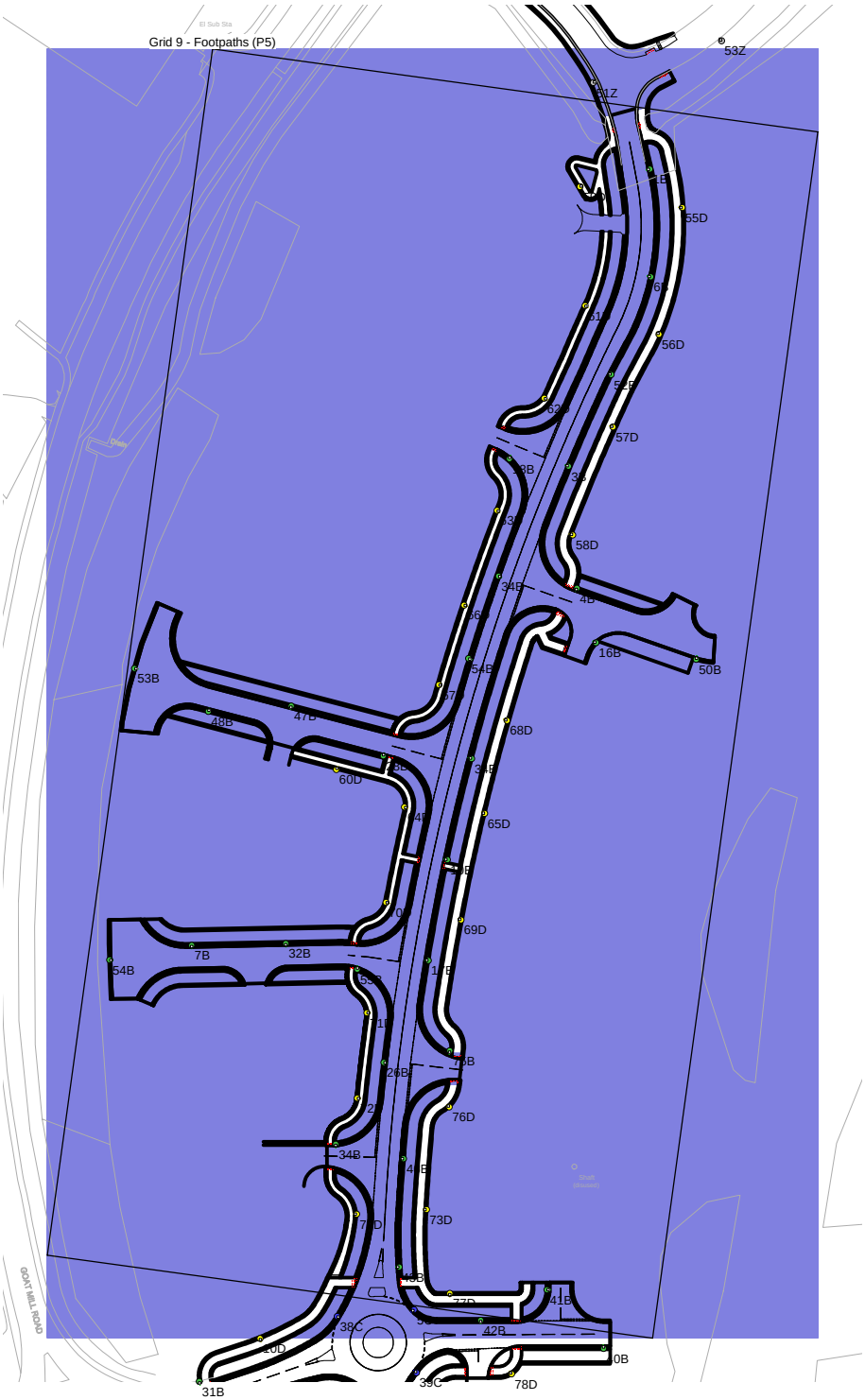
Horizontal Illuminance (lux)

Grid 9 - Footpaths (P5)



