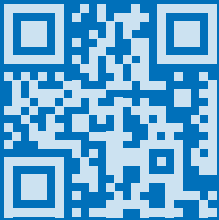




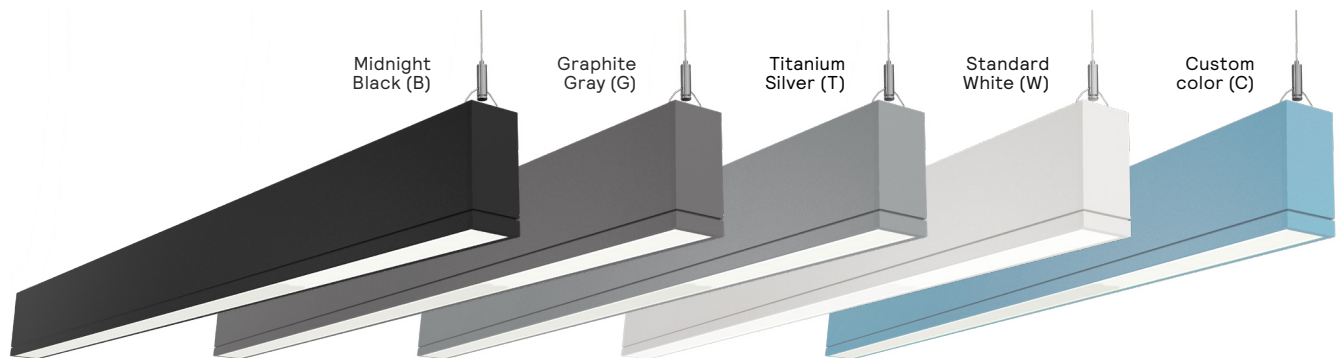
TruGroove micro flex (horizontal)



TruGroove micro flex (horizontal) comprises a wide range of 2, 3, and 4 way angles and intersections, enabling creation of fully illuminated patterns that extend your horizons.

Connect TruGroove micro flex to our TruGroove micro suspended luminaires. Find the TruGroove micro family by scanning or clicking the QR code.

Finishes

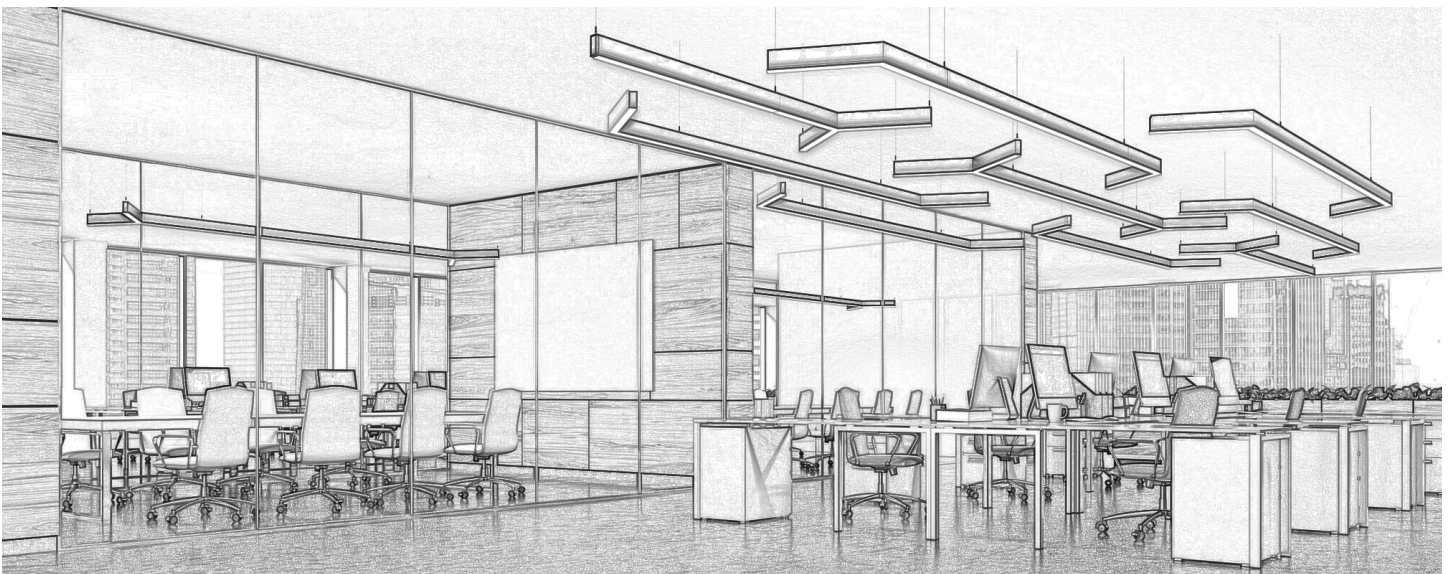


Note: Colors above are a representation, due to monitor calibration or printing process they may differ from luminaire powder coat finish.

Options and dimensions

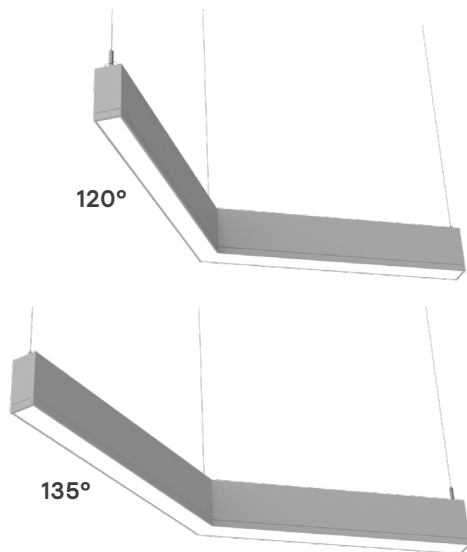
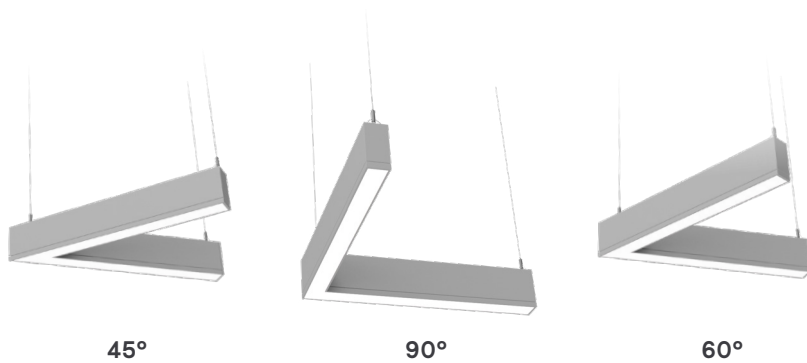
Patterns

Express your creativity with unique luminous patterns suspended across the horizontal plane. Contact Ledalite for other custom angles and intersections (extended lead times may apply).

