

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: P968946

Luminaire Tested: **NAV-SB5C-830-U-T3R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968946
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-5)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5C-830-U-T3R
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 35769.4 lumens
Efficiency: N/A
Efficacy: 143.4 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B3 - U0 - G4

Input Watts (W): 249.5
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: 24 FT



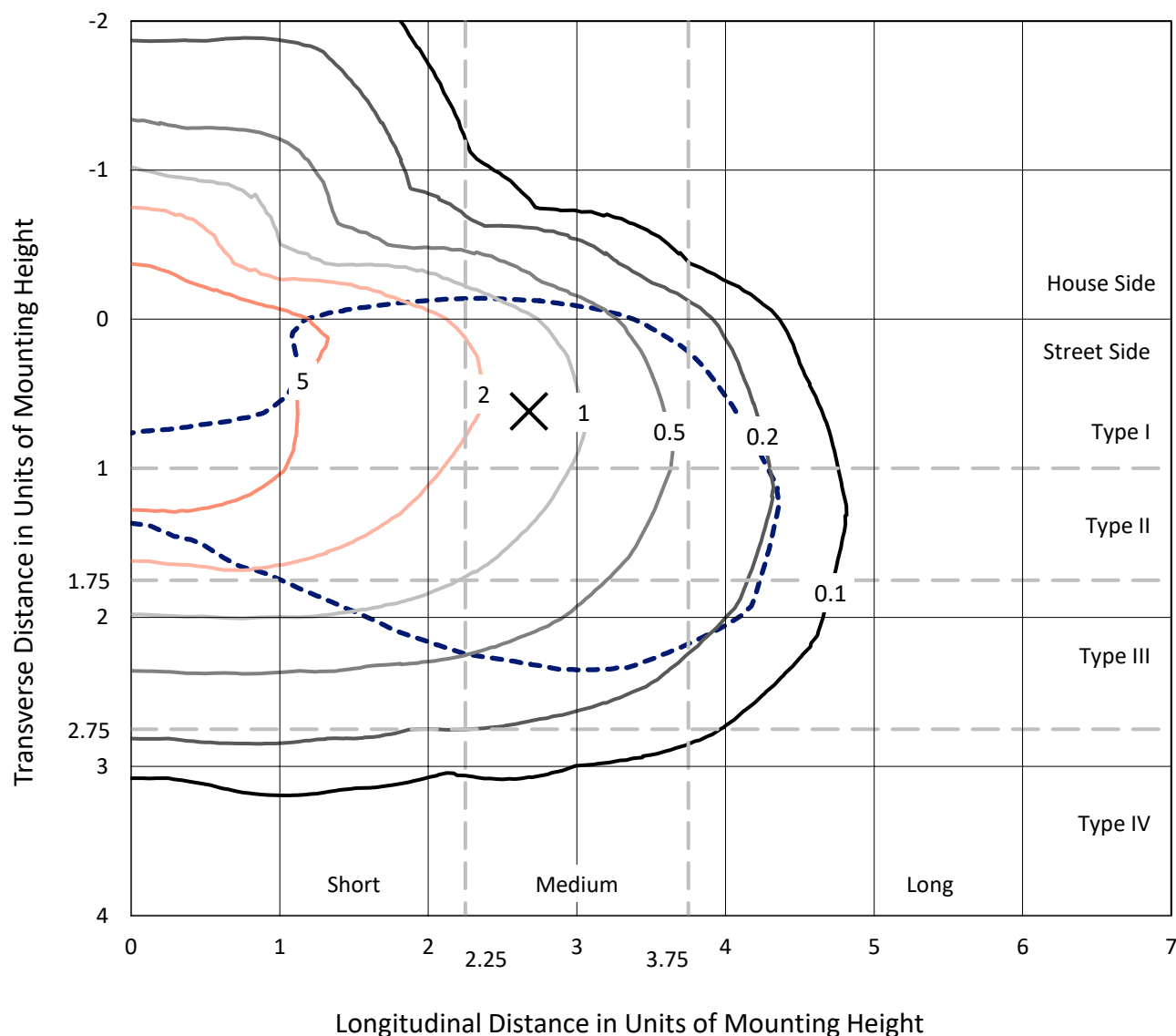
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

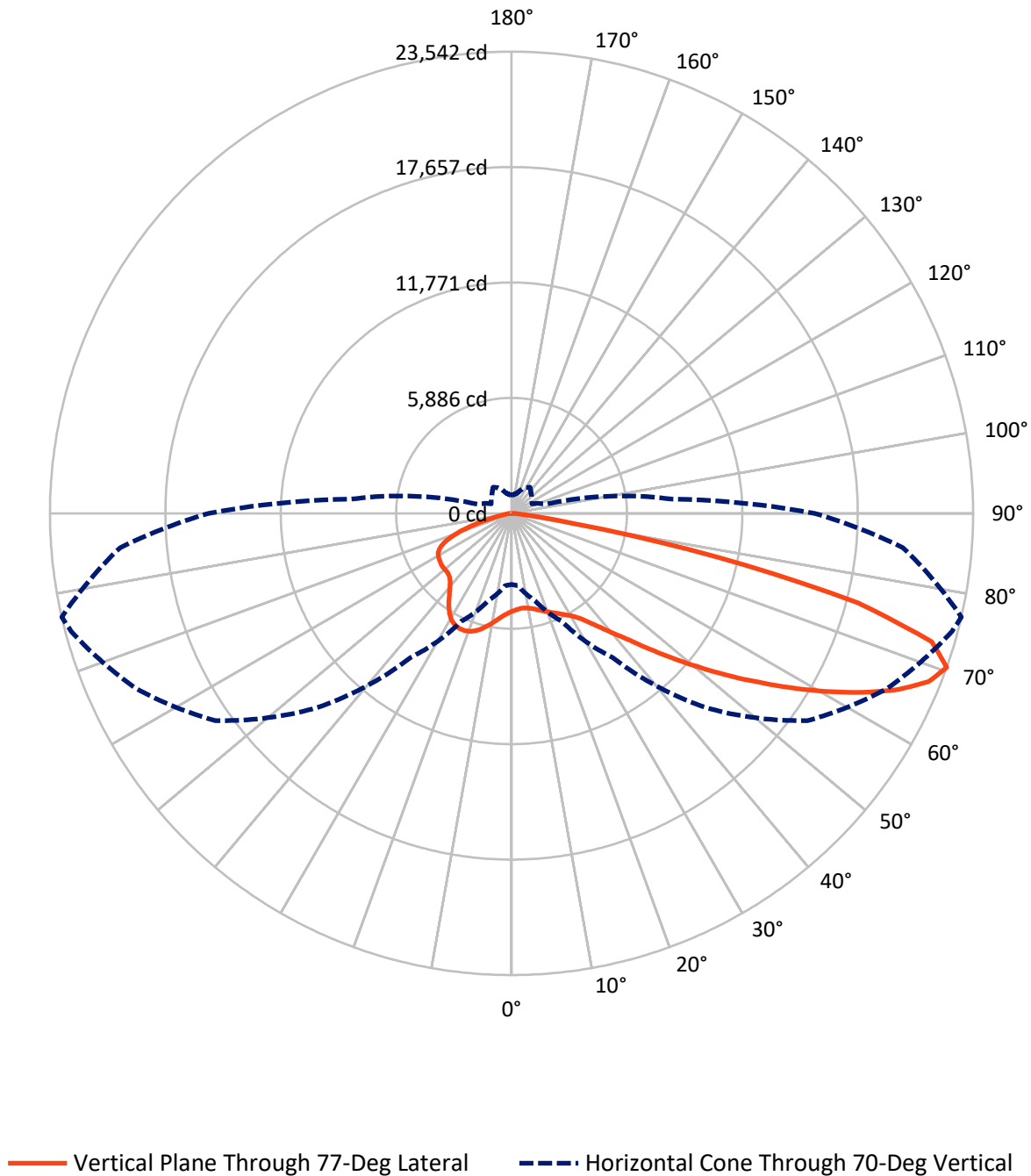
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.5 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7832.9	0.0	7832.9
	% Fixture	21.9	0.0	21.9
Street Side	Lumens	27936.5	0.0	27936.5
	% Fixture	78.1	0.0	78.1
Total	Lumens	35769.4	0.0	35769.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	475.9	1.3
10°-20°	1373.6	3.8
20°-30°	2349.0	6.6
30°-40°	3777.4	10.6
40°-50°	5897.6	16.5
50°-60°	7877.7	22.0
60°-70°	8396.4	23.5
70°-80°	5168.8	14.5
80°-90°	452.9	1.3
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°	35769.4	100.0
0°-180°	35769.4	100.0

Coefficient of Utilization



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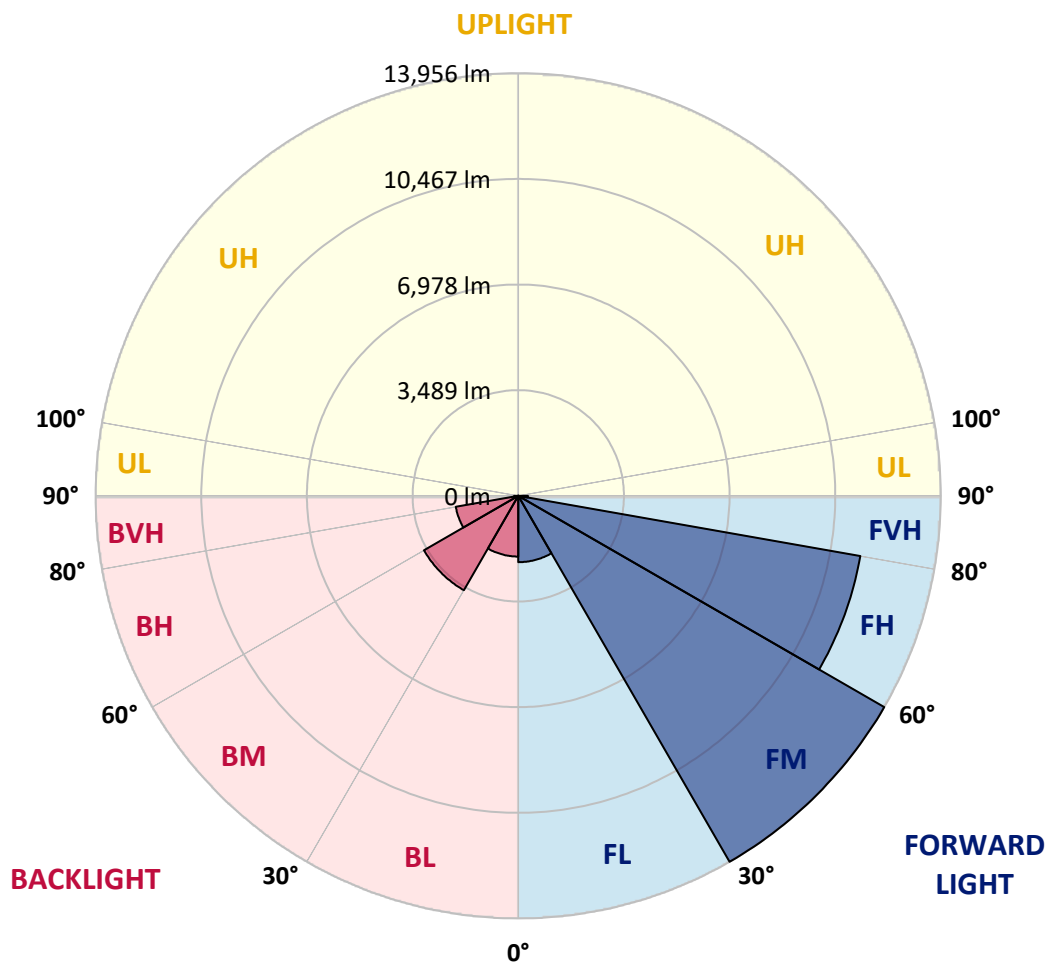
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2191.5	6.1			
FM	(30°-60°)	13956.5	39.0			
FH	(60°-80°)	11471.8	32.1			G4/12000
FVH	(80°-90°)	316.7	0.9			G3/500
BL	(0°-30°)	2007.0	5.6	B3/2500		
