

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: INVUE

Report Number: P140480

Luminaire Tested: **EMM-E03-LED-E1-5WQ**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P140480
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33687)
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: EMM-E03-LED-E1-5WQ
Description: EPIC MODERN MEDIUM DECORATIVE LED LUMINAIRE
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE WIDE
Light Source: (63) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8962 lumens
Efficiency: N/A
Efficacy: 119.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type V - Short - Semi-Cutoff
BUG Rating: B3 - U0 - G2

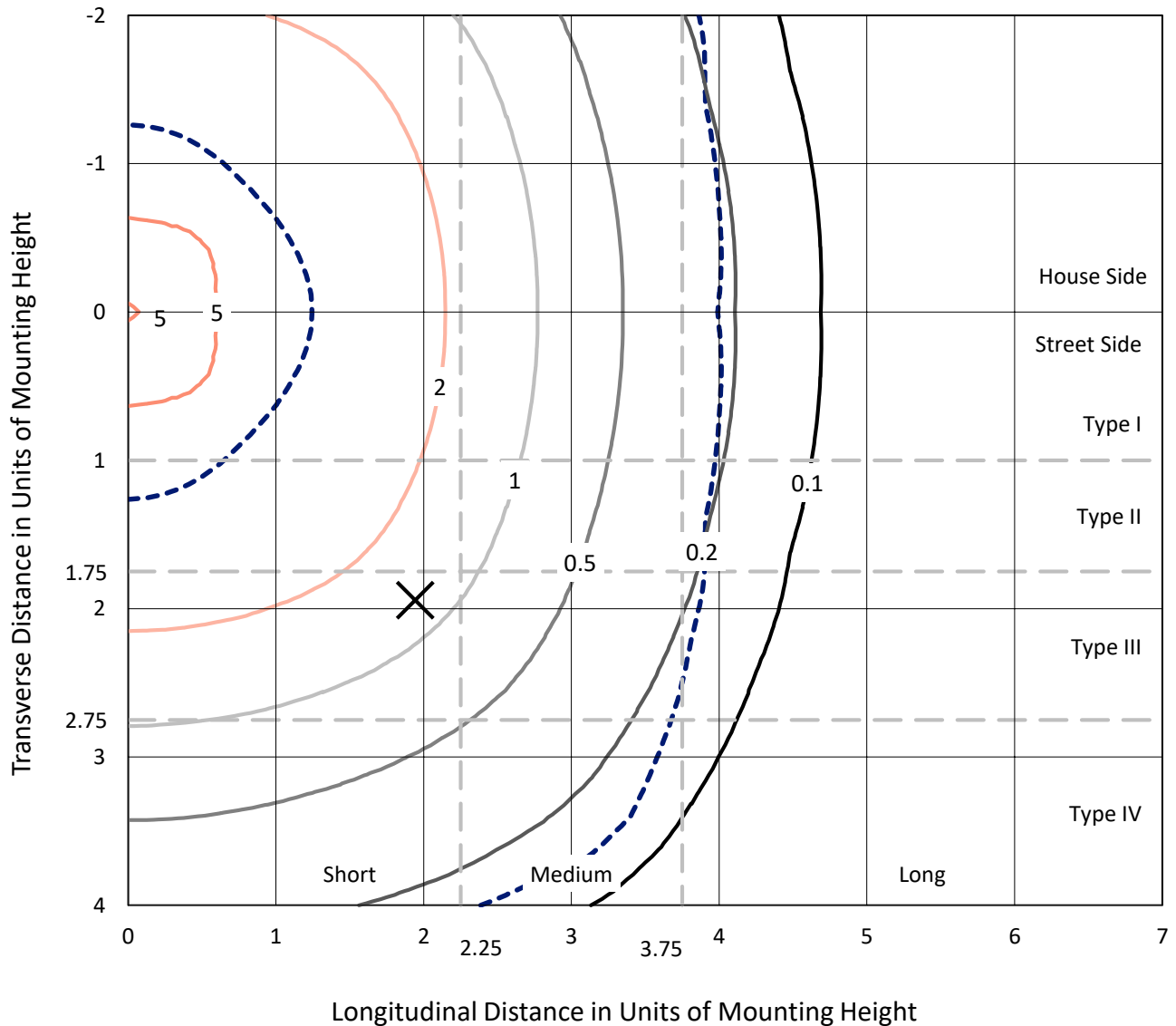
Input Watts (W): 75.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

