

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P226606

Luminaire Tested: **IST-AF-XXX-LED-E1-T4FT-7050-XXB**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P226606
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35943)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: IST-AF-XXX-LED-E1-T4FT-7050-XXB
Description: IMPACT ELITE LED TRAPEZOID LUMINAIRE, EMERGENCY MODE WITH BATTERY
BACKPACK BOX
LIGHT SQUARE WITH ACCULED OPTICS-TYPE IV FORWARD THROW
Light Source: (16) 5000K CCT, 70 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 673.1 lumens
Efficiency: N/A
Efficacy: 51.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B0 - U1 - G0

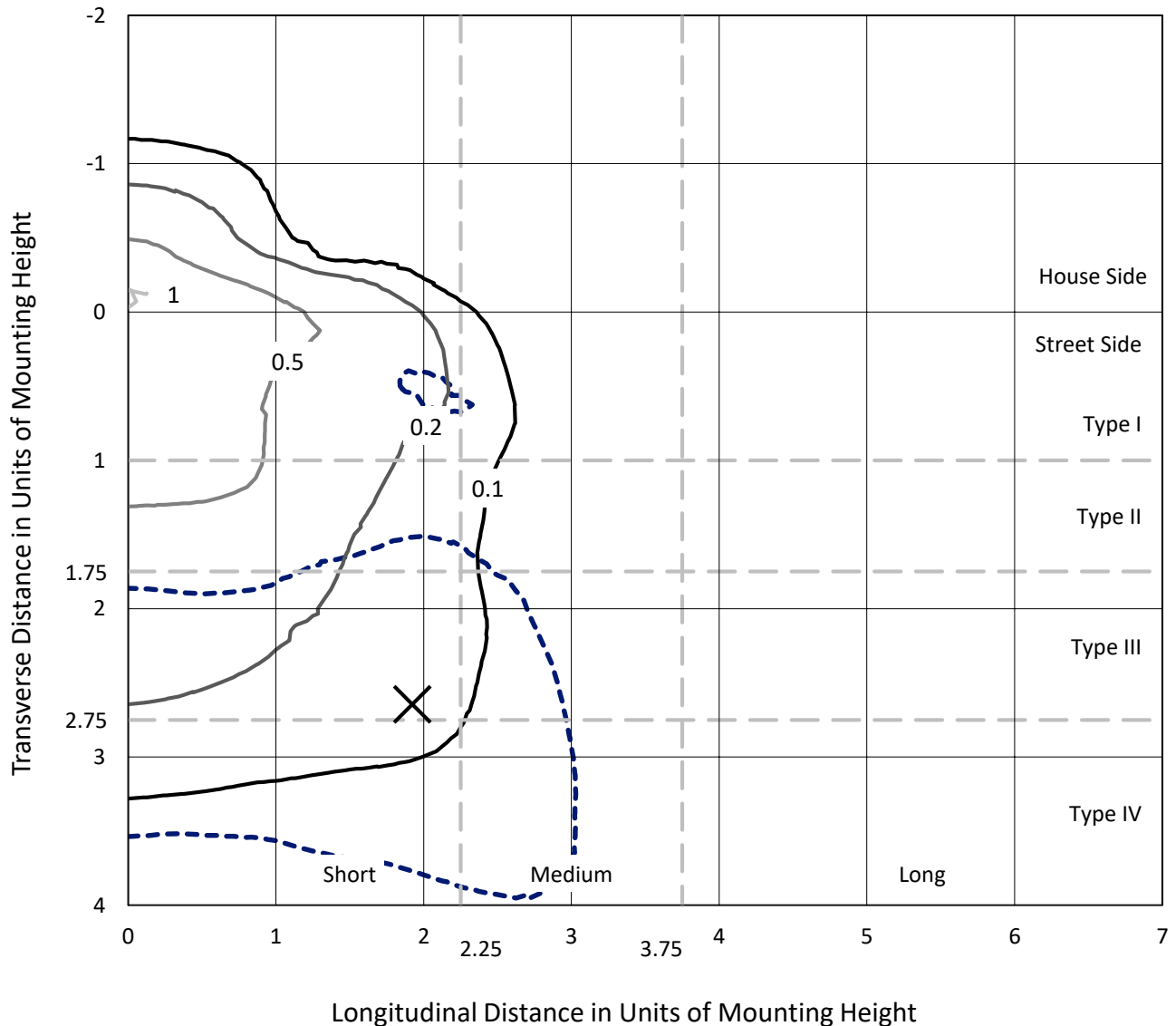
Input Watts (W): 13
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

