

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: METALUX

Report Number: P188307

Luminaire Tested: **22SR-LD2-19-C-UNV-L850-CD1-MR-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P188307  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24792)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22SR-LD2-19-C-UNV-L850-CD1-MR-U  
Description: METALUX 2X2 SKYRIDGE LED FIXTURE WITH MEDIUM RED SKYTRIM.  
  
Light Source: EATON LED 5000K  
Ballast/Driver: OSRAM ELECTRONIC DRIVER

**Summary**

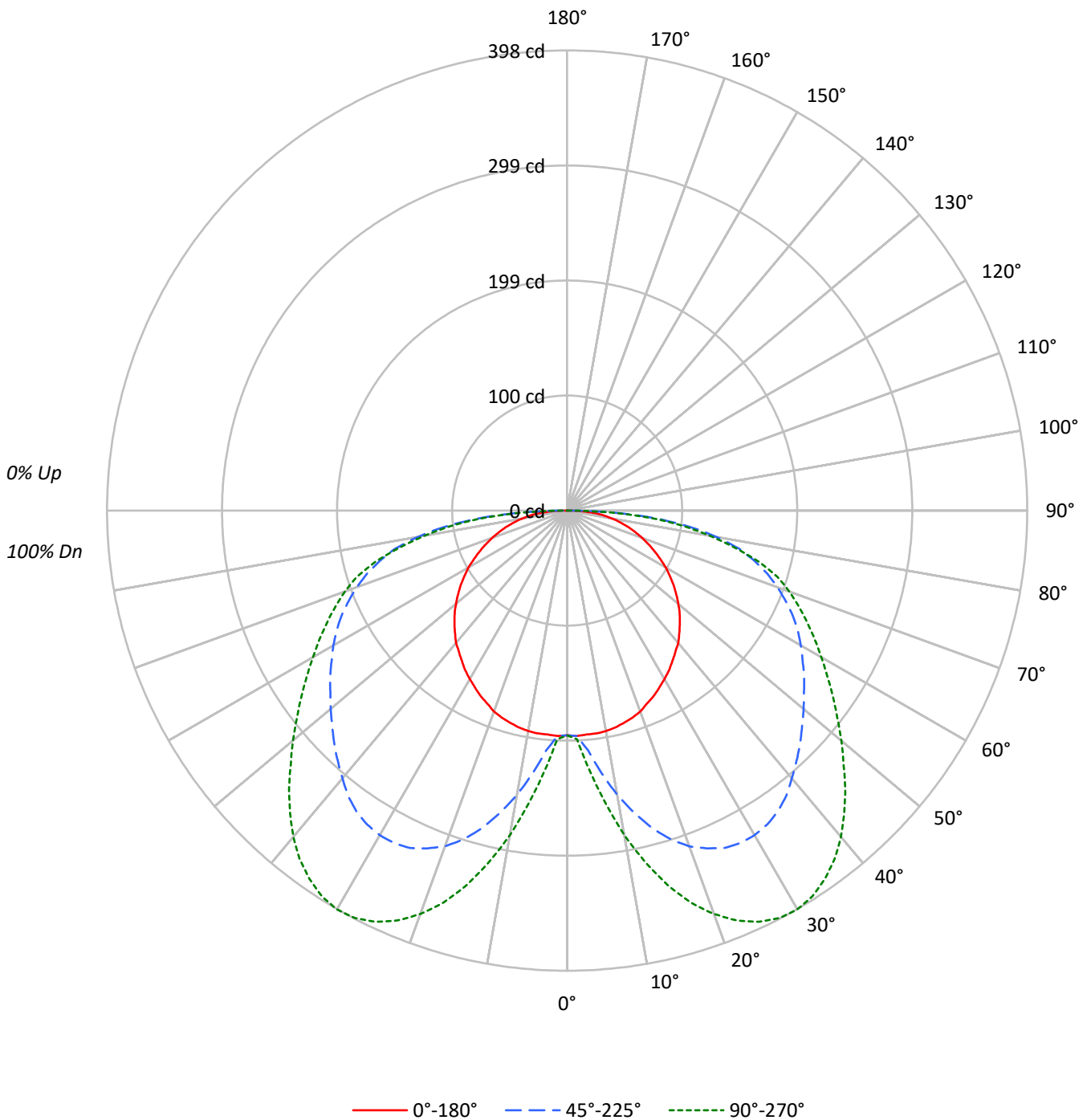
Lumens per Lamp: N/A  
Luminaire Lumens: 1240.0 lumens  
Efficiency: N/A  
Efficacy: 84.4 lumens/watt  
Spacing Criteria (0/90/45): 1.29 / 2.21 / 2.01  
Luminous Opening: Rectangular (W 1.92' x L: 1.92' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 14.7  
Input Voltage (V): NR  
Input Current (A<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



