

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: P939498

Luminaire Tested: **GALN-SB2A-840-U-T4FT-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P939498
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SB2A-840-U-T4FT-HSS
Description: GALLEON AREA AND ROADWAY HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 4000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6497 lumens
Efficiency: N/A
Efficacy: 113.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

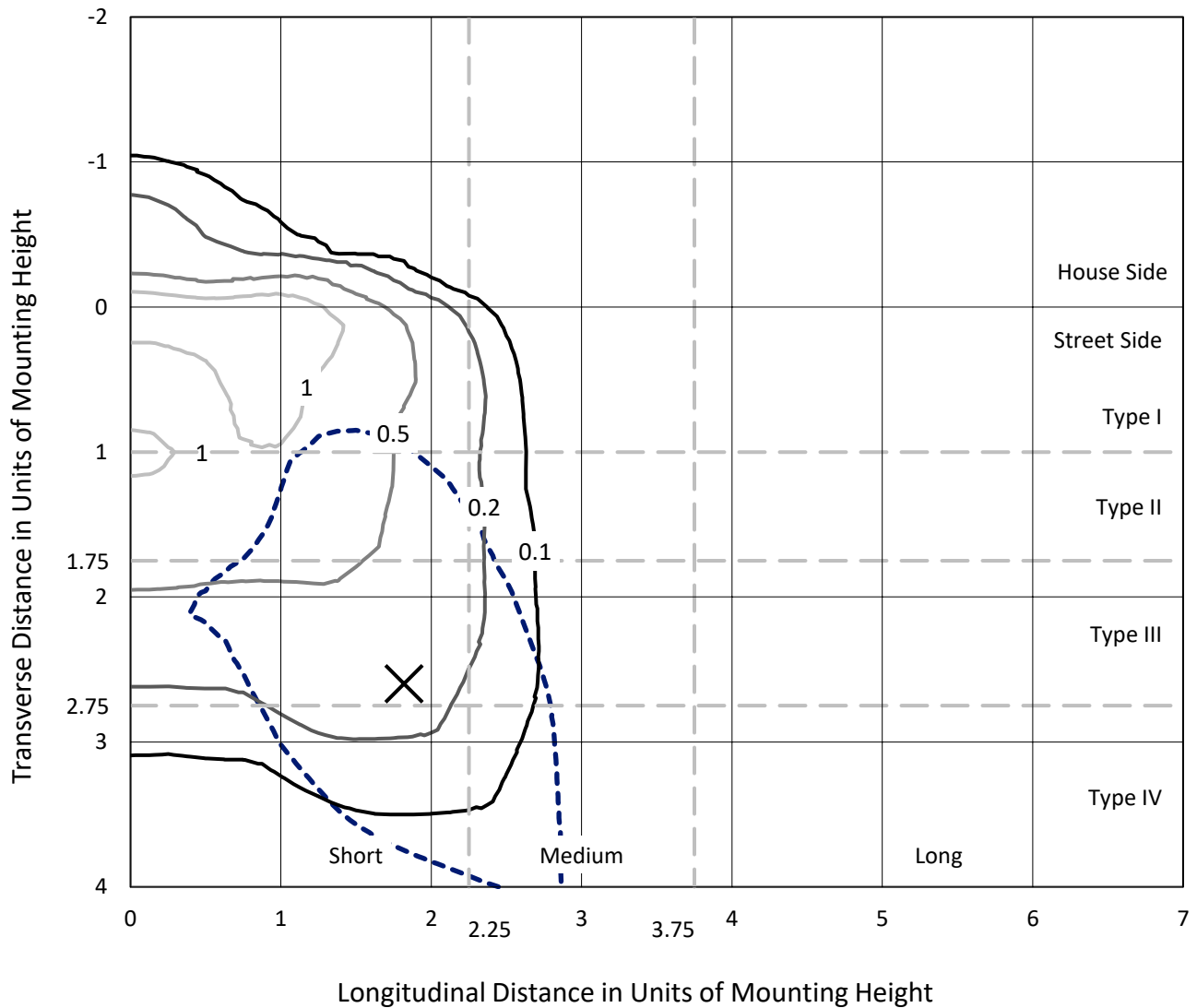
Input Watts (W): 57.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

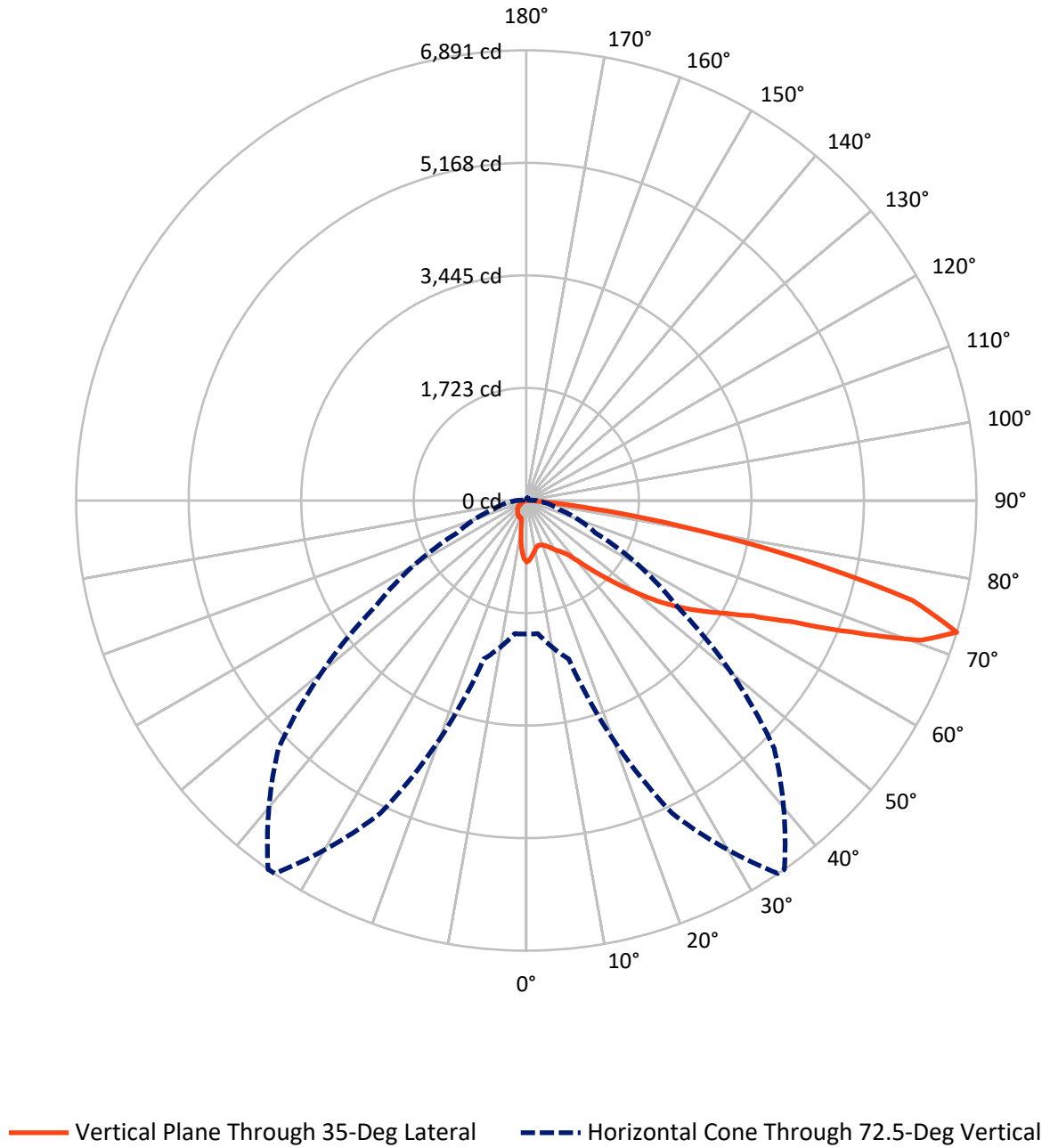
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.5 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 731.2 | 0.0 | 731.2 |
| | % Fixture | 11.3 | 0.0 | 11.3 |
| Street Side | Lumens | 5765.8 | 0.0 | 5765.8 |
| | % Fixture | 88.7 | 0.0 | 88.7 |
| Total | Lumens | 6497.0 | 0.0 | 6497.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 77.4 | 1.2 |
| 10°-20° | 181.0 | 2.8 |
| 20°-30° | 294.1 | 4.5 |
| 30°-40° | 490.6 | 7.6 |
| 40°-50° | 928.3 | 14.3 |
| 50°-60° | 1475.0 | 22.7 |
| 60°-70° | 1824.7 | 28.1 |
| 70°-80° | 1134.3 | 17.5 |
| 80°-90° | 91.7 | 1.4 |
| 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° | 6497.0 | 100.0 |
| 0°-180° | 6497.0 | 100.0 |

Coefficient of Utilization



