



OCTOBER 1964

RELATIVE SPECTRAL RESPONSE DATA

FOR PHOTOSENSITIVE DEVICES

("S" CURVES)

FORMULATED BY

JEDEC ELECTRON TUBE COUNCIL

JEDEC PUBLICATION NO. 50

PRICE \$2.00



Documents

Document Sharing Hub

Explanatory Note

The curves and tables appearing in this Publication were prepared by JEDEC JT-4 Committee on Photosensitive Electron Tubes, in cooperation with JEDEC JS-4 Committee on Photosensitive Semiconductor Devices. The tabular and graphical data presented corresponds closely with the original S-response registration data submitted by various manufacturers. In the cases of the S1, S3, S4, S5, S8, S9, S10, S11, S12, S13, S14, S15, S16, S17, S18, S19, S20, and S21 responses, original tabular data used in preparing response curves for registration purposes was submitted by the registrant and used in the preparation of the tables appearing herein. For other S-responses, tabular data was obtained from the available registration curves.

The Committee developed permissible wavelength tolerance limits on the 10% and 100% points for the S4, S10, and S18 responses and such limits are indicated on the curves for these responses.

S-response nomenclature applies only to the relative spectral response of a photosensitive device, including the entrance window. It does not refer to a specific type of photosurface, nor to the chemical and physical composition of that photosurface, nor to the absolute magnitude of the resulting sensitivity.

Published by

ELECTRONIC INDUSTRIES ASSOCIATION

Engineering Department

11 West 42nd Street, New York, N. Y. 10036



Documents

Document Sharing Hub

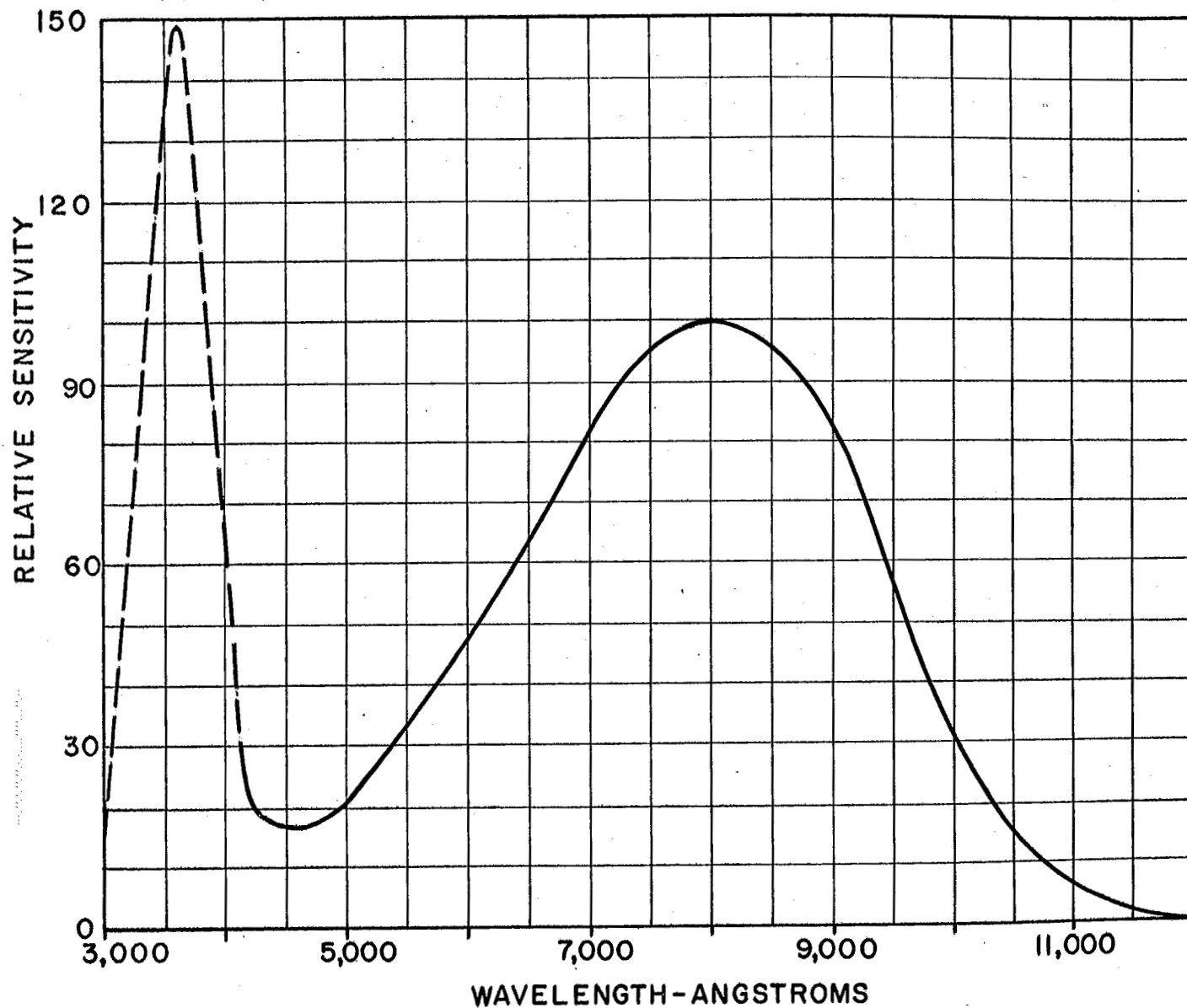
Registered S-Response Data
Photosensitive Device Spectral Response Information

