



DATE PROJECT

COMMENTS

CERTIFICATIONS



AVAILABLE PRE-CONFIGURED SHAPES



FEATURES

## GEO2 SUSPENDED

INDIRECT, DIRECT & INDIRECT / DIRECT

AN EXTENSION OF OUR SQ2 SERIES

The GEO2 Series provides specifiers with a creative lighting option to add depth and shape to a space. It combines the GEO2's 2.5" aperture with exceptional performance, accurate color, and powerful illumination with an elegant lens.

### APPLICATIONS

- Open Offices, Libraries, and Lobbies
- Combine with GEO1, 1" aperture in smaller applications
- Design space for SQ2 integration

### CORNER JOINTS

Fully machined aluminum corner joint that provides excellent joint strength, eliminates light leak, and delivers fast and easy installation.

### PERFORMANCE

Up to 152 LPW for indirect/direct and up to 111 LPW for direct.

### VERSATILITY

Direct, Indirect or Indirect/Direct lumen intensity ranges from 250 - 1250 lm/ft in 3000K, 3500K and 4000K CCT provides specifiers with accurate and powerful levels of illumination and color within each space.

### OPTICS

A seamless and elegant roll in lens for the direct illumination provides uniform light distribution, controls glare, and eliminates light leaks. The upper optics consist of 135 degree ultra-wide batwing distribution for even illumination across the ceiling while allowing for maximum spacing between fixtures.

### HIDDEN CONNECTOR

Recessed connection point between cable and fixture eliminates the visibility of hardware.

### DIMMING

0-10 Volt dimming to 1% standard, integral driver.

SAMPLE PART NUMBER: GEO2-D-PARA23-VHD-30-UNV-T1-WH-C90

ORDERING

SERIES	SHAPE & PATTERN								UPPER OUTPUT	DIRECT OUTPUT	CCT
									GEO2-I & GEO2-ID ONLY	GEO2-D & GEO2-ID ONLY	
GEO2-D Direct	PARALLELOGRAM <i>Leg Length</i>	RECTANGLE <i>Leg Length</i>	HEXAGON <i>Diameter</i>	TRIANGLE <i>Leg Length</i>	SQUARE <i>Leg Length</i>	CHEVRON <i>Leg Length</i>	SPOKE 3 & 4 <i>Leg Length</i>	CUSTOM	VHU 1250 LM/FT	VHD 1250 LM/FT	30 3000K
GEO2-I Indirect	PARA23 2'x3'	REC23 2'x3'	HEX4 4'	TRI2 2'	SQR2 2'x2'	CHEV2 2'	SPK3-2 2'	C <sup>1</sup> Custom	HU 1000 LM/FT	HD 1000 LM/FT	35 3500K
GEO2-ID Indirect/Direct	PARA24 2'x4'	REC24 2'x4'	HEX6 6'	TRI3 3'	SQR3 3'x3'	CHEV3 3'	SPK3-3 3'		MU 750 LM/FT	MD 750 LM/FT	40 4000K
	PARA26 2'x6'	REC26 2'x6'	HEX8 8'	TRI4 4'	SQR4 4'x4'	CHEV4 4'	SPK3-4 4'		LU 500 LM/FT	LD 500 LM/FT	
							SPK4-2 2'		VLU <sup>2</sup> 250 LM/FT	VLD 250 LM/FT	
							SPK4-3 3'		CU <sup>1</sup> Custom	CD <sup>1</sup> Custom	
							SPK4-4 4'				
VOLTAGE	MOUNTING	FIXTURE COLOR		CRI	SUSPENSION <sup>7</sup>		INTEGRATED CONTROLS <sup>4,5,6</sup>		CIRCUITING		
UNV 120-277V	T1 1" Grid	WH White		BLANK=80 CRI	BLANK=48" CABLES		DOS Daylight Occupancy Sensor DALI DRIVER STANDARD		BLANK=SINGLE CIRCUIT		
347 <sup>3</sup> 347V	T9 9/16" Grid	BLK Black		C90 <sup>3</sup> 90 CRI	CB96 96" Cables				SS-U/D Separate Switching		
	SC Screw Slot	S <sup>1</sup> Silver			CB144 144" Cables				UPLIGHT SWITCHED SEPARATELY FROM DIRECT LIGHT - GEO2-ID ONLY		
	HC Hard Ceiling	GR <sup>1</sup> Charcoal Gray			BC Black Canopy & Cord						
	JB Junction Box	CCC <sup>1</sup> Custom Corner Color									

EMERGENCY<sup>4,8</sup>

### NOTES

- 1 Contact factory for available configurations, additional lead times, and adder.
- 2 VLU not available with 2' fixtures.
- 3 EM not available with 347V.
- 4 EM and sensors are not available with 2'. Consult factory for 3' options.
- 5 For individual fixtures, sensor located at power feed end. For runs within patterns, a sensor is installed into each fixture in run, ex. 2 sensors are installed in a 16' run (1 sensor in each 8' fixture).

