

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: P597054

Luminaire Tested: **MSA-SA3C-835-U-SL3**

Issue Date: 5/27/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P597054  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-18)  
Test Lab: INNOVATIONS CENTER  
Issue Date: 5/27/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: MSA-SA3C-835-U-SL3  
Description: MESA POST TOP DECORATIVE LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III SPILL LIGHT ELIMINATOR OPTICS.  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 14727 lumens  
Efficiency: N/A  
Efficacy: 88.7 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G3

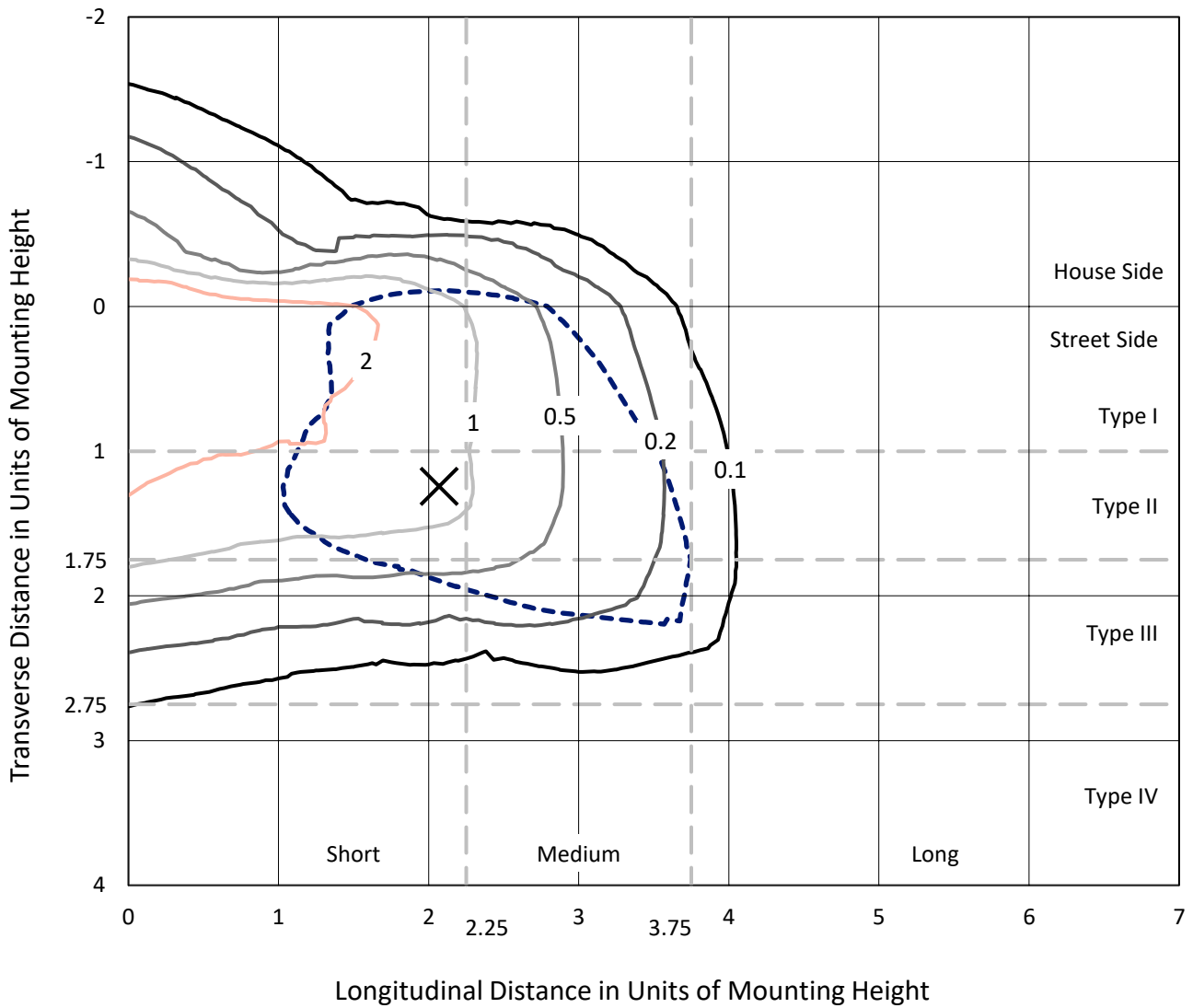
Input Watts (W): 166  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

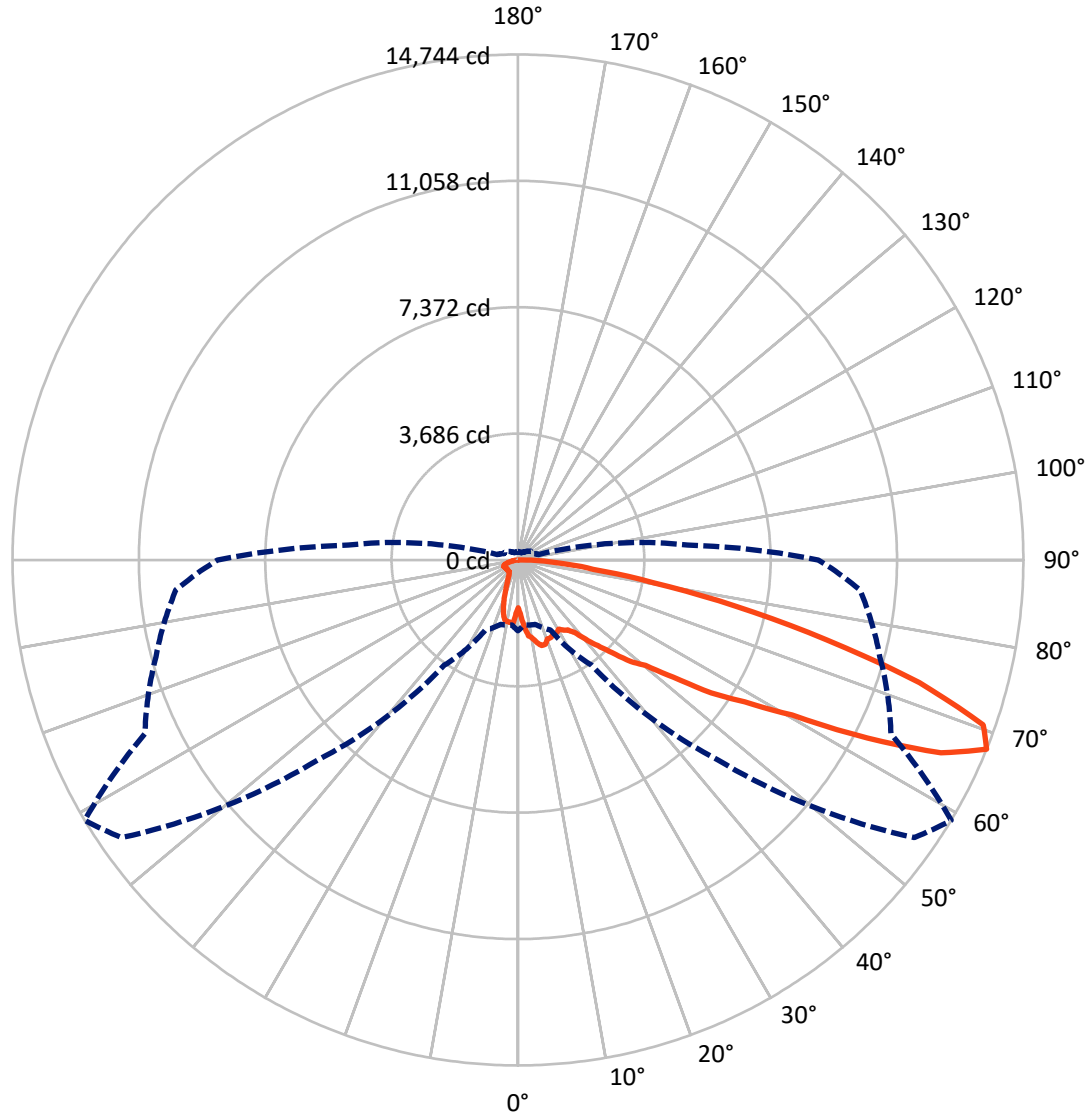
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.8 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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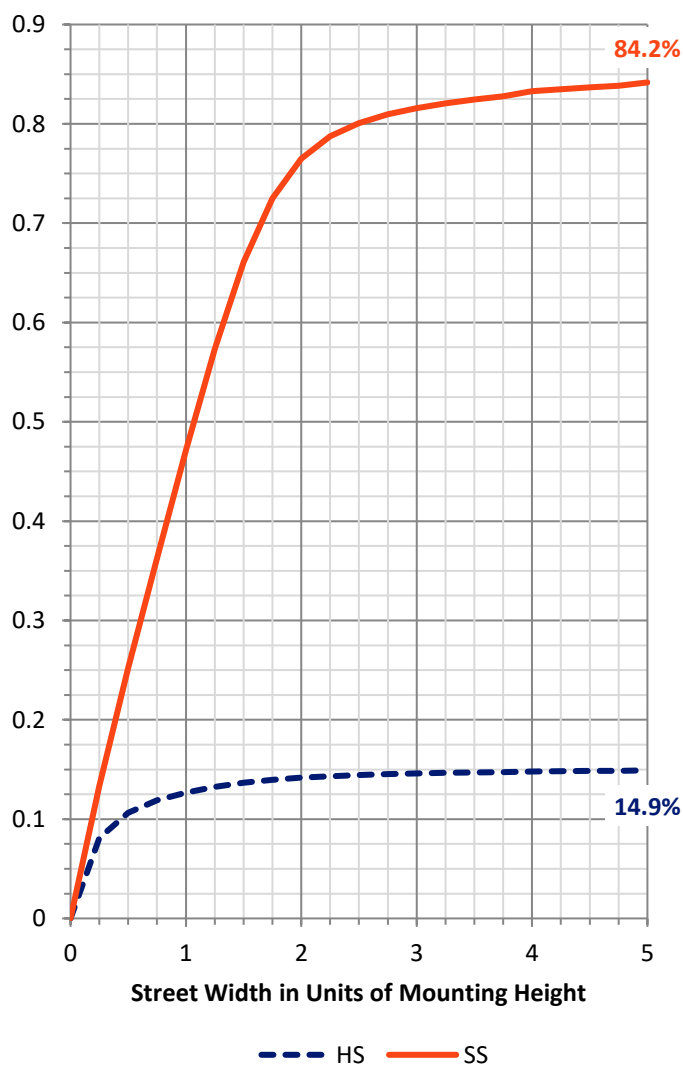
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2216.7	0.0	2216.7
	% Fixture	15.1	0.0	15.1
<b>Street Side</b>	Lumens	12510.3	0.0	12510.3
	% Fixture	84.9	0.0	84.9
<b>Total</b>	Lumens	14727.0	0.0	14727.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	182.0	1.2
