

Day-Brite

CFI

by Signify

Surface

DuaLED 1x4

2700, 3600, 4100, or 4700 lumens



Project: _____
 Location: _____
 Cat.No: _____
 Type: _____
 Lamps: _____ Qty: _____
 Notes: _____

The Day-Brite / CFI DuaLED surface LED is a highly efficient, visually comfortable, architecturally styled surface LED luminaire designed with a minimalistic strategy to achieve sustainable objectives. Its clean modern design offers a fresh variation on the popular dual chamber theme and provides architectural styling compatible with virtually any area

Ordering guide

Example: 1SDL27L840-4-D-UNV-DIM

Width	Family	Lumen Package	Color	Length	Center Diffuser	Voltage	Driver	Options
1	SDL		—	4	D	—	—	
1 1'	SDL Surface DuaLED	27L 2700 delivered lumens 36L 3600 delivered lumens 41L 4100 delivered lumens 47L 4700 delivered lumens	830 80 CRI, 3000K 835 80 CRI, 3500K 840 80 CRI, 4000K 850 80 CRI, 5000K	4 4'	D Diffuse (opal)	UNV Universal Voltage, 120-277 volt 347 347V	DIM 0-10V dimming SDIM Step dimming to 40% input power DALI DALI dimming	GLR Fusing, fast blow DSC Quick driver disconnect



1SDL DuaLED surface LED 1x4

2700, 3600, 4100, or 4700 lumens

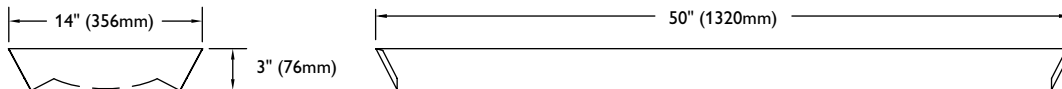
Application

- A highly efficient, visually comfortable, architecturally styled recessed LED luminaire designed with a minimalistic strategy to achieve sustainable objectives.
- Low profile configuration is only 3" high with sloped sides for a sleek appearance.
- Clean, modern design provides architectural styling compatible with virtually any area.
- Soft opal diffuser with large luminous area minimizes apparent brightness and provides high visual comfort perfect for a wide variety of general lighting applications like offices, schools, retail, or healthcare.
- Four lumen packages over a wide range provide significant application flexibility over light levels and/or luminaire spacing.
- A high lumen package can be used in conjunction with wide luminaire spacing to reduce luminaire quantities and overall cost while maintaining good uniformity.
- Directs a controlled amount of light to the higher angles in the room to balance the brightness of the surfaces and eliminate "cave effect" while creating the impression of a larger, brighter space without glare.
- Excellent color rendering with a CRI of 80.
- LEDs are an excellent source for use with controls since dimming or frequent switching does not degrade the performance or life of the source. External sensors are available for use.
- Surface mount design requires no plenum space.
- Some DuaLED luminaires are DesignLights Consortium® qualified. Please see the DLC QPL list for exact catalog numbers. (www.designlights.org/QPL)
- DuaLED luminaires are DesignLights Consortium® qualified. Please see the DLC QPL list for exact catalog numbers. (www.designlights.org/QPL).

Construction/Finish

- Uncomplicated design is well under 3" in depth and only requires a few parts outside of the electrical system and hardware, creating several benefits:
 - Less material required
 - Less packaging required
 - Reduced weight
 - Less energy required for construction and assembly
 - More luminaires can be shipped per truck to reduce fuel use and emissions

Dimensions



Electrical

- Driver and LED boards are easily accessible from below. Multiple LED boards are individually replaceable if needed via plug-in connectors to ensure long service life.
- 0-10V dimming is standard.
- Five year limited luminaire warranty includes LED boards and driver (emergency driver and batteries have a three year warranty in models so equipped). Visit www.philips.com/warranties for complete warranty information.
- High efficiency LEDs have a minimum 70,000 hour rated life (L70.)
- cETLus listed to UL and CSA standards, suitable for damp locations.

Enclosure

- Diffuser has large surface area for brightness control.
- Opal diffuser provides soft, comfortable lighting while maintaining high efficiency.
- Diffuser requires no frames or fasteners and can be easily removed from below without tools if needed.

General Notes

- All options factory installed.
- All accessories are field installed.
- This luminaire is not suitable for continuous row mounting.
- 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.

