

SpecFlex | **AFSD36 Wet Location Series**
Architectural Strip Lighting | RGB, 36 LEDs per foot

IP67 Wet Location Rated 24V Architectural Flex Strip, RGB, 36 LEDs per foot

This series offers a dynamic color output using individual RGB (Red, Green, and Blue) diodes in each LED. Designed for reliable performance in wet location environments. Ideal for indoor and outdoor wet location applications including handrail and step lighting, building, display, and landscape accent lighting.



FEATURES

- IP67 Wet Location Rated
- Medium Density: 36 LEDs per foot
- One (1) Wattage/Lumen option
- Full Reels or Factory Cut into Custom Lengths
- Low power consumption with consistent, stable performance
- Wide range of Non-dimming LED Drivers, Controllers, Mounting Channels, and Lenses
- Declare Listed
- Complete System is cCSAus Listed to UL and CSA Standards



SERIES	AFSD36-4RGB		
WATTAGE	4.4W/Ft		
LUMEN OUTPUT ¹	144Lm/Ft		
EFFICACY ¹	33Lm/W		
COLOR	Red	Green	Blue
WAVELENGTH	620-625nm	525-535nm	465-470nm
LUMEN OUTPUT PER COLOR	28Lm/Ft	107Lm/Ft	26Lm/Ft
MAX RUN LENGTH	22.6ft		
LED DENSITY	36 LEDs/Ft		
CUT INCREMENT	3.94-Inches (100mm), Field Cuttable		
STRIP LIGHT WIDTH	0.57-Inches (14.5 mm)		
MOUNTING	3M™ VHB Double Sided Tape / Channels & Clips		
OPERATING VOLTAGE	24V DC		
OPERATING TEMP.	-25° to 40°C (-13° to 104°F)		
LIFE RATING	50,000 Hours @ 70% Lumen Maintenance		
LISTINGS	cCSAus Listed to UL Standards and CSA Standards IP67 Rated; Suitable for Wet Locations Declare Listed RoHS Compliant For use with Class 2 LED Drivers only		
WARRANTY	Five (5) year replacement after date of purchase when installed within Mounting Channel Three (3) year replacement after date of purchase when installed without Mounting Channel		

1. Approximate lumen output data based on test with all channels full on, see photometric test results for additional information.

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ORDERING INFORMATION

FULL REELS

- Full Reels are available in Max Run Length for each available Wattage
- Each Reel has a 72-inch Plenum Rated Cable Power Lead soldered to the start of the length
- Additional lengths of Plenum Cable available (ordered separately)
- If field cut, use the included Silicone Endcaps with Silicone Sealant (TLAOSG) to re-seal the Strip Light
- Silicone Sealant (TLAOSG) and Plenum Rated Cable (CMP-4C) ordered separately; see Page 5 for details

Example Order: AFSD36-4RGB-7-R

Series	Location	Length (Illuminated Length)
AFSD36-4RGB RGB Dynamic Color: 36LEDs/Ft, 4.4W/Ft	7 IP67 Wet Location	R Full Reel with 72-inch Power lead 4.4W/Ft: 22.6Ft Reel

