

LIGHTOLIER

by @signify

3D printed lighting

Track Heads

MS Series



Lightolier 3D Printed Track Heads, MS Series offers superior specification grade beam performance with Signify optics. With a sleek, integrated hinge and internal driver for a contemporary appearance, 3D Printed Track Heads is positioned higher to the ceiling for a cleaner look and lighting design. A wide variety of configuration options including unique and different color palettes make 3D Printed Track Heads unlike any other trackhead on the market.

Project: _____

Location: _____

Cat.No: _____

Type: _____

Qty: _____

Notes: _____

Fixture

Now including AccuRender technology for the highest color quality at the highest efficacy.

example: 3DTH L GYST LF 15L NB 27K 2

Series	Adapters	Colors	Textures	Lumens	Beams	CRI/CCT	Version
3DTH			LF				2
3DTH MS Series 3D Track Head	L Lightolier J Juno H Halo	Satin colors WHST White (9003) GYST Grey (9006) DGYS Dark Grey (7043) BKST Black (9004) GDST Gold Metallic colors PUME Purple BLME Blue GNME Green PKME Pink (Rose Gold) Matte colors GNMT Enamel Green BRMT Stone Brown BLMT Steel Blue	LF Layered Fine	10L 1000lm 15L 1500lm 23L 2300lm	NB Narrow (17°) MB Medium (22°) WB Wide (34°) VWB Very Wide (60°)	27K 90CRI/2700K 30K 90CRI/3000K 35K 90CRI/3500K 40K 90CRI/4000K	2 Version 2

Note: Different colors are available upon request but will require a longer lead time.

Features

- Customizable:** choose from a wide variety of colors.
- Sustainable:** 3D Printed products produce less carbon emissions when compared to traditional, conventional luminaires.
- Local production:** Printed and assembled in Littlestown, PA.
- Quick delivery:** Created on demand and shipped in weeks.
- Lifetime:** B50L90 lumen maintenance at 65,000 hours.

Dimming Compatibility

Trailing edge (ELV) dimming compatible
SELV-300P Lutron Skylark (100-7%)
DVELV-300P Lutron Diva (100-7%)
6615-P Leviton Decora (100-12%)

Electrical

Wattage:
 1000 lm - (950lm) = 9W
 1500 lm - (1440lm) = 15W
 2300 lm - (2300lm) = 23W
Track Mount: Standard Lightolier track adapter
Input Voltage: 120V
Frequency: 50/60Hz
Power Factor: 0.9
Control: ELV dimming

Mounting

Lightolier, Juno or Halo mounting track options
 Horizontal rotation = 350°
 Vertical tilt = 90°

Labels

cULus listed, 5 year warranty,
 IP20, RoHS & DLC rated

Buy American Act of 1933 (BAA)

This product is manufactured in one of our US factories and, as of the date of this document, this product was considered a commercially available off-the-shelf (COTS) item meeting the requirements of the BAA. This BAA designation hereunder does not address (i) the applicability of, or availability of a waiver under, the Trade Agreements Act, or (ii) the "Buy America" domestic content requirements imposed on states, localities, and other non-federal entities as a condition of receiving funds administered by the Department of Transportation or other federal agencies. Prior to ordering, please visit www.signify.com/baa to view a current list of BAA-compliant products to confirm this product's current compliance.



Unleash your inner creator

To configure your custom 3D printed luminaire, scan this QR Code with your smartphone's camera or visit us at: <https://www.3dprinted.lighting.lightolier.com/en/us/MS-Series/>



interact
ready.

MS Series

3D Track Heads (1000lm, 1500lm, 2300lm)

AccuRender Technology (CRI 90+)

The right light brings colors to life. Our new AccuRender technology helps ensure colors are rendered more accurately and consistently, while doing so as efficiently as CRI 80 products.