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### 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 | 95  | 90  | 103 | 98  | 93  | 89  | 93  | 89  | 86  | 89  | 86  | 83  | 86  | 83  | 80  | 78  |
| 2   | 95  | 85  | 77  | 70  | 92  | 83  | 76  | 69  | 79  | 73  | 68  | 76  | 71  | 66  | 73  | 68  | 65  | 62  |
| 3   | 86  | 73  | 64  | 57  | 83  | 72  | 63  | 56  | 69  | 61  | 55  | 66  | 59  | 54  | 63  | 58  | 53  | 50  |
| 4   | 78  | 64  | 54  | 47  | 75  | 63  | 53  | 46  | 60  | 52  | 46  | 58  | 51  | 45  | 55  | 49  | 44  | 42  |
| 5   | 71  | 57  | 47  | 39  | 69  | 55  | 46  | 39  | 53  | 45  | 39  | 51  | 44  | 38  | 49  | 43  | 38  | 35  |
| 6   | 65  | 50  | 41  | 34  | 63  | 49  | 40  | 33  | 48  | 39  | 33  | 46  | 38  | 33  | 44  | 38  | 32  | 30  |
| 7   | 60  | 45  | 36  | 29  | 58  | 45  | 36  | 29  | 43  | 35  | 29  | 41  | 34  | 29  | 40  | 33  | 28  | 26  |
| 8   | 56  | 41  | 32  | 26  | 54  | 40  | 32  | 26  | 39  | 31  | 25  | 38  | 30  | 25  | 36  | 30  | 25  | 23  |
| 9   | 52  | 38  | 29  | 23  | 50  | 37  | 28  | 23  | 36  | 28  | 23  | 35  | 27  | 22  | 33  | 27  | 22  | 20  |
| 10  | 49  | 34  | 26  | 20  | 47  | 34  | 26  | 20  | 33  | 25  | 20  | 32  | 25  | 20  | 31  | 25  | 20  | 18  |

