TE289 A data sheet

Overview

Product name	TE289 A
Principle	Test chart to determine the color reproduction mirror replacement system, compliant to ISO 16505

Features

Color patches

Type/s of pattern	6 colors (primary and secondary colors) and black and white patches, circular arranged		
Color values	batch measured, individual measurement on request		
Size of color patch		W [mm]	H [mm]
	A360	10	10
	other		
Background OD*	0.75		
Line feature	4.5 cycles of black and white lines		
		Line width [mm]	
	A360	4.45	
	other		

General description hardware

Type	reflective				
Aspect ratio	not applicable				
Chart size [W x H x D]		W [mm]	H [mm]	D [mm]	Weight [g]
	☐ A360	500	400	3.2	
	☐ other				
Picture size		W [mm]	H [mm]		

	☐ A360	364	257
	☐ other		
Material	☐ specific matt paper ☐ specific matt paper, colors made of Munsell paper		
Mounting	aluminum		
Edge protection	fabric tape		
Service life	1 years		
Scope of delivery	Test chart, cardboard case for storing the chart safely		

Miscellaneous

Evaluation / Assessment	Visual appraisal on monitor, analysis with iQ-Analyzer (since version 6.2)
Standards	ISO 16505:2015 Road vehicles – Ergonomic and performance spects of Camera Monitor Systems – Requirements and test procedures
Accessories	Chart case

* optical density

Reference data TE289 - Print

Name	CIE XYZ_D50			CIE Lab_D50			Munsell Notation		
	X	Y	Z	L*	a*	b*	Hue	Value	Chroma
Blue	6,63	5,92	15,08	29,20	9,96	-35,55	7.5 PB	2.9	12.7
Green	9,85	18,63	8,48	50,25	-51,83	20,56	0.25 G	5.4	8.65
Red	28,82	16,11	3,86	47,12	62,21	36,76	5 R	4	12
Yellow	65,55	69,19	7,80	86,60	-2,59	85,78	5 Y	8	11.1
Magenta	32,00	17,13	14,32	48,43	68,46	-0,47	2.5 RP	5	12
Cyan	14,26	21,72	46,79	53,73	-36,14	-45,31	5 B	5	8
White	79,13	81,37	70,40	92,30	1,33	-2,96	-	-	-
Black (1.50*	3,75	3,83	2,86	23,12	0,83	2,26	-	2	-
Background	15,83	16,28	13,74	47,34	0,73	-0,81	-	-	-

The table above gives batch measured reference data.

For individually measured charts CIE XYZ_D50 and CIE Lab_D50 values of all colors and the background are measured. The actual value can deviate from the above value.

Reference data TE289 - Munsell

Name	CIE XYZ_D50			CIE Lab_D50			Munsell Notation		
	X	Y	Z	L*	a*	b*	Hue	Value	Chroma
Blue	6,81	5,60	20,78	28,37	15,42	-49,80	7.5 PB	2.9	12.7
Green	14,14	22,33	7,29	54,38	-39,72	32,27	0.25 G	5.4	8.65
Red	21,44	12,78	3,87	42,43	51,05	28,62	5 R	4	12
Yellow	58,89	59,93	7,08	81,80	2,67	80,41	5 Y	8	11.1
Magenta	29,91	18,95	22,14	50,63	51,28	-14,12	2.5 RP	5	12
Cyan	12,48	18,06	29,14	49,57	-29,71	-28,32	5 B	5	8
White	79,13	81,37	70,40	92,30	1,33	-2,96	-	-	-
Black (1.50*)	3,04	3,15	2,66	20,64	0,07	-0,46	-	2	-
Background	15,83	16,28	13,74	47,34	0,73	-0,81	-	-	-

The table above follows the original X-Rite data sheet, given with the ColorChecker for CIE L*a*b* and Munsell notation (except "White"). The CIE XYZ (for illuminant D50) values are calculated by using the origin L*a*b* values. According to X-Rite these values are "a generic, averaged colorimetric description of the ColorChecker charts. For highest accuracy it is a good idea to create custom reference files for a chart."

For individually measured charts CIE XYZ_D50 and CIE Lab_D50 values of all colors and the background are measured. The actual value can deviate from the above value.