

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: io LED

Report Number: P397270

Luminaire Tested: **4VRVT2-LD5-6-DR-W-UNV-LR63-CD1-WL-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P397270
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-355-19)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: 4VRVT2-LD5-6-DR-W-UNV-LR63-CD1-WL-U
Description:
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 948.9 lumens
Efficiency: N/A
Efficacy: 7.2 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.6 / 1.58
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 4.17' x H: 0.17')
CIE Type: Semi-Direct

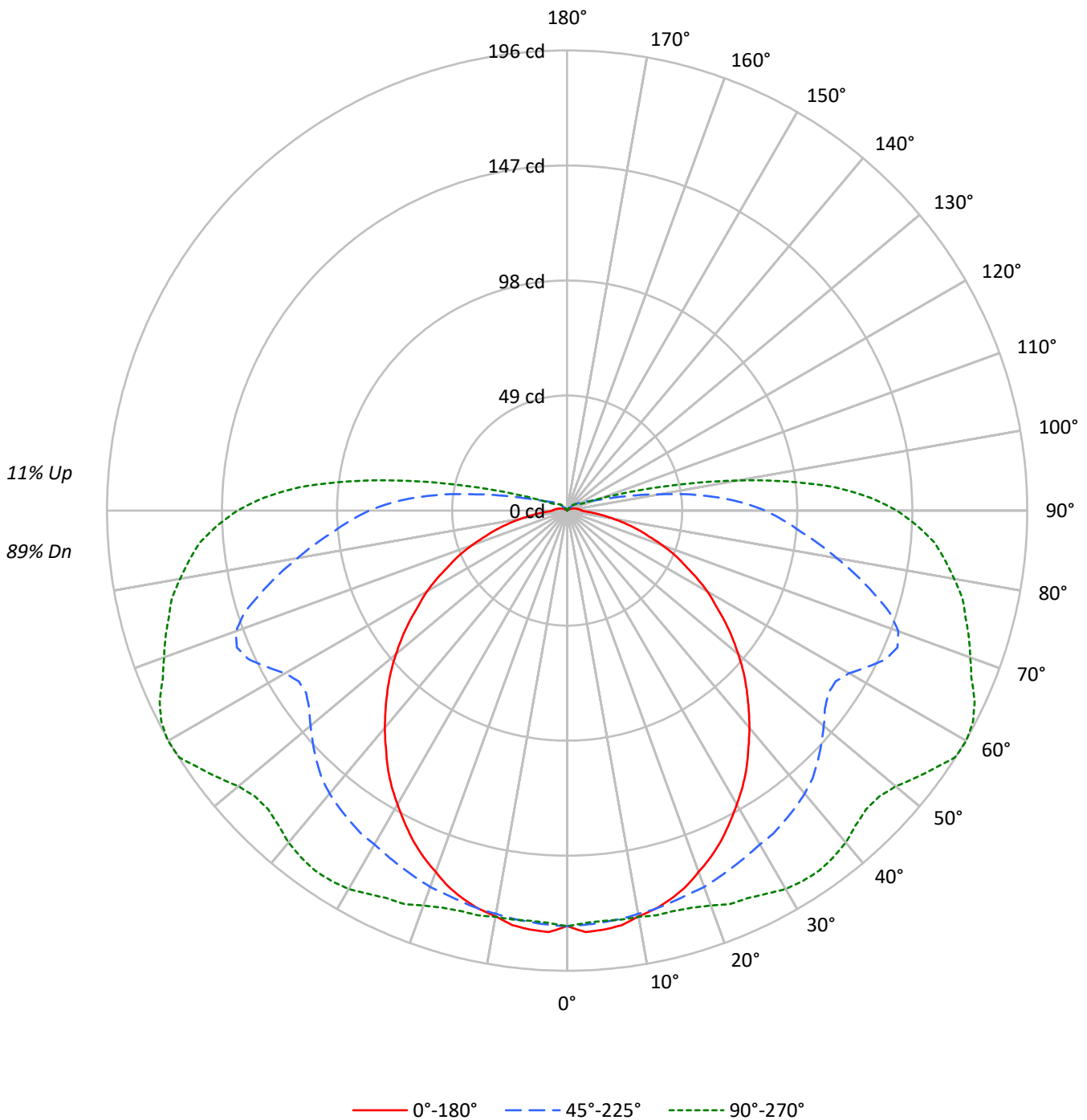
Input Watts (W): 131.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P397270

