

MS5HB MS8



Intended Use

Intended for use in retail stores, warehouses and manufacturing applications where high lumen package in a compact fixture is required. Recommended for mounting heights up to 30'. **Certain airborne contaminants can diminish integrity of acrylic. Refer to Acrylic Environmental Compatibility tables**

Construction

Channel and louvers are formed from cold-rolled, 20-gauge steel. Designed for simple servicing, louver assembly hinges remain attached and hinge down

providing easy access into the optical system. Convenient access plate located on the back of the the channel for easy access to wiring components.

Finish: High-gloss, baked white enamel finish. Five-stage, iron phosphate pretreatment ensures superior paint adhesion and rust resistance.

Optics

The Narrow Distribution (ND) includes a parabolic reflector system to provide high vertical and good horizontal illumination for aisle or rack lighting. The wide distribution (WD) is ideal for general area lighting at higher mounting

heights or where widespread distribution is preferred. Both distributions are available with white straight blade louver for additional shielding and brightness control. Uplight component softens ceiling appearance to reduce the "cave effect."

Electrical

Thermally protected, resetting, Class P, HPF, Non PCB, UL Listed, and Canadian Certified. A+ sound rated electronic ballast. AWN TFN or THHN wire used throughout, rated for required temperatures.

Sockets feature rotating collars and enclosed contacts.

Installation

A variety of mounting arrangements are available including tong hangers, aircraft cables and stems. Suitable for mounting in continuous row or individual mounting. End caps include knockouts for through wiring and fixture attachment in row mounting applications.

Listings

UL Listed. CSA optional; (consult factory).

Warranty: Guaranteed for one year against mechanical defects in manufacturing.

ORDERING INFORMATION

For shortest lead times, configure products using **bolded options**.

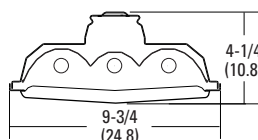
Example: MS5HB 3 54T5HO SBL ND MVOLT 1/41/2 GEB10PS

Series		Number of lamps ^{5,6}	Lamp type ⁵	Reflector	Distribution ▶▶▶
MS5HB	T5 low-profile direct/indirect	2	32 32W T8 (48")	(blank) No louver	ND Narrow
MS5HBST	T5 low-profile solid top ¹	3	54T5HO 54W T5HO (46")	SBL White straight blade louver assembly	WD Wide
MS8	T8 low-profile direct/indirect	Not included			
MS8ST	T8 low-profile solid top				
For tandem double-length unit, add prefix T. Example: TMS5HB					
▶ Voltage	Ballast configuration	Ballast	Options		
MVOLT	(blank) All 2-lamp ballasts ²	GEB10PS T5HO electronic ballast, ≤10% THD, programmed rapid start	GLR	Internal fast blow fuse ³	
347	1/3 One 3-lamp ballast	GEB10IS T8 electronic ballast, ≤10% THD, instant-start	GMF	Internal slow blow fuse ³	
480	1/4 One 4-lamp ballast		EL55	T5 emergency battery pack (nominal 390-700 lumens) ⁴	
	1/41/2 One 4-lamp ballast and one 2-lamp ballast		CSA	Meets Canadian standards	
	2/3 Two 3-lamp ballasts		MSI	Occupancy sensor pre-wired ^{3,7}	

ADDITIONAL INFORMATION

CONFIGURATIONS						
SERIES	NUMBER OF LAMPS ⁶	LAMPS PER FIXTURE	LAMP TYPE	WIDTH	DEPTH	LENGTH
MS5HB	2, 3	2, 3	54T5HO	9-3/4 (24.8)	4-1/4 (10.8)	46-1/8 (117.2)
TMS5HB	2, 3	4, 6	54T5HO	9-3/4 (24.8)	4-1/4 (10.8)	92-1/8 (234.0)
MS5HBST	2	2	54T5HO	9-3/4 (24.8)	4-1/4 (10.8)	46-1/8 (117.2)
TMS5HBST	2	4	54T5HO	9-3/4 (24.8)	4-1/4 (10.8)	92-1/8 (234.0)
MS8	2, 3	2, 3	32	9-3/4 (24.8)	4-1/4 (10.8)	48 (121.8)
TMS8	2, 3	4, 6	32	9-3/4 (24.8)	4-1/4 (10.8)	96 (243.8)

Drawings are for dimensional detail only and may not represent actual mechanical configuration. Dimensions are shown in inches (centimeters) unless otherwise noted.



