

NOTE:
 IF POLES LIGHT FIXTURE HEIGHTS LESS THAN 12' ARE USED WE
 CREATE HOT SPOTS THAT EXCEED THE PARADISE VALLEY
 MAXIMUM OF 1.6 AVERAGE FOOT CANDLE REQUIREMENT FOR
 PARKING LOTS. (REFER TO SECTION 2 OF THE PARADISE
 VALLEY ZONING ORDINANCE, SPECIAL USE PERMIT
 GUIDELINES).
 THE ILLUMINATION ENGINEERING SOCIETY (IES) OF AMERICA
 HAS A 0.3 FOOT CANDLE MINIMUM LEVEL FOR SECURITY AND 0.5
 FOOT CANDLES MINIMUM FOR ADVANCED LEVELS OF SECURITY.
 (REFER TO APPLICATIONS SECTION 26 OF THE IES LIGHTING
 HANDBOOK). THE CURRENT DESIGN FOR THIS PROJECT IS TO
 HAVE 0.3 FOOT CANDLE MINIMUM STANDARD.

Tag	Qty	Arrangement	LLF	Description	Mounting Height Above Finished Grade	Lum. Lumens	Color Temp.
B1	21	SINGLE	1.000	IRSNA LM-63-1995	2'-11"	728	3000 k
SA1	39	SINGLE	1.000	VK-90002-T3-W30	12'	4150	3000 k
SA2	12	BACK-BACK	1.000	VK-90002-T3-W30	12'	4150	3000 k
SB	37	SINGLE	1.000	VK-90002-T4-W30	12'	4221	3000 k
SD	41	SINGLE	1.000	LC6SL 6LCSL14L30K8	SEE PLANS	1490	3000 k
SS	35	SINGLE	1.000	WBLED-30-SO-4-D(PHIL54)	9'	1984	3000 k
L	45	SINGLE	1.000	MM-LED-e72-MFL-12-C	0' - GROUND MOUNTED	176	3000 k

Label	Calc Type	Units	Avg	Max	Min
BLDG A EAST PARKING	Illuminance	Fc	1.27	9.4	0.0
BLDG A SOUTH PARKING	Illuminance	Fc	1.07	8.8	0.0
BLDG B AND C WEST PARKING	Illuminance	Fc	1.59	9.2	0.1
BLDG B SOUTH PARKING	Illuminance	Fc	1.58	8.1	0.1
BLDG B, C, D & E DROP-OFF	Illuminance	Fc	2.20	11.7	0.4
BLDG C EAST EGRESS WALKWAY	Illuminance	Fc	4.80	10.3	1.0
BLDG C NORTH EGRESS WALKWAY	Illuminance	Fc	1.83	3.7	0.7
BLDG D & E SOUTH PARKING	Illuminance	Fc	1.59	11.2	0.0
BLDG D AND E NORTH PARKING	Illuminance	Fc	1.57	12.9	0.0
BLDG D SOUTH EGRESS WALKWAY	Illuminance	Fc	4.84	9.8	1.5
BLDG E EAST & F SOUTH PARKING	Illuminance	Fc	1.58	11.8	0.0
BLDG F NORTH AND EAST PARKING	Illuminance	Fc	1.21	10.8	0.0
PROPERTY LINE	Illuminance	Fc	0.02	0.2	0.0
SOUTHEAST ENTRY	Illuminance	Fc	2.97	13.2	0.3
WEST DRIVE WAY	Illuminance	Fc	1.43	9.9	0.0

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 AZ CORPORATE NUMBER: 10470-0
 EXPIRES 06/30/19

mountain view medical center, LLC
**Mountain View Medical
 Center Redevelopment**
 10555, 10565, 10575, 10585, 10595, 10599 N. Tatum Blvd.,
 Paradise Valley, Arizona 85253

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PROJECT NO. 2018_041
DATE OF ISSUE 04.16.2019

