

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P149528

Luminaire Tested: **TLM-E04-LED-E1-SL2-HSS-8030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P149528  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33726)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: TLM-E04-LED-E1-SL2-HSS-8030  
Description: TALON MEDIUM LED SITE LUMINAIRE  
(4) LIGHTBARS WITH AccuLED OPTICS - TYPE 2 W/ SPILL LIGHT CONTROL AND  
HOUSE SIDE SHIELD  
Light Source: (84) 3000K CCT, 80 CRI LEDs  
Ballast/Driver: -

**Summary**

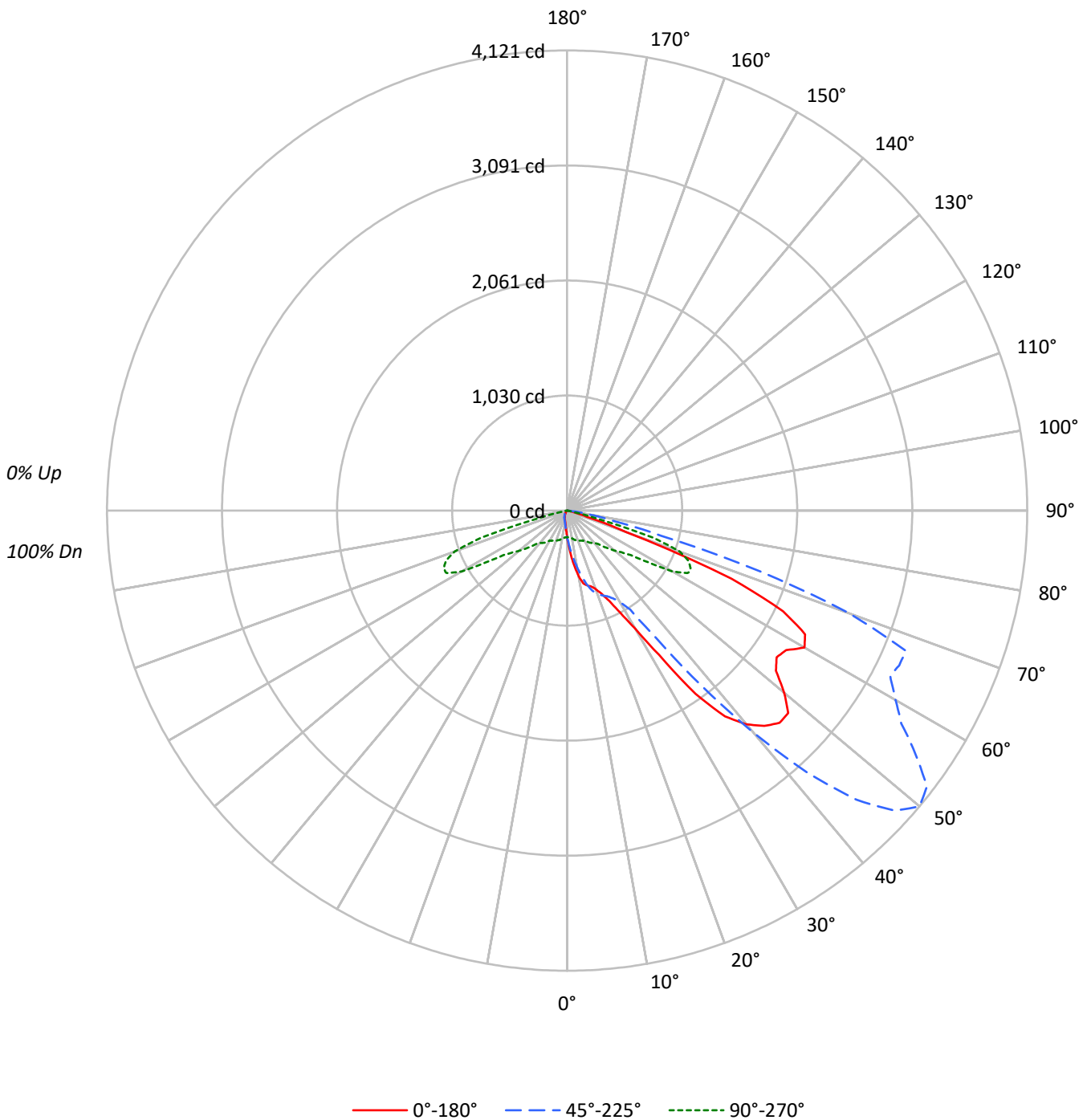
Lumens per Lamp: N/A  
Luminaire Lumens: 6190.1 lumens  
Efficiency: N/A  
Efficacy: 63.7 lumens/watt  
Spacing Criteria (0/90/45): 3.84 / 3.85 / 3.8  
Luminous Opening: Rectangular (W 0.67' x L: 1' x H: 0')  
CIE Type: Direct

Input Watts (W): 97.2  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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: P149528  
CATALOG NUMBER: TLM-E04-LED-E1-SL2-HSS-8030