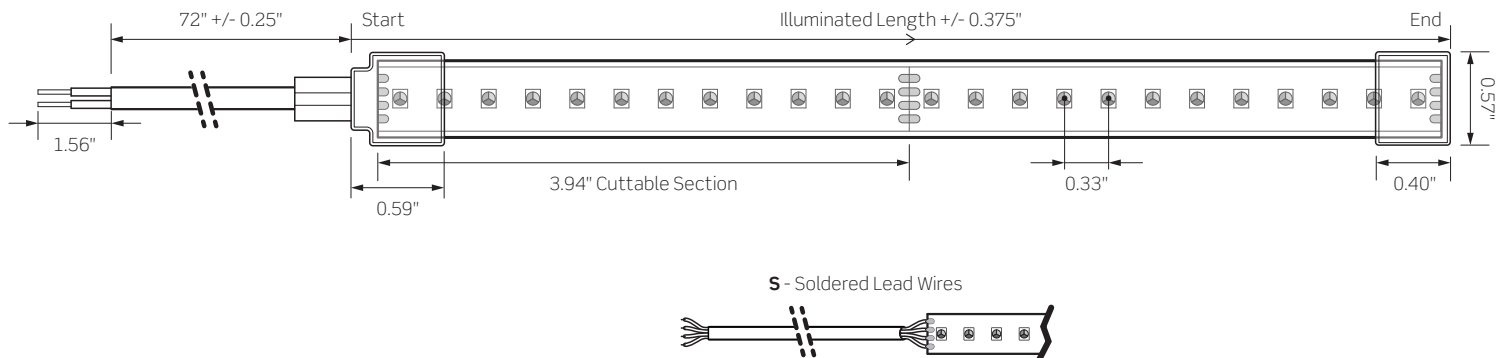
CUSTOM LENGTHS

- Custom Lengths cannot exceed the Maximum Run Length for the specified Wattage; see Max Run Length table on Page 10 for details
- Custom Lengths are factory sealed and bonded with specified Start of and End of Run Terminations
- If No Termination (NT) is specified for the End Termination, the end of the Strip Light will be sealed with an Endcap
- Allow additional lead time for Custom Lengths
- Custom Lengths are made-to-order and are not returnable; approved Submittal Sheets are required before processing the order

Example Order: AFSD36-4RGB-7-S-NT-C188

Series	Location	Start Termination	End Termination	Custom Length
AFSD36-4RGB RGB Dynamic Color: 36LEDs/Ft, 4.4W/Ft	7 IP67 Wet Location	S¹ 72-inch Soldered Lead Wires SXXX¹ Custom Length Soldered Lead Wires	NT No Termination S¹ 72-inch Soldered Lead Wires SXXX¹ Custom Length Soldered Lead Wires	CXXX Custom Length Desired length is specified in inches i.e. if the desired length is 15 Ft.-8-Inches or 188-inches total, enter C188 AFSD36-4RGB Series has a cut increment of 3.94-inches, illuminated length will be rounded down to nearest cut increment

1. All Lead Wires come sheathed in a Plenum Rated Cable rated to 90°C minimum; specify Custom Length Lead Wires in inches; max length: 120-inches



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24V MOUNTING CHANNELS AND ACCESSORIES

ALUMINUM MOUNTING CHANNEL

- Provides excellent heat sinking and protection to the LEDs while ensuring a clean, straight run
- Anodized Satin Aluminum Channel
- All Channels and Accessories are Declare Listed

CHANNEL MOUNTING CLIPS

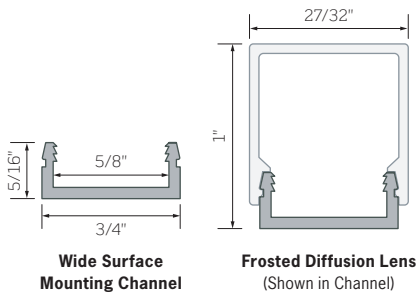
- Stainless Steel
- 24-Inches between clips recommended for most applications

CHANNEL ENDCAPS

- Creates a clean finish to the Mounting Channel
- ABS Grey Plastic
- Endcaps are ordered individually; one (1) solid Endcap and one (1) open Endcap (with Slot) is recommended
- Use Endcaps with Slots for Power Feed

Channel, Lens, Endcaps, and Mounting Clips are ordered separately

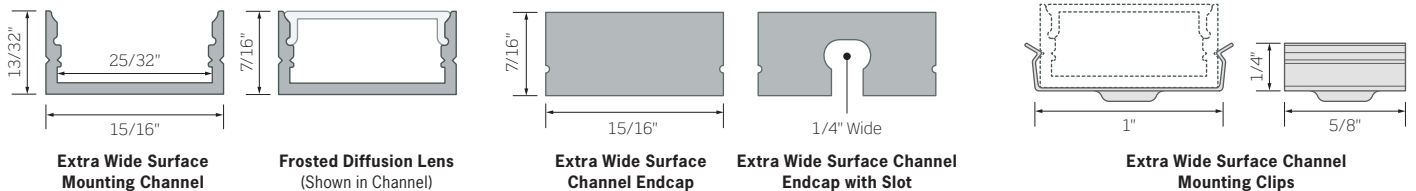
WIDE SURFACE MOUNTING CHANNEL



Channel and Lens	
AFEX1508S72-S	6 Ft. Wide Surface Mounting Channel, Aluminum
AFL1572-FR	6 Ft. Wide Surface Channel Diffusion Lens, Frosted No Pixelation with Diffusion Lens