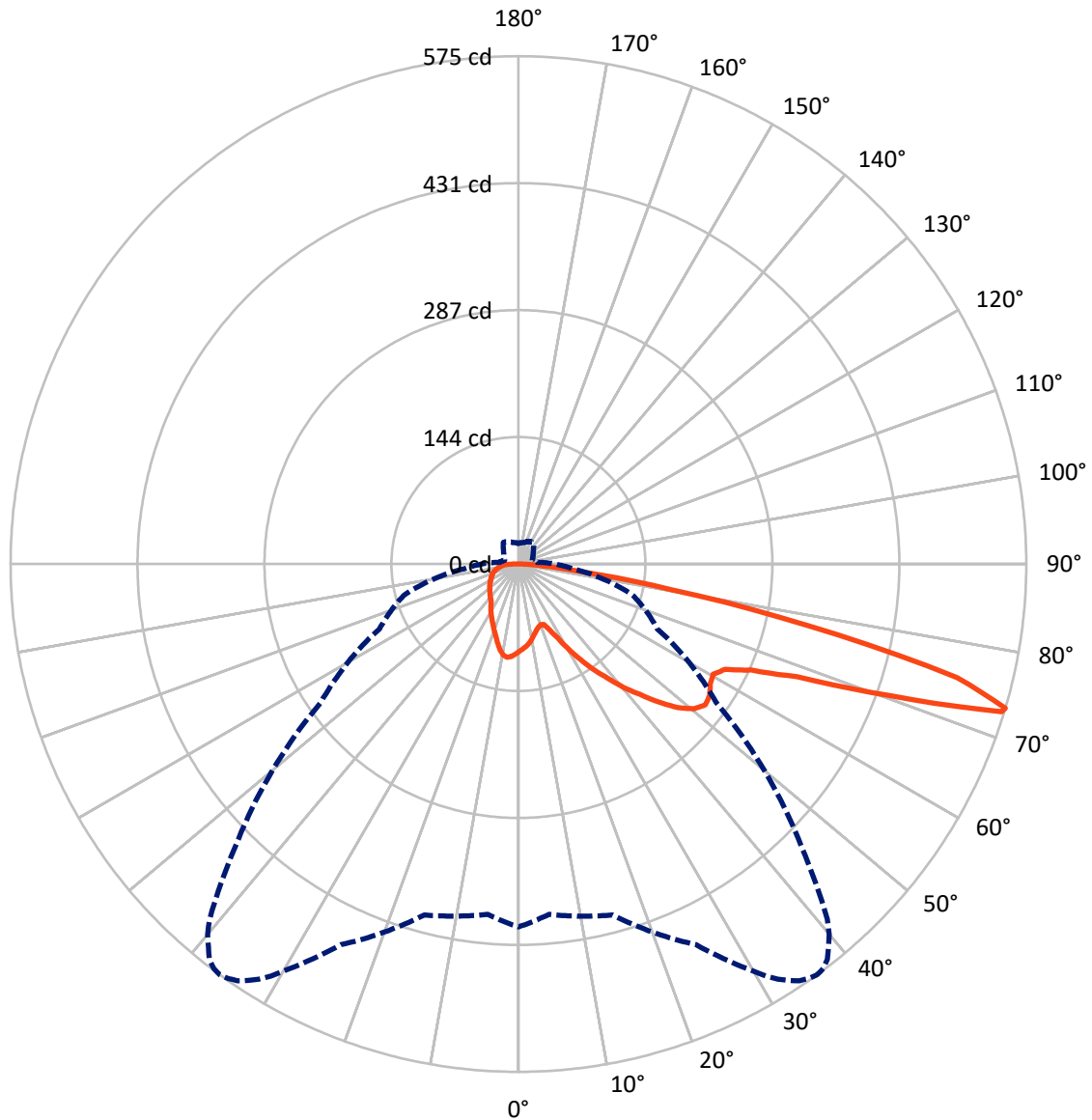
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 1 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 36-Deg Lateral - - - Horizontal Cone Through 73-Deg Vertical

