

Catalog Number	
Notes	Type

## TNLEDMED

TunnelPass LED™ Medium



### Mechanical

- Low copper content diecast aluminum alloy electrical and optical housing. Diecast aluminum housing has integral heat sink fins to optimize thermal management through conductive and convection cooling.
- Stainless steel bolted or latched door closure disengages top electrical cover for easy access to LED drivers, surge protection, luminaire disconnect, and terminal block.
- Super durable powder coat finish over anodized aluminum pre-finish. Rigorous pre-treating and paint process yields a finish that achieves a scribe creepage rating of 10 (per ASTM D1654) after over 20,000 hours of exposure to salt fog chamber (operated per ASTM B117).
- Luminaire mounting brackets are of 316 grade stainless steel.
- Luminaire is IP66 rated.
- Luminaire is 3G vibration rated per ANCI C136.31.
- Luminaire is suitable for continuous row mounting as standard, with through wire raceway available as an option.
- Luminaire and through wire raceway box each have three removable brass 3/4-14NPT entries to facilitate wiring.

### Electrical

- Quick disconnect connectors for ease of installation and maintenance.
- Extreme surge protection meets 20kV/10kA per ANSI/IEEE62.41 and is fail off.
- Three pole terminal block is standard for ease of installation.
- LED drivers meets maximum total harmonic distortion (THD) of 20% and are ROHS compliant. Minimum operating temperature is -40°C. Electronic driver has an estimated minimum life of 100,000 hours at 25°C.
- XVOLT - Electrical option provides protection against dropped neutral in 277V input as derived from 480V Wye. XVOLT also provides greater immunity from six common power quality issues.

### Optical

- PCB mounted LED technology comprised of multi-cluster LED's on a single metal core board.
- Color temperature options of 3000K, 4000K, and 5000K with CRI of 70 minimum.
- Segmented Miro 4 internal reflectors are designed for superior optical control in Counterbeam, Crossbeam, Long and Narrow, and Underpass optics.
- Borosilicate glass refractor ensures longevity and minimizes dirt depreciation and minimizes direct view of LED's, reducing glare.

### Controls

- 0-10V dimming standard
- Field Adjustable Output (AO) module - Onboard device that allows manual adjustment of the light output and input wattage to meet site specific requirements. The AO module is preset at the factory to position number 8 (see chart).
- ICMNYX - Nyx Hemera internally mounted control module communicates with Nyx Hemera powerline control systems, (consult factory).

### Testing/Compliance

Luminaire conforms to the following standards:

- ANSI/IEEE C62.41:2002 - Surge protection
- ANSI C82.77:2002 - Harmonic distortion limits
- ANSI C136.31 - Luminaire vibration
- ASTM B117 - Salt Spray
- FCC Title 47 CFR Part 15 - FCC EMC/EMI
- IEC 60068 - Environmental testing
- ANSI C136.27-17 - Environmental Testing (including Parsons test)
- IEC 60529 - Ingress Protection (IP)
- IEC 61000 - Electromagnetic Compatibility testing (EMC)
- IEEE 519 - Harmonic Control in Electrical Power systems
- UL 1598 - Wet Location Safety Listing
- UL 1598A - Marine Outside
- PK1, PK2, PK4, PK5 & PK6 Suitable for ambient temperature -40°C to 50°C
- PK3 Suitable for ambient temperature -40°C to 45°C
- PK7, PK8 & PK9 Suitable for ambient temperature -40°C to 40°C

### Manufacturing

- 100% electrical testing on all luminaires before shipment
- No less than five (5) years experience in manufacturing LED based products

### Government Procurement

BAA – Buy America(n) Act: Product qualifies as a domestic end product under the Buy American Act as implemented in the FAR and DFARS. Product also qualifies as manufactured in the United States under DOT Buy America regulations.

BABA – Build America Buy America: Product qualifies as produced in the United States under the definitions of the Build America, Buy America Act.

Please refer to [www.acuitybrands.com/resources/buy-american](http://www.acuitybrands.com/resources/buy-american) for additional information.