6 Consult factory for component or system not listed.  
7 For cable lengths longer than 144", consult factory.

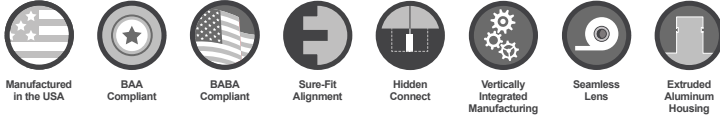
8 Contact factory for Emergency Battery (EM) and Circuit (EC) options with patterns. Factory drawings approval required.

EM Emergency Battery

EC Emergency Circuit

# GEO2 SUSPENDED

INDIRECT, DIRECT & INDIRECT / DIRECT



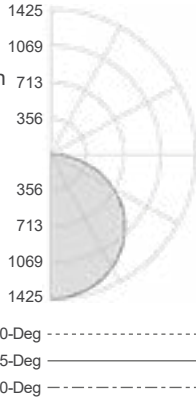
## PHOTOMETRICS & ENERGY CHARTS

### GEO2-D-XX-HU-35

Total Lumens: 3957  
 Ratio: 0% Up and 100% Down  
 Wattage: 37.2  
 Efficacy: 106 LM/W  
 Fixture Length: Four Feet

#### Zonal Lumen Summary

Zone	Lumens	% Fixt
0 - 30	1084.3	27.4
0 - 40	1765.9	44.6
0 - 60	3099.0	78.3
0 - 90	3956.3	100.0
90 - 180	0.3	0.0
0 - 180	3956.6	100.0



### Direct (Lambertian) Light

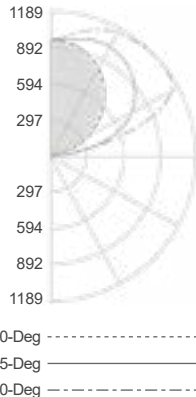
	VHD:1250	HD:1000	MD:750	LD:500	VLD:250
<b>Watts/ft</b>	11.9	9.3	6.9	4.6	2.4
<b>Lumens/ft</b>	1237	989.25	742	498	261
<b>LPW</b>	103.9	106.4	107.5	108.3	111.1

### GEO2-I-XX-HD-35

Total Lumens: 4,018  
 Ratio: 100% Up & 0% Down  
 Wattage: 24.1  
 Efficacy: 167 LM/W  
 Fixture Length: Four Feet

#### Zonal Lumen Summary

Zone	%Fixt	% Fixt
0 - 30	0.0	0.0
0 - 40	0.0	0.0
0 - 60	0.0	0.0
0 - 90	0.1	0.0
90 - 180	4018.1	100.0
0 - 180	4018.3	100.0



### Indirect (Batwing) Light

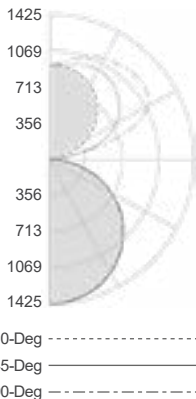
	VHU:1250	HU:1000	MU:750	LU:500	VLU:250
<b>Watts/ft</b>	7.8	6	4.5	3.1	1.7
<b>Lumens/ft</b>	1283	1005	712	490	251
<b>LPW</b>	158.6	160.6	159	158.2	152.4

### GEO2-ID-XX-HU-HD-35

Total Lumens: 7,830  
 Ratio: 50% Up & 50% Down  
 Wattage: 61.32  
 Efficacy: 128 LM/W  
 Fixture Length: Four Feet

#### Zonal Lumen Summary

Zone	Lumens	% Fixt
0 - 30	1084.3	13.8
0 - 40	1765.9	22.6
0 - 60	3099.0	39.6
0 - 90	3956.3	50.5
90 - 180	3873.5	49.5
0 - 180	7829.8	100.0



### Indirect (Batwing) / Direct (Lambertian) Light

	VHU-VHD	VHU-HD	VHU-MD	VHU-LD	VHU-VLD
<b>Watts/ft</b>	19.7	17.1	14.7	12.4	10.2
<b>Lumens/ft</b>	2520	2272	2025	1781	1544
<b>LPW</b>	127.9	132.9	137.8	143.6	152.1

	LU-VHD	LU-HD	LU-MD	LU-LD	LU-VLD
<b>Watts/ft</b>	15	12.4	10	7.7	5.5
<b>Lumens/ft</b>	1727	1480	1232	988	751
<b>LPW</b>	115.2	119.3	123.2	128.3	137.9

