

● **PROJECT INFORMATION**

Project:

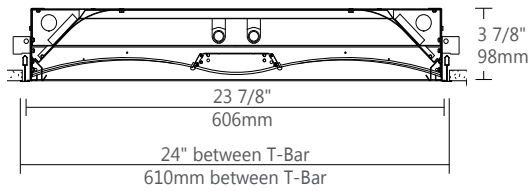
Type:

Notes:

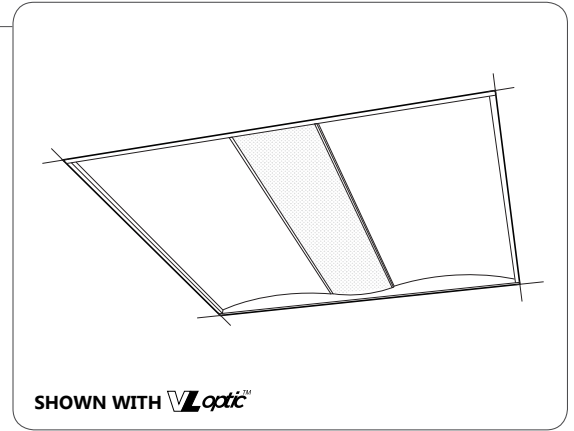
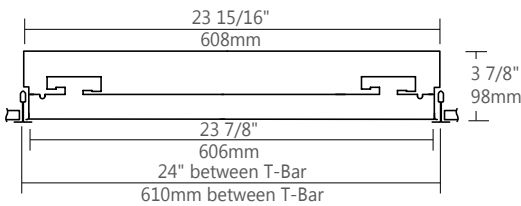
Approved by: Date:

● **DIMENSIONS**

SECTION VIEW



SIDE VIEW



● **ORDERING CODE**

1	2	3	4	5	6	7	8	9	10	11	12	13	14
---	---	---	---	---	---	---	---	---	----	----	----	----	----

● **PRODUCT SPECIFICATIONS**

1 PRODUCT ID	2 SIZE	3 CENTER OPTIC	4 LAMP	5 LAMP CONFIGURATION	6 FINISH
WA wave	22 2'X2'	VL vl optic	T5 T5 T5HO T5HO T8 T8 F25TT TT25W (2G11) F40TT TT40W (2G11) F50TT TT50W (2G11) F55TT TT55W (2G11)	1 1 lamp 2 2 lamps 3 3 lamps ⁽¹⁾	W white C custom

(1) Not available for F25/40/50/55TT

7 VOLTAGE	8 BALLAST	9 CIRCUITS	10 MOUNTING/SUSPENSION	11 BATTERY (OPTIONAL)
120 120V 277 277V 347 347V ⁽²⁾ UNV universal	D dimming E instant start ⁽³⁾ ERS program start BI bi-level dimming +M master +S satellite	1 1 regular 2 2 regular 2A/B 2 alternating +E(#) emergency section +NL(#) night light section +GTD(#) generator transfer device	TB9 t-bar 9/16" TB15 t-bar 15/16" ST screw slot t-bar TG9 tegular 9/16" TG15 tegular 15/16" DF drywall flange	B# battery pack

(2) Please consult factory (3) Available with T8 lamp only

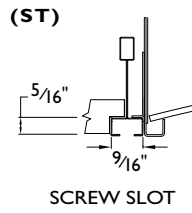
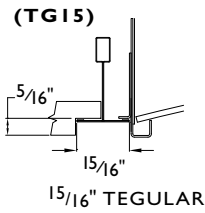
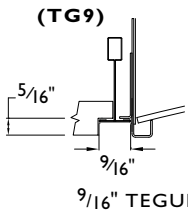
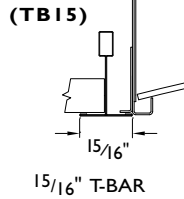
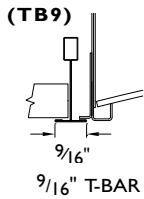
12 OTHER (OPTIONAL)	13 IC CONTROLS (OPTIONAL)	14 CUSTOM (OPTIONAL)
F fuse AR air return FW(#) flex whip (6' std) CP chicago plenum	DS# daylight sensor OS# occupancy sensor DS+OS# daylight+occupancy sensor DOS# daylight&occupancy sensor See integrated controls guide for further details	C custom Please specify

SPECIFY BALLAST NAME (if needed)

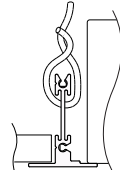
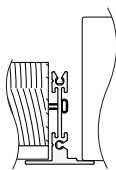
SPECIFY BATTERY NAME (if needed)

● **CEILING SYSTEM**

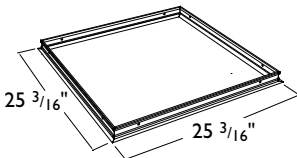
T-BAR STYLE MOUNTING



DRYWALL WITH FLANGE KIT (DF)



DRYWALL MOUNTING KIT



FIXTURE DIMENSIONS
23 3/8" / 23 3/8"

CUT HOLE DIMENSIONS
24 7/16" / 24 7/16"

i Installation sheets for all mounting options are available at: www.axislighting.com


● **CONSTRUCTION**

- Housing** Die formed cold rolled sheet steel (20 gauge)
- Central Lens Housing Reflectors** Extruded aluminum (0.060" nominal) Die formed cold rolled sheet steel (22 gauge)
- Interior Brackets** Die formed cold rolled sheet steel (20 gauge)
- Drywall Flange Kit** Extruded aluminum (0.060" nominal)

● **WEIGHT**

Standard	18.2 lbs / 8.3 kg
Drywall with Kit	20.2 lbs / 9.2 kg

● **APPROVALS**

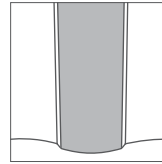
Certified to UL and CUL standards 
 Chicago Plenum Certified (CCEA)
 Meets NYC requirements
 Suitable for damp locations.

● **OPTICAL SYSTEM**

WAVE optical system includes two side lenses and one center lens. Center lens has an extruded aluminum frame and can be opened to replace the lamps. Side lenses are 0.08" PMMA satin blend.

There are three available options for center lens:

VL^{opti}: PMMA Precision formed microconical structure (VL Optic) 92 percent transmissive that cuts off glare above 55 degrees.



VL vl optic

● **FINISH**

Highly reflective, matte powder coat white paint for high efficiency. Matte texture to diffuse glare and lamp image on the surface within the optical chamber exterior. Custom finishes are also available.

