Pasadena Unified School District

JEFFERSON ELEMENTARY SCHOOL
PROJECT NO. 2333

FACILITIES REVIEW MEETING 01

DATE: June 24, 2010 (Issued June 29, 2010)

LOCATION: PUSD Facility Conference Room

TIME: 8:00 a.m. to 10:00 a.m.

ATTENDEES: Stephen Brinkman, Chief , Facilities (PUSD)
Gerald Schober, M&O, Facilities (PUSD)
Frazer Thompson, Facilities (PUSD)
Kevin Chen, DHA
Andrew Injo, Calpec Engineering
Joselito Lacson, F&M
George Ellis, Architect, F&M

Item	Description	Due	Action
1.00	**GENERAL INFORMATION**		
1.01	F&M reviewed with PUSD that Measure Y modernization A#03-103858 was closed without certification. PUSD will verify certification status of A#03-103858.	Info	PUSD
1.02	F&M noted the ball wall final sign-off is scheduled for June 25, 2010. PUSD will get with Dave Bang to schedule delivery of shade structure to site. F&M shall forward approval to PUSD as soon as possible.	Info	PUSD/F&M
1.03	F&M is not replacing any exterior doors on Jefferson E.S. and Field E.S.. Interior doors shall be solid core wood doors, paint grade.	Info	Info
1.04	Public address upgrades have been completed at Jefferson E.S.	Info	Info
1.05	PUSD is replacing light fixtures at various schools under the ECM rebate program. Jefferson E.S. was scheduled for replacement this year. F&M scope also includes light fixture replacement for Summer of 2011. F&M shall replace classroom lighting in Buildings C, D, E and U. Building A, Girl's and Boy's restroom No. A24 and A25 lighting shall be replaced under F&M scope of work. The remainder of building A and Building B will be replaced by PUSD. PUSD does not utilize dimming as part of their lighting controls. District standards utilize Prudential, Leviton Light Control and Sylvania. Light fixtures housing shall be 18 ga. minimum. PUSD Prudential Lighting representative is Chrissey Casey. Classroom shall have 50 foot candle minimum. The following lighting shall be provided (see attached catalog cuts):	Info	Info

Building A – Classrooms - Lighting shall be provided at only Girl's A24 and Boy's A25 restroom. Light fixture shall be ceiling surface mounted 9" x 4.5", 2 lamp fixture with electronic ballast. Fixture Type G.

Building B – No new lighting being provided.

Building C – Cafeteria Lighting – 2x4 recessed high efficiency, 2 lamp T8, Troffer fixture Type B.

Building D – Classroom Lighting – Re-use pendant direct/indirect, 3 lamp fixture from Building U. Provide A, B mode switching. Workrooms – 2x4 recessed fixture Type B. Restrooms – 2 lamp fixture Type G.

Building E – Classroom, workroom, and restroom same as Building D.

Building U – Classroom – 3 lamp recessed fixture Type A.

Child care play yard shall be lighted by wall pack fixtures from new modular buildings.

Light fixture catalog cuts are attached as discussed in the meeting. Actual fixture shall be specified from PUSD Standard Manufacturer Prudential Lighting's equivalent fixture.

1.06 Data drops and power will be provided at the following locations: Info Info

Building A

- Teacher's workroom – 1 data drop on east wall. Power for 5 copiers located at east and south wall.
- Teacher's lounge – power shall be provided for 1 refrigerator and 1 vending machine on west wall at north end. Power for microwave will be provided on south wall.
- Resource room – East and west wall will each be provided with 3 data drops with power.
- Parent room – (e) drop shall remain.

Building C

- Power as required by Kitchen equipment. Two data drops at location identified in kitchen drawings.

Building D

- Kindergarten Classrooms – Provide 1 data drops with power at marker board wall and opposite wall typical.

Building E

- Kindergarten Classrooms – Provide 2 data drops with power in each classroom. 1 each at marker board wall and 1 at south wall near workroom.

F&M has attached a floor plan for Building A, D & E, which reflects Facility Meeting regarding data drops and Jefferson Staff Meeting regarding cabinets. This plan will be reviewed with principal.

1.07	The fire alarm system at Jefferson E.S. is a manual system. Code requires buildings being modernized to be provided with fully automatic fire alarm systems. Jefferson's fire alarm shall be updated to a fully automatic system.	Info	Info
1.08	F&M proposed package unit for the HVAC upgrade at the auditorium. Option 1 provided package unit at roof and option 2 at grade. Both options were rejected. PUSD wants to minimize visual impact to the exterior and interior to the greatest extent possible. DHA proposed a fan coil system to be provided in projector room area. This solution will require remote condensers with underground refrigerant lines and concealed lines in walls. Condensing units would be concealed on north east corner of the existing structure in (e) planting area with new planting provided for additional screening. F&M to provide conceptual plans clearly showing full requirements of system and impact to existing building.	Info	Info
1.09	PUSD noted that they are fully stocked with waterless urinals for both ADA and non ADA units.	Info	Info
1.10	F&M noted that in the Fire Department review of the fabric shade structure the Fire Department reviewer indicated at least one (1) or more on-site fire hydrant will be required for any major improvements to the Jefferson campus.	Info	Info
1.11	The District standard Shiplast Roof has not been installed at Jefferson E.S. The District roofing manufacturer contacts are Shawn Magee with Garland and Ryan Tolsma with Tremco. F&M shall review any roofing work with one of the two contacts.	Info	Info
1.12	F&M received a copy of the AHERA Re-inspection Report for Jefferson E.S. The report identifies materials containing hazardous substances requiring abatement. F&M will utilize the report and denote in demolition drawings demolition items requiring abatement. PUSD will take care of Hazardous Material Abatement Specification.	Info	Info
1.13	PUSD is reviewing how many modulars on main campus shall be removed. Only one (1) modular is currently used by Child Care. Child Care campus shall have modulars removed and turned over to Owner. PUSD wants F&M to make every effort to re-use (e) shade structure if feasible. PUSD's American Modular contact is Jim Wallace. PUSD prefers the synthetic stucco.	Info	Info

1.14	PUSD will be issuing the following: a. Revised front end specs. b. Current lighting specs c. Current data specs d. Current Division 1 sections	Info	Info
1.15	F&M to communicate update data drop information to Principal.	Info	Info
1.16	F&M will send request for DSA submittal fees to Gerald Schober's attention, along with DSA-1 application.	Info	Info
1.17	PUSD requests that they be given two (2) weeks to review drawings prior to submission to DSA.	Info	Info
1.18	F&M to notify PUSD of anticipated DSA submittal date.		F&M

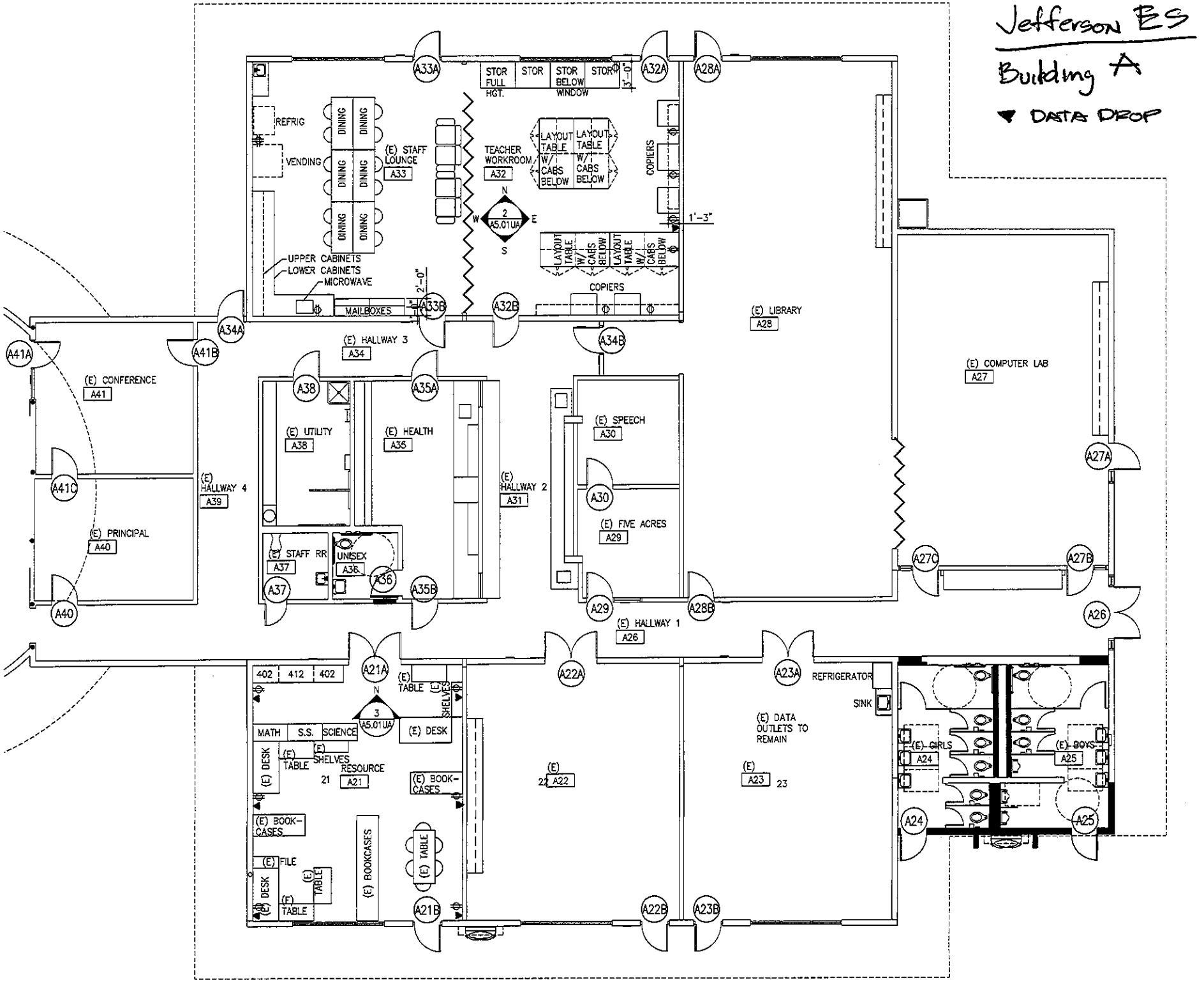
These minutes were prepared from notes taken by George Ellis. If anyone present at the meeting has any changes or corrections, they are to notify Flewelling & Moody Architecture in writing, within seven days after receipt of these minutes. In the absence of such notice, these minutes will be considered a true and accurate record of the meeting.

