

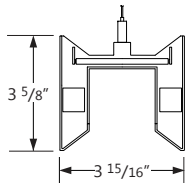
**MSO** - microgroove spotless lens



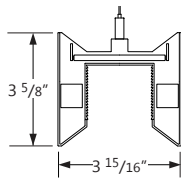
**MAL** - microgroove aluminum

**SO** - spotless lens

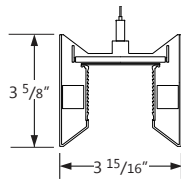
**SO** - spotless lens



**MSO** - microgroove spotless lens



**MAL** - microgroove aluminum



Project \_\_\_\_\_

Type \_\_\_\_\_

Notes \_\_\_\_\_



### NOMINAL LUMENS/FT

	SL 75/25	SL 50/50	SL 25/75	INPUT WATTS
	Lumens/ft	Lumens/ft	Lumens/ft	W/ft
<b>SO or MSO</b>	1350	1200	1050	11.7
	1100	950	850	9.4
	900	800	700	7.8
	700	600	550	5.9
<b>MAL*</b>	1350	1100	900	11.7
	1100	850	750	9.4
	900	750	600	7.8
	700	550	500	5.8

- 90 CRI only
- 80 CRI only
- For both 80 and 90 CRI

\*Lumen values are based upon a white finish, lumen values may vary for custom finishes

### Ordering Guide

ZESQDI	PRODUCT ID	LIGHT ENGINE	NOMINAL LUMENS/FT (#/#)	CRI	COLOR TEMP.	SHIELDING	SHIELDING FINISH (OPTIONAL)
ZESQDI	Zen Square Pendant Direct/Indirect	<b>SL 75/25</b> surroundlite 75%up/25%down <b>SL 50/50</b> surroundlite 50%up/50%down <b>SL 25/75</b> surroundlite 25%up/75%down	# #	<b>80</b> 80 CRI <b>90</b> 90 CRI	<b>27</b> 2700 K <b>30</b> 3000 K <b>35</b> 3500 K <b>40</b> 4000 K	<b>SO</b> spotless lens <b>MSO</b> microgroove spotless lens <b>MAL</b> microgroove aluminum *	<b>W</b> white - standard <b>C</b> custom
			See table above for lumen selection Applies to both UP & DOWN. Consult factory for other lumen packages	Applies to both UP & DOWN.	Applies to both UP & DOWN.	* Standard white	Shielding finish option is for MAL option only.

FIXTURE LENGTH	FINISH	VOLTAGE	DRIVER	CIRCUITS
<b>2</b> 2' <b>3</b> 3' <b>4</b> 4' <b>5</b> 5' <b>6</b> 6' <b>7</b> 7' <b>8</b> 8' <b>12</b> 12' <b>S#</b> system run	<b>AP</b> aluminum paint <b>W</b> white <b>BLK</b> black <b>C</b> custom	<b>UNV</b> universal  Consult factory for 347 V	<b>MD</b> integral mini driver 0-10V dimming 2%  Only integral 0-10V mini driver available	<b>1</b> 1 circuit <b>2</b> 2 circuits <b>2A/B</b> 2 circuit alternating/4ft <b>+E(#)</b> emergency section

MOUNTING/SUSPENSION	BATTERY (OPTIONAL)	END CAP (OPTIONAL)	REMOTE CONTROLS (OPTIONAL)	CUSTOM
<b>CA(#)</b> drywall+cable length (36" std.) <b>CT9(#)</b> TB/TG 9/16+cable length (36" std.) <b>CT15(#)</b> TB/TG 15/16+cable length (36" std.) <b>CTS(#)</b> ST+cable length (36" std.) <b>SA(#)</b> drywall+stem length >48" (18" std.) <b>+SM</b> seismic option  See Ceiling Mount Guide for further details	<b>B#</b> remote battery pack  Not available with 347V Please consult factory	<b>SE</b> slotted end cap  Comes with regular end cap. as standard; See page 2 for more details.	<b>DS#</b> daylight sensor <b>DOS#</b> daylight & occupancy sensor  Applies to both UP & DOWN. Remote only.	<b>C</b> custom  Please specify



