

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: P227516

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P227516
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29767)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: IST-AF-XXX-LED-E1-RW-7050-XXB
Description: IMPACT ELITE LED TRAPEZOID LUMINAIRE, EMERGENCY MODE WITH BATTERY
BACKPACK BOX
LIGHT SQUARE WITH ACCULED OPTICS-RECTANGULAR WIDE TYPE I
Light Source: (16) 5000K CCT, 70 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 655.6 lumens
Efficiency: N/A
Efficacy: 50.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium - 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

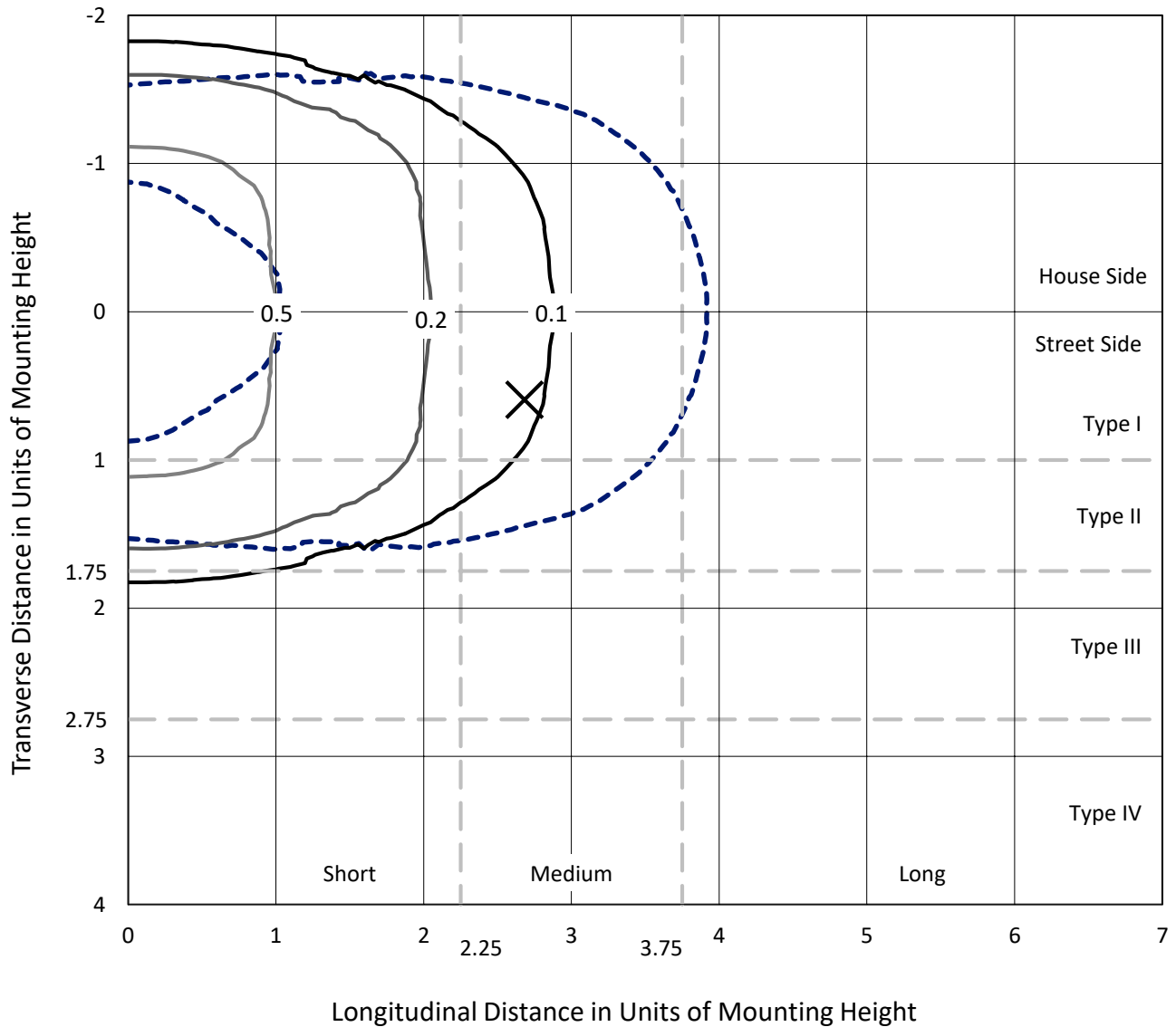


REPORT NUMBER: P227516

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

Iso-Footcandle Lines of Horizontal Illumination

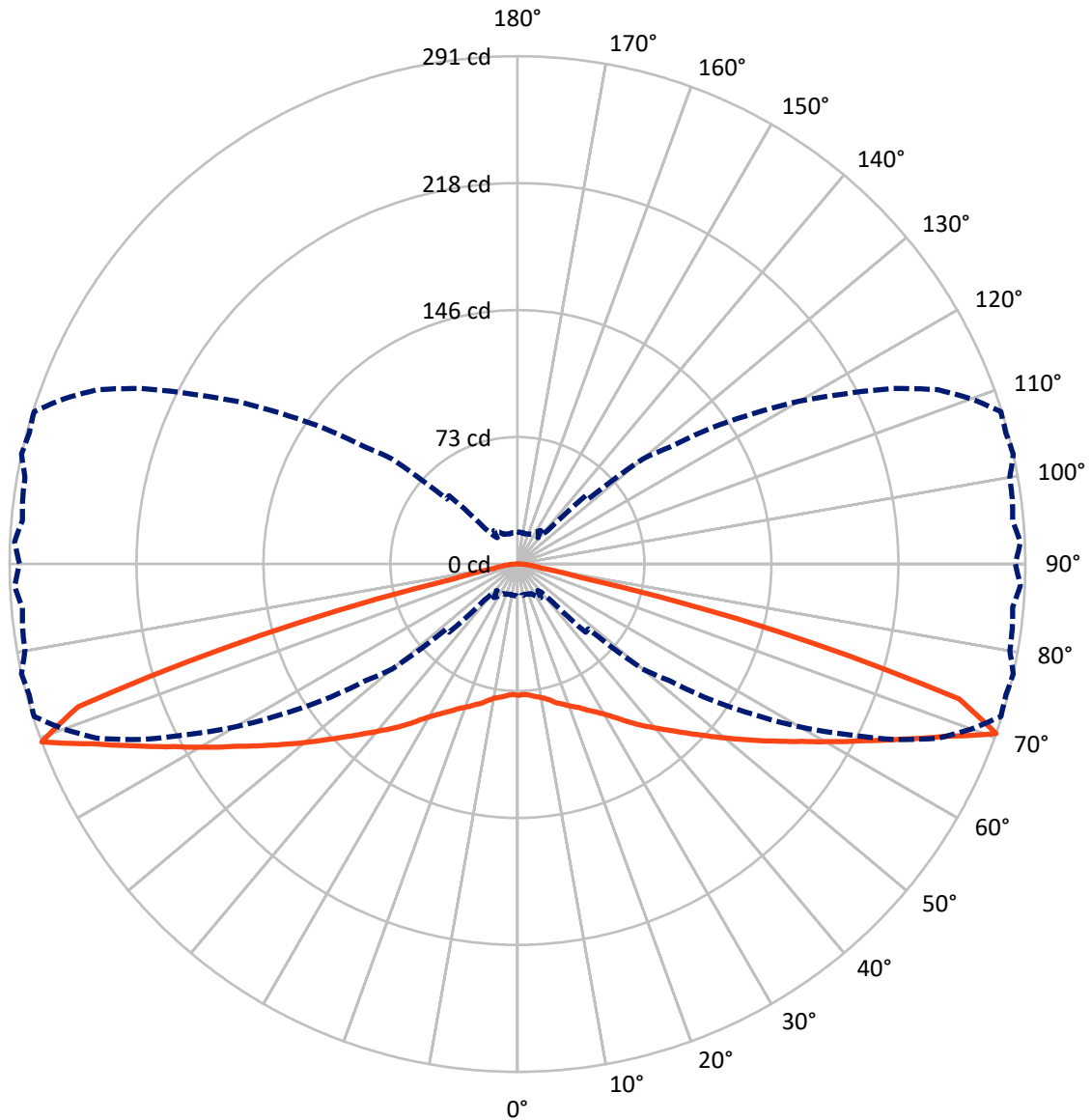
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 0.8 fc
 Type II - Medium - Cutoff

