

Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: LUMARK

Report Number: P1217529 (CONVERTED FROM TYPE C PHOTOMETRY)

Luminaire Tested: TRX15S-BK-4000K-5H5V

Issue Date: 7/24/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1217529 (CONVERTED FROM TYPE C PHOTOMETRY)  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA ( s26060036a-01)  
Test Lab: INNOVATION CENTER  
Issue Date: 27-07-2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: LUMARK  
Catalog Number: TRX15S-BK-4000K-5H5V  
Description: 15W Tracer Floodlight , NEMA 5H5V , Black Finish  
Light Source: 80 CRI,4000K  
Ballast/Driver: -

**Summary**

|                   |                                                       |                      |                 |
|-------------------|-------------------------------------------------------|----------------------|-----------------|
| Lumens per Lamp:  | N/A                                                   | NEMA Type:           | 5H x 5V         |
| Luminaire Lumens: | 2382.3 lumens                                         | Max Intensity:       | 4112.9 candela  |
| Efficiency:       | N/A                                                   | Max Intensity Angle: | 0°H x 0°V       |
| Efficacy:         | 154.7 lumens/watt                                     |                      |                 |
| Luminous Opening: | Rectangular w/ Sides (W: 0.46m x L: 0.46m x H: 0.22m) |                      |                 |
| Beam Angle (50%): | 35.1°H x 35.1°V                                       | Field Angle (10%):   | 75.5°H x 74.8°V |
| Beam Lumens:      | 865.9 lumens                                          | Field Lumens:        | 1875.2 lumens   |
| Beam Efficiency:  | 36.3%                                                 | Field Efficiency:    | 78.7%           |

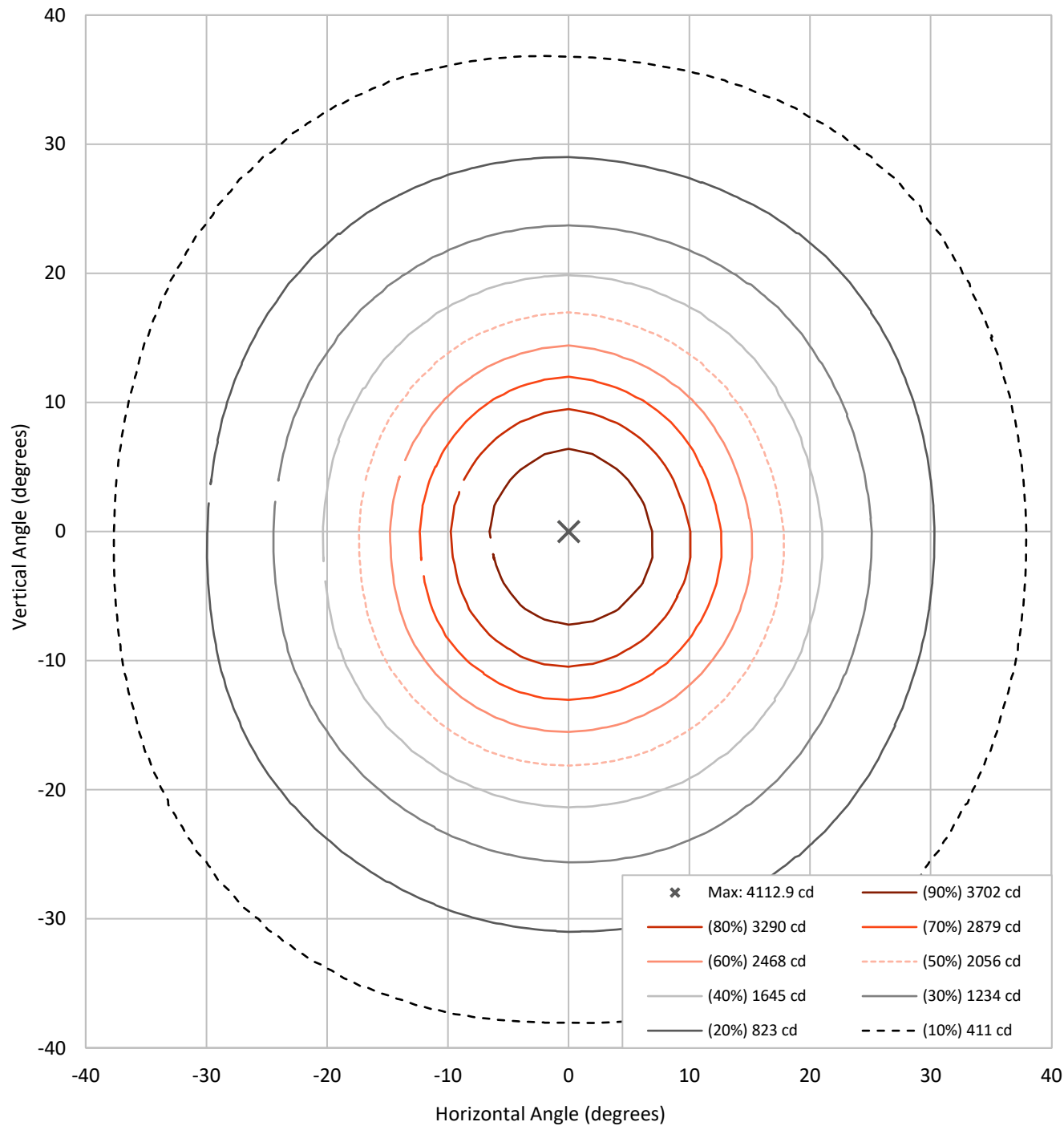
Input Watts (W): 15.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT





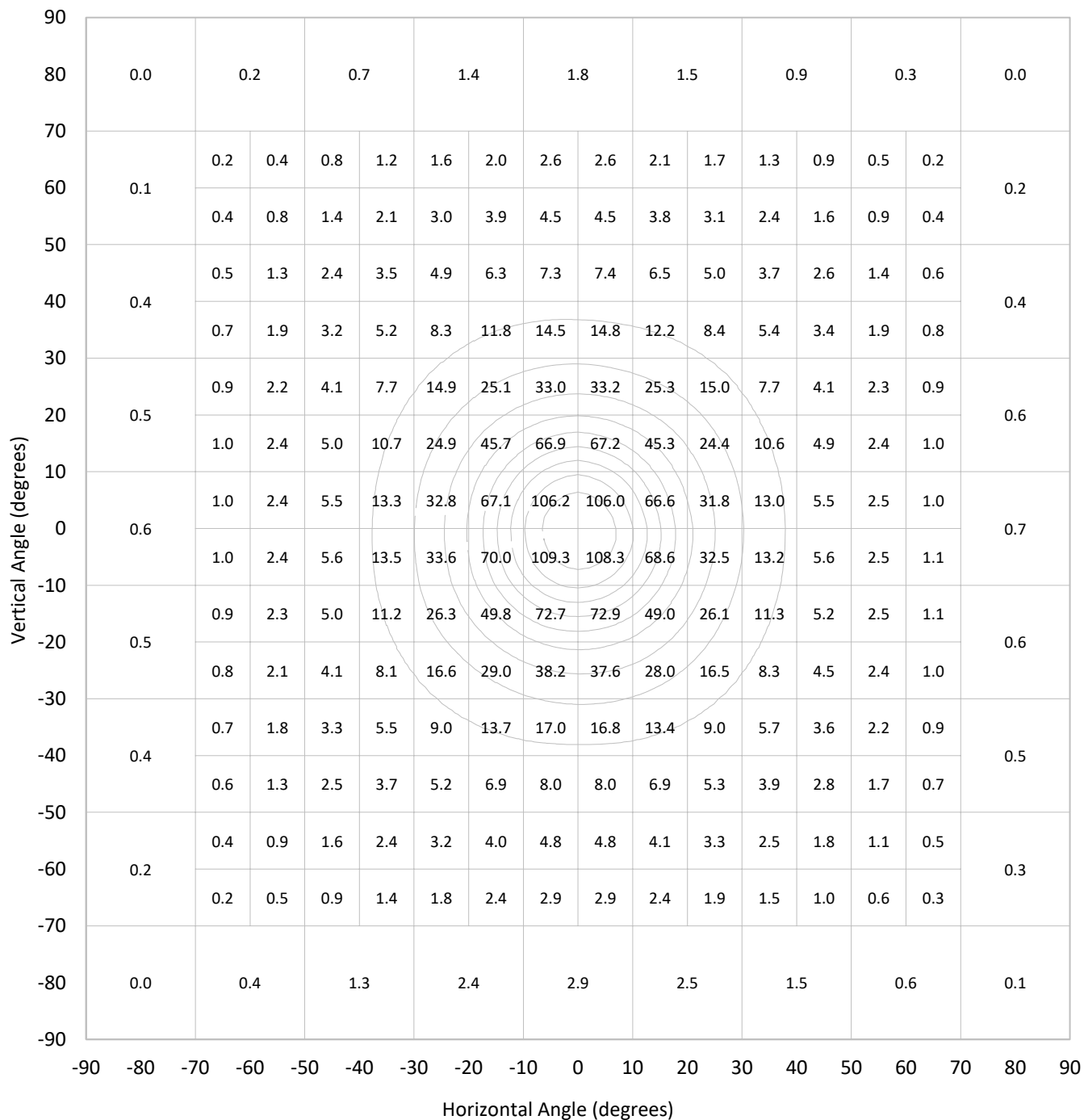
REPORT NUMBER: P1217529 (CONVERTED FROM TYPE C PHOTOMETRY)  
CATALOG NUMBER: TRX15S-BK-4000K-5H5V

Iso-Candela Plot



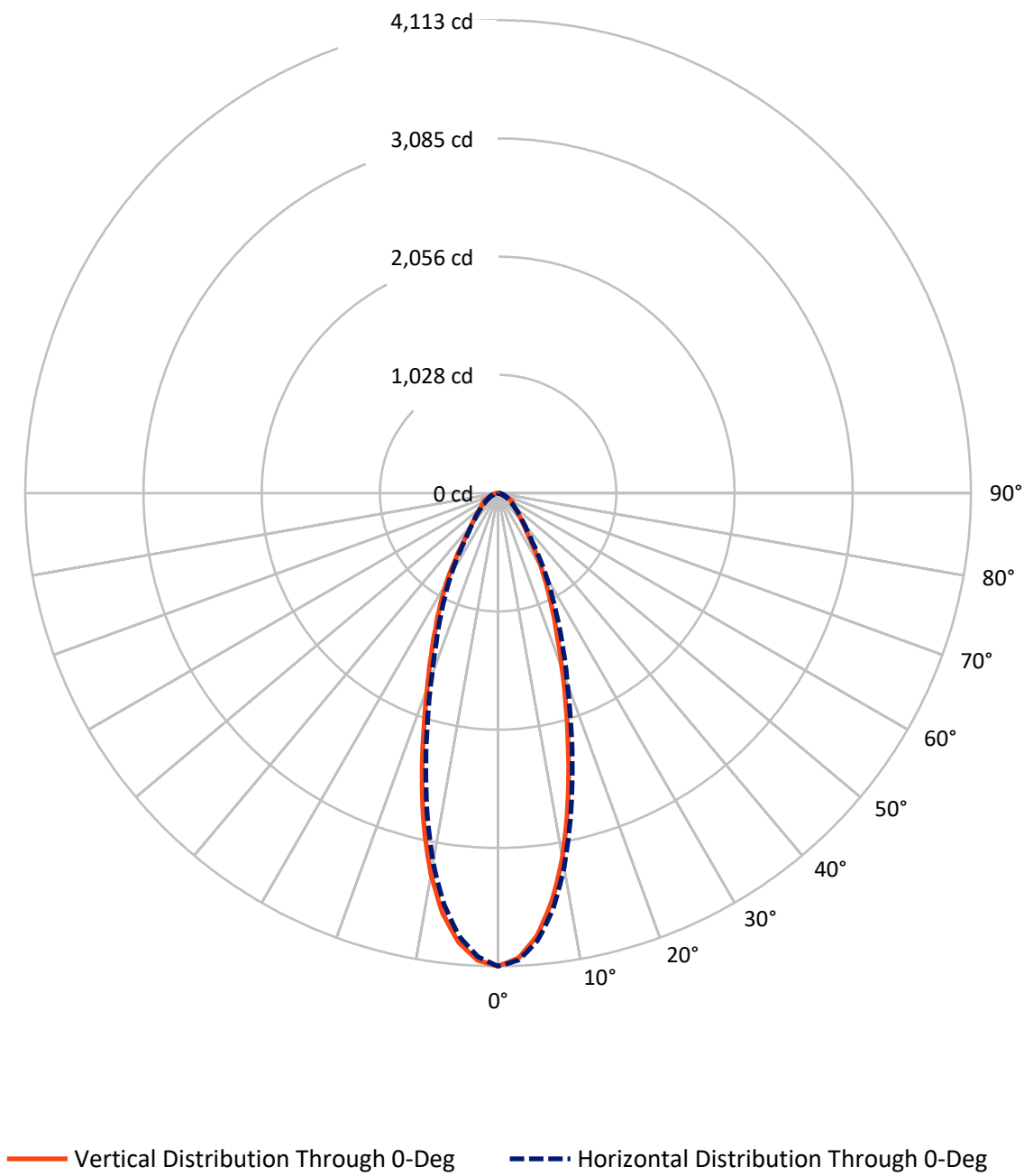
REPORT NUMBER: P1217529 (CONVERTED FROM TYPE C PHOTOMETRY)  
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## Lumen Table



