

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: P968791

Luminaire Tested: **NAV-SB5C-735-U-T3R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968791
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-735-U-T3R
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 39807.9 lumens
Efficiency: N/A
Efficacy: 159.6 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B3 - U0 - G5

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



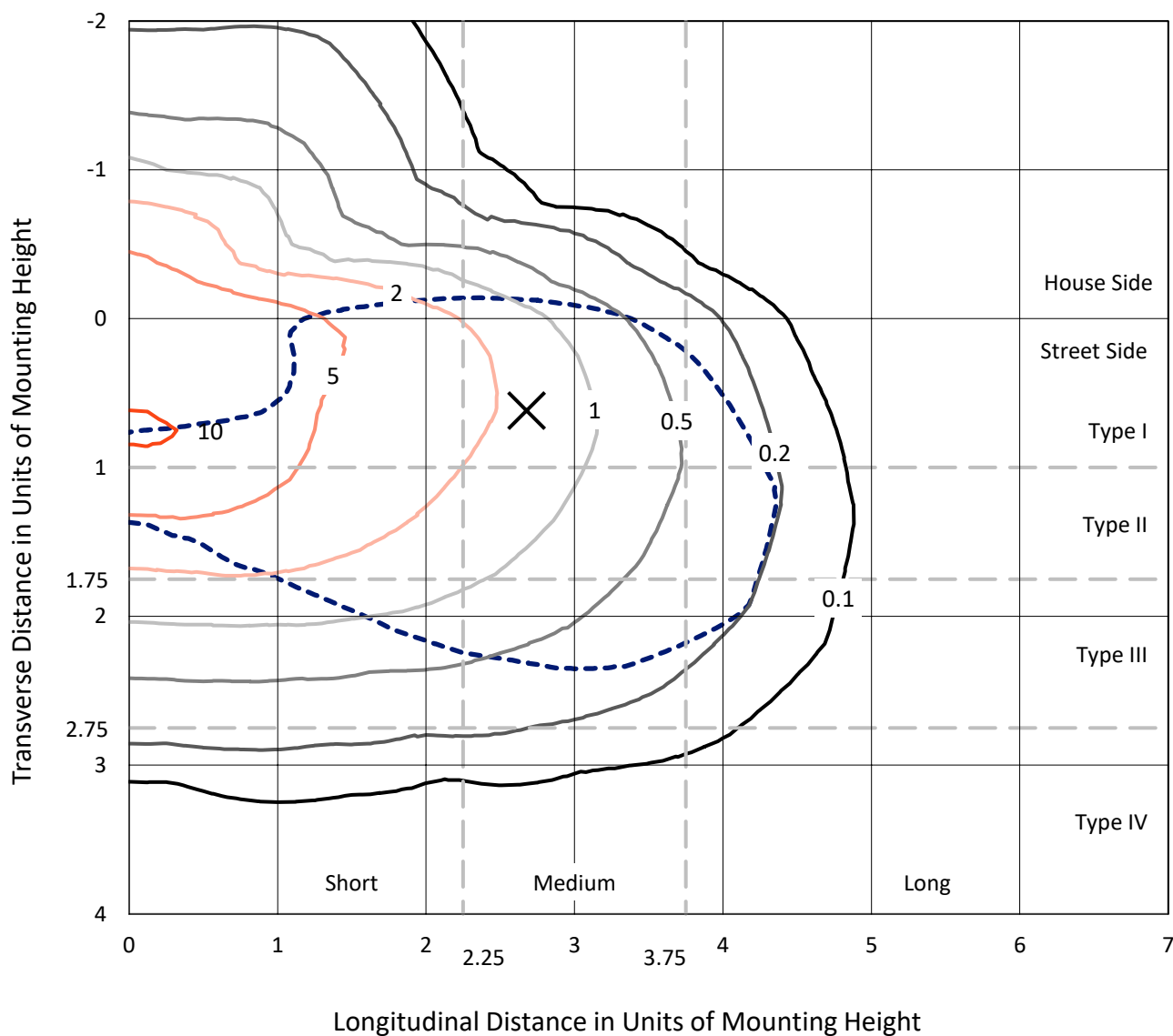
REPORT NUMBER: P968791

CATALOG NUMBER: NAV-SB5C-735-U-T3R

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

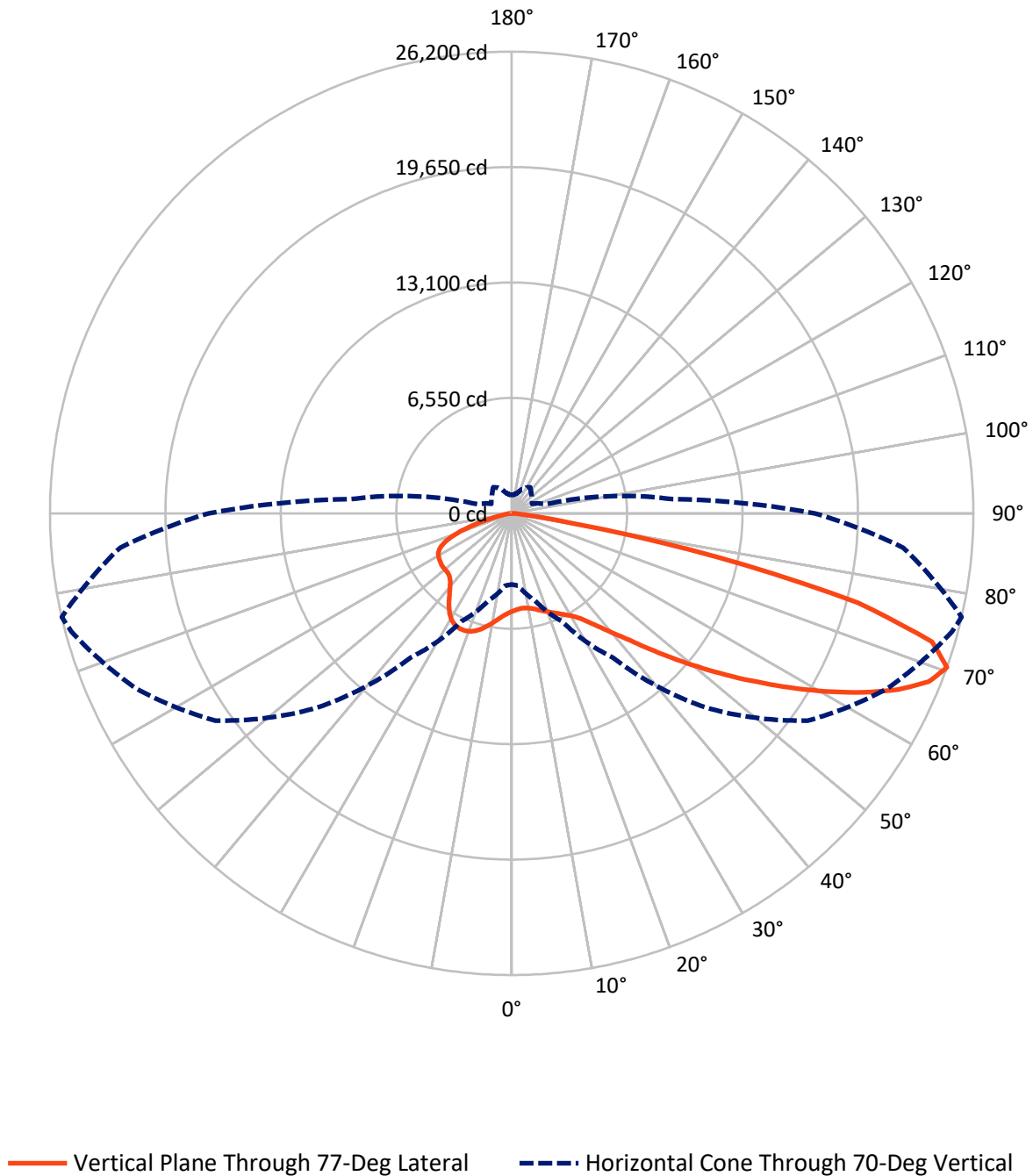
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.5 fc
Type III - Medium - N/A