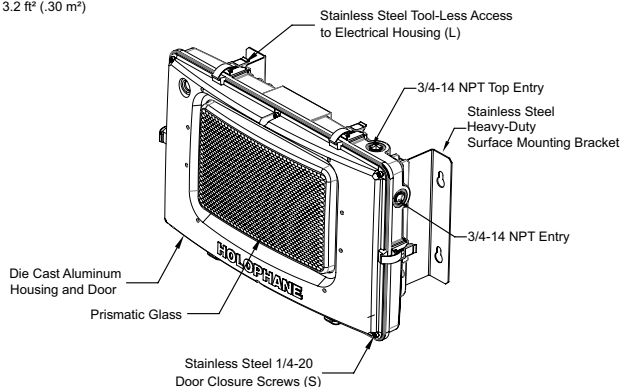
### Warranty

5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: [www.acuitybrands.com/support/warranty/terms-and-conditions](http://www.acuitybrands.com/support/warranty/terms-and-conditions)

**Note:** Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.



Max Weight = 43 lbs (19.5 kg)  
Max EPA = 3.2 ft² (.30 m²)



**ORDERING INFORMATION**

**Example:** TNLEDMED PK8 40K XVOLT CCB DGRA LTCH

Series	Lumen Package	Color Temperature	Voltage	Optics	Color	Door Closure
TNLEDMED TunnelPass LED™ Medium	PK1 6,000lm	30K 3000K CCT	MVOLT 120-277V	CCB Ceiling Mount Counterbeam	A As Specified	LTCH Latched
	PK2 9,500lm	40K 4000K CCT	HVOLT 347-480V	CLN Ceiling Mount Long and Narrow	DBKA Black	SCRW Bolted Assembly
	PK3 12,000lm	50K 5000K CCT	XVOLT 277-480V with enhanced power quality protection		DBZA Bronze	
	PK4 15,000lm			WCR Wall Mount Crossbeam	DGRA Gray	
	PK5 18,000lm			UDP Wall Mount Underpass	DWHA White	
	PK6 21,000lm				DGHA Graphite	
	PK7 24,000lm					
	PK8 30,000lm					
	PK9 36,000lm					

Options:					
BM	Box Mount	AWB00	Adjustable Wall Bracket Factory Set to 0 Degree Tilt	ICMNYX	Nyx Hemera Internal Control Module, Consult Factory
F1	Single Fusing	AWB05	Adjustable Wall Bracket Factory Set to 5 Degree Tilt	DALI	DALI Driver Option, Consult Factory
F2	Double Fusing	AWB10	Adjustable Wall Bracket Factory Set to 10 Degree Tilt		
TW	Through Wire Box Top Mount	AWB15	Adjustable Wall Bracket Factory Set to 15 Degree Tilt		
A0	Field Adjustable Module	AWB20	Adjustable Wall Bracket Factory Set to 20 Degree Tilt		
		AWB25	Adjustable Wall Bracket Factory Set to 25 Degree Tilt		

**OPTIONS MATRIX**

Parameters		Optic				Voltage			Options					Wall Brackets						Controls (consult factory)		
		CCB	CLN	WCR	UDP	MVOLT	HVOLT	XVOLT	BM	F1	F2	TW	AO	AWB00	AWB05	AWB10	AWB15	AWB20	AWB25	ICMNYX	DALI	
Lumen Package	PK1	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	PK2	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	PK3	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	PK4	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N
	PK5	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N
	PK6	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N
	PK7	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
	PK8	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
	PK9 (*1)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
Optic	CCB	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	CLN	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	WCR	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	UDP	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Door Closure	L	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	S	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Options	BM	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	N	Y	N	N	N	N	N	N	Y	Y	Y
	F1	Y	Y	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	F2	Y	Y	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	TW	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	AO	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	N	N
Wall Brackets	AWB00	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	N	N	N	N	N	N	Y	Y	Y
	AWB05	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	N	N	N	N	N	N	Y	Y	Y
	AWB10	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	N	N	N	N	N	Y	Y	Y	Y
	AWB15	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	N	N	N	N	N	Y	Y	Y	Y
	AWB20	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	N	N	N	N	N	Y	Y	Y	Y
	AWB25	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	N	N	N	N	N	Y	Y	Y	Y
Controls (consult factory)	ICMNYX	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N	N	N
	DALI	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N	N	N

Notes

\*1 PK9 has non-illuminated fail-off 20kV/10kA surge (fail off mode). PK1-thru-PK8 have 20kV/10kA fail off mode surge with indicator light.