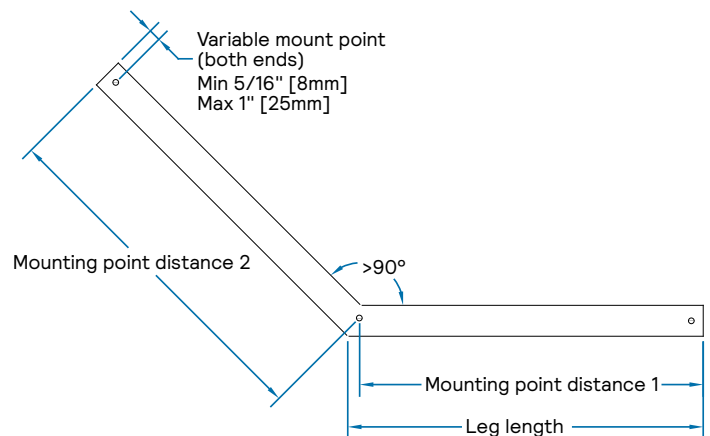
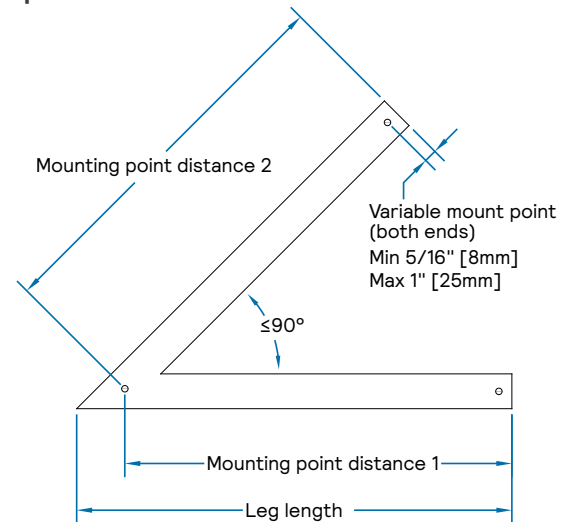


TruGroove micro flex (horizontal)

2 Way angles



Top views

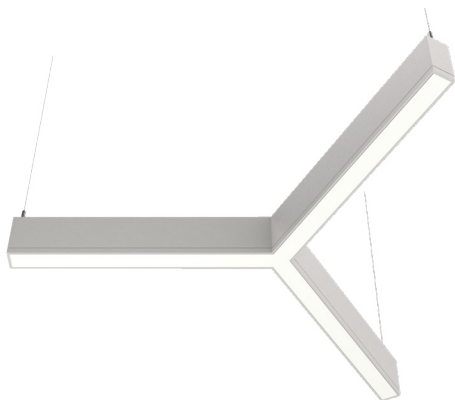


Distribution	Housing cross section	Nominal size		Leg length	Mounting point distance (1)	Mounting point distance (2)
		Type/Angle	Leg length			
Direct	Height: 4" [102mm] Width: 2 1/8" [54mm]	2 Way 135°	2'x2'	24 7/16" [621mm]	23 11/16" [602mm]	24 1/8" [612mm]
		2 Way 120°	2'x2'	24 5/8" [625mm]	23 5/8" [600mm]	23 15/16" [608mm]
		2 Way 90°	2'x2'	25 3/32" [636mm]	23" [585mm]	23" [585mm]
		2 Way 60°	2'x2'	25 13/16" [656mm]	23 1/4" [591mm]	23 1/4" [591mm]
		2 Way 45°	2'x2'	26 9/16" [675mm]	23 7/16" [596mm]	23 7/16" [596mm]
Direct Indirect	Height: 4 1/2" [114mm] Width: 2 1/8" [54mm]	2 Way 135°	2'x2'	24 7/16" [621mm]	23 11/16" [602mm]	24 1/8" [612mm]
		2 Way 120°	2'x2'	24 5/8" [625mm]	23 5/8" [600mm]	23 15/16" [608mm]
		2 Way 90°	2'x2'	25 3/32" [636mm]	23" [585mm]	23" [585mm]
		2 Way 60°	2'x2'	25 13/16" [656mm]	23 1/4" [591mm]	23 1/4" [591mm]
		2 Way 45°	2'x2'	26 9/16" [675mm]	23 7/16" [596mm]	23 7/16" [596mm]

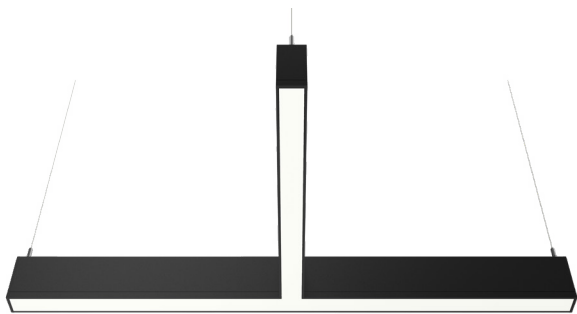
Note: Installing an endcap to an end of run fixture will add ¼" [6mm] to the fixture housing length (applies to both ends for standalone fixtures).

