

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: **LD4C08D010 EX4C089050 4LBSQLI**

Issue Date: 2/9/2022



Test Information

Test Method: LM-79-08
Report Number: P#
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P209151)
Test Lab: INNOVATION CENTER
Issue Date: 2/9/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LD4C08D010 EX4C089050 4LBSQLI
Description: 4 INCH 800 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 5000K, 90CRI LEDS AND 4LBSQ TRIM WITH LI FINISH
Light Source: -
Ballast/Driver: -

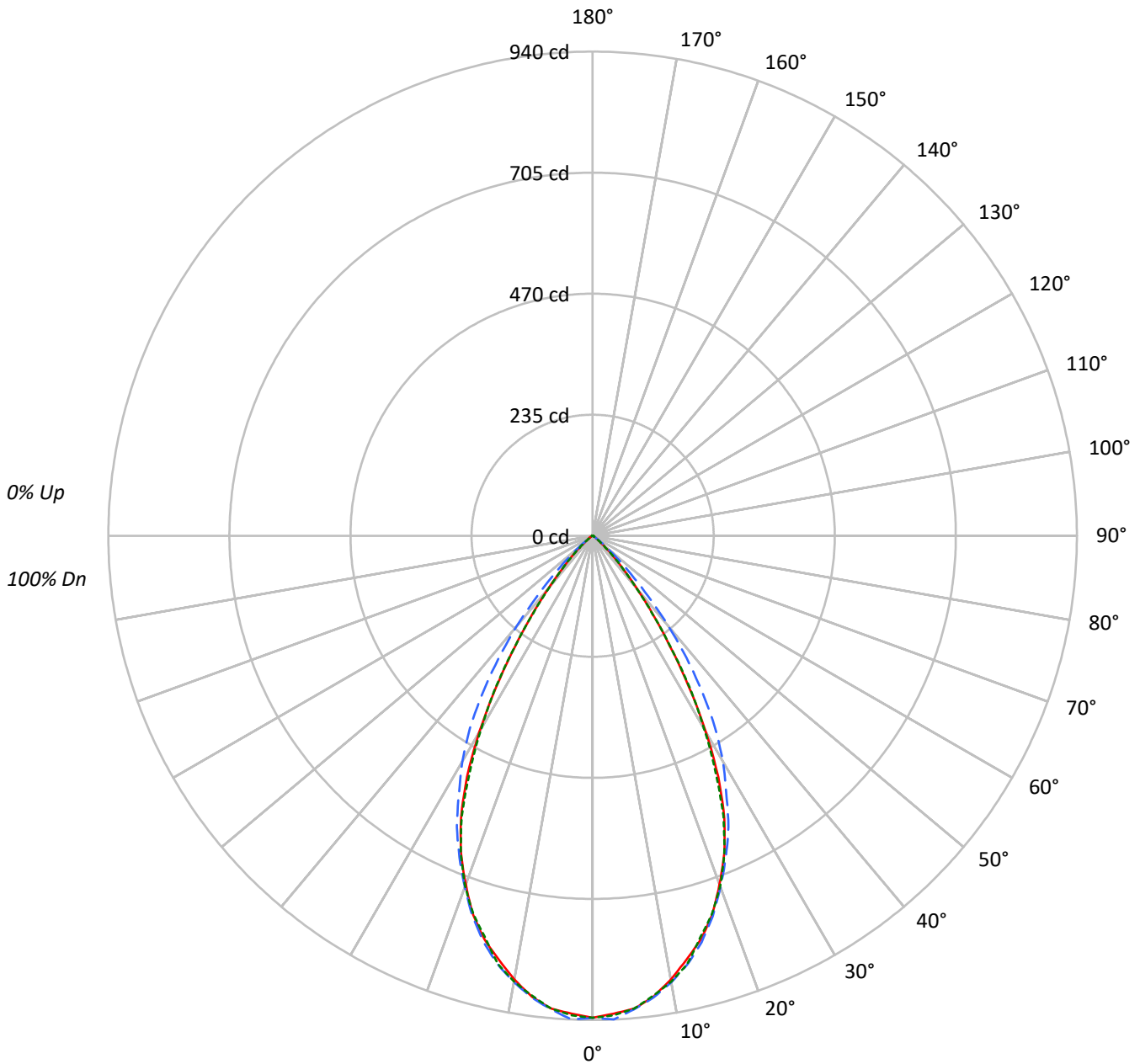
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 864.0 lumens
Efficiency: N/A
Efficacy: 87.3 lumens/watt
Spacing Criteria (0/90/45): 0.91 / 0.9 / 0.94
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 9.9
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: LD4C08D010 EX4C089050 4LBSQLI

Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: LD4C08D010 EX4C089050 4LBSQLI

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 | 113 | 111 | 108 | 106 | 111 | 108 | 106 | 104 | 104 | 103 | 101 | 101 | 99 | 98 | 97 | 96 | 95 | 93 | | | | | | | | | | | | | | | | | | | |
| 2 | 108 | 103 | 99 | 95 | 105 | 101 | 97 | 94 | 98 | 95 | 92 | 95 | 92 | 90 | 92 | 90 | 88 | 87 | | | | | | | | | | | | | | | | | | | |
| 3 | 102 | 96 | 91 | 87 | 100 | 94 | 90 | 86 | 92 | 88 | 84 | 89 | 86 | 83 | 87 | 84 | 82 | 80 | | | | | | | | | | | | | | | | | | | |
| 4 | 97 | 89 | 84 | 79 | 95 | 88 | 83 | 79 | 86 | 81 | 78 | 84 | 80 | 77 | 82 | 79 | 76 | 75 | | | | | | | | | | | | | | | | | | | |
| 5 | 92 | 83 | 77 | 73 | 90 | 82 | 77 | 73 | 81 | 76 | 72 | 79 | 75 | 71 | 77 | 74 | 71 | 69 | | | | | | | | | | | | | | | | | | | |
| 6 | 87 | 78 | 72 | 68 | 86 | 77 | 71 | 67 | 76 | 71 | 67 | 74 | 70 | 66 | 73 | 69 | 66 | 64 | | | | | | | | | | | | | | | | | | | |
| 7 | 83 | 73 | 67 | 63 | 81 | 73 | 67 | 63 | 71 | 66 | 62 | 70 | 65 | 62 | 69 | 65 | 62 | 60 | | | | | | | | | | | | | | | | | | | |
| 8 | 79 | 69 | 63 | 59 | 77 | 68 | 62 | 58 | 67 | 62 | 58 | 66 | 61 | 58 | 65 | 61 | 58 | 56 | | | | | | | | | | | | | | | | | | | |
| 9 | 75 | 65 | 59 | 55 | 74 | 64 | 59 | 55 | 63 | 58 | 55 | 63 | 58 | 54 | 62 | 57 | 54 | 53 | | | | | | | | | | | | | | | | | | | |
| 10 | 71 | 61 | 55 | 51 | 70 | 61 | 55 | 51 | 60 | 55 | 51 | 59 | 54 | 51 | 58 | 54 | 51 | 50 | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 90294 | 90294 | 90294 |
| 5° | 89264 | 89380 | 89264 |
| 10° | 85691 | 86220 | 86103 |
| 15° | 81013 | 81602 | 80593 |
| 20° | 73931 | 74485 | 74300 |
| 25° | 64379 | 66401 | 63931 |
| 30° | 48956 | 56310 | 48232 |
| 35° | 30814 | 43771 | 31097 |
| 40° | 16626 | 28907 | 16324 |
| 45° | 7874 | 14273 | 7792 |
| 50° | 2942 | 5359 | 2942 |
| 55° | 1396 | 1699 | 1295 |
| 60° | 926 | 811 | 926 |
| 65° | 548 | 548 | 548 |
| 70° | 339 | 508 | 339 |
| 75° | 224 | 224 | 224 |
| 80° | 333 | 333 | 333 |
| 85° | 0 | 0 | 0 |



TEST NUMBER: P#

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 86.8 | 10.0 |
| 10°-20° | 227.4 | 26.3 |
| 20°-30° | 277.8 | 32.2 |
| 30°-40° | 194.3 | 22.5 |
| 40°-50° | 63.7 | 7.4 |
| 50°-60° | 10.1 | 1.2 |
| 60°-70° | 2.8 | 0.3 |
| 70°-80° | 0.9 | 0.1 |
| 80°-90° | 0.3 | 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° | 592.0 | 68.5 |
| 0°-40° | 786.3 | 91.0 |
| 0°-60° | 860.1 | 99.5 |
| 0°-90° | 864.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 864.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 936 | 936 | 936 | 936 | 936 | |
| 5° | 922 | 922 | 923 | 917 | 922 | 86 |
| 15° | 811 | 814 | 817 | 812 | 807 | 226 |
| 25° | 605 | 614 | 624 | 612 | 600 | 272 |
| 35° | 262 | 309 | 372 | 304 | 264 | 167 |
| 45° | 58 | 71 | 105 | 70 | 57 | 48 |
| 55° | 8 | 9 | 10 | 9 | 8 | 8 |
| 65° | 2 | 3 | 2 | 3 | 2 | 3 |
| 75° | 1 | 1 | 1 | 1 | 1 | 1 |
| 85° | 0 | 0 | 0 | 0 | 0 | 0 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P#

