

TSRA25BET

2.5" Track Spot Luminaire with Regressed Arm

2.5" Diameter Track spot designed for retail, hospitality and commercial spot lighting applications.

LUMENS / WATTAGE DATA

PART NUMBER	SOURCE LUMENS ¹	DELIVERED LUMENS ²	SYSTEM WATTS	LPW
TSRA25BET 13L	1300	1300	15	87

¹ Nominal Source Lumens at 35K ² Nominal Delivered Lumens

FEATURES

TSRA25 fixture delivers approximately 1300 initial lumens viz precise TIR optics. Available in four distinct beam patterns. Regressed optic produces clean beam with smooth edge and is field interchangeable to other beam angles without tools. Integral flat black baffle reduces peripheral brightness. Sturdy, regressed support arm has positive friction-grip hardware that will not sag, or rotate out of aiming position over time. Clean cylindrical housing has no exposed hardware and can rotate 359 degrees with up to 90 degree aiming from nadir. Integral on/off switch for convenience.

CONSTRUCTION

TSRA25 is constructed of die cast aluminum and fabricated steel and is finished with durable powder coat finish that can be easily cleaned and maintained.

ELECTRONICS

TSRA25 has best in class LED system with 3 MacAdam ellipse binning and 80+ CRI. Integral 120V power supply is dimmable via ELV type dimming protocol control devices (contact factory for more information).

CODE COMPLIANCE

ETL listed for dry location. Manufactured and tested to UL Standards No. 1574.

WARRANTY

5 year warranty standard. L70>60,000 hours.

QUICK SHIP

Quick ship highlighted options ship in 2-4 days.

PROJECT: _____

QUANTITY: _____

TYPE: _____



PRODUCT SELECTOR GUIDE

SERIES	FAMILY	LUMENS	CCT	BEAM	DIMMING	ADAPTOR	FINISH
TS	RA25	13L			E1	BET	

EXAMPLE

TS	RA25	13L	35K	MD	E1	BET	MW
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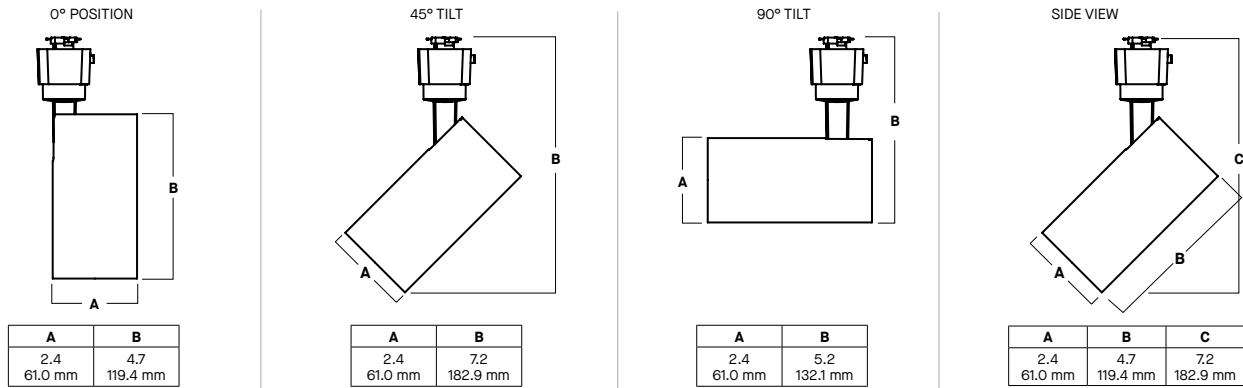
SERIES	FAMILY	LUMENS	CCT	BEAM	DIMMING	ADAPTOR	FINISH		
TS	RA25	13L	1320Lm	30K 35K	3000 K 3500 K	XN 19° ND 23° MD 31° XW 54°	E1 Electronic Driver, 120V. ELV Dimming.	BET Basix 1 CIR/1 NEUT 120V	MW Matte White MB Matte Black

GREEN TEXT INDICATES QUICK SHIP OPTIONS



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FIXTURE DIMENSIONS



FINISH



PAINT TIMES

TIER	COST	AVERAGE PAINT TIME*
Tier 1 - Standard Finishes	\$	🕒
Custom Color	Contact Factory	Contact Factory

