



Day-Brite/CFI SofTrace LED recessed is a fully luminous aperture luminaire providing contemporary appeal to architectural spaces. This linear form includes a round profile center and contiguous contoured sides with balanced glare to provide a clean aesthetic appeal. An architectural style coupled with control options makes SofTrace an ideal for applications such as office, institutional, and healthcare where energy savings and customized effects are desired.



DS lens (smooth)



D lens (ribbed)

Project: \_\_\_\_\_  
 Location: \_\_\_\_\_  
 Cat.No: \_\_\_\_\_  
 Type: \_\_\_\_\_  
 Qty: \_\_\_\_\_  
 Notes: \_\_\_\_\_

Now available with AccuRender technology for the highest color quality at the highest efficacy.

Base configurations are indicated in blue. Standard configurations are available with all choices, unless otherwise noted.

### Ordering guide (standard & wireless controls)

example: 2STXG38L840-2-DS-UNV-DIM-SWZCS

Series	Ceiling Type	Lumens (nominal delivered)	Efficacy	Color (CRI/CCT)	Length	Center Diffuser	Voltage	Driver	Options
<b>2STX</b>	<b>G</b>			-	<b>2</b> -	-	-	-	
2STX 2' SofTrace gen 2	G Grid	<b>Base configs</b>	<b>Blank Standard</b>	<b>830</b> 80 CRI, 3000K	2 2'	<b>D</b> Diffuse (ribbed)	<b>UNV</b> Universal Voltage, 120-277V	<b>DIM<sup>1</sup></b> Dimming	<b>F1</b> 3/8" flex, 18ga. 6'; 3 leads include hot, neutral, ground
		<b>38B</b> 3800	<b>H<sup>5</sup></b> High	<b>835</b> 80 CRI, 3500K		<b>DS</b> Diffuse (smooth)			
		<b>Standard configs</b>		<b>840</b> 80 CRI, 4000K				<b>LDEH</b> Lutron LDE1, 1% dimming	<b>F1/D</b> 3/8" twin flex, 18ga. 6' (for dimmable); <b>Flex 1:</b> 3 leads include hot, neutral, ground <b>Flex 2:</b> 2 leads, Dim+ / Dim-
		<b>30L</b> 3000		<b>850</b> 80 CRI, 5000K				<b>DALI</b> DALI dimming	<b>F2/SW</b> 3/8" single flex, 18ga. 6' (for dimmable); 5 leads include hot, neutral, ground, Dim+ / Dim-
		<b>38L</b> 3800		<b>AccuRender<sup>8,9</sup></b>					<b>F2/6W</b> 3/8" single flex, 18ga. 6' (for dim & EM); 6 leads include 2 hot, neutral, ground, Dim+ / Dim-
		<b>45L</b> 4500		<b>930</b> 90 CRI, 3000K					<b>GLR</b> Fusing, fast blow
		Other options may be ordered in increments of 100lm from 3000 to 4500lm		<b>935</b> 90 CRI, 3500K					<b>DSC</b> Quick driver disconnect
				<b>940</b> 90 CRI, 4000K					<b>CHIC<sup>3</sup></b> Chicago Plenum rated

### Ordering guide - PoE controls

example: 2STXG38L840-2-DS-LV-POE-IAO

Family	Ceiling Type	Lumens (nom. delivered)	Efficacy	Color	Length	Center Diffuser	Voltage	Driver	Driver	Options
<b>2STX</b>	<b>G</b>			-	<b>2</b> -	-	<b>LV</b> -	<b>POE</b> -	-	
2STX 2' SofTrace gen 2	G Grid	<b>Std. configs</b>	<b>Blank Standard</b>	<b>830</b> 80 CRI, 3000K	2 2'	<b>D</b> Diffuse (ribbed)	<b>LV</b> Low voltage	<b>POE</b> Power over Ethernet	<b>EMPOE</b> 600lm integral emergency driver and battery pack	<b>BSL6LST<sup>4</sup></b> Bodine 6W selftesting battery pack
		<b>30L</b> 3000		<b>835</b> 80 CRI, 3500K		<b>DS</b> Diffuse (smooth)				
		<b>38L</b> 3800		<b>840</b> 80 CRI, 4000K					<b>ER100<sup>4,6,7</sup></b> UL924 listed sensor bypass relay, factory installed between driver & sensor	
		<b>45L</b> 4500		<b>850</b> 80 CRI, 5000K					<b>GTD/E<sup>4,6</sup></b> UL924 listed Bodine GTD factory installed on driver input	
									<b>GTD/SNSR<sup>4,6,7</sup></b> UL924 listed Bodine GTD factory installed between driver & sensor	
									<b>SWZCS<sup>2,10</sup></b> Interact wireless sensor with integral daylight & occupancy sensing, advanced grouping with dwell time	
									<b>RADIO<sup>2</sup></b> Interact RF sensor for wireless connectivity only, no sensing	
									<b>IAOSB<sup>2,10</sup></b> Interact Pro wireless sensor with occupancy, daylight, and environmental sensing capabilities	
									<b>AG</b> Antimicrobial Finish	
									<b>WL</b> Wet location listed	

### Footnotes

- Integral controls options dimmable to 5% via wireless wall switch. Non-controls options are 0-10v dimmable to 1% for Standard configurations, and to 10% for Base configurations.
- Specify only with -DIM driver option.
- CHIC option not provided with air return functionality.
- Not available with 347V.
- High efficacy option may only be ordered with Standard lumen configurations.
- Must be installed in conjunction with a UL1008 device.
- Must be ordered with an integral sensing option.
- AccuRender is 90CRI with R<sub>a</sub>>50.
- Option is qualified as Engineered-to-Order (ETO) ready. Lead times and minimum order quantities may vary, please consult factory. (DLC Standard efficacy only)
- Must order IRT9015 Interact commissioning remote with each system order.

### Accessories (order separately)

- FSF422 - 2'x2' surface mount field installation kit (field assembled)
- FMA22 - 2'x2' "F" mounting frame for NEMA "F" ceiling
- STXDS22L - 2'x2' SofTrace Gen2 smooth replacement lens
- STXDS22LC - 2'x2' SofTrace Gen2 with controls smooth replacement lens
- STXD22L - 2'x2' SofTrace Gen2 ribbed replacement lens
- STXD22LC - 2'x2' SofTrace Gen2 with controls ribbed replacement lens

### SWZCS accessories (order separately)

- IRT9015 - handheld remote for grouping and configuration (at least one remote required for any SWZCS installation).

Not all product variations listed on this page are DLC qualified. To ensure that a specific model is qualified, visit [www.designlights.org/search](http://www.designlights.org/search)



interact ready.