Mounting Clips not available; use 3M™ Double-Sided Adhesive or Screw and Wall Anchor

EXTRA WIDE SURFACE MOUNTING CHANNEL



Channel and Lens	
AFEX2011S72-S	6 Ft. Extra Wide Surface Mounting Channel, Aluminum
AFL2072-FR	6 Ft. Extra Wide Surface Channel Diffusion Lens, Frosted; Slight Pixelation with Diffusion Lens

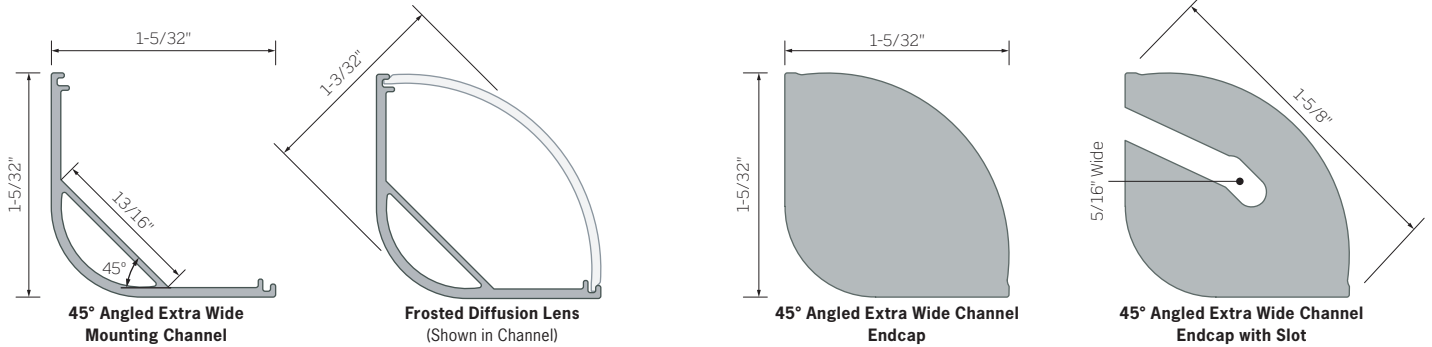
Endcaps	
AFEX2011S-EC	Extra Wide Surface Channel Solid Endcap, Grey
AFEX2011S-ECS	Extra Wide Surface Channel Endcap with Slot, Grey

Mounting Clips	
AFEX2011S-MC4	Four (4) Mounting Clips, Stainless Steel

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24V MOUNTING CHANNELS AND ACCESSORIES

45° ANGLED EXTRA WIDE MOUNTING CHANNEL

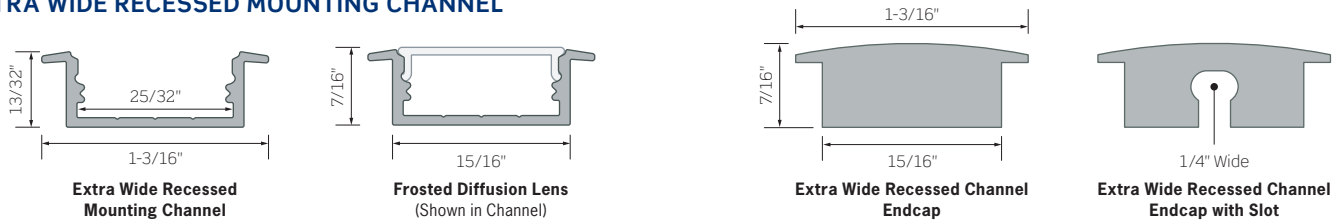


Channel and Lens	
AFEX2030A72-S	6 Ft. 45° Angled Extra Wide Mounting Channel, Aluminum
AFL20A72-FR	6 Ft. 45° Angled Extra Wide Channel Diffusion Lens, Frosted; No Pixelation with Diffusion Lens

