		Main		CA-527 Display Color Analyzer	CA-VP427A Advanced High Sensitivity Probe	CA-P427 Normal Probe	CA-P427H High Luminance Probe	CA-VP410A Advanced High Sensitivity Probe	CA-VP410H High Sensitivity Probe for high luminance	CA-VP410T	CA-P410 Normal Probe	CA-P410H High Luminance Probe
		Spec	cifications of		Auvalieeu riigii selisitivity riobe	Normarrobe	Thigh Edinmance Trobe				Norman robe	
		_	527/CA-410					-11/	5/1/	211		all.
ΚΟΝΙζΛ	MINOLTA					2	2		2			
		Prot									•	
		Measurement area Acceptance angle		Ø 27 mm ± 8.5°	Ø 27 mm ± 2.5°	Ø 27 mm ± 2.5°	Ø 27 mm ± 2.5°	Ø 10 mm ±8.5°	Ø 10 mm ±8.5°	Approx. Ø 10 mm ± 4°	Ø 10 mm ± 5°	Ø 10 mm ± 5°
	Accuracy gu	aranteed measurem Accuracy guara	nteed range <sup>*8</sup>	30 ± 5 mm 0.0001 to 10,000 cd/m <sup>2</sup>	30 ± 10 mm 0.0003 to 5,000 cd/m <sup>2</sup>	30 ± 10 mm 0.001 to 5,000 cd/m <sup>2</sup>	30 ± 10 mm 0.01 to 30,000 cd/m <sup>2</sup>	30 ± 5 mm 0.0003 to 3,000 cd/m <sup>2</sup>	30 ± 5 mm 0.0006 ~ 6,000 cd/m <sup>2</sup>	200 ± 2 mm 0.004 to 12,000 cd/m <sup>2</sup>	30 ± 5 mm 0.002 to 10,000 cd/m <sup>2</sup>	30 ± 5 mm 0.1 to 30,000 cd/m <sup>2</sup>
			> 0.0001 cd/m <sup>2</sup> > 0.0003 cd/m <sup>2</sup>	± 9 %	 ±9%			 ±9%				
			> 0.0005 cd/m <sup>2</sup> > 0.001 cd/m <sup>2</sup>	± 3 % ± 2 %		 ±9%		 ± 4 %	±9 % (0.0006 to cd/m <sup>2</sup> ) ± 4 %	± 9 % (0.004 to cd/m <sup>2</sup> )	± 9 % (0.002 to cd/m <sup>2</sup> )	
	Accuracy (for white)*1,*3 > 0.01 cd/m <sup>2</sup>		> 0.01 cd/m <sup>2</sup> > 0.1 cd/m <sup>2</sup>	± 1.5 % ± 1.5 %	±2% ±1.5%	± 2 % ± 1.5 %	±9% ±2%	± 2.5 % ± 2 %	± 2 % ± 2 %	±9% ±3%	±2.5% ±2%	 ± 2.5 %
			> 1 cd/m <sup>2</sup> > 10 cd/m <sup>2</sup>	± 1.5 % ± 1.5 %	± 1.5 % ± 1.5 %	± 1.5 % ± 1.5 %	± 1.5 % ± 1.5 %	± 2 % ± 1.5 %	±2% ±1.5%	± 3 % ± 2.5 %	±2% ±1.5%	± 2 % ± 2 %
Luminance			> 100 cd/m <sup>2</sup> > 0.0001 cd/m <sup>2</sup>	± 1.5 % ± 1.5 %	± 1.5 %	± 1.5 %	± 1.5 %	± 1.5 %	± 1.5 %	± 2 %	± 1.5 %	± 1.5 %
	Repeatability		> 0.0003 cd/m <sup>2</sup>		10 %			7%				
			> 0.0005 cd/m <sup>2</sup> > 0.001 cd/m <sup>2</sup>	2 % 1%	4 %	10 %		3%	7 % (0.0006 to cd/m <sup>2</sup> ) 3 %	10 % (0.004 to cd/m <sup>2</sup> )	 10 % (0.002 to cd/m <sup>2</sup> )	
	(20)*1	AUTO	> 0.01 cd/m <sup>2</sup> > 0.1 cd/m <sup>2</sup>	0.30 %	1 % 0.25 %	1 % 0.40 %	10 % 1 %	1 % 0.25 %	0.60 % 0.25 %	<u> </u>	2 %	2 %
			> 1 cd/m <sup>2</sup> > 10 cd/m <sup>2</sup>	0.10 %	0.10 %	0.10%	0.40 % 0.10 %	0.10 %	0.10 %	0.20 %	0.20 %	0.60 %
	Ac	curacy guaranteed	> 100 cd/m <sup>2</sup>	0.10 % 0.001 to 10,000 cd/m <sup>2</sup>	0.10 % 0.003 to 5,000 cd/m <sup>2</sup>	0.10 % 0.01 to 5,000 cd/m <sup>2</sup>	0.10 % 0.1 to 30,000 cd/m <sup>2</sup>	0.10 % 0.003 to 3,000 cd/m <sup>2</sup>	0.10 % 0.006 to 6,000 cd/m <sup>2</sup>	0.10 % 0.04 to 12,000 cd/m <sup>2</sup>	0.10 % 0.01 to 10,000 cd/m <sup>2</sup>	0.10 % 0.1 to 30,000 cd/m <sup>2</sup>
