

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: P366757

Luminaire Tested: **MSA-SA1B-730-U-SL2-HSS**

Issue Date: 12/2/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P366757  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-17)  
Test Lab: INNOVATION CENTER  
Issue Date: 12/2/2019  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: MSA-SA1B-730-U-SL2-HSS  
Description: MESA POST TOP DECORATIVE LUMINAIRE. (1) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

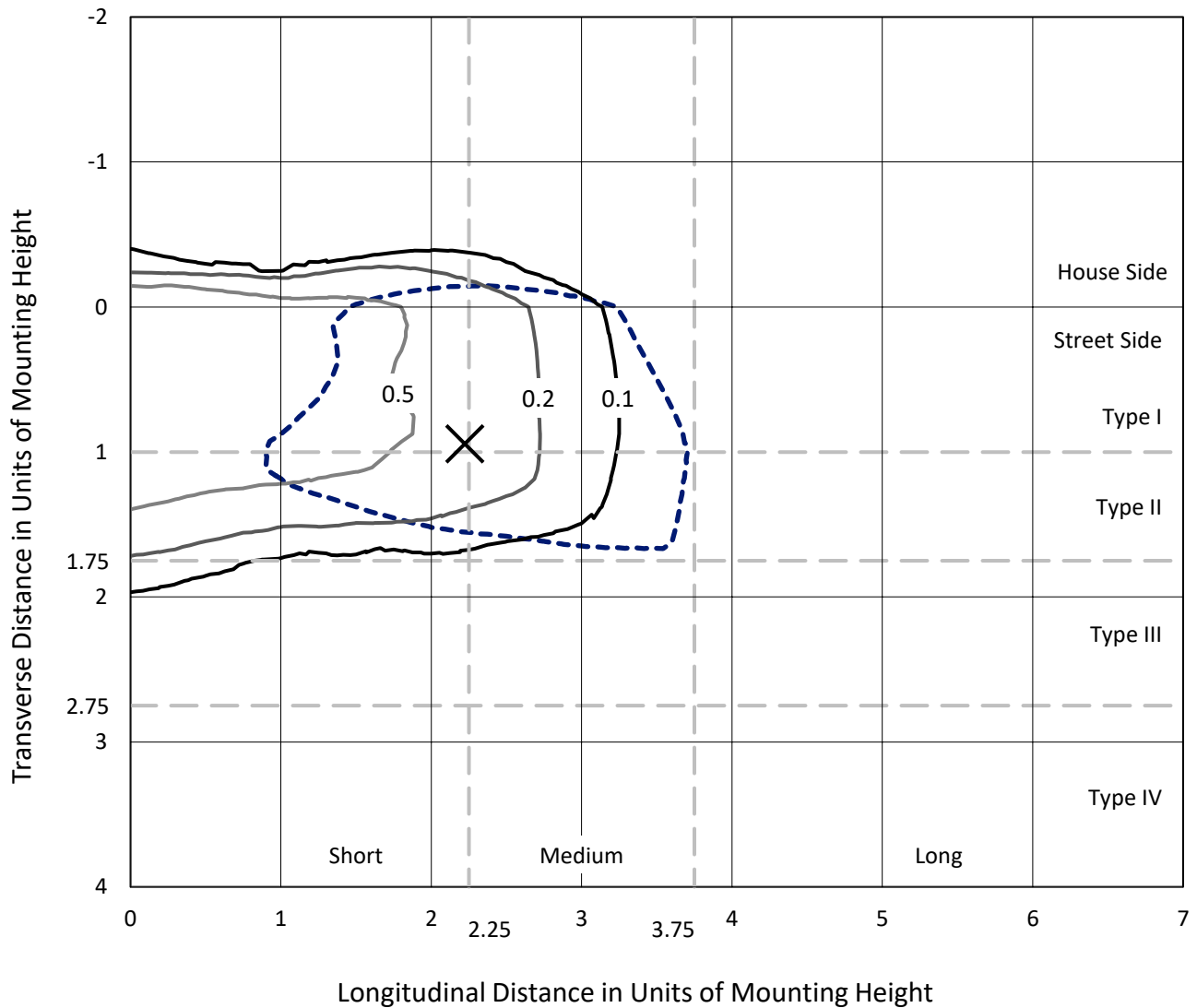
Lumens per Lamp: N/A  
Luminaire Lumens: 3780 lumens  
Efficiency: N/A  
Efficacy: 85.9 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G1  
  