10°-20°	538.6	3.7
20°-30°	769.2	5.2
30°-40°	1133.4	7.7
40°-50°	1914.9	13.0
50°-60°	3332.3	22.6
60°-70°	4246.4	28.8
70°-80°	2248.5	15.3
80°-90°	361.7	2.5
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°	14727.0	100.0
0°-180°	14727.0	100.0

**Coefficient of Utilization**

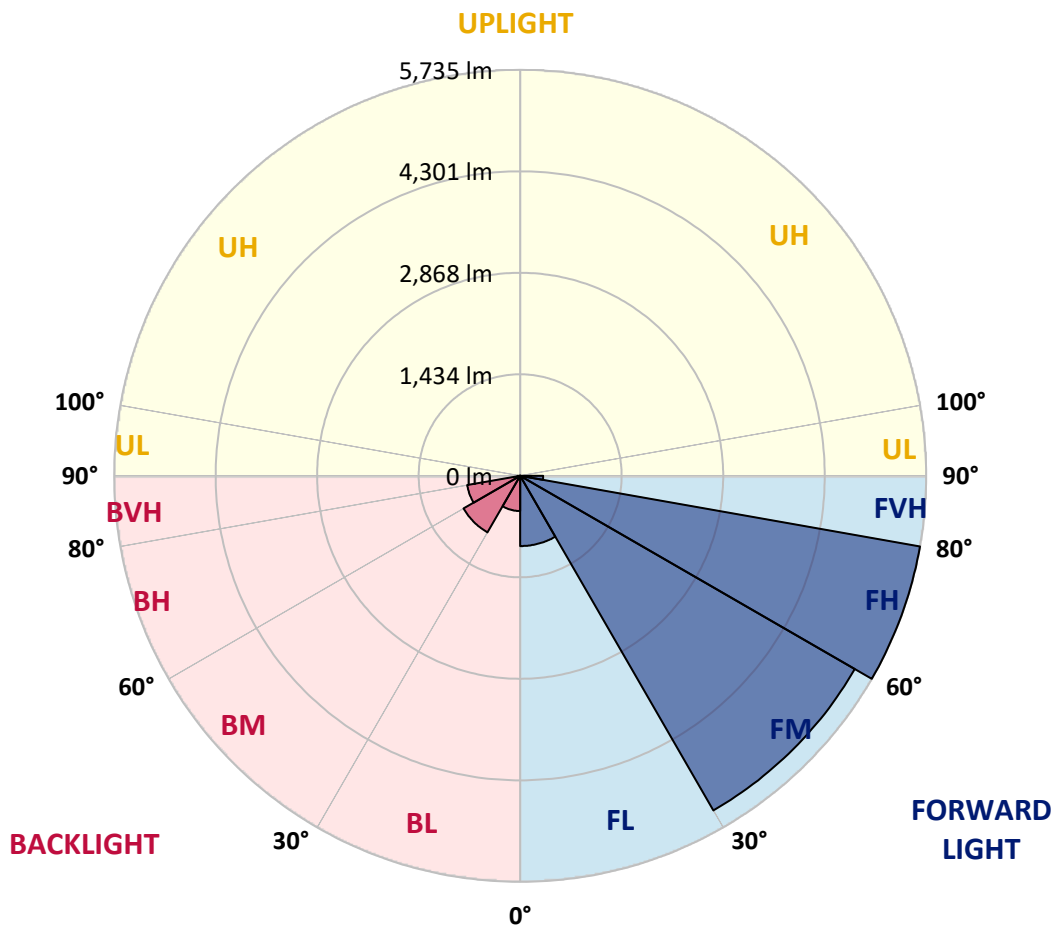


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	992.6	6.7			
FM (30°-60°)	5457.6	37.1			
FH (60°-80°)	5735.1	38.9			G3/7500
FVH (80°-90°)	324.9	2.2			G3/500
BL (0°-30°)	497.1	3.4	B1/500		
BM (30°-60°)	923.0	6.3	B1/1000		
BH (60°-80°)	759.8	5.2	B2/1000		G2/1000
BVH (80°-90°)	36.8	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G3**  
 Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	1393.6	1393.6	1393.6	1393.6	1393.6	1393.6	1393.6	1393.6	1393.6	1393.6	1393.6
2.5°	1739.9	1658.8	1572.7	1597.0	1646.3	1668.8	1644.4	1620.7	1590.1	1554.0	1677.5
5°	2110.0	1989.6	1972.1	1971.5	1954.0	1884.1	1974.0	1967.7	2003.9	2041.4	2137.5
7.5°	2215.5	2170.5	2121.9	2145.0	2057.0	2053.2	2193.0	2232.9	2302.8	2279.8	2408.9
10°	2161.2	2110.6	2136.2	2126.9	2135.0	2227.3	2312.8	2315.3	2390.2	2463.9	2380.9
12.5°	2065.7	2069.4	2171.2	2167.4	2298.5	2470.1	2495.7	2475.7	2598.0	2548.1	2619.2
15°	2133.7	2179.3	2153.7	2175.5	2227.3	2445.8	2516.9	2589.3	2705.4	2750.3	2679.2
