SUN VALLEY LIGHTING & U.S. ARCHITECTURAL LIGHTING

PROJECT NAME:

PROJECT TYPE:

VLED AREA & ROADWAY LIGHTING

DEZINER SERIES 10

Large Neoclassical, Domed Bell Luminaire

Features
The NEW Dezīner Series is a flexible, configurable pedestrian scale decorative pendant luminaire with an 10" diameter upper housing of 0.125" thick formed aluminum with a large assortment of spun aluminum shades and ornamental options. Each lower housing is comprised of a 0.080" thick spun aluminum reflector with an integrated LED module seat, thermal management for long LED life and a thermally isolated solid state power supply chamber. Trulevel ™ ball coupling.

VLED™ Optics
Emitters (LED's) are arrayed on a metal core PCB panel with each emitter located on a copper thermal transfer pad and enclosed by an LED refractor. LED optics completely seal each individual emitter to meet an IP66 rating. In asymmetric distributions, a micro-reflector inside the refractor re-directs the house side emitter output towards the street side and functions as a house side shielding element. Refractors are injection molded H12 acrylic. Each LED refractor is sealed to the PCB over an emitter and all refractors are retained by an aluminum frame. Any one Panel, or group of Panels in a luminaire, have the same optical pattern. LED refractors produce standard site/area distributions. All optics are U0, Zero Uplight and are Dark Sky compliant. Panels are field replaceable and field rotatable in 90° increments.

LED Emitters
High Power White LED's are driven between 350mA and 875mA for a maximum output of 2.5 Watts nominal. LED's are available in standard Warm White (2700K & 3000K), Neutral White (4000K), or Cool White (5000K). All Standard LED's have a minimum of 70 CRI. Consult Factory for other LED options. Lumen Maintenance of L93 at 100,000 hours (TM-21 calculated at 6x Test Time) for all LED options.

True Amber LED's TRA-True Amber LED's emit light in the amber spectral bandwidth centered on 585-590nm. True Amber has negligible blue light and is suitable for wildlife.

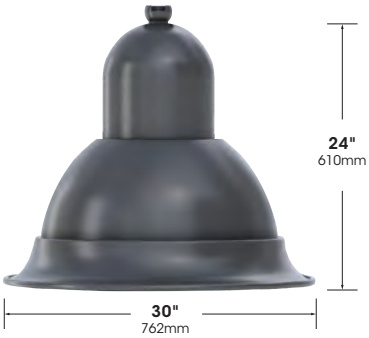
LED Driver
Constant current electronic with a power factor of >.90 and a minimum operating temperature of -40°F/-40°C. Driver(s) is/are UL and cUL recognized and mounted directly against the Electrical Housing to facilitate thermal transfer, held down by universal clamps to facilitate easy removal. In-line terminal blocks facilitate wiring between the driver and optical arrays. Drivers accept an input of 120-277V (UNV), 50/60Hz or 347V & 480V, 50,60Hz. 0 - 10V dimmable driver is standard. Driver has a minimum of 3KV internal surge protection. Luminaire supplied with 20KV surge protector for field accessible installation.)

Finish
Super TGIC polyester powder coating is applied onto a metal substrate this has been pretreated with a four-stage process for maximum adhesion and color retention. The top coat is baked at 400° F for maximum hardness and exterior durability.

DS10A
Angled

DS10C
Concave/Flared

DS10D
Deep Bell



DS10S
Skirted

DS10T
Tiered

The largest models within the Dezīner Series, offer 5 customizable styles available with unlit Bands.