REPORT NUMBER: P227516
CATALOG NUMBER: IST-AF-XXX-LED-E1-RW-7050-XXB

Luminous Intensity Polar Plot



— Vertical Plane Through 77.5-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P227516

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

FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|-------|
| House Side | Lumens | 327.8 | 0.1 | 327.8 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 327.8 | 0.1 | 327.8 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 655.5 | 0.1 | 655.6 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 7.3 | 1.1 |
| 10°-20° | 22.8 | 3.5 |
| 20°-30° | 42.7 | 6.5 |
| 30°-40° | 74.7 | 11.4 |
| 40°-50° | 121.7 | 18.6 |
| 50°-60° | 166.6 | 25.4 |
| 60°-70° | 153.2 | 23.4 |
| 70°-80° | 59.9 | 9.1 |
| 80°-90° | 6.7 | 1.0 |
| 90°-100° | 0.1 | 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° | 655.5 | 100.0 |
| 0°-180° | 655.6 | 100.0 |



REPORT NUMBER: P227516

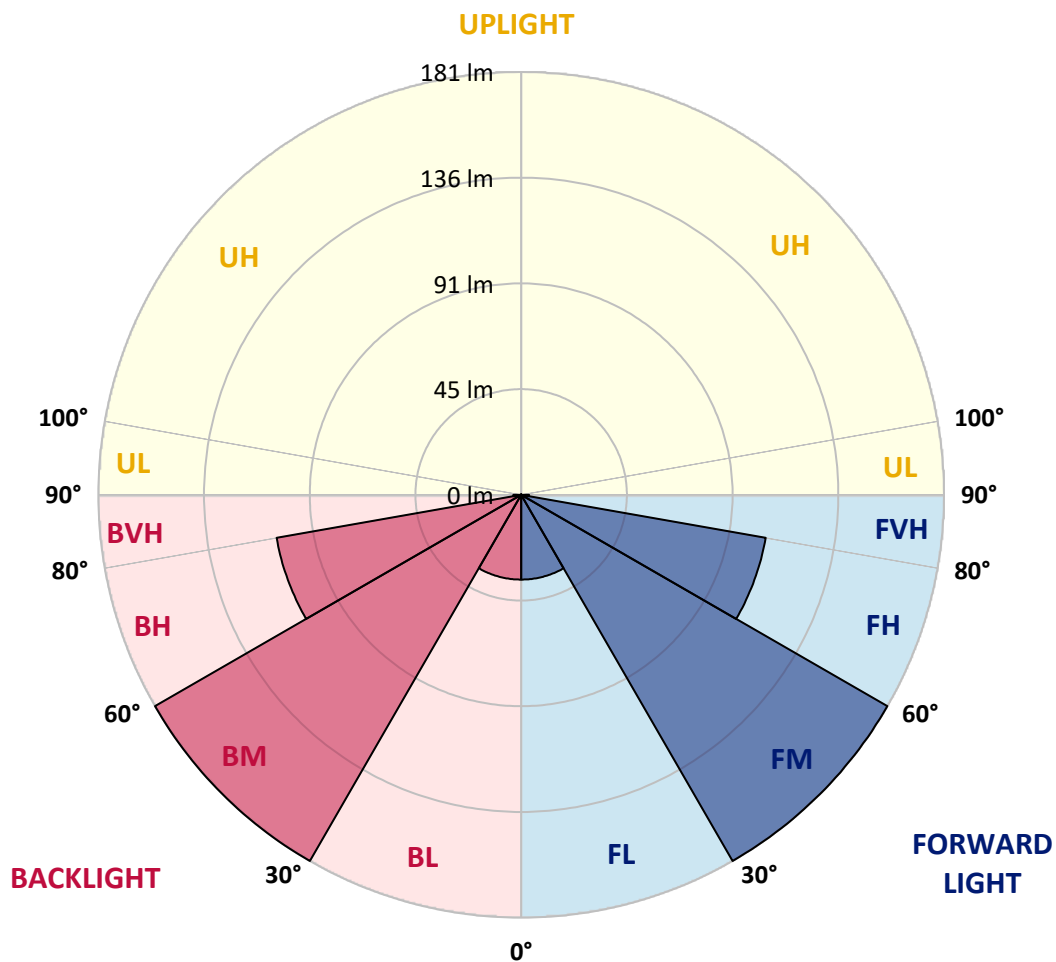
CATALOG NUMBER: IST-AF-XXX-LED-E1-RW-7050-XXB