ACCESSORIES	
ORDER SEPARATELY	
MSHBAC	Adjustable aircraft cable support (non-feed), (specify length as 36, 72 or 120 inches)
MSHBACF	Aircraft cable feed and support, (specify length as 36, 72 or 120 inches)
THMS5HB	Tong hanger
SQ	Swivel stem hanger (specify length in 2" increments)
HC36	Chain hanger, 36"
WGMSSHBZ	4' wire guard for MS5HB, zinc coated. (two required for 8' lengths)
WGMSS8Z	4' wire guard for MS8, zinc coated. (two required for 8' lengths)

Notes

- Available in 2-lamp only.
- Odd lamp configurations will include a 2 lamp ballast.
- Specify voltage.
- 3-lamp 4' fixtures require 1/3 ballast.
- See Configurations table for availability.
- Number of lamps per 4' section.
- Use of programmed rapid start ballast recommended to avoid shortened lamp life.

FEATURES & SPECIFICATIONS

INTENDED USE — Intended for use in retail stores, warehouses and manufacturing applications where high lumen package in a compact fixture is required.

Certain chemicals that may exist in end-user locations release airborne contaminants that can impact the integrity and safety of key fixture components. Please refer to the environmental compatibility chart located in the Product Selection Guide and/or the company website to ensure that these chemical interactions are considered when selecting fixtures. For additional information please consult an authorized factory representative. **Certain airborne contaminants can diminish integrity of acrylic.**

CONSTRUCTION — Product is specifically designed for operation with T5HO lamps. Channel and louvers are formed from cold-rolled, 20-gauge steel. No asbestos is used in this product.

End caps include knockouts for through wiring and fixture attachment in row mounting applications. Compact sockets feature rotating collars and enclosed contacts. Designed for simple servicing, louver assembly hinges remain attached and hinge down providing easy access into the optical system.

Finish: High-gloss, baked white enamel finish. Five-stage iron-phosphate pretreatment ensures superior paint adhesion and rust resistance.

OPTICS — The Narrow Distribution (ND) includes a Miro4™ parabolic reflector system to provide high vertical and good horizontal illumination for aisle or rack lighting. The Wide Distribution (WD) is ideal for general area lighting at higher mounting heights or where widespread distribution is preferred. Both distributions are available with white straight blade louver for additional shielding and brightness control. Uplight component softens ceiling appearance to reduce the "cavern effect".

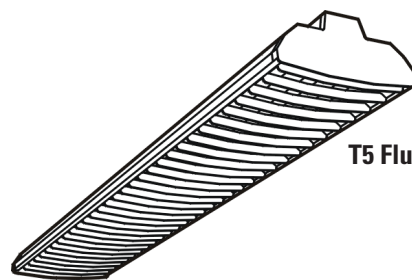
ELECTRICAL — Thermally protected, resetting, Class P, HPF, A+ sound rated electronic ballast. AWM TFM or THHN wire used throughout, rated for required temperatures. All ballasts are available for use in standard ambient temperatures. Consult factory for elevated ambient temperature applications.

INSTALLATION — A variety of mounting arrangements is available including tong hangers, aircraft cables and stems. Suitable for mounting in continuous row or individual mounting. End caps include knockouts for through wiring and fixture attachment in row mounting applications.

LISTINGS — UL listed for 25°C ambient temperatures. CSA optional (consult factory).

WARRANTY — Guaranteed for one year against mechanical defects in manufacturing.

NOTE: Specifications subject to change without notice.

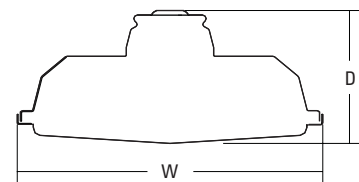


T5
Technology

T5 Fluorescent High Bay – Louver

MS5HB

4' or 8' Lengths
2, 3 Lamps



Specifications

Length:	46-1/8 (117.2)
	92-1/8 (234.0)
Width:	9-3/4 (24.8)
Depth:	4-1/4 (10.8)
Weight:	27.8 lbs (12.6 kg)

All dimensions are inches (centimeters).

ORDERING INFORMATION

For shortest lead times, configure product using **standard options (shown in bold)**.