BM	(30°-60°)	3596.3	10.1	B3/5000		
BH	(60°-80°)	2093.4	5.9	B3/2500		G3/2500
BVH	(80°-90°)	136.2	0.4			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 III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	4990.1	4990.1	4990.1	4990.1	4990.1	4990.1	4990.1	4990.1	4990.1	4990.1	4990.1
2.5°	4600.0	4598.2	4621.9	4629.3	4673.3	4704.3	4763.0	4825.3	4905.9	4915.1	4964.5
5°	4334.3	4334.3	4361.8	4391.1	4447.9	4510.2	4600.0	4708.0	4847.2	4869.3	4992.0
7.5°	4109.0	4123.7	4147.5	4204.2	4270.3	4359.9	4497.4	4651.2	4834.4	4869.3	5067.1
10°	3927.6	3944.1	3973.4	4019.2	4118.1	4242.8	4422.3	4620.1	4865.6	4920.5	5177.0
12.5°	3870.8	3887.3	3903.8	3938.7	4030.2	4176.8	4391.1	4634.7	4940.7	4995.6	5327.2
15°	4002.7	4022.9	4010.1	4000.9	4048.5	4182.3	4405.8	4687.9	5034.1	5112.9	5512.2
17.5°	4306.8	4314.2	4284.9	4198.8	4191.4	4262.9	4475.4	4761.1	5151.3	5237.4	5699.1
20°	4797.8	4785.0	4724.5	4554.2	4457.1	4442.5	4594.5	4871.1	5272.3	5363.8	5900.6
22.5°	5464.6	5449.9	5329.1	5059.8	4843.6	4700.8	4766.7	5014.0	5407.8	5510.4	6096.6
25°	6296.4	6276.2	6098.4	5732.1	5396.8	5043.3	5001.2	5202.7	5574.6	5669.8	6301.8
27.5°	7267.2	7250.7	7058.4	6574.8	6091.2	5512.2	5292.4	5424.3	5748.6	5856.6	6532.6
30°	8311.4	8359.1	8018.4	7498.1	6886.2	6124.2	5684.4	5697.3	5973.9	6071.0	6813.0
32.5°	9538.9	9621.3	9211.0	8551.5	7716.1	6789.1	6179.1	6078.4	6301.8	6382.5	7166.5
35°	10755.2	10848.7	10507.9	9778.8	8817.0	7573.2	6695.7	6516.1	6737.8	6825.8	7635.4
37.5°	11806.8	11931.3	11755.4	11121.7	9995.0	8518.5	7369.9	7030.9	7274.5	7384.5	8265.6