U.L. Listed for Wet Location

2023163

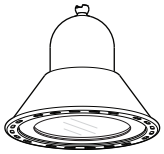
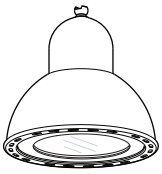
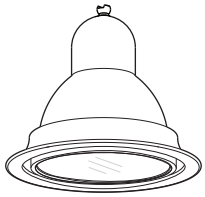
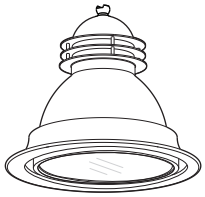
U.S. Pole Company Inc
An Employee Owned Company
660 West Avenue O, Palmdale, CA 93551
Phone (661) 233-2000 www.usaltg.com

MADE IN THE USA

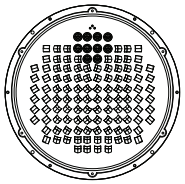
DEZĪNER SERIES 10 - VLED LARGE

PRODUCT CONFIGURATIONS

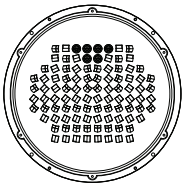
EPA & WEIGHT

Base Model	w/ unlit Bands
	
DS10A Max Weight = 31 lbs Max EPA = 1.33 120 LED Max	**DS10AB** Max Weight = 33 lbs Max EPA = 1.34 120 LED Max
	
DS10C Max Weight = 31 lbs Max EPA = 1.27 120 LED Max	**DS10CB** Max Weight = 33 lbs Max EPA = 1.28 120 LED Max
	
DS10D Max Weight = 33 lbs Max EPA = 1.68 120 LED Max	**DS10DB** Max Weight = 35 lbs Max EPA = 1.69 120 LED Max
	
DS10S Max Weight = 35 lbs Max EPA = 1.72 120 LED Max	**DS10SB** Max Weight = 37 lbs Max EPA = 1.73 120 LED Max
	
DS10T Max Weight = 29 lbs Max EPA = 1.38 120 LED Max	**DS10TB** Max Weight = 31 lbs Max EPA = 1.39 120 LED Max

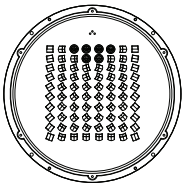
VLED™ MODULES



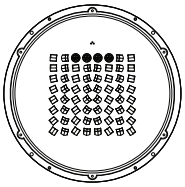
120 LED Module



100 LED Module



80 LED Module



64 LED Module

SUN VALLEY LIGHTING & U.S. ARCHITECTURAL LIGHTING

DEZINER SERIES 10 - VLED LARGE

ORDERING INFORMATION

Spec/Order Example: DS10AB/VLED-IV-FT/120LED-350mA/50K/480/3-90/RUST/HLSW

Luminaire	Shade	Optics	# of LEDs / Drive Current / Color Temp - CCT	Voltage
Luminaire	**Shade**	**Optics**	**LED**	**Voltage**

Luminaire

- ☐ **DS10**

Shade

- ☐ Angled — **A**
- ☐ Angled w/ unlit Bands — **AB**
- ☐ Concave/Flared — **C**
- ☐ Concave/Flared w/ unlit Bands — **CB**
- ☐ Deep Bell — **D**
- ☐ Deep Bell w/ unlit Bands — **DB**
- ☐ Hooded — **H**
- ☐ Hooded w/ unlit Bands — **HB**
- ☐ Skirted — **S**
- ☐ Skirted w/ unlit Bands — **SB**
- ☐ Tiered — **T**
- ☐ Tiered w/ unlit Bands — **TB**

Optics

VLED™ Distribution Type

- ☐ **VLED-II**
- ☐ **VLED-III**
- ☐ **VLED-IV**
- ☐ **VLED-V-SQ**

LED

# of LEDs	Drive Current	Color Temp - CCT
☐ **120LED**	☐ **700mA**[1]	☐ **27K** (2700K)
☐ **100LED**	☐ **525mA**	☐ **30K** (3000K)
☐ **80LED**	☐ **350mA**	☐ **40K** (4000K)
☐ **64LED**		☐ **50K** (5000K)
		☐ **TRA**[2] True Amber

NOTES:

1 - 700mA drive current available in 80LED & 64LED only

2 - TRA available in 350mA & 525mA Drive Currents only

Consult factory for other CCT, CRI, & Drive Current options

Voltage

- ☐ **UNV** (120-277)
- ☐ **347**
- ☐ **480**

Mounting	Finish	Options
Mounting	**Finish**	**Options**

Mounting

Arm Mount

- ☐ **1**
- ☐ **2-180**
- ☐ **2-90**
- ☐ **3-90**
- ☐ **3-120**
- ☐ **4-90**

Wall Mount

- ☐ **WM**

WM - Wall Mount provided with mounting bracket and cover.