TruGroove micro flex (horizontal)

3 Way intersections

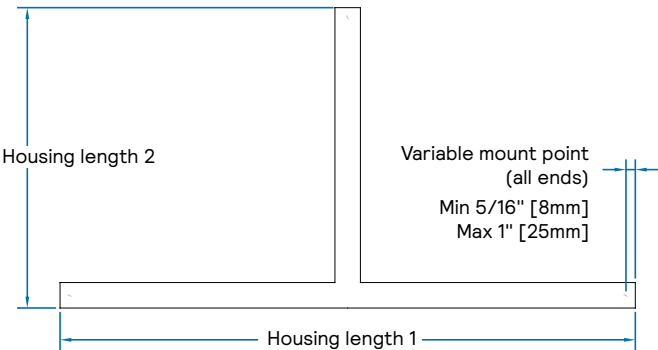
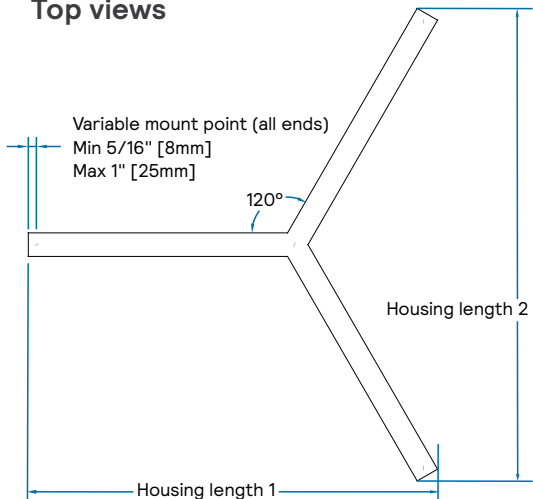


Y intersection



T intersection

Top views

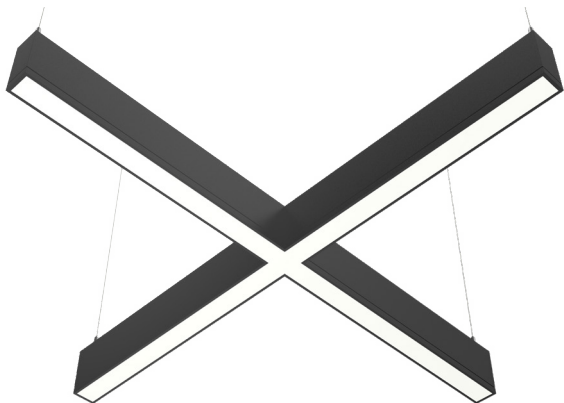


Distribution	Housing cross section	Nominal size		Housing length (1)	Housing length (2)
		Type/Angle	Leg length		
Direct	Height: 4" [102mm] Width: 2 1/8" [54mm]	3 Way Y 120°	2'x2'x2'	36 15/16" [938mm]	42 5/8" [1083mm]
		3 Way T 90°	2'x2'x2'	48" [1219mm]	25 1/16" [637mm]
Direct Indirect	Height: 4 1/2" [114mm] Width: 2 1/8" [54mm]	3 Way Y 120°	2'x2'x2'	36 15/16" [938mm]	42 5/8" [1083mm]
		3 Way T 90°	2'x2'x2'	48" [1219mm]	25 1/16" [637mm]

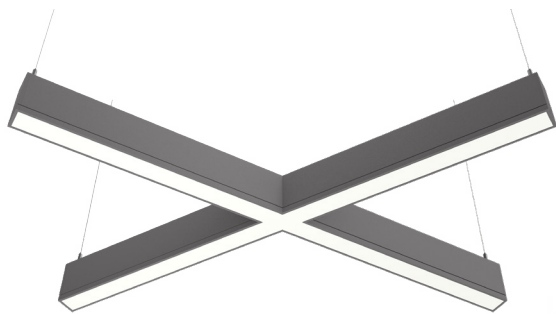
Note: Installing an endcap to an end of run fixture will add ¼" [6mm] to the fixture housing length (applies to all ends for standalone fixtures).

TruGroove micro flex (horizontal)

4 Way intersections

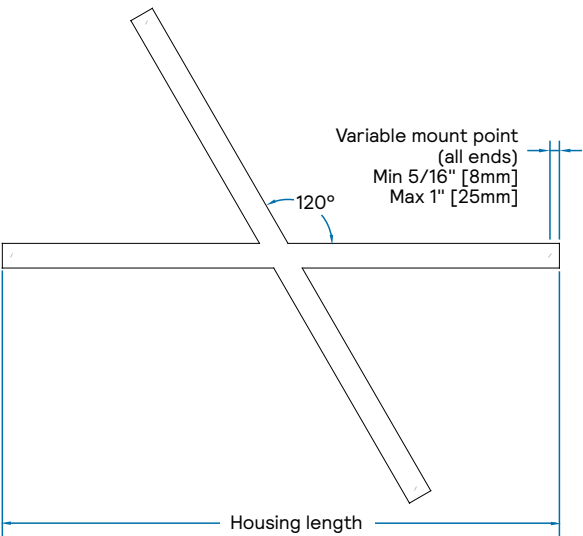
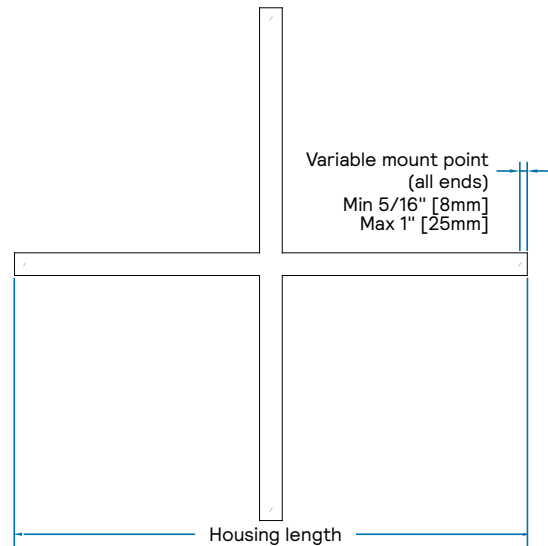


+ intersection



X intersection

Top views



Distribution	Housing cross section	Nominal size		Housing length (1)	Housing length (2)
		Type/Angle	Leg length		
Direct	Height: 4" [102mm] Width: 2 1/8" [54mm]	4 Way + 90°	2'x2'x2'x2'	48" [1219mm]	48" [1219mm]
		4 Way X 120° x 60°	2'x2'x2'x2'	48" [1219mm]	48" [1219mm]
Direct Indirect	Height: 4 1/2" [114mm] Width: 2 1/8" [54mm]	4 Way + 90°	2'x2'x2'x2'	48" [1219mm]	48" [1219mm]
		4 Way X 120° x 60°	2'x2'x2'x2'	48" [1219mm]	48" [1219mm]

Note: Installing an endcap to an end of run fixture will add ¼" [6mm] to the fixture housing length (applies to all ends for standalone fixtures).

TruGroove micro flex (horizontal)

Specifications

Optical System

Direct hemisphere: White light emitted from a linear array of downward-facing LEDs is laterally redirected through a flush silk lens generating a lambertian distribution and a uniform continuum of light.

