



TEST REPORT

Reference No.	WTF13F0503375S
Applicant	LED Hong Kong Ltd.
Address	No.204, Walok Industrial Building, SanMei Street, FoTan New Territory Hong Kong
Manufacturer	The same as above
Address	The same as above
Product Name	Dimmable LED Downlight
Model No.	See model list on page 3
Standards	Luminaires Part 2-2: Recessed luminaires IEC 60598-2-2:1996+A1:1997 used in conjunction with IEC 60598-1:2008, and with Australian Deviation IEC 62031:2008 LED modules for general lighting-Safety specifications
Date of Receipt sample	2013-04-22
Date of Test	2013-04-22 to 2013-05-04
Date of Issue	2013-05-04
Test Report Form No	WSL-6059822A-02A
Test Result	Pass*

*Remarks:

The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

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Test item description:	Recessed luminaires
Trade Mark:	-M at ret ret with with any the water
Model/Type reference	See model list on page 3
Ratings:	See model list on page 3

Copy of marking plate:





On the luminaries exterior surface outside the ceiling

Note: the marking labels for other models are identical as above, expect the model No.

Summary of testing:

- 1. Full tests are performed on R10WDLCW-01. Construction check for all models had been done.
- 2. The tests result complied with the requirements of the standards mentioned in page one.
- 3. Only the most unfavorable results are recorded in this report.



Test items particulars:	is when when we are all
Classification of installation and use	Recessed mounting
Supply Connection	Terminal block
Possible test case verdicts:	white white white and and
- test case does not apply to the test object	N (Not applicable)
- test object does meet the requirement	P (Pass)
- test object does not meet the requirement	F (Fail)
N I I I I I I I I	

General remarks:

"(see remark #)" refers to a remark 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.

General product information:

1. These products are Class II recessed luminaires.

2. All models are identical, except model name.

3. 240 V~, 50/60 Hz, for other details see model list below.

Item	Model	Input of LED	IP degree for lamp parts	IP degree for LED driver
1.15	R10WDLCW-01	DC 22V,300mA	IP44	IP20
2	R10WDLWW-01	DC 22V,300mA	IP44	IP20
3 <	R10WDLCW-15	DC 22V,300mA	IP44	IP20
4	R10WDLWW-15	DC 22V,300mA	IP44	IP20
5	R10WDLCWNZ-01	DC 22V,300mA	IP44	IP20
6	R10WDLWWNZ-01	DC 22V,300mA	IP44	IP20
7	R10WDLCWNZ-15	DC 22V,300mA	IP44	IP20
N8	R10WDLWWNZ-15	DC 22V,300mA	IP44	IP20



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white white	IEC 60598-2-2	THE THE STREET NITE	MALIA WALK
Clause	Requirement + Test	Result - Remark	Verdict

2.2 (0)	GENERAL TEST REQUIREMENTS	NNLIT	Jur.		In.	m	Р
2.2 (0.1)	Information for luminaire design considered	Yes		No		TEK	NITER
2.2 (0.3)	More sections applicable:	Yes	10	No	\boxtimes		

2.4 (2)	CLASSIFICATION	MUT MIT IN A	Р
2.4 (2.2)	Type of protection:	Class II	er Juli
2.4 (2.3)	Degree of protection (Requirement: Ordinary):	IP 44	
2.4 (2.4)	Luminaire suitable for direct mounting on normally flammable surfaces:	Yes 🛛 No 🗌	- MALIT
EX WALTER	Luminaire not suitable for direct mounting on normally flammable surfaces:	Yes 🗌 No 🖾	WILLER W
2.4 (2.5)	Luminaire for normal use:	Yes 🛛 No 🗌	1 1 - 1
mer m	Luminaire for rough service:	Yes 🗌 No 🖂	

2.5 (3)	MARKING	intit white white	P
2.5 (3.2)	Mandatory markings	See copy of marking plate	P
m	Position of the marking	et whit whit whe	⊿"_Ь
t jet	Format of symbols/text	at at let let	P
2.5 (3.3)	Additional information	into white white white w	Р
JIEK NI	Language of instructions	In English	́Р
2.5 (3.3.1)	Combination luminaires	mit wath wat was all	Ñ
2.5 (3.3.2)	Nominal frequency in Hz	50/60 Hz	P
2.5 (3.3.3)	Operating temperature	the set when the	N
2.5 (3.3.4)	Symbol or warning notice	e e fit stat	Ń
2.5 (3.3.5)	Wiring diagram	the set of the	N
2.5 (3.3.6)	Special conditions	at let tet tet	N ^م ک
2.5 (3.3.7)	Metal halide lamp luminaire – warning	white white white white and	N
2.5 (3.3.8)	Limitation for semi-luminaires	at let get get and	N
2.5 (3.3.9)	Power factor and supply current	the man sur and an	N
2.5 (3.3.10)	Suitability for use indoors also	at let the the state	N
2.5 (3.3.11)	Luminaires with remote control	No remote control used	N
2.5 (3.3.12)	Clip-mounted luminaire – warning	. It fit with whet	N V.
2.5 (3.3.13)	Specifications of protective shields	MU, MU, MU, MU, A	Ν
2.5 (3.3.14)	Symbol for nature of supply	10 ~ 10t 10t NIGE N	Р
2.5 (3.3.15)	Rated current of socket outlet	No socket outlet used	N
2.5 (3.3.16)	Rough service luminaire	it fit fit the with	Ν



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Clause	Requirement + Test	Result - Remark	Verdict
the phi	ant whe will be st st	the set ster st	I INNIT
2.5 (3.3.17)	Mounting instruction for type Y, type Z and some type X attachments	whit whit whit white	N
2.5 (3.3.18)	Non-ordinary luminaires with PVC cable	RETER WALTE WALT WAL	N N
2.5 (3.3.19)	rotective conductor current in instruction if applicable	et the state with the	LIEN WY
2.5 (3.3.20)	Provided with information if not intended to be mounted within arms reach	with the state of	P NIT
2.5 (3.4)	Test with water	Rubbing lightly for 15 s	Р
LIER NUTE	Test with hexane	Rubbing lightly for 15 s	Р
	Legible after test	anti white where white	Р
et Intress	Label attached	et set set set	N ^S P
2.5.1 (-)	Warning notice, if not suitable for insulating ceiling	when the second	Р

2.6 (4)	CONSTRUCTION		P
2.6 (4.2)	Components replaceable without difficulty	Let Jet Jet Jet	N N
2.6 (4.3)	Wireways smooth and free from sharp edges	up me m n	Р
2.6 (4.4)	Lampholders	TEX TEX STEEL NI	N.
2.6 (4.4.1)	Integral lampholder	en men men me	N
2.6 (4.4.2)	Wiring connection	et the street with	N,
2.6 (4.4.3)	Lampholder for end-to-end mounting	The sur an	N
2.6 (4.4.4)	Positioning	TEX STEEL NUTER	N N
1 1	- pressure test (N):	-the chi chi	N
LIL WAY	After test the lampholder comply with relevant standard sheets and show no damage	att white wh	N.
WALTER	After test on single-capped lampholder the lampholder have not moved from its position and show no permanent deformation	at which an Fest and	N
white wh	- bending test (Nm):	the state state with	NN
alifek mit	After test the lampholder have not moved from its position and show no permanent deformation	when we we we	N
2.6 (4.4.5)	Peak pulse voltage	white white white w	N
2.6 (4.4.6)	Centre contact	at all all a	See No
2.6 (4.4.7)	Parts in rough service luminaires resistant to tracking	the way way way	N
2.6 (4.4.8)	Lamp connectors	E INTE WALT WAL	- N - N -
2.6 (4.4.9)	Caps and bases correctly used	t at at	
2.6 (4.5)	Starter holders	MALTE WALTE WALT	w Nn
At A	Starter holder in luminaires other than class II	No starter holder used	× N<



