

EXTERIOR WASH 310

FULLY WEATHERIZED DYNAMIC COLOR CHANGING WASH LIGHT

SPEC SHEET



HIGHLIGHTS

- Uniform color mixing with 6 beam angle options
- Functional and discreet optional snoot which integrates with the design of the fixtures
- Control via DMX, RDM and OLED display

OVERVIEW

Exterior Wash™ 310 is a powerful, compact and energy-efficient LED lighting fixture designed to illuminate large structures, building facades and bridges. A discreet, optional snoot integrates seamlessly with the slick design of the fixtures. It has built-in display for ease-of-use, a wide selection of beam angles and is fully IP-rated for permanent outdoor use.

The Exterior Wash 310 is designed for superior color mixing applications and is based on quad-color premixed LEDs.

KEY MESSAGES

BUILT TO LAST

Ideal for minimal maintenance, low total cost of ownership, and resiliency to weather and other environmental conditions. Operates at temperatures from -30°C to 45°C and its robust, vandalism-proof IK08 and fully convection cooled IP66-rated aluminum housing is surface-treated to comply with the ISO12944/C5-M corrosion marine protection standard.

EASY TO INSTALL

The Exterior Wash comes pre-installed with power and data cable has integrated multirange 100-277V power supply, so no external control boxes are required.

FLEXIBLE BEAM CONTROL

The QUAD color LEDs allows for uniform color mixing direct from the lens with no color shadows and superior color mixing. Optional beam angle is installed via externally mounted holographic prismatic diffuser lens, ensuring precise beam control and very high transmission rate.

EASY TO CONTROL

The Exterior Wash features RDM and DMX control for great integration in control systems. The built-in OLED display allows for easy configuration and on-board stand-alone programming with up to 20 scenes.

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FEATURES

- Powerful premixed LEDs
- Up to 8300 lumens at full white (RGBW)
- Six different beam angle options
- Internal power and control (DMX, RDM and OLED display)
- Rugged IP66 housing
- 0 – 100% intensity control

ORDERING INFORMATION

- Exterior Wash 310, 10°, EU, aluminum: P/N 90507075
- Exterior Wash 310, 10°, US, aluminum: P/N 90507085

INCLUDED ITEMS

- Cover plate for control panel

RELATED ITEMS

- Martin Companion Cable: P/N 91616091

ACCESSORIES

- Exterior Wash 300 Series, narrow diffuser kit: P/N 91610155
- Exterior Wash 300 Series, medium diffuser kit: P/N 91610156
- Exterior Wash 300 Series, wide diffuser kit: P/N 91610157
- Exterior Wash 300 Series, very wide diffuser kit: P/N 91610158
- Exterior Wash 300 Series, asymmetric diffuser kit: P/N 91610159
- Exterior Wash 300 Series, glare shield / snoot: P/N 91611735
- Exterior Wash 300 Honeycomb Louvre: P/N 91611837



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TECHNICAL SPECIFICATIONS

DYNAMIC EFFECTS

Intensity 0 - 100%
Color mixing RGBW

CONTROL AND PROGRAMMING

Control systems DMX, RDM
DMX channels 3, 4 or 5 depending on DMX mode
Setting, addressing, standalone programming Control panel with OLED display
Receiver RS-485
Firmware update Serial upload via DMX link
DMX compliance USITT DMX512-A
RDM compliance ANSI/ESTA E1.20

OPTICS

Minimum LED lifetime 50 000 hours (to >70% luminous output)*
Light source 30 x RGBW quad-color LEDs
LED manufacturer Cree

*Figure obtained under manufacturer's test conditions

PHOTOMETRIC DATA

Beam angle	Total output	Center peak
No diffuser: 11°	8 300 lumens	214 000 cd
Narrow diffuser: 13°	6 800 lumens	111 000 cd
Medium diffuser: 27°	7 600 lumens	33 000 cd
Wide diffuser: 43°	7 800 lumens	14 000 cd
Very wide diffuser: 62°	8 000 lumens	7 700 cd
Asymmetric diffuser: 66° x 15°	7 500 lumens	22 000 cd

