

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: P961392

Luminaire Tested: **NAV-SB2A-735-U-AFL**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961392
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-14)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2A-735-U-AFL
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9351.1 lumens
Efficiency: N/A
Efficacy: 163.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G1

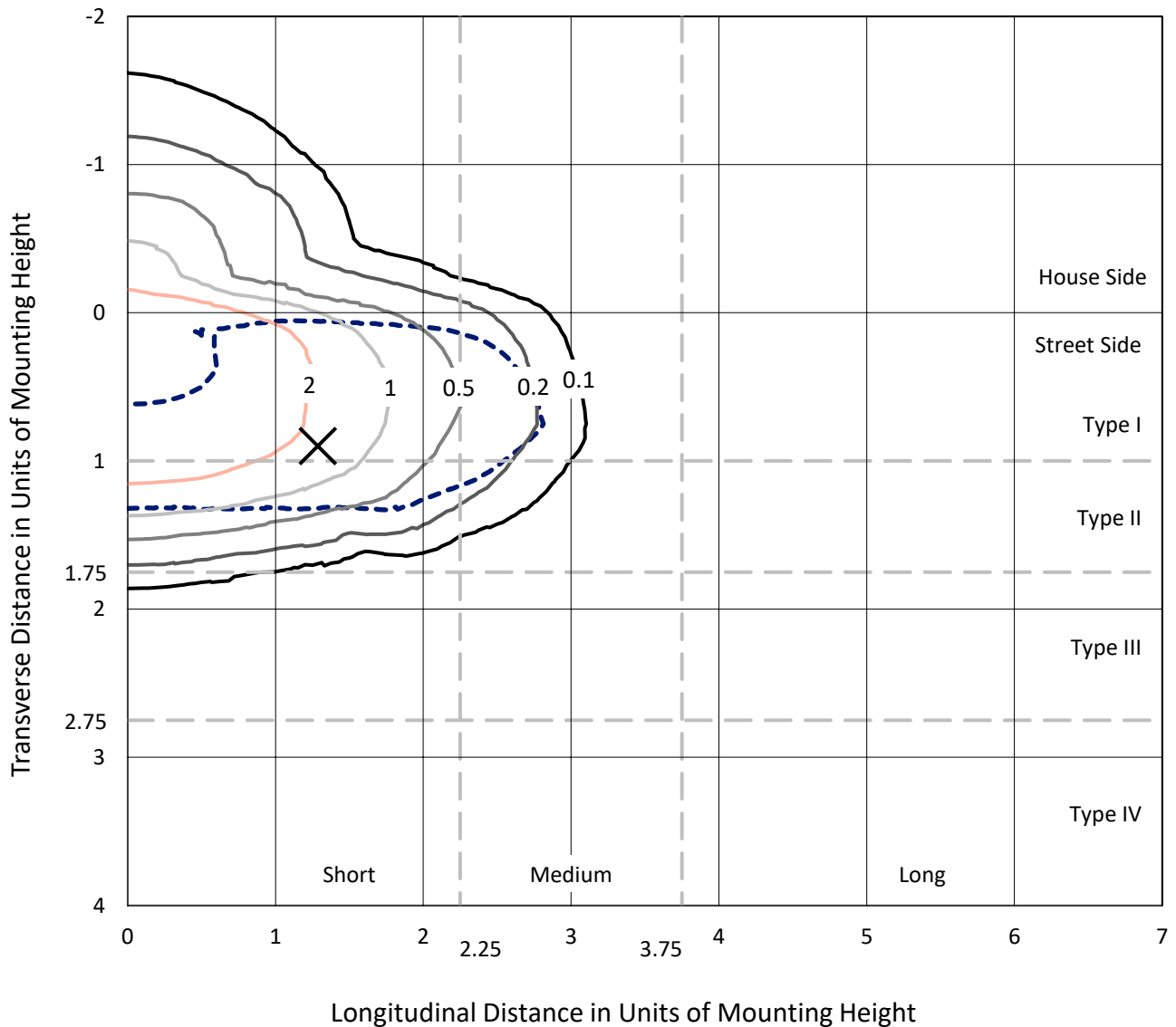
Input Watts (W): 57.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

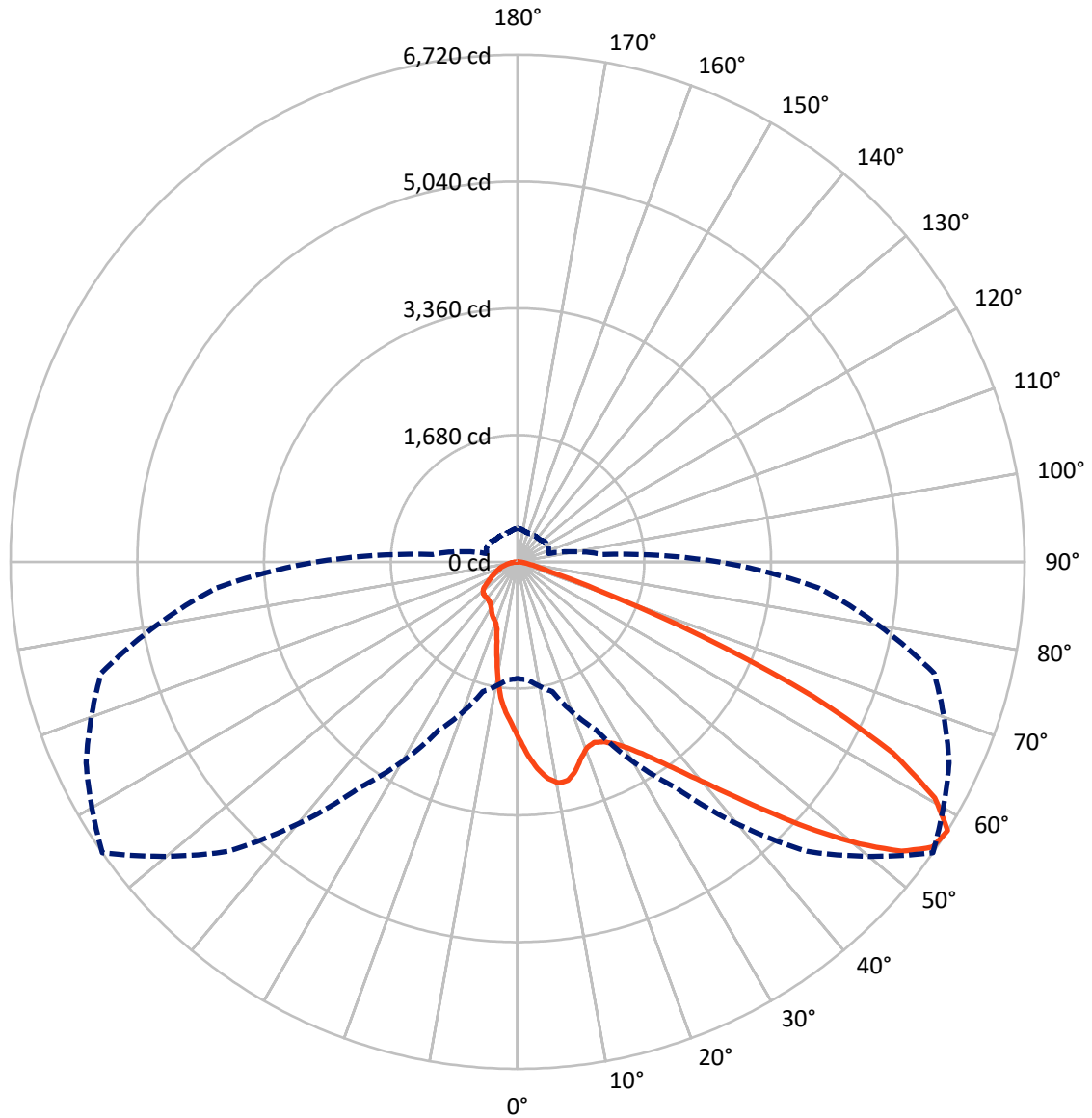
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.5 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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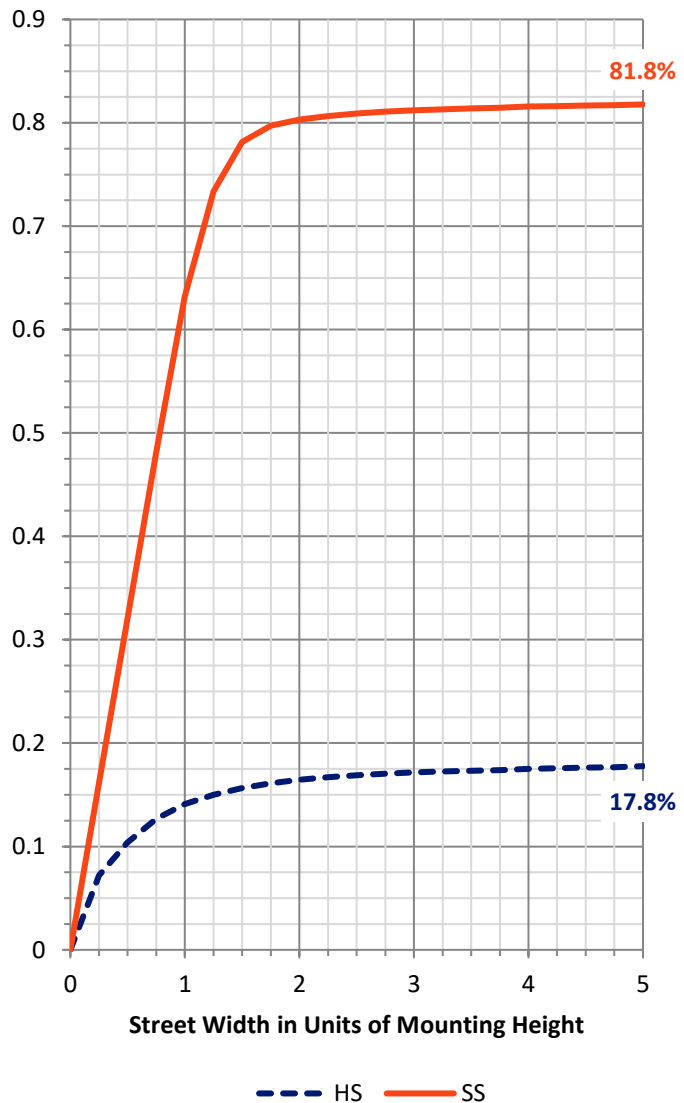
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1692.0	0.0	1692.0
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	7659.1	0.0	7659.1
	% Fixture	81.9	0.0	81.9
Total	Lumens	9351.1	0.0	9351.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	217.4	2.3
10°-20°	548.8	5.9
20°-30°	875.7	9.4
30°-40°	1386.5	14.8
40°-50°	2122.1	22.7
50°-60°	2273.0	24.3
60°-70°	1430.0	15.3
