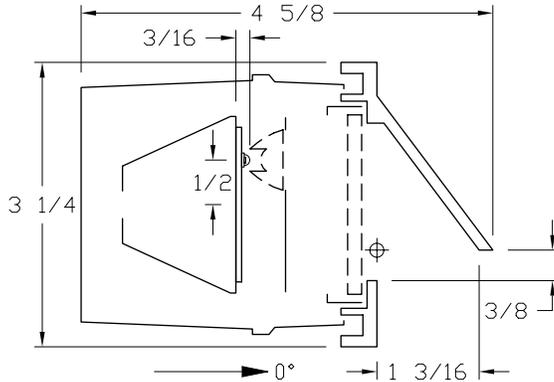
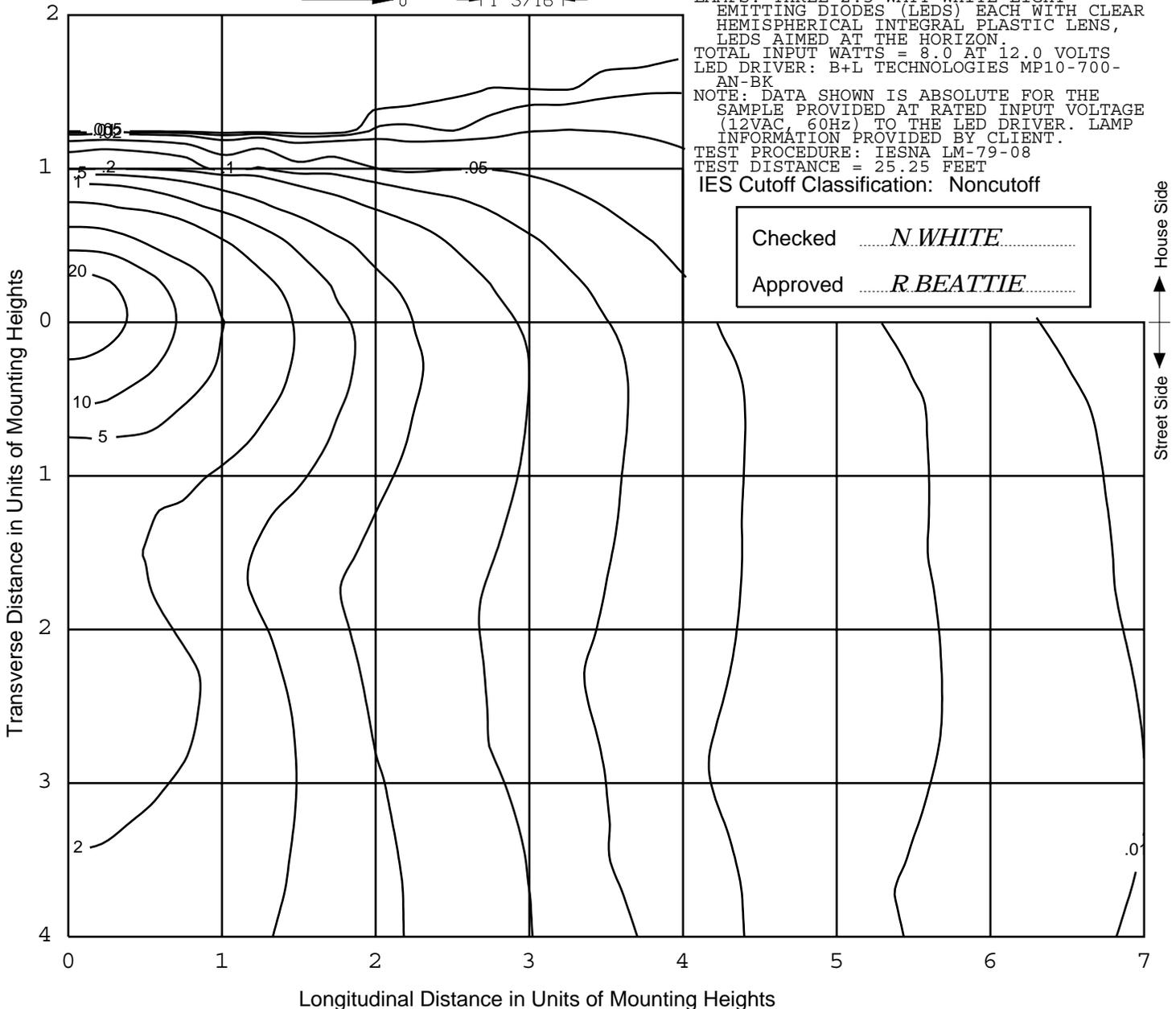
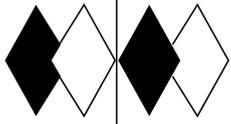


ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINATION
Values based on 1 foot mounting height.