# 2STX SofTrace recessed

## 2x2 recessed luminaire (up to 4500 lumens)

### Application

- Ideal for modern offices, institutional, retail, and healthcare applications.
- Modern architectural styling to complementary space.
- Full width luminous lens provides smooth brightness and high visual comfort.
- Directs a controlled amount of light to higher angles to eliminate "cave effect" without creating glare.
- Available in standard efficacy and high efficacy (H) configurations up to 130lm/W.
- 80 CRI minimum source provides a balanced spectral power distribution.
- AccuRender 90 CRI source provides preferred color quality.
- Suitable for use with NEMA G (15/16") and NFG (9/16") suspended t-grid ceilings. NEMA F flange ceilings require the FMA24 accessory (ordered separately).

### Environment

- Rated for dry or damp locations in operating ambient temperatures 0–30°C (32–86°F). Many luminaire components, such as reflectors, refractors, lenses, sockets, lampholders, 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. Not suitable for natatorium environments.

### Construction/Finish

- Robust and durable die-formed embossed steel housing and end caps.
- Molded one-piece acrylic diffuser may be removed without tools for access to LED boards and driver(s).
- Unique spring retainers ensure the diffuser is centered in the housing opening at all times.
- T-bar grid clips are built into luminaire end caps for quick and easy installation, no extra parts.
- Air return functionality is standard for all configurations. See air flow and noise data on page 5.
- Suitable for end to end continuous row mounting. 1" gap between luminaires requires chase nipple to accommodate through wiring (by others).
- Sheet metal components are multi-stage phosphate treated for maximum corrosion resistance and finish coat is high reflectance baked white enamel.
- Integral louvers on housing ends allow air from the heated space to return to a pressurized plenum.

### Validation

- cETLus listed for use in damp locations
- When ordered with -WL option code, suitable for use in wet locations with covered ceilings
- Rated for direct contact with insulation (IC)
- CCEA Chicago Plenum listed
- SofTrace luminaires are Designlights Consortium® qualified. Please see the DLC QPL list for exact catalog numbers, [www.designlights.org/QPL](http://www.designlights.org/QPL)

### Electrical

- Driver and LED board are accessible from below by easy removal of lens.
- Non-controls Base configurations 0–10V dimmable to 10%.
- Non-controls Standard configurations 0–10V dimmable to 1%.
- Standard configurations with controls options dimmable via wireless switches (see below).
- Predicted L70 lumen maintenance up to 85,000 hours at 25°C ambient for all configurations.
- Emergency battery packs accessible from above. To estimate lumen output in emergency mode, multiply emergency pack wattage by luminaire efficacy, then by 1.10.
- The GTD/E option is used to bypass wall switches and allow luminaire operation on auxiliary power. Generator transfer requires installation in conjunction with a UL1008 listed device.
- The GTD/SNSR option is used to bypass integrated sensor control in the event of utility power loss. Generator transfer requires installation in conjunction with a UL1008 listed device.
- Compliance to CAN ICES-005-A/ NEB-005-A and FCC Part 15-A.

### Warranty

- 5 year manufacturer's limited warranty. Visit [signify.com/warranties](http://signify.com/warranties) for complete warranty information.

### Energy data

Configuration	Nominal CCT/CRI	Flux (lm)	Input Power (W)	Efficacy (LPW)	DLC
2STXG38B835	3500K/80	3953	34	116	Standard
2STXG38B840	4000K/80	3974	34	116	Standard
2STXG30L835	3500K/80	3019	26	114	Standard
2STXG30L840	4000K/80	3026	26	114	Standard
2STXG30LH835	3500K/80	2994	24	124	Standard
2STXG30LH840	4000K/80	3067	24	127	Premium
2STXG38L835	3500K/80	3838	34	113	Standard
2STXG38L840	4000K/80	3846	34	125	Standard
2STXG38LH835	3500K/80	3750	30	128	Premium
2STXG38LH840	4000K/80	3840	30	130	Premium
2STXG45L835	3500K/80	4538	42	109	Standard
2STXG45L840	4000K/80	4566	42	110	Standard
2STXG45LH835	3500K/80	4557	36	126	Premium
2STXG45LH840	4000K/80	4652	36	129	Premium

# 2STX SofTrace recessed

## 2x2 recessed luminaire (up to 4500 lumens)

### Wireless controls options

#### Interact

- SWZCS is a connected sensor with integral occupancy and daylight sensing and supports wireless mesh connectivity.
- The sensor works in the standalone mode (similar to SpaceWise) when configured without a gateway or in a cloud connected mode if a compatible gateway is used.
- 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 on-site to identify and group devices together.

#### Compatible with:

- SWS200 & UID8465 wireless scene switch
- Battery powered IP42 presence sensor OCC sensor IA CM WH 10/1
- Battery powered IP42 presence & daylight sensor OCC-DL sensor IA CM IP42 WH
- LCN3110: battery powered IP65 presence sensor, OCC sensor IA CM IP65W
- LCN3120: battery powered IP65 presence & daylight sensor, OCC-DL sensor IA CM IP65 WH
- For more information on Interact visit: [interact-lighting.com/interactproscalablesystem](http://interact-lighting.com/interactproscalablesystem)

#### Radio only sensor (RA or RADIO)

- Integral RA or RADIO only sensor simply enables wireless mesh connectivity to the luminaire without any occupancy or daylight sensing.
- Ideal for applications where sensing functionality is managed by other Interact devices and the luminaire only needs to have wireless connectivity.
- 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, identify and group devices together onsite.
- Compatible with SWS200 and UID8465 wireless scene switch, wireless Occ sensor (OCC SENSOR IA CM IP42 WH 10/1) and wireless Day/Occ sensor (OCC MULTI SENSOR IA CM WH 10/1).
- For more information on Interact visit: [interact-lighting.com/interactproscalablesystem](http://interact-lighting.com/interactproscalablesystem)

#### SofTrace shown with integral sensor



#### Sensor bundle (IAOSB or SB)

- A wireless IoT connected lighting solution for large enterprises that span across multiple floors, buildings and require multiple gateways.
- View all your projects under one dashboard and easily compare insights from multiple projects in one view.
- Compatible with SWS200 wireless scene switch, wireless Occ sensor (OCC SENSOR IA CM IP42 WH 10/1) and wireless Day/Occ sensor (OCC MULTI SENSOR IA CM WH 10/1) and wireless Occupancy or Daylight & Occupancy sensors available. Use Interact software and insights to increase building efficiency, achieve building wide integration and optimize space through occupancy analytics.
- IAOSB or SB option in addition to occupancy and daylights sensing supports advanced IoT capabilities, such as people estimation analysis, desk level temperature & humidity sensing, noise classification, and BLE beacon.
- Requires compatible Gateway and internet connectivity for commissioning.
- For more information, visit: [interact-lighting.com/interactproscalablesystem](http://interact-lighting.com/interactproscalablesystem)

#### Emergency Options (ER100)

- **Power Sensing** (factory default) – Recommended UL924 option requires unswitched power sense line, absence of voltage on the normal circuit triggers luminaire to 100% output.
- **Power Interruption Detection** (field option) – Detects AC power interruption >30ms triggers 90 minute emergency mode with luminaire at 100% output.