CONSTRUCTION

Ingress protection rating IP66
Surface treatment Anodized and electrostatic powder-coated
Color Light grey (white, black or other colors available on request)
Housing Cast aluminum
Effective Projected Area (EPA) 0.14 m² including snoot
Impact resistance IK08 (with display panel cover plate installed)
Corrosion resistance C5-M (very high corrosivity / marine, ISO 12944)
RoHS compliant

INSTALLATION

Orientation Any
Mounting Adjustable yoke
Minimum distance to illuminated surfaces 0.2 m (0.6 ft.)

CONNECTIONS

Power connection 1.8 m (5.9 ft.) cable tail without connector
Power input cable type, EU models H05RN-F 300/500V, 3 x 0.75 mm², Ø 7 mm
Power input cable type, US models SJOW 18AWG, 300V, WL F1, Ø 8 mm
Data connection 1.8 m (5.9 ft.) open ended 5-conductor combined input + output cable tail
All cable entries IP68 cable gland

ELECTRICAL

AC power 100 - 240 / 277 V nominal, 50/60 Hz
Power supply unit Integrated, auto-sensing multi-voltage
Power consumption steady state, all LEDs at zero intensity 7 W
Maximum total power consumption 300 W
Typical half-cycle RMS inrush current 10.9 A
Surge protection 4 KV

TYPICAL POWER AND CURRENT

100 V, 60 Hz 2.7 A, 270 W, PF 0.99
120 V, 60 Hz 2.3 A, 265 W, PF 0.99
230 V, 50 Hz 1.2 A, 260 W, PF 0.98
277 V, 60 Hz 1.0 A, 260 W, PF 0.95

Measurements made with fixture in steady state at nominal voltage, ambient temperature (Ta) 20° C (68° F), all LEDs at full intensity. Allow for a deviation of +/- 10%.

THERMAL

Cooling Convection
Maximum ambient temperature (Ta max.) 45° C (113° F)*
Minimum ambient temperature (Ta min.) -30° C (-22° F)**
Maximum surface temperature, steady state, at 40° C ambient 70° C (158° F)
Total heat dissipation (calculated, +/- 10%) 945 BTU/hr

*Above this temperature, the fixture regulates output to protect from overheating.

**To ensure correct low temperature start-up, power must be maintained below -20° C (-4° F)

APPROVALS

EU safety EN60598-2-5 (EN60598-1), EN62471, EN62493, EN60598-2-1
EU EMC EN55015, EN61547, EN61000-3-2, EN61000-3-3, EN61000-4-2, EN61000-4-4, EN61000-4-5
US safety ANSI/UL 1598
US EMC 47 CFR Part 15 Class A
Canadian safety CSA C.22.2 No. 250
Australia/NZ RCM



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PROJECTION DATA

NO DIFFUSER (11°)

Distance in meters (ft.)	4 m (13.1 ft.)	8 m (26.2 ft.)	12 m (39.4 ft.)	16 m (52.5 ft.)	20 m (65.6 ft.)	24 m (79 ft.)	28 m (92 ft.)	32 m (105 ft.)	36 m (118 ft.)
Half-peak diameter in meters (ft.)	0.8 (2.5)	1.5 (5.1)	2.3 (7.6)	3.1 (10.1)	3.9 (12.6)	4.6 (15.2)	5.4 (17.7)	6.2 (20.2)	6.9 (22.7)
Center illuminance in lux	13375	3344	1486	836	535	372	273	209	165
Center illuminance in candela	1243	311	138	78	50	35	25	19	15

NARROW DIFFUSER (13°)