Items in italics represent topics or decisions made after the meeting.

Sincerely,
Flewelling & Moody

George Ellis,
Architect

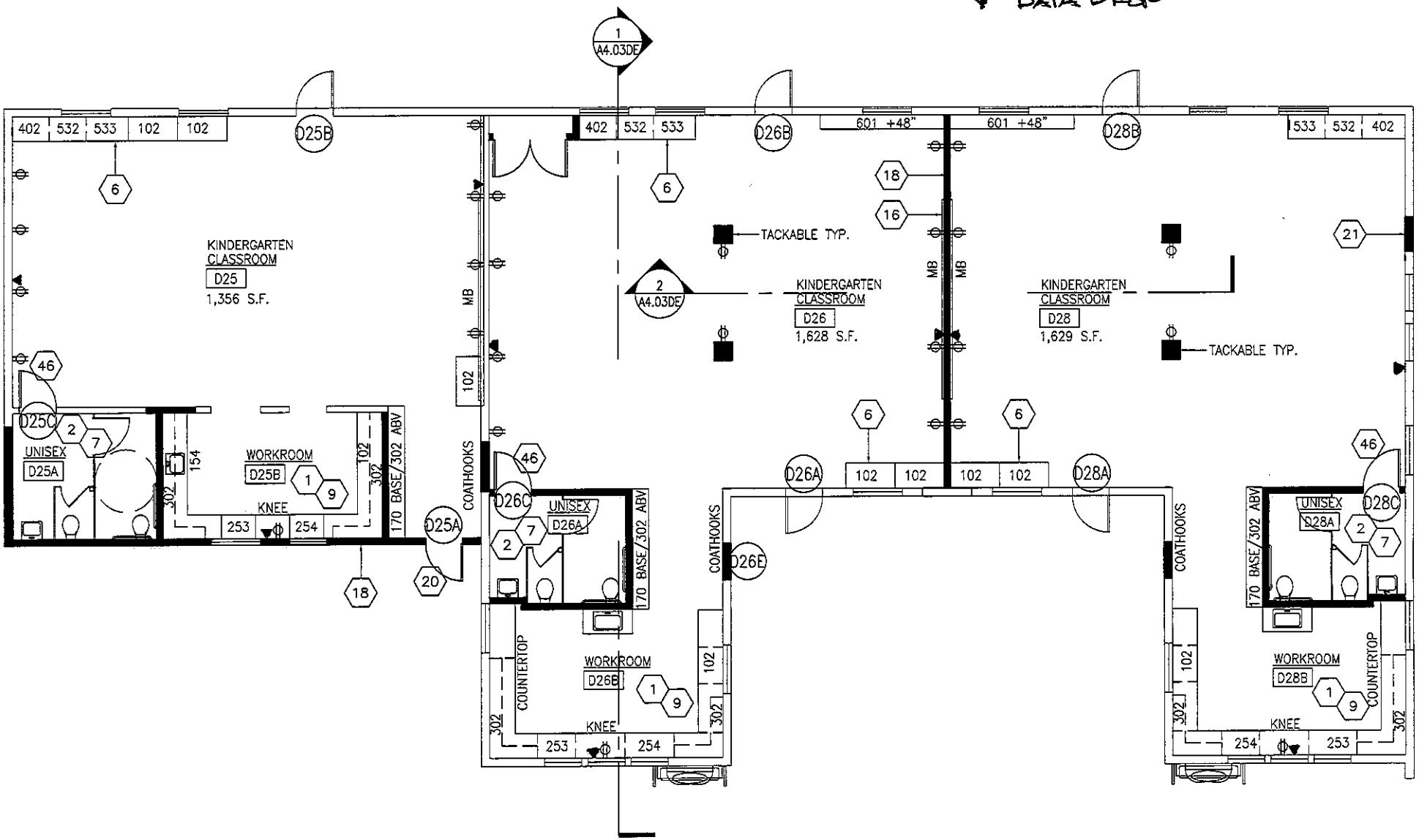
cc: Attendees
Ara Zenobians, F&M
Utar Pollard, F&M
Dave Mathison, F&M


Jefferson ES
Building A
DATA DROP
A33A
STOR FULL HGT.
STOR
STOR BELOW WINDOW
STOR
3'-0"
A32A
A28A
REFRIG
VENDING
DINING
DINING
DINING
DINING
DINING
DINING
(E) STAFF LOUNGE
A33
TEACHER WORKROOM
A32
LAYOUT TABLE W/ CABS BELOW
LAYOUT TABLE W/ CABS BELOW
COPIERS
N
W
E
S
2
A5.01UA
1'-3"
LAYOUT TABLE W/ CABS BELOW
LAYOUT TABLE W/ CABS BELOW
UPPER CABINETS
LOWER CABINETS
MICROWAVE
2'-0"
MAILBOXES
A33B
A32B
COPIERS
(E) LIBRARY
A28
A34A
A34B
(E) HALLWAY 3
A34
A41A
A41B
(E) CONFERENCE
A41
A38
A35A
(E) UTILITY
A38
(E) HEALTH
A35
(E) SPEECH
A30
(E) COMPUTER LAB
A27
A27A
A41C
(E) HALLWAY 4
A39
(E) HALLWAY 2
A31
A30
(E) FIVE ACRES
A29
(E) PRINCIPAL
A40
(E) STAFF RR
A37
UNISEX
A36
A36
A37
A35B
A27C
A27B
A40
A29
A28B
A26
(E) HALLWAY 1
A26
402
412
402
A21A
N
3
A5.01UA
(E) TABLE
(E) SHELVES
A22A
A23A
REFRIGERATOR
SINK
MATH
S.S.
SCIENCE
(E) DESK
(E) DESK
(E) TABLE
(E) SHELVES
RESOURCE
21
A21
(E) BOOK-CASES
(E) DATA OUTLETS TO REMAIN
(E) GIRLS
A24
(E) BOYS
A25
(E) 22 A22
(E) A23 23
(E) BOOK-CASES
(E) FILE
(E) DESK
(E) TABLE
(F) TABLE
(E) BOOKCASES
(E) TABLE
A24
A25
A21B
A22B
A23B

