

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: P597061

Luminaire Tested: **MSA-SA3C-835-U-T2-HSS**

Issue Date: 5/27/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P597061  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-9)  
Test Lab: INNOVATIONS CENTER  
Issue Date: 5/27/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: MSA-SA3C-835-U-T2-HSS  
Description: MESA POST TOP DECORATIVE LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11320 lumens  
Efficiency: N/A  
Efficacy: 68.2 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B1 - U0 - G2

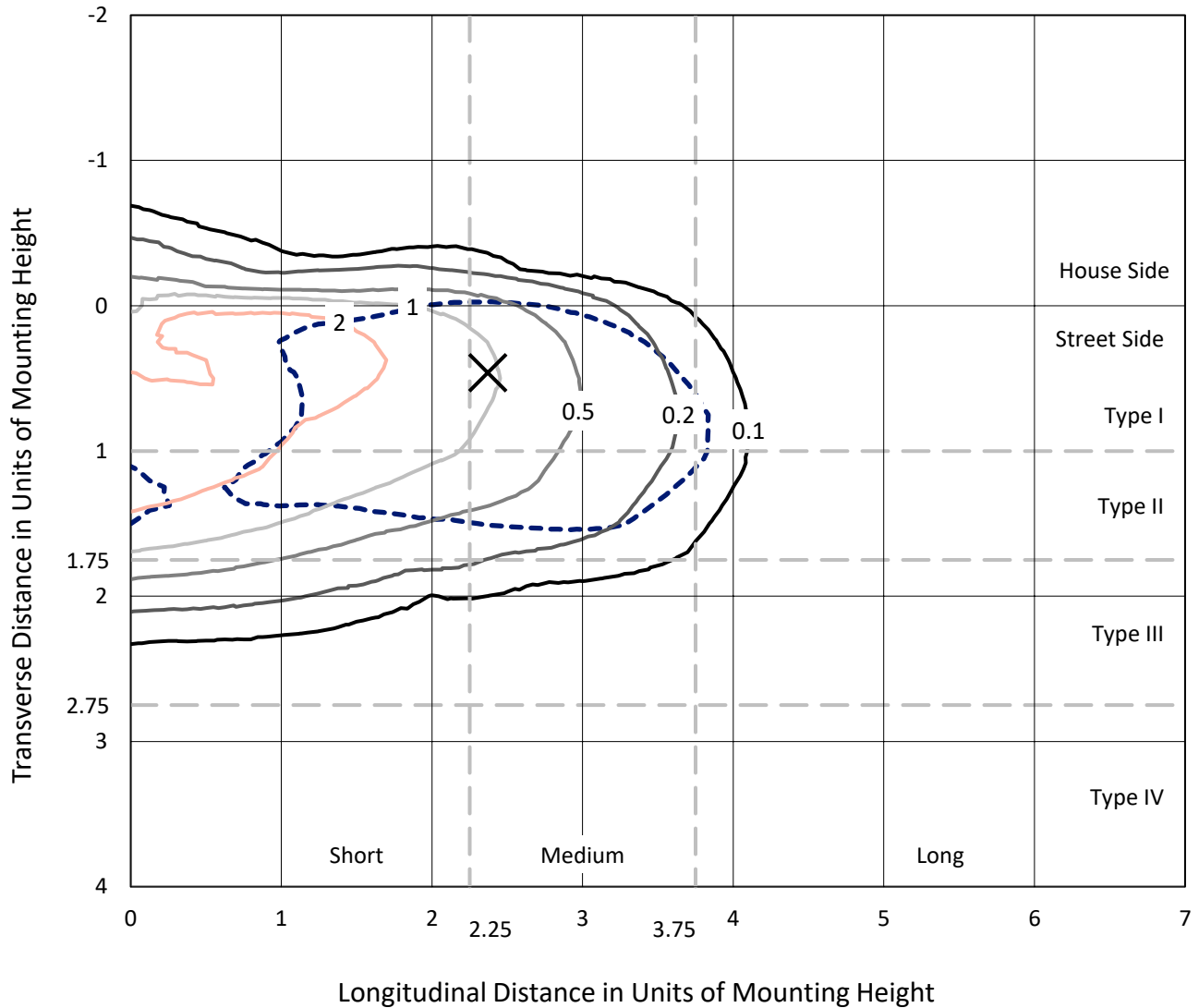
Input Watts (W): 166  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P597061  
 CATALOG NUMBER: MSA-SA3C-835-U-T2-HSS

