

VBL-1 LED Specifications

Architectural - Site - Outdoor



The V-Bollard LED Series continues the contemporary elegance and architectural styling that define the V-Collection. Engineered for performance, longevity, and design continuity, the V-Bollard separates the driver(s) from the precision die-cast aluminum LED light engines—enhancing thermal management, extending component life, and maximizing lumen output.

The modular LED assemblies are available in configurations of 16, 32, or 48 LEDs per single fixture, and 64 or 96 LEDs in a dual-fixture design—delivering powerful illumination tailored to each application. Available with 17 IES distribution patterns. Choose from 2700K, 3000K, 3500K, 4000K, or 5000K color temperatures and 70, 80, or 90 CRI options to achieve the ideal combination of visual comfort and architectural intent.

A durable polyester powder-coat finish, available in standard or custom colors, ensures lasting beauty and protection against the elements. The finish is backed by a five-year warranty, a testament to Visionaire Lighting's commitment to quality and durability.

The V-Bollard LED Series is an exceptional choice for low-level and pedestrian-scale lighting, combining modern aesthetics with superior optical performance for today's most refined outdoor environments.

Project Name:

Catalog Number:

Type:

Date:

Location:

MODEL	HEIGHT	OPTICS		SOURCE	CONFIG.	CURRENT	
VBL-1	3 36"	T1 Type 1	T5 Type 5	16LD	S Single	3 350mA	
		T2 Type 2	T5W Type 5 Wide	32LD			
	3.5 42"	T3 Type 3	T5WW Type 5	48LD	D Double	5 530mA	
		T3R Type 3 Round	Extra Wide	32LD			
	4 48"	T3W Type 3 Wide	T5LG Type 5 Low Glare	64LD		Double configuration only	7 700mA
		T3LG Type 3 Low Glare	FN Flood Narrow	96LD			
		T4 Type 4	FM Flood Medium				10 1050mA
		T4A Type 4 Automotive	FW Flood Wide				
		T4FT Type 4 Forward Throw					12 1200mA
		T4LG Type 4 Low Glare					

CCT	VOLTAGE	MOUNTING	FINISH	CONTROL OPTIONS	SHIELD OPTIONS	OPTIONS
27K7 27K8 27K9 2700K 70, 80, & 90 CRI	UNV 120-277V	AB Anchor Base (ANCHOR BOLT KIT SUPPLIED)	BZ Bronze	PC-120 PC-208 PC-240 PC-277 Button Type Photocell	CLS Backside cutoff shield	BBG Bird Spikes GFI GFI Receptacle *Standard location is in hand hole. *Specify GFI location if different from hand hole location. Supplied with in use cover. USB USB Receptacle *Specify location. Supplied with in use cover. BAA Buy America(n) Act Compliant
30K7 30K8 30K9 3000K 70, 80, & 90 CRI			BK Black			
35K7 35K8 35K9 3500K 70, 80, & 90 CRI			GY Grey	LCLS Leftside cutoff shield		
40K7 40K8 40K9 4000K 70, 80, & 90 CRI			SBK Smooth Black		BHS House shield	
50K7 50K8 50K9 5000K 70, 80, & 90 CRI			WH White			
	SWH Smooth White					
	GP Graphite					
	GY Grey					
	SL Silver Metallic					
	ZFP Zinc-Free Primer Coat					
	CC Custom Color					

Housing

Cast aluminum heatsink with integral cooling fins for thermal management. The 4" extruded pole contains the driver(s), allowing for cooler operation and longer life. Silicone gasketing is utilized throughout the fixture for weather tight operation.

Thermal Management

- The V-Bollard Series provides excellent overall thermal management by maximizing the fixture's heatsink capabilities. This enables the V-Bollard Series to withstand higher ambient temperatures and drive currents without degrading LED life. The V-Bollard Series has a very low thermal resistance rating.
- The L70 test determines the point in an LEDs life when it reaches 70 percent of its initial output. The V-Bollard Series LEDs have been determined to last a minimum of 100,000 hours in 25° C environments when driven at 350 mA.

Optical System

- The highest lumen output LEDs are utilized in the V-Bollard Series. Available with 16 IES distribution patterns. The optical system qualifies as IES full cutoff to restrict light trespass, glare and light pollution.
- CCT values are 2700, 3000, 3500, 4000 or 5000K. LED light assemblies come in multiples of 16 LEDs.
- CRI values are 70, 80 or 90

Quali-Guard® Finish

- The finish is a Quali-Guard® textured, chemically pretreated through a multiple-stage washer, electrostatically applied, thermoset polyester powder coat finish, with a minimum of 3-5 mils thickness. Finish is oven-baked at 400° F to promote maximum adherence and finish hardness.
- All finishes are available in standard and custom colors.
- Finish is guaranteed for five (5) years

Mounting

The V-Bollard Luminaire is easily attached to the pole by 2 tamper-proof countersunk screws.

Electrical Assembly

- The V-Bollard LED series is supplied with a choice of 350, 530, 700, 1050, or 1200mA high-performance LED drivers that accept 120v, 50 Hz to 60 Hz, input.
- Power factor of 90%.
- Rated for -40°C operations.
- 10 kV surge protector supplied as standard.

Warranty

- Five (5) year Limited Warranty on electrical components
 - Five (5) year on finish.
- For full warranty information, please visit visionairelighting.com.

Options

- Button Type Photocell
- 0-10v Dimming Driver
- BAA

Listings

- The V-Bollard is cUL Listed, suitable for wet locations.
- IP-65 Rated
- Powder Coated Tough.
- IDA Certification

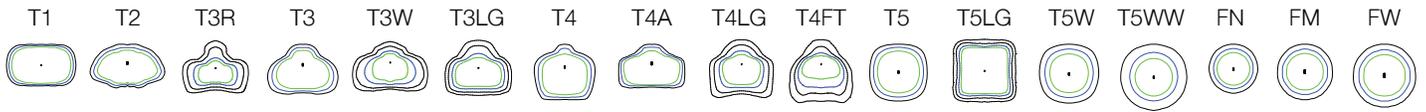
3000K or lower must be selected for IDA certification.

**Light Color**

Correlated Color Temperature (CCT)

