

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: P367163

Luminaire Tested: **MSA-SA2A-730-U-T2-HSS**

Issue Date: 12/2/2019

Test Information

Test Method: LM-79-08
Report Number: P367163
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-9)
Test Lab: INNOVATION CENTER
Issue Date: 12/2/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: MSA-SA2A-730-U-T2-HSS
Description: MESA POST TOP DECORATIVE LUMINAIRE. (2) 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: 5460 lumens
Efficiency: N/A
Efficacy: 82.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G2

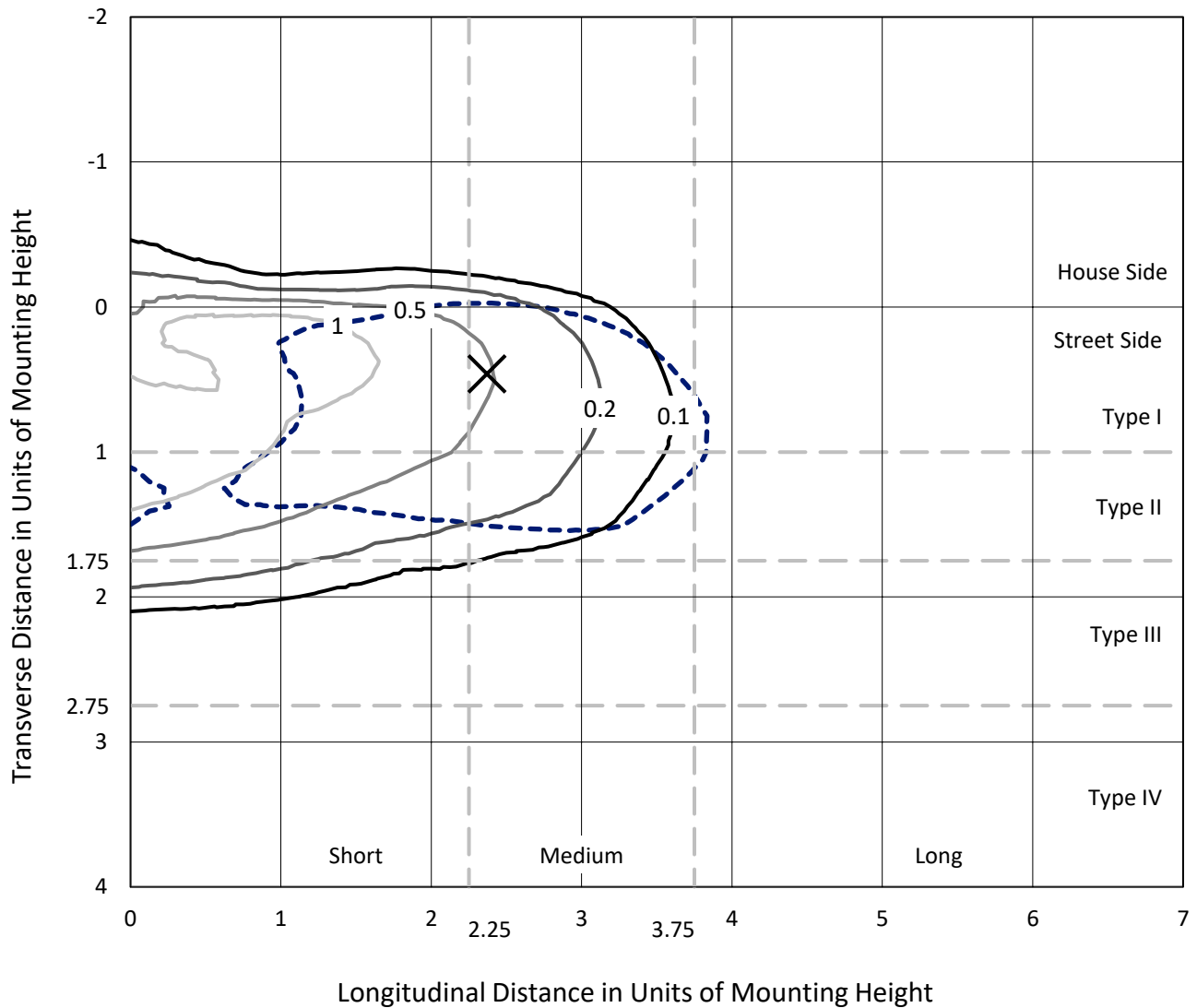
Input Watts (W): 66
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P367163
 CATALOG NUMBER: MSA-SA2A-730-U-T2-HSS

