NCIDQ Examination
Practice Design Problem

Section 3

Design Practicum - Part A
(Four Hours)

NCIDQ
Examination

PDP 2012-01
Published June, 2012

This booklet is to be used for the morning portion of the test. Please use this booklet in conjunction with the set of drawings labeled Design Practicum – Part A. There are four sheets in Part A.

The Section 3, Practicum examination is administered in three parts, Part A, Part B and Part C. The **maximum amount of time allowed for the morning portion of the test (Part A) is four hours.** At the end of the morning portion of the test, you will turn in Part A. You will not have access to Part A in the afternoon. You will have a maximum of four hours to finish the afternoon portions of the test, Part B and Part C (two hours for each). You may work at your own pace within the maximum time allowed.

We recommend you take this PDP under the same conditions as the exam. During the exam, work must be completed directly on the drawing sheets to be scored. Work done on tracing paper is not scored. You should use standard drafting equipment to complete the examination. The practicum section is not designed to require the use of a drafting table, but you will be permitted to use a portable drafting board or flat illustration board, within specified size requirements, during the examination. For more information on permitted supplies for the practicum section, visit our Web site at www.ncidq.org.

© 2012 National Council for Interior Design Qualification, Inc. All rights reserved. No part of these materials may be reproduced, stored in a retrieval system or transmitted without the prior written permission of NCIDQ. By breaking the seal you have acknowledged that these materials are solely for your own personal use, that they are the copyrighted property of NCIDQ, Inc. and are protected by United States and Canadian copyright law, and that any reproduction and/or transmission of any of these materials is prohibited.

THE PROBLEM BOOKLET FOR PART A CONTAINS

NCIDQ BUILDING CODE REQUIREMENTS 1
SPACE PLANNING Exercise 5
LIGHTING DESIGN Exercise 9
LIGHTING CUT SHEETS (4 pages) 11

THE SET OF DRAWINGS CONTAINS

COVER SHEET C-1
SPACE PLANNING EXERCISE ID-1
LIGHTING DESIGN EXERCISE ID-2
LIGHTING DESIGN EXERCISE ID-3

© 2012 National Council for Interior Design Qualification, Inc. All rights reserved.

© NCIDQ 2012

NCIDQ SECTION 3 BUILDING CODE REQUIREMENTS

Code requirements listed below are for the purpose of the NCIDQ Examination only.
Your exam exercises will be graded for compliance with these code requirements. Use the following codes to develop your design solution for the **TOTAL** space as necessary to protect the health, safety, and welfare of the public.

1.0 DEFINITIONS

1.1 Common Path of Egress Travel – The portion of the exit access [access to an exit] that must be traversed **BEFORE** two separate and distinct paths of travel to two exits are available. Common path of egress travel shall be included within the permitted travel distance.

1.2 Travel Distance – The distance measured from the most remote point within a story to the entrance to an exit along the natural and unobstructed path of egress travel.

2.0 FIRE-RESISTANT RATED CONSTRUCTION

2.1 Demising partitions between tenant spaces **MUST** be 1-hour fire rated.

2.2 Partitions along a public corridor **MUST** be 1-hour fire rated.

2.3 Partitions that demise an Assembly Occupancy of 750 sq. ft. [70 m^2] or greater **MUST** be 1-hour fire rated.

2.4 Door assemblies in a 1-hour fire rated partition **MUST** have a minimum fire protection rating of 20 minutes and be self-closing.

2.5 Storage rooms exceeding 100 sq. ft. [9.3 m^2] **MUST** be 1-hour rated.

2.6 Glazing in fire rated partitions, doors or sidelights may not exceed 240 sq. in. [1548 cm^2].

3.0 FIRE PROTECTION SYSTEM

3.1 There **MUST** be an audio/visual fire signal device located in each restroom, hallway, lobby, and general assembly area.

3.2 An audio/visual fire signal device **MUST** be visible from any location in the room or space and **MUST** be mounted between 6'-8" to 7'-6" [2 m to 2.3 m] AFF.

3.3 The minimum number of fire extinguishers **MUST** be calculated based on one (1) fire extinguisher per 3000 sq. ft. [280 m^2].