Input Watts (W): 44  
Input Voltage (V): NR  
Input Current (Ain): NR  
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: P366757  
 CATALOG NUMBER: MSA-SA1B-730-U-SL2-HSS

### Iso-Footcandle Lines of Horizontal Illumination

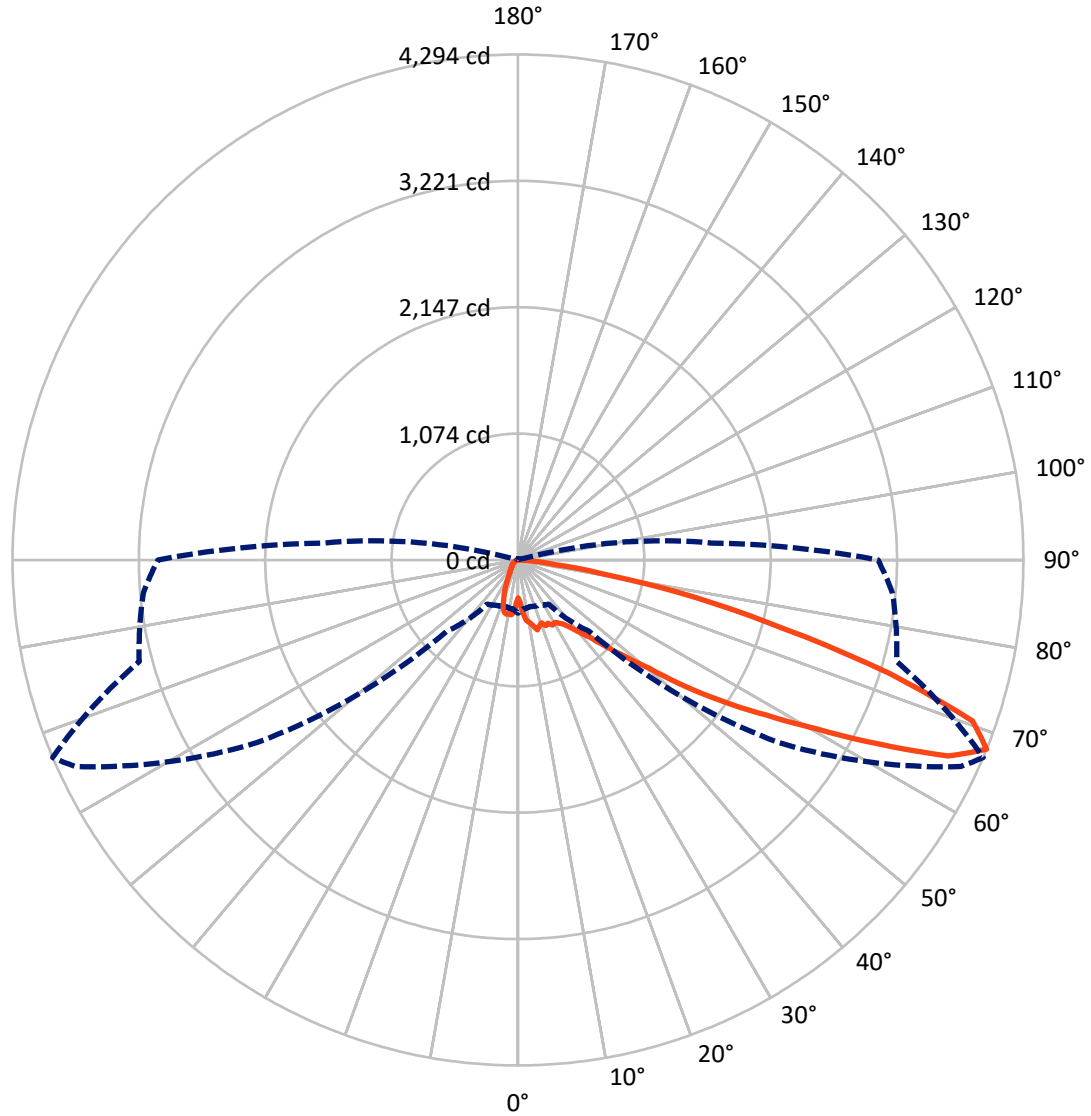
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1 fc  
 Type II - Short - N/A