Iso-Footcandle Lines of Horizontal Illumination

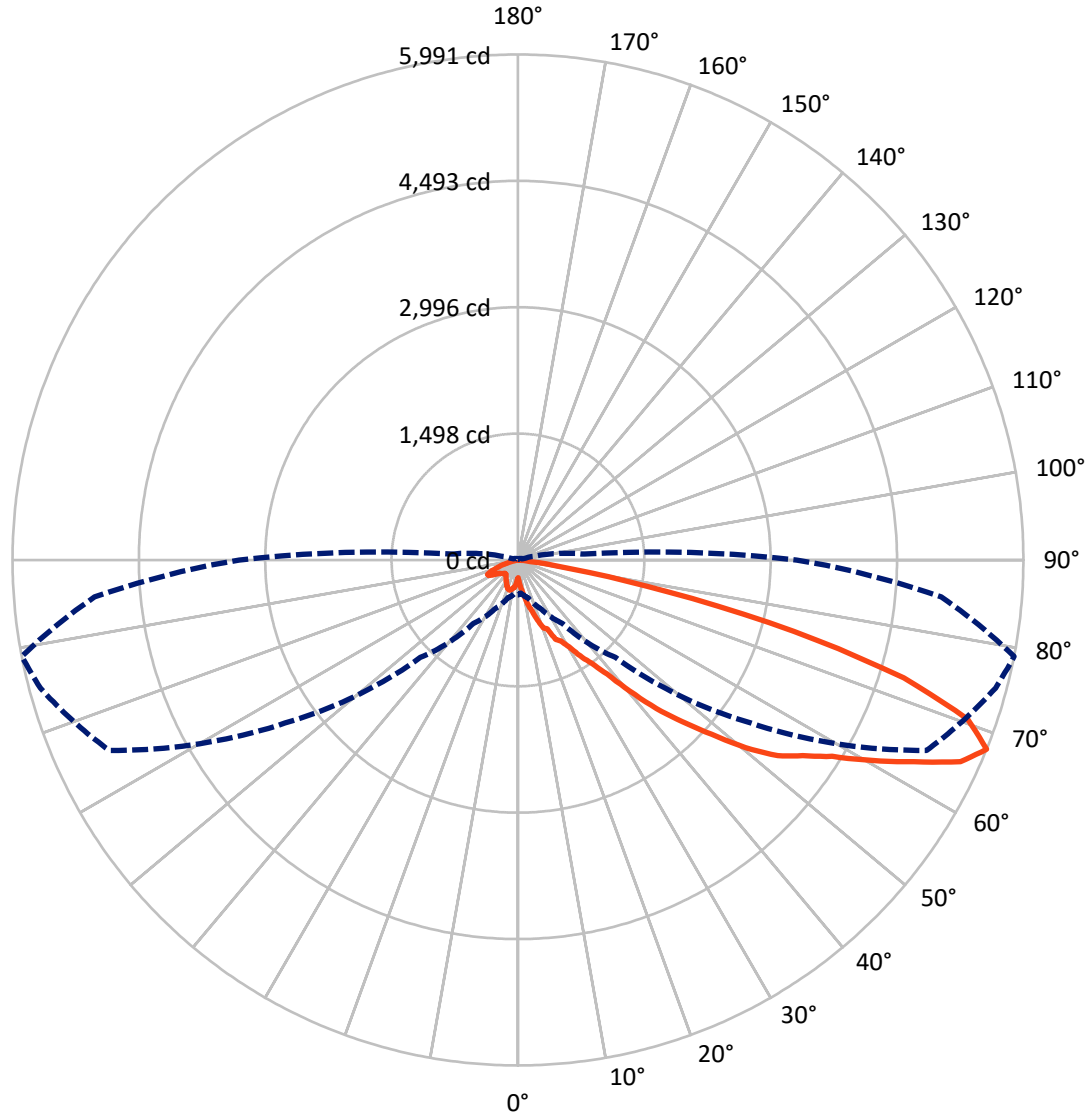
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.6 fc
 Type II - Medium - N/A