70°-80°	422.9	4.5
80°-90°	74.8	0.8
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°	9351.1	100.0
0°-180°	9351.1	100.0

Coefficient of Utilization

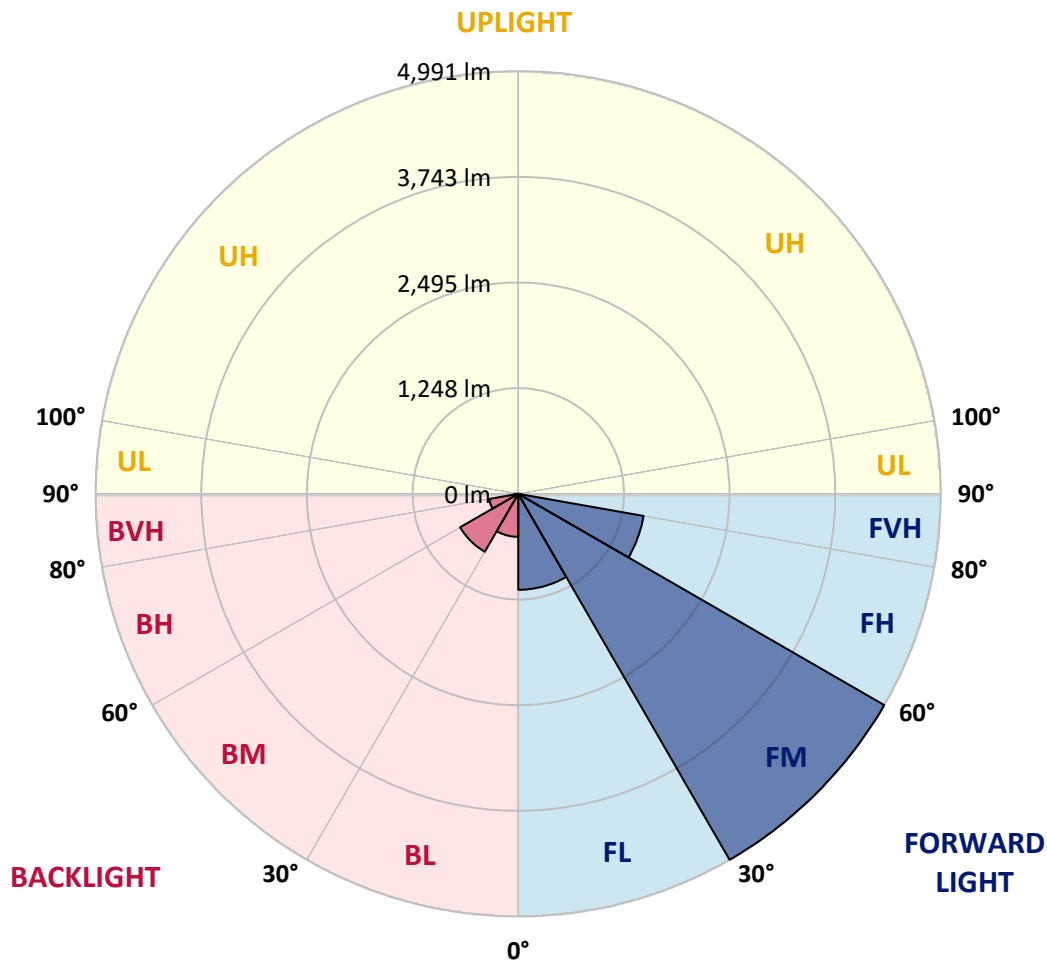


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1133.4	12.1			
FM (30°-60°)	4990.7	53.4			
FH (60°-80°)	1503.4	16.1			G1/1800
FVH (80°-90°)	31.6	0.3			G1/100
BL (0°-30°)	508.6	5.4	B2/1000		
BM (30°-60°)	790.8	8.5	B1/1000		
BH (60°-80°)	349.4	3.7	B1/500		G1/500
BVH (80°-90°)	43.2	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G1
 Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2343.0	2343.0	2343.0	2343.0	2343.0	2343.0	2343.0	2343.0	2343.0	2343.0	2343.0
2.5°	2688.3	2686.3	2697.0	2660.7	2636.0	2602.7	2558.7	2502.6	2442.2	2378.4	2350.8
5°	2930.4	2913.5	2924.6	2897.6	2870.5	2820.2	2754.9	2663.6	2551.9	2424.7	2357.1
7.5°	2892.2	2880.7	2909.2	2933.3	2953.6	2947.3	2899.5	2803.8	2659.7	2475.1	2376.9
10°	2584.3	2571.2	2611.4	2695.0	2817.8	2924.6	2982.6	2923.2	2770.0	2530.1	2396.2
12.5°	2312.6	2306.4	2332.9	2400.7	2536.9	2741.9	2972.0	3027.5	2884.5	2595.4	2422.4
15°	2196.6	2188.9	2205.8	2240.1	2327.2	2518.1	2875.3	3099.1	2997.1	2670.8	2463.9