			> 0.001 cd/m <sup>2</sup> > 0.003 cd/m <sup>2</sup>	±0.003 ±0.003	± 0.003			± 0.003	± 0.003			
	Accuracy	(for white)*1,*3	> 0.003 cd/m <sup>2</sup> > 0.1 cd/m <sup>2</sup>	± 0.002 ± 0.002	± 0.003 ± 0.002 ± 0.002	± 0.003 ± 0.002	± 0.003	± 0.003 ± 0.002 ± 0.002	± 0.003 ± 0.002 ± 0.002	± 0.004 (0.04 to cd/m <sup>2</sup> ) ± 0.004	± 0.006 ± 0.002	± 0.006
	Accuracy	(IOI WIIILE) ***	> 1 cd/m <sup>2</sup>	± 0.002	± 0.002 ± 0.002 ± 0.002	± 0.002	± 0.002	± 0.002	± 0.002	± 0.003	± 0.002	± 0.002
Chromaticity			> 10 cd/m <sup>2</sup> > 100 cd/m <sup>2</sup>	± 0.002 ± 0.002	± 0.002	± 0.002 ± 0.002	± 0.002 ± 0.002	± 0.002 ± 0.002	± 0.002 ± 0.002	± 0.003 ± 0.002	± 0.002 ± 0.002	± 0.002 ± 0.002
C officiation	At 100 cd/m <sup>2</sup> (1	or monochrome)*2	> 100 cd/m <sup>2</sup> > 0.001 cd/m <sup>2</sup>	± 0.003 0.0030	± 0.003	± 0.003	± 0.003	± 0.003	± 0.003	± 0.003	± 0.003	± 0.003
			> 0.003 cd/m <sup>2</sup> > 0.01 cd/m <sup>2</sup>	0.0030	0.0030	0.0035		0.0020	0.0020	0.0030 (0.04 to cd/m <sup>2</sup> )	0.0070	
	Repeatability (2g)*1	AUTO	> 0.1 cd/m <sup>2</sup> > 1 cd/m <sup>2</sup>	0.0004 0.0002	0.0008 0.0003	0.0015	0.0035 0.0015	0.0008 0.0003	0.0008	0.0015	0.0020 0.0008	0.0070 0.0020
			> 10 cd/m <sup>2</sup> > 100 cd/m <sup>2</sup>	0.0002	0.0002	0.0003	0.0004	0.0002	0.0002	0.0003	0.0005	0.0008
		Measur	ement luminance range <sup>*8</sup>	0.5 to 10,000 cd/m <sup>2</sup>		5 to 1,500 cd/m <sup>2</sup>	30 to 9,000 cd/m <sup>2</sup>				15 to 3,000 cd/m <sup>2</sup>	90 to 18,000 cd/m <sup>2</sup>
	Flicker*6	Accuracy	ent target (Flicker frequency) 30 Hz, AC/DC 10% sine wave	0.25 to 65 Hz ± 0.3 %		0.25 to 65 Hz ± 0.4 %	0.25 to 65 Hz ± 0.4 %				0.25 to 65 Hz ± 0.4 %	0.25 to 65 Hz ± 0.4 %
Flicker			60 Hz, AC/DC 10 % sine wave 20) 20-65 Hz, AC/DC 10 % sine wave	± 0.3 % 0.3 %		± 0.7 % 0.3 %	± 0.7 % 0.3 %				± 0.7 % 0.3 %	± 0.7 % 0.3 %
(Contrast)			ement luminance range <sup>*8</sup> ent target (Flicker frequency)	0.5 to 10,000 cd/m <sup>2</sup> 0.25 to 200 Hz	5 to 3,000 cd/m <sup>2</sup> 0.25 to 200 Hz	5 to 5,000 cd/m <sup>2</sup> 0.25 to 200 Hz	30 to 30,000 cd/m <sup>2</sup> 0.25 to 200 Hz	15 to 3,000 cd/m <sup>2</sup> 0.25 to 200 Hz	30 to 6,000 cd/m <sup>2</sup> 0.25 to 200 Hz	20 to 12,000 cd/m <sup>2</sup> 0.25 to 200 Hz	15 to 10,000 cd/m <sup>2</sup> 0.25 to 200 Hz	90 to 30,000 cd/m <sup>2</sup> 0.25 to 200 Hz
	XYZ*6	Accuracy	30 Hz, AC/DC 10% sine wave 60 Hz, AC/DC 10% sine wave	± 1.5 % ± 2.2 %	± 1.1 % ± 1.7 %	± 1.2 % ± 1.7 %	± 1.2 % ± 1.7 %	± 0.4 % ± 0.7 %	± 0.4 % ± 0.7 %	± 1.1 % ± 1.7 %	± 0.7 % ± 1.1 %	± 0.7 % ± 1.1 %