3.4 Fire extinguishers **MUST** be located no more than 75' [23 m] from the furthest occupant.

3.5 Smoke and Heat Detector coverage **MUST** include all rooms, corridors and storage areas.

4.0 MEANS OF EGRESS

4.1 General Means of Egress

4.1.1 The means of egress **MUST** have a ceiling height of not less than 7'-6" [2.3 m].

4.1.2 Protruding objects are permitted to extend below the minimum ceiling height provided a minimum headroom of 6'-8" [2 m] shall be provided along the path of egress, including any corridor, aisle or passageway.

4.1.3 Protruding objects **MUST NOT** reduce the minimum clear width of accessible routes.

4.1.4 **ALL** objects located on a wall between 27" [685 mm] and 80" [2115 mm] AFF **MUST NOT** protrude more than 4" [100 mm] into an egress path of travel.

4.2 Exit Signs

4.2.1 Exit signs with a directional indicator (illuminated) showing the direction of travel shall be placed in every location where the direction of travel to reach the nearest exit is not apparent.

4.3 Illumination

4.3.1 Emergency illumination shall be provided for a minimum of 1½ hours in the event of failure of normal lighting. Emergency lighting facilities shall be arranged to provide initial illumination along the path of egress.

4.4 Travel Distance

4.4.1 **ALL** paths of travel **MUST** be accessible (barrier-free) and provide at minimum a 60" [1500 mm] turning radius at changes of travel direction.

4.4.2 The path of egress travel **MUST NOT** pass through a secondary space that is subject to closure by doors or that contains storage materials or has items that project into the path of travel.

4.4.3 The common path of egress travel distance **MUST NOT** exceed 100'-0" [30.5 m].

4.4.4 The travel distance to an exit **MUST** be measured on the floor along the centerline of the natural path of travel, starting from the most remote point to the centerline of the exit.

4.4.5 The travel distance **MUST NOT** exceed 250'-0" [76.2 m] measured along the path of travel.

4.5 Exit Access Doors, Doorways, Door Hardware and Windows

4.5.1 The height of doors **MUST NOT** be less than 7'-0" [2.1 m].

4.5.2 **ALL** door openings shall be a **MINIMUM** of 36" [900 mm] wide with an 18" [450 mm] clear space on the pull side of the door and a 12" [300 mm] clear space on the push side of the door.

4.5.3 Where a pair of doors is provided, one of the doors **MUST** be not less than 36" [900 mm] wide.

4.5.4 Locks, if provided, **MUST NOT** require the use of a key, special knowledge, or effort for operation from the egress side.

4.5.5 Doors opening from occupied spaces into the path of egress travel shall not project more than 7" [180 mm] into the required width.

4.5.6 Exit access doorways **MUST** open in the direction of exit travel.

4.5.7 Exit access doorways **MUST** be placed at a distance that is equal to or greater than:

4.5.7.1 When the building is **NOT** sprinklered, one-half the length of the maximum overall diagonal dimension of the area being served, measured in a straight line between exit doors or exit access doorways.

4.5.7.2 When the building is sprinklered, one-third the length of the maximum overall diagonal dimension of the area being served, measured in a straight line between exit doors or exit access doorways.

4.5.8 Two (2) exit access doorways **MUST** be provided from any space where the Occupancy Load exceeds 49 in Occupancy Groups A (Assembly), B (Business) and M (Mercantile) or exceeds 29 in Occupancy Group S (Storage).

4.6 Corridors

4.6.1 The **MINIMUM** interior corridor width **MUST** be 44" [1100 mm].

4.6.2 Dead end corridors **MUST NOT** exceed 20'-0" [6 m] in length.

5.0 ACCESSIBILITY

5.1 Service (reception/transaction) counters over 8'-0" [2.4 m] in length **MUST** have an accessible height service counter, a minimum of 36" [900mm] in length.

5.2 **ALL** accessible (barrier-free) countertops, sinks, reception/transaction surfaces, and other horizontal work surfaces **MUST NOT** exceed 34" [865 mm] AFF with a 27"H [685 mm] clear knee space below.

5.3 **ALL** accessible (barrier-free) counters **MUST** have clear knee space of at least 30"W x 17"D [760 mm x 430 mm].

5.4 **ALL** exposed hot water pipes and drains **MUST** be insulated or otherwise protect wheelchair users from burns on the legs.

5.5 **ALL** accessible (barrier-free) wall-mounted controls **MUST** be located between 15" [380 mm] and 44" [1100 mm] AFF for a Forward Reach and between 9" [230 mm] and 48" [1200 mm] AFF for a Side Reach.