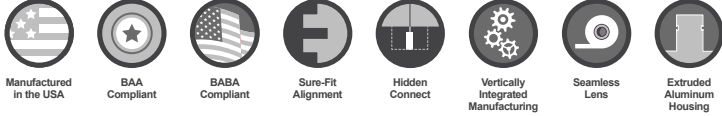
	HU-VHD	HU-HD	HU-MD	HU-LD	HU-VLD
<b>Watts/ft</b>	17.9	15.3	12.9	10.6	8.4
<b>Lumens/ft</b>	2242	1994	1747	1503	1266
<b>LPW</b>	125	130.1	135.1	141.4	151.1

	VLU-VHD	VLU-HD	VLU-MD	VLU-LD	VLU-VLD
<b>Watts/ft</b>	13.6	11	8.6	6.3	4
<b>Lumens/ft</b>	1488	1241	993	749	512
<b>LPW</b>	109.8	113.3	116.2	119.9	128.1

	MU-VHD	MU-HD	MU-MD	MU-LD	MU-VLD
<b>Watts/ft</b>	16.4	13.8	11.4	9.1	6.8
<b>Lumens/ft</b>	1949	1701	1454	1210	973
<b>LPW</b>	119	123.5	127.8	133.3	142.5

# GEO2 SUSPENDED

INDIRECT, DIRECT & INDIRECT / DIRECT



## STANDARD PRODUCT INFORMATION

### PARA

Corner Joints: (2) 60° and (2) 120°

Fixtures: 4 Linear Legs

### Product Dimensions

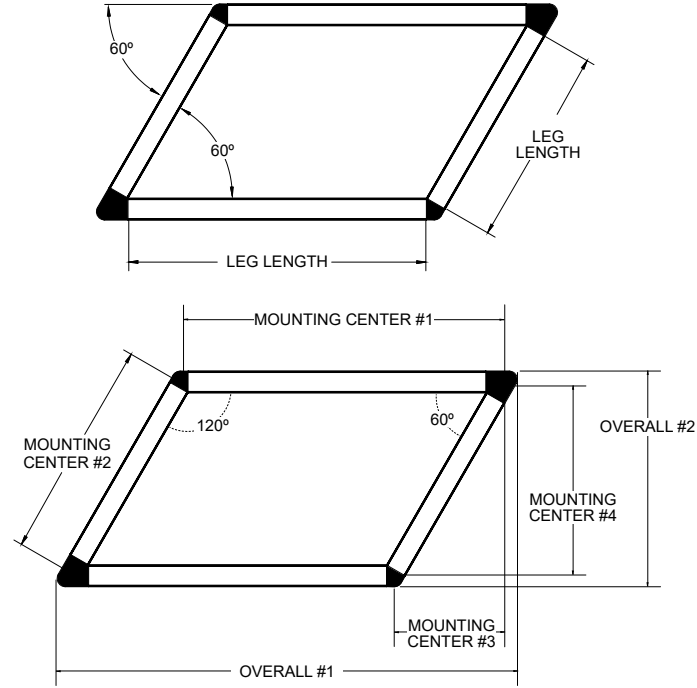
ORDERING	LEG LENGTH
PARA-23	2' & 3'
PARA-24	2' & 4'
PARA-26	2' & 6'

SIZE/DISTRIBUTION	PARA-23 INDIRECT, DIRECT & INDIRECT / DIRECT	PARA-24 INDIRECT, DIRECT & INDIRECT / DIRECT	PARA-26 INDIRECT, DIRECT & INDIRECT / DIRECT
MOUNTING CENTER #1	39.1	51.1	76.1
#2	27.1	27.1	27.1
#3	13.5	13.5	13.5
#4	23.5	23.5	23.5
OVERALL #1	55.7	67.7	91.7
#2	26.1	26.1	26.1

### Product Dimensions

ORDERING	LEG LENGTH
REC-23	2' & 3'
REC-24	2' & 4'
REC-26	2' & 6'

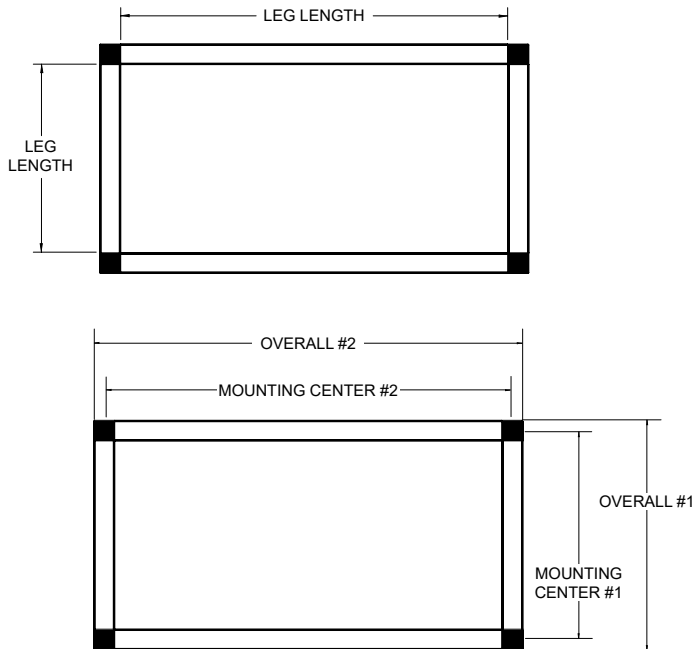
SIZE/DISTRIBUTION	REC-23 INDIRECT, DIRECT & INDIRECT / DIRECT	REC-24 INDIRECT, DIRECT & INDIRECT / DIRECT	REC-26 INDIRECT, DIRECT & INDIRECT / DIRECT
MOUNTING CENTER #1	26.7	26.7	26.7
#2	38.7	50.7	74.7
OVERALL #1	29.3	29.3	29.3
#2	41.3	53.3	77.3