Energy Data

Luminaire	Catalog Number	Input Power	Efficacy
1x4	1SDL27L840	21.5	124
	1SDL36L840	29.0	123
	1SDL41L840	34.7	121
	1SDL47L840	39.1	120

1SDL DualLED surface LED 1x4

2700, 3600, 4100, or 4700 lumens

Photometry

1x4 DualLED, 2700 nominal delivered lumens

LER – 124

<p>Catalog No. ISDL27L840-4-D-UNV-DIM</p> <p>Test No. 35431</p> <p>S/MH 1.3</p> <p>Lamp Type LED</p> <p>Lumens/Lamp 2674</p> <p>Input Watts 21.5</p>	<p>Candela distribution</p> <table border="1"> <thead> <tr> <th rowspan="2">Vertical Angle</th> <th colspan="4">Horizontal Angle</th> </tr> <tr> <th>0°</th> <th>45°</th> <th>90°</th> <th>-45°</th> </tr> </thead> <tbody> <tr><td>0</td><td>913</td><td>913</td><td>913</td><td>913</td></tr> <tr><td>5</td><td>900</td><td>910</td><td>916</td><td>910</td></tr> <tr><td>15</td><td>869</td><td>884</td><td>889</td><td>884</td></tr> <tr><td>25</td><td>807</td><td>821</td><td>830</td><td>821</td></tr> <tr><td>35</td><td>716</td><td>733</td><td>744</td><td>733</td></tr> <tr><td>45</td><td>601</td><td>623</td><td>634</td><td>623</td></tr> <tr><td>55</td><td>468</td><td>491</td><td>500</td><td>491</td></tr> <tr><td>65</td><td>325</td><td>345</td><td>345</td><td>345</td></tr> <tr><td>75</td><td>182</td><td>185</td><td>184</td><td>185</td></tr> <tr><td>85</td><td>54</td><td>46</td><td>49</td><td>46</td></tr> </tbody> </table>	Vertical Angle	Horizontal Angle				0°	45°	90°	-45°	0	913	913	913	913	5	900	910	916	910	15	869	884	889	884	25	807	821	830	821	35	716	733	744	733	45	601	623	634	623	55	468	491	500	491	65	325	345	345	345	75	182	185	184	185	85	54	46	49	46	<p>Light Distribution</p> <table border="1"> <thead> <tr> <th>Degrees</th> <th>Lumens</th> <th>% Luminaire</th> </tr> </thead> <tbody> <tr><td>0-30</td><td>714</td><td>26.7</td></tr> <tr><td>0-40</td><td>1172</td><td>43.8</td></tr> <tr><td>0-60</td><td>2086</td><td>78.0</td></tr> <tr><td>0-90</td><td>2675</td><td>100.0</td></tr> </tbody> </table>	Degrees	Lumens	% Luminaire	0-30	714	26.7	0-40	1172	43.8	0-60	2086	78.0	0-90	2675	100.0	<p>Average Luminance</p> <table border="1"> <thead> <tr> <th>Angle</th> <th>End</th> <th>45°</th> <th>Cross</th> </tr> </thead> <tbody> <tr><td>45</td><td>3990</td><td>4134</td><td>4206</td></tr> <tr><td>55</td><td>3830</td><td>4019</td><td>4089</td></tr> <tr><td>65</td><td>3609</td><td>3829</td><td>3825</td></tr> <tr><td>75</td><td>3301</td><td>3359</td><td>3339</td></tr> <tr><td>85</td><td>2923</td><td>2493</td><td>2622</td></tr> </tbody> </table>	Angle	End	45°	Cross	45	3990	4134	4206	55	3830	4019	4089	65	3609	3829	3825	75	3301	3359	3339	85	2923	2493	2622																																							
Vertical Angle	Horizontal Angle																																																																																																																																											
	0°	45°	90°	-45°																																																																																																																																								
0	913	913	913	913																																																																																																																																								
5	900	910	916	910																																																																																																																																								
15	869	884	889	884																																																																																																																																								
25	807	821	830	821																																																																																																																																								
35	716	733	744	733																																																																																																																																								
45	601	623	634	623																																																																																																																																								
55	468	491	500	491																																																																																																																																								
65	325	345	345	345																																																																																																																																								
75	182	185	184	185																																																																																																																																								
85	54	46	49	46																																																																																																																																								
Degrees	Lumens	% Luminaire																																																																																																																																										
0-30	714	26.7																																																																																																																																										
0-40	1172	43.8																																																																																																																																										
0-60	2086	78.0																																																																																																																																										
0-90	2675	100.0																																																																																																																																										
Angle	End	45°	Cross																																																																																																																																									