### Interact supported sensor option codes across Genlyte Solutions product lines

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

### Wired Controls Options

#### Interact Office Wired (PoE)

- PoE based IoT connected lighting solution for large enterprises that span across multiple floors, buildings and require multiple gateways.
- Use Interact software and insights to increase building efficiency, achieve building wide integration and optimize space through occupancy analytics.
- IAOSB 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 BLE beacon.
- PoE lighting controller is accessible from below.
- Integral sensor option for occupancy sensing (PIR) and/or daylight harvesting available for additional energy savings.
- Optional integral emergency controller and battery pack provides 600lm nominal output. Test switch and indicator light mounted on side of chassis on one end.
- Emergency battery has a 3 month pre-installed shelf life, and must be stored and installed in environments of 20C to 30C (-4F to 86F) ambient, and 45-85% relative humidity.
- For more information, visit: [www.interact-lighting.com/office](http://www.interact-lighting.com/office) or [www.usa.lighting.philips.com/systems/system-areas/offices](http://www.usa.lighting.philips.com/systems/system-areas/offices)

#### Energy Data (PoE)

Configuration	Nominal CCT/CRI	Flux (lm)	DC Power (W)*	Efficacy (LPW)
2STXG30L840	4000K/80	3067	24	126
2STXG38L840	4000K/80	3902	32	122
2STXG45L840	4000K/80	4634	39	118

\*DC power supply

# 2STX SofTrace recessed

2x2 recessed luminaire (up to 4500 lumens)

## interact

	Gateway Connected		
	Standalone	Option 1	Option 2
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	✓	✓	✓
Correlated color temperature (CCT) tuning by switch	New ✓	✓	✓
Support for sensor-based Tunable White luminaires	New ✓	✓	✓
Energy reporting and monitoring		✓	✓
Scheduling		✓	✓
Demand response		✓	✓
BMS integration (BACnet)			✓
Floor plan visualization			✓
IoT sensors for wellness			✓
IoT Apps for productivity			✓

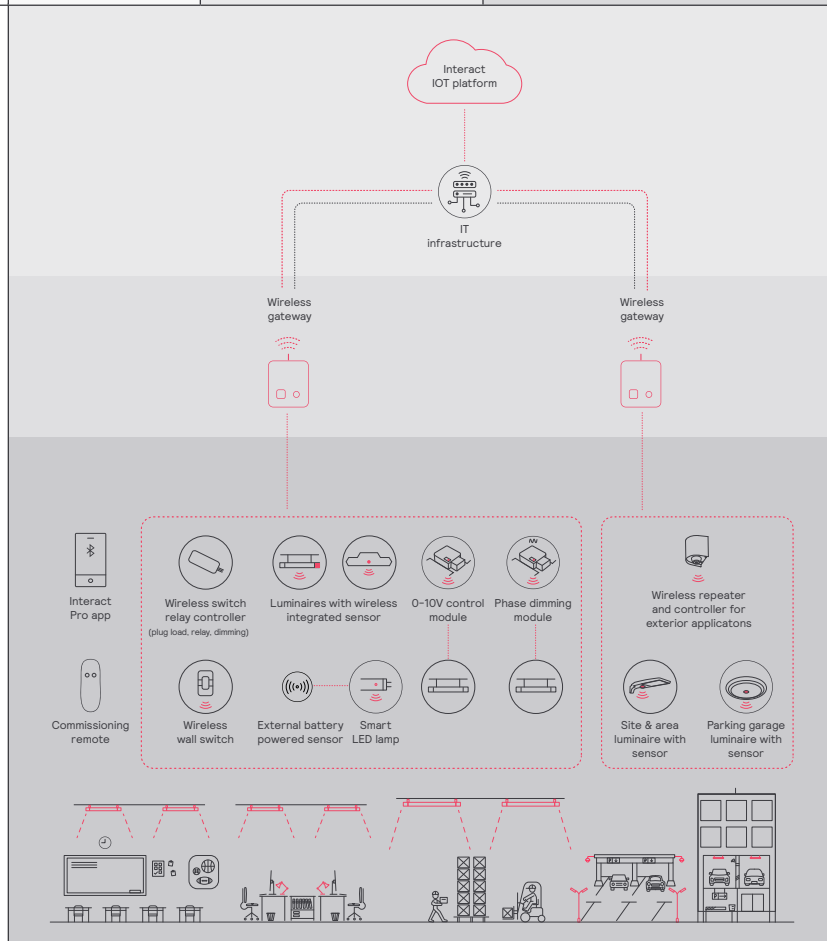
### Currently supported maximum system size

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
• Zones + groups	64
Total number of ZGP devices (sensors and switches)	50
• Sensors	30
• Switches	50

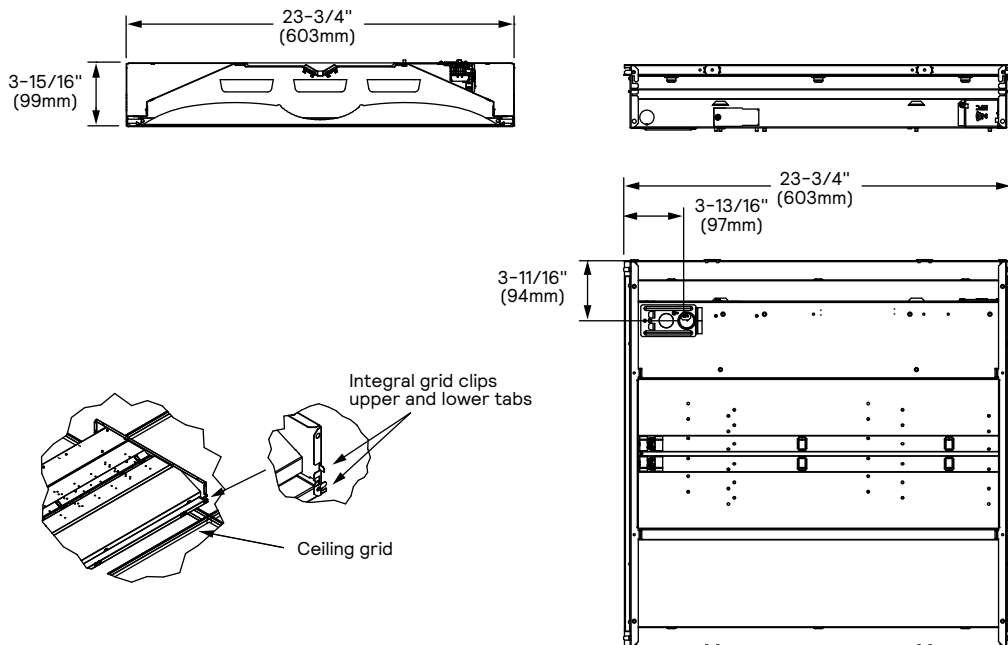
Group level	
Recommended number of lights	40 (maximum 150)
Number of ZGP devices	5
Number of scenes	16



