLASS ENVELOPE WITH TWO FLEXIBLE DUMET LEADS. THIS CELL WAS DESIGNED FOR STREET LIGHT CONTROLLER SERVICE AND FOR OTHER LIGHT CONTROLLED RELAY OPERATIONS.

GENERAL

SPECTRAL RESPONSE (SEE FIGURE 1)
WAVELENGTH OF MAXIMUM RESPONSE

S15
5800±500

ANGSTROM
UNITS

MAXIMUM RATINGS

ABSOLUTE MAXIMUM SYSTEM - SEE EIA STANDARD RS-239

APPLIED VOLTAGE (DC OR PEAK AC)

300

VOLTS

CURRENT^A

20

MA.

POWER DISSIPATION^A

SEE FIGURE 3

AT 25°C

400

MW.

AT 70°C

170

MW

AMBIENT TEMPERATURE RANGE

-40 TO +70

°C

^A
WITH UNIFORM ILLUMINATION OF SENSITIVE SURFACE.

CONTINUED ON FOLLOWING PAGE

TUNG-SOL

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CHARACTERISTICS

AT 25°C AMBIENT TEMPERATURE

VOLTAGE-CURRENT CHARACTERISTICS

SEE FIGURE #4

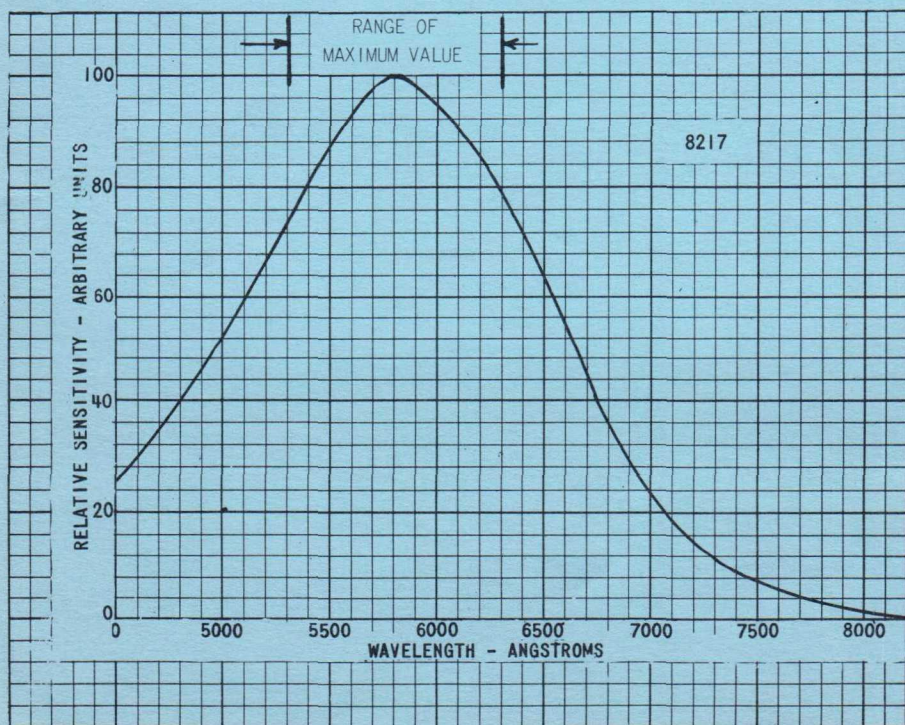
	MIN.	AVG.	MAX.	
LIGHT RESISTANCE ^B	5	7	10	KOHMS
DARK RESISTANCE ^C	1	---	---	MEGOHMS.
RISE TIME	SEE FIGURE #5			
DECAY TIME	SEE FIGURE #6			

^B MEASURED WITH 10 FOOT-CANDLES ILLUMINATION OF 2870°K COLOR TEMPERATURE.

^C MEASURED 20 SECONDS AFTER REMOVAL OF 10 FOOT-CANDLES ILLUMINATION.

FIGURE 1 - AVERAGE SPECTRAL RESPONSE

FOR EQUAL VALUES OF RADIANT FLUX AT ALL WAVELENGTHS



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FIGURE 3 - POWER DISSIPATION RATING CHART

RATINGS APPLY WHEN SENSITIVE SURFACE IS UNIFORMLY
ILLUMINATED WITH 10 FOOT-CANDLES.

DERATING IS NECESSARY FOR NON-UNIFORM ILLUMINATION.