● **ELECTRICAL**

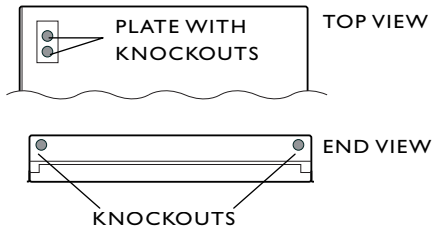
Ballast Electronic IS, Electronic Rapid Start, Dimming (0-10V, Line, EcoSystem, DALI), BI-level dimming
 With preinstalled ballast disconnect as per NEC & CEC

Emergency Emergency battery pack or emergency circuit

Voltage 120V, 277V, 347V, UNV

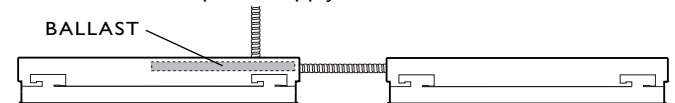
● **STANDARD AND END MOUNT POWER FEED**

Knockouts for BX cable connection are provided both on the top and on the ends of the luminaire. This allows for an end mount power feed solution if it is required. (BX CABLE BY OTHER)



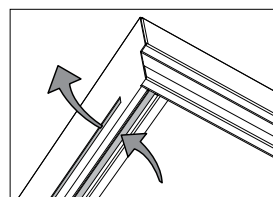
● **MASTER / SATELLITE CONFIGURATION**

Master / Satellite configuration allows the satellite luminaire to share a ballast and power supply with the master luminaire.



(BX CABLE BY OTHER) **i** Check Master/Satellite Installation Guide file DIA-PO-WA.MS.INST for details.

● **AIR RETURN**

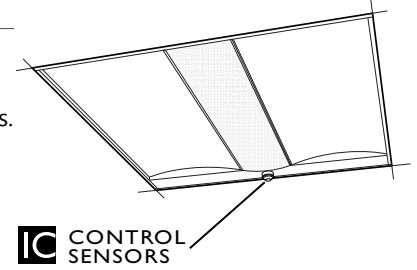


The air return (AR) option consists of discrete slots along the sides of the luminaire. These slots allow air to exhaust into the plenum and eliminate the need for unsightly air return grilles, and create a clean and well organized ceiling.

● **INTEGRATED CONTROL OPTIONS**

WAVE luminaires allow the use of integrated controls such as daylight sensors (DS), occupancy sensors (OS), individual daylight sensors and occupancy sensors (DS+OS), and combination daylight/occupancy sensors (DOS). These options can be seamlessly integrated into our luminaires. The control system could be used to optimize the lighting of the space by reducing energy consumption through daylight harvesting and occupancy, thereby improving the overall interior environment and allowing for LEED credits.

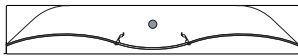
- Consult factory for other options.
- Refer to IC brochure for more information.



SENSORS	BRAND	Model	TYPE	CODE	COMPATIBLE DIMMING BALLAST
Daylight Sensor (DS)	Lutron	EC-DIR-WH	Daylight	LD	EcoSystem
	Wattstopper	FD-301	Daylight	WD	0-10V
	Philips	Luxsense	Daylight	PL	0-10V
Occupancy Sensor (OS)	Wattstopper	FS-205	PIR Occupancy	WP1	Programmed Rapid Start
		FS-355	PIR Occupancy	WP2	Programmed Rapid Start
		FS-155	PIR Occupancy	WP3	Programmed Rapid Start
		FS-505	Ultrasonic Occupancy	WU1	Programmed Rapid Start
		FS-505C	Ultrasonic Occupancy	WU2	Programmed Rapid Start
		FM-105	High Frequency Occupancy	WH	Programmed Rapid Start
Daylight & Occupancy Sensors (DOS)	Philips	Actilume	Daylight & PIR Occupancy	PA	DALI or 0-10V

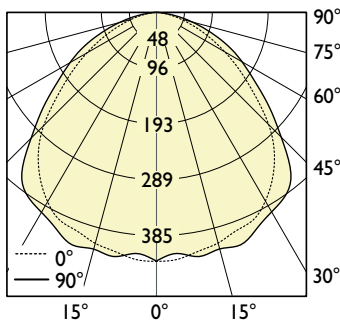
● **PHOTOMETRIC DATA**

I T5



with **VLoptic™**

PHOTOMETRIC CURVE



Test Lamp: 1x F14T5
 IES FILE: WA22-VL-T5-I

Efficiency: 86.9%

CANDELA DISTRIBUTION

Vertical Angle	Horizontal Angles					Zonal Lumens
	0	22.5	45	67.5	90	
0	429	429	429	429	429	
5	427	433	427	428	417	23
15	412	418	425	424	422	100
25	395	399	410	413	411	172
35	350	358	369	382	387	223
45	276	294	303	312	306	237
55	178	184	204	206	208	193
65	102	106	113	127	137	131
75	43	46	56	64	66	72
85	8	9	10	10	9	21
90						

COEFFICIENTS OF UTILIZATION (%)

Ceiling	COEFFICIENTS OF UTILIZATION (%)											
	80				70				50			
Wall	70	50	30	10	70	50	30	10	50	30	10	
0	103	103	103	103	101	101	101	101	97	97	97	
1	95	92	88	85	93	90	87	84	86	83	81	
2	87	81	75	70	85	79	74	70	76	72	68	
3	80	71	64	59	78	70	64	59	67	62	58	
4	73	63	56	51	71	62	55	50	60	54	49	
5	68	57	49	44	66	56	49	43	54	48	43	
6	62	51	44	38	61	50	43	38	49	43	38	
7	58	47	39	34	56	46	39	34	45	38	34	
8	54	42	35	30	53	42	35	30	41	34	30	
9	50	39	32	27	49	38	32	27	38	31	27	
10	47	36	29	25	46	36	29	25	35	29	25	

Based on floor reflectance of 20

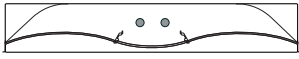
LUMINANCE DATA (CD/M²)