17.5°	2242.3	2266.6	2151.8	2140.0	2246.7	2350.3	2526.9	2588.7	2606.8	2926.9	2826.4
20°	2196.1	2245.4	2133.1	1988.9	2166.2	2303.5	2477.6	2458.9	2546.9	2940.6	2857.0
22.5°	2327.2	2245.4	2102.5	2000.2	2062.6	2188.6	2336.5	2459.5	2563.7	2860.1	2901.3
25°	2352.1	2313.5	2179.9	2078.2	2057.0	2101.9	2312.8	2393.3	2569.3	2970.0	2877.6
27.5°	2504.4	2446.4	2174.3	2177.4	2071.9	1992.7	2237.9	2407.1	2633.0	2902.0	2935.7
30°	2693.5	2649.2	2307.8	2320.3	2174.3	2028.2	2289.1	2340.3	2669.8	3008.0	3008.7
32.5°	2835.2	2913.2	2570.6	2400.8	2349.0	2239.8	2210.5	2440.8	2626.7	3200.3	3133.5
35°	3090.4	3151.0	2772.8	2636.7	2461.4	2338.4	2423.9	2506.9	2805.8	3453.0	3318.8
37.5°	3562.9	3493.0	3148.5	2934.4	2868.9	2691.6	2739.1	2681.0	3000.6	3737.0	3682.1
40°	3836.2	3775.7	3413.1	3294.5	3034.9	3057.3	2998.1	3040.5	3260.8	4039.0	4021.5
42.5°	4105.8	4024.7	3718.2	3635.9	3376.9	3267.0	3277.6	3414.9	3662.1	4527.0	4469.0
45°	4372.3	4164.5	4030.3	4052.1	3927.3	3702.0	3717.6	3846.8	4100.2	5085.0	4951.4
47.5°	4576.4	4404.7	4299.9	4273.1	4211.3	4512.7	4377.9	4430.3	4542.0	5581.7	5531.2
50°	4962.7	4762.3	4625.7	4587.0	4796.7	5216.0	4941.4	4828.5	5066.3	6223.9	6197.7
52.5°	5581.1	5331.5	5103.7	5101.2	5404.5	5676.6	5870.1	5675.4	5762.7	6881.7	6956.6