Indirect hemisphere: White light emitted from a linear array of upward-facing LEDs is shaped into a homogeneous, wide-throw batwing distribution using a freeform elliptical lens.

Housing

Post painted precision aluminum extrusion.

Endcaps

Diecast flat aluminum endcaps with integral groove to match housing.

Finish

Housing and endcaps are coated with a high quality electrostatically applied, thermally cured polyester powder coat finish, available in standard Matte White, Titanium Silver, Graphite Grey or Midnight Black. TruGroove micro flex can also be specified in any custom color upon request for a one-time setup charge.

Mounting

Suspended: High strength aircraft cable and tamper-resistant gripper provide unlimited vertical adjustment and are independently tested to stringent safety standards.

Joints

Self-aligning joining system with hands-free pre-joining wire access.

Weight

Maximum 3.8lbs/ft.

Electrical

Fixtures are factory pre-wired with quick-wire connectors and tested for all circuits and backup battery packs. LED boards and drivers are easily field replaceable with access from below the ceiling.

Power drops can be specified in white, black or clear cord options.

Standard Drivers

Advance Xitanium 0-10V, 1% Dimming.

Advance Xitanium DALI-2 compliant, 5% Dimming.

Lutron EcoSystem LDE1, 1% Dimming with Soft-On and Fade-to-Black.

Advance Xitanium SR, DALI-2 D4i (1% Dim)

2ch Tunable Drivers

Advance FlexTune Sensor Ready, DALI-2 compliant 1% Dimming.
0-10V, 0.1% Dimming.

DALI-2 DT6 or DT8, 0.1% Dimming.

Class 2 rated output. Consult Ledalite for other available drivers.

Lumen Maintenance

LEDs have been tested by the manufacturer in accordance with IESNA LM-80-15. At an ambient temperature of 25°C, the LED lumen maintenance expectation according to IES TM-21-11 is:

$L_{80}(10k) > 60,000$ hours (Reported methodology).

Source Color

LEDs rated for color rendering of:

$CRI R_a \geq 90, R_g \geq 50, G_a \geq 97, C_g \geq 90$

IES TM-30-18 : $R_f \geq 90, R_{fh1} \geq 89, R_g \geq 99, R_{cs,h1} \geq -5\%$

SPD and TM-30-18 reports available upon request.

Fixture to fixture color accuracy within:

2 SDCM for Static White luminaires.

3 SDCM for Tunable White luminaires.

Approvals

Certified to UL, IES & CSA Standards.

TruGroove is Declare label certified. More information on the TruGroove label can be found on www.declare.living-future.org.

Select TruGroove micro configurations contribute toward satisfying features L03, L04, L06, L07 and L08 under the WELL v2 Building Standard®.

Luminaires that include Interact Pro controls options can help meet the requirements in 90.1-2022, IECC 2021, and CA T24 2022 for a maximum of 20min. time out for occupancy controls.

Environment

Rated for dry or damp locations in operating ambient temperatures of 25±5°C (77±9°F).

Many luminaire components, such as reflectors, refractors, lenses, and LEDs are made from various types of plastics which can be adversely affected by airborne contaminants. If sulfur-based chemicals, petroleum-based products, cleaning solutions, or other contaminants are expected in the intended area of use, consult factory for compatibility. Damage caused by sulfur, chlorine, petroleum-based solution or other contaminants are not covered under warranty. Not suitable for natatorium environments.

Warranty

Five-year luminaire limited warranty including LED boards and driver:
www.signify.com/warranties

TruGroove micro flex (horizontal)

Controls Options*

Interact Radio Node for Standalone, Gateway and Gateway + IoT tiers (RA)

- RA is a connected radio node supporting wireless mesh connectivity.

Interact sensor for Standalone, Gateway and Gateway + IoT tiers (CS)

- CS is a connected sensor with integral occupancy and daylight sensing and supports wireless mesh connectivity.
- The sensor can operate in a standalone mode or in a gateway mode.
- Interact includes an App, a portal and a broad portfolio of wireless luminaires, lamps and retrofit kits all working on the same system.
- Startup is implemented via Interact Pro app (Android or iPhone) & Bluetooth connectivity. The app provides flexibility to choose between a gateway or non gateway mode for setup.
- Setup with the gateway requires wired internet access to the gateway. It is possible to add a gateway at a later point.
- Prepare project configuration steps remotely and use IRT9015 remote onsite to identify and group devices together.
- Compatible with UID8465/10 or UID8465/50 wireless dimmer switches, wireless dimmer switch, SWS200 wireless scene switch, wireless occupancy sensor (OCC0100A/02 BP Sensor WH) and wireless daylight /occupancy sensor (OCC0101A/02 DL BP Sensor WH).
- For more information on Interact visit:
www.interact-lighting.com/en-us/what-is-possible/about-interact

Interact sensor bundles for Gateway + IoT tier (SB)

- SB option, in addition to occupancy and daylight sensing, supports advanced IoT capabilities such as people estimation analysis, desk level temperature & humidity sensing, noise classification, and Bluetooth Low Energy (BLE) beacon.
- Compatible with UID8465/10 or UID8465/50 wireless dimmers switches, SWS200 wireless scene switch, wireless occupancy sensor (OCC0100A/02 BP Sensor WH) and wireless daylight/occupancy sensor (OCC0101A/02 DL BP Sensor WH).
- Use Interact software and insights to increase building efficiency, achieve building wide integration and optimize space through occupancy analytics.
- Requires compatible gateway and internet connectivity for commissioning. For more information, visit: www.interact-lighting.com/office

Tunable White

- Tunable white options are available with Interact wireless or with 2ch 0-10V or DALI-2 (DT6 or DT8) wired drivers. Please inquire about options such as Lutron or DMX control (extended lead times may apply).
- Signify tunable white solutions are designed to help maximize the influence of lighting on your daily life.
- Dynamic behaviors via scheduled lighting recipes mimicking daylight patterns or supporting biorhythms.
- Scene setting via lighting pre-sets based on various combinations of lighting color temperature and intensity.

Interact Pro scalable sensor option codes across Genlyte product lines*

	Evokit	Day-Brite	Ledalite	Lightolier
Zigbee + Bluetooth	RADIO	RADIO	RA	RA
Zigbee + Bluetooth + Sensing	SWZCS	SWZCS	CS	SBA accessory (external)
Zigbee + Bluetooth + Sensing + Environmental data	IAOSB	IAOSB	SB	SB
Zigbee + Highbay + Sensing	-	SWZCSH	-	-

*TruGroove micro flex is only available with remote mounted sensors, please confirm recessed or surface sensor mounting. An SR driver option must be selected, extended lead times may apply.