5.6 **ALL** accessible (barrier-free) lower cabinets **MUST** have a 6" D maximum x 9" H minimum [150mm x 230 mm] toe-kick.

5.7 **ALL** accessible (barrier-free) upper cabinets or shelves located above a work surface **MUST NOT** exceed 44" [1100 mm] AFF.

5.8 Restrooms [Washrooms]

5.8.1 **ALL** accessible toilets **MUST** have an unobstructed 60" [1500 mm] turning circle.

5.8.2 Centerline of accessible toilets **MUST** be 16"-18" [400 mm - 450 mm] from side wall or partition.

5.8.3 Clearance around accessible toilets **MUST** be 60" [1500 mm] along the rear wall and 56" [1420 mm] along the side wall.

5.8.4 Accessible toilets **MUST** be mounted at 17"-19" [430 mm – 480 mm] AFF to the top of the toilet seat.

5.8.5 **ALL** grab bars at toilets **MUST** be 36" [900 mm] long at the rear and 42" [1060 mm] long at the side, mounted between 33" [840 mm] and 36" [900 mm] AFF.

5.8.6 **ALL** accessible showers **MUST** have horizontal grab bars on three (3) sides mounted at a height between 33" [840 mm] and 36" [900 mm] AFF.

5.8.7 Accessible showers **MUST** be a minimum of 30" [760 mm] x 60" [1500 mm].

5.8.8 Accessible urinals **MUST** have an elongated rim at a maximum height of 17" [430 mm] AFF.

5.8.9 A clear floor space of 30" [760 mm] x 48" [1200 mm] **MUST** be provided in front of accessible lavatories, urinals, showers, and bathtubs.

5.8.10 Accessible mirrors **MUST** be mounted with the edge of the reflective surface no higher than 40" [1000 mm] AFF.

6.0 STRUCTURAL

6.1 Core drills **MUST NOT** be within 18" [450 mm] of any structural element.

© NCIDQ 2012

7.0 ELECTRICAL

7.1 **ALL** electrical receptacles **MUST** be 18" [450 mm] AFF unless otherwise noted.

7.2 **ALL** electrical receptacles located within 36" [900 mm] of a water source **MUST** be GFI.

7.3 Clearance of 36" [900 mm] deep **MUST** be provided in front of power panels.

8.0 OCCUPANCY LOAD TABLE

FUNCTION OF SPACE	FLOOR AREA IN SQ. FT. [m^2] PER OCCUPANT
Accessory storage areas, mechanical equipment room	300 [28 m^2] gross
Assembly without fixed seats Concentrated (chairs only—not fixed) Standing space Unconcentrated (tables and chairs)	 7 [.7 m^2] net 5 [.5 m^2] net 15 [1.4 m^2] net
Business areas	100 [9.3 m^2] gross
Education Classroom area Shops and other vocational room areas	 20 [1.9 m^2] net 50 [4.6 m^2] net
Exercise rooms	50 [4.6 m^2] gross
Kitchens, commercial	200 [18.6 m^2] gross
Mercantile Areas on other floors Basement and grade floor areas Storage, stock, shipping areas	 60 [5.6 m^2] gross 30 [2.8 m^2] gross 300 [28 m^2] gross
Residential	200 [18.6 m^2] gross

© NCIDQ 2012

SPACE PLANNING Exercise

Time: One (1) of two (2) parts in a four (4) hour problem. Three (3) hours recommended for this exercise.
Scale: 1/4" = 1'-0" [1:50]

I. PROJECT DESCRIPTION:

The client is a couple who have purchased a new space to accommodate the husband's special needs. He has experienced a debilitating health problem and is now in a wheelchair. They need a home that functions for their new requirements, but still desire a residence with style. In addition, they now have a caregiver who attends to the husband's needs for a few hours a day. The caregiver occasionally spends the night.

The area of work is a residential condominium on the ground floor, in a single story, slab-on-grade building. The area of work shares a common wall with an adjacent unit. All windows are operable; typical sill height is 12" [300 mm] AFF and head height is 9'-6" [2.9 m] AFF.