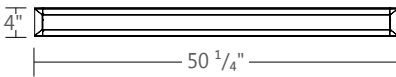
### ● LIGHT GUIDE

High precision light guide made of PMMA material, allows distribution of controlled light in all 3-dimensions to put light on both vertical and horizontal planes within the space. Patented lightguide design featuring molecular optics and precision-coupled optic components yield a high efficiency luminaire. In-plane mixing maximizes color uniformity while light emitting area is uniform and diffuse without 'head lighting' from the LED's.

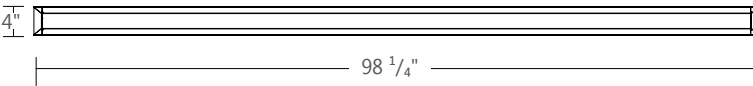
### ● LENGTHS

2' to 12' in 1 foot increments

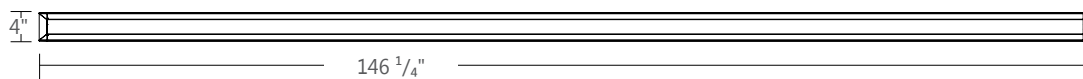
#### H 4ft



#### H 8ft



#### H 12ft



### ● SYSTEMS (S#)

Runs of H that are greater than 12ft in length are designated as systems (S#). This means that the run is comprised of a combination 4ft and/or 8ft sections to be assembled on site using our joining system.

### ● WEIGHT

- H 4 ft** 9 lbs / 4.1 kg
- H 8 ft** 18 lbs / 8.2 kg
- H 12 ft** 27 lbs / 12.3 kg

### ● FINISH

White, black, aluminum paint, powder coated and custom finishes are also available.

### ● APPROVALS

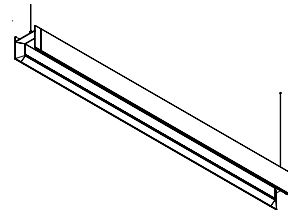
Certified to UL and CUL standards  
Suitable for damp locations.



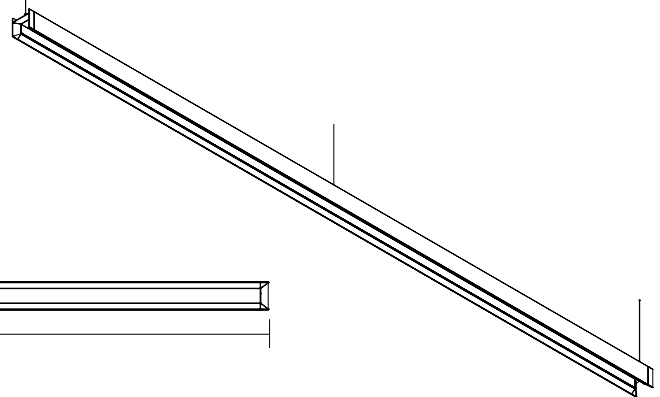
### ● SUSPENSION / MOUNTING SPACING

Distance Between  
Mounting Points:  
**H 4ft** 48"  
**H 8ft** 96"

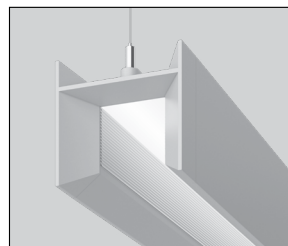
Standard Suspension  
Length:  
**CABLE: 36"**  
**STEM: 18"**