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Clause	Requirement + Test	Result - Remark	Verdic
tit wat	Starter holder class II construction	INTER INTER WATER	N N
2.6 (4.6)	Terminal blocks		
2.0 (1.0)	Tails	ALTER MATER MATTER	N
. Alt	Unsecured blocks		
2.6 (4.7)	Terminals and supply connections	THE INTERNITY WITH	P
2.6 (4.7.1)	Contact to metal parts		P
2.6 (4.7.2)	Test 8 mm live conductor	A ME WATE WILL	N
	Test 8 mm earth conductor		
2.6 (4.7.3)	Terminals for supply conductors	NE MATTE WILL	P
2.6 (4.7.3.1)	Welded connections:		ST SN
2.0 (1.1 .0. 1)	- stranded or solid conductor	anter with w	
Jet N	- spot welding	at at a	N
m. m.	- welding between wires	White White white	
JEX NIE	- Type Z attachment	at at at	N ^N
<u>r "N</u> r	- mechanical test according to 15.8.2	WITE WELL WALL	N
the shift	- electrical test according to 15.9	at at at	N N
<u></u>	- heat test according to 15.9.2.3 and 15.9.2.4	The Will water of	N
2.6 (4.7.4)	Terminals other than supply connection	at at at	
2.6 (4.7.5)	Heat-resistant wiring/sleeves	Te mili war our	N
2.6 (4.7.6)	Multi-pole plug	A AT AT ST	
2.0 (4.7.0)	- test at 30 N	MILL WAL MA	
2.6 (4.8)	Switches:		N N
	- adequate rating		N_
	- adequate fixing	The second	N N
<u></u>	- polarized supply	and the second	N
IN LEE NA	- compliance with 61058-1 for electronic switches	at the the	NN NN
2.6 (4.9)	Insulating lining and sleeves	2 mile all all	
2.6 (4.9.1)	Retainement	- Alt State State	N N
2.0 (4.0.1)	Method of fixing	· <u>m</u>	
2.6 (4.9.2)	Insulated linings and sleeves	TEK UTEK NUTEK	IN NN
L (NITEK N	Resistant to a temperature > 20 °C to the wire temperature or	et it it	
	a) & c) Insulation resistance and electric strength	Mr. M. M	N
INTER WAL	b) Ageing test. Temperature (°C)	: Jet Jet J	N.C
2.6 (4.10)	Insulation of Class II luminaires	Mr. Mr. M.	P



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Clause	Requirement + Test	Result - Remark	Verdict
LIE WALT	whit whit white the set of	THE STREET NUTER	and man
2.6 (4.10.1)	No contact, mounting surface – accessible metal parts – wiring of basic insulation	White white white	P
MUL	Safe installation fixed luminaires	NUTER UNITE WALTE W	N ^L N ^L P
- Alt	Capacitors and switches	and the	at AN
WAL W	Interference suppression capacitors according to IEC 60384-14	Set write write write	N N
2.6 (4.10.2)	Assembly gaps:	t tret atret white	N
at al	- not coincidental	an an a	N
1.1. WAL	- no straight access with test probe	TEX NUTER MUTER	NUN N
2.6 (4.10.3)	Retainment of insulation:	n n t	P
with	- fixed	TER STREET MUTER NO	ν ^τ P γ
it	- unable to be replaced; luminaire inoperative	10	, P
mer m	- sleeves retained in position	ALTER INLIER WALT	N/N
the state	- lining in lampholder	The second	L N
2.6 (4.11)	Electrical connections	NUTER INLIFE MAIL	JULY JPY
2.6 (4.11.1)	Contact pressure		, P,
2.6 (4.11.2)	Screws:	LIER MUTER WALTE W	NN N
t let	- self-tapping screws	t t A	N
MUT 1	- thread-cutting screws	Tet INLIFE WALTE WA	N 1
2.6 (4.11.3)	Screw locking:		F N
mer me	- spring washer	MITER WALTE WALT	Nº Nº
At A	- rivets	No the second	N A
2.6 (4.11.4)	Material of current-carrying parts	> 50 % Cu	W NP
2.6 (4.11.5)	No contact to wood		P ⁻
2.6 (4.11.6)	Electro-mechanical contact systems	W. W. W.	N
2.6 (4.12)	Mechanical connections and glands	t at at a	dr _d∕N _
2.6 (4.12.1)	Screws not made of soft metal	in white white white	Non.
JEK J	Screws of insulating material	t at all	- <u>_</u> * N_
w. w.	Torque test: torque (Nm); part	- WILL WUT WUT	N N
2.6 (4.12.2)	Screws with diameter < 3 mm screwed into metal	No such screw	N ^{at}
2.6 (4.12.4)	Locked connections:	untit white where y	N N
* LIFEK	- fixed arms; torque (Nm)		N N
24. 1	- lampholder; torque (Nm)	: - white white wh	N N
LITEK IN	- push-button switches; torque 0,8 Nm		THE N
2.6 (4.12.5)	Screwed glands; force (N)	- main mar mar	N
2.6 (4.13)	Mechanical strength	1 at at	P.



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Clause Requirement + Test	Result - Remark	Verdict
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2.6 (4.13.1)	Impact tests:		Р
et street	- fragile parts; energy (Nm):		Ń
10.0	- other parts; energy (Nm):	Enclosure: 0.35 Nm	Р
NITERIN	1) live parts	at left state states	С ^С Р
24. 24.	2) linings	which which we want	N
NITER MITE	3) protection	at the set of	Р
	4) covers	when we we will	N
2.6 (4.13.3)	Straight test finger	Enclosure: 30 N	Р
2.6 (4.13.4)	Rough service luminaires	W. M. M. M.	Ν
IN THE N	- IP54 or higher	at the set state	N V
	a) fixed	sur m m	Ν
INLIE WAL	b) hand-held	TEX LIER ALTER IN	N
	c) delivered with a stand	me men in	Ν
NUTE WALLS	d) for temporary installations and suitable for mounting on a stand	INTER WATER WATER WAT	N
2.6 (4.13.6)	Tumbling barrel	at left tet tet	N
2.6 (4.14)	Suspensions and adjusting devices	the work way was	∕∿ P
2.6 (4.14.1)	Mechanical load:	at let let set	, ́Р
111 2.	A) four times the weight	with me we w	Р
NUTER INLT	B) torque 2,5 Nm	let set set a	Ň
la	C) bracket arm; bending moment (Nm):	- WULL MULL MILL	N
LIEF INTE	D) load track-mounted luminaires		N
et .Tet	E) clip-mounted luminaires, glass-shelve. Thickness (mm):	at the	N
m. y	Metal rod. diameter (mm):	WILL WILL WITH WITH	N N
WALTER WAL	Fixed luminaire or independent control gear without fixing devices	t stret wiret wiret w	UT N
2.6 (4.14.2)	Load to flexible cables	Mr. m.	N
nti wat	Mass (kg)		N
it it	Stress in conductors (N/mm ²):	M. M. A.	N
MAL	Mass (kg) of semi-luminaire:	THEY MUTER MUTER WALTE	JUN N
t st	Bending moment (Nm) of semi-luminaire:		N
2.6 (4.14.3)	Adjusting devices:	TER NUTER WATE WALTE V	N N
the de	- flexing test; number of cycles:	W	
white white	- strands broken	NUTER INTER MALIE WA	N
at at	- electric strength test afterwards	The second second	- N .