			20) 20-65 Hz, AC/DC 10% sine wave ement luminance range <sup>18</sup>	1.6 % 0.5 to 10,000 cd/m <sup>2</sup>	1.6 %	1.7 % 5 to 1,500 cd/m <sup>2</sup>	1.7 % 30 to 9,000 cd/m <sup>2</sup>	0.3 %	0.3 %	0.016	1.0 % 15 to 3,000 cd/m <sup>2</sup>	1.0 % 90 to 18,000 cd/m <sup>2</sup>
			ent target (Flicker frequency)	0.42 ~ 65 Hz		0.42 to 65 Hz	0.42 to 65 Hz				0.42 to 65 Hz	0.42 to 65 Hz
	Flicker*6	Accuracy	30 Hz, AC/DC 4% sine wave 30 Hz, AC/DC 1.2% sine wave	± 0.35 dB ± 0.35 dB		± 0.35 dB ± 0.35 dB	± 0.35 dB				± 0.35 dB ± 0.35 dB	± 0.35 dB
Flicker (JEITA)		Repeatability (2	SU FIZ, AC/ DC 1.2 % SITE WAVE	0.1 dB 0.3 dB		0.1 dB 0.3 dB	0.1 dB				0.1 dB 0.3 dB	0.1 dB
· ······ (j··· )			rement luminance range <sup>*8</sup> nt target (Flicker frequency) <sup>*10</sup>	0.5 to 8,500 cd/m <sup>2</sup> 0.42 to 200 Hz	5 to 3,000 cd/m <sup>2</sup> 0.42 to 200 Hz	5 to 4,500 cd/m <sup>2</sup> 0.42 to 200 Hz	30 to 27,000 cd/m <sup>2</sup> 0.42 to 200 Hz	15 to 2,000 cd/m <sup>2</sup> 0.42 to 200 Hz	30 to 4,000 cd/m <sup>2</sup> 0.42 to 200 Hz	20 to 12,000 cd/m <sup>2</sup> 0.42 to 200 Hz	15 to 8,500 cd/m <sup>2</sup> 0.42 to 200 Hz	90 to 30,000 cd/m <sup>2</sup> 0.42 to 200 Hz
	XYZ*6	Accuracy	30 Hz, AC/DC 4% sine wave 30 Hz, AC/DC 1.2% sine wave	± 0.35 dB ± 0.35 dB	± 0.35 dB ± 0.35 dB	± 0.35 dB ± 0.35 dB	± 0.35 dB	± 0.35 dB ± 0.35 dB	± 0.35 dB ± 0.35 dB	± 0.35 dB ± 0.35 dB	± 0.35 dB ± 0.35 dB	± 0.35 dB
		Repeatability (2	20) 30 Hz, AC/DC 4% sine wave 30 Hz, AC/DC 1.2% sine wave	0.4 dB 1.4 dB	0.4 dB 1.4 dB	0.4 dB 1.5 dB	0.4 dB	0.1 dB 0.3 dB	0.1 dB 0.3 dB	0.4 dB 1.4 dB	0.3 dB 0.9 dB	0.3 dB
	Flicker*6		rement luminance range <sup>*8</sup> Sampling frequency	0.1 to 10,000 cd/m <sup>2</sup> 200 kHz Changeable								
Waveform	- Inciter	Repeatability (2	20 Lv:0.1 cd/m <sup>2</sup> , fs:3 kHz, fc:1 kHz rement luminance range <sup>-8</sup>	1.8 % 0.1 to 10,000 cd/m <sup>2</sup>	 1 to 3,000 cd/m <sup>2</sup>	 1 to 5,000 cd/m <sup>2</sup>	 6 to 30,000 cd/m <sup>2</sup>	 1 to 2,500 cd/m <sup>2</sup>	 2 to 5,000 cd/m <sup>2</sup>	 4 to 12.000 cd/m <sup>2</sup>	 1 to 10,000 cd/m <sup>2</sup>	 6 to 30,000 cd/m <sup>2</sup>
waveloitti	XYZ*6		Sampling frequency	3 kHz Changeable	3 kHz	3 kHz	3 kHz	3 kHz	3 kHz	3 kHz	3 kHz	3 kHz
		Repeatability (2	LV: I CO/ITI2	13 % 1.4 %								
			rement luminance range <sup>*8</sup> Sampling frequency	0.5 to 10,000 cd/m <sup>2</sup> 200 kHz Changeable								
	Flicker*6	Measurem Accuracy	1-120 Hz, AC/DC 10% sine wave	0.01 to 100k [Hz] ± 0.3 %								
VRR-Flicker		Repeatability (2	20) 1-120 Hz, AC/DC 10 % sine wave rement luminance range <sup>*8</sup>	0.3 %	 5 to 3,000 cd/m <sup>2</sup>	 5 to 5,000 cd/m <sup>2</sup>	 30 to 30,000 cd/m <sup>2</sup>	 15 to 3,000 cd/m <sup>2</sup>	 30 to 6,000 cd/m <sup>2</sup>	 20 to 12,000 cd/m <sup>2</sup>	 15 to 10,000 cd/m <sup>2</sup>	 90 to 30,000 cd/m <sup>2</sup>