CATALOG NUMBER: 4VRVT2-LD5-6-DR-W-UNV-LR63-CD1-WL-U

Luminous Intensity Polar Plot





TEST NUMBER: P397270

CATALOG NUMBER: 4VRVT2-LD5-6-DR-W-UNV-LR63-CD1-WL-U

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|
| RF | 20 | | | | 20 | | | | 20 | | | | 20 | | | | 20 | |
| RC | 80 | | | | 70 | | | | 50 | | | | 30 | | | | 10 | 0 |
| RW | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 |
| RCR | | | | | | | | | | | | | | | | | | |
| 0 | 116 | 116 | 116 | 116 | 112 | 112 | 112 | 112 | 105 | 105 | 105 | 98 | 98 | 98 | 92 | 92 | 92 | 89 |
| 1 | 101 | 94 | 88 | 82 | 97 | 91 | 85 | 80 | 84 | 80 | 75 | 78 | 75 | 71 | 73 | 70 | 67 | 64 |
| 2 | 90 | 79 | 70 | 63 | 86 | 76 | 68 | 61 | 71 | 64 | 58 | 66 | 60 | 55 | 61 | 56 | 52 | 49 |
| 3 | 81 | 68 | 58 | 50 | 77 | 65 | 56 | 49 | 61 | 53 | 47 | 56 | 50 | 44 | 52 | 47 | 42 | 39 |
| 4 | 73 | 59 | 49 | 41 | 70 | 57 | 48 | 40 | 53 | 45 | 38 | 49 | 42 | 37 | 46 | 40 | 35 | 32 |
| 5 | 67 | 52 | 42 | 35 | 64 | 51 | 41 | 34 | 47 | 39 | 32 | 44 | 37 | 31 | 41 | 35 | 30 | 27 |
| 6 | 62 | 47 | 37 | 30 | 59 | 45 | 36 | 29 | 42 | 34 | 28 | 39 | 32 | 27 | 37 | 30 | 26 | 23 |
| 7 | 57 | 42 | 32 | 26 | 54 | 41 | 32 | 25 | 38 | 30 | 24 | 36 | 29 | 23 | 33 | 27 | 22 | 20 |
| 8 | 53 | 38 | 29 | 23 | 51 | 37 | 28 | 22 | 35 | 27 | 21 | 33 | 26 | 21 | 31 | 24 | 20 | 18 |
| 9 | 49 | 35 | 26 | 20 | 47 | 34 | 25 | 20 | 32 | 24 | 19 | 30 | 23 | 18 | 28 | 22 | 18 | 16 |
| 10 | 46 | 32 | 24 | 18 | 44 | 31 | 23 | 18 | 29 | 22 | 17 | 28 | 21 | 17 | 26 | 20 | 16 | 14 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-----|------|------|
| 0° | 915 | 915 | 915 |
| 5° | 926 | 892 | 884 |
| 10° | 914 | 874 | 871 |
| 15° | 906 | 862 | 867 |
| 20° | 888 | 856 | 878 |
| 25° | 869 | 850 | 898 |
| 30° | 843 | 850 | 931 |
| 35° | 818 | 859 | 957 |
| 40° | 788 | 869 | 973 |
| 45° | 760 | 872 | 986 |
| 50° | 730 | 873 | 1051 |
| 55° | 697 | 888 | 1167 |
| 60° | 668 | 983 | 1286 |
| 65° | 625 | 1169 | 1365 |
| 70° | 585 | 1314 | 1441 |
| 75° | 542 | 1357 | 1563 |
| 80° | 480 | 1389 | 1723 |
| 85° | 443 | 1467 | 1936 |