Endcaps	
AFEX2030A-EC	45° Angled Extra Wide Channel Solid Endcap, Grey
AFEX2030A-ECS	45° Angled Extra Wide Channel Endcap with Slot, Grey

Mounting Clips not available; use 3M™ Double-Sided Adhesive or Screw and Wall Anchor

EXTRA WIDE RECESSED MOUNTING CHANNEL



Channel and Lens	
AFEX2011R72-S	6 Ft. Extra Wide Recessed Mounting Channel, Aluminum
AFL2072-FR	6 Ft. Extra Wide Recessed Channel Diffusion Lens, Frosted; Slight Pixelation with Diffusion Lens

Endcaps	
AFEX2011R-EC	Extra Wide Recessed Channel Solid Endcap, Grey
AFEX2011R-ECS	Extra Wide Recessed Channel Endcap with Slot, Grey

Mounting Clips not available; use 3M™ Double-Sided Adhesive or Screw and Wall Anchor

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24V ACCESSORIES

Plenum Rated Cable

Four Conductor Plenum Rated Cable

Model Number			
CMP-4C-10	10Ft	CMP-4C-30	30Ft
CMP-4C-15	15Ft	CMP-4C-50	50Ft
CMP-4C-20	20Ft	CMP-4C-100	100Ft



Silicone Sealant

Wet Location Silicone Sealant

Model Number	
TLAOSG	Silicone Sealant



24V CONTROLLERS

TLPRTW

4-Channel Power Repeater

- Enables synchronized control of multiple runs from one controller
- Not UL Listed for outdoor use
- Use with Non-dimming LED Drivers

Model Number	
TLPRTW	4-Channel Power Repeater (5-5/16" L x 1-3/4" W x 1-1/8" D)



TLPRGBWRF

RGB/RGBW 28-Key Remote Controller

- 8-Key RF Remote for color, speed, and brightness control
- Seven (7) programmable scenes
- 20AMP Max
- Use with Non-dimming LED Drivers

Model Number	
TLPRGBWRF	4-Channel Power Repeater (6-7/8" L x 1-3/4" W x 1-3/16" D)



TLPINT

DMX 512 CV Decoder

- Designed to convert universal DMX 512 signal to PWM signal when used with a DMX 512 console (by others)
- Use with Non-dimming LED Drivers
- Not UL Listed for outdoor use

Model Number	
TLPINT	DMX 512 CV Decoder (6-3/16" L x 3-1/8" W x 1-5/8" D)



TLPRGBWTC

RGB/RGBW Touch Controller

- Dial Touch Controller, select color by using color wheel
- Speed and brightness control
- Pre-selected modes
- 20AMP Max
- Use with Non-dimming LED Drivers

Model Number	
TLPRGBWTC	RGB/RGBW Touch Controller (6-7/8" L x 1-3/4" W x 1-3/16" D)



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24V HARDWIRE LED DRIVERS

TLP24VHW Series

Hardwire Constant Voltage Driver

- 120VAC Input / 24VDC Output
- Includes stripped and tinned wire pigtails on the input and output sides
- 1 Foot Wire Leads
- Class 2 Recognized
- MUST BE MAINTAINED WITHIN AN ENCLOSURE THAT MEETS LOCAL BUILDING CODES AND NEC (SUPPLIED BY OTHERS)

Model Number
TLP24VHW20 20W (5-3/4" L x 1-1/2" W x 1-1/4" H)
TLP24VHW60 60W (6-1/3" L x 1-3/4" W x 1-1/4" H)
TLP24VHW96 96W (6-1/8" L x 2-3/8" W x 1-1/2" H)



TLP24VHW*MV-ENC Series

Hardwire Class 2 Constant Voltage Enclosed Driver

- 120-277VAC Input / 24VDC Output
- Class 2 Listed Constant Voltage UL Listed Enclosed LED Driver with built-in junction boxes; Wet Location Rated
- Non-dimming LED Driver
- No minimum load requirement. Auto-reset protection for short circuit and over-temperature. Over load protection in CC mode.
- 12-1/8" L x 2-3/8" W x 1-3/8" D