REPORT NUMBER: P367163
CATALOG NUMBER: MSA-SA2A-730-U-T2-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P367163

CATALOG NUMBER: MSA-SA2A-730-U-T2-HSS

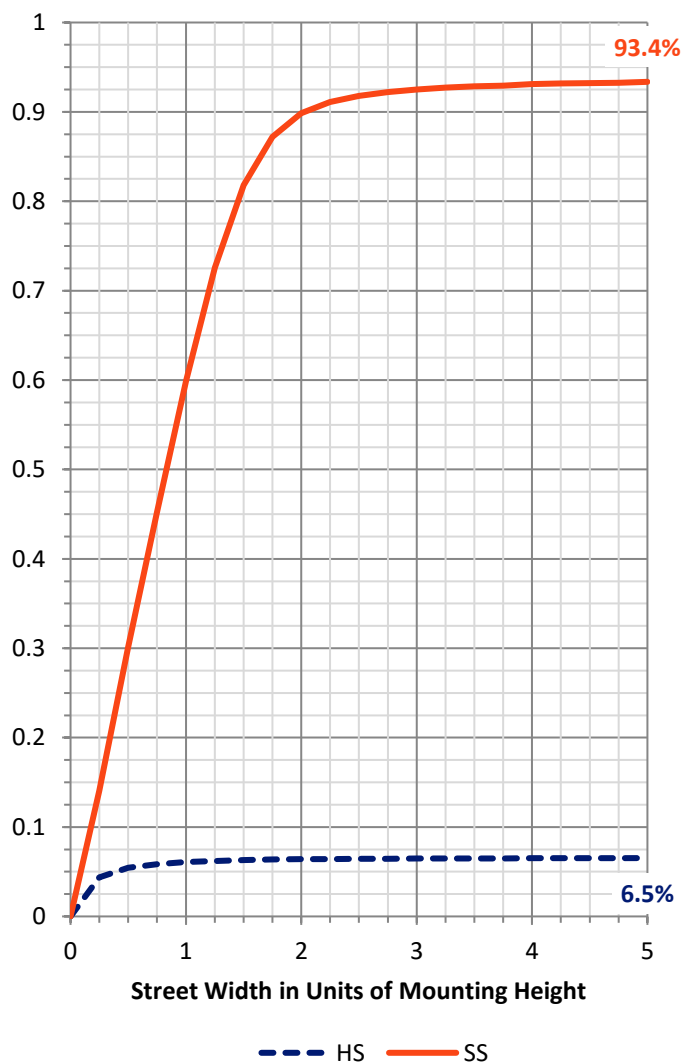
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	358.8	0.0	358.8
	% Fixture	6.6	0.0	6.6
Street Side	Lumens	5101.2	0.0	5101.2
	% Fixture	93.4	0.0	93.4
Total	Lumens	5460.0	0.0	5460.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	30.6	0.6
10°-20°	122.0	2.2
20°-30°	235.4	4.3
30°-40°	462.3	8.5
40°-50°	926.2	17.0
50°-60°	1480.4	27.1
60°-70°	1489.5	27.3
70°-80°	672.0	12.3
80°-90°	41.6	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°	5460.0	100.0
0°-180°	5460.0	100.0