Pendant Mount

- ☐ Cable Clamp J-Box — **CCB**
- ☐ Cross Cable Clamp J-Box — **CCC**

Finish

Standard Textured Finish

- ☐ Black — **RAL-9005-T**
- ☐ White — **RAL-9003-T**
- ☐ Grey — **RAL-7004-T**
- ☐ Dark Bronze — **RAL-8019-T**
- ☐ Green — **RAL-6005-T**

Premium Finishes

- ☐ Rust
- ☐ Patina Copper — **PC**

For smooth finish replace suffix "T" with suffix "S" (Example: RAL-9500-S)

Consult factor for custom colors

Options

- ☐ Internal House Side Shield incl. LED Count (Example: HS-VLED/48) — **HS-VLED**
- ☐ Twist Lock Receptable Only — **TPR**
- ☐ 7-Pin Twist Lock Receptable Only — **TPR7**
- ☐ High-Low Dimming for Switch by Others/Select Levels 50/100 or 25/100 (Example: HLSW/25) — **HLSW**
- ☐ Twist Lock Photocell + Voltage (Example: TPC347V) — **TPC+V**
- ☐ Photocell + Voltage (Example: PC120V) — **PC+V**
- ☐ Single Fuse (Example: DF277V) — **SF+V**
- ☐ Double Fuse (Example: DF240V) — **DF+V**
- ☐ Blue-Tooth Programmable Photo/Motion Sensor (Factory - Motion 50/100; Photo 75fc) — **MS-F311**

DEZĪNER SERIES 10 - VLED LARGE

SAMPLE ASSEMBLIES

A. RTA 2574-188/XPS/DS10S/LED/ACCESSORIES/FINISH

B. 7500/1058C/XPJ-2/DS10TB/LED/ACCESSORIES/FINISH

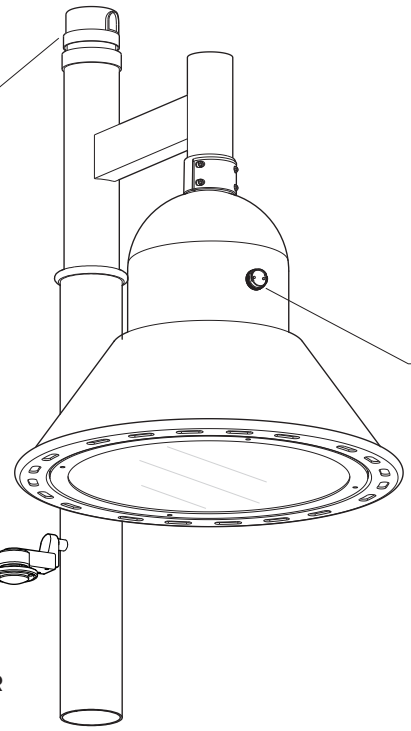
C. 3600SB/TFS 2564/XBC/DS10D/LED/ACCESSORIES/FINISH

D. 4200/1040-17'/ XPC-2/DS10C/LED/ACCESSORIES/FINISH

E. WM-XWB/DS10AB/LED/ACCESSORIES/FINISH

Sample Assemblies show a small offering of the Sun Valley Line of Poles, Bases, Shafts, Arms, & Luminaires. Please visit usaltg.com for the full product offering.

