

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: P196290

Luminaire Tested: **NAV-AF-06-D-UNV-T2R**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P196290
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24459)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-AF-06-D-UNV-T2R
Description: NAVION ROADWAY AND AREA LUMINAIRE
(6) 70 CRI, 4000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 38615.4 lumens
Efficiency: N/A
Efficacy: 116.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B3 - U0 - G4

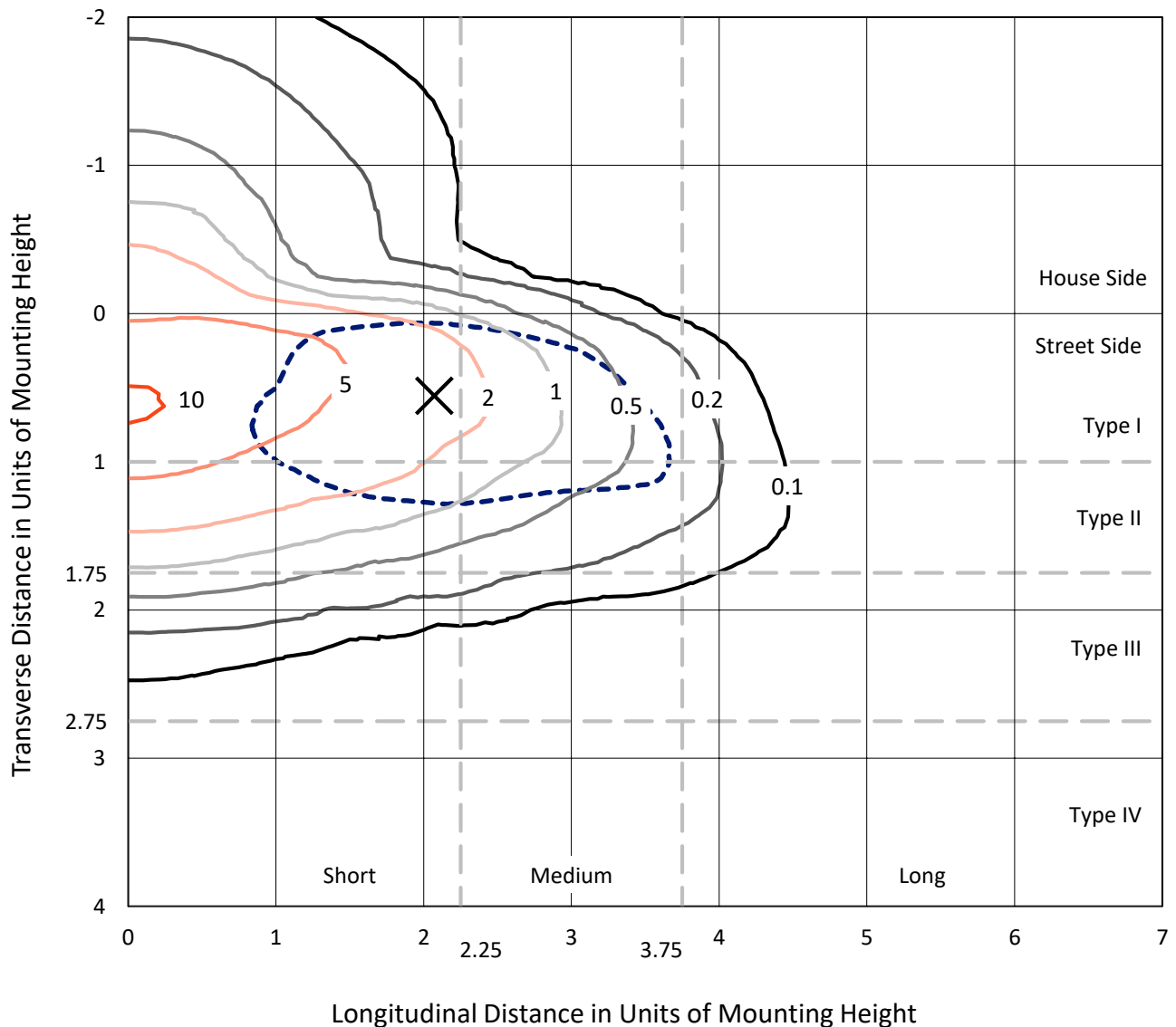
Input Watts (W): 333
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P196290
 CATALOG NUMBER: NAV-AF-06-D-UNV-T2R