REPORT NUMBER: P968791
CATALOG NUMBER: NAV-SB5C-735-U-T3R

Luminous Intensity Polar Plot



REPORT NUMBER: P968791

CATALOG NUMBER: NAV-SB5C-735-U-T3R

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8717.3	0.0	8717.3
	% Fixture	21.9	0.0	21.9
Street Side	Lumens	31090.6	0.0	31090.6
	% Fixture	78.1	0.0	78.1
Total	Lumens	39807.9	0.0	39807.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	529.7	1.3
10°-20°	1528.7	3.8
20°-30°	2614.2	6.6
30°-40°	4203.9	10.6
40°-50°	6563.4	16.5
50°-60°	8767.2	22.0
60°-70°	9344.4	23.5
70°-80°	5752.4	14.5
80°-90°	504.1	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°	39807.9	100.0
0°-180°	39807.9	100.0

Coefficient of Utilization



REPORT NUMBER: P968791

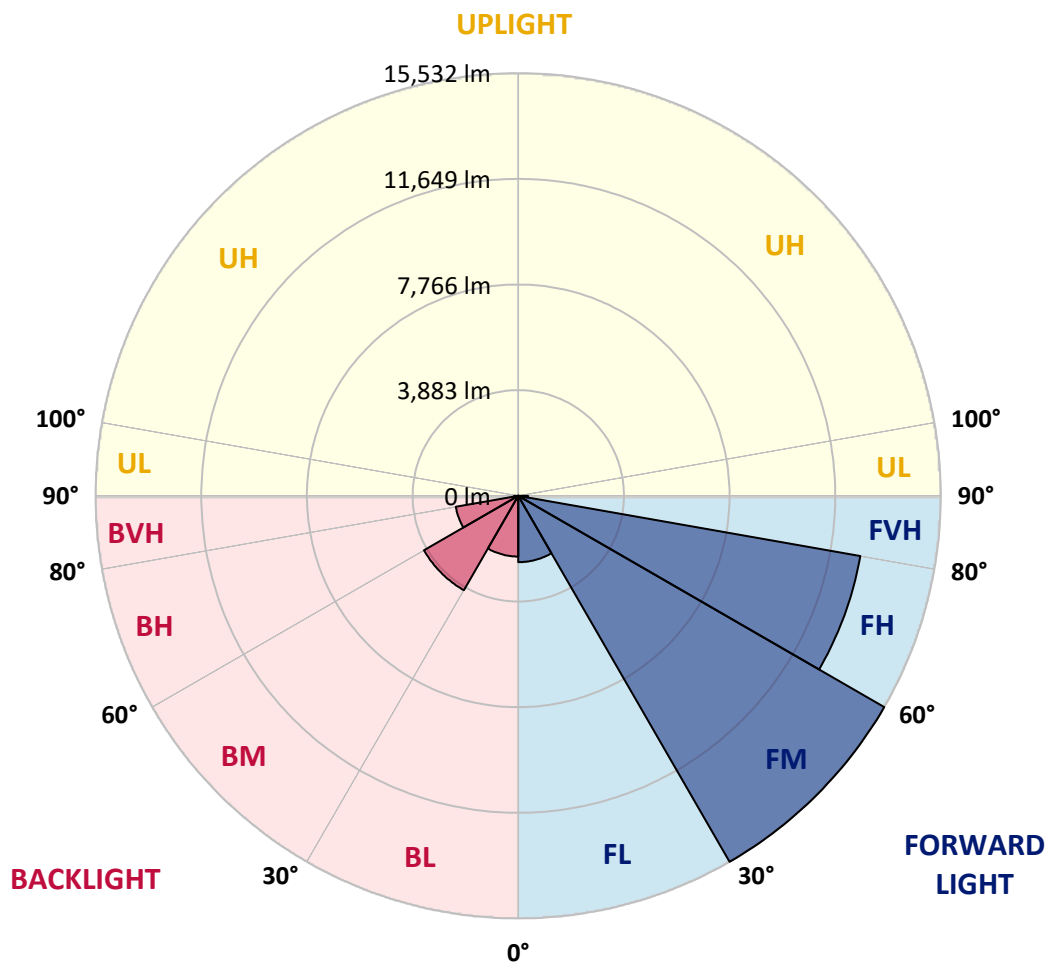
CATALOG NUMBER: NAV-SB5C-735-U-T3R

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2438.9	6.1			
FM	(30°-60°)	15532.2	39.0			
FH	(60°-80°)	12767.1	32.1			G5
FVH	(80°-90°)	352.5	0.9			G3/500
BL	(0°-30°)	2233.7	5.6	B3/2500		
BM	(30°-60°)	4002.3	10.1	B3/5000		
BH	(60°-80°)	2329.8	5.9	B3/2500		G3/2500
BVH	(80°-90°)	151.6	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-G5