Y = Valid Option Combination  
N = Combination Not available

**PERFORMANCE DATA**

TNLEDMED	Input Watts	Distribution	3000K		4000K		5000K	
			Lumens	LPW	Lumens	LPW	Lumens	LPW
PK1	57	CCB	6,782	119	7,343	129	7,343	129
		CLN	6,333	111	6,858	120	6,858	120
		WCR	6,485	114	7,022	123	7,022	123
		UDP	6,277	110	6,797	119	6,797	119
PK2	70	CCB	9,168	131	9,928	142	9,928	142
		CLN	8,562	122	9,271	132	9,271	132
		WCR	8,767	125	9,493	136	9,493	136
		UDP	8,486	121	9,189	131	9,189	131
PK3	102	CCB	12,592	123	13,634	134	13,634	134
		CLN	11,759	115	12,733	125	12,733	125
		WCR	12,040	118	13,037	128	13,037	128
		UDP	11,655	114	12,620	124	12,620	124
PK4	125	CCB	14,897	119	16,130	129	16,130	129
		CLN	13,911	111	15,063	121	15,063	121
		WCR	14,244	114	15,424	123	15,424	123
		UDP	13,788	110	14,930	119	14,930	119
PK5	151	CCB	17,601	117	19,059	126	19,059	126
		CLN	16,437	109	17,799	118	17,799	118
		WCR	16,831	111	18,224	121	18,224	121
		UDP	16,292	108	17,641	117	17,641	117
PK6	182	CCB	19,551	107	21,170	116	21,170	116
		CLN	18,258	100	19,770	109	19,770	109
		WCR	18,695	103	20,243	111	20,243	111
		UDP	18,097	99	19,595	108	19,595	108
PK7	203	CCB	25,497	126	27,608	136	27,608	136
		CLN	23,866	118	25,842	127	25,842	127
		WCR	24,176	119	26,178	129	26,178	129
		UDP	22,935	113	24,834	122	24,834	122
PK8	246	CCB	29,801	121	32,268	131	32,268	131
		CLN	27,895	113	30,204	123	30,204	123
		WCR	28,257	115	30,597	124	30,597	124
		UDP	26,806	109	29,026	118	29,026	118
PK9	323	CCB	34,026	105	36,843	114	36,843	114
		CLN	31,849	99	34,486	107	34,486	107
		WCR	32,263	100	34,935	108	34,935	108
		UDP	30,607	95	33,141	103	33,141	103

Package	Driver Output mA	Luminaire Input Operating Amps					
	mA	120V	208V	240V	277V	347V	480V
PK1	330	0.295	0.289	0.253	0.226	0.174	0.138
PK2	420	0.586	0.349	0.302	0.267	0.207	0.159
PK3	600	0.849	0.494	0.429	0.367	0.299	0.216
PK4	730	1.042	0.617	0.534	0.465	0.388	0.299
PK5	880	1.255	0.739	0.64	0.548	0.452	0.345
PK6	1050	1.513	0.881	0.764	0.647	0.534	0.402
PK7	600	1.693	1.007	0.872	0.763	0.623	0.486
PK8	730	2.049	1.213	1.051	0.914	0.763	0.589
PK9	960	2.76	1.64	1.43	1.2	0.75	0.73

**LUMINAIRE AMBIENT TEMPERATURE (LAT) TABLE**

Package	0°C	5°C	10°C	15°C	20°C	25°C	30°C	35°C	40°C	45°C	50°C
PK1	1.04	1.04	1.03	1.02	1.01	1.00	0.99	0.98	0.97	0.96	0.95
PK2	1.04	1.04	1.03	1.02	1.01	1.00	0.99	0.98	0.97	0.96	0.95
PK3	1.04	1.04	1.03	1.02	1.01	1.00	0.99	0.98	0.97	0.96	--
PK4	1.04	1.04	1.03	1.02	1.01	1.00	0.99	0.98	0.97	0.96	0.95
PK5	1.04	1.04	1.03	1.02	1.01	1.00	0.99	0.98	0.97	0.96	0.95
PK6	1.04	1.04	1.03	1.02	1.01	1.00	0.99	0.98	0.97	0.96	0.95
PK7	1.04	1.04	1.03	1.02	1.01	1.00	0.99	0.98	0.97	--	--
PK8	1.04	1.04	1.03	1.02	1.01	1.00	0.99	0.98	0.97	--	--
PK9	1.04	1.04	1.03	1.02	1.01	1.00	0.99	0.98	0.97	--	--