TABLE OF CONTENTS

	<u>Page</u>
S1 Curve and Tabular Data	2, 3
S2 (This S-designation has been abandoned)	-
S3 Curve and Tabular Data	4, 5
S4 Curve and Tabular Data (with tolerance limits)	6, 7
S5 Curve and Tabular Data	8, 9
S6 Curve and Tabular Data	10, 11
S7 Curve and Tabular Data	12, 13
S8 Curve and Tabular Data	14, 15
S9 Curve and Tabular Data	16, 17
S10 Curve and Tabular Data (with tolerance limits)	18, 19
S11 Curve and Tabular Data	20, 21
S12 Curve and Tabular Data	22, 23
S13 Curve and Tabular Data	24, 25
S14 Curve and Tabular Data	26, 27
S15 Curve and Tabular Data	28, 29
S16 Curve and Tabular Data	30, 31
S17 Curve and Tabular Data	32, 33
S18 Curve and Tabular Data (with tolerance limits)	34, 35
S19 Curve and Tabular Data	36, 37
S20 Curve and Tabular Data	38, 39
S21 Curve and Tabular Data	40, 41
S22 Not In Use	-
S23 Curve and Tabular Data	42, 43

SPECTRAL-SENSITIVITY CHARACTERISTIC OF PHOTOSENSITIVE DEVICE HAVING S-I RESPONSE

FOR EQUAL VALUES OF RADIANT FLUX AT ALL WAVELENGTHS

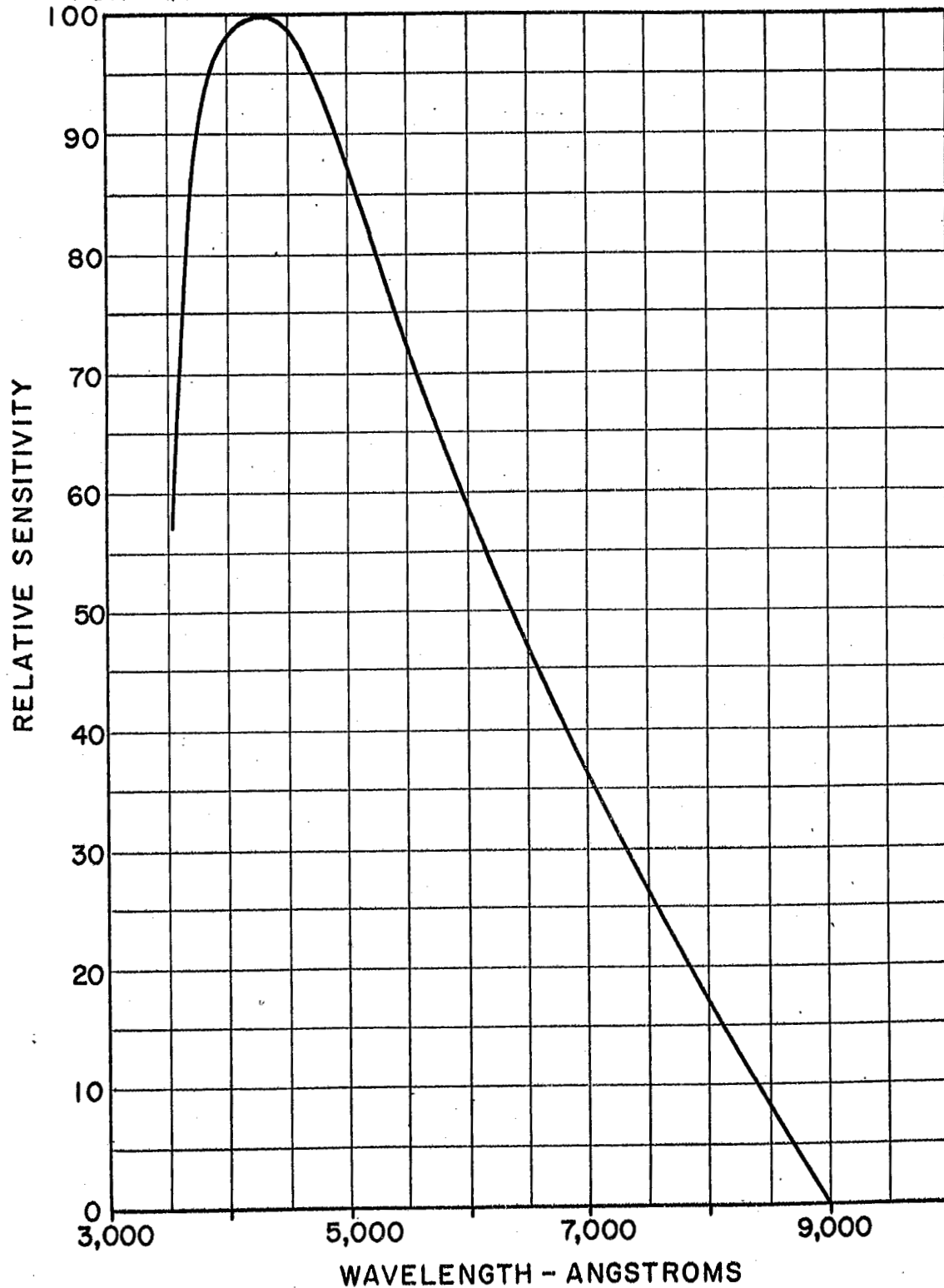