Model Number
TLP24VHW60MV-ENC 60W, Non-dimming Driver
TLP24VHW96MV-ENC 96W, Non-dimming Driver



24V PLUG-IN POWER SUPPLIES

TLP24VP Series

Plug-and-Play Power Supply

- 120VAC Input / 24VDC Output
- Includes AC Wall Plug and Female Power Output Barrel Plug for easy installation
- Class 2 Listed

Model Number
TLP24VP36 36W (4-1/4" L x 2" W x 1-3/8" H)
TLP24VP60 60W (4-1/2" L x 2" W x 1-3/8" H)
TLP24VP96 96W (6-1/8" L x 2-3/8" W x 1-1/2" H)



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PRODUCT SPECIFICATIONS

CONSTRUCTION

- RGB Flex Strip: 36 LEDs per foot
- Encased in silicone sleeve, factory sealed and bonded
- 3-Ounce Copper Construction provides excellent heat dissipation and reduced voltage drop
- Full Reels have 72-inch Soldered Lead sheathed in a Plenum Rated Cable rated to 90°C min.

LEDs

- Individual Red, Green and Blue diodes in each LED
- Red: 620-625nm
- Green: 525-535nm
- Blue: 465-470nm

ELECTRICAL

- **Input Voltage:** 24VDC
- **Average Power Consumption/Wattage:** 4.4W per Foot (all channels full on) 1.5W per Foot (single channel full on)
- **Ambient Operating Temp:** -25° to 40°C (-13° to 104°F)
- System designed and rated for 50,000 hours at 70% lumen maintenance
- Wet Location Rated Non-Dimming Drivers and Controllers ordered separately

INSTALLATION


- Includes 3M™ VHB Adhesive Backing for strong adhesion to channels and most smooth surfaces
- IP67 Rated Full Strip Light Reels include silicone mounting brackets and screws for low-profile installations
- If field cut, use the included Silicone Endcaps with Silicone Sealant (TLAOSG) to re-seal the Strip Light
- Wide selection of Aluminum Mounting Channels are available with or without a Lens, Lens sold separately
- Mounting Channels simplify installation and provide a uniform surface for strip adhesion and thermal management
- Channel Endcaps are available to create a finished appearance to the run; open or closed Endcaps are sold separately
- Mounting Clips available in packs of four (4); includes screws and dry-wall anchors for surface mounting, sold separately
- All Mounting Channels are field cuttable

CERTIFICATIONS

- Complete System is cCSAus Listed to UL Standards and CSA Standards
- IP67 Rated, suitable for Wet Locations
- Declare Listed
- RoHS Compliant

WARRANTY

- Covered by ConTech's full replacement guarantee after date of purchase:
 - Five (5) year replacement after date of purchase when installed within Mounting Channel
 - Three (3) year replacement after date of purchase when installed without Mounting Channel



SpecFlex Architectural Striplight
ConTech Lighting

Final Assembly: Northbrook, Illinois, USA
Life Expectancy: 5 Year(s)
End of Life Options: Recyclable (35%), Landfill (65%)

Ingredients:
 Aluminum; Copper; Carbonic acid, polymer with 4,4'-(1-methylethylidene)bis[phenol]; Polyvinyl chloride; Vinyl fluoride-Vinylidene fluoride-Chlorotrifluoroethylene copolymer; RTV silicone rubber; Ethylene glycol monomethyl ether; Tin, Organic; Plastiquinone; 1,3-Isobenzofurandione, polymer with 2,5-furandione and 2,2'-oxybis[ethanol]; Gold; Titanium dioxide; Silver; Diethylene Glycol

Living Building Challenge Criteria:

I-13 Red List:
 LBC Red List Free % Disclosed: 100% at 100ppm
 LBC Red List Approved VOC Content: Not Applicable
 Declared

I-10 Interior Performance: Not Applicable
I-14 Responsible Sourcing: Not Applicable