TEST NUMBER: P397270

CATALOG NUMBER: 4VRVT2-LD5-6-DR-W-UNV-LR63-CD1-WL-U

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 16.8 | 1.8 |
| 10°-20° | 49.1 | 5.2 |
| 20°-30° | 77.8 | 8.2 |
| 30°-40° | 100.8 | 10.6 |
| 40°-50° | 114.1 | 12.0 |
| 50°-60° | 123.9 | 13.1 |
| 60°-70° | 132.5 | 14.0 |
| 70°-80° | 126.1 | 13.3 |
| 80°-90° | 103.6 | 10.9 |
| 90°-100° | 68.2 | 7.2 |
| 100°-110° | 23.7 | 2.5 |
| 110°-120° | 7.0 | 0.7 |
| 120°-130° | 3.5 | 0.4 |
| 130°-140° | 1.5 | 0.2 |
| 140°-150° | 0.3 | 0.0 |
| 150°-160° | 0.0 | 0.0 |
| 160°-170° | 0.0 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-30° | 143.8 | 15.2 |
| 0°-40° | 244.6 | 25.8 |
| 0°-60° | 482.6 | 50.9 |
| 0°-90° | 844.9 | 89.0 |
| 90°-120° | 98.9 | 10.4 |
| 90°-150° | 104.1 | 11.0 |
| 90°-180° | 104.0 | 11.0 |
| 0°-180° | 948.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|-----|-------|-----|-------|-----|------|
| 0° | 177 | 177 | 177 | 177 | 177 | |
| 5° | 179 | 178 | 176 | 176 | 175 | 17 |
| 15° | 171 | 171 | 173 | 176 | 176 | 48 |
| 25° | 155 | 158 | 167 | 179 | 182 | 71 |
| 35° | 133 | 142 | 161 | 181 | 187 | 83 |
| 45° | 108 | 122 | 151 | 173 | 180 | 83 |
| 55° | 82 | 100 | 136 | 178 | 191 | 73 |
| 65° | 56 | 79 | 150 | 185 | 192 | 55 |
| 75° | 31 | 75 | 135 | 164 | 176 | 33 |
| 85° | 11 | 54 | 99 | 142 | 157 | 11 |
| 90° | 6 | 40 | 84 | 127 | 140 | 3 |
| 95° | 5 | 29 | 64 | 100 | 114 | 4 |
| 105° | 4 | 10 | 22 | 30 | 36 | 4 |
| 115° | 2 | 5 | 9 | 8 | 7 | 2 |
| 125° | 1 | 2 | 5 | 6 | 5 | 1 |
| 135° | 0 | 0 | 2 | 3 | 3 | 0 |
| 145° | 0 | 0 | 0 | 1 | 1 | 0 |
| 155° | 0 | 0 | 0 | 0 | 0 | 0 |
| 165° | 0 | 0 | 0 | 0 | 0 | 0 |
| 175° | 0 | 0 | 0 | 0 | 0 | 0 |
| 180° | 0 | 0 | 0 | 0 | 0 | 0 |



