

Arçelik A.Ş. Ürün Güvenliği ve EMC
Laboratuvarı
Kapaklı Tekirdağ / TÜRKİYE
Arçelik A.Ş. Product Safety and EMC
Laboratory
Kapaklı Tekirdağ / TURKEY



2019/2021/EU, IEC/EN 50564, IEC/EN 62087-3
POWER MEASUREMENT TEST REPORT

AB-1178-T

2022005

03-22

Rapor Numarası / Report Number	: 2022005-00
Talep Numarası / Request Number	: 9996_22_M4_ERP,9997_22_M4_ERP
Başvuran / Applicant	: Arçelik A.Ş. Elektronik İşletmesi / Electronics Plant
Adres / Address	: Arçelik Elektronik İşletmesi Çerkezköy OSB Karaağaç Mah. 8. Sokak No: 1A Kapaklı/Tekirdağ
Telefon / Telephone	: +90 282 292 3110
Faks / Fax	: -
Model Adı / Model Name	: A55PLU 5045AW , A43PLU 5045AW
Ürün Tipi / Product Type	: Intelligent Multimedia Display
Marka / Brand	: arçelik
Seri No / Serial Number	: 40211124000712 , 40211123000369
Üretici / Manufacturer	: Guangzhou Shirui Electronics Co.,Ltd.
Test Sonucu / Test Result ¹	: Ölçülen tüm değerler spesifikasyon sınırlarına uygundur All measured values are conformant according to specification limits
Sayfa Sayısı / Page Number	: 11

Deney laboratuvarı olarak faaliyet gösteren Arçelik A.Ş. Ürün Güvenliği ve EMC Laboratuvarı, TÜRKAK'tan AB-1178-T ile TS EN ISO/IEC 17025 standardına göre akredite edilmiştir. Türk Akreditasyon Kurumu(TÜRKAK) deney raporlarının tanınırlığı konusunda Avrupa Akreditasyon Birliği(EA) ile Çok Taraflı Anlaşma ve Uluslararası Laboratuvar Akreditasyon Birliği(ILAC) ile karşılıklı tanıma anlaşması imzalamıştır. Deney ve /veya ölçüm sonuçları, genişletilmiş ölçüm belirsizlikleri (olması halinde) ve deney metotları bu sertifikanın tamamlayıcı kısmı olan takip eden sayfalarda verilmiştir. “**” işaretli sonuçlar akreditasyon kapsamı dışındadır.

Arçelik AŞ Product Safety and EMC Lab accredited by TÜRKAK under registration number AB-1178-T for TS EN ISO/IEC 17025 as test laboratory. Turkish Accreditation Agency (TURKAK) is a signatory to the European co-operation for Accreditation (EA) Multilateral Agreement (MLA) and to the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement (MRA) for the recognition of test reports. The test and/or measurement results, the uncertainties (if applicable) with confidence probability and test methods are given on the following pages which are part of this report. “**” are excluded from the scope of accreditation.

ONAY VERİLİŞ TARİHİ : 14.03.2022
DATE OF ISSUE

Onaylayan / Approved by: Onaylar Test Lab. Müdürü Approvals Test Lab. Manager	Düzenleyen / Compiled by: LVD Test Mühendisi LVD Test Engineer
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¹Test sonucu bu raporda belirtilen deneylere göre değerlendirilmiştir. Deney numunesi müşteri tarafından sağlanmıştır o yüzden bu rapor sadece test edilen örnek için geçerlidir. Test sonucu sadece bu rapor içerisinde gerçekleştirilen testlere göre verilmiştir. Test laboratuvarının izni olmadan raporun kısmi olarak kopyalanması yasaktır. Sonuçlar bu raporda sunulmuştur. İmzasız raporlar geçersizdir.
The result has commented stated tests at this report. Test sample provided by the applicant thus the test result only responds to the tested sample. Please pay attention that the final judgement is only valid for the actually performed tests documented in this test report. It is not allowed to copy this report partly without the allowance of the test laboratory. The result has commented stated tests at this report. Test reports without signature and seal are not valid.

