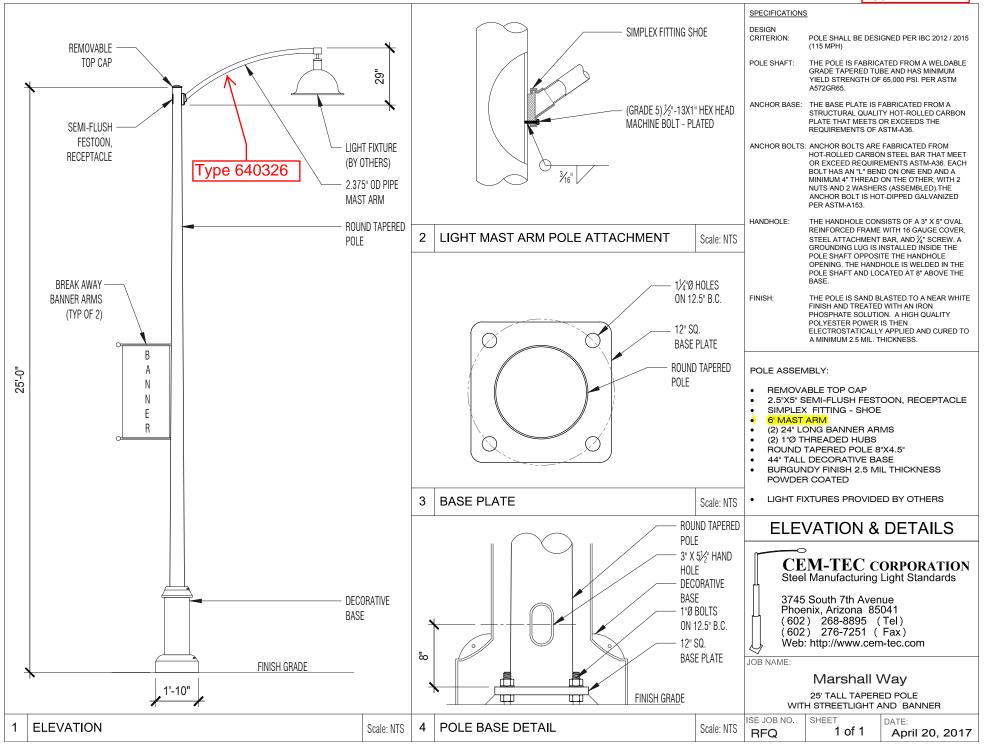


1425 W. 12th Place, #105 Tempe, Arizona 85281 Tel (480) 967-8653 Fax (480) 829-1589

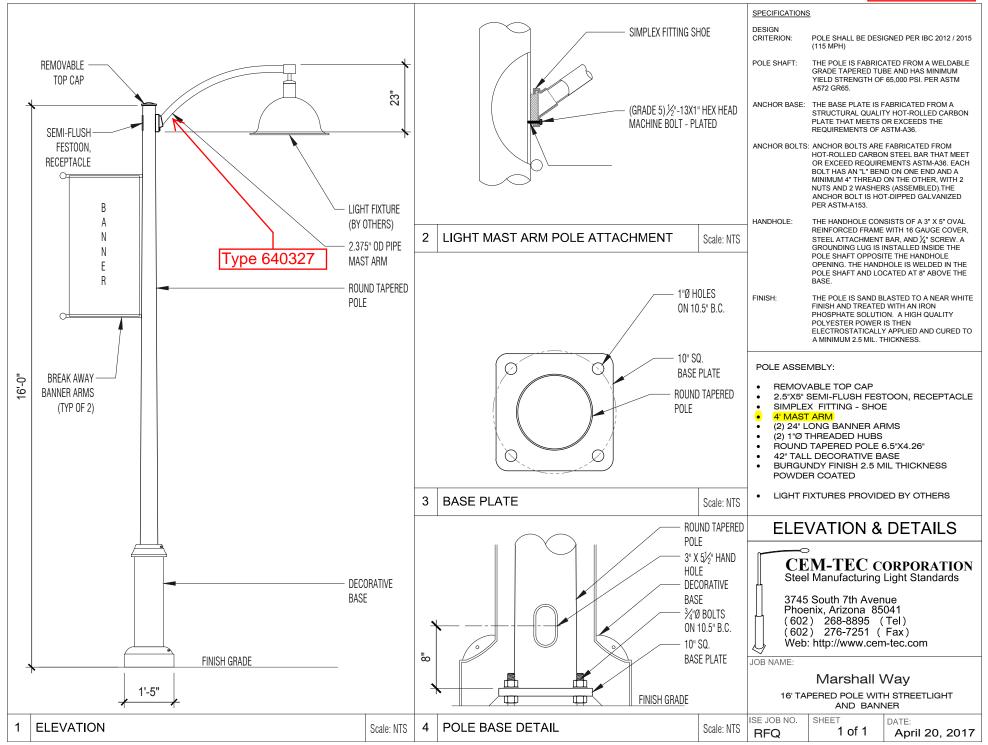
# MARSHALL WAY

5519 E Wa Phoenix, A	ites-Phoenix shington Street	Submittal Date: 4/21/2017
Туре	Mfg	Description
640322	Cem-Tec Manufacturing	25' RD TAPERED STEEL POLELESS SGL ARM
640324	Cem-Tec Manufacturing	16' RD TAPERED STEEL POLELESS SGL ARM
640325	Cem-Tec Manufacturing	25' RD TAPERED STEEL POLELESS DBL ARM
640326	Cem-Tec Manufacturing	ARM 6' RD MAST
640327	Cem-Tec Manufacturing	ARM 4' RD MAST
640601	Visionaire Lighting, LLC	ODN-3-L-T2-80LC-5-3K-UNV-MAF-CC-C2-H3-MAP01-DIM
640602	Visionaire Lighting, LLC	ODN-1-L-T2-32LC-5-3K-UNV-MAF-CC-C2-H3-MAP01-DIM