Iso-Footcandle Lines of Horizontal Illumination

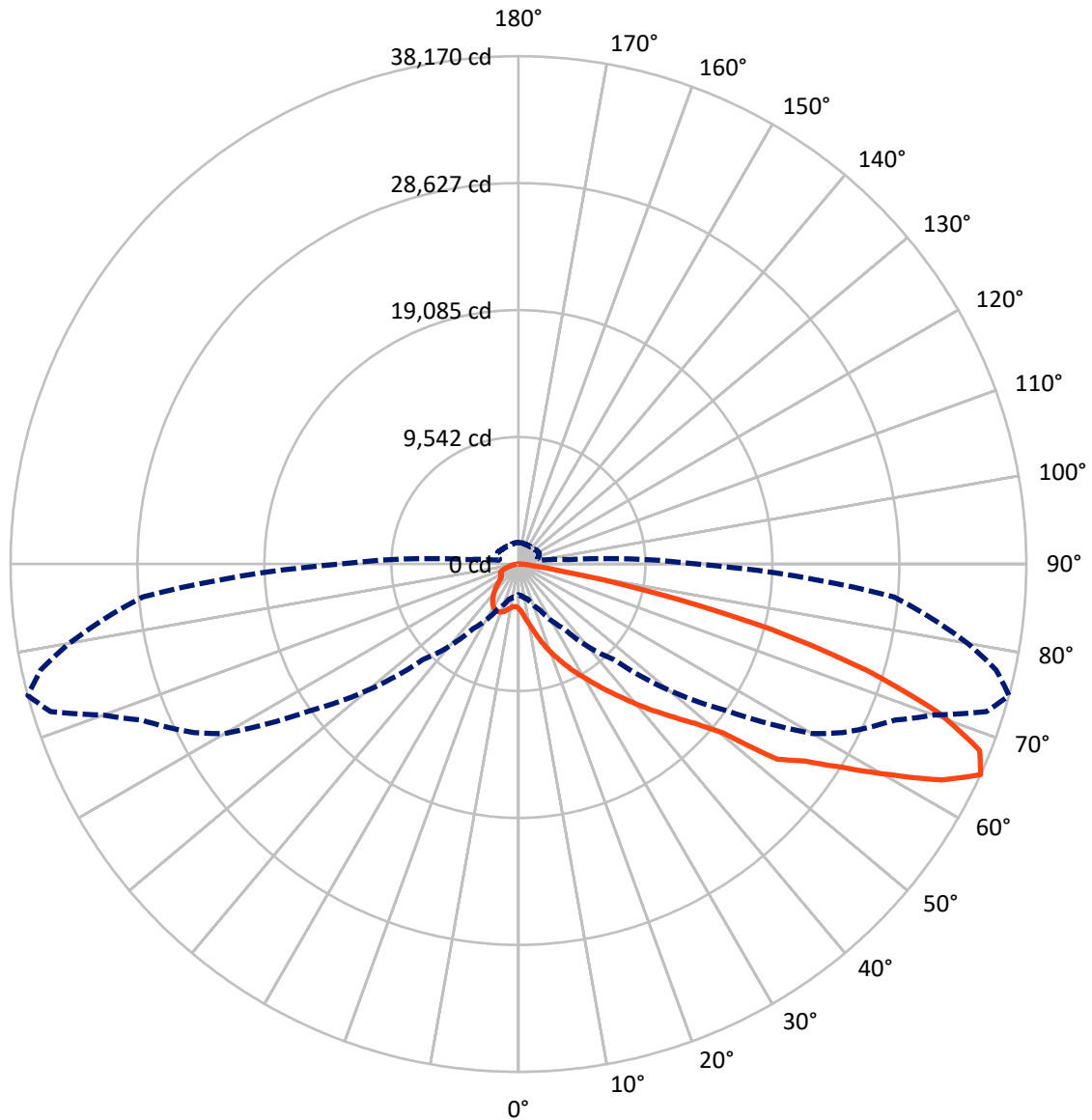
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 10.7 fc
 Type II - Short - Semi-Cutoff

REPORT NUMBER: P196290
CATALOG NUMBER: NAV-AF-06-D-UNV-T2R

Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P196290

CATALOG NUMBER: NAV-AF-06-D-UNV-T2R

FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 5802.5 | 0.0 | 5802.5 |
| | % Fixture | 15.0 | 0.0 | 15.0 |
| Street Side | Lumens | 32812.8 | 0.0 | 32812.8 |
| | % Fixture | 85.0 | 0.0 | 85.0 |
| Total | Lumens | 38615.4 | 0.0 | 38615.4 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 395.0 | 1.0 |
| 10°-20° | 1508.7 | 3.9 |
| 20°-30° | 3044.7 | 7.9 |
| 30°-40° | 5170.7 | 13.4 |
| 40°-50° | 7211.8 | 18.7 |
| 50°-60° | 8839.0 | 22.9 |
| 60°-70° | 8316.3 | 21.5 |
| 70°-80° | 3646.6 | 9.4 |
| 80°-90° | 482.5 | 1.2 |
| 90°-100° | 0.0 | 0.0 |
| 100°-110° | 0.0 | 0.0 |
| 110°-120° | 0.0 | 0.0 |
| 120°-130° | 0.0 | 0.0 |
| 130°-140° | 0.0 | 0.0 |
| 140°-150° | 0.0 | 0.0 |
| 150°-160° | 0.0 | 0.0 |
| 160°-170° | 0.0 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-90° | 38615.4 | 100.0 |
| 0°-180° | 38615.4 | 100.0 |