II. PROJECT REQUIREMENTS:

A. Adjacency Requirements:

- Primary Adjacencies
  - Entry & Study
  - Living Area & Dining Area
  - Dining Area & Kitchen
  - Accessible Master Bedroom & Accessible Master Bathroom
- Secondary Adjacencies
  - Accessible Walk-in Closet and Accessible Master Bathroom
  - Study & Powder Room
  - Kitchen & General Storage

B. Plumbing Requirements:

- Toilets and floor drains (for example: showers) must be directly on a plumbing trench.
- Up to 20'-0" **total** linear feet [6 m] of **additional** trench may be added but must be connected to the existing trench.
- Other plumbing fixtures (sinks, etc.) must be within 10'-0" [3 m] of a trench **and** on a wall connected to a trench.

C. Program Requirements:

- The following areas must be accessible:
  - Living Area
  - Dining Area
  - Kitchen
  - Accessible Master Bedroom, Accessible Master Bathroom and Accessible Closet
  - Accessible route throughout residence
- The sleeping room(s) must have a minimum of one (1) operable window.
- Work/plan around the existing concrete columns as shown.

(CONTINUED ON NEXT PAGE)

© NCIDQ 2012

Space Name	Quantity	Minimum Sq. Ft. [m^2] Each	Function	Minimum Furniture and Equipment
Entry	1	40 [3.7]	Needs to accommodate a minimum of 3'-0" linear feet [900 mm] of hanging storage.	
Living Area	1	300 [27.9]	Seating for six (6) people with views from the windows as the focal point, to include a wheelchair as one (1) of the occupants. Television viewing.	Seating, tables, flat-screen television and lamps to accommodate the requirements.
Dining Area	1	225 [20.9]	Seating for six (6), to include a wheelchair as one (1) of the occupants.	One (1) dining table, five (5) chairs, One (1) 72" [1820 mm] (minimum) open display for a collection of crystal.
Kitchen	1	120 [11]	Provide a cooking area for one (1) person at any one time (either the wife or the caregiver).	One (1) refrigerator, One (1) 36" [900 mm] wide stove, One (1) 27" [685 mm] wide dishwasher, One (1) microwave oven, 48" linear inches [1200 mm] of accessible height countertop, Min. 10'-0" linear feet [3 m] of standard height, non-accessible countertop, One (1) 33" [840 mm] sink.
Pantry	1	10 [0.9]	Storage for cans & dry goods	Minimum of 12'-0" linear feet [3.6 m] of storage shelves
Study	1	150 [13.9]	For one (1) person (either the wife or caregiver) to retreat for privacy or to work.	Minimum of 60 linear inches [1500 mm] of desktop, One (1) PC, One (1) telephone, One (1) desktop copier/fax/ Printer, One (1) letter/file drawer pedestal, One (1) desk chair, One (1) comfortable lounge chair or day bed.
Powder Room	1	50 [4.6]	Used by guests	One (1) sink, One (1) toilet, One (1) wall mounted mirror
Hallway	1	n/a	This will function as a gallery for the display of the Owner's artwork	Minimum 12'-0" linear feet [3.7 m] of display.

Space Name	Quantity	Minimum Sq. Ft. [m^2] Each	Function	Minimum Furniture and Equipment
Accessible Master Bedroom	1	280 [26.0]	For the Owners	One (1) king bed, Two (2) nightstands, Two (2) table lamps, One (1) dresser, One (1) lounge chair w/ ottoman.
Accessible Master Bathroom	1	180 [16.7]	For the Owners	Two (2) sinks total, one (1) must be accessible, One (1) accessible toilet, One (1) roll-in accessible shower, Grab bars as required, One (1) accessible wall mounted mirror.
Accessible Walk-in Closet	1	80 [7.4]	For the Master Bedroom	Minimum of 48" linear inches [1200 mm] of single pole hanging storage, Minimum of 16'-0" linear feet [4.8 m] of double-pole hanging storage (total).
Laundry Closet	1	72 [6.7]		One (1) side-by-side washer and dryer, 30" x 30" [760 mm x 760 mm] each.
General Storage	1	50 [4.6]	Storage for luggage, cleaning equipment & supplies	
Guest Bedroom	1	180 [16.7]	Used by guests and caregiver	One (1) queen bed, Two (2) nightstands, Two (2) table lamps, One (1) dresser, One (1) side chair.
Guest Closet	1	10 [1]	Used by guests and caregiver	Minimum of 48" linear inches [1200 mm] of single pole hanging storage.
Guest Bath	1	80 [7.4]	Used by guests and caregiver	One (1) sink, One (1) toilet, One (1) wall mounted mirror, One (1) tub/shower.