Standard CRI 80

Good color rendering
and high efficacy



Standard CRI 90

Better color rendering
and low efficacy



AccuRender

Best color rendering, color
preference and high efficacy

Enjoy design flexibility

Full range of products and options:

- Available soon in across Lightolier portfolio for application flexibility
- Multiple CCTs and lumen packages offered

Promote savings

High efficacy, with no penalty:

- Energy efficacy compares well to conventional CRI80
- Up to 25% more energy savings vs competitor CRI90¹
- Helps you meet Title 24 requirements

Bolster wellbeing

High MDER:

- AccuRender has a Melanopic Daylight Efficacy Ratio up to 0.80
- Helps support Circadian Rhythm²
- Earns points towards WELL Building Standard

Contribute to productivity

High MDER:

- Supports daytime vitality³ and alertness⁴
- Supports mood, thermo-regulation, and learning centers in the brain⁵
- May positively influence work engagement by helping make the environment more attractive⁶

Show your true colors

High color rendering:

- **CRI:**
R_a up to 94, R₉ up to 67, G_a up to 99, C₉ up to 94
- **TM-30:**
R_f up to 92, R_{f,h1} up to 91, R_g up to 100, R_{cs,h1} up to -5%
- **True to life colors** to help energize your environment and render better flesh tones critical for Healthcare, Hospitality and Retail

Achieve color balance

Best in class color consistency:

- ≤ 2 SDCM promotes aesthetic harmony in your space

1. Based on comparison of published specification sheet data, most competitor offerings reflect a 15 to 25% efficacy loss for CRI 90 compared to CRI 80, while Lightolier AccuRender results in only ≤5% drop compared to CRI 80.

2. Czeisler, 1999; Dijk & Archer, 2009; Lucas 2012, 2019

3. Partonen 2000

4. Viola 2008, Smolders 2012; Geerdink 2017

5. Fernandez 2018; Rupp, 2019

6. Veitch, Jennifer & Stokkermans, Mariska & R. Newsham, Guy. (2013). Linking Lighting Appraisals to Work Behaviors. Environment and Behavior. 45. 198-214. 10.1177/0013916511420560.

MS Series

3D Track Heads (1000lm, 1500lm, 2300lm)

Colors



WHST Satin White **GYST** Satin Grey **DGYS** Satin Dark Grey **BKST** Satin Black **GDST** Satin Gold



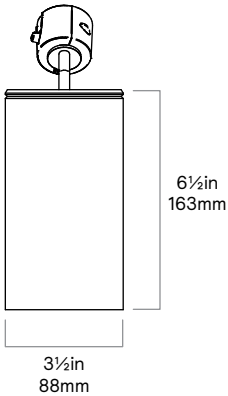
PUME Metallic Purple **BLME** Metallic Blue **GNME** Metallic Green **PKME** Metallic Pink (Rose Gold)



GNMT Matte Enamel Green **BRMT** Matte Stone Brown **BLMT** Matte Steel Blue **RDTP** Transparent Red

Different colors are available upon request but will require a longer lead time.

Dimensions



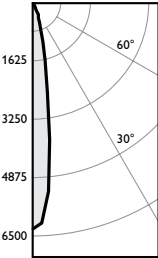
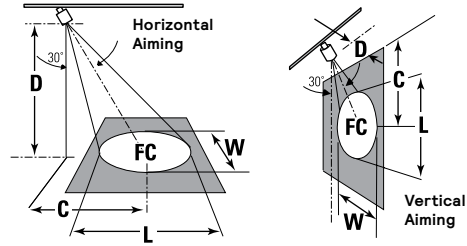
MS Series

3D Track Heads (1000lm)

Aiming Angles (1000lm)

L and W are the outer points where the candle power drops to 50% of the maximum. FC are the initial footcandles at the center of the beam. Data shown is for 3000K, use the table on the right for CRI/CCT adjustment factors.

D	Distance	C	Distance to center beam
L	Beam length	FC	Footcandles
W	Beam Width	CBCP	Center Beam Candlepower
A	Aiming Angle		



1000lm Narrow

3DTH L GYST LF 10L NB 30K

CCT ¹ :	3000K
Output lumens:	998 lms
Input watts ² :	9 W
Efficacy:	110.9 lm/w
CRI:	90 min
CBCP:	6,301 cd

Beam Angle:	18°
Report No:	1529

30° Aiming Angle

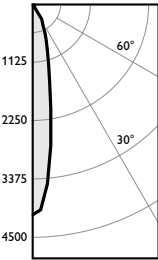
Horizontal Illuminance on floor

D	C	F.C.	L	W
6	3.5	114	2.6	2.2
8	4.6	64	3.4	2.9
10	5.8	41	4.3	3.7
12	6.9	28	5.1	4.4

30° Aiming Angle

Vertical Illuminance on floor

D	C	F.C.	L	W
2	3.5	197	2.7	1.3
3	5.2	88	4.1	1.9
4	6.9	49	5.5	2.5
5	8.7	32	6.9	3.2



1000lm Medium

3DTH L GYST LF 10L MB 30K

CCT ¹ :	3000K
Output lumens:	978 lms
Input watts ² :	9 W
Efficacy:	108.7 lm/w
CRI:	90 min
CBCP:	4,068 cd