*CONTACT FACTORY FOR SPECIFIC PRODUCT LEAD TIMES

TSRA25 13L 35K XN E1 BET xx

CANDLEPOWER CURVE TEST SP-15008	INTENSITY CANDELA 0° AZIMUTH	ZONAL LUMENS	SINGLE UNIT: PERFORMANCE HORIZONTAL FOOTCANDLES INITIAL DOWNLIGHT ONLY				MULTIPLE UNITS: PERFORMANCE 80/50/20% REFLECTANCES HORIZONTAL FOOTCANDLES AND WATTS/SQ FT								
			Mounting Distance	FC at Beam Center	Diameter at Beam Angle	FC at Beam Edge	Ceiling Height	Fixture Spacing	RCR 4		RCR 6				
	0°	8893	0° - 10°	612	46%	6.5'	210 fc	2.2'	101 fc	12'	3"	142	1.63	155	1.88
	5°	7525	0° - 20°	1087	82%	7.5'	158 fc	2.6'	76 fc	15'	4"	78	0.89	84	1.03
	15°	1612	0° - 30°	1235	93%	8.5'	123 fc	2.9'	59 fc	18'	5"	49	0.56	53	0.65
	25°	338	0° - 40°	1290	97%	10.0'	89 fc	3.4'	43 fc	Delivered Illuminance Rating: (DIR)		87 FC per W/Sq. Ft.		82 FC per W/Sq. Ft.	
	35°	90	0° - 60°	1315	99%	12.0'	62 fc	4.1'	30 fc	1' Suspension Length to luminous aperture Square rooms used for multiple units: RCR 4: Length & Width = Ceiling Ht. - 3.5' x 2.50 RCR 6: Length & Width = Ceiling Ht. - 3.5' x 1.66 * Average Initial Footcandles at 2.5' Above Floor + Exceeds Spacing Ratio by 7% ** Exceeds Spacing Ratio by 5% *** Exceeds Spacing Ratio by 4%					
	45°	24	0° - 80°	1319	99%	14.0'	45 fc	4.8'	22 fc						
	55°	7	0° - 90°	1320	99%	16.0'	35 fc	5.5'	17 fc						
	90°	1	Total	1328	100%	20.0'	22 fc	6.9'	11 fc						
	Delivered Lumens: 1328 Luminaire Watts: 15 LER: 88.53			CP at 0° (Nadir): 8893 CRI: 80+			Beam Angle: 19° Spacing Ratio: 0.33 Melanopic Ratio: 0.57			CCT Multiplier: 30K x .93					

TSRA25 13L 35K ND E1 BET xx

CANDLEPOWER CURVE TEST SP-15008_1	INTENSITY CANDELA 0° AZIMUTH	ZONAL LUMENS	SINGLE UNIT: PERFORMANCE HORIZONTAL FOOTCANDLES INITIAL DOWNLIGHT ONLY				MULTIPLE UNITS: PERFORMANCE 80/50/20% REFLECTANCES HORIZONTAL FOOTCANDLES AND WATTS/SQ FT								
			Mounting Distance	FC at Beam Center	Diameter at Beam Angle	FC at Beam Edge	Ceiling Height	Fixture Spacing	RCR 4		RCR 6				
	0°	6401	0° - 10°	478	37%	6.5'	152 fc	2.7'	71 fc	12'	3'	135	1.63	146	1.88
	5°	5685	0° - 20°	1010	78%	7.5'	114 fc	3.1'	53 fc	15'	4'	74	0.89	80	1.03
	15°	1880	0° - 30°	1176	91%	8.5'	89 fc	3.5'	42 fc	18'	5'	46	0.56	50	0.65
	25°	305	0° - 40°	1237	96%	10.0'	64 fc	4.1'	30 fc	Delivered Illuminance Rating: (DIR)		83 FC per W/Sq. Ft.		78 FC per W/Sq. Ft.	
	35°	84	0° - 60°	1273	99%	12.0'	44 fc	4.9'	21 fc	1' Suspension Length to luminous aperture Square rooms used for multiple units: RCR 4: Length & Width = Ceiling Ht. - 3.5' x 2.50 RCR 6: Length & Width = Ceiling Ht. - 3.5' x 1.66 * Average Initial Footcandles at 2.5' Above Floor					
	45°	30	0° - 80°	1278	99%	14.0'	33 fc	5.8'	15 fc						
	55°	11	0° - 90°	1280	99%	16.0'	25 fc	6.6'	12 fc						
	90°	1	Total	1288	100%	20.0'	16 fc	8.2'	8 fc						
	Delivered Lumens: 1288 Luminaire Watts: 15 LER: 85.87			CP at 0° (Nadir): 6401 CRI: 80+			Beam Angle: 23° Spacing Ratio: 0.39 Melanopic Ratio: 0.57			CCT Multiplier: 30K x .93					