# 2STX SofTrace recessed

2x2 recessed luminaire (up to 4500 lumens)

## Dimensions

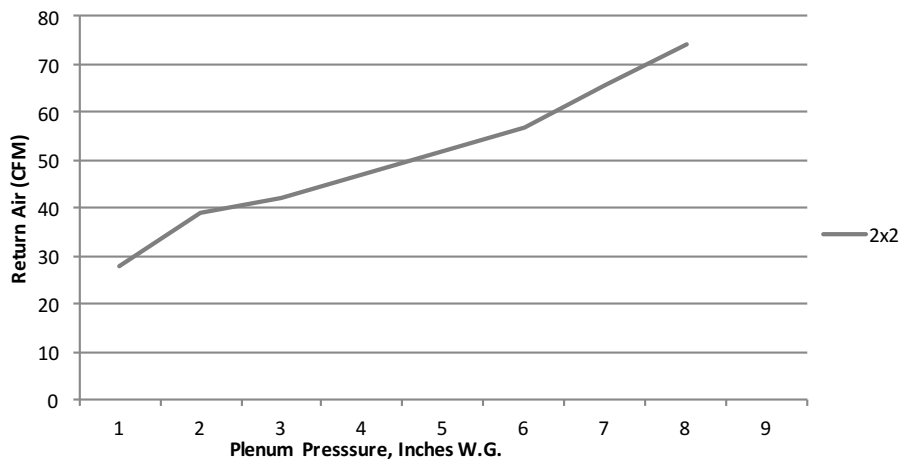


## Air return



Integral louvers on housing ends allow air from the heated space to return to a pressurized plenum.

## Return Air Data



2x2 Return Air - noise criteria

CFM	28	39	42	47	52	57	65.5	74
NC (dB)	<15	26	31	33	38	42	44	46

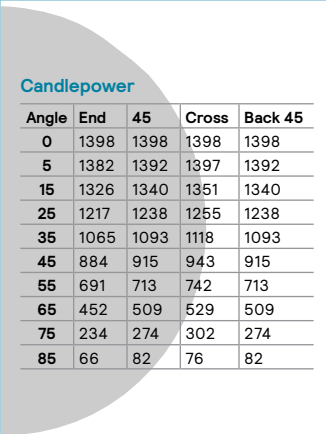
# 2STX SofTrace recessed

## 2x2 recessed luminaire (up to 4500 lumens)

### Photometry

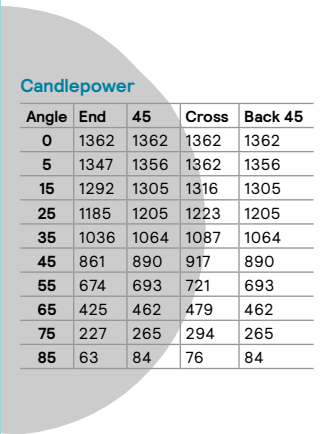
2x2 SofTrace recessed LED, base configuration, 3800 nominal delivered lumens