Beam Angle:	24°
Report No:	1529

30° Aiming Angle

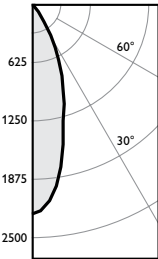
Horizontal Illuminance on floor

D	C	F.C.	L	W
6	3.5	73	3.0	2.6
8	4.6	41	4.0	3.4
10	5.8	26	5.0	4.3
12	6.9	18	6.0	5.1

30° Aiming Angle

Vertical Illuminance on floor

D	C	F.C.	L	W
2	3.5	127	3.3	1.5
3	5.2	57	5.0	2.2
4	6.9	32	6.6	3.0
5	8.7	20	8.3	3.7



1000lm Wide

3DTH L GYST LF 10L WB 30K

CCT ¹ :	3000K
Output lumens:	966 lms
Input watts ² :	9 W
Efficacy:	107.3 lm/w
CRI:	90 min
CBCP:	2,248 cd

Beam Angle:	35°
Report No:	1529

30° Aiming Angle

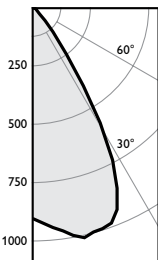
Horizontal Illuminance on floor

D	C	F.C.	L	W
6	3.5	41	5.2	4.4
8	4.6	23	7.0	5.8
10	5.8	15	8.7	7.3
12	6.9	10	10.4	8.7

30° Aiming Angle

Vertical Illuminance on floor

D	C	F.C.	L	W
2	3.5	70	7.2	2.5
3	5.2	31	10.8	3.8
4	6.9	18	14.4	5.0
5	8.7	11	18.0	6.3



1000lm Very Wide

3DTH L GYST LF 10L VWB 30K

CCT ¹ :	3000K
Output lumens:	945 lms
Input watts ² :	9 W
Efficacy:	105.0 lm/w
CRI:	90 min
CBCP:	903 cd

Beam Angle:	60°
Report No:	1529

30° Aiming Angle

Horizontal Illuminance on floor

D	C	F.C.	L	W
6	3.5	16	10.4	8.0
8	4.6	9	13.9	10.7
10	5.8	6	17.3	13.3
12	6.9	4	20.8	16.0

30° Aiming Angle

Vertical Illuminance on floor

D	C	F.C.	L	W
2	3.5	28	#N/A	4.6
3	5.2	13	#N/A	6.9
4	6.9	7	#N/A	9.2
5	8.7	5	#N/A	11.5

1. Correlated Color Temperature within specs as defined in ANSI_NEMA_ANSI C78.377-2008: Specifications for the Chromaticity of Solid State Lighting Products.

2. Wattage controlled to within +/- 5%.

Note: Tested using absolute photometry as specified in LM79: IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products.

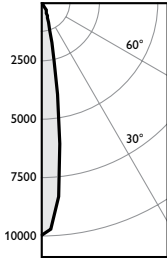
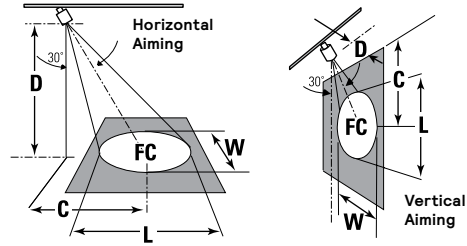
MS Series

3D Track Heads (1500lm)

Aiming Angles (1500lm)

L and W are the outer points where the candle power drops to 50% of the maximum. FC are the initial footcandles at the center of the beam. Data shown is for 3000K, use the table on the right for CRI/CCT adjustment factors.