Distance in meters (ft.)	4 m (13 ft.)	8 m (26 ft.)	12 m (39 ft.)	16 m (52 ft.)	20 m (66 ft.)	24 m (79 ft.)	28 m (92 ft.)	32 m (105 ft.)	36 m (118 ft.)
Half-peak diameter in meters (ft.)	0.9 (3.0)	1.8 (6.0)	2.7 (9.0)	3.6 (12.0)	4.6 (15.0)	5.5 (17.9)	6.4 (20.9)	7.3 (23.9)	8.2 (26.9)
Center illuminance in lux	6938	1734	771	434	278	193	142	108	86
Center illuminance in candela	645	161	72	40	26	18	13	10	8

MEDIUM DIFFUSER (27°)

Distance in meters (ft.)	4 m (13 ft.)	8 m (26 ft.)	12 m (39 ft.)	16 m (52 ft.)	20 m (66 ft.)	24 m (79 ft.)	28 m (92 ft.)	32 m (105 ft.)	36 m (118 ft.)
Half-peak diameter in meters (ft.)	1.9 (6.3)	3.8 (12.6)	5.8 (18.9)	7.7 (25.2)	9.6 (31.5)	11.5 (37.8)	13.4 (44.1)	15.4 (50.4)	17.3 (56.7)
Center illuminance in lux	2063	516	229	129	83	57	42	32	25
Center illuminance in candela	192	48	21	12	8	5	4	3	2

WIDE DIFFUSER (43°)

Distance in meters (ft.)	4 m (13 ft.)	8 m (26 ft.)	12 m (39 ft.)	16 m (52 ft.)	20 m (66 ft.)	24 m (79 ft.)	28 m (92 ft.)	32 m (105 ft.)	36 m (118 ft.)
Half-peak diameter in meters (ft.)	3.2 (10.3)	6.3 (20.7)	9.5 (31.0)	12.6 (41.4)	15.8 (51.7)	18.9 (62.0)	22.1 (72.4)	25.2 (82.7)	28.4 (93.0)
Center illuminance in lux	875	219	97	55	35	24	18	14	11
Center illuminance in candela	81	20	9	5	3	2	2	1	1

VERY WIDE DIFFUSER (62°)

Distance in meters (ft.)	4 m (13 ft.)	8 m (26 ft.)	12 m (39 ft.)	16 m (52 ft.)	20 m (66 ft.)	24 m (79 ft.)	28 m (92 ft.)	32 m (105 ft.)	36 m (118 ft.)
Half-peak diameter in meters (ft.)	4.8 (15.8)	9.6 (31.5)	14.4 (47.3)	19.2 (63.1)	24.0 (78.9)	28.8 (94.6)	33.6 (110.4)	38.5 (126.2)	43.3 (93.0)
Center illuminance in lux	481	120	53	30	19	13	10	8	6
Center illuminance in candela	45	11	5	3	2	1	1	1	1

ASYMMETRIC DIFFUSER (66° x 15°)

Distance in meters (ft.)	4 m (13 ft.)	8 m (26 ft.)	12 m (39 ft.)	16 m (52 ft.)	20 m (66 ft.)	24 m (79 ft.)	28 m (92 ft.)	32 m (105 ft.)	36 m (118 ft.)
Half-peak diameter C_0 in meters (ft.)	5.2 (17.0)	10.4 (34.1)	15.6 (51.1)	20.8 (68.2)	26.0 (85.2)	31.2 (102.3)	36.4 (119.3)	41.6 (136.4)	46.8 (153.4)
Half-peak diameter C_{90} in meters (ft.)	1.1 (4.5)	2.1 (9.0)	3.2 (13.5)	4.2 (18.0)	5.3 (22.4)	6.3 (26.9)	7.4 (31.4)	8.4 (35.9)	9.5 (40.4)
Center illuminance in lux	1375	344	153	86	55	38	28	21	6
Center illuminance in candela	128	32	14	8	5	4	3	2	2

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DIMENSIONS

PHYSICAL

- Length..... 283 mm (11.2 in.)
- Width..... 404 mm (15.9 in.)
- Height..... 439 mm (17.3 in.)
- Weight..... 19.0 kg (42.0 lbs.)