45	3990	4134	4206																																																																																																																																									
55	3830	4019	4089																																																																																																																																									
65	3609	3829	3825																																																																																																																																									
75	3301	3359	3339																																																																																																																																									
85	2923	2493	2622																																																																																																																																									
<p>Comparative yearly lighting energy cost per 1000 lumens – \$1.94 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>Coefficients of Utilization</p> <p>EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)</p> <table border="1"> <thead> <tr> <th rowspan="2">Ceiling (pcc)</th> <th colspan="3">80%</th> <th colspan="3">70%</th> <th colspan="3">50%</th> </tr> <tr> <th>70</th> <th>50</th> <th>30</th> <th>70</th> <th>50</th> <th>30</th> <th>50</th> <th>30</th> </tr> </thead> <tbody> <tr> <td>Wall (pw)</td> <td colspan="9">Zonal cavity method - Effective floor reflectance = 20%</td> </tr> <tr> <td>RCR</td> <td colspan="9">Zonal cavity method - Effective floor reflectance = 20%</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></tr> <tr><td>1</td><td>108</td><td>104</td><td>98</td><td>106</td><td>101</td><td>96</td><td>96</td><td>93</td></tr> <tr><td>2</td><td>97</td><td>90</td><td>82</td><td>95</td><td>88</td><td>81</td><td>84</td><td>79</td></tr> <tr><td>3</td><td>90</td><td>79</td><td>70</td><td>86</td><td>77</td><td>69</td><td>73</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></tr> <tr><td>5</td><td>75</td><td>61</td><td>53</td><td>72</td><td>60</td><td>53</td><td>58</td><td>51</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>53</td><td>46</td></tr> <tr><td>7</td><td>64</td><td>51</td><td>41</td><td>63</td><td>50</td><td>41</td><td>47</td><td>40</td></tr> <tr><td>8</td><td>59</td><td>46</td><td>38</td><td>57</td><td>46</td><td>36</td><td>44</td><td>36</td></tr> <tr><td>9</td><td>56</td><td>41</td><td>34</td><td>55</td><td>41</td><td>34</td><td>40</td><td>33</td></tr> <tr><td>10</td><td>52</td><td>39</td><td>30</td><td>51</td><td>39</td><td>30</td><td>38</td><td>30</td></tr> </tbody> </table>				Ceiling (pcc)	80%			70%			50%			70	50	30	70	50	30	50	30	Wall (pw)	Zonal cavity method - Effective floor reflectance = 20%									RCR	Zonal cavity method - Effective floor reflectance = 20%									0	118	118	118	115	115	115	111	111	1	108	104	98	106	101	96	96	93	2	97	90	82	95	88	81	84	79	3	90	79	70	86	77	69	73	68	4	81	69	60	80	68	59	66	58	5	75	61	53	72	60	53	58	51	6	69	56	46	68	55	46	53	46	7	64	51	41	63	50	41	47	40	8	59	46	38	57	46	36	44	36	9	56	41	34	55	41	34	40	33	10	52	39	30	51	39	30	38	30
Ceiling (pcc)	80%				70%			50%																																																																																																																																				
	70	50	30	70	50	30	50	30																																																																																																																																				
Wall (pw)	Zonal cavity method - Effective floor reflectance = 20%																																																																																																																																											
RCR	Zonal cavity method - Effective floor reflectance = 20%																																																																																																																																											
0	118	118	118	115	115	115	111	111																																																																																																																																				
1	108	104	98	106	101	96	96	93																																																																																																																																				
2	97	90	82	95	88	81	84	79																																																																																																																																				
3	90	79	70	86	77	69	73	68																																																																																																																																				
4	81	69	60	80	68	59	66	58																																																																																																																																				
5	75	61	53	72	60	53	58	51																																																																																																																																				
6	69	56	46	68	55	46	53	46																																																																																																																																				
7	64	51	41	63	50	41	47	40																																																																																																																																				
8	59	46	38	57	46	36	44	36																																																																																																																																				
9	56	41	34	55	41	34	40	33																																																																																																																																				
10	52	39	30	51	39	30	38	30																																																																																																																																				