TEST NUMBER: P397270

CATALOG NUMBER: 4VRVT2-LD5-6-DR-W-UNV-LR63-CD1-WL-U

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 22.5° | 25° | 30° | 35° | 40° | 45° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 177.0 | 177.0 | 177.0 | 177.0 | 177.0 | 177.0 | 177.0 | 177.0 | 177.0 | 177.0 | 177.0 |
| 2.5° | 179.7 | 179.2 | 178.7 | 178.6 | 178.6 | 178.6 | 178.6 | 178.2 | 177.8 | 177.3 | 176.6 |
| 5° | 179.2 | 178.9 | 178.4 | 178.1 | 178.1 | 178.1 | 178.1 | 177.8 | 177.3 | 176.6 | 176.0 |
| 7.5° | 178.1 | 177.6 | 177.0 | 176.8 | 176.6 | 176.6 | 176.8 | 176.6 | 176.2 | 175.8 | 175.4 |
| 10° | 175.5 | 175.4 | 174.9 | 174.7 | 175.0 | 175.2 | 175.2 | 175.2 | 175.0 | 174.7 | 174.4 |
| 12.5° | 173.8 | 173.1 | 172.8 | 173.0 | 173.1 | 173.1 | 173.4 | 173.6 | 173.6 | 173.8 | 173.8 |
| 15° | 171.2 | 170.6 | 170.4 | 170.9 | 171.0 | 171.4 | 171.4 | 171.7 | 171.8 | 172.3 | 172.6 |
| 17.5° | 168.0 | 167.8 | 167.2 | 167.7 | 168.5 | 169.0 | 169.0 | 169.6 | 170.1 | 170.6 | 171.4 |
| 20° | 163.8 | 163.7 | 163.4 | 164.0 | 165.0 | 165.4 | 166.2 | 167.2 | 167.8 | 169.6 | 170.6 |
| 22.5° | 159.8 | 159.7 | 159.2 | 160.2 | 161.1 | 162.2 | 163.2 | 164.5 | 165.9 | 167.5 | 169.0 |
| 25° | 155.2 | 155.0 | 154.9 | 156.5 | 157.6 | 158.4 | 159.5 | 161.4 | 163.2 | 165.4 | 167.4 |
| 27.5° | 149.9 | 150.1 | 150.4 | 151.8 | 153.6 | 154.7 | 155.8 | 158.6 | 160.5 | 162.9 | 165.8 |
| 30° | 144.5 | 144.5 | 145.4 | 146.9 | 149.4 | 150.6 | 152.0 | 155.2 | 157.1 | 160.8 | 164.2 |
| 32.5° | 139.2 | 139.2 | 139.7 | 141.4 | 144.8 | 146.2 | 148.0 | 151.0 | 154.2 | 158.7 | 163.2 |
| 35° | 133.3 | 133.3 | 134.2 | 136.6 | 140.0 | 141.6 | 143.5 | 147.4 | 151.4 | 156.5 | 161.4 |
| 37.5° | 126.9 | 127.2 | 128.8 | 131.4 | 135.4 | 137.4 | 139.0 | 143.4 | 148.3 | 153.9 | 159.5 |
| 40° | 120.8 | 121.1 | 123.0 | 125.9 | 130.2 | 132.2 | 134.2 | 139.7 | 144.8 | 150.9 | 157.4 |
| 42.5° | 114.4 | 115.4 | 117.1 | 120.5 | 124.6 | 126.7 | 129.6 | 135.2 | 141.0 | 147.5 | 154.7 |
| 45° | 108.2 | 109.0 | 110.9 | 114.7 | 119.4 | 121.9 | 125.0 | 130.9 | 137.3 | 143.8 | 150.9 |
| 47.5° | 101.9 | 102.6 | 105.0 | 108.6 | 113.6 | 117.0 | 120.2 | 126.4 | 133.3 | 140.6 | 146.9 |