RELATIVE SPECTRAL RESPONSE S-1

Wavelength (λ) (Angstroms)	Relative Response	Wavelength (λ) (Angstroms)	Relative Response
3000	.909		
3100	.270	7600	.971
3200	.520	7700	.984
3300	.810	7800	.993
3400	1.105	7900	.998
3500	1.350	8000	1.000
3600	1.480	8100	.998
3700	1.350	8200	.993
3800	1.100	8300	.983
3900	.820	8400	.969
4000	.561	8500	.951
4100	.360	8600	.929
4200	.235	8700	.903
4300	.190	8800	.874
4400	.177	8900	.841
4500	.171	9000	.803
4600	.170	9100	.761
4700	.174	9200	.716
4800	.182	9300	.670
4900	.194	9400	.622
5000	.209	9500	.573
5100	.227	9600	.523
5200	.248	9700	.473
5300	.271	9800	.423
5400	.295	9900	.375
5500	.321	10000	.329
5600	.349	10100	.285
5700	.378	10200	.245
5800	.408	10300	.208
5900	.439	10400	.175
6000	.471	10500	.148
6100	.504	10600	.124
6200	.539	10700	.104
6300	.575	10800	.088
6400	.611	10900	.074
6500	.647	11000	.063
6600	.683	11100	.053
6700	.718	11200	.044
6800	.753	11300	.036
6900	.787	11400	.029
7000	.820	11500	.023
7100	.851	11600	.017
7200	.881	11700	.012
7300	.909	11800	.008
7400	.933	11900	.005
7500	.954	12000	.002