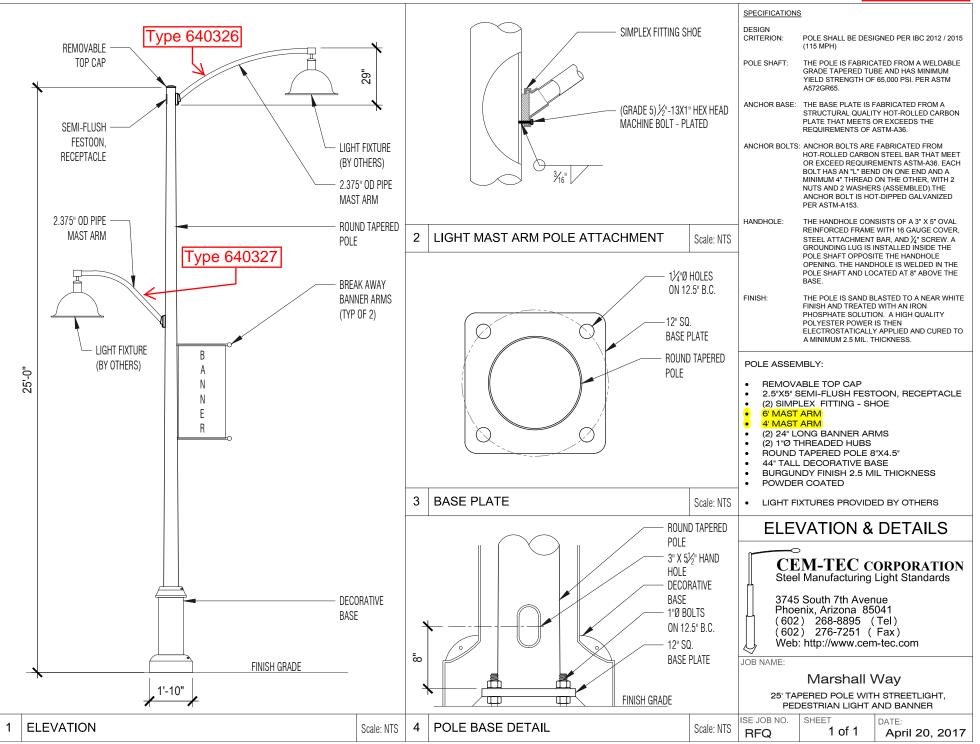
# Type 640322

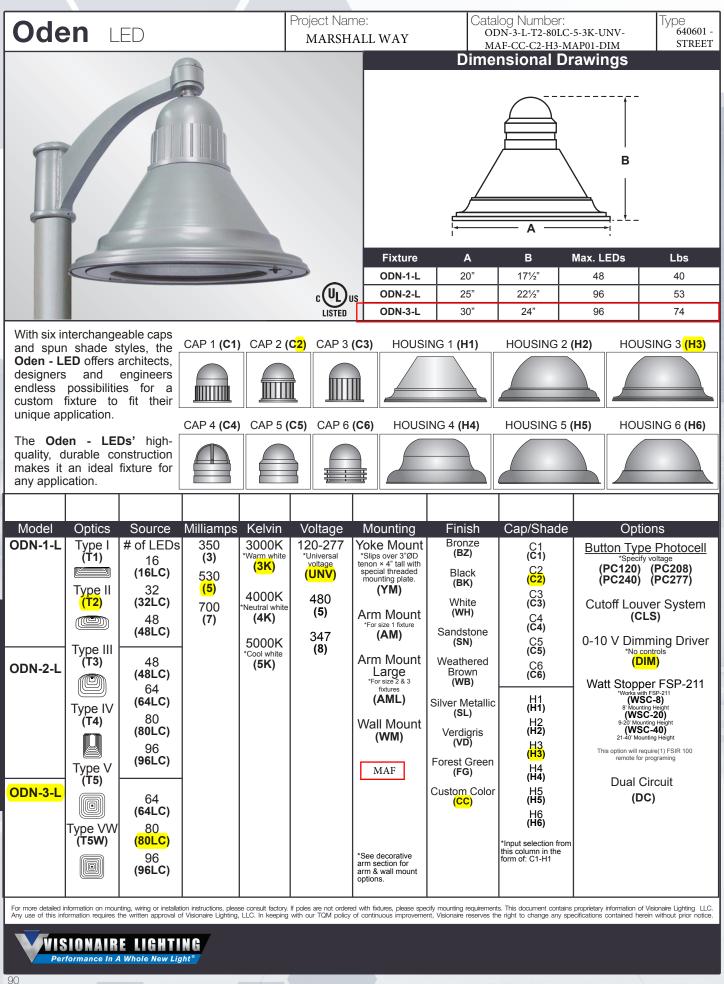


# Type 640324



# Туре 640325







# Housing

• High-quality, one-piece spun aluminum shade and durable cast aluminum top cap; available in three housing sizes.

- All external hardware is stainless steel.
- One-piece, cast-aluminum door assembly with tool-less access.

### **Thermal Management**

• The **Oden** - **LED** provides excellent overall thermal management by maximizing the efficiency of the heat sink in the fixture. This enables the **Oden** - **LED** to withstand higher ambient temperatures and higher drive currents without degrading LED life.

# **Optical System**

The highest lumen output LEDs are utilized. Estimated life of the LEDs is 100,000+ hours. Available with 6 IES distribution patterns. Available with up to 96 LEDs. The optical system qualifies as IES full cutoff to restrict light trespass, glare and light pollution for neighborhood-friendly lighting.
CRI values are 70

#### **Quali-Guard® Finish**

• Fixture components are chemically pretreated through a multiple-stage washer and finished with an electrostatically-applied, thermoset polyester powder coat textured paint with a 3 to 5 mils thickness. Finish is oven-baked at 400 °F for maximum adherence and finish hardness.

· Available in standard and custom colors.