17.5°	2171.0	2162.2	2169.5	2187.5	2243.5	2389.0	2729.3	3134.4	3114.6	2754.9	2498.7
20°	2218.4	2211.1	2212.1	2211.1	2250.3	2365.8	2627.8	3120.9	3217.1	2832.3	2532.6
22.5°	2332.9	2320.8	2321.3	2295.7	2317.0	2406.4	2601.2	3084.6	3308.4	2899.9	2558.2
25°	2519.6	2497.7	2502.1	2436.8	2431.1	2497.3	2642.8	3056.5	3399.3	2954.2	2563.0
27.5°	2774.8	2750.1	2737.1	2639.9	2593.5	2626.4	2727.4	3066.3	3485.4	3001.0	2550.9
30°	3093.8	3063.8	3037.3	2899.5	2815.4	2803.3	2858.8	3130.0	3586.9	3050.3	2530.1
32.5°	3484.9	3450.0	3401.8	3219.0	3100.6	3037.3	3029.1	3243.7	3705.8	3113.1	2519.6
35°	3950.5	3904.9	3836.4	3599.9	3450.0	3320.5	3253.4	3407.5	3868.8	3207.9	2531.6
37.5°	4429.9	4378.7	4315.9	4034.5	3850.3	3659.4	3526.9	3629.9	4085.8	3336.5	2563.5
40°	4872.2	4814.7	4756.2	4505.8	4308.2	4078.1	3861.9	3911.3	4351.1	3490.2	2617.6
42.5°	5133.3	5090.8	5068.5	4933.2	4780.4	4546.9	4278.7	4244.8	4649.4	3667.1	2679.6
45°	5121.7	5104.3	5173.0	5229.0	5192.8	5063.2	4766.9	4613.6	4948.6	3820.4	2736.5
47.5°	4848.0	4859.7	5013.0	5328.2	5466.8	5534.5	5322.8	4975.8	5208.7	3935.0	2762.2
50°	4103.7	4113.3	4468.2	5147.8	5537.5	5918.9	5874.4	5329.1	5410.3	4005.0	2756.4
52.5°	3514.4	3520.7	3672.9	4613.1	5304.5	6112.2	6371.3	5662.2	5557.8	4024.4	2724.0