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|-------|--------|
| | | | B | U | G |
| FL (0°-30°) | 36.4 | 5.5 | | | |
| FM (30°-60°) | 181.5 | 27.7 | | | |
| FH (60°-80°) | 106.6 | 16.3 | | | G0/660 |
| FVH (80°-90°) | 3.3 | 0.5 | | | G0/10 |
| BL (0°-30°) | 36.4 | 5.5 | B0/110 | | |
| BM (30°-60°) | 181.5 | 27.7 | B0/220 | | |
| BH (60°-80°) | 106.6 | 16.3 | B0/110 | | G0/110 |
| BVH (80°-90°) | 3.3 | 0.5 | | | G0/10 |
| UL (90°-100°) | 0.1 | 0.0 | | U1/10 | |
| UH (100°-180°) | 0.1 | 0.0 | | U1/10 | |

BUG Rating: B0-U1-G0

Type II Medium





REPORT NUMBER: P227516

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

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 37.5° | 40° | 42.5° | 45° | 47.5° | 50° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 75.3 | 75.3 | 75.3 | 75.3 | 75.3 | 75.3 | 75.3 | 75.3 | 75.3 | 75.3 | 75.3 |
| 2.5° | 75.0 | 74.9 | 74.9 | 75.0 | 75.2 | 75.3 | 75.1 | 75.2 | 75.2 | 75.1 | 75.4 |
| 5° | 75.2 | 75.1 | 75.2 | 75.4 | 75.7 | 76.0 | 75.9 | 75.9 | 76.0 | 75.8 | 76.3 |
| 7.5° | 75.0 | 74.9 | 75.1 | 75.6 | 76.3 | 76.7 | 76.7 | 76.7 | 76.9 | 76.8 | 77.3 |
| 10° | 74.2 | 74.1 | 74.5 | 75.4 | 76.7 | 77.0 | 77.2 | 77.3 | 77.9 | 77.9 | 78.5 |
| 12.5° | 73.4 | 73.5 | 74.2 | 75.5 | 77.5 | 77.6 | 78.0 | 78.4 | 79.2 | 78.8 | 79.8 |
| 15° | 73.7 | 73.9 | 74.7 | 76.4 | 79.1 | 79.0 | 79.3 | 79.7 | 80.9 | 80.0 | 81.8 |
| 17.5° | 75.1 | 75.4 | 76.4 | 78.3 | 81.1 | 80.6 | 81.0 | 81.6 | 83.2 | 82.2 | 84.2 |
| 20° | 77.4 | 77.8 | 78.9 | 81.0 | 83.6 | 83.1 | 83.5 | 84.2 | 86.1 | 85.1 | 87.1 |
| 22.5° | 80.5 | 80.9 | 82.1 | 84.5 | 87.3 | 86.7 | 87.1 | 87.7 | 89.8 | 88.1 | 90.7 |
| 25° | 84.7 | 85.1 | 86.3 | 88.8 | 92.0 | 91.3 | 91.5 | 91.9 | 94.1 | 92.2 | 94.6 |
| 27.5° | 90.5 | 90.8 | 91.9 | 94.3 | 97.4 | 96.8 | 97.0 | 97.4 | 99.7 | 97.8 | 99.9 |
| 30° | 97.8 | 98.2 | 99.1 | 101.5 | 104.2 | 103.5 | 103.8 | 104.1 | 106.2 | 104.2 | 106.0 |
| 32.5° | 106.5 | 106.4 | 107.8 | 110.3 | 112.6 | 111.4 | 111.4 | 111.4 | 113.4 | 111.5 | 112.8 |
| 35° | 116.7 | 116.7 | 118.1 | 120.5 | 122.7 | 121.2 | 120.5 | 120.2 | 122.4 | 120.0 | 120.9 |