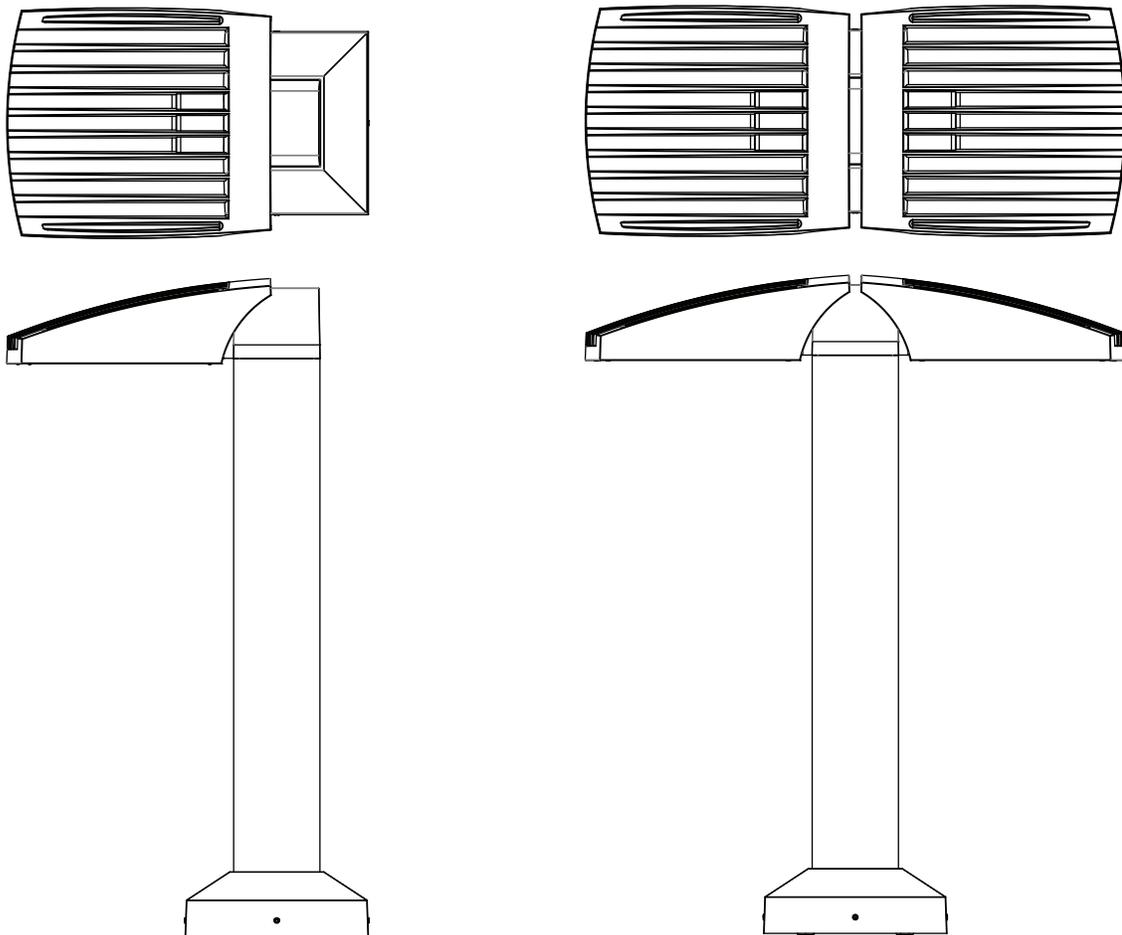


Photometric Optical Summary



Dimensions

Width:	VBL-1 10.5"
Height:	VBL-1 4"
Depth:	VBL-1 14.5"/25"
Weight:	VBL-1 27/40 LBS



VBL-1 LED SPECIFICATIONS / Forward Optics																															
Led Count	CONFIG	Current & Watts	Distribution Type	70CRI																											
				27K				30K				35K				40K				50K											
				Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW								
16LD	S	350 mA (16.4W)	T1	2571	2	0	2	156	2682	2	0	2	163	2682	2	0	2	163	2654	2	0	2	162	2794	2	0	2	170			
			T2	2478	1	0	1	151	2586	1	0	1	157	2586	1	0	1	157	2559	1	0	1	156	2694	1	0	1	164			
			T3R	2558	1	0	1	156	2669	1	0	1	162	2669	1	0	1	162	2642	1	0	1	161	2781	1	0	1	169			
			T3	2524	1	0	1	154	2634	1	0	1	160	2634	1	0	1	160	2607	1	0	1	159	2744	1	0	1	167			
			T3W	2554	1	0	1	155	2665	1	0	1	162	2665	1	0	1	162	2637	1	0	1	161	2776	1	0	1	169			
			T3LG	2565	1	0	1	156	2677	1	0	1	163	2677	1	0	1	163	2649	1	0	1	161	2788	1	0	1	170			
			T4	2524	1	0	1	154	2633	1	0	1	160	2633	1	0	1	160	2606	1	0	1	159	2743	1	0	1	167			
			T4A	2660	1	0	1	162	2775	1	0	1	169	2775	1	0	1	169	2747	1	0	1	167	2891	1	0	1	176			
			T4LG	2560	2	0	2	156	2672	2	0	2	163	2672	2	0	2	163	2644	2	0	2	161	2783	2	0	2	169			
			T4FT	2598	1	0	1	158	2711	1	0	1	165	2711	1	0	1	165	2683	1	0	1	163	2824	1	0	1	172			
			T5	2557	1	0	1	156	2668	1	0	1	162	2668	1	0	1	162	2640	1	0	1	161	2779	1	0	1	169			
			T5LG	2583	1	0	1	157	2695	1	0	1	164	2695	1	0	1	164	2667	1	0	1	162	2808	1	0	1	171			
			T5W	2456	1	0	1	149	2562	1	0	1	156	2562	1	0	1	156	2536	1	0	1	154	2669	2	0	2	162			
			T5WW	2322	1	0	1	141	2423	2	0	2	147	2423	2	0	2	147	2398	2	0	2	146	2524	2	0	2	154			
			FN	2188	2	0	1	133	2283	2	0	1	139	2283	2	0	1	139	2259	2	0	1	137	2378	2	0	1	145			
			FM	2228	2	0	1	136	2325	2	0	1	141	2325	2	0	1	141	2301	2	0	1	140	2422	2	0	1	147			
			FW	2505	1	0	1	152	2614	1	0	1	159	2614	1	0	1	159	2586	1	0	1	157	2722	1	0	1	166			
			16LD	S	530 mA (25.3W)	T1	3805	2	0	2	150	3970	2	0	2	157	3970	2	0	2	157	3929	2	0	2	155	4135	2	0	2	163
						T2	3668	1	0	2	145	3828	1	0	2	151	3828	1	0	2	151	3788	1	0	2	149	3987	1	0	2	157
						T3R	3786	1	0	2	149	3951	1	0	2	156	3951	1	0	2	156	3910	1	0	2	154	4115	1	0	2	162
T3	3736	1				0	1	147	3896	1	0	1	154	3896	1	0	1	154	3858	1	0	1	152	4061	1	0	1	160			
T3W	3780	1				0	1	149	3944	1	0	1	156	3944	1	0	1	156	3903	1	0	1	154	4108	1	0	1	162			
T3LG	3797	1				0	1	150	3962	1	0	1	156	3962	1	0	1	156	3921	1	0	1	155	4127	1	0	1	163			
T4	3735	1				0	1	147	3897	1	0	1	154	3897	1	0	1	154	3857	1	0	1	152	4060	1	0	1	160			
T4A	3937	1				0	1	155	4108	1	0	1	162	4108	1	0	1	162	4065	1	0	1	160	4279	1	0	1	169			