### Iso-Footcandle Lines of Horizontal Illumination

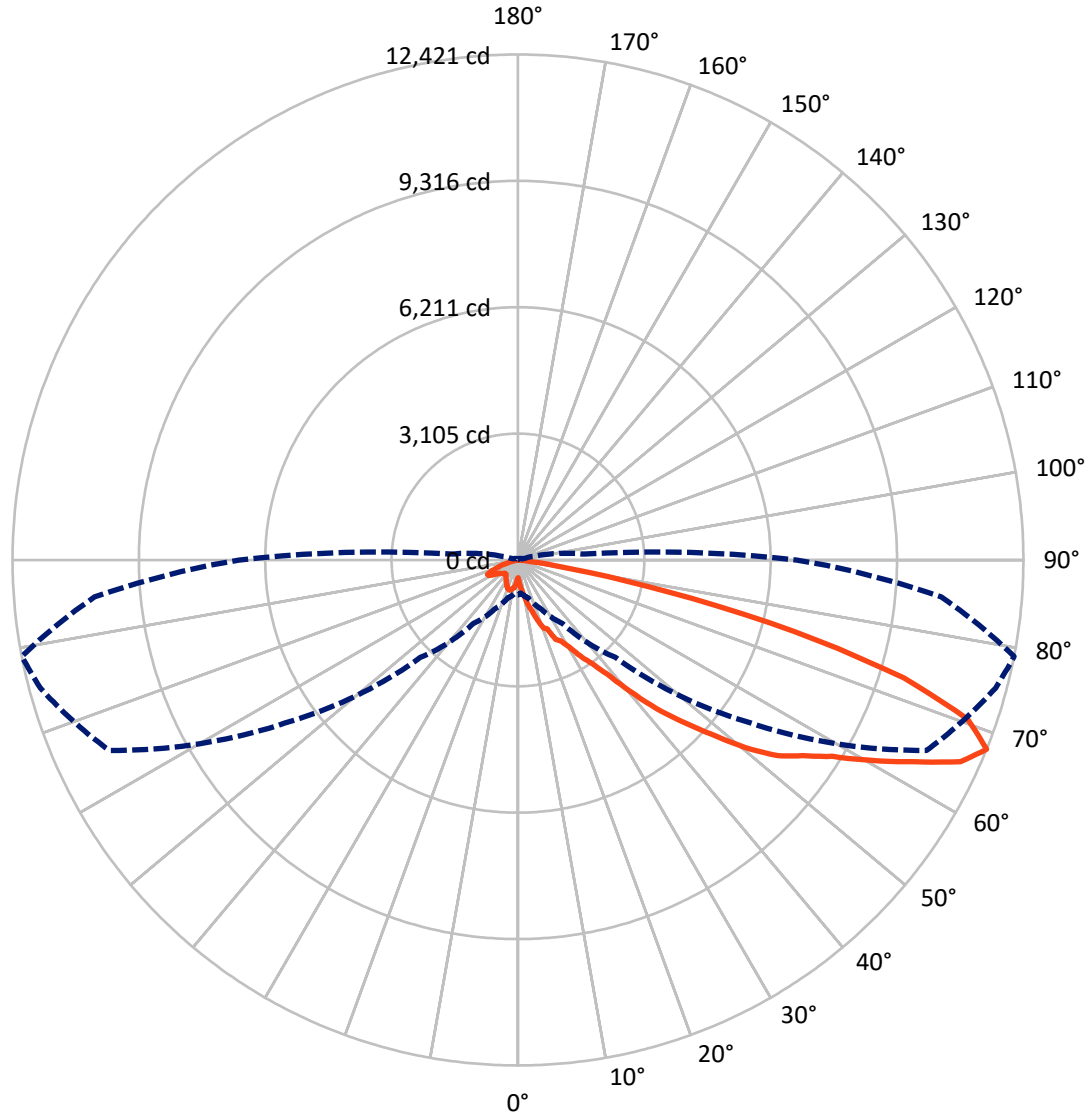
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.4 fc  
 Type II - Medium - N/A