| 37.5° | 127.9 | 127.4 | 129.6 | 131.8 | 133.9 | 132.0 | 131.4 | 131.0 | 132.6 | 129.9 | 130.4 |
| 40° | 139.7 | 139.4 | 141.8 | 144.3 | 145.6 | 143.2 | 142.7 | 142.1 | 143.9 | 141.3 | 141.2 |
| 42.5° | 150.5 | 150.2 | 153.3 | 156.2 | 157.9 | 154.8 | 154.1 | 153.5 | 155.5 | 152.9 | 152.3 |
| 45° | 159.7 | 159.6 | 163.2 | 167.1 | 170.0 | 166.7 | 166.3 | 165.3 | 167.2 | 164.0 | 163.7 |
| 47.5° | 166.8 | 166.4 | 170.8 | 176.6 | 181.2 | 177.8 | 177.7 | 177.1 | 179.1 | 175.6 | 175.2 |
| 50° | 171.7 | 171.9 | 176.7 | 183.4 | 190.9 | 187.8 | 188.1 | 187.8 | 190.8 | 187.3 | 187.8 |
| 52.5° | 172.5 | 173.1 | 179.2 | 188.1 | 198.6 | 194.7 | 196.9 | 197.8 | 201.6 | 198.6 | 199.5 |
| 55° | 162.2 | 163.8 | 173.1 | 188.5 | 203.3 | 200.9 | 203.7 | 206.2 | 211.5 | 209.0 | 210.7 |
| 57.5° | 139.2 | 142.5 | 153.2 | 175.6 | 202.7 | 204.1 | 209.7 | 213.6 | 220.1 | 217.8 | 221.9 |
| 60° | 107.5 | 109.8 | 121.7 | 147.8 | 184.2 | 186.0 | 196.3 | 208.6 | 223.4 | 226.5 | 232.9 |
| 62.5° | 70.4 | 71.7 | 83.3 | 109.8 | 152.3 | 152.9 | 165.7 | 181.6 | 207.3 | 214.1 | 231.9 |
| 65° | 34.9 | 36.7 | 42.9 | 63.3 | 106.7 | 105.9 | 120.0 | 138.6 | 171.9 | 179.4 | 208.4 |
| 67.5° | 21.8 | 22.1 | 23.3 | 29.3 | 53.4 | 47.4 | 59.0 | 78.5 | 118.9 | 125.6 | 162.4 |
| 70° | 18.3 | 18.2 | 17.9 | 18.8 | 23.5 | 19.1 | 21.1 | 27.6 | 55.4 | 55.1 | 93.6 |
| 72.5° | 16.9 | 16.6 | 15.8 | 15.7 | 16.4 | 15.0 | 15.2 | 15.6 | 22.2 | 18.6 | 36.1 |
| 75° | 15.5 | 14.9 | 14.0 | 13.7 | 13.7 | 12.6 | 12.6 | 12.7 | 14.4 | 13.5 | 16.4 |
| 77.5° | 13.9 | 13.2 | 12.2 | 11.9 | 11.5 | 10.3 | 10.2 | 10.3 | 11.6 | 10.8 | 12.2 |
| 80° | 12.0 | 11.3 | 10.6 | 10.0 | 9.5 | 8.4 | 8.1 | 8.1 | 9.2 | 8.4 | 9.5 |
| 82.5° | 10.4 | 9.5 | 9.4 | 8.4 | 7.5 | 6.6 | 6.3 | 5.8 | 6.8 | 5.9 | 7.1 |
| 85° | 7.7 | 7.0 | 8.9 | 7.4 | 6.0 | 5.3 | 4.2 | 3.6 | 4.2 | 3.5 | 4.5 |
| 87.5° | 4.4 | 4.1 | 7.8 | 5.9 | 5.3 | 5.7 | 3.5 | 2.5 | 2.4 | 2.1 | 2.5 |
| 90° | 0.9 | 1.0 | 1.3 | 0.9 | 1.2 | 0.6 | 0.3 | 0.3 | 0.6 | 0.4 | 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 |
| 110° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



