

# STT4PC

## 4" SPOT TRACK LUMINAIRE

Spectrum 4" Round TT Series Track Light for Accent Lighting with Up to 3500 Lumens Delivered.

LUMENS / WATTAGE DATA				
PART NUMBER	SOURCE LUMENS <sup>1</sup>	DELIVERED LUMENS <sup>2</sup>	SYSTEM WATTS	LPW
STT4PC10L	1000	686	7.4	93
STT4PC20L	2000	1372	13.2	104
STT4PC30L	3000	2059	20.4	101
STT4PC40L	4000	2745	28.1	98
STT4PC50L	5000	3431	35	98

<sup>1</sup> Nominal Source Lumens at 35K <sup>2</sup> Nominal Delivered Lumens at 82 CRI with PC50L 35K WD xx xx LM4AGL

### FEATURES

Passive cooled LED tracklight with a wide variety of options. Track light accepts up to two accessories. Reflector and accessories are easily changed. Zhaga International standard LED module for fixture maintenance and upgrades. High tension friction locking mechanism for aiming and rotation. Wide array of track systems and fixture mounting.

### FINISH

Multi-stage polyester powder-coat process applied on our dedicated paint lines. A wide variety of standard and custom finishes are available. All exposed materials are chromate pretreated to resist corrosion.

### CONSTRUCTION

Fixture is fabricated from die-cast, extruded and machined aluminum.

### ELECTRONICS

LED module features state of the art, high efficiency LEDs. 3-step MacAdam Ellipse binning with 80 and 90 CRI available. DS2W1 ELV/TRIAC phase cut driver dims smooth to 1%. 0-10V 1% 120V and 277V options.

### CODE COMPLIANCE

BAA Compliant. ETL Listed for dry location. Manufactured and tested to UL Standards No. 1574.

### WARRANTY

5 year warranty is Standard. L70 > 60,000 hours.

## PRODUCT SELECTOR GUIDE

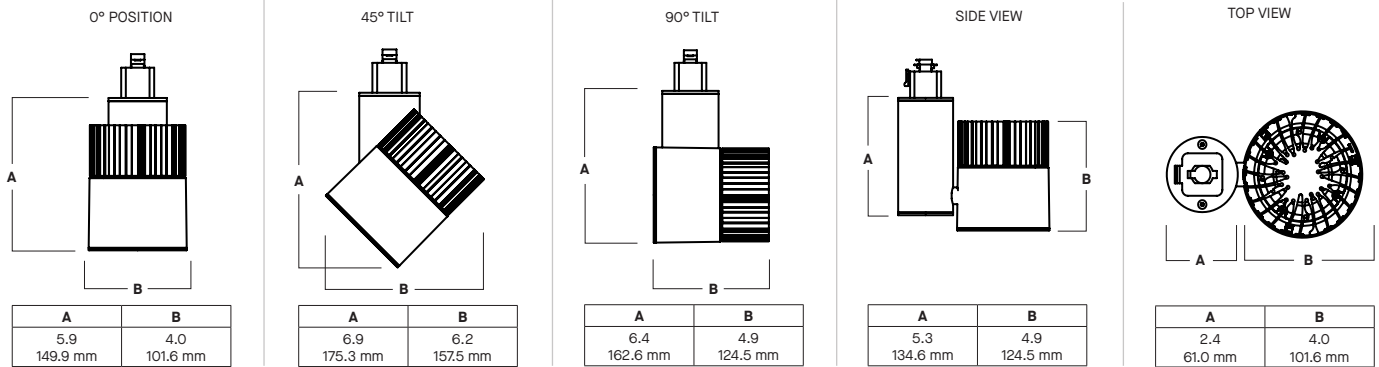
SERIES	LUMENS <sup>1</sup>	CCT	OPTICS	DRIVER / VOLTAGE	ADAPTOR	FINISH	ACCESSORIES
STT4PC							
EXAMPLE							
STT4PC	30L	35K	MD	DS2W1	GES66	PT	