REVISION NO.
 1 09.26.2018
 2 11.01.2018
 3 01.22.2019
 4 02.19.2019
 5 03.19.2019
 6 04.08.2019

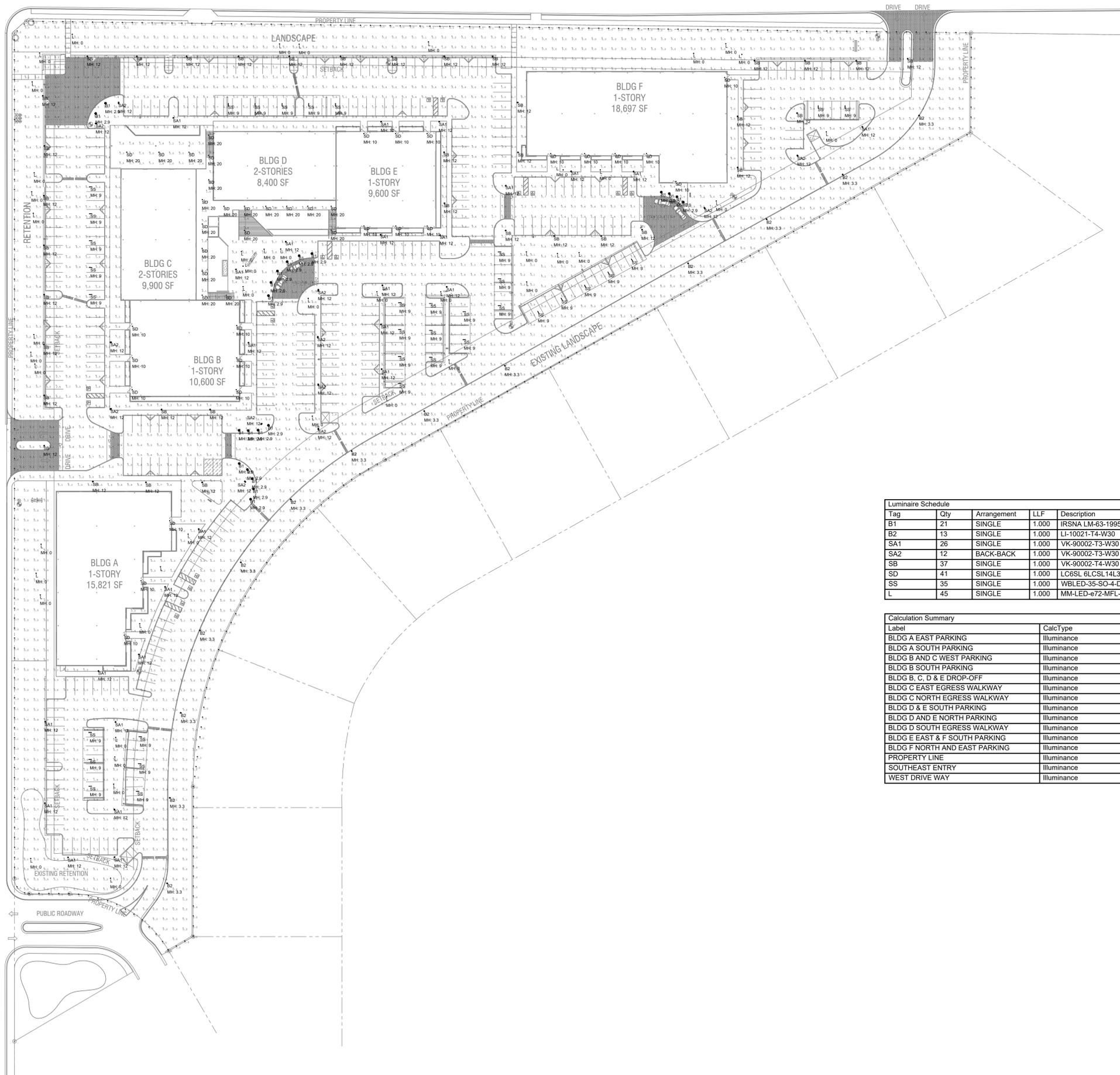
PROJECT TEAM John Cantrell
DRAWN BY BD

PROJECT PHASE SUP major amendment
Review #4

SHEET CONTENTS

photometric site plan
 option #1
 SHEET NO.