T4LG	3789	2				0	2	150	3954	2	0	2	156	3954	2	0	2	156	3913	2	0	2	154	4119	2	0	2	163			
T4FT	3845	1				0	1	152	4012	1	0	2	158	4012	1	0	2	158	3971	1	0	1	157	4180	1	0	2	165			
T5	3784	2				0	2	149	3948	2	0	2	156	3948	2	0	2	156	3907	2	0	2	154	4113	2	0	2	162			
T5LG	3823	2				0	2	151	3989	2	0	2	157	3989	2	0	2	157	3948	2	0	2	156	4155	2	0	2	164			
T5W	3635	2				0	2	143	3793	2	0	2	150	3793	2	0	2	150	3753	2	0	2	148	3951	2	0	2	156			
T5WW	3436	2				0	2	136	3586	2	0	2	141	3586	2	0	2	141	3546	2	0	2	140	3735	2	0	2	147			
FN	3238	2				0	1	128	3379	2	0	1	133	3379	2	0	1	133	3344	2	0	1	132	3520	2	0	1	139			
FM	3297	2				0	1	130	3441	2	0	1	136	3441	2	0	1	136	3405	2	0	1	134	3584	2	0	1	141			
FW	3707	2				0	1	146	3868	2	0	1	153	3868	2	0	1	153	3828	2	0	1	151	4029	2	0	1	159			
16LD	S	700 mA (34.0W)				T1	4931	3	0	3	145	5146	3	0	3	151	5146	3	0	3	151	5092	3	0	3	150	5360	3	0	3	158
						T2	4754	1	0	2	140	4961	1	0	2	146	4961	1	0	2	146	4910	1	0	2	145	5168	1	0	2	152
						T3R	4908	1	0	2	144	5121	1	0	2	151	5121	1	0	2	151	5068	1	0	2	149	5334	1	0	2	157
			T3	4843	1	0	1	143	5053	1	0	1	149	5053	1	0	1	149	5000	1	0	1	147	5264	1	0	1	155			
			T3W	4899	1	0	2	144	5112	1	0	2	150	5112	1	0	2	150	5059	1	0	2	149	5325	1	0	2	157			
			T3LG	4921	1	0	1	145	5135	1	0	1	151	5135	1	0	1	151	5082	1	0	1	150	5349	1	0	1	157			
			T4	4841	1	0	1	143	5052	1	0	1	149	5052	1	0	1	149	4999	1	0	1	147	5262	1	0	1	155			
			T4A	5103	1	0	1	150	5325	1	0	1	157	5325	1	0	1	157	5269	1	0	1	155	5546	1	0	1	163			
			T4LG	4912	3	0	3	145	5125	3	0	3	151	5125	3	0	3	151	5072	3	0	3	149	5339	3	0	3	157			
			T4FT	4984	1	0	2	147	5201	1	0	2	153	5201	1	0	2	153	5147	1	0	2	152	5418	1	0	2	159			
			T5	4905	2	0	2	144	5118	2	0	2	151	5118	2	0	2	151	5064	2	0	2	149	5331	2	0	2	157			
			T5LG	4955	2	0	2	146	5171	2	0	2	152	5171	2	0	2	152	5117	2	0	2	151	5386	2	0	2	159			
			T5W	4711	2	0	2	139	4916	2	0	2	145	4916	2	0	2	145	4865	2	0	2	143	5121	2	0	2	151			
			T5WW	4454	2	0	2	131	4648	3	0	3	137	4648	3	0	3	137	4599	2	0	2	135	4842	3	0	3	143			
			FN	4197	3	0	1	124	4380	3	0	1	129	4380	3	0	1	129	4334	3	0	1	128	4562	3	0	1	134			
			FM	4274	3	0	1	126	4460	3	0	1	131	4460	3	0	1	131	4414	3	0	1	130	4646	3	0	1	137			
			FW	4805	2	0	1	141	5014	2	0	1	148	5014	2	0	1	148	4962	2	0	1	146	5223	2	0	1	154			
			16LD	S	1050 mA (52.4W)	T1	6888	3	0	3	131	7188	3	0	3	137	7188	3	0	3	137	7113	3	0	3	136	7487	3	0	3	143
						T2	6641	2	0	2	127	6930	2	0	2	132	6930	2	0	2	132	6858	2	0	2	131	7219	2	0	2	138
						T3R	6855	2	0	2	131	7153	2	0	2	137	7153	2	0	2	137	7079	2	0	2	135	7451	2	0	2	142
T3	6764	1				0	2	129	7058	1	0	2	135	7058	1	0	2	135	6985	1	0	2									

