TE226 V2 data sheet

Overview

Product name	TE226 V2
Principle	Transparent color rendition test chart for HDTV cameras. In addition to the primary and secondary colors known from the well-known "ColorChecker", the test chart contains mainly the colors, which are critical in reproduction.

Features

Color patches

Type/s of pattern	45 patches arranged in 5 rows with 9 patches each • 30 colors which are critical in reproduction, e.g. dark and light skin tones, foliage, blue sky, orange, violet and others • First 24 color patches are the same as TE188D • 6 color patches with primary and secondary colors as blue, green, red, yellow, purple and cyan • 9-step gray scale
Color values	Individually measured (default color values 20180404). Values are provided in a separate Acceptance Protocol. Example measurement is given at the end of this data sheet.

Size of a single patch		4:3		16:9	
		W [mm]	H [mm]	W [mm]	H [mm]
	☐ D280	-	-	27.0	27.0
	☐ other				

Surface finish	The color foils of transparent charts (and, in rare cases, Munsell charts) may show scratches or streaks. This does not affect the test chart's function in any way as the scratches/streaks are not visible under normal illumination geometry. We also recommend recording the color chart slightly out of focus to obtain a stable average value in the result.

General description hardware

Type	transmissive (D chart)			
Aspect ratio	16:9 ☐ other: _____			
Chart size [W x H x D]		W [mm]	H [mm]	D [mm]
	☐ D280	360	280	4.6
	☐ other			

Picture size [W x H]		4:3		16:9	
		W [mm]	H [mm]	W [mm]	H [mm]
	☐ D280	-	-	280.0	157.5
	☐ other				

Material	different transparent foils
Mounting	embedded between metal frames
Edge protection	fabric tape
Service life	transparent color foils 1 years
	For color targets please check annually if a new reference measurement is necessary.
	Some of the filter foils used for transparent charts are not fade less, especially when exposed to sunlight (ultra violet light). We therefore recommend to store the chart in the folder or case when not in use.
	We also recommend and offer a recalibration of the chart after 3 years of regular use.
Scope of delivery	test chart, stable cardboard envelope (D charts)

Miscellaneous

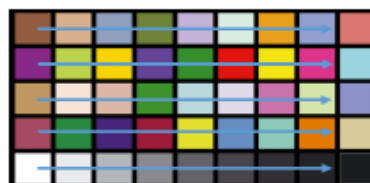| Evaluation / Assessment	supported by iQ-Analyzer Color Module
Illumination	It is recommended to test this chart under a continuous spectrum. Typical white LED spectra are not suited for color tests in general.
Standards	Metamorfoze Guideline (Archiving)
Accessoires	chart case
Terms & Conditions	image-engineering.de/terms-and-conditions

Example Color values D chart (transmissive)

TE226 D

Acceptance protocol

www.image-engineering.de

SN:
Order Confirmation:
Date:
Operator:

Color values of all 45 patches (white point D65)