LER - 115

<p><b>Catalog No.</b> 2STXG38B840-2-D-UNV-DIM  <b>Test No.</b> 40559  <b>S/MH</b> 1.3  <b>Lamp Type</b> LED  <b>Lumens</b> 3971  <b>Input Watts</b> 34</p> <p>Comparative yearly lighting energy cost per 1000 lumens - <b>\$2.09</b> based on 3000 hrs. and \$.08 pwr KWH.</p> <p>The photometric results were obtained in the Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology.</p> <p>Photometric values based on test performed in compliance with LM-79.</p>	 <p><b>Candlepower</b></p> <table border="1"> <thead> <tr> <th>Angle</th> <th>End</th> <th>45</th> <th>Cross</th> <th>Back 45</th> </tr> </thead> <tbody> <tr><td>0</td><td>1398</td><td>1398</td><td>1398</td><td>1398</td></tr> <tr><td>5</td><td>1382</td><td>1392</td><td>1397</td><td>1392</td></tr> <tr><td>15</td><td>1326</td><td>1340</td><td>1351</td><td>1340</td></tr> <tr><td>25</td><td>1217</td><td>1238</td><td>1255</td><td>1238</td></tr> <tr><td>35</td><td>1065</td><td>1093</td><td>1118</td><td>1093</td></tr> <tr><td>45</td><td>884</td><td>915</td><td>943</td><td>915</td></tr> <tr><td>55</td><td>691</td><td>713</td><td>742</td><td>713</td></tr> <tr><td>65</td><td>452</td><td>509</td><td>529</td><td>509</td></tr> <tr><td>75</td><td>234</td><td>274</td><td>302</td><td>274</td></tr> <tr><td>85</td><td>66</td><td>82</td><td>76</td><td>82</td></tr> </tbody> </table>	Angle	End	45	Cross	Back 45	0	1398	1398	1398	1398	5	1382	1392	1397	1392	15	1326	1340	1351	1340	25	1217	1238	1255	1238	35	1065	1093	1118	1093	45	884	915	943	915	55	691	713	742	713	65	452	509	529	509	75	234	274	302	274	85	66	82	76	82	<p><b>Light Distribution</b></p> <table border="1"> <thead> <tr> <th>Degrees</th> <th>Lumens</th> <th>% Luminaire</th> </tr> </thead> <tbody> <tr><td>0-30</td><td>1080</td><td>27.2</td></tr> <tr><td>0-40</td><td>1763</td><td>44.4</td></tr> <tr><td>0-60</td><td>3108</td><td>78.2</td></tr> <tr><td>0-90</td><td>3972</td><td>100</td></tr> <tr><td>0-180</td><td>3972</td><td>100</td></tr> </tbody> </table> <p><b>Average Luminance</b></p> <table border="1"> <thead> <tr> <th>Zone</th> <th>End</th> <th>45°</th> <th>Cross</th> </tr> </thead> <tbody> <tr><td>45</td><td>4106</td><td>4251</td><td>4380</td></tr> <tr><td>55</td><td>3961</td><td>4085</td><td>4248</td></tr> <tr><td>65</td><td>3517</td><td>3958</td><td>4115</td></tr> <tr><td>75</td><td>2972</td><td>3473</td><td>3838</td></tr> <tr><td>85</td><td>2477</td><td>3103</td><td>2876</td></tr> </tbody> </table>	Degrees	Lumens	% Luminaire	0-30	1080	27.2	0-40	1763	44.4	0-60	3108	78.2	0-90	3972	100	0-180	3972	100	Zone	End	45°	Cross	45	4106	4251	4380	55	3961	4085	4248	65	3517	3958	4115	75	2972	3473	3838	85	2477	3103	2876	<p><b>Coefficients of Utilization</b></p> <p><b>Effective Floor Cavity Reflectance 20 Per (pfc=0.20)</b></p> <table border="1"> <thead> <tr> <th></th> <th colspan="3">80</th> <th colspan="3">70</th> <th colspan="3">50</th> </tr> <tr> <th></th> <th>70</th><th>50</th><th>30</th> <th>70</th><th>50</th><th>30</th> <th>70</th><th>50</th><th>30</th> </tr> </thead> <tbody> <tr><td>Ceil</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>Wall</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>RCR</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>0</td><td>118</td><td>118</td><td>118</td><td>115</td><td>115</td><td>115</td><td>111</td><td>111</td><td>111</td></tr> <tr><td>1</td><td>109</td><td>104</td><td>98</td><td>106</td><td>101</td><td>96</td><td>96</td><td>93</td><td>93</td></tr> <tr><td>2</td><td>98</td><td>90</td><td>82</td><td>95</td><td>88</td><td>81</td><td>84</td><td>79</td><td>79</td></tr> <tr><td>3</td><td>90</td><td>79</td><td>70</td><td>86</td><td>78</td><td>69</td><td>75</td><td>68</td><td>68</td></tr> <tr><td>4</td><td>81</td><td>69</td><td>60</td><td>80</td><td>68</td><td>59</td><td>66</td><td>58</td><td>58</td></tr> <tr><td>5</td><td>76</td><td>63</td><td>53</td><td>72</td><td>60</td><td>53</td><td>58</td><td>52</td><td>52</td></tr> <tr><td>6</td><td>69</td><td>56</td><td>46</td><td>68</td><td>55</td><td>46</td><td>54</td><td>46</td><td>46</td></tr> <tr><td>7</td><td>65</td><td>51</td><td>41</td><td>63</td><td>50</td><td>41</td><td>48</td><td>40</td><td>40</td></tr> <tr><td>8</td><td>59</td><td>46</td><td>38</td><td>58</td><td>46</td><td>38</td><td>45</td><td>36</td><td>36</td></tr> <tr><td>9</td><td>56</td><td>42</td><td>34</td><td>55</td><td>41</td><td>34</td><td>40</td><td>34</td><td>34</td></tr> <tr><td>10</td><td>53</td><td>39</td><td>30</td><td>51</td><td>39</td><td>30</td><td>38</td><td>30</td><td>30</td></tr> </tbody> </table>		80			70			50				70	50	30	70	50	30	70	50	30	Ceil										Wall										RCR										0	118	118	118	115	115	115	111	111	111	1	109	104	98	106	101	96	96	93	93	2	98	90	82	95	88	81	84	79	79	3	90	79	70	86	78	69	75	68	68	4	81	69	60	80	68	59	66	58	58	5	76	63	53	72	60	53	58	52	52	6	69	56	46	68	55	46	54	46	46	7	65	51	41	63	50	41	48	40	40	8	59	46	38	58	46	38	45	36	36	9	56	42	34	55	41	34	40	34	34	10	53	39	30	51	39	30	38	30	30
		Angle	End	45	Cross	Back 45																																																																																																																																																																																																																																																														
0	1398	1398	1398	1398																																																																																																																																																																																																																																																																
5	1382	1392	1397	1392																																																																																																																																																																																																																																																																
15	1326	1340	1351	1340																																																																																																																																																																																																																																																																
25	1217	1238	1255	1238																																																																																																																																																																																																																																																																
35	1065	1093	1118	1093																																																																																																																																																																																																																																																																
45	884	915	943	915																																																																																																																																																																																																																																																																
55	691	713	742	713																																																																																																																																																																																																																																																																
65	452	509	529	509																																																																																																																																																																																																																																																																
75	234	274	302	274																																																																																																																																																																																																																																																																
85	66	82	76	82																																																																																																																																																																																																																																																																
Degrees	Lumens	% Luminaire																																																																																																																																																																																																																																																																		
0-30	1080	27.2																																																																																																																																																																																																																																																																		
0-40	1763	44.4																																																																																																																																																																																																																																																																		
0-60	3108	78.2																																																																																																																																																																																																																																																																		
0-90	3972	100																																																																																																																																																																																																																																																																		
0-180	3972	100																																																																																																																																																																																																																																																																		
Zone	End	45°	Cross																																																																																																																																																																																																																																																																	
45	4106	4251	4380																																																																																																																																																																																																																																																																	
55	3961	4085	4248																																																																																																																																																																																																																																																																	
65	3517	3958	4115																																																																																																																																																																																																																																																																	
75	2972	3473	3838																																																																																																																																																																																																																																																																	
85	2477	3103	2876																																																																																																																																																																																																																																																																	
	80			70			50																																																																																																																																																																																																																																																													
	70	50	30	70	50	30	70	50	30																																																																																																																																																																																																																																																											
Ceil																																																																																																																																																																																																																																																																				
Wall																																																																																																																																																																																																																																																																				
RCR																																																																																																																																																																																																																																																																				
0	118	118	118	115	115	115	111	111	111																																																																																																																																																																																																																																																											
1	109	104	98	106	101	96	96	93	93																																																																																																																																																																																																																																																											
2	98	90	82	95	88	81	84	79	79																																																																																																																																																																																																																																																											
3	90	79	70	86	78	69	75	68	68																																																																																																																																																																																																																																																											
4	81	69	60	80	68	59	66	58	58																																																																																																																																																																																																																																																											
5	76	63	53	72	60	53	58	52	52																																																																																																																																																																																																																																																											
6	69	56	46	68	55	46	54	46	46																																																																																																																																																																																																																																																											
7	65	51	41	63	50	41	48	40	40																																																																																																																																																																																																																																																											
8	59	46	38	58	46	38	45	36	36																																																																																																																																																																																																																																																											
9	56	42	34	55	41	34	40	34	34																																																																																																																																																																																																																																																											
10	53	39	30	51	39	30	38	30	30																																																																																																																																																																																																																																																											