REPORT NUMBER: ITL63773
DATE: 01/06/10
REVISED: 02/03/10
PREPARED FOR: B-K LIGHTING, INC.
CATALOG NUMBER: BO-LED-e23-0-DEGREES;
SQ-LED-e23-0-DEGREES; VB-LED-e23-0-DEGREES
LUMINAIRE: CAST METAL WALL MOUNTING HOUSING, ONE ADJUSTABLE OPTICAL ASSEMBLY CONSISTING OF: MACHINED DIFFUSE METAL HEAT SINK, ONE CIRCUIT BOARD WITH 3 LEDS, ONE CLEAR CONICAL PLASTIC OPTIC PER LED WITH FROSTED SURFACE OPPOSITE LED, MOLDED BLACK PLASTIC OPTIC MOUNTING FRAME. FABRICATED DIFFUSE METAL LED MODULE MOUNTING BRACKETS, CAST BLACK PAINTED METAL OPTIC ASSEMBLY MOUNTING COLLAR, CLEAR FLAT LINEAR PRISMATIC GLASS LENS, CAST WHITE PAINTED METAL FACEPLATE, LENS PRISMS OUT AND VERTICAL.
LAMPS: THREE 2.5-WATT WHITE LIGHT EMITTING DIODES (LEDS) EACH WITH CLEAR HEMISPHERICAL INTEGRAL PLASTIC LENS, LEDS AIMED AT THE HORIZON.
TOTAL INPUT WATTS = 8.0 AT 12.0 VOLTS
LED DRIVER: B+L TECHNOLOGIES MP10-700-AN-BK
NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED AT RATED INPUT VOLTAGE (12VAC, 60Hz) TO THE LED DRIVER. LAMP INFORMATION PROVIDED BY CLIENT.
TEST PROCEDURE: IESNA LM-79-08
TEST DISTANCE = 25.25 FEET
IES Cutoff Classification: Noncutoff





REPORT NUMBER: ITL63773
 DATE: 01/06/10
 REVISED: 02/03/10
 PREPARED FOR: B-K LIGHTING, INC.
 CATALOG NUMBER: BQ-LED-e23-0-DEGREES;
 SQ-LED-e23-0-DEGREES; VB-LED-e23-0-DEGREES

LUMINAIRE: CAST METAL WALL MOUNTING HOUSING, ONE ADJUSTABLE OPTICAL ASSEMBLY CONSISTING OF: MACHINED DIFFUSE METAL HEAT SINK, ONE CIRCUIT BOARD WITH 3 LEDs, ONE CLEAR CONICAL PLASTIC OPTIC PER LED WITH FROSTED SURFACE OPPOSITE LED, MOLDED BLACK PLASTIC OPTIC MOUNTING FRAME. FABRICATED DIFFUSE METAL LED MODULE MOUNTING BRACKETS, CAST BLACK PAINTED METAL OPTIC ASSEMBLY MOUNTING COLLAR, CLEAR FLAT LINEAR PRISMATIC GLASS LENS, CAST WHITE PAINTED METAL FACEPLATE, LENS PRISMS OUT AND VERTICAL.