HOW TO USE PERFORMANCE DATA

SINGLE UNIT	MULTIPLE UNITS
<p>Cone of Light of a single, symmetrical beam luminaire. Direct initial illumination (FC) and Beam Angle diameter directly beneath fixture; shown at different distances from aperture to horizontal plane. Calculated using Inverse Square Law.</p> $FC_{H} = CP \times (\cos \theta) \div D^2$ <p>Beam Diam. = 1/2 Beam Angle (Tan) x 2D</p> <ul style="list-style-type: none"> • CP Candela at 0° (Nadir) • Cos θ Cosine of θ Angle • D Distance (Mounting Height AFF) • FC_H Footcandles, Horizontal • Beam Angle Cone of light to 50% max. CP • Beam Diam. Pattern of light at Beam Angle 	<p>Square grid layout of multiple luminaires in unfurnished, square rooms of different proportions (Room Cavity Ratios) with 80/50/20% room surface reflectances. 2' Suspension Length to aperture. Initial average illumination (FC) calculated at 2.5' above floor, using Zonal Cavity Method. W/Sq. Ft. of layout shown for each ceiling height and RCR.</p> <p>Delivered Illuminance Rating (DIR*): System performance indicator expressed as ratio of approximate initial FC per W/Sq. Ft. delivered to horizontal plane below, for the range of ceiling heights indicated.</p> <ul style="list-style-type: none"> • To estimate FC for Fixture Spacing that is different than shown (do not exceed Spacing Ratio): $FC = \text{Chart Spacing}^2 \div \text{Different Spacing}^2 \times \text{Chart FC}$ • To estimate Sq. Ft. per fixture for a specific target FC: $\text{Sq. Ft.} / \text{Fixture} = \text{Chart FC} \times \text{Chart Spacing}^2 \div \text{Target FC}$ <ul style="list-style-type: none"> • To estimate Fixture Quantity in a room: $\text{Fixture Qty.} = \text{Sq. Ft. of Rm.} \div \text{Sq. Ft. per fixture}$ • To estimate Watts/Sq. Ft.: $W / \text{Sq. Ft.} = \text{Luminaire Watts} \times \text{Qty.} \div \text{Sq. Ft. of Rm.}$

TSRA25 13L 35K MD E1 BET xx

CANDLEPOWER CURVE TEST SP-15008_2	INTENSITY CANDELA 0° AZIMUTH	ZONAL LUMENS	SINGLE UNIT: PERFORMANCE HORIZONTAL FOOTCANDLES INITIAL DOWNLIGHT ONLY				MULTIPLE UNITS: PERFORMANCE 80/50/20% REFLECTANCES HORIZONTAL FOOTCANDLES AND WATTS/SQ FT					
			Mounting Distance	FC at Beam Center	Diameter at Beam Angle	FC at Beam Edge	Ceiling Height	Fixture Spacing	RCR 3		RCR 5	
	0°	0° - 10° 344 27%	6.5'	95 fc	3.6'	43 fc	9'	3"	133	1.61	150	1.98
	0°	0° - 20° 891 71%	7.5'	71 fc	4.1'	32 fc	12'	4"	76	0.92	63	0.83
	5°	0° - 30° 1115 89%	8.5'	55 fc	4.6'	25 fc	15'	5"	54	0.65	54	0.71
	15°	0° - 40° 1190 95%	10.0'	40 fc	5.5'	18 fc	Delivered Illuminance Rating: (DIR)		83 FC per W/Sq. Ft.		76 FC per W/Sq. Ft.	
	25°	0° - 60° 1237 99%	12.0'	28 fc	6.6'	12 fc	1' Suspension Length to luminous aperture Square rooms used for multiple units: RCR 3: Length & Width = Ceiling Ht. - 3.5' x 3.33 RCR 5: Length & Width = Ceiling Ht. - 3.5' x 2.00 * Average Initial Footcandles at 2.5' Above Floor * Exceeds Spacing Ratio by 7%					
	35°	0° - 80° 1242 99%	14.0'	20 fc	7.7'	9 fc						
	45°	0° - 90° 1244 99%	16.0'	16 fc	8.7'	7 fc						
	55°	90° 1	20.0'	10 fc	10.9'	4 fc						
	90°	Total 1252 100%										
	Delivered Lumens: 1252 Luminaire Watts: 15 LER: 83.47	CP at 0° (Nadir): 4008 CRI: 80+	Beam Angle: 31° Spacing Ratio: 0.51 Melanopic Ratio 0.57	CCT Multiplier: 30K x .93								