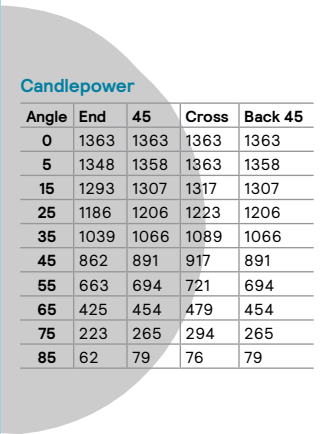
2x2 SofTrace recessed LED, standard configuration, 3800 nominal delivered lumens

LER - 112

<p><b>Catalog No.</b> 2STXG38L840-2-D-UNV-DIM  <b>Test No.</b> 40572  <b>S/MH</b> 1.3  <b>Lamp Type</b> LED  <b>Lumens</b> 3846  <b>Input Watts</b> 34</p> <p>Comparative yearly lighting energy cost per 1000 lumens - <b>\$2.14</b> based on 3000 hrs. and \$.08 pwr KWH.</p> <p>The photometric results were obtained in the Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology.</p> <p>Photometric values based on test performed in compliance with LM-79.</p>	 <p><b>Candlepower</b></p> <table border="1"> <thead> <tr> <th>Angle</th> <th>End</th> <th>45</th> <th>Cross</th> <th>Back 45</th> </tr> </thead> <tbody> <tr><td>0</td><td>1362</td><td>1362</td><td>1362</td><td>1362</td></tr> <tr><td>5</td><td>1347</td><td>1356</td><td>1362</td><td>1356</td></tr> <tr><td>15</td><td>1292</td><td>1305</td><td>1316</td><td>1305</td></tr> <tr><td>25</td><td>1185</td><td>1205</td><td>1223</td><td>1205</td></tr> <tr><td>35</td><td>1036</td><td>1064</td><td>1087</td><td>1064</td></tr> <tr><td>45</td><td>861</td><td>890</td><td>917</td><td>890</td></tr> <tr><td>55</td><td>674</td><td>693</td><td>721</td><td>693</td></tr> <tr><td>65</td><td>425</td><td>462</td><td>479</td><td>462</td></tr> <tr><td>75</td><td>227</td><td>265</td><td>294</td><td>265</td></tr> <tr><td>85</td><td>63</td><td>84</td><td>76</td><td>84</td></tr> </tbody> </table>	Angle	End	45	Cross	Back 45	0	1362	1362	1362	1362	5	1347	1356	1362	1356	15	1292	1305	1316	1305	25	1185	1205	1223	1205	35	1036	1064	1087	1064	45	861	890	917	890	55	674	693	721	693	65	425	462	479	462	75	227	265	294	265	85	63	84	76	84	<p><b>Light Distribution</b></p> <table border="1"> <thead> <tr> <th>Degrees</th> <th>Lumens</th> <th>% Luminaire</th> </tr> </thead> <tbody> <tr><td>0-30</td><td>1051</td><td>27.3</td></tr> <tr><td>0-40</td><td>1716</td><td>44.6</td></tr> <tr><td>0-60</td><td>3025</td><td>78.6</td></tr> <tr><td>0-90</td><td>3846</td><td>100</td></tr> <tr><td>0-180</td><td>3847</td><td>100</td></tr> </tbody> </table> <p><b>Average Luminance</b></p> <table border="1"> <thead> <tr> <th>Zone</th> <th>End</th> <th>45°</th> <th>Cross</th> </tr> </thead> <tbody> <tr><td>45</td><td>3999</td><td>4135</td><td>4259</td></tr> <tr><td>55</td><td>3859</td><td>3971</td><td>4129</td></tr> <tr><td>65</td><td>3303</td><td>3589</td><td>3726</td></tr> <tr><td>75</td><td>2880</td><td>3365</td><td>3727</td></tr> <tr><td>85</td><td>2383</td><td>3159</td><td>2876</td></tr> </tbody> </table>	Degrees	Lumens	% Luminaire	0-30	1051	27.3	0-40	1716	44.6	0-60	3025	78.6	0-90	3846	100	0-180	3847	100	Zone	End	45°	Cross	45	3999	4135	4259	55	3859	3971	4129	65	3303	3589	3726	75	2880	3365	3727	85	2383	3159	2876	<p><b>Coefficients of Utilization</b></p> <p><b>Effective Floor Cavity Reflectance 20 Per (pfc=0.20)</b></p> <table border="1"> <thead> <tr> <th></th> <th colspan="3">80</th> <th colspan="3">70</th> <th colspan="3">50</th> </tr> <tr> <th></th> <th>70</th><th>50</th><th>30</th> <th>70</th><th>50</th><th>30</th> <th>70</th><th>50</th><th>30</th> </tr> </thead> <tbody> <tr><td>Ceil</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>Wall</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>RCR</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>0</td><td>118</td><td>118</td><td>118</td><td>115</td><td>115</td><td>115</td><td>111</td><td>111</td><td>111</td></tr> <tr><td>1</td><td>109</td><td>104</td><td>98</td><td>106</td><td>101</td><td>96</td><td>96</td><td>93</td><td>93</td></tr> <tr><td>2</td><td>98</td><td>90</td><td>82</td><td>95</td><td>88</td><td>81</td><td>84</td><td>79</td><td>79</td></tr> <tr><td>3</td><td>90</td><td>79</td><td>70</td><td>86</td><td>78</td><td>69</td><td>75</td><td>68</td><td>68</td></tr> <tr><td>4</td><td>81</td><td>69</td><td>60</td><td>80</td><td>68</td><td>60</td><td>66</td><td>58</td><td>58</td></tr> <tr><td>5</td><td>76</td><td>63</td><td>54</td><td>73</td><td>61</td><td>53</td><td>58</td><td>52</td><td>52</td></tr> <tr><td>6</td><td>69</td><td>56</td><td>46</td><td>68</td><td>55</td><td>46</td><td>54</td><td>46</td><td>46</td></tr> <tr><td>7</td><td>65</td><td>51</td><td>41</td><td>63</td><td>50</td><td>41</td><td>48</td><td>40</td><td>40</td></tr> <tr><td>8</td><td>59</td><td>46</td><td>38</td><td>58</td><td>46</td><td>38</td><td>45</td><td>36</td><td>36</td></tr> <tr><td>9</td><td>56</td><td>42</td><td>34</td><td>55</td><td>41</td><td>34</td><td>40</td><td>34</td><td>34</td></tr> <tr><td>10</td><td>53</td><td>40</td><td>32</td><td>52</td><td>39</td><td>30</td><td>38</td><td>30</td><td>30</td></tr> </tbody> </table>		80			70			50				70	50	30	70	50	30	70	50	30	Ceil										Wall										RCR										0	118	118	118	115	115	115	111	111	111	1	109	104	98	106	101	96	96	93	93	2	98	90	82	95	88	81	84	79	79	3	90	79	70	86	78	69	75	68	68	4	81	69	60	80	68	60	66	58	58	5	76	63	54	73	61	53	58	52	52	6	69	56	46	68	55	46	54	46	46	7	65	51	41	63	50	41	48	40	40	8	59	46	38	58	46	38	45	36	36	9	56	42	34	55	41	34	40	34	34	10	53	40	32	52	39	30	38	30	30
		Angle	End	45	Cross	Back 45																																																																																																																																																																																																																																																														
0	1362	1362	1362	1362																																																																																																																																																																																																																																																																
5	1347	1356	1362	1356																																																																																																																																																																																																																																																																
15	1292	1305	1316	1305																																																																																																																																																																																																																																																																
25	1185	1205	1223	1205																																																																																																																																																																																																																																																																
35	1036	1064	1087	1064																																																																																																																																																																																																																																																																
45	861	890	917	890																																																																																																																																																																																																																																																																
55	674	693	721	693																																																																																																																																																																																																																																																																
65	425	462	479	462																																																																																																																																																																																																																																																																
75	227	265	294	265																																																																																																																																																																																																																																																																
