جراي ماكنزي للخدمات الهندسية (ش.ذ.م.م)
Gray Mackenzie Engineering Services L.L.C.

ص.ب ٣٢٣٩٣، دبي
الإمارات العربية المتحدة
تليفون : ٠٠ ٩٧١ ٤ ٣٢٤١٣٨٠
فاكس : ٠٠ ٩٧١ ٤ ٣٢٤١٣٨٤
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TEST REPORT

Reference Standard: IEC 60598-2-1

Luminaires - Part 2-1: Particular requirements - Fixed general purposed luminaires

Report Reference No. ..... :	**47070**
Date of issue ..... :	27 June 2018
Total Number of Pages ..... :	8
Applicant's Name ..... :	**LITE-TECH INDUSTRIES L.L.C**
Address ..... :	13-B, Ras Al Khor Ind. No.1, PO. Box: 60305, Dubai, UAE.
Test specification:	
Standard(s) ..... :	IEC 60598-2-1, IEC 60598-1
Test Report Form No. ..... :	GMES/LAB/FRM/-021 Rev 01, Jan'18
Test Report Form(s) Originator .... :	Gray Mackenzie Engineering Services LLC
Master TRF ..... :	04-January-2018
Client Document No. ..... :	N/A
Client Reference No ..... :	N/A
Lab Reference No ..... :	N/A
Job No ..... :	23759
Data Sheet No ..... :	16069
Test Item Description ..... :	LED Wall Light
Trademark/Identification mark ..... :	LITE-TECH
Manufacturer name ..... :	LITE-TECH INDUSTRIES L.L.C
Model/Type reference ..... :	46-WALLSTAR-1045-36-840-WH-EU
Serial Number ..... :	Not Indicated
Ratings ..... :	220V-240V, 50/60Hz, 36W, IP65, Ta.45°C, 4000K, 3500lm

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Serial No. : 003 Date : 27/06/18

TESTING
ATL 0024

Testing Procedure and Testing Location:

☒	**Testing Laboratory:**	Gray Mackenzie Engineering Services LLC
Tested By (name+signature).....:		Vijji.Pitta
Approved By (name+signature).....:		Harish N. Vasavan

Summary of Testing:

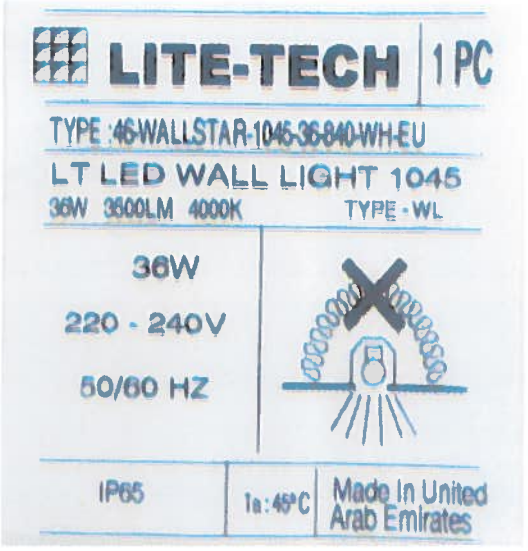
☒ The product complies with the requirements of the tests performed as per IEC 60598-2-1, IEC 60598-1.

☒ The product complies with the KUCAS and SASO Essential Requirements.

Note: Clause No 4 & 12 of IEC 60598-1 are not covered under GAC Scope of accreditation.

Copy of Marking Plate:

Luminaire Marking:



Control Gear Marking:

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Possible Test Case Verdicts:	
- test case not conducted to the test object.....	N/C
- 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 June 2018
Date (s) of performance of tests.....	25 June 2018 to 27 June 2018
Laboratory Temperature.....	23±2°C

General Remarks:

The test results presented in this report relate only to the object tested.

This report shall not be reproduced in full/partial without the written approval of the Issuing testing laboratory.