REPORT NUMBER: P1217529 (CONVERTED FROM TYPE C PHOTOMETRY)  
CATALOG NUMBER: TRX15S-BK-4000K-5H5V

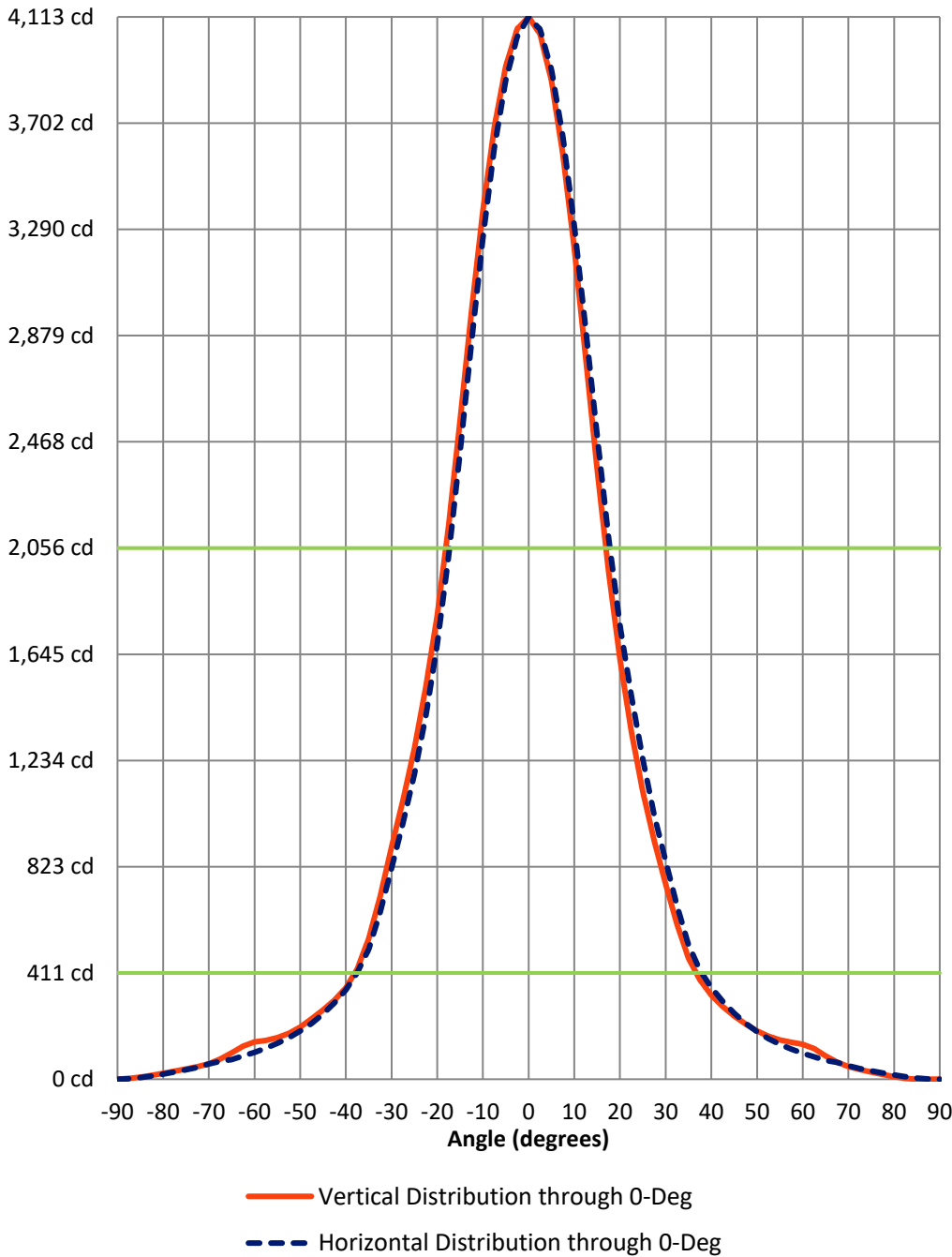
## Luminous Intensity Polar Plot





REPORT NUMBER: P1217529 (CONVERTED FROM TYPE C PHOTOMETRY)  
CATALOG NUMBER: TRX15S-BK-4000K-5H5V

Luminous Intensity Plot



**Beam:**  
H Angle: 35.1°  
V Angle: 35.1°  
Lumens: 865.9  
Efficiency: 36.3%

**Field:**  
H Angle: 75.5°  
V Angle: 74.8°  
Lumens: 1875.2  
Efficiency: 78.7%

**Spill:**  
Lumens: 507.1  
Efficiency: 21.3%

REPORT NUMBER: P1217529 (CONVERTED FROM TYPE C PHOTOMETRY)  
CATALOG NUMBER: TRX15S-BK-4000K-5H5V

FIELD  
BEAM

**CANDELA DISTRIBUTION:**

|        | -90° | -87.5° | -85° | -82.5° | -80° | -77.5° | -75° | -72.5° | -70° | -67.5° | -65° |
|--------|------|--------|------|--------|------|--------|------|--------|------|--------|------|
| 90°    | 0.1  | 0.1    | 0.2  | 0.2    | 0.2  | 0.2    | 0.3  | 0.3    | 0.3  | 0.4    | 0.4  |
| 87.5°  | 0.1  | 0.1    | 0.1  | 0.1    | 0.1  | 0.1    | 0.1  | 0.2    | 0.2  | 0.2    | 0.2  |
| 85°    | 0.1  | 0.1    | 0.1  | 0.2    | 0.2  | 0.3    | 0.4  | 0.4    | 0.4  | 0.5    | 0.6  |
| 82.5°  | 0.1  | 0.1    | 0.2  | 0.3    | 0.5  | 0.6    | 0.7  | 0.9    | 1.1  | 1.2    | 1.3  |
| 80°    | 0.1  | 0.2    | 0.3  | 0.5    | 0.7  | 1.0    | 1.3  | 1.6    | 1.9  | 2.2    | 2.5  |
| 77.5°  | 0.1  | 0.2    | 0.5  | 0.8    | 1.1  | 1.5    | 2.0  | 2.5    | 3.0  | 3.6    | 4.3  |
| 75°    | 0.1  | 0.3    | 0.6  | 1.0    | 1.5  | 2.2    | 2.8  | 3.6    | 4.5  | 5.5    | 6.5  |
| 72.5°  | 0.1  | 0.3    | 0.8  | 1.3    | 2.0  | 2.9    | 3.8  | 5.0    | 6.3  | 7.5    | 8.9  |
| 70°    | 0.1  | 0.4    | 0.9  | 1.6    | 2.6  | 3.7    | 5.1  | 6.5    | 8.1  | 9.8    | 11.6 |
| 67.5°  | 0.1  | 0.4    | 1.1  | 2.0    | 3.2  | 4.7    | 6.4  | 8.1    | 10.1 | 12.2   | 14.5 |
| 65°    | 0.1  | 0.5    | 1.2  | 2.4    | 3.9  | 5.7    | 7.7  | 9.9    | 12.3 | 14.9   | 17.5 |
| 62.5°  | 0.1  | 0.6    | 1.5  | 2.9    | 4.6  | 6.8    | 9.1  | 11.8   | 14.7 | 17.6   | 20.7 |
| 60°    | 0.1  | 0.6    | 1.7  | 3.3    | 5.5  | 7.8    | 10.6 | 13.7   | 17.0 | 20.3   | 23.8 |
| 57.5°  | 0.1  | 0.7    | 1.9  | 3.8    | 6.3  | 9.0    | 12.2 | 15.7   | 19.3 | 23.1   | 26.9 |
| 55°    | 0.1  | 0.8    | 2.2  | 4.3    | 7.0  | 10.2   | 13.8 | 17.7   | 21.7 | 25.8   | 30.1 |
| 52.5°  | 0.1  | 0.9    | 2.4  | 4.9    | 7.8  | 11.4   | 15.4 | 19.6   | 24.0 | 28.6   | 33.2 |
| 50°    | 0.1  | 0.9    | 2.7  | 5.4    | 8.7  | 12.6   | 17.0 | 21.6   | 26.3 | 31.3   | 36.4 |
| 47.5°  | 0.1  | 1.0    | 3.0  | 6.0    | 9.5  | 13.8   | 18.5 | 23.5   | 28.7 | 34.0   | 39.8 |
| 45°    | 0.1  | 1.1    | 3.2  | 6.5    | 10.4 | 15.1   | 20.1 | 25.4   | 30.9 | 36.7   | 43.3 |
| 42.5°  | 0.1  | 1.1    | 3.5  | 6.9    | 11.2 | 16.2   | 21.7 | 27.2   | 33.1 | 39.5   | 46.8 |
| 40°    | 0.1  | 1.2    | 3.7  | 7.4    | 12.1 | 17.4   | 23.1 | 29.1   | 35.3 | 42.3   | 50.2 |
| 37.5°  | 0.1  | 1.2    | 4.0  | 7.9    | 12.9 | 18.5   | 24.5 | 30.8   | 37.5 | 45.0   | 53.9 |
| 35°    | 0.1  | 1.3    | 4.2  | 8.4    | 13.7 | 19.5   | 25.9 | 32.4   | 39.6 | 47.7   | 57.9 |
| 32.5°  | 0.1  | 1.4    | 4.5  | 8.9    | 14.4 | 20.5   | 27.2 | 34.0   | 41.6 | 50.4   | 61.9 |
| 30°    | 0.1  | 1.4    | 4.8  | 9.3    | 15.1 | 21.6   | 28.4 | 35.6   | 43.6 | 53.2   | 65.4 |
| 27.5°  | 0.1  | 1.5    | 5.0  | 9.8    | 15.8 | 22.5   | 29.6 | 37.0   | 45.5 | 56.1   | 68.0 |
| 25°    | 0.1  | 1.6    | 5.2  | 10.2   | 16.5 | 23.4   | 30.7 | 38.4   | 47.3 | 59.1   | 69.7 |
| 22.5°  | 0.1  | 1.6    | 5.4  | 10.6   | 17.0 | 24.2   | 31.7 | 39.7   | 49.0 | 62.0   | 71.4 |
| 20°    | 0.1  | 1.7    | 5.6  | 11.0   | 17.5 | 24.9   | 32.6 | 40.9   | 50.6 | 64.4   | 72.9 |
| 17.5°  | 0.1  | 1.7    | 5.8  | 11.3   | 18.0 | 25.5   | 33.4 | 41.9   | 52.2 | 66.3   | 74.2 |
| 15°    | 0.1  | 1.8    | 5.9  | 11.6   | 18.5 | 26.1   | 34.2 | 42.9   | 53.8 | 67.4   | 75.2 |
| 12.5°  | 0.1  | 1.8    | 6.1  | 11.8   | 18.8 | 26.7   | 34.8 | 43.7   | 55.1 | 68.2   | 75.8 |
| 10°    | 0.1  | 1.8    | 6.2  | 12.0   | 19.2 | 27.1   | 35.4 | 44.4   | 56.4 | 68.7   | 76.3 |
| 7.5°   | 0.1  | 1.9    | 6.2  | 12.2   | 19.4 | 27.5   | 35.8 | 45.0   | 57.5 | 69.0   | 76.7 |
| 5°     | 0.1  | 1.9    | 6.3  | 12.3   | 19.7 | 27.8   | 36.2 | 45.4   | 58.4 | 69.2   | 76.7 |
| 2.5°   | 0.1  | 1.9    | 6.4  | 12.4   | 19.8 | 28.0   | 36.4 | 45.7   | 59.0 | 69.3   | 76.6 |
| 0°     | 0.1  | 1.9    | 6.4  | 12.5   | 19.9 | 28.1   | 36.6 | 45.8   | 59.3 | 69.3   | 76.2 |
| -2.5°  | 0.1  | 1.9    | 6.4  | 12.5   | 19.9 | 28.2   | 36.7 | 45.9   | 59.5 | 69.9   | 77.6 |
| -5°    | 0.1  | 1.9    | 6.4  | 12.5   | 19.9 | 28.1   | 36.7 | 45.9   | 59.4 | 70.3   | 78.7 |
| -7.5°  | 0.1  | 1.9    | 6.4  | 12.5   | 19.8 | 28.0   | 36.5 | 45.7   | 58.9 | 70.6   | 79.6 |
| -10°   | 0.1  | 1.9    | 6.3  | 12.4   | 19.7 | 27.8   | 36.3 | 45.4   | 58.2 | 70.6   | 80.0 |
| -12.5° | 0.1  | 1.9    | 6.3  | 12.3   | 19.5 | 27.5   | 36.0 | 45.0   | 57.2 | 70.5   | 80.3 |
| -15°   | 0.1  | 1.8    | 6.2  | 12.1   | 19.2 | 27.2   | 35.5 | 44.4   | 56.1 | 70.2   | 80.2 |
| -17.5° | 0.1  | 1.8    | 6.1  | 11.9   | 18.9 | 26.8   | 35.0 | 43.7   | 54.7 | 69.6   | 79.8 |
| -20°   | 0.1  | 1.8    | 6.0  | 11.7   | 18.5 | 26.3   | 34.4 | 42.9   | 53.3 | 68.7   | 79.0 |