| 50° | 95.2 | 96.0 | 98.4 | 102.4 | 108.0 | 111.4 | 114.6 | 121.4 | 128.5 | 135.8 | 142.7 |
| 52.5° | 88.5 | 89.3 | 92.5 | 97.0 | 102.7 | 105.8 | 109.4 | 116.8 | 123.8 | 131.4 | 138.4 |
| 55° | 81.8 | 82.7 | 86.1 | 90.1 | 96.5 | 100.2 | 103.5 | 111.4 | 119.0 | 127.0 | 135.7 |
| 57.5° | 74.9 | 76.3 | 79.4 | 84.3 | 90.4 | 94.2 | 97.9 | 106.2 | 114.4 | 124.2 | 135.5 |
| 60° | 69.1 | 69.6 | 72.6 | 77.9 | 84.6 | 88.5 | 92.8 | 101.3 | 111.5 | 124.0 | 138.6 |
| 62.5° | 62.2 | 63.8 | 66.4 | 71.8 | 78.7 | 83.5 | 87.8 | 98.2 | 110.9 | 127.5 | 144.2 |
| 65° | 55.5 | 57.1 | 60.3 | 66.2 | 74.2 | 79.0 | 84.2 | 97.1 | 113.4 | 132.8 | 149.8 |
| 67.5° | 49.6 | 50.9 | 54.4 | 61.3 | 70.2 | 75.7 | 82.6 | 98.7 | 118.2 | 137.8 | 152.3 |
| 70° | 43.0 | 44.6 | 48.8 | 56.6 | 67.7 | 74.4 | 82.9 | 102.2 | 122.2 | 139.2 | 150.1 |
| 72.5° | 36.6 | 38.7 | 44.0 | 53.3 | 66.2 | 74.6 | 84.5 | 104.6 | 122.7 | 135.4 | 144.0 |
| 75° | 31.2 | 33.0 | 39.5 | 50.4 | 65.9 | 75.2 | 85.4 | 103.7 | 117.8 | 126.9 | 134.9 |
| 77.5° | 25.4 | 27.8 | 36.2 | 48.5 | 65.3 | 74.6 | 83.2 | 97.8 | 109.3 | 118.1 | 125.8 |
| 80° | 19.8 | 23.4 | 32.5 | 45.9 | 62.2 | 69.3 | 76.3 | 88.6 | 99.4 | 108.3 | 116.6 |
| 82.5° | 15.2 | 19.0 | 29.0 | 42.4 | 55.7 | 62.1 | 68.3 | 79.4 | 89.0 | 99.0 | 108.0 |
| 85° | 10.9 | 15.2 | 25.3 | 37.0 | 48.3 | 54.4 | 59.4 | 69.8 | 79.0 | 89.4 | 99.4 |
| 87.5° | 7.5 | 12.0 | 20.8 | 31.2 | 41.6 | 46.4 | 51.4 | 61.3 | 71.0 | 81.6 | 92.0 |
| 90° | 6.1 | 9.8 | 17.4 | 26.7 | 36.0 | 40.5 | 45.4 | 54.9 | 64.0 | 74.1 | 84.3 |
| 92.5° | 5.8 | 8.0 | 14.6 | 22.4 | 30.9 | 35.2 | 39.2 | 47.7 | 56.6 | 66.4 | 75.0 |
| 95° | 5.3 | 6.4 | 11.7 | 18.2 | 25.3 | 29.0 | 32.5 | 40.0 | 47.8 | 56.6 | 64.5 |
| 97.5° | 4.8 | 5.3 | 9.0 | 14.1 | 20.0 | 23.0 | 25.9 | 31.7 | 38.7 | 45.0 | 52.8 |
| 100° | 4.3 | 4.5 | 6.7 | 10.9 | 15.2 | 17.8 | 20.0 | 25.1 | 29.8 | 34.7 | 39.8 |
| 102.5° | 3.8 | 3.8 | 5.1 | 8.2 | 11.8 | 13.4 | 15.4 | 19.0 | 22.6 | 25.8 | 29.9 |
| 105° | 3.5 | 3.5 | 4.2 | 6.1 | 8.8 | 10.2 | 11.7 | 14.6 | 17.3 | 19.5 | 21.8 |
| 107.5° | 3.0 | 3.0 | 3.4 | 4.8 | 6.9 | 8.2 | 9.1 | 11.4 | 13.4 | 15.0 | 16.3 |
| 110° | 2.6 | 2.6 | 2.6 | 3.8 | 5.6 | 6.6 | 7.7 | 9.4 | 10.9 | 12.0 | 12.8 |