(CONTINUED ON NEXT PAGE)

© NCIDQ 2012

III. REQUIRED DESIGN SOLUTION:

For this exercise, use the information given on Sheet ID-1. Familiarize yourself with the floor plan and project description to be aware of any physical constraints of the building shell.

Instructions to candidate:

A. **Design a solution for the space** on the Floor Plan meeting all requirements. All elements must be graphically shown at an appropriate scale.

B. Keep the design solution within the area of work.

C. Comply with all applicable codes as indicated in the NCIDQ Building Code Requirements.

D. Drawing Requirements:
- **Label all rooms** with room name and actual square footage [m^2].
- The two means of egress from the demised area are already given. **You may not relocate nor add any exterior doors or windows.**
- **Draw all casework, equipment and plumbing fixtures,** referring to the minimum requirements listed in the Program Requirements.
- **Draw and dimension any additional trenching** that your solution requires.
- **Fully furnish the space**, using the minimum requirements listed in the Program Requirements. Include additional FF&E as required to demonstrate functionality of the space.
  - It is not mandatory to label or tag furniture. If not tagged, furniture and fixtures should be appropriately scaled and recognizable as seating, table, mirrors, etc.
- **Draw and dimension circulation clearances**:
  - Barrier-free turn circles at critical changes in direction.
  - Barrier-free clearances at accessible plumbing fixtures as indicated in the Program Requirements.
  - Egress corridor widths.
  - Push/pull clearances.

E. Power/Voice/Data Requirements:
- Using symbols from the Power/Voice/Data Legend **indicate power, voice, and data required** for the:
  - Living Area
  - Study
  - Master Bedroom
- Assume a receptacle mounting height of 18" [450 mm] AFF. Note mounting height on any outlets that vary from this standard.
- Note GFI on receptacles as required in the NCIDQ Building Code Requirements.

© NCIDQ 2012

LIGHTING DESIGN Exercise

Time: One (1) of two (2) parts in a four (4) hour problem. One (1) hour is recommended for this exercise.
Scale: 1/4" = 1'-0" [1:50]

I. PROJECT DESCRIPTION:

The space consists of a clubhouse with a bar for a residential neighborhood. The bar accommodates barstools on each side with an export station for drink pick-up in the center. The center island has bar equipment below with a ceiling mounted glass rack above. In addition, the back bar cabinetry along the perimeter wall accommodates the cash register, glass shelves for liquor display and a hand sink.

The ceiling is suspended gypsum board with a solid wood beam. Refer to Reflected Ceiling Plan, Sheet ID-2, for ceiling heights and location of sloped ceilings.

Recognizing that electrical engineers are often required for lighting design, this problem is designed to demonstrate that interior designers must effectively communicate design intent with respect to lighting specifications and controls within the boundaries of code compliance. This exercise is not intended to test for emergency lighting or exit signage.

II. PROJECT REQUIREMENTS:

Accommodate the following lighting criteria:

- Flexible lighting solution that uses lighting types for interest, while still providing an appropriate level of lighting in this commercial space for function and display.
- General ambient lighting for the Entry.
- Task lighting for the cash register, hand sink and the center island
- Decorative lighting at front bar.
- Accent lighting for the liquor display.
- Adjustable levels of illumination at the Entry and the bar seating.
- Energy allowance of 1.5 watts/sq. ft. [15 watts/m^2]

III. REQUIRED DESIGN SOLUTION:

For this exercise, use information given on the Sheets ID-2 and ID-3, and only the fixtures given on the cut sheets provided. ID-3 is provided for reference only. Do not draw on ID-3.

Instructions to candidate:

A. **Design lighting and switching solutions** for the area of work shown, using fixtures from cut sheets provided.

B. Use energy-efficient lighting design principles and switching, considering energy trade-offs as adjusted to this occupancy type and use.

C. Comply with all applicable codes as indicated in the NCIDQ Building Code Requirements.

(CONTINUED ON NEXT PAGE)

© NCIDQ 2012

D. Using the lighting symbols on the cut sheets, **draw the Lighting Plan** on the Reflected Ceiling Plan, Sheet ID-2.
   - **Label** lighting fixtures with tag numbers indicated on cut sheets.
   - **Dimension** the accent light(s) at the liquor display.
   - **Note** mounting height for wall sconces and pendants.