Coefficient of Utilization



REPORT NUMBER: P367163

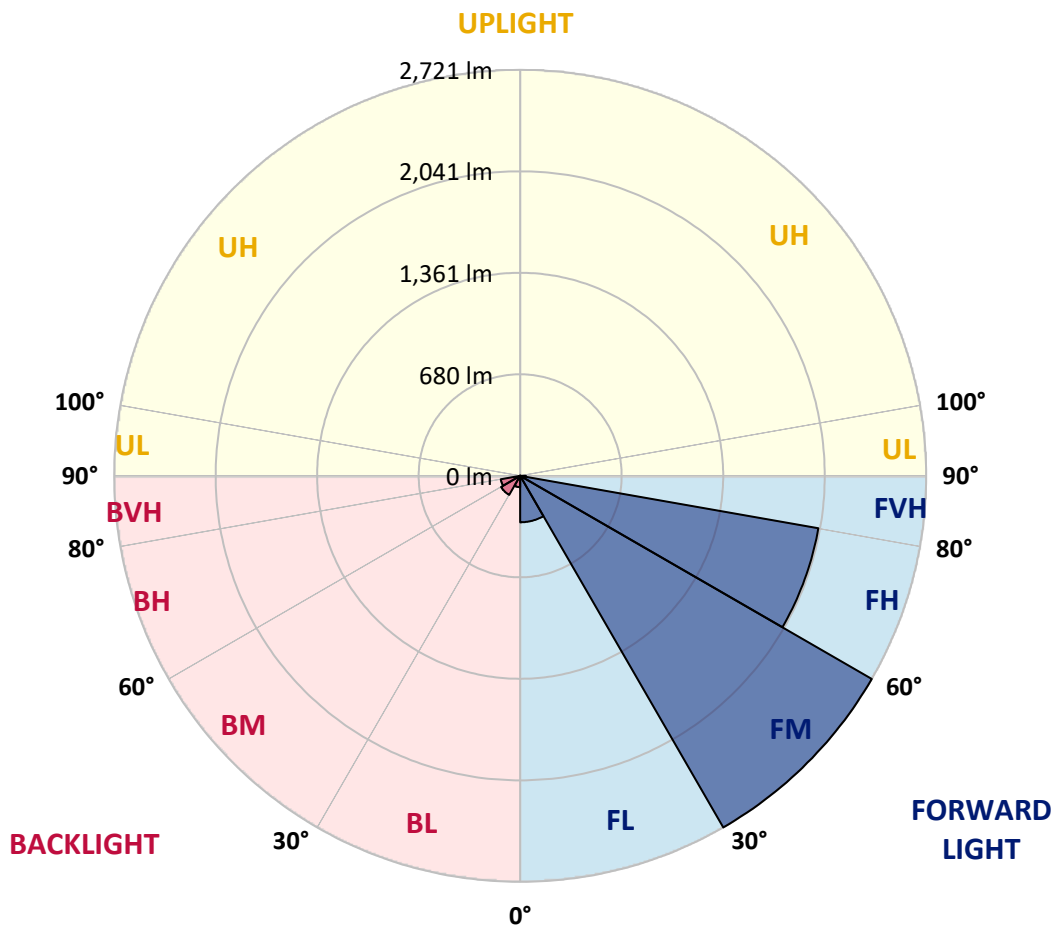
CATALOG NUMBER: MSA-SA2A-730-U-T2-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	311.7	5.7			
FM (30°-60°)	2721.3	49.8			
FH (60°-80°)	2029.3	37.2			G2/5000
FVH (80°-90°)	38.9	0.7			G1/100
BL (0°-30°)	76.3	1.4	B0/110		
BM (30°-60°)	147.6	2.7	B0/220		
BH (60°-80°)	132.2	2.4	B1/500		G1/500
BVH (80°-90°)	2.6	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: P367163
 CATALOG NUMBER: MSA-SA2A-730-U-T2-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	210.4	210.4	210.4	210.4	210.4	210.4	210.4	210.4	210.4	210.4	210.4
2.5°	284.1	273.9	257.3	266.7	266.1	270.9	261.9	251.9	236.0	251.9	253.1
5°	409.0	390.1	378.0	375.6	362.4	350.0	347.3	337.1	329.3	315.1	327.8
7.5°	509.6	500.8	479.5	477.1	444.6	426.5	432.2	427.7	397.9	383.2	395.5
10°	552.3	537.3	540.3	537.3	523.4	528.5	516.8	503.2	479.5	455.1	424.4
12.5°	568.9	566.5	591.4	588.4	620.9	660.1	633.9	611.3	556.2	550.2	508.4
15°	604.4	619.4	615.8	628.5	649.2	715.7	715.1	720.6	662.2	630.9	570.4
17.5°	636.0	647.1	629.1	643.5	700.1	740.4	794.3	773.2	779.9	747.9	654.3
20°	622.4	635.1	617.0	608.3	707.9	784.4	856.3	841.0	880.7	860.8	731.7
22.5°	707.0	683.2	637.8	609.5	683.8	783.5	878.3	942.4	935.5	886.7	803.6
25°	811.5	797.0	742.5	692.6	699.2	778.0	947.5	1041.7	1062.2	1041.4	872.0
27.5°	952.3	949.0	837.6	816.0	751.6	754.3	958.3	1166.9	1120.3	1087.8	951.7
30°	1136.2	1110.0	977.9	949.6	854.5	807.8	1024.6	1275.0	1240.7	1196.4	1026.7
32.5°	1334.0	1337.9	1169.3	1076.0	999.6	944.2	998.4	1325.5	1389.6	1353.8	1120.3
35°	1558.5	1576.0	1369.8	1260.2	1111.5	1030.0	1110.9	1480.8	1595.8	1501.6	1245.8
37.5°	1904.3	1903.7	1662.9	1444.7	1336.7	1248.2	1298.4	1622.0	1849.2	1716.8	1470.9
40°	2208.6	2142.4	1918.5	1667.8	1499.2	1475.1	1438.7	1815.2	2119.8	2040.1	1671.1
42.5°	2435.9	2389.2	2118.6	1923.6	1714.7	1638.3	1625.3	2098.5	2519.2	2407.6	1956.7