### REC

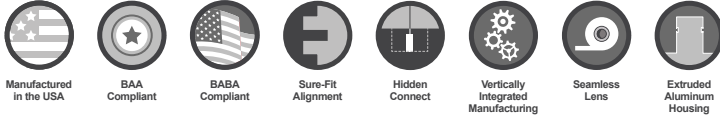
Corner Joints: (4) 90°

Fixtures: 4 Linear Legs



# GEO2 SUSPENDED

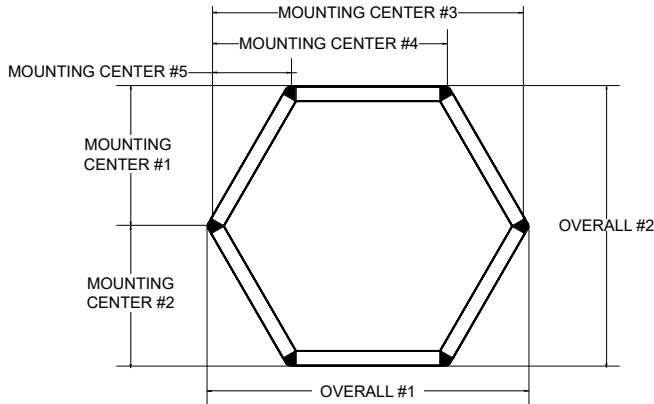
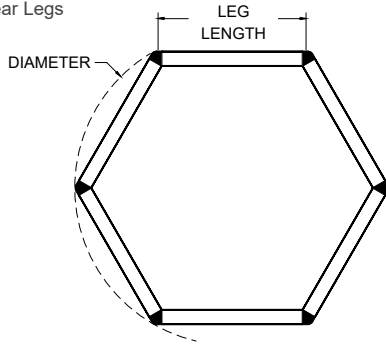
INDIRECT, DIRECT & INDIRECT / DIRECT



## STANDARD PRODUCT INFORMATION

### HEX

Corner Joints: (6) 120°  
Fixtures: 6 Linear Legs



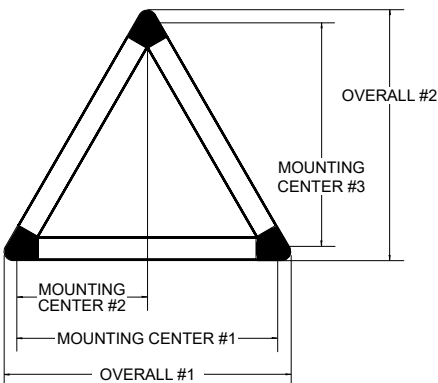
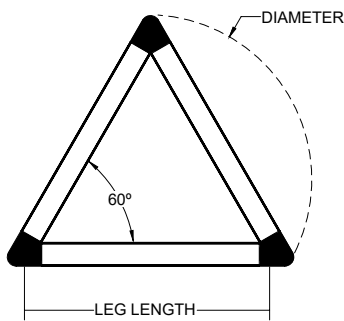
### Product Dimensions

ORDERING	DIAMETER	LEG LENGTH
HEX-4	4.5'	2'
HEX-6	6.5'	3'
HEX-8	8.5'	4'

SIZE/DISTRIBUTION	HEX-4 INDIRECT, DIRECT & INDIRECT / DIRECT	HEX-6 INDIRECT, DIRECT & INDIRECT / DIRECT	HEX-8 INDIRECT, DIRECT & INDIRECT / DIRECT
MOUNTING CENTER #1	22.1	32.5	42.9
#2	22.1	32.5	42.9
#3	51.1	75.1	99.1
#4	38.3	56.3	74.3
#5	12.8	18.8	24.8
OVERALL #1	53.9	77.8	101.8
#2	46.9	67.7	88.4