REPORT NUMBER: P1217529 (CONVERTED FROM TYPE C PHOTOMETRY)  
CATALOG NUMBER: TRX15S-BK-4000K-5H5V

**CANDELA DISTRIBUTION (continued):**

|        | -90° | -87.5° | -85° | -82.5° | -80° | -77.5° | -75° | -72.5° | -70° | -67.5° | -65° |
|--------|------|--------|------|--------|------|--------|------|--------|------|--------|------|
| -22.5° | 0.1  | 1.7    | 5.8  | 11.4   | 18.1 | 25.7   | 33.6 | 42.0   | 51.7 | 67.0   | 77.7 |
| -25°   | 0.1  | 1.7    | 5.7  | 11.1   | 17.7 | 25.1   | 32.8 | 41.0   | 50.2 | 64.7   | 76.3 |
| -27.5° | 0.1  | 1.6    | 5.5  | 10.7   | 17.2 | 24.4   | 31.9 | 39.9   | 48.6 | 61.7   | 74.3 |
| -30°   | 0.1  | 1.6    | 5.3  | 10.3   | 16.6 | 23.6   | 30.9 | 38.6   | 46.9 | 58.4   | 72.1 |
| -32.5° | 0.1  | 1.5    | 5.1  | 9.9    | 16.0 | 22.7   | 29.9 | 37.3   | 45.2 | 55.1   | 69.5 |
| -35°   | 0.1  | 1.4    | 4.8  | 9.4    | 15.3 | 21.8   | 28.7 | 35.9   | 43.4 | 52.2   | 65.8 |
| -37.5° | 0.1  | 1.4    | 4.6  | 9.0    | 14.6 | 20.8   | 27.5 | 34.4   | 41.6 | 49.6   | 61.2 |
| -40°   | 0.1  | 1.3    | 4.3  | 8.5    | 13.9 | 19.7   | 26.2 | 32.8   | 39.6 | 47.0   | 56.5 |
| -42.5° | 0.1  | 1.3    | 4.1  | 8.1    | 13.1 | 18.7   | 24.8 | 31.1   | 37.6 | 44.5   | 52.6 |
| -45°   | 0.1  | 1.2    | 3.8  | 7.6    | 12.3 | 17.6   | 23.4 | 29.4   | 35.6 | 42.0   | 49.1 |
| -47.5° | 0.1  | 1.1    | 3.5  | 7.1    | 11.5 | 16.5   | 21.9 | 27.6   | 33.4 | 39.4   | 45.9 |
| -50°   | 0.1  | 1.1    | 3.3  | 6.6    | 10.6 | 15.3   | 20.4 | 25.8   | 31.2 | 36.9   | 42.7 |
| -52.5° | 0.1  | 1.0    | 3.0  | 6.1    | 9.7  | 14.2   | 18.8 | 23.9   | 29.0 | 34.3   | 39.6 |
| -55°   | 0.1  | 0.9    | 2.7  | 5.6    | 8.9  | 13.0   | 17.3 | 21.9   | 26.7 | 31.6   | 36.5 |
| -57.5° | 0.1  | 0.9    | 2.5  | 5.0    | 8.1  | 11.8   | 15.7 | 19.9   | 24.4 | 28.9   | 33.3 |
| -60°   | 0.1  | 0.8    | 2.2  | 4.5    | 7.2  | 10.5   | 14.2 | 18.0   | 22.0 | 26.2   | 30.1 |
| -62.5° | 0.1  | 0.7    | 2.0  | 3.9    | 6.5  | 9.3    | 12.6 | 16.0   | 19.6 | 23.4   | 26.9 |
| -65°   | 0.1  | 0.6    | 1.7  | 3.4    | 5.7  | 8.1    | 11.0 | 14.1   | 17.3 | 20.6   | 23.8 |
| -67.5° | 0.1  | 0.5    | 1.5  | 2.9    | 4.9  | 7.1    | 9.4  | 12.2   | 15.0 | 17.9   | 20.6 |
| -70°   | 0.1  | 0.5    | 1.3  | 2.5    | 4.1  | 6.0    | 8.0  | 10.3   | 12.8 | 15.2   | 17.5 |
| -72.5° | 0.1  | 0.4    | 1.1  | 2.1    | 3.4  | 5.0    | 6.7  | 8.5    | 10.6 | 12.6   | 14.6 |
| -75°   | 0.1  | 0.3    | 0.9  | 1.7    | 2.7  | 3.9    | 5.4  | 6.9    | 8.5  | 10.1   | 11.7 |
| -77.5° | 0.1  | 0.3    | 0.7  | 1.3    | 2.1  | 3.0    | 4.1  | 5.4    | 6.7  | 7.9    | 9.1  |
| -80°   | 0.1  | 0.2    | 0.6  | 1.0    | 1.6  | 2.3    | 3.0  | 3.9    | 5.0  | 5.9    | 6.8  |
| -82.5° | 0.1  | 0.2    | 0.4  | 0.7    | 1.1  | 1.6    | 2.1  | 2.7    | 3.3  | 3.9    | 4.6  |
| -85°   | 0.1  | 0.2    | 0.3  | 0.5    | 0.7  | 1.0    | 1.3  | 1.7    | 2.1  | 2.4    | 2.8  |
| -87.5° | 0.1  | 0.2    | 0.2  | 0.3    | 0.4  | 0.5    | 0.7  | 0.9    | 1.1  | 1.2    | 1.4  |
| -90°   | 0.1  | 0.1    | 0.1  | 0.0    | 0.0  | 0.0    | 0.0  | 0.0    | 0.0  | 0.0    | 0.0  |

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CATALOG NUMBER: TRX15S-BK-4000K-5H5V

**CANDELA DISTRIBUTION (continued):**

|        | -62.5° | -60°  | -57.5° | -55°  | -52.5° | -50°  | -47.5° | -45°  | -42.5° | -40°  | -37.5° |
|--------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|
| 90°    | 0.5    | 0.5   | 0.5    | 0.5   | 0.5    | 0.5   | 0.5    | 0.5   | 0.4    | 0.4   | 0.4    |
| 87.5°  | 0.2    | 0.2   | 0.2    | 0.1   | 0.1    | 0.1   | 0.1    | 0.1   | 0.1    | 0.1   | 0.1    |
| 85°    | 0.6    | 0.6   | 0.6    | 0.6   | 0.6    | 0.6   | 0.6    | 0.5   | 0.5    | 0.4   | 0.3    |
| 82.5°  | 1.4    | 1.5   | 1.6    | 1.7   | 1.7    | 1.8   | 1.9    | 2.0   | 2.0    | 2.2   | 2.3    |
| 80°    | 2.8    | 3.1   | 3.5    | 4.0   | 4.5    | 5.0   | 5.4    | 5.7   | 6.1    | 6.5   | 6.9    |
| 77.5°  | 5.0    | 5.7   | 6.5    | 7.2   | 7.9    | 8.6   | 9.4    | 10.1  | 10.8   | 11.5  | 12.2   |
| 75°    | 7.5    | 8.5   | 9.6    | 10.8  | 11.9   | 13.0  | 14.2   | 15.4  | 16.5   | 17.5  | 18.6   |
| 72.5°  | 10.3   | 11.8  | 13.3   | 14.9  | 16.5   | 18.0  | 19.6   | 21.1  | 22.5   | 24.0  | 25.5   |
| 70°    | 13.4   | 15.4  | 17.3   | 19.3  | 21.2   | 23.2  | 25.2   | 27.2  | 29.1   | 30.9  | 32.6   |
| 67.5°  | 16.8   | 19.1  | 21.5   | 23.8  | 26.3   | 28.7  | 31.0   | 33.3  | 35.7   | 38.1  | 40.5   |
| 65°    | 20.2   | 23.0  | 25.7   | 28.6  | 31.4   | 34.2  | 37.1   | 40.1  | 43.0   | 45.8  | 48.8   |
| 62.5°  | 23.7   | 26.9  | 30.1   | 33.4  | 36.7   | 40.3  | 43.7   | 47.2  | 50.9   | 54.7  | 58.4   |
| 60°    | 27.3   | 30.9  | 34.5   | 38.4  | 42.6   | 46.6  | 50.8   | 55.3  | 60.0   | 63.9  | 67.4   |
| 57.5°  | 30.9   | 34.9  | 39.3   | 44.0  | 48.7   | 53.7  | 59.1   | 64.2  | 68.9   | 73.0  | 77.2   |
| 55°    | 34.5   | 39.3  | 44.4   | 49.7  | 55.5   | 61.7  | 67.5   | 73.0  | 78.7   | 84.4  | 90.3   |
| 52.5°  | 38.3   | 43.9  | 49.7   | 56.2  | 63.0   | 69.6  | 76.0   | 83.5  | 91.4   | 99.2  | 106.5  |
| 50°    | 42.3   | 48.6  | 55.6   | 63.0  | 70.4   | 77.9  | 86.8   | 96.4  | 106.7  | 114.9 | 120.5  |
| 47.5°  | 46.5   | 53.6  | 61.8   | 69.6  | 78.0   | 88.3  | 99.6   | 111.4 | 121.0  | 127.3 | 131.9  |
| 45°    | 50.6   | 59.1  | 67.6   | 76.2  | 87.3   | 100.3 | 113.8  | 124.4 | 131.5  | 137.2 | 142.5  |
| 42.5°  | 55.2   | 64.5  | 73.2   | 84.0  | 97.7   | 113.3 | 125.8  | 133.9 | 139.8  | 146.2 | 153.1  |
| 40°    | 60.0   | 69.4  | 79.4   | 92.7  | 108.7  | 124.2 | 134.8  | 141.2 | 147.7  | 155.3 | 164.2  |
| 37.5°  | 64.6   | 73.9  | 86.3   | 102.0 | 119.1  | 132.2 | 140.9  | 147.9 | 155.6  | 165.1 | 177.6  |
| 35°    | 68.3   | 78.4  | 93.7   | 111.4 | 127.2  | 137.7 | 145.9  | 154.5 | 164.1  | 177.2 | 193.5  |
| 32.5°  | 71.4   | 83.1  | 100.5  | 119.7 | 133.2  | 142.1 | 150.8  | 160.9 | 174.4  | 191.1 | 211.2  |
| 30°    | 74.3   | 87.8  | 106.8  | 125.4 | 137.5  | 146.3 | 156.0  | 168.8 | 185.8  | 206.7 | 229.9  |
| 27.5°  | 77.3   | 92.4  | 111.9  | 128.7 | 140.5  | 150.2 | 161.8  | 177.9 | 198.4  | 222.6 | 249.2  |
| 25°    | 80.0   | 96.7  | 115.6  | 130.8 | 142.5  | 154.2 | 168.6  | 187.7 | 211.5  | 238.2 | 268.8  |
| 22.5°  | 82.5   | 100.5 | 118.3  | 132.3 | 144.6  | 158.0 | 175.7  | 198.0 | 224.4  | 254.3 | 288.2  |
| 20°    | 85.0   | 103.2 | 120.0  | 133.7 | 146.8  | 162.3 | 182.7  | 207.9 | 236.7  | 269.9 | 307.5  |
| 17.5°  | 87.2   | 105.2 | 121.1  | 135.0 | 149.3  | 166.9 | 189.6  | 217.1 | 248.5  | 284.7 | 326.1  |
| 15°    | 89.1   | 106.4 | 121.8  | 136.2 | 151.6  | 171.5 | 196.3  | 225.2 | 259.4  | 298.6 | 344.5  |
| 12.5°  | 90.5   | 107.1 | 122.3  | 137.4 | 154.0  | 175.7 | 202.0  | 232.6 | 269.2  | 311.0 | 362.3  |
| 10°    | 91.4   | 107.3 | 122.7  | 138.5 | 156.4  | 179.5 | 206.9  | 239.3 | 277.7  | 322.1 | 378.4  |
| 7.5°   | 91.8   | 107.1 | 122.7  | 139.3 | 158.4  | 182.6 | 211.0  | 244.7 | 284.8  | 331.5 | 392.0  |
| 5°     | 91.7   | 106.5 | 122.4  | 139.7 | 159.8  | 184.9 | 213.9  | 248.9 | 290.6  | 339.1 | 403.2  |
| 2.5°   | 91.2   | 105.4 | 121.7  | 139.7 | 160.5  | 186.3 | 215.6  | 251.6 | 294.2  | 344.0 | 410.5  |
| 0°     | 90.3   | 104.0 | 120.5  | 139.1 | 160.5  | 186.7 | 216.0  | 252.6 | 295.7  | 346.1 | 413.4  |
| -2.5°  | 92.2   | 106.2 | 122.4  | 140.5 | 161.8  | 188.0 | 217.7  | 254.1 | 296.5  | 346.6 | 413.9  |
| -5°    | 93.8   | 108.0 | 123.8  | 141.4 | 162.3  | 188.2 | 218.1  | 253.8 | 295.3  | 344.3 | 410.0  |
| -7.5°  | 95.1   | 109.5 | 124.9  | 141.8 | 162.0  | 187.5 | 217.2  | 252.0 | 292.1  | 339.3 | 401.9  |
| -10°   | 95.9   | 110.6 | 125.6  | 141.7 | 161.1  | 185.8 | 215.0  | 248.8 | 287.3  | 331.9 | 390.9  |
| -12.5° | 96.3   | 111.4 | 126.0  | 141.2 | 159.5  | 183.2 | 211.9  | 244.7 | 281.1  | 322.9 | 377.1  |
| -15°   | 96.2   | 111.8 | 126.2  | 140.6 | 157.8  | 180.3 | 207.7  | 239.6 | 273.9  | 312.6 | 361.0  |
| -17.5° | 95.5   | 111.8 | 126.5  | 140.2 | 156.0  | 176.7 | 202.5  | 233.5 | 266.0  | 301.5 | 343.7  |
| -20°   | 94.3   | 111.9 | 126.9  | 139.7 | 154.0  | 172.6 | 196.6  | 226.1 | 256.8  | 288.1 | 325.0  |

