3D printed lighting

LIGHTOLIER

Track Heads

MS 3DP 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 pallets make 3D Printed Track Heads unlike any other trackhead on the market.

Project:			
Location:			
Cat.No:			
Туре:			
Qty:			
Notes:			

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

Fixture

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

Series 3DTH	Adapters	Colors	Textures	Lumens	Beams	CRI/CCT	Version 2
3DTH MS Series 3D Track Head	L Lightolier J Juno H Halo	BKST Satin Black BSST Satin Brass BZST Satin Bronze CAPP Satin Cappuccino GYST Satin Grey SAGE Satin Sage WHST Satin White	LF Layered Fine	10L 1000lm 15L 1500lm 23L 2300lm	NB Narrow (17°) MB Medium (22°) WB Wide (34°) VWB Very Wide (60°)	27K 90 CRI/2700K 30K 90 CRI/3000K 35K 90 CRI/3500K 40K 90 CRI/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.
- 2. Sustainable: 3D Printed products produce less carbon emissions when compared to traditional, conventional luminaires.
- **3. Local production:** Printed and assembled in Littlestown, PA.
- **4. Quick delivery:** Created on demand and shipped in weeks.
- **5. Lifetime:** L90/B50 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 Declare. LBC Red List Approved.

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.







Declare.





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 redered more accurately and consistently, while doing so as efficiently as CRI 80 products.



Standard CRI 80

Good color rendering and high efficacy

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

Enjoy design flexibility

Full range of products and options:

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



Standard CRI 90

Better color rendering and low efficacy

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
- 2. Czeisler, 1999; Dijk &Archer, 2009; Lucas 2012, 2019
- 3. Partonen 2000
- 4. Viola 2008, Smolders 2012; Geerdink 2017
- 5. Fernandez 2018; Rupp, 2019



AccuRender

Best color rendering, color preference and high efficacy

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:

- \leq 2 SDCM promotes aesthetic harmony
- Veitch, Jennifer & Stokkermans, Mariska & R. Newsham, Guy. (2013). Linking Lighting Appraisals to Work Behaviors. Environment and Behavior. 45. 198-214. 10.1177/0013916511420560.

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





SAGE Satin Sage

31/2in

6½in 163mm

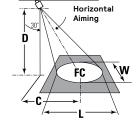
88mm

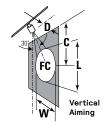
3D Track Heads (1000lm)

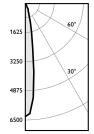
Aiming Angles (1000lm)

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
- Beam length
- FC Footcandles CBCP Center Beam Candlepower
- Beam Width 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

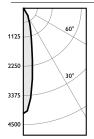
30° Aiming Angle

Horizontal Illuminance on floor

D	С	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
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30° Aiming Angle Vertical Illuminance on floor

С	F.C.	L	w
3.5	197	2.7	1.3
5.2	88	4.1	1.9
6.9	49	5.5	2.5
8.7	32	6.9	3.2
	3.5 5.2 6.9	3.5 197 5.2 88 6.9 49	3.5 197 2.7 5.2 88 4.1 6.9 49 5.5



1000lm Medium

3DTH L GYST LF 10L MB 30K

CCT1:	3000K
Output lumens:	978 lms
Input watts2:	9 W
Efficacy:	108.7 lm/w
CRI:	90 min
CBCP:	4,068 cd
Beam Angle:	24°
Report No:	1529

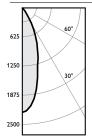
30° Aiming Angle

Horizontal Illuminance on floor D С F.C. W 6 3.5 73 3.0 2.6 8 4.6 41 40 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

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D	С	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		
	2 3 4	2 3.5 3 5.2 4 6.9	2 3.5 127 3 5.2 57 4 6.9 32	2 3.5 127 3.3 3 5.2 57 5.0 4 6.9 32 6.6		



1000lm Wide

3DTH L GYST LF 10L WB 30K

3000K
966 lms
9 W
107.3 lm/w
90 min
2,248 cd
35°
1529

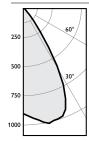
30° Aiming Angle

Horizontal Illuminance on floor

D	С	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 moor						
D	С	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 Wlde

3DTH L GYST LF 10L VWB 30K

CCT1:	3000K
Output lumens:	945 lms
Input watts ² :	9 W
Efficacy:	105.0 lm/v
CRI:	90 min
CBCP:	903 cd
Beam Angle:	60°
Report No:	1529

30° Aiming Angle

HOLIZOITER III UIIII II AIICE ON 1100					
D	С	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	С	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_ANSLG C78.377-2008: Specifications for the Chromaticity of Solid State Lighting Products.