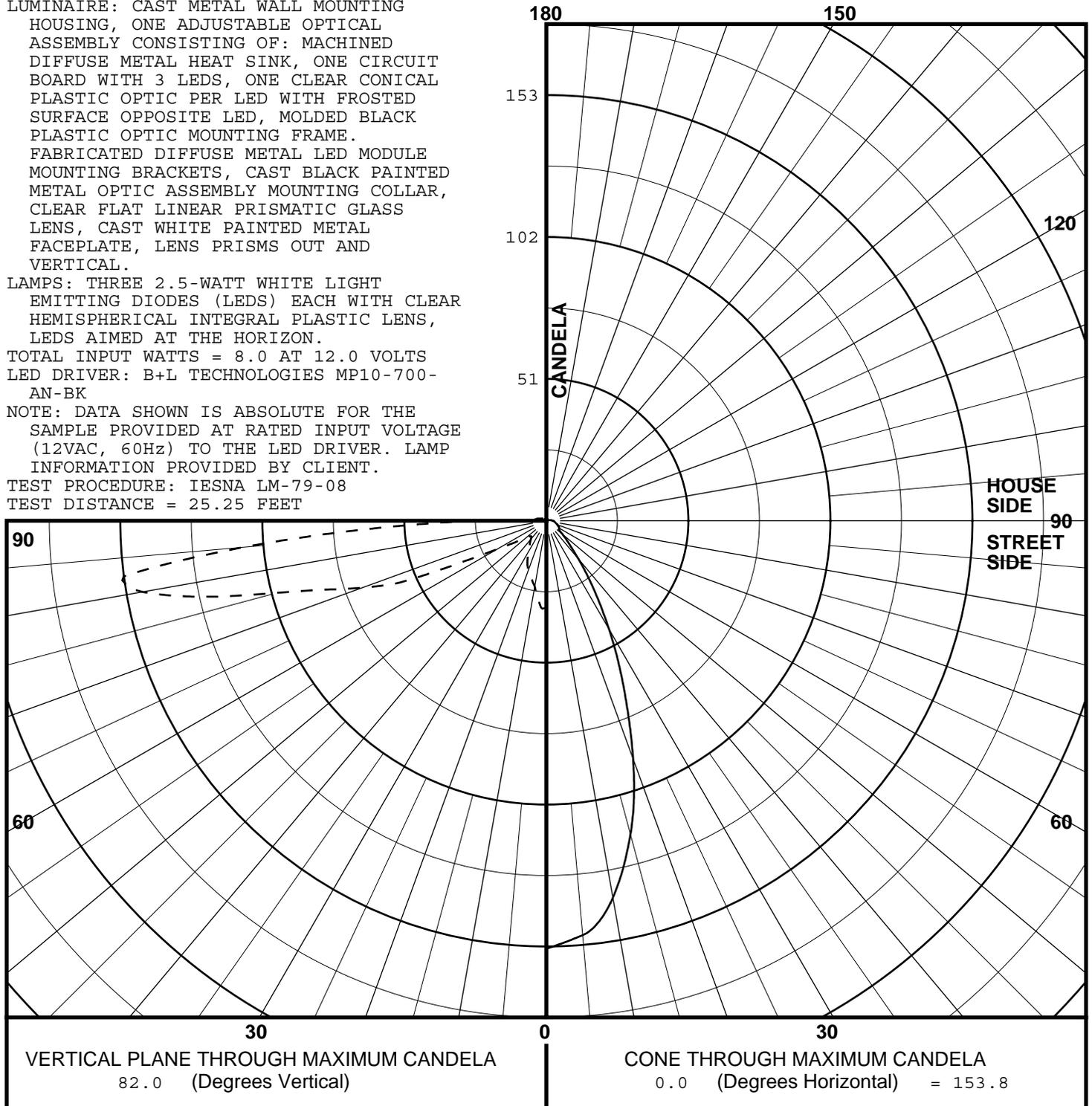
LAMPS: THREE 2.5-WATT WHITE LIGHT EMITTING DIODES (LEDs) EACH WITH CLEAR HEMISPHERICAL INTEGRAL PLASTIC LENS, LEDs AIMED AT THE HORIZON.

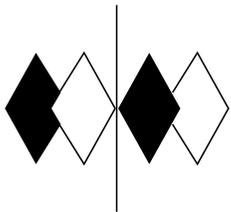
TOTAL INPUT WATTS = 8.0 AT 12.0 VOLTS
 LED DRIVER: B+L TECHNOLOGIES MP10-700-AN-BK

NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED AT RATED INPUT VOLTAGE (12VAC, 60Hz) TO THE LED DRIVER. LAMP INFORMATION PROVIDED BY CLIENT.