55°	6120.9	5832.0	5627.3	5740.3	6172.1	6338.7	6995.9	6843.6	6770.0	7545.7	7759.8
57.5°	6322.5	5984.9	5851.3	6018.0	6654.5	7510.8	8205.4	7804.7	7732.9	8297.1	8745.8
60°	5880.0	5523.1	5531.2	5845.1	6947.8	8371.4	9527.8	9187.7	8767.0	9232.6	9670.7
62.5°	4619.4	4296.8	4507.1	4984.5	6702.0	9207.6	11300.2	11443.7	9948.4	10008.3	10183.7
65°	3139.7	2916.3	3106.0	3573.5	5435.7	9663.8	12988.3	13563.7	11024.3	10516.3	10405.2
67.5°	2066.3	1908.4	1945.2	2256.0	3742.0	8238.4	14117.2	14744.4	12007.9	10933.2	10014.6
70°	1600.1	1472.8	1456.6	1619.5	2219.2	5723.4	13448.2	14401.8	12607.0	10542.5	8729.0
72.5°	1255.6	1158.9	1167.6	1324.3	1718.7	3175.3	10406.5	12246.9	11704.6	9092.2	6706.3
75°	979.2	899.9	944.2	1123.3	1589.5	1973.3	7180.0	9295.0	9049.1	6732.5	3825.0
77.5°	710.8	659.6	722.7	956.7	1494.0	1693.1	4469.6	6484.8	5797.0	3456.8	1312.4
80°	466.2	437.5	489.3	780.1	1354.9	1629.5	2762.2	3973.5	2864.5	971.1	496.8
82.5°	274.6	262.1	305.2	528.0	1089.0	1527.1	1842.3	2208.0	1172.0	410.6	264.0
85°	144.2	134.8	181.0	303.3	750.8	1394.2	1450.4	1321.8	566.0	178.5	126.1
87.5°	48.1	46.8	76.8	117.3	284.0	740.2	773.9	627.8	233.4	51.8	27.5
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°	1393.6	1393.6	1393.6	1393.6	1393.6	1393.6	1393.6	1393.6	1393.6	1393.6	1393.6
2.5°	1694.4	1669.4	1525.9	1545.8	1564.6	1555.2	1549.6	1484.7	1478.4	1570.8	1563.3