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Clause	Requirement + Test	Result - Remark	Verdic
		tet with still with	NUT NUT
2.6 (4.14.4)	Telescopic tubes: cords not fixed to tube; no strain on conductors	with the state	N
2.6 (4.14.5)	Guide pulleys	CLIER NALL WALL W	N N
2.6 (4.14.6)	Strain on socket-outlets	in a st	dr _dN
2.6 (4.15)	Flammable materials:	NETER UNITE WALL WAL	N PM
. 1 th . 5	- glow-wire test 650 °C	st at al	- 🦽 N 🖉
w w	- spacing ≥ 30 mm	LIER WALTE WALTE WALTE	N N
TEX JEX	- screen withstanding test of 13.3.1	i i it it	N ^d
w	- screen dimensions	ALTE WALT WAL	N N
t JEt	- no fiercely burning material	s at at	AF SP
14 1	- thermal protection	In the white white wh	N
SITER IN	- electronic circuits exempted	at at a	N N
2.6 (4.15.2)	Luminaires made of thermoplastic material wit	th lamp control gear	N. N.
LIFEK NUTE	a) construction	at at the	N.S.
24	b) temperature sensing control	inter whe was	N N
It NITE	c) surface temperature	at left telt	Net Net
2.6 (4.16)	Luminaires for mounting on normally flammab	le surfaces	Р
A LIFER I	No lamp control gear	at all all a	Set Sten
2.6 (4.16.1)	Lamp control gear spacing:	When whe we we	N
NUTER NAL	- spacing 35 mm	at let the the	N
1	- spacing 10 mm	Net when when when	N
2.6 (4.16.2)	Thermal protection:	TEX THE	P.I.
	- in lamp control gear	W. K. MILL	P
er Intre	- external		LI ^{EE} NI
.t.	- fixed position	with the start of	N
Intre M	- temperature marked lamp control gear	at the state of	N N
2.6 (4.16.3)	Design to satisfy the test of 12.6	(see 12.6)	N
2.6 (4.17)	Drain holes	let the the street	N ¹
s st	Clearance at least 5 mm	r. Mr. M. M.	N
2.6 (4.18)	Resistance to corrosion:	it fet the street	NP NP
2.6 (4.18.1)	- rust-resistance	Mr. M. W.	N
2.6 (4.18.2)	- season cracking in copper	ist with all the off	The Number of Party
2.6 (4.18.3)	- corrosion of aluminium	m. m. m. r.	
2.6 (4.19)	Ignitors compatible with ballast	No ignitors used	NN NN
2.6 (4.20)	Rough service vibration	the man we are	N



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Clause	Requirement + Test	Result - Remark	Verdict
the water	which we we are the	the set offer	Martin Martin
2.6 (4.21)	Protective shield:	MUT MU M	N
2.6 (4.21.1)	Shield fitted	at set set	N.
-24	Shield of glass if tungsten halogen lamps	her when when a	N
2.6 (4.21.2)	Particles from a shattering lamp not impair safety	at set set	SEL SEN
2.6 (4.21.3)	No direct path	mur mur mur	N
2.6 (4.21.4)	Impact test on shield	t set set set	N.S
	Glow-wire test on lamp compartment	wat was with	N
2.6 (4.22)	Attachments to lamps	let tet tet	N
2.6 (4.23)	Semi-luminaires comply Class II	ant when when	N
2.6 (4.24)	UV radiation for tungsten halogen lamps and metal halide lamps (Annex P)	TEX MILTER WALTER W	U.C.N N
2.6 (4.25)	No sharp point or edges	at at a	et et P
2.6 (4.26)	Short-circuit protection:	white white white	No.
2.6 (4.26.1)	Uninsulated accessible SELV parts	at at at	St N.St
2.6 (4.26.2)	Short-circuit test	uning white white	N ^N
2.6 (4.26.3)	Test chain according to Figure 29	t at at	N.

2.7 (11)	CREEPAGE DISTANCES AND CLEARANCES		Ρ
- 200 - C	Working voltage (V):	Max.240 V~	_
NNLTER NN	Voltage form	Sinusoidal 🛛 🖂 Non-sinusoidal 🗌	IET JUNI
JEX ST	PTI NI NI NI NI	< 600 🛛 > 600 🗌	
et tret	Impulse withstand category (Normal category II) (Category III Annex U)	Category II 🛛 Category III 🗌	
- Sup-	Rated pulse voltage (kV)	- we so we	m
WALTER N	(1) Current-carrying parts of different polarity: cr (mm); cl (mm):	Approved independent SELV output electronic controlgear	IT P
NLTEX MAI	(2) Current-carrying parts and accessible parts: cr (mm); cl (mm):		y⊢ P
TEK WALTE	(3) Parts becoming live due to breakdown of basic insulation and metal parts:cr (mm); cl (mm)	WIT WITH WITH	N
+ NALTER	(4) Outer surface of cable where it is clamped and metal parts: cr (mm); cl (mm):	et set wiret wiret	N
at .	(5) Not used	m m s.	*-
WUTLY W	(6) Current-carrying parts and supporting surface: cr (mm); cl (mm)		Ru



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Clause	Requirement + Test	Result - Remark	Verdict
Olddoc	Requirement i rest	Result Remain	Verdiot

2.8 (7)	PROVISION FOR EARTHING		N
2.8 (7.2.1 + 7.2.3)	Accessible metal parts	Class II	SEL MUN
- Att	Metal parts in contact with supporting surface	i st at a	⊢ _∕⊘N
mr m	Resistance < 0,5 Ω	Set until white white	~ N~
.1et .5	Two self-tapping screws used	s at at	N N
nu nu	Thread-forming screws	white white white	N N
THE JER	Thread-forming screw used in a grove	t at at	N
- M	Earth makes contact first	NETE WALL WALL W	~^^N
2.8 (7.2.2 + 7.2.3)	Earth continuity in joints etc.	TEX NUTEX MULTEX MAL	et NICN
2.8 (7.2.4)	Locking of clamping means		- N
mer m	Compliance with 4.7.3	NUTER INTERNATION	JUN NU
NITEX WALTE	Terminal blocks with integrated screwless earthing contacts tested according Annex V	ret itet itet	MIT N
2.8 (7.2.5)	Earth terminal integral part of connector socket	ne me m	N
2.8 (7.2.6)	Earth terminal adjacent to mains terminals	THE THE STREET IN	N N
2.8 (7.2.7)	Electrolytic corrosion of the earth terminal	c m m m	N
2.8 (7.2.8)	Material of earth terminal	et the street with	N,
*	Contact surface bare metal	me m r	N
2.8 (7.2.10)	Class II luminaire for looping-in	A JEX NITER MUTER	NN NN
* 1	Double or reinforced insulation to functional earth	The In In	N
2.8 (7.2.11)	Earthing core coloured green-yellow	TE INTER OF	N
st st	Length of earth conductor		N

2.9 (14)	(14) SCREW TERMINALS		N
white w	Separately approved; component list	(see Annex 1)	Nor Nor
.tt	Part of the luminaire	(see Annex 3)	L N

2.9 (15)	SCREWLESS TERMINALS AND ELECTRIC	CAL CONNECTIONS	N -
the write	Separately approved; component list	(see Annex 1)	MN NN
it set	Part of the luminaire	(see Annex 4)	N

2.10 (5)	EXTERNAL AND INTERNAL WIRING	and the	<i>_</i> , ⊢ Р
2.10 (5.2)	Supply connection and external wiring	White white white wh	P.In
2.10 (5.2.1)	Means of connection	Connecting leads	F P