### TRI

Corner Joints: (3) 60°  
Fixtures: 3 Linear Legs



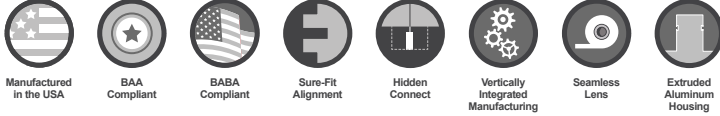
### Product Dimensions

ORDERING	DIAMETER	LEG LENGTH
TRI-4	3.0'	2'
TRI-6	4.2'	3'
TRI-8	5.3'	4'

SIZE/DISTRIBUTION	TRI-2 INDIRECT, DIRECT & INDIRECT / DIRECT	TRI-3 INDIRECT, DIRECT & INDIRECT / DIRECT	TRI-4 INDIRECT, DIRECT & INDIRECT / DIRECT
MOUNTING CENTER #1	28.6	40.6	52.6
#2	14.3	20.3	26.3
#3	24.8	35.1	45.5
OVERALL #1	31.7	43.7	55.7
#2	27.7	38.1	48.5

# GEO2 SUSPENDED

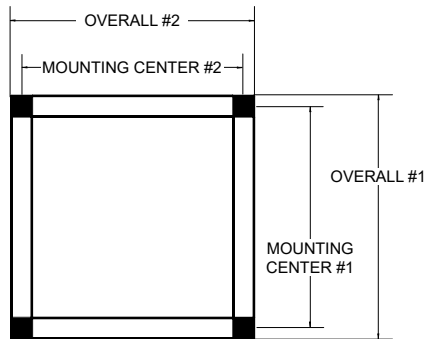
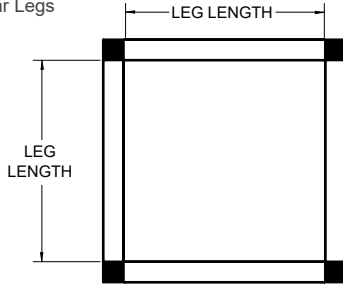
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## STANDARD PRODUCT INFORMATION

### SQR

Corner Joints: (4) 90°  
Fixtures: 4 Linear Legs



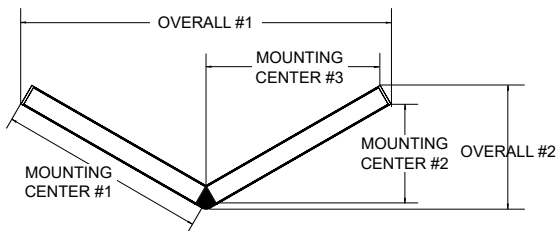
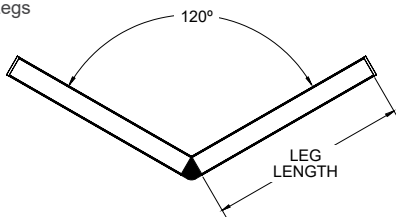
### Product Dimensions

ORDERING	LEG LENGTH
SQR-2	2'
SQR-3	3'
SQR-4	4'

SIZE/DISTRIBUTION	SQR-2 INDIRECT, DIRECT & INDIRECT / DIRECT	SQR-3 INDIRECT, DIRECT & INDIRECT / DIRECT	SQR-3 INDIRECT, DIRECT & INDIRECT / DIRECT
MOUNTING CENTER #1	26.7	38.7	50.7
#2	26.7	38.7	50.7
OVERALL #1	29.3	41.3	53.3
#2	29.3	41.3	53.3

### CHEV

Corner Joints: (1) 120°  
Fixtures: 2 Linear Legs



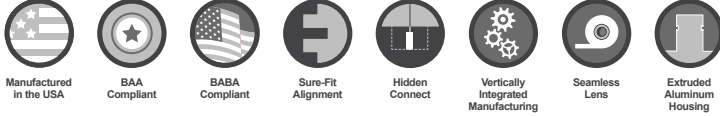
### Product Dimensions

ORDERING	LEG LENGTH
CHEV-2	2'
CHEV-3	3'
CHEV-4	4'

SIZE/DISTRIBUTION	CHEV-2 INDIRECT, DIRECT & INDIRECT / DIRECT	CHEV-3 INDIRECT, DIRECT & INDIRECT / DIRECT	CHEV-4 INDIRECT, DIRECT & INDIRECT / DIRECT
MOUNTING CENTER #1	24.5	36.5	48.5
#2	12.2	18.2	24.2
#3	21.2	31.6	42.0
OVERALL #1	44.8	65.6	86.4
#2	15.1	21.0	27.0