VBL-1 LED SPECIFICATIONS / Forward Optics																															
Led Count	CONFIG	Current & Watts	Distribution Type	70CRI																											
				27K				30K				35K				40K				50K											
				Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW			
32LD	S	350 mA (32.9W)	T1	5037	3	0	3	153	5256	3	0	3	160	5256	3	0	3	160	5201	3	0	3	158	5475	3	0	3	167			
			T2	4856	1	0	2	148	5067	1	0	2	154	5067	1	0	2	154	5015	1	0	2	153	5278	1	0	2	161			
			T3R	5013	1	0	2	153	5231	1	0	2	159	5231	1	0	2	159	5176	1	0	2	157	5448	1	0	2	166			
			T3	4946	1	0	1	150	5161	1	0	1	157	5161	1	0	1	157	5107	1	0	1	155	5376	1	0	1	164			
			T3W	5004	1	0	2	152	5221	1	0	2	159	5221	1	0	2	159	5167	1	0	2	157	5439	1	0	2	165			
			T3LG	5026	1	0	1	153	5245	1	0	1	160	5245	1	0	1	160	5190	1	0	1	158	5464	1	0	1	168			
			T4	4945	1	0	1	150	5160	1	0	1	157	5160	1	0	1	157	5106	1	0	1	155	5375	1	0	1	164			
			T4A	5212	1	0	1	159	5438	1	0	1	165	5438	1	0	1	165	5382	1	0	1	164	5665	1	0	1	172			
			T4LG	5017	3	0	3	153	5235	3	0	3	159	5235	3	0	3	159	5180	3	0	3	158	5453	3	0	3	166			
			T4FT	5091	3	0	1	155	5312	3	0	1	162	5312	3	0	1	162	5257	3	0	1	162	5533	3	0	1	168			
			T5	5009	2	0	2	152	5227	2	0	2	159	5227	2	0	2	159	5173	2	0	2	157	5445	2	0	2	166			
			T5LG	5061	2	0	2	154	5281	2	0	2	161	5281	2	0	2	161	5226	2	0	2	159	5501	2	0	2	167			
			T5W	4812	2	0	2	146	5021	2	0	2	153	5021	2	0	2	153	4969	2	0	2	151	5230	2	0	2	159			
			T5WW	4549	2	0	2	138	4747	2	0	2	144	4747	2	0	2	144	4698	2	0	2	143	4945	2	0	2	150			
			FN	4297	3	0	1	130	4474	3	0	1	136	4474	3	0	1	136	4427	3	0	1	135	4660	3	0	1	142			
			FM	4366	3	0	1	133	4555	3	0	1	139	4555	3	0	1	139	4508	3	0	1	137	4745	3	0	1	144			
			FW	4908	2	0	1	149	5121	2	0	1	156	5121	2	0	1	156	5068	2	0	1	154	5334	2	0	1	162			
			32LD	S	530 mA (50.7W)	T1	7455	3	0	3	147	7779	3	0	3	153	7779	3	0	3	153	7698	3	0	3	152	8103	3	0	3	160
						T2	7187	2	0	3	142	7500	2	0	3	148	7500	2	0	3	148	7422	2	0	3	146	7812	2	0	3	154
						T3R	7419	2	0	3	146	7741	2	0	3	153	7741	2	0	3	153	7661	2	0	3	151	8064	2	0	3	159
T3	7320	1				0	2	144	7639	1	0	2	151	7639	1	0	2	151	7559	1	0	2	149	7957	1	0	2	157			
T3W	7406	1				0	2	146	7728	1	0	2	152	7728	1	0	2	152	7647	1	0	2	151	8050	1	0	2	159			
T3LG	7439	1				0	2	147	7763	1	0	2	153	7763	1	0	2	153	7682	1	0	2	152	8086	1	0	2	160			
T4	7319	2				0	2	144	7637	2	0	2	151	7637	2	0	2	151	7557	2	0	2	149	7955	2	0	2	157			
T4A	7714	1				0	1	152	8049	1	0	1	159	8049	1	0	1	159	7965	1	0	1	157	8384	1	0	1	165			
T4LG	7425	3				0	3	146	7748	3	0	3	153	7748	3	0	3	153	7667	3	0	3	151	8070	3	0	3	159			
T4FT	7535	3				0	2	149	7862	3	0	2	155	7862	3	0	2	155	7780	3	0	2	153	8190	3	0	2	162			
T5	7414	3				0	3	146	7737	3	0	3	153	7737	3	0	3	153	7656	3	0	3	151	8059	3	0	3	159			
T5LG	7491	3				0	3	148	7816	3	0	3	154	7816	3	0	3	154	7735	3	0	3	153	8142	3	0	3	161			
T5W	7122	3				0	3	141	7431	3	0	3	147	7431	3	0	3	147	7354	3	0	3	145	7741	3	0	3	153			
T5WW	6733	3				0	3	133	7026	3	0	3	139	7026	3	0	3	139	6953	3	0	3	137	7319	3	0	3	144			
FN	6345	3				0	1	125	6621	3	0	1	131	6621	3	0	1	131	6552	3	0	1	129	6897	3	0	1	136			
FM	6461	3				0	1	127	6742	3	0	1	133	6742	3	0	1	133	6672	3	0	1	132	7023	3	0	1	139			
FW	7264	2				0	1	143	7579	2	0	1	150	7579	2	0	1	150	7501	2	0	1	148	7895	2	0	1	156			
32LD	S	700 mA (67.9W)				T1	9663	3	0	3	142	10083	3	0	3	148	10083	3	0	3	148	9978	3	0	3	147	10503	3	0	3	155
						T2	9316	2	0	3	137	9721	2	0	3	143	9721	2	0	3	143	9620	2	0	3	142	10126	2	0	3	149
						T3R	9616	2	0	3	142	10034	2	0	3	148	10034	2	0	3	148	9930	2	0	3	146	10452	2	0	3	154
			T3	9489	1	0	2	140	9901	1	0	2	146	9901	1	0	2	146	9798	1	0	2	144	10314	1	0	2	152			
			T3W	9599	1	0	2	141	10017	1	0	2	147	10017	1	0	2	147	9912	1	0	2	146	10434	1	0	2	154			
			T3LG	9643	2	0	2	142	10062	2	0	2	148	10062	2	0	2	148	9957	2	0	2	147	10481	2	0	2	154			
			T4	9486	2	0	2	140	9899	2	0	2	146	9899	2	0	2	146	9796	2	0	2	144	10311	2	0	2	152			
			T4A	9998	2	0	1	147	10433	2	0	1	154	10433	2	0	1	154	10324	2	0	1	152	10868	2	0	1	160			
			T4LG	9624	3	0	3	142	10042	3	0	3	148	10042	3	0	3	148	9938	3	0	3	146	10461	3	0	3	154			
			T4FT	9766	3	0	2	144	10191	3	0	2	150	10191	3	0	2	150	10085	3	0	2	148	10615	3	0	2	156			
			T5	9610	3	0	3	141	10028	3	0	3	148	10028	3	0	3	148	9924	3	0	3	146	10446	3	0	3	154			
			T5LG	9709	3	0	3	143	10131	3	0	3	149	10131	3	0	3	149	10026	3	0	3	148	10553	3	0	3	155			
			T5W	9231	3	0	3	136	9632	3	0	3	142	9632	3	0	3	142	9532	3	0	3	140	10034	3	0	3	148			
			T5WW	8728	3	0	3	128	9107	3	0	3	134	9107	3	0	3	134	9012	3	0	3	133	9487	3	0	3	140			
			FN	8225	3	0	1	121	8582	3	0	1	126	8582	3	0	1	126	8493	3	0	1	125	8940	3	0	1	132			
			FM	8375	3	0	1	123	8739	3	0	1	129	8739	3	0	1	129	8648	3	0	1	127	9103	3	0	1	134			
			FW	9415	3	0	1	139	9824	3	0	1	145	9824	3	0	1	145	9722	3	0	1	143	10234	3	0	1	151			
			32LD	S	1050 mA (104.8W)	T1	13497	4	0	4	129	14084	4	0	4	134	14084	4	0	4	134	13937	4	0	4	133	14671	4	0	4	140
						T2	13013	3	0	3	124	13579	3	0	3	130	13579	3	0	3	130	13437	3	0	3	128	14145	3	0	3	135
						T3R	13432	3	0	3	128	14016	3	0	3	134	14016	3	0	3	134	13870	3	0	3	132	14600	3	0	3	139
T3	13254	2				0	2	126	13830	2	0																				