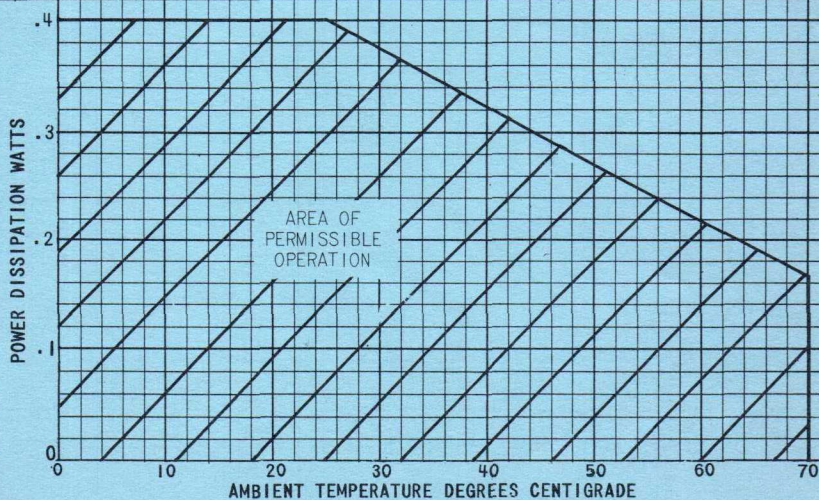
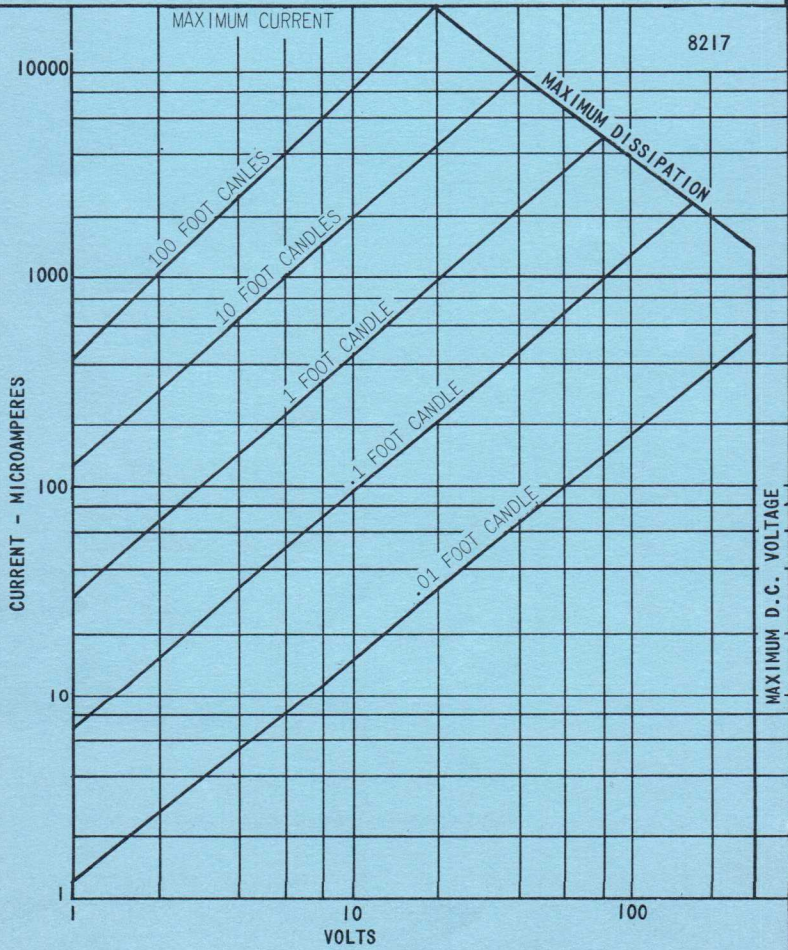
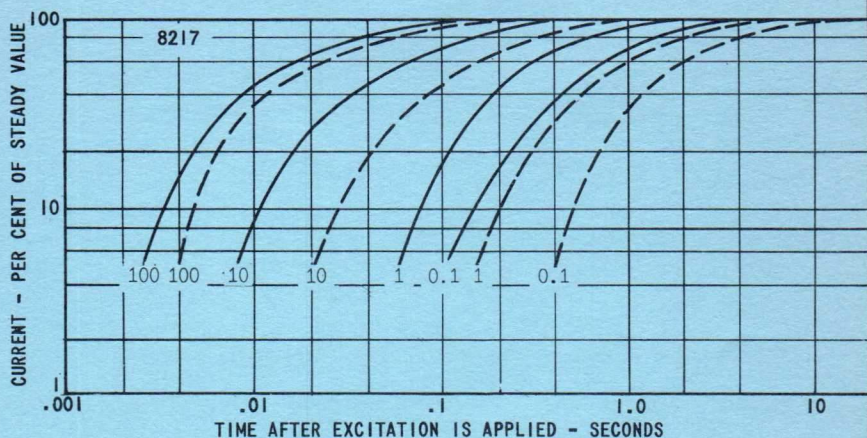


FIGURE 4 - AVERAGE VOLTAGE-CURRENT CHARACTERISTICS
ILLUMINATION OF 2870-°K COLOR TEMPERATURE
DISSIPATION LIMIT APPLIES UP TO 20 °C



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FIGURE 5 - AVERAGE RISE CHARACTERISTICS



NUMBERS ON CURVES GIVE FOOT-CANDLES OF ILLUMINATION OF COLOR TEMPERATURE 2870°K.

SOLID LINES APPLY TO 5 SEC. STORAGE IN DARKNESS PRIOR TO EXCITATION.

DASHED LINES APPLY TO 5 MIN. STORAGE IN DARKNESS PRIOR TO EXCITATION.

FIGURE 6 - AVERAGE DECAY CHARACTERISTICS