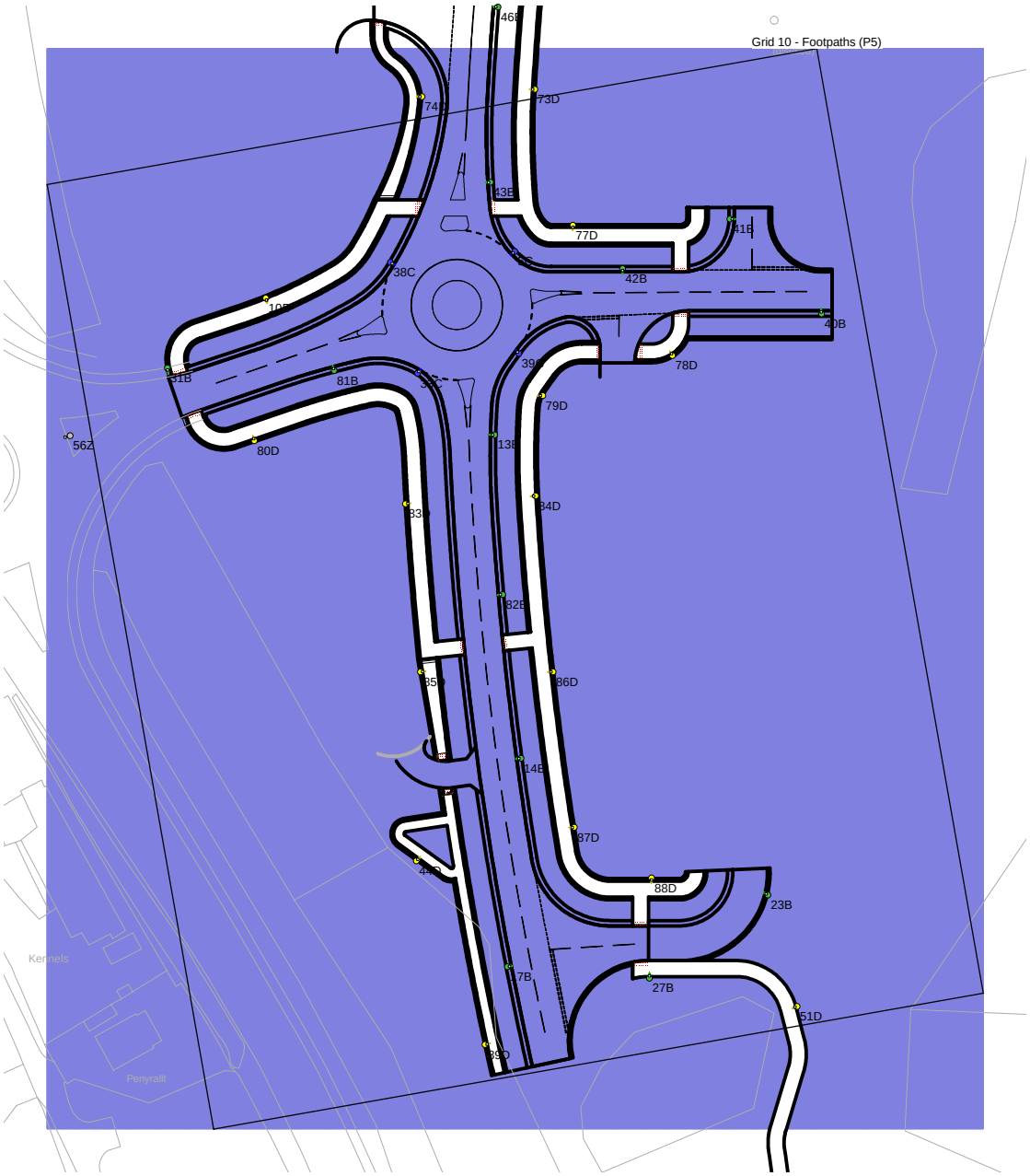
Results

Eav	5.60
Emin	1.42
Emax	19.85
Emin/Emax	0.07
Emin/Eav	0.25

919627089

Horizontal Illuminance (lux)

Grid 10 - Footpaths (P5)



Results

Eav	6.62
Emin	1.76
Emax	25.63
Emin/Emax	0.07
Emin/Eav	0.27

Appendix C – Manufacturer Literature

TRTLIGHTING



ASPECT GEN2
32 LED

IP66
Ingress Protection

IK08
Impact Resistance

8.1kg Weight

Electrical Class I

0.0439m² Wind Area

-20 to 35°C Ambient
(50°C with derated lumen output)

LED Light Source

TM66 Score
2.7 (Excellent)

DarkSky International approved Aspect Gen2 32 LED. Compliant when using a colour temperature of 3000K or below and at zero degree tilt.