#### Mounting

• The **Oden** - **LED** mounts to a wide selection of decorative and custom Visionaire mounting arms for both pole and wall mount applications (Mounts to Visionaire arms only. See Visionaire Mounting Arms section of catalog). **Electrical Assembly** 

• The **Oden - LED** is supplied with a high-performance LED driver, located in its cap, that accepts 120 V thru 277 V, and 480 V, 50 Hz to 60 Hz input. Power factor is 90%. Rated for -40 °F operation.

• 10 kV surge protector supplied as standard.

# Warranty

• Five (5) year Limited Warranty on entire system, including finish. For full warranty information, please visit VisionaireLighting.com.

#### Options

- Button type photocell
- Cutoff louver system
- 0-10 V dimming driver
- Watt Stopper FSP-211

#### Listings

- · Oden is cUL listed, suitable for wet locations.
- IP65.
- LM79.
- LM80.
- Powder Coated Tough<sup>™</sup>



# EPA Data

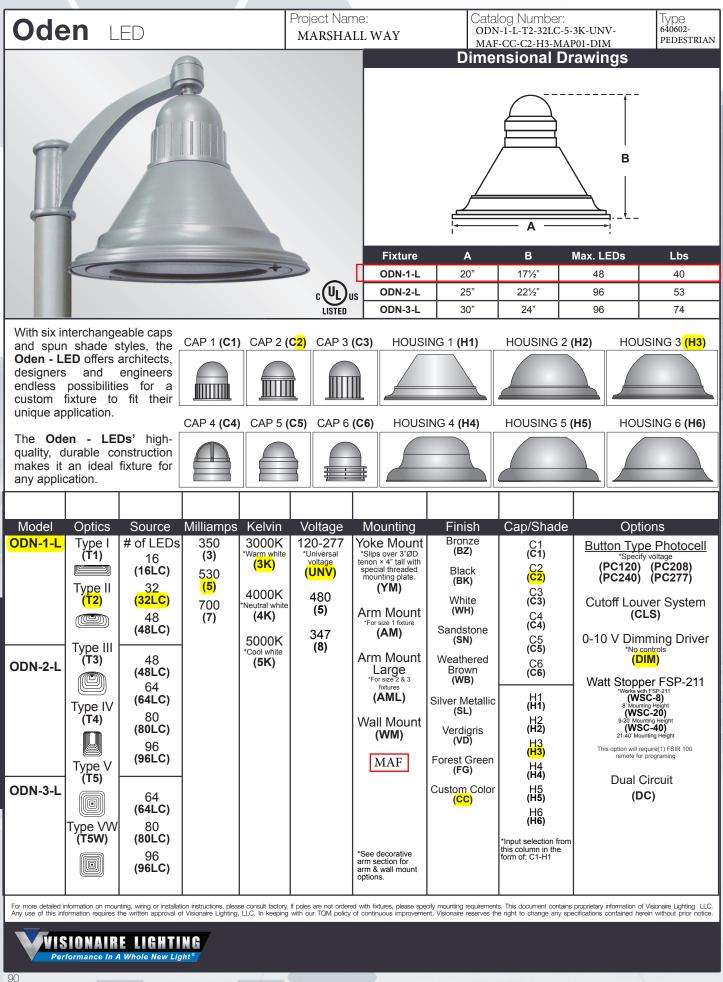
Einternet	Orala	Einstein		M	0.5%		440 00	-		07.04		
		Fixture		51	2 FD		110-D2	F		07-51	2 Fixtures with VA107-D2	
1.2			2.2			4.1			3.5		5.6	
2.6			3.6			6.6			4.9		8.3	
		L	ED Data Cl	hart fo	or 500	<b>0K</b> * Lumen da	ata subject to	chang	ge without notice			
# LEDs	Output	t mA	Type 1 Ty		pe 2	Туре 3	Type 4		Type 5	Type 5-W	System Watts	
10	350	)	2407	21	68	2230	2120		2266	2170	19	
10	530	)	3251	29	928	3012	2863		3061	2931	27	
22	350	)	4379	40	030	3996	3927		4382	4121	36	
32	530	)	6167	56	376	5627	5531		6171	5804	55	
48	350	)	7370 5		'68	5719	5621		6271	5898	52	
40	530	)	11817	81	44	8074	7936		8853	8327	78	
	350	)	7370	69	903	7030	6585		7391	7154	54	
48	530	)	11817	11	068	11271	10558		11849 11470		82	
	700	)	14741	13	807	14060	13170		14781	14308	107	
	350	)	10413 9		'54	9932	9304		10442	10108	72	
64	530	)	14727 13		3794 14046		13158		14767 14295		105	
	700	)	18553	17;	378	17696	16577		18604 18008		140	
	350	)	13185	12	350	12576	11781		13221	12798	89	
80	530	)	18433 17		265	17581	16469		18484 17892		130	
	700	)	23203	21	733	22131	20732		23267	22522	176	
	350	)	13844	12	967	13204	12369		13882	13438	104	
96	530	)	19953	18	689	19031	17828	Т	20008	19367	162	
	700	)	25108	23	518	23948	22434		25177	24371	210	
	1.2         2.6         # LEDs         16         32         48         64         80	Image: 2.6         Output           # LEDs         Output           16         350           32         350           32         350           48         350           48         530           48         530           64         530           64         530           96         530	I.2         I.2           I.2         I.2           I.2         II           I.2         II           I         II           II         III           III         IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	1.2         2.2           2.6         3.6           LED Data Cl           # LEDs         Output mA         Type 1           16         350         2407           16         530         3251           32         350         4379           32         350         6167           48         530         11817           48         530         11817           48         530         11817           64         530         10413           64         530         14727           700         18553         350           80         530         13185           80         530         1384           96         530         19953	1.2         2.2           2.6         3.6           LED Data Chart fr           # LEDs         Output mA         Type 1         Typ           16         350         2407         21           36         350         2407         21           36         350         2407         21           37         350         3251         26           32         350         4379         