5°	2135.0	2031.4	1909.0	1903.4	1822.9	1740.5	1756.8	1730.6	1738.1	1776.1	1779.9
7.5°	2367.7	2238.6	2121.9	1932.1	1771.1	1640.7	1661.3	1655.1	1638.2	1724.3	1747.4
10°	2363.4	2248.5	2116.9	1887.2	1778.6	1672.5	1545.2	1424.8	1389.2	1346.8	1350.5
12.5°	2519.4	2417.7	2130.6	1896.6	1749.3	1566.4	1328.0	1196.4	1070.3	1067.8	1036.0
15°	2568.1	2493.2	2159.9	1842.9	1544.0	1281.9	1035.3	892.4	801.3	783.2	756.4
17.5°	2691.0	2573.7	2070.7	1669.4	1305.6	1002.3	778.2	678.4	670.9	683.4	669.6
20°	2699.1	2508.8	1909.7	1412.9	1049.1	759.5	634.7	584.8	611.6	642.2	640.9
22.5°	2692.3	2427.0	1770.5	1194.5	788.2	610.3	556.1	544.8	569.8	615.3	621.0
25°	2622.4	2400.2	1596.4	981.0	639.7	523.0	508.0	514.9	546.1	599.7	599.7
27.5°	2695.4	2291.0	1378.0	798.2	538.0	465.6	476.2	493.6	516.7	577.9	589.1
30°	2671.7	2327.2	1202.0	642.8	474.3	425.6	449.3	466.8	493.0	556.7	562.3
32.5°	2735.3	2230.4	1054.1	540.5	432.5	410.0	415.6	439.3	473.7	523.6	533.6
35°	2832.7	2266.0	884.3	486.2	411.9	391.9	402.5	421.3	455.6	504.3	512.4
37.5°	3143.5	2264.1	767.0	456.2	408.1	388.2	393.2	406.3	446.2	490.5	509.2
40°	3343.2	2394.0	660.3	449.3	403.8	386.3	381.9	396.3	428.1	480.5	493.6
42.5°	3718.2	2473.2	614.1	446.8	403.2	375.7	371.3	388.2	419.4	468.1	488.0
45°	4114.5	2586.2	577.3	445.6	401.3	373.8	360.7	381.9	408.1	455.0	478.0