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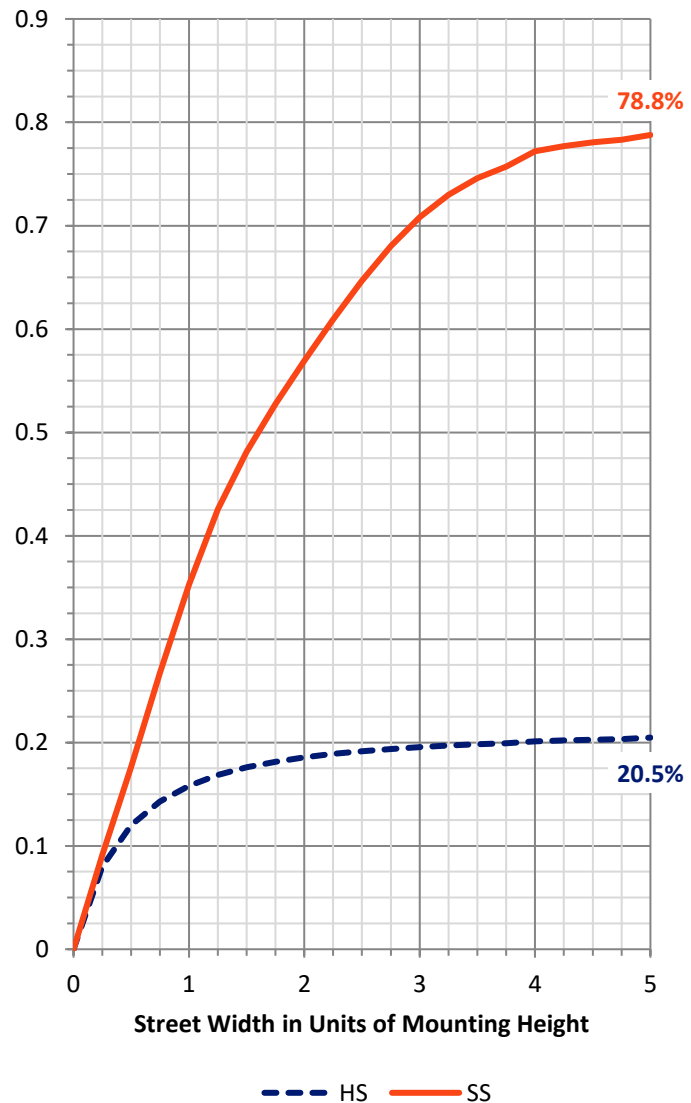
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|-------|
| House Side | Lumens | 141.9 | 0.2 | 142.1 |
| | % Fixture | 21.1 | 0.0 | 21.1 |
| Street Side | Lumens | 531.0 | 0.1 | 531.0 |
| | % Fixture | 78.9 | 0.0 | 78.9 |
| Total | Lumens | 672.9 | 0.2 | 673.1 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 9.3 | 1.4 |
| 10°-20° | 24.7 | 3.7 |
| 20°-30° | 40.4 | 6.0 |
| 30°-40° | 67.0 | 9.9 |
| 40°-50° | 98.4 | 14.6 |
| 50°-60° | 124.1 | 18.4 |
| 60°-70° | 162.5 | 24.1 |
| 70°-80° | 131.5 | 19.5 |
| 80°-90° | 15.1 | 2.2 |
| 90°-100° | 0.2 | 0.0 |
| 100°-110° | 0.0 | 0.0 |
| 110°-120° | 0.0 | 0.0 |
| 120°-130° | 0.0 | 0.0 |
| 130°-140° | 0.0 | 0.0 |
| 140°-150° | 0.0 | 0.0 |
| 150°-160° | 0.0 | 0.0 |
| 160°-170° | 0.0 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-90° | 672.9 | 100.0 |
| 0°-180° | 673.1 | 100.0 |



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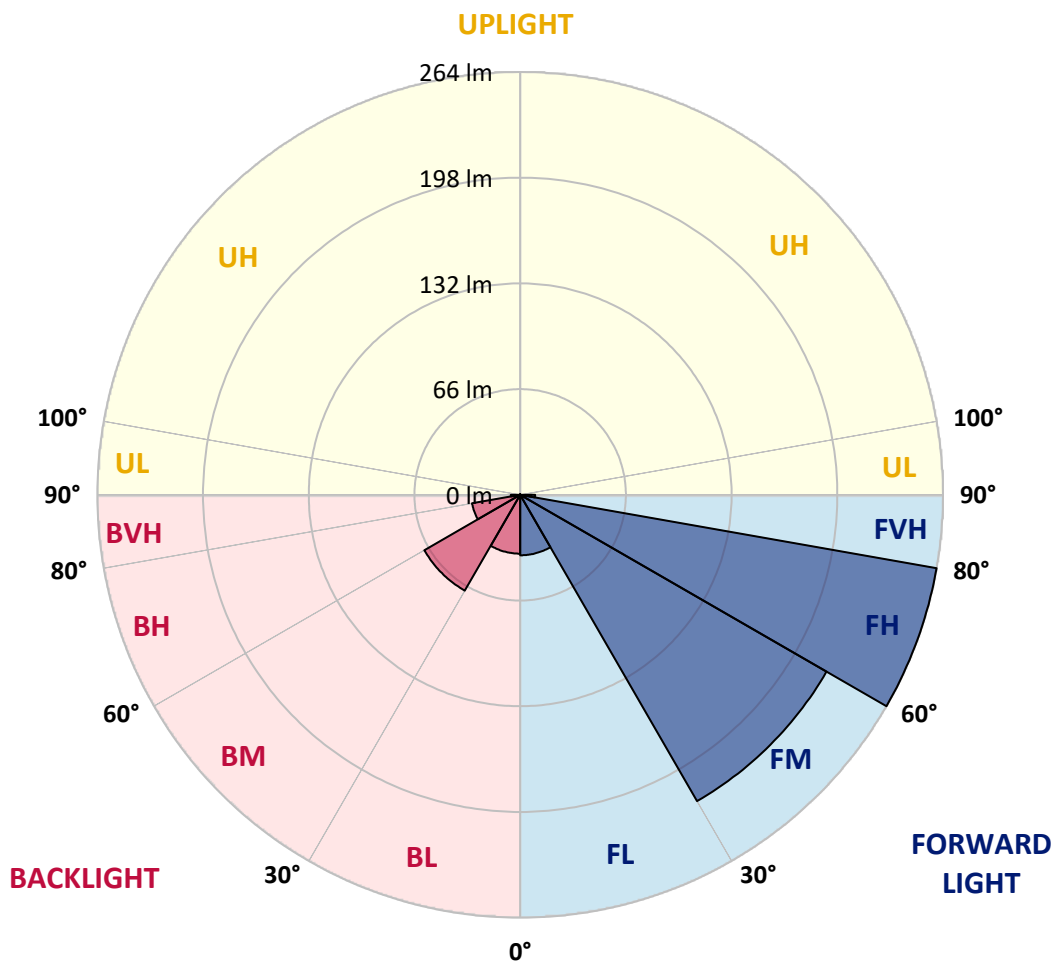
CATALOG NUMBER: IST-AF-XXX-LED-E1-T4FT-7050-XXB