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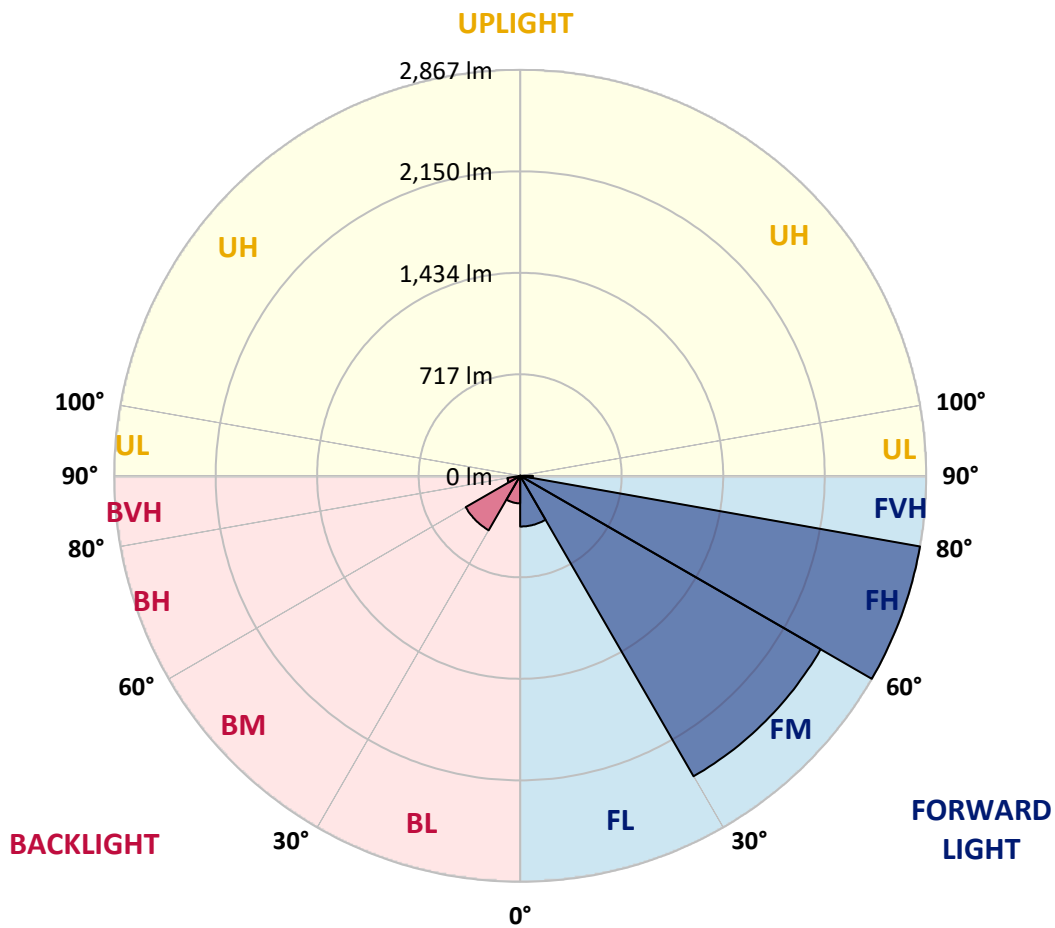
CATALOG NUMBER: GALN-SB2A-840-U-T4FT-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 358.1 | 5.5 | | | |
| FM (30°-60°) | 2450.0 | 37.7 | | | |
| FH (60°-80°) | 2867.2 | 44.1 | | | G2/5000 |
| FVH (80°-90°) | 90.4 | 1.4 | | | G1/100 |
| BL (0°-30°) | 194.3 | 3.0 | B1/500 | | |
| BM (30°-60°) | 443.9 | 6.8 | B1/1000 | | |
| BH (60°-80°) | 91.8 | 1.4 | B0/110 | | G0/110 |
| BVH (80°-90°) | 1.3 | 0.0 | | | G0/10 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B1-U0-G2

Type IV Short



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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 34° | 35° | 45° | 55° | 65° | 75° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 941.6 | 941.6 | 941.6 | 941.6 | 941.6 | 941.6 | 941.6 | 941.6 | 941.6 | 941.6 |
| 2.5° | 899.7 | 907.4 | 908.8 | 911.2 | 911.2 | 914.0 | 918.8 | 925.4 | 936.4 | 942.1 |
| 5° | 829.3 | 835.0 | 842.1 | 847.9 | 858.8 | 860.2 | 878.8 | 896.9 | 922.1 | 941.2 |
| 7.5° | 758.4 | 765.0 | 774.5 | 788.3 | 802.6 | 806.9 | 835.0 | 865.5 | 905.5 | 941.2 |
| 10° | 708.4 | 708.8 | 717.4 | 731.2 | 754.1 | 759.3 | 793.6 | 836.9 | 886.9 | 935.4 |
| 12.5° | 680.3 | 683.6 | 687.4 | 697.9 | 719.8 | 723.1 | 759.8 | 810.7 | 868.3 | 932.1 |
| 15° | 680.3 | 682.7 | 685.0 | 690.3 | 707.9 | 710.7 | 743.1 | 794.1 | 858.8 | 933.5 |