55°	2647.2	2668.9	2839.6	3619.3	4698.2	5958.9	6673.9	6005.4	5651.0	4026.3	2690.1
57.5°	1546.4	1570.1	1780.8	2456.7	3651.7	5424.8	6719.8	6309.9	5714.4	4010.8	2669.8
60°	757.5	767.6	859.5	1291.2	2251.7	4395.6	6350.5	6457.4	5749.6	4002.6	2668.9
62.5°	510.4	509.0	512.9	637.1	1109.5	2824.1	5580.9	6199.2	5730.8	3971.2	2659.3
65°	438.9	433.6	419.1	447.1	574.8	1291.7	4312.0	5428.7	5587.2	3892.4	2593.0
67.5°	379.5	380.0	380.5	371.8	410.4	596.0	2635.1	4276.2	5071.9	3519.2	2337.7
70°	314.3	318.6	320.5	320.5	334.6	391.0	1124.9	2930.9	4000.7	2759.3	1882.8
72.5°	286.2	277.0	278.0	273.2	273.2	297.8	452.9	1661.4	2520.5	1552.3	1149.0
75°	233.5	239.3	240.3	236.9	225.7	227.2	268.8	697.1	1078.5	643.9	568.0
77.5°	201.6	201.6	203.6	201.1	192.4	170.1	179.4	270.2	367.0	263.9	283.7
80°	162.0	161.4	169.6	174.6	160.9	125.7	114.6	149.3	162.9	116.0	147.4
82.5°	78.8	83.6	116.5	132.9	122.3	90.9	70.1	92.9	87.0	51.2	66.2
85°	45.9	43.5	52.2	74.0	70.1	50.2	33.8	48.4	45.4	26.1	26.5
87.5°	14.5	13.5	10.7	25.1	20.3	14.0	9.2	14.0	12.6	5.8	5.8
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2343.0	2343.0	2343.0	2343.0	2343.0	2343.0	2343.0	2343.0	2343.0	2343.0