Example: TMS5HB 3 54T5HO SBL ND MVOLT GEB10PS

SBL										
Series		Lamp type		Distribution		Voltage	Ballast		Options	
MS5HB	T5 low-profile direct/indirect	28T5	28W T5 (46")	ND	Narrow	MVOLT²	GEB10PS	Electronic program rapid start ballast, <10% THD	1/3	One, three-lamp ballast ³
		54T5HO	54W T5HO (46")	WD	Wide	347 480 ³			1/4	One, four-lamp ballast ³
MS5HBST	T5 low-profile solid top ¹	Number of lamps		Configuration					1/4 1/2	One, four-lamp ballast and one, two-lamp ballast ^{3,4}
		2		SBL	White straight blade louver assembly					
		3							GLR	Internal fast-blow fuse ⁵
For tandem double-length unit, add prefix T . Example: TMS5HB		Not included								GMF
										EL55
										MSI
										CSA
										BDP

For tandem double-length unit, add prefix T.

Example: **TMS5HB**

NOTES:

- Available in two-lamp configurations only.
- MVOLT (120-277 volt).
- F54T5HO only.
- Available on tandem units only.
- Specify voltage.
- Specify voltage; 120 or 277 only.
- Meets codes that require in fixture disconnect.
- One cable per package.

Accessories

Order as separate catalog number.

MSHBAC_	Adjustable aircraft cable support (non-feed), (specify length as 36, 72 or 120 inches) ⁸
MSHBACF_	Aircraft cable feed and support (specify length as 36, 72 or 120 inches) (three-wire cable) ⁸
MSHBAC2F_	Adjustable aircraft cable system with power feed (four-wire cable) (specify length as 36, 72 or 120 inches) ⁸
THMS5HB	Tong hanger.
SQ_	Swivel stem hanger (specify length in 2" increments.
HC36	Chain hanger - 36".
WGMS5HBZ	4' wire guard, zinc coated.

MS5HB T5 Fluorescent High Bay – Louver

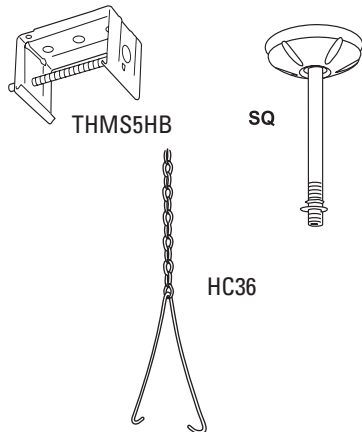
MOUNTING DATA

For unit or row installation, surface or stem mounting.

Unit installation – Minimum of two hangers required.

Row installation – One hanger per channel plus one per row required.

Hanging devices illustrated below.



DIMENSIONS

All dimensions are inches (centimeters).

A = 7/8 (2.2) K0

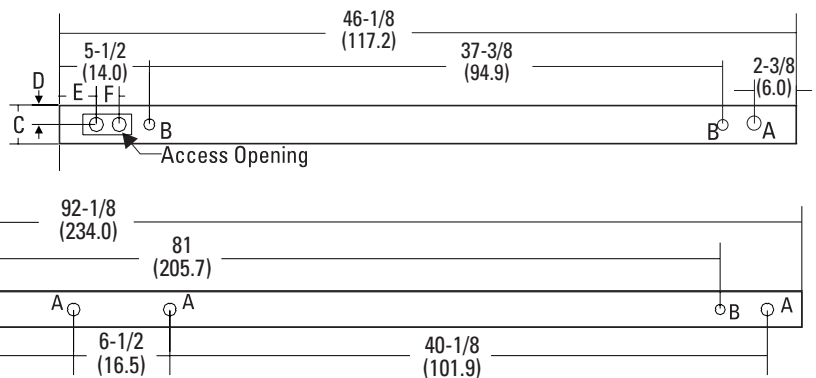
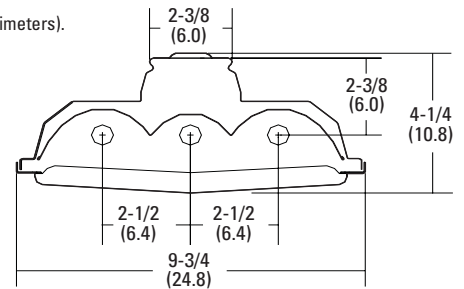
B = 3/4 (1.9) K0

C = 2-3/8 (6.0)

D = 1-1/4 (3.2)

E = 2-3/8 (6.0)

F = 1-3/8 (3.5)



PHOTOMETRICS

Calculated using the zonal cavity method in accordance with IESNA LM41 procedure. Floor reflectances are 20%. Lamp configurations shown are typical. All data based on 25°C. Full photometric data on these and other configurations available upon request.