Type III Medium



REPORT NUMBER: P968791

CATALOG NUMBER: NAV-SB5C-735-U-T3R

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	5553.6	5553.6	5553.6	5553.6	5553.6	5553.6	5553.6	5553.6	5553.6	5553.6	5553.6
2.5°	5119.4	5117.3	5143.8	5152.0	5200.8	5235.5	5300.8	5370.1	5459.8	5470.0	5525.1
5°	4823.6	4823.6	4854.3	4886.9	4950.1	5019.4	5119.4	5239.6	5394.6	5419.0	5555.6
7.5°	4572.9	4589.2	4615.8	4678.9	4752.3	4852.2	5005.2	5176.4	5380.2	5419.0	5639.2
10°	4371.1	4389.5	4422.1	4473.0	4583.1	4721.8	4921.5	5141.7	5415.0	5476.1	5761.5
12.5°	4307.9	4326.2	4344.6	4383.3	4485.3	4648.4	4886.9	5158.0	5498.5	5559.7	5928.7
15°	4454.6	4477.1	4462.8	4452.6	4505.7	4654.5	4903.2	5217.1	5602.5	5690.2	6134.6
17.5°	4793.1	4801.3	4768.6	4672.9	4664.7	4744.2	4980.7	5298.7	5733.0	5828.8	6342.6
20°	5339.5	5325.2	5257.9	5068.3	4960.3	4944.0	5113.2	5421.0	5867.5	5969.5	6566.9
22.5°	6081.6	6065.3	5930.8	5631.0	5390.5	5231.4	5304.9	5580.1	6018.4	6132.6	6785.0
25°	7007.2	6984.8	6787.0	6379.3	6006.2	5612.7	5565.7	5790.0	6203.9	6309.9	7013.4
27.5°	8087.8	8069.4	7855.3	7317.1	6778.8	6134.6	5890.0	6036.7	6397.6	6517.9	7270.2
30°	9249.8	9302.8	8923.6	8344.6	7663.7	6815.5	6326.3	6340.5	6648.4	6756.4	7582.1
32.5°	10615.8	10707.6	10250.8	9516.9	8587.2	7555.6	6876.7	6764.6	7013.4	7103.0	7975.6
35°	11969.5	12073.5	11694.3	10882.8	9812.5	8428.2	7451.6	7251.9	7498.5	7596.4	8497.6
37.5°	13139.8	13278.4	13082.7	12377.3	11123.4	9480.2	8201.9	7824.7	8095.9	8218.2	9198.9
40°	14063.3	14275.4	14261.1	13820.7	12668.8	10756.5	9154.0	8532.2	8838.0	8970.5	10049.0
42.5°	14813.6	14997.1	15156.1	15133.7	14281.5	12206.0	10273.3	9451.6	9684.1	9837.0	11005.2
