

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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: LUMARK

Report Number: P980912

Luminaire Tested: **NFFLD-L-C100-7030-33**

Issue Date: 04/10/2025



Test Information

Test Method: LM-79-08
Report Number: P980912
Test Lab: INNOVATION CENTER(G2)
Issue Date: 04/10/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NFFLD-L-C100-7030-33
Description: NIGHT FALCON LARGE SIZE 280W 70CRI 3000K LED FIXTURE NEMA 3
Light Source: (16) 3000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

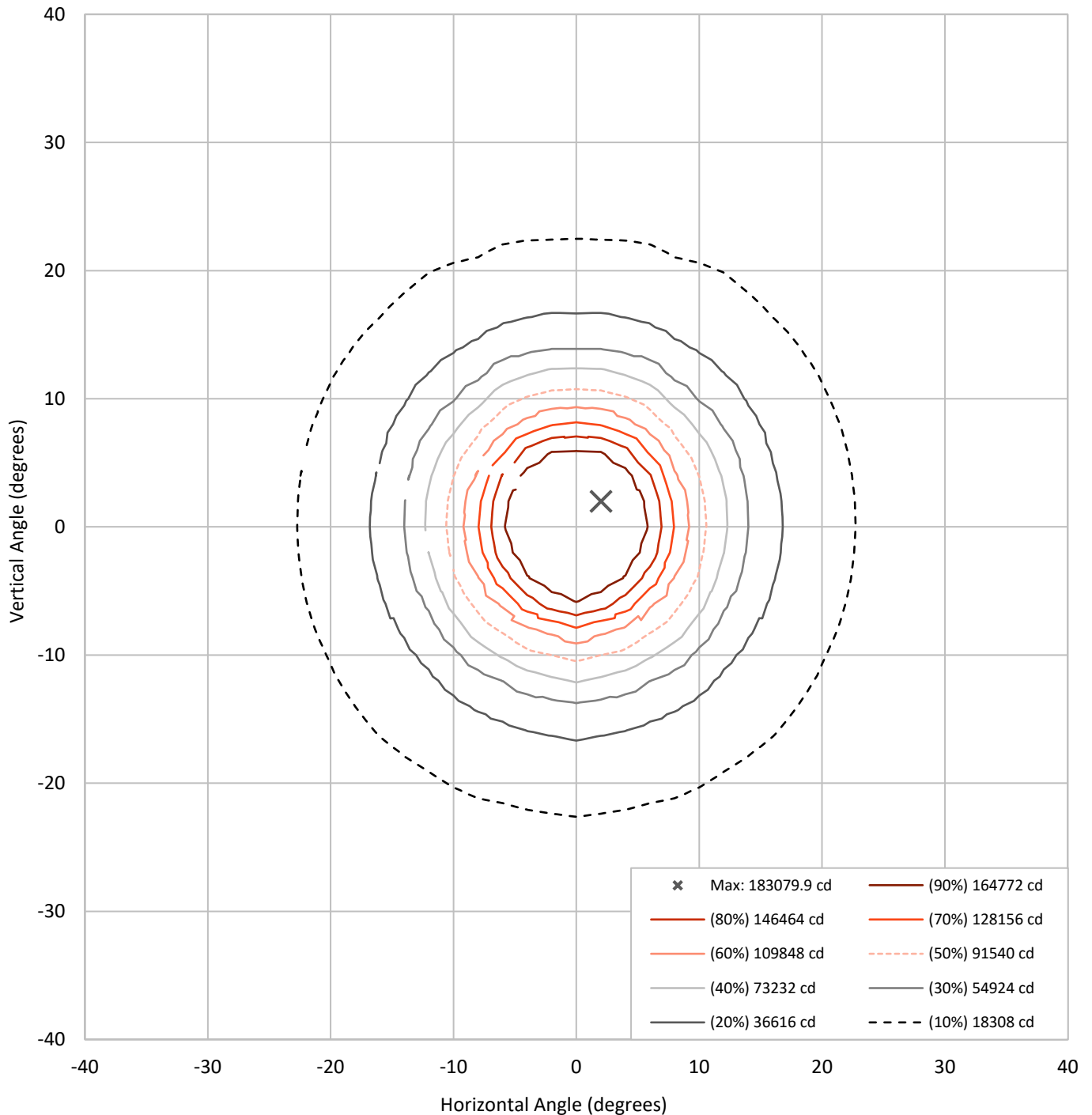
Summary

| | | | |
|-------------------|---|----------------------|------------------|
| Lumens per Lamp: | N/A | NEMA Type: | 3H x 3V |
| Luminaire Lumens: | 33466.5 lumens | Max Intensity: | 183079.9 candela |
| Efficiency: | N/A | Max Intensity Angle: | 2°H x 2°V |
| Efficacy: | 118.7 lumens/watt | | |
| Luminous Opening: | Rectangular (W 0.75' x L: 1.1' x H: 0') | | |
| Beam Angle (50%): | 20.9°H x 20.7°V | Field Angle (10%): | 45.3°H x 44.8°V |
| Beam Lumens: | 14491.8 lumens | Field Lumens: | 29520.3 lumens |
| Beam Efficiency: | 43.3% | Field Efficiency: | 88.2% |

Input Watts (W): 282
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.99
Total Harmonic Distortion (THDi): 3.53%
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT

REPORT NUMBER: P980912
CATALOG NUMBER: NFFLD-L-C100-7030-33

Iso-Candela Plot





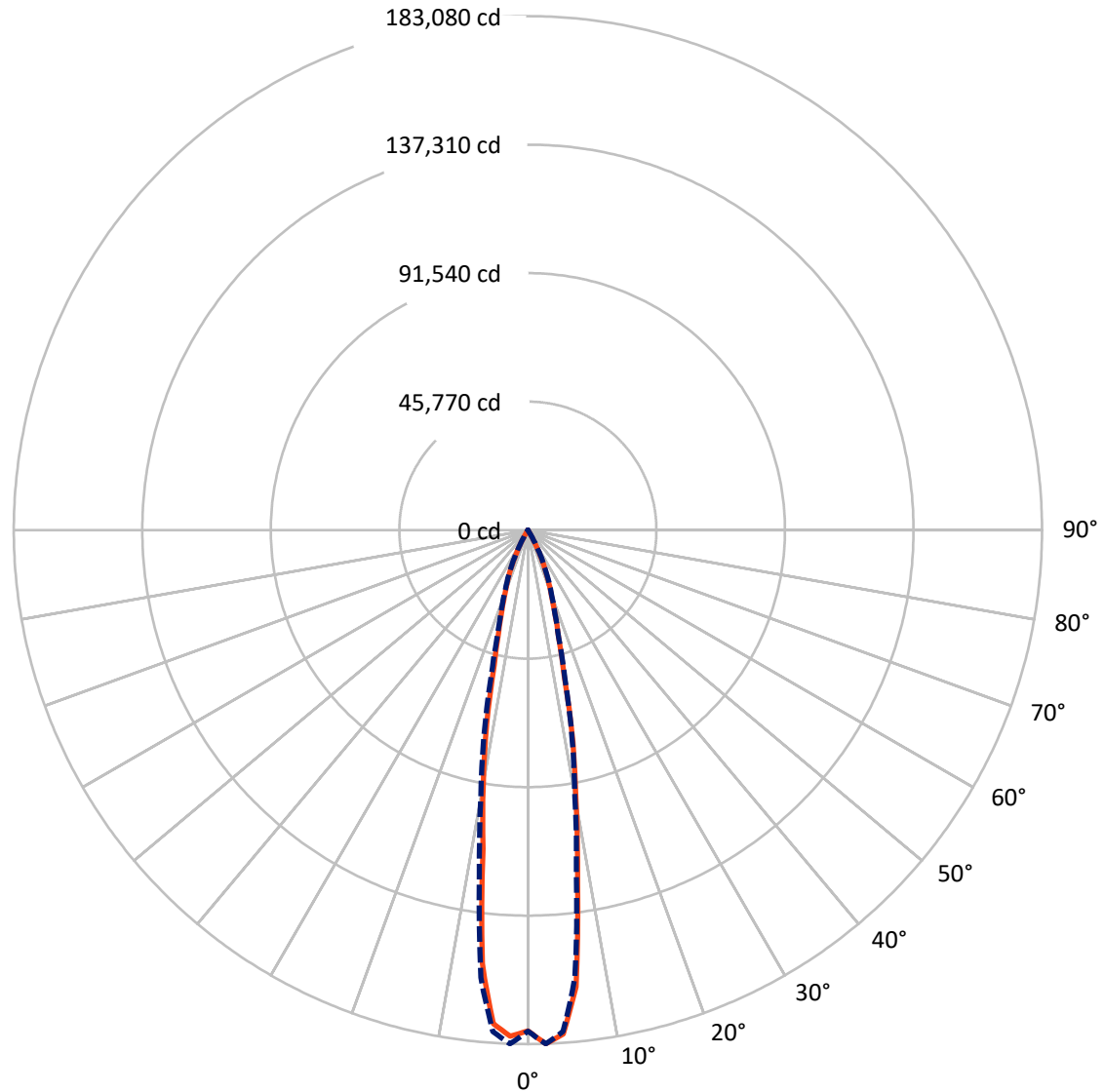
REPORT NUMBER: P980912
 CATALOG NUMBER: NFFLD-L-C100-7030-33

Lumen Table

| | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|------|-------|--------|--------|--------|--------|-------|------|-----|-----|-----|-----|----|----|----|----|
| 90 | | | | | | | | | | | | | | | | | | | |
| 80 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| 70 | | | | | | | | | | | | | | | | | | | |
| 60 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| 50 | | | | | | | | | | | | | | | | | | | |
| 40 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| 30 | | | | | | | | | | | | | | | | | | | |
| 20 | 0.0 | 0.0 | 0.0 | 0.0 | 18.6 | 174.8 | 353.3 | 353.3 | 174.8 | 18.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| 10 | | | | | | | | | | | | | | | | | | | |
| 0 | 0.0 | 0.0 | 0.0 | 14.8 | 343.4 | 1355.4 | 4030.3 | 4030.3 | 1355.4 | 343.4 | 14.8 | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| -10 | | | | | | | | | | | | | | | | | | | |
| -20 | 0.0 | 0.0 | 0.0 | 2.7 | 159.2 | 648.7 | 1304.1 | 1304.1 | 648.7 | 159.2 | 2.7 | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| -30 | | | | | | | | | | | | | | | | | | | |
| -40 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.5 | 9.6 | 9.6 | 1.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| -50 | | | | | | | | | | | | | | | | | | | |
| -60 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| -70 | | | | | | | | | | | | | | | | | | | |
| -80 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| -90 | | | | | | | | | | | | | | | | | | | |
| | -90 | -80 | -70 | -60 | -50 | -40 | -30 | -20 | -10 | 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 |

