# **Tufflite LED**













Tufflite LED is a versatile general purpose, IP66 rated, luminaire. It is supplied with fast fit mounting stainless steel clips for ease of installation, avoiding the need to drill the housing. Options include: 3 hour combined non-maintained emergency functionality, dimmable control gear and integrated lighting controls options to maximise energy savings, user comfort and control.

Linear LED light engines and efficient control gear provide class leading performance; they are protected by a GRP (glass reinforced polymer) base and polycarbonate diffuser with a high impact resistance rating of IK08.

With a comprehensive range of lumen outputs across 3 luminaire lengths, Tufflite LED delivers choice and flexibility to suit a wide range of applications such as warehousing, plant rooms, car parks, loading/storage spaces and assembly areas where high ingress protection and robust construction are required.

- Nominal 4', 5' and 6' formats, in narrow and wide housings, ideal for both new and retro fit applications
- Impact and heat resistant opal polycarbonate diffuser and GRP base housing construction, IK08 rated, and secured with anti-tamper diffuser clips
- Deep poured continuous polyurethane gasket to maintain IP66 rating
- Class leading LED luminaire performance and efficacy with lumen packages to match and exceed traditional fluorescent technology with reduced energy consumption
- Integrated lighting control options to maximise energy saving, user comfort and control
- Integral 3 hour combined non-maintained functionality option
- Fast fix stainless steel mounting clips for rapid installation. (No need to drill the housing avoiding a potential ingress path)

## **LED and Control Gear**

- High efficacy linear LED light engines
- >80CRI, 4000K
- Energy efficient fixed output control gear as standard
- DALI dimmable control gear option
- L80/B50 at 25°c (60,000)

#### **Materials**

- Body polyester GRP in RAL7035 grey with integrated gear tray supports and deep poured polyurethane gasket
- Diffuser UV stabilised fire retardant polycarbonate
- Diffuser clips stainless steel offering strength and integral locking screw function
- Gear tray sheet steel, white finish
- Mounting brackets stainless steel (grade 501)

#### Installation Notes

- Surface/suspension mount rear brackets supplied, removing the need to drill the housing base
- 20mm cable entry knockouts at each end, supplied complete with sealing plugs
- Terminal block with 2 x 2.5mm<sup>2</sup> cable capacity per termination
- Through wiring kits available
- Geartray hangs on the body for ease of install, locates in final position with tool free clips
- Simple to use stainless steel diffuser clips, 4 of which have security screws to lock them in the closed position as an antitamper feature and ensures access only through tooled entry to the luminaire.
- This luminaire is IP66 rated, this rating only applies when the luminaire is installed observing the correct orientation and must not be positioned in direct sunlight.
- This luminaire has an ambient temperature of -25°C to +25°C for the non-emergency version.
- For Emergency variants, this luminaire has an ambient temperature range of -5°C to +25°C to ensure the batteries work correctly.

In exterior applications, it is recommended the luminaires are protected under a canopy or cover. The housing is not suitable for mounting with the base directly on a vertical surface in the horizontal orientation.

# **Options**

- DALI dimming option
- · Intelligent light and energy management options:
  - End mounted IP65 rated sensor with switching or dimming function, with/without photocell
- 'Corridor Function' control available with the 'CO' suffix
- Fully integral combined non-maintained emergency, 3 hour duration. Suitable for use on defined escape routes.
- We offer a range of product support contracts to aid commissioning, reduce your maintenance costs, comply with legislative test requirements and maximise the lifespan of your lighting equipment.

# **Specification**

To specify state: General purpose IP66 rated luminaire with GRP base and reeded opal polycarbonate light controller, secured by tamper resistant hinged latches and removable geartray retained by tool free clips, as Eaton's Tufflite LED range, part no. \_

# **Dimensions**



Cat No	W (mm)	D (mm)	L (mm)
TXS4N264KZ	101	101	1282
TXS4N374KZ	101	101	1282
TXS4N474KZ	101	101	1282
TXS4W644KZ	145	101	1282
TXS5N274KZ	101	101	1578
TXS5N374KZ	101	101	1578
TXS5N504KZ	101	101	1578
TXS5W574KZ	145	101	1578
TXS5W764KZ	145	101	1578
TXS5W884KZ	145	101	1578
TXS6N544KZ	101	101	1840
TXS6W944KZ	145	101	1840
TXS6W1104K2	145	101	1840

### **Chemical Resistance**

Chemical Agent	Body (Polyester)	Diffuser (Poly- carbonate)
Acetic acid 10%	•	•
Acetone	0	Χ
Alcoholic beverages	•	
Aluminium sulphate		
Ammonia 5%	0	X
Aniline	0	Х
Arsenic acid 20%	0	
Benzene	X	Х
Bencylic alcohol	X	Х
Bromine	X	Х
Calcium chloride	•	•
Calcium nitrate		
Carbon tetrachloride	Х	Х
Carbonic acid		Х
Caustic potash 5%	Х	Х
Cement		
Hydrochloric acid 1-5%	0	•
Chlorine liquids (vapours)	X	Х
Chloroform	Х	Х
Chromic acid	X	0
Citric acid 20%	•	•
Copper sulphate		
Diesel-naphta oil		0
Ethyl alcohol 30%		
Ethyl chloride	Х	Х
Ethyl ether		Х
Food oils and fats	•	Х
Formic acid 10%	0	
Glycerine	•	•