### Luminous Intensity Polar Plot





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**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   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1   | 106 | 100 | 94  | 89  | 103 | 97  | 92  | 88  | 93  | 89  | 85  | 89  | 86  | 82  | 85  | 82  | 80  | 78  |
| 2   | 93  | 82  | 73  | 66  | 90  | 80  | 72  | 65  | 76  | 69  | 63  | 73  | 67  | 62  | 70  | 65  | 60  | 58  |
| 3   | 82  | 68  | 58  | 49  | 79  | 66  | 57  | 49  | 63  | 55  | 48  | 60  | 53  | 47  | 57  | 51  | 46  | 43  |
| 4   | 72  | 57  | 46  | 38  | 70  | 56  | 45  | 37  | 53  | 44  | 37  | 50  | 42  | 36  | 48  | 41  | 35  | 33  |
| 5   | 65  | 49  | 38  | 29  | 62  | 47  | 37  | 29  | 45  | 36  | 29  | 43  | 35  | 28  | 41  | 34  | 28  | 25  |
| 6   | 58  | 42  | 31  | 23  | 56  | 41  | 31  | 23  | 39  | 30  | 23  | 37  | 29  | 23  | 35  | 28  | 22  | 20  |
| 7   | 53  | 37  | 26  | 19  | 51  | 36  | 26  | 19  | 34  | 25  | 19  | 33  | 24  | 18  | 31  | 24  | 18  | 16  |
| 8   | 49  | 33  | 23  | 16  | 47  | 32  | 22  | 16  | 30  | 22  | 15  | 29  | 21  | 15  | 28  | 20  | 15  | 13  |
| 9   | 45  | 29  | 20  | 13  | 43  | 29  | 19  | 13  | 27  | 19  | 13  | 26  | 18  | 13  | 25  | 18  | 13  | 11  |
| 10  | 42  | 26  | 17  | 11  | 40  | 26  | 17  | 11  | 25  | 17  | 11  | 24  | 16  | 11  | 23  | 16  | 11  | 9   |

**AVERAGE LUMINANCE (cd/sqm):**

|     | 0°    | 90°   | 180° |
|-----|-------|-------|------|
| 0°  | 3814  | 3814  | 3814 |
| 5°  | 6570  | 3901  | 2232 |
| 10° | 9767  | 4131  | 1635 |
| 15° | 11548 | 4567  | 1347 |
| 20° | 12793 | 4926  | 1116 |
| 25° | 15839 | 5247  | 858  |
| 30° | 22608 | 5762  | 668  |
| 35° | 39262 | 6886  | 486  |
| 40° | 52392 | 7930  | 260  |
| 45° | 61081 | 10254 | 77   |
| 50° | 63396 | 13979 | 27   |
| 55° | 64142 | 19447 | 0    |
| 60° | 78824 | 35000 | 0    |
| 65° | 81149 | 46370 | 0    |
| 70° | 26535 | 50322 | 0    |
| 75° | 4537  | 16623 | 0    |
| 80° | 1147  | 2294  | 0    |
| 85° | 0     | 1253  | 0    |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 26.2   | 0.4       |
| 10°-20°   | 101.8  | 1.6       |
| 20°-30°   | 206.7  | 3.3       |
| 30°-40°   | 505.1  | 8.2       |
| 40°-50°   | 1129.6 | 18.2      |
| 50°-60°   | 1588.3 | 25.7      |
| 60°-70°   | 1867.7 | 30.2      |
| 70°-80°   | 674.4  | 10.9      |
| 80°-90°   | 90.2   | 1.5       |
| 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°    | 334.8  | 5.4       |
| 0°-40°    | 839.8  | 13.6      |
| 0°-60°    | 3557.8 | 57.5      |
| 0°-90°    | 6190.1 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 6190.1 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45°  | 90°  | 135° | 180° | Flux |
|-----|------|------|------|------|------|------|
| 0°  | 237  | 237  | 237  | 237  | 237  |      |
| 5°  | 407  | 359  | 242  | 155  | 138  | 45   |
| 15° | 694  | 688  | 275  | 89   | 81   | 196  |
| 25° | 894  | 846  | 296  | 60   | 48   | 436  |
| 35° | 2002 | 1392 | 351  | 35   | 25   | 1228 |
| 45° | 2688 | 3662 | 451  | 14   | 3    | 2035 |
| 55° | 2290 | 3812 | 694  | 1    | 0    | 2122 |
| 65° | 2135 | 3281 | 1220 | 0    | 0    | 1885 |
| 75° | 73   | 871  | 268  | 0    | 0    | 152  |
| 85° | 0    | 14   | 7    | 0    | 0    | 2    |
| 90° | 0    | 0    | 0    | 0    | 0    |      |