OPTIONS



Optional: PHOTOCELL SENSOR (TPC+V),
3-PIN RECEPTACLE (TPR) or
7-PIN RECEPTACLE (TPR7)
TPR = TWIST LOCK PHOTOCELL RECEPTACLE

MINI BUTTON PHOTOCELL (PC+V)

POLE MOUNTED
MFS-311BLUETOOTH
PHOTO/MOTION SENSOR

Factory Settings:
No Motion - 50%
Motion - 100%
Delay - 15 min.
Photocell - 75fc

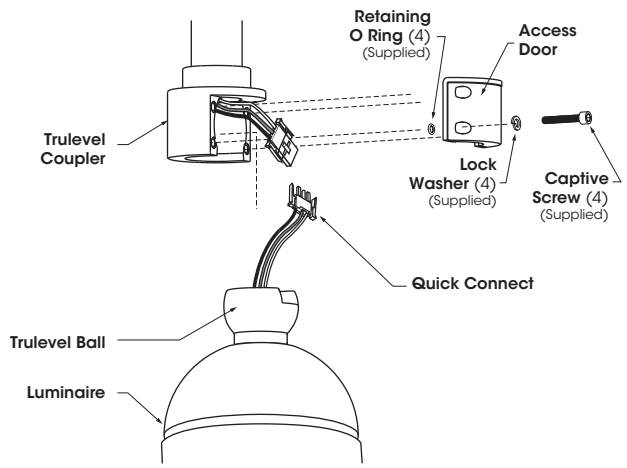
Sensors can be Field Programmed With Bluetooth App

High Low Dimming For Switches (HLSW)
The HLSW is a Small Electronic Switch which Provides High Low Dimming Control Through the LED Driver's 0-10V Control. Switching is Done by Adding a Seconday AC Switched Hot Trigger Line to the HLSW in Addition to the Normal AC Power Line. When the Secondary Trigger Line is Powered, the Fixture will go to 100% Dimming. With no Power to the Trigger, the Fixture will operate at 50% or 25% Dimming. Switches for the Trigger Line can be a Normal AC Switch/Breaker or Timed Switch/Breaker.

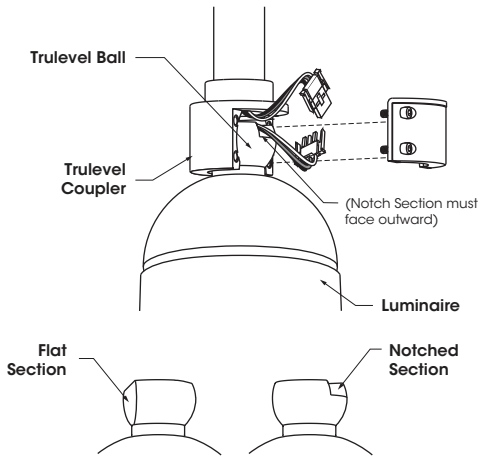
Wireless and Other Fixture Controls
Contact Factory for Wireless and Other Fixture Controls and Recomendations. Most Controls Can be Integrated and Factory Installed.

INSTALLATION DETAIL

Trulevel System® Assembly



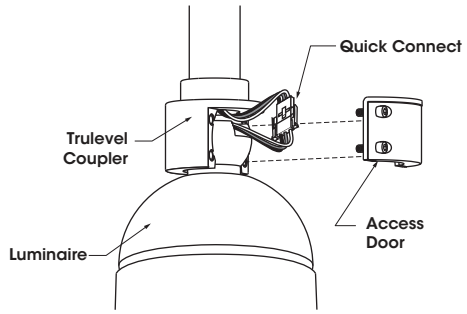
1. Loosen (4) Captive Screws and remove Access Door from Trulevel Coupler, pull out Quick Connect from Trulevel Coupler and Trulevel Ball.



2. Place Trulevel Ball inside of Trulevel Coupler as illustrated.

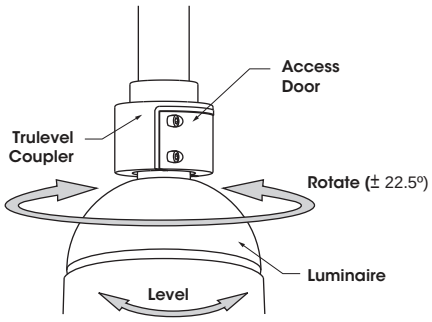
   A - Notched Section of Trulevel Ball must face outward as illustrated.