TEST PROCEDURE: IESNA LM-79-08
 TEST DISTANCE = 25.25 FEET

MAXIMUM PLANE AND MAXIMUM CONE PLOTS OF CANDELA

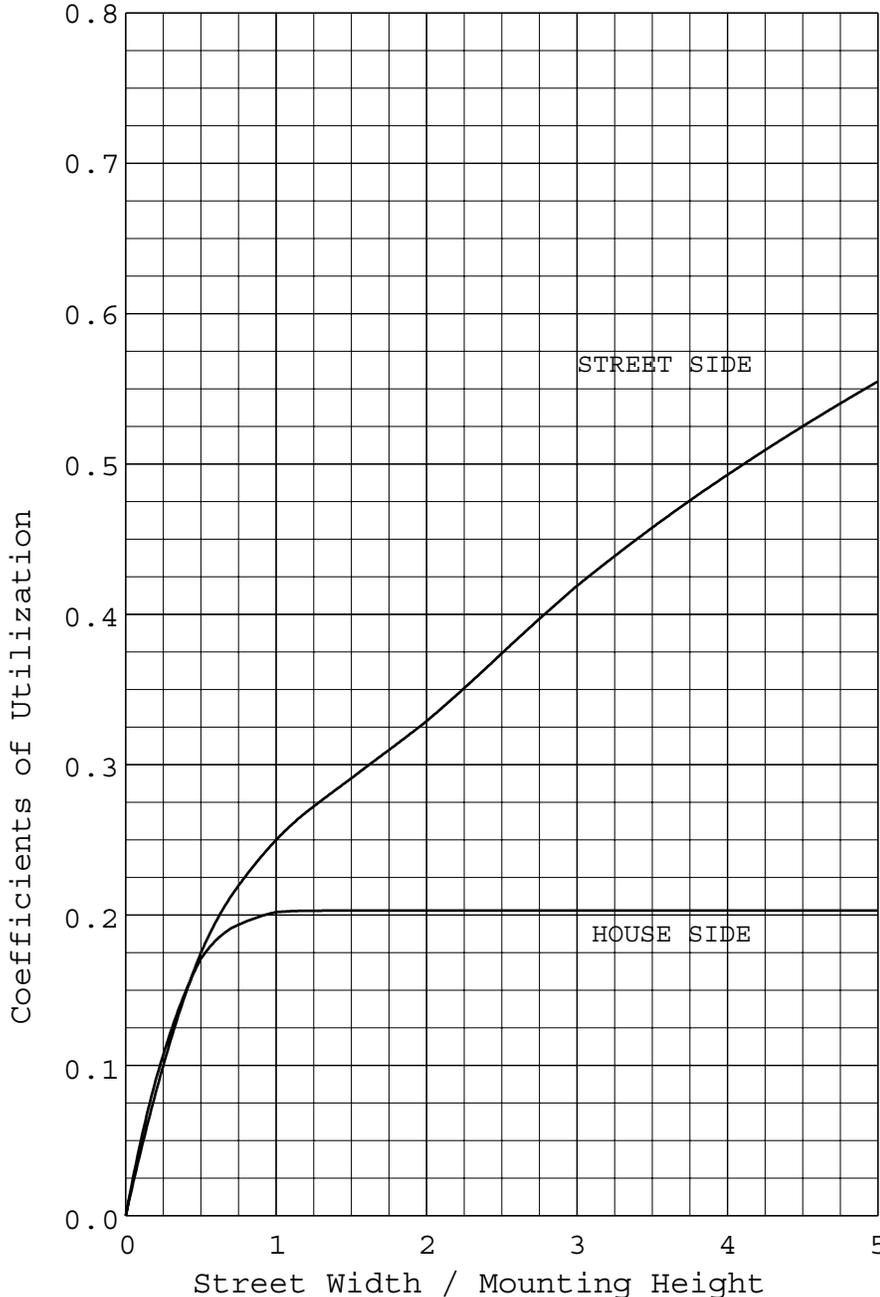




REPORT NUMBER: ITL63773
 DATE: 01/06/10
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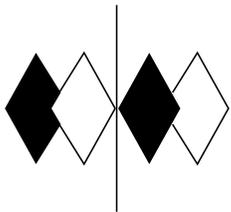
REVISED: 02/03/10