MS5HB 3 54T5HO SBL ND

Report: LTL10380

LUMENS PER LAMP: 4450

Luminaire Efficiency: 93.0%

Coefficients of Utilization

RCR	pf	20%									
		80%			50%			30%			
		pc	70%	50%	30%	50%	30%	10%	50%	30%	10%
		pw	70%	50%	30%	50%	30%	10%	50%	30%	10%
0	110	110	110	102	102	102	97	97	97		
1	102	98	95	91	89	86	87	85	83		
2	94	87	82	82	77	74	78	75	72		
3	87	78	71	73	68	64	70	66	62		
4	80	70	63	66	60	56	64	59	55		
5	74	64	56	60	54	50	58	53	49		
6	69	58	51	55	49	44	53	48	44		
7	65	53	46	51	45	40	49	44	40		
8	61	49	42	47	41	36	46	40	36		
9	57	45	38	44	37	33	42	37	33		
10	54	42	35	41	35	31	40	34	30		

Zonal Lumen Summary

Zone	Lumens	% Lamp	% Fixture
0° - 30°	4702	35.2	37.9
0° - 40°	7005	52.5	56.4
0° - 60°	10383	77.8	83.6
0° - 90°	12005	89.9	96.6
90° - 180°	417	3.1	3.4
0° - 180°	12422	93.0	100.0

MS5HB 3 54T5HO SBL WD

Report: LTL10773

LUMENS PER LAMP: 4400

Luminaire Efficiency: 88.3%

Coefficients of Utilization

ROR	pf	20%								
	pc	80%			50%			30%		
	pw	70%	50%	30%	50%	30%	10%	50%	30%	10%
	0	103	103	103	94	94	94	88	88	88
	1	94	90	86	82	79	77	77	75	73
	2	86	78	72	72	67	63	67	64	60
	3	78	69	61	63	57	53	59	55	51
	4	71	61	53	56	50	45	53	48	43
	5	65	54	46	50	44	39	47	42	38
	6	60	49	41	45	39	34	43	37	33
	7	56	44	36	41	35	30	39	33	29
	8	52	40	33	37	31	27	36	30	26
	9	49	37	30	34	28	24	33	27	23
	10	46	34	27	32	26	22	30	25	21

Zonal Lumen Summary

Zone	Lumens	% Lamp	% Fixture
0° - 30°	2883	21.8	24.7
0° - 40°	4689	35.5	40.2
0° - 60°	8319	63.0	71.3
0° - 90°	10614	80.4	91.0
90° - 180°	1046	7.9	9.0
0° - 180°	11660	88.3	100.0

MS5HBST 2 54T5HO SBL ND

Report: LTL10989

LUMENS PER LAMP: 4400

Luminaire Efficiency: 98.8%

Coefficients of Utilization

R _{CF}	pf	20%									
		80%			50%			30%			
		pc	70%	50%	30%	50%	30%	10%	50%	30%	10%
		pw	70%	50%	30%	50%	30%	10%	50%	30%	10%
0	118	118	118	110	110	110	105	105	105		
1	108	103	99	97	94	91	93	91	88		
2	98	91	84	85	80	76	82	78	74		
3	90	80	72	75	69	64	73	67	63		
4	83	71	63	67	60	55	65	59	54		
5	76	64	55	60	53	48	59	52	47		
6	70	57	49	55	47	42	53	47	42		
7	65	52	44	50	43	37	49	42	37		
8	61	48	40	46	39	34	45	38	33		
9	57	44	36	42	35	30	41	35	30		
10	53	41	33	39	32	28	38	32	27		

Zonal Lumen Summary

Zone	Lumens	% Lamp	% Fixture
0° - 30°	2599	29.5	29.9
0° - 40°	4162	47.3	47.9
0° - 60°	7064	80.3	81.2
0° - 90°	8696	98.8	100.0
90° - 180°	0	0.0	0.0
0° - 180°	8696	98.8	100.0

FEATURES & SPECIFICATIONS

INTENDED USE — Intended for use in retail stores, warehouses, manufacturing facilities or any other applications where an open optical with a high lumen package in a compact fixture is required.