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Clause	Requirement + Test	Result - Remark	Verdic
2.10 (5.2.2)	Type of cable		N
et jet	Nominal cross-sectional area (mm ²)		N N
Mr. C	Cables equal to IEC 60227 or IEC 60245	CHENNER WAT V	N
2.10 (5.2.3)	Type of attachment, X, Y or Z	s at at	<u>к</u> .
2.10 (5.2.5)	Type Z not connected to screws	ANN'S WIT WIT	N
2.10 (5.2.6)	Cable entries:	the state of	N
	- suitable for introduction	WULL MUS MIL	N
JEC ALLE	- adequate degree of protection	at at at	
2.10 (5.2.7)	Cable entries through rigid material have rounded edges	Mart Mart Mart	N
2.10 (5.2.8)	Insulating bushings:	TER INITE WALTE W	N S
	- suitably fixed	t at a	é (é N
m. m	- material in bushings	white white white	N N
JEK JE	- material not likely to deteriorate	at at at	S NS
L M	- tubes or guards made of insulating material	Intit white white	N N
2.10 (5.2.9)	Locking of screwed bushings	at at at	N ^P
2.10 (5.2.10)	Cord anchorage:	the write write a	N N
LIFER IN	- covering protected from abrasion	at at at .	ST N
w. w.	- clear how to be effective	and more and	N N
NITER MIT	- no mechanical or thermal stress	the state of	N S
1. T.	- no tying of cables into knots etc.	white white white	N
LTER NTE	- insulating material or lining	THE THE	N
2.10 (5.2.10.1)	Cord anchorage for type X attachment:	Net August	N
me a	a) at least one part fixed	1	N N
JEK SI	b) types of cable	c A A	dt _s e ^t N
m. m.	c) no damaging of the cable	in white white white	20 Non
JEX JIE	d) whole cable can be mounted	the state of	- <u> </u>
le m	e) no touching of clamping screws	NALTE WALL WAL	N N
TER WITTER	f) metal screw not directly on cable	the state	N ^{et}
	g) replacement without special tool	white wath wath	N. N.N
F SLIFER IS	Glands not used as anchorage	at at at	ANT N
In In	Labyrinth type anchorages	in white white wi	N
2.10 (5.2.10.2)	Adequate cord anchorage for type Y and type Z attachment	a mittet unifet unif	at white N
2.10 (5.2.10.3)	Tests:		



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Clause	Requirement + Test	Result - Remark	Verdic
till water	- impossible to push cable; unsafe	white mill white	N
t th	- pull test: 25 times; pull (N)		N
wint -	- torque test: torque (Nm)		N
the second			
ne in	- displacement ≤ 2 mm	et alt white white	
	- no movement of conductors	M N A	N
nti nti	- no damage of cable or cord	NUTER INTERNATIV	N
2.10 (5.2.11)	External wiring passing into luminaire	M M	N
2.10 (5.2.12)	Looping-in terminals	still million in the second	N
2.10 (5.2.13)	Wire ends not tinned		N
with w	Wire ends tinned: no cold flow	cet stet ster stress stre	N S
2.10 (5.2.14)	Mains plug same protection	301 - 50 - 5.	N
white white	Class III luminaire plug	titet atten atter	N N
2.10 (5.2.16)	Appliance inlets (IEC 60320)	an an a	N
NET WALT	Appliance couplers of class II type	THE ALTER ALTER AN	N
2.10 (5.2.17)	No standardized interconnecting cables properly assembled	at all all is	
2.10 (5.2.18)	Used plug in accordance with	the wat wat way	N
NUTER	- IEC 60083	at left telt telt	N N
10 T	- other standard	with the me	N
2.10 (5.3)	Internal wiring	t at set set	P
2.10 (5.3.1)	Internal wiring of suitable size and type	(see Annex 1)	Р
JE NI	Through wiring		S ^e N ^{re}
	- not delivered/ mounting instruction	When the ship	N
et nuter	- factory assembled		Ň
	- socket outlet loaded (A):	vite vite	N
MITE IN	- temperatures	t- at alt alt	N N
20	Green-yellow for earth only	white with with	N
2.10 (5.3.1.1)	Internal wiring connected directly to fixed wiring	at all the	S RV
	Cross-sectional area (mm ²)	(see Annex 1)	Р
It's NITE	Insulation thickness	it let set a	P
	Extra insulation added where necessary	his me me m	N
2.10 (5.3.1.2)	Internal wiring connected to fixed wiring via interna	al current-limiting device	P
ITEK II	Adequate cross-sectional area and insulation thickness	which we will	P
2.10 (5.3.1.3)	Double or reinforced insulation for class II	WALL WALL WALLY	Р
2.10 (5.3.1.4)	Conductors without insulation	i at at	NS NS



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Clause	Requirement + Test	Result - Remark	Verdict
LIE MIT	When when when we we	t at at st	alle alle
2.10 (5.3.1.5)	SELV current-carrying parts	White white with	P
2.10 (5.3.1.6)	Insulation thickness other than PVC or rubber	PVC	JIEK NIN
2.10 (5.3.2)	Sharp edges etc.	where	Р
INLIER IN	No moving parts of switches etc.	the set set a	SEL SEN
1	Joints, raising/lowering devices	re me me	N
INLIER NALT	Telescopic tubes etc.	et set set ste	N.S
a at	No twisting over 360°	MUL. MUL MI	N
2.10 (5.3.3)	Insulating bushings:	- THE THE THE	N
1 A	- suitable fixed	2 Vr. Mr. M.	N
MALTEN	- material in bushings	let the states	UN NUN
at .	- material not likely to deteriorate	The sales and sales	N
NALTE MAL	- cables with protective sheath	ifet sifet al	N N N
2.10 (5.3.4)	Joints and junctions effectively insulated	Mr. M. M.	N
2.10 (5.3.5)	Strain on internal wiring	TEK STEK STER	N
2.10 (5.3.6)	Wire carriers	n m m	N
2.10 (5.3.7)	Wire ends not tinned	THE STREE NUTER	N ^T NP
L	Wire ends tinned: no cold flow	c. 20, 20, 0	N

2.11 (8)	PROTECTION AGAINST ELECTRIC SHOCK	Sur Sur Start	Р
2.11 (8.2.1)	Live parts not accessible with standard test finger	white atter white way	R
LIEK INTEK	Basic insulated parts not used on the outer surface without appropriate protection	WIT THE LIFE ALTER	- P
et set	Basic insulated parts not accessible with standard test finger on portable and adjustable luminaires	att att	N
WITEK NN	Basic insulated parts not accessible with Ø 50 mm probe from outside, within arms reach, on wall mounted luminaires	with with with a	N
NUTEK WALT	Lamp and starterholders in portable and adjustable luminaires comply with double or reinforced insulation requirements	white white white white	N
JEX MITEK	Basic insulation only accessible under lamp or starter replacement	at set set and	N
	Protection in any position	the me me m	Р
NUTERN	Double-ended tungsten filament lamp	at all offer offer	<u>́</u> ́́ N
	Insulation lacquer not reliable	me me me	Ν
WITER WI	Double-ended high pressure discharge lamp	- let let let i	N
JEK JEK	Relevant warning according to 3.2.18 fitted to the luminaire	when when we we	N



