

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: PORTFOLIO

Report Number: P#

Luminaire Tested: **LD4C05D010 EX4C059040 4LBPSSQMW**

Issue Date: 2/18/2022



Test Information

Test Method: LM-79-08
Report Number: P#
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P209253)
Test Lab: INNOVATION CENTER
Issue Date: 2/18/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LD4C05D010 EX4C059040 4LBPSSQMW
Description: 4 INCH 500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 4000K, 90CRI LEDS AND 4LBPSSQ TRIM WITH MW FINISH
Light Source: -
Ballast/Driver: -

Summary

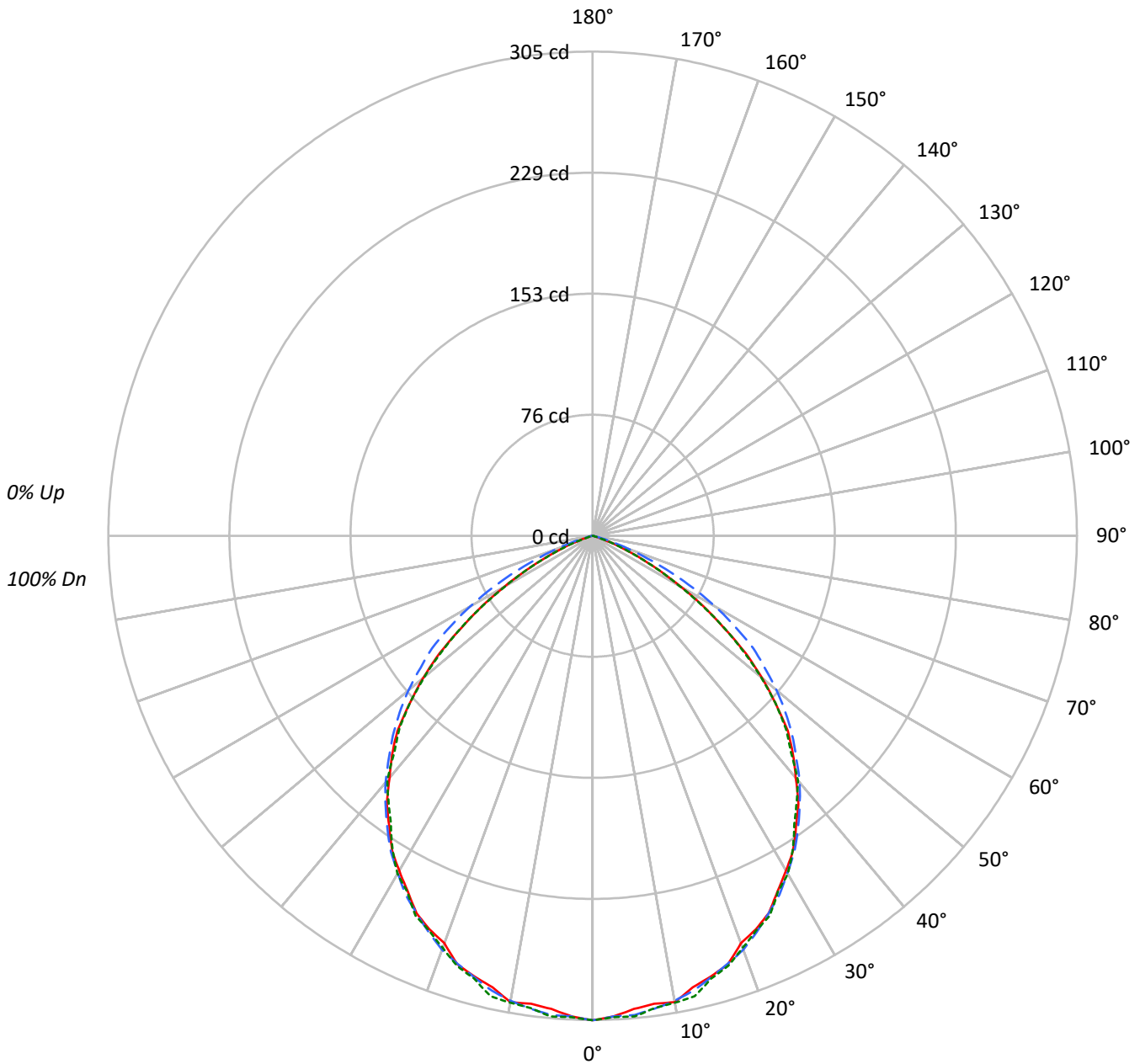
Lumens per Lamp: N/A
Luminaire Lumens: 652.0 lumens
Efficiency: N/A
Efficacy: 90.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.2 / 1.29
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 7.2
Input Voltage (V):
Input Current (A_{in}): 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: P#