44           350         7370         55           48         530         11817         81           48         530         11817         11           700         14741         13         97           64         530         10413         97           64         530         14727         13           700         18553         17         17           80         530         18433         17           700         23203         21           96         530         19953         18	1.2         2.2           2.6         3.6           LED Data Chart for 500           # LEDs         Output mA         Type 1         Type 2           16         350         2407         2168           32         350         3251         2928           32         350         4379         4030           32         350         6167         5676           38         530         11817         8144           48         530         11817         8144           350         7370         6903         530           48         530         11817         11068           700         14741         13807         530           64         530         10413         9754           64         530         14727         13794           700         18553         17378         530           80         530         13185         12350           96         530         13844         12967	1.2         2.2         4.1           2.6         3.6         6.6           LED Data Chart for 5000K* Lumen da           # LEDs         Output mA         Type 1         Type 2         Type 3           16         350         2407         2168         2230           16         530         3251         2928         3012           32         350         4379         4030         3996           32         350         6167         5676         5627           48         350         7370         5768         5719           48         530         11817         8144         8074           48         530         11817         11068         11271           48         530         11817         11068         11271           48         530         10413         9754         9932           64         530         14727         13794         14046           700         18563         17378         17696           80         530         18433         17265         17581           96         530         13844         12967         13204	1.2         2.2         4.1           2.6         3.6         6.6           LED Data Chart for 5000K* Lumen data subject to           # LEDs         Output mA         Type 1         Type 2         Type 3         Type 4           16         350         2407         2168         2230         2120           36         530         3251         2928         3012         2963           32         350         4379         4030         3996         3927           530         6167         5676         5627         5531           48         350         7370         5768         5719         5621           48         530         11817         8144         8074         7936           48         530         11817         11068         11271         10558           48         530         11817         11068         11271         10558           64         530         14727         13794         14060         13170           64         530         14727         13794         14066         13157           64         530         13185         12350         12576         11781	$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	$ \begin{array}{ c c c c c c } \hline 1.2 & 2.2 & 4.1 & 3.5 & \hline \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$	

Visit www.VisionaireLighting.com for up-to-the-minute chart information, including types not listed here.