47.5°	4580.7	2825.2	556.7	441.2	397.5	376.3	357.0	367.6	396.9	443.7	466.8
50°	5191.1	3141.6	561.0	435.0	403.2	376.9	351.4	356.3	383.2	428.7	452.5
52.5°	5933.1	3631.5	589.1	437.5	406.9	373.8	348.9	346.4	369.5	409.4	433.1
55°	6827.4	4326.7	673.4	449.3	406.9	373.2	345.1	333.9	351.4	383.8	406.9
57.5°	7906.4	5131.8	838.1	455.0	403.8	369.5	337.0	317.0	327.6	354.5	376.3
60°	8833.2	5781.4	1007.9	458.7	410.0	360.7	320.8	295.8	302.7	323.3	342.6
62.5°	9305.6	5963.7	1059.1	455.6	426.9	355.1	301.4	273.3	274.0	291.4	308.9
65°	9394.2	5720.9	853.7	452.5	448.7	354.5	287.7	254.0	249.6	262.1	277.1
67.5°	8762.7	4965.8	616.0	445.6	451.2	350.7	278.3	238.4	227.2	235.9	248.4
70°	7440.2	3999.1	517.4	431.9	421.3	332.0	262.1	222.2	207.2	213.4	222.8
72.5°	5546.8	2958.7	451.2	402.5	367.0	284.0	237.1	204.1	188.5	192.8	199.7
75°	3081.7	1578.3	377.6	350.1	299.6	229.7	202.2	181.0	167.3	169.1	176.6
77.5°	1023.5	582.3	277.1	277.7	226.5	177.2	166.6	154.8	144.2	144.8	151.0
80°	463.7	322.0	198.5	199.7	157.9	128.6	127.9	124.2	117.3	115.5	119.8
82.5°	269.0	195.3	136.0	129.8	101.7	83.6	93.0	91.1	89.2	82.4	83.6
85°	132.3	104.8	71.1	67.4	56.2	41.8	49.9	51.8	49.9	42.4	41.8
87.5°	32.5	34.3	17.5	16.2	9.4	4.4	7.5	7.5	9.4	6.2	3.1
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)