SPECIFICATION

- ✓ LED colour temperature PC-Amber*, 2200K, 2700K, 3000K, 4000K *(or 5700K Zebra only)*
- ✓ Colour rendering index >70 (*>48)
- ✓ Projected L90 after 100,000 hours
- ✓ Power factor >0.95 at full load
- ✓ 1000 hour salt spray compliant, polyester powder coat finish in light grey, dark grey, black or a bespoke colour
- ✓ Marine grade high pressure die cast LM6 aluminium components
- ✓ Stainless steel fixing screws with stainless steel inserts in pivot
- ✓ Toughened ultra efficient safety glass cover
- ✓ Quick release canopy for ease of upgrade
- ✓ Lumi-LinQ wireless exterior lighting control system (optional)
- ✓ Controls - NEMA 7, Zhaga Book 18 (SR) socket (top and/or bottom) and Photocell
- ✓ CLO available
- ✓ PowerSet NFC for external programming of power output, CLO and dimming regimes (manual version available)
- ✓ Part Night Dimming (PND) with manual override option
- ✓ Dim level 10-100%
- ✓ DALI compatible for use with CMS
- ✓ Optional surge protection 10kV/10kA
- ✓ Patented MountSet: Universal system providing post top 60mm or 76mm / side entry 34mm, 42mm, 60mm or 76mm mounting
- ✓ Post top inclination of 0°, +5° and +10°
- ✓ Side entry inclination of -10°, -5°, 0°, +5° and +10°
- ✓ Tool-less access (vandal-proof fixings optional)
- ✓ UMSUG codes available for full product range



PowerSet NFC is an innovative luminaire configuration solution that puts complete control in your hands. Using a simple remote control, end users can effortlessly program power levels, lumen output, Constant Light Output (CLO), and Part Night Dimming regimes, all without opening the luminaire.

Designed exclusively for TRT Lighting products, PowerSet NFC (and its manual counterpart, PowerSet) streamlines commissioning, reduces stock holding, and delivers ultimate flexibility in lighting performance.

ASPECT GEN2 32 LED

TRTLIGHTING

RANGE OVERVIEW

Type	System Power	Road Optics	Area Optics	CCT	Lumen Output	CRI
A32	37-75W	✓	✓	PC-Amber*, 2200K, 2700K, 3000K, 4000K (or 5700K Zebra only)	Up to 11,825lm	>70 (*>48)

ELECTRICAL CHARACTERISTICS

System Power	37-75W
LED CCT	PC-Amber*, 2200K, 2700K, 3000K, 4000K (or 5700K Zebra only)
LED CRI	>70 (*>48)
Lumen Output	Up to 11,825lm
Lumen Maintenance	Projected L90 after 100,000 hours
Driver Current	775mA
Driver Output	Constant current output with AM dimming
Power Factor (Full Load/Half Load)	0.95/0.90
Operational Voltage	220-240VAC rms
Operating Frequency	50/60Hz
Inrush Current (Apk/50%-µS)	42A/238µS
Running Current (Max)	329mA
Surge Protection (COM/DIF)	10kV/6kV
Additional Surge Protection (on request)	10kV/10kA
Lighting Controls Options	NEMA 7, Zhaga Book 18 (SR) socket (top and/or bottom), Photocell, Lumi-LinQ, PND and CMS compatible
Controls Protocols	DALI-2 (parts 251 & 253), D4i (optional)

MECHANICAL CHARACTERISTICS

Housing Material	Marine grade high pressure die cast LM6 aluminium components
Cover Material	Toughened ultra efficient safety glass cover
Lens Material	PMMA and polycarbonate options
Housing Finish	Chromate free pre-treatment, polyester powder coat light grey (RAL9006), dark grey (RAL7022), black (RAL9005) or bespoke colours on request
Ingress Protection Rating	IP66
Weight	8.1kg
Wind Area	0.0439m²
Impact Resistance Rating	IK08 (IK10 with polycarbonate cover)
Mounting Methods	Post top 60mm or 76mm/side entry 34mm, 42mm, 60mm or 76mm
Mounting Inclination	-10°, -5°, 0°, +5° and +10
Photometric Centre	398.5mm (to centre of PCB)

SHIELD OPTIONS

Front	83KIT73648
Rear	83KIT73649
Side	83KIT73650

ACCESSORY

PowerSet NFC Remote Control	03INT1907

HIGHWAY SAFETY TETHER KIT OPTIONS

76mm Post Ø	83KIT73829
60mm Post Ø	83KIT73830
42mm Post Ø	83KIT73831
34mm Post Ø	83KIT73832

MADE IN BRITAIN

FOR MORE INFORMATION

+44 (0) 1527 521 162
www.trtlighting.co.uk

All information detailed within this datasheet is accurate at the date of issue.
The information provided is subject to change at our discretion. If any questions arise or extra information is required, please contact TRT Lighting directly. Aspect Gen2 32 LED Datasheet issue Feb 2025.