\* For 4K multiply values by 0.95/ 3k 0.90

19645 Rancho Way Rancho Dominguez, CA 90220 Tel: (310) 512-6480 Fax: (310) 512-6486 www.visionairelighting.com

										Oder	) LEI
MAP-01 Ma	ast Arm F	itter Dim	ension	s			POWDER COATED TOUGH	COMPLIANT	IP65		
	_	10"		·	6"		TOUGH	COMPLIANT	IP65 RATED	LISTED	
	3.8"		$\overline{\cdot \cdot}$	10		4" E	PA Data	a			
		[]		<u> </u>			ixture	Eixture only	One Fixture		ixtures
							DN-2-L	Fixture only 2.6	<b>TNS101-S</b> 4.1		5101-D2
	* <u>T</u> I	Side Vie ne MAP-01 is d o over 2%" O.D	esigned to	Fror	nt View						
Tunical Mai			. mast arm				DN-3-L	3.5	5.0		9.2
Γypical Μοι	mung Arn	15									_
	•	— 4'					4' —			4'	
Ì				- T							
				1;	2"						
		IS101-51	EPA: 1.	5					TNS101-I	D2 EPA: 2.2	2
					ED Data C	hart for	5000K*_				
		Ture	Туре	Туре	Туре	Туре	Туре	System			
# #	Output			1900					1	L70 Hours	
# # Bars LED	s mÂ	1	2	3	4	4 0000	5-W	. Watts			
	s mÂ 350	<b>1</b> 4,224	<b>2</b> 4,335	<b>3</b> 4,129	4,192	4,386	4,554	46		150,000	;
BarsLED142	s mA 350 530	1 4,224 5,112	<b>2</b> 4,335 5,645	<b>3</b> 4,129 5,417	4,192 5,340	5,951	4,554 6,208	46 68		150,000 100,000	
Bars LED	s mA 350 530 350	1 4,224 5,112 8,258	<b>2</b> 4,335 5,645 8,671	<b>3</b> 4,129 5,417 7,329	4,192 5,340 8,052	5,951 8,773	4,554 6,208 9,108	46 68 92		150,000 100,000 150,000	
BarsLED142	s mÁ 350 530 350 530	1 4,224 5,112 8,258 10,070	<b>2</b> 4,335 5,645 8,671 11,291	<b>3</b> 4,129 5,417 7,329 10,986	4,192 5,340 8,052 10,681	5,951 8,773 11,902	4,554 6,208 9,108 12,417	46 68 92 136	not listed here.	150,000 100,000	; 
BarsLED142	s mÁ 350 530 350 530	1 4,224 5,112 8,258 10,070	<b>2</b> 4,335 5,645 8,671 11,291	<b>3</b> 4,129 5,417 7,329 10,986	4,192 5,340 8,052 10,681	5,951 8,773 11,902	4,554 6,208 9,108 12,417	46 68 92 136 n, including types	not listed here.	150,000 100,000 150,000 100,000	





# Housing

• High-quality, one-piece spun aluminum shade and durable cast aluminum top cap; available in three housing sizes.

- All external hardware is stainless steel.
- One-piece, cast-aluminum door assembly with tool-less access.

#### **Thermal Management**

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The highest lumen output LEDs are utilized. Estimated life of the LEDs is 100,000+ hours. Available with 6 IES distribution patterns. Available with up to 96 LEDs. The optical system qualifies as IES full cutoff to restrict light trespass, glare and light pollution for neighborhood-friendly lighting.
CRI values are 70

#### **Quali-Guard® Finish**

• Fixture components are chemically pretreated through a multiple-stage washer and finished with an electrostatically-applied, thermoset polyester powder coat textured paint with a 3 to 5 mils thickness. Finish is oven-baked at 400 °F for maximum adherence and finish hardness.

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• The **Oden - LED** is supplied with a high-performance LED driver, located in its cap, that accepts 120 V thru 277 V, and 480 V, 50 Hz to 60 Hz input. Power factor is 90%. Rated for -40 °F operation.

• 10 kV surge protector supplied as standard.

# Warranty

• Five (5) year Limited Warranty on entire system, including finish. For full warranty information, please visit VisionaireLighting.com.