REPORT NUMBER: P597061  
CATALOG NUMBER: MSA-SA3C-835-U-T2-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 79-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P597061

CATALOG NUMBER: MSA-SA3C-835-U-T2-HSS

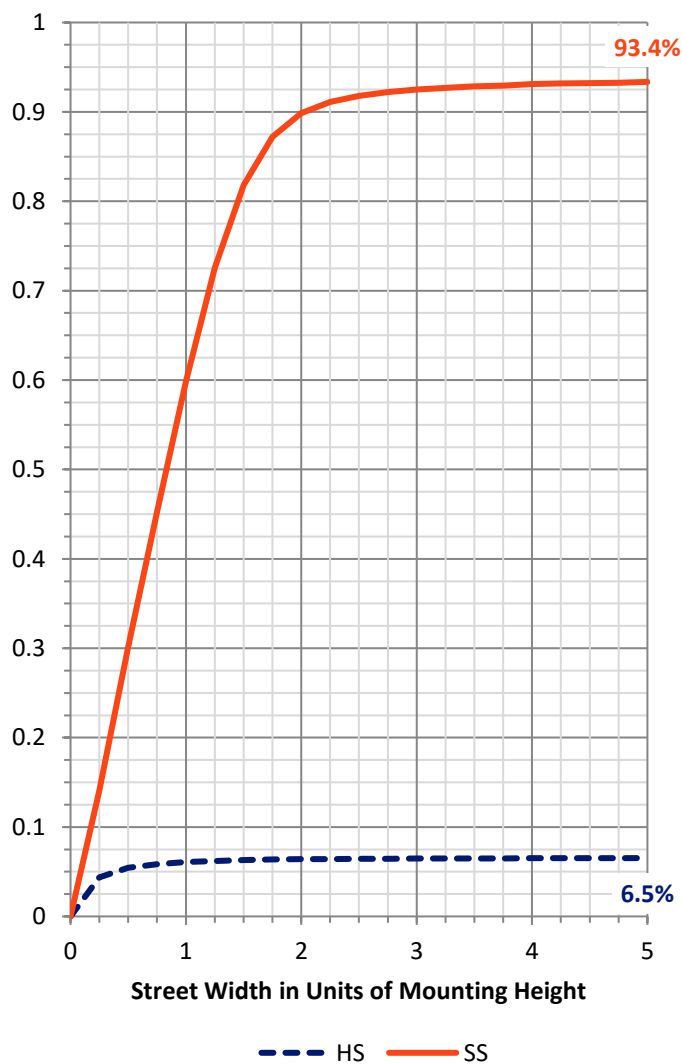
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	743.8	0.0	743.8
	% Fixture	6.6	0.0	6.6
<b>Street Side</b>	Lumens	10576.2	0.0	10576.2
	% Fixture	93.4	0.0	93.4
<b>Total</b>	Lumens	11320.0	0.0	11320.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	63.4	0.6
10°-20°	252.9	2.2
20°-30°	488.0	4.3
30°-40°	958.6	8.5
40°-50°	1920.3	17.0
50°-60°	3069.3	27.1
60°-70°	3088.2	27.3
70°-80°	1393.2	12.3
80°-90°	86.2	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°	11320.0	100.0
0°-180°	11320.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P597061