REPORT NUMBER: P366757  
CATALOG NUMBER: MSA-SA1B-730-U-SL2-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P366757  
 CATALOG NUMBER: MSA-SA1B-730-U-SL2-HSS

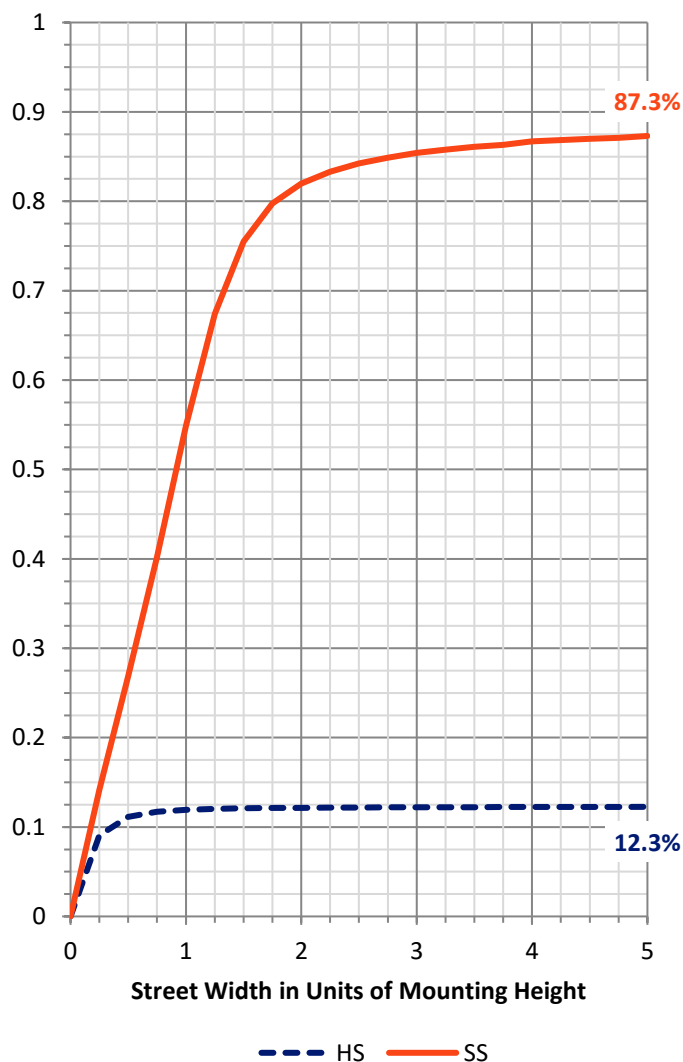
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	467.5	0.0	467.5
	% Fixture	12.4	0.0	12.4
<b>Street Side</b>	Lumens	3312.5	0.0	3312.5
	% Fixture	87.6	0.0	87.6
<b>Total</b>	Lumens	3780.0	0.0	3780.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	40.4	1.1
10°-20°	119.6	3.2
20°-30°	187.4	5.0
30°-40°	302.2	8.0
40°-50°	555.2	14.7
50°-60°	937.7	24.8
60°-70°	1036.7	27.4
70°-80°	542.6	14.4
80°-90°	58.3	1.5
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°	3780.0	100.0
0°-180°	3780.0	100.0