REPORT NUMBER: P227516

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

CANDELA DISTRIBUTION (continued):

| | 0° | 5° | 15° | 25° | 35° | 37.5° | 40° | 42.5° | 45° | 47.5° | 50° |
|--------|-----|-----|-----|-----|-----|-------|-----|-------|-----|-------|-----|
| 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: P227516

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

CANDELA DISTRIBUTION (continued):

| | 52.5° | 55° | 57.5° | 60° | 62.5° | 65° | 67.5° | 70° | 72.5° | 75° | 77.5° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 75.3 | 75.3 | 75.3 | 75.3 | 75.3 | 75.3 | 75.3 | 75.3 | 75.3 | 75.3 | 75.3 |
| 2.5° | 75.1 | 75.4 | 75.0 | 75.4 | 74.7 | 75.3 | 74.8 | 75.4 | 74.9 | 75.4 | 74.8 |
| 5° | 75.6 | 76.4 | 75.5 | 76.6 | 75.3 | 76.6 | 75.5 | 76.7 | 75.7 | 76.7 | 75.6 |
| 7.5° | 76.4 | 77.7 | 76.6 | 77.9 | 76.4 | 78.1 | 76.7 | 78.3 | 76.9 | 78.4 | 76.8 |
| 10° | 77.3 | 79.1 | 77.5 | 79.3 | 77.4 | 79.5 | 77.6 | 79.8 | 77.8 | 79.9 | 77.9 |
| 12.5° | 78.2 | 80.4 | 78.7 | 81.0 | 79.0 | 81.4 | 79.3 | 82.0 | 79.7 | 82.5 | 79.8 |
| 15° | 79.8 | 82.7 | 80.5 | 83.3 | 81.0 | 83.8 | 81.5 | 84.6 | 82.0 | 85.2 | 82.5 |
| 17.5° | 82.0 | 85.2 | 82.8 | 85.6 | 83.1 | 86.2 | 83.7 | 86.8 | 84.2 | 87.5 | 84.5 |
| 20° | 84.9 | 88.0 | 85.6 | 88.3 | 85.9 | 88.7 | 86.2 | 89.0 | 86.8 | 89.6 | 87.0 |
| 22.5° | 88.1 | 91.1 | 88.5 | 91.2 | 88.5 | 91.1 | 88.7 | 91.2 | 89.0 | 91.6 | 89.3 |
| 25° | 92.1 | 94.9 | 92.3 | 94.6 | 91.9 | 94.2 | 91.9 | 94.2 | 92.2 | 94.4 | 92.7 |
| 27.5° | 97.6 | 99.7 | 97.0 | 99.0 | 96.1 | 98.2 | 95.8 | 97.8 | 95.9 | 97.8 | 96.1 |
| 30° | 103.8 | 105.7 | 102.6 | 104.2 | 101.1 | 102.6 | 100.0 | 101.7 | 99.7 | 101.5 | 100.2 |
| 32.5° | 110.5 | 112.1 | 109.0 | 110.3 | 107.0 | 108.4 | 105.6 | 106.8 | 105.0 | 106.2 | 105.3 |
| 35° | 118.0 | 119.6 | 116.4 | 117.7 | 114.4 | 115.5 | 112.7 | 113.3 | 111.6 | 112.3 | 111.6 |
| 37.5° | 127.0 | 128.4 | 124.7 | 125.8 | 122.3 | 123.7 | 120.4 | 120.9 | 118.8 | 119.3 | 117.7 |
| 40° | 136.7 | 138.1 | 133.8 | 134.9 | 130.5 | 132.1 | 128.4 | 128.7 | 125.8 | 126.3 | 123.9 |
| 42.5° | 147.1 | 148.4 | 143.0 | 144.0 | 138.8 | 140.5 | 136.1 | 136.8 | 133.4 | 133.9 | 130.8 |