COEFFICIENTS OF UTILIZATION AND FLUX DISTRIBUTION



| | LUMENS | PERCENT OF FIXTURE |
|----------------------|--------|--------------------|
| DOWNWARD STREET SIDE | 65. | 75.4 |
| DOWNWARD HOUSE SIDE | 18. | 20.4 |
| DOWNWARD TOTAL | 83. | 95.7 |
| UPWARD STREET SIDE | 4. | 4.3 |
| UPWARD HOUSE SIDE | 0. | 0.0 |
| UPWARD TOTAL | 4. | 4.3 |
| TOTAL FLUX | 86. | 100.0 |
| EFFICACY = 10.8 Lm/W | | |

ALL CANDELA AND LUMENS IN THIS REPORT ARE BASED ON ABSOLUTE PHOTOMETRY. THE COEFFICIENT OF UTILIZATION VALUES ARE BASED ON THE TOTAL ABSOLUTE LUMEN OUTPUT OF THIS LUMINAIRE SAMPLE.



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THE LIGHT CENTER OF THE INDUSTRY SINCE 1955

INDEPENDENT TESTING LABORATORIES, INC.
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REPORT NUMBER: ITL63773

DATE: 01/06/10

PREPARED FOR: B-K LIGHTING, INC.

REVISED: 02/03/10

FLUX DISTRIBUTION BY SOLID ANGLE

(PER IESNA TM-15-07, LUMINAIRE CLASSIFICATION SYSTEM FOR OUTDOOR LUMINAIRES)

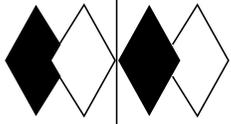
| | LUMENS | PERCENT OF FIXTURE |
|---------------|--------|--------------------|
| FORWARD LIGHT | 65. | 75.4 |
| FL (0- 30) | | 10.4 |
| FM (30- 60) | | 15.9 |
| FH (60- 80) | | 30.3 |
| FVH(80- 90) | | 18.8 |
| BACK LIGHT | 18. | 20.4 |
| BL (0- 30) | | 10.9 |
| BM (30- 60) | | 8.1 |
| BH (60- 80) | | 1.2 |
| BVH(80- 90) | | 0.1 |
| UPLIGHT | 4. | 4.3 |
| UL (90-100) | | 2.1 |
| UH (100-180) | | 2.2 |
| TRAPPED LIGHT | 0. | 0.0 |
| TOTAL FLUX | 86. | 100.0 |

BACKLIGHT, UPLIGHT, AND GLARE (BUG) RATINGS
 (PER ADDENDUM A FOR IESNA TM-15-07)

BUG RATING: B0 U1 G1

| | FIRST DETERMINING SECONDARY SOLID ANGLE* | LUMENS |
|----------------------|--|--------|
| BACKLIGHT RATING: B0 | BH | 1.0 |
| UPLIGHT RATING : U1 | UH | 0.9 |
| GLARE RATING : G1 | FVH | 16.2 |

* NOTE: OTHER DETERMINING SOLID ANGLES MAY FALL INTO THIS SAME CATEGORY. ONLY THE FIRST DETERMINING ANGLES FROM THE TABLES A1-A3 IN THE ADDENDUM ARE SHOWN.



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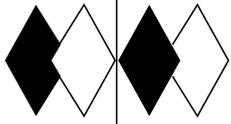
DATE: 01/06/10
 REVISED: 02/03/10

