

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: INVUE

Report Number: P597024

Luminaire Tested: **MSA-SA3A-835-U-T4W**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P597024
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-14)
Test Lab: INNOVATIONS CENTER
Issue Date: 5/27/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: MSA-SA3A-835-U-T4W
Description: MESA POST TOP DECORATIVE LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS.
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9805 lumens
Efficiency: N/A
Efficacy: 102.1 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G2

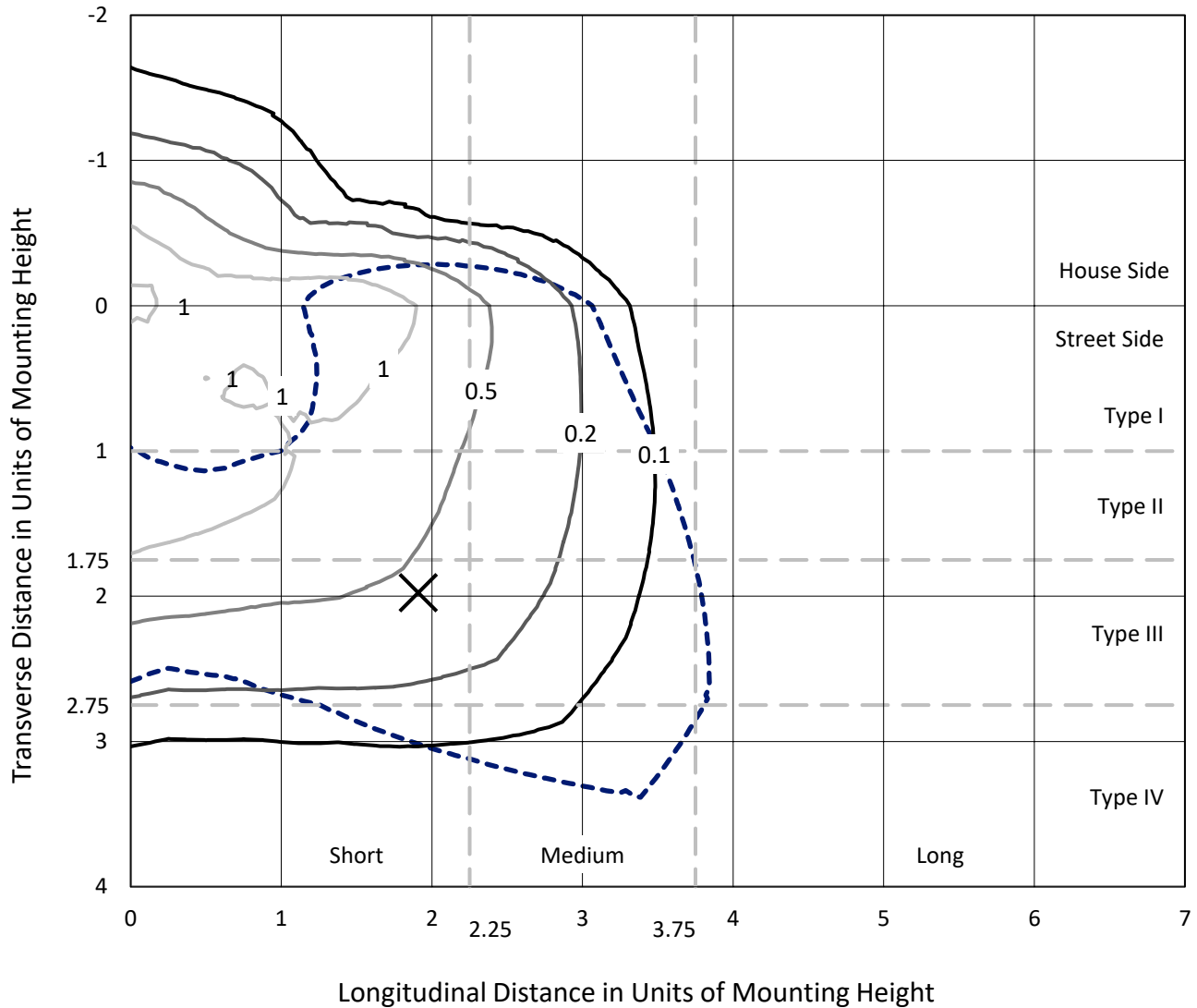
Input Watts (W): 96
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

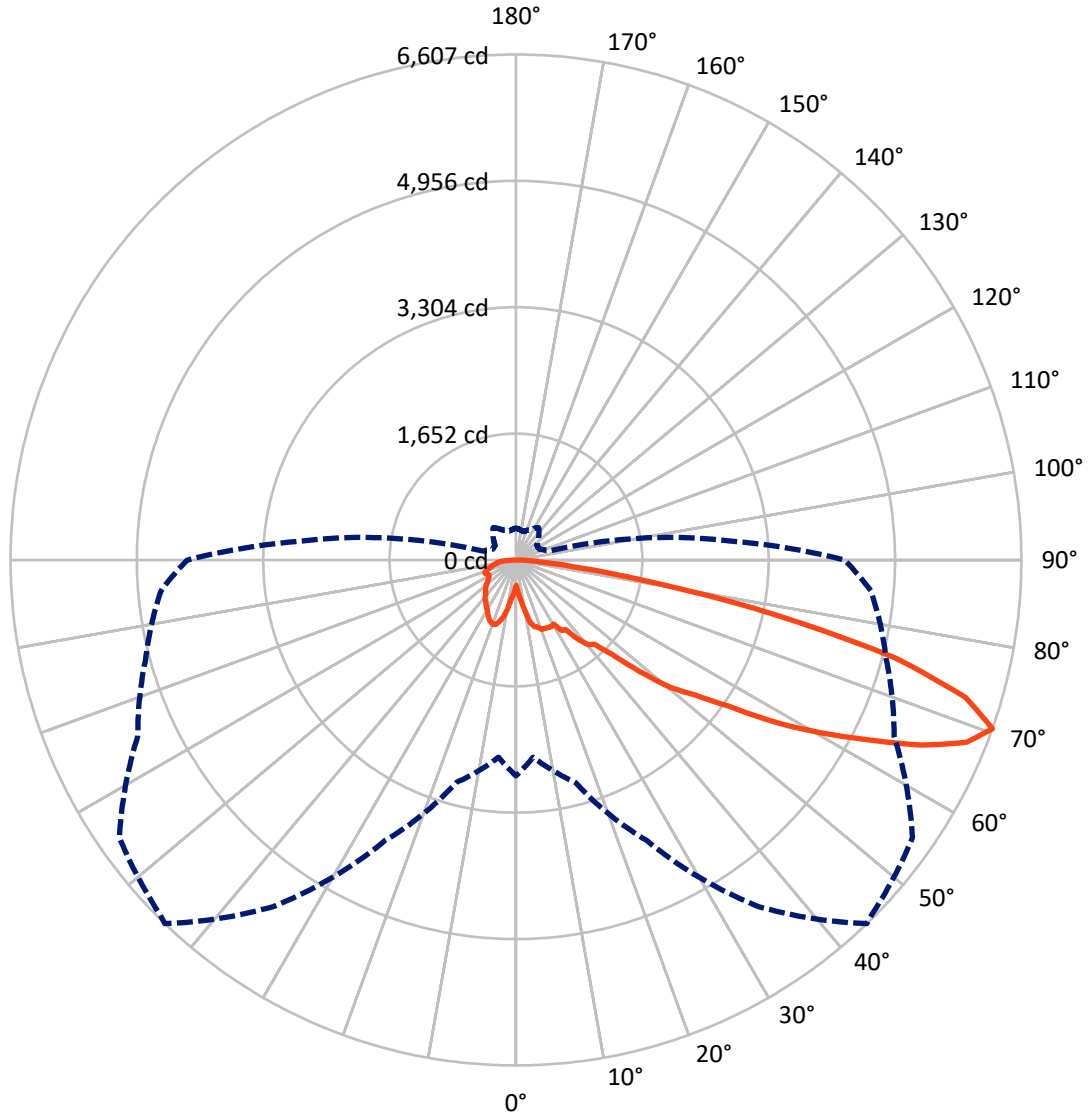
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.9 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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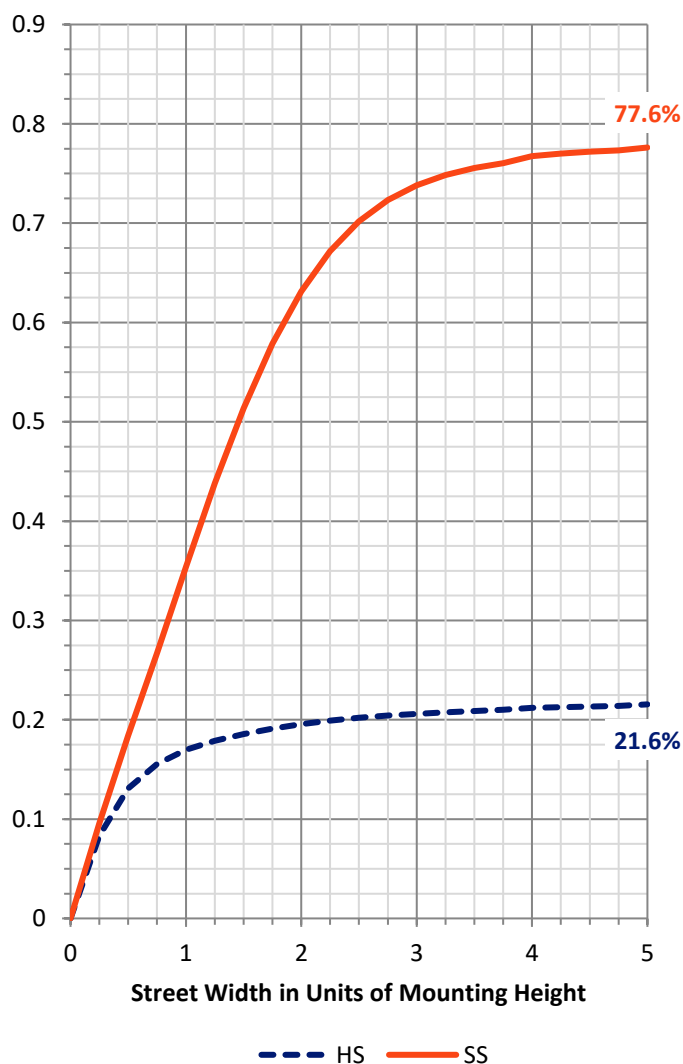
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2163.4	0.0	2163.4
	% Fixture	22.1	0.0	22.1
Street Side	Lumens	7641.6	0.0	7641.6
	% Fixture	77.9	0.0	77.9
Total	Lumens	9805.0	0.0	9805.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.3	0.5
10°-20°	240.6	2.5