**Coefficient of Utilization**

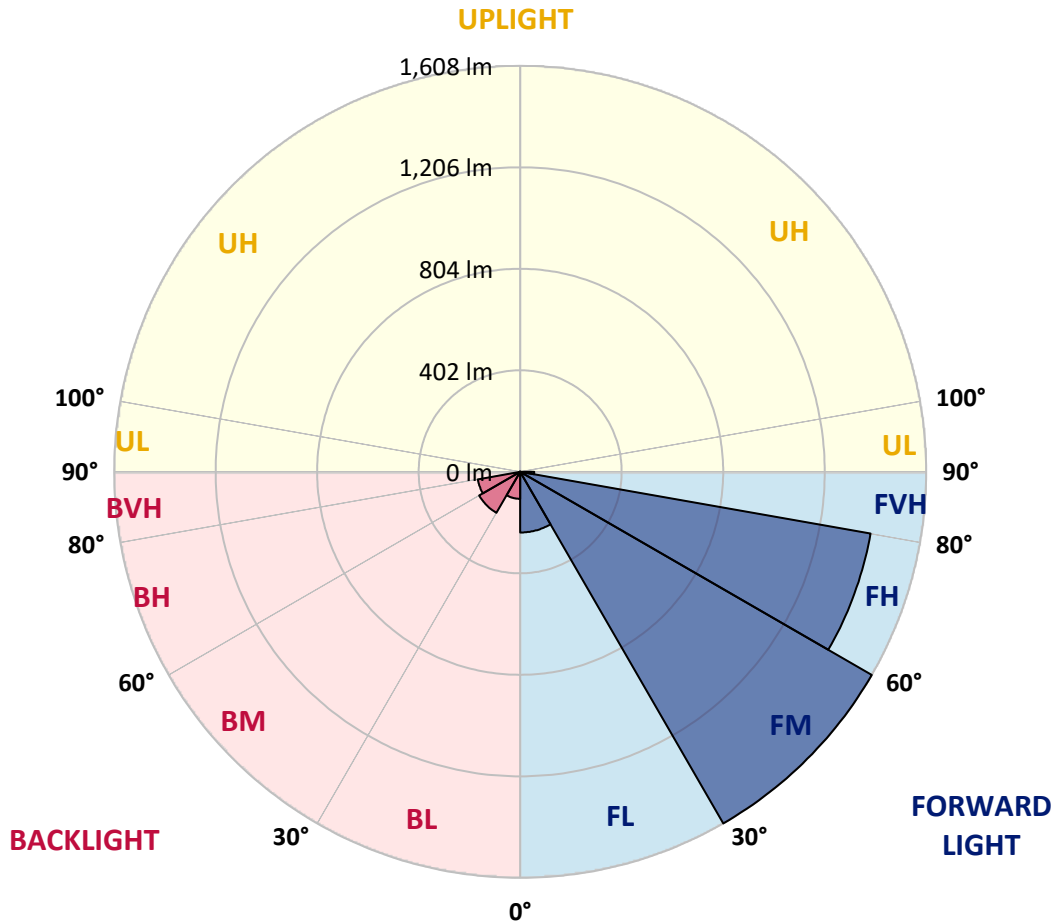


REPORT NUMBER: P366757  
 CATALOG NUMBER: MSA-SA1B-730-U-SL2-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	240.3	6.4			
FM (30°-60°)	1607.6	42.5			
FH (60°-80°)	1408.7	37.3			G1/1800
FVH (80°-90°)	55.8	1.5			G1/100
BL (0°-30°)	107.0	2.8	B0/110		
BM (30°-60°)	187.4	5.0	B0/220		
BH (60°-80°)	170.5	4.5	B1/500		G1/500
BVH (80°-90°)	2.5	0.1			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G1**  
 Type II Short