Vertical Angle	Horizontal Angles		
	0	45	90
45	901	933	1000
55	676	714	790
65	476	476	642
75	277	307	418
85	81	86	98

i All IES files are available for download at: www.axislighting.com

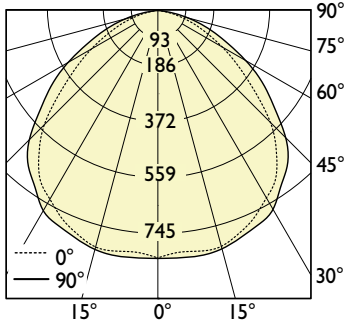
● **PHOTOMETRIC DATA**

2 T5 14W



with **VL_{opti}c™**

PHOTOMETRIC CURVE



Test Lamp: 2x F14T5
 IES FILE: WA22-VL-T5-2

Efficiency: 85.4%

CANDELA DISTRIBUTION

Vertical Angle	Horizontal Angles					Zonal Lumens
	0	22.5	45	67.5	90	
0	829	829	829	829	829	
5	813	833	825	837	831	45
15	820	822	826	830	828	196
25	769	777	802	796	795	334
35	694	697	716	727	724	432
45	547	554	588	613	616	457
55	347	365	402	433	443	385
65	196	209	243	263	268	268
75	88	94	112	130	132	146
85	16	17	20	21	20	43
90	2	2	2	2	2	

COEFFICIENTS OF UTILIZATION (%)

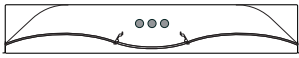
Ceiling	80				70				50			
	70	50	30	10	70	50	30	10	50	30	10	
Wall												
0	102	102	102	102	99	99	99	99	95	95	95	
1	94	90	87	84	91	88	85	82	84	82	80	
2	86	79	74	69	84	77	72	68	74	70	67	
3	78	70	63	58	76	69	62	57	66	61	56	
4	72	62	55	49	70	61	54	49	59	53	48	
5	66	56	48	43	65	55	48	42	53	47	42	
6	61	50	43	37	60	49	42	37	48	42	37	
7	57	46	38	33	55	45	38	33	44	37	33	
8	53	42	34	30	52	41	34	29	40	34	29	
9	49	38	31	27	48	38	31	26	37	31	26	
10	46	35	29	24	45	35	28	24	34	28	24	

Based on floor reflectance of 20

LUMINANCE DATA (CD/M²)

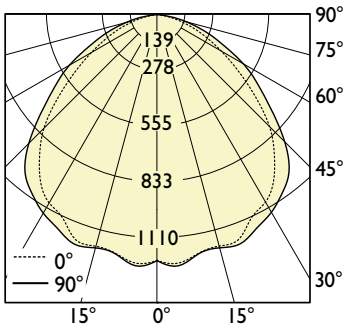
Vertical Angle	Horizontal Angles		
	0	45	90
45	1787	1811	2013
55	1315	1408	1677
65	920	1021	1255
75	564	615	838
85	168	166	205

3 T5 14W



with **VL_{opti}c™**

PHOTOMETRIC CURVE



Test Lamp: 3x F14T5
 IES FILE: WA22-VL-T5-3

Efficiency: 82.7%

CANDELA DISTRIBUTION

Vertical Angle	Horizontal Angles					Zonal Lumens
	0	22.5	45	67.5	90	
0	1217	1217	1217	1217	1217	
5	1236	1224	1219	1208	1249	66
15	1187	1190	1192	1193	1196	284
25	1112	1130	1157	1160	1170	488
35	1011	1021	1050	1077	1084	633
45	797	821	868	901	903	675
55	506	533	582	621	622	559
65	283	304	341	361	378	379
75	120	132	157	180	180	204
85	22	26	30	29	28	61
90	2	2	2	2	2	

COEFFICIENTS OF UTILIZATION (%)

Ceiling	80				70				50			
	70	50	30	10	70	50	30	10	50	30	10	
Wall												
0	98	98	98	98	96	96	96	96	92	92	92	
1	91	87	84	81	89	85	82	80	82	79	77	
2	83	77	71	67	81	75	70	66	72	68	65	
3	76	68	61	56	74	66	60	56	64	59	55	
4	70	60	53	48	68	59	53	48	57	51	47	
5	64	54	47	42	63	53	46	41	51	45	41	
6	59	49	42	36	58	48	41	36	46	40	36	
7	55	44	37	32	54	44	37	32	42	36	32	
8	51	40	33	29	50	40	33	29	39	33	28	
9	48	37	30	26	47	37	30	26	36	30	26	
10	45	34	28	23	44	34	28	23	33	27	23	

Based on floor reflectance of 20

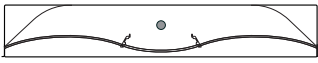
LUMINANCE DATA (CD/M²)

Vertical Angle	Horizontal Angles		
	0	45	90
45	2606	2673	2950
55	1917	2038	2356
65	1326	1434	1766
75	767	861	1145
85	235	243	296

i All IES files are available for download at: www.axislighting.com

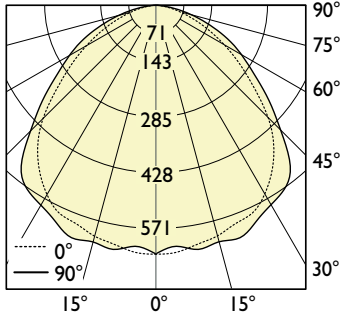
● **PHOTOMETRIC DATA**

1 T5HO



with **V_Loptic™**

PHOTOMETRIC CURVE



Test Lamp: 1x F24T5HO
 IES FILE: WA22-VL-T5HO-1

Efficiency: 86.9%

CANDELA DISTRIBUTION

Vertical Angle	Horizontal Angles					Zonal Lumens
	0	22.5	45	67.5	90	
0	636	636	636	636	636	
5	633	642	632	634	618	34
15	610	619	629	628	626	148
25	586	592	607	612	609	255
35	519	531	547	565	574	330
45	408	436	449	462	453	351
55	264	273	302	305	309	285
65	151	156	167	188	203	195
75	64	68	83	94	97	107
85	11	14	15	15	14	32
90	1	2	1	1	1	

COEFFICIENTS OF UTILIZATION (%)

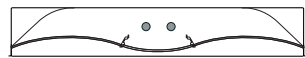
Ceiling	80			70			50				
	70	50	30	10	70	50	30	10	50	30	10
Wall	70	50	30	10	70	50	30	10	50	30	10
0	103	103	103	103	101	101	101	101	97	97	97
1	95	92	88	85	93	90	87	84	86	83	81
2	87	81	75	70	85	79	74	70	76	72	68
3	80	71	64	59	78	70	64	59	67	62	58
4	73	63	56	51	71	62	55	50	60	54	49
5	68	57	49	44	66	56	49	43	54	48	43
6	62	51	44	38	61	50	43	38	49	43	38
7	58	47	39	34	56	46	39	34	45	38	34
8	54	42	35	30	53	42	35	30	41	34	30
9	50	39	32	27	49	38	32	27	38	31	27
10	47	36	29	25	46	36	29	25	35	29	25