SPECTRAL - SENSITIVITY CHARACTERISTIC OF PHOTO-SENSITIVE DEVICE HAVING S-3 RESPONSE

FOR EQUAL VALUES OF RADIANT FLUX AT ALL WAVELENGTHS

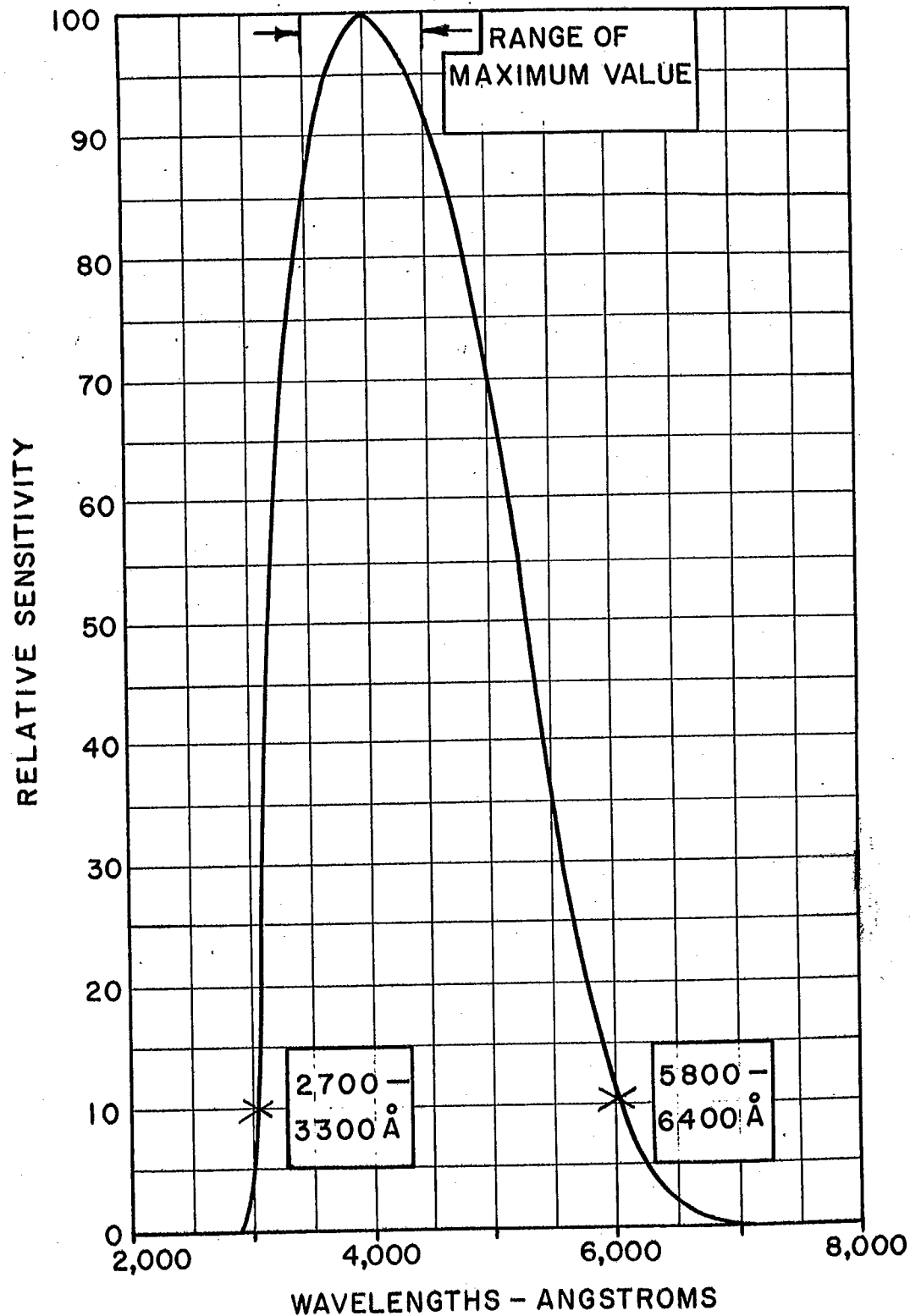


RELATIVE SPECTRAL RESPONSE S-3

<u>Wavelength (λ)</u> (Angstroms)	<u>Relative Response</u>	<u>Wavelength (λ)</u> (Angstroms)	<u>Relative Response</u>
3500	.565		
3600	.700	6600	.446
3700	.860	6700	.424
3800	.930	6800	.402
3900	.965	6900	.38
4000	.985	7000	.36
4100	.997	7100	.34
4200	1.00	7200	.32
4300	.998	7300	.301
4400	.993	7400	.282
4500	.982	7500	.264
4600	.970	7600	.246
4700	.950	7700	.228
4800	.93	7800	.21
4900	.90	7900	.192
5000	.87	8000	.175
5100	.84	8100	.158
5200	.81	8200	.14
5300	.78	8300	.122
5400	.75	8400	.105
5500	.72	8500	.088
5600	.69	8600	.070
5700	.665	8700	.052
5800	.64	8800	.035
5900	.615	8900	.02
6000	.59	9000	.0
6100	.565		
6200	.54		
6300	.515		
6400	.492		
6500	.469		