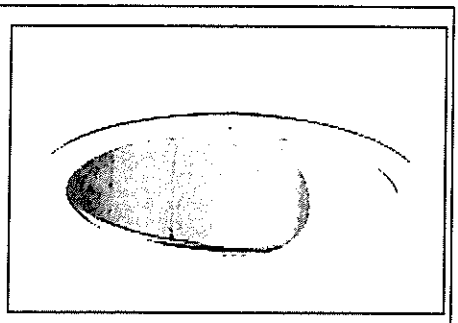
E. Using the Switching Legend, Sheet ID-2, **draw the Switching Plan** on the Reflected Ceiling Plan, Sheet ID-2.
   - **Switch** general ambient, task, and accent lighting separately
   - **Switch** lamp sources (fluorescent, LED incandescent, halogen, etc.) separately
   - **Connect** all lighting fixtures that are to be operated by the same switch(es) with a curved, dashed line.

F. **Complete the Lighting Schedule**, Sheet ID-2.
   - **Note** selection rationale.
   - **Complete** wattage calculations.

LIGHTING CUT SHEETS – Sheet 1 of 4

PDP 2012-01

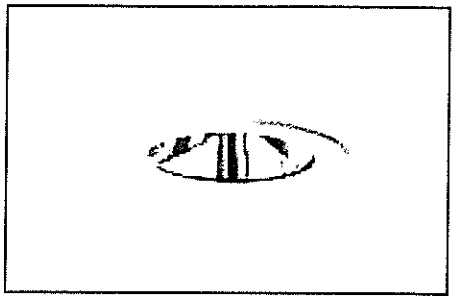
L-1



Symbol: ←○
Tag: **L-1**

Description: Recessed Wall Washer
Total Wattage: 50W
Lamp: One(1) MR16
Dimensions: 8 3/4"W x 14"D x 7"H

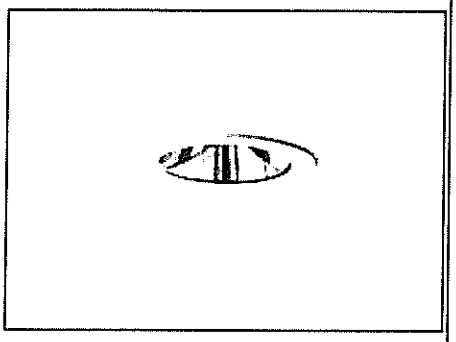
L-2



Symbol: ○
Tag: **L-2**

Description: Recessed Downlight
Total Wattage: 30W
Lamp: One(1) MR16
Dimensions: 8 3/4"W x 14"D x 7"H

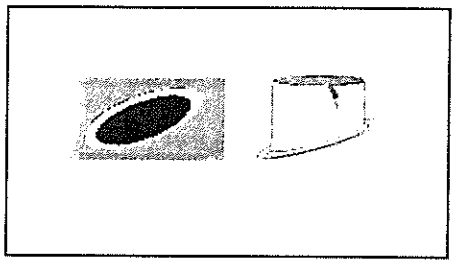
L-3



Symbol: ○→
Tag: **L-3**

Description: Recessed Wall Washer
Total Wattage: 30W
Lamp: One(1) MR16
Dimensions: 4" Dia. X 7"H

L-4



Symbol: ○
Tag: **L-4**

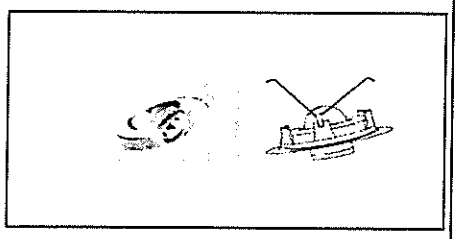
Description: Recessed Downlight for sloped ceiling
Total Wattage: 75W
Lamp: One(1) 75W Halogen
Dimensions: 7 1/2" Dia. x 7 1/2"H

Note: Symbols are scaled at 1/4" = 1'-0"