20°-30°	449.7	4.6
30°-40°	721.8	7.4
40°-50°	1218.3	12.4
50°-60°	2171.1	22.1
60°-70°	2969.7	30.3
70°-80°	1746.4	17.8
80°-90°	235.1	2.4
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°	9805.0	100.0
0°-180°	9805.0	100.0

Coefficient of Utilization



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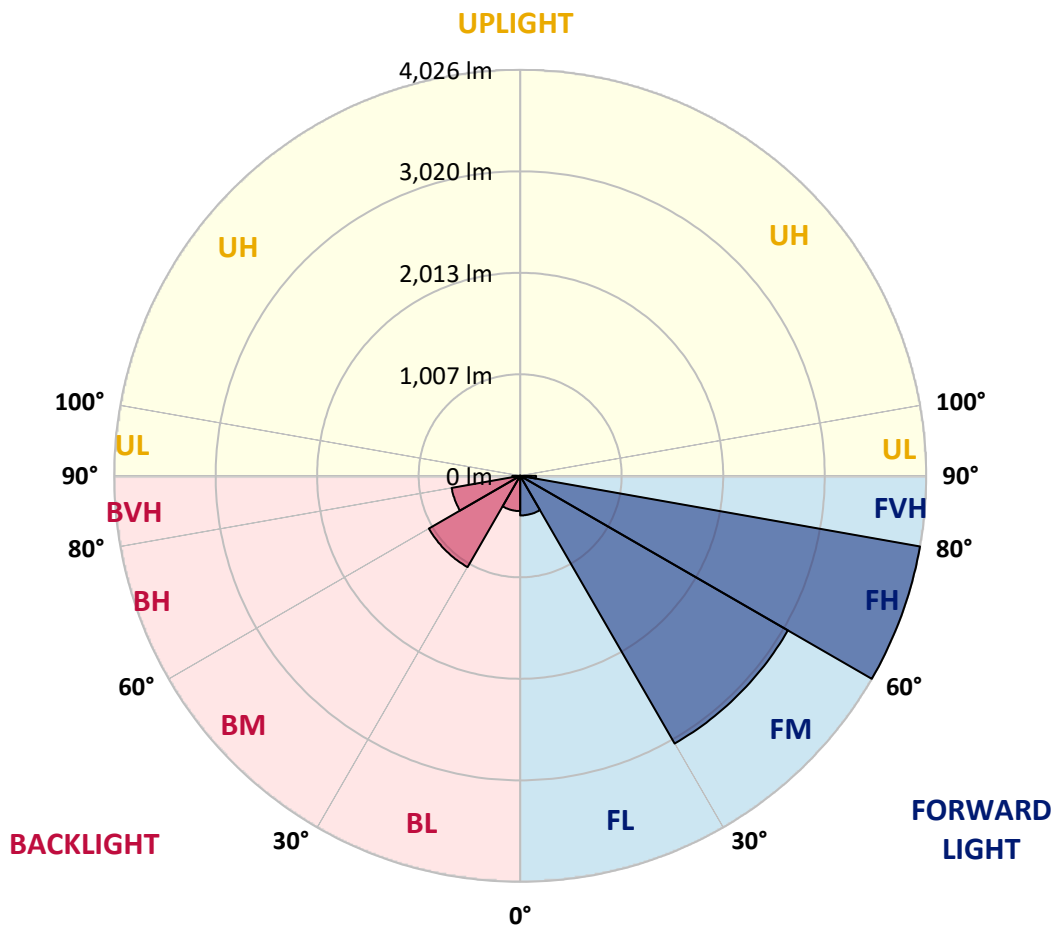
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	392.9	4.0			
FM (30°-60°)	3065.8	31.3			
FH (60°-80°)	4026.2	41.1			G2/5000
FVH (80°-90°)	156.7	1.6			G2/225
BL (0°-30°)	349.6	3.6	B1/500		
BM (30°-60°)	1045.5	10.7	B2/2500		
BH (60°-80°)	689.9	7.0	B2/1000		G2/1000
BVH (80°-90°)	78.4	0.8			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	333.3	333.3	333.3	333.3	333.3	333.3	333.3	333.3	333.3	333.3	333.3
2.5°	404.4	396.4	377.1	383.5	391.6	394.8	394.0	393.2	380.7	376.3	398.4
5°	549.6	531.9	517.8	512.2	493.7	479.2	470.4	493.7	490.1	496.1	511.4
7.5°	686.3	675.0	643.3	632.0	594.2	569.3	566.5	585.0	589.8	580.1	606.3
10°	774.3	755.0	748.6	721.6	695.5	691.5	689.1	680.6	669.0	668.2	644.9
12.5°	842.7	852.7	857.9	827.0	827.8	842.3	834.6	800.4	780.7	746.2	749.0
15°	965.3	979.8	938.3	918.6	880.9	902.6	899.7	871.2	868.4	845.9	819.7
17.5°	1072.2	1078.7	1009.5	964.5	951.6	920.3	928.7	929.5	892.5	932.7	909.4