   B - Flat Section of Trulevel Ball must face inward.



3. Connect Quick Connect components, push components inside of Trulevel Coupler cavity, replace Access Door and loosely secure, do not tighten.

   Fixture will suspend without Access Door during installation.



4. Rotate (left to right ± 22.5°) and level Luminaire to desired position. Tighten Access Door.

   (Tighten each bolt to recommended torque: **10 ft-lb, foot-pound**)

   Trulevel Pendant Mount is intended to allow for fixture leveling, but is not intended to be "free-swinging" upon proper installation.

ELECTRICAL DATA GUIDE - AMPERAGE CHART

# of LEDs	mA	System Watts	120V	208V	277V	347V	480V
64	350	71.0	0.59	0.34	0.26	0.20	0.15
64	525	103.0	0.86	0.50	0.37	0.30	0.21
64	700	140.0	1.17	0.67	0.51	0.40	0.29
80	350	87.0	0.73	0.42	0.31	0.25	0.18
80	525	130.0	1.08	0.63	0.47	0.37	0.27
80	700	173.0	1.44	0.83	0.62	0.50	0.36
100	350	108.0	0.90	0.52	0.39	0.31	0.23
100	525	160.0	1.33	0.77	0.58	0.46	0.33
120	350	129.0	1.08	0.62	0.47	0.37	0.27
120	525	192.0	1.60	0.92	0.69	0.55	0.40

ELECTRICAL DATA GUIDE - LM-80 LUMEN MAINTENANCE

LED LUMEN MAINTENANCE		
LED Life / Operating Hours	Lumen Depreciation	Lumen Depreciation Scale Factor
60,000	L96	0.96x
100,000 (6X LED Test Hrs)	L93	0.93x
150,000 (Theoretical)	L89	0.90x
200,000 (Theoretical)	L86	0.87x

TM-21 6x Test Time Dicatates that L93 > 100,000 Hours.

Lumen Depreciation Calculations Done in Accordance With IESNA TM-21 & LM-80 (25°C Ambient)

