

PEARSON TECHNOLOGIES
I N C O R P O R A T E D

4671 Hickory Bend Drive Acworth, GA 30102 USA 011 (770) 490-9991
fiberguru@ptnowire.com www.ptnowire.com

14-Aug-15

Crossword Puzzles For Fiber Optic Terminology And Basic Facts

This document is a training aid for fiber installers. In addition, it prepares installers for taking the Fiber Optic Association [FOA] Certified Fiber Optic Technician [CFOT] certification examination. This crossword includes the basics of the language of fiber optics and many of the subtleties that one learns from extensive fieldwork.

It is based on Professional Fiber Optic Installation, v.9 [© 2014] and on the latest CFOT certification examination. [Professional Fiber Optic Installation, v.9, The Essentials For Success.](#)

Other texts that have answers are:

[Mastering The OTDR-Trace Acquisition And Analysis,](#)

[Mastering Fiber Optic Connector Installation: A Guide To Low Loss, Low Cost, And High Reliability.](#)

To receive a .pdf with the answers, send an email to the address above. Put "Crossword 2015 Answers" in the subject.

Have fun.

Best Regards,

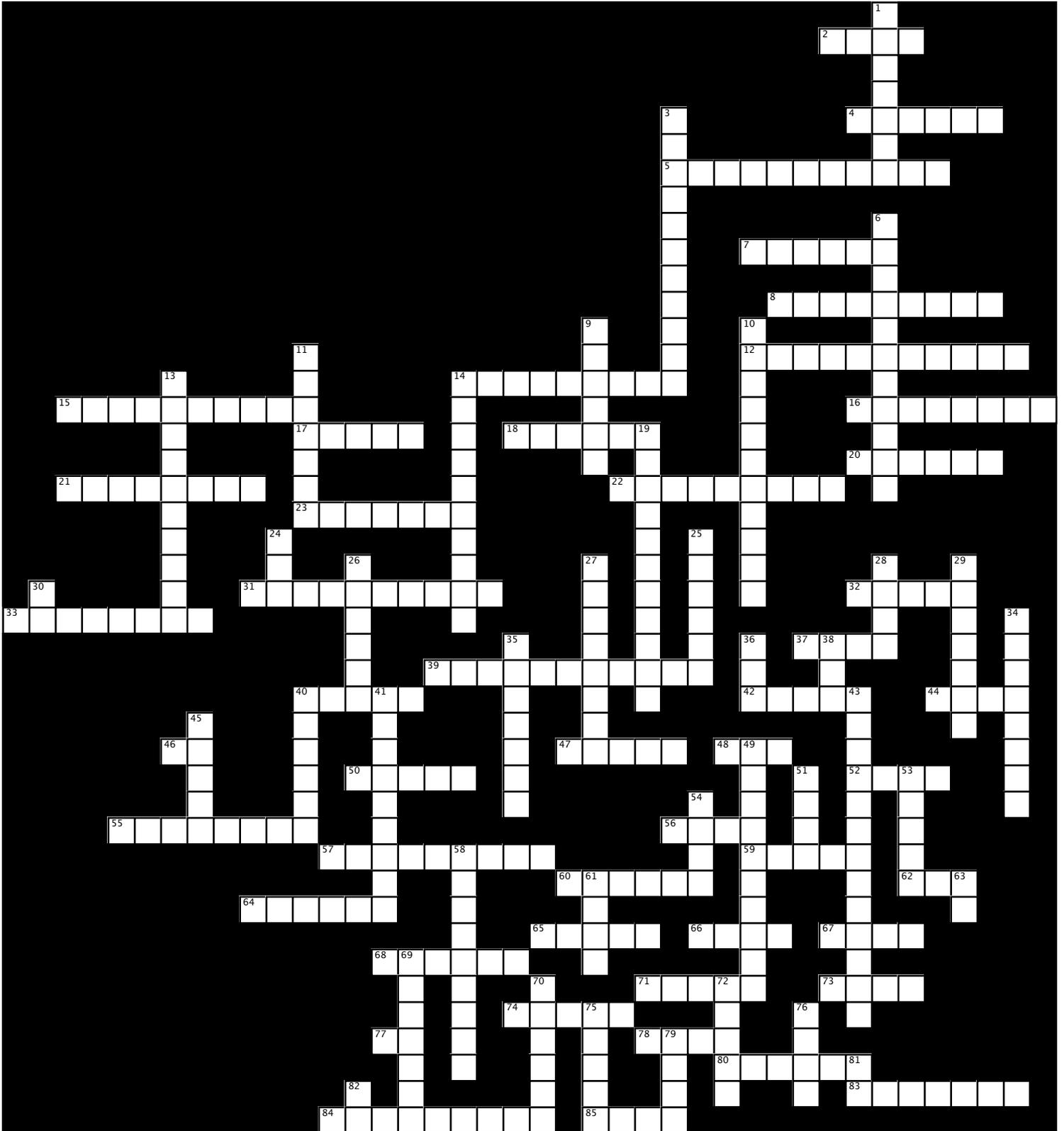


Eric R. Pearson, CFOS/C/T/S/I
President

Optoelectronics And Testing

PROFESSIONAL FIBER OPTIC INSTALLATION, V.9

Chapters 8, 14, 15 (© Pearson Technologies Inc.)