REPORT NUMBER: P980912
CATALOG NUMBER: NFFLD-L-C100-7030-33

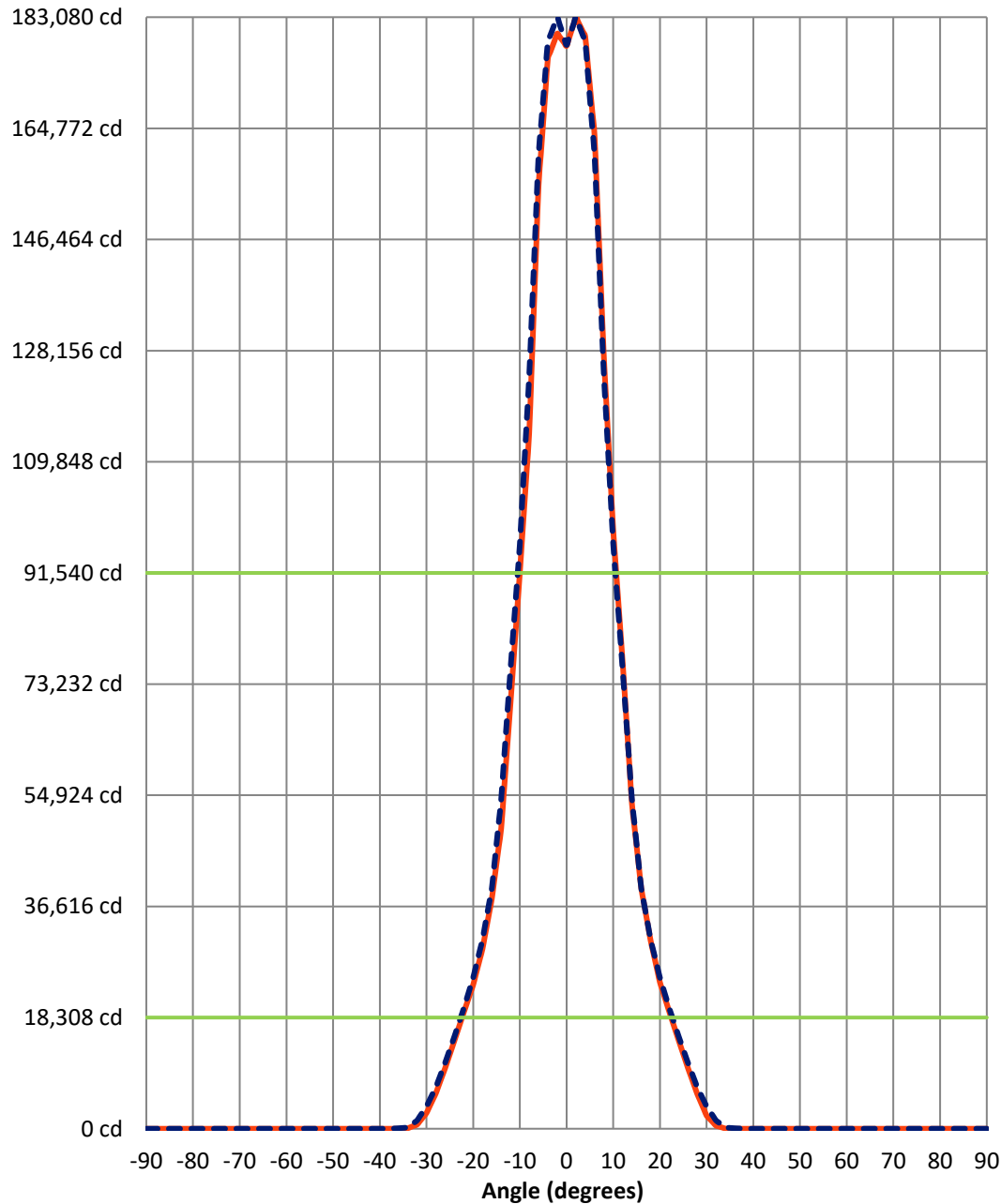
Luminous Intensity Polar Plot



— Vertical Distribution Through 2-Deg - - - Horizontal Distribution Through 2-Deg

REPORT NUMBER: P980912
 CATALOG NUMBER: NFFLD-L-C100-7030-33

Luminous Intensity Plot



Beam:
 H Angle: 20.9°
 V Angle: 20.7°
 Lumens: 14491.8
 Efficiency: 43.3%

Field:
 H Angle: 45.3°
 V Angle: 44.8°
 Lumens: 29520.3
 Efficiency: 88.2%

Spill:
 Lumens: 3946.2
 Efficiency: 11.8%

- Vertical Distribution through 2-Deg
- - - Horizontal Distribution through 2-Deg



REPORT NUMBER: P980912
 CATALOG NUMBER: NFFLD-L-C100-7030-33

FIELD
 BEAM

CANDELA DISTRIBUTION:

| | 0° | 2° | 4° | 6° | 8° | 10° | 12° | 14° | 16° | 18° | 20° |
|-----|----------|----------|----------|----------|----------|---------|---------|---------|---------|---------|---------|
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 88° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 86° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 84° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82° | 0.0 | 0.0 | 0.0 | 0.0 | 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 | 0.0 | 0.0 | 0.0 | 0.0 |
| 78° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 76° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 74° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 72° | 0.0 | 0.0 | 0.0 | 0.0 | 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 | 0.0 | 0.0 | 0.0 | 0.0 |
| 68° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 66° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 64° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 62° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 60° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 58° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 56° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 54° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 52° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 50° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 48° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 46° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 44° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 42° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 40° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 38° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 36° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 34° | 17.3 | 34.5 | 17.3 | 17.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 32° | 440.1 | 509.2 | 483.3 | 612.7 | 397.0 | 414.2 | 207.1 | 25.9 | 0.0 | 0.0 | 0.0 |
| 30° | 2019.4 | 2148.8 | 2088.4 | 2355.9 | 1579.2 | 1622.4 | 1165.0 | 578.2 | 258.9 | 69.0 | 0.0 |
| 28° | 5609.3 | 5721.5 | 5471.3 | 5410.8 | 4125.0 | 3995.6 | 3244.8 | 1976.2 | 1139.1 | 569.6 | 146.7 |
| 26° | 9941.5 | 10001.9 | 9768.9 | 9501.3 | 7758.1 | 7421.6 | 6325.6 | 4263.1 | 2908.2 | 1751.8 | 871.6 |
| 24° | 14636.0 | 14584.3 | 14420.3 | 13902.5 | 11934.9 | 11339.5 | 10045.0 | 7499.2 | 5540.3 | 3753.9 | 2355.9 |
| 22° | 19460.1 | 19270.2 | 19123.5 | 18407.2 | 16301.6 | 15438.6 | 14014.7 | 11201.4 | 8716.0 | 6429.2 | 4504.7 |
| 20° | 24301.3 | 24111.5 | 23826.7 | 22998.3 | 20512.9 | 19529.1 | 18018.9 | 15119.3 | 12219.7 | 9596.3 | 7050.5 |
| 18° | 30851.3 | 31023.9 | 30247.2 | 28754.3 | 25431.8 | 23714.5 | 21686.5 | 18778.3 | 15680.2 | 12754.8 | 9803.4 |
| 16° | 39472.4 | 39636.4 | 37919.1 | 35925.6 | 31369.1 | 29021.8 | 25872.0 | 22204.3 | 18856.0 | 15921.9 | 12685.7 |
| 14° | 53677.0 | 53538.9 | 50225.1 | 46333.1 | 39196.3 | 34993.6 | 30954.9 | 26174.0 | 21936.8 | 18674.8 | 15257.4 |
| 12° | 77797.1 | 77011.8 | 71523.3 | 63808.3 | 50164.7 | 42570.5 | 36754.1 | 30592.4 | 25172.9 | 21203.3 | 17544.3 |
| 10° | 99664.9 | 98551.6 | 93270.2 | 84226.3 | 67199.8 | 53530.3 | 43657.9 | 35261.1 | 28762.9 | 23852.6 | 19546.4 |
| 8° | 130593.8 | 126995.2 | 115396.9 | 101287.2 | 85434.4 | 68287.1 | 53133.3 | 40413.1 | 32154.4 | 26268.9 | 21410.4 |
| 6° | 164146.3 | 163594.0 | 149993.5 | 123672.8 | 99388.7 | 82042.9 | 63100.7 | 46151.8 | 35269.7 | 28391.8 | 22937.8 |
| 4° | 180603.2 | 179912.8 | 170834.3 | 147956.9 | 112247.0 | 91285.4 | 71134.9 | 51019.0 | 37858.7 | 30048.8 | 24051.1 |
| 2° | 178497.5 | 183079.9 | 179041.2 | 160262.9 | 123957.6 | 96290.6 | 75760.5 | 54289.7 | 39593.2 | 31170.6 | 24879.5 |