LIGHTING CUT SHEETS – Sheet 2 of 4

PDP 2012-01

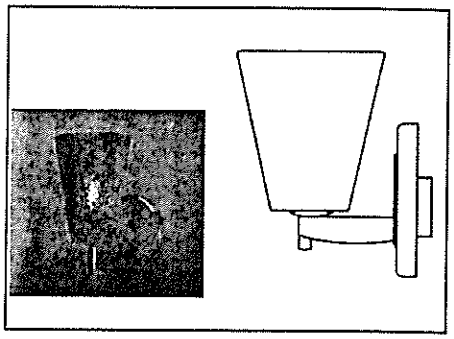
L-5



Symbol: ○
Tag: **L-5**

Description: Recessed Adjustable Downlight for sloped ceiling
Total Wattage: 35W
Lamp: One(1) MR16
Dimensions: 7 5/8" Dia. x 4"H

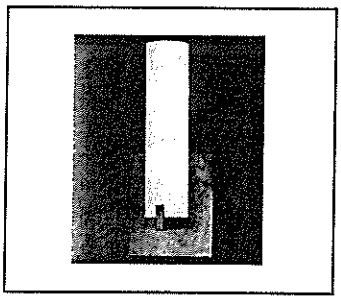
L-6



Symbol: ⊢○
Tag: **L-6**

Description: Wall Sconce
Total Wattage: 3W
Lamp: High output LED
Dimensions: 4 3/4"W x 6 1/2"D x 7"H

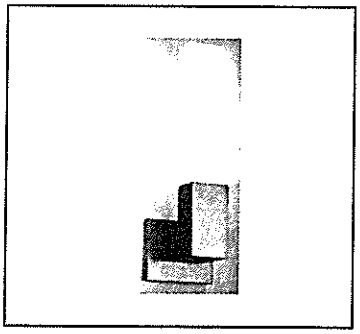
L-7



Symbol: ⊢○
Tag: **L-7**

Description: Wall Sconce
Total Wattage: 80W
Lamp: Two(2) 40W Xenon
Dimensions: 4.75"W x 5.5"D x 13.25"H

L-8



Symbol: ⊢□
Tag: **L-8**

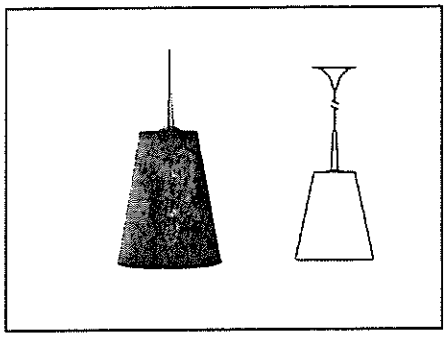
Description: Wall Sconce
Total Wattage: 18W
Lamp: One(1) FT18W/2G11 Fluor.
Dimensions: 2.25"W x 3.75"D x 16"H

Note: Symbols are scaled at 1/4" = 1'-0"

LIGHTING CUT SHEETS – Sheet 3 of 4

PDP 2012-01

L-9

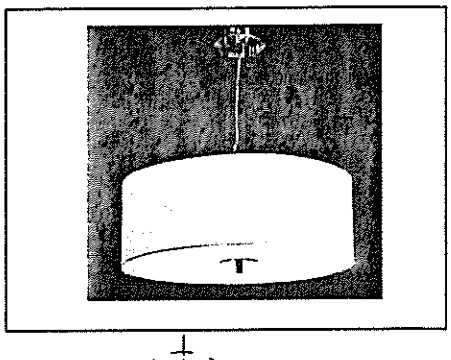


Symbol:

Tag: **L-9**

Description: Decorative Pendant
Total Wattage: 6W
Lamp: High output LED
Dimensions: 6"Dia. X 14" H

L-10

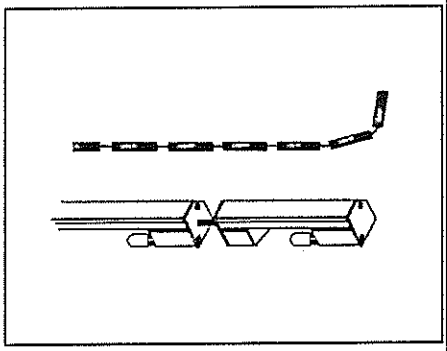


Symbol:

Tag: **L-10**

Description: Pendant Fixture
Total Wattage: 64W
Lamp: Two(2) 32W Fluorescent
Dimensions: 24" Dia. X 8" H (shade)
w/ cable to 72"