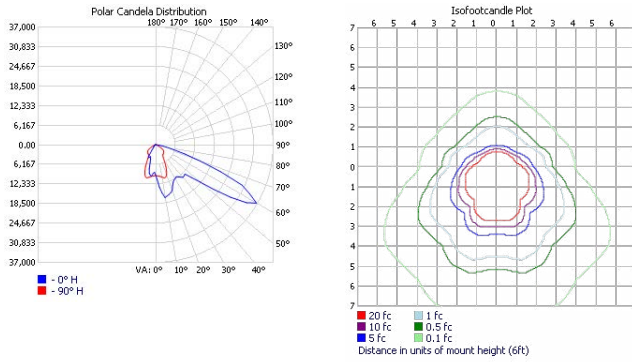
**LED LUMEN MAINTENANCE**

	PK1	PK2	PK3	PK4	PK5	PK6	PK7	PK8	PK9
25,000 hours	95.8%		94.7%			94.7%	93.3%	93.8%	
50,000 hours	91.9%		89.8%			89.9%	89.2%	88.1%	
75,000 hours	88.2%		85.2%			85.3%	84.3%	82.8%	
100,000 hours	84.7%		80.9%			81.0%	79.7%	77.7%	

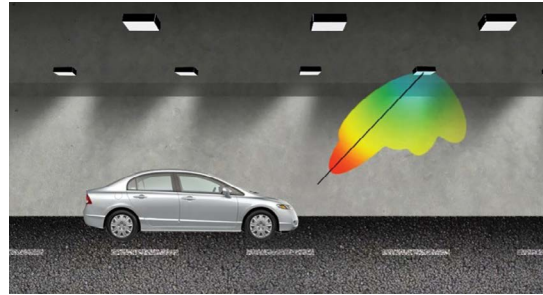
**AO OPTION SETTINGS**

PK1			PK2			PK3-PK7			PK8			PK9		
Setting	Lumens	Wattage	Setting	Lumens	Wattage	Setting	Lumens	Wattage	Setting	Lumens	Wattage	Setting	Lumens	Wattage
8	100%	100%	8	100%	100%	8	100%	100%	8	100%	100%	8	100%	100%
7	100%	100%	7	100%	100%	7	100%	100%	7	100%	100%	7	100%	99%
6	100%	100%	6	98%	97%	6	99%	99%	6	100%	100%	6	100%	99%
5	100%	88%	5	87%	85%	5	86%	86%	5	94%	90%	5	91%	87%
4	88%	76%	4	75%	72%	4	73%	73%	4	82%	77%	4	80%	74%
3	65%	65%	3	64%	60%	3	61%	61%	3	70%	65%	3	66%	60%
2	53%	54%	2	53%	47%	2	47%	47%	2	58%	52%	2	53%	46%
1	40%	43%	1	42%	35%	1	36%	36%	1	45%	40%	1	39%	34%

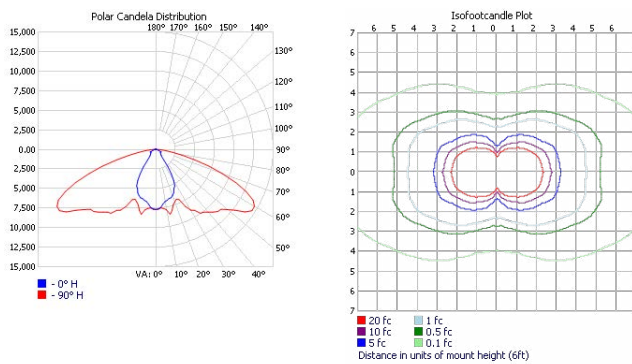
**CCB: Ceiling mount counterbeam**



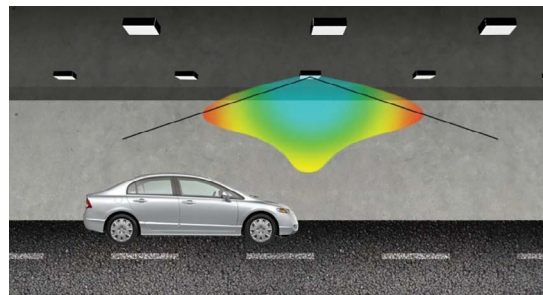
Recommended for divided tunnels where majority of lumens are directed towards oncoming drivers to maximize roadway luminance while controlling disability glare.