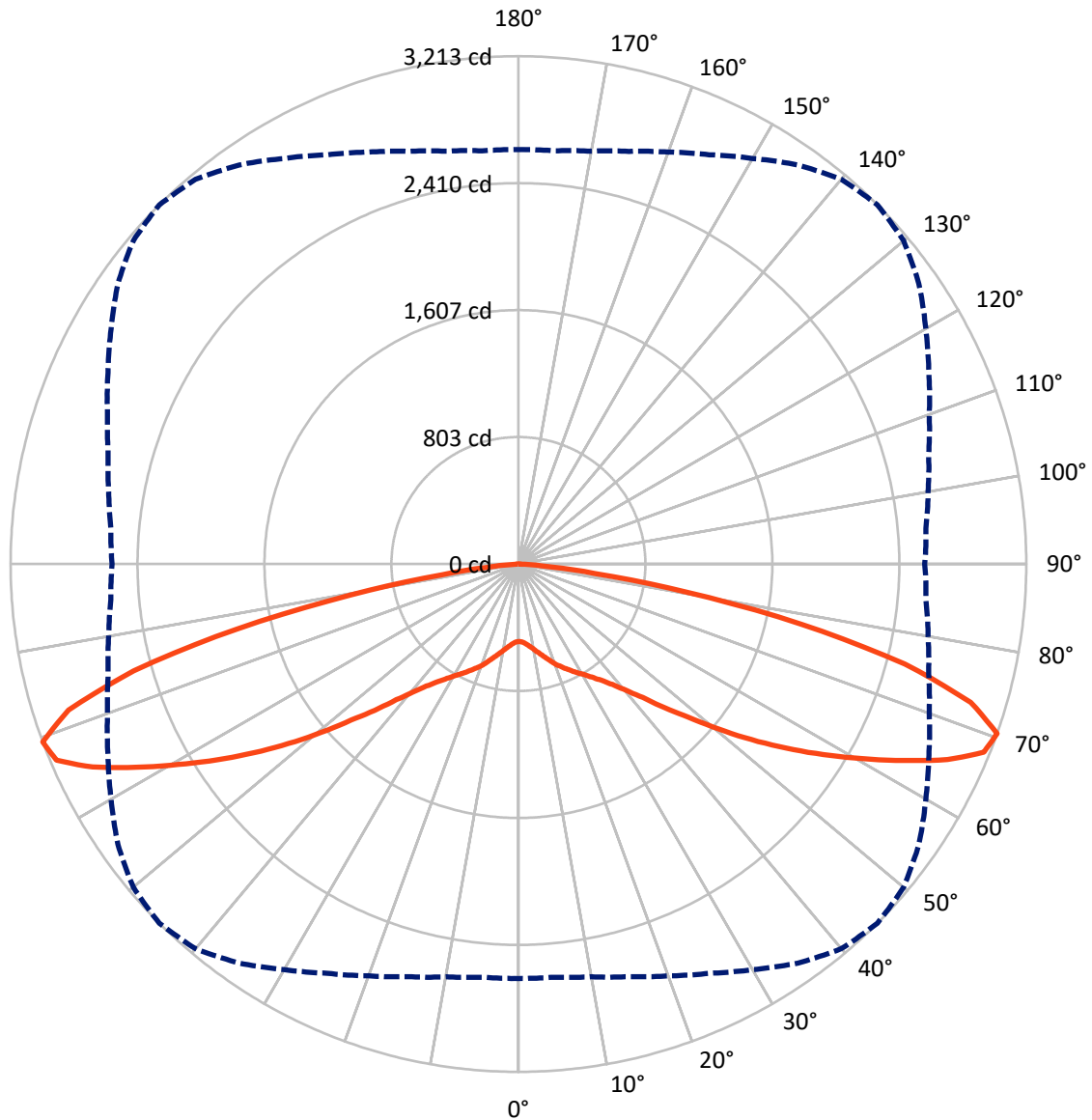
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.6 fc
 Type V - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 4481.0 | 0.0 | 4481.0 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 4481.0 | 0.0 | 4481.0 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 8962.0 | 0.0 | 8962.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 49.7 | 0.6 |
| 10°-20° | 173.5 | 1.9 |
| 20°-30° | 341.0 | 3.8 |
| 30°-40° | 564.2 | 6.3 |
| 40°-50° | 987.6 | 11.0 |
| 50°-60° | 1761.6 | 19.7 |
| 60°-70° | 2719.7 | 30.3 |
| 70°-80° | 2152.8 | 24.0 |
| 80°-90° | 211.9 | 2.4 |
| 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°-90° | 8962.0 | 100.0 |
| 0°-180° | 8962.0 | 100.0 |