CATALOG NUMBER: LD4C05D010 EX4C059040 4LBPSSQMW

Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: LD4C05D010 EX4C059040 4LBPSSQMW

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|---|--|--|--|--|--|--|----|--|--|--|--|--|--|--|--|---|
| RF | 20 | | | | | | | | | 20 | | | | | | | | | 20 | | | | | | | | | 20 | | | | | | | | | |
| RC | 80 | | | | | | | | | 50 | | | | | | | | | 30 | | | | | | | | | 10 | | | | | | | | | 0 |
| RW | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 | | | | | | | | | | | | | | | | |
| RCR | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 | | | | | | | | | | | | | | | | | | | |
| 1 | 111 | 108 | 104 | 101 | 109 | 105 | 102 | 100 | 101 | 99 | 96 | 97 | 95 | 94 | 94 | 92 | 91 | 89 | | | | | | | | | | | | | | | | | | | |
| 2 | 103 | 96 | 91 | 86 | 100 | 94 | 89 | 85 | 91 | 87 | 83 | 88 | 84 | 81 | 85 | 82 | 79 | 77 | | | | | | | | | | | | | | | | | | | |
| 3 | 95 | 86 | 79 | 74 | 93 | 85 | 78 | 73 | 82 | 76 | 72 | 79 | 74 | 71 | 77 | 73 | 69 | 67 | | | | | | | | | | | | | | | | | | | |
| 4 | 88 | 77 | 70 | 64 | 86 | 76 | 69 | 63 | 74 | 67 | 63 | 71 | 66 | 62 | 69 | 65 | 61 | 59 | | | | | | | | | | | | | | | | | | | |
| 5 | 81 | 70 | 62 | 56 | 79 | 69 | 61 | 56 | 67 | 60 | 55 | 65 | 59 | 54 | 63 | 58 | 54 | 52 | | | | | | | | | | | | | | | | | | | |
| 6 | 75 | 63 | 55 | 49 | 73 | 62 | 55 | 49 | 61 | 54 | 49 | 59 | 53 | 48 | 57 | 52 | 48 | 46 | | | | | | | | | | | | | | | | | | | |
| 7 | 70 | 58 | 50 | 44 | 68 | 57 | 49 | 44 | 55 | 49 | 44 | 54 | 48 | 43 | 53 | 47 | 43 | 41 | | | | | | | | | | | | | | | | | | | |
| 8 | 65 | 53 | 45 | 40 | 64 | 52 | 45 | 39 | 51 | 44 | 39 | 50 | 44 | 39 | 49 | 43 | 39 | 37 | | | | | | | | | | | | | | | | | | | |
| 9 | 61 | 49 | 41 | 36 | 60 | 48 | 41 | 36 | 47 | 40 | 36 | 46 | 40 | 35 | 45 | 39 | 35 | 34 | | | | | | | | | | | | | | | | | | | |
| 10 | 57 | 45 | 38 | 33 | 56 | 44 | 37 | 33 | 44 | 37 | 32 | 43 | 37 | 32 | 42 | 36 | 32 | 31 | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 29448 | 29448 | 29448 |
| 5° | 28980 | 29348 | 29435 |
| 10° | 29227 | 29138 | 29266 |
| 15° | 28709 | 28759 | 28839 |
| 20° | 28042 | 28494 | 28361 |
| 25° | 27925 | 27925 | 28106 |
| 30° | 27141 | 27341 | 27386 |
| 35° | 26303 | 26550 | 26091 |
| 40° | 25066 | 25557 | 25343 |
| 45° | 23716 | 24262 | 23484 |
| 50° | 20895 | 22712 | 20760 |
| 55° | 16923 | 20792 | 16991 |
| 60° | 12389 | 17233 | 12138 |
| 65° | 7534 | 12283 | 7329 |
| 70° | 2934 | 6601 | 2821 |
| 75° | 336 | 1789 | 336 |
| 80° | 222 | 222 | 222 |
| 85° | 0 | 0 | 0 |