TEST NUMBER: P149528

CATALOG NUMBER: TLM-E04-LED-E1-SL2-HSS-8030

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 56°    | 57°    | 58°    | 59°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 237.4  | 237.4  | 237.4  | 237.4  | 237.4  | 237.4  | 237.4  | 237.4  | 237.4  | 237.4  | 237.4  |
| 2.5°  | 310.6  | 314.0  | 311.7  | 306.1  | 299.3  | 290.3  | 282.5  | 282.5  | 281.3  | 278.0  | 279.1  |
| 5°    | 407.4  | 408.5  | 404.0  | 390.5  | 378.1  | 359.0  | 337.6  | 335.3  | 333.1  | 329.7  | 328.6  |
| 7.5°  | 501.9  | 506.4  | 501.9  | 487.3  | 462.5  | 433.2  | 399.5  | 396.1  | 389.4  | 389.4  | 384.9  |
| 10°   | 598.7  | 598.7  | 594.2  | 577.3  | 554.8  | 513.1  | 470.4  | 464.8  | 456.9  | 454.6  | 447.9  |
| 12.5° | 667.3  | 667.3  | 665.1  | 656.1  | 638.1  | 600.9  | 549.2  | 543.5  | 533.4  | 530.0  | 522.1  |
| 15°   | 694.3  | 694.3  | 695.4  | 703.3  | 704.5  | 687.6  | 633.6  | 629.1  | 618.9  | 609.9  | 606.5  |
| 17.5° | 711.2  | 710.1  | 710.1  | 721.3  | 741.6  | 752.8  | 718.0  | 713.5  | 702.2  | 697.7  | 686.4  |
| 20°   | 748.3  | 746.1  | 739.3  | 739.3  | 758.5  | 797.9  | 797.9  | 796.7  | 784.3  | 781.0  | 775.3  |
| 22.5° | 803.5  | 801.2  | 781.0  | 764.1  | 773.1  | 822.6  | 868.7  | 866.5  | 862.0  | 857.5  | 854.1  |
| 25°   | 893.5  | 885.6  | 850.7  | 801.2  | 793.4  | 846.2  | 922.8  | 928.4  | 931.8  | 931.8  | 934.0  |
| 27.5° | 1029.7 | 1019.5 | 957.6  | 865.4  | 830.5  | 884.5  | 982.4  | 993.7  | 1003.8 | 1006.0 | 1016.2 |
| 30°   | 1218.7 | 1200.7 | 1111.8 | 976.8  | 896.9  | 940.8  | 1070.2 | 1082.6 | 1097.2 | 1101.7 | 1117.4 |
| 32.5° | 1529.3 | 1519.2 | 1433.7 | 1231.1 | 1060.1 | 1051.1 | 1192.8 | 1208.6 | 1227.7 | 1235.6 | 1254.7 |
| 35°   | 2001.9 | 2004.2 | 1934.4 | 1752.1 | 1515.8 | 1392.0 | 1412.3 | 1425.8 | 1432.5 | 1456.2 | 1466.3 |
| 37.5° | 2322.7 | 2328.3 | 2344.0 | 2272.0 | 2103.2 | 1977.2 | 1818.5 | 1833.1 | 1798.3 | 1801.6 | 1802.8 |
| 40°   | 2498.2 | 2516.2 | 2608.5 | 2678.3 | 2664.8 | 2591.6 | 2464.5 | 2472.3 | 2407.1 | 2392.4 | 2321.5 |
| 42.5° | 2615.2 | 2638.9 | 2786.3 | 3002.4 | 3112.6 | 3179.0 | 3149.8 | 3146.4 | 3095.8 | 3076.6 | 3017.0 |
| 45°   | 2688.4 | 2709.8 | 2895.5 | 3213.9 | 3468.2 | 3661.8 | 3741.7 | 3750.7 | 3707.9 | 3688.8 | 3639.3 |
| 47.5° | 2685.0 | 2709.8 | 2909.0 | 3292.7 | 3667.4 | 3976.9 | 4201.9 | 4213.2 | 4239.1 | 4222.2 | 4225.6 |
| 50°   | 2536.5 | 2560.1 | 2760.4 | 3158.8 | 3608.9 | 4120.9 | 4532.8 | 4568.8 | 4610.4 | 4638.6 | 4652.1 |
| 52.5° | 2356.4 | 2373.3 | 2551.1 | 2929.2 | 3359.1 | 4061.3 | 4728.6 | 4790.5 | 4852.4 | 4905.3 | 4942.4 |
| 55°   | 2290.0 | 2309.2 | 2448.7 | 2762.7 | 3158.8 | 3811.5 | 4819.8 | 4910.9 | 4998.7 | 5085.3 | 5156.2 |
| 57.5° | 2324.9 | 2342.9 | 2443.1 | 2683.9 | 3039.5 | 3548.1 | 4845.6 | 4987.4 | 5131.5 | 5272.1 | 5411.7 |
| 60°   | 2453.2 | 2472.3 | 2557.9 | 2757.0 | 3008.0 | 3396.2 | 4744.4 | 4979.5 | 5219.2 | 5464.6 | 5695.3 |
| 62.5° | 2402.6 | 2410.4 | 2536.5 | 2885.3 | 3233.0 | 3266.8 | 4376.4 | 4705.0 | 5070.7 | 5448.8 | 5821.3 |
| 63°   | 2354.2 | 2363.2 | 2491.5 | 2850.4 | 3301.7 | 3247.7 | 4262.7 | 4609.3 | 4995.3 | 5402.7 | 5807.8 |
| 65°   | 2134.7 | 2135.9 | 2233.8 | 2517.3 | 3225.2 | 3281.4 | 3756.3 | 4087.2 | 4530.5 | 5018.9 | 5531.0 |
| 67.5° | 1593.5 | 1585.6 | 1680.1 | 1896.2 | 2532.0 | 3282.6 | 3224.0 | 3409.7 | 3718.1 | 4151.3 | 4610.4 |
| 70°   | 564.9  | 552.5  | 705.6  | 1004.9 | 1577.7 | 2685.0 | 2770.5 | 2782.9 | 2868.4 | 3102.5 | 3390.6 |
| 72.5° | 183.4  | 186.8  | 225.1  | 368.0  | 727.0  | 1807.3 | 2508.3 | 2470.1 | 2447.6 | 2446.4 | 2484.7 |
| 75°   | 73.1   | 74.3   | 90.0   | 163.2  | 326.3  | 871.0  | 2196.6 | 2218.0 | 2225.9 | 2237.1 | 2249.5 |
| 77.5° | 34.9   | 38.3   | 50.6   | 91.2   | 162.0  | 431.0  | 1572.1 | 1753.3 | 1856.8 | 1936.7 | 1985.1 |
| 80°   | 12.4   | 14.6   | 28.1   | 56.3   | 75.4   | 198.1  | 828.2  | 999.3  | 1151.2 | 1347.0 | 1515.8 |
| 82.5° | 0.0    | 0.0    | 5.6    | 39.4   | 41.6   | 79.9   | 339.8  | 398.4  | 455.8  | 590.8  | 758.5  |
| 85°   | 0.0    | 0.0    | 0.0    | 11.3   | 12.4   | 13.5   | 114.8  | 138.4  | 155.3  | 181.2  | 209.3  |
| 87.5° | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 1.1    | 3.4    | 6.8    | 16.9   | 25.9   |
| 90°   | 0.0    | 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):**