TruGroove micro flex (horizontal)

Functionalities overview

***Note:** TruGroove micro flex is only available with remote mounted sensors, please confirm recessed or surface sensor mounting. A Sensor Ready driver option must be selected, extended lead times may apply.

The three tiers of Interact

	Standalone	Gateway	Gateway + IoT
Dimming, grouping, and zoning	✓	✓	✓
Bluetooth and ZigBee enabled	✓	✓	✓
Motion sensing and daylight harvesting	✓	✓	✓
Integration with 0-10V and phase dimming fixtures	✓	✓	✓
Code compliance	✓	✓	✓
Granular dimming and dwell time	✓	✓	✓
New Correlated color temperature (CCT) tuning by switch	✓	✓	✓
New Support for sensor-based Tunable White luminaires	✓	✓	✓
Energy reporting and monitoring		✓	✓
Scheduling		✓	✓
Demand response		✓	✓
BMS integration (BACnet)			✓
Floor plan visualization			✓
IoT sensors for wellness			✓
IoT Apps for productivity			✓

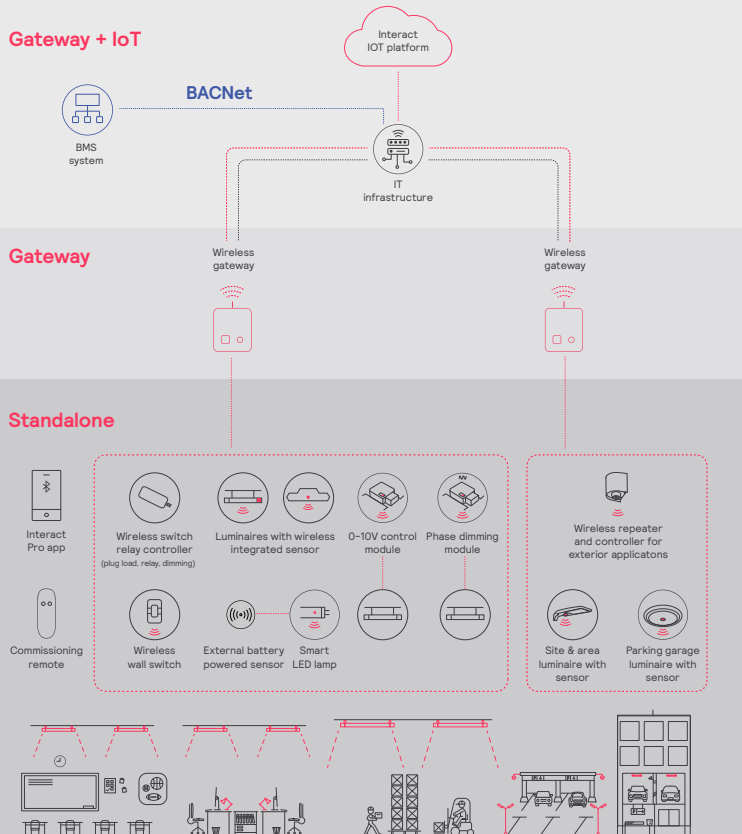
Currently supported maximum system size

To be able to design the lighting system correctly for the customer, it is important to know the prime characteristics of the system, its possibilities and limitations.

System level	
Total number of gateways	Unlimited
Total number of devices	200 per network
• luminaires with integrated sensors	150
• smart TLEDs	150
Total number of ZGP devices (sensors and switches)	50
• sensors	30
• switches	50
• zones and groups	64
Group level	
Recommended number of lights	40 (recommended 25)
Number of ZGP devices	5
Number of scenes	16

Interact system architecture for office, education, healthcare, retail, industrial and parking applications

Gateway + IoT



TruGroove micro flex (horizontal)

Colorimetry

TruGroove micro flex (TM0x) AccuRender Tunable White

Nominal CRI & CCT		CRI 90+, 2700K	CRI 90+, 3000K	CRI 90+, 3500K	CRI 90+, 4000K	CRI 90+, 5000K	CRI 90+, 6500K
CIE 013.3-1995 ¹	CRI R_a	94	94	95	95	92	92
	R_9	54	63	72	76	75	75
	G_a	98	100	100	100	98	98
	C_g	92	94	95	96	95	95
IES TM-30-18 ²	R_f	92	92	91	91	90	87
	$R_{f,h1}$	90	91	91	91	89	89
	R_g	99	100	100	99	99	99
	$R_{cs,h1}$	-6%	-5%	-4%	-4%	-5%	-5%
MDER ³		0.45	0.53	0.63	0.71	0.83	0.83

TruGroove micro flex (TM0x) AccuRender Static White

Nominal CRI & CCT		CRI 90+, 2700K	CRI 90+, 3000K	CRI 90+, 3500K	CRI 90+, 4000K	CRI 90+, 5000K
CIE 013.3-1995 ¹	CRI R_a	94	93	93	93	93
	R_9	55	57	59	64	68
	G_a	99	99	99	99	99
	C_g	93	93	93	93	94
IES TM-30-18 ²	R_f	92	91	91	91	90
	$R_{f,h1}$	90	90	90	91	89
	R_g	100	100	99	100	100
	$R_{cs,h1}$	-6%	-5%	-6%	-5%	-5%
MDER ³		0.45	0.51	0.58	0.65	0.81

1. Color Rendering Index (CRI R_a) and Strong Red (R_9) are calculated in accordance with CIE 013.3-1995. Color Gamut index (G_a) and red chroma Index (C_g) are CIE based properties using the Global Lighting Association's calculation tool.

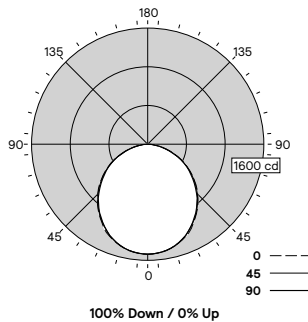
2. Fidelity Index (R_f), Red Fidelity Index ($R_{f,h1}$), Gamut Index (R_g), and Red Local Chroma Shift ($R_{cs,h1}$) are calculated in accordance with IES TM-30-18.

3. Melanopic Daylight Efficacy Ratio (MDER) is the measure for "spectral melanopic efficiency" as defined in CIE S 026-2018.