TEST NUMBER: P397270

CATALOG NUMBER: 4VRVT2-LD5-6-DR-W-UNV-LR63-CD1-WL-U

CANDELA DISTRIBUTION (continued):

| | 0° | 5° | 10° | 15° | 20° | 22.5° | 25° | 30° | 35° | 40° | 45° |
|--------|-----|-----|-----|-----|-----|-------|-----|-----|-----|-----|------|
| 112.5° | 2.1 | 2.1 | 2.1 | 3.2 | 4.6 | 5.4 | 6.4 | 7.8 | 9.1 | 9.9 | 10.6 |
| 115° | 1.8 | 1.8 | 1.6 | 2.4 | 3.8 | 4.6 | 5.4 | 6.7 | 7.8 | 8.6 | 9.1 |
| 117.5° | 1.4 | 1.4 | 1.3 | 1.8 | 3.0 | 3.8 | 4.5 | 5.8 | 6.9 | 7.7 | 8.0 |
| 120° | 1.1 | 1.1 | 1.0 | 1.1 | 2.4 | 3.0 | 3.8 | 5.0 | 5.9 | 6.7 | 7.2 |
| 122.5° | 0.8 | 0.8 | 0.8 | 0.8 | 1.6 | 2.2 | 2.9 | 4.0 | 5.1 | 5.9 | 6.4 |
| 125° | 0.6 | 0.6 | 0.6 | 0.5 | 1.1 | 1.6 | 2.2 | 3.4 | 4.2 | 5.0 | 5.4 |
| 127.5° | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 1.0 | 1.4 | 2.6 | 3.4 | 4.2 | 4.6 |
| 130° | 0.5 | 0.5 | 0.3 | 0.3 | 0.3 | 0.5 | 1.0 | 1.8 | 2.6 | 3.2 | 3.8 |
| 132.5° | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.5 | 1.1 | 1.9 | 2.6 | 3.0 |
| 135° | 0.3 | 0.3 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.6 | 1.3 | 1.8 | 2.2 |
| 137.5° | 0.2 | 0.2 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.2 | 0.6 | 1.1 | 1.6 |
| 140° | 0.2 | 0.2 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.6 | 1.0 |
| 142.5° | 0.2 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.3 |
| 145° | 0.2 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 147.5° | 0.2 | 0.2 | 0.2 | 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 |



TEST NUMBER: P397270

CATALOG NUMBER: 4VRVT2-LD5-6-DR-W-UNV-LR63-CD1-WL-U

CANDELA DISTRIBUTION (continued):