1x4 DualLED, 3600 nominal delivered lumens

LER – 123

<p>Catalog No. ISDL36L840-4-D-UNV-DIM</p> <p>Test No. 35432</p> <p>S/MH 1.3</p> <p>Lamp Type LED</p> <p>Lumens/Lamp 3567</p> <p>Input Watts 29.0</p>	<p>Candela distribution</p> <table border="1"> <thead> <tr> <th rowspan="2">Vertical Angle</th> <th colspan="4">Horizontal Angle</th> </tr> <tr> <th>0°</th> <th>45°</th> <th>90°</th> <th>-45°</th> </tr> </thead> <tbody> <tr><td>0</td><td>1218</td><td>1218</td><td>1218</td><td>1218</td></tr> <tr><td>5</td><td>1200</td><td>1214</td><td>1222</td><td>1214</td></tr> <tr><td>15</td><td>1159</td><td>1179</td><td>1186</td><td>1179</td></tr> <tr><td>25</td><td>1077</td><td>1095</td><td>1106</td><td>1095</td></tr> <tr><td>35</td><td>954</td><td>979</td><td>992</td><td>979</td></tr> <tr><td>45</td><td>802</td><td>831</td><td>845</td><td>831</td></tr> <tr><td>55</td><td>625</td><td>655</td><td>668</td><td>655</td></tr> <tr><td>65</td><td>433</td><td>459</td><td>461</td><td>459</td></tr> <tr><td>75</td><td>243</td><td>247</td><td>246</td><td>247</td></tr> <tr><td>85</td><td>73</td><td>62</td><td>66</td><td>62</td></tr> </tbody> </table>	Vertical Angle	Horizontal Angle				0°	45°	90°	-45°	0	1218	1218	1218	1218	5	1200	1214	1222	1214	15	1159	1179	1186	1179	25	1077	1095	1106	1095	35	954	979	992	979	45	802	831	845	831	55	625	655	668	655	65	433	459	461	459	75	243	247	246	247	85	73	62	66	62	<p>Light Distribution</p> <table border="1"> <thead> <tr> <th>Degrees</th> <th>Lumens</th> <th>% Luminaire</th> </tr> </thead> <tbody> <tr><td>0-30</td><td>952</td><td>26.7</td></tr> <tr><td>0-40</td><td>1563</td><td>43.8</td></tr> <tr><td>0-60</td><td>2782</td><td>78.0</td></tr> <tr><td>0-90</td><td>3568</td><td>100.0</td></tr> </tbody> </table>	Degrees	Lumens	% Luminaire	0-30	952	26.7	0-40	1563	43.8	0-60	2782	78.0	0-90	3568	100.0	<p>Average Luminance</p> <table border="1"> <thead> <tr> <th>Angle</th> <th>End</th> <th>45°</th> <th>Cross</th> </tr> </thead> <tbody> <tr><td>45</td><td>5321</td><td>5512</td><td>5607</td></tr> <tr><td>55</td><td>5111</td><td>5357</td><td>5465</td></tr> <tr><td>65</td><td>4805</td><td>5099</td><td>5116</td></tr> <tr><td>75</td><td>4402</td><td>4476</td><td>4462</td></tr> <tr><td>85</td><td>3925</td><td>3333</td><td>3526</td></tr> </tbody> </table>	Angle	End	45°	Cross	45	5321	5512	5607	55	5111	5357	5465	65	4805	5099	5116	75	4402	4476	4462	85	3925	3333	3526																																							
Vertical Angle	Horizontal Angle																																																																																																																																											
	0°	45°	90°	-45°																																																																																																																																								
0	1218	1218	1218	1218																																																																																																																																								
5	1200	1214	1222	1214																																																																																																																																								
15	1159	1179	1186	1179																																																																																																																																								
25	1077	1095	1106	1095																																																																																																																																								
35	954	979	992	979																																																																																																																																								
45	802	831	845	831																																																																																																																																								
55	625	655	668	655																																																																																																																																								
65	433	459	461	459																																																																																																																																								
75	243	247	246	247																																																																																																																																								
85	73	62	66	62																																																																																																																																								
Degrees	Lumens	% Luminaire																																																																																																																																										
0-30	952	26.7																																																																																																																																										
0-40	1563	43.8																																																																																																																																										
0-60	2782	78.0																																																																																																																																										
0-90	3568	100.0																																																																																																																																										
Angle	End	45°	Cross																																																																																																																																									
45	5321	5512	5607																																																																																																																																									
55	5111	5357	5465																																																																																																																																									
65	4805	5099	5116																																																																																																																																									
75	4402	4476	4462																																																																																																																																									
85	3925	3333	3526																																																																																																																																									
<p>Comparative yearly lighting energy cost per 1000 lumens – \$1.95 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>Coefficients of Utilization</p> <p>EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)</p> <table border="1"> <thead> <tr> <th rowspan="2">Ceiling (pcc)</th> <th colspan="3">80%</th> <th colspan="3">70%</th> <th colspan="3">50%</th> </tr> <tr> <th>70</th> <th>50</th> <th>30</th> <th>70</th> <th>50</th> <th>30</th> <th>50</th> <th>30</th> </tr> </thead> <tbody> <tr> <td>Wall (pw)</td> <td colspan="9">Zonal cavity method - Effective floor reflectance = 20%</td> </tr> <tr> <td>RCR</td> <td colspan="9">Zonal cavity method - Effective floor reflectance = 20%</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></tr> <tr><td>1</td><td>108</td><td>104</td><td>98</td><td>106</td><td>101</td><td>96</td><td>96</td><td>93</td></tr> <tr><td>2</td><td>97</td><td>90</td><td>82</td><td>95</td><td>88</td><td>81</td><td>84</td><td>79</td></tr> <tr><td>3</td><td>90</td><td>79</td><td>70</td><td>86</td><td>77</td><td>69</td><td>73</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></tr> <tr><td>5</td><td>75</td><td>61</td><td>53</td><td>72</td><td>60</td><td>53</td><td>58</td><td>51</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>53</td><td>46</td></tr> <tr><td>7</td><td>64</td><td>51</td><td>41</td><td>63</td><td>50</td><td>41</td><td>47</td><td>40</td></tr> <tr><td>8</td><td>59</td><td>46</td><td>38</td><td>57</td><td>46</td><td>36</td><td>44</td><td>36</td></tr> <tr><td>9</td><td>56</td><td>41</td><td>34</td><td>55</td><td>41</td><td>34</td><td>40</td><td>33</td></tr> <tr><td>10</td><td>52</td><td>39</td><td>30</td><td>51</td><td>39</td><td>30</td><td>38</td><td>30</td></tr> </tbody> </table>				Ceiling (pcc)	80%			70%			50%			70	50	30	70	50	30	50	30	Wall (pw)	Zonal cavity method - Effective floor reflectance = 20%									RCR	Zonal cavity method - Effective floor reflectance = 20%									0	118	118	118	115	115	115	111	111	1	108	104	98	106	101	96	96	93	2	97	90	82	95	88	81	84	79	3	90	79	70	86	77	69	73	68	4	81	69	60	80	68	59	66	58	5	75	61	53	72	60	53	58	51	6	69	56	46	68	55	46	53	46	7	64	51	41	63	50	41	47	40	8	59	46	38	57	46	36	44	36	9	56	41	34	55	41	34	40	33	10	52	39	30	51	39	30	38	30
Ceiling (pcc)	80%				70%			50%																																																																																																																																				
	70	50	30	70	50	30	50	30																																																																																																																																				
Wall (pw)	Zonal cavity method - Effective floor reflectance = 20%																																																																																																																																											
RCR	Zonal cavity method - Effective floor reflectance = 20%																																																																																																																																											
0	118	118	118	115	115	115	111	111																																																																																																																																				
1	108	104	98	106	101	96	96	93																																																																																																																																				
2	97	90	82	95	88	81	84	79																																																																																																																																				
3	90	79	70	86	77	69	73	68																																																																																																																																				
4	81	69	60	80	68	59	66	58																																																																																																																																				
5	75	61	53	72	60	53	58	51																																																																																																																																				
6	69	56	46	68	55	46	53	46																																																																																																																																				
7	64	51	41	63	50	41	47	40																																																																																																																																				
8	59	46	38	57	46	36	44	36																																																																																																																																				
9	56	41	34	55	41	34	40	33																																																																																																																																				
10	52	39	30	51	39	30	38	30																																																																																																																																				