Certain chemicals that may exist in end-user locations release airborne contaminants that can impact the integrity and safety of key fixture components. Please refer to the environmental compatibility chart located in the Product Selection Guide and/or the company website to ensure that these chemical interactions are considered when selecting fixtures. For additional information please consult an authorized factory representative. **Certain airborne contaminants can diminish integrity of acrylic.**

CONSTRUCTION — Product is specifically designed for operation with T5HO lamps. Channel and louvers are formed from cold-rolled, 20-gauge steel. No asbestos is used in this product.

End caps include knockouts for through wiring and fixture attachment in row mounting applications. Compact sockets feature rotating collars and enclosed contacts.

Convenient access plate is located on the back of the channel for easy access to the wiring compartment.

Finish: High-gloss, baked white enamel finish. Five-stage iron-phosphate pretreatment ensures superior paint adhesion and rust resistance.

OPTICS — The Narrow Distribution (ND) includes a Miro4™ parabolic reflector system to provide high vertical and good horizontal illumination for aisle or rack lighting where additional punch down and out is required. The Wide Distribution (WD) is ideal for general area lighting at higher mounting heights or where widespread distribution is preferred. Optional uplight component softens ceiling appearance to reduce the "cavern effect".

ELECTRICAL — Thermally protected, resetting, Class P, HPF, A+ sound rated electronic ballast. AWM TFM or THHN wire used throughout, rated for required temperatures. All ballasts are available for use in standard ambient temperatures. Consult factory for elevated ambient temperature applications.

INSTALLATION — A variety of mounting arrangements are available including tong hangers, aircraft cables and stems. Suitable for mounting in continuous row or individual mounting.

LISTINGS — UL listed for 25°C ambient temperatures. CSA optional; (consult factory)

WARRANTY — Guaranteed for one year against mechanical defects in manufacturing.

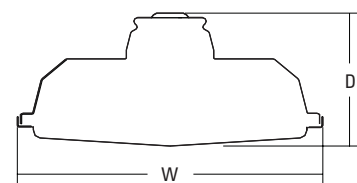
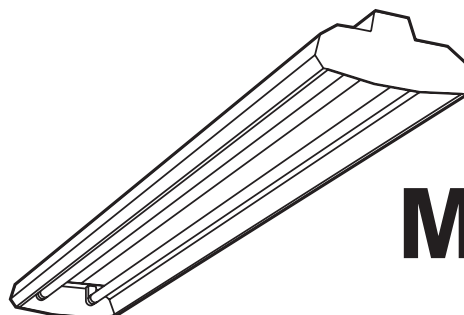
NOTE: Specifications subject to change without notice.

T5
Technology

T5 Direct Open

MS5HB

4' or 8' Lengths
2, 3 Lamps



Specifications

Length:	46-1/8 (117.2)
	92-1/8 (234.0)
Width:	9-3/4 (24.8)
Depth:	4-1/4 (10.8)
Weight:	27.8 lbs (12.6 kg)

All dimensions are inches (centimeters).

ORDERING INFORMATION

For shortest lead times, configure product using **standard options (shown in bold)**.

Example: MS5HB 3 54T5HO ND MVOLT

Series	Number of lamps	Lamp type	Distribution	Voltage	Ballast	Options
MS5HB T5 low-profile direct/indirect	2	28T5 28W T5 (46")	ND Narrow	MVOLT²	GEB10PS Electronic program rapid start ballast, <10% THD	1/3 One, three-lamp ballast ³
MS5HBST T5 low-profile solid top ¹	3	54T5HO 54W T5HO (46")	WD Wide	347		1/4 One, four-lamp ballast ³
	Not included.			480 ³		1/4 1/2 One, four-lamp ballast and one, two-lamp ballast ⁴

For tandem double-length unit, add prefix T. Example: TMS5HB

Accessories

Order as separate catalog number.

NOTES:

- Available in two-lamp configuration only.
- MVOLT (120-277 volt).
- 54T5HO lamp only.
- Available on tandem units only.
- Specify voltage.
- Must specify voltage; 120 or 277 only.
- One cable per package.

MSHBAC_	Adjustable aircraft cable support (non-feed), (specify length as 36, 72 or 120 inches) ⁷
MSHBACF_	Aircraft cable feed and support, (specify length as 36, 72 or 120 inches) (three-wire cable) ⁷
MSHBAC2F_	Adjustable aircraft cable system with power feed (four-wire cable) (specify length as 36, 72 or 120 inches) ⁷
THMS5HB	Tong hanger
SQ_	Swivel stem hanger (specify length in 2" increments)
HC36	Chain hanger - 36"
WGMS5HBZ	4' wire guard, zinc coated.

