

Important technical data

CLAIREX®

BULLETIN No. 4-5-600 "I"

5-I CELL

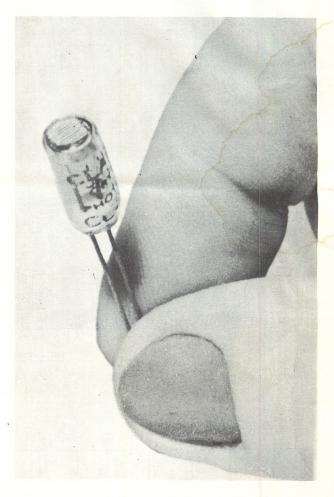
The latest addition to the Clairex line of photoconductive cells utilizes a cadmium sulphide formulation whose sensitivity variation with the color temperature of light sources more closely approximates that of the human eye than does any other uncorrected sensor.

Thus, cell conductance will measure light (as sensed by the human eye) accurately whether it be "tungsten" or "daylight" - whether the color temperature be 2700°K or 6500°K or any intermediate value. A foot-candle meter which incorporated this cell would require no correction filter.

Light and lighting control systems which involve human vision can be improved by use of this cell. Such applications range from street lighting control to the automatic adjustment of television receiver picture-tube brightness and contrast to compensate for ambient room illumination.

Although the monochromatic spectral response is not identical with that of the eye, the curves share a common peak and axis of symmetry. These factors, and the fact that cell response to broad spectral radiation does not appear to be the linear integral of monochromatic response, contribute to the close correspondence in overall response.

The 5-I material will be available in the cell configurations tabulated below. Among these are the low impedance "L" types which are highly suitable for portable, battery operated light meters.



CI	505L	CdS		5500	15K	1711	250mW
	CL CELL #	Sens. Mat.	Enclosure	Pk. Spect. Resp.	R-2 ft.C.	Max. Volt.	Max.Diss.
	605-I	Cds.	.25 x .500	5500	166K	300V.	75 mW.
	605-IL	Cds.	.25 x .500	5500	7.5 K	60	75 mW.
	505-I	Cds.	.5 x .5	5500	9K	250	500-250
	505-IL	Cds.	.5 x .5	5500	1.5K	60	500-250
	405-IS	Cds.	.265 x 1	5500	166K	300	75
	405-ISL	Cds.	.265 x 1	5500	7.5K	60	75

NEW ENGLAND Bordewieck Engineering Sales Company 221 Grove Street South Braintree, Mass. Phone: VICTOR 3-0845

PENNSYLVANIA AND EAST COAST Samuel A. Dixon 208 Russell Avenue Barrington, N.J. Phone: LINCOLN 7-7383

MID-WEST The Heimann Company 1711 Hawthorne Avenue Minneapolis 3, Minn. Phone: FEDERAL 2-5457

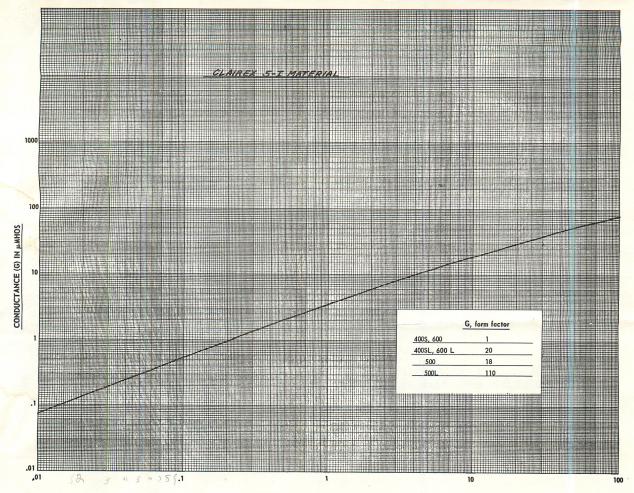
CENTRAL T. B. Hunter Associates 4441 W. Irving Road Chicago 41, Illinois Phone: SPRING 7-2500

CALIFORNIA AND SOUTH WEST Moxon Electronics Corp. 489 So. Robertson Blvd. Beverly Hills, Calif. Phone: BRADSHAW 2-9311 OHIO STATE: Edmund Frost, 14545 Chelmsford Rd., Mayfield Heights, Cleveland 24, Ohio. Phone: HILLCREST 2-9040

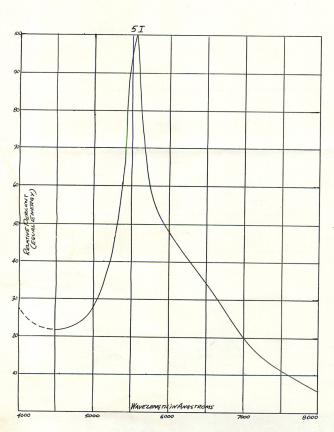
AUTOMOTIVE FIELD Daniel J. Clifford 623 Fisher Bldg. Detroit 2, Mich. Phone: TRINITY 5-3544

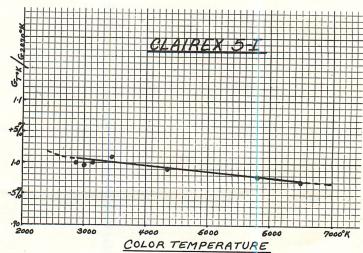
THE light TOUCH IN AUTOMATION AND CONTROL

FOR ADDITIONAL INFORMATION, CONTACT THE CLAIREX REPRESENTATIVE NEAREST YOU OR: CLAIREX CORPORATION, 8 WEST 30 STREET, NEW YORK 1, N. Y., MU 4-0940



FOOT CANDLES





MATERIAL:	5-I						
LIGHT LEVEL IN FOOT CANDLES	.01	./	,	10	100		
TIME CONSTANT (TO 1-1/E OF FINAL READING)							
RISE: (SECONDS)	2.8	.30	.074	150.	.007		
DECAY: (SECONDS)	1.3	.22	.058	.021	.014		
TEMPERATURE CHARACTERISTIC: 100x GT/ G25°C,							
-25°C.	77	80	95	95	100		
0°C.	78	82	96	99	100		
25°C.	100	100	100	100	100		
50°C.	160	120	110	110	100		
75°C.	230	120	120	110	100		