REPORT NUMBER: P196290

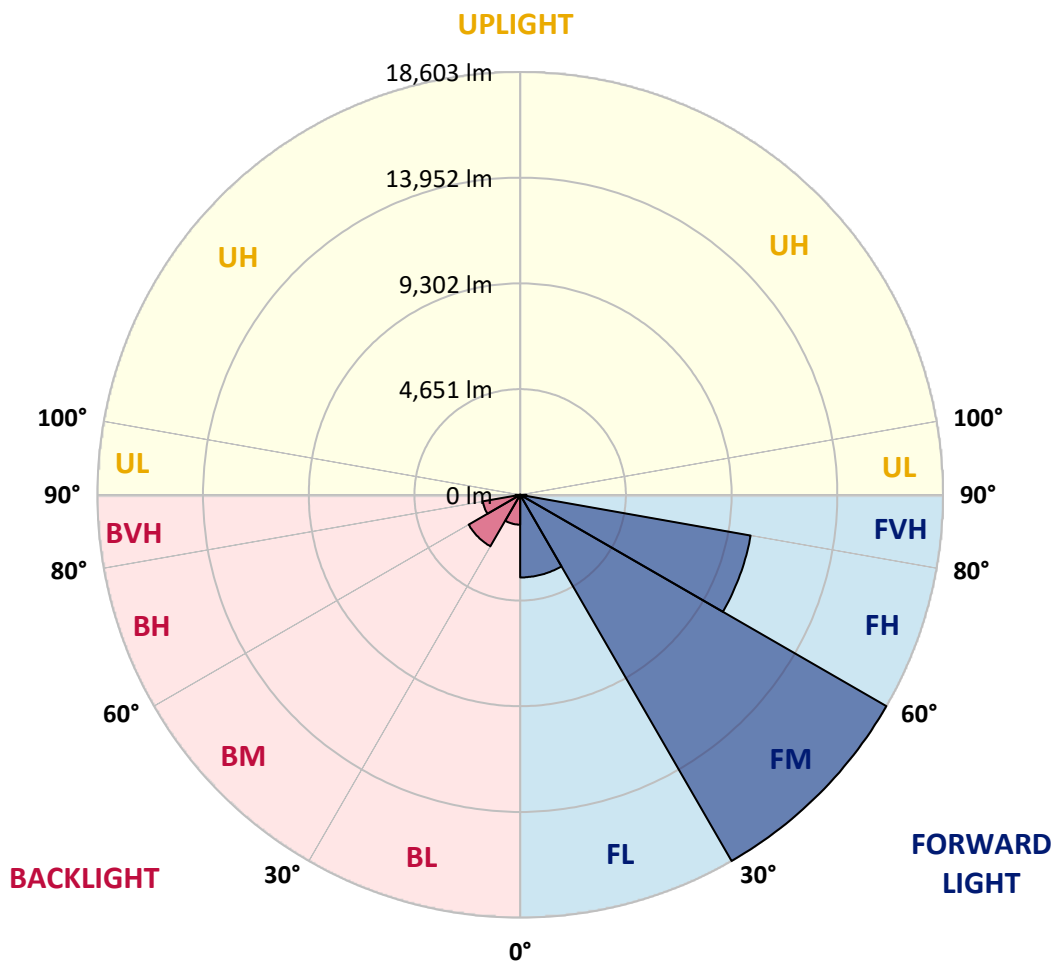
CATALOG NUMBER: NAV-AF-06-D-UNV-T2R

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|----------|
| | | | B | U | G |
| FL (0°-30°) | 3634.8 | 9.4 | | | |
| FM (30°-60°) | 18603.1 | 48.2 | | | |
| FH (60°-80°) | 10295.2 | 26.7 | | | G4/12000 |
| FVH (80°-90°) | 279.7 | 0.7 | | | G3/500 |
| BL (0°-30°) | 1313.6 | 3.4 | B3/2500 | | |
| BM (30°-60°) | 2618.4 | 6.8 | B3/5000 | | |
| BH (60°-80°) | 1667.7 | 4.3 | B3/2500 | | G3/2500 |
| BVH (80°-90°) | 202.8 | 0.5 | | | G2/225 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G4