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|-------|--------|
| | | | | B | U | G |
| FL | (0°-30°) | 37.7 | 5.6 | | | |
| FM | (30°-60°) | 220.4 | 32.7 | | | |
| FH | (60°-80°) | 263.5 | 39.2 | | | G0/660 |
| FVH | (80°-90°) | 9.3 | 1.4 | | | G0/10 |
| BL | (0°-30°) | 36.7 | 5.5 | B0/110 | | |
| BM | (30°-60°) | 69.0 | 10.2 | B0/220 | | |
| BH | (60°-80°) | 30.5 | 4.5 | B0/110 | | G0/110 |
| BVH | (80°-90°) | 5.8 | 0.9 | | | G0/10 |
| UL | (90°-100°) | 0.2 | 0.0 | | U1/10 | |
| UH | (100°-180°) | 0.2 | 0.0 | | U1/10 | |

BUG Rating: B0-U1-G0

Type IV Short





REPORT NUMBER: P226606

CATALOG NUMBER: IST-AF-XXX-LED-E1-T4FT-7050-XXB

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 30° | 31° | 32° | 33° | 34° | 35° | 36° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 98.9 | 98.9 | 98.9 | 98.9 | 98.9 | 98.9 | 98.9 | 98.9 | 98.9 | 98.9 | 98.9 |
| 2.5° | 95.3 | 95.5 | 95.7 | 95.7 | 95.7 | 96.0 | 95.9 | 95.9 | 96.0 | 96.1 | 96.1 |
| 5° | 91.7 | 91.8 | 92.4 | 92.6 | 93.2 | 93.1 | 93.1 | 93.1 | 93.5 | 93.2 | 93.4 |
| 7.5° | 87.7 | 87.9 | 88.4 | 89.1 | 89.6 | 89.7 | 89.6 | 89.4 | 89.9 | 90.1 | 89.9 |
| 10° | 82.8 | 82.9 | 83.7 | 84.3 | 85.1 | 85.0 | 85.3 | 85.3 | 85.4 | 85.4 | 85.7 |
| 12.5° | 80.4 | 80.2 | 79.9 | 80.1 | 80.3 | 80.3 | 80.3 | 80.6 | 80.5 | 80.7 | 81.0 |
| 15° | 80.1 | 79.7 | 77.7 | 77.1 | 76.9 | 76.9 | 76.8 | 76.7 | 77.0 | 77.3 | 77.3 |
| 17.5° | 81.5 | 80.5 | 76.8 | 74.8 | 74.5 | 74.3 | 74.4 | 74.2 | 74.2 | 74.5 | 74.5 |
| 20° | 88.1 | 86.3 | 78.8 | 74.5 | 73.4 | 73.4 | 73.3 | 73.0 | 73.0 | 73.1 | 73.1 |
| 22.5° | 104.7 | 102.5 | 89.4 | 80.6 | 76.6 | 76.5 | 76.2 | 75.9 | 75.1 | 74.9 | 74.5 |
| 25° | 128.0 | 125.4 | 102.9 | 93.5 | 87.8 | 87.6 | 86.1 | 85.9 | 84.1 | 84.2 | 82.9 |
| 27.5° | 146.0 | 144.3 | 120.9 | 108.4 | 103.0 | 101.8 | 101.2 | 99.4 | 97.9 | 96.6 | 95.1 |
| 30° | 152.2 | 151.9 | 139.2 | 129.0 | 120.9 | 119.6 | 117.8 | 117.0 | 114.8 | 113.0 | 112.0 |
| 32.5° | 161.9 | 162.2 | 156.9 | 145.7 | 138.7 | 137.3 | 135.8 | 134.0 | 132.4 | 131.3 | 128.8 |
| 35° | 175.8 | 175.9 | 172.2 | 163.9 | 155.8 | 153.9 | 153.1 | 150.9 | 149.5 | 148.0 | 146.8 |
| 37.5° | 185.5 | 185.9 | 183.3 | 176.9 | 172.1 | 169.4 | 169.4 | 167.8 | 166.2 | 164.9 | 163.8 |
| 40° | 204.0 | 201.4 | 192.8 | 188.6 | 184.7 | 184.4 | 183.5 | 182.7 | 183.0 | 182.4 | 183.6 |
| 42.5° | 222.7 | 219.4 | 207.4 | 201.6 | 199.2 | 199.6 | 199.3 | 199.4 | 200.6 | 200.3 | 201.7 |
| 45° | 238.7 | 234.9 | 223.6 | 216.6 | 218.5 | 219.1 | 220.8 | 221.7 | 221.2 | 223.0 | 223.0 |
| 47.5° | 254.7 | 245.9 | 232.4 | 235.6 | 237.0 | 241.4 | 242.6 | 242.3 | 243.9 | 244.7 | 242.6 |
| 50° | 243.4 | 241.1 | 240.0 | 249.8 | 255.9 | 257.3 | 258.9 | 259.8 | 260.6 | 259.5 | 257.4 |
| 52.5° | 219.6 | 219.4 | 234.4 | 258.2 | 263.3 | 265.2 | 266.8 | 267.4 | 267.1 | 266.6 | 264.8 |
| 55° | 211.6 | 210.1 | 223.0 | 249.5 | 257.3 | 259.1 | 261.4 | 262.7 | 264.1 | 263.9 | 262.5 |
| 57.5° | 222.5 | 221.2 | 221.3 | 241.9 | 249.5 | 251.1 | 252.6 | 254.1 | 254.5 | 255.8 | 255.9 |
| 60° | 254.1 | 252.5 | 239.3 | 241.6 | 249.3 | 251.1 | 251.3 | 252.2 | 252.3 | 253.0 | 253.1 |
| 62.5° | 299.7 | 296.8 | 276.6 | 259.2 | 261.9 | 262.8 | 263.5 | 263.3 | 262.9 | 262.4 | 262.4 |
| 65° | 349.7 | 346.9 | 321.0 | 300.7 | 292.9 | 295.0 | 291.6 | 291.0 | 290.2 | 290.2 | 289.3 |
| 67.5° | 409.1 | 403.8 | 383.7 | 361.0 | 349.7 | 350.8 | 352.3 | 346.4 | 344.3 | 344.5 | 340.0 |
| 70° | 469.7 | 464.1 | 455.3 | 455.0 | 460.7 | 458.2 | 451.1 | 460.5 | 449.3 | 446.6 | 445.7 |