	XYZ*6		Sampling frequency ent Target (Flicker frequency)		3 kHz 0.03 to 1.5k [Hz]	3 kHz 0.03 to 1.5k [Hz]	3 kHz 0.03 to 1.5k [Hz]	3 kHz 0.03 to 1.5k [Hz]	3 kHz 0.03 to 1.5k [Hz]	3 kHz 0.03 to 1.5k [Hz]	3 kHz 0.03 to 1.5k [Hz]	3 kHz 0.03 to 1.5k [Hz]
	E	Accuracy	1-120 Hz, AC/DC 10% sine wave 20 1-120 Hz, AC/DC 10% sine wave		± 0.22 %	± 0.24 %	± 0.24 %	± 0.08 %	± 0.08 %	± 0.22 %	±0.14%	± 0.14 %
		repeatability (2			0.16 times/sec (> 0.0003 cd/m <sup>2</sup> )			0.16 times/sec(> 0.0003 cd/m <sup>2</sup> )	0.16 times/sec (> 0.0006 cd/m <sup>2</sup> )			
Accuracy	Lvxy		AUTO -	1times/sec (> 0.0001 cd/m <sup>2</sup> ) 5times/sec (> 0.015 cd/m <sup>2</sup> )	1 times/sec (> 0.01 cd/m <sup>2</sup> ) 5 times/sec (> 0.15 cd/m <sup>2</sup> )	1 times/sec (> 0.001 cd/m <sup>2</sup> ) 5 times/sec (> 0.15 cd/m <sup>2</sup> )	1 times/sec (> 0.01 cd/m <sup>2</sup> ) 5 times/sec (> 0.9 cd/m <sup>2</sup> )	1 times/sec (> 0.01 cd/m <sup>2</sup> ) 5 times/sec (> 0.15 cd/m <sup>2</sup> )	1 times/sec (> 0.02 cd/m <sup>2</sup> ) 5 times/sec (> 0.3 cd/m <sup>2</sup> )	1 times/sec(> 0.004 cd/m <sup>2</sup> ) 5 times/sec(> 0.6 cd/m <sup>2</sup> )	1 times/sec (> 0.002 cd/m <sup>2</sup> ) 5 times/sec (> 0.15 cd/m <sup>2</sup> )	1 times/sec (> 0.1 cd/m <sup>2</sup> ) 5 times/sec (> 0.9 cd/m <sup>2</sup> )
guaranteed measurement		Flicker (Co	ontrast)	20times/sec (> 0.2 cd/m <sup>2</sup> ) 20 times /sec	20 times/sec (> 2 cd/m <sup>2</sup> ) 20 times/sec	20 times/sec (> 2 cd/m <sup>2</sup> ) 20 times/sec	20 times/sec (> 12 cd/m <sup>2</sup> ) 20 times/sec	20 times/sec (> 2 cd/m <sup>2</sup> ) 20 times/sec	20 times/sec (> 4 cd/m <sup>2</sup> ) 20 times/sec	20 times/sec(> 8 cd/m <sup>2</sup> ) 20 times/sec	20 times/sec (> 2 cd/m <sup>2</sup> ) 20 times/sec	20 times/sec (> 12 cd/m <sup>2</sup> ) 20 times/sec
speed*4		Flicker (		0.5 times/sec (at 1 HzPitch), 2.5 times/sec (at 10 HzPitch)	0.5 times/sec (at 1 HzPitch), 2.5 times/sec (at 10 HzPitch)	0.5 times/sec (at 1 HzPitch), 2.5 times/sec (at 10 HzPitch)	0.5 times/sec (at 1 HzPitch), 2.5 times/sec (at 10 HzPitch)	0.5 times/sec (at 1 HzPitch), 2.5 times/sec (at 10 HzPitch)	0.5 times/sec (at 1 HzPitch), 2.5 times/sec (at 10 HzPitch)	0.5 times/sec(at 1 HzPitch), 2.5 times/sec(at 10 HzPitch)	0.5 times/sec (at 1 HzPitch), 2.5 times/sec (at 10 HzPitch)	0.5 times/sec (at 1 HzPitch), 2.5 times/sec (at 10 HzPitch)
	VRR-Flicker Measure	San San	npling frequency 3 kHz	0.7 times/sec (at 1s Obs.)	0.7 times/sec (at 1s Obs.)	0.7 times/sec (at 1s Obs.)	0.7 times/sec (at 1s Obs.)	0.7 times/sec (at 1s Obs.) NTSC, PAL, EXT, UNIV, INT, MANU (4 ms to 4	0.7 times/sec (at 1s Obs.)	0.7 times/sec (at 1s Obs.)	0.7 times/sec (at 1s Obs.)	0.7 times/sec (at 1s Obs.)