SERIES	LUMENS <sup>1</sup>	CCT	OPTICS	DRIVER / VOLTAGE	ADAPTOR	FINISH <sup>2</sup>	ACCESSORIES <sup>4</sup>		
STT4PC	80 CRI		<b>ND</b> 16° <b>MD</b> 26° <b>WD</b> 36° <b>XW</b> 56°	<b>E1</b> Electronic Driver, 120V <b>DS2W1</b> 1%, ELV/TRIAC Phase Cut Dimming, 120V Also Used For Non-Dimming 120V	<b>BET</b> Basix 1 CIR/1 NEUT 120V <b>GES66</b> Global GES 1 CIR/1 NEUT 120V <b>TEK100</b> Global TEK 2 CIR/2 NEUT 120V	<b>MW<sup>3</sup></b> Matte White <b>MB<sup>3</sup></b> Matte Black <b>PT<sup>3</sup></b> Platinum Silver <b>CC</b> Custom Color	ORDER SEPARATELY <b>LN4ASO</b> Solite Diffuse Lens <b>LN4AFG</b> Frosted Lens <b>LN4ASK</b> Skytex Linear Lens <b>LN4AGL</b> Clear Lens <b>SN4A<sup>5</sup></b> Snoot <b>HL4A<sup>5</sup></b> Hex Louver <b>BET70WH</b> Mono Point Canopy White <b>BET70BK</b> Mono Point Canopy Black		
	10L	700 Lm						27K	2700K
	20L	1400 Lm						30K	3000K
	30L	2000 Lm						35K	3500K
	40L	2750 Lm						40K	4000K
	50L	3500 Lm							
	90 CRI		<b>E2</b> Non-Dimming Electronic Driver, 277V <b>DO102</b> 1%, 0-10V Dimming, 277V	<b>HTEK100</b> Global TEK 2 CIR/2 NEUT 277V <b>TWD</b> EUTRAC 2 CIR/2 NEUT 277V, 0-10V Dimmable	<b>2</b> See Color Page for More Options/ Consult Factory for Special Finishes <b>3</b> Standard Finishes				
	10L	700 Lm				27HK		2700K	
	20L	1400 Lm				30HK		3000K	
	30L	2000 Lm				35HK		3500K	
40L	2750 Lm	40HK				4000K			
50L	3500 Lm								
		<sup>1</sup> Nominal Delivered Lumens at 35K							

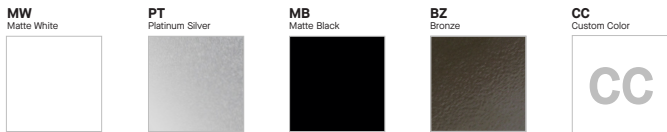
PROJECT: \_\_\_\_\_  
 QUANTITY: \_\_\_\_\_ TYPE: \_\_\_\_\_



## FIXTURE DIMENSIONS



## FINISH



## PAINT TIMES

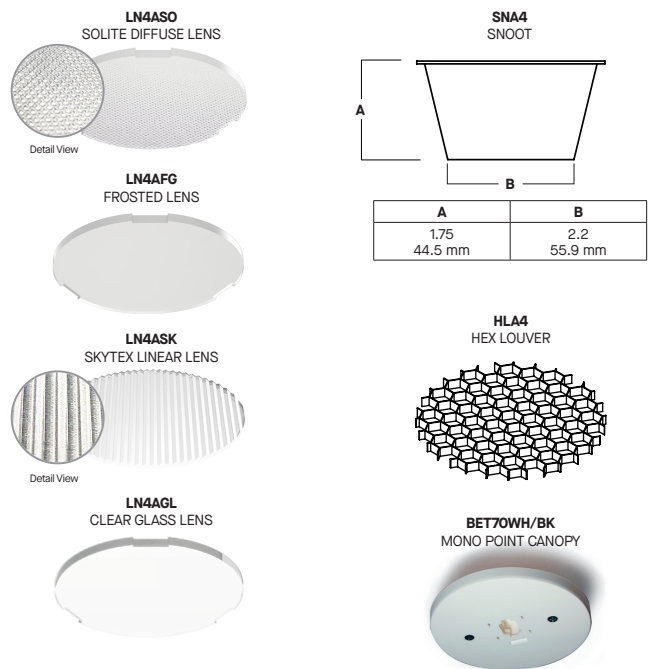
TIER	COST	AVERAGE PAINT TIME*
Tier 1 - Standard Finishes	\$	⌚
Custom Color	Contact Factory	Contact Factory