VBL-1 LED SPECIFICATIONS / Forward Optics																															
Lumens	B	U	G	LPW	27K				30K				35K				40K				50K										
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW							
48LD	S	350 mA (49.3W)	T1	6996	3	0	3	142	7301	3	0	3	148	7301	3	0	3	148	7225	3	0	3	147	7605	3	0	3	154			
			T2	6745	2	0	2	137	7039	2	0	3	143	7039	2	0	3	143	6965	2	0	2	141	7332	2	0	3	149			
			T3R	6963	2	0	2	141	7265	2	0	3	147	7265	2	0	3	147	7190	2	0	3	146	7568	2	0	3	154			
			T3	6870	1	0	2	139	7169	1	0	2	145	7169	1	0	2	145	7094	1	0	2	144	7468	1	0	2	151			
			T3W	6950	1	0	2	141	7253	1	0	2	147	7253	1	0	2	147	7177	1	0	2	146	7555	1	0	2	153			
			T3LG	6982	1	0	2	142	7286	1	0	2	148	7286	1	0	2	148	7210	1	0	2	146	7589	2	0	2	154			
			T4	6869	2	0	2	139	7167	2	0	2	145	7167	2	0	2	145	7093	2	0	2	144	7466	2	0	2	151			
			T4A	7239	1	0	1	147	7554	1	0	1	153	7554	1	0	1	153	7476	1	0	1	152	7869	1	0	1	160			
			T4LG	6968	3	0	3	141	7271	3	0	3	147	7271	3	0	3	147	7196	3	0	3	146	7574	3	0	3	154			
			T4FT	7071	1	0	2	143	7379	1	0	2	150	7379	1	0	2	150	7302	1	0	2	148	7696	1	0	2	156			
			T5	6958	3	0	3	141	7261	3	0	3	147	7261	3	0	3	147	7185	3	0	3	146	7563	3	0	3	153			
			T5LG	7030	2	0	2	143	7336	2	0	2	149	7336	2	0	2	149	7259	2	0	2	147	7641	3	0	3	155			
			T5W	6684	3	0	3	136	6974	3	0	3	141	6974	3	0	3	141	6902	3	0	3	140	7265	3	0	3	147			
			T5WW	6319	3	0	3	128	6594	3	0	3	134	6594	3	0	3	134	6526	3	0	3	132	6869	3	0	3	139			
			FN	5955	3	0	1	121	6214	3	0	1	126	6214	3	0	1	126	6149	3	0	1	125	6473	3	0	1	131			
			FM	6064	3	0	1	123	6328	3	0	1	128	6328	3	0	1	128	6262	3	0	1	127	6591	3	0	1	134			
			FW	6817	2	0	1	138	7113	2	0	1	144	7113	2	0	1	144	7039	2	0	1	143	7410	2	0	1	150			
			48LD	S	530 mA (76.0W)	T1	10355	3	0	3	136	10805	3	0	3	142	10805	3	0	3	142	10693	3	0	3	141	11256	4	0	4	148
						T2	9984	2	0	3	131	10418	2	0	3	137	10418	2	0	3	137	10309	2	0	3	136	10852	2	0	3	143
						T3R	10305	2	0	3	138	10753	2	0	3	141	10753	2	0	3	141	10641	2	0	3	140	11201	2	0	3	147
T3	10169	2				0	2	134	10611	2	0	2	140	10611	2	0	2	140	10500	2	0	2	138	11053	2	0	2	145			
T3W	10287	2				0	3	135	10734	2	0	3	141	10734	2	0	3	141	10623	2	0	3	140	11182	2	0	3	147			
T3LG	10334	2				0	2	136	10783	2	0	2	142	10783	2	0	2	142	10671	2	0	2	140	11232	2	0	2	148			
T4	10166	2				0	2	134	10608	2	0	2	140	10608	2	0	2	140	10498	2	0	2	138	11050	2	0	2	145			
T4A	10715	2				0	1	141	11161	2	0	1	147	11161	2	0	1	147	11064	2	0	1	146	11647	2	0	1	153			
T4LG	10313	3				0	3	136	10762	4	0	4	142	10762	4	0	4	142	10650	4	0	4	140	11210	4	0	4	147			
T4FT	10466	2				0	3	138	10921	2	0	3	144	10921	2	0	3	144	10807	2	0	3	142	11376	2	0	3	150			
T5	10299	3				0	3	135	10747	3	0	3	141	10747	3	0	3	141	10635	3	0	3	140	11194	3	0	3	147			
T5LG	10405	3				0	3	137	10857	3	0	3	143	10857	3	0	3	143	10744	3	0	3	141	11310	3	0	3	149			
T5W	9892	3				0	3	130	10323	3	0	3	136	10323	3	0	3	136	10215	3	0	3	134	10753	3	0	3	141			
T5WW	9353	3				0	3	123	9760	3	0	3	128	9760	3	0	3	128	9658	3	0	3	127	10166	3	0	3	134			
FN	8814	3				0	1	116	9197	3	0	1	121	9197	3	0	1	121	9101	3	0	1	120	9580	4	0	1	126			
FM	8975	3				0	1	118	9365	3	0	1	123	9365	3	0	1	123	9268	3	0	1	122	9755	3	0	1	128			
FW	10090	3				0	1	133	10528	3	0	2	138	10528	3	0	2	138	10419	3	0	1	137	10967	3	0	2	144			
48LD	S	700 mA (101.9W)				T1	13422	4	0	4	132	14006	4	0	4	137	14006	4	0	4	137	13860	4	0	4	136	14589	4	0	4	143
						T2	12941	3	0	3	127	13503	3	0	3	132	13503	3	0	3	132	13363	3	0	3	131	14066	3	0	3	138
						T3R	13357	3	0	3	131	13938	3	0	3	137	13938	3	0	3	137	13793	3	0	3	135	14519	3	0	3	142
			T3	13180	2	0	2	129	13753	2	0	2	135	13753	2	0	2	135	13610	2	0	2	134	14326	2	0	2	141			
			T3W	13334	2	0	3	131	13914	2	0	3	137	13914	2	0	3	137	13769	2	0	3	135	14493	2	0	3	142			
			T3LG	13394	2	0	2	131	13977	2	0	2	137	13977	2	0	2	137	13831	2	0	2	136	14559	2	0	2	143			
			T4	13177	3	0	3	129	13750	3	0	3	135	13750	3	0	3	135	13607	3	0	3	134	14323	3	0	3	141			
			T4A	13888	2	0	2	136	14492	2	0	2	142	14492	2	0	2	142	14341	2	0	2	141	15096	2	0	2	148			
			T4LG	13368	4	0	4	131	13949	4	0	4	137	13949	4	0	4	137	13804	4	0	4	135	14530	4	0	4	143			
			T4FT	13566	2	0	3	133	14155	2	0	3	139	14155	2	0	3	139	14006	2	0	3	137	14745	2	0	3	145			
			T5	13349	3	0	3	131	13929	3	0	3	137	13929	3	0	3	137	13784	3	0	3	135	14510	3	0	3	142			
			T5LG	13487	3	0	3	132	14073	3	0	3	138	14073	3	0	3	138	13926	3	0	3	137	14659	3	0	3	144			
			T5W	12822	4	0	4	126	13380	4	0	4	131	13380	4	0	4	131	13240	4	0	4	130	13937	4	0	4	137			
			T5WW	11213	4	0	4	119	12650	4	0	4	124	12650	4	0	4	124	12519	4	0	4	123	13178	4	0	4	129			
			FN	11424	4	0	1	112	11921	4	0	1	117	11921	4	0	1	117	11797	4	0	1	116	12418	4	0	1	122			
			FM	11633	4	0	1	114	12139	4	0	1	119	12139	4	0	1	119	12013	4	0	1	118	12645	4	0	2	124			
			FW	13078	3	0	2	128	13647	3	0	2	134	13647	3	0	2	134	13504	3	0	2	133	14215	3	0	2	139			
			48LD	S	1050 mA (157.2W)	T1	18748	4	0	4	119	19563	4	0	4	124	19563	4	0	4	124	19380	4	0	4	123	20379	4	0	4	130
						T2	18076	3	0	4	115	18862	3	0	4	120	18862	3	0	4	120	18665	3	0	4	119	19648	3	0	4	125
						T3R	18658	3	0	4	119	19469	3	0	4	124	19469	3	0	4	124	19266	3	0	4	123	20280	3	0	4	1