20°	1081.1	1104.0	1024.4	934.7	973.3	969.3	970.5	962.5	913.8	980.2	971.3
22.5°	1124.5	1089.5	1017.9	952.4	962.5	968.5	974.1	964.5	961.7	998.6	1025.6
25°	1116.4	1105.2	1032.8	977.3	978.5	979.8	982.6	1011.5	1008.3	1058.6	1072.6
27.5°	1191.6	1174.3	1037.2	1023.6	992.2	985.4	966.1	1026.4	1073.4	1072.2	1149.8
30°	1334.7	1317.1	1140.2	1100.4	1043.7	973.7	1010.7	1091.1	1128.1	1140.6	1239.1
32.5°	1558.3	1587.2	1342.8	1182.4	1112.0	1096.7	1092.7	1084.7	1176.3	1237.9	1327.5
35°	1879.1	1856.2	1581.6	1358.1	1184.0	1118.5	1127.3	1176.3	1285.3	1325.1	1407.9
37.5°	2246.6	2199.1	1887.5	1557.1	1391.4	1309.4	1280.1	1327.5	1351.6	1383.0	1552.2
40°	2620.0	2504.3	2187.9	1818.8	1516.1	1454.2	1428.4	1370.1	1426.8	1490.3	1705.4
42.5°	2980.7	2891.0	2514.7	2131.2	1725.9	1505.2	1491.1	1434.0	1609.7	1676.9	1926.5
45°	3358.6	3150.7	2849.6	2483.8	2032.7	1755.7	1734.8	1632.3	1857.4	1997.3	2238.5
47.5°	3612.7	3420.1	3156.4	2770.0	2289.6	2174.6	2134.8	1959.5	2163.7	2345.5	2720.6
50°	3853.1	3654.9	3377.9	3083.2	2754.7	2622.5	2537.6	2245.8	2545.3	2841.2	3338.5
52.5°	4197.2	4019.9	3635.2	3398.8	3254.5	2929.2	2866.1	2705.7	2991.5	3390.7	4013.9
55°	4565.1	4323.5	3974.9	3843.8	3785.5	3369.0	3317.6	3215.5	3585.7	3953.2	4670.4