| | 50° | 55° | 60° | 65° | 67.5° | 70° | 75° | 80° | 85° | 90° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 177.0 | 177.0 | 177.0 | 177.0 | 177.0 | 177.0 | 177.0 | 177.0 | 177.0 | 177.0 |
| 2.5° | 176.5 | 176.6 | 176.8 | 176.8 | 176.6 | 176.6 | 176.3 | 176.3 | 176.0 | 175.8 |
| 5° | 175.8 | 176.2 | 176.3 | 176.3 | 176.2 | 176.2 | 176.0 | 175.8 | 175.5 | 175.4 |
| 7.5° | 175.4 | 175.8 | 176.2 | 176.2 | 176.2 | 176.2 | 176.0 | 176.0 | 175.8 | 175.7 |
| 10° | 174.7 | 175.2 | 175.7 | 176.3 | 176.5 | 176.5 | 176.3 | 176.2 | 175.8 | 175.7 |
| 12.5° | 174.1 | 174.7 | 175.4 | 176.0 | 176.2 | 176.3 | 176.6 | 176.6 | 176.5 | 176.5 |
| 15° | 173.4 | 174.6 | 175.5 | 176.3 | 176.5 | 177.0 | 177.1 | 177.3 | 177.0 | 176.5 |
| 17.5° | 172.8 | 174.2 | 175.0 | 176.3 | 176.6 | 177.0 | 177.3 | 177.4 | 177.4 | 177.3 |
| 20° | 172.2 | 173.9 | 175.4 | 176.6 | 177.0 | 177.4 | 178.1 | 178.6 | 179.0 | 179.0 |
| 22.5° | 171.2 | 173.4 | 175.0 | 177.0 | 178.1 | 178.6 | 179.8 | 180.5 | 180.8 | 181.4 |
| 25° | 169.9 | 172.3 | 175.5 | 177.8 | 178.6 | 179.5 | 181.4 | 182.4 | 182.4 | 182.1 |
| 27.5° | 169.3 | 173.0 | 176.2 | 178.4 | 179.5 | 180.6 | 182.4 | 183.8 | 184.3 | 184.0 |
| 30° | 168.5 | 172.5 | 176.2 | 179.0 | 180.3 | 181.8 | 183.5 | 185.8 | 186.1 | 186.1 |
| 32.5° | 167.5 | 171.8 | 176.2 | 179.4 | 181.0 | 182.2 | 184.3 | 186.4 | 187.2 | 187.0 |
| 35° | 166.6 | 171.4 | 175.5 | 179.0 | 180.8 | 182.4 | 184.8 | 186.4 | 187.0 | 187.2 |
| 37.5° | 165.1 | 170.2 | 174.4 | 178.2 | 180.2 | 181.6 | 184.2 | 185.3 | 186.2 | 186.2 |
| 40° | 163.0 | 168.3 | 173.0 | 176.6 | 178.1 | 179.5 | 181.9 | 183.2 | 184.0 | 184.6 |
| 42.5° | 160.6 | 165.8 | 170.2 | 173.4 | 175.4 | 176.5 | 179.2 | 180.5 | 181.8 | 181.9 |
| 45° | 157.0 | 162.6 | 166.9 | 170.9 | 172.6 | 173.8 | 176.8 | 178.9 | 180.0 | 180.0 |
| 47.5° | 153.1 | 158.4 | 163.5 | 168.5 | 170.6 | 172.5 | 176.0 | 178.6 | 179.8 | 180.3 |
| 50° | 148.8 | 155.4 | 161.4 | 167.8 | 170.6 | 173.0 | 177.1 | 180.0 | 181.6 | 182.7 |
| 52.5° | 146.1 | 154.6 | 162.1 | 169.6 | 172.6 | 175.8 | 181.1 | 184.2 | 186.4 | 187.0 |
| 55° | 145.8 | 156.0 | 165.3 | 174.2 | 177.8 | 180.8 | 186.4 | 189.8 | 191.5 | 191.2 |
| 57.5° | 148.2 | 160.6 | 171.5 | 179.7 | 183.5 | 186.4 | 191.5 | 194.6 | 195.8 | 195.8 |
| 60° | 153.4 | 166.7 | 177.3 | 184.5 | 187.5 | 190.2 | 193.9 | 196.0 | 196.6 | 196.3 |
| 62.5° | 158.9 | 171.0 | 179.8 | 185.8 | 188.0 | 189.3 | 192.3 | 193.9 | 194.6 | 194.9 |
| 65° | 163.2 | 173.1 | 179.2 | 183.5 | 185.3 | 186.6 | 189.0 | 190.9 | 191.2 | 191.5 |
| 67.5° | 162.7 | 169.6 | 175.0 | 179.0 | 180.5 | 181.8 | 184.2 | 185.6 | 186.7 | 186.4 |
| 70° | 158.2 | 163.7 | 168.8 | 173.0 | 174.6 | 176.3 | 179.2 | 181.4 | 181.9 | 182.7 |
| 72.5° | 150.4 | 156.0 | 162.2 | 166.4 | 169.3 | 171.0 | 174.6 | 177.4 | 178.6 | 179.4 |
| 75° | 142.2 | 148.8 | 155.0 | 161.3 | 164.3 | 167.2 | 171.4 | 173.4 | 176.2 | 175.7 |
| 77.5° | 133.6 | 142.1 | 149.4 | 156.5 | 159.7 | 162.7 | 167.0 | 169.9 | 171.7 | 172.5 |
| 80° | 126.2 | 135.2 | 143.4 | 150.9 | 153.9 | 157.4 | 161.9 | 165.0 | 166.9 | 167.4 |
| 82.5° | 117.9 | 127.7 | 137.0 | 144.8 | 148.0 | 151.0 | 156.2 | 159.4 | 161.8 | 162.4 |
| 85° | 109.8 | 120.2 | 129.8 | 138.2 | 141.6 | 145.0 | 150.4 | 153.9 | 156.2 | 157.1 |
| 87.5° | 102.9 | 112.6 | 122.4 | 130.4 | 134.4 | 137.6 | 143.0 | 147.2 | 149.3 | 149.3 |
| 90° | 94.4 | 104.3 | 114.1 | 122.1 | 126.6 | 128.8 | 134.2 | 138.1 | 140.6 | 140.5 |
| 92.5° | 85.4 | 94.9 | 103.0 | 111.0 | 114.7 | 117.6 | 123.4 | 126.2 | 128.5 | 129.0 |
| 95° | 73.3 | 81.8 | 90.2 | 97.0 | 99.8 | 104.3 | 108.6 | 112.3 | 113.8 | 114.4 |
| 97.5° | 59.0 | 67.5 | 73.4 | 81.6 | 83.5 | 86.6 | 91.0 | 94.1 | 95.5 | 95.0 |
| 100° | 45.3 | 50.9 | 55.5 | 60.6 | 63.7 | 65.6 | 69.4 | 72.5 | 74.1 | 73.9 |
| 102.5° | 32.2 | 36.6 | 40.0 | 44.0 | 44.3 | 46.1 | 48.5 | 51.5 | 52.2 | 53.0 |
| 105° | 23.8 | 25.6 | 28.2 | 29.6 | 30.2 | 32.3 | 32.8 | 34.1 | 34.2 | 35.8 |
| 107.5° | 17.8 | 18.7 | 19.7 | 20.5 | 21.0 | 21.1 | 22.4 | 22.2 | 22.6 | 22.9 |
| 110° | 13.4 | 13.9 | 14.6 | 14.2 | 14.9 | 14.4 | 14.7 | 14.6 | 14.7 | 14.7 |