1SDL DualLED surface LED 1x4

2700, 3600, 4100, or 4700 lumens

1x4 DualLED, 4100 nominal delivered lumens

LER – 121

Catalog No. ISDL41L840-4-D-UNV-DIM Test No. 35433 S/MH 1.3 Lamp Type LED Lumens/Lamp 4220 Input Watts 34.7	Candela distribution <table border="1"> <thead> <tr> <th rowspan="2">Vertical Angle</th> <th colspan="4">Horizontal Angle</th> </tr> <tr> <th>0°</th> <th>45°</th> <th>90°</th> <th>-45°</th> </tr> </thead> <tbody> <tr><td>0</td><td>1440</td><td>1440</td><td>1440</td><td>1440</td></tr> <tr><td>5</td><td>1418</td><td>1435</td><td>1445</td><td>1435</td></tr> <tr><td>15</td><td>1371</td><td>1394</td><td>1402</td><td>1394</td></tr> <tr><td>25</td><td>1273</td><td>1295</td><td>1308</td><td>1295</td></tr> <tr><td>35</td><td>1129</td><td>1157</td><td>1173</td><td>1157</td></tr> <tr><td>45</td><td>948</td><td>981</td><td>1000</td><td>981</td></tr> <tr><td>55</td><td>739</td><td>774</td><td>791</td><td>774</td></tr> <tr><td>65</td><td>513</td><td>543</td><td>546</td><td>543</td></tr> <tr><td>75</td><td>287</td><td>293</td><td>291</td><td>293</td></tr> <tr><td>85</td><td>86</td><td>74</td><td>78</td><td>74</td></tr> </tbody> </table>	Vertical Angle	Horizontal Angle				0°	45°	90°	-45°	0	1440	1440	1440	1440	5	1418	1435	1445	1435	15	1371	1394	1402	1394	25	1273	1295	1308	1295	35	1129	1157	1173	1157	45	948	981	1000	981	55	739	774	791	774	65	513	543	546	543	75	287	293	291	293	85	86	74	78	74	Light Distribution <table border="1"> <thead> <tr> <th>Degrees</th> <th>Lumens</th> <th>% Luminaire</th> </tr> </thead> <tbody> <tr><td>0-30</td><td>1126</td><td>26.7</td></tr> <tr><td>0-40</td><td>1849</td><td>43.8</td></tr> <tr><td>0-60</td><td>3292</td><td>78.0</td></tr> <tr><td>0-90</td><td>4222</td><td>100.0</td></tr> </tbody> </table>	Degrees	Lumens	% Luminaire	0-30	1126	26.7	0-40	1849	43.8	0-60	3292	78.0	0-90	4222	100.0	Average Luminance <table border="1"> <thead> <tr> <th>Angle</th> <th>End</th> <th>45°</th> <th>Cross</th> </tr> </thead> <tbody> <tr><td>45</td><td>6293</td><td>6508</td><td>6636</td></tr> <tr><td>55</td><td>6049</td><td>6329</td><td>6472</td></tr> <tr><td>65</td><td>5690</td><td>6033</td><td>6057</td></tr> <tr><td>75</td><td>5210</td><td>5303</td><td>5279</td></tr> <tr><td>85</td><td>4646</td><td>3957</td><td>4183</td></tr> </tbody> </table>	Angle	End	45°	Cross	45	6293	6508	6636	55	6049	6329	6472	65	5690	6033	6057	75	5210	5303	5279	85	4646	3957	4183																																							
			Vertical Angle	Horizontal Angle																																																																																																																																								
0°	45°	90°		-45°																																																																																																																																								
0	1440	1440	1440	1440																																																																																																																																								
5	1418	1435	1445	1435																																																																																																																																								
15	1371	1394	1402	1394																																																																																																																																								
25	1273	1295	1308	1295																																																																																																																																								
35	1129	1157	1173	1157																																																																																																																																								
45	948	981	1000	981																																																																																																																																								
55	739	774	791	774																																																																																																																																								
65	513	543	546	543																																																																																																																																								
75	287	293	291	293																																																																																																																																								
85	86	74	78	74																																																																																																																																								
Degrees	Lumens	% Luminaire																																																																																																																																										
0-30	1126	26.7																																																																																																																																										
0-40	1849	43.8																																																																																																																																										
0-60	3292	78.0																																																																																																																																										
0-90	4222	100.0																																																																																																																																										
Angle	End	45°	Cross																																																																																																																																									
45	6293	6508	6636																																																																																																																																									