REPORT NUMBER: P1217529 (CONVERTED FROM TYPE C PHOTOMETRY)  
CATALOG NUMBER: TRX15S-BK-4000K-5H5V

**CANDELA DISTRIBUTION (continued):**

|        | -62.5° | -60°  | -57.5° | -55°  | -52.5° | -50°  | -47.5° | -45°  | -42.5° | -40°  | -37.5° |
|--------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|
| -22.5° | 93.0   | 111.5 | 127.0  | 139.4 | 152.1  | 168.4 | 190.0  | 216.3 | 244.7  | 273.7 | 306.6  |
| -25°   | 91.1   | 110.2 | 126.6  | 139.4 | 150.4  | 164.6 | 182.3  | 204.7 | 231.7  | 259.0 | 288.3  |
| -27.5° | 88.8   | 107.8 | 125.7  | 139.3 | 149.3  | 159.7 | 174.2  | 193.5 | 217.7  | 243.5 | 269.2  |
| -30°   | 86.1   | 104.5 | 123.7  | 138.8 | 147.1  | 154.7 | 166.6  | 182.8 | 203.2  | 226.9 | 249.3  |
| -32.5° | 82.7   | 100.4 | 120.4  | 135.9 | 144.1  | 150.3 | 159.7  | 172.9 | 189.5  | 208.5 | 229.2  |
| -35°   | 78.7   | 95.5  | 115.4  | 130.1 | 140.2  | 146.4 | 153.5  | 164.0 | 176.2  | 191.4 | 209.0  |
| -37.5° | 74.2   | 90.0  | 107.3  | 122.8 | 134.7  | 142.5 | 148.2  | 155.0 | 164.3  | 176.1 | 190.2  |
| -40°   | 69.8   | 83.5  | 98.7   | 114.1 | 127.5  | 137.4 | 143.1  | 147.0 | 153.6  | 162.8 | 173.6  |
| -42.5° | 64.4   | 76.4  | 90.1   | 104.6 | 118.6  | 130.1 | 136.1  | 139.5 | 143.9  | 150.6 | 159.1  |
| -45°   | 58.4   | 69.8  | 81.7   | 94.9  | 108.3  | 119.8 | 126.6  | 131.3 | 134.9  | 139.4 | 145.8  |
| -47.5° | 53.2   | 63.1  | 73.5   | 85.3  | 97.5   | 107.3 | 114.8  | 120.6 | 125.1  | 129.1 | 133.8  |
| -50°   | 48.8   | 56.3  | 66.0   | 76.0  | 86.6   | 94.8  | 102.1  | 108.0 | 112.9  | 117.8 | 122.0  |
| -52.5° | 44.9   | 50.8  | 58.4   | 67.2  | 75.9   | 83.5  | 89.5   | 95.0  | 99.7   | 104.5 | 108.9  |
| -55°   | 41.2   | 46.2  | 51.8   | 59.0  | 66.1   | 73.0  | 78.8   | 83.0  | 87.1   | 91.1  | 94.5   |
| -57.5° | 37.6   | 41.9  | 46.6   | 51.7  | 57.4   | 63.4  | 68.9   | 73.3  | 76.7   | 79.1  | 81.6   |
| -60°   | 34.0   | 37.9  | 41.9   | 45.9  | 50.1   | 54.6  | 59.5   | 64.0  | 67.9   | 70.4  | 71.8   |
| -62.5° | 30.4   | 33.9  | 37.4   | 40.7  | 44.1   | 47.6  | 51.1   | 54.9  | 58.7   | 62.1  | 64.6   |
| -65°   | 26.9   | 30.0  | 33.1   | 35.9  | 38.8   | 41.6  | 44.4   | 47.3  | 50.1   | 53.0  | 55.7   |
| -67.5° | 23.4   | 26.1  | 28.8   | 31.3  | 33.7   | 36.0  | 38.3   | 40.7  | 43.0   | 45.2  | 47.4   |
| -70°   | 19.9   | 22.3  | 24.6   | 26.7  | 28.8   | 30.7  | 32.7   | 34.6  | 36.5   | 38.3  | 40.2   |
| -72.5° | 16.6   | 18.6  | 20.5   | 22.3  | 24.0   | 25.7  | 27.3   | 28.9  | 30.4   | 31.9  | 33.4   |
| -75°   | 13.4   | 15.0  | 16.6   | 18.0  | 19.4   | 20.7  | 22.1   | 23.4  | 24.6   | 25.8  | 27.0   |
| -77.5° | 10.4   | 11.6  | 12.8   | 13.9  | 15.1   | 16.0  | 17.1   | 18.1  | 19.0   | 20.0  | 20.9   |
| -80°   | 7.7    | 8.6   | 9.4    | 10.2  | 11.0   | 11.8  | 12.5   | 13.3  | 14.0   | 14.6  | 15.3   |
| -82.5° | 5.3    | 5.9   | 6.5    | 7.0   | 7.5    | 7.9   | 8.4    | 8.8   | 9.2    | 9.7   | 10.1   |
| -85°   | 3.1    | 3.5   | 3.8    | 4.1   | 4.4    | 4.7   | 5.0    | 5.3   | 5.5    | 5.8   | 6.0    |
| -87.5° | 1.5    | 1.7   | 1.8    | 1.9   | 2.0    | 2.1   | 2.2    | 2.3   | 2.4    | 2.5   | 2.6    |
| -90°   | 0.0    | 0.0   | 0.0    | 0.0   | 0.0    | 0.0   | 0.0    | 0.0   | 0.0    | 0.0   | 0.0    |



REPORT NUMBER: P1217529 (CONVERTED FROM TYPE C PHOTOMETRY)  
CATALOG NUMBER: TRX15S-BK-4000K-5H5V

**CANDELA DISTRIBUTION (continued):**

|        | -35°  | -32.5° | -30°  | -27.5° | -25°   | -22.5° | -20°   | -17.5° | -15°   | -12.5° | -10°   |
|--------|-------|--------|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| 90°    | 0.4   | 0.4    | 0.4   | 0.4    | 0.4    | 0.4    | 0.4    | 0.4    | 0.4    | 0.4    | 0.4    |
| 87.5°  | 0.1   | 0.0    | 0.0   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 85°    | 0.3   | 0.3    | 0.3   | 0.2    | 0.2    | 0.2    | 0.1    | 0.1    | 0.1    | 0.0    | 0.0    |
| 82.5°  | 2.4   | 2.5    | 2.5   | 2.6    | 2.7    | 2.7    | 2.7    | 2.8    | 2.9    | 2.9    | 2.9    |
| 80°    | 7.2   | 7.5    | 7.9   | 8.2    | 8.5    | 8.8    | 9.0    | 9.3    | 9.5    | 9.7    | 9.8    |
| 77.5°  | 13.0  | 13.6   | 14.2  | 14.8   | 15.3   | 15.8   | 16.2   | 16.7   | 17.2   | 17.5   | 17.8   |
| 75°    | 19.6  | 20.6   | 21.5  | 22.4   | 23.3   | 24.1   | 24.7   | 25.4   | 26.0   | 26.5   | 26.9   |
| 72.5°  | 26.9  | 28.2   | 29.5  | 30.6   | 31.7   | 32.8   | 33.7   | 34.6   | 35.5   | 36.1   | 36.7   |
| 70°    | 34.4  | 36.2   | 37.9  | 39.5   | 41.1   | 42.5   | 43.7   | 44.9   | 46.1   | 47.2   | 48.0   |
| 67.5°  | 42.7  | 44.9   | 47.2  | 49.6   | 51.8   | 54.0   | 56.0   | 57.6   | 58.9   | 60.2   | 61.5   |
| 65°    | 52.0  | 55.1   | 57.8  | 59.6   | 61.3   | 62.9   | 64.7   | 66.7   | 69.6   | 72.7   | 75.8   |
| 62.5°  | 61.4  | 63.9   | 66.1  | 67.9   | 70.2   | 72.8   | 75.6   | 78.8   | 84.2   | 89.4   | 94.6   |
| 60°    | 70.3  | 73.0   | 75.9  | 78.7   | 82.2   | 86.1   | 89.6   | 92.6   | 98.6   | 104.4  | 109.9  |
| 57.5°  | 81.3  | 85.7   | 89.6  | 92.9   | 96.3   | 100.2  | 103.5  | 106.4  | 112.0  | 117.4  | 122.2  |
| 55°    | 96.0  | 101.4  | 105.2 | 108.0  | 110.7  | 114.9  | 118.6  | 121.8  | 126.3  | 131.4  | 135.7  |
| 52.5°  | 111.8 | 115.9  | 119.4 | 122.7  | 125.8  | 130.4  | 134.7  | 138.4  | 142.8  | 147.9  | 152.3  |
| 50°    | 124.8 | 128.8  | 133.1 | 137.5  | 141.8  | 146.7  | 152.1  | 157.4  | 162.7  | 168.6  | 173.7  |
| 47.5°  | 136.6 | 141.7  | 147.2 | 152.8  | 159.1  | 166.0  | 173.3  | 180.5  | 186.9  | 193.7  | 199.7  |
| 45°    | 148.4 | 154.9  | 162.3 | 170.7  | 179.8  | 188.9  | 198.4  | 207.5  | 215.7  | 224.0  | 231.1  |
| 42.5°  | 160.6 | 169.8  | 180.6 | 192.1  | 204.1  | 215.9  | 228.2  | 239.9  | 250.8  | 260.8  | 269.1  |
| 40°    | 175.1 | 188.0  | 202.2 | 216.9  | 232.3  | 247.8  | 263.3  | 278.1  | 291.5  | 303.0  | 312.7  |
| 37.5°  | 192.5 | 209.1  | 226.6 | 245.2  | 264.6  | 284.0  | 302.8  | 321.3  | 338.4  | 354.3  | 367.7  |
| 35°    | 212.3 | 232.3  | 253.7 | 276.7  | 299.9  | 324.4  | 349.3  | 375.1  | 400.6  | 424.3  | 444.3  |
| 32.5°  | 233.3 | 257.3  | 283.2 | 310.7  | 340.7  | 373.6  | 409.2  | 446.8  | 483.5  | 517.1  | 547.3  |
| 30°    | 255.6 | 283.9  | 314.9 | 349.7  | 389.8  | 435.8  | 487.1  | 541.0  | 592.0  | 641.7  | 684.9  |
| 27.5°  | 278.9 | 311.9  | 350.2 | 395.7  | 450.8  | 517.0  | 587.5  | 658.3  | 722.8  | 776.4  | 828.0  |
| 25°    | 302.6 | 341.9  | 390.2 | 451.5  | 528.5  | 614.0  | 702.1  | 777.1  | 853.4  | 923.8  | 987.8  |
| 22.5°  | 327.0 | 374.9  | 436.4 | 518.3  | 616.8  | 719.5  | 810.7  | 905.8  | 999.7  | 1091.3 | 1173.3 |
| 20°    | 352.5 | 410.6  | 489.4 | 591.3  | 712.3  | 816.9  | 928.6  | 1044.9 | 1162.1 | 1274.0 | 1381.3 |
| 17.5°  | 378.7 | 449.4  | 546.2 | 676.1  | 794.1  | 919.2  | 1052.9 | 1192.5 | 1334.6 | 1481.9 | 1626.0 |
| 15°    | 405.4 | 488.7  | 607.7 | 747.3  | 878.9  | 1022.0 | 1177.5 | 1343.3 | 1522.9 | 1715.6 | 1910.6 |
| 12.5°  | 431.7 | 527.2  | 674.4 | 810.9  | 957.8  | 1120.7 | 1299.8 | 1499.8 | 1725.4 | 1970.6 | 2214.0 |
| 10°    | 455.0 | 564.5  | 722.1 | 869.2  | 1030.9 | 1211.1 | 1417.1 | 1656.1 | 1930.7 | 2227.3 | 2526.7 |
| 7.5°   | 474.8 | 600.6  | 756.9 | 917.9  | 1092.2 | 1289.5 | 1522.7 | 1799.7 | 2121.4 | 2470.2 | 2813.2 |
| 5°     | 490.6 | 627.5  | 788.5 | 956.4  | 1138.8 | 1351.2 | 1606.7 | 1916.7 | 2281.9 | 2670.4 | 3046.8 |
| 2.5°   | 500.5 | 643.2  | 809.2 | 982.0  | 1169.8 | 1392.2 | 1663.1 | 1996.4 | 2388.5 | 2804.1 | 3203.7 |
| 0°     | 503.6 | 646.8  | 817.4 | 992.6  | 1181.8 | 1406.7 | 1684.8 | 2027.3 | 2429.3 | 2853.3 | 3258.0 |
| -2.5°  | 505.8 | 648.7  | 819.7 | 993.1  | 1179.8 | 1403.5 | 1680.7 | 2020.6 | 2414.3 | 2831.4 | 3228.3 |
| -5°    | 501.1 | 639.3  | 808.9 | 979.6  | 1160.1 | 1377.4 | 1646.6 | 1976.9 | 2356.5 | 2759.2 | 3141.5 |
| -7.5°  | 490.1 | 622.0  | 787.9 | 955.1  | 1126.9 | 1331.7 | 1584.5 | 1891.1 | 2240.2 | 2612.3 | 2962.7 |
| -10°   | 475.3 | 598.5  | 756.8 | 918.3  | 1079.3 | 1265.5 | 1490.4 | 1763.8 | 2071.4 | 2392.2 | 2703.9 |
| -12.5° | 454.2 | 566.7  | 715.5 | 867.2  | 1017.1 | 1183.4 | 1379.8 | 1606.6 | 1864.7 | 2135.6 | 2401.2 |
| -15°   | 428.8 | 528.1  | 662.7 | 804.5  | 945.7  | 1091.6 | 1257.7 | 1443.1 | 1648.9 | 1869.3 | 2088.2 |
| -17.5° | 401.3 | 485.8  | 604.0 | 735.6  | 861.9  | 991.0  | 1132.9 | 1286.5 | 1448.3 | 1617.5 | 1787.9 |
| -20°   | 373.6 | 442.4  | 540.6 | 658.1  | 773.0  | 886.2  | 1006.9 | 1136.6 | 1269.5 | 1400.5 | 1525.5 |

