

T e s t R e p o r t

Report No : L16282

Client: : Clear Channel United Kingdom
Unit 9, Newtons Court
Galleon Boulevard
Crossways Business Park
Dartford
DA2 6QL

Description : LCD Advertising Panel

Manufacturer : Not Disclosed

Type/Model : DS70

Test Specification : Measurement of power consumption in accordance with the
'Unmetered Supplies Operational Information Document' –
Version 15.0 (15/06/2016)

Date Testing Started : 30/01/2017

Conclusion : Refer to body of report

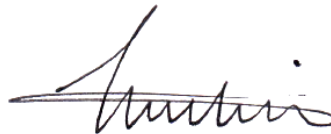
Date of Issue : 21/02/2017

Date of Expiry : 20/02/2022

Tested by: M.ALI
Position: Photometric Team
Leader



Approved: T.MALIK
Position: Operations & Quality
Manager



INTRODUCTION

The products identified in Table 1 were tested at the premises of Clear Channel United Kingdom for measurement of power consumption in accordance with the “Unmetered Supplies Operational Information” document – Version 15.0 (15/06/2016).

PRODUCT DETAILS

Table 1. Test Sample Details

Product Description	LCD Advertising Panel
Model No.	DS70
Number of Samples	Five
Condition on Receipt	Good
Nominal Dimensions	2000mm x 1350mm x 310mm
Product Supply Requirement	240V AC 50Hz
Lamp Type and Power	LED, Variable Power
Sampling Method: Test samples selected and supplied by client, no sampling method specified by client.	

The customer has declared that the equipment load does not vary with ambient temperature.

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RESULTS

Table 2. Wattage and VA results for DS70 at Standby operation

Operating Mode	Standby				
Watts					
Voltage	Sample Number				
	1	2	3	4	5
210	171.46	173.66	175.30	176.26	171.75
220	171.34	174.06	176.34	177.29	167.73
230	171.49	173.39	175.30	176.72	162.20
240	166.63	172.79	174.32	176.89	162.18
250	166.27	171.74	173.54	176.67	161.21
VA					
Voltage	Sample Number				
	1	2	3	4	5
210	270.66	274.97	271.03	271.17	269.04
220	285.65	288.06	284.87	286.70	280.67
230	304.43	308.07	304.00	305.26	296.67
240	322.41	329.39	325.11	323.35	315.39
250	343.31	349.49	344.01	341.33	334.32
Power Factor					
Voltage	Sample Number				
	1	2	3	4	5
210	0.63	0.63	0.65	0.65	0.64
220	0.60	0.60	0.62	0.62	0.60
230	0.56	0.56	0.58	0.58	0.55
240	0.52	0.52	0.54	0.55	0.51
250	0.48	0.49	0.50	0.52	0.48
Ambient Temperature During Test (°C)			8.7		
PF Leading/Lagging			Leading		

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Table 3. Wattage and VA results for DS70 at 100% Load (without fan)

Operating Mode	100% Load				
Watts					
Voltage	Sample Number				
	1	2	3	4	5
210	943.23	942.04	941.15	955.36	931.45
220	942.10	940.39	940.42	952.65	936.61
230	940.84	940.06	939.92	954.91	934.64
240	939.64	938.99	938.09	953.33	939.48
250	937.18	936.11	936.21	950.42	936.50
VA					
Voltage	Sample Number				
	1	2	3	4	5
210	984.27	982.33	979.37	993.87	968.49
220	990.47	988.45	986.14	998.96	981.47
230	997.77	995.89	993.48	1008.90	987.80
240	1006.90	1006.20	1002.70	1017.40	1009.10
250	1015.30	1015.10	1013.30	1025.30	1009.90
Power Factor					
Voltage	Sample Number				
	1	2	3	4	5
210	0.96	0.96	0.96	0.96	0.96
220	0.95	0.95	0.95	0.95	0.95
230	0.94	0.94	0.95	0.95	0.95
240	0.93	0.93	0.94	0.94	0.93
250	0.92	0.92	0.92	0.93	0.93
Ambient Temperature During Test (°C)			9.2		
PF Leading/Lagging			Leading		

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Table 4. Wattage and VA results for DS70 at 75% Load (without fan)

Operating Mode	75% Load				
Watts					
Voltage	Sample Number				
	1	2	3	4	5
210	739.34	735.89	730.43	741.45	724.17
220	738.44	734.74	729.03	740.24	723.07
230	736.44	734.57	728.57	739.57	722.76
240	735.82	733.12	727.66	738.23	722.89
250	734.04	732.49	727.19	736.49	722.43
VA					
Voltage	Sample Number				
	1	2	3	4	5
210	788.71	785.76	777.35	789.68	770.03
220	796.21	793.20	785.08	796.87	778.04
230	804.32	802.48	792.34	805.44	787.40
240	816.17	814.89	804.18	816.45	798.76
250	827.86	827.43	817.62	828.19	811.75
Power Factor					
Voltage	Sample Number				
	1	2	3	4	5
210	0.94	0.94	0.94	0.94	0.94
220	0.93	0.93	0.93	0.93	0.93
230	0.92	0.92	0.92	0.92	0.92
240	0.90	0.90	0.90	0.90	0.91
250	0.89	0.89	0.89	0.89	0.89
Ambient Temperature During Test (°C)			10.7		
PF Leading/Lagging			Leading		