40°	12636.6	12827.2	12814.3	12418.6	11383.5	9665.2	8225.3	7666.6	7941.4	8060.5	9029.5
42.5°	13310.8	13475.7	13618.6	13598.4	12832.6	10967.7	9231.0	8492.8	8701.6	8839.0	9888.7
45°	13776.1	13951.9	14259.7	14591.3	14226.7	12361.8	10383.4	9472.8	9663.4	9870.4	10912.8
47.5°	14191.9	14391.6	14791.0	15316.7	15410.2	13761.4	11645.5	10614.2	10788.2	11002.6	11940.4
50°	14228.5	14400.7	15019.9	15765.5	16251.0	15106.0	13001.2	11894.7	12057.7	12286.7	13041.5
52.5°	13343.8	13614.9	14695.7	15752.7	16637.5	16230.9	14347.6	13226.5	13409.7	13684.5	14180.9
55°	10357.7	10755.2	13744.9	15261.7	16500.1	16958.1	15628.2	14642.5	14877.1	15164.7	15327.7
57.5°	8921.5	9095.5	10910.9	14367.7	15873.7	17146.8	16708.9	16073.3	16450.6	16765.7	16540.4
60°	8018.4	8163.1	9236.6	12977.3	15049.3	16848.2	17544.3	17407.0	18059.1	18434.6	17780.7
62.5°	7051.1	7188.4	8164.8	10835.8	13994.0	16351.7	18072.0	18638.0	19707.9	20118.2	18949.4
65°	6091.2	6208.4	7144.5	9104.7	12653.1	15855.3	18344.9	19702.3	21233.8	21658.9	19920.4
67.5°	5021.3	5118.4	6003.2	7681.2	11022.6	15175.6	18480.4	20539.6	22562.0	22926.5	20400.3
70°	3623.6	3698.6	4612.8	6074.7	8976.4	14006.9	18425.5	21133.0	23250.8	23542.1	20037.6
72.5°	1712.9	1780.6	2854.1	3944.1	6340.2	11731.6	17313.5	20662.3	22551.0	22406.3	17817.3
75°	914.1	972.7	1639.6	2163.5	3348.8	8042.2	14168.1	17799.0	18936.6	18233.1	13167.9
77.5°	619.2	665.0	1014.9	1298.9	1529.6	3817.7	9106.5	12323.4	11856.2	10694.7	6595.0
80°	491.0	538.5	831.7	879.3	740.0	1379.4	3762.8	5704.6	4098.1	3277.3	1875.9
82.5°	377.4	430.5	699.8	637.6	403.0	566.1	1095.5	1804.4	1049.7	798.7	454.3