REPORT NUMBER: P1217529 (CONVERTED FROM TYPE C PHOTOMETRY)  
CATALOG NUMBER: TRX15S-BK-4000K-5H5V

**CANDELA DISTRIBUTION (continued):**

|        | -35°  | -32.5° | -30°  | -27.5° | -25°  | -22.5° | -20°  | -17.5° | -15°   | -12.5° | -10°   |
|--------|-------|--------|-------|--------|-------|--------|-------|--------|--------|--------|--------|
| -22.5° | 347.4 | 401.6  | 477.9 | 577.8  | 682.6 | 783.3  | 883.2 | 990.4  | 1101.7 | 1209.4 | 1307.6 |
| -25°   | 321.9 | 364.5  | 422.0 | 499.8  | 591.7 | 679.5  | 766.9 | 853.9  | 944.0  | 1032.2 | 1111.9 |
| -27.5° | 297.6 | 331.9  | 374.8 | 430.8  | 501.1 | 580.0  | 654.9 | 728.0  | 801.5  | 872.0  | 936.9  |
| -30°   | 273.9 | 302.0  | 335.5 | 375.1  | 424.8 | 484.4  | 546.2 | 607.7  | 666.2  | 723.2  | 778.2  |
| -32.5° | 250.5 | 274.2  | 300.8 | 331.1  | 365.3 | 405.6  | 450.2 | 496.2  | 540.8  | 583.6  | 623.4  |
| -35°   | 227.7 | 247.5  | 269.4 | 293.4  | 319.5 | 346.7  | 376.5 | 407.8  | 438.8  | 466.5  | 492.2  |
| -37.5° | 205.9 | 222.4  | 240.2 | 259.2  | 280.3 | 301.8  | 323.1 | 343.5  | 363.6  | 382.5  | 398.9  |
| -40°   | 186.0 | 199.4  | 213.4 | 228.8  | 245.4 | 262.6  | 279.6 | 296.1  | 311.2  | 324.1  | 335.0  |
| -42.5° | 168.5 | 179.1  | 189.9 | 202.3  | 215.2 | 228.5  | 242.0 | 255.6  | 268.1  | 279.3  | 288.9  |
| -45°   | 153.2 | 161.2  | 170.1 | 179.6  | 189.5 | 199.4  | 210.4 | 221.2  | 231.2  | 241.1  | 250.1  |
| -47.5° | 139.2 | 145.4  | 152.6 | 160.1  | 167.8 | 175.4  | 184.0 | 192.2  | 199.9  | 208.5  | 216.4  |
| -50°   | 126.2 | 130.9  | 137.0 | 143.0  | 148.7 | 155.1  | 162.0 | 168.3  | 174.4  | 181.4  | 187.7  |
| -52.5° | 112.8 | 117.4  | 122.8 | 127.8  | 132.3 | 138.0  | 143.5 | 148.6  | 154.0  | 159.7  | 165.0  |
| -55°   | 97.8  | 103.1  | 108.3 | 113.0  | 117.5 | 123.3  | 128.3 | 132.7  | 137.9  | 143.5  | 148.5  |
| -57.5° | 84.0  | 88.5   | 93.0  | 97.4   | 102.4 | 108.6  | 114.2 | 119.0  | 125.4  | 131.6  | 137.0  |
| -60°   | 73.3  | 76.4   | 79.7  | 82.8   | 87.3  | 92.9   | 98.4  | 103.6  | 111.6  | 119.2  | 126.3  |
| -62.5° | 66.4  | 68.3   | 70.1  | 71.8   | 75.0  | 79.0   | 83.3  | 87.8   | 94.7   | 101.6  | 108.5  |
| -65°   | 58.8  | 61.6   | 63.6  | 65.0   | 67.0  | 69.4   | 71.9  | 74.9   | 79.1   | 83.5   | 88.2   |
| -67.5° | 49.7  | 52.1   | 54.5  | 57.0   | 59.3  | 61.4   | 63.1  | 64.8   | 66.9   | 69.0   | 71.4   |
| -70°   | 42.0  | 43.9   | 45.6  | 47.3   | 49.0  | 50.7   | 52.4  | 53.9   | 55.3   | 56.5   | 57.6   |
| -72.5° | 34.9  | 36.4   | 37.8  | 39.2   | 40.5  | 41.8   | 42.9  | 44.1   | 45.2   | 46.1   | 46.9   |
| -75°   | 28.2  | 29.4   | 30.5  | 31.6   | 32.7  | 33.8   | 34.8  | 35.7   | 36.6   | 37.4   | 38.1   |
| -77.5° | 21.9  | 22.8   | 23.6  | 24.5   | 25.4  | 26.2   | 27.0  | 27.8   | 28.6   | 29.3   | 29.9   |
| -80°   | 16.0  | 16.6   | 17.2  | 17.9   | 18.5  | 19.1   | 19.7  | 20.3   | 20.9   | 21.4   | 21.9   |
| -82.5° | 10.6  | 11.1   | 11.5  | 11.9   | 12.3  | 12.7   | 13.0  | 13.4   | 13.8   | 14.1   | 14.4   |
| -85°   | 6.2   | 6.4    | 6.6   | 6.8    | 7.0   | 7.1    | 7.3   | 7.5    | 7.6    | 7.8    | 7.9    |
| -87.5° | 2.6   | 2.7    | 2.8   | 2.8    | 2.9   | 2.9    | 3.0   | 3.0    | 3.1    | 3.1    | 3.1    |
| -90°   | 0.0   | 0.0    | 0.0   | 0.0    | 0.0   | 0.0    | 0.0   | 0.0    | 0.0    | 0.0    | 0.0    |

REPORT NUMBER: P1217529 (CONVERTED FROM TYPE C PHOTOMETRY)  
CATALOG NUMBER: TRX15S-BK-4000K-5H5V

**CANDELA DISTRIBUTION (continued):**

|        | -7.5°  | -5°    | -2.5°  | 0°     | 2.5°   | 5°     | 7.5°   | 10°    | 12.5°  | 15°    | 17.5°  |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 90°    | 0.4    | 0.4    | 0.4    | 0.4    | 0.4    | 0.4    | 0.3    | 0.3    | 0.3    | 0.3    | 0.3    |
| 87.5°  | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.1    | 0.1    | 0.1    | 0.1    | 0.1    | 0.1    |
| 85°    | 0.0    | 0.0    | 0.1    | 0.1    | 0.1    | 0.0    | 0.0    | 0.0    | 0.0    | 0.1    | 0.1    |
| 82.5°  | 3.0    | 3.0    | 3.0    | 3.0    | 2.9    | 2.7    | 2.5    | 2.2    | 2.1    | 1.9    | 1.7    |
| 80°    | 9.9    | 10.0   | 10.1   | 10.1   | 9.8    | 9.5    | 9.1    | 8.7    | 8.3    | 7.9    | 7.5    |
| 77.5°  | 18.1   | 18.3   | 18.4   | 18.4   | 18.0   | 17.6   | 17.0   | 16.4   | 15.9   | 15.3   | 14.6   |
| 75°    | 27.3   | 27.5   | 27.7   | 27.7   | 27.2   | 26.6   | 26.0   | 25.2   | 24.5   | 23.6   | 22.7   |
| 72.5°  | 37.1   | 37.4   | 37.6   | 37.6   | 37.1   | 36.4   | 35.6   | 34.8   | 33.9   | 32.9   | 31.8   |
| 70°    | 48.6   | 48.9   | 49.1   | 49.0   | 48.5   | 47.7   | 46.8   | 45.7   | 44.6   | 43.3   | 41.8   |
| 67.5°  | 62.8   | 64.2   | 65.4   | 66.4   | 65.0   | 63.4   | 61.5   | 59.6   | 57.7   | 55.7   | 53.6   |
| 65°    | 79.4   | 83.3   | 87.0   | 90.3   | 86.9   | 83.1   | 79.0   | 74.9   | 71.3   | 67.6   | 64.2   |
| 62.5°  | 100.5  | 106.9  | 113.0  | 118.6  | 113.3  | 107.4  | 101.1  | 95.0   | 89.2   | 83.2   | 77.3   |
| 60°    | 115.8  | 122.6  | 129.1  | 135.2  | 130.2  | 124.8  | 118.9  | 113.0  | 107.0  | 100.4  | 93.4   |
| 57.5°  | 127.2  | 132.9  | 138.2  | 143.1  | 139.7  | 135.9  | 131.6  | 127.1  | 122.1  | 116.4  | 110.2  |
| 55°    | 139.8  | 144.4  | 148.5  | 152.1  | 149.8  | 147.0  | 143.7  | 140.0  | 135.9  | 131.1  | 126.0  |
| 52.5°  | 156.3  | 160.4  | 163.8  | 166.6  | 164.7  | 162.2  | 159.0  | 155.4  | 151.2  | 146.4  | 141.2  |
| 50°    | 177.8  | 181.8  | 184.9  | 187.0  | 184.8  | 181.9  | 178.2  | 174.2  | 169.5  | 164.1  | 158.5  |
| 47.5°  | 204.6  | 208.9  | 212.0  | 213.8  | 211.2  | 207.5  | 202.7  | 197.5  | 191.4  | 184.4  | 177.7  |
| 45°    | 236.6  | 240.9  | 243.6  | 244.6  | 242.0  | 238.0  | 232.6  | 226.5  | 219.0  | 210.7  | 202.3  |
| 42.5°  | 275.3  | 279.5  | 281.6  | 281.6  | 279.5  | 275.4  | 269.6  | 262.4  | 253.4  | 243.4  | 232.6  |
| 40°    | 319.9  | 324.5  | 326.2  | 325.3  | 323.5  | 319.1  | 312.7  | 304.6  | 294.3  | 282.8  | 269.7  |
| 37.5°  | 378.1  | 384.8  | 387.0  | 384.9  | 382.6  | 376.5  | 367.7  | 356.3  | 342.4  | 328.1  | 312.1  |
| 35°    | 459.3  | 468.6  | 471.8  | 468.8  | 466.1  | 457.1  | 444.3  | 427.2  | 407.4  | 386.0  | 363.0  |
| 32.5°  | 571.5  | 589.3  | 599.6  | 599.6  | 593.1  | 577.1  | 556.0  | 528.5  | 498.3  | 466.3  | 431.6  |
| 30°    | 717.8  | 740.0  | 753.4  | 755.6  | 746.6  | 725.9  | 698.5  | 661.7  | 621.1  | 575.1  | 525.6  |
| 27.5°  | 869.3  | 899.5  | 918.6  | 923.1  | 913.7  | 890.0  | 856.3  | 810.6  | 760.5  | 703.6  | 644.0  |
| 25°    | 1041.1 | 1083.4 | 1107.6 | 1113.2 | 1103.8 | 1075.9 | 1033.6 | 980.3  | 916.2  | 845.5  | 771.4  |
| 22.5°  | 1243.0 | 1297.6 | 1333.6 | 1345.5 | 1332.9 | 1296.7 | 1241.9 | 1172.7 | 1089.8 | 1002.3 | 909.0  |
| 20°    | 1479.0 | 1556.9 | 1608.1 | 1626.5 | 1606.6 | 1557.1 | 1481.7 | 1386.7 | 1282.6 | 1173.5 | 1057.1 |
| 17.5°  | 1760.4 | 1869.6 | 1941.9 | 1967.1 | 1933.0 | 1857.5 | 1750.3 | 1627.6 | 1496.3 | 1350.8 | 1211.7 |
| 15°    | 2086.3 | 2229.7 | 2326.9 | 2362.9 | 2316.9 | 2213.8 | 2070.5 | 1902.3 | 1718.8 | 1544.2 | 1366.0 |
| 12.5°  | 2443.2 | 2626.0 | 2749.0 | 2793.2 | 2734.7 | 2606.4 | 2422.4 | 2203.8 | 1969.3 | 1736.3 | 1525.7 |
| 10°    | 2800.7 | 3021.0 | 3163.1 | 3216.7 | 3150.3 | 3001.8 | 2784.1 | 2516.0 | 2223.9 | 1936.1 | 1671.9 |
| 7.5°   | 3122.1 | 3366.0 | 3519.4 | 3579.9 | 3515.5 | 3358.9 | 3116.6 | 2808.3 | 2462.9 | 2123.8 | 1814.9 |
| 5°     | 3381.9 | 3636.1 | 3797.7 | 3865.8 | 3803.1 | 3640.1 | 3385.3 | 3043.5 | 2663.6 | 2287.6 | 1939.6 |
| 2.5°   | 3549.3 | 3812.1 | 3975.8 | 4045.8 | 3988.8 | 3827.7 | 3555.8 | 3206.5 | 2813.8 | 2412.9 | 2036.8 |
| 0°     | 3606.1 | 3867.7 | 4035.2 | 4112.9 | 4064.4 | 3908.2 | 3649.2 | 3304.2 | 2904.2 | 2493.4 | 2098.1 |
| -2.5°  | 3561.7 | 3817.0 | 3986.7 | 4065.9 | 4044.7 | 3907.2 | 3655.7 | 3306.5 | 2907.9 | 2498.7 | 2100.3 |
| -5°    | 3464.2 | 3705.0 | 3859.8 | 3921.5 | 3894.2 | 3755.1 | 3507.9 | 3178.6 | 2799.6 | 2411.6 | 2038.1 |
| -7.5°  | 3265.2 | 3493.2 | 3638.9 | 3686.0 | 3650.1 | 3511.3 | 3274.1 | 2966.6 | 2618.3 | 2264.7 | 1928.0 |
| -10°   | 2979.6 | 3196.0 | 3329.9 | 3363.4 | 3321.0 | 3189.1 | 2974.4 | 2697.2 | 2392.3 | 2083.3 | 1788.7 |
| -12.5° | 2641.7 | 2834.8 | 2946.1 | 2973.1 | 2932.6 | 2813.2 | 2628.0 | 2397.2 | 2141.6 | 1881.9 | 1636.5 |
| -15°   | 2284.6 | 2441.7 | 2531.3 | 2551.5 | 2517.9 | 2423.4 | 2276.2 | 2092.3 | 1889.2 | 1677.1 | 1481.2 |
| -17.5° | 1942.4 | 2059.7 | 2128.5 | 2144.9 | 2122.5 | 2054.2 | 1946.4 | 1806.1 | 1649.0 | 1489.6 | 1323.9 |
| -20°   | 1639.7 | 1726.8 | 1780.9 | 1796.2 | 1782.6 | 1734.3 | 1657.8 | 1559.0 | 1437.6 | 1310.5 | 1174.9 |