L-11

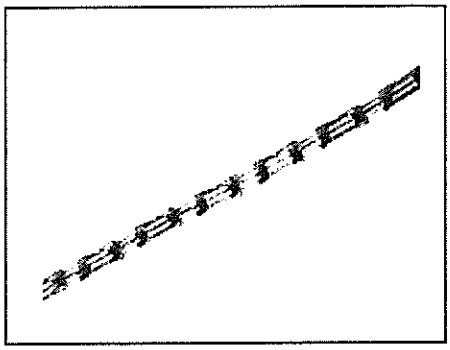


Symbol:

Tag: **L-11**

Description: Undercabinet Task Lighting
Total Wattage: 20W per segment
Lamp: 20W Bi-pin halogen
Dimensions: 1 1/2"W x 1 1/2"D x 9"L
Note: Each segment shown = 9"

L-12



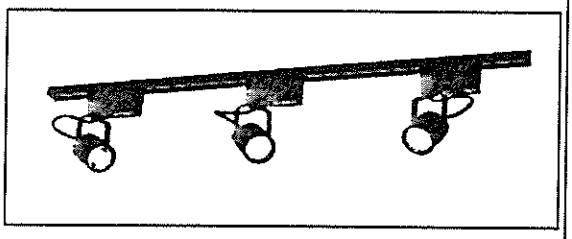
Symbol:

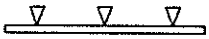
Tag: **L-12**

Description: LED Track/Cove Light
Total Wattage: 10W
Lamp: High output LED
Dimensions: 3/4"W x 1"D x 24"L
Note: Four (4) segments shown = 24"

Note: Symbols are scaled at 1/4" = 1'-0"

L-13

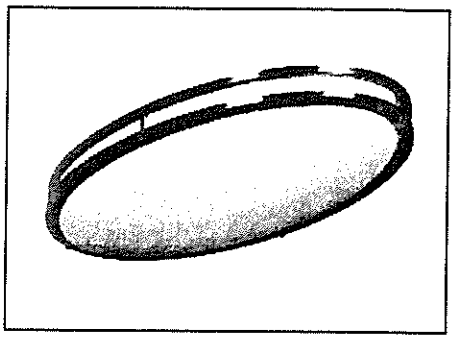


Symbol: 

Tag: **L-13**

Description: Track Lighting
Total Wattage: 150W
Lamp: Three(3) 50W MR16
Dimensions: 7"H x 4"D lights on 48"L track

L-14

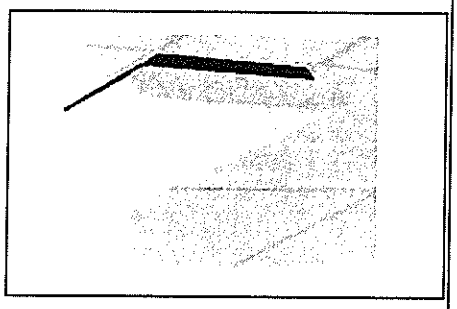


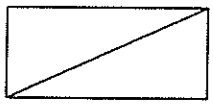
Symbol:

Tag: **L-14**

Description: Surface Mtd. Fixture
Total Wattage: 64W
Lamp: Two(2) 32W Fluorescent
Dimensions: 17"W x 32" L

L-15

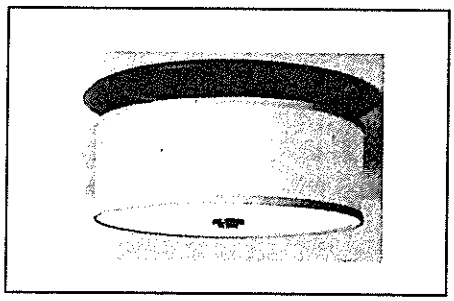


Symbol: 

Tag: **L-15**

Description: Surface Mtd. Fluorescent
Total Wattage: 64W
Lamp: Two(2) 32W T8 Fluorescent
Dimensions: 24"W x 4"D x 48"L

L-16



Symbol:

Tag: **L-16**

Description: Surface Mtd. Fixture
Total Wattage: 22W
Lamp: One(1) FC9T5-22W/2GX13 Fluor.
Dimensions: 16" Dia x 9.25"H

Note: Symbols are scaled at 1/4" = 1'-0"

THIS PAGE IS INTENTIONALLY BLANK.