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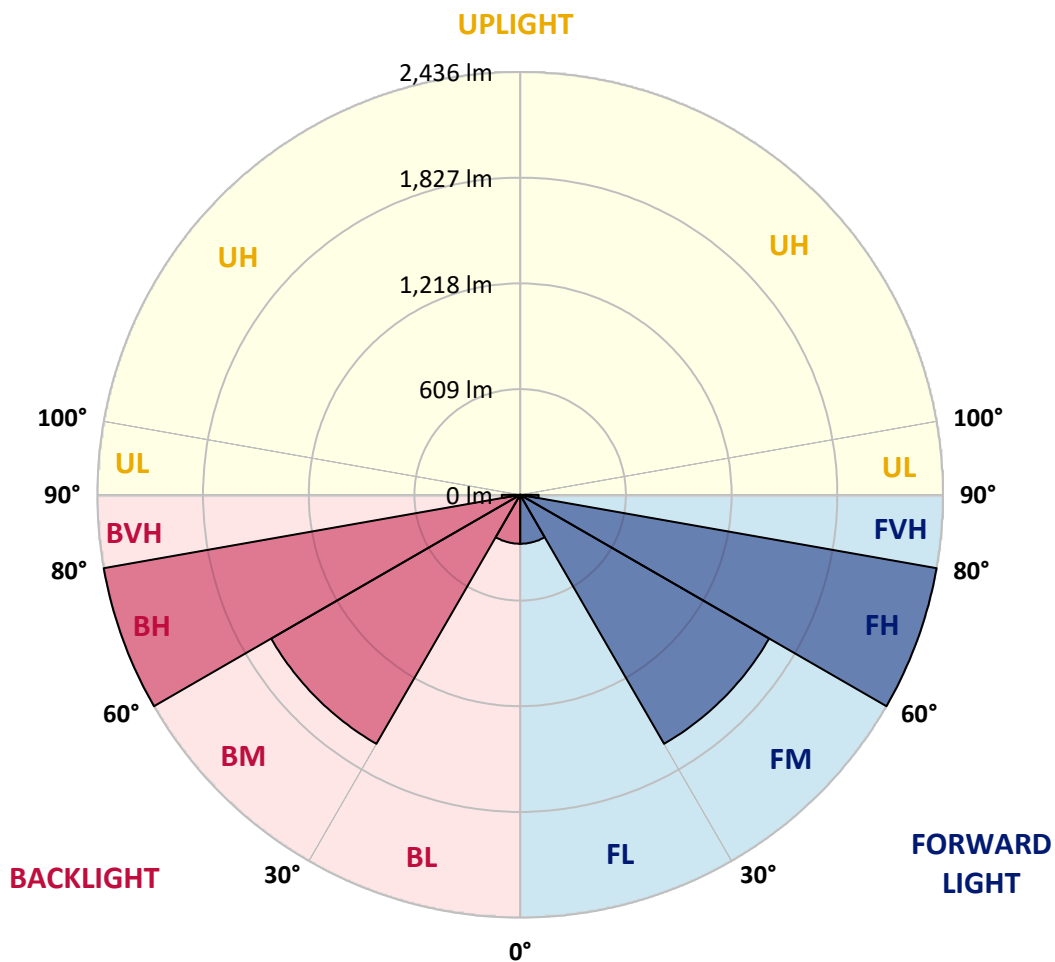
CATALOG NUMBER: EMM-E03-LED-E1-5WQ

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 282.1 | 3.1 | | | |
| FM (30°-60°) | 1656.7 | 18.5 | | | |
| FH (60°-80°) | 2436.2 | 27.2 | | | G2/5000 |
| FVH (80°-90°) | 105.9 | 1.2 | | | G2/225 |
| BL (0°-30°) | 282.1 | 3.1 | B1/500 | | |
| BM (30°-60°) | 1656.7 | 18.5 | B2/2500 | | |
| BH (60°-80°) | 2436.2 | 27.2 | B3/2500 | | G2/5000 |
| BVH (80°-90°) | 105.9 | 1.2 | | | G2/225 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G2