85°	230.8	287.6	549.6	406.7	227.1	258.3	371.9	501.9	320.6	267.4	163.1
87.5°	117.3	164.9	278.5	148.4	102.6	60.5	98.9	98.9	84.3	73.3	42.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4990.1	4990.1	4990.1	4990.1	4990.1	4990.1	4990.1	4990.1	4990.1	4990.1	4990.1
2.5°	5008.5	5045.2	5107.4	5166.0	5211.8	5255.8	5299.8	5323.5	5330.9	5360.2	5376.7
5°	5067.1	5134.8	5255.8	5369.4	5440.8	5484.8	5515.9	5534.3	5537.9	5547.1	5561.8
7.5°	5175.2	5283.3	5451.8	5565.3	5618.5	5614.8	5602.0	5556.2	5537.9	5521.5	5525.1
10°	5327.2	5470.1	5677.2	5755.9	5722.9	5635.0	5521.5	5387.7	5325.4	5264.9	5246.7
12.5°	5515.9	5697.3	5900.6	5896.9	5734.0	5508.6	5244.8	5039.6	4909.5	4816.2	4794.1
15°	5744.9	5953.7	6109.5	5984.9	5627.7	5222.8	4836.3	4568.8	4451.6	4349.0	4338.0
17.5°	5981.2	6204.7	6276.2	5957.4	5360.2	4799.7	4361.8	4151.1	4035.7	3980.8	3997.3
20°	6212.0	6433.7	6375.1	5799.9	4953.5	4319.7	3929.4	3814.0	3790.2	3803.1	3797.6
22.5°	6455.7	6653.6	6395.3	5495.7	4435.1	3828.7	3614.4	3618.0	3671.1	3709.7	3718.8
25°	6704.8	6838.6	6342.1	5056.1	3878.2	3467.9	3414.7	3473.3	3577.8	3652.9	3673.0
27.5°	6944.8	7003.4	6226.7	4512.0	3400.0	3209.5	3218.7	3339.6	3497.1	3601.5	3627.2
30°	7216.0	7150.0	6005.1	3900.1	3068.4	2987.9	3064.9	3205.9	3363.4	3456.8	3478.8
32.5°	7521.9	7276.4	5653.3	3334.1	2834.0	2810.1	2936.6	3028.2	3097.8	3125.2	3139.9
35°	7903.0	7454.1	5202.7	2936.6	2623.3	2680.1	2801.0	2755.2	2727.7	2713.1	2727.7
37.5°	8397.5	7694.1	4675.0	2678.2	2452.9	2586.7	2636.1	2493.2	2385.2	2332.1	2344.9
40°	8992.9	8045.8	4167.6	2478.6	2344.9	2506.0	2419.9	2247.7	2110.4	2035.2	2040.8