D	Distance	C	Distance to center beam
L	Beam length	FC	Footcandles
W	Beam Width	CBCP	Center Beam Candlepower
A	Aiming Angle		



1500lm Narrow

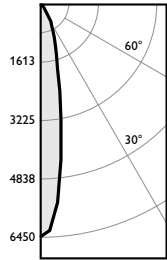
3DTH L GYST LF 15L NB 30K

CCT ¹ :	3000K
Output lumens:	1583 lms
Input watts ² :	15 W
Efficacy:	105.5 lm/w
CRI:	90 min
CBCP:	9,989 cd

Beam Angle:	18°
Report No:	1529

30° Aiming Angle					
Horizontal Illuminance on floor					
D	C	F.C.	L	W	
6	3.5	180	2.6	2.2	
8	4.6	101	3.4	2.9	
10	5.8	65	4.3	3.7	
12	6.9	45	5.1	4.4	

30° Aiming Angle					
Vertical Illuminance on floor					
D	C	F.C.	L	W	
2	3.5	312	2.7	1.3	
3	5.2	139	4.1	1.9	
4	6.9	78	5.5	2.5	
5	8.7	50	6.9	3.2	



1500lm Medium

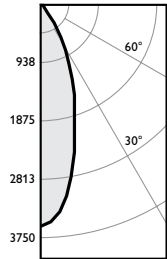
3DTH L GYST LF 15L MB 30K

CCT ¹ :	3000K
Output lumens:	1551 lms
Input watts ² :	15 W
Efficacy:	103.4 lm/w
CRI:	90 min
CBCP:	6,449 cd

Beam Angle:	21°
Report No:	1529

30° Aiming Angle					
Horizontal Illuminance on floor					
D	C	F.C.	L	W	
6	3.5	116	3.0	2.6	
8	4.6	65	4.0	3.4	
10	5.8	42	5.0	4.3	
12	6.9	29	6.0	5.1	

30° Aiming Angle					
Vertical Illuminance on floor					
D	C	F.C.	L	W	
2	3.5	202	3.3	1.5	
3	5.2	90	5.0	2.2	
4	6.9	50	6.6	3.0	
5	8.7	32	8.3	3.7	



1500lm Wide

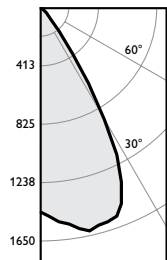
3DTH L GYST LF 15L WB 30K

CCT ¹ :	3000K
Output lumens:	1532 lms
Input watts ² :	15 W
Efficacy:	102.1 lm/w
CRI:	90 min
CBCP:	3,564 cd

Beam Angle:	35°
Report No:	1529

30° Aiming Angle					
Horizontal Illuminance on floor					
D	C	F.C.	L	W	
6	3.5	64	5.2	4.4	
8	4.6	36	7.0	5.8	
10	5.8	23	8.7	7.3	
12	6.9	16	10.4	8.7	

30° Aiming Angle					
Vertical Illuminance on floor					
D	C	F.C.	L	W	
2	3.5	47	7.2	2.5	
3	5.2	21	10.8	3.8	
4	6.9	12	14.4	5.0	
5	8.7	8	18.0	6.3	



1500lm Very Wide

3DTH L GYST LF 15L VWB 30K

CCT ¹ :	3000K
Output lumens:	1498 lms
Input watts ² :	15 W
Efficacy:	99.9 lm/w
CRI:	90 min
CBCP:	1,432 cd

Beam Angle:	60°
Report No:	1529

30° Aiming Angle					
Horizontal Illuminance on floor					
D	C	F.C.	L	W	
6	3.5	26	10.4	8.0	
8	4.6	15	13.9	10.7	
10	5.8	9	17.3	13.3	
12	6.9	6	20.8	16.0	

30° Aiming Angle					
Vertical Illuminance on floor					
D	C	F.C.	L	W	
2	3.5	45	#N/A	4.6	
3	5.2	20	#N/A	6.9	
4	6.9	11	#N/A	9.2	
5	8.7	7	#N/A	11.5	

1. Correlated Color Temperature within specs as defined in ANSI_NEMA_ANSLG C78.377-2008: Specifications for the Chromaticity of Solid State Lighting Products.

2. Wattage controlled to within +/- 5%.

Note: Tested using absolute photometry as specified in LM79: IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products.

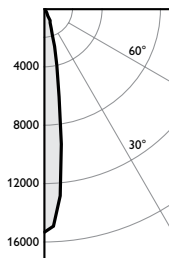
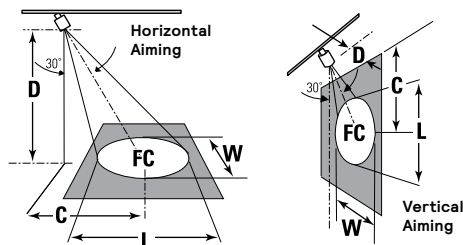
MS Series

3D Track Heads (2300lm)

Aiming Angles (2300lm)

L and W are the outer points where the candle power drops to 50% of the maximum. FC are the initial footcandles at the center of the beam. Data shown is for 3000K, use the table on the right for CRI/CCT adjustment factors.