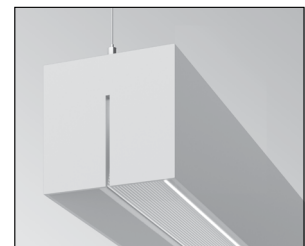
Distance Between  
Mounting Points:  
**H 12ft** 72"



### ● END CAP OPTIONS



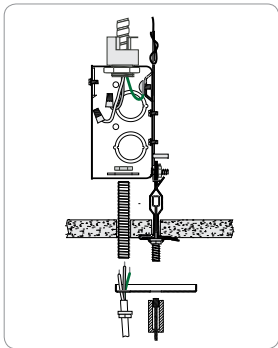
**Regular end cap**  
Standard



**Slotted end cap**  
Optional



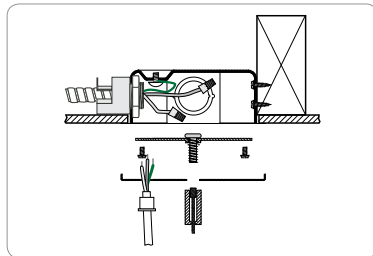
### ● MOUNTING OPTIONS



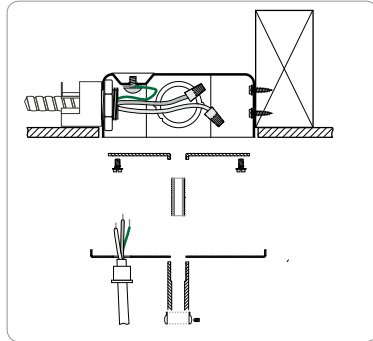
**GT** TILE CEILING - ON GRID

Mounting options are also available for slope ceiling and seismic bracing.

**i** Installation sheets for all mounting options are available at: [www.axislighting.com](http://www.axislighting.com) under 'Downloads' tab.

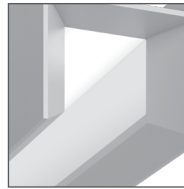


**CA** DRYWALL CEILING

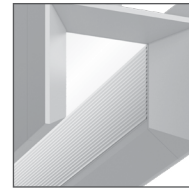


**SA** STEM MOUNT IN DRYWALL CEILING

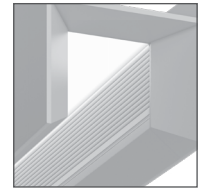
### ● OPTICS



**SO** spotless lens



**MSO** microgroove spotless lens



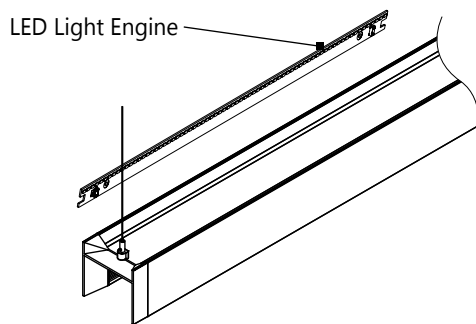
**MAL** microgroove aluminum

### ● LED SYSTEM

<b>CRI</b>	Minimum 80 or 90 color rendering index
<b>CCT</b>	Choice of 3000K, 3500K and 4000K color temperature with a great color consistency (within 3-step MacAdam ellipse). Both within fixture and fixture to fixture.
<b>LED life</b>	Minimum 50,000h with 85% of lumen maintenance in 25°C ambient temperature, in compliance with IES LM-80 testing measurements.
<b>Thermal Management</b>	Aluminum housing acting as the heat sink to maximize life.
<b>Environment</b>	Dry and damp rated in operating ambient temperatures of 0-40°C (32-104F)

### ● LED UPGRADE / REPLACEMENT

All LED light engines used are field replaceable and upgradable to ensure the lighting system will last for years. Future-proof design comes with easy access to LED light engines from above using quick connectors (included in luminaire) and a screwdriver.