| 17.5° | 687.4 | 691.2 | 689.3 | 695.5 | 714.1 | 716.0 | 744.5 | 789.3 | 858.3 | 942.6 |
| 20° | 704.6 | 707.4 | 703.6 | 707.4 | 726.0 | 729.8 | 759.3 | 798.3 | 866.4 | 958.3 |
| 22.5° | 731.7 | 733.1 | 724.1 | 726.9 | 746.0 | 750.7 | 785.0 | 824.0 | 885.9 | 983.5 |
| 25° | 766.0 | 768.8 | 755.0 | 758.4 | 776.4 | 782.2 | 821.7 | 862.6 | 916.9 | 1018.3 |
| 27.5° | 805.5 | 806.9 | 795.0 | 794.5 | 817.9 | 826.0 | 865.9 | 910.2 | 958.3 | 1062.1 |
| 30° | 850.7 | 855.0 | 843.6 | 841.7 | 871.2 | 877.8 | 917.4 | 968.8 | 1019.2 | 1127.8 |
| 32.5° | 886.4 | 889.7 | 883.1 | 887.8 | 917.8 | 923.1 | 979.7 | 1051.6 | 1114.9 | 1221.1 |
| 35° | 937.8 | 939.7 | 924.5 | 933.1 | 967.3 | 980.7 | 1064.9 | 1167.8 | 1235.4 | 1338.2 |
| 37.5° | 1124.0 | 1124.0 | 1059.2 | 1016.8 | 1049.7 | 1061.6 | 1181.6 | 1313.9 | 1383.9 | 1495.3 |
| 40° | 1381.5 | 1377.2 | 1282.5 | 1195.8 | 1191.6 | 1214.9 | 1347.7 | 1498.1 | 1575.7 | 1683.8 |
| 42.5° | 1656.2 | 1649.5 | 1520.5 | 1434.8 | 1420.5 | 1428.6 | 1539.6 | 1725.2 | 1804.2 | 1913.7 |
| 45° | 1899.9 | 1898.0 | 1780.0 | 1664.8 | 1639.1 | 1664.8 | 1779.0 | 1990.9 | 2047.5 | 2162.7 |
| 47.5° | 2104.2 | 2104.2 | 2018.0 | 1942.8 | 1929.4 | 1944.7 | 2103.2 | 2285.5 | 2280.3 | 2427.9 |
| 50° | 2339.3 | 2337.4 | 2255.5 | 2223.2 | 2237.0 | 2258.4 | 2476.4 | 2595.9 | 2521.2 | 2688.3 |
| 52.5° | 2504.0 | 2515.5 | 2487.4 | 2482.1 | 2552.6 | 2589.7 | 2855.4 | 2899.6 | 2736.8 | 2935.3 |