REPORT NUMBER: P980912
 CATALOG NUMBER: NFFLD-L-C100-7030-33

CANDELA DISTRIBUTION (continued):

| | 0° | 2° | 4° | 6° | 8° | 10° | 12° | 14° | 16° | 18° | 20° |
|------|----------|----------|----------|----------|----------|---------|---------|---------|---------|---------|---------|
| 0° | 177479.2 | 178342.2 | 179610.8 | 163119.3 | 127305.9 | 97662.8 | 76485.4 | 54945.5 | 40102.4 | 31481.3 | 25009.0 |
| -2° | 182001.2 | 180387.4 | 176081.2 | 156690.2 | 121506.7 | 95341.4 | 73456.3 | 52805.4 | 39248.1 | 30929.0 | 24534.3 |
| -4° | 180119.9 | 176262.4 | 163524.9 | 138239.8 | 108985.0 | 89714.8 | 66569.8 | 48602.7 | 37315.0 | 29703.6 | 23636.9 |
| -6° | 163524.9 | 155240.4 | 137549.4 | 112566.3 | 96299.3 | 78841.3 | 57543.1 | 43424.8 | 34544.8 | 27891.3 | 22316.5 |
| -8° | 125692.2 | 114568.4 | 106879.3 | 94305.8 | 82293.2 | 64317.4 | 48128.1 | 38247.0 | 31377.7 | 25708.0 | 20789.0 |
| -10° | 96912.0 | 91613.3 | 86780.7 | 75493.0 | 64101.7 | 50915.5 | 40136.9 | 33353.9 | 28012.1 | 23300.3 | 18985.4 |
| -12° | 74647.2 | 70125.3 | 64395.1 | 55204.4 | 48292.0 | 40930.9 | 33863.1 | 28961.4 | 24758.7 | 20892.6 | 17061.0 |
| -14° | 52261.7 | 49448.4 | 46574.7 | 41776.6 | 38160.7 | 33561.1 | 28607.6 | 24845.0 | 21738.3 | 18320.9 | 14687.8 |
| -16° | 39420.6 | 37884.6 | 36227.6 | 33207.2 | 31006.7 | 27736.0 | 24042.5 | 21375.9 | 18881.9 | 15611.2 | 12124.8 |
| -18° | 31015.3 | 29625.9 | 28624.8 | 26752.2 | 25267.9 | 22860.2 | 20374.8 | 18122.5 | 15706.1 | 12452.7 | 9285.6 |
| -20° | 24422.2 | 23697.3 | 22851.5 | 21695.2 | 20858.1 | 18985.4 | 16629.5 | 14454.8 | 12228.3 | 9225.2 | 6550.0 |
| -22° | 19770.7 | 19175.3 | 18467.6 | 17345.8 | 16517.3 | 14774.1 | 12547.6 | 10890.7 | 8862.7 | 6247.9 | 4133.6 |
| -24° | 15110.7 | 14541.1 | 13919.8 | 12841.1 | 12038.5 | 10519.7 | 8629.7 | 7309.4 | 5730.1 | 3546.8 | 2036.6 |
| -26° | 10554.2 | 9984.6 | 9484.1 | 8474.4 | 7809.9 | 6567.2 | 5143.3 | 4168.2 | 2977.3 | 1510.2 | 690.4 |
| -28° | 6351.5 | 5816.4 | 5479.9 | 4599.7 | 4133.6 | 3262.0 | 2433.6 | 1795.0 | 1139.1 | 448.7 | 86.3 |
| -30° | 2916.9 | 2580.3 | 2373.2 | 1795.0 | 1579.2 | 1087.3 | 733.5 | 509.2 | 258.9 | 43.1 | 0.0 |
| -32° | 845.7 | 681.7 | 578.2 | 422.9 | 388.3 | 207.1 | 77.7 | 25.9 | 8.6 | 0.0 | 0.0 |
| -34° | 129.4 | 77.7 | 25.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -36° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -38° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -40° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -42° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -44° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -46° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -48° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -50° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -52° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -54° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -56° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -58° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -60° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -62° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -64° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -66° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -68° | 0.0 | 0.0 | 0.0 | 0.0 | 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 | 0.0 | 0.0 | 0.0 | 0.0 |
| -72° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -74° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -76° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -78° | 0.0 | 0.0 | 0.0 | 0.0 | 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 | 0.0 | 0.0 | 0.0 | 0.0 |
| -82° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -84° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -86° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -88° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



REPORT NUMBER: P980912
CATALOG NUMBER: NFFLD-L-C100-7030-33

CANDELA DISTRIBUTION (continued):

| | | | | | | | | | | | |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | 0° | 2° | 4° | 6° | 8° | 10° | 12° | 14° | 16° | 18° | 20° |
| -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: P980912
 CATALOG NUMBER: NFFLD-L-C100-7030-33

CANDELA DISTRIBUTION (continued):

| | 22° | 24° | 26° | 28° | 30° | 32° | 34° | 36° | 38° | 40° | 42° |
|-----|---------|---------|---------|--------|--------|--------|-------|------|-----|-----|-----|
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 88° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 86° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 84° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82° | 0.0 | 0.0 | 0.0 | 0.0 | 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 | 0.0 | 0.0 | 0.0 | 0.0 |
| 78° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 76° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 74° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 72° | 0.0 | 0.0 | 0.0 | 0.0 | 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 | 0.0 | 0.0 | 0.0 | 0.0 |
| 68° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 66° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 64° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 62° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 60° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 58° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 56° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 54° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 52° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 50° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 48° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 46° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 44° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 42° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 40° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 38° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 36° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 34° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 32° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 30° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 28° | 43.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 26° | 397.0 | 69.0 | 17.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 24° | 1242.7 | 371.1 | 146.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22° | 2727.0 | 1104.6 | 483.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20° | 4651.4 | 2468.1 | 1173.6 | 120.8 | 69.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18° | 6852.0 | 4168.2 | 2192.0 | 483.3 | 258.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16° | 9216.6 | 6032.2 | 3503.7 | 1208.2 | 630.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14° | 11425.8 | 7930.7 | 4927.6 | 2243.7 | 1087.3 | 112.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12° | 13609.1 | 9794.8 | 6360.1 | 3322.4 | 1639.7 | 293.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10° | 15533.5 | 11468.9 | 7706.4 | 4349.4 | 2183.3 | 517.8 | 8.6 | 8.6 | 0.0 | 0.0 | 0.0 |
| 8° | 17138.7 | 12875.6 | 8854.1 | 5246.9 | 2701.1 | 802.6 | 60.4 | 25.9 | 0.0 | 0.0 | 0.0 |
| 6° | 18415.9 | 14006.1 | 9794.8 | 5980.4 | 3141.2 | 1052.8 | 112.2 | 43.1 | 0.0 | 0.0 | 0.0 |
| 4° | 19304.7 | 14800.0 | 10485.1 | 6524.1 | 3477.8 | 1251.3 | 155.3 | 69.0 | 0.0 | 0.0 | 0.0 |
| 2° | 19848.4 | 15231.5 | 10864.8 | 6826.1 | 3667.6 | 1372.1 | 189.9 | 77.7 | 0.0 | 0.0 | 0.0 |



REPORT NUMBER: P980912
 CATALOG NUMBER: NFFLD-L-C100-7030-33

CANDELA DISTRIBUTION (continued):

| | 22° | 24° | 26° | 28° | 30° | 32° | 34° | 36° | 38° | 40° | 42° |
|------|---------|---------|---------|--------|--------|--------|-------|------|-----|-----|-----|
| 0° | 19995.1 | 15360.9 | 10968.4 | 6903.8 | 3728.0 | 1415.3 | 198.5 | 86.3 | 0.0 | 0.0 | 0.0 |
| -2° | 19736.2 | 15153.8 | 10769.9 | 6731.2 | 3607.2 | 1354.9 | 189.9 | 77.7 | 0.0 | 0.0 | 0.0 |
| -4° | 19114.9 | 14601.5 | 10252.1 | 6334.2 | 3357.0 | 1208.2 | 155.3 | 69.0 | 0.0 | 0.0 | 0.0 |
| -6° | 18148.3 | 13721.3 | 9466.8 | 5712.9 | 2968.6 | 992.4 | 103.6 | 43.1 | 0.0 | 0.0 | 0.0 |
| -8° | 16836.6 | 12521.8 | 8457.1 | 4910.3 | 2485.4 | 733.5 | 51.8 | 25.9 | 0.0 | 0.0 | 0.0 |
| -10° | 15162.5 | 11002.9 | 7223.1 | 3978.3 | 1959.0 | 466.0 | 8.6 | 0.0 | 0.0 | 0.0 | 0.0 |
| -12° | 13203.5 | 9242.5 | 5825.1 | 2942.7 | 1423.9 | 258.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -14° | 10985.7 | 7318.0 | 4349.4 | 1855.4 | 897.5 | 94.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -16° | 8621.1 | 5359.1 | 2942.7 | 845.7 | 448.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -18° | 6265.2 | 3486.4 | 1743.2 | 284.8 | 155.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -20° | 4073.2 | 1829.5 | 845.7 | 60.4 | 34.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -22° | 2269.6 | 630.0 | 293.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -24° | 966.5 | 198.5 | 86.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -26° | 284.8 | 25.9 | 8.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -28° | 25.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -30° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -32° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -34° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -36° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -38° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -40° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -42° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -44° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -46° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -48° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -50° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -52° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -54° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -56° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -58° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -60° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -62° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -64° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -66° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -68° | 0.0 | 0.0 | 0.0 | 0.0 | 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 | 0.0 | 0.0 | 0.0 | 0.0 |
| -72° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -74° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -76° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -78° | 0.0 | 0.0 | 0.0 | 0.0 | 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 | 0.0 | 0.0 | 0.0 | 0.0 |
| -82° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -84° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -86° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -88° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



REPORT NUMBER: P980912

CATALOG NUMBER: NFFLD-L-C100-7030-33

CANDELA DISTRIBUTION (continued):

| | | | | | | | | | | | |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | 22° | 24° | 26° | 28° | 30° | 32° | 34° | 36° | 38° | 40° | 42° |
| -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: P980912

CATALOG NUMBER: NFFLD-L-C100-7030-33

CANDELA DISTRIBUTION (continued):

| | 44° | 46° | 48° | 50° | 52° | 54° | 56° | 58° | 60° | 62° | 64° |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 88° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 86° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 84° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82° | 0.0 | 0.0 | 0.0 | 0.0 | 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 | 0.0 | 0.0 | 0.0 | 0.0 |
| 78° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 76° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 74° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 72° | 0.0 | 0.0 | 0.0 | 0.0 | 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 | 0.0 | 0.0 | 0.0 | 0.0 |
| 68° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 66° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 64° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 62° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 60° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 58° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 56° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 54° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 52° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 50° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 48° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 46° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 44° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 42° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 40° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 38° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 36° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 34° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 32° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 30° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 28° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 26° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 24° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