|       | 60°    | 61°    | 62°    | 64°    | 65°    | 66°    | 67°    | 68°    | 69°    | 70°    | 71°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 237.4  | 237.4  | 237.4  | 237.4  | 237.4  | 237.4  | 237.4  | 237.4  | 237.4  | 237.4  | 237.4  |
| 2.5°  | 276.8  | 275.7  | 275.7  | 273.5  | 272.3  | 270.1  | 269.0  | 265.6  | 264.5  | 264.5  | 264.5  |
| 5°    | 327.5  | 323.0  | 320.7  | 315.1  | 311.7  | 310.6  | 305.0  | 302.7  | 299.3  | 300.5  | 294.8  |
| 7.5°  | 383.7  | 375.9  | 372.5  | 364.6  | 362.4  | 354.5  | 352.2  | 346.6  | 343.2  | 336.5  | 334.2  |
| 10°   | 445.6  | 435.5  | 429.9  | 417.5  | 414.1  | 408.5  | 401.7  | 395.0  | 389.4  | 382.6  | 379.2  |
| 12.5° | 516.5  | 507.5  | 503.0  | 486.1  | 478.3  | 470.4  | 461.4  | 452.4  | 443.4  | 437.7  | 429.9  |
| 15°   | 599.8  | 585.2  | 580.7  | 564.9  | 551.4  | 541.3  | 528.9  | 517.6  | 510.9  | 499.6  | 491.8  |
| 17.5° | 681.9  | 667.3  | 663.9  | 640.3  | 625.7  | 618.9  | 605.4  | 590.8  | 578.4  | 567.2  | 554.8  |
| 20°   | 764.1  | 754.0  | 745.0  | 722.5  | 706.7  | 695.4  | 677.4  | 662.8  | 652.7  | 636.9  | 621.2  |
| 22.5° | 846.2  | 836.1  | 829.4  | 805.7  | 791.1  | 775.3  | 759.6  | 743.8  | 729.2  | 710.1  | 692.1  |
| 25°   | 930.6  | 923.9  | 920.5  | 899.1  | 885.6  | 871.0  | 855.2  | 837.2  | 819.2  | 797.9  | 778.7  |
| 27.5° | 1018.4 | 1020.7 | 1013.9 | 1009.4 | 994.8  | 984.7  | 959.9  | 947.5  | 934.0  | 908.1  | 884.5  |
| 30°   | 1129.8 | 1136.6 | 1134.3 | 1137.7 | 1128.7 | 1121.9 | 1102.8 | 1087.1 | 1071.3 | 1046.5 | 1019.5 |
| 32.5° | 1270.5 | 1279.5 | 1284.0 | 1296.4 | 1291.9 | 1289.6 | 1284.0 | 1261.5 | 1250.2 | 1207.5 | 1196.2 |
| 35°   | 1487.7 | 1483.2 | 1502.3 | 1512.4 | 1507.9 | 1505.7 | 1498.9 | 1486.5 | 1473.0 | 1442.7 | 1414.5 |
| 37.5° | 1770.1 | 1774.6 | 1781.4 | 1761.1 | 1747.6 | 1746.5 | 1726.2 | 1713.9 | 1694.7 | 1661.0 | 1627.2 |
| 40°   | 2287.8 | 2259.6 | 2228.1 | 2142.6 | 2105.5 | 2084.1 | 2024.5 | 2007.6 | 1974.9 | 1928.8 | 1893.9 |
| 42.5° | 2960.7 | 2932.6 | 2838.1 | 2695.1 | 2618.6 | 2512.8 | 2464.5 | 2404.8 | 2358.7 | 2283.3 | 2242.8 |
| 45°   | 3629.2 | 3548.1 | 3536.9 | 3370.3 | 3275.8 | 3136.3 | 3049.6 | 2949.5 | 2844.8 | 2745.8 | 2673.8 |
| 47.5° | 4192.9 | 4174.9 | 4119.8 | 4018.5 | 3930.7 | 3813.7 | 3702.3 | 3548.1 | 3440.1 | 3299.4 | 3170.0 |
| 50°   | 4644.2 | 4643.1 | 4622.8 | 4564.3 | 4491.2 | 4396.6 | 4298.7 | 4168.2 | 4045.5 | 3873.4 | 3734.9 |
| 52.5° | 4981.8 | 4999.8 | 5006.6 | 4988.5 | 4960.4 | 4877.1 | 4827.6 | 4718.5 | 4614.9 | 4468.7 | 4319.0 |
| 55°   | 5229.4 | 5295.8 | 5329.5 | 5367.8 | 5359.9 | 5330.6 | 5328.4 | 5257.5 | 5210.2 | 5094.3 | 4988.5 |
| 57.5° | 5535.5 | 5644.6 | 5749.3 | 5934.9 | 5941.7 | 6007.0 | 6040.7 | 6074.5 | 6083.5 | 6037.3 | 6002.5 |
| 60°   | 5924.8 | 6147.6 | 6345.7 | 6733.9 | 6835.2 | 6995.0 | 7098.5 | 7211.1 | 7306.7 | 7314.6 | 7312.3 |
| 62.5° | 6199.4 | 6542.6 | 6862.2 | 7438.4 | 7635.3 | 7819.9 | 7958.3 | 8067.4 | 8133.8 | 8201.3 | 8232.9 |
| 63°   | 6207.3 | 6583.1 | 6923.0 | 7517.1 | 7724.2 | 7899.8 | 8031.4 | 8132.7 | 8202.5 | 8243.0 | 8263.2 |
| 65°   | 6017.1 | 6472.8 | 6878.0 | 7469.9 | 7664.6 | 7841.2 | 7909.9 | 7976.3 | 8010.0 | 8025.8 | 7966.1 |
| 67.5° | 5100.0 | 5545.6 | 6018.2 | 6679.9 | 6846.5 | 7058.0 | 7114.3 | 7148.0 | 7163.8 | 7160.4 | 7109.8 |
| 70°   | 3813.7 | 4187.3 | 4712.8 | 5469.1 | 5689.6 | 5896.7 | 6025.0 | 6080.1 | 6098.1 | 6092.5 | 6017.1 |
| 72.5° | 2662.5 | 2881.9 | 3315.2 | 4156.9 | 4457.4 | 4723.0 | 4881.6 | 4963.8 | 4980.7 | 4946.9 | 4877.1 |
| 75°   | 2236.0 | 2247.3 | 2345.2 | 2805.4 | 3086.8 | 3370.3 | 3549.3 | 3601.0 | 3567.3 | 3464.9 | 3287.1 |
| 77.5° | 1996.3 | 2021.1 | 2021.1 | 2089.7 | 2144.9 | 2223.6 | 2240.5 | 2114.5 | 1968.2 | 1779.1 | 1626.1 |
| 80°   | 1674.5 | 1761.1 | 1821.9 | 1872.5 | 1878.2 | 1862.4 | 1820.8 | 1749.9 | 1637.3 | 1493.3 | 1333.5 |
| 82.5° | 1017.3 | 1188.3 | 1258.1 | 1519.2 | 1647.5 | 1734.1 | 1727.4 | 1632.8 | 1547.3 | 1397.6 | 1261.5 |
| 85°   | 256.6  | 276.8  | 300.5  | 390.5  | 437.7  | 534.5  | 595.3  | 623.4  | 633.6  | 581.8  | 526.7  |
| 87.5° | 24.8   | 16.9   | 28.1   | 21.4   | 30.4   | 22.5   | 30.4   | 28.1   | 34.9   | 37.1   | 40.5   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |



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CATALOG NUMBER: TLM-E04-LED-E1-SL2-HSS-8030

**CANDELA DISTRIBUTION (continued):**

|       | 72°    | 73°    | 74°    | 75°    | 76°    | 77°    | 78°    | 79°    | 80°    | 81°    | 82°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 237.4  | 237.4  | 237.4  | 237.4  | 237.4  | 237.4  | 237.4  | 237.4  | 237.4  | 237.4  | 237.4  |
| 2.5°  | 262.2  | 261.1  | 259.9  | 258.8  | 257.7  | 256.6  | 254.3  | 254.3  | 252.1  | 250.9  | 249.8  |
| 5°    | 291.5  | 289.2  | 288.1  | 285.8  | 282.5  | 280.2  | 276.8  | 272.3  | 269.0  | 267.8  | 265.6  |
| 7.5°  | 328.6  | 323.0  | 320.7  | 317.3  | 312.8  | 306.1  | 301.6  | 298.2  | 292.6  | 289.2  | 282.5  |
| 10°   | 370.2  | 364.6  | 357.9  | 351.1  | 344.3  | 336.5  | 330.8  | 326.3  | 317.3  | 312.8  | 305.0  |
| 12.5° | 423.1  | 413.0  | 405.1  | 396.1  | 387.1  | 378.1  | 371.4  | 357.9  | 350.0  | 339.8  | 333.1  |
| 15°   | 477.1  | 468.1  | 459.1  | 447.9  | 434.4  | 419.7  | 413.0  | 400.6  | 390.5  | 374.7  | 365.7  |
| 17.5° | 542.4  | 525.5  | 512.0  | 498.5  | 486.1  | 472.6  | 459.1  | 440.0  | 425.4  | 411.9  | 393.9  |
| 20°   | 606.5  | 586.3  | 571.7  | 553.7  | 535.7  | 514.3  | 498.5  | 485.0  | 464.8  | 446.8  | 427.6  |
| 22.5° | 675.2  | 654.9  | 631.3  | 613.3  | 588.5  | 571.7  | 550.3  | 527.8  | 507.5  | 483.9  | 460.3  |
| 25°   | 758.5  | 737.1  | 710.1  | 686.4  | 658.3  | 634.7  | 608.8  | 582.9  | 558.2  | 531.2  | 500.8  |
| 27.5° | 860.9  | 838.4  | 809.1  | 781.0  | 743.8  | 714.6  | 689.8  | 654.9  | 623.4  | 589.7  | 554.8  |
| 30°   | 990.3  | 965.5  | 929.5  | 889.0  | 851.9  | 819.2  | 784.3  | 738.2  | 703.3  | 662.8  | 617.8  |
| 32.5° | 1159.1 | 1129.8 | 1081.4 | 1043.2 | 997.0  | 954.3  | 905.9  | 859.7  | 810.2  | 757.3  | 705.6  |
| 35°   | 1371.8 | 1344.8 | 1288.5 | 1232.2 | 1181.6 | 1130.9 | 1070.2 | 1017.3 | 947.5  | 883.4  | 817.0  |
| 37.5° | 1592.3 | 1543.9 | 1492.2 | 1431.4 | 1368.4 | 1307.6 | 1233.4 | 1160.2 | 1080.3 | 1010.5 | 927.3  |
| 40°   | 1844.4 | 1785.9 | 1743.1 | 1677.9 | 1589.0 | 1502.3 | 1433.7 | 1342.5 | 1242.4 | 1149.0 | 1051.1 |