\*CONTACT FACTORY FOR SPECIFIC PRODUCT LEAD TIMES

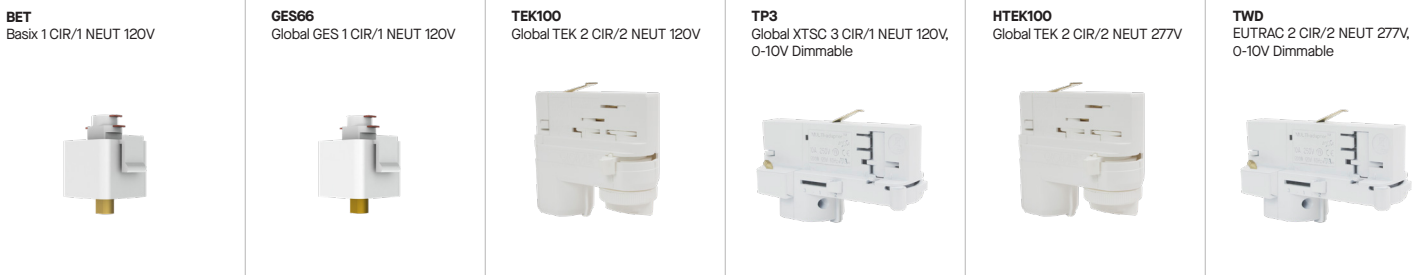
## STANDARD PRODUCT FINISHES

FIXTURE COLOR	STANDARD CORD COLOR / TRACK ADAPTER
Matte White	Matte White
Matte Black	Matte Black
All Others	Matte Black
Custom Color	Contact Factory

## FIXTURE ACCESSORIES



## ADAPTOR



STT4PC 50L 35K ND xx xx NL

CANDLEPOWER CURVE TEST SP-01364	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°	0° - 10°	1260	35%	6.5'	439 fc	2.2'	210 fc	18'	4'	210	2.16	196	2.17		
	0°	0° - 20°	2487	69%	7.5'	330 fc	2.6'	158 fc	22'	5'	129	1.33	120	1.34		
	5°	0° - 30°	3208	90%	8.5'	257 fc	2.9'	123 fc	26'	6'	87	0.90	81	0.90		
	15°	0° - 40°	3408	95%	10.0'	186 fc	3.4'	89 fc	Delivered Illuminance Rating: (DIR)		97 FC per W/Sq. Ft.		90 FC per W/Sq. Ft.			
	25°	0° - 60°	3478	97%	12.0'	129 fc	4.1'	62 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							
	35°	0° - 80°	3559	99%	14.0'	95 fc	4.8'	45 fc								
	45°	0° - 90°	3571	100%	16.0'	73 fc	5.5'	35 fc								
	55°	0° - 90°	3571	100%	20.0'	46 fc	6.9'	22 fc								
	90°	Total	3580	100%												

Delivered Lumens: 3580  
Luminaire Watts: 35  
LER: 102.29

CP at 0° (Nadir): 18567  
CRI: 80

Beam Angle: 20°  
Spacing Ratio: 0.33

Lumen Multiplier: 10L x 0.20, 20L x 0.40, 30L x 0.60, 40L x 0.80  
CCT Multiplier: 27K x 0.95, 30K x 0.98, 40K x 1.03