SPECTRAL-SENSITIVITY CHARACTERISTIC OF PHOTO-SENSITIVE DEVICE HAVING S-4 RESPONSE

FOR EQUAL VALUES OF RADIANT FLUX AT ALL WAVELENGTHS

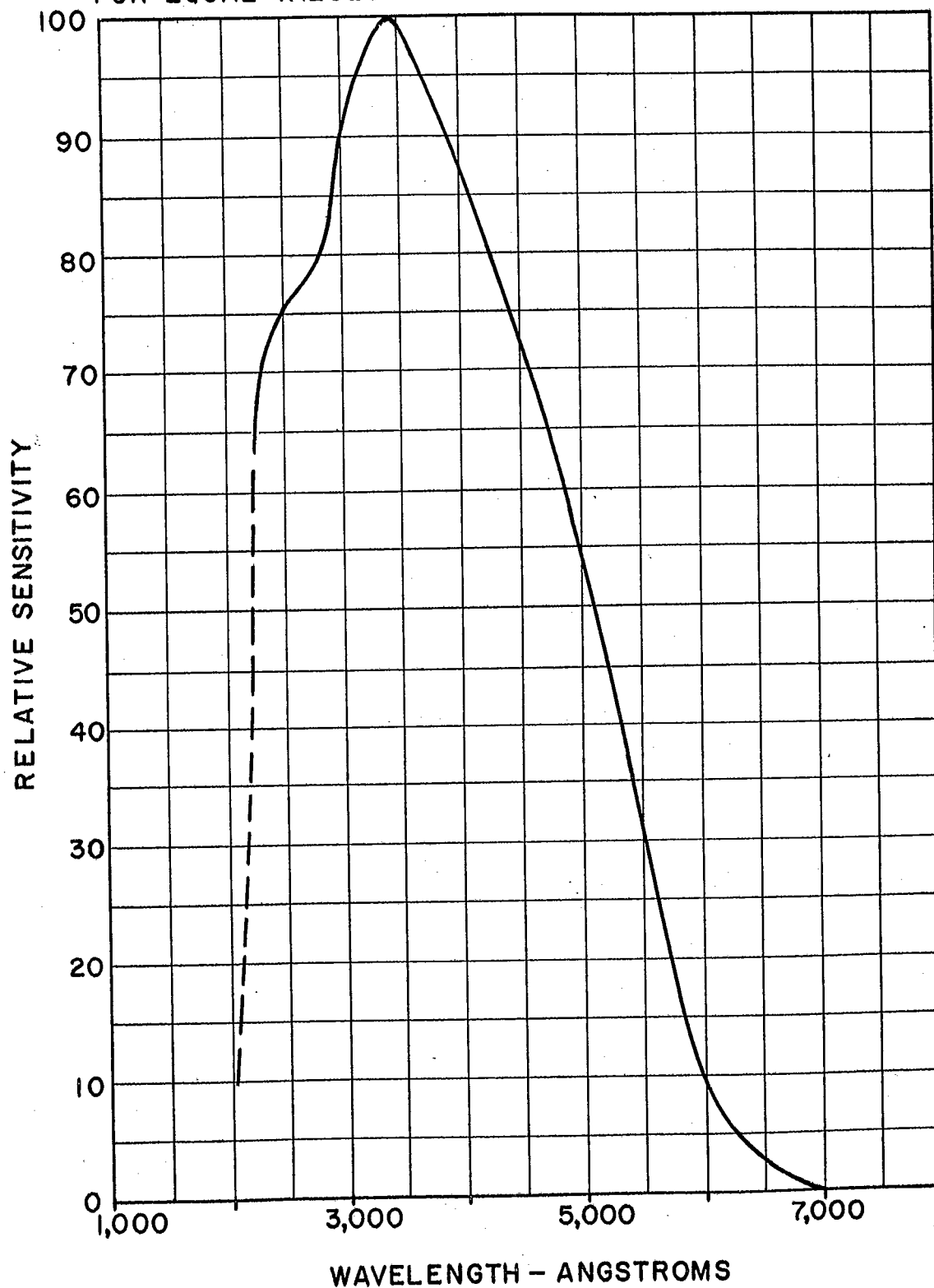


RELATIVE SPECTRAL RESPONSE S-4

<u>Wavelength (λ) (Angstroms)</u>	<u>Relative Response</u>
3000	.048
3100	.260
3200	.546
3300	.685
3400	.782
3500	.858
3600	.915
3700	.955
3800	.981
3900	.995
4000	1.000
4100	.997
4200	.986
4300	.968
4400	.946
4500	.920
4600	.889
4700	.853
4800	.810
4900	.761
5000	.706
5100	.645
5200	.578
5300	.506
5400	.431
5500	.360
5600	.294
5700	.235
5800	.184
5900	.140
6000	.104
6100	.076
6200	.054
6300	.038
6400	.026
6500	.017
6600	.011
6700	.007
6800	.004
6900	.002
7000	.001