TRTLIGHTING



ASPECT GEN2
24 LED

IP66
Ingress Protection

IK08
Impact Resistance

8.1kg Weight

Electrical Class I

0.0439m² Wind Area

-20 to 35°C
(*50°C (* with derated lumen output))

LED Light Source

TM66 Score
2.7 (Excellent)

DarkSky International approved Aspect Gen2 24 LED. Compliant when using a colour temperature of 3000K or below and at zero degree tilt.

SPECIFICATION

- ✓ LED colour temperature PC-Amber*, 2200K, 2700K, 3000K, 4000K *(or 5700K Zebra only)*
- ✓ Colour rendering index >70 (*>48)
- ✓ Projected L90 after 100,000 hours
- ✓ Power factor >0.95 at full load
- ✓ 1000 hour salt spray compliant, polyester powder coat finish in light grey, dark grey, black or a bespoke colour
- ✓ Marine grade high pressure die cast LM6 aluminium components
- ✓ Stainless steel fixing screws with stainless steel inserts in pivot
- ✓ Toughened ultra efficient safety glass cover
- ✓ Quick release canopy for ease of upgrade
- ✓ Lumi-LinQ wireless exterior lighting control system (optional)
- ✓ Controls - NEMA 7, Zhaga Book 18 (SR) socket (top and/or bottom) and Photocell
- ✓ CLO available
- ✓ PowerSet NFC for external programming of power output, CLO and dimming regimes (manual version available)
- ✓ Part Night Dimming (PND) with manual dimming override option
- ✓ Dim level 10-100%
- ✓ DALI compatible for use with CMS
- ✓ Optional surge protection 10kV/10kA
- ✓ Patented MountSet: Universal system providing post top 60mm or 76mm / side entry 34mm, 42mm, 60mm or 76mm mounting
- ✓ Post top inclination of 0°, +5° and +10°
- ✓ Side entry inclination of -10°, -5°, 0°, +5° and +10°
- ✓ Tool-less access (vandal-proof fixings optional)
- ✓ UMSUG codes available for full product range



PowerSet NFC is an innovative luminaire configuration solution that puts complete control in your hands. Using a simple remote control, end users can effortlessly program power levels, lumen output, Constant Light Output (CLO), and Part Night Dimming regimes, all without opening the luminaire.

Designed exclusively for TRT Lighting products, PowerSet NFC (and its manual counterpart, PowerSet) streamlines commissioning, reduces stock holding, and delivers ultimate flexibility in lighting performance.

ASPECT GEN2 24 LED

TRTLIGHTING

RANGE OVERVIEW

Type	System Power	Road Optics	Area Optics	CCT	Lumen Output	CRI
A24	20-47W	✓	✓	PC-Amber*, 2200K, 2700K, 3000K, 4000K *(or 5700K Zebra only)*	Up to 7,540lm	>70 (*>48)

ELECTRICAL CHARACTERISTICS

System Power	20-47W
LED CCT	PC-Amber*, 2200K, 2700K, 3000K, 4000K *(or 5700K Zebra only)*
LED CRI	>70 (*>48)
Lumen Output	Up to 7,540lm
Lumen Maintenance	Projected L90 after 100,000 hours
Driver Current	650mA
Driver Output	Constant current output with AM dimming
Power Factor (Full Load/Half Load)	0.95/0.90
Operational Voltage	220-240VAC rms
Operating Frequency	50/60Hz
Inrush Current (Apk/50%-µS)	42A/238µS
Running Current (Max)	329mA
Surge Protection (COM/DIF)	10kV/6kV
Additional Surge Protection (on request)	10kV/10kA
Lighting Controls Options	NEMA 7, Zhaga Book 18 (SR) socket (top and/or bottom), Photocell, Lumi-LinQ, PND and CMS compatible
Controls Protocols	DALI-2 (parts 251 & 253), D4i (optional)