Based on floor reflectance of 20

LUMINANCE DATA (CD/M²)

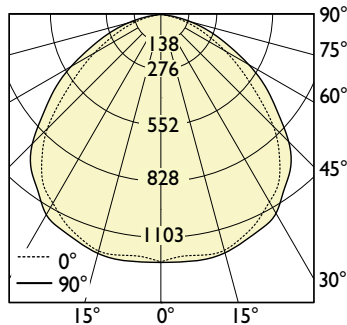
Vertical Angle	Horizontal Angles		
	0	45	90
45	1335	1383	1481
55	1002	1058	1170
65	706	705	952
75	411	454	619
85	120	127	145

2 T5HO



with **V_Loptic™**

PHOTOMETRIC CURVE



Test Lamp: 2x F24T5HO
 IES FILE: WA22-VL-T5HO-2

Efficiency: 85.4%

CANDELA DISTRIBUTION

Vertical Angle	Horizontal Angles					Zonal Lumens
	0	22.5	45	67.5	90	
0	1228	1228	1228	1228	1228	
5	1204	1234	1222	1240	1231	66
15	1214	1218	1223	1229	1227	290
25	1139	1152	1189	1179	1178	495
35	1029	1032	1061	1077	1073	640
45	810	821	871	909	913	677
55	514	541	595	641	656	571
65	291	310	359	389	397	396
75	131	139	166	193	195	217
85	24	25	30	31	29	64
90	2	3	3	2	2	

COEFFICIENTS OF UTILIZATION (%)

Ceiling	80			70			50				
	70	50	30	10	70	50	30	10	50	30	10
Wall	70	50	30	10	70	50	30	10	50	30	10
0	102	102	102	102	99	99	99	99	95	95	95
1	94	90	87	84	91	88	85	82	84	82	80
2	86	79	74	69	84	77	72	68	74	70	67
3	78	70	63	58	76	69	62	57	66	61	56
4	72	62	55	49	70	61	54	49	59	53	48
5	66	56	48	43	65	55	48	42	53	47	42
6	61	50	43	37	60	49	42	37	48	42	37
7	57	46	38	33	55	45	38	33	44	37	33
8	53	42	34	30	52	41	34	29	40	34	29
9	49	38	31	27	48	38	31	26	37	31	26
10	46	35	29	24	45	35	28	24	34	28	24

Based on floor reflectance of 20

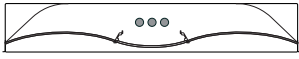
LUMINANCE DATA (CD/M²)

Vertical Angle	Horizontal Angles		
	0	45	90
45	2648	2683	2983
55	1948	2086	2485
65	1363	1513	1859
75	835	911	1242
85	249	247	304

i All IES files are available for download at: www.axislighting.com

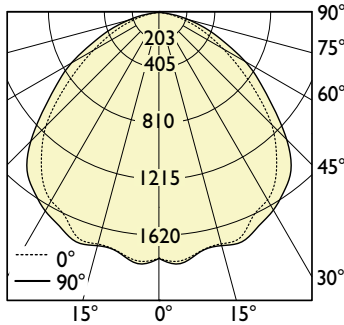
● **PHOTOMETRIC DATA**

3 T5HO



with **V-Optic™**

PHOTOMETRIC CURVE



Test Lamp: 3x F24T5HO
 IES FILE: WA22-VL-T5HO-3

Efficiency: 82.8 %

CANDELA DISTRIBUTION

Vertical Angle	Horizontal Angles					Zonal Lumens
	0	22.5	45	67.5	90	
0	1788	1788	1788	1788	1788	
5	1766	1804	1793	1809	1810	97
15	1738	1760	1771	1792	1774	421
25	1663	1681	1691	1723	1724	721
35	1477	1515	1564	1593	1601	938
45	1187	1212	1291	1336	1349	1000
55	759	785	872	922	926	831
65	420	448	505	541	554	562
75	178	196	232	268	276	305
85	32	38	44	43	41	90
90	4	4	3	4	3	

COEFFICIENTS OF UTILIZATION (%)

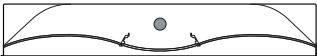
Ceiling	80				70				50			
	70	50	30	10	70	50	30	10	50	30	10	
Wall	70	50	30	10	70	50	30	10	50	30	10	
0	99	99	99	99	96	96	96	96	92	92	92	
1	91	87	84	81	89	85	82	80	82	79	77	
2	83	77	71	67	81	75	70	66	72	68	65	
3	76	68	61	56	74	66	61	56	64	59	55	
4	70	60	53	48	68	59	53	48	57	52	47	
5	64	54	47	42	63	53	46	41	51	45	41	
6	59	49	42	36	58	48	41	36	46	40	36	
7	55	44	37	32	54	44	37	32	42	36	32	
8	51	40	33	29	50	40	33	29	39	33	28	
9	48	37	30	26	47	37	30	26	36	30	26	
10	45	34	28	23	44	34	28	23	33	27	23	

Based on floor reflectance of 20

LUMINANCE DATA (CD/M²)

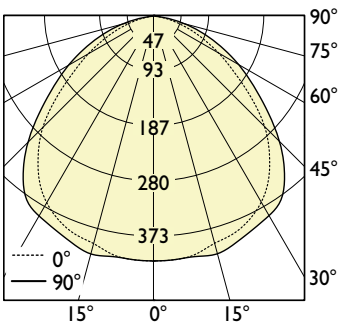
Vertical Angle	Horizontal Angles		
	0	45	90
45	3881	3977	4406
55	2880	3057	3506
65	1969	2128	2592
75	1135	1270	1757
85	340	359	423

1 T8



with **V-Optic™**

PHOTOMETRIC CURVE



Test Lamp: 1x F17T8
 IES FILE: WA22-VL-T8-1

Efficiency: 85.8%

CANDELA DISTRIBUTION

Vertical Angle	Horizontal Angles					Zonal Lumens
	0	22.5	45	67.5	90	
0	417	417	417	417	417	
5	417	419	414	409	416	22
15	402	410	413	416	420	98
25	385	388	398	399	402	168
35	344	349	360	376	382	219
45	272	283	300	306	308	232
55	174	183	204	213	213	193
65	100	106	118	129	135	133
75	44	48	55	64	66	73
85	8	9	10	10	9	21
90	1	1	1	1	1	