VBL-1 LED SPECIFICATIONS / Forward Optics																																	
Lumens	B	U	G	LPW	27K				30K				35K				40K				50K												
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW				
32LD	D	350 mA (32.9W)	T1	5141	1	0	1	156	5365	1	0	1	163	5365	1	0	1	163	5309	1	0	1	162	5588	1	0	1	170					
				T2	4957	2	0	2	151	5172	2	0	2	157	5172	2	0	2	157	5118	2	0	2	156	5368	2	0	2	164				
				T3R	5116	3	0	3	156	5339	3	0	3	162	5339	3	0	3	162	5283	3	0	3	161	5561	3	0	3	169				
				T3	5048	2	0	2	154	5268	2	0	2	160	5268	2	0	2	160	5213	2	0	2	159	5487	2	0	2	167				
				T3W	5107	2	0	2	155	5329	2	0	2	162	5329	2	0	2	162	5274	2	0	2	160	5551	2	0	2	169				
				T3LG	5131	2	0	2	156	5354	2	0	2	163	5354	2	0	2	163	5298	2	0	2	161	5577	2	0	2	170				
				T4	5047	3	0	1	154	5267	3	0	1	160	5267	3	0	1	160	5212	3	0	1	159	5486	3	0	1	167				
				T4A	5320	2	0	1	162	5551	2	0	1	169	5551	2	0	1	169	5493	2	0	1	167	5782	2	0	1	176				
				T4LG	5120	2	0	2	156	5343	2	0	2	163	5343	2	0	2	163	5287	2	0	2	161	5566	2	0	2	169				
				T4FT	5196	1	0	2	158	5422	1	0	2	165	5422	1	0	2	165	5366	1	0	2	163	5648	1	0	2	172				
				T5	5113	2	0	1	156	5335	2	0	1	162	5335	2	0	1	162	5280	2	0	1	161	5558	2	0	1	169				
				T5LG	5166	2	0	1	157	5390	2	0	1	164	5390	2	0	1	164	5334	2	0	1	162	5615	2	0	1	171				
				T5W	4911	3	0	1	149	5125	3	0	1	156	5125	3	0	1	156	5072	3	0	1	154	5338	3	0	1	162				
				T5WW	4644	3	0	1	141	4846	3	0	1	147	4846	3	0	1	147	4795	3	0	1	146	5047	3	0	1	154				
				FN	4376	3	0	1	133	4566	3	0	1	139	4566	3	0	1	139	4519	3	0	1	137	4756	3	0	1	145				
				FM	4456	3	0	1	136	4650	3	0	1	141	4650	3	0	1	141	4601	3	0	1	140	4843	3	0	1	147				
				FW	5009	2	0	1	152	5227	2	0	1	159	5227	2	0	1	159	5173	2	0	1	157	5445	2	0	1	166				
				32LD	D	530 mA (50.7W)	T1	7609	2	0	2	150	7940	2	0	2	157	7940	2	0	2	157	7857	2	0	2	155	8271	2	0	2	163	
								T2	7336	3	0	3	145	7655	3	0	3	151	7655	3	0	3	151	7575	3	0	3	149	7974	3	0	3	157
								T3R	7572	3	0	3	149	7902	3	0	3	156	7902	3	0	3	156	7819	3	0	3	154	8231	3	0	3	162
T3	7472	3	0					3	147	7797	3	0	3	154	7797	3	0	3	154	7716	3	0	3	152	8122	3	0	3	160				
T3W	7559	3	0					3	149	7888	3	0	3	156	7888	3	0	3	156	7806	3	0	3	154	8216	3	0	3	162				
T3LG	7593	3	0					3	150	7924	3	0	3	156	7924	3	0	3	156	7841	3	0	3	154	8254	3	0	3	163				
T4	7470	3	0					1	147	7795	3	0	1	154	7795	3	0	1	154	7714	3	0	1	152	8120	3	0	1	160				
T4A	7873	2	0					2	155	8216	2	0	2	162	8216	2	0	2	162	8130	2	0	2	160	8558	2	0	2	169				
T4LG	7578	3	0					3	150	7908	3	0	3	156	7908	3	0	3	156	7826	3	0	3	154	8237	3	0	3	163				
T4FT	7691	1	0					2	152	8025	1	0	2	158	8025	1	0	2	158	7941	1	0	2	157	8359	1	0	2	165				
T5	7568	3	0					1	149	7897	3	0	1	156	7897	3	0	1	156	7814	3	0	1	154	8226	3	0	1	162				
T5LG	7646	3	0					1	151	7978	3	0	1	157	7978	3	0	1	157	7895	3	0	1	156	8311	3	0	1	164				
T5W	7269	3	0					2	143	7585	3	0	2	150	7585	3	0	2	150	7506	3	0	2	148	7901	3	0	2	156				
T5WW	6873	3	0					1	136	7172	3	0	1	141	7172	3	0	1	141	7097	3	0	1	140	7470	3	0	1	147				
FN	6477	3	0					1	128	6758	3	0	1	133	6758	3	0	1	133	6688	3	0	1	132	7040	3	0	1	139				
FM	6595	3	0					1	130	6882	3	0	1	136	6882	3	0	1	136	6810	3	0	1	134	7168	3	0	1	141				
FW	7414	2	0					1	146	7736	2	0	1	153	7736	2	0	1	153	7656	2	0	1	151	8059	2	0	1	159				
32LD	D	700 mA (67.9W)	T1					9863	2	0	2	145	10292	2	0	2	151	10292	2	0	2	151	10184	2	0	2	150	10720	2	0	2	158	
								T2	9509	3	0	3	140	9922	3	0	3	146	9922	3	0	3	146	9819	3	0	3	145	10336	3	0	3	152
								T3R	9815	3	0	3	144	10242	3	0	3	151	10242	3	0	3	151	10135	3	0	3	149	10699	3	0	3	157
				T3	9685	3	0	3	143	10106	3	0	3	149	10106	3	0	3	149	10001	3	0	3	147	10527	3	0	3	155				
				T3W	9798	3	0	3	144	10224	3	0	3	150	10224	3	0	3	150	10117	3	0	3	149	10650	3	0	3	157				
				T3LG	9842	3	0	3	145	10270	3	0	3	151	10270	3	0	3	151	10163	3	0	3	150	10698	3	0	3	157				
				T4	9683	3	0	2	143	10104	3	0	2	149	10104	3	0	2	149	9998	3	0	2	147	10525	3	0	2	155				
				T4A	10205	3	0	2	150	10649	3	0	2	157	10649	3	0	2	157	10538	3	0	2	155	11093	3	0	2	163				
				T4LG	9823	3	0	3	145	10250	3	0	3	151	10250	3	0	3	151	10143	3	0	3	149	10677	3	0	3	157				
				T4FT	9968	2	0	3	147	10402	2	0	3	153	10402	2	0	3	153	10293	2	0	3	152	10835	2	0	3	159				
				T5	9809	3	0	2	144	10236	3	0	2	151	10236	3	0	2	151	10129	3	0	2	149	10662	3	0	2	157				
				T5LG	9910	3	0	2	146	10341	3	0	2	152	10341	3	0	2	152	10233	3	0	2	151	10772	3	0	2	159				
				T5W	9422	3	0	2	139	9832	3	0	2	145	9832	3	0	2	145	9729	3	0	2	143	10241	3	0	2	151				
				T5WW	8908	3	0	2	131	9296	3	0	2	137	9296	3	0	2	137	9199	3	0	2	135	9683	3	0	2	143				
				FN	8395	4	0	1	124	8760	4	0	1	129	8760	4	0	1	129	8669	4	0	1	128	9125	4	0	1	134				
				FM	8548	4	0	1	126	8920	4	0	1	131	8920	4	0	1	131	8827	4	0	1	130	9292	4	0	1	137				
				FW	9610	3	0	1	141	10028	3	0	1	148	10028	3	0	1	148	9923	3	0	1	146	10446	3	0	1	154				
				32LD	D	1050 mA (104.8W)	T1	13777	2	0	2	131	14376	2	0	2	137	14376	2	0	2	137	14226	2	0	2	136	14975	2	0	2	143	
								T2	13282	3	0	3	127	13860	3	0	3	132	13860	3	0	3	132	13716	3	0	3	131	14437	3	0	3	138
								T3R	13710	4	0	4	131	14306	4	0	4	137	14306	4	0	4	137	14157	4	0	4	135	14902	4	0	4	142
T3	13528	3	0					3	129	14116	3	0	3	135	14116	3	0	3	135	13969	3	0	3	133	14705	3	0	3	140				
T3W	13686	3	0					3	131	14281	3	0	3	136	14281	3	0	3	136	14132	3	0	3	135	14876	3	0	3	142				
T3LG	13748	3	0					3	131	14346	3	0	3	137	14346	3	0	3	137	14196	3	0	3	135	14944	3	0	3	143				
T4	13525	4	0					2	129	14113	4	0	2	135	14113	4	0	2	135	13966	4	0	2	133	14701	4	0	2	140				
T4A	14255	3	0					3	136	14875	3	0	3	142	14875	3	0	3	142	14720	3	0	3	140	15495	3	0	3	148				
T4LG	13721	3	0					3	131	14318	3	0	3	137	14318	3	0	3	137	14169	3	0	3	135	14914	3	0	3	142				
T4FT	13924	2	0					3	133	14529	2	0	3	139	14529	2	0	3	139	14378	2	0	3	137	15135	2	0	3	144				
T5	13702	3																															