SUN VALLEY LIGHTING & U.S. ARCHITECTURAL LIGHTING

DEZINER SERIES 10 - VLED LARGE

PHOTOMETRIC DATA GUIDE - LUMEN TABLES

DS10-VLED

LED Count	Drive Current (mA)	System Watts	Dist'n Type	27K (2700K - 70CRI)			30K (3000K - 70CRI)			40K (4000K - 70CRI)			50K (5000K - 70CRI)			System Watts	TRA (590nm)		
				LUMENS	LPW	BUG RATING	LUMENS	LPW	BUG RATING	LUMENS	LPW	BUG RATING	LUMENS	LPW	BUG RATING		LUMENS	LPW	BUG RATING
64	350	71.0	II	7315	103	B2-U0-G2	7896	111	B2-U0-G2	8312	117	B2-U0-G2	8727	123	B2-U0-G2	54.7	2494	46	B1-U0-G1
			III	7238	102	B1-U0-G2	7813	110	B1-U0-G2	8225	116	B1-U0-G2	8636	122	B2-U0-G2		2468	45	B1-U0-G1
			IV	7338	103	B1-U0-G2	7921	112	B1-U0-G2	8338	117	B1-U0-G2	8755	123	B2-U0-G2		2502	46	B1-U0-G1
			VSQ	7696	108	B3-U0-G1	8308	117	B3-U0-G1	8745	123	B3-U0-G1	9182	129	B3-U0-G1		2624	48	B1-U0-G1
			II-HS	5476	77	B1-U0-G2	5911	83	B1-U0-G2	6223	88	B1-U0-G2	6534	92	B1-U0-G2		1867	34	B1-U0-G1
			III-HS	5425	76	B1-U0-G2	5856	82	B1-U0-G2	6165	87	B1-U0-G2	6473	91	B1-U0-G2		1850	34	B0-U0-G1
			IV-HS	5617	79	B1-U0-G2	6064	85	B1-U0-G2	6383	90	B1-U0-G2	6702	94	B1-U0-G2		1915	35	B0-U0-G1
64	525	103.0	II	10075	98	B2-U0-G2	10877	106	B2-U0-G2	11449	111	B2-U0-G2	12021	117	B2-U0-G2	79.3	3206	40	B1-U0-G1
			III	9966	97	B2-U0-G2	10759	104	B2-U0-G2	11325	110	B2-U0-G2	11891	115	B2-U0-G3		3171	40	B1-U0-G1
			IV	10104	98	B2-U0-G2	10907	106	B2-U0-G2	11481	111	B2-U0-G2	12055	117	B2-U0-G3		3215	41	B1-U0-G1
			VSQ	10597	103	B3-U0-G2	11440	111	B3-U0-G2	12042	117	B3-U0-G2	12644	123	B3-U0-G2		3372	43	B2-U0-G1
			II-HS	7541	73	B2-U0-G2	8141	79	B2-U0-G2	8569	83	B2-U0-G2	8998	87	B2-U0-G2		2399	30	B1-U0-G1
			III-HS	7469	73	B1-U0-G2	8063	78	B1-U0-G2	8488	82	B1-U0-G2	8912	87	B1-U0-G2		2377	30	B1-U0-G1
			IV-HS	7734	75	B1-U0-G2	8349	81	B1-U0-G2	8789	85	B1-U0-G2	9228	90	B1-U0-G2		2461	31	B0-U0-G1
64	700	140.0	II	11608	83	B2-U0-G2	12531	90	B2-U0-G2	13190	94	B3-U0-G3	13850	99	B3-U0-G3	N/A	N/A		
			III	11663	83	B2-U0-G2	12590	90	B2-U0-G2	13253	95	B2-U0-G3	13915	99	B2-U0-G3				
			IV	11755	84	B2-U0-G2	12690	91	B2-U0-G3	13358	95	B2-U0-G3	14026	100	B2-U0-G3				
			VSQ	12166	87	B4-U0-G2	13133	94	B4-U0-G2	13824	99	B4-U0-G2	14516	104	B4-U0-G2				
			II-HS	7168	51	B2-U0-G2	7738	55	B2-U0-G2	8146	58	B2-U0-G2	8553	61	B2-U0-G2				
			III-HS	7392	53	B1-U0-G2	7979	57	B1-U0-G2	8399	60	B1-U0-G2	8819	63	B1-U0-G2				
			IV-HS	8609	61	B1-U0-G2	9294	66	B1-U0-G2	9783	70	B1-U0-G2	10272	73	B1-U0-G2				