45°	2707.7	2554.8	2355.5	2179.7	1966.9	1944.7	1914.3	2385.9	2984.0	2732.3	2205.0
47.5°	2951.2	2807.3	2618.9	2393.1	2148.7	2332.3	2215.5	2638.4	3322.0	3085.7	2478.9
50°	3156.1	3003.2	2792.2	2620.4	2515.6	2640.2	2445.5	2846.4	3687.1	3495.6	2735.0
52.5°	3260.6	3087.5	2924.4	2818.1	2882.2	2854.2	2757.3	3098.3	3998.3	3855.0	2962.0
55°	3174.8	3005.6	2937.3	2990.0	3184.7	3103.7	3111.6	3488.7	4292.0	4094.6	3159.4
57.5°	2794.3	2639.9	2670.3	2814.5	3187.7	3399.6	3515.5	3867.9	4527.7	4393.2	3464.0
60°	2113.8	1989.5	2102.1	2357.9	2887.9	3340.6	3802.0	4247.2	4864.5	4822.4	3925.1
62.5°	1290.9	1223.5	1383.0	1702.1	2301.3	3051.4	3969.1	4752.8	5224.8	5269.6	4414.2
65°	658.6	628.2	761.2	1041.7	1554.9	2506.6	3848.4	5067.1	5597.1	5762.6	4880.5
67.5°	414.8	395.2	466.2	635.4	917.4	1634.9	3369.5	5341.9	5860.2	5991.1	5036.1
70°	287.4	275.1	336.5	436.1	578.8	880.7	2501.8	5085.4	5651.6	5657.6	4659.5
72.5°	182.4	172.8	232.7	323.0	427.1	454.8	1434.2	3990.4	4837.7	4782.0	3773.4
75°	118.3	113.5	147.8	236.6	328.1	280.5	708.8	2692.6	3468.8	3381.6	2506.3
77.5°	84.9	81.9	99.0	158.0	233.6	196.2	317.8	1604.8	1988.9	1798.1	1216.6
80°	51.2	50.9	71.6	99.0	166.1	138.5	146.9	728.7	771.1	628.8	371.7
82.5°	25.6	26.5	40.0	63.8	106.8	90.6	67.1	242.6	207.1	152.6	75.2
85°	6.0	7.5	21.1	43.9	53.6	36.1	31.9	63.5	56.9	43.0	22.0
87.5°	0.0	0.0	6.6	10.5	14.4	6.0	10.8	12.0	15.4	12.0	4.5
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: P367163
 CATALOG NUMBER: MSA-SA2A-730-U-T2-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	210.4	210.4	210.4	210.4	210.4	210.4	210.4	210.4	210.4	210.4	210.4
2.5°	253.4	249.8	227.8	222.1	221.5	215.2	216.7	210.7	211.0	224.5	224.5
5°	323.0	301.9	280.8	262.2	249.5	231.5	224.8	222.1	219.7	225.1	228.4
7.5°	379.2	348.2	310.3	269.7	232.1	206.2	202.6	195.9	193.5	199.0	203.2
10°	404.2	365.7	313.6	254.3	219.1	198.0	180.6	171.3	169.5	169.2	170.7
12.5°	457.2	409.3	317.2	248.6	210.4	187.2	167.3	151.7	137.2	138.8	137.2