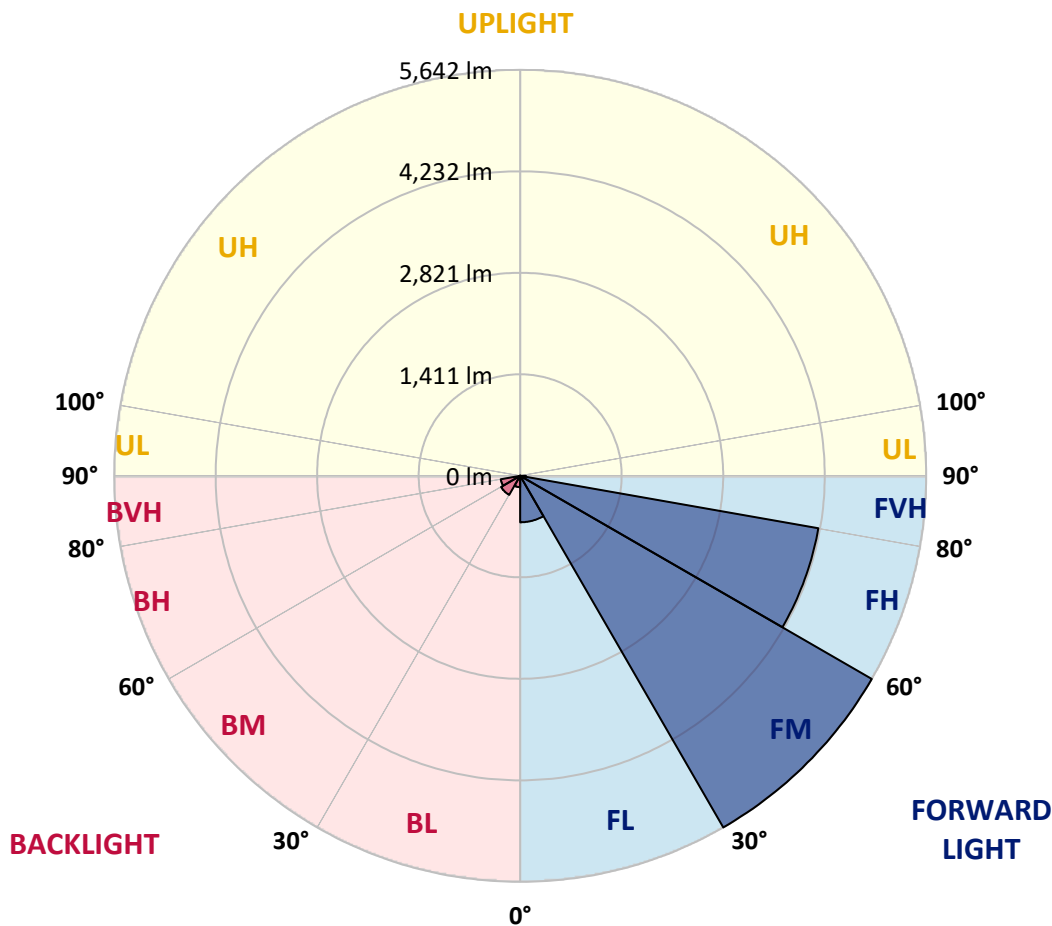
CATALOG NUMBER: MSA-SA3C-835-U-T2-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	646.3	5.7			
FM (30°-60°)	5642.1	49.8			
FH (60°-80°)	4207.2	37.2			G2/5000
FVH (80°-90°)	80.7	0.7			G1/100
BL (0°-30°)	158.1	1.4	B1/500		
BM (30°-60°)	306.0	2.7	B1/1000		
BH (60°-80°)	274.2	2.4	B1/500		G1/500
BVH (80°-90°)	5.5	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G2**