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

|     | 0°  | 45°  | 90°  |
|-----|-----|------|------|
| 0°  | 570 | 570  | 570  |
| 5°  | 572 | 612  | 666  |
| 10° | 576 | 742  | 848  |
| 15° | 576 | 862  | 1017 |
| 20° | 577 | 963  | 1158 |
| 25° | 572 | 1041 | 1269 |
| 30° | 569 | 1097 | 1347 |
| 35° | 568 | 1136 | 1390 |
| 40° | 571 | 1157 | 1409 |
| 45° | 571 | 1181 | 1410 |
| 50° | 572 | 1217 | 1412 |
| 55° | 574 | 1278 | 1434 |
| 60° | 578 | 1368 | 1487 |
| 65° | 578 | 1493 | 1589 |
| 70° | 590 | 1659 | 1752 |
| 75° | 616 | 1896 | 1946 |
| 80° | 661 | 2215 | 2118 |
| 85° | 756 | 2562 | 2414 |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 21.1   | 1.7       |
| 10°-20°   | 77.8   | 6.3       |
| 20°-30°   | 141.0  | 11.4      |
| 30°-40°   | 187.3  | 15.1      |
| 40°-50°   | 205.9  | 16.6      |
| 50°-60°   | 204.2  | 16.5      |
| 60°-70°   | 188.0  | 15.2      |
| 70°-80°   | 150.1  | 12.1      |
| 80°-90°   | 64.8   | 5.2       |
| 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°    | 239.9  | 19.3      |
| 0°-40°    | 427.2  | 34.4      |
| 0°-60°    | 837.2  | 67.5      |
| 0°-90°    | 1240.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1240.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0°  | 194 | 194   | 194 | 194   | 194 |      |
| 5°  | 194 | 196   | 208 | 222   | 226 | 19   |
| 15° | 190 | 228   | 284 | 322   | 335 | 54   |
| 25° | 177 | 244   | 322 | 374   | 392 | 82   |
| 35° | 159 | 236   | 318 | 371   | 389 | 100  |
| 45° | 138 | 214   | 285 | 326   | 340 | 106  |
| 55° | 112 | 187   | 250 | 275   | 281 | 100  |
| 65° | 83  | 158   | 215 | 226   | 229 | 83   |
| 75° | 54  | 120   | 168 | 171   | 172 | 57   |
| 85° | 22  | 55    | 76  | 72    | 72  | 23   |
| 90° | 0   | 0     | 0   | 0     | 0   |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 5°    | 10°   | 15°   | 20°   | 25°   | 30°   | 35°   | 40°   | 45°   | 50°   |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 194.4 | 194.4 | 194.4 | 194.4 | 194.4 | 194.4 | 194.4 | 194.4 | 194.4 | 194.4 | 194.4 |
| 2.5°  | 195.1 | 195.1 | 195.1 | 195.1 | 194.4 | 194.4 | 194.4 | 194.4 | 194.4 | 195.1 | 195.8 |
| 5°    | 194.4 | 194.4 | 194.4 | 195.1 | 195.1 | 196.5 | 198.7 | 201.6 | 204.5 | 208.2 | 212.5 |
| 7.5°  | 194.4 | 194.4 | 194.4 | 195.1 | 198.7 | 204.5 | 211.1 | 217.6 | 223.4 | 229.2 | 235.7 |
| 10°   | 193.6 | 193.6 | 193.6 | 198.0 | 206.0 | 215.4 | 224.8 | 233.5 | 241.5 | 249.5 | 257.5 |
| 12.5° | 192.2 | 192.2 | 194.4 | 202.4 | 214.0 | 226.3 | 236.4 | 248.0 | 258.2 | 267.6 | 277.1 |
| 15°   | 190.0 | 190.0 | 194.4 | 206.7 | 221.2 | 234.3 | 248.0 | 261.1 | 273.4 | 284.3 | 295.2 |
| 17.5° | 187.8 | 187.8 | 195.1 | 210.3 | 226.3 | 242.2 | 257.5 | 272.0 | 285.8 | 298.1 | 309.7 |