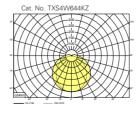
Chemical Agent	Body (Polyester)	Diffuser (Poly- carbonate)
Hexane	0	•
lodine	•	Х
Iron chloride		•
Isopropylic alcohol	•	•
Lubricating oil		
Magnesium sulphate		
Methanol		Х
Mineral oils		
Nitric acid 20%	Х	0
Oxygen	•	
Ozone		•
Perchloric acid 10%	X	
Petrol		Х
Phenol	0	X
Pothassium bromide		•
Pothassium nitrate	•	
Pothassium permanganate		
Sea climate		
Silicon oils	•	
Soda bleach 15%		Х
Sodium chloride		
Sodium hydroxide 5%	•	Х
Sodium sulphate	•	•
Sugar		•
Sulphur	•	
Sulphuric acid 30%	Х	•
Toluene	Х	X
Trichloroethylene	Х	Х
Zinc sulphate		

# **Photometric Data - Tufflite Narrow**

Luminaire Output = 2673 lumens
SHRnom: 1.50
SHRmax : 1.526

Utilis	Utilisation factors / TM5										
Reflectances				Room Index							
C	W	F	0.75	1.0	1.25	1.5	2.0	2.5	3.0	4.0	5.0
70	50	20	54	62	69	74	81	86	90	94	97
70	30	20	46	54	61	66	74	80	84	89	93
_70	10	20	40	48	55	61	69	75	79	85	89
50	50	20	51	59	65	70	76	81	84	89	91
50	30	20	44	52	59	64	71	76	80	85	88
_50	10	20	39	46	53	59	66	71	75	81	85
30	50	20	49	56	61	68	72	76	79	83	86
30	30	20	43	50	56	61	68	72	76	80	83
30	10	20	38	45	52	57	64	69	72	77	81
0	0	0	35	42	48	52	59	63	66	71	74
B	Z-cla:	SS	5	5	5	5	5	5	5	5	5

# **Photometric Data - Tufflite Wide**



Luminaire Output = 6417 lumens
SHRnom: 1.25
CUDmay : 1 477

Utilisation factors / TM5											
Refle	ectar	ices	Room Index								
C	W	F	0.75	1.0	1.25	1.5	2.0	2.5	3.0	4.0	5.0
70	50	20	52	62	69	74	82	87	90	95	98
70	30	20	44	54	61	67	75	81	85	91	94
_70	10	20	38	48	55	61	69	75	80	86	91
50	50	20	50	59	66	71	78	82	86	90	93
50	30	20	43	52	59	64	72	77	81	86	90
50	10	20	38	47	54	59	67	73	77	83	86
30	50	20	48	57	63	67	74	78	81	85	88
30	30	20	42	51	57	62	69	74	77	82	85
30	10	20	37	46	53	58	65	70	74	79	83
0	0	0	34	43	49	54	60	65	69	73	76
B	Z-cla	SS	6	5	5	5	5	5	5	5	5

Weight (kg)

Industrial

#### Type W(mm) LED **LED Emerg** DALI DALI Emerg L(mm) D(mm) Fixing Centres (mm) 1282 101 101 3.05 3.40 3.15 4.27 4' twin 1282 145 101 800 4.62 4.35 4.70 3.75 4.10 3.95 1578 101 101 1100 4.30 1100 5.35 5.70 5.30 5.60 1578 145 101





Twin width housing



Narrow width housing



Batten fit sensors (IP65 rated), 0°C - 25°C ambient



Narrow width rear with tamper proof stainless steel clip



Twin width rear with tamper proof stainless steel clip

# **Catalogue Numbers**

Cat No	Description	Lumen Output (Im)	Circuit Watts (W)	Efficacy (Llm/cW)
All luminaires below	w come with stainless steel clips			
TXS4N264KZ	Tufflite LED 2600 4000K FO 1.2m single, stainless steel clips	2673	19.8	135.0
TXS4N374KZ	Tufflite LED 3700 4000K FO 1.2m single, stainless steel clips	3707	28.2	131.5
TXS4N474KZ	Tufflite LED 4700 4000K FO 1.2m single, stainless steel clips	4767	38.5	123.8
TXS4W644KZ	Tufflite LED 6400 4000K FO 1.2m twin, stainless steel clips	6417	48.5	132.3
TXS5N274KZ	Tufflite LED 2700 4000K FO 1.5m single, stainless steel clips	2730	19.2	142.2
TXS5N374KZ	Tufflite LED 3700 4000K FO 1.5m single, stainless steel clips	3721	26.6	139.9
TXS5N504KZ	Tufflite LED 5000 4000K FO 1.5m single, stainless steel clips	5071	39.4	128.7
TXS5W574KZ	Tufflite LED 5700 4000K FO 1.5m twin, stainless steel clips	5777	40.6	142.3
TXS5W764KZ	Tufflite LED 7600 4000K FO 1.5m twin, stainless steel clips	7601	55.5	137.0
TXS5W884KZ	Tufflite LED 8800 4000K FO 1.5m twin, stainless steel clips	8835	66.2	133.5
TXS6N544KZ	Tufflite LED 5400 4000K FO 1.8m single, stainless steel clips	5411	42.0	128.8
TXS6W944KZ	Tufflite LED 9400 4000K FO 1.8m twin, stainless steel clips	9494	71.4	133.0
TXS6W1104KZ	Tufflite LED 11000 4000K FO 1.8m twin, stainless steel clips	11013	85.5	128.8

For emergency versions please add the EL prefix, e.g. TXS4W644KZ becomes ELTXS4W644KZ For emergency versions the circuit watts will increase by 1.5W to account for the charging circuit

For DALI dimmable options please replace the Z suffix with DD e.g. TXS4W644KZ becomes TXS4W644KDD

Refer to the catalogue number matrix for other options

For further information contact our technical support and application department on 01302 303240 or email LightingTechnicalUK@Eaton.com