#### Options

- Button type photocell
- Cutoff louver system
- 0-10 V dimming driver
- Watt Stopper FSP-211

#### Listings

- · Oden is cUL listed, suitable for wet locations.
- IP65.
- LM79.
- LM80.
- Powder Coated Tough<sup>™</sup>



# EPA Data

Fixture	Fixture Fixture Only		Fixtur	e with VA110-	S1	2 Fi	ctures with VA	110-D2	F	ixture with VA1	07-S1	2 Fixtures with VA107-D2	
ODN-2-L	1.2			2.2			4.1			3.5		5.6	
ODN-3-L	2.6			3.6			6.6			4.9		8.3	
	·		L	ED Data C	hart f	or 500	<b>0K</b> * Lumen da	ata subject to	chang	ge without notice	·		
Size	# LEDs	Outpu	1	Type 1		pe 2	Type 3	Type 4	Í	Type 5	Type 5-W	System Watts	
	10	35	50	2407	2	168	2230	2120		2266	2170	19	
	16	53	30	3251	29	928	3012	2863		3061	2931	27	
ODN-1-L	32	35	50	4379	4(	030	3996	3927		4382	4121	36	
ODN-1-L	32	53	30	6167	56	676	5627	5531		6171	5804	55	
	48	35	50	7370	5	768	5719	5621		6271	5898	52	
	40	53	30	11817	8	144	8074	7936		8853	8327	78	
		35	50	7370	69	903	7030	6585	7391		7154	54	
ODN-2-L	48	53	30	11817	11	068	11271	10558		11849	11470	82	
		70	00	14741	13	807	14060	13170		14781 14308		107	
		35	50	10413	9	754	9932	9304		10442	10108	72	
	64	53	30	14727	13	3794	14046	13158		14767 14295		105	
		70	00	18553	17	'378	17696	16577		18604 18008		140	
		35	50	13185	12	350	12576	11781		13221	12798	89	
ODN-2-L ODN-3-L	80	53	30	18433	17	265	17581	16469		18484 17892		130	
		70	00	23203	21	733	22131	20732		23267	22522	176	
		35	50	13844	12	967	13204	12369		13882 13438		104	
	96	53	30	19953	18	689	19031	17828		20008 19367		162	
		70	00	25108	23	518	23948	22434		25177	24371	210	

Visit www.VisionaireLighting.com for up-to-the-minute chart information, including types not listed here.