| 20°   | 184.9 | 184.9 | 195.1 | 213.2 | 230.6 | 248.0 | 264.7 | 280.0 | 295.2 | 309.0 | 321.3 |
| 22.5° | 180.6 | 182.0 | 195.1 | 214.7 | 233.5 | 251.7 | 269.1 | 286.5 | 302.4 | 316.2 | 330.0 |
| 25°   | 177.0 | 179.1 | 194.4 | 214.7 | 234.3 | 253.8 | 272.7 | 290.1 | 306.8 | 322.0 | 335.8 |
| 27.5° | 172.6 | 175.5 | 192.9 | 214.0 | 234.3 | 253.8 | 273.4 | 291.6 | 309.0 | 324.2 | 338.7 |
| 30°   | 168.3 | 171.9 | 190.7 | 211.8 | 232.8 | 253.1 | 272.0 | 290.8 | 308.2 | 324.2 | 338.7 |
| 32.5° | 163.9 | 168.3 | 187.1 | 208.9 | 229.9 | 250.2 | 269.8 | 288.7 | 306.1 | 322.0 | 336.5 |
| 35°   | 158.8 | 163.9 | 183.5 | 205.3 | 226.3 | 246.6 | 265.4 | 284.3 | 301.7 | 317.7 | 331.4 |
| 37.5° | 153.8 | 159.6 | 179.1 | 200.9 | 221.2 | 241.5 | 260.4 | 278.5 | 295.9 | 311.1 | 324.9 |
| 40°   | 149.4 | 154.5 | 174.1 | 195.8 | 216.1 | 235.7 | 254.6 | 272.0 | 288.7 | 302.4 | 316.2 |
| 42.5° | 143.6 | 150.1 | 169.0 | 190.7 | 210.3 | 229.2 | 248.0 | 264.7 | 280.7 | 293.7 | 306.8 |
| 45°   | 137.8 | 145.1 | 163.9 | 184.2 | 204.5 | 222.7 | 240.8 | 257.5 | 272.0 | 285.0 | 296.6 |
| 47.5° | 132.0 | 139.3 | 158.1 | 178.4 | 198.0 | 216.1 | 233.5 | 249.5 | 263.3 | 275.6 | 287.2 |
| 50°   | 125.5 | 134.2 | 152.3 | 171.9 | 191.5 | 209.6 | 226.3 | 241.5 | 255.3 | 266.9 | 277.8 |
| 52.5° | 118.9 | 128.4 | 146.5 | 166.1 | 184.2 | 202.4 | 219.0 | 233.5 | 246.6 | 258.2 | 267.6 |
| 55°   | 112.4 | 121.8 | 140.7 | 159.6 | 177.7 | 196.5 | 212.5 | 227.0 | 240.1 | 250.2 | 258.9 |
| 57.5° | 105.2 | 116.0 | 134.2 | 153.0 | 171.2 | 188.6 | 205.3 | 219.8 | 231.4 | 241.5 | 249.5 |
| 60°   | 98.6  | 109.5 | 127.6 | 145.8 | 164.6 | 182.0 | 198.0 | 211.8 | 223.4 | 233.5 | 240.8 |
| 62.5° | 90.7  | 103.0 | 120.4 | 139.3 | 157.4 | 174.1 | 190.7 | 204.5 | 216.1 | 224.8 | 230.6 |
| 65°   | 83.4  | 95.7  | 113.1 | 131.3 | 149.4 | 166.8 | 182.8 | 196.5 | 206.7 | 215.4 | 220.5 |
| 67.5° | 76.2  | 88.5  | 105.9 | 124.0 | 141.4 | 158.1 | 174.1 | 187.1 | 197.3 | 204.5 | 208.9 |
| 70°   | 68.9  | 81.2  | 97.9  | 115.3 | 132.7 | 149.4 | 164.6 | 177.0 | 186.4 | 193.6 | 197.3 |
| 72.5° | 61.6  | 74.0  | 89.9  | 106.6 | 123.3 | 139.3 | 154.5 | 166.1 | 174.8 | 181.3 | 184.9 |
| 75°   | 54.4  | 66.0  | 81.2  | 97.2  | 112.4 | 128.4 | 142.9 | 153.8 | 162.5 | 167.5 | 170.4 |
| 77.5° | 47.1  | 58.0  | 71.8  | 86.3  | 101.5 | 116.0 | 129.1 | 140.0 | 147.2 | 152.3 | 153.8 |
| 80°   | 39.2  | 49.3  | 60.9  | 74.7  | 87.8  | 101.5 | 113.1 | 122.6 | 129.1 | 131.3 | 131.3 |
| 82.5° | 31.9  | 39.2  | 48.6  | 60.2  | 71.1  | 82.7  | 92.8  | 100.8 | 104.4 | 106.6 | 105.9 |
| 85°   | 22.5  | 26.8  | 33.4  | 42.1  | 50.0  | 60.2  | 67.5  | 72.5  | 75.4  | 76.2  | 75.4  |
| 87.5° | 11.6  | 12.3  | 16.0  | 20.3  | 24.7  | 31.2  | 34.1  | 38.4  | 39.9  | 39.9  | 39.9  |
| 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):**