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Clause	Requirement + Test	Result - Remark	Verdict
UTE NUT	where where where where a set	at at 5th	
2.11 (8.2.2)	Portable luminaire adjusted in most unfavourable position	white white white	N
2.11 (8.2.3)	a) Class II luminaire:	NUTER UNITE WALTE V	M P V
NNITEK NN	- basic insulated metal parts not accessible during starter or lamp replacement	set whet whet we	THE TOP
ALTEK MLT	- basic insulation not accessible other than during starter or lamp replacement	with the set	At July P
Let Let	- glass protective shields not used as supplementary insulation	white white white	N
t when	b) BC lampholder of metal in class I luminaires shall be earthed	ontre write write	SILL SIN
white w	c) Class III luminaires with exposed SELV parts:	THE LIFE NUTER I	N N N
at .	Ordinary luminaire:	sale in a	N
white wh	- touch current	TEK NITER INT	North North
at a	- no-load voltage	m n	
nti wat	Other than ordinary luminaire:	LIFEK NITER WITE	N N
it it	- nominal voltage	It was a	L N.L
2.11 (8.2.4)	Portable luminaire:	TEX NUTER INITE	N'N.
t st	- protection independent of supporting surface		N
write w	- terminal block completely covered	Let writer writer w	No. N . St.
2.11 (8.2.5)	Compliance with the standard test finger or relevant probe	y ret stat with	at in the P
2.11 (8.2.6)	Covers reliably secured	me me m	Р
2.11 (8.2.7)	Discharging of capacitors $\ge 0.5 \ \mu F$	THE LIFE	N
st it	Portable plug connected luminaire with capacitor	I.C. , ZMI	N
NINIT	Other plug connected luminaire with capacitor	THE ALL ALL	NUN N
at .	Discharge device on or within capacitor	- n - n -	Ν
Intra In	Discharge device mounted separately	at the the	N N

2.12 (12)	ENDURANCE TEST AND THERMAL TEST Endurance test:		and the second
2.12 (12.3)			P
ETT WAL	- mounting-position:	As in normal use	with
* it	- test temperature (°C):	35 °C	<u></u>
When wh	- total duration (h):	240 h	W1
UNLIEK WALT	- supply voltage: Un factor; calculated voltage (V):	1.1U _R =264.0 V ; I=0.039 A; P=9.1W; cosφ=0.883	rex-
	- lamp used:	LED integral	
2.12 (12.3.2)	After endurance test:	THE LIFE SUIFE MITE	Р



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Clause	Requirement + Test	Result - Remark	Verdic
the water	- no part unserviceable	t nifet set white	WI P
et set	- luminaire not unsafe		P
wint :	- no damage to track system	of the spectrum of the	N
the	- marking legible	an in the state	P
- mer an	- no cracks, deformation etc.	11 MALENNIT WA	P
2.12 (12.4)	Thermal test (normal operation)	(see Annex 2)	P
2.12 (12.4)	Thermal test (abnormal operation)	(see Annex 2)	N
2.12 (12.6)	Thermal test (failed lamp control gear condition)		N ^d
2.12 (12.6.1)	Through wiring or looping-in wiring loaded by a current of (A)	1 - Mar Mar	
millin p	- case of abnormal conditions		
	- electronic lamp control gear		ot IN
m. m.	- measured winding temperature (°C): at 1,1 U_n	- NUEL INTER NO	- M - M
10 10			
NET WALK	- measured mounting surface temperature (°C) a 1,1 U_n		WALL WALL
et jet	- calculated mounting surface temperature (°C)		Not Not
where a	- track-mounted luminaires	the write write s	N N
2.12 (12.6.2)	Temperature sensing control	a tot	N N
	- case of abnormal conditions		~~~n
JEK JI	- thermal link	s at let le	۶ St N
m n	- manual reset cut-out	re white white white	N N
JEK JE	- auto reset cut-out		N ^C
- N.	- measured mounting surface temperature (°C) .		n N
et lifet	- track-mounted luminaires		N.
2.12 (12.7)	Thermal test (failed lamp control gear in plastic l	luminaires):	N
2.12 (12.7.1)	Luminaire without temperature sensing control	at at at a	N N
2.12 (12.7.1.1)	Luminaire with fluorescent lamp ≤ 70W	the true three to the	N
In me	Test method 12.7.1.1 or Annex V	- nite white white	mer m
THE WILLING	Test according to 12.7.1.1:	e de de	A N
	- case of abnormal conditions	WITE WALTE WALT	mer mer
t jiet	- Ballast failure at supply voltage (V)		tet tet
m m	- Components retained in place after the test	n' in white white wh	N
JEK JI	- Test with standard test finger after the test	the state of the s	N N
M. M.	Test according to Annex V:	TE MALT WALL WALL	N N
JEK JEK	- case of abnormal conditions	i i it it	



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Clause	Requirement + Test	Result - Remark	Verdic
the water	when when when we we	LIEK LIEK NITER NIT	- walt
* *	- measured winding temperature (°C): at 1,1 U _n :	he he is	
White s	- measured temperature of fixing point/exposed part (°C): at 1,1 U _n	Tet Multer Whiter White	MULT
	- calculated temperature of fixing point/exposed part (°C):	at stret intret white	WILLEK NI
at de	Ball-pressure test:	m n	N N
which which	- part tested; temperature (°C):	lifet mile white wh	N
it it	- part tested; temperature (°C):		N N
2.12 (12.7.1.2)	Luminaire with discharge lamp, fluorescent lamp >	>70W, transformer > 10 VA	Ň
WILL N	- case of abnormal conditions	ret tret stret with	Intit v
at .	- measured winding temperature (°C): at 1,1 $U_{n}:$	All which we we	-
white white	- measured temperature of fixing point/exposed part (°C): at 1,1 U _n :	WAITER WAITER WAITE W	1 n
NITER WALTE	- calculated temperature of fixing point/exposed part (°C)	MITER WALFER WALFER WAL	In WALLE
et jet	Ball-pressure test:	at at at all	N
14 1	- part tested; temperature (°C):	The write write write	Jun N
t still in	- part tested; temperature (°C):	The state of the	N
2.12 (12.7.1.3)	Luminaire with short circuit proof transformers ≤ 10 VA	which which which	N
NUT MUT	- case of abnormal conditions	MITER WAITE WALL W	r the
the set	- Components retained in place after the test	the state of the	- N. (*
r. Mr.	- Test with standard test finger after the test	NE WITH WALL	~ ¹ N
2.12 (12.7.2)	Luminaire with temperature sensing control		N
m. u	- thermal link	Yes 🗌 No 🗌	- m
VII III VINII VIIII VINIII VIIII VINIII	- manual reset cut-out	Yes 🗌 No 🗌	
	- auto reset cut-out	Yes 🗌 No 🗌	n2n
	- case of abnormal conditions	at at the	1 ¹²
	- highest measured temperature of fixing point/exposed part (°C)::	White white white white	t Tet
M	Ball-pressure test:	INTER WALTE WALT WAL	- NN
t stet	- part tested; temperature (°C):	- + + A	Ň
me m	- part tested; temperature (°C):	The marte which which	3 N - N

2.13 (9)	RESISTANCE TO DUST, SOLID OBJECTS AND MOISTURE	-24
2.13 (9.2)	Tests for ingress of dust, solid objects and moisture:	P



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untit with	IEC 60598-2-2					
Clause	Requirement + Test Result - Remark		Verdict			
ALTE WALT	- classification according to IP	: IP 44 for lamp parts	NUTE WALT			
1. 1.						
it with	- mounting position during test					
	- fixing screws tightened; torque (Nm)	: <u></u> 'u'u'				
MALTENN	- tests according to clauses	: 9.2.0 and 9.2.5	White NA			
*	- electric strength test afterwards	See section 10	Р			
INLIE WIL	a) no deposit in dust-proof luminaire	t the the street out the	N			
1 0	b) no talcum in dust-tight luminaire	MUL AND AN	N			
the watt	c) no trace of water on current-carrying parts or where it could become a hazard	NALTER WALLER WALTER W	VI VIP			
EX WALTER	d) i) For luminaires without drain holes – no water entry	TEX NITEX WALTER WALT	P			
WALTER W	d) ii) For luminaires with drain holes – no hazardous water entry	Tet wret wiret	SIN SEX N			
	e) no water in watertight luminaire	Mr. M. M.	N			
NHIE MALI	f) no contact with live parts (IP 2X)	THE THE NUTER	N ¹¹ N ¹¹			
1	f) no entry into enclosure (IP 3X and IP 4X)	n m m	P			
TE NALT	f) no contact with live parts (IP3X and IP4X)	TEK JEK NITER IN	P			
A NITER	g) no trace of water on part of lamp requiring protection from splashing water	at all alt all	P			
TEX	h) no damage of protective shield or glass envelope	white white with	N			
2.13 (9.3)	Humidity test 48 h	R.H.: 93 %, 25 °C	Mr Ph			