Test Report Number: 2022005-00

Test Date: 24.02.2022

FRM-18168-3

Revizyon Kayıtları / Revision Records

Revizyon No / Revision Number	Revizyon Tarihi / Revision Date	Özet / Summary	Revizyonu Yapan / Revised By	Onaylayan / Approved By
0	14.03.2022	New Document	Hüseyin İÇMEN	Bekir Yalın

Raporu Düzenleyen Laboratuvarın; Testing Laboratory's;

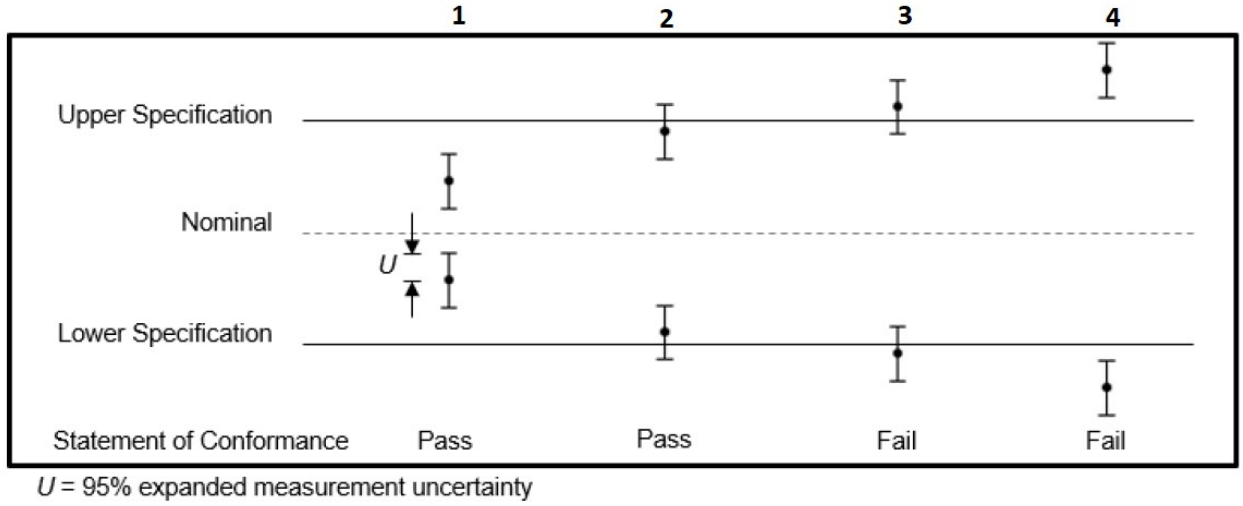
Adı : Arçelik A.Ş. Ürün Güvenliği ve EMC Laboratuvarı
Name : Arçelik A.Ş. Product Safety and EMC Laboratory

Adresi : Arçelik Elektronik İşletmesi Çerkezköy OSB Karaağaç Mah. 8. Sokak
Address : No: 1A Kapaklı/Tekirdağ

İlgili Kişi : Hüseyin İÇMEN
Contact Person

İletişim Bilgileri : +90 282 292 3758
Contact Info

Karar Kuralı ve Ölçüm Belirsizlikleri: Decision Rule and Measurement Uncertainties:



Ölçülen sonuç belirtilen spesifikasyon limitinin altındaysa (Durum 1-2) ürün spesifikasyona uygundur. Uygunluk beyanı verilir.


Result is under specified limit (Status 1 and 2). Product is conformant with specification limits.

Ölçülen sonuç belirtilen spesifikasyon limitinin üzerindeyse (Durum 3-4) ürün spesifikasyona uygun değildir. Uygunluk beyanı verilemez.

Result is above specified limit (Status 3 and 4). Product is non-conformant with specification limits.

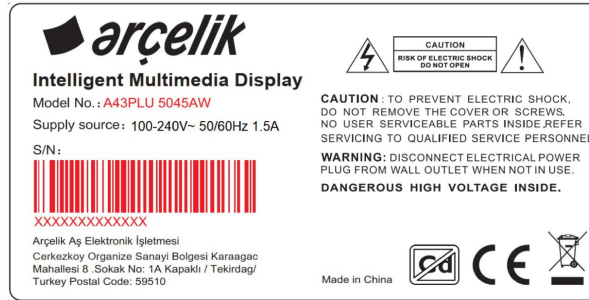
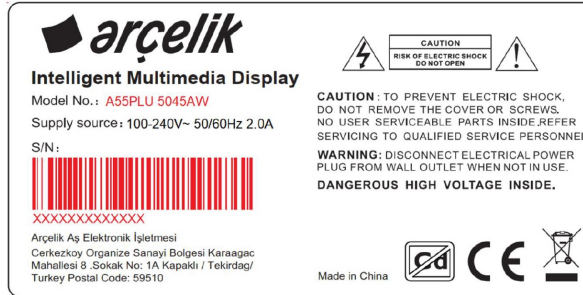
Test Report issued under the responsibility of:

Arçelik A.Ş. Product Safety and EMC Laboratory

TEST REPORT	
2019/2021/EU, IEC/EN 50564,IEC/EN 62087-3	
Audio/video, information and communication technology equipment	
Power Measurement	
Test specification:	
Standard.....:	2019/2021/EU, IEC/EN 50564,IEC/EN 62087-3
Non-standard test method.....:	N/A
Test item description Television Set	
Trade Mark	
Manufacturer.....:	Arçelik Electronics Plant
Model/Type reference	A43PLU 5045AW, A55PLU 5045AW
Ratings	A43PLU 5045AW 100-240V~ 50/60Hz 1.5A Class I A55PLU 5045AW 100-240V~ 50/60Hz 2.0A Class I
List of Attachments (including a total number of pages in each attachment):	
-	
Summary of testing:	
Tests performed (name of test and test clause):	Testing location:
All relevant tests according to the standard 2019/2021/EU Eco Design,2019/2013/EU Energy Labelling, IEC/EN 50564,IEC/EN 62087-3	Arçelik A.Ş. Product Safety and EMC Laboratory
Summary of compliance with National Differences (List of countries addressed):	
<input checked="" type="checkbox"/> The product fulfils the requirements of EN IEC 50564:2011 ,EN IEC 62087-3:2016	

Copy of marking plate:

The artwork below may be only a draft.



Possible test case verdicts: - test case does not apply to the test object ... : N/A - test object does meet the requirement : P (Pass) - test object does not meet the requirement ... : F (Fail)	
Testing: Date of receipt of test item : 24.02.2022 Date (s) of performance of tests : 24.02.2022-02.03.2022	
General remarks: "(See Enclosure #)" refers to additional information appended to the report. "(See appended table)" refers to a table appended to the report. Throughout this report a <input checked="" type="checkbox"/> comma / <input type="checkbox"/> point is used as the decimal separator.	
Manufacturer's Declaration per sub-clause 4.2.5 of IEC 60950-1:	
The application for obtaining a Test Certificate includes more than one factory location and a declaration from the Manufacturer stating that the sample(s) submitted for evaluation is (are) representative of the products from each factory has been provided..... :	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> Not applicable
When differences exist; they shall be identified in the General product information section.	
Name and address of factory (ies) :	Guangzhou Shirui Electronics Co.,Ltd. 192 Kezhu Road, Sciencetech Park, Guangzhou Economic & Technology Development District, Guangzhou, Guangdong, China

Measurements		P
Brand Name:	Arçelik	
Model Name:	A43PLU 5045AW	
Screen Size (inch/size):	43	

Measurements	
Off Mode Power(W)	0,0 W
Standby Power (W)	0,304 W
Networked Standby Power (W)	N/A
Standby Power (with info,clock,status display) (W)	N/A
Peak Luminance Ratio % (minimum)	%100
On Mode Power (W)	124,30 W
Annual On Mode Energy Consumption (kWh)	181,5 kW
Energy Label Efficiency Class	G

Test Conditions					
General		On mode Power		Stand-by Mode Power	
Mains Voltage/Frequency	230V / 50Hz	Measurement method	Average-Dynamic Pat.	Measurement method	Average
Ambient Temperature	23-25°C	How to stable condition achieved	1hr OFF and 1hr ON	How to stable condition achieved	20min. warm and 20min. measuring
THD(%)	0.05%	Uncertainty of power measuring system	0,42%	How to select the standby mode	By button on TV or Remote Control
				Networked standby	According to Com. Regu. 2019/2021 EU
				Uncertainty of power measuring system	0,42%

Measurements		P
Brand Name:	Arçelik	
Model Name:	A55PLU 5045AW	
Screen Size (inch/size):	55	

Measurements	
Off Mode Power(W)	0,0 W
Standby Power (W)	0,370 W
Networked Standby Power (W)	N/A
Standby Power (with info,clock,status display) (W)	N/A
Peak Luminance Ratio % (minimum)	%100
On Mode Power (W)	157,50 W
Annual On Mode Energy Consumption (kWh)	230 kW
Energy Label Efficiency Class	G

Test Conditions					
General		On mode Power		Stand-by Mode Power	
Mains Voltage/Frequency	230V / 50Hz	Measurement method	Average-Dynamic Pat.	Measurement method	Average
Ambient Temperature	23-25°C	How to stable condition achieved	1hr OFF and 1hr ON	How to stable condition achieved	20min. warm and 20min. measuring
THD(%)	0.05%	Uncertainty of power measuring system	0,42%	How to select the standby mode	By button on TV or Remote Control
				Networked standby	According to Com. Regu. 2019/2021 EU
				Uncertainty of power measuring system	0,42%