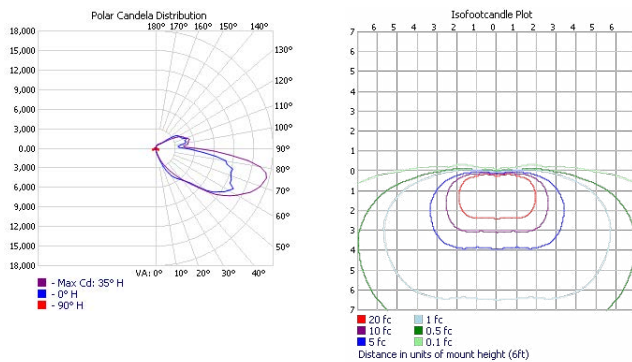
**CLN: Ceiling mount long and narrow**



Recommended for undivided tunnels where equal lumens are with and against traffic flow.



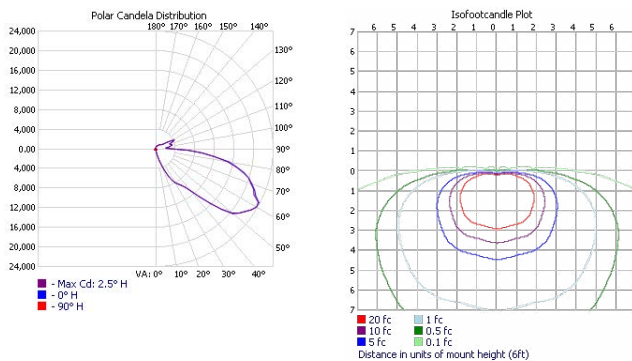
**UDP: Wall mount underpass**



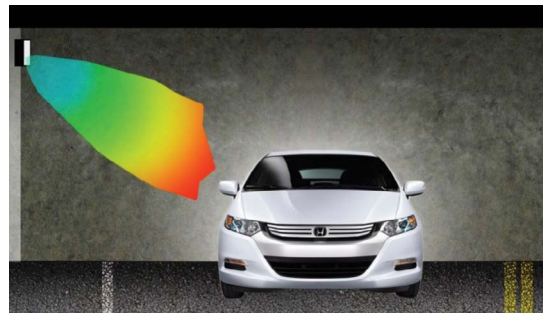
Recommended for underpass applications where illuminance is required IES type 4 distribution.



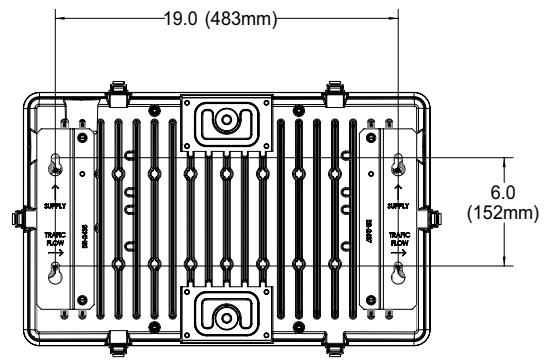
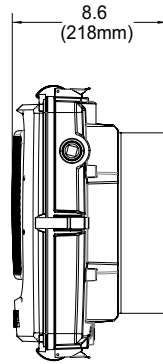
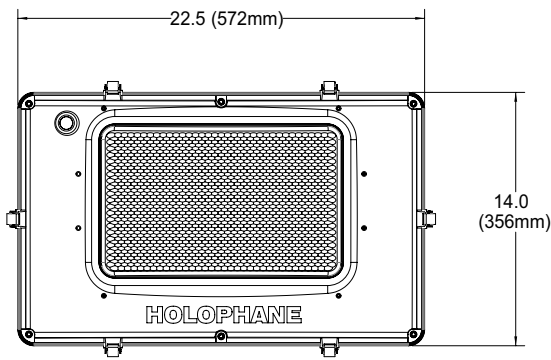
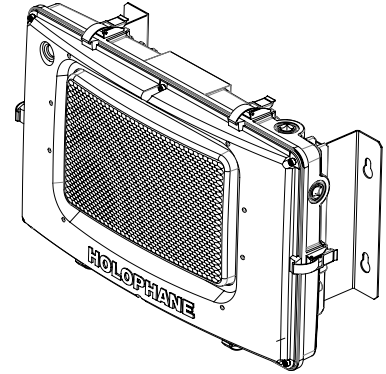
**WCR: Wall mount crossbeam**