E-1.1



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SA1	26	SINGLE	1.000	VK-90002-T3-W30	12'	4150	3000 k
SA2	12	BACK-BACK	1.000	VK-90002-T3-W30	12'	4150	3000 k
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BLDG D & E SOUTH PARKING	illumiance	Fc	1.47	16.9	0.0
BLDG D AND E NORTH PARKING	illumiance	Fc	1.57	12.9	0.0
BLDG D SOUTH EGRESS WALKWAY	illumiance	Fc	4.84	9.8	1.5
BLDG E EAST & F SOUTH PARKING	illumiance	Fc	1.51	11.8	0.0
BLDG F NORTH AND EAST PARKING	illumiance	Fc	1.06	10.8	0.0
PROPERTY LINE	illumiance	Fc	0.02	0.1	0.0
SOUTHEAST ENTRY	illumiance	Fc	2.94	13.2	0.2
WEST DRIVE WAY	illumiance	Fc	1.43	9.9	0.0

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PROJECT TEAM
 John Cantrell
 BD
DRAWN BY
 BD

PROJECT PHASE
 SUP major amendment
 Review #4
SHEET CONTENTS
 photometric site plan
 option #2
SHEET NO.

E-1.2

1 PHOTOMETRIC SITE PLAN - OPTION #2
 1"=40'-0"

DELTA STAR™

PROJECT: _____
TYPE: _____
CATALOG NUMBER: _____
SOURCE: _____
NOTES: _____

CATALOG NUMBER LOGIC

Example: DS - LED - e65 - SP - A7 - BZW - 12 - 11 - A - 360SL

Material
Blank - Aluminum
S - Stainless Steel

Series
DS - Delta Star™

LED - "e" Technology with Integral Dimming Driver (See Specifications for Dimming) (Optional: For use with remote (DIM-CR2) Transmitter. Requires separate Low Voltage Transformer)

LED Type
e65 - 7W/LED/27K
e74 - 7W/LED/Amber

Optics
Narrow Spot (Red Indicator)
SP - Spot (Green Indicator)
MFL - Medium Flood (Yellow Indicator)
WFL - Wide Flood (Blue Indicator)

Adjust-e-Lume® Output Intensity (Choose factory setting)
A9 (Standard), A8, A7, A6, A5, A4, A3, A2, A1

Finish

Aluminum Finish	Brass Finish	Premium Finish
Powder Coat Color Bronze: BZP Black: BLP White Gloss: WWP Aluminum: SAP Veneer: VBR	Stainless Steel Machined: MAC Polished: POL Brushed: BRU	Aluminum AMG: Antique Brass Powder ADM: Antique White BCH: Black Chrome RSH: Brushed Brass SAP: Clear Anodized Powder
Aluminum RMC: Rocky Mountain Granite SDS: Sonoran Desert Sandstone SMG: Sierra Mountain Granite TXF: Textured Forest	Brass HGS: Horizon Green WCP: Weathered Copper	Brass MAG: Magnesium MOP: Mosaic SCP: Silver Copper

Lens Type
12 - Soft Focus Lens
13 - Bezelless Lens

Shielding
11 - Honeycomb Baffle

Cap Style
A - 45°
B - 90°
E - 47° less Weep Hole
F - 90° less Weep Hole

Option
360SL™ - 360° Rotational Knobless Mounting System

DRIVER DATA

Input Volts	Inrush Current	Operating Current	Dimmable	Operation Ambient Temperature
120VAC/DC 50/60Hz	<250mA (non-dimmable)	700mA		-27° to 147° (-30°C - 90°C)