45°	15331.4	15527.1	15869.7	16238.7	15833.0	13757.6	11555.6	10542.4	10754.4	10984.8	12144.8
47.5°	15794.2	16016.4	16460.9	17046.1	17150.0	15315.1	12960.4	11812.5	12006.2	12244.8	13288.6
50°	15835.0	16026.7	16715.8	17545.5	18085.8	16811.5	14469.0	13237.7	13419.1	13673.9	14513.9
52.5°	14850.3	15152.1	16354.9	17531.3	18516.0	18063.4	15967.6	14719.8	14923.7	15229.4	15782.0
55°	11527.2	11969.5	15296.8	16984.9	18363.1	18872.7	17392.6	16295.8	16556.7	16876.8	17058.3
57.5°	9928.8	10122.4	12142.9	15990.0	17665.8	19082.7	18595.4	17888.0	18308.0	18658.7	18407.9
60°	8923.6	9084.7	10279.4	14442.6	16748.4	18750.4	19525.1	19372.3	20098.1	20516.0	19788.1
62.5°	7847.2	8000.1	9086.7	12059.2	15574.1	18198.0	20112.3	20742.3	21932.9	22389.6	21088.9
65°	6778.8	6909.3	7951.1	10132.6	14081.7	17645.4	20416.1	21926.8	23631.2	24104.2	22169.4
67.5°	5588.2	5696.2	6681.0	8548.5	12267.2	16889.0	20566.9	22858.5	25109.3	25515.0	22703.5
70°	4032.7	4116.3	5133.6	6760.5	9989.9	15588.3	20505.8	23519.0	25875.9	26200.0	22299.9
72.5°	1906.2	1981.6	3176.4	4389.5	7056.1	13056.1	19268.3	22995.2	25097.1	24936.0	19828.9
75°	1017.3	1082.6	1824.7	2407.7	3726.8	8950.1	15767.8	19808.5	21074.6	20291.7	14654.5
77.5°	689.1	740.0	1129.4	1445.5	1702.3	4248.7	10134.7	13714.7	13194.8	11902.3	7339.5
80°	546.4	599.4	925.6	978.6	823.7	1535.1	4187.6	6348.6	4560.7	3647.4	2087.7
82.5°	419.9	479.1	778.8	709.5	448.5	630.0	1219.1	2008.2	1168.2	888.9	505.6
85°	256.9	320.1	611.6	452.6	252.8	287.5	413.9	558.6	356.8	297.7	181.4
87.5°	130.5	183.5	309.9	165.1	114.2	67.2	110.1	110.1	93.8	81.6	46.8
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: P968791