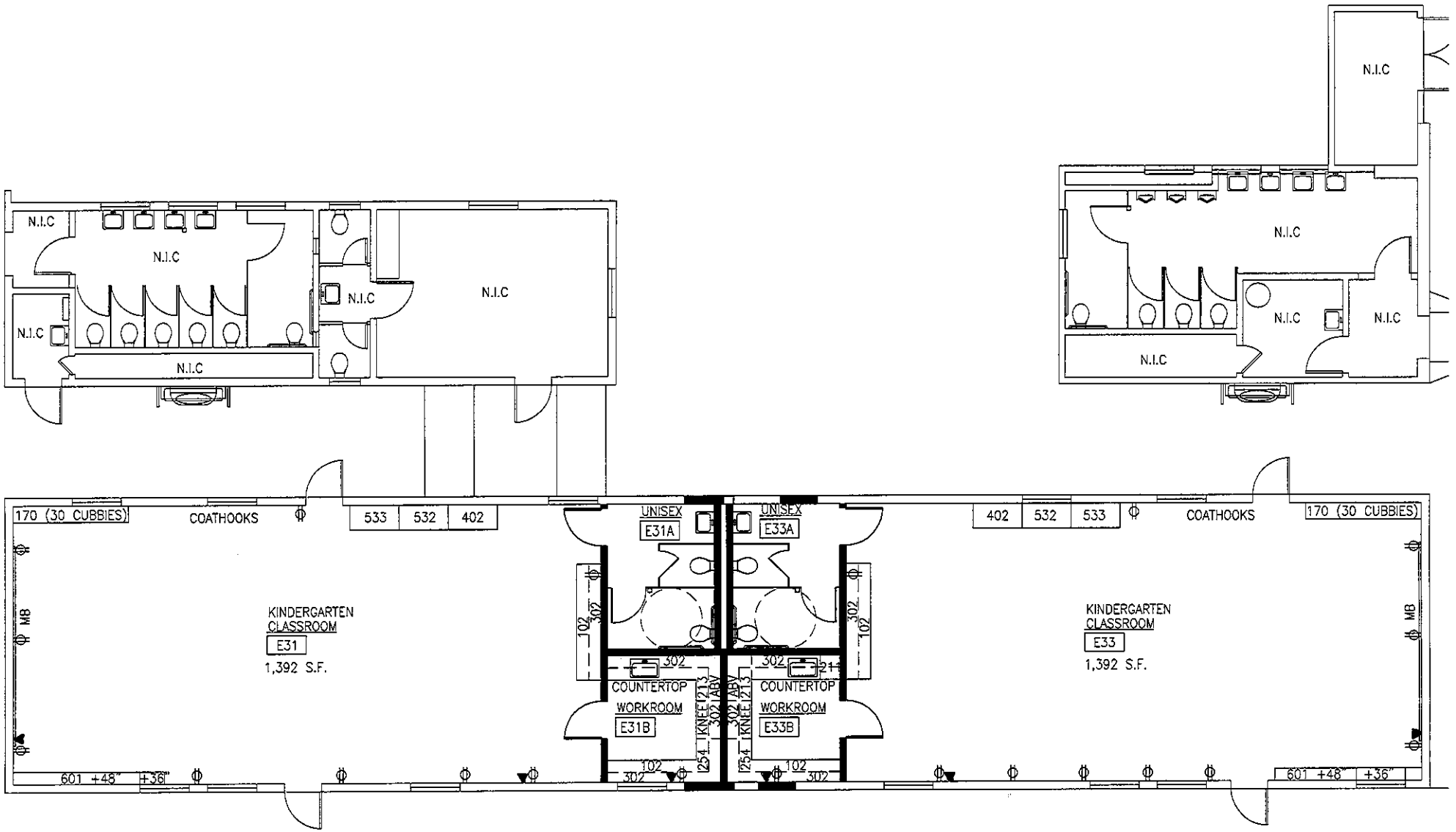
Jefferson ES

Building D

▼ DATA DROP



Jefferson ES
Building E



2′ x 4′ **RECESSED DIRECT/INDIRECT**

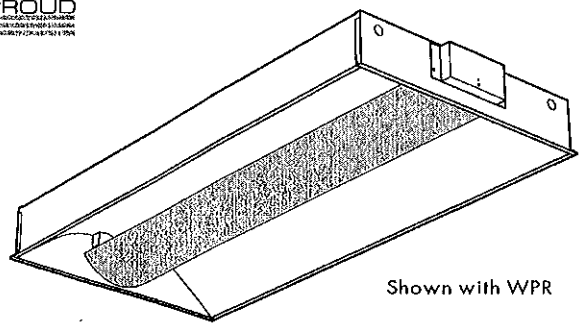
DI
2′ x 4′
STATIC

SERIES

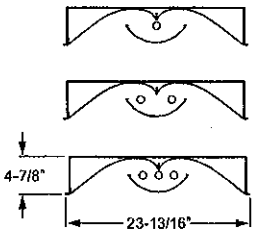
JOB

TYPE

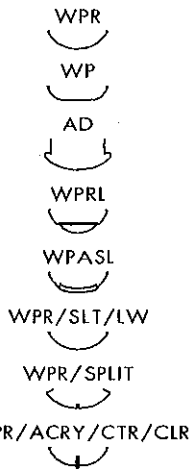
VOLTAGE



Shown with WPR



SHIELDING OPTIONS



SPECIFICATIONS

- **Housing** – 20-gauge die-formed C.R.S.
- **Shielding** – Die-formed C.R.S., 50% open perforation, white powder coated diffuser with matte white acrylic overlay.
- **Reflector** – Precision die-formed C.R.S. with highly reflective, non-glare textured matte white polyester powder coated finish.
- **Finish** – Highly reflective textured matte white powder coat with multi-stage iron/phosphate prepared metal.
- **Electrical** – Electronic ballast standard, instant start T8, program start T5, rated Class P.
- **Labels** – UL/CUL listed as recessed fluorescent luminaire suitable for dry or damp locations.
- **Mounting** – NEMA Type "G" standard. NEMA Type "SS" available. For flange installations use the Drywall Frame-In Kit (DFK), ordered separately, see Information section.

FEATURES

- Acrylic diffuser option provides up to 88% fixture efficiency.
- Matte white overlay and highly reflective textured white powder coated reflectors and end plates provide soft, uniform illumination and increased efficiency.
- Lamps shielded from direct view by diffuser.
- Shallow housing depth.
- Ballast accessible from room side of fixture.
- Aesthetically pleasing slot grid option available.
- Optional anti-microbial powder coating available to prevent the spread of dangerous micro-organisms and suppress the growth of mold and bacteria.
- All parts painted after fabrication to facilitate installation, increase efficiency, and inhibit corrosion.
- This fixture is proudly made in the USA.

ORDERING INFORMATION

Submittal

	CEILING SERIES	TYPE	AIR FUNC.	NOM. W.	NOM. L.	TOTAL LAMPS	WATTAGE/ TYPE	SHIELDING	OPTIONS	BALLAST TYPE	VOLTAGE
EXAMPLE:	DI	G	S	2	4	2	32	WPR	OPTIONS	EB2	UNV

SERIES

DI	Recessed Direct/Indirect

CEILING TYPE

G	NEMA Type "G"
SG	Screw Slot NEMA Type "SS" (Earthquake clips required)

For flange installations use the Drywall Frame-In Kit (DFK), ordered separately, see Information section.

AIR FUNCTION

S	Static, no air capability

NOMINAL WIDTH

2	2′

NOMINAL LENGTH

4	4′

TOTAL LAMPS

1, 2, or 3

LAMP WATTAGE/TYPE

28T5S	4′, 28-watt T5
32	4′, 32-watt T8
54T5H	4′, 54-watt T5HO

SHIELDING

WPR	White perforated round
WP	White perforated flat
AD	Acrylic
WPRL	White perforated w/round louver
WPASL	White perforated w/aluminum solid louver
WPR/SLT/LW	White slot-perforated lengthwise round[1]
WPR/SPLIT	White perforated round w/split
WPR/ACRY/CTR/CLR	White perforated round w/center clear acrylic (Consult factory for additional colors.)

[1] See detail on back.

OPTIONS

AMW	Anti-microbial white finish
EQCLIPS	Earthquake clips (4 per fixture)

See Information section for EM options.

BALLAST TYPE

EB1	1-lamp electronic ballast
EB2	2-lamp electronic ballast
EB3	3-lamp electronic ballast
EB2/1	(1) 2-lamp & (1) 1-lamp electronic ballast

VOLTAGE

120	120V	UNV	120-277V
277	277V	347	347V

Williams
FLUORESCENT LIGHTING

DI
2' x 4'
STATIC
SERIES

PHOTOMETRY INFORMATION

DI WITH WPR OPTION

Williams Catalog #DIG-S24-232-WPR
Test Report #13833.0

Lamp Type: F32T8
Lamp Quantity: 2

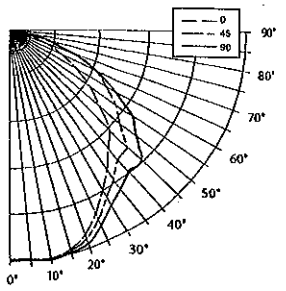
CANDLEPOWER DISTRIBUTION

VERT. ANG.	HORIZONTAL ANGLE 0	45	90	ZONAL LUMENS
0	1432.	1432.	1432.	
5	1433.	1433.	1433.	136.8
15	1412.	1425.	1439.	403.8
25	1270.	1308.	1348.	605.5
35	1068.	1140.	1213.	715.9
45	895.	1036.	1153.	797.9
55	620.	822.	933.	717.4
65	378.	601.	610.	545.2
75	177.	256.	248.	257.5
85	36.	42.	44.	43.1
90	4.	3.	3.	

LUMEN SUMMARY

ZONE	LUMENS	% LAMP	% FIXTURE
0 - 30	1146.	19.4	27.1
0 - 40	1862.	31.6	44.1
0 - 60	3377.	57.2	80.0
0 - 90	4223.	71.6	100.0
Total luminaire			
0 - 180	4223.	71.6	100.0

TOTAL LUMINAIRE OPTICAL **EFFICIENCY = 71.6%**
SPACING CRITERIA: END = 1.2 DIAG. = 1.3 ACROSS = 1.3



DI WITH AD OPTION

Williams Catalog #DIG-S24-232-AD
Test Report #14225.0

Lamp Type: F32T8
Lamp Quantity: 2

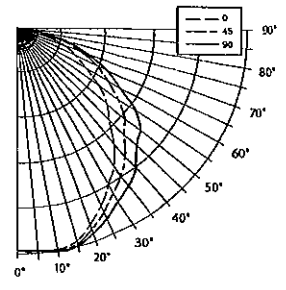
CANDLEPOWER DISTRIBUTION

VERT. ANG.	HORIZONTAL ANGLE 0	45	90	ZONAL LUMENS
0	1759.	1759.	1759.	
5	1771.	1766.	1763.	168.6
15	1752.	1769.	1784.	501.2
25	1565.	1614.	1666.	747.8
35	1339.	1439.	1527.	901.6
45	1028.	1188.	1309.	912.4
55	792.	986.	1124.	873.2
65	510.	697.	787.	670.6
75	257.	364.	404.	374.1
85	62.	84.	82.	85.9
90	0.	0.	0.	

LUMEN SUMMARY

ZONE	LUMENS	% LAMP	% FIXTURE
0 - 30	1418.	24.0	27.1
0 - 40	2319.	39.3	44.3
0 - 60	4105.	69.6	78.4
0 - 90	5235.	88.7	100.0
Total luminaire			
0 - 180	5235.	88.7	100.0

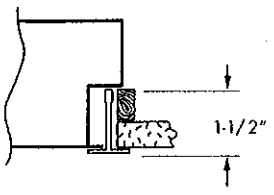
TOTAL LUMINAIRE OPTICAL **EFFICIENCY = 88.7%**
SPACING CRITERIA: END = 1.2 DIAG. = 1.3 ACROSS = 1.3



DETAIL VIEWS

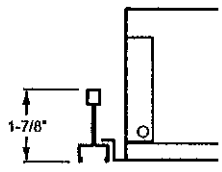
DFK

When using the DFK with Williams DI fixture, the structure surrounding the DFK at each end of fixture is to extend no more than 1-1/2" from the bottom of the "T", as shown.