2.14 (10)	INSULATION RESISTANCE AND ELECTRIC STR	ENGTH STATES	<i>⊲</i> ∿P
2.14 (10.2.1)	Insulation resistance test		
W V	Cable or cord covered by metal foil or replaced by a metal rod of mm Ø		
with with	Insulation resistance (MΩ)	A ALTER MAILE WALTE WI	r -m
At A	SELV:	No a tat	F P
Int when	- between current-carrying parts of different polarity:	White on the water one	N
TE WALTE	- between current-carrying parts and mounting surface:	R _{insulation} > 100 MΩ	WP.
K WALTER WA	- between current-carrying parts and metal parts of the luminaire	R _{insulation} > 100 M Ω	NUTP V
at a	Other than SELV:	in the at	
when when	- between live parts of different polarity:	R _{insulation} > 100 MΩ	R
it it	- between live parts and mounting surface:	R _{insulation} > 100 MΩ	P



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Clause	Requirement + Test	Result - Remark	Verdic
LIE WALL	and my my the	- SEA SEA STREAM	NUT
	- between live parts and metal parts	R _{insulation} > 100 MΩ	Р
EN WALTER V	- between live parts of different polarity through action of a switch	Lift south souther waiter	N.
2.14 (10.2.2)	Electric strength test		P
Mur Mi	Dummy lamp	Set intre white white when we	N 10
Tet It	Luminaires with ignitors after 24 h test		ر N ا
Wr. WI	Luminaires with manual ignitors	White while white white	N
Tet Jet	Test voltage (V):	s at at at	P
m	SELV:	INTERNATION WAL WAL	AU.b
* WALTER N	- between current-carrying parts of different polarity	ret tret miret sources	IN STATES
INLIEK NIN	- between current-carrying parts and mounting surface	500 V	TEKP
TEX JE	- between current-carrying parts and metal parts of the luminaire	500 V	P
ne with tek untek voi unek	Other than SELV:	Intre water water water	ŃР
	- between live parts of different polarity	1480 V	P
	- between live parts and mounting surface	2960 V	∕w_b
	- between live parts and metal parts	2960 V	P
with the	- between live parts of different polarity through action of a switch	- white white white white	N
2.14 (10.3)	Touch current (mA)	: Max. 0.03 mA < 0.7 mA	P
t at	Protective conductor current	<u></u>	N

2.15 (13.2.1) Ball-pressure test: - part tested; temperature (°C): LED board, 125 °C, 1.0 mm - part tested; temperature (°C): Connector, 125 °C, 1.0 mm 2.15 (13.3.1) Needle flame test (10 s): - part tested 2.15 (13.3.2) Glow-wire test (650°C):	Jun-
 - part tested; temperature (°C): Connector, 125 °C, 1.0 mm 2.15 (13.3.1) Needle flame test (10 s): - part tested	
2.15 (13.3.1) Needle flame test (10 s): - part tested:	P
- part tested	Р
	e t
2 15 (13 3 2) Clove wire test (650°C):	Ń
- part tested: See Australian deviation	An P
2.15 (13.4.1) Tracking test:	Ň
- part tested	N



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WALTE WAL		IEC 60598-2-2		WAL
Clause	Requirement + Test	ter white white	Result - Remark	Verdict

ANNEX 1	Compo	onents				P ⁺
object/part No.	code	manufacturer/ trademark	type/model	technical data	Standard	mark(s) of conformity
LED board	В	SHUNDE JUNDA ELECTRONIC CO LTD	JD-D	130°C	- whiter wh	UL E173873
LED	С	LIGHTNING	T3B00SL (C、W)A	80 mA	whitek white	Tested with appliance
LED driver	В	CAPTAIN GROUP LIMITED	CPT-PS300	Input:220- 240,50/60Hz,0.1 A;Output:DC9- 48V,0.3A, t_a :50°C, t_c :70°C, Independent, Class II	AS/NZS 61347.1 IEC 61347-2- 13	SAA120912EA
Output wire for LED driver and lead wire for LED	ІК	SHENZHEN YIMEITE ELECTRIC CABLE CO LTD	2464	300VAC,80°C,20 AWG	white whi	UL E318342

The codes above have the following meaning:

- A The component is replaceable with another one, also certified, with equivalent characteristics
- B The component is replaceable if authorised by the test house
- C Integrated component tested together with the appliance
- D Alternative component



Verdict

Reference No.: WTF13F0503375S

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Result - Remark

ANNEX 2	Temperature measurements, thermal tests of Section 12			
NA		no state and and state		
L	Type reference			
white of	Lamp used	Integral LED	NUT -	
A	Lamp control gear used	CPT-PS300	-	
NULI - NULI	Mounting position of luminaire	Acc. to user manual	1.1 T	
at a	Supply wattage (W)	8.7	* _	
the wat	Supply current (A)	0.040	- m-	
t st	Calculated power factor	0.86		
write	Table: measured temperatures corrected for $t_a = 3$	25 °C:	J P	
	- abnormal operating mode :	Short-circuited LED		
mr. m	- test 1: rated voltage		n	
INITEK WAL	- test 2: 1,06 times rated voltage or 1,05 times rated wattage	1,06 times rated voltage	JEt INNI	
TEX NITER	- test 3: Load on wiring to socket-outlet, 1,06 times voltage or 1,05 times wattage	the set set set	t JIF	
t stek	- test 4: 1,1 times rated voltage or 1,05 times rated wattage	1,1 times rated voltage	SN -	
MAL V	Through wiring or looping-in wiring loaded by a current of A during the test	while while white	M	

temperature (°C) of part	× A	Clause 12	2.4 – norma	alnut	Clause 12	.5 – abnormal
state of the spatial spatial	test 1	test 2	test 3	limit	test 4	limit
Input cable for LED driver	-	34.6	INLIT NI	90	A WILL	w - At
Output cable for LED driver		47.4		80		WALTE WALTE
LED driver top outside	MITE V	47.4		t _c 70	58.0	Ref.
LED board	/t /	59.9	A NTITE	Ref.	the mut a	- m n
Connector	m	39.0		Ref.	et nitet int	Let White whi
Internal wire near LED board	K WALTER	51.0	sunt s	80	Alt A	aliet Mitel
Mounting surface (flammable surface)	INI <u>STER</u>	42.1	LIE WN	90	48.6	130
Surface illuminated by lamp(0.1m)	5-0 <u>-</u>	28.5	EK WALTE	90	45.8	130
Ambient		25.0		State .	25.0	LIE WALTE W



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Clause Requirement + Test Result - Remark Verd				
	Clause	Requirement + Test	Result - Remark	Verdict

ANNEX 3	Screw terminals (part of the luminaire)			
W	we we at the	alter white white white	with	
(14)	SCREW TERMINALS	w w t	N	
(14.2)	Type of terminal:	1th miles while while a	n	
. Alt	Rated current (A)			
(14.3.2.1)	One or more conductors	intre-water water wa	Ň	
(14.3.2.2)	Special preparation	L A A A	N	
(14.3.2.3)	Terminal size	INTE MALL WITH WITH	N N	
et Jet	Cross-sectional area (mm ²)	a at at at	Ń	
(14.3.3)	Conductor space (mm):	TE WALT WALL WAL	<u>л</u> И ₂	
(14.4)	Mechanical tests	at at at	N	
(14.4.1)	Minimum distance	white white where we	N	
(14.4.2)	Cannot slip out	at at set of	< <u>N</u>	
(14.4.3)	Special preparation	inter water water water	N	
(14.4.4)	Nominal diameter of thread (metric ISO thread):	at at all all	N	
-m	External wiring	the work when we	N	
* SITEK	No soft metal	at at all the	Ň	
(14.4.5)	Corrosion	it wat wat way y	N	
(14.4.6)	Nominal diameter of thread (mm)	at lef left lift	S N S	
n n	Torque (Nm)	MULT WIT MIT W	N	
(14.4.7)	Between metal surfaces	THE THE STAR	N	
	Lug terminal	with a with with	N	
ER INLIE	Mantle terminal	TEK JIEK	Ň	
194 A	Pull test; pull (N)	1 - Jun Ju Ju	N	
(14.4.8)	Without undue damage	at let tet ster	N.	