CATALOG NUMBER: NAV-SB5C-735-U-T3R

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5553.6	5553.6	5553.6	5553.6	5553.6	5553.6	5553.6	5553.6	5553.6	5553.6	5553.6
2.5°	5574.0	5614.7	5684.0	5749.3	5800.3	5849.2	5898.2	5924.6	5932.8	5965.4	5983.7
5°	5639.2	5714.6	5849.2	5975.5	6055.1	6104.1	6138.7	6159.1	6163.1	6173.4	6189.7
7.5°	5759.5	5879.8	6067.4	6193.8	6252.9	6248.8	6234.6	6183.5	6163.1	6144.8	6148.9
10°	5928.7	6087.7	6318.1	6405.7	6369.0	6271.3	6144.8	5995.9	5926.7	5859.4	5839.0
12.5°	6138.7	6340.5	6566.9	6562.8	6381.3	6130.5	5837.0	5608.6	5463.9	5359.9	5335.4
15°	6393.5	6625.9	6799.2	6660.7	6263.1	5812.5	5382.3	5084.6	4954.1	4840.0	4827.8
17.5°	6656.6	6905.2	6984.8	6630.0	5965.4	5341.6	4854.3	4619.8	4491.3	4430.3	4448.6
20°	6913.4	7160.1	7094.8	6454.7	5512.8	4807.4	4373.2	4244.7	4218.2	4232.4	4226.4
22.5°	7184.5	7404.8	7117.3	6116.3	4935.8	4261.0	4022.5	4026.5	4085.6	4128.5	4138.6
25°	7461.8	7610.6	7058.2	5626.9	4316.1	3859.3	3800.3	3865.5	3981.7	4065.3	4087.7
27.5°	7728.9	7794.2	6929.7	5021.5	3783.9	3571.9	3582.1	3716.6	3892.0	4008.2	4036.8
30°	8030.7	7957.3	6683.0	4340.5	3414.9	3325.2	3410.8	3567.8	3743.2	3847.1	3871.6
32.5°	8371.2	8097.9	6291.6	3710.5	3153.9	3127.5	3268.1	3370.1	3447.5	3478.1	3494.4
35°	8795.2	8295.7	5790.0	3268.1	2919.5	2982.6	3117.2	3066.3	3035.7	3019.4	3035.7
37.5°	9345.6	8562.7	5202.9	2980.7	2729.9	2878.7	2933.8	2774.8	2654.4	2595.3	2609.6
40°	10008.2	8954.2	4638.1	2758.5	2609.6	2789.0	2693.2	2501.5	2348.7	2265.0	2271.2
42.5°	10744.3	9364.0	4163.1	2591.3	2542.3	2715.6	2515.9	2287.5	2040.8	2014.3	2040.8
45°	11516.9	9786.0	3838.9	2462.8	2509.7	2652.4	2413.9	2044.9	1869.5	1977.6	2034.7
47.5°	12289.6	10173.4	3643.3	2367.0	2493.4	2581.1	2324.2	1910.3	1786.0	1942.9	2016.3
50°	13149.9	10520.0	3555.6	2297.6	2475.1	2552.6	2189.6	1875.6	1698.3	1802.3	1879.7
52.5°	14004.2	10789.0	3490.3	2228.4	2448.5	2530.1	2124.4	1834.9	1592.2	1598.4	1641.2
55°	14856.5	10964.4	3419.0	2136.6	2389.4	2481.1	2118.3	1790.1	1512.8	1484.2	1504.6
57.5°	15765.7	11064.4	3331.4	2034.7	2287.5	2356.8	2112.1	1755.4	1488.3	1441.4	1447.5
60°	16691.3	11211.1	3217.2	1910.3	2150.9	2208.0	2097.9	1743.1	1474.1	1394.5	1400.7
62.5°	17521.0	11262.1	3080.5	1792.1	1975.6	2061.2	2067.3	1733.0	1435.3	1298.7	1298.7
65°	18065.4	11041.9	2842.0	1657.5	1786.0	1910.3	2008.2	1698.3	1365.9	1229.4	1229.4
67.5°	18043.0	10414.0	2468.9	1484.2	1602.5	1743.1	1922.6	1639.2	1282.4	1143.7	1149.8
70°	17203.0	9174.4	1996.0	1282.4	1400.7	1563.7	1812.4	1551.5	1182.4	1050.0	1062.2
72.5°	14754.5	7180.5	1449.6	1045.9	1166.1	1378.2	1669.7	1445.5	1080.6	966.4	960.2
75°	10540.4	4544.3	982.7	803.3	907.2	1168.2	1492.4	1321.1	986.8	970.5	915.4
77.5°	5384.3	2171.3	650.4	587.1	632.0	921.5	1253.9	1180.4	1001.0	801.2	713.6
80°	1751.3	801.2	409.8	399.5	419.9	613.7	970.5	968.4	758.4	544.4	481.1
82.5°	558.6	344.5	267.1	256.9	246.7	385.3	676.9	766.6	511.7	344.5	342.6
85°	222.2	205.9	157.0	144.7	103.9	181.4	354.8	509.7	381.2	248.8	254.8
87.5°	81.6	81.6	42.8	30.5	22.4	61.2	95.8	152.9	218.1	128.4	126.4
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)