CNT-0004
 EXP. 01 JUN 2025
 Original Issue Date: 2024

MANUFACTURER RESPONSIBLE FOR LABEL ACCURACY
 INTERNATIONAL LIVING FUTURE INSTITUTE™ living-future.org/declare

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PHOTOMETRICS

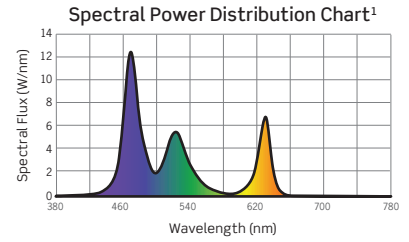
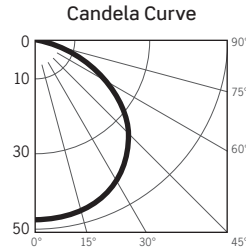
AFSD36-4RGB-7 ALL ON: 24V Wet Location SpecFlex RGB Strip Light

4.4W/Ft, 36LEDs/Ft, 1-Foot Strip

Fixture Delivered Lumens: 143.8
 Total Watts@24V: 4.3
 Lumens Per Watt: 33.4
 Center Beam Candle Power: 48
 Beam Distribution: 115°
 Spacing Criterion: 1.33

LM-63 Test No. G24011603
 LM-79 Test No. S22050201

Intensity Distribution		
DISTANCE (FT.)	FOOTCANDLES (FC)	BEAM DIA. (FT.)
2 FT	11.9	6.3
4 FT	3.0	12.7
6 FT	1.3	19.0
8 FT	0.7	25.3
10 FT	0.5	31.6
12 FT	0.3	37.9



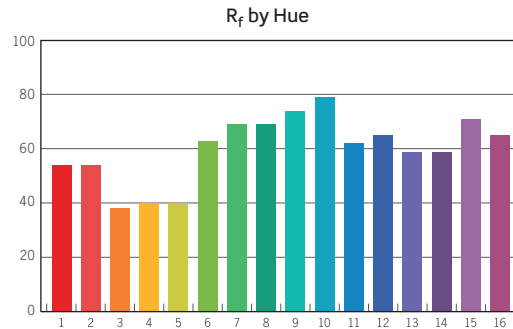
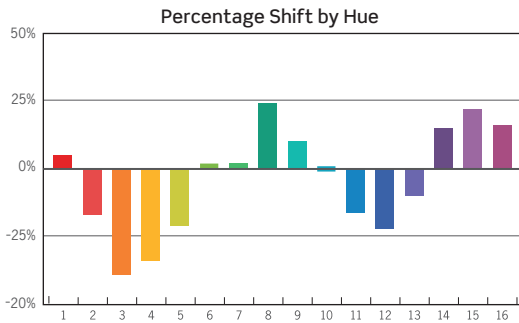
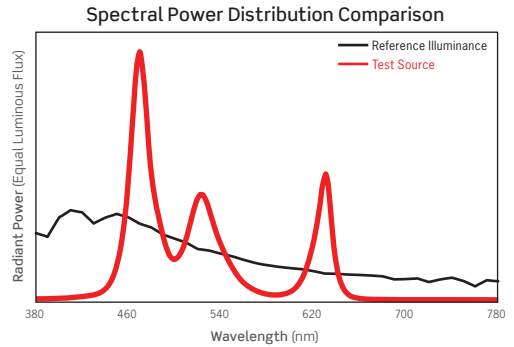
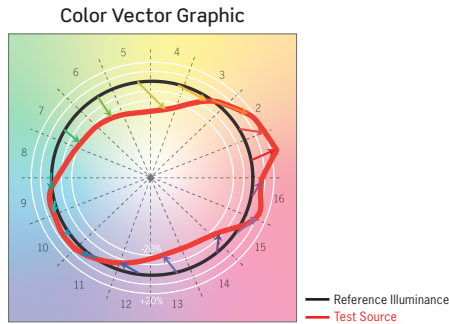
1. Colors Present within the Light Source