		Name	X	Y	Z	x	y	L	a	b
ColorChecker colors	A1	dark skin	0,1278	0,1074	0,0726	0,4153	0,3490	39,1458	18,4784	13,9909
	B1	light skin	0,4945	0,4484	0,3586	0,3799	0,3445	72,7838	19,4403	14,9615
	C1	blue sky	0,1459	0,1690	0,2925	0,2402	0,2782	48,1326	-8,7008	-18,4742
	D1	foliage	0,0714	0,1243	0,0254	0,3228	0,5621	41,8985	-38,5848	42,6416
	E1	blue flower	0,4470	0,4039	0,7304	0,2827	0,2554	69,7466	19,2197	-27,2383
	F1	bluish green	0,3921	0,5420	0,6113	0,2537	0,3507	78,5754	-35,4473	-1,9336
	G1	orange	0,4574	0,3628	0,0624	0,5182	0,4110	66,7310	35,2152	65,5233
	H1	purplish blue	0,2979	0,3180	0,8481	0,2035	0,2172	63,1803	-1,6460	-47,4961
	I1	moderate red	0,3884	0,2794	0,1886	0,4535	0,3263	59,8389	44,1375	19,2671
	A2	purple	0,1324	0,0796	0,3824	0,2228	0,1339	33,8974	44,1378	-55,0789
	B2	yellow green	0,3399	0,5786	0,1360	0,3223	0,5487	80,6585	-61,7410	66,6659
	C2	orange yellow	0,5417	0,4677	0,0644	0,5045	0,4356	74,0455	26,4213	77,3406
	D2	blue	0,0859	0,0361	0,4728	0,1445	0,0607	22,3304	59,2019	-85,3606
	E2	green	0,1000	0,2297	0,0530	0,2614	0,6002	55,0399	-70,1382	49,4792
	F2	red	0,3594	0,1796	0,0197	0,6433	0,3215	49,4485	79,4447	60,3398
	G2	yellow	0,5236	0,5972	0,0368	0,4523	0,5159	81,6864	-11,1846	103,7898
	H2	magenta	0,4253	0,2050	0,5369	0,3644	0,1756	52,3979	87,6059	-40,0764
	I2	cyan	0,4942	0,6119	1,0304	0,2313	0,2864	82,4815	-22,4200	-26,5614
additional colors	A3	patch 19	0,2646	0,2542	0,1631	0,3879	0,3728	57,4861	9,7078	20,4758
	B3	patch 20	0,7921	0,7560	0,5988	0,3689	0,3521	89,6750	15,0332	18,3357
	C3	patch 21	0,4409	0,4004	0,3366	0,3743	0,3400	69,4999	18,5051	12,1802
	D3	patch 22	0,1546	0,3395	0,1016	0,2595	0,5700	64,9241	-75,8993	48,8250
	E3	patch 23	0,3182	0,3950	0,5857	0,2450	0,3041	69,1099	-19,6646	-15,9156
	F3	patch 24	0,5920	0,5751	0,9892	0,2745	0,2667	80,4637	11,2111	-27,3871
	G3	patch 25	0,4287	0,2583	0,0444	0,5862	0,3531	57,8730	65,0412	58,5319
	H3	patch 26	0,4282	0,5757	0,4770	0,2891	0,3888	80,5011	-32,6558	14,4887
	I3	patch 27	0,1697	0,1294	0,7026	0,1694	0,1292	42,6768	28,6218	-71,6646
	A4	patch 28	0,2143	0,1564	0,1908	0,3817	0,2785	46,4923	34,9711	-4,1775
	B4	patch 29	0,1659	0,3876	0,3945	0,1750	0,4089	68,5791	-85,1213	3,2489
	C4	patch 30	0,1869	0,1093	0,7069	0,1863	0,1090	39,4666	51,6582	-77,5447
	D4	patch 31	0,3316	0,1596	0,1714	0,5004	0,2408	46,9154	80,7913	0,4772
	E4	patch 32	0,8298	0,8910	0,5199	0,3703	0,3976	95,6201	-3,2448	36,1241
	F4	patch 33	0,1412	0,1758	0,4643	0,1807	0,2251	48,9875	-15,3155	-38,4849
	G4	patch 34	0,0153	0,0668	0,0694	0,1011	0,4408	31,0655	-76,5704	1,2571
	H4	patch 35	0,6053	0,5088	0,1593	0,4753	0,3996	76,6070	31,0027	54,2889
	I4	patch 36	0,4217	0,4459	0,3173	0,3559	0,3763	72,6221	-0,6295	20,1936
neutrals	A5	white	0,9505	1,0000	1,0888	0,3127	0,3290	100,0000	0,0000	0,0000
	B5	neutral 87	0,8331	0,8801	0,9576	0,3119	0,3295	95,1664	-0,6658	0,0476
	C5	neutral 63	0,6050	0,6401	0,6958	0,3117	0,3298	83,9690	-0,7994	0,0916
	D5	neutral 44	0,4119	0,4358	0,4724	0,3120	0,3301	71,9475	-0,7195	0,2294
	E5	neutral 28	0,2638	0,2798	0,3018	0,3120	0,3310	59,8740	-0,8883	0,4088
	F5	neutral 15	0,1405	0,1489	0,1598	0,3128	0,3314	45,4778	-0,6148	0,5015
	G5	neutral 7	0,0628	0,0665	0,0701	0,3150	0,3334	30,9939	-0,4065	0,8683
	H5	neutral 2	0,0190	0,0202	0,0202	0,3194	0,3401	15,5948	-0,5433	1,5049
	I5	neutral < 0,1	0,0000	0,0001	0,0000	0,5990	0,9981	0,0622	-0,0989	0,1663

SPECTRAL ANALYSIS
Normed to whitepoint:
X = 0,95047; Y = 1; Z = 1,08883

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