VBL-1 LED SPECIFICATIONS / Forward Optics																															
Led Count	CONFIG	Current & Watts	Distribution Type	70CRI																											
				27K				30K				35K				40K				50K											
				Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW								
64LD	D	350 mA (85.7W)	T1	10074	2	0	2	153	10512	2	0	2	160	10512	2	0	2	160	10402	2	0	2	158	10950	2	0	2	167			
			T2	9712	3	0	3	148	10135	3	0	3	154	10135	3	0	3	154	10029	3	0	3	153	10557	3	0	3	161			
			T3R	10025	3	0	3	153	10461	3	0	3	159	10461	3	0	3	159	10352	3	0	3	157	10897	3	0	3	166			
			T3	9892	3	0	3	150	10322	3	0	3	157	10322	3	0	3	157	10215	3	0	3	155	10752	3	0	3	164			
			T3W	10008	3	0	3	152	10443	3	0	3	159	10443	3	0	3	159	10334	3	0	3	157	10878	3	0	3	165			
			T3LG	10053	3	0	3	153	10490	3	0	3	160	10490	3	0	3	160	10391	3	0	3	159	10927	3	0	3	168			
			T4	9890	3	0	2	150	10320	3	0	2	157	10320	3	0	2	157	10212	3	0	2	155	10750	3	0	2	164			
			T4A	10424	3	0	2	159	10877	3	0	2	165	10877	3	0	2	165	10764	3	0	2	164	11330	3	0	2	172			
			T4LG	10033	3	0	3	153	10469	3	0	3	159	10469	3	0	3	159	10360	3	0	3	158	10906	3	0	3	166			
			T4FT	10181	3	0	2	155	10624	3	0	2	162	10624	3	0	2	162	10514	3	0	2	160	11067	3	0	2	168			
			T5	10019	3	0	2	152	10455	3	0	2	159	10455	3	0	2	159	10346	3	0	2	157	10890	3	0	2	166			
			T5LG	10122	3	0	2	154	10562	3	0	2	161	10562	3	0	2	161	10452	3	0	2	159	11002	3	0	2	167			
			T5W	9624	3	0	2	146	10042	3	0	2	153	10042	3	0	2	153	9937	3	0	2	151	10460	3	0	2	159			
			T5WW	9099	3	0	2	138	9495	3	0	2	144	9495	3	0	2	144	9396	3	0	2	143	9990	3	0	2	150			
			FN	8574	4	0	1	130	8947	4	0	1	136	8947	4	0	1	136	8854	4	0	1	135	9320	4	0	1	142			
			FM	8731	4	0	1	133	9111	4	0	1	139	9111	4	0	1	139	9016	4	0	1	137	9490	4	0	1	144			
			FW	9815	3	0	1	149	10242	3	0	1	156	10242	3	0	1	156	10135	3	0	1	154	10669	3	0	1	162			
			64LD	D	530 mA (101.4W)	T1	14910	2	0	2	147	15558	3	0	2	153	15558	3	0	2	153	15396	3	0	2	152	16206	3	0	2	160
						T2	14375	3	0	3	142	15000	3	0	3	148	15000	3	0	3	148	14844	3	0	3	146	15625	3	0	3	154
						T3R	14838	4	0	4	146	15483	4	0	4	153	15483	4	0	4	153	15322	4	0	4	151	16128	4	0	4	159
T3	14641	3				0	3	144	15277	3	0	3	151	15277	3	0	3	151	15118	3	0	3	149	15914	3	0	3	157			
T3W	14812	4				0	4	146	15456	4	0	4	152	15456	4	0	4	152	15295	4	0	4	151	16100	4	0	4	159			
T3LG	14879	3				0	3	147	15526	3	0	3	153	15526	3	0	3	153	15364	3	0	3	152	16173	3	0	3	160			
T4	14637	4				0	2	144	15274	4	0	2	151	15274	4	0	2	151	15115	4	0	2	149	15910	4	0	2	157			
T4A	15427	3				0	3	152	16098	3	0	3	159	16098	3	0	3	159	15931	3	0	3	157	16769	3	0	3	165			
T4LG	14850	3				0	3	146	15495	3	0	3	153	15495	3	0	3	153	15334	3	0	3	151	16141	3	0	3	159			
T4FT	15069	4				0	3	149	15724	4	0	3	155	15724	4	0	3	155	15561	4	0	3	153	16379	4	0	3	162			
T5	14828	4				0	2	146	15473	4	0	2	153	15473	4	0	2	153	15312	4	0	2	151	16118	4	0	2	159			
T5LG	14981	4				0	2	148	15633	4	0	2	154	15633	4	0	2	154	15470	4	0	2	153	16284	4	0	2	161			
T5W	14243	4				0	3	141	14863	4	0	3	147	14863	4	0	3	147	14708	4	0	3	145	15482	4	0	3	153			
T5WW	13467	4				0	2	133	14052	4	0	2	139	14052	4	0	2	139	13906	4	0	2	137	14638	4	0	2	144			
FN	12691	4				0	2	125	13242	4	0	2	131	13242	4	0	2	131	13104	4	0	2	129	13794	4	0	2	136			
FM	12923	4				0	2	127	13484	4	0	2	133	13484	4	0	2	133	13344	4	0	2	132	14046	4	0	2	139			
FW	14527	3				0	2	143	15159	4	0	2	150	15159	4	0	2	150	15001	3	0	2	148	15791	4	0	2	156			
64LD	D	700 mA (135.9W)				T1	19325	3	0	3	142	20166	3	0	3	148	20166	3	0	3	148	19956	3	0	3	147	21006	3	0	3	155
						T2	18632	4	0	4	137	19442	4	0	4	143	19442	4	0	4	143	19240	4	0	4	142	20252	4	0	4	149
						T3R	19232	4	0	4	142	20069	4	0	4	148	20069	4	0	4	148	19860	4	0	4	146	20905	4	0	4	154
			T3	18977	4	0	4	140	19802	4	0	4	146	19802	4	0	4	146	19596	4	0	4	144	20627	4	0	4	152			
			T3W	19198	4	0	4	141	20033	4	0	4	147	20033	4	0	4	147	19825	4	0	4	146	20888	4	0	4	154			
			T3LG	19286	4	0	4	142	20124	4	0	4	148	20124	4	0	4	148	19914	4	0	4	147	20963	4	0	4	154			
			T4	18973	4	0	3	140	19797	4	0	3	146	19797	4	0	3	146	19591	4	0	3	144	20622	4	0	3	152			
			T4A	19997	4	0	3	147	20866	4	0	3	154	20866	4	0	3	154	20649	4	0	3	152	21736	4	0	3	160			
			T4LG	19248	4	0	4	142	20085	4	0	4	148	20085	4	0	4	148	19875	4	0	4	146	20921	4	0	4	154			
			T4FT	19532	4	0	3	144	20381	4	0	3	150	20381	4	0	3	150	20169	4	0	3	148	21231	4	0	3	156			
			T5	19220	4	0	2	141	20056	4	0	2	148	20056	4	0	2	148	19847	4	0	2	146	20892	4	0	2	154			
			T5LG	19418	4	0	3	143	20263	4	0	3	149	20263	4	0	3	149	20052	4	0	3	148	21107	4	0	3	155			
			T5W	18482	4	0	3	136	19265	4	0	3	142	19265	4	0	3	142	19064	4	0	3	140	20067	4	0	3	148			
			T5WW	17456	4	0	3	128	18214	4	0	3	134	18214	4	0	3	134	18025	4	0	3	133	18973	4	0	3	140			
			FN	16449	5	0	2	121	17164	5	0	2	126	17164	5	0	2	126	16986	5	0	2	125	17880	5	0	2	132			
			FM	16750	5	0	2	123	17478	5	0	2	129	17478	5	0	2	129	17296	5	0	2	127	18206	5	0	2	134			
			FW	18830	4	0	2	139	19649	4	0	2	145	19649	4	0	2	145	19444	4	0	2	143	20467	4	0	2	151			
			64LD	D	1050 mA (209.6W)	T1	26994	3	0	3	129	28168	3	0	3	134	28168	3	0	3	134	27875	3	0	3	133	29342	3	0	3	140
						T2	26026	4	0	4	124	27158	4	0	4	130	27158	4	0	4	130	26875	4	0	4	128	28289	4	0	4	135
						T3R	26864	5	0	5	128	28032	5	0	5	134	28032	5	0	5	134										