### ● CONSTRUCTION

<b>Housing</b>	Extruded aluminum (0.06" nominal)
<b>End Cap</b>	Die cast aluminum (0.10" nominal)
<b>Joiners</b>	Die cast aluminum (0.10" nominal)
<b>Interior Bracket</b>	Die formed zinc (20 gauge)
<b>Lens</b>	Uniform frosted acrylic lens

### ● ELECTRICAL

<b>Emergency</b>	Remote emergency battery pack or emergency circuit optional.
<b>Input Voltage</b>	UNV (120-277 V)

**i** Incorporating these components may have limitations or affect the length of the luminaire. Please contact factory for more details.

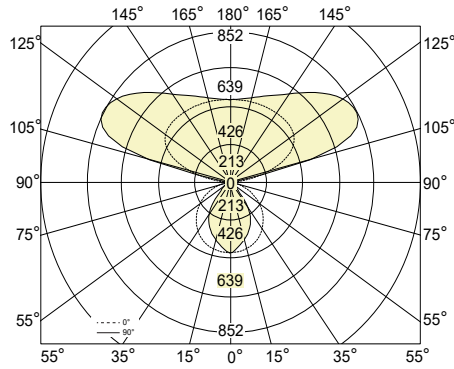


### PHOTOMETRIC DATA

#### Microgroove Aluminium (MAL)

**HDI-SL75/25-900-80-35-MAL-4.IES**  
75% up / 25% down at 900 lm/ft

#### PHOTOMETRIC CURVE



**Lumens up: 2782 lm**  
**Lumens down: 748 lm**  
**Total lumens: 3530 lm (for 4ft)**  
**Input Watts: 31.19 W**  
**Efficacy: 113 lm/W**

CRI:80 shown  
TESTED ACCORDING TO IES LM-79-2008

#### CANDELA DISTRIBUTION

Vertical Angle	Horizontal Angles				
	0	22.5	45	67.5	90
0	398	398	398	398	398
5	397	395	389	384	384
15	388	369	349	338	335
25	368	331	303	287	282
35	332	282	245	217	206
45	281	221	169	105	82
55	218	153	65	51	47
65	147	76	34	24	22
75	74	23	13	6	5
85	11	2	2	1	2
90	2	3	2	2	2
95	52	48	21	16	16
105	239	292	383	484	493
115	395	448	556	741	842
125	466	511	610	747	822
135	481	512	588	676	719
145	480	497	544	588	611
155	477	484	508	530	540
165	472	474	482	490	495
175	469	468	469	470	471
180	468	468	468	468	468

#### ZONAL LUMENS

Zone	Lumens
0	
0-10	37
10-20	100
20-30	144
30-40	159
40-50	134
50-60	93
60-70	56
70-80	22
80-90	4
90	
90-100	47
100-110	375
110-120	579
120-130	560
130-140	460
140-150	343
150-160	235
160-170	137
170-180	45
180	

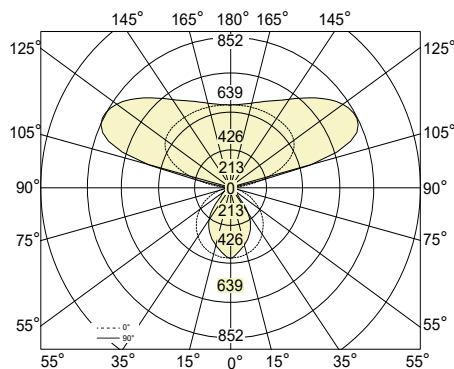
#### LUMINANCE DATA (cd/m<sup>2</sup>)

Vertical Angle	Horizontal Angles		
	0	45	90
45	7813	2554	1054
55	7363	1013	604
65	6571	564	296
75	5073	225	68
85	1770	49	25

#### Microgroove Spotless Lens (MSO)

**HDI-SL75/25-900-80-35-MSO-4.IES**  
75% up / 25% down at 900 lm/ft

#### PHOTOMETRIC CURVE



**Lumens up: 2724 lm**  
**Lumens down: 994 lm**  
**Total lumens: 3717 lm (for 4ft)**  
**Input Watts: 31.2 W**  
**Efficacy: 119 lm/W**