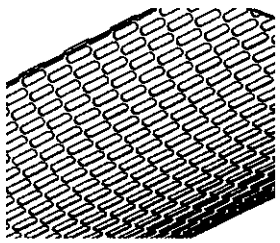


SLOT GRID

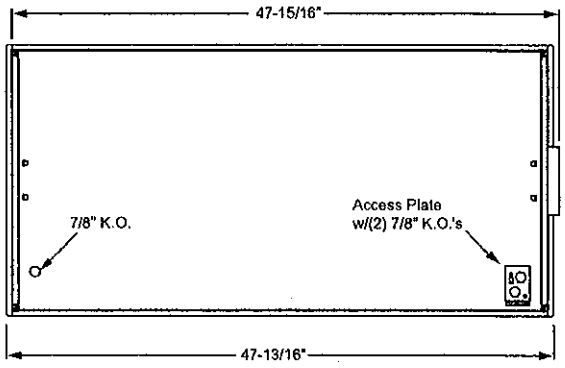
Williams "SG" – Screw Slot
NEMA Type "SS"



WPR/SLT/LW DETAIL



BACKVIEW



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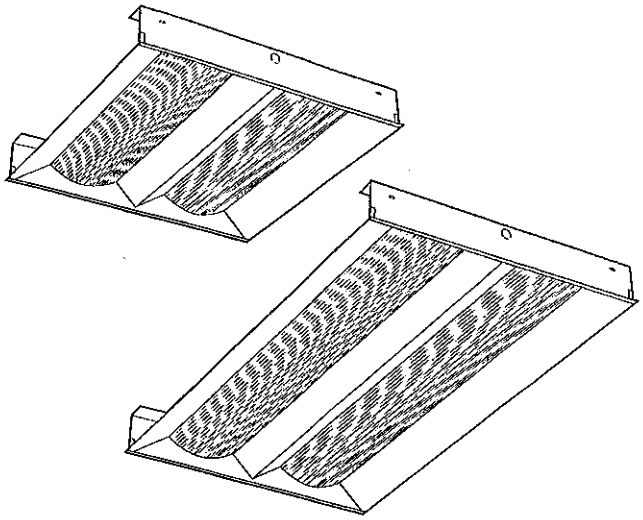
Information contained herein is subject to change without notice.

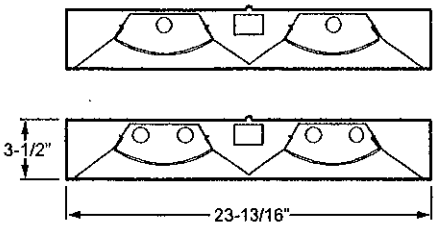
B BE Bldg. C (cafeteria) D (work room) B BE

HIGH EFFICIENCY T8 TROFFER

HET
2x2 & 2x4
T8

VOLTAGE TYPE JOB SERIES





SPECIFICATIONS

- **Housing** – 22-gauge die-formed C.R.S.
- **Shielding** – Ribbed acrylic diffuser.
- **Finish** – Highly reflective matte white powder coat.
- **Electrical** – Electronic ballast standard, instant start T8, rated Class P.
- **Labels** – UL/CUL listed as recessed fluorescent luminaire suitable for dry or damp locations.
- **Mounting** – NEMA Type "G" standard. For flange installations use the Drywall Frame-In Kit (DFK), ordered separately.

FEATURES

- Attractive and energy efficient architectural fixture that delivers comfortable, uniform lighting.
- Frosted acrylic diffusers combined with highly reflective matte white paint provide high optical efficiencies while providing visual comfort.
- Shallow fixture depth of 3-1/2" allows for use in limited plenum applications.
- Companion HET 1' x 1' recessed downlight available in Williams Downlighting Recessed Fluorescent section.
- Optional anti-microbial powder coating available to prevent the spread of dangerous micro-organisms and suppress the growth of mold and bacteria.
- Tool-less access to the electrical from the room-side of the fixture.
- Integral T-bar clips quickly secure fixture to structure.
- All parts painted after fabrication to facilitate installation, increase efficiency, and inhibit corrosion.
- This fixture is proudly made in the USA.

ORDERING INFORMATION

Submittal

SERIES	CEILING TYPE	FIXT. STYLE	NOM. W.	NOM. L.	TOTAL LAMPS	WATTAGE/ TYPE	SHIELDING	OPTIONS	BALLAST	VOLTAGE
EXAMPLE: HET	G	- S	2	4	- 2	32	- A	- OPTIONS	- EB2	- UNV

SERIES

HET	High Efficiency Troffer

CEILING TYPE

G	NEMA Type "G"
	NEMA Type "F". Use Drywall Frame-In Kit (DFK), ordered seporately.

FIXTURE STYLE

S	Static, no air capability

NOMINAL WIDTH

2	2'

NOMINAL LENGTH

2	2'
4	4'

TOTAL LAMPS

2 or 4	

2' x 2' LAMP WATTAGE/TYPE

17	2', 17-watt T8

2' x 4' LAMP WATTAGE/TYPE

32	4', 32-watt T8

SHIELDING

A	Acrylic lens

OPTIONS

AMW	Anti-microbial white finish

BALLAST TYPE

EB2	2-lamp electronic ballast
EBSD2*S50	2-lamp electronic ballast, step-dimming to 50% power
EB4	4-lamp electronic ballast
EB2/2	(2) 2-lamp electronic ballasts
EBSD2/2*S50	(2) 2-lamp electronic ballasts, step-dimming to 50% power

VOLTAGE

120	120V
277	277V
UNV	120-277V
347	347V

Williams
FLUORESCENT LIGHTING

HET SERIES
2x2 & 2x4
T8

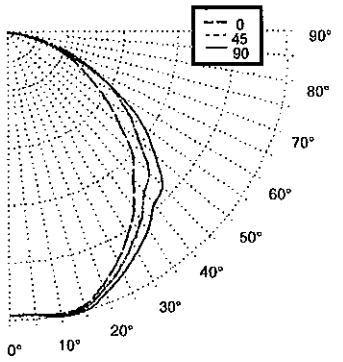
PHOTOMETRY INFORMATION

Williams Catalog #HETG-S24-232-A-EB3
Test Report #13270.0, Dated 09/28/06

Lamp Type: F32T8/835/RS
Lamp Quantity: 2

CANDLEPOWER DISTRIBUTION

VERT. ANG.	HORIZONTAL ANGLE 0	45	90	ZONAL LUMENS
0	1880.	1880.	1880.	
5	1881.	1881.	1883.	179.6
15	1881.	1899.	1915.	538.2
25	1684.	1728.	1773.	799.8
35	1441.	1530.	1611.	959.4
45	1165.	1324.	1455.	1019.9
55	791.	983.	1097.	865.3
65	484.	650.	616.	591.8
75	230.	269.	202.	261.3
85	52.	33.	24.	40.6
90	0.	0.	0.	



LUMEN SUMMARY

ZONE	LUMENS	% LAMP	% FIXTURE
0 - 30	1518.	25.7	28.9
0 - 40	2477.	42.0	47.1
0 - 60	4362.	73.9	83.0
0 - 90	5256.	89.1	100.0
90 - 120	0.	0.	0.
90 - 130	0.	0.	0.
90 - 150	0.	0.	0.
90 - 180	0.	0.	0.
TOTAL LUMINAIRE 0-180	5256.	89.1	100.0

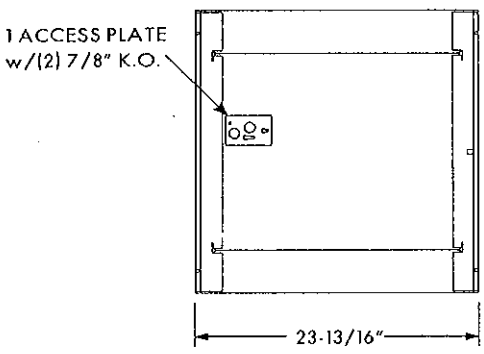
ZONAL CAVITY COEFFICIENTS

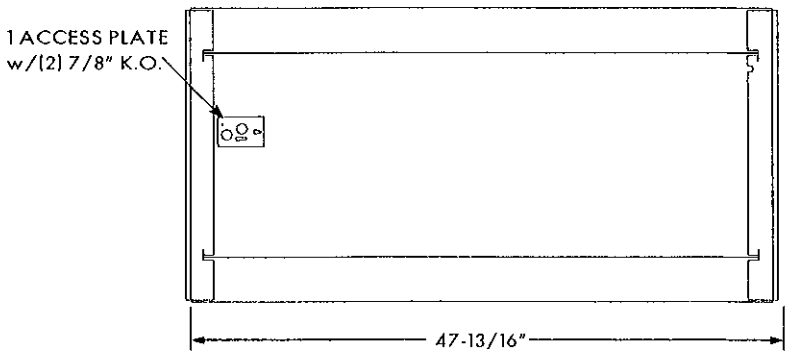
EFFECTIVE FLOOR CAVITY REFL. = .20

CEILING	.80			.70			.50		
WALL RCR	.70	.50	.30	.70	.50	.30	.50	.30	.10
0	106	106	106	104	104	104	.99	.99	.99
1	.98	.95	.91	.96	.93	.90	.89	.86	.84
2	.90	.84	.78	.88	.82	.77	.79	.75	.71
3	.83	.75	.68	.81	.73	.67	.71	.65	.61
4	.76	.66	.59	.74	.65	.59	.63	.57	.53
5	.70	.59	.51	.68	.58	.51	.56	.50	.45
6	.64	.53	.45	.63	.52	.45	.50	.44	.39
7	.59	.47	.40	.58	.47	.39	.45	.39	.34
8	.54	.42	.35	.53	.42	.35	.41	.34	.29
9	.50	.38	.31	.49	.37	.30	.36	.30	.25
10	.46	.34	.27	.45	.34	.27	.33	.27	.22

TOTAL LUMINAIRE
OPTICAL **EFFICIENCY** = **89.1 %**
SPACING CRITERIA: END= 1.2 ACROSS= 1.3 ALONG= 1.3

BACK VIEW





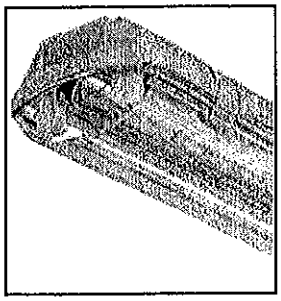
Williams
H.E. WILLIAMS, INC.

H.E. Williams, Inc. • Carthage, Missouri • www.**hewilliams**.com • 417-358-4065 • Fax: 417-358-6015
Information contained herein is subject to change without notice.

ILLUMINA
BS100
FLUORESCENT (T8)

Conforms to ANSI/NSF STD No. 2

T8 2' - 4'
Wet/IP66



Suspended Luminaire

Application: The ILLUMINA® BS100T8 linear fluorescent has been designed to offer performance, efficiency, reliability and easy installation. The three piece design snaps together without the need of any tools. The BS100T8 HT version weighs a mere 6.5lbs and is available in 2ft or 4ft versions. Construction is 100% polycarbonate, which makes it corrosion, flame and vandal resistant. The ILLUMINA® BS100T8 is ideal for parking structures, warehouses, breezeways, canopies and schools.