SPECTRAL-SENSITIVITY CHARACTERISTIC OF PHOTO-SENSITIVE DEVICE HAVING S-5 RESPONSE

FOR EQUAL VALUES OF RADIANT FLUX AT ALL WAVELENGTHS

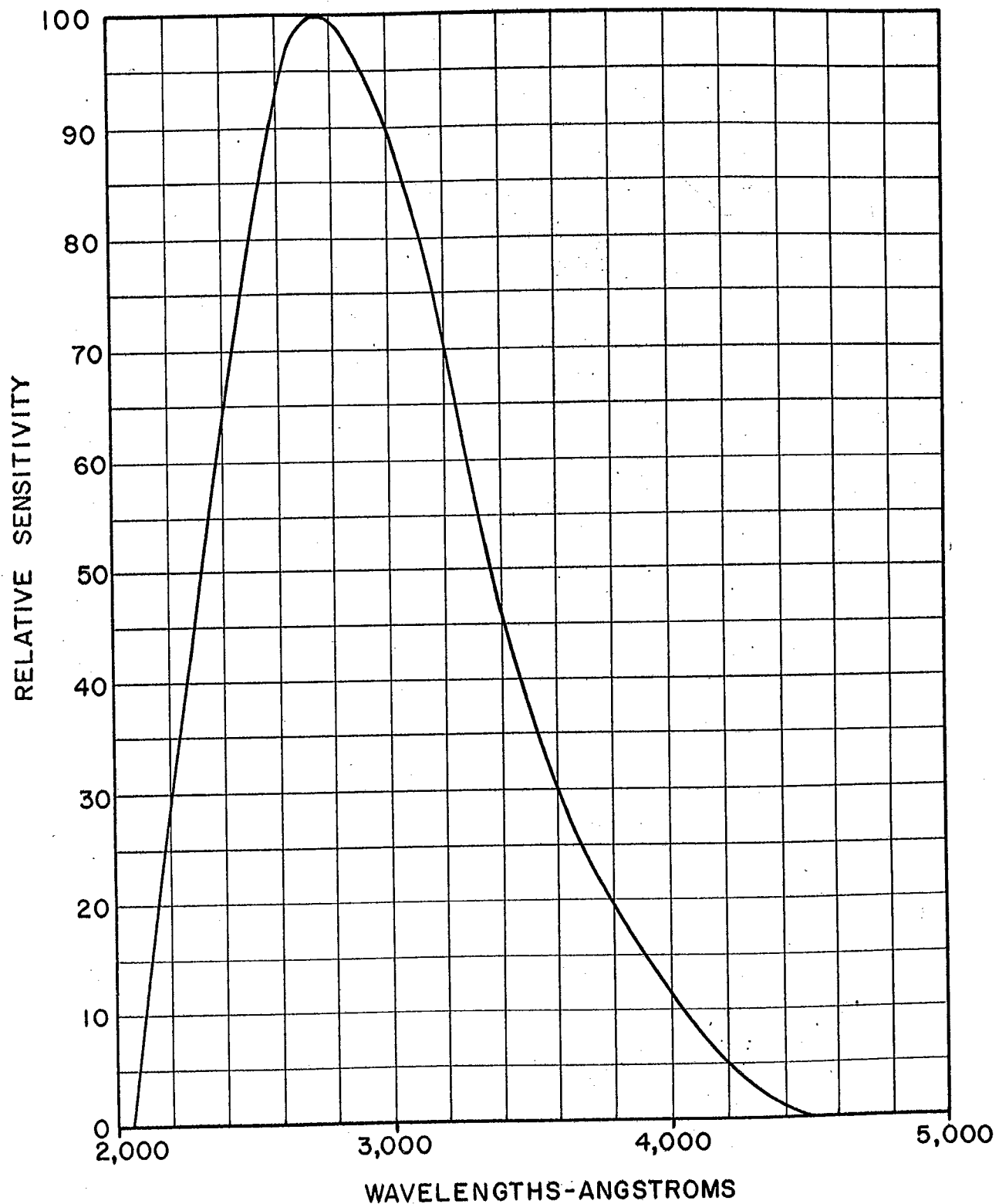


RELATIVE SPECTRAL RESPONSE S-5

<u>Wavelength (λ) (Angstroms)</u>	<u>Relative Response</u>
3000	.900
3100	.940
3200	.970
3300	.990
3400	1.000
3500	.990
3600	.975
3700	.950
3800	.925
3900	.900
4000	.870
4100	.840
4200	.810
4300	.780
4400	.750
4500	.715
4600	.680
4700	.645
4800	.610
4900	.575
5000	.535
5100	.495
5200	.450
5300	.405
5400	.360
5500	.310
5600	.260
5700	.210
5800	.165
5900	.130
6000	.100
6100	.070
6200	.050
6300	.035
6400	.025
6500	.015
6600	.010
6700	.006
6800	.003
6900	.001
7000	.0

SPECTRAL-SENSITIVITY CHARACTERISTIC OF PHOTO-SENSITIVE DEVICE HAVING S-6 RESPONSE

FOR EQUAL VALUES OF RADIANT FLUX AT ALL WAVELENGTHS



RELATIVE SPECTRAL RESPONSE S-6

<u>Wavelength (λ)</u> <u>(Angstroms)</u>	<u>Relative</u> <u>Response</u>
2100	.10
2200	.27
2300	.46
2400	.64
2500	.81
2600	.93
2700	.99
2800	.99
2900	.95
3000	.90
3100	.81
3200	.70
3300	.57
3400	.46
3500	.37
3600	.30
3700	.24
3800	.19
3900	.15
4000	.115
4100	.075
4200	.05
4300	.025
4400	.01

SPECTRAL-SENSITIVITY CHARACTERISTIC OF PHOTO-SENSITIVE DEVICE HAVING S-7 RESPONSE