REPORT NUMBER: P980912
 CATALOG NUMBER: NFFLD-L-C100-7030-33

CANDELA DISTRIBUTION (continued):

| | 44° | 46° | 48° | 50° | 52° | 54° | 56° | 58° | 60° | 62° | 64° |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 0° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -2° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -4° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -6° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -8° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -10° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -12° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -14° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -16° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -18° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -20° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -22° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -24° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -26° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -28° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -30° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -32° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -34° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -36° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -38° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -40° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -42° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -44° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -46° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -48° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -50° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -52° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -54° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -56° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -58° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -60° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -62° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -64° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -66° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -68° | 0.0 | 0.0 | 0.0 | 0.0 | 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 | 0.0 | 0.0 | 0.0 | 0.0 |
| -72° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -74° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -76° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -78° | 0.0 | 0.0 | 0.0 | 0.0 | 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 | 0.0 | 0.0 | 0.0 | 0.0 |
| -82° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -84° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -86° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -88° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



REPORT NUMBER: P980912

CATALOG NUMBER: NFFLD-L-C100-7030-33

CANDELA DISTRIBUTION (continued):

| | | | | | | | | | | | |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | 44° | 46° | 48° | 50° | 52° | 54° | 56° | 58° | 60° | 62° | 64° |
| -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: P980912

CATALOG NUMBER: NFFLD-L-C100-7030-33

CANDELA DISTRIBUTION (continued):

| | 66° | 68° | 70° | 72° | 74° | 76° | 78° | 80° | 82° | 84° | 86° |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 88° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 86° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 84° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82° | 0.0 | 0.0 | 0.0 | 0.0 | 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 | 0.0 | 0.0 | 0.0 | 0.0 |
| 78° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 76° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 74° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 72° | 0.0 | 0.0 | 0.0 | 0.0 | 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 | 0.0 | 0.0 | 0.0 | 0.0 |
| 68° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 66° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 64° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 62° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 60° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 58° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 56° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 54° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 52° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 50° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 48° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 46° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 44° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 42° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 40° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 38° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 36° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 34° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 32° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 30° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 28° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 26° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 24° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 22° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 20° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 18° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 16° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 14° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 10° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 8° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 6° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 4° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



REPORT NUMBER: P980912
 CATALOG NUMBER: NFFLD-L-C100-7030-33

CANDELA DISTRIBUTION (continued):

| | 66° | 68° | 70° | 72° | 74° | 76° | 78° | 80° | 82° | 84° | 86° |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 0° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -2° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -4° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -6° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -8° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -10° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -12° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -14° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -16° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -18° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -20° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -22° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -24° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -26° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -28° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -30° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -32° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -34° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -36° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -38° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -40° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -42° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -44° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -46° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -48° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -50° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -52° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -54° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -56° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -58° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -60° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -62° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -64° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -66° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -68° | 0.0 | 0.0 | 0.0 | 0.0 | 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 | 0.0 | 0.0 | 0.0 | 0.0 |
| -72° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -74° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -76° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -78° | 0.0 | 0.0 | 0.0 | 0.0 | 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 | 0.0 | 0.0 | 0.0 | 0.0 |
| -82° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -84° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -86° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| -88° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



REPORT NUMBER: P980912

CATALOG NUMBER: NFFLD-L-C100-7030-33

CANDELA DISTRIBUTION (continued):

| | | | | | | | | | | | |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | 66° | 68° | 70° | 72° | 74° | 76° | 78° | 80° | 82° | 84° | 86° |
| -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: P980912
CATALOG NUMBER: NFFLD-L-C100-7030-33

CANDELA DISTRIBUTION (continued):

| | 88° | 90° |
|-----|-----|-----|
| 90° | 0.0 | 0.0 |
| 88° | 0.0 | 0.0 |
| 86° | 0.0 | 0.0 |
| 84° | 0.0 | 0.0 |
| 82° | 0.0 | 0.0 |
| 80° | 0.0 | 0.0 |
| 78° | 0.0 | 0.0 |
| 76° | 0.0 | 0.0 |
| 74° | 0.0 | 0.0 |
| 72° | 0.0 | 0.0 |
| 70° | 0.0 | 0.0 |
| 68° | 0.0 | 0.0 |
| 66° | 0.0 | 0.0 |
| 64° | 0.0 | 0.0 |
| 62° | 0.0 | 0.0 |
| 60° | 0.0 | 0.0 |
| 58° | 0.0 | 0.0 |
| 56° | 0.0 | 0.0 |
| 54° | 0.0 | 0.0 |
| 52° | 0.0 | 0.0 |
| 50° | 0.0 | 0.0 |
| 48° | 0.0 | 0.0 |
| 46° | 0.0 | 0.0 |
| 44° | 0.0 | 0.0 |
| 42° | 0.0 | 0.0 |
| 40° | 0.0 | 0.0 |
| 38° | 0.0 | 0.0 |
| 36° | 0.0 | 0.0 |
| 34° | 0.0 | 0.0 |
| 32° | 0.0 | 0.0 |
| 30° | 0.0 | 0.0 |
| 28° | 0.0 | 0.0 |
| 26° | 0.0 | 0.0 |
| 24° | 0.0 | 0.0 |
| 22° | 0.0 | 0.0 |
| 20° | 0.0 | 0.0 |
| 18° | 0.0 | 0.0 |
| 16° | 0.0 | 0.0 |
| 14° | 0.0 | 0.0 |
| 12° | 0.0 | 0.0 |
| 10° | 0.0 | 0.0 |
| 8° | 0.0 | 0.0 |
| 6° | 0.0 | 0.0 |
| 4° | 0.0 | 0.0 |
| 2° | 0.0 | 0.0 |



REPORT NUMBER: P980912

CATALOG NUMBER: NFFLD-L-C100-7030-33

CANDELA DISTRIBUTION (continued):

| | 88° | 90° |
|------|-----|-----|
| 0° | 0.0 | 0.0 |
| -2° | 0.0 | 0.0 |
| -4° | 0.0 | 0.0 |
| -6° | 0.0 | 0.0 |
| -8° | 0.0 | 0.0 |
| -10° | 0.0 | 0.0 |
| -12° | 0.0 | 0.0 |
| -14° | 0.0 | 0.0 |
| -16° | 0.0 | 0.0 |
| -18° | 0.0 | 0.0 |
| -20° | 0.0 | 0.0 |
| -22° | 0.0 | 0.0 |
| -24° | 0.0 | 0.0 |
| -26° | 0.0 | 0.0 |
| -28° | 0.0 | 0.0 |
| -30° | 0.0 | 0.0 |
| -32° | 0.0 | 0.0 |
| -34° | 0.0 | 0.0 |
| -36° | 0.0 | 0.0 |
| -38° | 0.0 | 0.0 |
| -40° | 0.0 | 0.0 |
| -42° | 0.0 | 0.0 |
| -44° | 0.0 | 0.0 |
| -46° | 0.0 | 0.0 |
| -48° | 0.0 | 0.0 |
| -50° | 0.0 | 0.0 |
| -52° | 0.0 | 0.0 |
| -54° | 0.0 | 0.0 |
| -56° | 0.0 | 0.0 |
| -58° | 0.0 | 0.0 |
| -60° | 0.0 | 0.0 |
| -62° | 0.0 | 0.0 |
| -64° | 0.0 | 0.0 |
| -66° | 0.0 | 0.0 |
| -68° | 0.0 | 0.0 |
| -70° | 0.0 | 0.0 |
| -72° | 0.0 | 0.0 |
| -74° | 0.0 | 0.0 |
| -76° | 0.0 | 0.0 |
| -78° | 0.0 | 0.0 |
| -80° | 0.0 | 0.0 |
| -82° | 0.0 | 0.0 |
| -84° | 0.0 | 0.0 |
| -86° | 0.0 | 0.0 |
| -88° | 0.0 | 0.0 |



REPORT NUMBER: P980912
CATALOG NUMBER: NFFLD-L-C100-7030-33

CANDELA DISTRIBUTION (continued):

| | | |
|------|-----|-----|
| | 88° | 90° |
| -90° | 0.0 | 0.0 |

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



LM-79-2019: Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Report Prepared for

Cooper Lighting Solutions

Lumark

Report Number: SP1-2501-319-3

Test Date: 02/04/2025

Luminaire Tested: NFFLD-C25-7030-33

Data in this report applies to families of products including NFFLD-C25-7030-33

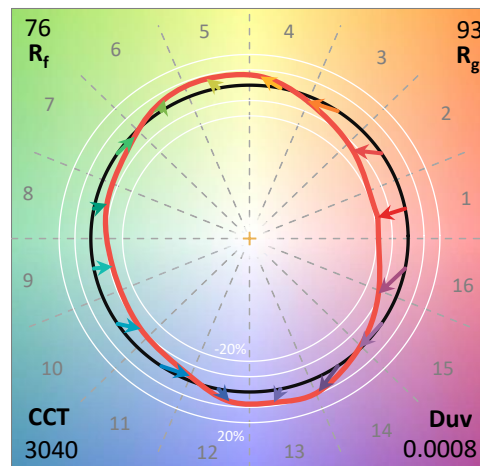
Test Information

Test Method: LM-79-2019
 Report Number: SP1-2501-319-3
 Test Lab: COOPER LIGHTING SOLUTIONS
 Photometer: SP1 - 76IN SPHERE
 Measurement Geometry: 4π
 Issue Date: 02/06/2025
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: Lumark
 Catalog Number: **NFFLD-C25-7030-33**
 Description: LUMARK NIGHT FALCON 10500LM NEMA 3