CRI:80 shown  
TESTED ACCORDING TO IES LM-79-2008

#### CANDELA DISTRIBUTION

Vertical Angle	Horizontal Angles				
	0	22.5	45	67.5	90
0	407	407	407	407	407
5	407	404	401	400	399
15	402	392	386	386	387
25	387	370	367	369	369
35	355	334	329	321	315
45	305	280	260	219	191
55	239	211	148	113	105
65	161	130	74	56	49
75	80	48	23	12	9
85	12	3	3	1	1
90	2	2	2	1	1
95	51	51	23	17	16
105	233	287	386	540	588
115	383	433	550	753	878
125	448	491	594	739	820
135	456	489	565	654	699
145	446	466	512	558	581
155	433	444	468	490	500
165	423	427	435	443	448
175	417	417	418	418	420
180	416	416	416	416	416

#### ZONAL LUMENS

Zone	Lumens
0	
0-10	38
10-20	110
20-30	171
30-40	205
40-50	193
50-60	145
60-70	90
70-80	35
80-90	5
90	
90-100	51
100-110	397
110-120	580
120-130	549
130-140	443
140-150	323
150-160	217
160-170	124
170-180	40
180	

#### LUMINANCE DATA (cd/m<sup>2</sup>)

Vertical Angle	Horizontal Angles		
	0	45	90
45	6814	3623	2329
55	6475	2169	1315
65	5799	1187	655
75	4463	424	132
85	1532	57	21

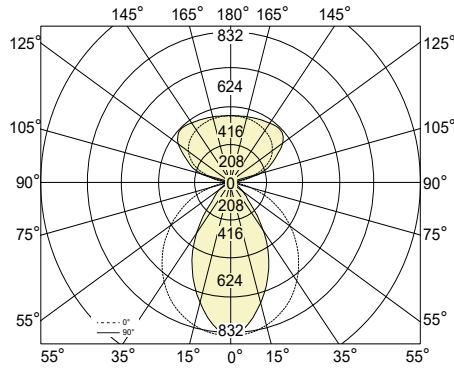


### PHOTOMETRIC DATA

#### Microgroove Aluminium (MAL)

**HDI-SL50/50-750-80-35-MAL-4.IES**  
50% up / 50% down at 750 lm/ft

#### PHOTOMETRIC CURVE



**Lumens up: 1487 lm**  
**Lumens down: 1409 lm**  
**Total lumens: 2897 lm (for 4ft)**  
**Input Watts: 31.14 W**  
**Efficacy: 93 lm/W**

CRI:80 shown  
TESTED ACCORDING TO IES LM-79-2008

#### CANDELA DISTRIBUTION

Vertical Angle	Horizontal Angles				
	0	22.5	45	67.5	90
0	832	832	832	832	832
5	828	824	814	808	804
15	800	768	718	685	671
25	744	675	590	536	515
35	657	556	445	366	336
45	546	420	284	186	153
55	418	278	125	96	88
65	280	134	64	46	42
75	140	42	22	14	10
85	21	3	2	1	1
90	1	2	1	1	1
95	30	28	10	5	4
105	132	119	113	149	166
115	230	230	220	241	267
125	291	296	320	344	361
135	324	329	355	387	403
145	343	346	363	382	392
155	354	355	364	373	378
165	359	359	362	366	368
175	360	360	361	362	362
180	361	361	361	361	361

#### ZONAL LUMENS

Zone	Lumens
0	
0-10	77
10-20	204
20-30	279
30-40	290
40-50	240
50-60	170
60-70	101
70-80	41
80-90	7
90	
90-100	23
100-110	135
110-120	232
120-130	286
130-140	276
140-150	229
150-160	169
160-170	103
170-180	34
180	