"(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 point is used as the decimal separator.

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IEC 60598-2-1			
Clause	**Requirement - Test**	**Result - Remark**	**Verdict**
1.5 (3)	**MARKING:**		**P**
3.1	**GENERAL:**		**P**
	Any written instructions related to safety shall be in a language which is acceptable in the country in which the equipment is to be installed.		P
3.2	**MARKING ON LUMINAIRES:**		**P**
	Mark of origin	LITE-TECH	P
	Rated voltage(s) in volts	220-240V	P
	rated maximum ambient temperature *ta*	Ta 45°C	P
	Symbol for class II luminaires		N/A
	Symbol for class III luminaires		N/A
	Marking with IP numbers	IP65	P
	Model number or type reference	46-WALLSTAR-1045-36-840-WH-EU	P
	Rated wattage or the designation	36W	P
	Symbol for luminaires for lamps of similar shape to "cool beam"		N/A
	Except for type Z attachments, terminations shall be marked to identify live, neutral and earth		P
	Symbol for minimum distance from lighted objects		N/A
	Symbol for rough service luminaires		N/A
	Symbol for luminaires for cracked protective shield		N/A
	Luminaires incorporating a protective shield		N/A
	maximum number of luminaires that may be interconnected or the maximum total current		N/A
	Relevant symbol for luminaires not suitable for covering with thermally insulated material.		P
3.3	**Additional information:**		**P**
	All details which are necessary to ensure proper installation, use and maintenance shall be given		P
3.3.2	Nominal Frequency:	50/60Hz	P
3.3.3	Operating temperature:	Ta 45°C	P
3.3.17	Supply cord replacement instruction		N/A
1.5 (3.4)	**TEST OF MARKING:**		**P**
	After the test, the marking shall be legible,		P
	marking labels shall not be easily removable and		P
	They shall show no curling.		P

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IEC 60598-2-1							
Clause	**Requirement - Test**	**Result - Remark**					**Verdict**
1.6 (4.13)	**MECHANICAL STRENGTH:**						**P**
4.13.1	Luminaires shall have adequate mechanical strength and be so constructed as to be safe after such rough handling as may be expected in normal use.	Applied impact energy					P
		Fragile		Other			
		0.20 Nm		0.35 Nm			
4.13.2	Metal parts enclosing live parts shall have adequate mechanical strength.	No Live Parts					P
1.6 (4.14)	**SUSPENSION AND ADJUSTING DEVICES:**						**P**
4.14.1	Mechanical suspensions shall have adequate factors of safety.						P
4.14.2	The mass of the luminaire suspended by flexible cables or cords shall not exceed 5 kg.						N/A
	The total nominal cross-sectional area of the conductors of flexible cables or cords suspending pendants shall be such that the stress in the conductors does not exceed 15 N/mm2						N/A
4.14.3	Adjusting devices and means of adjustment shall be so constructed that cords or cables are not pressed, clamped, damaged or twisted along the longitudinal axis by more than 360° during operation						N/A
1.6 (4.21)	**PROTECTIVE SHIELD:**						**N/A**
4.21.4	inspection and by the following tests:						N/A
	– the protective shield shall comply with the impact test of 4.13.1 with the impact energy of Table 4.3 for fragile parts;						N/A
	– parts of the lamp compartment, if of insulating material, shall comply with the resistance to flame and ignition test of 13.3.2.						N/A
1.7 (11)	**CREEPAGE DISTANCES AND CLEARANCES**						**P**
	Creepage and clearances distance (mm) between	Measured		Limit (mm)			P
	Current carrying parts of different polarity	2.8Cr	2.5Cl	1.2Cr	0.2Cl		P
	Live parts and mounting surface	3.0Cr	2.5Cl	1.2Cr	0.2Cl		P
1.8 (7.2.1)	**PROVISION FOR EARTHING:**						**P**
	Metal parts separated from live parts by double insulation or by reinforced insulation, are not regarded as likely to become live in the event of an insulation fault.						N/A
	The earthing connections shall be of low resistance.	0.03Ω					P
	Functional earth circuit shall be separated from live parts or accessible metal parts by double or reinforced insulation.						N/A