Type: _____

Project: _____

_____

CONFIGURE:

a MODEL	b LENGTH	c OPERATION	d LAMPS	e INPUT	f OPTIONS
BS100T8 ILLUMINA® *BS100 T8 SERIES*	**2** *2 foot* **4** *4 foot*	**HT** *AC only* **SA** *AC & Emergency* *NOTE: (SA) versions 700 lumens*	**117W** *1x17W T8* **217W** *2x17W T8* **132W** *1x32W T8* **232W** *2x32W T8*	**120V** **277V** **120/277V** **347V** *NOTE: consult factory for 347V (SA)*	**SS** *stainless steel clips* **FP** *inline fuse protection* **LUCE3** *1400 lumen EM (USA only)* **PK** *rigid pendant kit: 18", 24", 36" & 48"* **AC** *aviation cable: 50", 72", 100", 150" & 250"* **CH** *chain hang kit* **SL** *sanitation listed* **TP** *tamper proof* *NOTE: (AC & PK) length to be specified, i.e. PK24 or AC100*
MODEL a	**LENGTH** b	**OPERATION** c	**LAMPS** d	**INPUT** e	**OPTIONS** f
BS100T8					

HOUSING: 100% UV stabilized polycarbonate material, integrated liquid silicone perimeter gasket with memory retention, recessed stainless steel mounting brackets.

REFLECTOR: Dual parabolic (2-lamp versions) and single parabolic (1-lamp versions) high emission reflector. Vacuum metallized finish. Direct mount reflector configuration supports all electrical components.

DIFFUSER: High performance diffuser. Complete light emission (CLE) technology. 100% Polycarbonate construction, impact resistant, UV stabilized to reduce yellowing index.

LAMP/SOCKET: Two (2) or four (4) T8 ratchet type sockets.

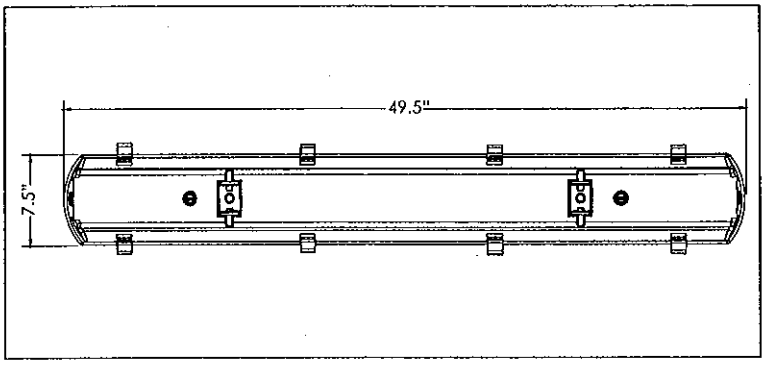
MOUNTING: Surface mount configuration as standard. Optional **(AC)** aviation cable, adjustable and **(PK)** pendant mounting are available. Required mounting height to be specified.

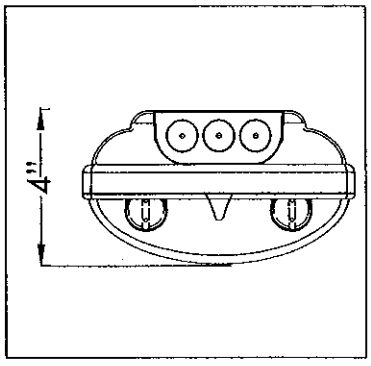
POWER LINE/FEED: 3-wire, solid type 18awg, pre-stripped 12" leads for quick in-field connection.

EMERGENCY (SA): Integral emergency ballast to operate one (1) lamp for a minimum duration of 90 minutes. Reflector mounted monitor indicator and test switch. (SA) for AC & emergency operation. The (SA) version is only available with either 120V or 277V inputs, (consult factory for 347V).

WEIGHT: 6.5 lbs. / 2.948 kilo.

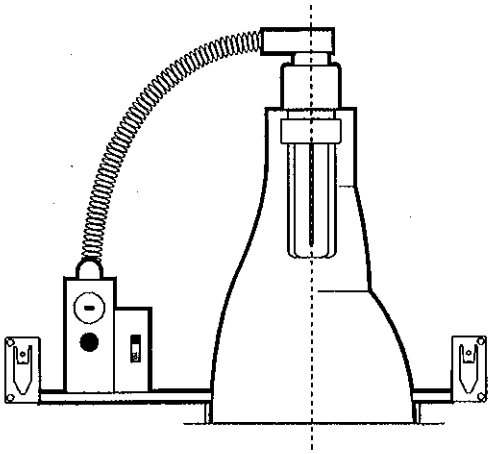
Sanitation listed (SL): Is equivalent to the NSF standard 2, meeting the rigorous sanitation, electrical safety and performance standards. The ILLUMINA® BS100 is ideal for use in food service equipment environments.





Beghelli reserves the right to change, without notice, specifications or materials that in our opinion will not alter the function or performance of the product. Technical specifications that appear on www.beghelliluce.com supersede all other versions existing in print or electronic form.

6" VERTICAL SINGLE LAMP DOWNLIGHT



Clear Alzak® Haze

Wheat Alzak® Haze

Black Baffle

DELRAY LIGHTING INCORPORATED

V6126

SPECIFICATION INFORMATION

HOUSING ASSEMBLY
- Pre-coated galvanized steel mounting frame and J-box.
- Telescopic bar hangers supplied, provides for off-center mounting on joists or T-bar.
- .063 aluminum lampholder securely fastens to reflector, provides thermally efficient operation.
- Self flange type trim for clean, contemporary appearance.
- Ground wire included (prewired).

TWIST LOCK SOCKET
- Push lamp in and twist clockwise to lock into place.
- Lamp will not fall out.
- Relamp with pole (with Changer accessory).

REFLECTOR
- Thirty degree (30°) or forty degree (40°) cutoff.
- Anodized, haze, durable and anti-iridescent.
- Finishes: **A**–Clear Alzak® Haze, and **G**–Wheat Alzak® Haze.

BALLAST
- Standard in universal voltage 120V through 277V.
- Thermally protected rapid start electronic ballasts use 4-pin lamps
- .99 power factor with THD<10%.
- End of lamp life protection.

ELECTRICAL
- Allows 4-in/4-out #12 AWG conductors rated at minimum 90° C.
- J-box and ballast are both accessible through fixture.
- U.L. listed for use in damp locations.

ACCESSORIES
- **AL**–acrylic food service lens
- **B**–black baffle
- **CHANGER** for re-lamp cup
- **P**–trim flange painted white
- **CP**–Chicago plenum
- **OT6**–white oversize trim ring (adds ⅝" to flange)
- **FS**–inline fuse

DIMMING
- Voltage *must* be specified.
- Controls lumen output down to ±5%.
- Compatible dimmers required for all ballasts.
- **D1** Lutron Compact SE for 26W lamp.
- **D3** Advance Mark X for 26W lamp.
- **D4** Lutron Tu-Wire for 26W lamp. 120V *only*.
- **D5** Advance Mark VII for 26W lamp.
- **D8** Lutron Hi-Lume for 26W lamp. Controls lumen output down to ±1%.
- **D9** Lutron Eco System for 26W lamp.

EMERGENCY
- Voltage *must* be specified.
- **EM** emergency power provides 650 lumens for one lamp for 90 minutes.
- **EM13** emergency power provides 1300 lumens for one lamp for 90 minutes.

ORDERING INFORMATION

LAMP INFO
1-26 26W quad or triple tube

120V ELECTRONIC
☐ **V6126.A30.1E** 26W 30°
☐ **V6126.A40.1E** 26W 40°

277V ELECTRONIC
☐ **V6126.A30.2E** 26W 30°
☐ **V6126.A40.2E** 26W 40°

SUBMITTAL INFORMATION

TYPE:

PROJECT:

NOTES:

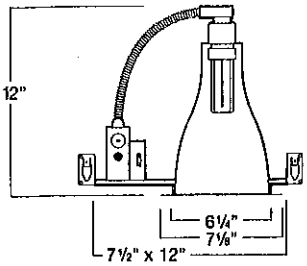
DESCRIPTION:

BURBANK,
CALIFORNIA,
91505
WWW.
DELRAY
LIGHTING.
COM

SEPT 2009

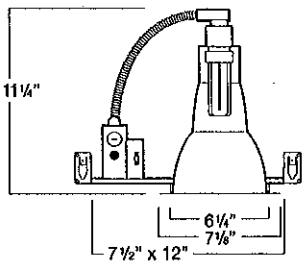
CLEAR ALZAK 30°

TV6126.A30



CLEAR ALZAK 40°

TV6126.A40



CONE OF LIGHT

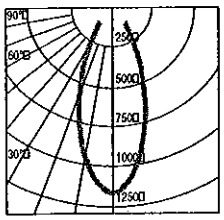
MTG. HT.	FC/0°	DIA.
4'	77	2.3
6'	34	3.4
8'	19	4.6
10'	12	5.7
12'	9	6.9

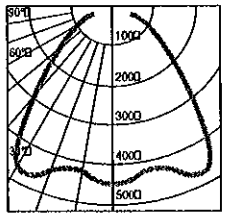
50% FC at edge

MTG. HT.	FC/0°	DIA.
4'	29	6.0
6'	13	9.0
8'	7	12.1
10'	5	15.1
12'	3	18.1

50% FC at edge

CP DISTRIBUTION





COEFFICIENTS OF UTILIZATION

% CEILING 80		(20% FLOOR)	
% WALL	70	50	30
0	42	42	42
1	40	39	39
2	38	37	36
3	37	35	34
4	35	33	32
5	34	31	30
6	33	30	28
7	31	29	27
8	30	27	25
9	29	26	24
10	27	24	22

% CEILING 80		(20% FLOOR)	
% WALL	70	50	30
0	70	70	70
1	67	65	63
2	63	60	57
3	59	55	52
4	56	51	47
5	52	46	42
6	49	42	38
7	45	39	34
8	42	35	31
9	39	32	28
10	35	28	23

NOTES

V6126.A30
1–26 watt quad tube
G24q-3 electronic socket
Total lumens: 1800
Spacing criteria: .6
Wheat Alzak CP x .9
Efficiency: 33.9%

V6126.A40
1–26 watt quad tube
G24q-3 electronic socket
Total lumens: 1800
Spacing criteria: 1.4
Wheat Alzak CP x .9
Efficiency: 68.4%

E1 E2

TYPE: _____

CATALOG NO.: _____

CHLORIDE SYSTEMS

GENERAL DESCRIPTION

The Caliber Series Edge-Lit Exit provides a slim profile combined with attractive finishing options that blend well with architectural spaces. A self-diagnostic charger is standard on self-powered models. Easy installation, universal mounting configurations and field selectable chevrons make the Caliber Edge-Lit both a specification product and an electrical contractor favorite. The Caliber Series is a Made in the USA product.