CATALOG NUMBER: LD4C08D010 EX4C089050 4LBSQLI

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 935.8 | 935.8 | 935.8 | 935.8 | 935.8 | 935.8 | 935.8 | 935.8 | 935.8 | 935.8 | 935.8 |
| 2.5° | 928.7 | 935.3 | 933.5 | 937.6 | 937.6 | 932.9 | 934.1 | 935.8 | 938.2 | 940.0 | 925.7 |
| 5° | 921.6 | 927.5 | 922.2 | 928.1 | 924.5 | 919.2 | 928.1 | 923.4 | 926.3 | 922.8 | 925.1 |
| 7.5° | 902.6 | 912.1 | 901.4 | 908.5 | 906.1 | 903.1 | 906.7 | 905.5 | 907.3 | 904.3 | 897.8 |
| 10° | 874.6 | 882.3 | 875.2 | 885.3 | 880.6 | 877.6 | 880.6 | 883.5 | 882.9 | 880.0 | 883.5 |
| 12.5° | 842.5 | 851.4 | 847.8 | 853.8 | 848.5 | 848.5 | 855.6 | 853.8 | 854.4 | 852.0 | 856.2 |
| 15° | 811.0 | 817.5 | 812.2 | 819.9 | 817.5 | 811.0 | 813.9 | 813.9 | 818.7 | 816.9 | 812.2 |
| 17.5° | 771.8 | 777.1 | 771.1 | 772.9 | 770.6 | 769.4 | 781.8 | 773.5 | 778.3 | 774.7 | 775.3 |
| 20° | 720.0 | 722.4 | 720.6 | 725.4 | 722.4 | 726.0 | 724.8 | 723.6 | 723.6 | 725.4 | 721.2 |
| 22.5° | 667.7 | 667.7 | 669.5 | 670.7 | 673.1 | 669.5 | 676.6 | 670.7 | 671.3 | 675.4 | 674.2 |
| 25° | 604.7 | 602.9 | 607.1 | 613.0 | 615.4 | 612.4 | 621.9 | 617.2 | 620.7 | 623.7 | 617.2 |
| 27.5° | 528.0 | 528.0 | 532.1 | 542.3 | 544.0 | 547.6 | 560.7 | 560.7 | 565.4 | 561.3 | 566.0 |
| 30° | 439.4 | 445.9 | 451.3 | 464.3 | 468.5 | 476.3 | 489.9 | 496.5 | 507.2 | 505.4 | 503.0 |
| 32.5° | 348.4 | 357.3 | 357.9 | 371.6 | 382.9 | 396.0 | 414.4 | 429.9 | 437.6 | 442.9 | 437.0 |
| 35° | 261.6 | 267.0 | 271.7 | 281.2 | 300.3 | 317.5 | 334.1 | 354.4 | 368.0 | 371.6 | 366.2 |
| 37.5° | 191.5 | 192.6 | 197.4 | 206.3 | 220.6 | 237.2 | 257.5 | 279.4 | 293.7 | 299.1 | 293.1 |
| 40° | 132.0 | 133.2 | 135.6 | 143.3 | 155.2 | 167.1 | 183.1 | 205.7 | 218.8 | 229.5 | 221.8 |
| 42.5° | 88.6 | 89.8 | 92.2 | 98.1 | 104.6 | 115.9 | 128.4 | 142.7 | 155.2 | 159.9 | 155.8 |
| 45° | 57.7 | 57.7 | 58.9 | 63.0 | 66.6 | 75.5 | 84.4 | 93.3 | 101.7 | 104.6 | 101.7 |
| 47.5° | 33.9 | 34.5 | 35.7 | 38.7 | 42.8 | 46.4 | 52.9 | 58.9 | 61.2 | 63.6 | 62.4 |
| 50° | 19.6 | 19.6 | 21.4 | 23.2 | 26.2 | 28.5 | 30.9 | 33.3 | 34.5 | 35.7 | 34.5 |
| 52.5° | 10.7 | 11.3 | 11.9 | 12.5 | 13.7 | 16.1 | 17.8 | 17.8 | 18.4 | 19.0 | 18.4 |
| 55° | 8.3 | 8.3 | 8.3 | 8.3 | 8.9 | 8.9 | 8.9 | 9.5 | 9.5 | 10.1 | 9.5 |
| 57.5° | 5.9 | 5.9 | 5.9 | 6.6 | 6.6 | 6.6 | 5.9 | 5.9 | 5.9 | 5.9 | 5.9 |
| 60° | 4.8 | 4.8 | 4.8 | 4.8 | 4.8 | 4.8 | 4.8 | 4.2 | 4.2 | 4.2 | 4.2 |
| 62.5° | 3.6 | 3.6 | 3.6 | 3.6 | 3.6 | 3.6 | 3.6 | 3.6 | 3.6 | 3.6 | 3.6 |
| 65° | 2.4 | 2.4 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 2.4 | 2.4 | 2.4 | 2.4 |
| 67.5° | 1.8 | 1.8 | 1.8 | 1.8 | 2.4 | 2.4 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 |
| 70° | 1.2 | 1.2 | 1.2 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 |
| 72.5° | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 |
| 75° | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 |
| 77.5° | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 |
| 80° | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 |
| 82.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.6 | 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° | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 |
| 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: LD4C08D010 EX4C089050 4LBSQLI