| 72.5° | 436.2 | 429.6 | 431.4 | 485.9 | 537.0 | 545.3 | 553.2 | 560.5 | 567.1 | 571.0 | 571.6 |
| 73° | 410.6 | 397.9 | 411.0 | 475.1 | 531.8 | 544.0 | 553.9 | 561.7 | 568.7 | 572.3 | 574.5 |
| 75° | 205.0 | 205.7 | 270.3 | 391.9 | 464.8 | 475.3 | 490.6 | 499.2 | 511.9 | 518.5 | 512.7 |
| 77.5° | 47.5 | 49.3 | 81.9 | 186.0 | 278.6 | 293.7 | 305.9 | 318.5 | 333.2 | 338.7 | 333.9 |
| 80° | 16.8 | 17.6 | 28.8 | 70.7 | 116.3 | 124.6 | 135.1 | 148.9 | 162.6 | 166.0 | 174.5 |
| 82.5° | 8.9 | 9.7 | 15.2 | 30.7 | 49.7 | 54.3 | 57.0 | 62.7 | 67.5 | 70.4 | 71.9 |
| 85° | 5.1 | 5.2 | 8.7 | 17.0 | 22.8 | 24.6 | 26.3 | 27.7 | 29.2 | 28.2 | 28.2 |
| 87.5° | 2.0 | 2.2 | 4.4 | 8.0 | 11.0 | 12.2 | 12.2 | 12.2 | 12.2 | 10.7 | 9.7 |
| 90° | 0.4 | 0.6 | 0.9 | 1.6 | 1.4 | 1.4 | 1.4 | 1.2 | 1.1 | 1.2 | 0.7 |
| 92.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 95° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 97.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 100° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 102.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 105° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 107.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



REPORT NUMBER: P226606

CATALOG NUMBER: IST-AF-XXX-LED-E1-T4FT-7050-XXB

CANDELA DISTRIBUTION (continued):

| | 0° | 5° | 15° | 25° | 30° | 31° | 32° | 33° | 34° | 35° | 36° |
|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 110° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 112.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 115° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 117.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 120° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 122.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 125° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 127.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 130° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 132.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 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 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 137.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 140° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 142.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 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 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 147.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 150° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 152.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 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 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 157.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 160° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 162.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 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 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 167.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 170° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 172.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 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 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 177.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 180° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



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CATALOG NUMBER: IST-AF-XXX-LED-E1-T4FT-7050-XXB