ANNEX 4	Screwless terminals (part of the luminaire)	t let ret iret iret ir	N
(15)	SCREWLESS TERMINALS	wint with with	
(15.2)	Type of terminal	THE WILL WALL WILL	m_
et det	Rated current (A)	······································	1 the
(15.3.1)	Material	LIE UNITE WALL WALL W	N - 5**
(15.3.2)	Clamping	i at at at a	ر N ک
(15.3.3)	Stop	and and white white white	Ň
(15.3.4)	Unprepared conductors	the state of the	N



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				<u> </u>						
Prossur	on inc							- NATE	MILIE	N
				un.	m	- Shi -	-24. -24.	<u></u>	11-	N
-	<u>b.</u>	<u> </u>			- Jet		NUTER	INTE J	JI LI L	N
			NIE N		su :	<u>an 1</u>				N
1	<u> </u>	<u></u>			set .	N. IN	SER. NO	It. MI	ir n	N
	<u> </u>	or N	E. NI	in the	- M	241		<u> </u>	*	N
				- 5	* 5	et nur	A NAIL	NILL'	with	N
Pull tes	t spring-			N,	NITEK		MLTEX	WALTER	WALTER	SUCN N
Pull tes	t pin or t		nals (4 N	, ¹¹ ,	NO LEY		LTEK .	NLTEX N	NITEK .	N S
Insertio	n force r	ot excee	eding 50	N		90 - 19			A	N
Permar	ent con	nections:	pull-off t	est (20 I	N)>-		in Th	IE INI	ie nn	N
Electric	al tests	NIT	er NALT	wh.		-2011	100			
Voltage	drop (m	V) after	1 h (4 sa	mples)			NITE	. INLIE	WALT	N
Voltage	drop of	two inse	parable j	oints		0	100	.L	A	N
Numbe	r of cycle	s					NUTER	NUTE	NULT	m-
						 .et	. fet	JEX .	LIEK	N N
						· · · · · · · · · · · · · · · · · · ·	it in	1× .1	*	N
						1	wht	MUL	-WI-	N
After ag 100th c	jeing, vo ycle (4 s	ltage dro amples)	op (mV) a	after 50th	alt.	. N ^{LL}		WALT	WALL	SUL N
Termina	als exter	nal wiring	g	Ļ	t-	, sh		THE .	NUTER	N
Termina	al size ar	nd rating	NUTER	nti v	Int.	1 · · · 1	n - 1	$\frac{1}{2}$		N
						1	IEX WA	TERWIN	TEN WI	ST N _N
							+ INLIE	* NALTE	K WALT	
Contact	t resistar	nce test	WAL	WUL	-211-	24.	N.	. t	ji.	N
Voltage	drop (m	V) after	1 h	TEX	THE	NUTER	MITE	MALIT	when	^a n N
TEK	1	× ²	JN 3	4	5	6	7	8	9	10
) (mV)			J.F.			olite <u>r</u>	1 ⁶	1-1	<u>ب</u> ر	······
Voltage	drop of	two inse	parable j	oints 🔊	3			×	et .	N .
Voltage	drop aft	er 10th a	alt. 25th c	cycle	et .	TEN NU	E. NI	. whi	nn.	N
	 Clear of Clampin Clampin Fixed in Conduct Type of Termina Pull tes 4 samp Pull tes 4 samp Pull tes 4 samp Insertio Permar Electric Voltage Voltage After ag 25th cye Contact Pull tes connect Pull tes connect Pull tes connect Voltage Voltage After ag 25th cye After ag 25th cye Contact Voltage 	Clear connection Clamping indep Fixed in position Conductor size Type of conduct Terminals interm Pull test spring-4 4 samples) Pull test pin or ta 4 samples) Voltage drop (m) Voltage drop (m) Voltage drop (m) Voltage drop (m) (4 samples) Voltage drop (m) Voltage drop (m) (4 samples) Voltage drop (m) (4 samples) Voltage drop (m) (4 samples) After ageing, vo 100th cycle (4 sa Pull test spring-1 connections (4 sa Pull test spring for or ta Pull test spring for or ta Pull test pin or ta Pull test spring for or ta Pull test pin or ta <td>Clear connection method Clamping independently Fixed in position Conductor size Type of conductor Terminals internal wiring Pull test spring-type term 4 samples): Pull test pin or tab termin 4 samples): Insertion force not exceed Permanent connections: Electrical tests Voltage drop (mV) after Voltage drop of two inse Number of cycles Voltage drop (mV) after (4 samples) Voltage drop (mV) after (4 samples) Voltage drop (mV) after (4 samples) Voltage drop (mV) after (4 samples) After ageing, voltage drop 25th cycle (4 samples) After ageing, voltage drop 100th cycle (4 samples) After ageing, voltage drop Terminal size and rating Pull test spring-type term connections (4 samples). Pull test pin or tab termin pull (N) Contact resistance test Voltage drop (mV) after (1 2 Voltage drop of two inse Voltage drop of two inse Voltage drop (mV) after</td> <td>Conductor size Type of conductor Terminals internal wiring Pull test spring-type terminals (4 4 samples): Pull test pin or tab terminals (4 N 4 samples): Insertion force not exceeding 50 Permanent connections: pull-off t Electrical tests Voltage drop (mV) after 1 h (4 sa Voltage drop of two inseparable i Number of cycles Voltage drop (mV) after 10th alt. (4 samples) Voltage drop (mV) after 50th alt. 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WILL'S WI				-20°	IEC 6059	8-2-2					
Clause	Require	ement +	Test 🧹		in white	m	Result -	Remark			Verdict
JIE NI	JAL .	MA	M	- 2m			L At		- 1 ⁰¹	J.J.E	NIT
terminal		1	2	3	4	5	6	JN7	~08	<i>1</i> /9	10
voltage dro	o (mV)	NN ¹⁻²⁻	m r.	<u></u>				Ţ.	- Alt	J.J.	NIT T
24.	Voltage	e drop af	ter 50th a	lt. 100th	cycle	MUTE .	NALI N	n- 1	in 1	<i>n</i> -	N
TEL	Max. al	lowed vo	oltage dro	op (mV).		.:		it.	tet .	JEX .	1 ¹¹
terminal	d.	1	2	<u>م</u> لح علم الم	4	5	5 6 N	7,1	8,0	9.%	10
voltage dro	o (mV)	- Tur	201	410				ب <u>بر</u>	<	<u>ل</u> را	· ····································
Un a.	Continu	ued ageir	ng: voltag	je drop a	after 10th	alt. 25t	h cycle	MUL	m	201	N
LIER NIE	Max. al	lowed vo	oltage dro	op (mV).		.:	,+	,et	. Alt	JER	. The state
terminal		1	2	3	4	5	6	e ¹⁰ 7	8 %	9	10
voltage drop	o (mV)	n ¹² (v 1	J		<u> </u>			1	Jair -	1 <u>11</u>
	Continu	ued ageii	ng: voltag	je drop a	after 50th	alt. 100)th cycle	10 N	1 - N		N
NITER I	Max. al	lowed vo	oltage dro	op (mV).		.;_ /		et .	et i	IFF N	14 - N
terminal		1	2	53	4	5	6	7	8	9	10
voltage dro	o (mV)	17	540	4			,				