Type II Short





REPORT NUMBER: P196290

CATALOG NUMBER: NAV-AF-06-D-UNV-T2R

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 57.5° | 60° | 62.5° | 65° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 3345.8 | 3345.8 | 3345.8 | 3345.8 | 3345.8 | 3345.8 | 3345.8 | 3345.8 | 3345.8 | 3345.8 | 3345.8 |
| 2.5° | 4212.9 | 4163.8 | 4168.7 | 4100.0 | 3999.2 | 3888.6 | 3797.8 | 3748.7 | 3706.9 | 3694.6 | 3625.8 |
| 5° | 5510.0 | 5448.5 | 5426.4 | 5269.2 | 5033.4 | 4753.3 | 4475.8 | 4367.7 | 4279.3 | 4225.2 | 4092.5 |
| 7.5° | 6571.2 | 6539.3 | 6509.8 | 6364.9 | 6131.5 | 5772.8 | 5325.8 | 5166.1 | 5018.7 | 4856.6 | 4696.9 |
| 10° | 7293.4 | 7281.2 | 7268.9 | 7168.1 | 6974.1 | 6662.1 | 6180.6 | 6006.2 | 5821.9 | 5615.6 | 5406.8 |
| 12.5° | 7838.8 | 7838.8 | 7848.6 | 7765.1 | 7647.2 | 7406.5 | 6969.2 | 6807.0 | 6620.3 | 6404.2 | 6165.8 |
| 15° | 8204.8 | 8214.6 | 8266.2 | 8290.8 | 8229.3 | 8074.6 | 7691.4 | 7548.9 | 7372.0 | 7158.3 | 6922.5 |
| 17.5° | 8447.9 | 8467.7 | 8543.8 | 8624.8 | 8703.5 | 8649.5 | 8364.5 | 8231.8 | 8072.1 | 7875.6 | 7654.5 |
| 20° | 9013.0 | 8988.5 | 8990.9 | 8966.3 | 9081.8 | 9123.5 | 8966.3 | 8855.8 | 8728.0 | 8548.7 | 8347.3 |
| 22.5° | 10199.5 | 10152.8 | 10032.5 | 9725.4 | 9585.4 | 9570.6 | 9477.2 | 9418.3 | 9320.0 | 9207.1 | 9005.6 |
| 25° | 11747.1 | 11693.0 | 11454.8 | 10948.7 | 10531.1 | 10145.4 | 9973.5 | 9936.6 | 9872.8 | 9796.6 | 9651.6 |
| 27.5° | 13346.3 | 13287.3 | 12980.2 | 12341.6 | 11796.3 | 11017.5 | 10482.0 | 10432.9 | 10373.9 | 10341.9 | 10273.2 |
| 30° | 14753.9 | 14690.0 | 14387.9 | 13739.4 | 13081.0 | 12152.5 | 11167.3 | 10995.4 | 10894.7 | 10904.6 | 10865.2 |
| 32.5° | 15989.5 | 15933.0 | 15594.0 | 14933.2 | 14265.0 | 13363.5 | 12056.6 | 11788.9 | 11562.8 | 11479.3 | 11508.8 |
| 35° | 17026.2 | 16974.5 | 16603.6 | 15937.9 | 15264.9 | 14515.6 | 13201.4 | 12798.4 | 12430.0 | 12199.1 | 12172.1 |
| 37.5° | 17635.4 | 17605.9 | 17345.6 | 16780.5 | 16112.3 | 15562.0 | 14483.7 | 14036.6 | 13493.6 | 13157.1 | 13009.8 |
| 40° | 17601.0 | 17632.9 | 17588.7 | 17333.2 | 16814.9 | 16414.5 | 15820.0 | 15377.8 | 14847.2 | 14346.1 | 14046.4 |
| 42.5° | 17099.9 | 17144.0 | 17343.1 | 17475.7 | 17335.6 | 17092.5 | 16986.8 | 16657.7 | 16181.1 | 15650.5 | 15235.3 |
| 45° | 16412.0 | 16451.3 | 16709.3 | 17188.3 | 17588.7 | 17657.5 | 18008.7 | 17844.1 | 17441.3 | 16989.3 | 16532.4 |
| 47.5° | 15358.2 | 15434.4 | 15734.0 | 16495.6 | 17448.7 | 18112.0 | 18866.1 | 18942.3 | 18708.8 | 18335.5 | 17908.1 |
| 50° | 13832.6 | 13933.4 | 14353.4 | 15436.8 | 16918.1 | 18578.7 | 20141.1 | 20430.9 | 20337.6 | 19959.3 | 19526.9 |
| 52.5° | 12270.3 | 12371.1 | 12931.1 | 14083.3 | 16063.2 | 18770.3 | 21396.3 | 22138.2 | 22673.7 | 23064.3 | 23140.5 |
| 55° | 10644.1 | 10757.1 | 11371.2 | 12697.8 | 14923.4 | 18527.1 | 22293.0 | 23135.6 | 23678.4 | 24086.2 | 24250.8 |
| 57.5° | 8809.1 | 8936.8 | 9531.3 | 10872.5 | 13311.9 | 17549.4 | 23290.3 | 24484.1 | 25292.4 | 25921.3 | 26275.0 |
| 60° | 6703.8 | 6863.5 | 7480.1 | 8831.2 | 11194.4 | 15677.5 | 23734.9 | 25501.1 | 26786.0 | 27729.2 | 28289.3 |
| 62.5° | 4249.7 | 4411.9 | 5053.1 | 6455.7 | 8784.5 | 13120.3 | 22477.2 | 25054.1 | 27245.3 | 28640.6 | 29667.4 |
| 65° | 2318.9 | 2390.2 | 2746.4 | 3802.7 | 5922.7 | 10179.8 | 19288.7 | 22327.3 | 25484.0 | 27461.5 | 29038.6 |
| 67.5° | 1739.2 | 1749.0 | 1785.9 | 2043.9 | 3154.2 | 6873.3 | 15080.6 | 17863.9 | 21369.3 | 23914.2 | 25798.4 |
| 70° | 1523.1 | 1523.1 | 1528.0 | 1530.4 | 1712.2 | 3724.1 | 10216.7 | 12778.8 | 15992.0 | 18566.5 | 20907.5 |
| 72.5° | 1365.8 | 1351.1 | 1346.2 | 1316.7 | 1341.3 | 1908.7 | 5561.6 | 7863.3 | 10572.9 | 13461.7 | 15645.6 |
| 75° | 1179.2 | 1176.7 | 1176.7 | 1147.2 | 1162.0 | 1343.7 | 2412.3 | 3773.3 | 5873.6 | 8563.4 | 10712.9 |
| 77.5° | 1019.5 | 1002.3 | 1004.7 | 987.6 | 1034.2 | 1029.3 | 1144.8 | 1555.0 | 2557.3 | 4497.9 | 6281.3 |
| 80° | 840.1 | 827.9 | 835.2 | 825.4 | 899.1 | 761.5 | 771.3 | 950.6 | 1270.0 | 1972.6 | 2780.8 |
| 82.5° | 621.5 | 626.5 | 673.1 | 668.2 | 756.6 | 513.4 | 565.0 | 709.9 | 854.9 | 982.6 | 1068.6 |
| 85° | 363.6 | 370.9 | 484.0 | 508.5 | 555.2 | 270.3 | 346.4 | 422.5 | 476.6 | 528.1 | 550.2 |
| 87.5° | 39.3 | 51.6 | 270.3 | 277.6 | 248.1 | 81.0 | 140.0 | 176.9 | 189.1 | 201.4 | 176.9 |
| 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: P196290