CANDELA DISTRIBUTION (continued):

| | 37° | 38° | 39° | 40° | 41° | 45° | 55° | 65° | 75° | 85° | 90° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 98.9 | 98.9 | 98.9 | 98.9 | 98.9 | 98.9 | 98.9 | 98.9 | 98.9 | 98.9 | 98.9 |
| 2.5° | 96.2 | 96.3 | 96.2 | 96.5 | 96.2 | 96.2 | 96.7 | 97.6 | 98.3 | 98.5 | 99.0 |
| 5° | 93.5 | 93.6 | 93.6 | 93.7 | 93.6 | 93.8 | 94.7 | 95.5 | 96.8 | 97.5 | 98.4 |
| 7.5° | 90.1 | 90.4 | 90.3 | 90.5 | 90.5 | 90.7 | 92.0 | 93.3 | 94.6 | 95.9 | 96.9 |
| 10° | 85.9 | 86.1 | 86.5 | 86.3 | 86.3 | 86.9 | 88.3 | 90.2 | 91.8 | 93.6 | 94.9 |
| 12.5° | 81.0 | 81.5 | 81.4 | 81.8 | 82.0 | 82.4 | 84.8 | 86.8 | 88.8 | 90.9 | 92.6 |
| 15° | 77.2 | 77.4 | 77.6 | 77.7 | 77.7 | 78.6 | 81.0 | 83.5 | 86.2 | 88.7 | 90.5 |
| 17.5° | 74.6 | 74.6 | 74.8 | 74.9 | 75.1 | 75.7 | 78.2 | 81.0 | 84.1 | 87.2 | 89.1 |
| 20° | 73.2 | 73.2 | 73.3 | 73.4 | 73.4 | 74.1 | 76.4 | 79.6 | 82.9 | 86.9 | 89.2 |
| 22.5° | 74.4 | 74.1 | 74.0 | 74.0 | 73.6 | 73.6 | 75.8 | 79.2 | 83.4 | 88.5 | 91.5 |
| 25° | 82.3 | 81.4 | 80.0 | 79.8 | 79.3 | 77.0 | 76.7 | 80.5 | 85.7 | 92.1 | 96.6 |
| 27.5° | 94.1 | 93.3 | 92.4 | 91.3 | 90.6 | 86.3 | 80.5 | 84.0 | 90.2 | 99.2 | 104.8 |
| 30° | 109.7 | 107.9 | 106.7 | 105.5 | 102.1 | 97.5 | 88.5 | 89.4 | 97.0 | 109.2 | 116.2 |
| 32.5° | 127.0 | 125.2 | 123.3 | 120.6 | 119.7 | 112.2 | 100.7 | 98.4 | 105.7 | 120.7 | 128.1 |
| 35° | 143.8 | 142.9 | 141.6 | 140.5 | 138.5 | 132.2 | 116.5 | 109.2 | 115.7 | 134.3 | 140.0 |
| 37.5° | 163.3 | 161.6 | 161.7 | 160.9 | 159.7 | 154.4 | 132.9 | 122.2 | 126.5 | 147.4 | 150.9 |
| 40° | 182.5 | 182.1 | 182.7 | 181.2 | 179.3 | 172.1 | 145.0 | 131.7 | 137.8 | 159.9 | 159.0 |
| 42.5° | 200.6 | 200.9 | 200.2 | 198.6 | 196.5 | 184.5 | 152.7 | 139.8 | 147.9 | 170.9 | 165.5 |
| 45° | 221.3 | 220.3 | 217.5 | 214.6 | 212.0 | 195.1 | 156.8 | 148.9 | 157.7 | 182.8 | 172.1 |
| 47.5° | 240.9 | 236.8 | 234.4 | 229.9 | 224.8 | 204.7 | 162.4 | 158.5 | 168.5 | 193.9 | 178.3 |
| 50° | 255.3 | 251.4 | 247.4 | 242.0 | 236.6 | 213.1 | 169.8 | 169.3 | 180.7 | 206.5 | 186.9 |
| 52.5° | 261.8 | 258.3 | 254.3 | 248.8 | 243.4 | 219.2 | 179.8 | 179.8 | 195.2 | 223.1 | 198.8 |
| 55° | 260.8 | 258.2 | 254.7 | 249.7 | 245.5 | 222.5 | 190.0 | 191.3 | 213.3 | 241.0 | 212.5 |
| 57.5° | 255.2 | 253.7 | 251.7 | 248.2 | 244.9 | 225.0 | 202.0 | 202.9 | 237.6 | 258.3 | 225.4 |
| 60° | 253.3 | 252.7 | 251.5 | 249.5 | 246.9 | 230.5 | 214.9 | 216.8 | 264.8 | 274.1 | 232.7 |
| 62.5° | 261.8 | 260.7 | 259.8 | 257.8 | 255.4 | 244.0 | 231.0 | 231.6 | 290.4 | 276.0 | 225.6 |
| 65° | 286.0 | 283.8 | 282.4 | 279.7 | 277.0 | 264.3 | 251.5 | 245.3 | 302.9 | 258.0 | 201.4 |
| 67.5° | 336.5 | 333.0 | 328.9 | 323.8 | 316.3 | 304.9 | 271.9 | 247.2 | 291.5 | 218.5 | 158.8 |
| 70° | 436.4 | 428.9 | 419.3 | 408.4 | 405.6 | 372.5 | 284.6 | 232.9 | 242.4 | 152.7 | 105.3 |
| 72.5° | 570.6 | 562.8 | 554.3 | 545.4 | 527.6 | 454.7 | 279.0 | 187.9 | 150.7 | 78.5 | 50.1 |
| 73° | 572.9 | 567.6 | 557.3 | 546.9 | 532.5 | 453.3 | 272.9 | 173.2 | 132.9 | 61.8 | 41.1 |
| 75° | 513.7 | 511.6 | 501.6 | 481.5 | 469.3 | 382.9 | 201.0 | 100.4 | 58.2 | 38.2 | 26.7 |
| 77.5° | 333.4 | 331.1 | 325.4 | 323.5 | 300.9 | 248.2 | 90.0 | 39.1 | 31.6 | 25.4 | 18.9 |
| 80° | 177.6 | 166.8 | 164.9 | 157.2 | 140.7 | 95.6 | 30.8 | 23.9 | 21.0 | 17.0 | 13.2 |
| 82.5° | 72.0 | 67.4 | 65.7 | 59.5 | 55.9 | 28.6 | 15.4 | 16.6 | 14.1 | 10.0 | 8.1 |
| 85° | 26.5 | 24.4 | 23.8 | 19.4 | 17.1 | 8.5 | 9.5 | 11.7 | 8.8 | 5.6 | 4.1 |
| 87.5° | 9.2 | 7.9 | 6.8 | 5.3 | 4.9 | 3.5 | 5.2 | 6.4 | 5.6 | 3.4 | 1.9 |
| 90° | 0.7 | 0.6 | 0.5 | 0.4 | 0.5 | 0.4 | 0.6 | 0.9 | 1.0 | 0.6 | 0.4 |
| 92.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 95° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 97.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 100° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 102.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 105° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 107.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