| 45° | 158.5 | 159.3 | 153.3 | 154.0 | 147.7 | 149.5 | 143.9 | 145.3 | 141.2 | 142.1 | 138.6 |
| 47.5° | 169.2 | 170.8 | 164.2 | 164.8 | 158.1 | 159.1 | 152.7 | 154.6 | 150.2 | 151.6 | 147.3 |
| 50° | 181.5 | 182.7 | 176.4 | 176.5 | 169.9 | 170.3 | 163.1 | 165.0 | 160.2 | 161.7 | 157.1 |
| 52.5° | 194.0 | 194.8 | 188.1 | 188.7 | 182.3 | 182.9 | 175.7 | 176.5 | 170.9 | 172.2 | 167.7 |
| 55° | 206.2 | 206.4 | 200.8 | 200.6 | 194.5 | 195.8 | 187.8 | 189.5 | 182.8 | 184.3 | 179.2 |
| 57.5° | 218.3 | 219.0 | 213.8 | 214.0 | 207.9 | 208.8 | 201.6 | 202.8 | 196.5 | 198.3 | 191.9 |
| 60° | 231.2 | 233.3 | 228.2 | 228.8 | 223.1 | 224.8 | 216.0 | 217.7 | 210.8 | 213.6 | 206.8 |
| 62.5° | 239.4 | 247.3 | 246.3 | 247.4 | 241.9 | 242.7 | 233.7 | 236.3 | 228.1 | 230.1 | 223.1 |
| 65° | 223.7 | 243.1 | 253.0 | 263.8 | 264.0 | 266.8 | 258.1 | 259.0 | 250.8 | 250.3 | 242.1 |
| 67.5° | 182.4 | 206.3 | 222.9 | 245.0 | 260.6 | 275.5 | 280.9 | 282.3 | 277.8 | 273.1 | 263.8 |
| 70° | 110.0 | 136.2 | 160.6 | 186.7 | 211.2 | 238.1 | 261.0 | 276.8 | 290.6 | 289.9 | 291.2 |
| 72.5° | 43.5 | 65.2 | 81.5 | 106.0 | 130.3 | 160.1 | 185.4 | 207.6 | 231.4 | 245.9 | 264.8 |
| 75° | 17.2 | 22.7 | 26.5 | 40.2 | 51.8 | 74.0 | 96.2 | 108.3 | 126.9 | 139.6 | 152.8 |
| 77.5° | 12.3 | 13.5 | 13.7 | 15.9 | 16.8 | 23.2 | 27.2 | 31.3 | 35.3 | 37.8 | 37.3 |
| 80° | 9.5 | 10.3 | 10.3 | 11.3 | 11.2 | 12.4 | 12.2 | 13.3 | 13.2 | 14.2 | 13.5 |
| 82.5° | 7.1 | 7.6 | 7.6 | 8.4 | 8.4 | 9.2 | 9.0 | 9.7 | 9.5 | 10.1 | 9.5 |
| 85° | 4.6 | 5.1 | 5.1 | 5.5 | 5.3 | 6.1 | 6.0 | 6.6 | 6.3 | 6.6 | 6.1 |
| 87.5° | 2.6 | 2.9 | 3.0 | 3.3 | 3.0 | 3.6 | 3.5 | 3.8 | 3.5 | 3.8 | 3.6 |
| 90° | 0.4 | 0.6 | 0.4 | 0.6 | 0.3 | 0.9 | 0.5 | 1.0 | 0.3 | 1.2 | 0.5 |
| 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 |
| 110° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



REPORT NUMBER: P227516

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

CANDELA DISTRIBUTION (continued):

| | 52.5° | 55° | 57.5° | 60° | 62.5° | 65° | 67.5° | 70° | 72.5° | 75° | 77.5° |
|--------|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|
| 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: P227516