15°	499.6	443.0	317.2	234.8	189.3	166.1	131.2	123.4	121.3	124.6	121.9
17.5°	563.7	476.5	301.3	210.1	171.3	129.1	115.9	115.3	119.5	124.3	121.3
20°	602.3	481.0	274.5	181.8	140.6	112.0	107.2	102.3	108.4	112.3	110.8
22.5°	642.3	481.3	247.7	166.7	113.2	102.0	94.2	90.3	91.2	94.8	95.4
25°	659.5	469.5	222.7	146.9	102.6	91.2	83.1	78.9	77.4	79.2	78.6
27.5°	706.1	447.0	195.6	125.2	97.5	81.0	73.4	68.3	63.8	66.8	67.4
30°	712.7	439.7	180.9	111.4	90.9	71.6	65.0	59.6	56.3	60.5	60.5
32.5°	733.8	400.0	173.4	105.6	84.0	66.2	57.2	53.3	52.7	55.4	55.7
35°	766.3	382.6	162.2	101.1	77.7	59.9	51.5	49.7	49.1	51.2	51.2
37.5°	876.5	360.9	149.9	97.2	72.2	56.6	50.0	47.0	47.3	49.1	50.3
40°	949.6	363.6	131.5	92.4	65.9	53.6	47.0	44.8	44.5	45.4	46.4
42.5°	1085.3	365.7	123.4	87.3	61.1	50.0	43.9	42.4	41.2	42.1	43.0
45°	1237.0	376.8	119.2	83.1	58.4	47.9	41.2	40.3	37.6	38.2	39.4
47.5°	1383.3	417.5	114.1	77.1	56.0	46.7	38.5	36.4	34.6	34.3	35.5
50°	1549.5	456.9	108.4	70.4	53.6	44.8	35.8	32.5	31.3	31.3	32.2
52.5°	1698.2	494.5	102.9	65.9	51.8	41.5	33.4	30.1	29.2	29.2	30.4
55°	1854.7	533.9	98.1	61.7	49.4	38.2	31.3	28.3	28.0	27.4	28.3
57.5°	2131.0	620.0	92.1	58.1	46.1	35.5	29.5	26.5	25.9	25.0	25.9
60°	2533.4	752.2	84.3	54.5	42.1	33.7	28.0	24.4	23.5	22.0	22.3
62.5°	2926.8	859.0	75.2	50.0	38.5	31.9	25.6	22.0	20.5	18.7	19.0
65°	3263.9	901.1	65.6	44.5	34.9	27.7	22.3	19.3	17.2	14.7	14.4
67.5°	3303.6	795.8	56.3	39.4	31.3	23.5	19.0	17.2	13.8	11.7	11.1
70°	2973.1	592.9	47.0	34.9	27.1	19.9	16.3	15.0	12.9	11.1	10.2
72.5°	2367.5	437.6	39.4	31.0	23.8	16.9	13.8	14.1	12.9	10.8	9.6
75°	1565.7	250.4	32.2	25.9	19.9	13.5	12.6	12.6	12.3	10.2	9.0
77.5°	753.4	108.1	24.7	20.5	16.0	10.2	11.4	11.4	11.7	9.3	7.5
80°	213.7	32.5	15.4	13.8	11.7	6.9	9.0	8.7	7.8	5.4	3.3
82.5°	38.2	12.6	6.9	7.2	6.6	2.7	5.1	4.8	3.9	2.1	0.3
85°	10.5	4.8	3.9	4.2	3.3	0.9	2.1	2.7	2.1	1.2	0.0
87.5°	2.7	2.1	2.7	3.0	2.4	0.3	0.9	0.3	0.9	0.3	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)