	Me	asurement speed mo	ode	0.5 to 240 Hz (luminance and	0.5 to 240 Hz (luminance and	0.5 to 240 Hz (luminance and	0.5 to 240 Hz (luminance and	AUTO, LTD. AUTO, SLOW, FAST 0.5 to 240 Hz	0.5 to 240 Hz	0.5 to 240 Hz	0.5 to 240 Hz (luminance and	0.5 to 240 Hz (luminance and
	Measurement target (Vertical synchronization frequency)			chromaticity)	chromaticity)	chromaticity), 0.5 to 130 Hz (flicker)	chromaticity), 0.5 to 130 Hz (flicker)	(luminance and chromaticity)	(luminance and chromaticity)	(luminance and chromaticity)	chromaticity), 0.5 to 130 Hz (flicker)	chromaticity), 0.5 to 130 Hz (flicker)
Interface			User calibration memory channel Communication					99 channels USB2.0, RS-232C				
		Trigg Size (mm)		52 x 52x 272	47 x 47 x 190.5	42 x 42 x 139.7	42 x 42 x 139.7	IN: 1.8 V/3.3 to 5 V switching Out: 5 V 47 x 47 x 226.5	47 x 47 x 226.5	47 x 47 x 226.2	42×42×173.5	42 x 42 x 173.5
		Weight Power supply		710 g (including mount)	510 g (including mount)	270 g (including mount)		570 g (including mount) t from USB bus power line or RS communica		550 g (including mount)	280 g (including mount)	280 g (including mount)
		temperature/humid emperature/humidi						°C, relative humidity 85 % or less with no con lative humidity 85 % or less (at 35°C) with no				
	der Konica Minolta's st	andard light source (6	5,500 K).	*6: "Flicker" and "XYZ	" are mode names for PC Software CA-S40. used when no CA-DP40 data processor is con	nerted	*10: The listed values	are for use with CA-SDK2 or CA-S40. Flicker with the CA-410 series, firmware musi		must be used	ISO Certifications of KONI	CA MINOLTA, Inc., Sakai Site
*3: Temperature 2 *4: In NTSC [DOU designated PC *5: Reading fluctu	23°C/±2°C, relative hu JBLE FLAME] synchro C (with PC and probe d	midity 40 %±10 % nization mode using irectly connected, us ference reading at 23	minance for white is 100 cd/m <sup>2</sup> . USB with one probe. Measured using a K ing the supplied measurement software). °C, 40 % RH): Luminance: ±2% for white; C	*7: The spectral sensit matching function based on the CIE 1 *8: Measured under h	tivities of probes conforming to CIE 170-2:201 s; therefore, displayed values for luminance i 1931 color-matching fuctions. Konica Minolta's standard light source (consta	5 are different from those defined for the CIE 1 and chromaticity will be different from those nt light). If the luminance momentarily great	931 color- calculated * Unless otherwise sp ly exceeds	-Flicker With the CA-410 series, firmware musi ecified, specifications are given for conditions A, the Konica Minolta logo and symbol mark	established by Konica Minolta.		JQA-QMA15888 Design, development, manufacture/ manufacturing management	JQA-E-80027 Design, development, manufacture, service and sales of measuring instruments
	5 KONICA MINC			shown as too high	uch as with a PWM light source with a small itching from products produced in March 2021			and appearance shown herein are subject to			calibration, and service of measuring instruments	ISO 14001 E9222-AEEG-81 CFCCD