TEST NUMBER: P397270

CATALOG NUMBER: 4VRVT2-LD5-6-DR-W-UNV-LR63-CD1-WL-U

CANDELA DISTRIBUTION (continued):

| | 50° | 55° | 60° | 65° | 67.5° | 70° | 75° | 80° | 85° | 90° |
|--------|------|------|------|------|-------|------|------|-----|------|-----|
| 112.5° | 10.9 | 10.9 | 10.7 | 10.6 | 10.6 | 10.4 | 10.4 | 9.9 | 10.1 | 9.9 |
| 115° | 9.3 | 9.1 | 8.8 | 8.5 | 8.5 | 8.2 | 8.0 | 7.5 | 7.4 | 7.2 |
| 117.5° | 8.2 | 8.0 | 7.7 | 7.4 | 7.2 | 7.0 | 6.7 | 6.2 | 6.1 | 6.1 |
| 120° | 7.4 | 7.2 | 7.0 | 6.7 | 6.6 | 6.4 | 5.9 | 5.8 | 5.4 | 5.4 |
| 122.5° | 6.6 | 6.6 | 6.4 | 6.1 | 6.1 | 5.9 | 5.6 | 5.3 | 5.1 | 5.1 |
| 125° | 5.8 | 5.9 | 5.8 | 5.6 | 5.6 | 5.4 | 5.3 | 5.0 | 4.8 | 4.8 |
| 127.5° | 5.0 | 5.1 | 5.1 | 5.1 | 5.1 | 5.0 | 4.8 | 4.6 | 4.5 | 4.5 |
| 130° | 4.2 | 4.5 | 4.5 | 4.5 | 4.6 | 4.5 | 4.5 | 4.3 | 4.2 | 4.2 |
| 132.5° | 3.4 | 3.7 | 3.8 | 4.0 | 4.0 | 4.0 | 3.8 | 3.8 | 3.7 | 3.7 |
| 135° | 2.6 | 2.9 | 3.2 | 3.2 | 3.4 | 3.4 | 3.4 | 3.4 | 3.2 | 3.2 |
| 137.5° | 1.9 | 2.2 | 2.4 | 2.6 | 2.6 | 2.7 | 2.7 | 2.7 | 2.6 | 2.6 |
| 140° | 1.3 | 1.6 | 1.8 | 1.9 | 1.9 | 2.1 | 2.1 | 2.1 | 1.9 | 1.9 |
| 142.5° | 0.6 | 1.0 | 1.1 | 1.3 | 1.3 | 1.3 | 1.4 | 1.4 | 1.4 | 1.3 |
| 145° | 0.2 | 0.3 | 0.5 | 0.6 | 0.6 | 0.6 | 0.8 | 0.8 | 0.8 | 0.6 |
| 147.5° | 0.0 | 0.0 | 0.0 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| 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)