57.5°	4727.5	4475.4	4283.3	4204.9	4200.0	4008.3	3949.2	3878.0	4193.2	4435.6	5288.3
60°	4856.6	4586.0	4509.2	4553.0	4712.2	4586.0	4509.2	4446.5	4687.7	4912.4	5792.5
62.5°	4832.8	4561.5	4600.9	4734.3	5140.8	5177.8	5118.7	4966.7	5177.8	5303.2	6081.5
65°	4450.1	4199.2	4428.8	4745.6	5539.2	5834.7	5831.5	5433.9	5507.0	5507.0	6051.0
67.5°	3779.5	3519.8	3895.7	4646.3	5814.6	6355.3	6356.1	5929.2	5537.2	5486.5	5578.2
70°	2822.3	2587.1	3009.6	4046.5	5530.4	6607.4	6570.8	6328.8	5454.4	5011.7	4659.6
72.5°	1685.7	1533.8	1922.5	2945.7	4717.4	6143.9	6241.2	5868.5	4993.2	4167.9	3330.8
75°	765.5	699.5	903.4	1692.2	3367.8	5124.7	5230.4	4952.6	3966.0	2997.6	1924.9
77.5°	327.7	310.0	394.4	750.6	1857.0	3504.5	3721.2	3539.5	2687.2	1742.0	851.5
80°	210.7	199.4	242.4	361.0	862.4	1893.6	2080.1	2012.2	1368.9	677.4	299.9
82.5°	125.8	122.2	162.0	226.7	470.4	833.4	939.1	964.1	568.5	303.9	171.7
85°	68.7	69.6	88.8	137.5	282.2	324.4	347.4	377.9	267.8	176.1	83.2
87.5°	22.9	26.5	35.8	55.9	100.5	91.7	92.1	106.9	113.0	73.2	26.5
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°	333.3	333.3	333.3	333.3	333.3	333.3	333.3	333.3	333.3	333.3	333.3
2.5°	402.0	394.8	376.3	377.5	384.3	386.0	388.0	376.3	373.9	396.0	398.0
5°	513.8	490.1	479.2	475.6	465.2	461.5	480.8	489.7	498.5	515.8	524.3