| 55° | 2634.5 | 2647.8 | 2680.2 | 2716.8 | 2852.5 | 2901.1 | 3222.4 | 3187.7 | 2917.3 | 3149.6 |
| 57.5° | 2819.2 | 2800.1 | 2850.1 | 2922.5 | 3142.0 | 3200.5 | 3578.0 | 3459.5 | 3062.4 | 3323.3 |
| 60° | 3043.4 | 3046.3 | 3054.8 | 3146.2 | 3430.9 | 3506.1 | 3928.4 | 3716.5 | 3155.8 | 3430.0 |
| 62.5° | 3312.9 | 3317.1 | 3334.8 | 3475.2 | 3818.9 | 3889.8 | 4301.6 | 3927.0 | 3198.6 | 3400.0 |
| 65° | 3294.3 | 3312.4 | 3509.0 | 3989.3 | 4408.7 | 4478.7 | 4737.2 | 4074.5 | 3133.9 | 3125.8 |
| 67.5° | 3001.0 | 3030.6 | 3359.5 | 4603.4 | 5298.0 | 5376.1 | 5263.7 | 4103.6 | 2854.4 | 2430.7 |
| 70° | 2616.4 | 2626.9 | 3022.5 | 5155.7 | 6327.7 | 6406.7 | 5735.0 | 3784.1 | 2166.0 | 1355.8 |
| 72.5° | 2043.2 | 2045.6 | 2509.8 | 5283.7 | 6886.6 | 6890.9 | 5365.1 | 2809.2 | 1164.9 | 520.8 |
| 75° | 1459.6 | 1445.3 | 1680.9 | 4285.0 | 6058.7 | 6107.3 | 4022.2 | 1317.7 | 445.1 | 246.1 |
| 77.5° | 782.6 | 798.3 | 951.2 | 2541.2 | 4185.5 | 4268.3 | 2194.6 | 379.9 | 226.6 | 167.6 |
| 80° | 241.8 | 255.2 | 389.9 | 1163.5 | 2370.7 | 2420.7 | 813.6 | 169.0 | 158.0 | 119.5 |
| 82.5° | 76.2 | 79.0 | 181.9 | 488.9 | 984.0 | 1006.9 | 235.6 | 95.7 | 108.1 | 79.0 |
| 85° | 21.9 | 22.4 | 80.9 | 182.3 | 243.3 | 248.0 | 66.2 | 37.1 | 61.9 | 49.0 |
| 87.5° | 2.4 | 7.6 | 30.5 | 30.5 | 21.4 | 20.9 | 7.1 | 8.1 | 17.6 | 6.2 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

