

EXTERIOR WASH 320

FULLY WEATHERIZED DYNAMIC COLOR TEMPERATURE WASH LIGHT

SPEC SHEET



HIGHLIGHTS

- Variable color temperature control 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™ 320 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 320 is designed for variable color temperature (2700K-6500K) applications and is based on separate 2700K and 6500K 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 warm and cool color LEDs allows for precise color temperature control from 2700 K to 6500 K. 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.

EXTERIOR WASH 320

FULLY WEATHERIZED DYNAMIC COLOR TEMPERATURE WASH LIGHT

SPEC SHEET

FEATURES

- Powerful LEDs (2700K, 6500K)
- Up to 15,100 lumens at full white
- 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 320, 7°, EU, aluminum: P/N 90507080
- Exterior Wash 320, 7°, US, aluminum: P/N 90507081

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 91611858



EXTERIOR WASH 320

FULLY WEATHERIZED DYNAMIC COLOR TEMPERATURE WASH LIGHT

SPEC SHEET

TECHNICAL SPECIFICATIONS

DYNAMIC EFFECTS

Intensity 0 - 100%
Color mixing 2700 K - 6500 K

CONTROL AND PROGRAMMING

Control systems DMX, RDM
DMX channels 2
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 2700 K and 6500 K LEDs
LED manufacturer Cree

*Figure obtained under manufacturer's test conditions

PHOTOMETRIC DATA

Beam angle	Total output	Center peak
No diffuser: 7.5°	15 100 lumens	729 000 cd
Narrow diffuser: 11.5°	13 600 lumens	288 000 cd
Medium diffuser: 25°	14 000 lumens	68 000 cd
Wide diffuser: 41°	14 300 lumens	27 000 cd
Very wide diffuser: 59°	14 800 lumens	16 000 cd
Asymmetric diffuser: 65° x 14.5°	15 000 lumens	49 000 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 6 W
Maximum total power consumption 280 W
Typical half-cycle RMS inrush current 10.9 A
Surge protection 4 KV

TYPICAL POWER AND CURRENT

100 V, 60 Hz 2.6 A, 250 W, PF 0.99
120 V, 60 Hz 2.1 A, 245 W, PF 0.99
230 V, 50 Hz 1.2 A, 240 W, PF 0.97
277 V, 60 Hz 1.0 A, 240 W, PF 0.94

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



EXTERIOR WASH 320

FULLY WEATHERIZED DYNAMIC COLOR TEMPERATURE WASH LIGHT

SPEC SHEET

PROJECTION DATA

NO DIFFUSER (7.5°)

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.)	0.5 (1.7)	1.0 (3.4)	1.6 (5.2)	2.1 (6.9)	2.6 (8.6)	3.1 (10.3)	3.7 (12.0)	4.2 (13.8)	4.7 (15.5)
Center illuminance in lux	45563	11391	5063	2848	1823	1266	930	712	563
Center illuminance in candela	4233	1058	470	265	169	118	86	66	52

NARROW DIFFUSER (11.5°)

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.)	0.8 (2.6)	1.6 (5.3)	2.4 (7.9)	3.2 (10.6)	4.0 (13.2)	4.8 (15.9)	5.6 (18.5)	6.4 (21.1)	7.3 (23.8)
Center illuminance in lux	18000	4500	2000	1125	720	500	367	281	222
Center illuminance in candela	1672	418	186	105	67	46	34	26	21

MEDIUM DIFFUSER (25°)

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.)	1.8 (5.8)	3.5 (11.6)	5.3 (17.5)	7.1 (23.3)	8.9 (29.1)	10.6 (34.9)	12.4 (40.7)	14.2 (46.6)	16.0 (52.4)
Center illuminance in lux	4250	1063	472	266	170	118	87	66	52
Center illuminance in candela	395	99	44	25	16	11	8	6	5

WIDE DIFFUSER (41°)

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.)	3.0 (9.8)	6.0 (19.6)	9.0 (29.4)	12.0 (39.3)	15.0 (49.1)	17.9 (58.9)	20.9 (68.7)	23.9 (78.5)	26.9 (88.3)
Center illuminance in lux	1688	422	188	105	68	47	34	26	21
Center illuminance in candela	157	39	17	10	6	4	3	2	2

VERY WIDE DIFFUSER (59°)

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.)	4.5 (14.8)	9.1 (29.7)	13.6 (44.5)	18.1 (59.4)	22.6 (74.2)	27.2 (89.1)	31.7 (103.9)	36.2 (118.8)	40.7 (88.3)
Center illuminance in lux	1000	250	111	63	40	28	20	16	12
Center illuminance in candela	93	23	10	6	4	3	2	1	1

ASYMMETRIC DIFFUSER (65° x 14.5°)

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.)	5.3 (16.7)	10.2 (33.4)	15.3 (50.2)	20.4 (66.9)	25.5 (83.6)	30.6 (100.3)	35.7 (117.0)	40.8 (133.8)	45.9 (150.5)
Half-peak diameter C ₉₀ in meters (ft.)	1.0 (4.3)	2.0 (8.5)	3.1 (12.8)	4.1 (17.0)	5.1 (21.3)	6.1 (25.5)	7.1 (29.8)	8.1 (34.0)	9.2 (38.3)
Center illuminance in lux	3063	766	340	191	123	85	63	48	12
Center illuminance in candela	285	71	32	18	11	8	6	4	4

EXTERIOR WASH 320

FULLY WEATHERIZED DYNAMIC COLOR TEMPERATURE WASH LIGHT

SPEC SHEET

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.)