MECHANICAL CHARACTERISTICS

Housing Material	Marine grade high pressure die cast LM6 aluminium components
Cover Material	Toughened ultra efficient safety glass cover
Lens Material	PMMA and polycarbonate options
Housing Finish	Chromate free pre-treatment, polyester powder coat light grey (RAL9006), dark grey (RAL7022), black (RAL9005) or bespoke colours on request
Ingress Protection Rating	IP66
Weight	8.1kg
Wind Area	0.0439m²
Impact Resistance Rating	IK08
Mounting Methods	Post top 60mm or 76mm/side entry 34mm, 42mm, 60mm or 76mm
Mounting Inclination	-10°, -5°, 0°, +5° and +10
Photometric Centre	398.5mm (to centre of PCB)

SHIELD OPTIONS

Front	83KIT73648
Rear	83KIT73649
Side	83KIT73650

ACCESSORY

PowerSet NFC Remote Control	03INT1907

HIGHWAY SAFETY TETHER KIT OPTIONS

76mm Post Ø	83KIT73829
60mm Post Ø	83KIT73830
42mm Post Ø	83KIT73831
34mm Post Ø	83KIT73832

MADE IN BRITAIN

FOR MORE INFORMATION

+44 (0) 1527 521 162
www.trtlighting.co.uk

All information detailed within this datasheet is accurate at the date of issue.
The information provided is subject to change at our discretion. If any questions arise or extra information is required, please contact TRT Lighting directly. Aspect Gen2 24 LED Datasheet issue Feb 2026.

TRTLIGHTING

OPTIO NANO
12 LED



IP66
Ingress Protection

IK08
Impact Resistance

4kg Weight

Electrical Class I

0.046m² Wind Area

-20 to +35°C Ambient

LED Light Source

SPECIFICATION

- ✓ LED colour temperature PC-Amber*, 2200K, 2700K, 3000K or 4000K
- ✓ Colour rendering index >70 (*> 55 for PC-Amber)
- ✓ Projected L90 after 100,000 hours
- ✓ Power factor >0.95 at full load
- ✓ Polyester powder coat finish in light grey, dark grey, black or a bespoke colour
- ✓ High quality high pressure die cast LM6 aluminium components
- ✓ Stainless steel fixing screws with stainless steel inserts in pivot
- ✓ High efficiency PMMA lenses
- ✓ Ventilation (breather) gland for pressure equalisation in the LED module and gear housing (optional)
- ✓ Easily replaceable hinged light engine
- ✓ Coloured optical distribution identifier
- ✓ CLO available
- ✓ PowerSet feature - Field adjustable, integral power output selection device (optional)
- ✓ Controls - NEMA 3, 7, Miniature Photocell and Zhaga Book 18 (SR) socket (top and bottom)
- ✓ Part Night Dimming (PND) with manual dimming override option
- ✓ DALI-2 and D4i certified control gear for use with CMS and external sensors/devices
- ✓ Optional surge protection 10kV/10kA
- ✓ MountSet (patent granted) - Universal mounting system to interface with multiple column/bracket diameters or length
- ✓ UMSUG codes available for full product range

MADE IN BRITAIN

DARKSKY APPROVED · Reduces light pollution · Certified by DarkSky.org

International Dark-Sky Association approved Optio Nano 12 LED. Compliant when using a colour temperature of 3000K or below and at zero degree tilt.



PowerSet

The **PowerSet** module allows on site power adjustment providing maximum flexibility both in-situ and for stock holding. Each module accommodates the selection of any one of the range of UMSUG coded system powers for Optio Nano.

OPTIO NANO 12 LED

TRTLIGHTING

RANGE OVERVIEW

Type	System Power	Road Optics	Area Optics	CCT	Lumen Output	CRI
Optio Nano 12	5-40W	✓	✓	PC-Amber*, 2200K, 2700K, 3000K or 4000K	Up to 6136lm	>70 (*>55)

ELECTRICAL CHARACTERISTICS

System Power	5-40W
LED CCT	PC-Amber*, 2200K, 2700K, 3000K or 4000K
LED CRI	>70 (*>55)
Lumen Output	Up to 6,136lm
Lumen Maintenance	Projected L90 after 100,000 hours
Drive Current	96-1,050mA
Driver Output	Constant current output with AM dimming
Power Factor (Full Load/Half Load)	0.95/0.90
Operational Voltage	220-240VAC rms
Operating Frequency	50/60Hz
Inrush Current (Apk/50%-S)	26A/180µS
Running Current (max)	171mA
Surge Protection (COM/DIF)	10kV/6kV
Additional Surge Protection (on request)	10kV/10kA
Lighting Controls Options	NEMA 3, 7, Miniature Photocell, Zhaga Book 18 (SR) socket (top & bottom), PND and CMS compatible
Dimming Protocols	DALI-2 & D4i certified control gear for use with CMS and external sensors/devices