CANDELA TABULATION

| | STREET SIDE | | | | | | | | | | | |
|----------|-------------|------|------|------|------|------|------|------|------|------|------|-----|
| | 0.0 | 5.0 | 15.0 | 25.0 | 35.0 | 45.0 | 55.0 | 65.0 | 75.0 | 85.0 | 90.0 | |
| | | | | | | | | | | | | |
| 180.0 | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 175.0 | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 165.0 | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 155.0 | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 145.0 | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 135.0 | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 125.0 | 1. | 1. | 1. | 1. | 1. | 1. | 1. | 0. | 0. | 0. | 0. | 0. |
| 115.0 | 2. | 2. | 2. | 2. | 1. | 1. | 1. | 1. | 0. | 0. | 0. | 0. |
| 105.0 | 3. | 3. | 3. | 3. | 2. | 2. | 2. | 1. | 1. | 0. | 0. | 0. |
| 95.0 | 4. | 4. | 4. | 4. | 3. | 3. | 2. | 2. | 1. | 0. | 0. | 0. |
| 92.5 | 5. | 5. | 5. | 4. | 4. | 3. | 3. | 2. | 1. | 0. | 0. | 0. |
| 90.0 | 25. | 24. | 20. | 12. | 6. | 4. | 3. | 2. | 1. | 0. | 0. | 0. |
| 87.5 | 61. | 58. | 48. | 29. | 13. | 6. | 4. | 3. | 2. | 1. | 1. | 1. |
| 85.0 | 109. | 105. | 85. | 50. | 22. | 8. | 5. | 4. | 3. | 2. | 1. | 1. |
| V 82.5 | 153. | 150. | 118. | 67. | 29. | 11. | 6. | 5. | 4. | 3. | 2. | 2. |
| E 82.0<< | 154. | 150. | 117. | 66. | 29. | 11. | 6. | 5. | 4. | 3. | 2. | 2. |
| R 80.0 | 147. | 145. | 115. | 69. | 31. | 13. | 7. | 6. | 4. | 4. | 3. | 3. |
| T 77.5 | 126. | 125. | 100. | 62. | 29. | 13. | 7. | 6. | 5. | 5. | 4. | 4. |
| I 75.0 | 100. | 99. | 80. | 51. | 26. | 13. | 8. | 7. | 6. | 5. | 5. | 5. |
| C 72.5 | 82. | 80. | 66. | 43. | 21. | 11. | 8. | 7. | 7. | 6. | 5. | 5. |
| A 70.0 | 70. | 68. | 55. | 36. | 17. | 10. | 8. | 8. | 7. | 7. | 6. | 6. |
| L 67.5 | 59. | 58. | 45. | 28. | 15. | 10. | 8. | 8. | 8. | 8. | 7. | 7. |
| 65.0 | 41. | 40. | 31. | 20. | 12. | 9. | 9. | 9. | 9. | 9. | 8. | 8. |
| A 62.5 | 28. | 27. | 22. | 15. | 11. | 9. | 9. | 9. | 9. | 9. | 9. | 9. |
| N 60.0 | 21. | 20. | 17. | 13. | 10. | 9. | 9. | 10. | 10. | 10. | 9. | 9. |
| G 57.5 | 16. | 16. | 14. | 11. | 10. | 9. | 10. | 10. | 11. | 11. | 10. | 10. |
| L 55.0 | 13. | 13. | 11. | 10. | 10. | 9. | 10. | 11. | 11. | 12. | 11. | 11. |
| E 52.5 | 11. | 11. | 10. | 9. | 10. | 9. | 11. | 11. | 12. | 12. | 12. | 12. |
| 50.0 | 10. | 9. | 9. | 9. | 10. | 10. | 11. | 12. | 13. | 13. | 13. | 13. |
| 47.5 | 8. | 8. | 8. | 9. | 10. | 10. | 12. | 12. | 13. | 14. | 14. | 14. |
| 45.0 | 8. | 8. | 8. | 9. | 11. | 11. | 12. | 13. | 14. | 15. | 15. | 15. |
| 42.5 | 8. | 8. | 8. | 10. | 11. | 12. | 13. | 14. | 15. | 16. | 15. | 15. |
| 40.0 | 9. | 9. | 9. | 11. | 12. | 12. | 13. | 14. | 15. | 16. | 16. | 16. |
| 37.5 | 10. | 10. | 10. | 12. | 13. | 13. | 14. | 15. | 16. | 17. | 17. | 17. |
| 35.0 | 10. | 11. | 11. | 13. | 14. | 14. | 15. | 16. | 17. | 18. | 18. | 18. |
| 30.0 | 13. | 13. | 14. | 15. | 16. | 16. | 17. | 18. | 19. | 20. | 20. | 20. |
| 25.0 | 16. | 16. | 17. | 17. | 18. | 18. | 19. | 20. | 21. | 22. | 22. | 22. |
| 20.0 | 19. | 19. | 19. | 19. | 19. | 20. | 21. | 22. | 24. | 25. | 25. | 25. |
| 15.0 | 21. | 21. | 21. | 21. | 22. | 23. | 24. | 25. | 27. | 27. | 27. | 27. |
| 10.0 | 24. | 24. | 24. | 25. | 26. | 27. | 28. | 29. | 29. | 29. | 29. | 29. |
| 5.0 | 30. | 30. | 30. | 30. | 30. | 31. | 31. | 31. | 31. | 31. | 31. | 31. |
| 0.0 | 31. | 31. | 31. | 31. | 31. | 31. | 31. | 31. | 31. | 31. | 31. | 31. |