REPORT NUMBER: P226606

CATALOG NUMBER: IST-AF-XXX-LED-E1-T4FT-7050-XXB

CANDELA DISTRIBUTION (continued):

| | 37° | 38° | 39° | 40° | 41° | 45° | 55° | 65° | 75° | 85° | 90° |
|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 110° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 112.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 115° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 117.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 120° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 122.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 125° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 127.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 130° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 132.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 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 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 137.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 140° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 142.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 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 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 147.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 150° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 152.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 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 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 157.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 160° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 162.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 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 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 167.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 170° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 172.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 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 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 177.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 180° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



REPORT NUMBER: P226606

CATALOG NUMBER: IST-AF-XXX-LED-E1-T4FT-7050-XXB

CANDELA DISTRIBUTION (continued):

| | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 98.9 | 98.9 | 98.9 | 98.9 | 98.9 | 98.9 | 98.9 | 98.9 | 98.9 | 98.9 |
| 2.5° | 99.2 | 99.6 | 100.4 | 101.0 | 101.5 | 102.1 | 102.3 | 102.7 | 102.2 | 102.8 |
| 5° | 98.9 | 100.0 | 101.5 | 102.8 | 104.1 | 105.1 | 105.6 | 105.7 | 105.8 | 106.2 |
| 7.5° | 97.9 | 99.6 | 101.9 | 103.8 | 105.7 | 106.4 | 106.7 | 106.8 | 106.1 | 106.4 |
| 10° | 96.0 | 98.8 | 101.6 | 103.9 | 104.8 | 104.4 | 103.6 | 102.3 | 101.7 | 101.7 |
| 12.5° | 93.8 | 97.4 | 100.8 | 102.0 | 101.2 | 99.3 | 97.2 | 94.9 | 94.0 | 94.0 |
| 15° | 92.1 | 96.6 | 99.4 | 98.6 | 96.1 | 92.6 | 89.7 | 87.3 | 86.5 | 86.2 |
| 17.5° | 91.1 | 96.2 | 97.3 | 94.6 | 90.4 | 86.0 | 83.1 | 81.1 | 80.4 | 80.4 |
| 20° | 91.9 | 96.6 | 94.9 | 89.9 | 84.6 | 80.6 | 78.1 | 76.8 | 76.1 | 76.4 |
| 22.5° | 95.2 | 98.1 | 92.8 | 85.3 | 78.8 | 75.4 | 74.3 | 73.4 | 73.3 | 73.5 |
| 25° | 100.7 | 100.0 | 90.9 | 80.4 | 73.4 | 71.0 | 70.9 | 70.6 | 70.5 | 70.4 |
| 27.5° | 107.8 | 102.4 | 88.7 | 75.0 | 68.0 | 66.8 | 67.4 | 67.3 | 67.2 | 67.3 |
| 30° | 117.3 | 104.5 | 85.4 | 69.1 | 62.9 | 62.9 | 63.7 | 63.5 | 63.1 | 63.2 |
| 32.5° | 126.0 | 106.1 | 80.4 | 62.6 | 58.8 | 59.0 | 59.3 | 58.5 | 57.6 | 57.8 |
| 35° | 133.6 | 106.1 | 73.7 | 56.7 | 54.7 | 54.7 | 54.9 | 54.2 | 53.4 | 53.1 |
| 37.5° | 139.8 | 104.0 | 65.2 | 52.3 | 51.3 | 51.3 | 52.1 | 51.4 | 50.0 | 49.7 |
| 40° | 143.6 | 99.3 | 57.4 | 49.0 | 49.7 | 49.8 | 48.7 | 47.5 | 46.2 | 45.9 |
| 42.5° | 146.0 | 92.6 | 51.2 | 46.7 | 48.6 | 47.8 | 45.3 | 43.5 | 43.4 | 43.8 |
| 45° | 148.1 | 85.0 | 46.3 | 44.4 | 47.4 | 45.8 | 42.4 | 40.7 | 41.3 | 41.7 |