TruGroove micro flex (horizontal)

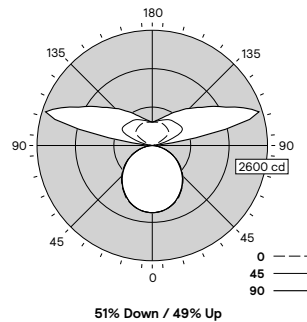
Photometry

Direct (TM01) Definition Symmetric Flush Silk lens



Candela plot shown is for 4000lm/4ft Direct CRI 90, 3500K.

Direct/Indirect (TM05 & TM06) Definition Symmetric Flush Silk lens



Candela plot shown is for 4000lm/4ft Direct, 4000lm/4ft Indirect CRI 90, 3500K.

TruGroove micro flex Direct (TM01) Definition Symmetric Flush Silk lens

Click "PDF" or "IES" text to download

Nominal CRI & CCT				CRI 90+, 2700K					CRI 90+, 3000K					CRI 90+, 3500K					CRI 90+, 4000K					CRI 90+, 5000K					CRI 90+, 6500K				
Nominal Lumen Package (lm/4ft) ^{1,6}			Watts (W) ³	Flux (lm/4ft) ¹	Efficacy (LPW) ¹	UGR ²	Photometry Report ¹	IES File ⁴	Flux (lm/4ft) ¹	Efficacy (LPW) ¹	UGR ²	Photometry Report ¹	IES File ⁴	Flux (lm/4ft) ¹	Efficacy (LPW) ¹	UGR ²	Photometry Report ¹	IES File ⁴	Flux (lm/4ft) ¹	Efficacy (LPW) ¹	UGR ²	Photometry Report ¹	IES File ⁴	Flux (lm/4ft) ¹	Efficacy (LPW) ¹	UGR ²	Photometry Report ¹	IES File ⁴	Flux (lm/4ft) ¹	Efficacy (LPW) ¹	UGR ²	Photometry Report ¹	IES File ⁴
Direct		Indirect		Flux (lm/4ft) ¹	Efficacy (LPW) ¹	UGR ²	Photometry Report ¹	IES File ⁴	Flux (lm/4ft) ¹	Efficacy (LPW) ¹	UGR ²	Photometry Report ¹	IES File ⁴	Flux (lm/4ft) ¹	Efficacy (LPW) ¹	UGR ²	Photometry Report ¹	IES File ⁴	Flux (lm/4ft) ¹	Efficacy (LPW) ¹	UGR ²	Photometry Report ¹	IES File ⁴	Flux (lm/4ft) ¹	Efficacy (LPW) ¹	UGR ²	Photometry Report ¹	IES File ⁴	Flux (lm/4ft) ¹	Efficacy (LPW) ¹	UGR ²	Photometry Report ¹	IES File ⁴
Tunable White ⁵	4,000	-	41.5	3,948	91.8	27.2	PDF	IES	3,948	93.3	27.2	PDF	-	3,948	95.2	27.2	PDF	-	3,948	96.9	27.2	PDF	-	3,948	99.6	27.2	PDF	-	3,948	102.7	27.2	PDF	-
	2,000	-	20.6	2,103	99.2	25.0	PDF	IES	2,103	100.5	25.0	PDF	-	2,103	102.1	25.0	PDF	-	2,103	103.5	25.0	PDF	-	2,103	105.7	25.0	PDF	-	2,103	108.1	25.0	PDF	-
Static White ⁵	4,000	-	43.1	3,955	91.8	27.2	PDF	IES	4,058	94.2	27.3	PDF	IES	4,204	97.5	27.4	PDF	IES	4,249	98.6	27.4	PDF	IES	4,299	99.7	27.5	PDF	IES	-	-	-	-	-
	3,500	-	37.3	3,466	92.9	26.7	PDF	IES	3,548	95.1	26.8	PDF	IES	3,681	98.7	26.9	PDF	IES	3,721	99.8	27.0	PDF	IES	3,762	100.9	27.0	PDF	IES	-	-	-	-	-
	3,000	-	31.6	2,980	94.3	26.2	PDF	IES	3,045	96.4	26.3	PDF	IES	3,163	100.1	26.4	PDF	IES	3,198	101.2	26.4	PDF	IES	3,231	102.2	26.5	PDF	IES	-	-	-	-	-
	2,500	-	26.4	2,482	94.0	25.6	PDF	IES	2,533	95.9	25.6	PDF	IES	2,634	99.8	25.8	PDF	IES	2,662	100.8	25.8	PDF	IES	2,688	101.8	25.8	PDF	IES	-	-	-	-	-
	2,000	-	20.7	1,990	96.1	24.8	PDF	IES	2,031	98.1	24.9	PDF	IES	2,113	102.1	25.0	PDF	IES	2,135	103.1	25.0	PDF	IES	2,155	104.1	25.1	PDF	IES	-	-	-	-	-
	1,500	-	15.9	1,490	93.7	23.8	PDF	IES	1,520	95.6	23.9	PDF	IES	1,583	99.6	24.0	PDF	IES	1,597	100.4	24.0	PDF	IES	1,613	101.4	24.1	PDF	IES	-	-	-	-	-
	1,000	-	11.2	982	87.7	22.3	PDF	IES	1,002	89.5	22.4	PDF	IES	1,045	93.3	22.5	PDF	IES	1,052	93.9	22.6	PDF	IES	1,063	94.9	22.6	PDF	IES	-	-	-	-	-

- 4ft Luminaire photometry has been conducted in accordance with IES LM-79-08. Photometry should be scaled for luminaire configurations other than 4ft. Luminaires with finishes other than standard white may result in a drop in flux and efficacy.
- Unified Glare Ratio (UGR) is calculated in accordance with CIE 117-1995. Reference conditions of 4Hx8Hx1H and reflectances of 70/50/20% have been applied using the procedure described in CIE 190-2010.
- Input power stated at 3500K.

- IES files can be downloaded by clicking the links in the table above, or online at www.ledalite.com. TruGroove micro flex luminaires IES files are provided as 1ft sections to enable pattern building in simulation software. Note, Tunable white IES files provided at 2700K.
- Static White stated with Advance Xitanium 0-10V driver, Tunable White stated with Advance FlexTune SR driver. Data may vary with other drivers.
- Nominal total fixture lengths:
2 Way angles = 4ft, scaling factor for 4ft photometry = 1x.
3 Way intersection = 6ft, scaling factor for 4ft photometry = 1.5x.
4 Way intersection = 8ft, scaling factor for 4ft photometry = 2x.