TSRA25 13L 35K XW E1 BET xx

CANDLEPOWER CURVE TEST SP-15008_3	INTENSITY CANDELA 0° AZIMUTH	ZONAL LUMENS	SINGLE UNIT: PERFORMANCE HORIZONTAL FOOTCANDLES INITIAL DOWNLIGHT ONLY				MULTIPLE UNITS: PERFORMANCE 80/50/20% REFLECTANCES HORIZONTAL FOOTCANDLES AND WATTS/SQ FT					
			Mounting Distance	FC at Beam Center	Diameter at Beam Angle	FC at Beam Edge	Ceiling Height	Fixture Spacing	RCR 2		RCR 4	
	0°	0° - 10° 160 12%	6.5'	39 fc	6.6'	14 fc	9'	4"	87	0.97	57	0.71
	0°	0° - 20° 589 44%	7.5'	29 fc	7.6'	10 fc	12'	5"	48	0.53	42	0.53
	5°	0° - 30° 1027 77%	8.5'	23 fc	8.6'	8 fc	15'	6"	33	0.37	23	0.29
	15°	0° - 40° 1236 93%	10.0'	17 fc	10.1'	6 fc	Delivered Illuminance Rating: (DIR)		90 FC per W/Sq. Ft.		79 FC per W/Sq. Ft.	
	25°	0° - 60° 1316 99%	12.0'	11 fc	12.1'	4 fc	1' Suspension Length to luminous aperture Square rooms used for multiple units: RCR 2: Length & Width = Ceiling Ht. - 3.5' x 5.00 RCR 4: Length & Width = Ceiling Ht. - 3.5' x 2.50 * Average Initial Footcandles at 2.5' Above Floor					
	35°	0° - 80° 1321 99%	14.0'	8 fc	14.1'	3 fc						
	45°	0° - 90° 1322 99%	16.0'	6 fc	16.2'	2 fc						
	55°	90° 1	20.0'	4 fc	20.2'	1 fc						
	90°	Total 1330 100%										
	Delivered Lumens: 1330 Luminaire Watts: 15 LER: 88.67	CP at 0° (Nadir): 1656 CRI: 80+	Beam Angle: 54° Spacing Ratio: 0.87 Melanopic Ratio 0.58	CCT Multiplier: 30K x .93								

HOW TO USE PERFORMANCE DATA

SINGLE UNIT	MULTIPLE UNITS
<p>Cone of Light of a single, symmetrical beam luminaire. Direct initial illumination (FC) and Beam Angle diameter directly beneath fixture; shown at different distances from aperture to horizontal plane. Calculated using Inverse Square Law.</p> $FC_{H} = CP \times (\cos \theta) \div D^2$ <p>Beam Diam. = 1/2 Beam Angle (Tan) x 2D</p> <ul style="list-style-type: none"> CP Candela at 0° (Nadir) Cos θ Cosine of θ Angle D Distance (Mounting Height AFF) FC_H Footcandles, Horizontal Beam Angle Cone of light to 50% max. CP Beam Diam. Pattern of light at Beam Angle 	<p>Square grid layout of multiple luminaires in unfurnished, square rooms of different proportions (Room Cavity Ratios) with 80/50/20% room surface reflectances. 2' Suspension Length to aperture. Initial average illumination (FC) calculated at 2.5' above floor, using Zonal Cavity Method. W/Sq. Ft. of layout shown for each ceiling height and RCR.</p> <p>Delivered Illuminance Rating (DIR*): System performance indicator expressed as ratio of approximate initial FC per W/Sq. Ft. delivered to horizontal plane below, for the range of ceiling heights indicated.</p> <ul style="list-style-type: none"> To estimate FC for Fixture Spacing that is different than shown (do not exceed Spacing Ratio): $FC = \text{Chart Spacing}^2 \div \text{Different Spacing}^2 \times \text{Chart FC}$ To estimate Sq. Ft. per fixture for a specific target FC: $\text{Sq. Ft.} / \text{Fixture} = \text{Chart FC} \times \text{Chart Spacing}^2 \div \text{Target FC}$ To estimate Fixture Quantity in a room: $\text{Fixture Qty.} = \text{Sq. Ft. of Rm.} \div \text{Sq. Ft. per fixture}$ To estimate Watts/Sq. Ft.: $\text{W/Sq. Ft.} = \text{Luminaire Watts} \times \text{Qty.} \div \text{Sq. Ft. of Rm.}$