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IEC 60598-2-1			
Clause	**Requirement - Test**	**Result - Remark**	**Verdict**
1.10 (5.2)	**SUPPLY CONNECTION AND OTHER EXTERNAL WIRING**		**P**
	Luminaires shall be provided with one of the following means of connection to the supply:		-
	- fixed luminaires	Terminal	P
	- portable luminaires		N/A
	- track-mounted luminaires		N/A
	- semi-luminaires		N/A
1.11 (8.2)	**PROTECTION AGAINST ELECTRIC SHOCK:**		**P**
	Luminaires shall be so constructed that their live parts are not accessible when		P
	the luminaire has been installed and		P
	wired as in normal use, and		P
	when it is opened as necessary for replacing lamps or (replaceable) starters		N/A
1.12 (12.4)	**THERMAL TEST: (normal use)**		**P**
	Ambient Temperature: 45.0°C		-
	LED Driver:	51.4°C	P
	Enclosure:	48.5°C	
	Internal wire:	49.7°C	
1.13 (9)	**RESISTANCE TO DUST, SOLID OBJECTS AND MOISTURE**		**P**
9.3.1	All luminaires shall be proof against humid conditions which may occur in normal use.	25°C 93%Rh 48h	P
1.14 (10.2)	**INSULATION RESISTANCE AND ELECTRIC STRENGTH:**		**P**
	The insulation resistance and the electric strength of luminaires shall be adequate.	Between live parts and Enclosure	P
	500V DC Insulation Resistance:	>99.99MΩ	P
	1480V AC 60Sec Electric Strength:	No Breakdown	P
(10.3)	**LEAKAGE CURRENT/TOUCH CURRENT:**		**P**
	The touch current or protective conductor current that may occur during normal operation of the luminaire shall not exceed the values given in Table 10.3	0.01mA	P

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IEC 60598-2-1			
Clause	**Requirement - Test**	**Result - Remark**	**Verdict**
1.15 (13)	**RESISTANCE TO HEAT, FIRE AND TRACKING**		**P**
13.2	External parts of insulating material providing protection against electric shock,		N/A
	and parts of insulating material retaining current-carrying parts or SELV parts in position shall be sufficiently resistant to heat.	BPT 125°C	P
13.3	Parts of insulating material retaining current-carrying parts or		P
	SELV parts in position		N/A
	And external parts of insulating material providing protection against electric shock	GWT 650°C	P
	shall be resistant to flame and ignition.	No Flame	P

Kucas	**ESSENTIAL REQUIREMENTS:**		**P**
	Rated Voltage:	220-240V	P
	Rated Frequency:	50/60Hz	P
	Plug:		N/A
	Country of Origin:	UAE	P
	Instruction Manual:		P

SASO	**ESSENTIAL REQUIREMENTS:**		**P**
	Rated Voltage:	220-240V	P
	Rated Frequency:	50/60Hz	P
	Plug:		N/A
	Country of Origin:	UAE	P
	Instruction Manual:		P

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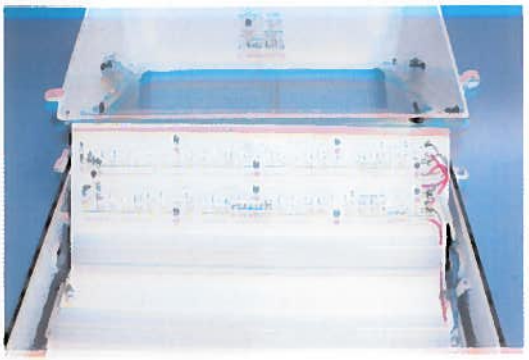
PHOTOGRAPH OF TEST OBJECT:



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