STT4PC 50L 35K MD xx xx NL

CANDLEPOWER CURVE TEST SP-01362	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°	992	29%	6.5'	314 fc	2.8'	147 fc	18'	6"	94	0.96	93	1.04		
	0°	0° - 20°	2321	67%	7.5'	236 fc	3.2'	110 fc	22'	7"	73	0.75	57	0.64		
	5°	0° - 30°	3104	89%	8.5'	184 fc	3.6'	86 fc	26'	8"	49	0.51	56	0.62		
	15°	0° - 40°	3306	95%	10.0'	133 fc	4.3'	62 fc	Delivered Illuminance Rating: (DIR)		98 FC per W/Sq. Ft.		89 FC per W/Sq. Ft.			
	25°	0° - 60°	3382	97%	12.0'	92 fc	5.1'	43 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 3%							
	35°	0° - 80°	3459	99%	14.0'	68 fc	6.0'	32 fc								
	45°	0° - 90°	3473	100%	16.0'	52 fc	6.8'	24 fc								
	55°	0° - 90°	3473	100%	20.0'	33 fc	8.5'	16 fc								
	90°	Total	3481	100%												

Delivered Lumens: 3481  
Luminaire Watts: 35  
LER: 99.46

CP at 0° (Nadir): 13276  
CRI: 80

Beam Angle: 24°  
Spacing Ratio: 0.40

Lumen Multiplier: 10L x 0.20, 20L x 0.40, 30L x 0.60, 40L x 0.80  
CCT Multiplier: 27K x 0.95, 30K x 0.98, 40K x 1.03

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. = ½ Beam Angle (Tan) x 2D</p> <ul style="list-style-type: none"> <li>• CP Candela at 0° (Nadir)</li> <li>• Cos θ Cosine of θ Angle</li> <li>• D Distance (Mounting Height AFF)</li> <li>• FC<sub>H</sub> Footcandles, Horizontal</li> <li>• Beam Angle Cone of light to 50% max. CP</li> <li>• Beam Diam. Pattern of light at Beam Angle</li> </ul>	<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"> <li>• To estimate FC for Fixture Spacing that is different than shown (do not exceed Spacing Ratio): <math>FC = \text{Chart Spacing}^2 \div \text{Different Spacing}^2 \times \text{Chart FC}</math></li> <li>• To estimate Sq. Ft. per fixture for a specific target FC: <math>\text{Sq. Ft.} / \text{Fixture} = \text{Chart FC} \times \text{Chart Spacing}^2 \div \text{Target FC}</math></li> </ul> <ul style="list-style-type: none"> <li>• To estimate Fixture Quantity in a room: Fixture Qty. = Sq. Ft. of Rm. ÷ Sq. Ft. per fixture</li> <li>• To estimate Watts/Sq. Ft.: <math>W / \text{Sq. Ft.} = \text{Luminaire Watts} \times \text{Qty.} \div \text{Sq. Ft. of Rm.}</math></li> </ul>

## STT4PC 50L 35K WD xx xx NL

CANDLEPOWER CURVE TEST SP-01366	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°	557	15%	6.5'	140 fc	5.9'	53 fc	14'	6'	108	1.03	76	0.81	
	0°	0° - 20°	1892	52%	7.5'	105 fc	6.9'	39 fc	18'	8'	57	0.54	40	0.43	
	5°	0° - 30°	3128	86%	8.5'	82 fc	7.8'	31 fc	22'	10'	35	0.33	25	0.26	
	15°	0° - 40°	3445	95%	10.0'	59 fc	9.2'	22 fc	Delivered Illuminance Rating: (DIR)		105 FC per W/Sq. Ft.		94 FC per W/Sq. Ft.		
	25°	0° - 60°	3526	97%	12.0'	41 fc	11.0'	15 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°	3597	99%	14.0'	30 fc	12.8'	11 fc							
	45°	0° - 90°	3610	100%	16.0'	23 fc	14.6'	9 fc							
	55°	0° - 90°	3610	100%	20.0'	15 fc	18.3'	6 fc							
	90°	0° - 90°	3620	100%											
			Total	3620	100%										

Delivered Lumens: 3620  
Luminaire Watts: 35  
LER: 103.43

CP at 0° (Nadir): 5899  
CRI: 80

Beam Angle: 49°  
Spacing Ratio: 0.78

Lumen Multiplier: 10L x 0.20, 20L x 0.40, 30L x 0.60, 40L x 0.80  
CCT Multiplier: 27K x 0.95, 30K x 0.98, 40K x 1.03