ILLUMINATION

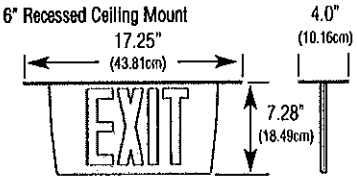
Illumination of the Caliber Series exit panel is accomplished with the use of high brightness LEDs in an optical array offering even illumination. Average exit legend illumination level is 25 fl (79 cd/m²). Panel is available in 6" or 8", UL and NFPA compliant lettering without a change to the housing parts.

INSTALLATION

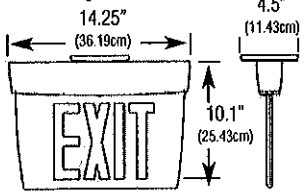
Universal mounting configurations include recessed ceiling mount, surface ceiling mount, surface end mount and surface wall mount. Surface mount configurations mount to a 3.5" octagonal junction box. Field selectable chevrons are standard.

DIMENSIONS

6" Recessed Ceiling Mount



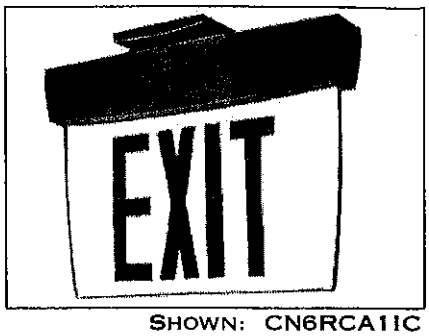
6" Surface Ceiling Mount



See reverse for other configurations.
Dimensions are approximate and subject to change.

Caliber Series

LED Illuminated Edge-Lit Exit
AC Only and Emergency Operation
Standard Self-Diagnostics Electronics*
Universal Mounting



SHOWN: CN6RCA1IC

HOUSING

All housing components are premium die-cast aluminum construction. A range of finishes are available (see Ordering Information below). A bar hanger bracket kit is standard for recessed applications.

PANEL

The Caliber Edge-Lit Exit panel is manufactured from high impact acrylic and silk-screened using computer generated artwork. All artwork meets UL and NFPA standards for exit signage. Universal self-stick chevrons are standard. Panel is available in 6" and 8" "EXIT" legend heights.

ELECTRONICS

AC Only - 120/277 VAC dual voltage input with surge protection is standard on all models.
Emergency Operation - Charging system is microprocessor driven with software embedded diagnostic routine and temperature compensation. See specification sheet C1465 for electronics details. 120/277 VAC input, surge protection, brownout, AC lockout and low voltage disconnect features are standard.

BATTERY

Maintenance free, sealed nickel cadmium battery
Exceeds 90-minute run time requirement
Estimated service life of 10 years
Operating temperature range of 32°F (0°C) to 104°F (40°C)

WARRANTY

Five year full electronics warranty
Five year full plus five year prorated battery warranty

*Self-powered models incorporate the Intelli-Charge diagnostics electronics package. Self-testing is a factory installed option.

CODE COMPLIANCE

UL 924 listed
UL damp location listing 32°F (0°C) to 104°F (40°C)
NFPA 101, NEC, BOCA, OSHA and IBC illumination standards
Meets ADA specifications for wall mounted lighting fixtures
Certified to the California Energy Commission in accordance with California law

ELECTRICAL SPECIFICATIONS

Input power requirements at 120 VAC / 277 VAC

AC Only
Red - 3.80 watts (120VAC), PF = 0.96
3.80 watts (277VAC), PF = 0.91
Green - 4.00 watts (120VAC), PF = 0.95
4.00 watts (277VAC), PF = 0.90

Emergency Operation
Red - 4.70 watts (120VAC), PF = 0.95
4.81 watts (277VAC), PF = 0.97
Green - 4.71 watts (120VAC), PF = 0.95
4.67 watts (277VAC), PF = 0.99

ORDERING INFORMATION (EXAMPLE: CN6RCW1IC)

SERIES	LEGEND HEIGHT	LETTER/ BACKGROUND COLOR	HOUSING FINISH	# OF FACES	MODEL DESIGNATOR[1]		FACTORY INSTALLED OPTIONS
CA = Caliber AC Only LED Exit CN = Caliber Self-Powered LED Exit	6 = 6" Exit 8 = 8" Exit	RC = Red/Clear[5] GC = Green/Clear[5] RW = Red/White GW = Green/White RM = Red/Mirror GM = Green/Mirror	A = Brushed Aluminum B = Black W = White N = Nickel G = Gunmetal BR = Ornamental Bronze AC = Aged Copper VG = Velvet Green GR = Granite PA = Painted Aluminum	1 = Single Face 2 = Double Face X = Less Panel[4]	IC = Intelli-Charge Diagnostic Electronics (non-audible)	—	2CKT1 = Two-Circuit 120/120 VAC (AC-only models) 2CKT2 = Two-Circuit 277/277 VAC (AC-only models) BF = Buzzer/Flasher (self-powered models only) BZ = Buzzer (self-powered models only) DC = 12-48 VDC Input (AC only models) EX = Special Input Transformer (specify voltage & frequency)[2] FA = Fire Alarm Activated Flasher FL = Flasher (self-powered models only) LBB = Unit-Less Backbox[3] T = Self-Testing Diagnostics (non-audible) TA = Audible Self-Testing Diagnostics SW = Special Wording (consult factory)[2]

NOTE:
*Custom pendant lengths and colors available, consult factory.
**BBKIT supplied with a clear coat finish for installation above a finished ceiling.

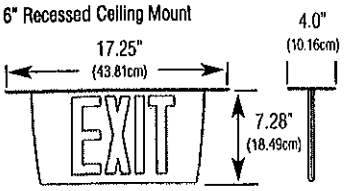
NOTES:
1) For self-testing models refer to options.
2) Some options may impact the UL listing. Consult factory for specifics.
3) Required model number for units with back boxes installed on the job.
4) Order when panels are not required at time of installation. Consult factory for edge-lit panel order number.
5) Clear background only available on single face.

ACCESSORIES
(order as a separate line item)

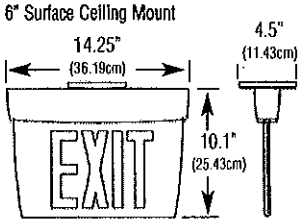
BBKIT = Backbox Rough-In Kit** (must order remainder of product with LBB suffix)
BBKITDC = Backbox Rough-In Kit with DC Option
BBKIT2CKT1 = Backbox Rough-In Kit with 2CKT1 Option
BBKIT2CKT2 = Backbox Rough-In Kit with 2CKT2 Option
ICIR = Intelli-Charge Infra-Red Remote
PKIT12W = Pendant Kit, 12" White Finish*
PKIT12B = Pendant Kit, 12" Black Finish*

Specification Data for Caliber Series Edge-Lit Exit

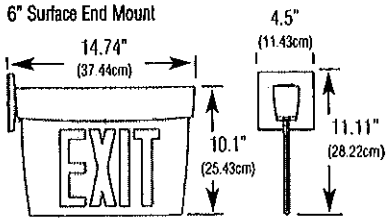
6" Recessed Ceiling Mount



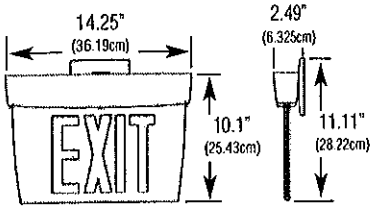
6" Surface Ceiling Mount



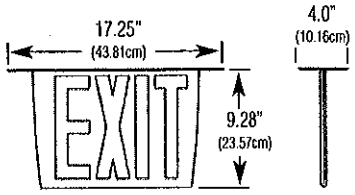
6" Surface End Mount



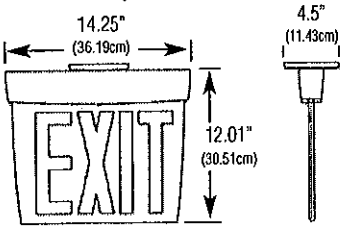
6" Surface Wall Mount



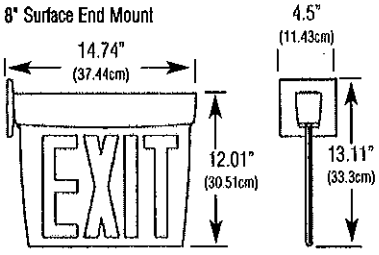
8" Recessed Ceiling Mount



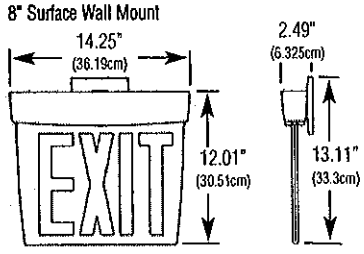
8" Surface Ceiling Mount



8" Surface End Mount



8" Surface Wall Mount



SUGGESTED SPECIFICATION

Furnish and install Chloride's Caliber Series edge-lit exit sign model _____. The exit sign shall be constructed to meet UL standard 924, the National Electrical Code (NEC, NFPA 70). All models shall meet and be recognized as "Low-voltage, limited energy" products in accordance with UL 924.