# GEO2 SUSPENDED

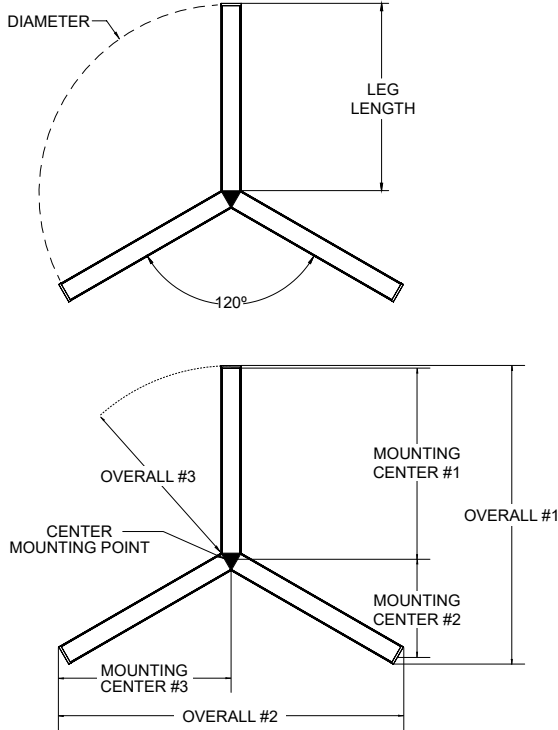
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## STANDARD PRODUCT INFORMATION

### SPK3

Corner Joints: (1) 120°  
Fixtures: 3 Linear Legs



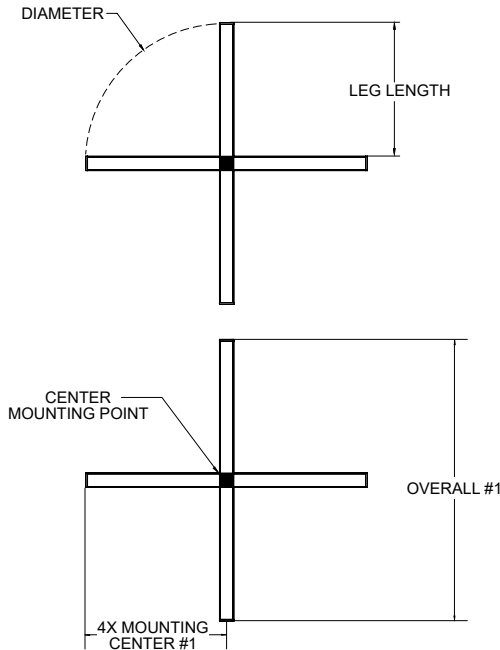
### Product Dimensions

ORDERING	DIAMETER	LEG LENGTH
SPK3-2	4.2'	2'
SPK3-3	6.2'	3'
SPK3-4	8.2'	4'

SIZE/DISTRIBUTION	SPK3-2 INDIRECT, DIRECT & INDIRECT / DIRECT	SPK3-3 INDIRECT, DIRECT & INDIRECT / DIRECT	SPK3-4 INDIRECT, DIRECT & INDIRECT / DIRECT
MOUNTING CENTER #1	24.5	36.5	48.5
#2	12.2	18.2	24.2
#3	21.2	31.6	42.0
OVERALL #1	38.8	56.8	74.8
#2	44.8	65.6	86.4
#3	25.1	37.1	49.1

### SPK4

Corner Joints: (1) 90°  
Fixtures: 4 Linear Legs



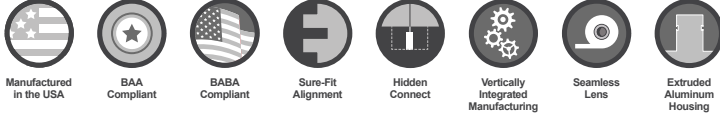
### Product Dimensions

ORDERING	DIAMETER	LEG LENGTH
SPK4-2	4.3'	2'
SPK4-3	6.3'	3'
SPK4-4	8.3'	4'

SIZE/DISTRIBUTION	SPK4-2 INDIRECT, DIRECT & INDIRECT / DIRECT	SPK4-3 INDIRECT, DIRECT & INDIRECT / DIRECT	SPK4-4 INDIRECT, DIRECT & INDIRECT / DIRECT
MOUNTING CENTER #1	25.0	37.0	49.0
OVERALL #1	51.4	75.3	99.3

# GEO2 SUSPENDED

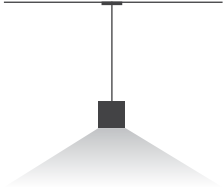
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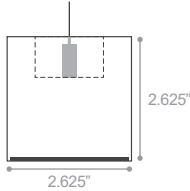
## DISTRIBUTIONS & CROSS SECTIONS