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CANDELA DISTRIBUTION (continued):

| 85° | | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° |
|--------|-------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| 941.6 | 0° | 941.6 | 941.6 | 941.6 | 941.6 | 941.6 | 941.6 | 941.6 | 941.6 | 941.6 | 941.6 |
| 945.9 | 2.5° | 943.5 | 944.0 | 937.8 | 927.4 | 915.9 | 906.4 | 894.5 | 885.0 | 878.3 | 876.4 |
| 954.5 | 5° | 950.2 | 946.9 | 929.3 | 897.4 | 859.3 | 826.4 | 789.8 | 760.7 | 741.7 | 733.6 |
| 963.5 | 7.5° | 960.2 | 950.7 | 912.1 | 849.3 | 776.4 | 711.7 | 646.0 | 595.1 | 562.7 | 546.5 |
| 972.1 | 10° | 968.8 | 949.7 | 883.6 | 779.8 | 668.4 | 570.3 | 481.8 | 420.4 | 386.1 | 369.9 |
| 982.1 | 12.5° | 976.9 | 949.2 | 846.4 | 697.4 | 546.5 | 426.5 | 344.2 | 313.7 | 304.2 | 300.9 |
| 998.3 | 15° | 992.1 | 950.7 | 799.8 | 603.2 | 425.1 | 322.3 | 292.3 | 291.8 | 293.7 | 292.8 |
| 1023.0 | 17.5° | 1013.0 | 952.1 | 746.9 | 503.2 | 328.0 | 284.2 | 282.8 | 287.1 | 289.9 | 288.5 |
| 1054.0 | 20° | 1040.2 | 957.8 | 690.8 | 404.2 | 281.8 | 274.7 | 278.0 | 281.8 | 284.2 | 281.8 |
| 1095.4 | 22.5° | 1078.3 | 967.8 | 629.3 | 324.7 | 267.1 | 269.0 | 271.8 | 276.1 | 278.5 | 275.2 |
| 1148.2 | 25° | 1124.9 | 983.5 | 568.9 | 282.3 | 259.9 | 262.3 | 266.6 | 271.4 | 274.2 | 270.9 |
| 1214.9 | 27.5° | 1185.4 | 1008.8 | 513.2 | 272.8 | 252.8 | 254.2 | 260.4 | 267.5 | 271.4 | 267.1 |