INSTALLATION AND OPERATION - The edge-lit exit sign shall be easily field connected to a 120 or 277 VAC, 60 HZ un-switched power source. The installation must comply with the NEC as well as other applicable codes. The edge-lit exit sign shall be capable of universal mounting (surface ceiling, recessed ceiling, surface wall, or end wall mount) without additional or accessory parts and be available with 6 or 8-inch, UL and NFPA compliant lettering and chevrons, in red or green, without modification to any housing parts.

ELECTRONICS AC-Only Models – The edge-lit exit sign shall be easily field connected to 120 or 277 VAC, 60 HZ un-switched power source. The Caliber Series edge-lit exit sign equipped with red LED's shall consume 3.80 watts with a power factor of 0.96 (120 VAC) and 3.80 watts with a power factor of 0.91 (277 VAC). The Caliber Series edge-lit exit sign equipped with green LED's shall consume 4.00 watts with a power factor of 0.95 (120 VAC) and 4.00 watts with a power factor of 0.90 (277 VAC). Available, factory-installed options shall include a two-circuit module to accommodate 120/120 or 277/277 VAC for use with a generator or central inverter system; A fire alarm activated flasher option to accommodate an input from a fire alarm panel and provide a flashing rate when the alarm system is activated.
Self-Powered Models – All self-powered models shall be provided with Chloride's Intelli-Charge diagnostics electronics platform. The edge-lit exit sign shall be easily field connected to 120 or 277 VAC, 60 HZ un-switched power source. Intelli-Charge will detect and notify the installer regarding incorrect wiring of the transformer primary and restrict the damaging effects from affecting the printed circuit board. The Caliber Series edge-lit exit sign equipped with red LED's shall consume 4.70 watts with a power factor of 0.95 (120 VAC) and 4.81 watts with a power factor of 0.97 (277 VAC). The Caliber Series edge-lit exit sign equipped with green LED's shall consume 4.71 watts with a power factor of 0.95 (120 VAC) and 4.67 watts with a power factor of 0.99 (277 VAC). The Intelli-Charge electronics package shall provide continuous, real-time monitoring of all the critical equipment functions including, but not limited to: Line voltage status and condition, charger fault, transfer fault, battery fault, and LED load fault and notify personnel with a visual indicator sequence. Optional audible diagnostics as well as self-testing diagnostics shall be available from the factory. The self-testing option shall satisfy the periodic testing requirements in NFPA 101, Life Safety Code as well as the International Building Code (IBC). The Intelli-Charge circuit shall continuously sample ambient temperature conditions and adjust the charging regime to compensate for typical and dramatic ambient conditions to maximize the life of the battery. An on-board IR receiver shall be standard and pre-programmed to operate from an optional IR user interface device (available as an accessory item).

BATTERY (Self-Powered Models Only) - The battery shall be maintenance-free, sealed nickel cadmium utilizing sintered plate construction and polypropylene separators for trouble-free operation. The Caliber Series edge-lit sign shall carry a UL damp location listing for use in ambient conditions ranging from 32° F (0° C) to 104° F (40° C). The battery shall be tested and recognized in accordance with the accelerated life testing requirements of the IEC.

ILLUMINATION - The Caliber Series edge-lit exit signs shall be illuminated by high intensity, long-life LEDs. Average legend illumination shall be equal to or greater than 25 fl (79 cd/m2).

HOUSING - The edge-lit exit housing shall be constructed of premium die cast aluminum available in an array of durable, polyester powder-coated finishes. A standard bar hanger kit shall be supplied to facilitate recessed applications. A clear, acrylic exit panel shall be provided, in red or green, with optional white or mirrored inserts. Field-applied chevrons shall be standard and supplied with an application template.

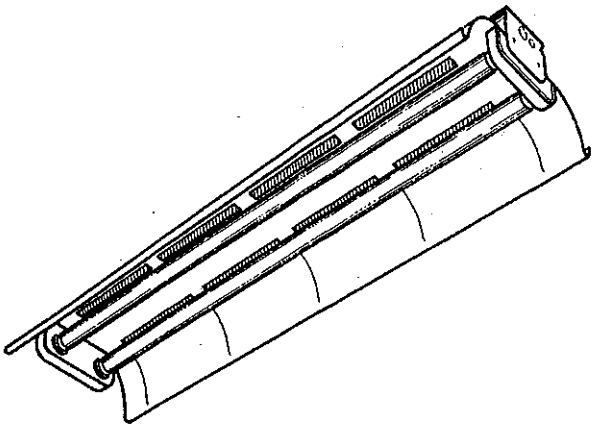
CHLORIDE SYSTEMS
272 West Stag Park Service Road • Burgaw NC 28425
Telephone: (910) 259 1000 • Facsimile: (800) 258 8803
www.chloridesys.com

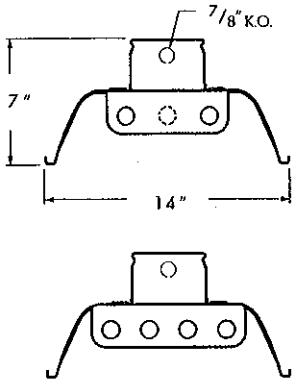
C1365R9
3/10 IH

PREMIUM **TURRET INDUSTRIAL**

82

VOLTAGE TYPE JOB SERIES





SPECIFICATIONS

- HOUSING – 20 Ga. die formed, ribbed C.R.S.
- FINISH – white powder coating with 5-stage iron/phosphate prepared metal. 92% minimum average reflectance
- REFLECTOR – 22 Ga. die formed, ribbed C.R.S. with white powder coat finish. 10% uplight component standard, closed top optional
- ELECTRICAL – electronic ballast standard, rated Class P
- LABELS – UL & CUL listed as fluorescent luminaire suitable for dry or damp locations
- MOUNTING – surface or suspended

FEATURES

- Heavy-duty ribbed reflector with 10% uplight component softly illuminates ceiling for a pleasing, ambient effect
- Factory mounted, pre-wired sockets cut installation time
- Spring-loaded, turret style sockets enclosed in heavy-duty steel housing
- Hinging/locking lamp bracket cuts installation time
- 2 heavy-duty, spring-loaded quarter turn fasteners secure reflector to housing
- Channel connector furnished for continuous row applications
- Ballast secured by 2 captive bolts and nuts to ensure a tight, reliable fit for maximum heat dissipation and minimal ballast noise
- All parts painted after fabrication to facilitate installation, increase efficiency, and inhibit rusting

SUBMITTAL INFORMATION

TOTAL LAMPS
2, 3, 4, 6, or 8

NOMINAL LENGTH
4 = 4 ft.
8 = 8 ft.

LUMINAIRE SERIES

CT = Closed top reflector
EM7 = Emergency battery pack (B70A) or equivalent
WG11 = 11 Ga. white powder coat wireguard
WG14 = 14 Ga. white powder coat wireguard

For more options, accessories, and product details, refer to Information Section

VOLTAGE
120 = 120V
277 = 277V

82-4-232-OPTIONS-EB2-120

LAMP WATTAGE/TYPE
32 = 4', 32 watt T8
40T12 = 4', 40 watt T12
48SL = 4', 39 watt T12, slimline
48HO = 4', 60 watt T12, HO
59 = 8', 59 watt T8, slimline
86 = 8', 86 watt T8, HO
96SL = 8', 75 watt T12, slimline
96HO = 8', 110 watt T12, HO
96VHO = 8', 215 watt T12, VHO

BALLAST TYPE (dependent on specified lamp type)
EB2 = 2 lamp electronic ballast
EB2/2 = (2) 2 lamp electronic ballasts
EBLH2 = 2 lamp electronic ballast, <10% THD
MB2 = 2 lamp magnetic ballast
MBLO2 = 2 lamp magnetic ballast, 0°F starting

T8: EB defaults to instant start
T12: MB defaults to rapid start

williams

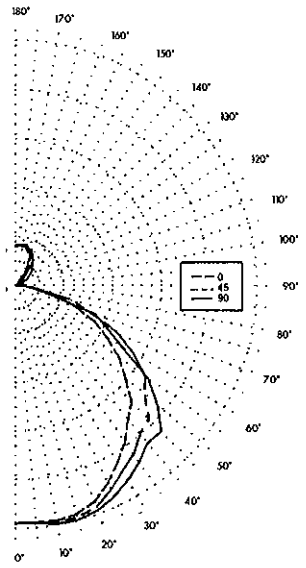
82 SERIES — PHOTOMETRY INFORMATION

Williams Catalog #82-8-432-EB2/2-120
Test Report #8604.0, Dated 12/28/95

Lamp Type: F32T8/SPX35/RS
Lamp Quantity: 4

CANDLEPOWER DISTRIBUTION

VERT. ANG.	HORIZONTAL ANGLE 0	45	90	ZONAL LUMENS
0	3098.	3098.	3098.	
5	3096.	3102.	3106.	296.0
15	3082.	3128.	3162.	886.3
25	2840.	2934.	3032.	1359.2
35	2488.	2684.	2812.	1676.7
45	2144.	2456.	2682.	1886.7
55	1650.	2064.	2106.	1779.1
65	1136.	1460.	1298.	1317.9
75	578.	782.	448.	703.8
85	122.	150.	112.	160.7
90	0.	44.	24.	
95	6.	34.	20.	30.8
105	52.	62.	86.	64.8
115	132.	20.	28.	47.1
125	224.	42.	30.	89.5
135	308.	186.	52.	153.7
145	414.	396.	248.	229.1
155	470.	518.	470.	224.3
165	520.	532.	556.	151.9
175	518.	526.	530.	50.2
180	512.	512.	512.	