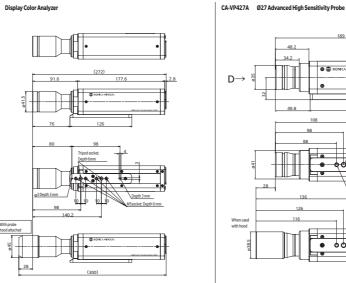


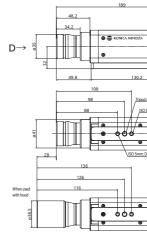


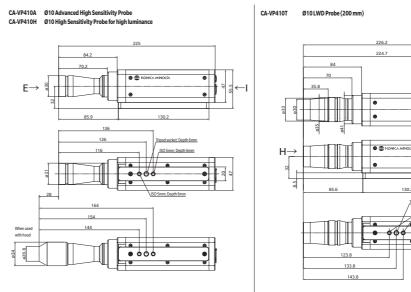
	ecification	ons of		CA-VP404 Small Spot Probe	CA-VP402 Small Spot Probe	CA-P427C CIE 170-2: 2015 Supported Probe <sup>-7</sup>	CA-MP410H Mini Probe			
A-527	/ <b>CA-410</b>	Probes		0		0				
		Measurement area		Ø4mm	Ø 2.1 mm	Ø 27 mm	Ø 10 mm			
	Accuracy gu	Acceptance angle aranteed measurement d	istance	±8.5° 30 ± 2 mm	±10° 28 ± 2 mm	± 2.5° 30 ± 10 mm	± 5° 10 ± 5 mm			
		Accuracy guaranteed		0.004 to 12,000 cd/m <sup>2</sup>	0.002 to 25,000 cd/m <sup>2</sup>	0.001 to 5,000 cd/m <sup>2</sup>	0.1 to 30,000 cd/m <sup>2</sup>			
			> 0.0003 cd/m <sup>2</sup>							
			> 0.0005 cd/m <sup>2</sup> > 0.001 cd/m <sup>2</sup>	± 9 % (0.004 to cd/m <sup>2</sup> )	 ± 9 % (0.002 to cd/m <sup>2</sup> )	 ±9%				
	Accuracy	(for white)*1,*3	> 0.01 cd/m <sup>2</sup>	±9%	±9%	±2 %				
			> 0.1 cd/m <sup>2</sup> > 1 cd/m <sup>2</sup>	± 3 %	± 3 %	± 1.5 % ± 1.5 %	± 2.5 %			
			> 10 cd/m <sup>2</sup>	± 3 % ± 2.5 %	± 3 % ± 2.5 %	± 1.5 %	± 2 % ± 2 %			
uminance			> 100 cd/m <sup>2</sup> > 0.0001 cd/m <sup>2</sup>	± 2 %	± 2 %	± 1.5 %	± 1.5 %			
			> 0.0001 cd/m <sup>2</sup> > 0.0003 cd/m <sup>2</sup>							
			> 0.0005 cd/m <sup>2</sup> > 0.001 cd/m <sup>2</sup>	 10 % (0.004 to cd/m <sup>2</sup> )	 10 % (0.002 to cd/m <sup>2</sup> )	10 %				
	Repeatability	AUTO	> 0.001 cd/m <sup>2</sup>	5 %	10 % (0.002 to cd/m²)	1 %				
	(2o)*1		> 0.1 cd/m <sup>2</sup>	0.50 %	1%	0.4 %	2.40 %			
			> 1 cd/m <sup>2</sup> > 10 cd/m <sup>2</sup>	0.20 %	0.25 %	0.10%	0.70 %			
			> 100 cd/m <sup>2</sup>	0.10 %	0.10 %	0.10 %	0.12 %			
r	4	Accuracy guaranteed lumi	nance range <sup>*8</sup> > 0.001 cd/m <sup>2</sup>	0.04 to 12,000 cd/m <sup>2</sup>	0.02 to 25,000 cd/m <sup>2</sup>	0.01 to 5,000 cd/m <sup>2</sup>	0.1 to 30,000 cd/m <sup>2</sup>			
		(for white)*1,*3	> 0.003 cd/m <sup>2</sup>							
	Accuracy		> 0.01 cd/m <sup>2</sup> > 0.1 cd/m <sup>2</sup>	± 0.004 (0.04 to cd/m <sup>2</sup> ) ± 0.004	± 0.004 (0.02 to cd/m <sup>2</sup> ) ± 0.004	± 0.003 ± 0.002	 ± 0.006			
	Accuracy	(or write)	> 1 cd/m <sup>2</sup>	± 0.003	± 0.003	± 0.002	± 0.002			
			> 10 cd/m <sup>2</sup> > 100 cd/m <sup>2</sup>	± 0.003 ± 0.002	± 0.003 ± 0.002	± 0.002 ± 0.002	± 0.002 ± 0.002			
nromaticity	<u>At 100</u> cd/m <sup>2</sup> (1	or monochrome)*2	> 100 cd/m <sup>2</sup> > 100 cd/m <sup>2</sup>	± 0.002 ± 0.003	± 0.002 ± 0.003	± 0.002 ± 0.003	± 0.002 ± 0.003			
ľ			> 0.001 cd/m <sup>2</sup> > 0.003 cd/m <sup>2</sup>							
			> 0.003 cd/m <sup>2</sup> > 0.01 cd/m <sup>2</sup>	0.0030 (0.04 to cd/m <sup>2</sup> )	0.003 (0.02 to cd/m <sup>2</sup> )	0.0035				
	Repeatability (2g)*1	AUTO	> 0.1 cd/m <sup>2</sup>	0.0015	0.003	0.0015	0.0085			
	(_0)		> 1 cd/m <sup>2</sup> > 10 cd/m <sup>2</sup>	0.0005	0.0008	0.0004	0.0025			
			> 100 cd/m <sup>2</sup>	0.0002	0.0002	0.0002	0.0006			
			nt luminance range <sup>*8</sup> arget (Flicker frequency)			5 to 1,500 cd/m <sup>2</sup> 0.25 to 65 Hz	90 to 18,000 cd/m <sup>2</sup> 0.25 to 65 Hz			
