

TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No: **MERB000048S** Revision No:

This Certificate is issued by DNV UK Limited based on authorisation of the Maritime & Coast Guard Agency (MCA) as an UK Approved Body to undertake conformity assessments on marine equipment in accordance with the requirements of the Merchant Shipping (Marine Equipment) Regulations 2016 as amended.

This is to certify:

That the Navigation lights

with type designation(s) TEF2880 Navigation Light

Issued to

R. Stahl Tranberg AS Stavanger, Norway

is found to comply with the requirements in the following Regulations/Standards: Regulation **MSN 1874 Amendment 8**,

item No. UK/6.1. COLREG 72 as amended, Annex I/14, IMO Res. A.694(17), IMO Res. MSC.253(83)

Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until 2025-05-04.

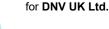
Issued at London on 2024-04-15

DNV local unit: Norway CMC, West

Approval Engineer: Tommi Juhani Rifaat



Approved Body No.: 0097



Digitally Signed By: Mydlak-Röder, Christine

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Mydlak-Röder, Christine MER Service Responsible



UK Approved Body Authorised

by the MCA

This certificate will not be valid if the manufacturer makes any changes or modifications to the approved type of equipment, which have not been notified to, and agreed with the approved body named on this certificate.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



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During the period of validity of this certificate the applicable regulations (international conventions and the relevant resolutions and circulars of the IMO) and testing standards may change, therefore the product conformity may need to be re-assessed by the Approved Body.

[&]quot;The Mark of Conformity" may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-control phase module (D, E or F) of Schedule 2 of the Merchant Shipping (Marine Equipment) Regulations 2016, as amended is fully complied with and controlled by a written inspection agreement with an approved body. In case limitations of use apply, these should be indicated in the Annex.

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Product description

TEF2880 Navigation Light - LED navigation lights for Simplex or Duplex installation.

For approved COLREG light types and part numbers; see list in certificate appendix.

Light may be installed in accordance to product codes (independent of COLREG specified lights, see appendix):

2880	A Sector		B Colour		C Visible Range		D	D		E	
							Option (functional)		Option		
	0	Simplex All-round (360°)	0		0		0	Non	0	Non	
	1	Simplex Half all- round (181°)	1	White	1	1 nm	1	DI/DO (On/off or blinking function)	1	White painted	
	2	Simplex Masth / Side (225° / 112,5°)	2	Red	2	2 nm	2		2		
	3	Simplex Stern (135°)	3	Yellow	3	3 nm	3	DI/DO ("Push-button" dimming function)	3		
	4	Simplex Prehoistable All- round (360°)	4	Green	4		4		4		
	5	Simplex Panama Steering	5	Blue	5	5 nm	5	Blink light 30/min	5		
	6	Duplex All-round (360°)	6	White/Red	6	6 nm	6	Blink light 60/min	6		
	7	Duplex Half all- round (181°)	7	White/Gree n	7		7	Blink light 120/min	7		
	8	Duplex Masth/Side (225°/112,5°)	8	Red/Yellow	8		8	Blink light 180/min	8		
	9	Duplex Stern (135°)	9	Red/Green	9		9	Single cable entry for duplex models	9		

Application/Limitation

- Installation and maintenance in accordance to manufacturers documentation.
- May be installed in accordance to COLREG, CCNR and CEVNI vessel requirements.
- Models may be installed with the following options:
 - o single cable entry for duplex models
 - white painted housing
 - o hoistable simplex all-round models
 - $\circ\quad$ switching on/off and status monitoring via DI/DO card
 - built-in flashing

For details see model matrix, certificate appendix and manufacturers manual

Type Examination documentation

DNV No	Drw No	Rev	Title
73	TUM6500	REV M 01.11.2022	Manual: Navigation Light TEF 2880 NAVIGATION LIGHT USER MANUAL
58	454.NL/R.		Report: BSH EN 14744 Navigation light TEF2880
48	TCR6552	0	Report: IEC60945, Applica Type testing of TEF2880 series Navigation Lights

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Tests carried out

Environmental testing: IEC 60945 (2002)
Performance testing: EN 14744 (2005)

Marking of product

In accordance with EN 14744.