TEST NUMBER: P#

CATALOG NUMBER: LD4C05D010 EX4C059040 4LBPSSQMW

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 28.8 | 4.4 |
| 10°-20° | 81.5 | 12.5 |
| 20°-30° | 121.0 | 18.6 |
| 30°-40° | 140.2 | 21.5 |
| 40°-50° | 134.4 | 20.6 |
| 50°-60° | 98.8 | 15.2 |
| 60°-70° | 42.7 | 6.5 |
| 70°-80° | 4.6 | 0.7 |
| 80°-90° | 0.1 | 0.0 |
| 90°-100° | 0.0 | 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°-30° | 231.3 | 35.5 |
| 0°-40° | 371.5 | 57.0 |
| 0°-60° | 604.7 | 92.7 |
| 0°-90° | 652.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 652.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 305 | 305 | 305 | 305 | 305 | |
| 5° | 299 | 302 | 303 | 304 | 304 | 29 |
| 15° | 287 | 289 | 288 | 288 | 289 | 81 |
| 25° | 262 | 262 | 262 | 263 | 264 | 120 |
| 35° | 223 | 225 | 225 | 225 | 222 | 140 |
| 45° | 174 | 174 | 178 | 175 | 172 | 132 |
| 55° | 101 | 111 | 124 | 111 | 101 | 91 |
| 65° | 33 | 41 | 54 | 41 | 32 | 34 |
| 75° | 1 | 1 | 5 | 1 | 1 | 3 |
| 85° | 0 | 0 | 0 | 0 | 0 | 0 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P#