80	350	87.0	II	8605	99	B2-U0-G2	9289	107	B2-U0-G2	9778	112	B2-U0-G2	10267	118	B2-U0-G2	67.0	2934	44	B1-U0-G1
			III	8514	98	B2-U0-G2	9191	106	B2-U0-G2	9675	111	B2-U0-G2	10158	117	B2-U0-G2		2903	43	B1-U0-G1
			IV	8631	99	B1-U0-G2	9317	107	B2-U0-G2	9808	113	B2-U0-G2	10298	118	B2-U0-G2		2943	44	B1-U0-G1
			VSQ	9052	104	B3-U0-G1	9772	112	B3-U0-G2	10286	118	B3-U0-G2	10801	124	B3-U0-G2		3086	46	B2-U0-G1
			II-HS	6442	74	B1-U0-G2	6954	80	B2-U0-G2	7320	84	B2-U0-G2	7686	88	B2-U0-G2		2196	33	B1-U0-G1
			III-HS	6381	73	B1-U0-G2	6889	79	B1-U0-G2	7252	83	B1-U0-G2	7614	88	B1-U0-G2		2176	32	B1-U0-G1
			IV-HS	6606	76	B1-U0-G2	7132	82	B1-U0-G2	7507	86	B1-U0-G2	7882	91	B1-U0-G2		2252	34	B0-U0-G1
80	525	127.0	II	11730	92	B2-U0-G2	12663	100	B2-U0-G2	13330	105	B3-U0-G3	13996	110	B3-U0-G3	97.8	3732	38	B1-U0-G1
			III	11606	91	B2-U0-G2	12529	99	B2-U0-G2	13189	104	B2-U0-G3	13848	109	B2-U0-G3		3693	38	B1-U0-G1
			IV	11766	93	B2-U0-G3	12701	100	B2-U0-G3	13370	105	B2-U0-G3	14038	111	B2-U0-G3		3743	38	B1-U0-G1
			VSQ	12340	97	B3-U0-G2	13322	105	B3-U0-G2	14023	110	B4-U0-G2	14724	116	B4-U0-G2		3926	40	B2-U0-G1
			II-HS	8781	69	B2-U0-G2	9480	75	B2-U0-G2	9979	79	B2-U0-G2	10478	83	B2-U0-G2		2794	29	B1-U0-G1
			III-HS	8699	68	B1-U0-G2	9391	74	B1-U0-G2	9885	78	B2-U0-G2	10379	82	B2-U0-G2		2768	28	B1-U0-G1
			IV-HS	9007	71	B1-U0-G2	9723	77	B1-U0-G2	10235	81	B1-U0-G2	10747	85	B1-U0-G3		2866	29	B0-U0-G1
80	700	173.0	II	14508	84	B3-U0-G3	15662	91	B3-U0-G3	16487	95	B3-U0-G3	17311	100	B3-U0-G3	N/A	N/A		
			III	14579	84	B2-U0-G3	15738	91	B3-U0-G3	16567	96	B3-U0-G3	17395	101	B3-U0-G3				
			IV	14694	85	B2-U0-G3	15863	92	B2-U0-G3	16698	97	B2-U0-G3	17532	101	B3-U0-G3				
			VSQ	15206	88	B4-U0-G2	16416	95	B4-U0-G2	17280	100	B4-U0-G2	18144	105	B4-U0-G2				
			II-HS	8960	52	B2-U0-G2	9673	56	B2-U0-G2	10182	59	B2-U0-G2	10691	62	B2-U0-G2				
			III-HS	9239	53	B1-U0-G2	9974	58	B1-U0-G2	10499	61	B2-U0-G2	11023	64	B2-U0-G2				
			IV-HS	10762	62	B1-U0-G3	11617	67	B1-U0-G3	12229	71	B1-U0-G3	12840	74	B1-U0-G3				
100	350	108.0	II	10363	96	B2-U0-G2	11187	104	B2-U0-G2	11776	109	B2-U0-G2	12365	114	B2-U0-G2	83.2	3533	42	B1-U0-G1
			III	10408	96	B2-U0-G2	11236	104	B2-U0-G2	11827	110	B2-U0-G2	12418	115	B2-U0-G2		3548	43	B1-U0-G1
			IV	10487	97	B2-U0-G2	11320	105	B2-U0-G2	11916	110	B2-U0-G3	12512	116	B2-U0-G3		3575	43	B1-U0-G1
			VSQ	10828	100	B3-U0-G2	11689	108	B3-U0-G2	12304	114	B4-U0-G2	12919	120	B4-U0-G2		3691	44	B2-U0-G1