COEFFICIENTS OF UTILIZATION (%)

Ceiling	80				70				50			
	70	50	30	10	70	50	30	10	50	30	10	
Wall	70	50	30	10	70	50	30	10	50	30	10	
0	102	102	102	102	100	100	100	100	95	95	95	
1	94	90	87	84	92	88	85	83	85	82	80	
2	86	79	74	69	84	78	73	68	75	71	67	
3	79	70	63	58	77	69	63	58	66	61	57	
4	72	62	55	50	70	61	54	49	59	53	49	
5	67	56	48	43	65	55	48	43	53	47	42	
6	62	50	43	38	60	50	43	37	48	42	37	
7	57	46	38	33	56	45	38	33	44	37	33	
8	53	42	35	30	52	41	34	30	40	34	29	
9	50	38	31	27	48	38	31	27	37	31	26	
10	47	35	29	24	45	35	28	24	34	28	24	

Based on floor reflectance of 20

LUMINANCE DATA (CD/M²)

Vertical Angle	Horizontal Angles		
	0	45	90
45	890	923	1005
55	660	714	806
65	470	498	632
75	280	303	423
85	82	85	97

i All IES files are available for download at: www.axislighting.com

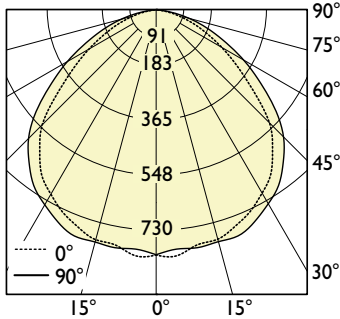
● **PHOTOMETRIC DATA**

2 T8



with **V_Loptic™**

PHOTOMETRIC CURVE



Test Lamp: 2x F17T8
 IES FILE: WA22-VL-T8-2

Efficiency: 82.9%

CANDELA DISTRIBUTION

Vertical Angle	Horizontal Angles					Zonal Lumens
	0	22.5	45	67.5	90	
0	816	816	816	816	816	
5	821	809	790	801	799	43
15	791	792	808	811	799	190
25	742	756	761	776	779	324
35	668	671	695	703	713	418
45	538	549	574	593	603	446
55	337	358	392	416	428	376
65	191	204	231	255	258	259
75	84	92	108	122	125	141
85	16	18	20	20	20	42
90	2	2	1	2	1	

COEFFICIENTS OF UTILIZATION (%)

Ceiling	80				70				50			
	70	50	30	10	70	50	30	10	50	30	10	
Wall	70	50	30	10	70	50	30	10	50	30	10	
0	99	99	99	99	97	97	97	97	92	92	92	
1	91	87	84	81	89	85	83	80	82	80	77	
2	83	77	71	67	81	75	70	66	72	68	65	
3	76	68	61	56	74	66	61	56	64	59	55	
4	70	60	53	48	68	59	53	48	57	51	47	
5	64	54	47	41	63	53	46	41	51	45	41	
6	59	49	41	36	58	48	41	36	46	40	36	
7	55	44	37	32	54	44	37	32	42	36	32	
8	51	40	33	29	50	40	33	29	39	33	28	
9	48	37	30	26	47	37	30	26	36	30	26	
10	45	34	28	23	44	34	27	23	33	27	23	

Based on floor reflectance of 20

LUMINANCE DATA (CD/M²)

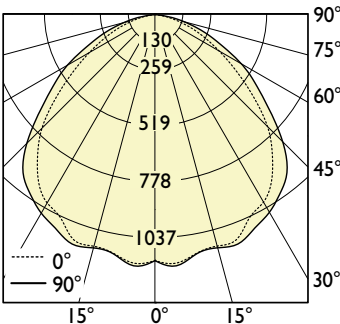
Vertical Angle	Horizontal Angles		
	0	45	90
45	1758	1767	1969
55	1277	1375	1621
65	894	975	1209
75	537	590	793
85	171	161	208

3 T8



with **V_Loptic™**

PHOTOMETRIC CURVE



Test Lamp: 3x F17T8
 IES FILE: WA22-VL-T8-3

Efficiency: 79.6%

CANDELA DISTRIBUTION

Vertical Angle	Horizontal Angles					Zonal Lumens
	0	22.5	45	67.5	90	
0	1161	1161	1161	1161	1161	
5	1143	1167	1157	1150	1162	62
15	1118	1120	1121	1130	1147	268
25	1061	1062	1099	1116	1125	462
35	952	963	1003	1027	1034	602
45	762	785	830	868	873	646
55	495	523	575	609	620	549
65	279	299	332	364	373	373
75	119	133	154	172	177	201
85	23	26	29	29	28	60
90	3	2	2	2	2	

COEFFICIENTS OF UTILIZATION (%)

Ceiling	80				70				50			
	70	50	30	10	70	50	30	10	50	30	10	
Wall	70	50	30	10	70	50	30	10	50	30	10	
0	95	95	95	95	93	93	93	93	89	89	89	
1	87	84	81	78	85	82	79	77	79	76	74	
2	80	74	69	64	78	72	67	63	69	65	62	
3	73	65	59	54	71	64	58	53	61	56	52	
4	67	58	51	46	65	57	50	46	55	49	45	
5	62	52	45	40	60	51	44	39	49	43	39	
6	57	47	40	35	55	46	39	35	44	39	34	
7	53	42	35	31	51	42	35	31	40	35	30	
8	49	39	32	27	48	38	32	27	37	31	27	
9	46	35	29	25	45	35	29	25	34	28	24	
10	43	33	26	22	42	32	26	22	31	26	22	

Based on floor reflectance of 20

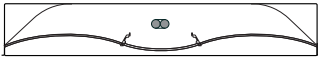
LUMINANCE DATA (CD/M²)