Type V Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|-------|------|------|------|------|------|------|------|------|------|------|------|
| 0° | 490 | 490 | 490 | 490 | 490 | 490 | 490 | 490 | 490 | 490 | 490 |
| 2.5° | 496 | 496 | 495 | 495 | 495 | 495 | 494 | 494 | 495 | 494 | 494 |
| 5° | 508 | 509 | 509 | 508 | 508 | 508 | 508 | 508 | 509 | 508 | 508 |
| 7.5° | 526 | 527 | 527 | 526 | 526 | 526 | 526 | 526 | 527 | 527 | 525 |
| 10° | 548 | 549 | 549 | 548 | 548 | 549 | 549 | 549 | 550 | 550 | 549 |
| 12.5° | 574 | 575 | 576 | 575 | 576 | 576 | 577 | 578 | 578 | 578 | 576 |
| 15° | 604 | 607 | 605 | 605 | 606 | 607 | 607 | 610 | 609 | 608 | 607 |
| 17.5° | 639 | 638 | 638 | 639 | 640 | 639 | 640 | 643 | 642 | 641 | 640 |
| 20° | 672 | 672 | 672 | 671 | 673 | 673 | 674 | 675 | 675 | 677 | 674 |
| 22.5° | 704 | 704 | 703 | 703 | 705 | 705 | 707 | 709 | 709 | 709 | 707 |
| 25° | 734 | 734 | 735 | 734 | 735 | 736 | 738 | 740 | 741 | 741 | 741 |
| 27.5° | 761 | 764 | 763 | 764 | 766 | 768 | 770 | 773 | 775 | 776 | 773 |
| 30° | 795 | 795 | 794 | 795 | 797 | 800 | 804 | 809 | 809 | 810 | 810 |
| 32.5° | 831 | 832 | 830 | 832 | 835 | 839 | 843 | 847 | 849 | 853 | 852 |
| 35° | 878 | 875 | 876 | 879 | 881 | 885 | 890 | 897 | 901 | 903 | 901 |
| 37.5° | 932 | 931 | 933 | 933 | 940 | 944 | 953 | 959 | 962 | 967 | 965 |
| 40° | 1000 | 1004 | 1005 | 1008 | 1012 | 1020 | 1030 | 1040 | 1046 | 1050 | 1051 |
| 42.5° | 1092 | 1094 | 1090 | 1101 | 1112 | 1117 | 1129 | 1143 | 1152 | 1155 | 1156 |
| 45° | 1205 | 1205 | 1211 | 1218 | 1232 | 1242 | 1255 | 1278 | 1286 | 1297 | 1297 |
| 47.5° | 1340 | 1344 | 1344 | 1360 | 1371 | 1391 | 1416 | 1435 | 1452 | 1447 | 1464 |
| 50° | 1496 | 1499 | 1510 | 1519 | 1538 | 1561 | 1584 | 1612 | 1637 | 1640 | 1643 |
| 52.5° | 1659 | 1663 | 1672 | 1693 | 1716 | 1742 | 1784 | 1808 | 1832 | 1845 | 1843 |
| 55° | 1846 | 1844 | 1859 | 1875 | 1909 | 1944 | 1979 | 2013 | 2038 | 2056 | 2055 |
| 57.5° | 2042 | 2049 | 2066 | 2086 | 2115 | 2146 | 2188 | 2222 | 2263 | 2274 | 2258 |
| 60° | 2270 | 2263 | 2280 | 2311 | 2337 | 2377 | 2414 | 2458 | 2487 | 2500 | 2495 |
| 62.5° | 2503 | 2497 | 2510 | 2550 | 2581 | 2610 | 2661 | 2709 | 2733 | 2738 | 2729 |
| 65° | 2674 | 2676 | 2697 | 2732 | 2781 | 2825 | 2882 | 2940 | 2978 | 2984 | 2964 |
| 67.5° | 2714 | 2718 | 2747 | 2792 | 2853 | 2926 | 3011 | 3097 | 3162 | 3176 | 3147 |
| 70° | 2622 | 2624 | 2652 | 2703 | 2773 | 2857 | 2963 | 3082 | 3177 | 3213 | 3181 |
| 72.5° | 2433 | 2441 | 2464 | 2507 | 2562 | 2645 | 2747 | 2853 | 2947 | 2993 | 2993 |
| 75° | 2092 | 2110 | 2121 | 2135 | 2183 | 2250 | 2333 | 2417 | 2500 | 2526 | 2453 |
| 77.5° | 1493 | 1463 | 1470 | 1548 | 1537 | 1613 | 1705 | 1765 | 1839 | 1828 | 1723 |
| 80° | 685 | 668 | 707 | 759 | 825 | 876 | 975 | 985 | 1070 | 1075 | 999 |
| 82.5° | 137 | 144 | 172 | 212 | 264 | 321 | 373 | 417 | 475 | 486 | 451 |
| 85° | 43 | 47 | 59 | 65 | 68 | 78 | 89 | 120 | 138 | 143 | 134 |
| 87.5° | 9 | 14 | 23 | 26 | 27 | 26 | 26 | 25 | 20 | 16 | 19 |
| 90° | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |



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CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|-------|------|------|------|------|------|------|------|------|
| 0° | 490 | 490 | 490 | 490 | 490 | 490 | 490 | 490 |
| 2.5° | 493 | 493 | 494 | 494 | 494 | 493 | 492 | 493 |
| 5° | 507 | 507 | 507 | 507 | 505 | 505 | 504 | 504 |
| 7.5° | 525 | 524 | 524 | 523 | 522 | 522 | 521 | 522 |
| 10° | 549 | 547 | 546 | 545 | 544 | 544 | 543 | 542 |
| 12.5° | 575 | 574 | 573 | 571 | 570 | 568 | 568 | 568 |
| 15° | 605 | 604 | 603 | 600 | 600 | 597 | 598 | 598 |
| 17.5° | 638 | 636 | 633 | 632 | 631 | 628 | 628 | 628 |
| 20° | 672 | 668 | 666 | 664 | 664 | 661 | 660 | 660 |
| 22.5° | 705 | 701 | 697 | 695 | 693 | 692 | 690 | 689 |
| 25° | 738 | 734 | 730 | 727 | 723 | 721 | 719 | 719 |
| 27.5° | 771 | 767 | 761 | 757 | 753 | 749 | 747 | 748 |
| 30° | 805 | 801 | 795 | 790 | 785 | 781 | 779 | 778 |
| 32.5° | 848 | 843 | 836 | 831 | 822 | 818 | 816 | 817 |
| 35° | 898 | 891 | 886 | 878 | 871 | 866 | 863 | 863 |
| 37.5° | 962 | 956 | 951 | 943 | 933 | 927 | 923 | 926 |
| 40° | 1045 | 1040 | 1030 | 1018 | 1010 | 1005 | 1001 | 1002 |
| 42.5° | 1151 | 1141 | 1132 | 1125 | 1113 | 1106 | 1095 | 1099 |
| 45° | 1285 | 1274 | 1265 | 1254 | 1243 | 1229 | 1225 | 1217 |
| 47.5° | 1447 | 1439 | 1419 | 1409 | 1395 | 1375 | 1365 | 1357 |
| 50° | 1626 | 1611 | 1597 | 1572 | 1556 | 1533 | 1524 | 1521 |
| 52.5° | 1828 | 1803 | 1780 | 1757 | 1725 | 1703 | 1685 | 1689 |
| 55° | 2028 | 1999 | 1966 | 1941 | 1916 | 1889 | 1870 | 1859 |
| 57.5° | 2239 | 2207 | 2172 | 2136 | 2115 | 2083 | 2071 | 2065 |
| 60° | 2456 | 2427 | 2392 | 2359 | 2330 | 2293 | 2273 | 2265 |
| 62.5° | 2696 | 2656 | 2614 | 2573 | 2541 | 2514 | 2493 | 2479 |
| 65° | 2917 | 2862 | 2819 | 2767 | 2732 | 2693 | 2667 | 2662 |
| 67.5° | 3082 | 2997 | 2922 | 2855 | 2801 | 2753 | 2720 | 2707 |
| 70° | 3093 | 2976 | 2865 | 2766 | 2687 | 2632 | 2588 | 2571 |
| 72.5° | 2879 | 2734 | 2584 | 2487 | 2403 | 2327 | 2296 | 2289 |
| 75° | 2342 | 2221 | 2096 | 1986 | 1928 | 1890 | 1864 | 1826 |
| 77.5° | 1627 | 1516 | 1449 | 1326 | 1304 | 1273 | 1247 | 1222 |
| 80° | 911 | 814 | 739 | 662 | 615 | 589 | 562 | 547 |
| 82.5° | 409 | 336 | 267 | 207 | 171 | 135 | 101 | 107 |
| 85° | 102 | 86 | 66 | 55 | 50 | 46 | 37 | 33 |
| 87.5° | 19 | 18 | 16 | 16 | 17 | 14 | 8 | 7 |
| 90° | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

(END OF REPORT)