AFSD36-4RGB-7 ALL ON TM-30 DATA

ANSI/IES TM-30-18 Color Rendition Report Test No. S22050606

Colors are for visual orientation purposes only

R _f	59
R _g	87
CCT (K)	16854K
D _{uv}	0.0291
u' ⁱ	0.1574
v' ⁱ	0.4344



HUE BIN	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
HUE SHIFT	5%	-17%	-38%	-34%	-22%	1%	2%	21%	10%	-1%	-16%	-22%	-9%	17%	23%	16%
R _f VALUE	54	53	38	41	39	65	70	68	76	79	60	66	60	59	71	64

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PHOTOMETRICS

AFSD36-4RGB-7 BLUE ONLY: 24V Wet Location SpecFlex RGB Strip Light

4.4W/Ft, 36LEDs/Ft, 1-Foot Strip

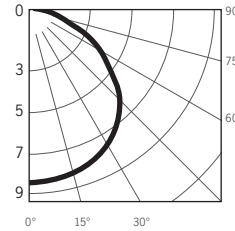
LM-63 Test No. G22052608; LM-79 Test No. S24011501

Fixture Delivered Lumens: 26
 Total Watts@24V: 1.5
 Lumens Per Watt: 17.3
 Center Beam Candle Power: 8
 Beam Distribution: 115°
 Spacing Criterion: 1.33

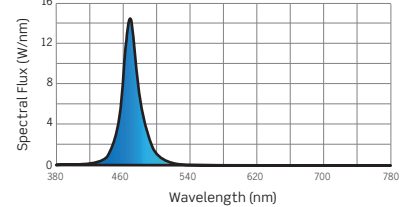
Intensity Distribution

DISTANCE (FT.)	FOOTCANDLES (FC)	BEAM DIA. (FT.)
2 FT	2.1	6.3
4 FT	0.5	12.6
6 FT	0.2	18.9
8 FT	0.1	25.2
10 FT	0.1	31.4
12 FT	0.1	37.7

Candela Curve



Spectral Power Distribution Chart¹



AFSD36-4RGB-7 GREEN ONLY: 24V Wet Location SpecFlex RGB Strip Light

4.4W/Ft, 36LEDs/Ft, 1-Foot Strip

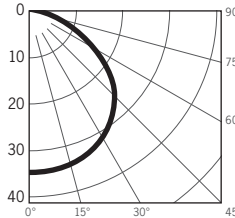
LM-63 Test No. G22052607; LM-79 Test No. S24011602

Fixture Delivered Lumens: 107.4
 Total Watts@24V: 1.5
 Lumens Per Watt: 71.6
 Center Beam Candle Power: 35
 Beam Distribution: 116°
 Spacing Criterion: 1.34

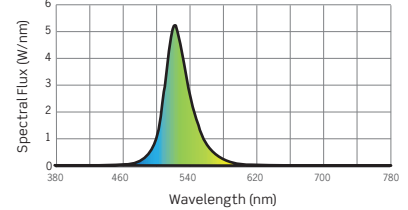
Intensity Distribution

DISTANCE (FT.)	FOOTCANDLES (FC)	BEAM DIA. (FT.)
2 FT	8.7	6.4
4 FT	2.2	12.8
6 FT	1.0	19.2
8 FT	0.5	25.6
10 FT	0.3	32.0
12 FT	0.2	38.4

Candela Curve



Spectral Power Distribution Chart¹



AFSD36-4RGB-7 RED ONLY: 24V Wet Location SpecFlex RGB Strip Light

4.4W/Ft, 36LEDs/Ft, 1-Foot Strip

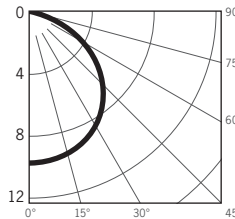
LM-63 Test No. G22052606; LM-79 Test No. S24011603

Fixture Delivered Lumens: 27.9
 Total Watts@24V: 1.5
 Lumens Per Watt: 18.6
 Center Beam Candle Power: 10
 Beam Distribution: 112°
 Spacing Criterion: 1.27