2.5°	2316.5	2259.4	2202.9	2151.2	2119.7	2099.4	2079.1	2056.5	2047.7	2034.6
5°	2293.3	2183.0	2085.0	2000.4	1923.5	1863.0	1802.2	1752.9	1730.6	1745.6
7.5°	2279.7	2120.2	1968.9	1813.7	1664.4	1545.0	1441.0	1368.1	1335.2	1343.4
10°	2267.7	2049.2	1818.6	1573.5	1358.8	1210.9	1104.5	1049.0	1028.2	1032.6
12.5°	2256.5	1969.4	1637.3	1314.9	1086.7	989.0	958.6	959.1	963.0	965.9
15°	2254.6	1873.2	1434.8	1088.7	939.7	933.5	966.4	987.1	998.2	1001.6
17.5°	2251.7	1758.2	1228.4	934.4	903.9	946.5	976.9	990.5	999.2	999.7
20°	2240.1	1612.1	1037.9	860.9	896.3	933.0	951.8	962.5	969.8	972.1
22.5°	2204.4	1449.8	889.5	828.1	865.3	894.8	917.1	929.1	933.5	936.3
25°	2140.0	1268.0	787.0	796.6	822.3	859.5	877.4	879.8	878.3	882.7
27.5°	2055.9	1073.2	723.1	754.1	787.0	818.9	828.6	827.1	824.2	829.0
30°	1954.4	898.2	682.5	706.2	751.2	780.2	788.9	785.6	779.7	785.0
32.5°	1847.0	755.1	649.2	672.9	721.7	750.2	758.9	755.5	751.2	755.5
35°	1747.0	655.0	618.3	650.7	698.5	726.5	737.7	738.2	738.2	743.4
37.5°	1655.2	596.6	592.7	636.6	682.5	707.7	723.6	724.7	703.9	705.3
40°	1570.1	571.8	581.1	627.5	667.1	691.3	692.3	638.1	599.9	598.9
42.5°	1500.5	567.0	584.5	626.5	656.0	656.9	588.8	546.7	536.1	536.6