CATALOG NUMBER: NAV-AF-06-D-UNV-T2R

CANDELA DISTRIBUTION (continued):

| | 67.5° | 70° | 72.5° | 75° | 77.5° | 80° | 85° | 90° | 95° | 100° | 102.5° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|--------|--------|--------|
| 0° | 3345.8 | 3345.8 | 3345.8 | 3345.8 | 3345.8 | 3345.8 | 3345.8 | 3345.8 | 3345.8 | 3345.8 | 3345.8 |
| 2.5° | 3603.8 | 3571.7 | 3537.4 | 3517.7 | 3483.4 | 3453.9 | 3399.9 | 3355.6 | 3306.5 | 3272.1 | 3257.4 |
| 5° | 4026.2 | 3950.1 | 3869.0 | 3810.1 | 3736.3 | 3672.5 | 3549.6 | 3402.3 | 3355.6 | 3257.4 | 3232.8 |
| 7.5° | 4576.5 | 4438.9 | 4301.4 | 4188.4 | 4060.6 | 3955.0 | 3748.7 | 3483.4 | 3449.0 | 3291.8 | 3257.4 |
| 10° | 5222.6 | 5021.2 | 4817.3 | 4642.9 | 4456.2 | 4294.0 | 3989.4 | 3616.0 | 3579.2 | 3377.7 | 3343.3 |
| 12.5° | 5944.8 | 5699.2 | 5436.3 | 5175.9 | 4954.8 | 4726.3 | 4311.2 | 3822.4 | 3763.4 | 3525.1 | 3478.4 |
| 15° | 6689.1 | 6423.8 | 6119.2 | 5804.7 | 5532.1 | 5229.9 | 4706.7 | 4092.5 | 3984.5 | 3704.4 | 3640.6 |
| 17.5° | 7423.7 | 7136.2 | 6816.8 | 6465.6 | 6146.2 | 5785.1 | 5134.1 | 4394.7 | 4208.0 | 3881.3 | 3800.3 |
| 20° | 8133.6 | 7841.2 | 7504.7 | 7160.8 | 6762.8 | 6350.1 | 5571.4 | 4692.0 | 4407.0 | 4028.7 | 3923.1 |
| 22.5° | 8779.6 | 8529.1 | 8192.5 | 7797.0 | 7394.1 | 6929.9 | 6016.1 | 4989.2 | 4581.4 | 4141.7 | 4006.6 |
| 25° | 9460.0 | 9231.6 | 8897.5 | 8516.8 | 8047.6 | 7531.7 | 6475.4 | 5271.7 | 4721.4 | 4203.1 | 4036.1 |
| 27.5° | 10147.9 | 9951.4 | 9636.9 | 9236.5 | 8732.9 | 8160.6 | 6942.2 | 5532.1 | 4834.5 | 4222.7 | 4021.3 |
| 30° | 10882.4 | 10730.1 | 10440.2 | 9993.1 | 9484.6 | 8850.9 | 7450.7 | 5787.5 | 4905.7 | 4195.7 | 3955.0 |
| 32.5° | 11577.6 | 11572.6 | 11314.8 | 10850.4 | 10302.6 | 9605.0 | 7986.2 | 6045.5 | 4942.5 | 4119.6 | 3839.5 |
| 35° | 12299.9 | 12400.5 | 12206.5 | 11764.3 | 11187.0 | 10413.2 | 8578.2 | 6320.6 | 4944.9 | 3984.5 | 3689.7 |
| 37.5° | 13120.3 | 13299.6 | 13213.7 | 12793.5 | 12186.8 | 11334.4 | 9273.4 | 6630.2 | 4930.2 | 3797.8 | 3471.1 |
| 40° | 14053.8 | 14299.4 | 14297.0 | 13943.2 | 13294.7 | 12366.1 | 10081.6 | 6976.5 | 4895.8 | 3564.4 | 3213.1 |