MECHANICAL CHARACTERISTICS

Housing Material	High quality high pressure die cast LM6 aluminium components
Housing Finish	Chromate free pre-treatment, polyester powder coat, light grey (RAL9006), dark grey (RAL7022), black (RAL9005) or bespoke colours on request
Lens Material	PMMA
Ingress Protection Rating	IP66
Weight	4kg
Wind Area	0.046m2
Impact Resistance Rating	IK08
Mounting Methods	Post top 60mm or 76mm/side entry 34mm, 42mm, 60mm or 76mm
Mounting Inclination	-10°, -5°, 0°, 5°, 10°
Photometric Centre	225mm (to centre of PCB)

SHIELD OPTIONS

Universal Front/Rear	83SHD72365
Side	83SHD72366

ENEC 22

All information detailed within this datasheet is accurate at the date of issue.
The information provided is subject to change at our discretion. If any questions arise or extra information is required, please contact TRT Lighting directly. Optio Nano 12 LED Datasheet issue Apr 2023.

FOR MORE INFORMATION

+44 (0) 1527 521 162
www.trtlighting.co.uk

Appendix D – TRT Aspect DarkSky Certificate

Issued: 2025-01.24
ID#: 170012425

DarkSky

DarkSky Approved Luminaire

DarkSky International grants this approval to:

TRT Lighting Ltd.

for achieving certification of the following commercial DarkSky friendly product family:

Aspect Gen2 12-32 LED

Thank you for your part in the world-wide effort to protect and preserve the natural nighttime environment and our heritage of dark skies.

James Brigagliano
Lighting Program Manager

DARKSKY APPROVED
Reduces light pollution
Certified by DarkSky.org

Ruskin K. Hartley
DarkSky Executive Director

Issued: 2025-01.24
ID#: 180012425

DarkSky

DarkSky Approved Luminaire

DarkSky International grants this approval to:

TRT Lighting Ltd.

for achieving certification of the following commercial DarkSky friendly product family:

Aspect Gen2 32-64 LED

Thank you for your part in the world-wide effort to protect and preserve the natural nighttime environment and our heritage of dark skies.

James Brigagliano
Lighting Program Manager

DARKSKY APPROVED
Reduces light pollution
Certified by DarkSky.org

Ruskin K. Hartley
DarkSky Executive Director

Issued: 2025-01.24
ID#: 190012425

DarkSky

DarkSky Approved Luminaire

DarkSky International grants this approval to:

TRT Lighting Ltd.

for achieving certification of the following commercial DarkSky friendly product family:

Aspect Gen2 64-96 LED

Thank you for your part in the world-wide effort to protect and preserve the natural nighttime environment and our heritage of dark skies.

James Brigagliano
Lighting Program Manager

DARKSKY APPROVED
Reduces light pollution
Certified by DarkSky.org

Ruskin K. Hartley
DarkSky Executive Director

Issued: 2025-01.24
ID#: 200012425

DarkSky

DarkSky Approved Luminaire

DarkSky International grants this approval to:

TRT Lighting Ltd.

for achieving certification of the following commercial DarkSky friendly product family:

Aspect Gen2 96-128 LED

Thank you for your part in the world-wide effort to protect and preserve the natural nighttime environment and our heritage of dark skies.

James Brigagliano
Lighting Program Manager

DARKSKY APPROVED
Reduces light pollution
Certified by DarkSky.org

Ruskin K. Hartley
DarkSky Executive Director

INTERNATIONAL DARK-SKY ASSOCIATION

Fixture Seal of Approval

The **International Dark-Sky Association** grants this approval to

TRT Lighting Ltd.

for achieving certification of the following dark-sky friendly product:

Optio Nano

Thank you for your part in the world-wide effort to protect and preserve the natural nighttime environment and our heritage of dark skies.

Pete Strasser
IDA Technical Director

IDA APPROVED
Dark Sky Friendly Fixture

Ruskin K. Hartley
IDA Executive Director

wsp.com