45°	1435.2	565.6	592.1	626.5	639.5	567.5	521.6	510.4	511.5	515.3
47.5°	1362.2	559.8	593.6	617.8	592.1	504.7	491.2	486.3	484.4	485.3
50°	1282.5	539.0	575.2	600.3	511.0	477.6	460.7	459.2	461.7	463.1
52.5°	1198.3	505.1	543.9	569.0	473.8	453.9	435.1	438.5	449.1	452.4
55°	1143.3	465.6	502.2	506.1	447.6	431.7	415.7	423.4	443.3	449.6
57.5°	1128.7	423.4	454.9	450.5	414.3	412.4	402.7	409.5	434.6	443.7
60°	1124.4	385.8	408.5	405.1	381.9	391.0	388.7	392.1	400.8	403.6
62.5°	1090.6	355.8	367.0	362.0	352.9	368.8	374.6	367.4	374.1	377.5
65°	1004.5	331.6	326.3	322.9	326.8	341.3	352.9	338.4	344.7	354.3
67.5°	862.4	298.8	284.2	288.1	300.2	307.9	322.9	306.5	311.8	328.2
70°	697.5	257.2	244.2	255.2	266.8	282.8	285.3	274.1	286.7	305.0
72.5°	493.5	215.1	205.9	228.7	232.5	253.3	247.9	242.7	260.0	266.4
75°	342.2	173.5	168.2	185.6	199.7	217.5	213.7	220.0	256.7	259.6
77.5°	216.6	134.9	131.5	142.6	162.0	181.7	188.1	259.6	438.5	455.8
80°	125.7	100.6	96.7	105.4	122.3	140.6	181.3	318.6	289.0	285.7
82.5°	70.1	69.1	64.3	66.7	81.7	101.5	256.2	224.3	182.2	188.1
85°	32.9	40.6	34.8	33.3	45.9	118.9	171.2	128.1	85.1	83.1
87.5°	8.7	7.7	7.7	8.7	19.4	102.5	68.2	54.6	32.4	31.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)