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Table 5. Wattage and VA results for DS70 at 50% Load (without fan)

Operating Mode	50% Load				
Watts					
Voltage	Sample Number				
	1	2	3	4	5
210	559.43	560.50	558.02	563.53	553.05
220	556.44	560.17	556.86	563.48	547.82
230	555.90	560.47	557.17	562.78	547.52
240	558.50	559.71	555.75	562.14	547.17
250	557.63	558.83	554.44	561.27	546.40
VA					
Voltage	Sample Number				
	1	2	3	4	5
210	620.61	621.58	615.79	622.91	609.91
220	628.19	631.13	625.66	632.57	615.98
230	639.27	643.21	637.24	642.86	627.06
240	655.91	659.39	651.98	657.39	640.51
250	671.36	673.14	665.48	671.36	654.55
Power Factor					
Voltage	Sample Number				
	1	2	3	4	5
210	0.90	0.90	0.91	0.90	0.91
220	0.89	0.89	0.89	0.89	0.89
230	0.87	0.87	0.87	0.88	0.87
240	0.85	0.85	0.85	0.86	0.85
250	0.83	0.83	0.83	0.84	0.83
Ambient Temperature During Test (°C)			12.4		
PF Leading/Lagging			Leading		

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Table 6. Wattage and VA results for DS70 at 25% Load (without fan)

Operating Mode	25% Load				
Watts					
Voltage	Sample Number				
	1	2	3	4	5
210	355.76	357.33	356.67	364.93	351.75
220	356.46	357.42	356.84	365.05	346.54
230	355.69	358.31	357.36	365.88	346.90
240	358.84	357.96	357.07	365.60	346.17
250	358.24	358.06	356.80	358.27	346.19
VA					
Voltage	Sample Number				
	1	2	3	4	5
210	441.26	443.07	437.51	447.34	432.66
220	454.81	457.91	451.44	460.32	442.24
230	472.51	475.64	469.37	477.49	459.10
240	494.98	496.33	490.87	496.45	476.29
250	513.88	514.53	506.70	510.29	495.14
Power Factor					
Voltage	Sample Number				
	1	2	3	4	5
210	0.81	0.81	0.82	0.82	0.81
220	0.78	0.78	0.79	0.79	0.78
230	0.75	0.75	0.76	0.77	0.76
240	0.72	0.72	0.73	0.74	0.73
250	0.70	0.70	0.70	0.70	0.70
Ambient Temperature During Test (°C)			12.4		
PF Leading/Lagging			Leading		

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Table 7. Wattage and VA results for DS70 at maximum operating mode (with fan)

Operating Mode	100% Load with cooling fan				
Watts					
Voltage	Sample Number				
	1	2	3	4	5
210	1015.10	1118.80	1109.80	1111.80	1094.50
220	1013.30	1117.40	1107.60	1110.70	1092.00
230	1011.40	1116.40	1107.40	1108.60	1091.20
240	1009.20	1114.40	1104.50	1106.60	1089.30
250	1007.10	1110.90	1102.80	1103.70	1086.60
VA					
Voltage	Sample Number				
	1	2	3	4	5
210	1053.20	1154.10	1143.90	1146.50	1127.90
220	1058.70	1158.70	1147.80	1151.70	1131.50
230	1065.80	1164.40	1154.40	1156.20	1138.10
240	1073.40	1172.40	1161.70	1164.30	1144.90
250	1083.10	1180.00	1169.00	1171.00	1152.40
Power Factor					
Voltage	Sample Number				
	1	2	3	4	5
210	0.96	0.97	0.97	0.97	0.97
220	0.96	0.96	0.96	0.96	0.97
230	0.95	0.96	0.96	0.96	0.96
240	0.94	0.95	0.95	0.95	0.95
250	0.93	0.94	0.94	0.94	0.94
Ambient Temperature During Test (°C)			13.4		
PF Leading/Lagging			Leading		

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DEVIATION(S) FROM TEST STANDARD

No reported deviations from test standard.

MEASUREMENT UNCERTAINTY

The following expanded uncertainties apply to the measurements shown in the results;

True Power (W): $\pm 0.69\%$, Apparent Power (VA): $\pm 0.61\%$

The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor $k=2$, providing a coverage probability of approximately 95%. The uncertainty evaluation has been carried out in accordance with UKAS requirements.

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ILLUSTRATION



Figure 1. *Product image*

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