Vertical Angle	Horizontal Angles		
	0	45	90
45	2492	2556	2853
55	1877	2014	2349
65	1309	1396	1746
75	759	846	1124
85	243	237	294

i All IES files are available for download at: www.axislighting.com

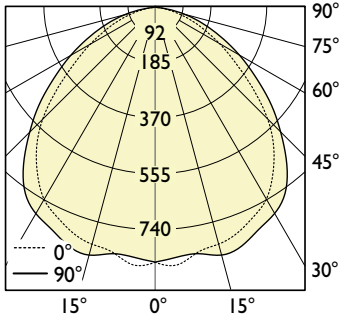
● **PHOTOMETRIC DATA**

1 F25TT



with **VL_{opti}**

PHOTOMETRIC CURVE



Test Lamp: 1xF25TT
 IES FILE: WA22-VL-F25TT-1

Efficiency: 84.8%

CANDELA DISTRIBUTION

Vertical Angle	Horizontal Angles					Zonal Lumens
	0	22.5	45	67.5	90	
0	820	820	820	820	820	
5	832	815	828	807	808	44
15	790	790	802	807	826	190
25	747	745	780	788	790	327
35	662	678	710	730	731	446
45	517	542	568	568	575	410
55	324	350	378	399	401	361
65	183	192	217	241	246	244
75	78	85	102	115	121	133
85	15	17	19	19	17	40
90	1	2	1	1	1	

COEFFICIENTS OF UTILIZATION (%)

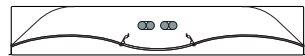
Ceiling	80				70				50			
	70	50	30	10	70	50	30	10	50	30	10	
Wall	70	50	30	10	70	50	30	10	50	30	10	
0	101	101	101	101	99	99	99	99	94	94	94	
1	93	90	86	83	91	88	85	82	84	82	79	
2	85	79	73	69	83	77	72	68	74	70	67	
3	78	70	63	58	76	68	62	57	66	61	56	
4	72	62	55	50	70	61	54	49	59	53	49	
5	66	56	48	43	64	55	48	43	53	47	42	
6	61	50	43	38	60	49	43	37	48	42	37	
7	57	46	38	33	55	45	38	33	44	37	33	
8	53	42	35	30	52	41	34	30	40	34	30	
9	49	38	31	27	48	38	31	27	37	31	27	
10	46	35	29	24	45	35	29	24	34	28	24	

Based on floor reflectance of 20

LUMINANCE DATA (CD/M²)

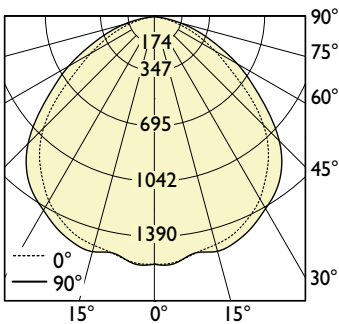
Vertical Angle	Horizontal Angles		
	0	45	90
45	1689	1751	1879
55	1229	1324	1518
65	858	915	1152
75	501	561	772
85	155	158	181

2 F25TT



with **VL_{opti}**

PHOTOMETRIC CURVE



Test Lamp: 2xF25TT
 IES FILE: WA22-VL-F25TT-2

Efficiency: 80.9%

CANDELA DISTRIBUTION

Vertical Angle	Horizontal Angles					Zonal Lumens
	0	22.5	45	67.5	90	
0	1560	1560	1560	1560	1560	
5	1556	1508	1525	1536	1563	83
15	1492	1512	1519	1502	1534	359
25	1411	1432	1461	1478	1471	616
35	1243	1285	1320	1342	1350	793
45	998	1019	1077	1123	1135	840
55	619	669	734	782	788	705
65	357	379	424	473	479	479
75	153	166	199	224	230	258
85	28	33	37	37	34	76
90	3	3	3	3	2	

COEFFICIENTS OF UTILIZATION (%)

Ceiling	80				70				50			
	70	50	30	10	70	50	30	10	50	30	10	
Wall	70	50	30	10	70	50	30	10	50	30	10	
0	98	98	98	98	96	96	96	96	92	92	92	
1	91	87	84	81	89	85	82	80	82	79	77	
2	83	77	71	67	81	75	70	66	72	68	65	
3	76	68	61	56	74	66	60	56	64	59	55	
4	70	60	53	48	68	59	53	48	57	51	47	
5	64	54	47	42	63	53	46	41	51	45	41	
6	59	49	42	36	58	48	41	36	46	40	36	
7	55	44	37	32	54	44	37	32	42	36	32	
8	51	40	33	29	50	40	33	29	39	33	28	
9	48	37	30	26	47	37	30	26	36	30	26	
10	45	34	28	23	44	34	28	23	33	27	23	

Based on floor reflectance of 20

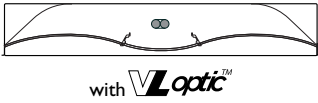
LUMINANCE DATA (CD/M²)

Vertical Angle	Horizontal Angles		
	0	45	90
45	3263	3318	3709
55	2348	2573	2984
65	1675	1787	2242
75	973	1091	1466
85	296	302	353

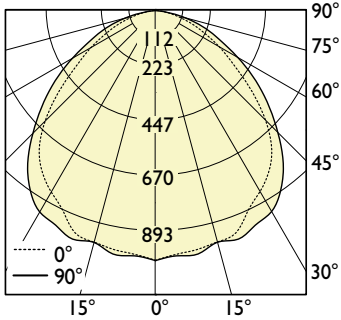
i All IES files are available for download at: www.axislighting.com

● **PHOTOMETRIC DATA**

1 F40TT



PHOTOMETRIC CURVE



Test Lamp: 1xF40TT
 IES FILE: WA22-VL-F40TT-1

Efficiency: 84.7%

CANDELA DISTRIBUTION

Vertical Angle	Horizontal Angles					Zonal Lumens
	0	22.5	45	67.5	90	
0	1005	1005	1005	1005	1005	
5	984	985	971	999	989	53
15	964	953	959	971	964	229
25	887	910	934	957	952	394
35	796	815	851	870	880	510
45	631	656	688	691	700	534
55	393	424	455	489	496	439
65	224	238	263	294	296	298
75	97	105	124	140	148	162
85	18	21	23	23	21	48
90	2	2	2	2	2	

COEFFICIENTS OF UTILIZATION (%)

Ceiling	80			70			50				
	70	50	30	10	70	50	30	10	50	30	10
Wall	70	50	30	10	70	50	30	10	50	30	10
0	101	101	101	101	99	99	99	99	94	94	94
1	93	89	86	83	91	87	84	82	84	81	79
2	85	79	73	69	83	77	72	68	74	70	66
3	78	70	63	58	76	68	62	57	66	61	56
4	72	62	55	49	70	61	54	49	59	53	48
5	66	55	48	43	64	55	48	43	53	47	42
6	61	50	43	37	59	49	42	37	48	42	37
7	57	45	38	33	55	45	38	33	44	37	33
8	53	42	34	30	51	41	34	30	40	34	29
9	49	38	31	27	48	38	31	27	37	31	26
10	46	35	29	24	45	35	28	24	34	28	24