Spectral Parameters

CCT (K): 3040
 CIE u': 0.2489
 CIE v': 0.5217
 Duv: 0.0008
 CIE x: 0.4353
 CIE y: 0.4056
 CIE z: 0.1592
 Peak Wavelength (nm): 591
 Dominant Wavelength (nm): 582
 Purity: 52.38868
 Rf: 76.2
 Rg: 92.6

| | | | |
|-----------|------|------|-------|
| CRI (Ra): | 71.0 | | |
| R1: | 66.4 | R9: | -45.2 |
| R2: | 83.1 | R10: | 63.6 |
| R3: | 94.1 | R11: | 62.6 |
| R4: | 66.5 | R12: | 58.3 |
| R5: | 67.3 | R13: | 69.7 |
| R6: | 78.1 | R14: | 96.8 |
| R7: | 74.9 | R15: | 56.6 |
| R8: | 37.8 | | |



Test Conditions

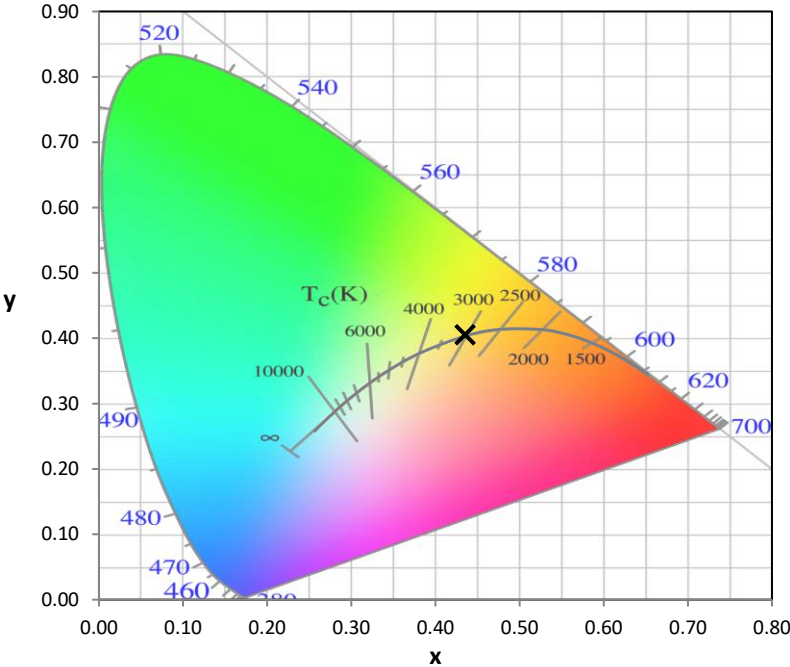
Stabilization Time: 40M
 Operation Time: 1H 40M
 Sphere Temperature (°C): 24.9

REPORT NUMBER: SP1-2501-319-3

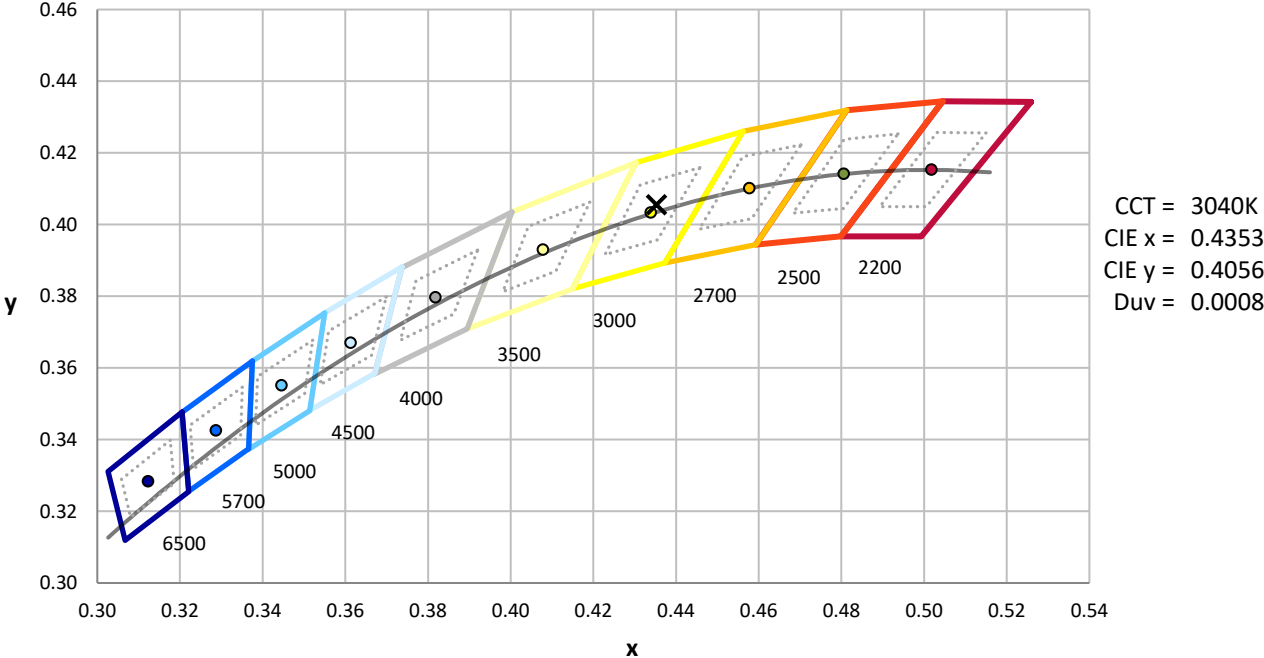
| Measurement and Test Equipment | | | |
|--------------------------------|-----------------------|------------------|----------------------|
| Instrument | Identification Number | Calibration Date | Calibration Due Date |
| Photometer | IN0058 | 12/16/2024 | 6/16/2025 |
| Power Meter | INXT2011004 | 1/21/2025 | 1/21/2026 |
| AC Power Source | IN0063 | 10/22/2024 | 10/22/2025 |
| DC Power Source | IN0208 | 10/22/2024 | 10/22/2025 |
| Sphere Thermometer | IN0085 | 10/22/2024 | 10/22/2025 |
| Room Thermometer | IN0046 | 10/22/2024 | 10/22/2025 |

REPORT NUMBER: SP1-2501-319-3

CIE 1931 Chromaticity Diagram



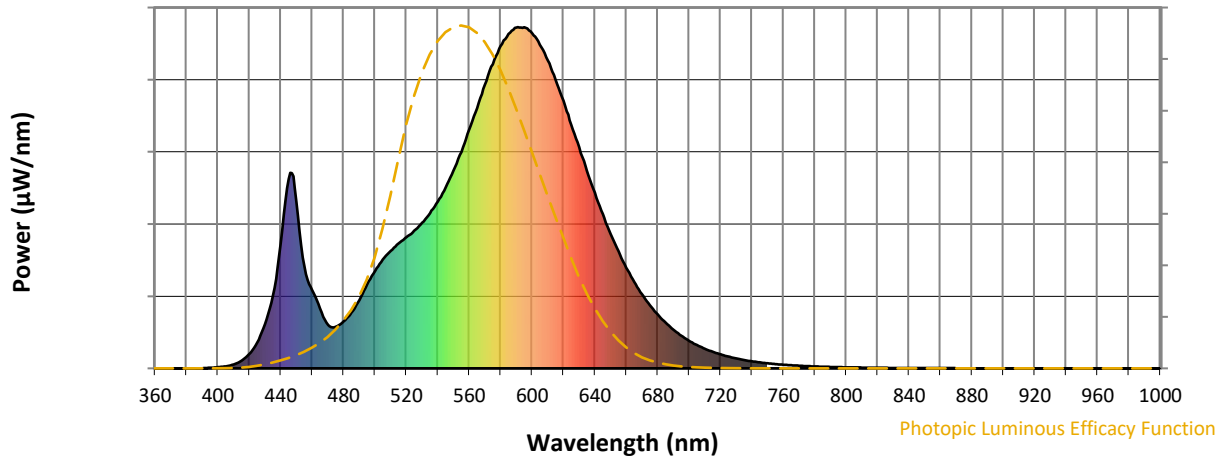
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2501-319-3