85	63	84	76	84																																																																																																																																																																																																																																																																
Degrees	Lumens	% Luminaire																																																																																																																																																																																																																																																																		
0-30	1051	27.3																																																																																																																																																																																																																																																																		
0-40	1716	44.6																																																																																																																																																																																																																																																																		
0-60	3025	78.6																																																																																																																																																																																																																																																																		
0-90	3846	100																																																																																																																																																																																																																																																																		
0-180	3847	100																																																																																																																																																																																																																																																																		
Zone	End	45°	Cross																																																																																																																																																																																																																																																																	
45	3999	4135	4259																																																																																																																																																																																																																																																																	
55	3859	3971	4129																																																																																																																																																																																																																																																																	
65	3303	3589	3726																																																																																																																																																																																																																																																																	
75	2880	3365	3727																																																																																																																																																																																																																																																																	
85	2383	3159	2876																																																																																																																																																																																																																																																																	
	80			70			50																																																																																																																																																																																																																																																													
	70	50	30	70	50	30	70	50	30																																																																																																																																																																																																																																																											
Ceil																																																																																																																																																																																																																																																																				
Wall																																																																																																																																																																																																																																																																				
RCR																																																																																																																																																																																																																																																																				
0	118	118	118	115	115	115	111	111	111																																																																																																																																																																																																																																																											
1	109	104	98	106	101	96	96	93	93																																																																																																																																																																																																																																																											
2	98	90	82	95	88	81	84	79	79																																																																																																																																																																																																																																																											
3	90	79	70	86	78	69	75	68	68																																																																																																																																																																																																																																																											
4	81	69	60	80	68	60	66	58	58																																																																																																																																																																																																																																																											
5	76	63	54	73	61	53	58	52	52																																																																																																																																																																																																																																																											
6	69	56	46	68	55	46	54	46	46																																																																																																																																																																																																																																																											
7	65	51	41	63	50	41	48	40	40																																																																																																																																																																																																																																																											
8	59	46	38	58	46	38	45	36	36																																																																																																																																																																																																																																																											
9	56	42	34	55	41	34	40	34	34																																																																																																																																																																																																																																																											
10	53	40	32	52	39	30	38	30	30																																																																																																																																																																																																																																																											