Based on floor reflectance of 20

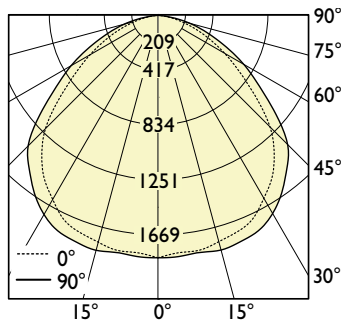
LUMINANCE DATA (CD/M²)

Vertical Angle	Horizontal Angles		
	0	45	90
45	2064	2121	2285
55	1491	1595	1877
65	1050	1106	1383
75	620	679	939
85	192	190	220

2 F40TT



PHOTOMETRIC CURVE



Test Lamp: 2xF40TT
 IES FILE: WA22-VL-F40TT-2

Efficiency: 80.6%

CANDELA DISTRIBUTION

Vertical Angle	Horizontal Angles					Zonal Lumens
	0	22.5	45	67.5	90	
0	1836	1836	1836	1836	1836	
5	1805	1833	1855	1877	1834	99
15	1775	1822	1835	1834	1841	433
25	1700	1706	1743	1759	1800	740
35	1505	1520	1594	1620	1637	955
45	1203	1245	1295	1361	1391	1014
55	763	817	886	935	940	849
65	439	463	518	564	576	580
75	188	202	240	271	278	313
85	35	41	45	45	40	93
90	3	4	4	3	3	

COEFFICIENTS OF UTILIZATION (%)

Ceiling	80			70			50				
	70	50	30	10	70	50	30	10	50	30	10
Wall	70	50	30	10	70	50	30	10	50	30	10
0	96	96	96	96	94	94	94	94	90	90	90
1	89	85	82	79	86	83	80	78	80	77	75
2	81	75	70	65	79	73	68	64	70	66	63
3	74	66	60	55	72	65	59	54	62	57	53
4	68	59	52	47	66	58	51	46	56	50	46
5	63	53	46	40	61	52	45	40	50	44	40
6	58	47	40	35	56	47	40	35	45	39	35
7	54	43	36	31	52	42	36	31	41	35	31
8	50	39	33	28	49	39	32	28	38	32	28
9	47	36	30	25	46	36	29	25	35	29	25
10	44	33	27	23	43	33	27	23	32	27	23

Based on floor reflectance of 20

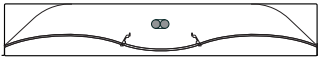
LUMINANCE DATA (CD/M²)

Vertical Angle	Horizontal Angles		
	0	45	90
45	3935	3989	4543
55	2895	3104	3562
65	2059	2183	2692
75	1201	1314	1772
85	372	366	417

i All IES files are available for download at: www.axislighting.com

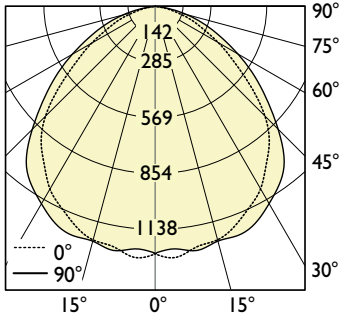
PHOTOMETRIC DATA

1 F50TT



with **V_Lopti[™]**

PHOTOMETRIC CURVE



Test Lamp: 1xF50TT
 IES FILE: WA22-VL-F50TT-1

Efficiency: 84.7%

CANDELA DISTRIBUTION

Vertical Angle	Horizontal Angles					Zonal Lumens
	0	22.5	45	67.5	90	
0	1256	1256	1256	1256	1256	
5	1281	1241	1214	1242	1237	67
15	1230	1211	1217	1218	1237	291
25	1134	1155	1181	1212	1216	500
35	991	1030	1075	1112	1107	644
45	801	833	875	889	895	679
55	502	533	579	617	627	558
65	279	300	336	371	381	379
75	122	132	157	180	187	206
85	23	27	31	29	27	62
90	3	3	3	2	3	

COEFFICIENTS OF UTILIZATION (%)

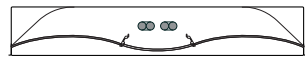
Ceiling	80			70			50				
	70	50	30	10	70	50	30	10	50	30	10
Wall	70	50	30	10	70	50	30	10	50	30	10
0	101	101	101	101	99	99	99	99	94	94	94
1	93	89	86	83	91	87	84	82	84	81	79
2	85	79	73	69	83	77	72	68	74	70	66
3	78	69	63	58	76	68	62	57	66	60	56
4	72	62	55	49	70	61	54	49	59	53	48
5	66	55	48	43	64	54	48	42	53	47	42
6	61	50	43	37	59	49	42	37	48	42	37
7	57	45	38	33	55	45	38	33	43	37	33
8	53	41	34	30	51	41	34	29	40	34	29
9	49	38	31	27	48	38	31	27	37	31	26
10	46	35	29	24	45	35	28	24	34	28	24

Based on floor reflectance of 20

LUMINANCE DATA (CD/M²)

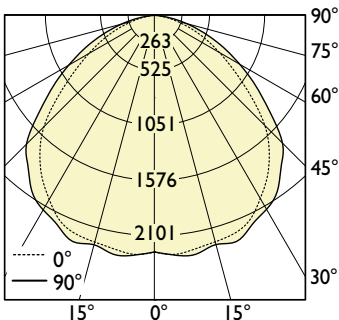
Vertical Angle	Horizontal Angles		
	0	45	90
45	2618	2694	2924
55	1903	2028	2376
65	1308	1414	1782
75	777	863	1190
85	237	251	286

2 F50TT



with **V_Lopti[™]**

PHOTOMETRIC CURVE



Test Lamp: 2xF50TT
 IES FILE: WA22-VL-F50TT-2

Efficiency: 80.7%

CANDELA DISTRIBUTION

Vertical Angle	Horizontal Angles					Zonal Lumens
	0	22.5	45	67.5	90	
0	2297	2297	2297	2297	2297	
5	2330	2364	2329	2356	2338	126
15	2278	2334	2295	2336	2306	551
25	2195	2170	2217	2259	2246	943
35	1917	1963	2015	2057	2086	1214
45	1526	1574	1641	1722	1766	1286
55	963	1026	1131	1182	1215	1077
65	561	590	657	719	749	738
75	240	262	302	344	354	399
85	46	53	56	58	53	119
90	5	5	5	4	4	