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white white	Aust	ralian deviation	untit water
Clause	Requirement + Test	Result - Remark	Verdict

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ANNEX 5 Austra

Australian deviation (AS/NZS 60598.2.2)

2.5 (3)	Marking		n - 1
(3.3.12)	Terminations shall be clearly marked or otherwise identified	tet itet witet mitet an	JOP P
	-In Australia, luminaries with non-detachable flexible cables or cords which are intended to be connected to the supply via a socket-outlet and which are not fitted with a plug are not permitted.	whitek whitek whitek white	at white
(3.3)	Additional information -Instructions and other texts required by this Standard shall be written in English. Compliance is checked by inspection.	UNITER WAITER WAITER WAITER	WN P
(3.3.7)	Luminaires provided with metal halide lamps -To avoid potential unsafe lamp failure, the luminaire should be switched off at least once a week.	whitet whitet whitet whi	
(3.3.10)	Indoor and outdoor use	street white white white	_Ä

2.6 (4)	CONSTRUCTION		Mr
(4.4.1)	Integral lampholder -G5 lampholders are assessed for access to live parts during lamp replacements and with the lamp removed.	let white white white	N
(4.16)	Luminaires marked with F-symbol -Luminaires not marked with the warning symbol, shall comply with one of the following requirements of 4.16.1, 4.16.2 or 4.16.3. Table 4.6 gives guidance on when to use the symbol or warning notice	F-symbol is deleted acc. to IEC 60598-1:2008	P

2.10 (5)	EXTERNAL AND INTERNAL WIRING	at let the states	TER. IN
(5.2.1)	Means of connection : -Portable luminaries with non detachable cables or cords shall be fitted with plugs complying with AS/NZS 3112. The plug portion of the luminaire with integral pins shall comply with Appendix J of AS/NZS 3112. Also see note under Clause 3.2.12.	watter watter water water	N
(5.2.16)	Appliance inlets -Installation couplers complying with AS/NZS 61535.1(Int) are an acceptable alternative in Australia and New Zealand.	Tet waitet waitet waitet	N

2.11 (8)	PROTECTION AGAINST ELECTRIC SHOCK	- Alt
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. dr . 4	Additalian deviation		
Clause	Requirement + Test	Result - Remark	Verdict
(8.2.1)	Live parts not accessible -For testing G5 lampholders, see Clause 4.4.1	white white white whi	N N
(8.2.4)	Portable luminaire: For Class I portable luminaries and luminaire for wall mounting within arm's reach (see Clause 1.4.12 of AS/NZS 3000), terminal blocks shall be completely covered and it shall not be possible to touch basic insulation unless opened for replacement of lamps or replaceable control gear.	et whitet whitet whitet	or n vn

2.12 (12)	ENDURANCE TEST AND THERMAL TEST		2m
(12.4.1)	Note: Luminaire manufacturers are advised to consider maximum ambient air temperature of a component such as starting device, electronic ballast or converter etc.	ret whitek whitek whitek	N

2.15 (13)	RESISTANCE TO HEAT, FIRE AND TRACKING	the states	
(13.3.1)	Parts of insulating material retaining current-carrying the test glow-wire at 750 °C:	parts in position shall withstand	- NIA
ic with	- part tested:	thet allet mile white	N
t it	- part tested:	- su su st	Ν
(13.3.2)	Parts of insulating material which do not retain live p provide protection against electric shock, and parts of SELV parts in position shall withstand the glow-wire	of insulating material retaining	
m. m	- part tested:	LED board, connector	Ρ
(13.3.3)	During the application of the glow-wire tests of sub clauses 13.3.1 and 13.3.2, the height and duration of the flames are measured.	No flame produced	WALT



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IEC 62031

Clause Requirement + Test

Result - Remark

Verdict

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ANNEX 6 LED modules for general lighting – Safety specifications IEC 62031: 2008

4 .M	GENERAL REQUIREMENTS	TEN NATE WALT WAL	1 P 1
4.4	Integral modules treated as part of luminaires defined in clause 0.5 of IEC 60598-1	at street our et unitreet a	NUTEP JUN
4.5	Independent modules complies with requirements in IEC 60598-1	the set set	N N

6, A	CLASSIFICATION		et set
<u>, 1</u>	Built-in module:	Yes 🗌 No 🛛	- 201-
et :	Independent module	Yes 🗌 No 🖂	, A
M	Integral module:	Yes 🛛 No 🗌	n_ n
WALTER	For Integral module; Note to 1.2.1 in IEC 60598-1 applies.	nitet mitet anitet an	I TESP MIL

13	FAULT CONDITIONS		P
13.1	In compliance with IEC 61347-1 (clause numbers between parentheses refer to IEC 61347-1)		Р
-In-	When operated under fault conditions the LED-module	e. The unit with white	A, B
t Jet	- does not emit flames or molten material	e at at at	Р
-24	- does not produce flammable gases	white white where	P
TER	- protection against accidental contact not impaired	at at at	P
n v	Thermally protected controlgear does not exceed the marked temperature value	vents white vents	N
EX WALTE	Fault conditions: capacitors, resistors or inductors without proof of compliance with relevant specifications have been short-circuited or disconnected	att white white	NN MILIEK
- (14.1)	Short-circuit of creepage distances and clearances if less than specified in clause 16 in Part 1 (except between live parts and accessible metal parts)	+ whitek whitek whitek	N N
INLIEK W	Distances on printed boards provided with coating according to IEC 60664-3	alifet miret miret wh	
- (14.2)	Short-circuit or interruption of semiconductor devices	LED	Р
- (14.3)	Short-circuit across insulation consisting of lacquer, enamel or textile	LIER WALTE WALT WALT	-surN
- (14.4)	Short-circuit across electrolytic capacitors	et tet utet sufer	N
- (14.5)	During the tests, a five-layer tissue paper, where the test specimen is wrapped, does not ignite	with with with	Р
sult i	After the tests the insulation resistance with d.c. 500 V (M Ω) are \geq 1 M Ω	100 MΩ	Р



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white wh	it was sur and	IEC 62031	ret stet stret with	ANNITE WALT
Clause	Requirement + Test	MITER WALL WA	Result - Remark	Verdict

	Temperature declared thermally protected LED- modules fulfil the requirements in Annex C of IEC 61437-1	and and and an	N
13.2	Module withstands overpower condition >15 min.	Mr. M. M.	Р
WALT	Module with automatic protective device or power limiter, test performed 15 min. at limit.	MALTER WALTER WALTER W	NIN M
NNLIEK.	During the tests, tissue paper, spread below module, does not ignite	MATER MAILER MALIER MAI	IT P IT

15	CONSTRUCTION		Р
et "N	Wood, cotton, silk, paper and similar fibrous material not used as insulation	at the state state	P

A	ANNEX A - TESTS	AP S
wh	All tests performed in accordance with the advice given in Annex H of IEC 61347-1, if applicable	Poll at at



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Model: R10WDLCW-01



Photo 1



Photo 2



Page 2 of 3 **Photo Documentation** Reference No.: WTF13F0503375S





Photo 4



Page 3 of 3 **Photo Documentation** Reference No.: WTF13F0503375S



Photo 6