|       | 55°   | 60°   | 65°   | 70°   | 75°   | 80°   | 85°   | 90°   |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 194.4 | 194.4 | 194.4 | 194.4 | 194.4 | 194.4 | 194.4 | 194.4 |
| 2.5°  | 195.8 | 195.8 | 197.3 | 197.3 | 198.0 | 197.3 | 198.0 | 198.0 |
| 5°    | 215.4 | 218.3 | 221.2 | 222.7 | 224.8 | 225.6 | 226.3 | 226.3 |
| 7.5°  | 239.3 | 243.7 | 247.3 | 249.5 | 253.1 | 254.6 | 255.3 | 255.3 |
| 10°   | 262.5 | 268.4 | 273.4 | 277.1 | 280.7 | 282.9 | 284.3 | 285.0 |
| 12.5° | 284.3 | 291.6 | 297.4 | 302.4 | 306.1 | 309.0 | 310.4 | 311.1 |
| 15°   | 303.2 | 311.9 | 319.1 | 324.2 | 329.3 | 332.2 | 334.4 | 335.1 |
| 17.5° | 319.8 | 328.5 | 336.5 | 343.1 | 348.1 | 351.8 | 353.9 | 355.4 |
| 20°   | 332.2 | 342.3 | 351.0 | 357.6 | 364.1 | 367.7 | 369.9 | 371.3 |
| 22.5° | 341.6 | 352.5 | 361.9 | 369.2 | 375.7 | 380.0 | 382.2 | 383.7 |
| 25°   | 348.1 | 359.7 | 369.9 | 377.1 | 384.4 | 388.7 | 391.6 | 392.4 |
| 27.5° | 351.8 | 364.1 | 374.2 | 382.2 | 389.5 | 393.8 | 396.7 | 397.4 |
| 30°   | 352.5 | 364.1 | 375.0 | 382.9 | 390.2 | 394.5 | 397.4 | 398.2 |
| 32.5° | 350.3 | 361.9 | 372.1 | 380.8 | 387.3 | 391.6 | 394.5 | 395.3 |
| 35°   | 345.2 | 356.8 | 366.3 | 375.0 | 381.5 | 385.8 | 388.7 | 388.7 |
| 37.5° | 337.3 | 348.9 | 358.3 | 366.3 | 372.8 | 376.4 | 379.3 | 380.0 |
| 40°   | 328.5 | 338.7 | 348.1 | 355.4 | 361.2 | 364.8 | 367.7 | 368.4 |
| 42.5° | 318.4 | 327.8 | 335.8 | 342.3 | 348.1 | 352.5 | 353.9 | 354.7 |
| 45°   | 307.5 | 316.2 | 323.5 | 329.3 | 334.4 | 336.5 | 339.4 | 340.2 |
| 47.5° | 296.6 | 304.6 | 310.4 | 315.5 | 319.8 | 322.7 | 324.2 | 324.2 |
| 50°   | 285.8 | 292.3 | 298.1 | 302.4 | 305.3 | 306.8 | 308.2 | 309.7 |
| 52.5° | 275.6 | 280.7 | 285.8 | 288.7 | 290.8 | 293.0 | 293.7 | 294.5 |
| 55°   | 265.4 | 270.5 | 274.2 | 276.3 | 277.8 | 280.0 | 280.0 | 280.7 |
| 57.5° | 255.3 | 258.9 | 261.8 | 263.3 | 264.7 | 265.4 | 266.2 | 266.9 |
| 60°   | 245.1 | 248.0 | 249.5 | 250.9 | 251.7 | 253.1 | 253.1 | 253.8 |
| 62.5° | 235.0 | 236.4 | 237.9 | 238.6 | 239.3 | 240.8 | 241.5 | 241.5 |
| 65°   | 223.4 | 224.8 | 225.6 | 226.3 | 227.0 | 228.5 | 229.2 | 229.2 |
| 67.5° | 211.8 | 212.5 | 212.5 | 214.0 | 214.7 | 216.1 | 216.1 | 216.9 |
| 70°   | 199.4 | 199.4 | 200.2 | 200.9 | 201.6 | 202.4 | 203.8 | 204.5 |
| 72.5° | 186.4 | 185.7 | 186.4 | 187.1 | 188.6 | 189.3 | 190.0 | 190.7 |
| 75°   | 170.4 | 170.4 | 171.2 | 170.4 | 170.4 | 171.2 | 171.2 | 171.9 |
| 77.5° | 153.0 | 150.9 | 148.7 | 148.7 | 148.7 | 148.0 | 148.0 | 148.7 |
| 80°   | 129.8 | 126.9 | 125.5 | 125.5 | 124.7 | 124.7 | 125.5 | 125.5 |
| 82.5° | 103.7 | 103.0 | 100.1 | 100.1 | 100.8 | 99.4  | 100.1 | 100.8 |
| 85°   | 74.0  | 73.3  | 71.8  | 71.8  | 71.8  | 70.4  | 71.1  | 71.8  |
| 87.5° | 39.2  | 38.4  | 37.0  | 37.7  | 37.7  | 36.3  | 37.7  | 37.0  |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |

(END OF REPORT)