TruGroove micro flex (horizontal)

Photometry

TruGroove micro flex Direct/Indirect (TM05 & TM06) Definition Symmetric Flush Silk Lens

Click "PDF" or "IES" text to download

Nominal CRI & CCT				CRI 90+, 2700K					CRI 90+, 3000K					CRI 90+, 3500K					CRI 90+, 4000K					CRI 90+, 5000K					CRI 90+, 6500K				
Nominal Lumen Package (lm/4ft) ^{1,e}		Watts (W) ³	Flux (lm/4ft) ¹	Efficacy (LPW) ¹	UGR ²	Photometry Report ¹	IES File ⁴	Flux (lm/4ft) ¹	Efficacy (LPW) ¹	UGR ²	Photometry Report ¹	IES File ⁴	Flux (lm/4ft) ¹	Efficacy (LPW) ¹	UGR ²	Photometry Report ¹	IES File ⁴	Flux (lm/4ft) ¹	Efficacy (LPW) ¹	UGR ²	Photometry Report ¹	IES File ⁴	Flux (lm/4ft) ¹	Efficacy (LPW) ¹	UGR ²	Photometry Report ¹	IES File ⁴	Flux (lm/4ft) ¹	Efficacy (LPW) ¹	UGR ²	Photometry Report ¹	IES File ⁴	
Direct	Indirect																																
Tunable White ⁵	4,000	5,000	81.0	8,947	106.5	22.5	PDF	IES	8,947	108.2	22.5	PDF	-	8,947	110.4	22.5	PDF	-	8,947	112.3	22.5	PDF	-	8,947	115.4	22.5	PDF	-	8,947	119.0	22.5	PDF	-
		3,000	63.6	6,946	105.7	23.7	PDF	IES	6,946	107.2	23.7	PDF	-	6,946	109.2	23.7	PDF	-	6,946	110.9	23.7	PDF	-	6,946	113.7	23.7	PDF	-	6,946	116.8	23.7	PDF	-
	2,000	5,000	60.0	7,103	114.7	18.6	PDF	IES	7,103	116.2	18.6	PDF	-	7,103	118.3	18.6	PDF	-	7,103	120.1	18.6	PDF	-	7,103	123.1	18.6	PDF	-	7,103	126.4	18.6	PDF	-
		3,000	43.0	5,102	115.4	20.1	PDF	IES	5,102	116.8	20.1	PDF	-	5,102	118.7	20.1	PDF	-	5,102	120.3	20.1	PDF	-	5,102	122.9	20.1	PDF	-	5,102	125.9	20.1	PDF	-
Static White ⁵	4,000	5,000	80.8	8,648	107.0	22.7	PDF	IES	8,883	109.9	22.8	PDF	IES	9,209	114.0	22.9	PDF	IES	9,329	115.5	23.0	PDF	IES	9,494	117.5	22.9	PDF	IES	-	-	-	-	-
		4,000	72.4	7,709	106.5	23.3	PDF	IES	7,917	109.4	23.4	PDF	IES	8,196	113.2	23.5	PDF	IES	8,306	114.7	23.5	PDF	IES	8,448	116.7	23.5	PDF	IES	-	-	-	-	-
		3,000	65.0	6,772	104.2	23.8	PDF	IES	6,957	107.0	23.9	PDF	IES	7,196	110.7	24.1	PDF	IES	7,293	112.2	24.1	PDF	IES	7,409	114.0	24.2	PDF	IES	-	-	-	-	-
		2,000	57.6	5,850	101.6	24.6	PDF	IES	6,012	104.4	24.7	PDF	IES	6,215	107.9	24.8	PDF	IES	6,298	109.3	24.9	PDF	IES	6,387	110.9	24.9	PDF	IES	-	-	-	-	-
		1,000	51.2	4,906	95.8	25.7	PDF	IES	5,039	98.4	25.8	PDF	IES	5,209	101.7	25.9	PDF	IES	5,278	103.1	26.0	PDF	IES	5,343	104.4	26.0	PDF	IES	-	-	-	-	-
	3,500	5,000	74.9	8,159	108.9	21.9	PDF	IES	8,374	111.8	22.0	PDF	IES	8,685	116.0	22.1	PDF	IES	8,801	117.5	22.2	PDF	IES	8,957	119.6	22.1	PDF	IES	-	-	-	-	-
		4,000	66.6	7,220	108.4	22.5	PDF	IES	7,408	111.2	22.6	PDF	IES	7,673	115.2	22.7	PDF	IES	7,778	116.8	22.7	PDF	IES	7,911	118.8	22.7	PDF	IES	-	-	-	-	-
		3,000	59.2	6,283	106.1	23.2	PDF	IES	6,448	108.9	23.3	PDF	IES	6,672	112.7	23.4	PDF	IES	6,765	114.3	23.4	PDF	IES	6,872	116.1	23.4	PDF	IES	-	-	-	-	-
		2,000	51.7	5,360	103.7	23.9	PDF	IES	5,502	106.4	24.0	PDF	IES	5,691	110.1	24.2	PDF	IES	5,770	111.6	24.2	PDF	IES	5,850	113.2	24.2	PDF	IES	-	-	-	-	-
		1,000	45.4	4,416	97.3	25.1	PDF	IES	4,529	99.8	25.1	PDF	IES	4,686	103.2	25.3	PDF	IES	4,750	104.6	25.3	PDF	IES	4,806	105.9	25.4	PDF	IES	-	-	-	-	-
	3,000	5,000	69.3	7,673	110.7	21.0	PDF	IES	7,871	113.6	21.1	PDF	IES	8,168	117.9	21.2	PDF	IES	8,278	119.5	21.2	PDF	IES	8,426	121.6	21.2	PDF	IES	-	-	-	-	-
		4,000	61.0	6,734	110.4	21.6	PDF	IES	6,905	113.2	21.6	PDF	IES	7,155	117.3	21.7	PDF	IES	7,255	118.9	21.8	PDF	IES	7,381	121.0	21.8	PDF	IES	-	-	-	-	-
		3,000	53.8	5,797	107.8	22.3	PDF	IES	5,945	110.5	22.3	PDF	IES	6,155	114.4	22.5	PDF	IES	6,242	116.0	22.5	PDF	IES	6,341	117.9	22.5	PDF	IES	-	-	-	-	-