### GEO2-D DIRECT

LIGHT DISTRIBUTION

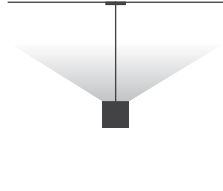


CROSS SECTION

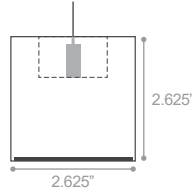


### GEO2-I INDIRECT

LIGHT DISTRIBUTION

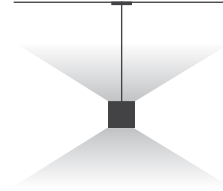


CROSS SECTION

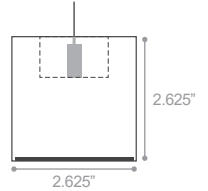


### GEO2-ID INDIRECT / DIRECT

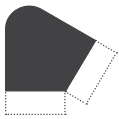
LIGHT DISTRIBUTION



CROSS SECTION



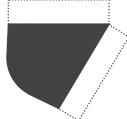
## CORNER JOINTS



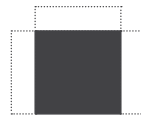
60°  
Two Legs



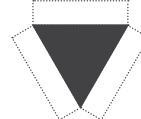
90°  
Two Legs



120°  
Two Legs



90°  
Three Legs



120°  
Three Legs



90°  
Four Legs

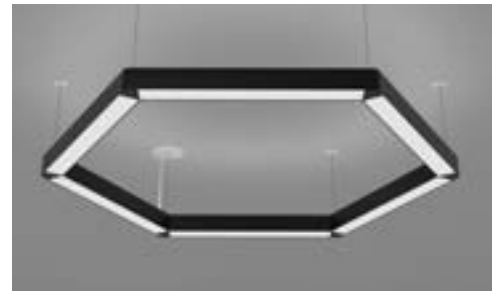
## COMPLETE GEO2 COLLECTION



GEO2-PARA Parallelgram



GEO2-REC Rectangle



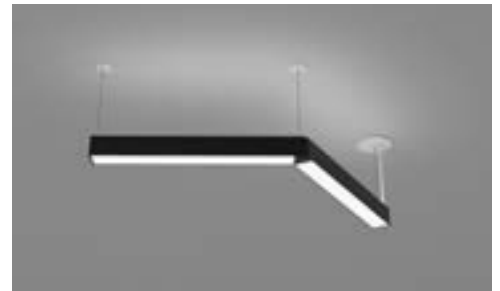
GEO2-HEX Hexagon



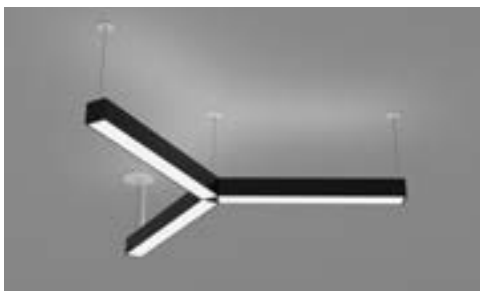
GEO2-TRI Triangle



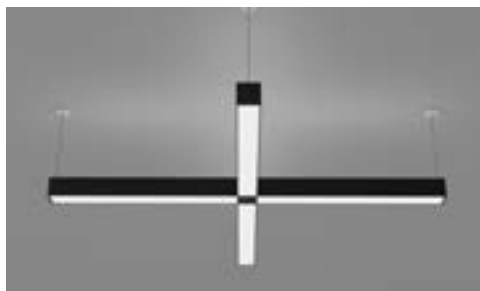
GEO2-SQR Square



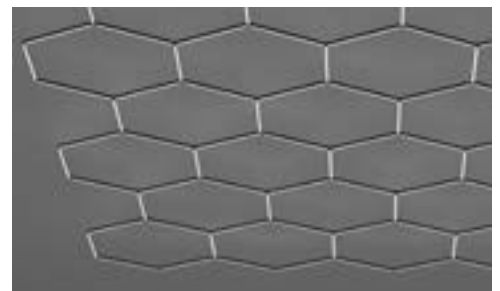
GEO2-CHEV Chevron



GEO2-SPK3 Spoke 3



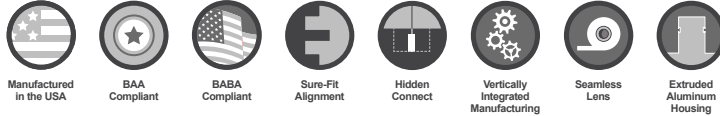
GEO2-SPK4 Spoke 4



GEO2-C Custom

# GEO2 SUSPENDED

INDIRECT, DIRECT & INDIRECT / DIRECT



## SPECIFICATIONS

### MECHANICAL

#### Housing Construction:

Extruded aluminum 6063-T5 alloy outer housing with die-formed steel internal components for strength, alignment, and mounting attachment.

#### Alignment/Assembly:

The Sure-Fit alignment system employs a full height joining biscuit, designed to create straighter rows and eliminate light leak at fixture seams. Two nuts are used to draw fixtures together to secure housing-to-housing attachment. For connector assembly, two bolts are used to attach the fixtures to the connectors for rigid joints.