ANNEX-1
Limits for Energy Efficiency Class
(COMMISSION DELEGATED REGULATION (EU) No 2019/2013/EU)

Screen Size (inch)	Screen Area (dm ²)	Energy Class						
		A	B	C	D	E	F	G
16	6,2	4,2	5,9	7,6	9,3	11,9	14,5	>F Class
19	9,4	5,1	7,1	9,1	11,1	14,2	17,2	>F Class
22	12,8	6,0	8,4	10,7	13,1	16,6	20,1	>F Class
24	15	6,7	9,2	11,8	14,3	18,1	22,0	>F Class
26	18,6	7,7	10,6	13,5	16,4	20,7	25,0	>F Class
28	21	8,4	11,5	14,6	17,7	22,4	27,1	>F Class
32	27,1	10,1	13,8	17,5	21,1	26,7	32,2	>F Class
37	37,8	13,1	17,8	22,5	27,2	34,2	41,2	>F Class
39	41	14,0	19,0	24,0	28,9	36,4	43,9	>F Class
40	40,5	13,8	18,8	23,7	28,7	36,1	43,5	>F Class
42	48,7	16,1	21,8	27,5	33,2	41,8	50,3	>F Class
43	49,8	16,4	22,2	28,0	33,8	42,5	51,2	>F Class
46	58,3	18,8	25,3	31,9	38,5	48,4	58,3	>F Class
47	60,8	19,4	26,2	33,1	39,9	50,1	60,3	>F Class
48	62,5	19,9	26,9	33,8	40,8	51,2	61,7	>F Class
49	65	20,6	27,8	35,0	42,1	52,9	63,7	>F Class
50	67,5	21,3	28,7	36,1	43,5	54,6	65,8	>F Class
55	82,3	25,2	33,9	42,7	51,4	64,5	77,6	>F Class
58	92,6	27,9	37,5	47,1	56,8	71,2	85,6	>F Class
65	114,7	33,4	44,9	56,4	67,9	85,1	102,3	>F Class
75	153,08	42,3	56,8	71,2	85,7	107,3	129,0	>F Class
86	202	52,1	69,8	87,5	105,2	131,8	158,4	>F Class
98	262,2	61,7	82,6	103,5	124,4	155,7	187,1	>F Class
Tolerance : Actual on mode power consumption shall not exceed declared power consumption values by more than 7% Actual standby mode power consumption shall not exceed declared power consumption values by more than 0,1W								

ANNEX-2
Limits for Ecodesign Power Consumption Requirements
(COMMISSION REGULATION (EC) No 2019/2021/EC)

Table 2.1		Permissible On-mode power consumption values according to screen size.		
Screen Size (inch)	Screen Area (dm²)	FHD (2021)	UHD (2021)	OLED (2021)
16	6,2	12,7	15,7	25,7
19	9,4	15,8	19,5	29,5
22	12,8	19,1	23,6	33,6
24	15	21,2	26,2	36,2
26	18,6	24,7	30,5	40,5
28	21	27,1	33,3	43,3
32	27,1	33,0	40,5	50,5
37	37,8	43,2	53,1	63,1
39	41	46,3	56,8	66,8
40	40,5	45,8	56,2	66,2
42	48,7	53,6	65,7	75,7
43	49,8	54,6	67,0	77,0
46	58,3	62,6	76,7	86,7
47	60,8	64,9	79,6	89,6
48	62,5	66,5	81,5	91,5
49	65	68,8	84,3	94,3
50	67,5	71,1	87,1	97,1
55	82,3	84,4	103,4	113,4
58	92,6	93,5	114,5	124,5
65	114,7	112,0	137,1	147,1
75	153,08	141,0	172,5	182,5
86	202	171,7	210,0	220,0
98	262,2	200,1	244,7	254,7
Table 2.2		Permissible Standby/Off-Mode power consumption values		
	Condition	From 01 March 2021		
	Off	< 0,3W		
	Standby	< 0,50W		
	Networked standby	< 2W		

ANNEX-3
List of Measurement Devices

Test Device model	Test Device No.	Calibration date	
		Last	Next
Wattmeter (Yokogawa- WT210)	QLAB 368	07.05.2021	06.05.2022
AC PowerSupply (KIKUSUI-PCR4000W)	QLAB 632	09.04.2021	08.04.2022