| 42.5° | 2189.9 | 2124.6 | 2048.1 | 1949.1 | 1884.9 | 1783.6 | 1694.7 | 1586.7 | 1455.0 | 1350.4 | 1232.2 |
| 45°   | 2589.4 | 2500.5 | 2426.2 | 2330.5 | 2252.9 | 2126.9 | 2023.3 | 1879.3 | 1747.6 | 1610.3 | 1466.3 |
| 47.5° | 3045.1 | 2934.8 | 2826.8 | 2732.3 | 2608.5 | 2484.7 | 2353.0 | 2200.0 | 2031.2 | 1880.4 | 1709.4 |
| 50°   | 3568.4 | 3412.0 | 3262.3 | 3140.8 | 2970.8 | 2827.9 | 2685.0 | 2512.8 | 2326.0 | 2152.7 | 1958.1 |
| 52.5° | 4150.2 | 3969.0 | 3771.0 | 3584.1 | 3387.2 | 3203.8 | 3031.6 | 2833.6 | 2625.4 | 2413.8 | 2196.6 |
| 55°   | 4852.4 | 4716.2 | 4483.3 | 4245.8 | 3982.5 | 3737.2 | 3515.5 | 3270.2 | 3017.0 | 2739.0 | 2510.6 |
| 57.5° | 5951.8 | 5885.4 | 5690.7 | 5453.3 | 5110.1 | 4811.9 | 4436.0 | 4135.6 | 3768.7 | 3386.1 | 3091.3 |
| 60°   | 7441.7 | 7359.6 | 7250.4 | 7058.0 | 6785.7 | 6380.6 | 5966.5 | 5499.4 | 4941.3 | 4411.3 | 3908.2 |
| 62.5° | 8236.2 | 8207.0 | 8118.1 | 7985.3 | 7731.0 | 7411.4 | 6993.9 | 6480.7 | 5850.5 | 5206.9 | 4565.4 |
| 63°   | 8259.9 | 8222.7 | 8146.2 | 8011.2 | 7787.2 | 7477.8 | 7068.1 | 6569.6 | 5952.9 | 5296.9 | 4642.0 |
| 65°   | 7940.3 | 7925.6 | 7848.0 | 7700.6 | 7547.5 | 7311.2 | 6993.9 | 6565.1 | 6047.5 | 5427.4 | 4775.9 |
| 67.5° | 7042.3 | 6998.4 | 6879.1 | 6834.1 | 6727.2 | 6562.9 | 6320.9 | 6026.1 | 5655.9 | 5168.6 | 4605.9 |
| 70°   | 5956.3 | 5891.1 | 5741.4 | 5661.5 | 5531.0 | 5427.4 | 5280.0 | 5069.6 | 4841.1 | 4501.3 | 4081.5 |
| 72.5° | 4805.1 | 4670.1 | 4532.8 | 4324.6 | 4142.3 | 3957.8 | 3794.6 | 3646.0 | 3395.1 | 3257.8 | 2939.3 |
| 75°   | 3120.5 | 2875.2 | 2640.0 | 2324.9 | 2041.3 | 1790.4 | 1546.2 | 1422.4 | 1164.7 | 1060.1 | 910.4  |
| 77.5° | 1480.9 | 1343.6 | 1159.1 | 1016.2 | 833.9  | 680.8  | 555.9  | 417.5  | 327.5  | 256.6  | 195.8  |
| 80°   | 1195.1 | 1079.2 | 967.8  | 838.4  | 701.1  | 559.3  | 428.7  | 320.7  | 227.3  | 157.5  | 111.4  |
| 82.5° | 1065.7 | 939.6  | 802.4  | 713.5  | 620.1  | 507.5  | 416.4  | 339.8  | 250.9  | 183.4  | 124.9  |
| 85°   | 414.1  | 348.8  | 269.0  | 219.4  | 171.0  | 140.7  | 127.2  | 87.8   | 68.6   | 54.0   | 41.6   |
| 87.5° | 36.0   | 29.3   | 23.6   | 15.8   | 16.9   | 9.0    | 10.1   | 6.8    | 5.6    | 5.6    | 4.5    |
| 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: P149528