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 935.8 | 935.8 | 935.8 | 935.8 | 935.8 | 935.8 | 935.8 | 935.8 |
| 2.5° | 935.8 | 925.7 | 926.9 | 932.3 | 929.3 | 932.3 | 931.7 | 931.7 |
| 5° | 925.7 | 922.8 | 918.0 | 916.2 | 919.8 | 927.5 | 926.3 | 921.6 |
| 7.5° | 906.7 | 899.0 | 904.3 | 906.7 | 903.7 | 908.5 | 910.9 | 900.8 |
| 10° | 884.1 | 881.2 | 880.0 | 881.2 | 880.0 | 884.7 | 878.8 | 878.8 |
| 12.5° | 852.0 | 847.3 | 847.3 | 854.4 | 850.2 | 846.7 | 851.4 | 850.8 |
| 15° | 819.9 | 810.4 | 810.4 | 812.8 | 814.6 | 812.2 | 812.8 | 806.8 |
| 17.5° | 772.3 | 769.4 | 765.2 | 771.8 | 773.5 | 771.1 | 772.9 | 770.0 |
| 20° | 727.7 | 727.7 | 720.0 | 723.0 | 725.4 | 727.2 | 728.3 | 723.6 |
| 22.5° | 670.7 | 671.9 | 666.5 | 672.4 | 674.2 | 668.3 | 669.5 | 668.3 |
| 25° | 618.3 | 617.8 | 613.6 | 611.2 | 612.4 | 610.0 | 609.4 | 600.5 |
| 27.5° | 560.7 | 554.7 | 545.8 | 548.2 | 538.1 | 529.8 | 529.8 | 516.1 |
| 30° | 498.2 | 488.1 | 476.3 | 464.3 | 455.4 | 445.9 | 440.6 | 432.9 |
| 32.5° | 425.1 | 411.5 | 396.6 | 380.5 | 370.4 | 356.2 | 348.4 | 352.6 |
| 35° | 352.6 | 332.4 | 312.1 | 296.1 | 280.6 | 272.3 | 262.8 | 264.0 |
| 37.5° | 282.4 | 253.9 | 236.1 | 218.8 | 205.7 | 195.0 | 190.9 | 189.7 |
| 40° | 206.3 | 183.7 | 165.9 | 153.4 | 144.5 | 136.2 | 131.4 | 129.6 |
| 42.5° | 142.7 | 126.7 | 112.4 | 102.3 | 96.3 | 91.0 | 88.6 | 88.0 |
| 45° | 92.8 | 83.2 | 73.7 | 66.6 | 61.8 | 58.3 | 57.7 | 57.1 |
| 47.5° | 58.3 | 53.5 | 47.6 | 42.2 | 38.0 | 35.7 | 33.9 | 33.9 |
| 50° | 33.3 | 31.5 | 28.5 | 25.6 | 23.2 | 22.0 | 20.2 | 19.6 |
| 52.5° | 17.8 | 17.8 | 16.6 | 14.3 | 12.5 | 11.3 | 11.3 | 10.7 |
| 55° | 9.5 | 9.5 | 8.9 | 8.9 | 8.3 | 8.3 | 8.3 | 7.7 |
| 57.5° | 5.9 | 5.9 | 6.6 | 6.6 | 5.9 | 5.9 | 5.9 | 5.9 |
| 60° | 4.2 | 4.8 | 4.8 | 4.8 | 4.8 | 4.8 | 4.8 | 4.8 |
| 62.5° | 3.6 | 3.6 | 3.6 | 3.6 | 3.6 | 3.6 | 3.6 | 3.6 |
| 65° | 2.4 | 3.0 | 3.0 | 3.0 | 3.0 | 2.4 | 2.4 | 2.4 |
| 67.5° | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 |
| 70° | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.2 | 1.2 | 1.2 |
| 72.5° | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 |
| 75° | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 |
| 77.5° | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 |
| 80° | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 |
| 82.5° | 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 |
| 87.5° | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 |
| 90° | 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)