REPORT NUMBER: P1217529 (CONVERTED FROM TYPE C PHOTOMETRY)  
CATALOG NUMBER: TRX15S-BK-4000K-5H5V

**CANDELA DISTRIBUTION (continued):**

|        | -7.5°  | -5°    | -2.5°  | 0°     | 2.5°   | 5°     | 7.5°   | 10°    | 12.5°  | 15°    | 17.5°  |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| -22.5° | 1392.1 | 1457.6 | 1501.8 | 1519.0 | 1511.0 | 1476.3 | 1418.3 | 1342.3 | 1251.6 | 1143.6 | 1029.0 |
| -25°   | 1181.4 | 1233.2 | 1267.2 | 1280.9 | 1277.5 | 1254.4 | 1212.5 | 1150.5 | 1073.1 | 983.0  | 885.0  |
| -27.5° | 993.4  | 1037.5 | 1066.8 | 1080.3 | 1077.6 | 1058.4 | 1022.4 | 971.0  | 904.6  | 830.7  | 751.7  |
| -30°   | 824.4  | 861.4  | 886.9  | 899.2  | 895.2  | 877.1  | 843.9  | 799.5  | 745.8  | 686.3  | 622.5  |
| -32.5° | 656.9  | 682.8  | 700.8  | 707.6  | 706.3  | 692.9  | 669.3  | 637.1  | 597.7  | 553.2  | 506.0  |
| -35°   | 514.3  | 531.1  | 542.1  | 544.8  | 545.3  | 537.3  | 522.8  | 502.0  | 475.0  | 444.5  | 411.9  |
| -37.5° | 411.9  | 421.2  | 426.8  | 427.5  | 428.3  | 423.8  | 415.1  | 402.8  | 386.8  | 366.6  | 345.8  |
| -40°   | 343.8  | 350.1  | 353.8  | 354.4  | 354.5  | 351.6  | 345.6  | 337.2  | 326.0  | 312.2  | 296.8  |
| -42.5° | 296.5  | 301.9  | 305.2  | 306.3  | 305.4  | 302.4  | 297.1  | 289.5  | 279.6  | 268.1  | 255.8  |
| -45°   | 257.5  | 262.8  | 266.3  | 268.2  | 266.3  | 262.9  | 257.6  | 250.2  | 240.9  | 230.3  | 220.3  |
| -47.5° | 223.1  | 228.2  | 231.9  | 234.2  | 231.7  | 227.9  | 222.7  | 215.8  | 207.8  | 198.8  | 190.5  |
| -50°   | 193.0  | 196.9  | 199.9  | 201.9  | 199.7  | 196.5  | 192.3  | 186.6  | 179.9  | 172.7  | 166.3  |
| -52.5° | 169.5  | 172.9  | 175.5  | 177.5  | 175.3  | 172.4  | 168.7  | 163.7  | 157.9  | 151.5  | 145.5  |
| -55°   | 152.8  | 156.0  | 158.8  | 161.1  | 158.3  | 155.1  | 151.4  | 146.5  | 140.8  | 134.7  | 128.9  |
| -57.5° | 141.4  | 144.7  | 147.6  | 150.3  | 146.9  | 143.3  | 139.3  | 134.2  | 128.0  | 121.1  | 114.1  |
| -60°   | 132.0  | 136.5  | 140.6  | 144.4  | 139.8  | 134.8  | 129.5  | 123.2  | 115.7  | 107.8  | 99.6   |
| -62.5° | 114.5  | 119.5  | 124.0  | 128.0  | 123.6  | 118.8  | 113.6  | 107.6  | 100.5  | 93.3   | 86.2   |
| -65°   | 92.4   | 96.1   | 99.3   | 102.2  | 99.2   | 95.9   | 92.2   | 87.9   | 83.0   | 78.2   | 73.6   |
| -67.5° | 73.5   | 75.4   | 77.0   | 78.3   | 76.9   | 75.2   | 73.3   | 71.2   | 68.8   | 66.6   | 64.6   |
| -70°   | 58.4   | 59.0   | 59.4   | 59.6   | 59.3   | 58.9   | 58.1   | 57.1   | 55.8   | 54.3   | 52.5   |
| -72.5° | 47.5   | 48.0   | 48.4   | 48.6   | 48.2   | 47.6   | 47.0   | 46.1   | 45.1   | 44.0   | 42.8   |
| -75°   | 38.7   | 39.1   | 39.4   | 39.6   | 39.2   | 38.8   | 38.2   | 37.5   | 36.6   | 35.6   | 34.6   |
| -77.5° | 30.4   | 30.8   | 31.1   | 31.3   | 30.9   | 30.5   | 30.0   | 29.4   | 28.6   | 27.8   | 26.9   |
| -80°   | 22.2   | 22.5   | 22.7   | 22.9   | 22.6   | 22.3   | 21.9   | 21.5   | 20.9   | 20.2   | 19.5   |
| -82.5° | 14.6   | 14.8   | 14.9   | 15.0   | 14.8   | 14.6   | 14.3   | 13.9   | 13.5   | 13.0   | 12.5   |
| -85°   | 8.0    | 8.1    | 8.1    | 8.1    | 8.0    | 7.8    | 7.6    | 7.4    | 7.2    | 7.0    | 6.7    |
| -87.5° | 3.1    | 3.1    | 3.1    | 3.1    | 3.0    | 3.0    | 2.9    | 2.8    | 2.8    | 2.7    | 2.6    |
| -90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.1    | 0.1    | 0.1    | 0.1    | 0.1    | 0.1    |

REPORT NUMBER: P1217529 (CONVERTED FROM TYPE C PHOTOMETRY)  
CATALOG NUMBER: TRX15S-BK-4000K-5H5V

**CANDELA DISTRIBUTION (continued):**

|        | 20°    | 22.5°  | 25°    | 27.5°  | 30°   | 32.5° | 35°   | 37.5° | 40°   | 42.5° | 45°   |
|--------|--------|--------|--------|--------|-------|-------|-------|-------|-------|-------|-------|
| 90°    | 0.3    | 0.3    | 0.3    | 0.3    | 0.3   | 0.3   | 0.3   | 0.2   | 0.2   | 0.2   | 0.2   |
| 87.5°  | 0.1    | 0.1    | 0.1    | 0.1    | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   |
| 85°    | 0.1    | 0.1    | 0.1    | 0.1    | 0.1   | 0.1   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   |
| 82.5°  | 1.5    | 1.4    | 1.3    | 1.1    | 1.0   | 1.0   | 0.9   | 0.8   | 0.7   | 0.7   | 0.7   |
| 80°    | 7.0    | 6.7    | 6.2    | 5.8    | 5.4   | 5.0   | 4.6   | 4.2   | 3.8   | 3.4   | 3.0   |
| 77.5°  | 13.9   | 13.3   | 12.6   | 11.8   | 11.1  | 10.5  | 9.8   | 9.1   | 8.4   | 7.7   | 7.0   |
| 75°    | 21.8   | 20.9   | 20.0   | 19.1   | 18.1  | 17.1  | 16.1  | 15.1  | 14.0  | 12.9  | 11.8  |
| 72.5°  | 30.6   | 29.5   | 28.2   | 26.9   | 25.5  | 24.3  | 22.9  | 21.5  | 20.1  | 18.8  | 17.4  |
| 70°    | 40.3   | 38.8   | 37.2   | 35.4   | 33.7  | 32.0  | 30.3  | 28.5  | 26.7  | 24.9  | 23.1  |
| 67.5°  | 51.6   | 49.4   | 47.1   | 44.8   | 42.6  | 40.3  | 38.1  | 35.8  | 33.6  | 31.5  | 29.2  |
| 65°    | 61.6   | 59.4   | 57.0   | 54.5   | 51.9  | 49.2  | 46.3  | 43.5  | 40.9  | 38.2  | 35.5  |
| 62.5°  | 72.9   | 69.0   | 65.4   | 62.3   | 60.1  | 58.0  | 55.2  | 51.8  | 48.6  | 45.3  | 42.1  |
| 60°    | 88.0   | 82.3   | 76.8   | 72.0   | 68.4  | 65.1  | 62.1  | 59.9  | 57.5  | 53.5  | 49.1  |
| 57.5°  | 104.7  | 98.6   | 91.9   | 85.9   | 80.5  | 75.3  | 70.5  | 67.5  | 64.6  | 61.6  | 57.9  |
| 55°    | 120.7  | 114.8  | 108.0  | 102.1  | 96.0  | 89.2  | 82.8  | 78.1  | 73.7  | 69.6  | 65.5  |
| 52.5°  | 135.8  | 129.7  | 123.4  | 117.3  | 110.8 | 103.9 | 98.0  | 91.9  | 85.6  | 79.6  | 74.7  |
| 50°    | 152.4  | 145.7  | 138.7  | 131.8  | 124.6 | 117.4 | 111.7 | 106.1 | 99.8  | 92.0  | 85.6  |
| 47.5°  | 170.9  | 163.6  | 155.9  | 147.8  | 139.3 | 131.0 | 124.2 | 118.2 | 112.2 | 106.2 | 98.6  |
| 45°    | 193.1  | 183.5  | 174.3  | 165.4  | 155.6 | 146.3 | 137.4 | 129.3 | 122.6 | 117.6 | 112.0 |
| 42.5°  | 221.0  | 209.0  | 197.0  | 184.9  | 173.3 | 162.9 | 152.2 | 141.9 | 133.1 | 126.9 | 122.0 |
| 40°    | 255.0  | 240.2  | 224.8  | 209.4  | 194.3 | 180.4 | 168.0 | 155.8 | 145.0 | 136.1 | 130.0 |
| 37.5°  | 294.8  | 276.6  | 257.7  | 238.4  | 219.8 | 201.8 | 185.1 | 170.8 | 158.1 | 146.5 | 137.6 |
| 35°    | 340.0  | 317.3  | 294.4  | 271.2  | 248.6 | 226.6 | 205.8 | 187.1 | 171.5 | 158.1 | 146.2 |
| 32.5°  | 398.0  | 365.4  | 335.2  | 306.7  | 279.5 | 253.8 | 229.1 | 206.2 | 186.1 | 169.9 | 155.4 |
| 30°    | 476.3  | 428.7  | 384.0  | 346.0  | 312.7 | 281.9 | 253.6 | 227.2 | 202.6 | 181.8 | 165.3 |
| 27.5°  | 578.7  | 510.2  | 447.0  | 392.9  | 348.5 | 311.2 | 278.2 | 248.7 | 220.7 | 195.3 | 174.8 |
| 25°    | 693.9  | 611.0  | 526.5  | 450.9  | 388.9 | 341.8 | 303.3 | 269.5 | 238.6 | 209.9 | 185.5 |
| 22.5°  | 813.8  | 718.2  | 619.4  | 519.8  | 437.2 | 374.7 | 328.6 | 289.9 | 255.9 | 224.9 | 196.7 |
| 20°    | 941.1  | 827.6  | 713.5  | 597.8  | 493.1 | 411.8 | 353.8 | 310.0 | 272.4 | 239.1 | 207.6 |
| 17.5°  | 1073.0 | 937.0  | 807.6  | 679.2  | 554.4 | 452.6 | 380.1 | 329.3 | 287.9 | 251.6 | 218.0 |
| 15°    | 1202.5 | 1045.9 | 898.2  | 757.8  | 617.2 | 495.7 | 407.2 | 347.8 | 302.5 | 263.0 | 227.5 |
| 12.5°  | 1325.1 | 1149.4 | 983.4  | 829.5  | 678.6 | 538.7 | 435.6 | 366.1 | 316.0 | 273.3 | 235.7 |
| 10°    | 1446.2 | 1241.5 | 1059.3 | 892.7  | 734.2 | 580.0 | 462.4 | 383.0 | 327.7 | 282.4 | 242.8 |
| 7.5°   | 1553.7 | 1324.6 | 1125.9 | 944.7  | 780.2 | 616.8 | 485.3 | 397.8 | 337.9 | 290.0 | 248.4 |
| 5°     | 1643.4 | 1395.3 | 1178.8 | 984.3  | 814.5 | 645.3 | 503.6 | 409.9 | 346.1 | 296.0 | 252.6 |
| 2.5°   | 1714.0 | 1451.6 | 1218.4 | 1010.4 | 835.9 | 663.6 | 515.7 | 418.0 | 351.9 | 299.9 | 255.1 |
| 0°     | 1757.1 | 1483.7 | 1239.1 | 1021.9 | 844.6 | 670.9 | 520.6 | 421.8 | 354.8 | 301.6 | 255.8 |
| -2.5°  | 1755.8 | 1481.0 | 1235.1 | 1016.8 | 841.1 | 669.7 | 519.9 | 421.0 | 354.2 | 301.1 | 255.4 |
| -5°    | 1713.1 | 1447.3 | 1209.3 | 995.1  | 825.2 | 657.0 | 511.2 | 415.7 | 350.6 | 298.3 | 253.2 |
| -7.5°  | 1636.2 | 1383.7 | 1159.3 | 958.8  | 798.2 | 634.4 | 495.7 | 406.3 | 343.9 | 293.1 | 249.2 |
| -10°   | 1535.8 | 1303.8 | 1093.2 | 911.9  | 760.3 | 603.5 | 476.1 | 393.7 | 334.6 | 286.0 | 243.6 |
| -12.5° | 1413.3 | 1210.5 | 1018.7 | 859.3  | 712.6 | 564.6 | 451.9 | 377.8 | 323.2 | 277.0 | 236.7 |
| -15°   | 1290.0 | 1107.1 | 938.5  | 798.1  | 656.8 | 521.8 | 425.1 | 360.0 | 309.9 | 266.4 | 228.5 |
| -17.5° | 1162.9 | 1002.3 | 859.3  | 729.0  | 595.8 | 479.1 | 397.4 | 340.8 | 295.0 | 254.8 | 219.5 |
| -20°   | 1034.7 | 897.7  | 775.4  | 652.8  | 532.2 | 436.6 | 369.8 | 320.8 | 279.1 | 242.3 | 209.5 |