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Appendix: Approved Navigation Lights.

Part number	Description	Range in NM
Simplex:		
288001100	TEF 2880 Nav. Light LED Simplex Additional 360° White >1nm	1
288001200	TEF 2880 Nav. Light LED Simplex 360° White 2nm	2
288001300	TEF 2880 Nav. Light LED Simplex 360° White 3nm	3
288001510	TEF 2880 Nav. Light LED Simplex Morse/Manouvre 360° White 5nm	5
288002100	TEF 2880 Nav. Light LED Simplex Additional 360° Red >1nm	1
288002200	TEF 2880 Nav. Light LED Simplex 360° Red 2nm	2
288002300	TEF 2880 Nav. Light LED Simplex 360° Red 3nm	3
288003100	TEF 2880 Nav. Light LED Simplex additional 360° Yellow 1nm	1
288003200	TEF 2880 Nav. Light LED Simplex 360° Yellow 2nm	2
288003300	TEF 2880 Nav. Light LED Simplex 360° Yellow 3nm	3
288004200	TEF 2880 Nav. Light LED Simplex 360° Green 2nm	2
288004300	TEF 2880 Nav. Light LED Simplex 360° Green 3nm	3
288011100	TEF 2880 Nav. Light LED Simplex Additional 181° White >1nm	1
288011200	TEF 2880 Nav. Light LED Simplex 181° White 2nm	2
288011300	TEF 2880 Nav. Light LED Simplex 181° White 3nm	3
288012100	TEF 2880 Nav. Light LED Simplex Additional 181° Red >1nm	1
288012200	TEF 2880 Nav. Light LED Simplex 181° Red 2nm	2
288012300	TEF 2880 Nav. Light LED Simplex 181° Red 3nm	3
288013100	TEF 2880 Nav. Light LED Simplex Additional 181° Yellow >1nm	1
288014200	TEF 2880 Nav. Light LED Simplex 181° Green 2nm	2
288014300	TEF 2880 Nav. Light LED Simplex 181° Green 3nm	3
288021500	TEF 2880 Nav. Light LED Simplex Masthead 225° White 5nm	5
288021600	TEF 2880 Nav. Light LED Simplex Masthead 225° White 6nm	6
288022200	TEF 2880 Nav. Light LED Simplex Port 112,5° Red 2nm	2
288022300	TEF 2880 Nav. Light LED Simplex Port 112,5° Red 3nm	3
288024200	TEF 2880 Nav. Light LED Simplex Starboard 112,5° Green 2nm	2
288024300	TEF 2880 Nav. Light LED Simplex Starboard 112,5° Green 3nm	3
288031200	TEF 2880 Nav. Light LED Simplex Stern 135° White 2nm	2
288031300	TEF 2880 Nav. Light LED Simplex Stern 135° White 3nm	3
288033200	TEF 2880 Nav. Light LED Simplex Towing Stern 135° Yellow 2nm	2
288033300	TEF 2880 Nav. Light LED Simplex Towing Stern 135° Yellow 3nm	3
Duplex:		
288061100	TEF 2880 Nav. Light LED Duplex Additional 360° White >1nm	1
288061200	TEF 2880 Nav. Light LED Duplex 360° White 2nm	2
288061300	TEF 2880 Nav. Light LED Duplex 360° White 3nm	3