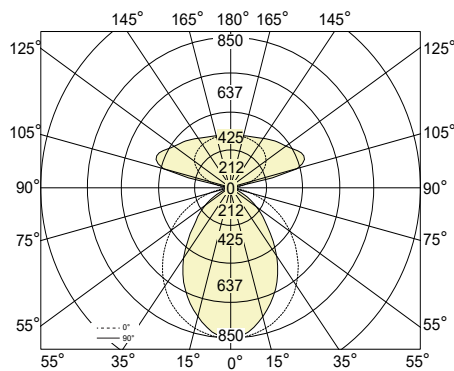
#### LUMINANCE DATA (cd/m<sup>2</sup>)

Vertical Angle	Horizontal Angles		
	0	45	90
45	12194	3956	1862
55	11337	1838	1103
65	10070	1023	558
75	7802	398	149
85	2809	53	23

#### Spotless Lens (SO)

**HDI-SL50/50-800-80-35-SO-4.IES**  
25% up / 75% down at 800 lm/ft

#### PHOTOMETRIC CURVE



**Lumens up: 1497 lm**  
**Lumens down: 1774 lm**  
**Total lumens: 3271 lm (for 4ft)**  
**Input Watts: 31.2 W**  
**Efficacy: 105 lm/W**

CRI:80 shown  
TESTED ACCORDING TO IES LM-79-2008

#### CANDELA DISTRIBUTION

Vertical Angle	Horizontal Angles				
	0	22.5	45	67.5	90
0	850	850	850	850	850
5	845	845	841	837	836
15	818	805	777	757	750
25	763	729	678	644	632
35	677	625	555	502	481
45	565	496	406	333	308
55	433	358	249	207	193
65	291	212	136	99	89
75	145	89	42	21	16
85	22	6	5	3	3
90	1	2	2	1	1
95	26	37	10	6	5
105	117	110	175	336	409
115	204	201	232	367	464
125	258	261	291	357	408
135	283	288	313	351	373
145	293	297	311	329	339
155	296	299	305	312	316
165	297	299	301	303	304
175	297	298	298	298	298
180	297	297	297	297	297

#### ZONAL LUMENS

Zone	Lumens
0	
0-10	79
10-20	220
20-30	316
30-40	352
40-50	323
50-60	253
60-70	158
70-80	63
80-90	10
90	
90-100	26
100-110	214
110-120	280
120-130	277
130-140	247
140-150	197
150-160	142
160-170	85
170-180	28
180	

#### LUMINANCE DATA (cd/m<sup>2</sup>)

Vertical Angle	Horizontal Angles		
	0	45	90
45	12620	5661	3760
55	11760	3655	2418
65	10446	2177	1174
75	8054	762	228
85	2921	111	42

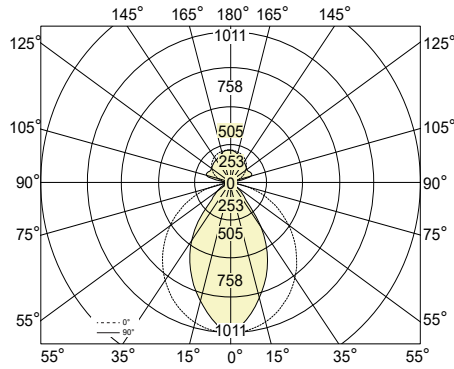


### PHOTOMETRIC DATA

#### Microgroove Aluminium (MAL)

**HDI-SL25/75-600-80-35-MAL-4.IES**  
25% up / 75% down at 600 lm/ft

#### PHOTOMETRIC CURVE



**Lumens up: 734 lm**  
**Lumens down: 1752 lm**  
**Total lumens: 2486 lm (for 4ft)**  
**Input Watts: 31.9 W**  
**Efficacy: 80 lm/W**