CATALOG NUMBER: TLM-E04-LED-E1-SL2-HSS-8030

**CANDELA DISTRIBUTION (continued):**

|       | 83°    | 84°    | 85°    | 86°    | 87°    | 88°    | 89°    | 90°    | 95°   | 105°  | 115°  |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|-------|
| 0°    | 237.4  | 237.4  | 237.4  | 237.4  | 237.4  | 237.4  | 237.4  | 237.4  | 237.4 | 237.4 | 237.4 |
| 2.5°  | 248.7  | 247.6  | 246.4  | 244.2  | 244.2  | 241.9  | 240.8  | 239.7  | 234.1 | 221.7 | 211.6 |
| 5°    | 261.1  | 258.8  | 256.6  | 253.2  | 250.9  | 247.6  | 245.3  | 241.9  | 229.6 | 205.9 | 185.7 |
| 7.5°  | 279.1  | 274.6  | 271.2  | 264.5  | 261.1  | 256.6  | 253.2  | 247.6  | 227.3 | 191.3 | 163.2 |
| 10°   | 300.5  | 292.6  | 287.0  | 279.1  | 272.3  | 266.7  | 261.1  | 253.2  | 225.1 | 175.6 | 142.9 |
| 12.5° | 326.3  | 317.3  | 306.1  | 297.1  | 288.1  | 280.2  | 272.3  | 262.2  | 221.7 | 162.0 | 127.2 |
| 15°   | 352.2  | 338.7  | 330.8  | 318.5  | 306.1  | 294.8  | 283.6  | 274.6  | 222.8 | 147.4 | 113.7 |
| 17.5° | 381.5  | 368.0  | 351.1  | 337.6  | 324.1  | 309.5  | 296.0  | 278.0  | 217.2 | 136.2 | 103.5 |
| 20°   | 409.6  | 390.5  | 374.7  | 357.9  | 338.7  | 320.7  | 303.8  | 288.1  | 212.7 | 124.9 | 94.5  |
| 22.5° | 440.0  | 417.5  | 397.2  | 375.9  | 352.2  | 332.0  | 311.7  | 291.5  | 204.8 | 114.8 | 86.6  |
| 25°   | 477.1  | 451.3  | 422.0  | 396.1  | 371.4  | 346.6  | 320.7  | 296.0  | 196.9 | 105.8 | 81.0  |
| 27.5° | 522.1  | 488.4  | 459.1  | 426.5  | 391.6  | 360.1  | 332.0  | 305.0  | 189.1 | 99.0  | 75.4  |
| 30°   | 579.5  | 540.2  | 498.5  | 456.9  | 419.7  | 383.7  | 344.3  | 310.6  | 181.2 | 92.3  | 69.8  |
| 32.5° | 656.1  | 606.5  | 555.9  | 507.5  | 458.0  | 411.9  | 370.2  | 326.3  | 176.7 | 86.6  | 64.1  |
| 35°   | 757.3  | 693.2  | 631.3  | 570.5  | 510.9  | 454.6  | 400.6  | 351.1  | 176.7 | 79.9  | 57.4  |
| 37.5° | 853.0  | 778.7  | 699.9  | 624.6  | 553.7  | 488.4  | 424.2  | 364.6  | 167.7 | 74.3  | 51.8  |
| 40°   | 956.5  | 867.6  | 775.3  | 686.4  | 600.9  | 519.9  | 446.8  | 378.1  | 159.8 | 67.5  | 46.1  |
| 42.5° | 1115.2 | 1002.7 | 882.3  | 778.7  | 676.3  | 576.2  | 485.0  | 404.0  | 149.7 | 60.8  | 40.5  |
| 45°   | 1323.4 | 1180.5 | 1038.7 | 912.6  | 782.1  | 659.4  | 551.4  | 451.3  | 147.4 | 55.1  | 34.9  |
| 47.5° | 1546.2 | 1377.4 | 1210.8 | 1049.9 | 896.9  | 754.0  | 624.6  | 504.1  | 147.4 | 49.5  | 30.4  |
| 50°   | 1767.9 | 1556.3 | 1378.5 | 1191.7 | 1019.5 | 850.7  | 696.6  | 559.3  | 148.5 | 45.0  | 24.8  |
| 52.5° | 1968.2 | 1742.0 | 1542.8 | 1326.8 | 1136.6 | 940.8  | 773.1  | 613.3  | 146.3 | 39.4  | 20.3  |
| 55°   | 2246.1 | 1980.6 | 1749.9 | 1511.3 | 1288.5 | 1067.9 | 877.8  | 694.3  | 147.4 | 34.9  | 16.9  |
| 57.5° | 2758.2 | 2446.4 | 2168.5 | 1855.7 | 1599.1 | 1314.4 | 1083.7 | 860.9  | 160.9 | 29.3  | 12.4  |
| 60°   | 3493.0 | 3087.9 | 2697.4 | 2315.9 | 1989.6 | 1650.8 | 1351.5 | 1089.3 | 189.1 | 23.6  | 9.0   |
| 62.5° | 3987.0 | 3457.0 | 2991.1 | 2570.2 | 2191.0 | 1836.5 | 1510.2 | 1212.0 | 208.2 | 19.1  | 5.6   |
| 63°   | 4037.7 | 3489.6 | 3021.5 | 2587.1 | 2200.0 | 1845.5 | 1516.9 | 1221.0 | 209.3 | 18.0  | 5.6   |
| 65°   | 4133.3 | 3545.9 | 3038.4 | 2590.5 | 2191.0 | 1833.1 | 1512.4 | 1219.8 | 211.6 | 14.6  | 4.5   |
| 67.5° | 4024.1 | 3459.2 | 2940.5 | 2493.7 | 2112.2 | 1760.0 | 1456.2 | 1174.8 | 210.4 | 10.1  | 3.4   |
| 70°   | 3598.8 | 3130.6 | 2674.9 | 2258.5 | 1911.9 | 1593.5 | 1325.6 | 1071.3 | 193.6 | 6.8   | 2.3   |
| 72.5° | 2642.3 | 2323.8 | 1970.4 | 1670.0 | 1440.4 | 1196.2 | 1020.7 | 804.6  | 149.7 | 4.5   | 1.1   |
| 75°   | 783.2  | 713.5  | 599.8  | 528.9  | 467.0  | 386.0  | 343.2  | 267.8  | 76.5  | 2.3   | 0.0   |
| 77.5° | 156.4  | 141.8  | 127.2  | 115.9  | 109.2  | 93.4   | 88.9   | 73.1   | 31.5  | 1.1   | 0.0   |
| 80°   | 82.1   | 67.5   | 57.4   | 50.6   | 43.9   | 36.0   | 30.4   | 24.8   | 5.6   | 0.0   | 0.0   |
| 82.5° | 78.8   | 52.9   | 38.3   | 31.5   | 27.0   | 21.4   | 16.9   | 12.4   | 3.4   | 0.0   | 0.0   |
| 85°   | 29.3   | 22.5   | 16.9   | 13.5   | 11.3   | 10.1   | 7.9    | 6.8    | 0.0   | 0.0   | 0.0   |
| 87.5° | 4.5    | 3.4    | 3.4    | 2.3    | 2.3    | 1.1    | 1.1    | 1.1    | 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: P149528