## STT4PC 50L 35K XW xx xx NL

CANDLEPOWER CURVE TEST SP-01368	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°	410	11%	6.5'	103 fc	7.2'	34 fc	14'	8'	48	0.46	42	0.46	
	0°	0° - 20°	1559	43%	7.5'	77 fc	8.3'	26 fc	18'	10'	34	0.33	22	0.24	
	5°	0° - 30°	2964	82%	8.5'	60 fc	9.4'	20 fc	22'	12'	21	0.20	24	0.26	
	15°	0° - 40°	3444	95%	10.0'	43 fc	11.1'	15 fc	Delivered Illuminance Rating: (DIR)		105 FC per W/Sq. Ft.		93 FC per W/Sq. Ft.		
	25°	0° - 60°	3541	98%	12.0'	30 fc	13.3'	10 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°	3608	99%	14.0'	22 fc	15.5'	7 fc							
	45°	0° - 90°	3621	100%	16.0'	17 fc	17.7'	6 fc							
	55°	0° - 90°	3621	100%	20.0'	11 fc	22.1'	4 fc							
	90°	0° - 90°	3630	100%											
			Total	3630	100%										

Delivered Lumens: 3630  
Luminaire Watts: 35  
LER: 103.71

CP at 0° (Nadir): 4345  
CRI: 80

Beam Angle: 58°  
Spacing Ratio: 0.96

Lumen Multiplier: 10L x 0.20, 20L x 0.40, 30L x 0.60, 40L x 0.80  
CCT Multiplier: 27K x 0.95, 30K x 0.98, 40K x 1.03

## 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. = ½ Beam Angle (Tan) x 2D</p> <ul style="list-style-type: none"> <li>• CP Candela at 0° (Nadir)</li> <li>• Cos θ Cosine of θ Angle</li> <li>• D Distance (Mounting Height AFF)</li> <li>• FC<sub>H</sub> Footcandles, Horizontal</li> <li>• Beam Angle Cone of light to 50% max. CP</li> <li>• Beam Diam. Pattern of light at Beam Angle</li> </ul>	<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> <p>- To estimate FC for Fixture Spacing that is different than shown (do not exceed Spacing Ratio): <math>FC = \text{Chart Spacing}^2 \div \text{Different Spacing}^2 \times \text{Chart FC}</math></p> <p>- To estimate Sq. Ft. per fixture for a specific target FC: <math>\text{Sq. Ft.} / \text{Fixture} = \text{Chart FC} \times \text{Chart Spacing}^2 \div \text{Target FC}</math></p> <p>- To estimate Fixture Quantity in a room: <math>\text{Fixture Qty.} = \text{Sq. Ft. of Rm.} \div \text{Sq. Ft. per fixture}</math></p> <p>- To estimate Watts/Sq. Ft.: <math>\text{W/Sq. Ft.} = \text{Luminaire Watts} \times \text{Qty.} \div \text{Sq. Ft. of Rm.}</math></p>

STT4PC 50L 35K ND xx xx LN4AGL

CANDLEPOWER CURVE TEST SP-01363	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°	0° - 10°	1171	35%	6.5'	408 fc	2.2'	195 fc	18'	4'	196	2.16	183	2.17
	0°	0° - 20°	2325	70%	7.5'	307 fc	2.6'	147 fc	22'	5'	120	1.33	113	1.34
	5°	0° - 30°	3007	90%	8.5'	239 fc	2.9'	114 fc	26'	6'	81	0.90	76	0.90
	15°	0° - 40°	3212	97%	10.0'	172 fc	3.4'	83 fc	Delivered Illuminance Rating: (DIR)		91 FC per W/Sq. Ft.		84 FC per W/Sq. Ft.	
	25°	0° - 60°	3269	98%	12.0'	120 fc	4.1'	57 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					
	35°	0° - 80°	3312	100%	14.0'	88 fc	4.8'	42 fc						
	45°	0° - 90°	3316	100%	16.0'	67 fc	5.5'	32 fc						
	55°	0° - 90°	3316	100%	20.0'	43 fc	6.9'	21 fc						
	90°	Total	3325	100%										