| 42.5° | 15122.4 | 15414.6 | 15495.8 | 15146.9 | 14491.0 | 13493.6 | 11007.7 | 7357.3 | 4841.8 | 3333.5 | 2940.5 |
| 45° | 16345.7 | 16603.6 | 16755.9 | 16431.7 | 15773.4 | 14721.9 | 12071.3 | 7789.7 | 4775.4 | 3036.2 | 2628.5 |
| 47.5° | 17655.0 | 17954.7 | 18183.2 | 17905.6 | 17203.1 | 16122.2 | 13331.6 | 8347.3 | 4750.9 | 2697.2 | 2291.9 |
| 50° | 19278.8 | 19588.3 | 20082.1 | 19956.8 | 19571.1 | 18701.5 | 15996.9 | 9663.9 | 4760.7 | 2375.5 | 2009.5 |
| 52.5° | 23307.5 | 24017.5 | 24641.4 | 24363.8 | 23447.6 | 21956.4 | 18163.5 | 10396.0 | 4554.4 | 2112.6 | 1812.9 |
| 55° | 24523.5 | 25329.2 | 26250.5 | 26135.0 | 25255.5 | 23752.1 | 19875.7 | 11007.7 | 4355.4 | 1921.0 | 1685.2 |
| 57.5° | 26650.8 | 27601.5 | 28888.7 | 28864.2 | 27785.7 | 26093.2 | 22079.3 | 11739.7 | 4269.4 | 1810.4 | 1621.3 |
| 60° | 28903.5 | 30114.5 | 31893.0 | 32170.7 | 30998.9 | 29237.6 | 24683.2 | 12638.9 | 4281.8 | 1749.0 | 1584.4 |
| 62.5° | 30549.3 | 32325.3 | 34912.1 | 35742.4 | 34361.8 | 32421.2 | 27385.3 | 13537.9 | 4208.0 | 1677.8 | 1540.3 |
| 65° | 30650.1 | 33207.3 | 36877.4 | 38169.5 | 36771.7 | 34278.4 | 28338.5 | 13361.1 | 3765.9 | 1582.0 | 1469.0 |
| 67.5° | 28193.5 | 31524.6 | 35983.1 | 37400.6 | 35970.8 | 33133.6 | 26668.0 | 11680.8 | 3060.9 | 1414.9 | 1346.2 |
| 70° | 23481.9 | 27348.5 | 31976.5 | 33556.2 | 32374.6 | 29502.8 | 23209.2 | 9329.9 | 2287.0 | 1193.9 | 1162.0 |
| 72.5° | 18146.3 | 21752.5 | 25955.6 | 27417.2 | 26513.2 | 23988.0 | 18306.0 | 6799.7 | 1633.6 | 967.9 | 943.3 |
| 75° | 12972.9 | 16043.6 | 19094.6 | 19652.2 | 18760.5 | 16441.5 | 11877.3 | 4247.3 | 1144.8 | 793.5 | 759.0 |
| 77.5° | 8032.8 | 10030.0 | 11125.6 | 10408.3 | 9270.9 | 7706.1 | 4834.5 | 2097.9 | 761.5 | 646.1 | 611.7 |
| 80° | 3564.4 | 4183.5 | 3905.8 | 3480.9 | 2748.9 | 2260.0 | 1476.3 | 931.0 | 491.3 | 498.7 | 479.0 |
| 82.5° | 1198.8 | 1267.5 | 1233.2 | 1225.8 | 1105.4 | 967.9 | 626.5 | 402.8 | 275.2 | 319.4 | 312.0 |
| 85° | 584.6 | 611.7 | 614.2 | 636.3 | 552.7 | 429.8 | 169.5 | 159.7 | 117.9 | 172.0 | 179.3 |
| 87.5° | 176.9 | 179.3 | 162.1 | 176.9 | 142.5 | 98.3 | 31.9 | 44.2 | 22.1 | 41.7 | 41.7 |
| 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: P196290