42.5°	9654.3	8414.0	3740.8	2328.4	2284.4	2440.1	2260.6	2055.4	1833.7	1809.9	1833.7
45°	10348.5	8793.3	3449.5	2213.0	2255.1	2383.3	2169.0	1837.4	1679.9	1776.9	1828.3
47.5°	11042.8	9141.3	3273.6	2126.9	2240.4	2319.2	2088.4	1716.5	1604.7	1745.8	1811.8
50°	11815.9	9452.8	3194.9	2064.6	2223.9	2293.5	1967.5	1685.4	1526.0	1619.4	1689.0
52.5°	12583.5	9694.6	3136.3	2002.3	2200.2	2273.4	1908.9	1648.7	1430.7	1436.2	1474.7
55°	13349.2	9852.1	3072.1	1919.8	2147.0	2229.5	1903.3	1608.4	1359.3	1333.6	1352.0
57.5°	14166.2	9941.9	2993.4	1828.3	2055.4	2117.8	1897.9	1577.3	1337.3	1295.2	1300.6
60°	14998.0	10073.7	2890.8	1716.5	1932.6	1984.0	1885.1	1566.3	1324.5	1253.1	1258.5
62.5°	15743.6	10119.5	2768.0	1610.3	1775.1	1852.1	1857.6	1557.2	1289.7	1167.0	1167.0
65°	16232.7	9921.7	2553.7	1489.3	1604.7	1716.5	1804.4	1526.0	1227.4	1104.6	1104.6
67.5°	16212.5	9357.4	2218.5	1333.6	1439.9	1566.3	1727.5	1472.8	1152.3	1027.7	1033.2
70°	15457.8	8243.7	1793.4	1152.3	1258.5	1405.1	1628.6	1394.1	1062.5	943.4	954.5
72.5°	13257.7	6452.1	1302.5	939.8	1047.9	1238.4	1500.4	1298.9	970.9	868.4	862.8
75°	9471.0	4083.4	883.0	721.8	815.2	1049.7	1341.0	1187.1	886.6	872.0	822.6
77.5°	4838.1	1951.0	584.4	527.6	567.8	828.0	1126.7	1060.7	899.4	720.0	641.1
80°	1573.6	720.0	368.2	359.1	377.4	551.4	872.0	870.1	681.5	489.1	432.3
82.5°	501.9	309.5	240.0	230.8	221.7	346.2	608.2	688.8	459.8	309.5	307.8
85°	199.7	185.0	141.0	130.1	93.4	163.1	318.8	458.0	342.6	223.4	229.0
87.5°	73.3	73.3	38.4	27.5	20.2	54.9	86.1	137.4	196.0	115.4	113.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)