LUMEN SUMMARY

ZONE	LUMENS	% LAMP	% FIXTURE
0 - 30	2541.	21.5	22.9
0 - 40	4218.	35.7	38.0
0 - 60	7884.	66.8	71.0
0 - 90	10066.	85.3	90.6
90 - 120	143.	1.2	1.3
90 - 130	232.	2.0	2.1
90 - 150	615.	5.2	5.5
90 - 180	1041.	8.8	9.4
Total Luminaire 0-180	11108.	94.1	100.0

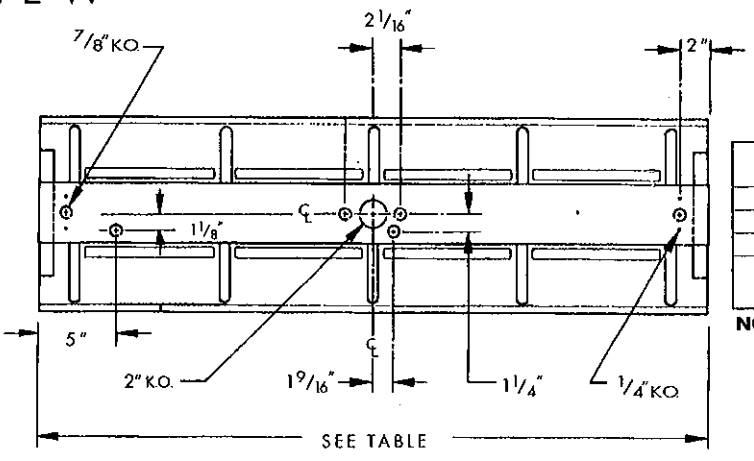
TOTAL LUMINAIRE
OPTICAL **EFFICIENCY = 94.1 %**
SPACING CRITERIA: ACROSS= 1.4 ALONG= 1.3

ZONAL CAVITY COEFFICIENTS

EFFECTIVE FLOOR CAVITY REFL. = .20

CEILING	.80			.70			.50		
WALL RCR	.70	.50	.30	.70	.50	.30	.50	.30	.10
0	110	110	110	106	106	106	100	100	100
1	101	.97	.93	.98	.94	.90	.88	.85	.83
2	.92	.85	.79	.89	.82	.77	.78	.73	.69
3	.84	.75	.68	.81	.73	.66	.69	.63	.58
4	.77	.66	.58	.74	.64	.57	.61	.55	.50
5	.70	.58	.50	.68	.57	.49	.54	.47	.42
6	.64	.52	.44	.62	.51	.43	.48	.41	.36
7	.59	.46	.38	.57	.45	.38	.43	.36	.31
8	.54	.42	.33	.52	.40	.33	.38	.32	.27
9	.50	.37	.29	.48	.36	.29	.34	.28	.23
10	.46	.34	.26	.45	.33	.26	.31	.25	.20

BACK VIEW



NOMINAL SIZE	UNIT LENGTH
4' T8, T12/RS	49-7/8"
4' SL, HO, VHO	48"
8' T8, T12/RS	99-7/8"
8' SL, HO, VHO, 59 WATT, 86 WATT	96"

NOTE: 8' fixture uses (2) 4' reflectors

williams®

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JP43122 12/3/03

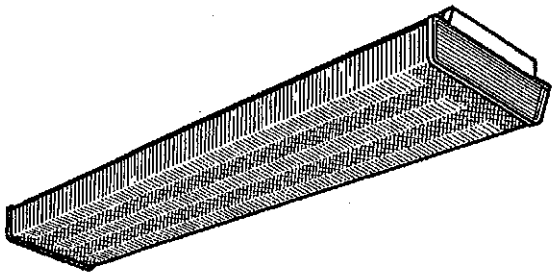
Bldg A

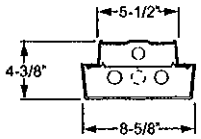
(G) (GE)

2 OR 3 LAMP INJECTION-MOLDED **WRAP AROUND**

SERIES **31**

VOLTAGE TYPE JOB





SPECIFICATIONS

- HOUSING – 20-gauge die-formed C.R.S.
- SHIELDING – Injection- molded clear acrylic prismatic diffuser standard or high-impact diffuser optional.
- FINISH – 92% minimum average reflective white powder coat with multi-stage iron/phosphate prepared metal.
- ELECTRICAL – Electronic ballast standard, instant start T8, rated Class P.
- LABELS – UL/CUL listed as fluorescent luminaire suitable for dry or damp locations.
- MOUNTING – Surface or suspended.

FEATURES

- Available with high-impact diffuser.
- Nearly 90% efficient.
- Injection-molded opaque white end caps provide decorative appearance and ensure long-term diffuser stability.
- Fully-enclosed spring-loaded barrel latches secure diffuser to fixture housing.
- Individual or continuous row mounting.
- Wireway is accessible without the use of tools.
- All parts painted after fabrication to facilitate installation, increase efficiency, and inhibit corrosion.
- This fixture is proudly made in the USA.

SUBMITTAL INFORMATION

NOMINAL LENGTH
4 = 4 ft.
8 = 8 ft.

TOTAL LAMPS
2, 3, 4, or 6

SHIELDING
I = Injection-molded 100% acrylic prismatic diffuser (#7101-A)
ID = Injection-molded high-impact acrylic prismatic diffuser (#7101-DRA)

VOLTAGE
120 = 120V
277 = 277V

31-4-232-I-OPTIONS-EB2-120

LUMINAIRE SERIES

EM7A = Emergency battery pack (B70A) or equivalent

BALLAST TYPE: (dependent on specified lamp type)
EB2 = 2-lamp electronic ballast
EB3 = 3-lamp electronic ballast
EB4 = 4-lamp electronic ballast
EB2/1 = (1) 2-lamp & (1) 1-lamp electronic ballast

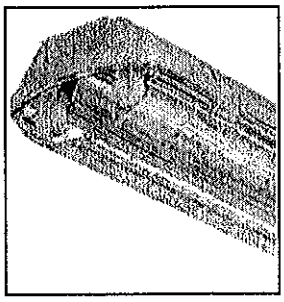
LAMP WATTAGE/TYPE
32 = 4', 32-watt T8

For more options, accessories, and product details, refer to Information Section.

Williams
FLUORESCENT LIGHTING

ILLUMINA
HZ100
FLUORESCENT (T5)

T5 2' - 4'
Hazardous
Class 1, Div 2
Groups A-D



Suspended Luminaire

Application: ILLUMINA® HZ100T5 is a high performance luminaire that is rated for hazardous locations. Approved for installation in Class 1, Division 2, Groups A, B, C and D environments. The three piece design snaps together without the need of any tools. The HZ100T5 weighs a mere 6.5lbs and is available in 2ft or 4ft. Construction is 100% polycarbonate, which makes it corrosion, flame and vandal resistant. The ILLUMINA® HZ100T5 is ideal for prep and inspection areas, sanding and machining environments.

Type: _____

Project: _____

_____

CONFIGURE:

a MODEL	b LENGTH	c OPERATION	d LAMPS	e INPUT	f OPTIONS
HZ100T5 ILLUMINA® *HZ100 T5 SERIES*	**2** *2 foot* **4** *4 foot*	**HT** *AC only*	**114W** *1x14W T5* **214W** *2x14W T5* **128W** *1x28W T5* **228W** *2x28W T5*	**120V** **277V** **120/277V** **347V**	**FP** *inline fuse protection* **PK** *rigid pendant kit: 18", 24", 36" & 48"* **AC** *aviation cable: 50", 72", 100", 150" & 250"* **CH** *chain hang kit* **TP** *tamper proof* *NOTE: (AC & PK) length to be specified, i.e. PK24 or AC100*
MODEL a	LENGTH b	OPERATION c	LAMPS d	INPUT e	OPTIONS f
HZ100T5					

HOUSING: 100% UV stabilized polycarbonate material, integrated liquid silicone perimeter gasket with memory retention, recessed stainless steel mounting brackets.

REFLECTOR: Dual parabolic (2-lamp versions) and single parabolic (1-lamp versions) high emission reflector. Vacuum metallized finish. Direct mount reflector configuration supports all electrical components.

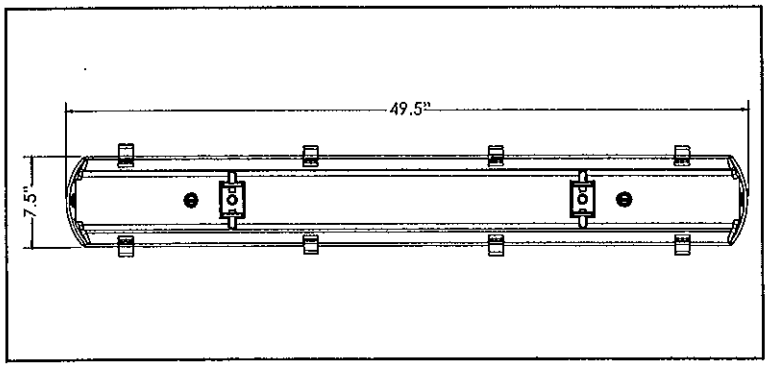
DIFFUSER: High performance diffuser. Complete light emission (CLE) technology. 100% Polycarbonate construction, impact resistant, UV stabilized to reduce yellowing index.

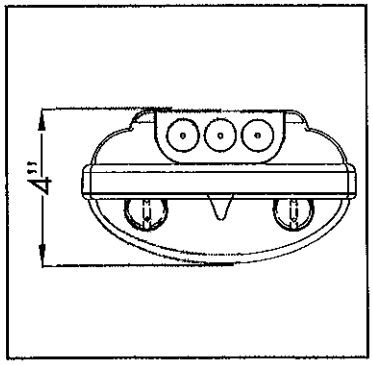
LAMP/SOCKET: Two (2) or four (4) T5 ratchet type sockets with Beghelli T5 adaptor extenders.

MOUNTING: Surface mount configuration as standard. Optional **(AC)** aviation cable, adjustable and **(PK)** pendant mounting are available. Required mounting height to be specified.

POWER LINE/FEED: 3-wire, solid type 18awg, pre-stripped 12" leads for quick in-field connection.

WEIGHT: 6.5 lbs. / 2.948 kilo.





Beghelli reserves the right to change, without notice, specifications or materials that in our opinion will not alter the function or performance of the product. Technical specifications that appear on www.beghelliluce.com supersede all other versions existing in print or electronic form.