CATALOG NUMBER: NAV-AF-06-D-UNV-T2R

CANDELA DISTRIBUTION (continued):

| | 105° | 107.5° | 110° | 112.5° | 115° | 117.5° | 120° | 122.5° | 125° | 127.5° | 130° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 3345.8 | 3345.8 | 3345.8 | 3345.8 | 3345.8 | 3345.8 | 3345.8 | 3345.8 | 3345.8 | 3345.8 | 3345.8 |
| 2.5° | 3230.4 | 3220.5 | 3203.3 | 3183.6 | 3178.7 | 3154.2 | 3146.8 | 3134.5 | 3127.2 | 3114.9 | 3105.1 |
| 5° | 3200.8 | 3183.6 | 3164.0 | 3141.9 | 3141.9 | 3107.5 | 3092.8 | 3078.1 | 3078.1 | 3056.0 | 3046.0 |
| 7.5° | 3230.4 | 3208.2 | 3186.1 | 3166.4 | 3173.8 | 3134.5 | 3119.8 | 3105.1 | 3102.6 | 3080.5 | 3070.7 |
| 10° | 3313.8 | 3291.8 | 3264.7 | 3245.1 | 3237.7 | 3205.7 | 3188.5 | 3166.4 | 3151.7 | 3137.0 | 3122.3 |
| 12.5° | 3441.6 | 3412.2 | 3377.7 | 3335.9 | 3318.8 | 3291.8 | 3264.7 | 3235.3 | 3200.8 | 3186.1 | 3164.0 |
| 15° | 3593.9 | 3544.7 | 3498.1 | 3446.5 | 3399.9 | 3372.8 | 3335.9 | 3289.3 | 3242.7 | 3222.9 | 3193.4 |
| 17.5° | 3719.1 | 3667.6 | 3601.3 | 3539.8 | 3456.3 | 3434.3 | 3382.6 | 3326.1 | 3250.0 | 3242.7 | 3198.4 |
| 20° | 3824.8 | 3746.1 | 3665.1 | 3591.5 | 3463.7 | 3451.4 | 3387.5 | 3321.2 | 3213.1 | 3213.1 | 3159.1 |
| 22.5° | 3883.7 | 3775.7 | 3679.9 | 3581.7 | 3422.0 | 3412.2 | 3338.4 | 3259.8 | 3127.2 | 3132.1 | 3065.8 |
| 25° | 3893.6 | 3763.4 | 3643.0 | 3525.1 | 3340.9 | 3323.7 | 3230.4 | 3144.3 | 2999.4 | 2989.6 | 2920.8 |
| 27.5° | 3854.3 | 3702.0 | 3561.9 | 3419.5 | 3220.5 | 3183.6 | 3080.5 | 2977.3 | 2834.8 | 2810.3 | 2736.6 |
| 30° | 3763.4 | 3584.1 | 3426.9 | 3262.3 | 3053.5 | 2994.5 | 2886.5 | 2780.8 | 2635.8 | 2603.9 | 2535.2 |
| 32.5° | 3618.5 | 3414.6 | 3240.2 | 3075.6 | 2844.6 | 2771.0 | 2662.8 | 2557.3 | 2417.2 | 2392.7 | 2328.7 |
| 35° | 3426.9 | 3198.4 | 3014.1 | 2839.7 | 2608.8 | 2532.7 | 2429.5 | 2336.1 | 2208.4 | 2198.6 | 2154.3 |
| 37.5° | 3186.1 | 2947.8 | 2751.3 | 2584.3 | 2365.7 | 2326.3 | 2220.7 | 2151.9 | 2046.3 | 2056.1 | 2034.0 |
| 40° | 2913.5 | 2670.2 | 2483.5 | 2336.1 | 2147.0 | 2112.6 | 2048.8 | 1997.1 | 1906.3 | 1933.3 | 1935.7 |
| 42.5° | 2638.3 | 2395.1 | 2225.6 | 2093.0 | 1930.8 | 1908.7 | 1864.5 | 1835.1 | 1766.2 | 1820.2 | 1842.4 |
| 45° | 2326.3 | 2100.3 | 1955.4 | 1854.7 | 1734.3 | 1734.3 | 1712.2 | 1709.8 | 1663.1 | 1739.2 | 1761.3 |
| 47.5° | 2024.2 | 1847.3 | 1746.6 | 1685.2 | 1601.6 | 1640.9 | 1633.6 | 1653.2 | 1618.8 | 1697.5 | 1717.1 |
| 50° | 1795.7 | 1672.9 | 1611.5 | 1582.0 | 1523.1 | 1584.4 | 1599.2 | 1626.2 | 1596.7 | 1665.6 | 1680.3 |
| 52.5° | 1650.7 | 1569.7 | 1535.3 | 1528.0 | 1486.2 | 1562.4 | 1586.9 | 1611.5 | 1577.1 | 1640.9 | 1638.5 |
| 55° | 1569.7 | 1515.7 | 1503.4 | 1518.2 | 1486.2 | 1559.9 | 1584.4 | 1601.6 | 1572.2 | 1616.4 | 1613.9 |
| 57.5° | 1540.3 | 1510.8 | 1518.2 | 1540.3 | 1518.2 | 1579.5 | 1591.8 | 1611.5 | 1582.0 | 1601.6 | 1611.5 |
| 60° | 1537.8 | 1537.8 | 1567.3 | 1596.7 | 1582.0 | 1626.2 | 1633.6 | 1631.1 | 1604.1 | 1606.5 | 1611.5 |
| 62.5° | 1523.1 | 1559.9 | 1609.0 | 1655.7 | 1650.7 | 1704.8 | 1709.8 | 1677.8 | 1655.7 | 1631.1 | 1623.7 |
| 65° | 1476.3 | 1537.8 | 1609.0 | 1672.9 | 1682.8 | 1766.2 | 1776.0 | 1744.1 | 1729.4 | 1687.7 | 1655.7 |
| 67.5° | 1373.2 | 1451.8 | 1535.3 | 1613.9 | 1631.1 | 1744.1 | 1766.2 | 1778.5 | 1785.9 | 1758.9 | 1717.1 |
| 70° | 1198.8 | 1279.8 | 1365.8 | 1456.7 | 1481.3 | 1606.5 | 1653.2 | 1709.8 | 1754.0 | 1793.2 | 1778.5 |
| 72.5° | 975.3 | 1048.9 | 1122.6 | 1206.2 | 1243.0 | 1373.2 | 1434.6 | 1532.9 | 1601.6 | 1702.4 | 1744.1 |
| 75° | 773.8 | 818.1 | 862.2 | 913.8 | 943.3 | 1071.0 | 1147.2 | 1265.1 | 1358.5 | 1498.5 | 1591.8 |
| 77.5° | 609.2 | 631.4 | 653.5 | 675.6 | 687.8 | 759.0 | 820.5 | 938.4 | 1046.5 | 1223.3 | 1360.9 |
| 80° | 469.2 | 481.5 | 484.0 | 491.3 | 486.4 | 520.8 | 542.9 | 614.2 | 707.5 | 881.9 | 1044.0 |
| 82.5° | 302.2 | 312.0 | 316.9 | 329.2 | 304.6 | 348.8 | 363.6 | 370.9 | 420.0 | 547.8 | 663.3 |
| 85° | 169.5 | 172.0 | 174.4 | 179.3 | 145.0 | 189.1 | 191.6 | 179.3 | 174.4 | 226.0 | 255.4 |
| 87.5° | 41.7 | 39.3 | 41.7 | 41.7 | 17.2 | 39.3 | 39.3 | 27.0 | 19.6 | 36.8 | 29.5 |
| 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: P196290