LM79 DATA

BK No.	CCT (Typ)	Input Watts (Typ)	CRF	Minimum Rated Life (hrs.)	Beam Type	Angle	e66	Visual Indicator
e64	2700K	7.0	80	50,000	Narrow Spot	11°	6889	Red Dot
e65	3000K	7.0	80	50,000	Spot	12°	3225	Green Dot
e66	4000K	7.0	80	50,000	Medium Flood	23°	1984	Yellow Dot
e74	Amber (590nm)	7.0	-	50,000	Wide Flood	31°	1300	Blue Dot

L70 DATA

BK No.	CCT (Typ)	Input Watts (Typ)	CRF	70% of Initial Lumens (hrs.)	Beam Type	Angle	e66	Visual Indicator
e64	2700K	7.0	80	50,000	Narrow Spot	11°	6889	Red Dot
e65	3000K	7.0	80	50,000	Spot	12°	3225	Green Dot
e66	4000K	7.0	80	50,000	Medium Flood	23°	1984	Yellow Dot
e74	Amber (590nm)	7.0	-	50,000	Wide Flood	31°	1300	Blue Dot

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1 LUMINAIRE TYPE "L" NTS

LUMINAIRE TYPE "L"

LED bollards with unshielded light

Post construction: Constructed of copper-free extruded and die-cast aluminum. Die-castings are marine grade, copper free (0.3% copper content). A5052 aluminum cap. Bollard secures to base with one stainless steel set screw. The mounting system allows the luminaire to be adjusted independent of anchor bolt orientation.

Finish: All BEGA standard finishes are polyester powder coat with minimum 3 mil thickness. Available in four standard BEGA colors: Black (BLK), White (WH), Bronze (BRZ), Silver (SLV). To specify, add appropriate suffix to catalog number. Custom colors supplied on special order.

CSA certified to U.S. and Canadian standards, suitable for wet locations. Protection class IP65.

Weight: 11.5 lbs.

Luminaire lumens: 728

Type: BEGA
Product: Project
Voltage: Voltage
Color: Color
Options: Modified:

Lamp: A B Anchorage
77743 8.2W LED 0.1% 36° 79117

BEGA-US 1000 BEGA Way, Carpinteria, CA 93013 (805) 684-0533 FAX (805) 566-9474 www.bega-us.com
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2 LUMINAIRE TYPE "B1" NTS

ULI-10021 Light Linear PT 1 Single Head Bollard

Construction
Aluminum: Less than 0.1% copper content - Marine Grade 6061 extruded & LM6 Aluminum High pressure die casting provides excellent mechanical strength, clean detailed product lines and excellent heat dissipation.
Die cast: 8 step degrease and phosphate process that includes anodizing and etching as well as a zinc and nickel phosphate process before powder painting.
Memory Retentive - Silicon Gasket: Provided with special injection molded "fit for purpose" long life high temperature memory retentive silicon gaskets. Maintains the gaskets exact profile and seal over years of use and compression.
Thermal management: LM6 Aluminum is used for its excellent mechanical strength and thermal dissipation properties in low and high ambient temperatures. The superior thermal heat sink design by Ligman used in conjunction with the driver, controls thermal below critical temperature range to ensure maximum luminous flux output, as well as providing long LED service life and ensuring less than 10% lumen depreciation at 50,000 hours.
Surge Suppression: Provided with surge suppressor provided with all fixtures.
BUG Rating: IEC 60598-2-22
Finishing: All Ligman products go through an extensive finishing process that includes lettering to improve paint adherence.
Paint: UV Stabilized 4.5MI thick powder coat paint and baked at 200 Deg C. This process ensures that Ligman products can withstand harsh environments. Rated for use in ratatoriums.
Hardware: Provided Hardware is Marine grade 316 Stainless steel.
Anti Seize Screw Holes: Tapped holes are infused with a special anti-seize compound designed to prevent seizure of threaded connections, due to electrolysis from heat, corrosive atmospheres and moisture.
Crystal Clear Low Iron Glass Lens: Provided with tempered, impact resistant crystal clear low iron glass ensuring no green glass tinge.
Optics & LED: Precise optic design provides exceptional light control and precise distribution of light. LED CRF > 80.
Lumen - Maintenance Life: LM6 1810 at 50,000 hours (This means that at least 90% of the LED still achieve 80% of their original flux).