D Distance
L Beam length
W Beam Width
A Aiming Angle
C Distance to center beam
FC Footcandles
CBCP Center Beam Candlepower



2300lm Narrow

3DTH L GYST LF 23L NB 30K

CCT¹: 3000K
Output lumens: 2435 lms
Input watts²: 23 W
Efficacy: 105.9 lm/w
CRI: 90 min
CBCP: 15,367 cd

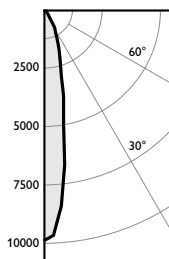
Beam Angle: 18°
Report No: 1529

30° Aiming Angle Horizontal Illuminance on floor

D	C	F.C.	L	W
6	3.5	277	2.6	2.2
8	4.6	156	3.4	2.9
10	5.8	100	4.3	3.7
12	6.9	69	5.1	4.4

30° Aiming Angle Vertical Illuminance on floor

D	C	F.C.	L	W
2	3.5	480	2.7	1.3
3	5.2	213	4.1	1.9
4	6.9	120	5.5	2.5
5	8.7	77	6.9	3.2



2300lm Medium

3DTH L GYST LF 23L MB 30K

CCT¹: 3000K
Output lumens: 2385 lms
Input watts²: 23 W
Efficacy: 103.7 lm/w
CRI: 90 min
CBCP: 9,921 cd

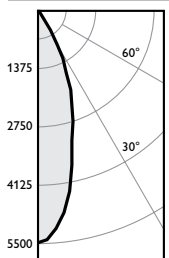
Beam Angle: 21°
Report No: 1529

30° Aiming Angle Horizontal Illuminance on floor

D	C	F.C.	L	W
6	3.5	179	3.0	2.6
8	4.6	101	4.0	3.4
10	5.8	64	5.0	4.3
12	6.9	45	6.0	5.1

30° Aiming Angle Vertical Illuminance on floor

D	C	F.C.	L	W
2	3.5	310	3.3	1.5
3	5.2	138	5.0	2.2
4	6.9	78	6.6	3.0
5	8.7	50	8.3	3.7



2300lm Wide

3DTH L GYST LF 23L WB 30K

CCT¹: 3000K
Output lumens: 2357 lms
Input watts²: 23 W
Efficacy: 102.5 lm/w
CRI: 90 min
CBCP: 5,483 cd

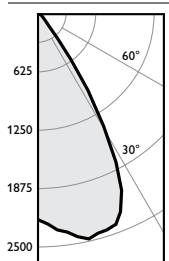
Beam Angle: 35°
Report No: 1529

30° Aiming Angle Horizontal Illuminance on floor

D	C	F.C.	L	W
6	3.5	99	5.2	4.4
8	4.6	56	7.0	5.8
10	5.8	36	8.7	7.3
12	6.9	25	10.4	8.7

30° Aiming Angle Vertical Illuminance on floor

D	C	F.C.	L	W
2	3.5	171	7.2	2.5
3	5.2	76	10.8	3.8
4	6.9	43	14.4	5.0
5	8.7	27	18.0	6.3



2300lm Very Wide

3DTH L GYST LF 23L VWB 30K

CCT¹: 3000K
Output lumens: 2305 lms
Input watts²: 23 W
Efficacy: 100.2 lm/w
CRI: 90 min
CBCP: 2,203 cd

Beam Angle: 60°
Report No: 1529

30° Aiming Angle Horizontal Illuminance on floor

D	C	F.C.	L	W
6	3.5	40	10.4	8.0
8	4.6	22	13.9	10.7
10	5.8	14	17.3	13.3
12	6.9	10	20.8	16.0

30° Aiming Angle Vertical Illuminance on floor

D	C	F.C.	L	W
2	3.5	69	#N/A	4.6
3	5.2	31	#N/A	6.9
4	6.9	17	#N/A	9.2
5	8.7	11	#N/A	11.5

1. Correlated Color Temperature within specs as defined in ANSI/NEMA/ANSI C78.377-2008: Specifications for the Chromaticity of Solid State Lighting Products.

2. Wattage controlled to within +/- 5%.

Note: Tested using absolute photometry as specified in LM79: IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products.



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