7.5°	603.5	576.9	557.2	539.1	523.8	515.0	547.6	572.5	587.8	623.2	639.2
10°	644.5	621.5	614.3	599.8	611.5	638.0	644.1	644.9	678.6	677.8	684.7
12.5°	726.1	711.2	687.5	692.7	723.3	750.6	743.0	754.6	766.7	795.6	782.4
15°	800.4	796.4	774.3	777.9	784.0	818.1	822.6	834.2	852.7	875.6	859.9
17.5°	892.1	890.5	836.6	831.8	845.9	879.2	868.8	848.3	909.4	933.9	927.5
20°	954.4	942.4	873.2	852.7	888.5	892.9	880.9	848.3	901.4	954.8	969.3
22.5°	1006.3	992.2	921.1	880.9	873.6	875.6	875.6	869.6	895.7	939.5	939.1
25°	1048.1	1061.4	970.9	932.3	893.7	845.5	839.4	844.7	859.5	944.0	941.2
27.5°	1153.0	1116.4	987.8	958.8	879.6	803.7	820.1	828.2	833.0	925.5	940.8
30°	1221.4	1232.6	1048.1	974.5	859.1	757.0	762.7	786.0	814.1	923.5	927.9
32.5°	1313.4	1289.3	1142.2	948.4	804.5	728.9	718.4	749.8	791.6	890.9	903.0
35°	1399.1	1427.6	1182.0	943.6	766.3	686.7	697.9	708.8	752.2	854.7	868.8
37.5°	1600.1	1535.0	1293.7	920.3	734.5	665.4	653.3	669.8	706.8	786.0	818.5
40°	1752.9	1756.9	1317.9	890.9	673.8	634.8	609.1	625.6	641.2	704.4	718.4
42.5°	2039.5	1951.9	1377.0	826.6	635.6	589.0	574.5	581.7	584.2	610.7	634.0
45°	2404.2	2198.7	1400.3	740.1	585.4	570.1	540.7	537.1	523.8	527.5	548.0
47.5°	2908.7	2583.9	1383.4	648.1	540.7	545.6	503.3	486.9	468.4	472.8	492.1