REPORT NUMBER: P1217529 (CONVERTED FROM TYPE C PHOTOMETRY)  
CATALOG NUMBER: TRX15S-BK-4000K-5H5V

**CANDELA DISTRIBUTION (continued):**

|        | 20°   | 22.5° | 25°   | 27.5° | 30°   | 32.5° | 35°   | 37.5° | 40°   | 42.5° | 45°   |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| -22.5° | 908.0 | 795.9 | 686.8 | 573.7 | 473.0 | 396.2 | 343.1 | 300.1 | 262.1 | 228.8 | 199.0 |
| -25°   | 789.0 | 692.0 | 593.3 | 498.0 | 418.0 | 360.5 | 316.9 | 279.0 | 245.0 | 214.5 | 188.1 |
| -27.5° | 670.7 | 587.2 | 503.4 | 429.1 | 371.7 | 328.3 | 291.2 | 257.8 | 227.9 | 200.3 | 177.2 |
| -30°   | 555.9 | 490.1 | 425.3 | 373.4 | 333.1 | 297.9 | 266.0 | 237.0 | 210.2 | 186.7 | 167.5 |
| -32.5° | 455.3 | 406.8 | 365.3 | 329.9 | 298.2 | 269.2 | 241.7 | 216.3 | 193.3 | 173.9 | 157.9 |
| -35°   | 378.4 | 347.8 | 319.4 | 292.1 | 266.3 | 241.6 | 218.4 | 196.6 | 177.7 | 162.6 | 148.8 |
| -37.5° | 324.1 | 301.9 | 279.6 | 258.1 | 236.4 | 215.9 | 196.3 | 178.7 | 164.6 | 151.2 | 140.6 |
| -40°   | 279.8 | 262.5 | 244.6 | 226.9 | 209.3 | 192.3 | 176.9 | 164.3 | 151.8 | 141.4 | 133.5 |
| -42.5° | 241.8 | 227.4 | 213.4 | 199.1 | 185.0 | 172.3 | 161.1 | 150.1 | 140.7 | 133.1 | 126.4 |
| -45°   | 209.3 | 197.7 | 186.4 | 175.2 | 165.4 | 155.4 | 146.0 | 138.0 | 131.3 | 125.2 | 118.0 |
| -47.5° | 181.6 | 172.5 | 164.4 | 156.1 | 147.7 | 140.2 | 133.4 | 127.6 | 122.3 | 115.9 | 105.8 |
| -50°   | 159.4 | 151.9 | 144.8 | 138.7 | 132.7 | 127.2 | 122.2 | 117.3 | 111.3 | 102.5 | 92.2  |
| -52.5° | 140.1 | 134.3 | 128.4 | 124.0 | 119.5 | 115.2 | 110.6 | 104.4 | 96.6  | 88.4  | 80.8  |
| -55°   | 124.3 | 119.3 | 113.8 | 110.1 | 106.3 | 101.5 | 95.6  | 89.4  | 83.1  | 77.4  | 72.0  |
| -57.5° | 109.8 | 105.0 | 99.7  | 95.3  | 91.4  | 86.7  | 81.6  | 77.1  | 73.0  | 68.8  | 64.1  |
| -60°   | 95.5  | 91.0  | 86.1  | 81.6  | 78.1  | 74.7  | 71.4  | 68.3  | 65.0  | 60.8  | 56.0  |
| -62.5° | 81.8  | 77.9  | 74.2  | 70.9  | 68.6  | 66.4  | 63.9  | 60.6  | 56.8  | 52.6  | 48.8  |
| -65°   | 70.5  | 68.2  | 66.0  | 64.0  | 61.9  | 59.0  | 55.5  | 51.8  | 48.5  | 45.6  | 42.5  |
| -67.5° | 62.7  | 60.5  | 58.0  | 54.9  | 51.9  | 49.1  | 46.6  | 44.1  | 41.7  | 39.1  | 36.5  |
| -70°   | 50.6  | 48.7  | 46.9  | 45.1  | 43.1  | 41.3  | 39.3  | 37.2  | 35.1  | 33.0  | 30.9  |
| -72.5° | 41.6  | 40.2  | 38.8  | 37.3  | 35.7  | 34.1  | 32.4  | 30.8  | 29.1  | 27.4  | 25.6  |
| -75°   | 33.6  | 32.5  | 31.3  | 30.0  | 28.7  | 27.5  | 26.1  | 24.7  | 23.4  | 21.9  | 20.5  |
| -77.5° | 26.0  | 25.1  | 24.1  | 23.1  | 22.1  | 21.1  | 20.1  | 19.0  | 17.8  | 16.8  | 15.6  |
| -80°   | 18.8  | 18.1  | 17.4  | 16.7  | 15.9  | 15.1  | 14.3  | 13.5  | 12.6  | 11.7  | 10.8  |
| -82.5° | 12.0  | 11.5  | 11.0  | 10.5  | 10.0  | 9.5   | 9.0   | 8.5   | 7.9   | 7.4   | 6.9   |
| -85°   | 6.4   | 6.2   | 5.9   | 5.6   | 5.4   | 5.1   | 4.8   | 4.5   | 4.2   | 3.9   | 3.7   |
| -87.5° | 2.5   | 2.4   | 2.2   | 2.1   | 2.0   | 1.9   | 1.8   | 1.7   | 1.6   | 1.5   | 1.3   |
| -90°   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   |

REPORT NUMBER: P1217529 (CONVERTED FROM TYPE C PHOTOMETRY)  
CATALOG NUMBER: TRX15S-BK-4000K-5H5V

**CANDELA DISTRIBUTION (continued):**

|        | 47.5° | 50°   | 52.5° | 55°   | 57.5° | 60°   | 62.5° | 65°  | 67.5° | 70°  | 72.5° |
|--------|-------|-------|-------|-------|-------|-------|-------|------|-------|------|-------|
| 90°    | 0.2   | 0.2   | 0.2   | 0.2   | 0.1   | 0.1   | 0.1   | 0.1  | 0.1   | 0.1  | 0.1   |
| 87.5°  | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1  | 0.1   | 0.1  | 0.1   |
| 85°    | 0.2   | 0.1   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2  | 0.2   | 0.1  | 0.1   |
| 82.5°  | 0.7   | 0.7   | 0.7   | 0.7   | 0.6   | 0.6   | 0.6   | 0.5  | 0.5   | 0.3  | 0.3   |
| 80°    | 2.7   | 2.4   | 2.1   | 1.9   | 1.7   | 1.5   | 1.3   | 1.2  | 1.0   | 0.9  | 0.7   |
| 77.5°  | 6.3   | 5.7   | 5.0   | 4.3   | 3.7   | 3.2   | 2.7   | 2.3  | 1.9   | 1.6  | 1.3   |
| 75°    | 10.7  | 9.6   | 8.6   | 7.6   | 6.6   | 5.6   | 4.8   | 3.9  | 3.2   | 2.6  | 2.0   |
| 72.5°  | 15.9  | 14.4  | 12.8  | 11.3  | 9.9   | 8.5   | 7.2   | 6.0  | 4.9   | 3.8  | 3.0   |
| 70°    | 21.3  | 19.5  | 17.7  | 15.8  | 13.8  | 11.9  | 10.1  | 8.4  | 6.9   | 5.5  | 4.2   |
| 67.5°  | 26.9  | 24.7  | 22.5  | 20.3  | 18.0  | 15.7  | 13.3  | 11.1 | 9.1   | 7.2  | 5.6   |
| 65°    | 32.9  | 30.3  | 27.5  | 24.9  | 22.2  | 19.5  | 16.9  | 14.1 | 11.5  | 9.2  | 7.1   |
| 62.5°  | 38.9  | 35.9  | 32.9  | 29.7  | 26.5  | 23.5  | 20.4  | 17.3 | 14.2  | 11.3 | 8.7   |
| 60°    | 45.2  | 41.6  | 38.1  | 34.6  | 31.0  | 27.4  | 24.0  | 20.5 | 17.0  | 13.6 | 10.5  |
| 57.5°  | 52.9  | 48.0  | 43.5  | 39.4  | 35.5  | 31.5  | 27.4  | 23.7 | 19.8  | 16.0 | 12.4  |
| 55°    | 61.7  | 56.1  | 49.9  | 44.5  | 39.9  | 35.5  | 31.1  | 26.8 | 22.6  | 18.4 | 14.4  |
| 52.5°  | 70.0  | 64.6  | 58.0  | 50.7  | 44.6  | 39.5  | 34.8  | 29.9 | 25.3  | 20.7 | 16.3  |
| 50°    | 79.6  | 73.3  | 66.3  | 58.3  | 50.3  | 43.6  | 38.3  | 33.2 | 27.9  | 23.1 | 18.3  |
| 47.5°  | 90.6  | 83.1  | 75.1  | 66.4  | 57.0  | 48.6  | 41.8  | 36.2 | 30.6  | 25.3 | 20.2  |
| 45°    | 103.2 | 93.7  | 84.2  | 74.4  | 64.6  | 54.3  | 45.7  | 39.2 | 33.3  | 27.5 | 22.0  |
| 42.5°  | 115.8 | 105.3 | 93.5  | 82.7  | 72.0  | 60.7  | 50.2  | 42.1 | 35.8  | 29.7 | 23.9  |
| 40°    | 125.1 | 116.6 | 103.5 | 91.1  | 79.4  | 67.8  | 55.2  | 45.3 | 38.3  | 31.9 | 25.6  |
| 37.5°  | 131.6 | 125.0 | 113.8 | 99.7  | 86.9  | 73.9  | 60.5  | 48.9 | 40.6  | 33.9 | 27.3  |
| 35°    | 136.9 | 130.6 | 122.7 | 108.8 | 94.2  | 79.2  | 66.1  | 52.7 | 43.0  | 35.8 | 28.9  |
| 32.5°  | 143.3 | 135.1 | 128.8 | 117.6 | 100.1 | 84.2  | 70.6  | 56.8 | 45.5  | 37.6 | 30.5  |
| 30°    | 150.6 | 139.7 | 133.1 | 123.6 | 105.8 | 88.7  | 74.2  | 61.1 | 48.2  | 39.4 | 32.0  |
| 27.5°  | 158.7 | 145.1 | 135.9 | 126.5 | 110.8 | 92.7  | 77.6  | 65.3 | 50.9  | 41.0 | 33.4  |
| 25°    | 166.7 | 150.6 | 137.7 | 128.0 | 114.7 | 96.6  | 80.7  | 68.3 | 53.5  | 42.6 | 34.6  |
| 22.5°  | 173.9 | 155.6 | 140.3 | 129.1 | 117.3 | 100.1 | 83.4  | 70.5 | 56.1  | 44.1 | 35.8  |
| 20°    | 181.3 | 160.8 | 143.1 | 130.2 | 118.7 | 102.9 | 85.6  | 71.8 | 58.7  | 45.6 | 36.8  |
| 17.5°  | 188.6 | 165.5 | 146.2 | 131.4 | 119.5 | 105.0 | 87.2  | 72.9 | 61.2  | 47.0 | 37.8  |
| 15°    | 195.6 | 170.0 | 149.3 | 132.8 | 119.9 | 105.7 | 88.4  | 73.8 | 63.1  | 48.3 | 38.6  |
| 12.5°  | 202.1 | 174.4 | 152.3 | 134.0 | 120.0 | 105.9 | 89.3  | 74.4 | 64.5  | 49.4 | 39.3  |
| 10°    | 207.7 | 178.1 | 154.6 | 135.0 | 119.8 | 105.7 | 89.7  | 74.7 | 65.2  | 50.4 | 40.0  |
| 7.5°   | 211.9 | 180.9 | 156.3 | 135.6 | 119.5 | 104.9 | 89.6  | 74.7 | 65.5  | 51.2 | 40.5  |
| 5°     | 214.8 | 183.0 | 157.3 | 135.9 | 118.9 | 103.8 | 89.0  | 74.4 | 65.6  | 51.7 | 40.8  |
| 2.5°   | 216.3 | 184.1 | 157.5 | 135.7 | 117.9 | 102.3 | 88.0  | 73.8 | 65.5  | 52.1 | 41.1  |
| 0°     | 216.4 | 184.2 | 157.1 | 134.9 | 116.6 | 100.5 | 86.7  | 72.9 | 65.2  | 52.2 | 41.2  |
| -2.5°  | 216.2 | 184.0 | 157.3 | 135.2 | 117.2 | 101.1 | 86.8  | 72.9 | 65.0  | 52.1 | 41.2  |
| -5°    | 214.6 | 182.8 | 156.7 | 135.0 | 117.4 | 101.3 | 86.6  | 72.7 | 64.7  | 51.8 | 41.0  |
| -7.5°  | 211.4 | 180.6 | 155.2 | 134.3 | 117.2 | 101.0 | 86.0  | 72.3 | 64.3  | 51.3 | 40.8  |
| -10°   | 207.3 | 177.5 | 153.1 | 133.0 | 116.5 | 100.3 | 85.2  | 71.6 | 63.8  | 50.7 | 40.4  |
| -12.5° | 202.2 | 173.5 | 150.2 | 131.4 | 115.4 | 99.1  | 83.9  | 70.7 | 63.1  | 49.8 | 39.9  |
| -15°   | 196.2 | 169.4 | 147.3 | 129.6 | 113.9 | 97.4  | 82.2  | 69.5 | 62.0  | 48.8 | 39.3  |
| -17.5° | 189.3 | 164.8 | 144.0 | 127.9 | 112.4 | 95.2  | 80.2  | 68.2 | 60.7  | 47.7 | 38.6  |
| -20°   | 181.9 | 159.6 | 140.6 | 125.9 | 110.6 | 93.2  | 78.0  | 66.7 | 58.8  | 46.4 | 37.7  |