		2,000	46.3	4,875	105.3	23.1	PDF	IES	4,999	108.0	23.2	PDF	IES	5,174	111.7	23.3	PDF	IES	5,247	113.3	23.4	PDF	IES	5,320	114.9	23.4	PDF	IES	-	-	-	-	-
		1,000	40.1	3,931	98.0	24.4	PDF	IES	4,027	100.4	24.4	PDF	IES	4,168	103.9	24.6	PDF	IES	4,227	105.4	24.6	PDF	IES	4,276	106.6	24.6	PDF	IES	-	-	-	-	-
	2,500	5,000	63.9	7,175	112.3	19.8	PDF	IES	7,358	115.1	19.9	PDF	IES	7,639	119.5	20.1	PDF	IES	7,742	121.2	20.1	PDF	IES	7,884	123.4	20.1	PDF	IES	-	-	-	-	-
		4,000	55.8	6,236	111.8	20.5	PDF	IES	6,393	114.6	20.5	PDF	IES	6,626	118.7	20.7	PDF	IES	6,719	120.4	20.7	PDF	IES	6,838	122.5	20.7	PDF	IES	-	-	-	-	-
		3,000	48.6	5,299	109.0	21.2	PDF	IES	5,432	111.8	21.3	PDF	IES	5,626	115.8	21.4	PDF	IES	5,706	117.4	21.5	PDF	IES	5,799	119.3	21.4	PDF	IES	-	-	-	-	-
		2,000	41.1	4,376	106.5	22.1	PDF	IES	4,487	109.2	22.2	PDF	IES	4,645	113.0	22.3	PDF	IES	4,711	114.6	22.4	PDF	IES	4,777	116.2	22.3	PDF	IES	-	-	-	-	-
		1,000	34.9	3,432	98.3	23.5	PDF	IES	3,514	100.7	23.5	PDF	IES	3,639	104.3	23.7	PDF	IES	3,691	105.8	23.6	PDF	IES	3,733	107.0	23.7	PDF	IES	-	-	-	-	-
	2,000	5,000	58.3	6,683	114.6	18.5	PDF	IES	6,856	117.6	18.5	PDF	IES	7,118	122.1	18.6	PDF	IES	7,214	123.7	18.7	PDF	IES	7,351	126.1	18.6	PDF	IES	-	-	-	-	-
		4,000	49.9	5,744	115.1	19.1	PDF	IES	5,890	118.0	19.2	PDF	IES	6,106	122.4	19.3	PDF	IES	6,191	124.1	19.3	PDF	IES	6,305	126.4	19.3	PDF	IES	-	-	-	-	-
		3,000	42.7	4,808	112.6	19.9	PDF	IES	4,930	115.5	19.9	PDF	IES	5,105	119.6	20.1	PDF	IES	5,178	121.3	20.1	PDF	IES	5,266	123.3	20.1	PDF	IES	-	-	-	-	-
		2,000	35.5	3,885	109.4	20.8	PDF	IES	3,984	112.2	20.9	PDF	IES	4,124	116.2	21.0	PDF	IES	4,183	117.8	21.1	PDF	IES	4,244	119.5	21.1	PDF	IES	-	-	-	-	-
1,000		29.1	2,941	101.1	22.3	PDF	IES	3,012	103.5	22.3	PDF	IES	3,119	107.2	22.6	PDF	IES	3,163	108.7	22.5	PDF	IES	3,200	110.0	22.5	PDF	IES	-	-	-	-	-	
1,500	5,000	53.4	6,183	115.8	16.6	PDF	IES	6,346	118.8	16.6	PDF	IES	6,588	123.4	16.8	PDF	IES	6,677	125.0	16.8	PDF	IES	6,808	127.5	16.8	PDF	IES	-	-	-	-	-	
	4,000	45.3	5,244	115.8	17.3	PDF	IES	5,380	118.8	17.3	PDF	IES	5,576	123.1	17.5	PDF	IES	5,654	124.8	17.5	PDF	IES	5,763	127.2	17.5	PDF	IES	-	-	-	-	-	
	3,000	38.1	4,307	113.0	18.1	PDF	IES	4,420	116.0	18.2	PDF	IES	4,575	120.1	18.3	PDF	IES	4,640	121.8	18.3	PDF	IES	4,724	124.0	18.3	PDF	IES	-	-	-	-	-	
	2,000	30.7	3,384	110.2	19.1	PDF	IES	3,474	113.2	19.2	PDF	IES	3,594	117.1	19.3	PDF	IES	3,646	118.8	19.4	PDF	IES	3,702	120.6	19.3	PDF	IES	-	-	-	-	-	
	1,000	24.3	2,440	100.4	20.7	PDF	IES	2,501	102.9	20.8	PDF	IES	2,588	106.5	20.9	PDF	IES	2,626	108.1	21.0	PDF	IES	2,658	109.4	21.0	PDF	IES	-	-	-	-	-	
1,000	5,000	48.5	5,675	117.0	13.8	PDF	IES	5,827	120.1	13.9	PDF	IES	6,049	124.7	14.1	PDF	IES	6,131	126.4	14.1	PDF	IES	6,258	129.0	14.1	PDF	IES	-	-	-	-	-	
	4,000	40.6	4,736	116.7	14.5	PDF	IES	4,862	119.8	14.6	PDF	IES	5,037	124.1	14.7	PDF	IES	5,108	125.8	14.8	PDF	IES	5,213	128.4	14.7	PDF	IES	-	-	-	-	-	
	3,000	33.4	3,799	113.7	15.4	PDF	IES	3,901	116.8	15.4	PDF	IES	4,036	120.8	15.7	PDF	IES	4,095	122.6	15.6	PDF	IES	4,173	124.9	15.7	PDF	IES	-	-	-	-	-	
	2,000	25.9	2,876	111.0	16.6	PDF	IES	2,956	114.1	16.7	PDF	IES	3,056	118.0	16.8	PDF	IES	3,100	119.7	16.8	PDF	IES	3,152	121.7	16.8	PDF	IES	-	-	-	-	-	
	1,000	19.6	1,932	98.6	18.4	PDF	IES	1,983	101.2	18.5	PDF	IES	2,050	104.6	18.6	PDF	IES	2,080	106.1	18.6	PDF	IES	2,108	107.6	18.6	PDF	IES	-	-	-	-	-	

1. 4ft Luminaire photometry has been conducted in accordance with IES LM-79-08. Photometry should