Across

2. EF stands for (second word)
4. the cable between an OTDR and the cable under test is known as a _____ cable
5. the _____ calibrates the OTDR to create accurate attenuation rate measurements (second word)
7. without a second launch cable, the OTDR _____ cannot measure the loss of the far end connector from the near end
8. usually, insertion loss measurements in opposite directions are _____
12. on an OTDR trace, fiber _____ creates (3 Down)
14. during insertion loss testing, the installer matches three characteristics of the test leads to those of the cable under test. One of these characteristics is _____
15. the OTDR trace shows three types of features. A second is _____
16. a properly installed cable segment has a _____ line
17. properly made fusion splices and bend radius violations can create _____
18. if the opposite of (32 Across) insertion loss value is observed, the installer should expect _____ on the cable
20. to measure the loss of the near end connector with an OTDR, the launch cable needs to be _____ than the (44 Across) zone
21. the (4 Across) cable _____ the OTDR port
22. as the wavelength increases, the fiber (19 Down) to (18 Across) _____ (second word)
23. (36 Down) stands for (third word)
31. a test source is _____
32. insertion loss values at a long wavelength are _____ than those at a short wavelength
33. (40 Across) stands for (fourth word)
37. during insertion loss testing, the installer matches three characteristics of the test leads to those of the cable under test. One of these characteristics is _____
39. in the insertion loss test, the source simulates the _____
40. EF launch conditions come close to simulating the launch conditions of a _____ transmitter
42. singlemode transmitters have _____ _____ (first word)

Down

1. (40 Across) stands for (third word)
3. the _____ _____ calibrates the OTDR to create accurate attenuation rate measurements (first word)
6. on an OTDR trace, the slope of the (3 Down) line is the _____ _____ (first word)
9. the mandrel used to establish HOML conditions is sized to the diameters of the _____ and _____ (second word)
10. the OTDR trace shows three types of features. One is _____
11. a HOML launch conditions may, or may not, require a _____
13. a fiber end can create _____
14. during insertion loss testing, a _____ power meter is used
19. as the wavelength increases, the fiber _____ to (18 Across) (22 Across)
24. if the maximum distance setting on the OTDR is less than the length of the cable under test, the installer will _____ see the far end of the cable
25. a splice with a positive loss on an OTDR is known as a _____
26. singlemode transmitters have _____ _____ (second word)
27. in the insertion loss test, the meter simulates the _____
28. the mandrel used to establish HOML conditions is sized to the diameters of the _____ and _____ (first word)
29. the technical name for a (73 Across) is a _____ (13 Down)
30. wavelength is measured in units of _____
34. the loop on a singlemode test lead removes _____ in the _____ (second word)
35. a (16 Across) (10 Down) indicates _____ loss
36. an installer uses a _____ (acronym) to find locations of excessive power loss in a splice case or near the end of a cable
38. during an insertion loss test, the input power level is measured with _____ lead(s)
40. (36 Down) stands for (first word)
41. EF stands for (first word)
43. OTDR stands for (fourth word)
45. (36 Down) stands for (second word)
49. the _____ of the test source matches the same characteristic of the transmitter.

Across

44. a (13 Down) and (17 Across) create ____ zones
46. during insertion loss testing, the installer matches three characteristics of the test leads to those of the cable under test. One of these characteristics is _____
47. the OTDR trace shows three types of features. A third is _____
48. during an insertion loss test, the output power level is measured with _____ lead(s)
50. EF launch conditions are used to test fiber with a _____ micron core diameter at 850 nm
52. when performing a singlemode insertion loss test, the installer puts a _____ in the test lead connected to the source.
55. (40 Across) stands for (first word)
56. HOML stands for (third word)
57. HOML testing is performed on _____ fiber
59. the (52 Across) in the singlemode test lead removes _____ in the _____ (first word)
60. a properly installed connector pair with radius tips _____ creates a (15 Across)
62. the color of the light in (36 Down) is _____
64. the multimode test method indicated by input power measurement with one lead and output power measurement with two leads is known as _____ B.
65. (40 Across) stands for (fifth word)
66. HOML stands for (first word)
67. early multimode transmitters created light with _____
68. (40 Across) stands for (second word)
71. in the insertion loss test, the test leads simulate the _____ on the end of a backbone cable (first word)
73. a (13 Down) is also known as a _____
74. a (44 Across) zone is also known as a _____ zone
77. the _____ calibrates the OTDR to create accurate length measurements
78. the _____ enables identification of multiple loss locations in a single teste
80. OTDR stands for (third word)
83. OTDR stands for (first word)
84. on an OTDR trace, a singlemode mechanical splice _____ creates a (13 Down)
85. the slope of the (10 Down) is the _____ (second word)

Down

51. if the maximum distance setting on the OTDR is much longer than the length of the cable under test, the installer will experience _____ test time
53. HOML stands for (second word)
54. HOML stands for (fourth word)
58. a (40 Across) is used on _____ fibers
61. when measured in the opposite direction, (16 Across) always shows a _____
63. on an OTDR, power loss is in units of _____
69. the true loss of a splice is the _____ of the losses measured in both directions with an OTDR
70. a multimode mechanical splice _____ creates a (13 Down)
72. in the insertion loss test, the test leads simulate the _____ on the end of a backbone cable (second word)
75. a properly made fusion splice _____ creates a (13 Down)
76. the (4 Across) cable enables testing of the _____ end connector
79. OTDR stands for (second word)
81. on an OTDR trace, an connector with an 8° angle on the end face on the far end of the cable will have _____ (13 Down)
82. on an OTDR trace, an connector pair with 8° end faces will have _____ (13 Down)