VBL-1 LED SPECIFICATIONS / Forward Optics																															
Lumens	B	U	G	LPW	27K				30K				70CRI				40K				50K										
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW		
96LD	D	350 mA (86.6W)	T1	13993	2	0	2	142	14601	2	0	2	148	14601	2	0	2	148	14449	2	0	2	147	15210	2	0	2	154			
			T2	13491	3	0	3	137	14078	3	0	3	143	14078	3	0	3	143	13931	3	0	3	141	14664	3	0	3	149			
			T3R	13926	4	0	4	141	14531	4	0	4	147	14531	4	0	4	147	14380	4	0	4	146	15136	4	0	4	154			
			T3	13741	3	0	3	139	14338	3	0	3	145	14338	3	0	3	145	14189	3	0	3	144	14936	3	0	3	151			
			T3W	13901	3	0	3	141	14505	4	0	4	147	14505	4	0	4	147	14354	3	0	3	146	15110	4	0	4	153			
			T3LG	13964	3	0	3	142	14571	3	0	3	148	14571	3	0	3	148	14419	3	0	3	146	15178	3	0	3	154			
			T4	13737	4	0	2	139	14335	4	0	2	145	14335	4	0	2	145	14185	4	0	2	144	14932	4	0	2	151			
			T4A	14479	3	0	3	147	15109	3	0	3	153	15109	3	0	3	153	14951	3	0	3	152	15738	3	0	3	160			
			T4LG	13937	3	0	3	141	14543	3	0	3	147	14543	3	0	3	147	14391	3	0	3	146	15148	3	0	3	154			
			T4FT	14143	4	0	3	143	14758	4	0	3	150	14758	4	0	3	150	14604	4	0	3	148	15372	4	0	3	156			
			T5	13917	4	0	2	141	14522	4	0	2	147	14522	4	0	2	147	14371	4	0	2	146	15127	4	0	2	153			
			T5LG	14060	3	0	2	143	14672	4	0	2	149	14672	4	0	2	149	14519	4	0	2	147	15283	4	0	2	155			
			T5W	13368	4	0	2	136	13949	4	0	3	141	13949	4	0	3	141	13804	4	0	2	140	14530	4	0	3	147			
			T5WW	12639	4	0	2	128	13188	4	0	2	134	13188	4	0	2	134	13051	4	0	2	132	13738	4	0	2	139			
			FN	11910	4	0	2	121	12428	4	0	2	126	12428	4	0	2	126	12299	4	0	2	125	12946	4	0	2	131			
			FM	12128	4	0	2	123	12655	4	0	2	128	12655	4	0	2	128	12524	4	0	2	127	13183	4	0	2	134			
			FW	13634	3	0	2	138	14227	3	0	2	144	14227	3	0	2	144	14079	3	0	2	143	14820	3	0	2	150			
			96LD	D	530 mA (152.1W)	T1	20710	3	0	3	136	21611	3	0	3	142	21611	3	0	3	142	21386	3	0	3	141	22511	3	0	3	148
						T2	19967	4	0	4	131	20835	4	0	4	137	20835	4	0	4	137	20618	4	0	4	136	21704	4	0	4	143
						T3R	20610	4	0	4	138	21507	4	0	4	141	21507	4	0	4	141	21283	4	0	4	140	22403	4	0	4	147
T3	20337	4				0	4	134	21221	4	0	4	140	21221	4	0	4	140	21000	4	0	4	138	22105	4	0	4	145			
T3W	20574	4				0	4	135	21469	4	0	4	141	21469	4	0	4	141	21245	4	0	4	140	22363	4	0	4	147			
T3LG	20668	4				0	4	136	21566	4	0	4	142	21566	4	0	4	142	21341	4	0	4	140	22465	4	0	4	148			
T4	20332	4				0	3	134	21216	4	0	3	140	21216	4	0	3	140	20995	4	0	3	138	22100	4	0	3	145			
T4A	21430	4				0	3	141	22361	4	0	3	147	22361	4	0	3	147	22128	4	0	3	146	23293	4	0	3	153			
T4LG	20627	4				0	4	136	21524	4	0	4	142	21524	4	0	4	142	21299	4	0	4	140	22420	4	0	4	147			
T4FT	20932	4				0	3	138	21842	5	0	3	144	21842	5	0	3	144	21614	5	0	3	142	22752	5	0	3	150			
T5	20598	4				0	2	135	21493	4	0	3	141	21493	4	0	3	141	21269	4	0	2	140	22389	4	0	3	147			
T5LG	20810	4				0	3	137	21715	4	0	3	143	21715	4	0	3	143	21488	4	0	3	141	22619	4	0	3	149			
T5W	19785	4				0	3	130	20645	4	0	3	136	20645	4	0	3	136	20430	4	0	3	134	21505	4	0	3	141			
T5WW	18706	4				0	3	123	19520	4	0	3	128	19520	4	0	3	128	19316	4	0	3	127	20333	5	0	3	134			
FN	17628	5				0	2	116	18394	5	0	2	121	18394	5	0	2	121	18203	5	0	2	120	19161	5	0	3	126			
FM	17950	5				0	2	118	18731	5	0	2	123	18731	5	0	2	123	18535	5	0	2	122	19511	5	0	2	128			
FW	20179	4				0	2	133	21057	4	0	2	138	21057	4	0	2	138	20837	4	0	2	137	21934	4	0	2	144			
96LD	D	700 mA (203.8W)				T1	26844	3	0	3	132	28011	3	0	3	137	28011	3	0	3	137	27719	3	0	3	136	29178	3	0	3	143
						T2	25881	4	0	4	127	27006	4	0	4	132	27006	4	0	4	132	26725	4	0	4	131	28132	4	0	4	138
						T3R	26715	5	0	5	131	27876	5	0	5	137	27876	5	0	5	137	27586	5	0	5	135	29038	5	0	5	142
			T3	26360	4	0	4	129	27506	4	0	4	135	27506	4	0	4	135	27220	4	0	4	134	28653	4	0	4	141			
			T3W	26668	4	0	4	131	27827	4	0	4	137	27827	4	0	4	137	27537	4	0	4	135	28987	5	0	5	142			
			T3LG	26789	4	0	4	131	27954	4	0	4	137	27954	4	0	4	137	27662	4	0	4	136	29118	4	0	4	143			
			T4	26354	5	0	3	129	27500	5	0	3	135	27500	5	0	3	135	27213	5	0	3	134	28646	5	0	3	141			
			T4A	27777	4	0	3	136	28994	5	0	4	142	28994	5	0	4	142	28682	4	0	4	141	30192	5	0	4	148			
			T4LG	26736	4	0	4	131	27899	4	0	4	137	27899	4	0	4	137	27608	4	0	4	135	29061	4	0	4	143			
			T4FT	27131	5	0	3	133	28311	5	0	3	139	28311	5	0	3	139	28016	5	0	3	137	29491	5	0	3	145			
			T5	26698	4	0	3	131	27859	5	0	3	137	27859	5	0	3	137	27569	5	0	3	135	29020	5	0	3	142			
			T5LG	26973	4	0	3	132	28146	4	0	3	138	28146	4	0	3	138	27853	4	0	3	137	29319	5	0	3	144			
			T5W	25645	5	0	3	126	26760	5	0	3	131	26760	5	0	3	131	26481	5	0	3	130	27875	5	0	3	137			
			T5WW	24247	5	0	3	119	25301	5	0	3	124	25301	5	0	3	124	25037	5	0	3	123	26355	5	0	3	129			
			FN	22849	5	0	3	112	23842	5	0	3	117	23842	5	0	3	117	23594	5	0	3	116	24836	5	0	3	122			
			FM	23266	5	0	3	114	24278	5	0	3	119	24278	5	0	3	119	24025	5	0	3	118	25290	5	0	3	124			
			FW	26156	5	0	2	128	27293	5	0	2	134	27293	5	0	2	134	27009	5	0	2	133	28430	5	0	3	139			
			96LD	D	1050 mA (314.4W)	T1	37497	4	0	4	119	39127	4	0	4	124	39127	4	0	4	124	38719	4	0	4	123	40757	4	0	4	130
						T2	36152	5	0	5	115	37723	5	0	5	120	37723	5	0	5	120	37330	5	0	5	119	39295	5	0	5	125
						T3R	37316	5	0	5	119	38938	5	0																	