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

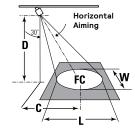
^{2.} Wattage controlled to within +/- 5%

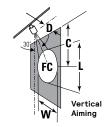
3D Track Heads (1500lm)

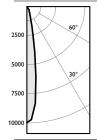
Aiming Angles (1500lm)

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 FC Footcandles
- Beam length
 - Beam Width CBCP Center Beam Candlepower
- Aiming Angle







1500lm Narrow

3DTH L GYST LF 15L NB 30K

CCT1:	3000K
Output lumens:	1583 lms
Input watts2:	15 W
Efficacy:	105.5 lm/w
CRI:	90 min
CBCP:	9,989 cd
Beam Angle:	18°
Report No:	1529

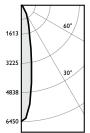
30° Aiming Angle

Horizontal Illuminance on floor

D	С	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	С	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

CBCP: Beam Angle:	6,449 cd
Efficacy:	103.4 lm/w
CRI:	90 min
CBCP:	6,449 cd
CCT¹:	3000K
Output lumens:	1551 lms
Input watts²:	15 W

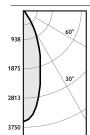
30° Aiming Angle

Horizontal Illuminance on floor D С F.C. W 6 3.5 116 3.0 2.6 8 4.6 65 40 3.4 10 5.8 42 5.0 4.3

12 6.9 29 6.0 5.1

30° Aiming Angle

ver tical maininance on moor				
D	С	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
	2 3 4	2 3.5 3 5.2 4 6.9	2 3.5 202 3 5.2 90 4 6.9 50	D C F.C. L 2 3.5 202 3.3 3 5.2 90 5.0 4 6.9 50 6.6



1500lm Wide

3DTH L GYST LF 15L WB 30K

3000K
1532 lms
15 W
102.1 lm/w
90 min
3,564 cd
35°
1529

30° Aiming Angle

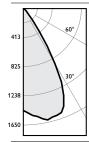
Horizontal Illuminance on floor

D	С	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° Aimina Anale

Vertical Illuminance on floor				
Ь	_	E C		14/

С	F.C.	L	W
3.5	47	7.2	2.5
5.2	21	10.8	3.8
6.9	12	14.4	5.0
8.7	8	18.0	6.3
	3.5 5.2 6.9	3.5 47 5.2 21 6.9 12	3.5 47 7.2 5.2 21 10.8 6.9 12 14.4



1500lm Very Wlde

3DTH L GYST LF 15L VWB 30K

CCT1:	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

W
8.0
10.7
13.3
16.0

30° Aiming Angle

4 6.9

5

8.7

vertical illuminance on floor					
D	С	F.C.	L	W	
2	3.5	45	#N/A	4.6	
3	5.2	20	#N/A	6.9	

#N/A 11

#N/A 11.5

9.2

 $Note: Te\bar{\textbf{s}} \textbf{ted using absolute photometry as specified in LM79: IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products.}$

^{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%

3D Track Heads (2300lm)

Aiming Angles (2300lm)

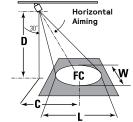
L and W are the outer points where the candle power drops to 50% of the maximum. FC are the initial footcandles at the center of the beam. Data shown is for 3000K, use the table on the right for CRI/CCT adjustment factors.

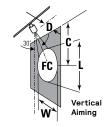
D Distance C Distance to center beam

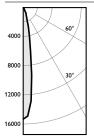
Beam length FC Footcandles

CBCP Center Beam Candlepower

Beam Width Aiming Angle







2300lm Narrow

3DTH L GYST LF 23L NB 30K

CCT ¹ :	3000K
Output lumens:	2435 lms
Input watts2:	23 W
Efficacy:	105.9 lm/w
CRI:	90 min
CBCP:	15,367 cd
Beam Angle:	18°
Poport No:	1520

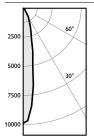
30° Aiming Angle

Horizontal Illuminance on floor

D	С	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	С	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

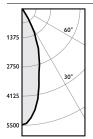
CCT1:	3000K
Output lumens:	2385 lms
Input watts2:	23 W
Efficacy:	103.7 lm/w
CRI:	90 min
CBCP:	9,921 cd
Beam Angle:	21°
Report No:	1529

30° Aiming Angle

Hor	izontal	Illumin	ance o	n floo
D	С	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

voi cioai ilialililiarico ori rioor				
D	С	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

CCT ¹ :	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° Aimina Anale

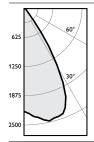
Horizontal Illuminance on floor

D	С	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	С	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 Wlde

3DTH L GYST LF 23L VWB 30K

CCT1:	3000K
Output lumens:	2305 lms
Input watts2:	23 W
Efficacy:	100.2 lm/v
CRI:	90 min
CBCP:	2,203 cd
Beam Angle:	60°
Report No:	1529

30° Aiming Angle

Tiorizontal illullillance on nooi				
D	С	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

ver clear manimance on neer				
D	С	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
	2 3 4	2 3.5 3 5.2 4 6.9	2 3.5 69 3 5.2 31 4 6.9 17	2 3.5 69 #N/A 3 5.2 31 #N/A 4 6.9 17 #N/A

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

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

^{2.} Wattage controlled to within +/- 5%