\* For 4K multiply values by 0.95/ 3k 0.90

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#       #       Dutput LEDs       Type 1       Type 2       Type 3       Type 4       Type 5       Type 5       System Watts       L70 Hours         1       42       350       4,224       4,335       4,129       4,192       4,386       4,554       46       150,000         2       84       350       8,258       8,671       7,329       8,052       8,773       9,108       92       150,000	INNED       LINED         INNED       LINED         INNED       LINED         INNED       INNED         EPA Data         Front View       EPA Data         Front View       EPA Data         Front View       EPA Data         Front View       EPA Data         Typical Mounting Arms         LED Data Chart for 5000K*         #       Type Type Type Type Type Type Type Type											Oden ∟
Typical Mounting Arms           4'         4'         4'         4'         4'         4'         4'         4'         4'         4'         4'         4'         4'         4'         4'         4'         4'         12"'         TNS101-D2 EPA: 2.2           LED Data Chart for 5000K*           LED Data Chart for 5000K*           LED Data Chart for 5000K*           1         LTO Hours           1         Type Type Type Type Type Type Type Type	Typical Mounting Arms           4'         4'         4'           TNS101-S1 EPA: 1.5           TNS101-D2 EPA: 2.2           LED Data Chart for 5000K*           EED Data Chart for 5000K*           Math colspan="5">Type Type Type Type Type Type Type System Watts         L70 Hours           1           1         42         350         4,224         4,335         4,129         4,192         4,386         4,554         46         150,000           2         84         350         8,258         8,671         7,329         8,052         8,773         9,108         92         150,000           2         84         350         10,070         11,291         10,986         10,681         11,902         12,417         136         100,000	MAP-01 Mas		10"			$\cdot$	 F	PA Data ixture DN-2-L	Fixture only 2.6	One Fixture w/ TNS101-S1 4.1	Two Eixture TNS101-D 7.4
# Bars         # LEDs         Output mA         Type 1         Type 2         Type 3         Type 4         Type 5         Type 5-W         System Watts         L70 Hours           1         42         350         4,224         4,335         4,129         4,192         4,386         4,554         46         150,000           1         42         530         5,112         5,645         5,417         5,340         5,951         6,208         68         100,000           2         84         350         8,258         8,671         7,329         8,052         8,773         9,108         92         150,000           2         84         530         10,070         11,291         10,986         10,681         11,902         12,417         136         100,000	# Bars         # LEDs         Output mA         Type 1         Type 2         Type 3         Type 4         Type 5         Type 5-W         System Watts         L70 Hours           1         42         350         4,224         4,335         4,129         4,192         4,386         4,554         46         150,000           2         42         5,312         5,645         5,417         5,340         5,951         6,208         68         100,000           2         84         350         8,258         8,671         7,329         8,052         8,773         9,108         92         150,000           2         84         530         10,070         11,291         10,986         10,681         11,902         12,417         136         100,000	Typical Mour	nting Arn	ns 4'		5	·		4'	3.5	4'	
Bars         LEDs         mA         1         2         3         4         5         5-W         Watts         L70 Hours           1         42         350         4,224         4,335         4,129         4,192         4,386         4,554         46         150,000           1         42         530         5,112         5,645         5,417         5,340         5,951         6,208         68         100,000           2         84         350         8,258         8,671         7,329         8,052         8,773         9,108         92         150,000           2         84         530         10,070         11,291         10,986         10,681         11,902         12,417         136         100,000	Bars         LEDs         mA         1         2         3         4         5         5-W         Watts         L70 Hours           1         42         350         4,224         4,335         4,129         4,192         4,386         4,554         46         150,000           1         42         530         5,112         5,645         5,417         5,340         5,951         6,208         68         100,000           2         84         350         8,258         8,671         7,329         8,052         8,773         9,108         92         150,000           2         84         530         10,070         11,291         10,986         10,681         11,902         12,417         136         100,000	# <u>"</u>					J.	1				
1         42         530         5,112         5,645         5,417         5,340         5,951         6,208         68         100,000           2         84         350         8,258         8,671         7,329         8,052         8,773         9,108         92         150,000           2         84         530         10,070         11,291         10,986         10,681         11,902         12,417         136         100,000	1         42         530         5,112         5,645         5,417         5,340         5,951         6,208         68         100,000           2         84         350         8,258         8,671         7,329         8,052         8,773         9,108         92         150,000           2         84         530         10,070         11,291         10,986         10,681         11,902         12,417         136         100,000		Output mA						Type 5-W	System Watts	L7	0 Hours
2         350         5,112         5,645         5,417         5,340         5,951         6,208         68         100,000           2         84         350         8,258         8,671         7,329         8,052         8,773         9,108         92         150,000           2         84         530         10,070         11,291         10,986         10,681         11,902         12,417         136         100,000	2         84         530         5,112         5,645         5,417         5,340         5,951         6,208         68         100,000           2         84         350         8,258         8,671         7,329         8,052         8,773         9,108         92         150,000	1 10	350	4,224	4,335	4,129	4,192	4,386	4,554	46	1	50,000
2         84         530         10,070         11,291         10,986         10,681         11,902         12,417         136         100,000	2         84         530         10,070         11,291         10,986         10,681         11,902         12,417         136         100,000	1 42	530	5,112	5,645	5,417	5,340	5,951	6,208	68	1	00,000
2         84         530         10,070         11,291         10,986         10,681         11,902         12,417         136         100,000	2         84         530         10,070         11,291         10,986         10,681         11,902         12,417         136         100,000		350							92		
		2 84							-			
	* For 4000K multiply values by 0.95	I										