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Part number	Description	Range in NM
288062100	TEF 2880 Nav. Light LED Duplex Additional 360° Red >1nm	1
288062200	TEF 2880 Nav. Light LED Duplex 360° Red 2nm	2
288062300	TEF 2880 Nav. Light LED Duplex 360° Red 3nm	3
288063100	TEF 2880 Nav. Light LED Duplex Additional 360° Yellow >1nm	1
288063200	TEF 2880 Nav. Light LED Duplex 360° Yellow 2nm	2
288064200	TEF 2880 Nav. Light LED Duplex 360° Green 2nm	2
288064300	TEF 2880 Nav. Light LED Duplex 360° Green 3nm	3
288066200	TEF 2880 Nav. Light LED Dual 360° Red/Yellow 2nm	2
288067200	TEF 2880 Nav. Light LED Dual 360° White/Red 2nm	2
288068200	TEF 2880 Nav. Light LED Dual 360° Red/Yellow 2nm	2
288069200	TEF 2880 Nav. Light LED Dual 360° Red/Green 2nm	2
288069300	TEF 2880 Nav. Light LED Dual 360° Red / Green 3nm	3
288071100	TEF 2880 Nav. Light LED Duplex Additional 181° White >1nm	1
288071200	TEF 2880 Nav. Light LED Duplex 181° White 2nm	2
288071300	TEF 2880 Nav. Light LED Duplex 181° White 3nm	3
288072100	TEF 2880 Nav. Light LED Duplex Additional 181° Red >1nm	1
288072200	TEF 2880 Nav. Light LED Duplex 181° Red 2nm	2
288072300	TEF 2880 Nav. Light LED Duplex 181° Red 3nm	3
288073100	TEF 2880 Nav. Light LED Duplex Additional 181° Yellow >1nm	1
288074200	TEF 2880 Nav. Light LED Duplex 181° Green 2nm	2
288074300	TEF 2880 Nav. Light LED Duplex 181° Green 3nm	3
288076200	TEF 2880 Nav. Light LED Dual 181° White/Red 2nm	2
288079200	TEF 2880 Nav. Light LED Dual 181° Red/Green 2nm	2
288079300	TEF 2880 Nav. Light LED Dual 181° Red/Green 3nm	3
288081500	TEF 2880 Nav. Light LED Duplex Masthead 225° White 5nm	5
288081600	TEF 2880 Nav. Light LED Duplex Masthead 225° White 6nm	6
288082200	TEF 2880 Nav. Light LED Duplex Port 112,5° Red 2nm	2
288082300	TEF 2880 Nav. Light LED Duplex Port 112,5° 3nm	3
288084200	TEF 2880 Nav. Light LED Duplex Starboard 112,5° Green 2nm	2
288084300	TEF 2880 Nav. Light LED Duplex Starboard Green 112,5° 3nm	3
288091200	TEF 2880 Nav. Light LED Duplex Stern 135° White 2nm	2
288091300	TEF 2880 Nav. Light LED Duplex Stern 135° White 3nm	3
288093200	TEF 2880 Nav. Light LED Duplex Towing Stern 135° Yellow 2nm	2
288093300	TEF 2880 Nav. Light LED Duplex Towing Stern 135° Yellow 3nm	3
288005200	TEF 2880 Nav. Light LED Simplex All Round 360° Blue 2nm	2
Flashing:		
288066210	TEF 2880 Nav. Light LED Duplex 360° White/Red 2nm 24V	2

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Part number	Description	Range in NM
288067210	TEF 2880 Nav. Light LED Duplex 360° White/Green 2nm 24V	2
288069210	TEF 2880 Nav. Light LED Duplex 360° Red/Green 2nm 24V	2
288061510	TEF 2880 Nav. Light LED Duplex Morse/Man 360° White 5nm 24V	5
288001210	TEF 2880 Nav. Light LED Simplex All-round 360° White 2nm 24V	2
288002210	TEF 2880 Nav. Light LED Simplex All-round 360° Red 2nm 24V	2
288004210	TEF 2880 Nav. Light LED Simplex All-round 360° Green 2nm 24V	2
288005210	TEF 2880 Nav. Light LED Simplex All-round 360° Blue 2nm 24V	2
288001510	TEF 2880 Nav. Light LED Simplex Morse/Man 360° White 5nm 24V	5

Note to table:

- Models may include option for single cable entry for duplex models (second last digit is "9").
- Models may be installed with option of white painted housing (last digit is "1").
- Simplex light types may be delivered at hoistable all-round models (fifth digit is "4")
- Switching on/off and status monitoring via DI/DO card: Part number as above, second last digit is "1"
- Built-in flashing: Part number as above, second last digit is "5"," 6", "7" or "8" depending on flash rate.

(See corresponding model codes in manufactures User's Manual)

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