2x2 SofTrace recessed LED, high efficacy configuration, 3800 nominal delivered lumens

LER - 128

<p><b>Catalog No.</b> 2STXG38LH840-2-D-UNV-DIM  <b>Test No.</b> 40572  <b>S/MH</b> 1.3  <b>Lamp Type</b> LED  <b>Lumens</b> 3840  <b>Input Watts</b> 30</p> <p>Comparative yearly lighting energy cost per 1000 lumens - <b>\$1.88</b> based on 3000 hrs. and \$.08 pwr KWH.</p> <p>The photometric results were obtained in the Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology.</p> <p>Photometric values based on test performed in compliance with LM-79.</p>	 <p><b>Candlepower</b></p> <table border="1"> <thead> <tr> <th>Angle</th> <th>End</th> <th>45</th> <th>Cross</th> <th>Back 45</th> </tr> </thead> <tbody> <tr><td>0</td><td>1363</td><td>1363</td><td>1363</td><td>1363</td></tr> <tr><td>5</td><td>1348</td><td>1358</td><td>1363</td><td>1358</td></tr> <tr><td>15</td><td>1293</td><td>1307</td><td>1317</td><td>1307</td></tr> <tr><td>25</td><td>1186</td><td>1206</td><td>1223</td><td>1206</td></tr> <tr><td>35</td><td>1039</td><td>1066</td><td>1089</td><td>1066</td></tr> <tr><td>45</td><td>862</td><td>891</td><td>917</td><td>891</td></tr> <tr><td>55</td><td>663</td><td>694</td><td>721</td><td>694</td></tr> <tr><td>65</td><td>425</td><td>454</td><td>479</td><td>454</td></tr> <tr><td>75</td><td>223</td><td>265</td><td>294</td><td>265</td></tr> <tr><td>85</td><td>62</td><td>79</td><td>76</td><td>79</td></tr> </tbody> </table>	Angle	End	45	Cross	Back 45	0	1363	1363	1363	1363	5	1348	1358	1363	1358	15	1293	1307	1317	1307	25	1186	1206	1223	1206	35	1039	1066	1089	1066	45	862	891	917	891	55	663	694	721	694	65	425	454	479	454	75	223	265	294	265	85	62	79	76	79	<p><b>Light Distribution</b></p> <table border="1"> <thead> <tr> <th>Degrees</th> <th>Lumens</th> <th>% Luminaire</th> </tr> </thead> <tbody> <tr><td>0-30</td><td>1053</td><td>27.4</td></tr> <tr><td>0-40</td><td>1719</td><td>44.8</td></tr> <tr><td>0-60</td><td>3025</td><td>78.8</td></tr> <tr><td>0-90</td><td>3840</td><td>100</td></tr> <tr><td>0-180</td><td>3841</td><td>100</td></tr> </tbody> </table> <p><b>Average Luminance</b></p> <table border="1"> <thead> <tr> <th>Zone</th> <th>End</th> <th>45°</th> <th>Cross</th> </tr> </thead> <tbody> <tr><td>45</td><td>4003</td><td>4141</td><td>4263</td></tr> <tr><td>55</td><td>3796</td><td>3976</td><td>4128</td></tr> <tr><td>65</td><td>3305</td><td>3529</td><td>3725</td></tr> <tr><td>75</td><td>2832</td><td>3359</td><td>3728</td></tr> <tr><td>85</td><td>2326</td><td>2993</td><td>2873</td></tr> </tbody> </table>	Degrees	Lumens	% Luminaire	0-30	1053	27.4	0-40	1719	44.8	0-60	3025	78.8	0-90	3840	100	0-180	3841	100	Zone	End	45°	Cross	45	4003	4141	4263	55	3796	3976	4128	65	3305	3529	3725	75	2832	3359	3728	85	2326	2993	2873	<p><b>Coefficients of Utilization</b></p> <p><b>Effective Floor Cavity Reflectance 20 Per (pfc=0.20)</b></p> <table border="1"> <thead> <tr> <th></th> <th colspan="3">80</th> <th colspan="3">70</th> <th colspan="3">50</th> </tr> <tr> <th></th> <th>70</th><th>50</th><th>30</th> <th>70</th><th>50</th><th>30</th> <th>70</th><th>50</th><th>30</th> </tr> </thead> <tbody> <tr><td>Ceil</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>Wall</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>RCR</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>0</td><td>118</td><td>118</td><td>118</td><td>115</td><td>115</td><td>115</td><td>111</td><td>111</td><td>111</td></tr> <tr><td>1</td><td>109</td><td>104</td><td>98</td><td>106</td><td>101</td><td>96</td><td>96</td><td>93</td><td>93</td></tr> <tr><td>2</td><td>98</td><td>90</td><td>82</td><td>95</td><td>88</td><td>81</td><td>84</td><td>79</td><td>79</td></tr> <tr><td>3</td><td>90</td><td>79</td><td>70</td><td>86</td><td>78</td><td>69</td><td>75</td><td>68</td><td>68</td></tr> <tr><td>4</td><td>81</td><td>69</td><td>60</td><td>80</td><td>68</td><td>60</td><td>66</td><td>58</td><td>58</td></tr> <tr><td>5</td><td>76</td><td>63</td><td>54</td><td>73</td><td>61</td><td>53</td><td>58</td><td>52</td><td>52</td></tr> <tr><td>6</td><td>69</td><td>56</td><td>46</td><td>68</td><td>56</td><td>46</td><td>54</td><td>46</td><td>46</td></tr> <tr><td>7</td><td>65</td><td>51</td><td>41</td><td>63</td><td>50</td><td>41</td><td>48</td><td>40</td><td>40</td></tr> <tr><td>8</td><td>59</td><td>46</td><td>38</td><td>58</td><td>46</td><td>38</td><td>45</td><td>36</td><td>36</td></tr> <tr><td>9</td><td>56</td><td>42</td><td>34</td><td>55</td><td>41</td><td>34</td><td>40</td><td>34</td><td>34</td></tr> <tr><td>10</td><td>53</td><td>40</td><td>32</td><td>52</td><td>39</td><td>30</td><td>38</td><td>30</td><td>30</td></tr> </tbody> </table>		80			70			50				70	50	30	70	50	30	70	50	30	Ceil										Wall										RCR										0	118	118	118	115	115	115	111	111	111	1	109	104	98	106	101	96	96	93	93	2	98	90	82	95	88	81	84	79	79	3	90	79	70	86	78	69	75	68	68	4	81	69	60	80	68	60	66	58	58	5	76	63	54	73	61	53	58	52	52	6	69	56	46	68	56	46	54	46	46	7	65	51	41	63	50	41	48	40	40	8	59	46	38	58	46	38	45	36	36	9	56	42	34	55	41	34	40	34	34	10	53	40	32	52	39	30	38	30	30
		Angle	End	45	Cross	Back 45																																																																																																																																																																																																																																																														
0	1363	1363	1363	1363																																																																																																																																																																																																																																																																
5	1348	1358	1363	1358																																																																																																																																																																																																																																																																
15	1293	1307	1317	1307																																																																																																																																																																																																																																																																
25	1186	1206	1223	1206																																																																																																																																																																																																																																																																
35	1039	1066	1089	1066																																																																																																																																																																																																																																																																
45	862	891	917	891																																																																																																																																																																																																																																																																
55	663	694	721	694																																																																																																																																																																																																																																																																
65	425	454	479	454																																																																																																																																																																																																																																																																
75	223	265	294	265																																																																																																																																																																																																																																																																
85	62	79	76	79																																																																																																																																																																																																																																																																
Degrees	Lumens	% Luminaire																																																																																																																																																																																																																																																																		
0-30	1053	27.4																																																																																																																																																																																																																																																																		
0-40	1719	44.8																																																																																																																																																																																																																																																																		
0-60	3025	78.8																																																																																																																																																																																																																																																																		
0-90	3840	100																																																																																																																																																																																																																																																																		
0-180	3841	100																																																																																																																																																																																																																																																																		
Zone	End	45°	Cross																																																																																																																																																																																																																																																																	
45	4003	4141	4263																																																																																																																																																																																																																																																																	
55	3796	3976	4128																																																																																																																																																																																																																																																																	
65	3305	3529	3725																																																																																																																																																																																																																																																																	
75	2832	3359	3728																																																																																																																																																																																																																																																																	
85	2326	2993	2873																																																																																																																																																																																																																																																																	
	80			70			50																																																																																																																																																																																																																																																													
	70	50	30	70	50	30	70	50	30																																																																																																																																																																																																																																																											
Ceil																																																																																																																																																																																																																																																																				
Wall																																																																																																																																																																																																																																																																				
RCR																																																																																																																																																																																																																																																																				
0	118	118	118	115	115	115	111	111	111																																																																																																																																																																																																																																																											
1	109	104	98	106	101	96	96	93	93																																																																																																																																																																																																																																																											
2	98	90	82	95	88	81	84	79	79																																																																																																																																																																																																																																																											
3	90	79	70	86	78	69	75	68	68																																																																																																																																																																																																																																																											
4	81	69	60	80	68	60	66	58	58																																																																																																																																																																																																																																																											
5	76	63	54	73	61	53	58	52	52																																																																																																																																																																																																																																																											
6	69	56	46	68	56	46	54	46	46																																																																																																																																																																																																																																																											
7	65	51	41	63	50	41	48	40	40																																																																																																																																																																																																																																																											
8	59	46	38	58	46	38	45	36	36																																																																																																																																																																																																																																																											
9	56	42	34	55	41	34	40	34	34																																																																																																																																																																																																																																																											
10	53	40	32	52	39	30	38	30	30																																																																																																																																																																																																																																																											