	Flicker*6	Accuracy	30 Hz, AC/DC 10 % sine wave			± 0.4 %	± 0.4 %			
Flieleer		-	60 Hz, AC/DC 10 % sine wave			±0.7%	± 0.7 % 0.3 %			
Flicker (Contrast)			20-65 Hz, AC/DC 10 % sine wave nt luminance range <sup>*8</sup>	20 to 12,000 cd/m <sup>2</sup>	35 to 25,000 cd/m <sup>2</sup>	0.3 % 5 to 5,000 cd/m <sup>2</sup>	90 to 30,000 cd/m <sup>2</sup>			
	10/7-5	Measurement ta	arget (Flicker frequency)	0.25 to 200 Hz	0.25 to 200 Hz	0.25 to 200 Hz	0.25 to 200 Hz			
	XYZ*6	Accuracy	30 Hz, AC/DC 10 % sine wave 60 Hz, AC/DC 10 % sine wave	± 1.1 % ± 1.7 %	± 1.1 % ± 1.7 %	± 1.2 % ± 1.7 %	± 0.9% ± 1.3 %			
			20-65 Hz, AC/DC 10 % sine wave	1.6 %	1.6 %	1.7 %	1.3 %			
			nt luminance range <sup>*8</sup> arget (Flicker frequency)			5 to 1,500 cd/m <sup>2</sup> 0.42 to 65 Hz	90 to 18,000 cd/m <sup>2</sup> 0.42 to 65 Hz			
	Flicker*6	Accuracy	30 Hz, AC/DC 4% sine wave			± 0.35 dB	± 0.35 dB			
	T Honer		30 Hz, AC/DC 1.2% sine wave 30 Hz, AC/DC 4% sine wave			± 0.35 dB 0.1 dB	 0.1 dB			
icker (JEITA)		Repeatability (20)	30 Hz, AC/DC 1.2% sine wave			0.3 dB				
			nt luminance range*8 rget (Flicker frequency)*10	20 to 12,000 cd/m <sup>2</sup> 0.42 to 200 Hz	35 to 22,000 cd/m <sup>2</sup> 0.42 to 200 Hz	5 to 4,500 cd/m <sup>2</sup> 0.42 to 200 Hz	90 to 30,000 cd/m <sup>2</sup> 0.42 to 200 Hz			
	XYZ*6	Accuracy	30 Hz, AC/DC 4% sine wave	± 0.35 dB	± 0.35 dB	± 0.35 dB	± 0.35 dB			
	7112		30 Hz, AC/DC 1.2% sine wave 30 Hz, AC/DC 4% sine wave	± 0.35 dB 0.4 dB	± 0.35 dB 0.4 dB	± 0.35 dB 0.4 dB	0.3 dB			
		Repeatability (20)	30 Hz, AC/DC 1.2% sine wave	1.4 dB	1.4 dB	1.5 dB				
	Flicker*6	Measurement luminance range <sup>*8</sup>								
	T licker -	Sampling frequency           Repeatability (2σ)         Lv:0.1 cd/m², fs:3 kHz, fc:1 kHz								
Naveform			nt luminance range <sup>18</sup> ling frequency	4 to 12,000 cd/m <sup>2</sup> 3 kHz	7 to 25,000 cd/m <sup>2</sup> 3kHz	1 to 5,000 cd/m <sup>2</sup> 3 kHz	6 to 30,000 cd/m <sup>2</sup> 3 kHz			
	XYZ*6	Repeatability (20)	Lv: 0.1 cd/m <sup>2</sup>	3 KHZ	3KHZ	3 KHZ	3 KHZ			
			Lv: 1 cd/m <sup>2</sup>							
			nt luminance range <sup>*8</sup> ling frequency							
	Flicker*6		arget (Flicker frequency)							
RR-Flicker		Accuracy Repeatability (2g)	1-120 Hz, AC/DC 10 % sine wave 1-120 Hz, AC/DC 10 % sine wave							
*10*11		Measureme	nt luminance range <sup>*8</sup>	20 to 12,000 cd/m <sup>2</sup>	35 to 25,000 cd/m <sup>2</sup>	5 to 5,000 cd/m <sup>2</sup>	90 to 30,000 cd/m <sup>2</sup>			
	XYZ*6		ling frequency arget (Flicker frequency)	3 kHz 0.03 to 1.5k [Hz]	3 kHz 0.03 to 1.5k [Hz]	3 kHz 0.03 to 1.5k [Hz]	3 kHz 0.03 to 1.5k [Hz]			
		Accuracy	1-120 Hz, AC/DC 10 % sine wave	± 0.22 %	± 0.22 %	± 0.24 %	± 0.18 %			
		Repeatability (20)	1-120 Hz, AC/DC 10 % sine wave	0.32 %	0.32 % 0.16 times/sec(> 0.002 cd/m <sup>2</sup> )	0.34 %	0.26 %			
A	Lvxy	AUTO		1 times/sec(> 0.004 cd/m <sup>2</sup> )	1 times/sec(> 0.05 cd/m <sup>2</sup> )	1 times/sec (> 0.001 cd/m <sup>2</sup> )	1 times/sec (> 0.1 cd/n			