#### Mounting Method/Hardware:

The Hidden-Connect design on the linear fixtures recesses attachment hardware (hanging cable and power cord) below the top plane of the housing to enable a sleek, clean finished look. Standard hanging hardware includes 1/16" diameter, galvanized steel aircraft cable with adjustable and nickel-plated cable grippers and a white 18/5 S.J.T. power cord. The standard hardware includes a 60" power cord and 54" aircraft cables to accommodate a 48" mounting distance from the ceiling. Longer hanging cables and power cords are available as an option. Ceiling canopy provided. All Lumato suspension hardware is tested and listed to UL1598 requirements for loading/fixture support.

#### Suspension Components:

Fixtures are suspended by 1/16" galvanized aircraft cable. Cables are attached to the ceiling suspension point with a 1/4-20 threaded ceiling cable barrel that incorporates a threaded ring to support the feed/hanger canopy allowing access to the J-box/hanger without removal of the suspension cable allowing conductor inspection/service without having to support the fixture(s). Feed canopies are 5" O.D. and hanger canopies are 2" O.D. Cable lengths can be specified for 48", 96" and 144" suspension lengths. Ceiling type options are "T1" = T-Grid, "T9" = T-Grid, "SC" = Screw Slot Grid, "HC" = Hard Ceiling or "JB" = J-Box mount.

#### Fixture Finish:

The GEO2 fixture finish is available in White, Black, Silver or Charcoal Gray polyester powder coat finish to ensure durability. Luminaires are available in any RAL color as an option.

#### Integrated Controls:

The GEO2 is available with optional integrated controls. Sensors are conveniently designed to mount in aperture and are located at the power feed end of each fixture. For runs, each fixture section will be supplied with a discrete sensor that will control that specific section. Philips EasySense is standard daylight/occupancy sensor. DALI driver required. If your project requires a component or system not listed, please contact Lumato to review requirements.

MANUFACTURER	ORDERING CODE	SENSOR	CONNECTION	DRIVER
Philips EasySense	DOS	Daylight/PIR Occupancy	Wireless	DALI (Advanced Xitanium SR, 1% Dimming)

### OPERATION

#### Light Engine:

The GEO2 is available in 3000K, 3500K, and 4000K CCT all within a 3-Step MacAdam Ellipse and has a standard CRI of 80+ with a 90+ CRI option available. Longer lead-times may apply for 90 CRI. Consult factory.

#### Direct Optics:

Our frosted acrylic roll in lens is designed to maximize efficiency while minimizing glare and eliminating light leaks at fixture joints. Individual fixtures come with lens factory installed while continuous runs will have a separate lens kit installed in the field once the run is hung. This will allow for a continuous/seamless lens up to 100 ft.

#### Upper Optics:

On GEO2-ID and GEO2-I, the upper optics consist of an extruded acrylic lens that provides an ultra-wide batwing distribution to produce a more evenly illuminated ceiling and wider spacing of luminaires while protecting LEDs from dust and debris.

#### Electrical:

Class 2 programmable (factory pre-set) premium power supply, 120-277VAC input or 347V. Power factor >0.9 THD<15%. Integral Surge Protection to 2KV.

#### Dimming:

The GEO2 comes standard with 0-10V dimming to 1%. For DOS (Daylight/Occupancy Sensor) ordering code, DALI driver required. Advance Xitanium SR, 1% dimming to be utilized.

#### Emergency Battery Pack:

Emergency Battery Pack has been engineered to exceed UL minimum safety standards. Standard battery is CEC Listed. For most fixtures, the entire direct portion of the fixture will be illuminated by the EM Battery Pack. Consult factory for EM position through submittal approval.

#### Emergency Circuit:

Emergency Circuit fixtures are engineered so that the entire fixture is wired to the emergency circuit. Consult factory for EC position through submittal approval.

### GENERAL

#### Warranty:

Ten (10) year limited warranty from date of shipment, covers LED's, driver and luminaire. Optional accessories are covered by their individual Manufacturers' warranties.

#### Lumen Maintenance:

Rated for 85% initial lumen output (L85) at 50,000 hours of operation, operated at 25°C ambient temperatures; per TM-21 Guidelines published by the Illuminated Engineering Society (IES).

#### Certification:

All luminaires are UL/cUL Listed to UL 1598 Standards and approved for Indoor use in Dry/Damp Locations.

#### BAA & BABA Compliant:

Lumato products are entirely manufactured and assembled in the United States of America and comply with the Build America Buy America Act based on the Buy America requirements as prescribed in 49 U.S.C. §5323(j)/49 CFR Part 661. Go to [Lumato.com/docs/Lumato\\_BABA-Letter.pdf](http://Lumato.com/docs/Lumato_BABA-Letter.pdf) for additional information.

#### Manufactured in the USA:

All Lumato luminaires and components (with the exception of our LED boards and drivers) are proudly manufactured and assembled in the USA. All luminaires are UL/cUL Listed to UL 1598 Standards and approved for Indoor use in Dry/Damp Locations.

#### Shipping:

4 week lead-time for orders up to 1000 linear feet. Lead-time for orders greater than 1000 linear feet will be determined at time of order.