CATALOG NUMBER: NAV-AF-06-D-UNV-T2R

CANDELA DISTRIBUTION (continued):

| | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|
| 0° | 3345.8 | 3345.8 | 3345.8 | 3345.8 | 3345.8 | 3345.8 |
| 2.5° | 3083.0 | 3078.1 | 3080.5 | 3068.2 | 3063.3 | 3065.8 |
| 5° | 3033.8 | 3023.9 | 3023.9 | 3016.6 | 3006.8 | 3006.8 |
| 7.5° | 3056.0 | 3036.2 | 3028.9 | 3014.1 | 2999.4 | 3001.8 |
| 10° | 3090.3 | 3056.0 | 3031.3 | 3009.2 | 2992.0 | 2992.0 |
| 12.5° | 3112.4 | 3051.1 | 3014.1 | 2984.7 | 2965.0 | 2965.0 |
| 15° | 3117.3 | 3023.9 | 2969.9 | 2938.0 | 2918.4 | 2918.4 |
| 17.5° | 3087.9 | 2969.9 | 2901.2 | 2859.4 | 2837.3 | 2842.2 |
| 20° | 3014.1 | 2869.2 | 2788.2 | 2744.0 | 2721.9 | 2724.3 |
| 22.5° | 2898.7 | 2731.7 | 2638.3 | 2586.7 | 2564.6 | 2564.6 |
| 25° | 2741.5 | 2559.7 | 2459.0 | 2417.2 | 2397.6 | 2397.6 |
| 27.5° | 2562.2 | 2375.5 | 2287.0 | 2255.1 | 2242.8 | 2242.8 |
| 30° | 2360.8 | 2206.0 | 2142.1 | 2120.0 | 2100.3 | 2100.3 |
| 32.5° | 2191.3 | 2080.7 | 2058.6 | 2029.1 | 1977.5 | 1975.0 |
| 35° | 2056.1 | 2043.9 | 2026.7 | 1938.2 | 1864.5 | 1854.7 |
| 37.5° | 1982.4 | 2056.1 | 1948.0 | 1795.7 | 1736.8 | 1734.3 |
| 40° | 1943.1 | 2011.9 | 1825.1 | 1751.5 | 1744.1 | 1744.1 |
| 42.5° | 1849.8 | 1898.9 | 1817.8 | 1776.0 | 1776.0 | 1778.5 |
| 45° | 1751.5 | 1793.2 | 1835.1 | 1798.1 | 1810.4 | 1812.9 |
| 47.5° | 1682.8 | 1766.2 | 1835.1 | 1803.1 | 1827.6 | 1842.4 |
| 50° | 1618.8 | 1741.7 | 1798.1 | 1798.1 | 1825.1 | 1827.6 |
| 52.5° | 1604.1 | 1707.3 | 1763.8 | 1790.8 | 1793.2 | 1781.0 |
| 55° | 1606.5 | 1680.3 | 1736.8 | 1771.1 | 1756.4 | 1756.4 |
| 57.5° | 1604.1 | 1665.6 | 1714.7 | 1726.9 | 1734.3 | 1734.3 |
| 60° | 1606.5 | 1645.8 | 1685.2 | 1680.3 | 1704.8 | 1704.8 |
| 62.5° | 1613.9 | 1618.8 | 1638.5 | 1633.6 | 1670.5 | 1670.5 |
| 65° | 1631.1 | 1584.4 | 1572.2 | 1577.1 | 1621.3 | 1618.8 |
| 67.5° | 1663.1 | 1537.8 | 1498.5 | 1501.0 | 1564.8 | 1555.0 |
| 70° | 1709.8 | 1473.9 | 1414.9 | 1400.2 | 1508.3 | 1491.2 |
| 72.5° | 1724.5 | 1400.2 | 1306.8 | 1292.1 | 1356.0 | 1306.8 |
| 75° | 1655.7 | 1341.3 | 1191.4 | 1142.3 | 1115.2 | 1100.5 |
| 77.5° | 1476.3 | 1304.4 | 1071.0 | 967.9 | 926.1 | 916.3 |
| 80° | 1223.3 | 1228.3 | 913.8 | 791.0 | 918.7 | 916.3 |
| 82.5° | 923.6 | 1061.2 | 732.0 | 685.4 | 665.7 | 555.2 |
| 85° | 447.1 | 798.4 | 562.5 | 471.7 | 282.5 | 267.8 |
| 87.5° | 39.3 | 334.1 | 324.3 | 211.2 | 95.9 | 90.9 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)