GLR	Internal fast-blow fuse ⁵
GMF	Internal slow-blow fuse ⁵
EL55	Emergency battery pack (nominal 390-700 lumens) ⁶
MSI	Occupancy sensor pre-wired ⁵
CSA	CSA certification

MS5HB T5 Direct Open

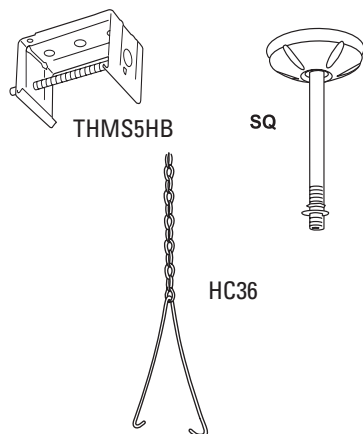
MOUNTING DATA

For unit or row installation, surface or stem mounting.

Unit installation — Minimum of two hangers required.

Row installation — One hanger per channel plus one per row required.

Hanging devices illustrated below.



DIMENSIONS

All dimensions are inches (centimeters).

A = 7/8 (2.2) KO

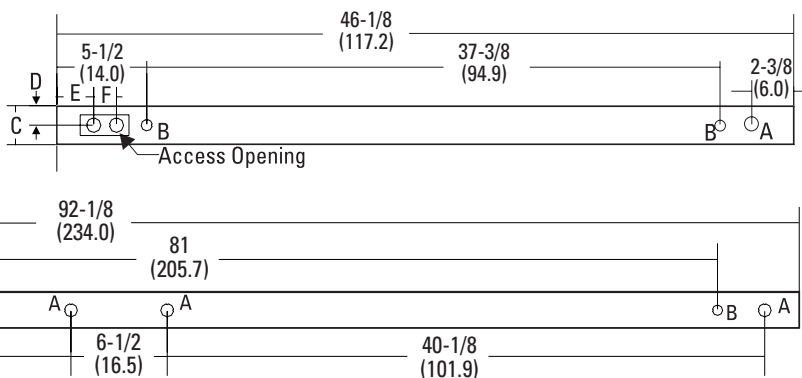
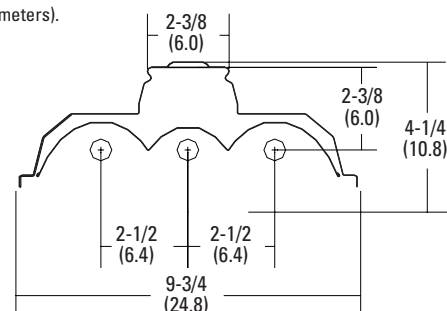
B = 3/4 (1.9) KO

C = 2-3/8 (6.0)

D = 1-1/4 (3.2)

E = 2-3/8 (6.0)

F = 1-3/8 (3.5)



PHOTOMETRICS

Calculated using the zonal cavity method in accordance with IESNA LM41 procedure. Floor reflectances are 20%. Lamp configurations shown are typical. All data based on 25°C. Full photometric data on these and other configurations available upon request.

MS5HB 3 54T5HO ND

Report LTL 11057

Lumens per lamp - 4400 – Lum. eff. - 101.5%

Coefficient of Utilization

	80%			20%			30%		
Floor	70%	50%	30%	50%	30%	10%	50%	30%	10%
Ceiling									
Wall									
0	120	120	120	112	112	112	107	107	107
1	111	106	102	99	96	93	95	92	90
2	101	93	87	88	83	78	84	80	76
3	93	83	75	78	72	67	75	70	65
4	86	74	66	70	63	58	68	62	57
5	79	67	58	63	56	51	61	55	50
6	74	61	52	58	51	45	56	50	45
7	69	56	47	53	46	41	51	45	40
8	64	51	43	49	42	37	48	41	36
9	60	47	39	45	38	33	44	38	33
10	57	44	36	42	35	31	41	35	31

Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixture
0-30	4598	34.8	34.3
0-40	6942	52.6	51.8
0-60	10732	81.3	80.1
0-90	13190	99.9	98.5
90-180	201	1.5	1.5
0-180	13392	101.5	100.0