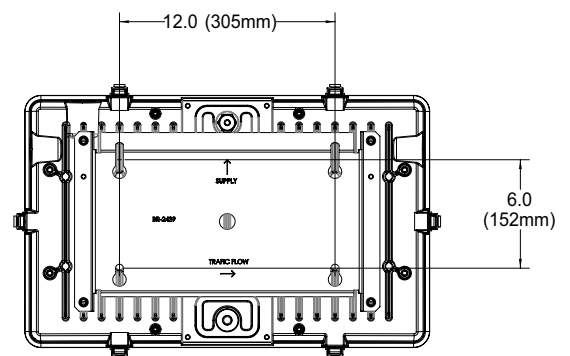
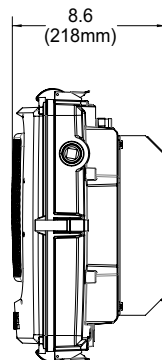
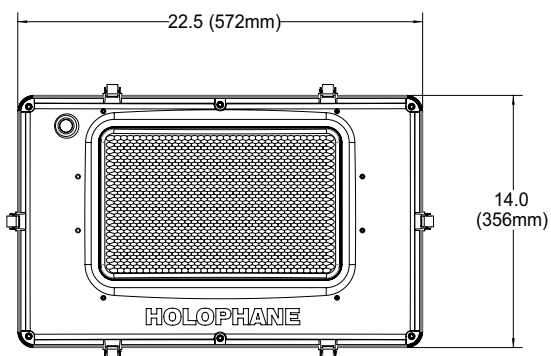
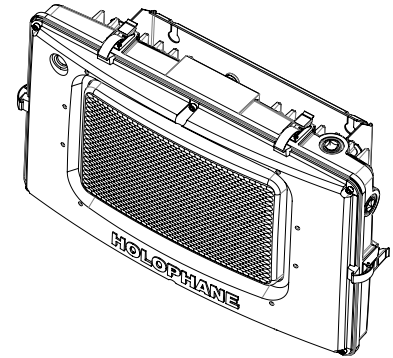
Recommended for undivided tunnels where equal lumens are with and against traffic flow.



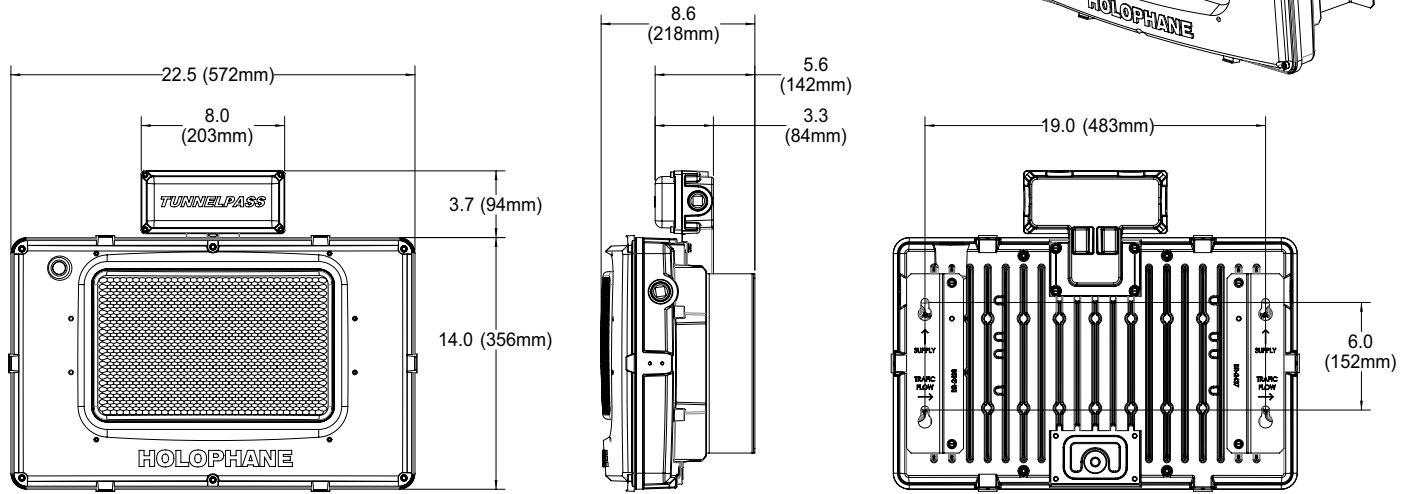
**SURFACE MOUNTING DETAILS**



**BOX MOUNTING DETAILS**



**THROUGH WIRE BOX TOP MOUNTING DETAILS**



**ADJUSTABLE WALL BRACKET MOUNTING DETAILS**