| 1309.6 | 30° | 1273.0 | 1050.2 | 465.1 | 277.1 | 248.5 | 245.2 | 253.7 | 263.7 | 268.0 | 264.2 |
| 1438.6 | 32.5° | 1389.1 | 1108.7 | 435.6 | 283.7 | 246.6 | 234.7 | 242.8 | 255.6 | 262.8 | 260.4 |
| 1607.2 | 35° | 1541.5 | 1197.7 | 424.2 | 291.3 | 245.2 | 223.7 | 229.5 | 243.3 | 255.6 | 258.0 |
| 1819.5 | 37.5° | 1726.2 | 1321.5 | 427.5 | 294.7 | 240.9 | 214.7 | 217.6 | 229.5 | 245.6 | 253.3 |
| 2058.5 | 40° | 1936.1 | 1465.8 | 446.5 | 291.3 | 236.1 | 207.1 | 207.6 | 216.6 | 230.9 | 242.3 |
| 2315.5 | 42.5° | 2152.7 | 1634.3 | 481.8 | 279.0 | 231.8 | 200.4 | 199.0 | 205.2 | 214.7 | 222.8 |
| 2572.1 | 45° | 2358.8 | 1807.6 | 516.5 | 261.8 | 226.6 | 193.8 | 190.4 | 192.8 | 194.7 | 198.0 |
| 2822.0 | 47.5° | 2538.8 | 1929.4 | 506.5 | 246.1 | 219.5 | 186.1 | 180.4 | 179.5 | 173.8 | 173.3 |
| 3045.3 | 50° | 2663.0 | 1956.1 | 449.9 | 230.4 | 209.0 | 177.6 | 168.5 | 162.8 | 152.8 | 148.1 |
| 3212.4 | 52.5° | 2702.6 | 1850.9 | 367.5 | 214.7 | 191.8 | 166.1 | 153.3 | 144.2 | 131.9 | 127.6 |
| 3308.6 | 55° | 2650.2 | 1644.8 | 293.7 | 195.7 | 168.0 | 150.9 | 136.6 | 124.7 | 114.7 | 109.5 |
| 3319.0 | 57.5° | 2522.1 | 1382.5 | 232.3 | 173.3 | 142.8 | 133.8 | 119.5 | 107.6 | 99.0 | 93.8 |
| 3202.9 | 60° | 2309.8 | 1097.8 | 183.8 | 146.6 | 121.9 | 115.2 | 100.4 | 92.8 | 85.2 | 79.0 |
| 2903.0 | 62.5° | 1987.5 | 783.6 | 144.2 | 116.2 | 101.9 | 94.3 | 85.7 | 80.0 | 70.9 | 62.4 |