50°	3561.2	3076.0	1382.2	570.1	510.2	513.4	478.8	449.1	430.6	439.8	456.7
52.5°	4293.3	3569.6	1387.8	516.6	476.8	475.2	462.7	426.6	411.7	421.3	440.6
55°	4993.6	3994.2	1429.6	482.8	442.2	445.0	449.9	419.3	402.8	411.7	431.8
57.5°	5603.1	4329.5	1413.9	447.1	410.1	422.9	435.8	409.3	396.8	409.7	429.8
60°	6029.3	4485.1	1290.1	412.9	386.4	404.0	429.0	408.1	406.5	434.2	458.3
62.5°	6184.9	4427.6	1048.9	386.0	372.3	401.6	444.6	434.6	436.2	470.4	503.7
65°	5957.7	4125.3	782.4	368.7	361.4	413.3	480.8	450.3	428.2	456.3	486.9
67.5°	5311.7	3587.7	571.7	353.8	349.0	431.8	514.2	448.7	407.7	436.2	461.1
70°	4297.3	2831.9	442.6	334.9	332.5	419.3	517.4	436.6	385.5	404.0	418.1
72.5°	2944.5	1939.0	366.7	316.8	303.9	371.5	491.3	409.7	359.0	369.9	381.5
75°	1645.5	1088.3	308.4	294.3	266.1	330.9	460.7	393.6	339.3	342.5	358.6
77.5°	738.5	470.8	261.7	264.5	232.0	292.7	420.9	367.9	309.2	301.9	318.0
80°	279.4	229.6	212.3	223.5	195.0	253.7	379.5	344.5	277.4	268.2	277.4
82.5°	162.0	139.1	157.6	172.1	154.8	233.2	362.2	323.2	244.4	221.1	229.2
85°	75.2	72.0	94.5	111.8	108.1	181.7	310.0	243.2	174.1	147.1	162.8
87.5°	19.7	22.1	33.4	39.4	40.2	62.3	119.4	90.5	67.9	51.5	49.4
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)