Photopic Flux vs. Wavelength

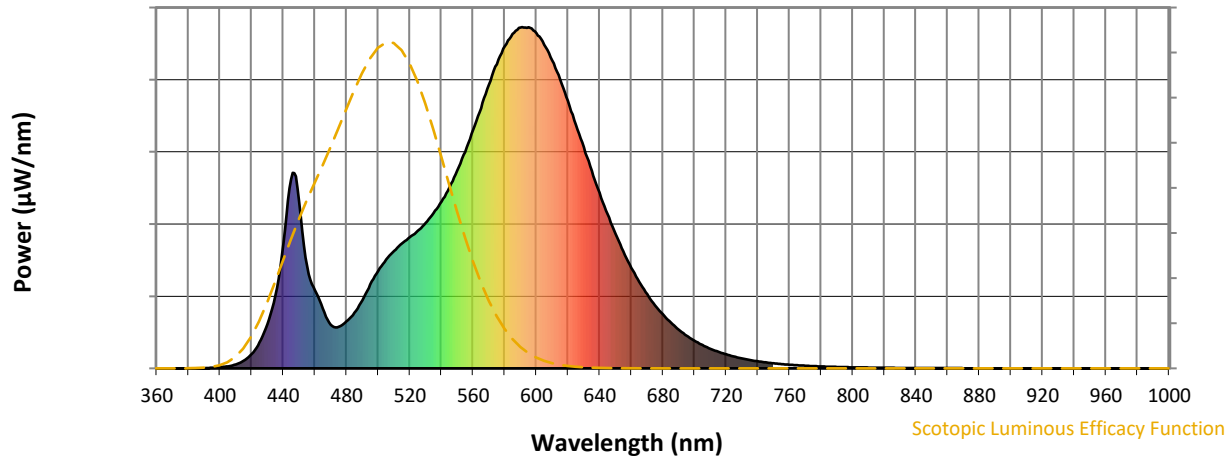


Photopic Lumens: NR

| λ (nm) | Power W [^] /nm | Lumens (ϕ /nm) | λ (nm) | Power W [^] /nm | Lumens (ϕ /nm) | λ (nm) | Power W [^] /nm | Lumens (ϕ /nm) | λ (nm) | Power W [^] /nm | Lumens (ϕ /nm) | λ (nm) | Power W [^] /nm | Lumens (ϕ /nm) |
|----------------|--------------------------|----------------------|----------------|--------------------------|----------------------|----------------|--------------------------|----------------------|----------------|--------------------------|----------------------|----------------|--------------------------|----------------------|
| 360 | 0 | NR | 490 | 200 | NR | 620 | 784 | NR | 750 | 15 | NR | 880 | 0 | NR |
| 365 | 0 | NR | 495 | 246 | NR | 625 | 714 | NR | 755 | 13 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 285 | NR | 630 | 648 | NR | 760 | 11 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 319 | NR | 635 | 579 | NR | 765 | 9 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 344 | NR | 640 | 514 | NR | 770 | 8 | NR | 900 | 0 | NR |
| 385 | 0 | NR | 515 | 366 | NR | 645 | 452 | NR | 775 | 7 | NR | 905 | 0 | NR |
| 390 | 0 | NR | 520 | 384 | NR | 650 | 394 | NR | 780 | 6 | NR | 910 | 0 | NR |
| 395 | 2 | NR | 525 | 403 | NR | 655 | 343 | NR | 785 | 5 | NR | 915 | 0 | NR |
| 400 | 3 | NR | 530 | 426 | NR | 660 | 295 | NR | 790 | 4 | NR | 920 | 0 | NR |
| 405 | 6 | NR | 535 | 455 | NR | 665 | 254 | NR | 795 | 4 | NR | 925 | 0 | NR |
| 410 | 12 | NR | 540 | 489 | NR | 670 | 217 | NR | 800 | 3 | NR | 930 | 0 | NR |
| 415 | 22 | NR | 545 | 531 | NR | 675 | 185 | NR | 805 | 3 | NR | 935 | 0 | NR |
| 420 | 42 | NR | 550 | 580 | NR | 680 | 158 | NR | 810 | 2 | NR | 940 | 0 | NR |
| 425 | 76 | NR | 555 | 634 | NR | 685 | 134 | NR | 815 | 2 | NR | 945 | 0 | NR |
| 430 | 130 | NR | 560 | 699 | NR | 690 | 113 | NR | 820 | 2 | NR | 950 | 0 | NR |
| 435 | 214 | NR | 565 | 762 | NR | 695 | 96 | NR | 825 | 1 | NR | 955 | 0 | NR |
| 440 | 366 | NR | 570 | 831 | NR | 700 | 81 | NR | 830 | 1 | NR | 960 | 0 | NR |
| 445 | 554 | NR | 575 | 891 | NR | 705 | 68 | NR | 835 | 1 | NR | 965 | 0 | NR |
| 450 | 489 | NR | 580 | 944 | NR | 710 | 57 | NR | 840 | 1 | NR | 970 | 0 | NR |
| 455 | 300 | NR | 585 | 980 | NR | 715 | 48 | NR | 845 | 1 | NR | 975 | 0 | NR |
| 460 | 230 | NR | 590 | 999 | NR | 720 | 41 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 176 | NR | 595 | 999 | NR | 725 | 35 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 128 | NR | 600 | 982 | NR | 730 | 29 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 122 | NR | 605 | 948 | NR | 735 | 25 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 138 | NR | 610 | 902 | NR | 740 | 20 | NR | 870 | 0 | NR | 1000 | 0 | NR |
| 485 | 163 | NR | 615 | 846 | NR | 745 | 17 | NR | 875 | 0 | NR | | | |

REPORT NUMBER: SP1-2501-319-3

Scotopic Flux vs. Wavelength



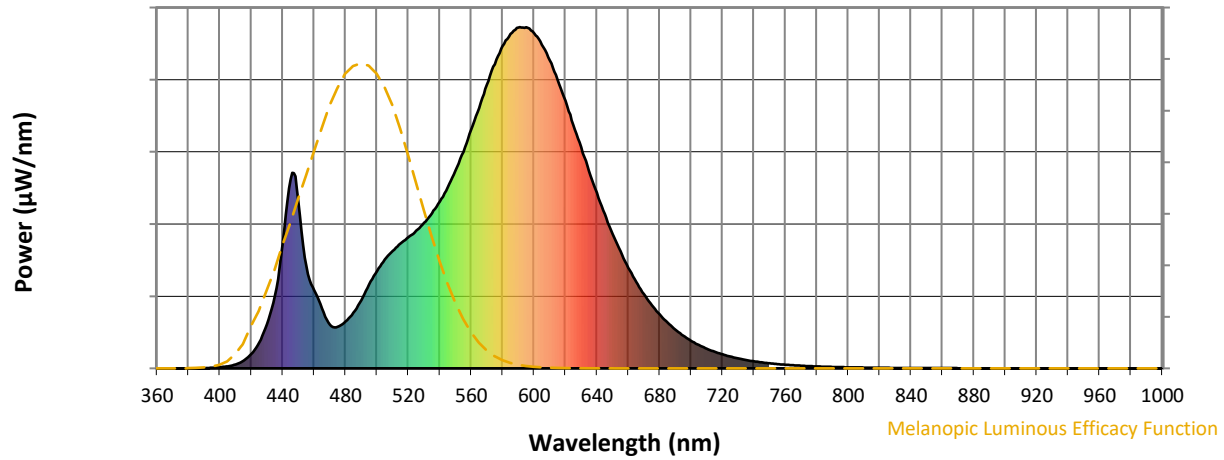
Scotopic Lumens: NR

S/P: 1.26

| λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) |
|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|
| 360 | 0 | NR | 490 | 200 | NR | 620 | 784 | NR | 750 | 15 | NR | 880 | 0 | NR |
| 365 | 0 | NR | 495 | 246 | NR | 625 | 714 | NR | 755 | 13 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 285 | NR | 630 | 648 | NR | 760 | 11 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 319 | NR | 635 | 579 | NR | 765 | 9 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 344 | NR | 640 | 514 | NR | 770 | 8 | NR | 900 | 0 | NR |
| 385 | 0 | NR | 515 | 366 | NR | 645 | 452 | NR | 775 | 7 | NR | 905 | 0 | NR |
| 390 | 0 | NR | 520 | 384 | NR | 650 | 394 | NR | 780 | 6 | NR | 910 | 0 | NR |
| 395 | 2 | NR | 525 | 403 | NR | 655 | 343 | NR | 785 | 5 | NR | 915 | 0 | NR |
| 400 | 3 | NR | 530 | 426 | NR | 660 | 295 | NR | 790 | 4 | NR | 920 | 0 | NR |
| 405 | 6 | NR | 535 | 455 | NR | 665 | 254 | NR | 795 | 4 | NR | 925 | 0 | NR |
| 410 | 12 | NR | 540 | 489 | NR | 670 | 217 | NR | 800 | 3 | NR | 930 | 0 | NR |
| 415 | 22 | NR | 545 | 531 | NR | 675 | 185 | NR | 805 | 3 | NR | 935 | 0 | NR |
| 420 | 42 | NR | 550 | 580 | NR | 680 | 158 | NR | 810 | 2 | NR | 940 | 0 | NR |
| 425 | 76 | NR | 555 | 634 | NR | 685 | 134 | NR | 815 | 2 | NR | 945 | 0 | NR |
| 430 | 130 | NR | 560 | 699 | NR | 690 | 113 | NR | 820 | 2 | NR | 950 | 0 | NR |
| 435 | 214 | NR | 565 | 762 | NR | 695 | 96 | NR | 825 | 1 | NR | 955 | 0 | NR |
| 440 | 366 | NR | 570 | 831 | NR | 700 | 81 | NR | 830 | 1 | NR | 960 | 0 | NR |
| 445 | 554 | NR | 575 | 891 | NR | 705 | 68 | NR | 835 | 1 | NR | 965 | 0 | NR |
| 450 | 489 | NR | 580 | 944 | NR | 710 | 57 | NR | 840 | 1 | NR | 970 | 0 | NR |
| 455 | 300 | NR | 585 | 980 | NR | 715 | 48 | NR | 845 | 1 | NR | 975 | 0 | NR |
| 460 | 230 | NR | 590 | 999 | NR | 720 | 41 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 176 | NR | 595 | 999 | NR | 725 | 35 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 128 | NR | 600 | 982 | NR | 730 | 29 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 122 | NR | 605 | 948 | NR | 735 | 25 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 138 | NR | 610 | 902 | NR | 740 | 20 | NR | 870 | 0 | NR | 1000 | 0 | NR |
| 485 | 163 | NR | 615 | 846 | NR | 745 | 17 | NR | 875 | 0 | NR | | | |