Area distribution bollard-integrated projectors. Stylish but technically precise area lighting solutions as part of a large flexible family.

Light Linear PT Bollard is a elegant minimalist bollard that is suitable for both modern and classic architecture. Ideal for creating visual guidance with exceptional visual comfort. The dual optical chamber with integrated low sink houses a range of field interchangeable optically controlled LEDs, providing Type II, III, IV & V distribution, as well as variations of the light distribution requirements.
An example of this, is using a combination of Type II and Type IV distribution optics include in 29w and 50w options, as single & double head styles.
Customer specific wattages can be provided, contact the factory for more information.
This luminaire complies to Data Sky requirements. Bollards can be provided with GFC boxes positioned to specific heights specified by the customer.
Internal house side options are available as an option.

Optional Security Bollard:
The Light Linear Bollard is available as a traffic rated traffic bollard.
This security bollard provides restraint of vehicular traffic in unauthorized areas.
Impact calculations show this bollard will stop a 5,500lb/2.75 tons vehicle, travelling at 30mph.
For additional strength, the advanced pole can be filled with concrete up to the waterproof driver housing to provide a solid concrete barrier.

Additional Options (Consult Factory For Pricing)
Security Bollard
RCBW or Static Color Laser Cut Lettering, Logos & Designs (UVF Bollard shown for visual reference)
Ligman can provide custom logo and signage on the Light Linear Bollard. The images above show this feature in the Light Linear VT Bollard.

microVos TECHNOLOGY
Ligman's micro Variable Optical System provides the ability to interchange, mix & rotate optics to provide specific light distributions for optimized spacing and uniformity.

HYBRID TYPE I & TYPE IV

3 LUMINAIRE TYPE "B2" NTS

ULI-10021 Light Linear PT 1 Single Head Bollard

Beam Options
Type II Distribution
Type III Distribution
Type IV Distribution

PROJECT _____ **DATE** _____
QUANTITY _____ **TYPE** _____ **NOTE** _____

ORDERING EXAMPLE | ULI - 10021 - 29w - T2 - W30 - 02 - 120/27v - Options

LAMP	BEAM	LED COLOR	FINISH COLOR	VOLTAGE
T2 - Type II Distribution - 2628lm	W37 - 2700K	03 - BLACK RAL 9011	01 - BLACK RAL 9011	0200V
T3 - Type III Distribution - 2656lm	W35 - 3500K	01 - WHITE RAL 9003	04 - METALLIC SILVER RAL 9006	0200V
T4 - Type IV Distribution - 2656lm	W40 - 4000K	02 - MATTE SILVER RAL 9006	06 - LIGMAN BRONZE	0200V
			07 - CUSTOM RAL	0200V

ADDITIONAL OPTIONS
NAT - Natatorium Rated
F - Frosted Lens
GFCI - GFCI Box
DIM - 0-10v Dimming
AMB - Turtle Friendly Amber LED

HCT - Custom Bollard Height
HSS - House Side Shield
SB - Security Bollard
EMC - Emergency Flash

RCBW - Color Changing RGBW
SC - Static Color (Choose Color & Red, Blue & Green)
WB - White Back

WORDS FRONT _____ **WORDS BACK** _____

LASER CUT LETTERING (Custom laser cut lettering with anodized finish)

Light Linear Product Family
ULI-5000 ULI-10022 ULI-10021 ULI-2101 ULI-2101 ULI-2101 ULI-2101

Light Linear Product Family
ULI-5000 ULI-10022 ULI-10021 ULI-2101 ULI-2101 ULI-2101 ULI-2101

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