Delivered Lumens: 3325  
Luminaire Watts: 35  
LER: 95.00

CP at 0° (Nadir): 17249  
CRI: 80

Beam Angle: 20°  
Spacing Ratio: 0.33

Lumen Multiplier: 10L x 0.20, 20L x 0.40, 30L x 0.60, 40L x 0.80  
CCT Multiplier: 27K x 0.95, 30K x 0.98, 40K x 1.03

STT4PC 50L 35K MD xx xx LN4AGL

CANDLEPOWER CURVE TEST SP-01361	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°	939	28%	6.5'	297 fc	2.8'	139 fc	18'	6"	89	0.96	89	1.04
	0°	0° - 20°	2199	67%	7.5'	223 fc	3.2'	105 fc	22'	7"	70	0.75	55	0.64
	5°	0° - 30°	2956	90%	8.5'	174 fc	3.6'	81 fc	26'	8"	47	0.51	53	0.62
	15°	0° - 40°	3172	96%	10.0'	126 fc	4.2'	59 fc	Delivered Illuminance Rating: (DIR)		93 FC per W/Sq. Ft.		85 FC per W/Sq. Ft.	
	25°	0° - 60°	3242	98%	12.0'	87 fc	5.1'	41 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 3%					
	35°	0° - 80°	3284	99%	14.0'	64 fc	5.9'	30 fc						
	45°	0° - 90°	3290	100%	16.0'	49 fc	6.8'	23 fc						
	55°	0° - 90°	3290	100%	20.0'	31 fc	8.5'	15 fc						
	90°	Total	3301	100%										

Delivered Lumens: 3301  
Luminaire Watts: 35  
LER: 94.31

CP at 0° (Nadir): 12564  
CRI: 80

Beam Angle: 24°  
Spacing Ratio: 0.40

Lumen Multiplier: 10L x 0.20, 20L x 0.40, 30L x 0.60, 40L x 0.80  
CCT Multiplier: 27K x 0.95, 30K x 0.98, 40K x 1.03

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. = ½ Beam Angle (Tan) x 2D</p> <ul style="list-style-type: none"> <li>• CP Candela at 0° (Nadir)</li> <li>• Cos θ Cosine of θ Angle</li> <li>• D Distance (Mounting Height AFF)</li> <li>• FC<sub>H</sub> Footcandles, Horizontal</li> <li>• Beam Angle Cone of light to 50% max. CP</li> <li>• Beam Diam. Pattern of light at Beam Angle</li> </ul>	<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"> <li>• To estimate FC for Fixture Spacing that is different than shown (do not exceed Spacing Ratio): <math>FC = \text{Chart Spacing}^2 \div \text{Different Spacing}^2 \times \text{Chart FC}</math></li> <li>• To estimate Sq. Ft. per fixture for a specific target FC: <math>\text{Sq. Ft.} / \text{Fixture} = \text{Chart FC} \times \text{Chart Spacing}^2 \div \text{Target FC}</math></li> </ul> <ul style="list-style-type: none"> <li>• To estimate Fixture Quantity in a room: Fixture Qty. = Sq. Ft. of Rm. ÷ Sq. Ft. per fixture</li> <li>• To estimate Watts/Sq. Ft.: <math>W / \text{Sq. Ft.} = \text{Luminaire Watts} \times \text{Qty.} \div \text{Sq. Ft. of Rm.}</math></li> </ul>