REPORT NUMBER: SP1-2501-319-3

Melanopic Flux vs. Wavelength



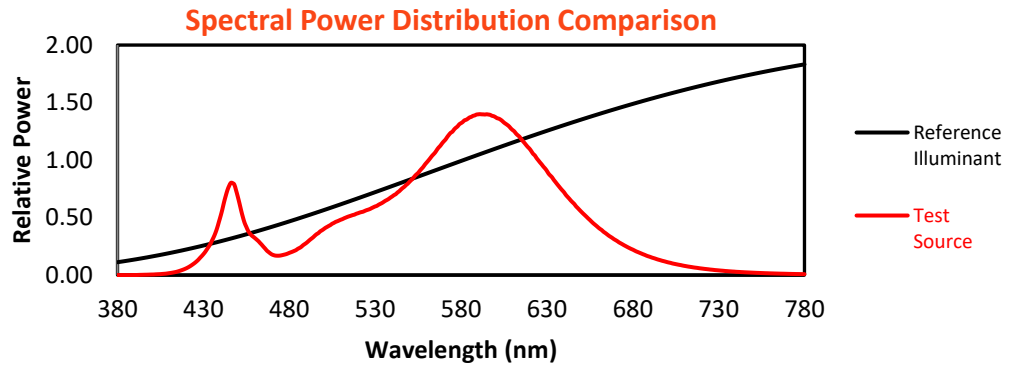
Melanopic Lumens: NR

M/P: 2.35

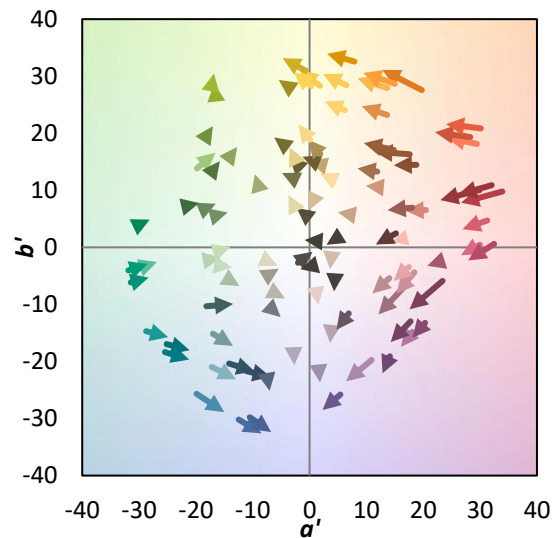
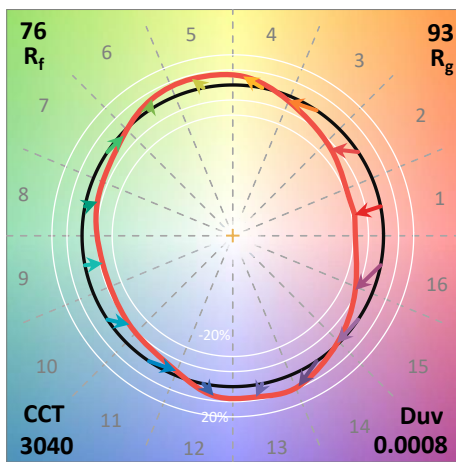
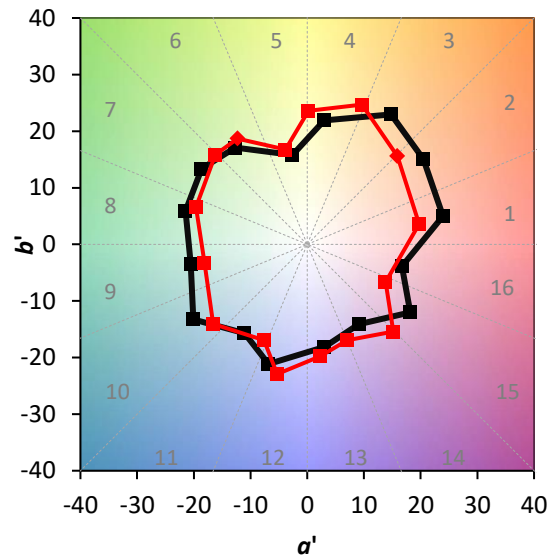
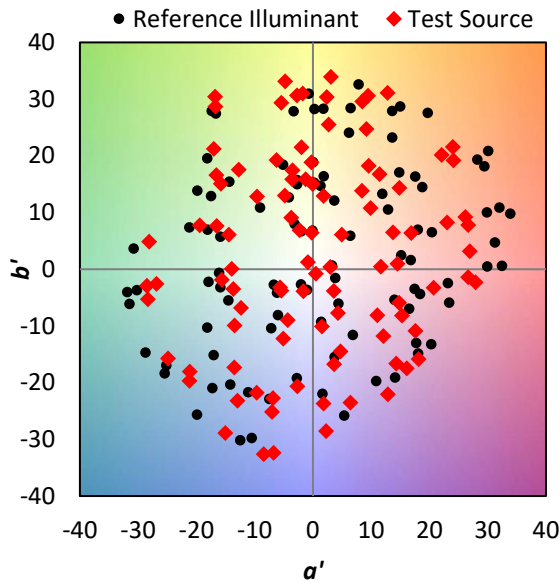
| λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) |
|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|
| 360 | 0 | NR | 490 | 200 | NR | 620 | 784 | NR | 750 | 15 | NR | 880 | 0 | NR |
| 365 | 0 | NR | 495 | 246 | NR | 625 | 714 | NR | 755 | 13 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 285 | NR | 630 | 648 | NR | 760 | 11 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 319 | NR | 635 | 579 | NR | 765 | 9 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 344 | NR | 640 | 514 | NR | 770 | 8 | NR | 900 | 0 | NR |
| 385 | 0 | NR | 515 | 366 | NR | 645 | 452 | NR | 775 | 7 | NR | 905 | 0 | NR |
| 390 | 0 | NR | 520 | 384 | NR | 650 | 394 | NR | 780 | 6 | NR | 910 | 0 | NR |
| 395 | 2 | NR | 525 | 403 | NR | 655 | 343 | NR | 785 | 5 | NR | 915 | 0 | NR |
| 400 | 3 | NR | 530 | 426 | NR | 660 | 295 | NR | 790 | 4 | NR | 920 | 0 | NR |
| 405 | 6 | NR | 535 | 455 | NR | 665 | 254 | NR | 795 | 4 | NR | 925 | 0 | NR |
| 410 | 12 | NR | 540 | 489 | NR | 670 | 217 | NR | 800 | 3 | NR | 930 | 0 | NR |
| 415 | 22 | NR | 545 | 531 | NR | 675 | 185 | NR | 805 | 3 | NR | 935 | 0 | NR |
| 420 | 42 | NR | 550 | 580 | NR | 680 | 158 | NR | 810 | 2 | NR | 940 | 0 | NR |
| 425 | 76 | NR | 555 | 634 | NR | 685 | 134 | NR | 815 | 2 | NR | 945 | 0 | NR |
| 430 | 130 | NR | 560 | 699 | NR | 690 | 113 | NR | 820 | 2 | NR | 950 | 0 | NR |
| 435 | 214 | NR | 565 | 762 | NR | 695 | 96 | NR | 825 | 1 | NR | 955 | 0 | NR |
| 440 | 366 | NR | 570 | 831 | NR | 700 | 81 | NR | 830 | 1 | NR | 960 | 0 | NR |
| 445 | 554 | NR | 575 | 891 | NR | 705 | 68 | NR | 835 | 1 | NR | 965 | 0 | NR |
| 450 | 489 | NR | 580 | 944 | NR | 710 | 57 | NR | 840 | 1 | NR | 970 | 0 | NR |
| 455 | 300 | NR | 585 | 980 | NR | 715 | 48 | NR | 845 | 1 | NR | 975 | 0 | NR |
| 460 | 230 | NR | 590 | 999 | NR | 720 | 41 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 176 | NR | 595 | 999 | NR | 725 | 35 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 128 | NR | 600 | 982 | NR | 730 | 29 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 122 | NR | 605 | 948 | NR | 735 | 25 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 138 | NR | 610 | 902 | NR | 740 | 20 | NR | 870 | 0 | NR | 1000 | 0 | NR |
| 485 | 163 | NR | 615 | 846 | NR | 745 | 17 | NR | 875 | 0 | NR | | | |