CRI:80 shown  
TESTED ACCORDING TO IES LM-79-2008

#### CANDELA DISTRIBUTION

Vertical Angle	Horizontal Angles				
	0	22.5	45	67.5	90
0	1010	1010	1010	1010	1010
5	1008	1000	983	971	969
15	974	923	861	823	812
25	905	808	715	656	638
35	805	671	549	461	428
45	675	519	359	210	171
55	524	353	145	111	101
65	362	177	75	51	46
75	193	55	25	12	8
85	43	6	4	2	2
90	2	2	2	1	1
95	10	16	4	2	2
105	52	51	67	122	151
115	102	87	98	136	167
125	143	120	128	144	156
135	174	154	152	161	166
145	196	184	170	174	177
155	210	205	194	187	186
165	218	217	213	209	208
175	222	222	221	221	221
180	222	222	222	222	222

#### ZONAL LUMENS

Zone	Lumens
0	
0-10	92
10-20	246
20-30	340
30-40	362
40-50	303
50-60	214
60-70	130
70-80	54
80-90	11
90	
90-100	11
100-110	83
110-120	113
120-130	121
130-140	123
140-150	112
150-160	91
160-170	60
170-180	21
180	

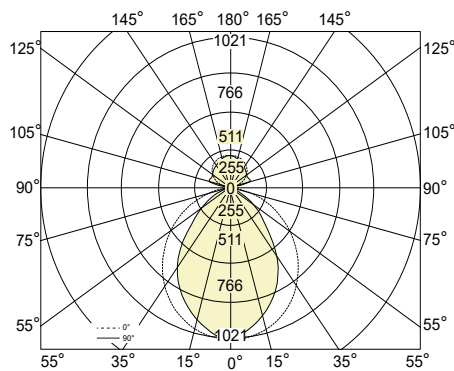
#### LUMINANCE DATA (cd/m²)

Vertical Angle	Horizontal Angles		
	0	45	90
45	15084	5004	2086
55	14227	2132	1265
65	13001	1198	611
75	10737	462	112
85	5693	88	35

#### Spotless Lens (SO)

**HDI-SL25/75-600-80-35-SO-4.IES**  
25% up / 75% down at 600 lm/ft

#### PHOTOMETRIC CURVE



**Lumen up: 716 lm**  
**Lumen down: 2172 lm**  
**Total lumens: 2486 lm (for 4ft)**  
**Input Watts: 31.2 W**  
**Efficacy: 93 lm/W**

CRI:80 shown  
TESTED ACCORDING TO IES LM-79-2008

#### CANDELA DISTRIBUTION

Vertical Angle	Horizontal Angles				
	0	22.5	45	67.5	90
0	1020	1020	1020	1020	1020
5	1020	1013	1003	995	991
15	988	955	923	901	893
25	922	864	813	778	765
35	819	743	673	616	590
45	684	597	499	396	361
55	527	435	295	237	217
65	358	262	156	106	91
75	183	106	43	17	11
85	34	7	6	3	3
90	2	2	2	1	1
95	10	15	4	3	2
105	52	49	64	114	143
115	102	86	95	125	149
125	143	120	125	138	148
135	174	154	150	158	162
145	196	181	171	172	174
155	208	201	192	187	187
165	215	212	208	204	203
175	217	217	216	216	216
180	217	217	217	217	217

#### ZONAL LUMENS

Zone	Lumens
0	
0-10	95
10-20	264
20-30	383
30-40	434
40-50	402
50-60	311
60-70	194
70-80	77
80-90	12
90	
90-100	11
100-110	79
110-120	107
120-130	118
130-140	121
140-150	111
150-160	90
160-170	59
170-180	21
180	

#### LUMINANCE DATA (cd/m²)

Vertical Angle	Horizontal Angles		
	0	45	90
45	15281	6950	4400
55	14292	4334	2718
65	12854	2495	1210
75	10175	791	165
85	4452	132	52