CATALOG NUMBER: TLM-E04-LED-E1-SL2-HSS-8030

**CANDELA DISTRIBUTION (continued):**

|       | 125°  | 135°  | 145°  | 155°  | 165°  | 175°  | 180°  |
|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 237.4 | 237.4 | 237.4 | 237.4 | 237.4 | 237.4 | 237.4 |
| 2.5°  | 201.4 | 192.4 | 187.9 | 182.3 | 182.3 | 181.2 | 183.4 |
| 5°    | 167.7 | 155.3 | 146.3 | 139.5 | 140.7 | 137.3 | 138.4 |
| 7.5°  | 141.8 | 129.4 | 121.5 | 117.0 | 115.9 | 114.8 | 114.8 |
| 10°   | 122.7 | 111.4 | 104.7 | 101.3 | 100.2 | 100.2 | 100.2 |
| 12.5° | 109.2 | 97.9  | 92.3  | 90.0  | 90.0  | 88.9  | 88.9  |
| 15°   | 97.9  | 88.9  | 83.3  | 81.0  | 81.0  | 79.9  | 81.0  |
| 17.5° | 88.9  | 79.9  | 75.4  | 73.1  | 73.1  | 72.0  | 72.0  |
| 20°   | 81.0  | 73.1  | 68.6  | 65.3  | 65.3  | 64.1  | 65.3  |
| 22.5° | 74.3  | 66.4  | 60.8  | 58.5  | 57.4  | 56.3  | 57.4  |
| 25°   | 67.5  | 59.6  | 54.0  | 50.6  | 49.5  | 49.5  | 48.4  |
| 27.5° | 61.9  | 54.0  | 47.3  | 43.9  | 42.8  | 42.8  | 41.6  |
| 30°   | 56.3  | 47.3  | 40.5  | 37.1  | 36.0  | 36.0  | 36.0  |
| 32.5° | 50.6  | 40.5  | 34.9  | 31.5  | 30.4  | 30.4  | 30.4  |
| 35°   | 45.0  | 34.9  | 29.3  | 25.9  | 24.8  | 24.8  | 24.8  |
| 37.5° | 38.3  | 29.3  | 22.5  | 20.3  | 19.1  | 18.0  | 18.0  |
| 40°   | 32.6  | 22.5  | 16.9  | 14.6  | 12.4  | 12.4  | 12.4  |
| 42.5° | 27.0  | 18.0  | 12.4  | 9.0   | 7.9   | 6.8   | 7.9   |
| 45°   | 22.5  | 13.5  | 7.9   | 4.5   | 3.4   | 3.4   | 3.4   |
| 47.5° | 18.0  | 9.0   | 3.4   | 1.1   | 1.1   | 1.1   | 1.1   |
| 50°   | 13.5  | 5.6   | 1.1   | 0.0   | 0.0   | 1.1   | 1.1   |
| 52.5° | 10.1  | 3.4   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 55°   | 5.6   | 1.1   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 57.5° | 3.4   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 60°   | 2.3   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 62.5° | 1.1   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 63°   | 1.1   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 65°   | 1.1   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 67.5° | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 70°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 72.5° | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 75°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 77.5° | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 80°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 82.5° | 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   |
| 87.5° | 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   |

(END OF REPORT)