55	6049	6329	6472																																																																																																																																									
65	5690	6033	6057																																																																																																																																									
75	5210	5303	5279																																																																																																																																									
85	4646	3957	4183																																																																																																																																									
Comparative yearly lighting energy cost per 1000 lumens – \$1.97 based on 3000 hrs. and \$.08 pwr KWH. The photometric results were obtained in the Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology. Photometric values based on test performed in compliance with LM-79.	Coefficients of Utilization EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20) <table border="1"> <thead> <tr> <th rowspan="2">Ceiling (pcc)</th> <th colspan="3">80%</th> <th colspan="3">70%</th> <th colspan="3">50%</th> </tr> <tr> <th>70</th> <th>50</th> <th>30</th> <th>70</th> <th>50</th> <th>30</th> <th>50</th> <th>30</th> </tr> </thead> <tbody> <tr> <td>Wall (pw)</td> <td>70</td> <td>50</td> <td>30</td> <td>70</td> <td>50</td> <td>30</td> <td>50</td> <td>30</td> </tr> <tr> <td>RCR</td> <td colspan="9">Zonal cavity method - Effective floor reflectance = 20%</td> </tr> <tr> <td>Room Cavity Ratio</td> <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> </tr> <tr><td>1</td><td>108</td><td>104</td><td>98</td><td>106</td><td>101</td><td>96</td><td>96</td><td>93</td></tr> <tr><td>2</td><td>97</td><td>90</td><td>82</td><td>95</td><td>88</td><td>81</td><td>84</td><td>79</td></tr> <tr><td>3</td><td>90</td><td>79</td><td>70</td><td>86</td><td>77</td><td>69</td><td>73</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></tr> <tr><td>5</td><td>75</td><td>61</td><td>53</td><td>72</td><td>60</td><td>53</td><td>58</td><td>51</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>53</td><td>46</td></tr> <tr><td>7</td><td>64</td><td>51</td><td>41</td><td>63</td><td>50</td><td>41</td><td>47</td><td>40</td></tr> <tr><td>8</td><td>59</td><td>46</td><td>38</td><td>57</td><td>46</td><td>36</td><td>44</td><td>36</td></tr> <tr><td>9</td><td>56</td><td>41</td><td>34</td><td>55</td><td>41</td><td>34</td><td>40</td><td>33</td></tr> <tr><td>10</td><td>52</td><td>39</td><td>30</td><td>51</td><td>39</td><td>30</td><td>38</td><td>30</td></tr> </tbody> </table>			Ceiling (pcc)	80%			70%			50%			70	50	30	70	50	30	50	30	Wall (pw)	70	50	30	70	50	30	50	30	RCR	Zonal cavity method - Effective floor reflectance = 20%									Room Cavity Ratio	0	118	118	118	115	115	115	111	111	1	108	104	98	106	101	96	96	93	2	97	90	82	95	88	81	84	79	3	90	79	70	86	77	69	73	68	4	81	69	60	80	68	59	66	58	5	75	61	53	72	60	53	58	51	6	69	56	46	68	55	46	53	46	7	64	51	41	63	50	41	47	40	8	59	46	38	57	46	36	44	36	9	56	41	34	55	41	34	40	33	10	52	39	30	51	39	30	38	30
Ceiling (pcc)	80%				70%			50%																																																																																																																																				
	70	50	30	70	50	30	50	30																																																																																																																																				
Wall (pw)	70	50	30	70	50	30	50	30																																																																																																																																				
RCR	Zonal cavity method - Effective floor reflectance = 20%																																																																																																																																											
Room Cavity Ratio	0	118	118	118	115	115	115	111	111																																																																																																																																			
1	108	104	98	106	101	96	96	93																																																																																																																																				
2	97	90	82	95	88	81	84	79																																																																																																																																				
3	90	79	70	86	77	69	73	68																																																																																																																																				
4	81	69	60	80	68	59	66	58																																																																																																																																				
5	75	61	53	72	60	53	58	51																																																																																																																																				
6	69	56	46	68	55	46	53	46																																																																																																																																				
7	64	51	41	63	50	41	47	40																																																																																																																																				
8	59	46	38	57	46	36	44	36																																																																																																																																				
9	56	41	34	55	41	34	40	33																																																																																																																																				
10	52	39	30	51	39	30	38	30																																																																																																																																				