REPORT NUMBER: P366757

CATALOG NUMBER: MSA-SA1B-730-U-SL2-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	321.9	321.9	321.9	321.9	321.9	321.9	321.9	321.9	321.9	321.9	321.9
2.5°	380.1	367.2	345.3	351.7	364.3	374.9	369.9	360.1	360.3	350.3	386.2
5°	442.2	424.9	412.3	416.7	416.1	415.7	439.3	448.3	452.1	468.6	493.0
7.5°	460.0	453.9	440.6	444.7	431.4	432.4	473.8	512.9	519.1	529.2	572.6
10°	453.1	441.2	446.0	446.0	446.2	467.7	495.5	532.9	540.4	579.5	584.1
12.5°	445.6	446.2	465.2	461.7	487.8	526.4	535.8	577.7	574.1	608.0	658.5
15°	473.4	488.0	475.7	480.5	483.0	528.3	543.4	599.2	615.3	658.3	691.1
17.5°	521.2	523.1	497.6	490.7	508.7	521.6	552.1	578.9	589.6	702.4	748.8
20°	529.8	542.1	516.2	476.3	514.5	532.1	553.4	566.2	570.8	716.0	781.4
22.5°	581.8	568.2	526.7	496.4	507.4	526.5	539.8	578.5	606.1	690.3	812.6
25°	608.4	604.8	565.3	539.4	528.3	526.7	557.0	586.4	595.2	717.0	820.3
27.5°	672.3	664.0	587.5	584.3	547.6	515.4	557.6	610.3	626.8	691.8	849.1
30°	759.1	756.1	654.3	652.1	593.9	535.9	588.7	625.1	615.1	704.7	868.2
32.5°	846.6	871.5	767.4	707.9	664.2	611.3	579.9	620.5	638.3	735.9	903.5
35°	952.2	970.3	864.2	821.1	723.9	646.6	638.3	664.4	672.1	773.1	943.6
37.5°	1137.1	1109.9	1019.5	946.1	895.1	772.6	731.9	711.2	729.0	823.6	1025.5
40°	1273.6	1256.4	1145.1	1101.2	983.9	912.2	805.9	786.6	806.5	875.3	1082.4
42.5°	1438.3	1402.5	1297.8	1268.0	1147.2	1009.0	901.2	907.9	895.5	977.5	1182.3
45°	1587.3	1506.4	1448.1	1454.8	1390.4	1203.6	1060.2	1056.9	1046.6	1125.6	1287.4
47.5°	1687.6	1616.8	1560.1	1541.5	1533.8	1545.9	1289.9	1232.0	1224.3	1281.1	1452.9
50°	1741.5	1664.0	1593.8	1597.7	1753.4	1870.5	1526.9	1444.7	1447.5	1506.8	1679.2
52.5°	1705.2	1617.6	1543.6	1615.5	1923.6	2087.0	1919.2	1722.5	1789.2	1774.1	1982.7
55°	1537.8	1461.7	1409.2	1537.8	1942.2	2320.0	2402.3	2140.7	2125.8	2091.2	2292.2
57.5°	1256.2	1190.6	1158.2	1293.9	1738.8	2507.7	2887.4	2613.4	2485.9	2341.3	2549.1
60°	935.9	887.6	853.9	925.6	1370.1	2325.4	3205.1	3058.8	2911.2	2582.3	2780.0
62.5°	693.2	653.9	618.0	624.5	943.4	2000.0	3327.1	3530.7	3446.0	2836.8	2997.8
65°	553.2	517.3	492.2	477.8	584.3	1504.7	3157.4	3917.5	4015.3	3076.5	3155.1
67.5°	451.8	421.5	409.0	425.5	458.3	857.7	2704.1	4152.2	4294.1	3330.7	3193.8
70°	367.6	342.7	341.3	385.8	422.0	522.9	1989.0	3990.1	4097.0	3374.1	2961.6
72.5°	256.2	245.2	262.7	325.8	418.2	435.5	1142.3	3302.0	3305.8	2980.0	2436.0
75°	145.0	143.2	170.9	259.8	407.3	431.1	636.8	2333.4	2335.1	2253.8	1687.6
77.5°	79.8	74.6	99.5	175.6	349.8	421.1	410.7	1593.3	1552.4	1254.2	770.8
80°	36.8	34.7	53.9	112.6	255.8	398.3	329.2	875.7	789.6	408.6	188.1