REPORT NUMBER: P1217529 (CONVERTED FROM TYPE C PHOTOMETRY)  
CATALOG NUMBER: TRX15S-BK-4000K-5H5V

**CANDELA DISTRIBUTION (continued):**

|        | 47.5° | 50°   | 52.5° | 55°   | 57.5° | 60°  | 62.5° | 65°  | 67.5° | 70°  | 72.5° |
|--------|-------|-------|-------|-------|-------|------|-------|------|-------|------|-------|
| -22.5° | 174.2 | 154.0 | 137.5 | 123.8 | 108.2 | 90.7 | 76.0  | 65.2 | 56.6  | 45.1 | 36.8  |
| -25°   | 166.9 | 148.7 | 134.4 | 121.3 | 105.1 | 87.8 | 73.7  | 63.9 | 54.2  | 43.8 | 35.7  |
| -27.5° | 158.9 | 143.3 | 131.5 | 118.4 | 101.2 | 84.4 | 71.4  | 62.4 | 51.6  | 42.4 | 34.6  |
| -30°   | 150.9 | 138.2 | 127.8 | 114.5 | 96.3  | 80.7 | 68.8  | 60.4 | 49.4  | 40.8 | 33.4  |
| -32.5° | 143.9 | 133.4 | 123.1 | 108.8 | 91.1  | 76.9 | 66.0  | 57.3 | 47.0  | 39.2 | 32.0  |
| -35°   | 137.8 | 128.6 | 117.2 | 101.2 | 85.7  | 73.1 | 63.2  | 53.8 | 44.8  | 37.5 | 30.6  |
| -37.5° | 132.3 | 123.0 | 109.5 | 93.3  | 80.1  | 69.1 | 60.1  | 50.5 | 42.6  | 35.7 | 29.2  |
| -40°   | 126.3 | 115.5 | 100.2 | 85.8  | 74.6  | 64.8 | 56.1  | 47.4 | 40.4  | 33.9 | 27.7  |
| -42.5° | 118.2 | 105.4 | 90.8  | 79.1  | 69.4  | 60.5 | 52.0  | 44.6 | 38.0  | 31.9 | 26.0  |
| -45°   | 106.9 | 93.9  | 82.4  | 72.9  | 64.1  | 55.9 | 48.2  | 41.7 | 35.7  | 30.0 | 24.4  |
| -47.5° | 94.2  | 83.9  | 75.2  | 66.8  | 58.7  | 51.2 | 44.8  | 38.9 | 33.4  | 28.0 | 22.7  |
| -50°   | 83.2  | 75.5  | 68.3  | 60.5  | 53.3  | 47.1 | 41.4  | 36.1 | 30.9  | 25.9 | 21.0  |
| -52.5° | 74.4  | 68.0  | 61.1  | 54.3  | 48.5  | 43.2 | 38.1  | 33.3 | 28.5  | 23.8 | 19.3  |
| -55°   | 66.6  | 60.5  | 54.4  | 49.0  | 44.1  | 39.4 | 34.8  | 30.4 | 26.1  | 21.7 | 17.6  |
| -57.5° | 58.7  | 53.4  | 48.6  | 44.1  | 39.9  | 35.6 | 31.6  | 27.5 | 23.6  | 19.6 | 15.8  |
| -60°   | 51.5  | 47.4  | 43.4  | 39.5  | 35.7  | 32.0 | 28.3  | 24.7 | 21.1  | 17.5 | 13.9  |
| -62.5° | 45.3  | 41.9  | 38.4  | 35.0  | 31.8  | 28.4 | 25.2  | 21.8 | 18.6  | 15.4 | 12.1  |
| -65°   | 39.5  | 36.5  | 33.6  | 30.7  | 27.8  | 24.9 | 21.9  | 19.0 | 16.2  | 13.2 | 10.4  |
| -67.5° | 33.9  | 31.5  | 29.0  | 26.5  | 24.0  | 21.4 | 18.8  | 16.3 | 13.6  | 11.1 | 8.8   |
| -70°   | 28.8  | 26.7  | 24.6  | 22.4  | 20.2  | 18.0 | 15.8  | 13.5 | 11.2  | 9.2  | 7.2   |
| -72.5° | 23.9  | 22.0  | 20.3  | 18.4  | 16.6  | 14.7 | 12.7  | 10.8 | 9.0   | 7.3  | 5.7   |
| -75°   | 19.1  | 17.6  | 16.1  | 14.5  | 12.9  | 11.3 | 9.8   | 8.4  | 7.0   | 5.6  | 4.4   |
| -77.5° | 14.4  | 13.2  | 11.9  | 10.7  | 9.6   | 8.4  | 7.3   | 6.2  | 5.1   | 4.2  | 3.2   |
| -80°   | 10.0  | 9.2   | 8.3   | 7.5   | 6.7   | 5.8  | 5.0   | 4.3  | 3.6   | 2.9  | 2.2   |
| -82.5° | 6.4   | 5.8   | 5.2   | 4.7   | 4.2   | 3.7  | 3.1   | 2.6  | 2.2   | 1.8  | 1.3   |
| -85°   | 3.4   | 3.1   | 2.8   | 2.5   | 2.2   | 1.9  | 1.6   | 1.3  | 1.1   | 0.9  | 0.7   |
| -87.5° | 1.2   | 1.1   | 1.0   | 0.8   | 0.7   | 0.6  | 0.5   | 0.4  | 0.3   | 0.3  | 0.2   |
| -90°   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1  | 0.1   | 0.1  | 0.1   | 0.1  | 0.1   |

REPORT NUMBER: P1217529 (CONVERTED FROM TYPE C PHOTOMETRY)  
 CATALOG NUMBER: TRX15S-BK-4000K-5H5V

**CANDELA DISTRIBUTION (continued):**

|        | 75°  | 77.5° | 80°  | 82.5° | 85° | 87.5° | 90° |
|--------|------|-------|------|-------|-----|-------|-----|
| 90°    | 0.1  | 0.1   | 0.1  | 0.1   | 0.1 | 0.1   | 0.1 |
| 87.5°  | 0.1  | 0.1   | 0.1  | 0.1   | 0.1 | 0.1   | 0.1 |
| 85°    | 0.1  | 0.1   | 0.1  | 0.1   | 0.1 | 0.1   | 0.1 |
| 82.5°  | 0.3  | 0.2   | 0.2  | 0.1   | 0.1 | 0.1   | 0.1 |
| 80°    | 0.5  | 0.4   | 0.3  | 0.2   | 0.1 | 0.1   | 0.1 |
| 77.5°  | 1.0  | 0.7   | 0.5  | 0.3   | 0.1 | 0.1   | 0.1 |
| 75°    | 1.5  | 1.1   | 0.7  | 0.4   | 0.2 | 0.1   | 0.1 |
| 72.5°  | 2.2  | 1.6   | 1.0  | 0.6   | 0.3 | 0.1   | 0.1 |
| 70°    | 3.1  | 2.2   | 1.4  | 0.8   | 0.4 | 0.1   | 0.1 |
| 67.5°  | 4.1  | 2.9   | 1.8  | 1.0   | 0.5 | 0.1   | 0.1 |
| 65°    | 5.3  | 3.7   | 2.3  | 1.3   | 0.6 | 0.1   | 0.1 |
| 62.5°  | 6.5  | 4.5   | 2.9  | 1.6   | 0.7 | 0.2   | 0.1 |
| 60°    | 7.8  | 5.5   | 3.5  | 1.9   | 0.8 | 0.2   | 0.1 |
| 57.5°  | 9.2  | 6.5   | 4.1  | 2.3   | 1.0 | 0.2   | 0.1 |
| 55°    | 10.6 | 7.5   | 4.8  | 2.7   | 1.2 | 0.3   | 0.1 |
| 52.5°  | 12.2 | 8.6   | 5.5  | 3.1   | 1.3 | 0.3   | 0.1 |
| 50°    | 13.8 | 9.6   | 6.3  | 3.5   | 1.5 | 0.4   | 0.1 |
| 47.5°  | 15.3 | 10.8  | 7.0  | 3.9   | 1.7 | 0.4   | 0.1 |
| 45°    | 16.8 | 11.9  | 7.7  | 4.4   | 1.9 | 0.5   | 0.1 |
| 42.5°  | 18.4 | 13.1  | 8.5  | 4.8   | 2.1 | 0.5   | 0.1 |
| 40°    | 19.7 | 14.2  | 9.2  | 5.2   | 2.3 | 0.6   | 0.1 |
| 37.5°  | 21.1 | 15.3  | 9.9  | 5.6   | 2.4 | 0.6   | 0.1 |
| 35°    | 22.4 | 16.3  | 10.7 | 6.1   | 2.6 | 0.7   | 0.1 |
| 32.5°  | 23.7 | 17.3  | 11.3 | 6.5   | 2.8 | 0.7   | 0.1 |
| 30°    | 24.9 | 18.2  | 12.0 | 6.9   | 3.0 | 0.8   | 0.1 |
| 27.5°  | 26.0 | 19.1  | 12.7 | 7.3   | 3.2 | 0.8   | 0.1 |
| 25°    | 27.0 | 19.9  | 13.3 | 7.6   | 3.4 | 0.8   | 0.1 |
| 22.5°  | 27.9 | 20.6  | 13.9 | 8.0   | 3.5 | 0.9   | 0.1 |
| 20°    | 28.8 | 21.3  | 14.4 | 8.3   | 3.7 | 0.9   | 0.1 |
| 17.5°  | 29.6 | 21.9  | 14.9 | 8.6   | 3.8 | 0.9   | 0.1 |
| 15°    | 30.3 | 22.5  | 15.3 | 8.8   | 4.0 | 0.9   | 0.1 |
| 12.5°  | 30.9 | 22.9  | 15.7 | 9.1   | 4.1 | 0.9   | 0.1 |
| 10°    | 31.5 | 23.3  | 16.0 | 9.3   | 4.2 | 1.0   | 0.1 |
| 7.5°   | 31.9 | 23.7  | 16.3 | 9.4   | 4.3 | 1.0   | 0.1 |
| 5°     | 32.2 | 23.9  | 16.5 | 9.5   | 4.3 | 1.0   | 0.1 |
| 2.5°   | 32.4 | 24.1  | 16.6 | 9.6   | 4.4 | 1.0   | 0.1 |
| 0°     | 32.5 | 24.2  | 16.7 | 9.7   | 4.4 | 1.0   | 0.1 |
| -2.5°  | 32.5 | 24.2  | 16.7 | 9.7   | 4.4 | 1.0   | 0.1 |
| -5°    | 32.4 | 24.1  | 16.7 | 9.7   | 4.4 | 1.0   | 0.1 |
| -7.5°  | 32.2 | 24.0  | 16.5 | 9.6   | 4.4 | 1.0   | 0.1 |
| -10°   | 31.9 | 23.8  | 16.4 | 9.5   | 4.3 | 1.0   | 0.1 |
| -12.5° | 31.5 | 23.5  | 16.2 | 9.4   | 4.3 | 1.0   | 0.1 |
| -15°   | 31.0 | 23.1  | 15.9 | 9.3   | 4.2 | 1.0   | 0.1 |
| -17.5° | 30.4 | 22.6  | 15.6 | 9.1   | 4.1 | 1.0   | 0.1 |
| -20°   | 29.7 | 22.2  | 15.2 | 8.8   | 4.0 | 0.9   | 0.1 |



REPORT NUMBER: P1217529 (CONVERTED FROM TYPE C PHOTOMETRY)  
CATALOG NUMBER: TRX15S-BK-4000K-5H5V

**CANDELA DISTRIBUTION (continued):**

|        | 75°  | 77.5° | 80°  | 82.5° | 85° | 87.5° | 90° |
|--------|------|-------|------|-------|-----|-------|-----|
| -22.5° | 29.0 | 21.6  | 14.8 | 8.6   | 3.8 | 0.9   | 0.1 |
| -25°   | 28.1 | 21.0  | 14.3 | 8.3   | 3.7 | 0.9   | 0.1 |
| -27.5° | 27.2 | 20.3  | 13.8 | 8.0   | 3.5 | 0.9   | 0.1 |
| -30°   | 26.2 | 19.5  | 13.2 | 7.7   | 3.4 | 0.8   | 0.1 |
| -32.5° | 25.2 | 18.7  | 12.6 | 7.3   | 3.2 | 0.8   | 0.1 |
| -35°   | 24.1 | 17.9  | 11.9 | 6.9   | 3.0 | 0.8   | 0.1 |
| -37.5° | 22.9 | 17.0  | 11.3 | 6.5   | 2.8 | 0.7   | 0.1 |
| -40°   | 21.7 | 16.1  | 10.6 | 6.1   | 2.7 | 0.7   | 0.1 |
| -42.5° | 20.4 | 15.0  | 10.0 | 5.7   | 2.5 | 0.6   | 0.1 |
| -45°   | 19.1 | 14.0  | 9.3  | 5.3   | 2.3 | 0.5   | 0.1 |
| -47.5° | 17.8 | 12.9  | 8.5  | 4.8   | 2.1 | 0.5   | 0.1 |
| -50°   | 16.4 | 11.8  | 7.8  | 4.4   | 1.9 | 0.4   | 0.1 |
| -52.5° | 14.9 | 10.8  | 7.1  | 4.0   | 1.7 | 0.4   | 0.1 |
| -55°   | 13.4 | 9.7   | 6.3  | 3.5   | 1.5 | 0.3   | 0.1 |
| -57.5° | 11.9 | 8.7   | 5.6  | 3.1   | 1.4 | 0.3   | 0.1 |
| -60°   | 10.6 | 7.6   | 4.9  | 2.7   | 1.2 | 0.2   | 0.1 |
| -62.5° | 9.2  | 6.6   | 4.2  | 2.4   | 1.0 | 0.2   | 0.1 |
| -65°   | 7.9  | 5.6   | 3.6  | 2.0   | 0.9 | 0.1   | 0.1 |
| -67.5° | 6.6  | 4.6   | 3.0  | 1.6   | 0.7 | 0.1   | 0.1 |
| -70°   | 5.4  | 3.8   | 2.4  | 1.3   | 0.6 | 0.1   | 0.1 |
| -72.5° | 4.3  | 3.0   | 1.9  | 1.1   | 0.4 | 0.1   | 0.1 |
| -75°   | 3.3  | 2.3   | 1.5  | 0.8   | 0.3 | 0.1   | 0.1 |
| -77.5° | 2.4  | 1.7   | 1.0  | 0.5   | 0.2 | 0.1   | 0.1 |
| -80°   | 1.6  | 1.1   | 0.7  | 0.3   | 0.1 | 0.1   | 0.1 |
| -82.5° | 0.9  | 0.6   | 0.4  | 0.2   | 0.1 | 0.1   | 0.1 |
| -85°   | 0.5  | 0.3   | 0.2  | 0.1   | 0.1 | 0.1   | 0.1 |
| -87.5° | 0.2  | 0.1   | 0.1  | 0.1   | 0.1 | 0.1   | 0.1 |
| -90°   | 0.1  | 0.1   | 0.1  | 0.1   | 0.1 | 0.1   | 0.1 |

(END OF REPORT)