CATALOG NUMBER: LD4C05D010 EX4C059040 4LBPSSQMW

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 22.5° | 25° | 30° | 35° | 40° | 45° |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 305.2 | 305.2 | 305.2 | 305.2 | 305.2 | 305.2 | 305.2 | 305.2 | 305.2 | 305.2 | 305.2 |
| 2.5° | 303.0 | 306.5 | 307.0 | 304.8 | 303.9 | 302.6 | 305.6 | 303.5 | 304.4 | 303.5 | 303.0 |
| 5° | 299.2 | 303.0 | 303.5 | 303.5 | 302.6 | 302.2 | 303.5 | 303.0 | 302.6 | 301.8 | 303.0 |
| 7.5° | 297.4 | 299.6 | 301.8 | 299.2 | 300.4 | 300.0 | 303.0 | 301.8 | 301.3 | 301.3 | 300.4 |
| 10° | 298.3 | 297.8 | 299.6 | 297.0 | 297.8 | 297.0 | 299.6 | 299.6 | 298.7 | 297.8 | 297.4 |
| 12.5° | 291.3 | 294.8 | 294.8 | 294.4 | 293.5 | 292.2 | 294.8 | 296.6 | 293.9 | 293.9 | 293.5 |
| 15° | 287.4 | 288.3 | 288.7 | 288.7 | 288.3 | 289.2 | 290.5 | 288.7 | 289.2 | 287.0 | 287.9 |
| 17.5° | 283.1 | 281.4 | 282.7 | 281.8 | 282.2 | 283.1 | 284.8 | 284.8 | 282.2 | 281.8 | 282.7 |
| 20° | 273.1 | 278.3 | 278.8 | 276.2 | 276.6 | 276.6 | 279.6 | 277.0 | 278.8 | 276.6 | 277.5 |
| 22.5° | 268.4 | 271.8 | 272.3 | 268.8 | 271.0 | 268.4 | 271.4 | 267.5 | 271.8 | 268.8 | 270.1 |
| 25° | 262.3 | 261.9 | 263.2 | 261.4 | 261.9 | 261.9 | 264.0 | 262.3 | 263.6 | 261.9 | 262.3 |
| 27.5° | 252.3 | 255.8 | 255.4 | 253.6 | 254.5 | 254.1 | 258.4 | 253.6 | 256.2 | 254.1 | 254.9 |
| 30° | 243.6 | 246.7 | 245.8 | 244.1 | 244.1 | 242.8 | 247.6 | 246.2 | 245.8 | 245.8 | 245.4 |
| 32.5° | 235.0 | 235.4 | 234.6 | 235.0 | 235.4 | 233.7 | 237.6 | 235.8 | 235.4 | 235.8 | 236.3 |
| 35° | 223.3 | 223.3 | 224.1 | 222.8 | 224.6 | 224.6 | 228.0 | 225.9 | 225.4 | 224.1 | 225.4 |
| 37.5° | 212.9 | 211.6 | 212.0 | 212.0 | 212.9 | 213.7 | 215.5 | 214.6 | 214.6 | 213.3 | 214.2 |
| 40° | 199.0 | 198.1 | 199.4 | 199.4 | 200.7 | 200.7 | 202.5 | 201.6 | 202.9 | 202.9 | 202.9 |
| 42.5° | 186.9 | 186.9 | 186.0 | 187.3 | 187.7 | 187.3 | 190.3 | 189.9 | 190.3 | 189.5 | 189.9 |
| 45° | 173.8 | 173.8 | 173.0 | 172.6 | 174.7 | 174.3 | 177.8 | 176.4 | 178.2 | 177.3 | 177.8 |
| 47.5° | 156.1 | 158.2 | 156.9 | 158.2 | 160.8 | 161.3 | 163.4 | 162.6 | 164.3 | 163.0 | 164.8 |
| 50° | 139.2 | 139.2 | 140.5 | 142.2 | 144.8 | 145.2 | 147.8 | 149.6 | 150.4 | 150.9 | 151.3 |
| 52.5° | 121.4 | 121.0 | 122.3 | 124.4 | 126.6 | 128.3 | 130.9 | 133.5 | 135.3 | 137.9 | 136.6 |
| 55° | 100.6 | 101.4 | 102.8 | 105.4 | 108.8 | 111.0 | 113.2 | 116.6 | 119.7 | 121.0 | 123.6 |
| 57.5° | 82.8 | 81.9 | 82.8 | 86.3 | 90.2 | 91.9 | 95.0 | 98.4 | 102.8 | 105.4 | 106.2 |
| 60° | 64.2 | 64.6 | 65.5 | 68.5 | 71.5 | 74.1 | 75.4 | 81.1 | 85.0 | 87.6 | 89.3 |
| 62.5° | 47.3 | 48.1 | 49.0 | 51.6 | 54.6 | 56.8 | 59.0 | 63.7 | 67.2 | 69.8 | 71.5 |
| 65° | 33.0 | 33.4 | 34.7 | 36.0 | 39.0 | 41.2 | 42.9 | 46.8 | 50.3 | 52.5 | 53.8 |
| 67.5° | 20.4 | 20.8 | 21.7 | 23.4 | 25.6 | 27.3 | 29.0 | 31.6 | 34.7 | 36.8 | 37.3 |
| 70° | 10.4 | 10.8 | 11.3 | 12.6 | 14.3 | 15.2 | 16.5 | 18.6 | 20.8 | 22.5 | 23.4 |
| 72.5° | 3.5 | 3.5 | 3.9 | 4.8 | 5.6 | 6.5 | 6.9 | 9.1 | 10.8 | 11.7 | 12.1 |
| 75° | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 1.3 | 1.3 | 2.6 | 3.5 | 4.3 | 4.8 |
| 77.5° | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.9 | 0.9 |
| 80° | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 |
| 82.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



TEST NUMBER: P#

CATALOG NUMBER: LD4C05D010 EX4C059040 4LBPSSQMW

CANDELA DISTRIBUTION (continued):