82.5°	15.1	14.4	24.7	72.3	161.6	320.8	277.5	388.5	311.8	77.7	58.1
85°	2.7	2.9	10.2	43.7	90.5	147.8	224.9	184.5	135.6	21.5	31.8
87.5°	0.0	0.0	2.1	10.5	21.9	40.5	91.3	51.6	35.5	6.3	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: P366757  
 CATALOG NUMBER: MSA-SA1B-730-U-SL2-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	321.9	321.9	321.9	321.9	321.9	321.9	321.9	321.9	321.9	321.9	321.9
2.5°	393.3	390.0	357.0	358.6	360.9	358.8	358.4	349.2	340.7	368.5	368.2
5°	497.4	474.2	451.4	442.6	423.6	398.7	398.8	391.0	382.9	394.2	394.2
7.5°	571.6	539.6	510.6	459.1	408.8	363.4	359.3	348.6	336.3	351.1	354.0
10°	588.9	561.1	523.7	447.9	400.4	356.1	307.4	267.3	248.7	240.1	238.5
12.5°	642.0	621.3	537.7	453.9	385.4	310.4	230.7	183.1	150.7	148.2	144.8
15°	677.5	662.9	551.5	439.1	322.1	223.2	145.0	111.2	98.2	97.0	95.3
17.5°	732.5	707.2	538.2	392.1	252.0	147.3	97.4	87.8	89.4	92.8	90.1
20°	754.9	705.5	509.5	324.1	177.0	98.8	84.6	79.4	83.4	86.7	85.1
22.5°	777.9	710.4	484.0	267.1	115.6	81.7	75.4	72.7	73.1	76.3	76.5
25°	777.7	724.2	454.4	208.0	86.1	72.7	68.1	64.6	63.3	65.6	65.0
27.5°	815.5	708.3	400.6	154.4	75.7	65.0	60.6	56.4	51.6	53.9	53.9
30°	815.7	734.2	363.0	110.8	69.4	57.9	54.1	47.6	42.0	43.9	44.1
32.5°	837.4	711.8	328.3	84.8	64.4	53.7	45.3	39.3	36.0	37.2	37.2
35°	862.1	731.0	275.0	74.8	59.4	47.7	38.7	33.9	31.4	32.4	32.4
37.5°	943.8	726.9	238.0	69.6	56.2	43.1	35.3	29.9	28.8	29.3	30.1
40°	973.3	755.5	187.7	66.5	50.8	38.9	31.1	27.0	25.5	25.9	26.1
42.5°	1048.5	761.8	149.9	64.0	46.0	33.7	27.6	24.7	22.8	22.8	23.4
45°	1131.5	777.7	119.3	61.9	42.0	30.3	24.9	22.6	19.8	19.4	20.1
47.5°	1251.8	838.7	97.2	57.7	37.2	28.2	23.0	19.6	17.3	16.5	17.3
50°	1452.9	942.3	85.9	52.5	33.7	26.5	20.3	16.7	15.0	14.0	14.6
52.5°	1736.7	1121.2	80.0	47.7	30.7	23.8	18.2	14.6	12.8	12.1	12.5
55°	2051.9	1326.3	77.1	43.0	28.0	20.9	15.9	12.8	11.3	10.4	10.5
57.5°	2343.4	1519.2	74.2	38.4	25.3	18.6	14.0	11.3	9.8	8.8	9.0
60°	2630.6	1673.2	67.3	33.0	22.8	16.7	12.3	9.8	8.8	7.7	7.7
62.5°	2884.7	1765.3	57.3	28.6	20.5	14.8	10.9	8.8	8.1	6.9	6.9
65°	3057.7	1769.5	46.2	24.5	18.0	12.7	9.6	8.2	7.5	6.1	5.9
67.5°	3060.2	1654.4	37.0	21.9	15.9	11.1	8.6	7.9	6.9	5.8	5.4
70°	2739.0	1366.8	30.9	19.2	13.8	9.8	7.5	7.5	6.7	5.6	5.0
72.5°	2190.9	1044.5	25.9	16.7	12.3	8.4	6.9	7.1	6.5	5.6	5.0
75°	1472.6	599.0	21.5	14.2	10.7	7.1	6.7	6.9	6.7	5.6	4.8
77.5°	678.2	190.8	16.7	11.7	9.2	5.9	6.5	6.5	6.1	5.0	4.2
80°	152.8	47.0	12.1	8.6	7.5	4.4	5.9	5.4	4.8	3.5	2.5
82.5°	55.6	14.4	7.3	5.4	4.6	1.7	3.8	3.8	3.5	2.5	1.5
85°	31.8	7.5	4.0	3.5	2.5	0.8	2.1	2.3	1.9	1.7	0.8
87.5°	10.4	1.7	1.9	2.1	1.9	0.4	0.8	0.8	0.6	0.4	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)