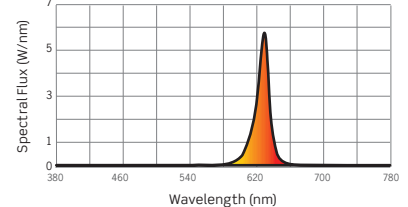
Intensity Distribution

DISTANCE (FT.)	FOOTCANDLES (FC)	BEAM DIA. (FT.)
2 FT	2.5	6.0
4 FT	0.6	12.0
6 FT	0.3	18.0
8 FT	0.2	24.0
10 FT	0.1	30.0
12 FT	0.1	36.0

Candela Curve



Spectral Power Distribution Chart¹



1. Colors Present within the Light Source

SpecFlex
Architectural Strip Lighting

AFSD36 Wet Location Series

RGB, 36 LEDs per foot

DIMMING SPECIFICATIONS LED Drivers have been tested with the following Dimmer Models:

TRIAC (LEADING EDGE) DIMMING

Manufacturer	Product	Model
Leviton	SureSlide	6672, 6674, 6674N, 66DF
	Decora Smart	D26HD, D2MSD, DN6HD
	Decora Digital	DDL06-1, DDM06, DDL06-1, DDMX1
	Decora Slide	DSL06, DSM10
	Illumatech	IPL06
	Trimatron Rotary	RDL06, RNL06
	Toggle Slide	TSL06, TSM10
Lutron	Caseta	PD-6WCL
	Diva	DVCL-153P
	Lumea	LECL-153P
	Maestro	MACL-153M
	Skylark	SCL-153P
	Toggler	TGCL-153P

ELV (TRAILING EDGE) DIMMING

Manufacturer	Product	Model
Leviton	Decora Digital	DDE06
Lutron	Diva	DVELV-300P-WH
	Skylark	SELV-300P-WH

0-10V DIMMING

Manufacturer	Product	Model
Leviton	IllumaTech	IP710-DLX, IP710-LFZ
Lutron	Diva	DVSCSTV, DVSCSTV, DVSTV, DVTV, DVTV-WH

- Testing has been performed on these Dimmers, but this does not imply any warranty of compatibility
- Dimming performance can be influenced by different Loads, as well as variations in Dimmer Switches within the same Model
- Dimmer Maximum Load Rating with LED may differ from published Traditional Source Dimmer Ratings; consult manufacturer for maximum dimmer information
- Consult factory for additional dimming information

MAX RUN LENGTH

INPUT = 24VDC

LED Driver	AFSD36-4RGB
Wattage	Max Run Length
20W	4 Ft
36W	7 Ft
60W	12 Ft
96W	22 Ft

- Max Run refers to the total single run of Strip Light that can go on a Driver
- Max Run Lengths are calculated with 24V DC at the start of the Strip Light run. Voltage drop may occur if not using proper wire gauge. Refer to the Voltage Drop and Wire Length Distance chart.
- Max Run lengths above are calculated with no more than 30% light loss from the start of the Strip Light run to the end of the Strip Light run for optimal light consistency. If run lengths are extended beyond the recommended lengths noted above, there will be inconsistent light output and voltage drop.
- Overall distance of Strip Light under load (lit length). If exceeded, damage to the Driver and Strip Light may result.

VOLTAGE DROP AND WIRE LENGTH DISTANCE

3% VOLTAGE DROP

Wire Gauge	20W	30W	36W	60W	96W
22 AWG	27 Ft	18 Ft	15 Ft	9 Ft	5 Ft
20 AWG	43 Ft	28 Ft	24 Ft	14 Ft	9 Ft
18 AWG	68 Ft	45 Ft	38 Ft	23 Ft	14 Ft
16 AWG	109 Ft	72 Ft	60 Ft	36 Ft	23 Ft
14 AWG	174 Ft	115 Ft	95 Ft	57 Ft	36 Ft
12 AWG	272 Ft	181 Ft	151 Ft	90 Ft	57 Ft
10 AWG	432 Ft	288 Ft	240 Ft	144 Ft	90 Ft

The Voltage Drop/Wire Length Distance Chart provides general guidelines for determining wire gauge based on total load and distance from the Driver to the beginning of the Strip Light run.