| | 50° | 55° | 60° | 65° | 67.5° | 70° | 75° | 80° | 85° | 90° |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 305.2 | 305.2 | 305.2 | 305.2 | 305.2 | 305.2 | 305.2 | 305.2 | 305.2 | 305.2 |
| 2.5° | 305.2 | 304.4 | 303.9 | 304.4 | 304.4 | 303.9 | 305.2 | 307.0 | 309.1 | 303.5 |
| 5° | 304.8 | 303.9 | 304.8 | 302.2 | 303.5 | 302.6 | 304.4 | 303.9 | 305.6 | 303.9 |
| 7.5° | 303.5 | 301.8 | 302.2 | 300.9 | 302.6 | 300.4 | 301.8 | 304.4 | 302.6 | 300.0 |
| 10° | 299.2 | 298.3 | 301.3 | 297.0 | 296.1 | 297.8 | 301.3 | 298.7 | 297.8 | 298.7 |
| 12.5° | 294.8 | 294.8 | 296.1 | 292.6 | 293.1 | 293.9 | 295.7 | 293.9 | 294.8 | 297.0 |
| 15° | 290.0 | 289.2 | 291.3 | 288.7 | 288.3 | 287.4 | 289.2 | 289.2 | 290.0 | 288.7 |
| 17.5° | 284.4 | 283.1 | 283.1 | 282.2 | 281.8 | 284.0 | 284.8 | 285.3 | 285.7 | 284.0 |
| 20° | 277.5 | 277.0 | 278.3 | 277.0 | 277.5 | 277.9 | 277.9 | 277.0 | 280.9 | 276.2 |
| 22.5° | 270.1 | 271.4 | 269.7 | 268.8 | 269.7 | 270.5 | 270.5 | 271.0 | 270.1 | 269.2 |
| 25° | 262.7 | 263.6 | 264.0 | 261.4 | 262.7 | 261.4 | 264.5 | 264.9 | 263.2 | 264.0 |
| 27.5° | 256.2 | 254.9 | 254.5 | 252.8 | 253.6 | 253.2 | 253.6 | 253.6 | 256.2 | 252.8 |
| 30° | 246.2 | 245.0 | 245.4 | 244.1 | 244.5 | 244.1 | 244.5 | 244.5 | 246.2 | 245.8 |
| 32.5° | 236.7 | 235.4 | 235.8 | 234.6 | 234.6 | 235.0 | 234.1 | 234.1 | 235.4 | 234.6 |
| 35° | 227.6 | 224.6 | 225.0 | 224.6 | 225.0 | 223.3 | 223.3 | 222.8 | 223.7 | 221.5 |
| 37.5° | 214.6 | 213.3 | 212.9 | 212.4 | 212.9 | 212.0 | 212.9 | 211.6 | 212.9 | 211.1 |
| 40° | 202.9 | 202.0 | 202.5 | 199.9 | 199.9 | 200.3 | 199.4 | 199.0 | 199.4 | 201.2 |
| 42.5° | 191.2 | 189.5 | 188.6 | 187.7 | 188.2 | 186.9 | 186.4 | 185.6 | 186.4 | 184.7 |
| 45° | 177.3 | 177.3 | 176.9 | 174.7 | 175.2 | 175.2 | 173.4 | 171.7 | 172.1 | 172.1 |
| 47.5° | 164.8 | 163.9 | 163.4 | 161.3 | 160.8 | 160.4 | 158.7 | 157.4 | 157.4 | 156.1 |
| 50° | 150.9 | 150.0 | 148.7 | 146.5 | 145.7 | 143.1 | 141.8 | 140.0 | 138.3 | 138.3 |
| 52.5° | 137.9 | 134.8 | 133.1 | 129.6 | 128.3 | 127.0 | 123.6 | 122.3 | 121.0 | 119.7 |
| 55° | 122.3 | 119.7 | 116.2 | 112.3 | 110.6 | 108.4 | 104.9 | 102.3 | 100.6 | 101.0 |
| 57.5° | 107.1 | 102.8 | 99.3 | 94.1 | 91.9 | 90.6 | 87.1 | 83.7 | 81.9 | 81.9 |
| 60° | 88.4 | 85.0 | 80.6 | 75.9 | 74.1 | 72.0 | 67.6 | 65.5 | 64.2 | 62.9 |
| 62.5° | 70.7 | 68.1 | 64.2 | 58.1 | 56.8 | 54.6 | 51.6 | 49.0 | 47.7 | 47.7 |
| 65° | 52.9 | 50.3 | 46.8 | 42.5 | 40.8 | 39.0 | 36.4 | 33.8 | 32.5 | 32.1 |
| 67.5° | 37.3 | 34.2 | 31.2 | 27.8 | 26.4 | 25.6 | 23.0 | 21.2 | 20.4 | 19.9 |
| 70° | 22.5 | 20.8 | 18.6 | 16.0 | 14.7 | 13.9 | 12.1 | 10.8 | 10.4 | 10.0 |
| 72.5° | 11.7 | 10.4 | 8.7 | 6.9 | 6.1 | 5.2 | 4.3 | 3.5 | 3.0 | 3.0 |
| 75° | 4.3 | 3.5 | 2.2 | 1.3 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 |
| 77.5° | 0.9 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 |
| 80° | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 |
| 82.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



Report Generated By 670246072 / DESKTOP-50001EG





— 0°-180° - - 45°-225° - - - - 90°-270°









(END OF REPORT)