| 2363.6 | 65° | 1551.0 | 479.4 | 111.4 | 85.2 | 81.9 | 78.1 | 72.8 | 67.6 | 56.7 | 48.1 |
| 1541.9 | 67.5° | 978.3 | 227.1 | 79.5 | 64.3 | 64.7 | 62.8 | 60.5 | 56.2 | 48.1 | 40.5 |
| 690.8 | 70° | 430.8 | 110.0 | 52.4 | 49.0 | 48.1 | 48.1 | 50.0 | 48.6 | 40.9 | 33.8 |
| 239.9 | 72.5° | 146.6 | 59.0 | 39.0 | 37.1 | 34.8 | 34.3 | 41.9 | 40.5 | 32.8 | 26.2 |
| 119.5 | 75° | 76.6 | 39.5 | 28.6 | 26.7 | 20.9 | 25.2 | 33.3 | 31.4 | 23.3 | 17.1 |
| 79.0 | 77.5° | 50.0 | 28.1 | 19.5 | 17.1 | 11.9 | 16.7 | 24.8 | 21.9 | 13.8 | 8.6 |
| 51.9 | 80° | 31.4 | 18.6 | 11.4 | 8.1 | 5.7 | 9.0 | 13.3 | 9.5 | 5.2 | 1.9 |
| 30.5 | 82.5° | 16.7 | 9.5 | 4.3 | 2.9 | 2.4 | 2.9 | 3.3 | 2.4 | 1.0 | 0.0 |
| 15.7 | 85° | 6.7 | 3.3 | 1.4 | 1.0 | 0.5 | 0.0 | 1.0 | 0.5 | 0.0 | 0.0 |
| 2.9 | 87.5° | 2.4 | 0.5 | 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 |

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|-------------|
| <u>180°</u> |
| 941.6 |
| 879.7 |
| 736.5 |
| 548.9 |
| 370.4 |
| 299.9 |
| 292.3 |
| 288.0 |
| 281.3 |
| 274.7 |
| 270.4 |
| 267.1 |
| 263.7 |
| 260.4 |
| 258.0 |
| 255.2 |
| 246.1 |
| 226.1 |
| 199.9 |
| 172.8 |
| 148.5 |
| 127.1 |
| 109.5 |
| 92.8 |
| 77.6 |
| 60.9 |
| 46.7 |
| 39.5 |
| 32.4 |
| 24.8 |
| 15.7 |
| 7.6 |
| 1.4 |
| 0.0 |
| 0.0 |
| 0.0 |
| 0.0 |

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