Accuracy uaranteed	2			5 times/sec(> 0.6 cd/m <sup>2</sup> ) 20 times/sec(> 8 cd/m <sup>2</sup> )	5 times/sec(> 1.5 cd/m <sup>2</sup> ) 20 times/sec(> 25 cd/m <sup>2</sup> )	5 times/sec (> 0.15 cd/m <sup>2</sup> ) 20 times/sec (> 2 cd/m <sup>2</sup> )	5 times/sec (> 0.9 cd/n 20 times/sec (> 12 cd/n			
easurement [		Flicker (Contra	st)	20 times/sec	20 times/sec	20 times/sec	20 times/sec			
speed*4		Flicker (JEITA	)	0.5 times/sec(at 1 HzPitch), 2.5 times/sec(at 10 HzPitch)	0.5 times/sec(at 1 HzPitch), 2.5 times/sec(at 10 HzPitch)	0.5 times/sec (at 1 HzPitch), 2.5 times/sec (at 10 HzPitch)	0.5 times/sec (at 1 HzPit 2.5 times/sec (at 10 HzPi			
	VRR-Flicker		g frequency 3 kHz	0.7 times/sec (at 1s Obs.)	0.7 times/sec (at 1s Obs.)	0.7 times/sec (at 1s Obs.)	0.7 times/sec (at 1s Obs			
		ement synchronization mo asurement speed mode	de			INT, MANU(4 ms to 4 s) TO, SLOW, FAST				
			on frequency)	0.5 to 240 Hz	0.5 to 240 Hz	0.5 to 240 Hz (luminance and	0.5 to 240 Hz (luminance ar			
Measurement target (Vertical synchronization frequency)				(luminance and chromaticity) (luminance and chromaticity) chromaticity), 0.5 to 130 Hz (flicker) chromaticity), 0.5 to 130 Hz (flicker)						
User calibration memory channel Interface Communication Trigger®					USB2.0,	RS-232C				
				A7 - A7 - 220 F	IN: 1.8 V /3.3 to 5 \	/switching Out: 5 V	12 12- 77			
		Size (mm) Weight		47 x 47 x 226.5 570 g (including mount)	47 x 47 x 222.9 580 g (including mount)	42 x 42 x 139.7 270 g (including mount)	42 x 42 x 77 200 g (including mour			
						ine or RS communication conne				
	<u> </u>	Power supply		DC 5						
		Power supply temperature/humidity ra temperature/humidity rai			10 to 35°C, relative humidity 8	5 % or less with no condensation r less (at 35°C) with no condens	n			

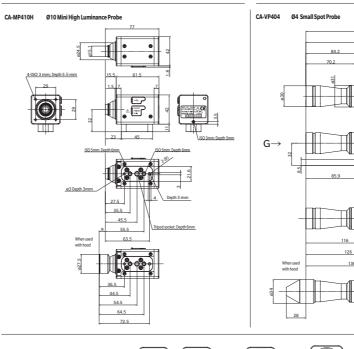
## **Probe Dimensions** (unit: mm)

CA-527







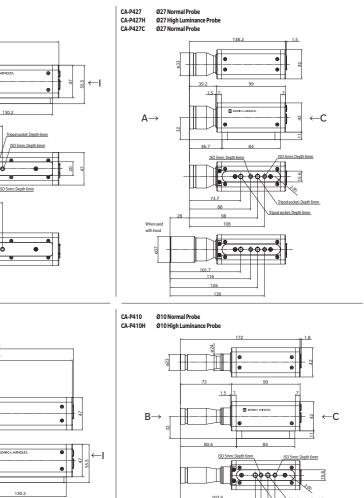


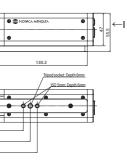


\*4: In NTSC [DOUBLE FLAME] synchronization mode using USB with one probe
 \*5: Reading fluctuation (compared to reference reading at 23°C, 40% RH): Luminance: ±2% for white; Chromaticity (at 100 cd/m2): ±0.002 for white; ±0.003 for monochrome
 \*6: "Flicker" and "XY2" are mode names for PC Software CA-S40.
 "XY2" can only be used when no CA-DP40 data processor is connected.
 \*7: The spectral sensitivities of probes conforming to CEI T70-2:2015 are different from those defined for the CIE 1931 color-matching functions; therefore, displayed values for luminance and chromaticity will be different from those calculated based on the CIE 1931 color-matching functions.

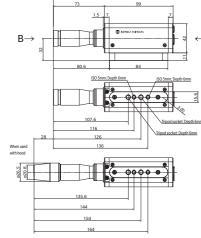
aupports 1. or Switching from products produced in March 2021.
 \*10: The listed values are for use with CA-SDK2 or CA-S40.
 \*11: To messure VRR-Flicker with the CA-410 series, firmware must be Ver. 1.40 or later and CA-SDK2 or CA-S40 must be used.

\* Unless otherwise specified, specifications are given for conditions established by Konica Minolta.

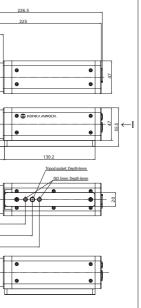


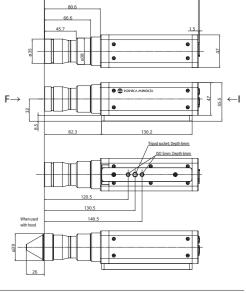


224.7









222.9 221.4