COEFFICIENTS OF UTILIZATION (%)

Ceiling	80			70			50				
	70	50	30	10	70	50	30	10	50	30	10
Wall	70	50	30	10	70	50	30	10	50	30	10
0	96	96	96	96	94	94	94	94	90	90	90
1	89	85	82	79	86	83	80	78	80	77	75
2	81	75	70	65	79	73	69	65	70	66	63
3	74	66	60	55	72	65	59	54	62	57	53
4	68	59	52	47	66	58	51	46	56	50	46
5	63	53	46	40	61	52	45	40	50	44	40
6	58	48	40	35	56	47	40	35	45	39	35
7	54	43	36	31	52	42	36	31	41	35	31
8	50	39	33	28	49	39	32	28	38	32	28
9	47	36	30	25	46	36	29	25	35	29	25
10	44	33	27	23	43	33	27	23	32	27	23

Based on floor reflectance of 20

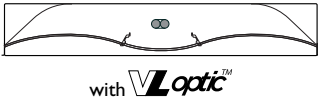
LUMINANCE DATA (CD/M²)

Vertical Angle	Horizontal Angles		
	0	45	90
45	4991	5056	5770
55	3654	3964	4602
65	2629	2767	3504
75	1534	1656	2253
85	486	463	553

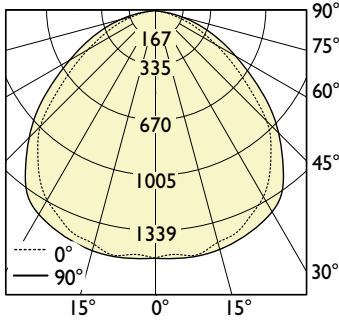
i All IES files are available for download at: www.axislighting.com

● **PHOTOMETRIC DATA**

1 F55TT



PHOTOMETRIC CURVE



Test Lamp: 1xF55TT
 IES FILE: WA22-VL-F55TT-1

Efficiency: 85.1%

CANDELA DISTRIBUTION

Vertical Angle	Horizontal Angles					Zonal Lumens
	0	22.5	45	67.5	90	
0	1496	1496	1496	1496	1496	
5	1479	1466	1483	1495	1504	80
15	1455	1450	1476	1481	1498	350
25	1374	1402	1413	1461	1451	602
35	1218	1250	1305	1337	1347	783
45	975	1002	1047	1064	1072	815
55	608	647	694	743	747	674
65	340	361	406	447	460	456
75	148	161	192	217	230	249
85	28	30	36	35	31	74
90	3	3	3	2	2	

COEFFICIENTS OF UTILIZATION (%)

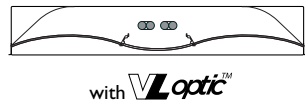
Ceiling	80			70			50				
	70	50	30	10	70	50	30	10	50	30	10
Wall	70	50	30	10	70	50	30	10	50	30	10
0	101	101	101	101	99	99	99	99	95	95	95
1	93	90	86	83	91	88	85	82	84	82	79
2	85	79	74	69	83	77	72	68	74	70	67
3	78	70	63	58	76	68	62	57	66	61	56
4	72	62	55	50	70	61	54	49	59	53	49
5	66	56	48	43	64	55	48	43	53	47	42
6	61	50	43	38	60	49	42	37	48	42	37
7	57	46	38	33	55	45	38	33	44	37	33
8	53	42	35	30	52	41	34	30	40	34	29
9	49	38	31	27	48	38	31	27	37	31	27
10	46	35	29	24	45	35	28	24	34	28	24

Based on floor reflectance of 20

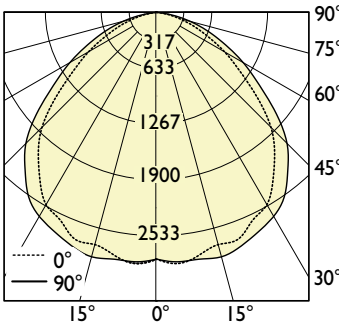
LUMINANCE DATA (CD/M²)

Vertical Angle	Horizontal Angles		
	0	45	90
45	3189	3224	3501
55	2306	2432	2831
65	1595	1708	2153
75	946	1053	1462
85	289	296	328

2 F55TT



PHOTOMETRIC CURVE



Test Lamp: 2xF55TT
 IES FILE: WA22-VL-F55TT-2

Efficiency: 81.1%

CANDELA DISTRIBUTION

Vertical Angle	Horizontal Angles					Zonal Lumens
	0	22.5	45	67.5	90	
0	2771	2771	2771	2771	2771	
5	2834	2833	2850	2813	2815	152
15	2704	2742	2783	2795	2846	662
25	2580	2646	2688	2723	2726	1137
35	2306	2355	2441	2511	2529	1471
45	1843	1914	2009	2070	2098	1557
55	1166	1250	1358	1428	1429	1303
65	659	712	782	873	875	884
75	288	310	369	415	423	478
85	53	58	69	67	63	141
90	6	6	6	5	4	

COEFFICIENTS OF UTILIZATION (%)

Ceiling	80				70				50			
	70	50	30	10	70	50	30	10	50	30	10	
Wall	70	50	30	10	70	50	30	10	50	30	10	
0	97	97	97	97	94	94	94	94	90	90	90	
1	89	85	82	79	87	84	81	78	80	78	76	
2	81	75	70	66	79	74	69	65	71	67	63	
3	75	66	60	55	73	65	59	55	63	58	54	
4	68	59	52	47	67	58	52	47	56	50	46	
5	63	53	46	41	61	52	45	40	50	45	40	
6	58	48	41	36	57	47	40	35	46	40	35	
7	54	43	36	32	53	43	36	31	41	36	31	
8	50	40	33	28	49	39	33	28	38	32	28	
9	47	36	30	25	46	36	30	25	35	29	25	
10	44	33	27	23	43	33	27	23	32	27	23	

Based on floor reflectance of 20

LUMINANCE DATA (CD/M²)

Vertical Angle	Horizontal Angles		
	0	45	90
45	6027	6189	6852
55	4421	4758	5413
65	3087	3292	4090
75	1836	2022	2690
85	559	567	656

i All IES files are available for download at: www.axislighting.com