1x4 DualLED, 4700 nominal delivered lumens

LER – 120

Catalog No. ISDL47L840-4-D-UNV-DIM Test No. 35436 S/MH 1.3 Lamp Type LED Lumens/Lamp 4706 Input Watts 39.1	Candela distribution <table border="1"> <thead> <tr> <th rowspan="2">Vertical Angle</th> <th colspan="4">Horizontal Angle</th> </tr> <tr> <th>0°</th> <th>45°</th> <th>90°</th> <th>-45°</th> </tr> </thead> <tbody> <tr><td>0</td><td>1606</td><td>1606</td><td>1606</td><td>1606</td></tr> <tr><td>5</td><td>1581</td><td>1603</td><td>1611</td><td>1603</td></tr> <tr><td>15</td><td>1528</td><td>1556</td><td>1564</td><td>1556</td></tr> <tr><td>25</td><td>1419</td><td>1447</td><td>1459</td><td>1447</td></tr> <tr><td>35</td><td>1257</td><td>1292</td><td>1307</td><td>1292</td></tr> <tr><td>45</td><td>1056</td><td>1096</td><td>1114</td><td>1096</td></tr> <tr><td>55</td><td>823</td><td>865</td><td>881</td><td>865</td></tr> <tr><td>65</td><td>571</td><td>606</td><td>606</td><td>606</td></tr> <tr><td>75</td><td>319</td><td>325</td><td>324</td><td>325</td></tr> <tr><td>85</td><td>96</td><td>81</td><td>86</td><td>81</td></tr> </tbody> </table>	Vertical Angle	Horizontal Angle				0°	45°	90°	-45°	0	1606	1606	1606	1606	5	1581	1603	1611	1603	15	1528	1556	1564	1556	25	1419	1447	1459	1447	35	1257	1292	1307	1292	45	1056	1096	1114	1096	55	823	865	881	865	65	571	606	606	606	75	319	325	324	325	85	96	81	86	81	Light Distribution <table border="1"> <thead> <tr> <th>Degrees</th> <th>Lumens</th> <th>% Luminaire</th> </tr> </thead> <tbody> <tr><td>0-30</td><td>1256</td><td>26.7</td></tr> <tr><td>0-40</td><td>2062</td><td>43.8</td></tr> <tr><td>0-60</td><td>3671</td><td>78.0</td></tr> <tr><td>0-90</td><td>4708</td><td>100.0</td></tr> </tbody> </table>	Degrees	Lumens	% Luminaire	0-30	1256	26.7	0-40	2062	43.8	0-60	3671	78.0	0-90	4708	100.0	Average Luminance <table border="1"> <thead> <tr> <th>Angle</th> <th>End</th> <th>45°</th> <th>Cross</th> </tr> </thead> <tbody> <tr><td>45</td><td>7007</td><td>7274</td><td>7394</td></tr> <tr><td>55</td><td>6734</td><td>7075</td><td>7205</td></tr> <tr><td>65</td><td>6335</td><td>6728</td><td>6732</td></tr> <tr><td>75</td><td>5785</td><td>5887</td><td>5878</td></tr> <tr><td>85</td><td>5141</td><td>4345</td><td>4603</td></tr> </tbody> </table>	Angle	End	45°	Cross	45	7007	7274	7394	55	6734	7075	7205	65	6335	6728	6732	75	5785	5887	5878	85	5141	4345	4603																																							
			Vertical Angle	Horizontal Angle																																																																																																																																								
0°	45°	90°		-45°																																																																																																																																								
0	1606	1606	1606	1606																																																																																																																																								
5	1581	1603	1611	1603																																																																																																																																								
15	1528	1556	1564	1556																																																																																																																																								
25	1419	1447	1459	1447																																																																																																																																								
35	1257	1292	1307	1292																																																																																																																																								
45	1056	1096	1114	1096																																																																																																																																								
55	823	865	881	865																																																																																																																																								
65	571	606	606	606																																																																																																																																								
75	319	325	324	325																																																																																																																																								
85	96	81	86	81																																																																																																																																								
Degrees	Lumens	% Luminaire																																																																																																																																										
0-30	1256	26.7																																																																																																																																										
0-40	2062	43.8																																																																																																																																										
0-60	3671	78.0																																																																																																																																										
0-90	4708	100.0																																																																																																																																										
Angle	End	45°	Cross																																																																																																																																									
45	7007	7274	7394																																																																																																																																									