||
 PLANE OF MAXIMUM CANDELA

CONE OF MAXIMUM CANDELA



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REPORT NUMBER: ITL63773
 PREPARED FOR: B-K LIGHTING, INC.

DATE: 01/06/10
 REVISED: 02/03/10

CANDELA TABULATION

| | HOUSE SIDE | | LATERAL ANGLE | | | | | | | |
|----------|------------|-------|---------------|-------|-------|-------|-------|-------|-------|-------|
| | 95.0 | 105.0 | 115.0 | 125.0 | 135.0 | 145.0 | 155.0 | 165.0 | 175.0 | 180.0 |
| 180.0 | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 175.0 | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 165.0 | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 155.0 | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 145.0 | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 135.0 | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 125.0 | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 115.0 | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 105.0 | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 95.0 | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 92.5 | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 90.0 | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 87.5 | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 85.0 | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| V 82.5 | 2. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| E 82.0<< | 2. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| R 80.0 | 2. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| T 77.5 | 3. | 2. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| I 75.0 | 4. | 2. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| C 72.5 | 4. | 2. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| A 70.0 | 5. | 3. | 0. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| L 67.5 | 6. | 3. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| 65.0 | 7. | 4. | 1. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| A 62.5 | 8. | 5. | 2. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| N 60.0 | 8. | 6. | 3. | 0. | 0. | 0. | 0. | 0. | 0. | 0. |
| G 57.5 | 9. | 7. | 4. | 1. | 0. | 0. | 0. | 0. | 0. | 0. |
| L 55.0 | 10. | 8. | 5. | 2. | 0. | 0. | 0. | 0. | 0. | 0. |
| E 52.5 | 11. | 9. | 6. | 3. | 1. | 0. | 0. | 0. | 0. | 0. |
| 50.0 | 12. | 10. | 7. | 4. | 2. | 1. | 0. | 0. | 0. | 0. |
| 47.5 | 13. | 11. | 8. | 6. | 3. | 2. | 1. | 0. | 0. | 0. |
| 45.0 | 14. | 12. | 9. | 7. | 5. | 3. | 2. | 1. | 1. | 1. |
| 42.5 | 15. | 13. | 11. | 8. | 6. | 4. | 3. | 2. | 2. | 2. |
| 40.0 | 16. | 14. | 12. | 9. | 7. | 5. | 4. | 3. | 3. | 3. |
| 37.5 | 17. | 16. | 13. | 11. | 8. | 7. | 5. | 5. | 4. | 4. |
| 35.0 | 18. | 17. | 15. | 12. | 10. | 8. | 7. | 6. | 5. | 5. |
| 30.0 | 19. | 19. | 19. | 16. | 13. | 11. | 10. | 9. | 8. | 8. |
| 25.0 | 22. | 22. | 22. | 21. | 19. | 16. | 14. | 13. | 12. | 12. |
| 20.0 | 24. | 24. | 25. | 26. | 25. | 24. | 22. | 20. | 19. | 19. |
| 15.0 | 27. | 27. | 27. | 28. | 29. | 29. | 29. | 28. | 28. | 28. |
| 10.0 | 29. | 29. | 29. | 29. | 30. | 31. | 32. | 32. | 32. | 32. |
| 5.0 | 31. | 31. | 31. | 31. | 31. | 31. | 31. | 31. | 31. | 31. |
| 0.0 | 31. | 31. | 31. | 31. | 31. | 31. | 31. | 31. | 31. | 31. |

CONE OF MAXIMUM CANDELA