## STT4PC 50L 35K WD xx xx LN4GL

CANDLEPOWER CURVE TEST SP-01365	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°	530	15%	6.5'	132 fc	5.9'	50 fc	14'	6'	103	1.03	73	0.81
	0°	0° - 20°	1798	52%	7.5'	99 fc	6.8'	38 fc	18'	8'	54	0.54	38	0.43
	5°	0° - 30°	2978	87%	8.5'	77 fc	7.7'	29 fc	22'	10'	33	0.33	23	0.26
	15°	0° - 40°	3309	96%	10.0'	56 fc	9.0'	21 fc	Delivered Illuminance Rating: (DIR)		100 FC per W/Sq. Ft.		90 FC per W/Sq. Ft.	
	25°	0° - 60°	3377	98%	12.0'	39 fc	10.8'	15 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°	3415	100%	14.0'	29 fc	12.6'	11 fc						
	45°	0° - 90°	3420	100%	16.0'	22 fc	14.4'	8 fc						
	55°	90°	2		20.0'	14 fc	18.0'	5 fc						
	90°	Total	3431	100%										

Delivered Lumens: 3431  
Luminaire Watts: 35  
LER: 98.03

CP at 0° (Nadir): 5588  
CRI: 80

Beam Angle: 49°  
Spacing Ratio: 0.77

Lumen Multiplier: 10L x 0.20, 20L x 0.40, 30L x 0.60, 40L x 0.80  
CCT Multiplier: 27K x 0.95, 30K x 0.98, 40K x 1.03

## STT4PC 50L 35K XW xx xx LN4GL

CANDLEPOWER CURVE TEST SP-01367	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°	382	11%	6.5'	95 fc	7.2'	32 fc	14'	8'	45	0.46	39	0.46
	0°	0° - 20°	1448	43%	7.5'	72 fc	8.3'	24 fc	18'	10'	32	0.33	21	0.24
	5°	0° - 30°	2755	82%	8.5'	56 fc	9.4'	19 fc	22'	12'	20	0.20	23	0.26
	15°	0° - 40°	3229	96%	10.0'	40 fc	11.1'	13 fc	Delivered Illuminance Rating: (DIR)		98 FC per W/Sq. Ft.		86 FC per W/Sq. Ft.	
	25°	0° - 60°	3318	99%	12.0'	28 fc	13.3'	9 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°	3353	100%	14.0'	21 fc	15.6'	7 fc						
	45°	0° - 90°	3357	100%	16.0'	16 fc	17.8'	5 fc						
	55°	90°	2		20.0'	10 fc	22.2'	3 fc						
	90°	Total	3367	100%										

Delivered Lumens: 3367  
Luminaire Watts: 35  
LER: 96.20

CP at 0° (Nadir): 4033  
CRI: 80

Beam Angle: 58°  
Spacing Ratio: 0.98

Lumen Multiplier: 10L x 0.20, 20L x 0.40, 30L x 0.60, 40L x 0.80  
CCT Multiplier: 27K x 0.95, 30K x 0.98, 40K x 1.03

## 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. = ½ Beam Angle (Tan) x 2D</p> <ul style="list-style-type: none"> <li>• CP Candela at 0° (Nadir)</li> <li>• Cos θ Cosine of θ Angle</li> <li>• D Distance (Mounting Height AFF)</li> <li>• FC<sub>H</sub> Footcandles, Horizontal</li> <li>• Beam Angle Cone of light to 50% max. CP</li> <li>• Beam Diam. Pattern of light at Beam Angle</li> </ul>	<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"> <li>• To estimate FC for Fixture Spacing that is different than shown (do not exceed Spacing Ratio): <math>FC = \text{Chart Spacing}^2 \div \text{Different Spacing}^2 \times \text{Chart FC}</math></li> <li>• To estimate Sq. Ft. per fixture for a specific target FC: <math>\text{Sq. Ft.} / \text{Fixture} = \text{Chart FC} \times \text{Chart Spacing}^2 \div \text{Target FC}</math></li> <li>• To estimate Fixture Quantity in a room: <math>\text{Fixture Qty.} = \text{Sq. Ft. of Rm.} \div \text{Sq. Ft. per fixture}</math></li> <li>• To estimate Watts/Sq. Ft.: <math>\text{W/Sq. Ft.} = \text{Luminaire Watts} \times \text{Qty.} \div \text{Sq. Ft. of Rm.}</math></li> </ul>