Type II Medium





REPORT NUMBER: P597061  
 CATALOG NUMBER: MSA-SA3C-835-U-T2-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	436.2	436.2	436.2	436.2	436.2	436.2	436.2	436.2	436.2	436.2	436.2
2.5°	589.1	567.9	533.5	552.9	551.6	561.6	542.9	522.3	489.2	522.3	524.8
5°	848.0	808.7	783.8	778.8	751.3	725.7	720.1	698.9	682.7	653.3	679.6
7.5°	1056.5	1038.4	994.1	989.1	921.7	884.2	896.1	886.7	825.0	794.4	820.0
10°	1145.1	1113.9	1120.1	1113.9	1085.2	1095.8	1071.4	1043.4	994.1	943.5	879.9
12.5°	1179.4	1174.4	1226.2	1220.0	1287.4	1368.5	1314.2	1267.4	1153.2	1140.7	1054.0
15°	1253.0	1284.2	1276.7	1303.0	1346.0	1483.9	1482.7	1493.9	1372.8	1307.9	1182.5
17.5°	1318.6	1341.6	1304.2	1334.2	1451.5	1535.1	1646.8	1603.1	1616.8	1550.7	1356.6
20°	1290.5	1316.7	1279.2	1261.1	1467.7	1626.2	1775.3	1743.5	1825.9	1784.7	1517.0
22.5°	1465.8	1416.5	1322.3	1263.6	1417.8	1624.3	1820.9	1953.8	1939.5	1838.4	1666.1
25°	1682.4	1652.4	1539.5	1435.9	1449.6	1613.1	1964.4	2159.7	2202.2	2159.1	1807.8
27.5°	1974.4	1967.5	1736.6	1691.7	1558.2	1563.8	1986.9	2419.3	2322.6	2255.2	1973.1
30°	2355.7	2301.4	2027.4	1968.8	1771.6	1674.9	2124.2	2643.3	2572.2	2480.5	2128.5
32.5°	2765.7	2773.8	2424.3	2230.9	2072.4	1957.5	2069.9	2748.2	2881.1	2806.8	2322.6
35°	3231.2	3267.4	2839.9	2612.8	2304.5	2135.4	2303.3	3070.2	3308.5	3113.2	2582.8
37.5°	3948.2	3946.9	3447.7	2995.3	2771.3	2587.8	2692.0	3362.8	3834.0	3559.4	3049.6
40°	4579.0	4441.8	3977.5	3457.7	3108.2	3058.3	2982.8	3763.5	4395.0	4229.6	3464.6
42.5°	5050.2	4953.5	4392.5	3988.1	3555.0	3396.5	3369.7	4350.7	5223.0	4991.5	4056.7
45°	5613.7	5296.7	4883.6	4519.1	4078.0	4031.8	3968.8	4946.6	6186.5	5664.8	4571.6
47.5°	6118.5	5820.2	5429.6	4961.6	4454.9	4835.5	4593.4	5470.1	6887.3	6397.4	5139.4
50°	6543.5	6226.5	5789.0	5432.7	5215.5	5473.9	5070.2	5901.3	7644.2	7247.4	5670.5
52.5°	6760.0	6401.2	6063.0	5842.7	5975.6	5917.6	5716.6	6423.6	8289.5	7992.4	6141.0
55°	6582.1	6231.5	6089.8	6199.0	6602.7	6434.9	6451.1	7233.0	8898.5	8489.2	6550.3
57.5°	5793.4	5473.3	5536.3	5835.2	6609.0	7048.3	7288.5	8019.3	9387.1	9108.2	7181.8
60°	4382.5	4124.8	4358.1	4888.6	5987.5	6926.0	7882.6	8805.5	10085.4	9998.0	8137.8
62.5°	2676.4	2536.6	2867.4	3528.8	4771.2	6326.3	8228.9	9853.9	10832.3	10925.3	9151.9
65°	1365.4	1302.3	1578.1	2159.7	3223.7	5196.8	7978.7	10505.4	11604.3	11947.5	10118.5
67.5°	859.9	819.3	966.6	1317.3	1902.0	3389.7	6985.9	11075.1	12149.6	12421.1	10441.1
70°	595.9	570.4	697.7	904.2	1200.0	1825.9	5186.8	10543.4	11717.2	11729.7	9660.4
72.5°	378.2	358.2	482.4	669.6	885.5	942.9	2973.4	8273.2	10029.9	9914.4	7823.3
75°	245.2	235.3	306.4	490.5	680.2	581.6	1469.6	5582.5	7191.8	7010.9	5196.2
77.5°	176.0	169.7	205.3	327.6	484.2	406.9	659.0	3327.3	4123.5	3727.9	2522.3
80°	106.1	105.5	148.5	205.3	344.5	287.0	304.5	1510.7	1598.7	1303.6	770.7