			II-HS	6644	62	B1-U0-G2	7172	66	B2-U0-G2	7550	70	B2-U0-G2	7927	73	B2-U0-G2		2265	27	B1-U0-G1
			III-HS	6830	63	B1-U0-G2	7373	68	B1-U0-G2	7761	72	B1-U0-G2	8149	75	B1-U0-G2		2329	28	B1-U0-G1
			IV-HS	7853	73	B1-U0-G2	8478	78	B1-U0-G2	8924	83	B1-U0-G2	9370	87	B1-U0-G2		2678	32	B0-U0-G1
100	525	160.0	II	14336	90	B3-U0-G3	15476	97	B3-U0-G3	16291	102	B3-U0-G3	17106	107	B3-U0-G3	123.2	4562	37	B1-U0-G1
			III	14402	90	B2-U0-G3	15547	97	B3-U0-G3	16366	102	B3-U0-G3	17184	107	B3-U0-G3		4583	37	B1-U0-G1
			IV	14509	91	B2-U0-G3	15663	98	B2-U0-G3	16487	103	B2-U0-G3	17312	108	B3-U0-G3		4616	37	B1-U0-G2
			VSQ	14982	94	B4-U0-G2	16174	101	B4-U0-G2	17025	106	B4-U0-G2	17877	112	B4-U0-G2		4767	39	B3-U0-G1
			II-HS	9194	57	B2-U0-G2	9925	62	B2-U0-G2	10447	65	B2-U0-G2	10969	69	B2-U0-G2		2925	24	B1-U0-G1
			III-HS	9451	59	B1-U0-G2	10202	64	B1-U0-G2	10739	67	B2-U0-G2	11276	70	B2-U0-G2		3007	24	B1-U0-G1
			IV-HS	10865	68	B1-U0-G3	11729	73	B1-U0-G3	12346	77	B1-U0-G3	12963	81	B1-U0-G3		3457	28	B1-U0-G1
120	350	129.0	II	12434	96	B2-U0-G2	13423	104	B3-U0-G3	14129	110	B3-U0-G3	14836	115	B3-U0-G3	99.3	4239	43	B1-U0-G1
			III	12490	97	B2-U0-G2	13484	105	B2-U0-G3	14194	110	B2-U0-G3	14903	116	B2-U0-G3		4258	43	B1-U0-G1
			IV	12585	98	B2-U0-G3	13585	105	B2-U0-G3	14301	111	B2-U0-G3	15016	116	B2-U0-G3		4290	43	B1-U0-G2
			VSQ	12994	101	B4-U0-G2	14027	109	B4-U0-G2	14765	114	B4-U0-G2	15503	120	B4-U0-G2		4430	45	B2-U0-G1
			II-HS	7973	62	B2-U0-G2	8607	67	B2-U0-G2	9061	70	B2-U0-G2	9513	74	B2-U0-G2		2718	27	B1-U0-G1
			III-HS	8196	64	B1-U0-G2	8847	69	B1-U0-G2	9313	72	B1-U0-G2	9779	76	B1-U0-G2		2794	28	B1-U0-G1
			IV-HS	9423	73	B1-U0-G2	10172	79	B1-U0-G2	10708	83	B1-U0-G2	11243	87	B1-U0-G3		3213	32	B1-U0-G1
120	525	192.0	II	17203	90	B3-U0-G3	18572	97	B3-U0-G3	19549	102	B3-U0-G4	20527	107	B3-U0-G4	147.8	5474	37	B1-U0-G2
			III	17281	90	B3-U0-G3	18655	97	B3-U0-G3	19637	102	B3-U0-G4	20619	107	B3-U0-G4		5498	37	B1-U0-G2
			IV	17411	91	B3-U0-G3	18796	98	B3-U0-G4	19785	103	B3-U0-G4	20775	108	B3-U0-G4		5540	37	B1-U0-G2
			VSQ	17979	94	B4-U0-G2	19409	101	B4-U0-G2	20430	106	B4-U0-G2	21451	112	B4-U0-G2		5720	39	B3-U0-G1
			II-HS	11030	57	B2-U0-G2	11908	62	B2-U0-G2	12535	65	B2-U0-G3	13161	69	B2-U0-G3		3510	24	B1-U0-G1
			III-HS	11340	59	B2-U0-G2	12242	64	B2-U0-G3	12887	67	B2-U0-G3	13531	70	B2-U0-G3		3608	24	B1-U0-G1
			IV-HS	13037	68	B1-U0-G3	14074	73	B2-U0-G3	14815	77	B2-U0-G3	15555	81	B2-U0-G3		4148	28	B1-U0-G2