55	6734	7075	7205																																																																																																																																									
65	6335	6728	6732																																																																																																																																									
75	5785	5887	5878																																																																																																																																									
85	5141	4345	4603																																																																																																																																									
Comparative yearly lighting energy cost per 1000 lumens – \$2.00 based on 3000 hrs. and \$.08 pwr KWH. The photometric results were obtained in the Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology. Photometric values based on test performed in compliance with LM-79.	Coefficients of Utilization EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20) <table border="1"> <thead> <tr> <th rowspan="2">Ceiling (pcc)</th> <th colspan="3">80%</th> <th colspan="3">70%</th> <th colspan="3">50%</th> </tr> <tr> <th>70</th> <th>50</th> <th>30</th> <th>70</th> <th>50</th> <th>30</th> <th>50</th> <th>30</th> </tr> </thead> <tbody> <tr> <td>Wall (pw)</td> <td>70</td> <td>50</td> <td>30</td> <td>70</td> <td>50</td> <td>30</td> <td>50</td> <td>30</td> </tr> <tr> <td>RCR</td> <td colspan="9">Zonal cavity method - Effective floor reflectance = 20%</td> </tr> <tr> <td>Room Cavity Ratio</td> <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> </tr> <tr><td>1</td><td>108</td><td>104</td><td>98</td><td>106</td><td>101</td><td>96</td><td>96</td><td>93</td></tr> <tr><td>2</td><td>97</td><td>90</td><td>82</td><td>95</td><td>88</td><td>81</td><td>84</td><td>79</td></tr> <tr><td>3</td><td>90</td><td>79</td><td>70</td><td>86</td><td>77</td><td>69</td><td>73</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></tr> <tr><td>5</td><td>75</td><td>61</td><td>53</td><td>72</td><td>60</td><td>53</td><td>58</td><td>51</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>53</td><td>46</td></tr> <tr><td>7</td><td>64</td><td>51</td><td>41</td><td>63</td><td>50</td><td>41</td><td>47</td><td>40</td></tr> <tr><td>8</td><td>59</td><td>46</td><td>38</td><td>57</td><td>46</td><td>36</td><td>44</td><td>36</td></tr> <tr><td>9</td><td>56</td><td>41</td><td>34</td><td>55</td><td>41</td><td>34</td><td>40</td><td>33</td></tr> <tr><td>10</td><td>52</td><td>39</td><td>30</td><td>51</td><td>39</td><td>30</td><td>38</td><td>30</td></tr> </tbody> </table>			Ceiling (pcc)	80%			70%			50%			70	50	30	70	50	30	50	30	Wall (pw)	70	50	30	70	50	30	50	30	RCR	Zonal cavity method - Effective floor reflectance = 20%									Room Cavity Ratio	0	118	118	118	115	115	115	111	111	1	108	104	98	106	101	96	96	93	2	97	90	82	95	88	81	84	79	3	90	79	70	86	77	69	73	68	4	81	69	60	80	68	59	66	58	5	75	61	53	72	60	53	58	51	6	69	56	46	68	55	46	53	46	7	64	51	41	63	50	41	47	40	8	59	46	38	57	46	36	44	36	9	56	41	34	55	41	34	40	33	10	52	39	30	51	39	30	38	30
Ceiling (pcc)	80%				70%			50%																																																																																																																																				
	70	50	30	70	50	30	50	30																																																																																																																																				
Wall (pw)	70	50	30	70	50	30	50	30																																																																																																																																				
RCR	Zonal cavity method - Effective floor reflectance = 20%																																																																																																																																											
Room Cavity Ratio	0	118	118	118	115	115	115	111	111																																																																																																																																			
1	108	104	98	106	101	96	96	93																																																																																																																																				
2	97	90	82	95	88	81	84	79																																																																																																																																				
3	90	79	70	86	77	69	73	68																																																																																																																																				
4	81	69	60	80	68	59	66	58																																																																																																																																				
5	75	61	53	72	60	53	58	51																																																																																																																																				
6	69	56	46	68	55	46	53	46																																																																																																																																				
7	64	51	41	63	50	41	47	40																																																																																																																																				
8	59	46	38	57	46	36	44	36																																																																																																																																				
9	56	41	34	55	41	34	40	33																																																																																																																																				
10	52	39	30	51	39	30	38	30																																																																																																																																				