82.5°	53.0	54.9	83.0	132.3	221.5	187.8	139.2	503.0	429.3	316.4	156.0
85°	12.5	15.6	43.7	91.1	111.1	74.9	66.1	131.7	117.9	89.2	45.6
87.5°	0.0	0.0	13.7	21.8	30.0	12.5	22.5	25.0	31.8	25.0	9.4
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: P597061  
 CATALOG NUMBER: MSA-SA3C-835-U-T2-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	436.2	436.2	436.2	436.2	436.2	436.2	436.2	436.2	436.2	436.2	436.2
2.5°	525.4	517.9	472.4	460.5	459.3	446.2	449.3	436.8	437.4	465.5	465.5
5°	669.6	625.9	582.2	543.5	517.3	479.9	466.1	460.5	455.5	466.8	473.6
7.5°	786.3	722.0	643.4	559.1	481.1	427.5	420.0	406.2	401.2	412.5	421.2
10°	838.1	758.2	650.2	527.3	454.3	410.6	374.4	355.1	351.3	350.7	353.8
12.5°	947.9	848.7	657.7	515.4	436.2	388.1	347.0	314.5	284.6	287.7	284.6
15°	1035.9	918.6	657.7	486.7	392.5	344.5	272.1	255.8	251.5	258.3	252.7
17.5°	1168.8	987.8	624.6	435.6	355.1	267.7	240.2	239.0	247.7	257.7	251.5
20°	1248.7	997.2	569.1	376.9	291.4	232.1	222.2	212.2	224.6	232.8	229.6
22.5°	1331.7	997.8	513.6	345.7	234.6	211.5	195.3	187.2	189.1	196.6	197.8
25°	1367.2	973.5	461.8	304.5	212.8	189.1	172.2	163.5	160.4	164.1	162.9
27.5°	1463.9	926.7	405.6	259.6	202.2	167.9	152.3	141.7	132.3	138.5	139.8
30°	1477.7	911.7	375.0	230.9	188.5	148.5	134.8	123.6	116.7	125.4	125.4
32.5°	1521.4	829.3	359.4	219.0	174.1	137.3	118.6	110.5	109.2	114.8	115.4
35°	1588.8	793.1	336.3	209.7	161.0	124.2	106.7	103.0	101.7	106.1	106.1
37.5°	1817.1	748.2	310.8	201.6	149.8	117.3	103.6	97.3	98.0	101.7	104.2
40°	1968.8	753.8	272.7	191.6	136.7	111.1	97.3	93.0	92.4	94.2	96.1
42.5°	2250.2	758.2	255.8	181.0	126.7	103.6	91.1	88.0	85.5	87.4	89.2
45°	2564.7	781.3	247.1	172.2	121.1	99.2	85.5	83.6	78.0	79.3	81.7
47.5°	2868.0	865.5	236.5	159.7	116.1	96.7	79.9	75.5	71.8	71.1	73.6
50°	3212.4	947.3	224.6	146.0	111.1	93.0	74.3	67.4	64.9	64.9	66.8
52.5°	3520.7	1025.3	213.4	136.7	107.3	86.1	69.3	62.4	60.5	60.5	63.0
55°	3845.2	1107.0	203.4	127.9	102.3	79.3	64.9	58.7	58.0	56.8	58.7
57.5°	4418.1	1285.5	190.9	120.4	95.5	73.6	61.2	54.9	53.7	51.8	53.7
60°	5252.4	1559.4	174.7	112.9	87.4	69.9	58.0	50.5	48.7	45.6	46.2
62.5°	6068.0	1780.9	156.0	103.6	79.9	66.1	53.0	45.6	42.4	38.7	39.3
65°	6766.9	1868.3	136.0	92.4	72.4	57.4	46.2	39.9	35.6	30.6	30.0
67.5°	6849.2	1649.9	116.7	81.7	64.9	48.7	39.3	35.6	28.7	24.3	23.1
70°	6164.1	1229.3	97.3	72.4	56.2	41.2	33.7	31.2	26.8	23.1	21.2
72.5°	4908.5	907.3	81.7	64.3	49.3	34.9	28.7	29.3	26.8	22.5	20.0
75°	3246.1	519.2	66.8	53.7	41.2	28.1	26.2	26.2	25.6	21.2	18.7
77.5°	1561.9	224.0	51.2	42.4	33.1	21.2	23.7	23.7	24.3	19.3	15.6
80°	443.1	67.4	31.8	28.7	24.3	14.4	18.7	18.1	16.2	11.2	6.9
82.5°	79.3	26.2	14.4	15.0	13.7	5.6	10.6	10.0	8.1	4.4	0.6
85°	21.8	10.0	8.1	8.7	6.9	1.9	4.4	5.6	4.4	2.5	0.0
87.5°	5.6	4.4	5.6	6.2	5.0	0.6	1.9	0.6	1.9	0.6	0.0
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)