| 47.5° | 150.3 | 77.3 | 42.3 | 41.8 | 45.3 | 44.2 | 40.6 | 38.7 | 38.4 | 39.0 |
| 50° | 155.3 | 66.7 | 37.8 | 38.7 | 42.7 | 42.3 | 39.0 | 36.7 | 34.9 | 34.8 |
| 52.5° | 162.0 | 52.6 | 33.9 | 36.0 | 40.7 | 41.3 | 37.1 | 35.0 | 32.5 | 32.1 |
| 55° | 169.5 | 40.3 | 30.8 | 33.9 | 38.8 | 39.7 | 36.5 | 33.3 | 30.6 | 30.2 |
| 57.5° | 171.8 | 31.8 | 27.8 | 30.9 | 36.2 | 38.3 | 35.4 | 31.2 | 29.2 | 28.8 |
| 60° | 164.1 | 26.4 | 25.3 | 28.4 | 33.6 | 36.8 | 33.8 | 29.7 | 27.9 | 27.6 |
| 62.5° | 140.9 | 23.3 | 23.9 | 26.7 | 31.6 | 35.5 | 32.5 | 28.5 | 27.1 | 26.9 |
| 65° | 107.5 | 21.2 | 22.8 | 25.4 | 29.9 | 34.2 | 31.6 | 28.1 | 26.9 | 26.7 |
| 67.5° | 67.5 | 19.7 | 21.6 | 23.9 | 28.2 | 32.9 | 31.0 | 27.5 | 26.6 | 26.3 |
| 70° | 37.4 | 18.0 | 20.1 | 22.3 | 26.4 | 31.6 | 30.1 | 26.6 | 26.5 | 25.9 |
| 72.5° | 22.8 | 16.3 | 18.4 | 20.5 | 24.5 | 30.1 | 28.5 | 25.6 | 24.6 | 23.4 |
| 73° | 21.7 | 16.1 | 18.0 | 20.2 | 24.0 | 29.7 | 28.3 | 25.2 | 24.2 | 23.0 |
| 75° | 17.6 | 14.5 | 16.5 | 18.3 | 22.3 | 28.2 | 26.6 | 23.8 | 22.3 | 21.4 |
| 77.5° | 12.9 | 12.3 | 14.3 | 16.0 | 20.1 | 26.0 | 24.3 | 21.8 | 20.0 | 19.5 |
| 80° | 9.5 | 10.2 | 12.1 | 13.6 | 17.6 | 23.9 | 21.9 | 19.5 | 18.3 | 17.7 |
| 82.5° | 6.5 | 7.9 | 9.6 | 10.9 | 15.6 | 21.6 | 19.4 | 17.1 | 17.8 | 14.9 |
| 85° | 3.8 | 5.5 | 6.9 | 8.5 | 12.5 | 19.3 | 16.9 | 14.6 | 12.7 | 11.5 |
| 87.5° | 2.5 | 3.1 | 4.2 | 5.8 | 9.1 | 15.1 | 13.4 | 11.4 | 8.3 | 8.3 |
| 90° | 0.3 | 0.4 | 0.6 | 0.7 | 1.3 | 6.5 | 4.4 | 5.3 | 1.0 | 0.9 |
| 92.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 95° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 97.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 100° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 102.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 105° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 107.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



REPORT NUMBER: P226606

CATALOG NUMBER: IST-AF-XXX-LED-E1-T4FT-7050-XXB

CANDELA DISTRIBUTION (continued):

| | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|--------|-----|------|------|------|------|------|------|------|------|------|
| 110° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 112.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 115° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 117.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 120° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 122.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 125° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 127.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 130° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 132.5° | 0.0 | 0.0 | 0.0 | 0.0 | 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 | 0.0 | 0.0 | 0.0 | 0.0 |
| 137.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 140° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 142.5° | 0.0 | 0.0 | 0.0 | 0.0 | 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 | 0.0 | 0.0 | 0.0 | 0.0 |
| 147.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 150° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 152.5° | 0.0 | 0.0 | 0.0 | 0.0 | 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 | 0.0 | 0.0 | 0.0 | 0.0 |
| 157.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 160° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 162.5° | 0.0 | 0.0 | 0.0 | 0.0 | 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 | 0.0 | 0.0 | 0.0 | 0.0 |
| 167.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 170° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 172.5° | 0.0 | 0.0 | 0.0 | 0.0 | 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 | 0.0 | 0.0 | 0.0 | 0.0 |
| 177.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 180° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)