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

CANDELA DISTRIBUTION (continued):

| | 80° | 82.5° | 85° | 87.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 0° | 75.3 | 75.3 | 75.3 | 75.3 | 75.3 |
| 2.5° | 75.3 | 75.1 | 75.5 | 74.9 | 75.4 |
| 5° | 76.7 | 75.8 | 76.9 | 75.8 | 76.8 |
| 7.5° | 78.5 | 77.1 | 78.6 | 77.1 | 78.6 |
| 10° | 80.2 | 77.8 | 80.3 | 78.0 | 80.4 |
| 12.5° | 82.8 | 79.9 | 83.2 | 80.0 | 83.2 |
| 15° | 85.7 | 82.5 | 86.1 | 82.5 | 86.3 |
| 17.5° | 88.0 | 84.9 | 88.4 | 84.9 | 88.5 |
| 20° | 90.0 | 87.5 | 90.5 | 87.5 | 90.7 |
| 22.5° | 92.2 | 90.4 | 92.8 | 90.4 | 93.4 |
| 25° | 95.1 | 93.8 | 95.8 | 94.0 | 96.1 |
| 27.5° | 98.5 | 97.6 | 99.1 | 97.9 | 99.5 |
| 30° | 102.4 | 102.1 | 102.9 | 102.3 | 103.3 |
| 32.5° | 106.9 | 107.5 | 107.5 | 107.5 | 107.9 |
| 35° | 113.3 | 113.9 | 113.9 | 114.1 | 114.2 |
| 37.5° | 119.5 | 120.4 | 120.4 | 120.6 | 120.6 |
| 40° | 125.9 | 127.2 | 127.2 | 127.2 | 127.4 |
| 42.5° | 133.1 | 134.4 | 134.6 | 134.0 | 134.4 |
| 45° | 141.1 | 141.6 | 142.1 | 141.8 | 142.4 |
| 47.5° | 149.7 | 150.2 | 150.5 | 150.2 | 151.2 |
| 50° | 159.8 | 159.7 | 160.8 | 159.7 | 161.2 |
| 52.5° | 170.4 | 171.3 | 171.9 | 170.9 | 171.9 |
| 55° | 182.4 | 182.1 | 184.3 | 182.8 | 184.3 |
| 57.5° | 195.5 | 195.5 | 197.7 | 196.3 | 198.0 |
| 60° | 211.0 | 209.7 | 212.8 | 210.6 | 212.8 |
| 62.5° | 226.7 | 224.5 | 228.0 | 226.0 | 228.9 |
| 65° | 244.9 | 241.7 | 244.9 | 242.4 | 245.0 |
| 67.5° | 263.2 | 259.5 | 260.6 | 259.3 | 260.8 |
| 70° | 286.7 | 286.2 | 285.0 | 288.6 | 285.5 |
| 72.5° | 261.8 | 267.4 | 262.9 | 271.7 | 265.7 |
| 75° | 160.9 | 171.2 | 176.9 | 185.8 | 184.4 |
| 77.5° | 38.1 | 33.8 | 37.3 | 33.5 | 37.7 |
| 80° | 14.1 | 12.8 | 13.4 | 11.7 | 13.0 |
| 82.5° | 9.6 | 8.4 | 8.1 | 6.5 | 6.9 |
| 85° | 6.2 | 5.0 | 4.6 | 3.9 | 4.2 |
| 87.5° | 3.7 | 2.8 | 2.6 | 2.2 | 2.3 |
| 90° | 1.1 | 0.4 | 0.8 | 0.2 | 0.7 |
| 92.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 95° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 97.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 100° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 102.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 105° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 107.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 110° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



REPORT NUMBER: P227516

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

CANDELA DISTRIBUTION (continued):

| | 80° | 82.5° | 85° | 87.5° | 90° |
|--------|-----|-------|-----|-------|-----|
| 112.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 115° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 117.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 120° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 122.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 125° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 127.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 130° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 132.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 135° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 137.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 140° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 142.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 145° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 147.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 150° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 152.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 155° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 157.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 160° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 162.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 165° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 167.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 170° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 172.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 175° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 177.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 180° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)