Summary

$R_f = 76.2$
 $R_g = 92.6$
 $CIE R_a = 71.0$
 $R_g = -45.2$

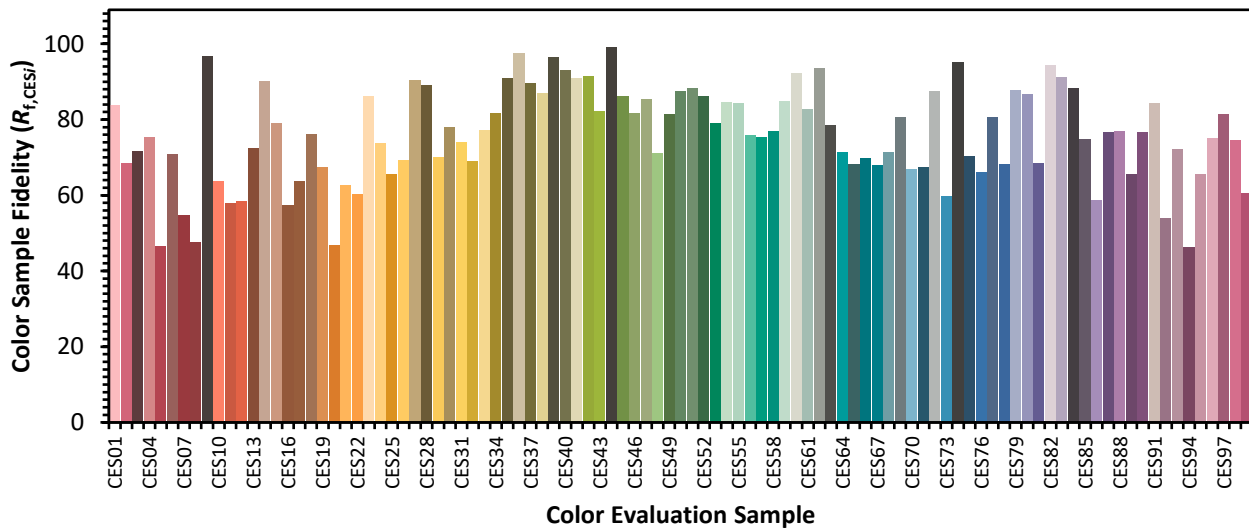


Color Vector Graphics

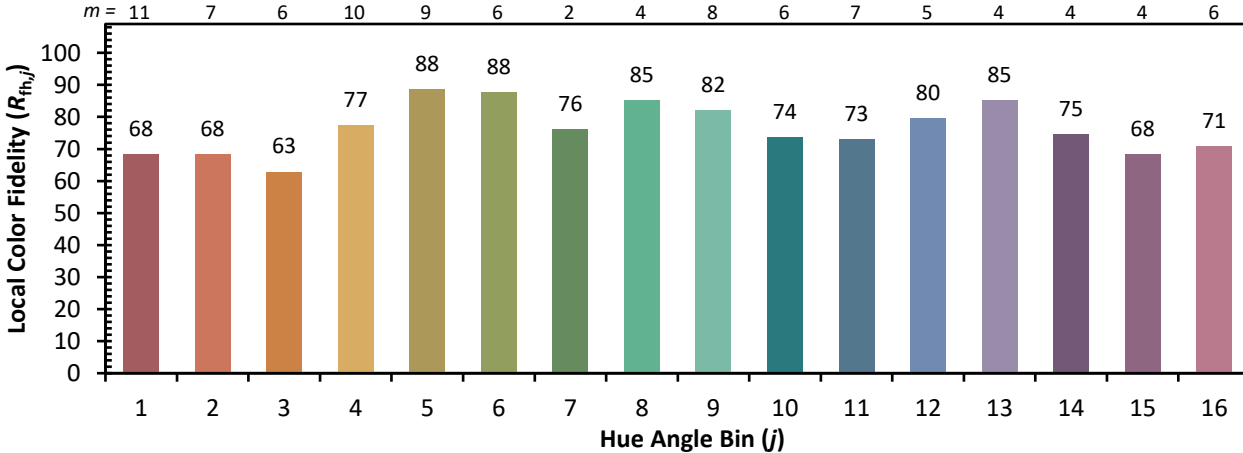
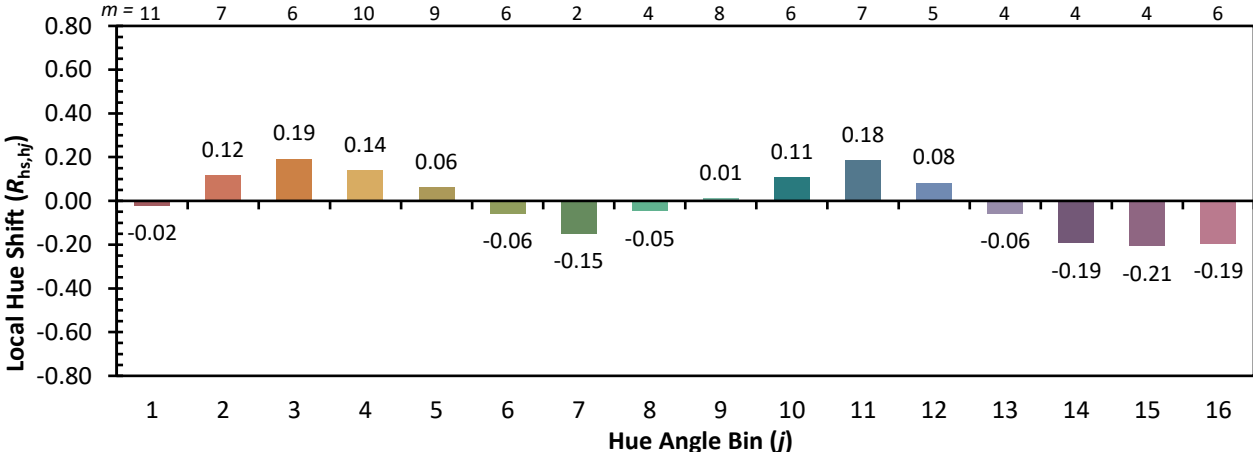
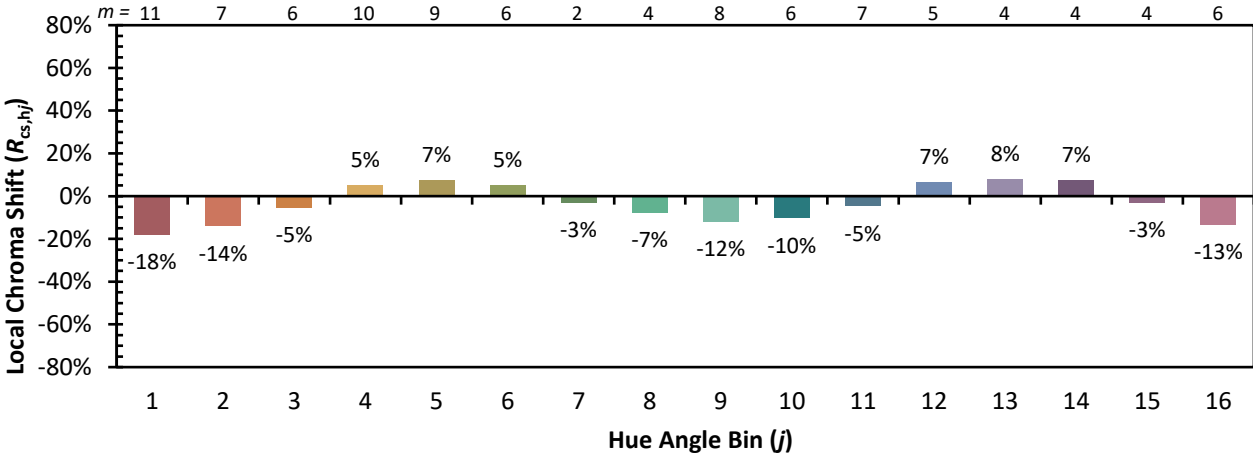


Individual Sample Fidelity Index ($R_{f,i}$)

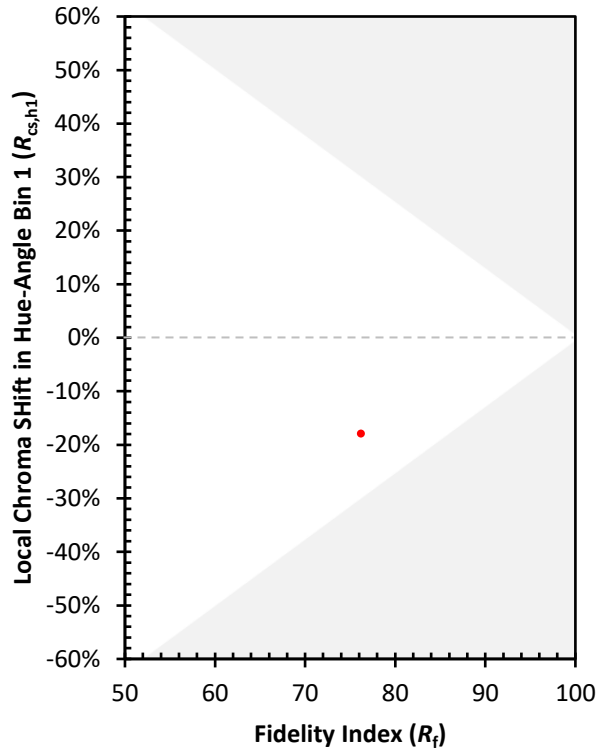
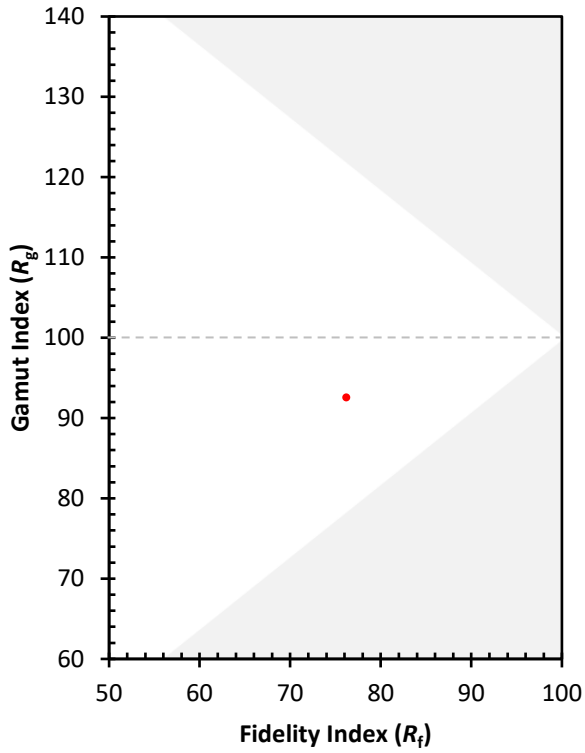
| | | | |
|------------|------------|------------|------------|
| CES01 = 86 | CES26 = 69 | CES51 = 88 | CES76 = 66 |
| CES02 = 62 | CES27 = 90 | CES52 = 86 | CES77 = 81 |
| CES03 = 31 | CES28 = 89 | CES53 = 79 | CES78 = 68 |
| CES04 = 71 | CES29 = 70 | CES54 = 85 | CES79 = 88 |
| CES05 = 49 | CES30 = 78 | CES55 = 84 | CES80 = 87 |
| CES06 = 51 | CES31 = 74 | CES56 = 76 | CES81 = 69 |
| CES07 = 41 | CES32 = 69 | CES57 = 75 | CES82 = 94 |
| CES08 = 40 | CES33 = 77 | CES58 = 77 | CES83 = 91 |
| CES09 = 29 | CES34 = 82 | CES59 = 85 | CES84 = 88 |
| CES10 = 76 | CES35 = 91 | CES60 = 92 | CES85 = 75 |
| CES11 = 59 | CES36 = 98 | CES61 = 83 | CES86 = 59 |
| CES12 = 65 | CES37 = 90 | CES62 = 94 | CES87 = 77 |
| CES13 = 43 | CES38 = 87 | CES63 = 79 | CES88 = 77 |
| CES14 = 74 | CES39 = 96 | CES64 = 71 | CES89 = 66 |
| CES15 = 71 | CES40 = 93 | CES65 = 68 | CES90 = 77 |
| CES16 = 47 | CES41 = 91 | CES66 = 70 | CES91 = 84 |
| CES17 = 50 | CES42 = 92 | CES67 = 68 | CES92 = 54 |
| CES18 = 56 | CES43 = 82 | CES68 = 71 | CES93 = 72 |
| CES19 = 73 | CES44 = 99 | CES69 = 81 | CES94 = 46 |
| CES20 = 66 | CES45 = 86 | CES70 = 67 | CES95 = 66 |
| CES21 = 87 | CES46 = 82 | CES71 = 68 | CES96 = 75 |
| CES22 = 79 | CES47 = 85 | CES72 = 88 | CES97 = 81 |
| CES23 = 92 | CES48 = 71 | CES73 = 60 | CES98 = 75 |
| CES24 = 91 | CES49 = 81 | CES74 = 95 | CES99 = 61 |
| CES25 = 73 | CES50 = 87 | CES75 = 70 | |



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)