

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: P366899

Luminaire Tested: **MSA-SA1C-730-U-T2-HSS**

Issue Date: 12/2/2019

Test Information

Test Method: LM-79-08
Report Number: P366899
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-SA1C-730-U-T2-HSS
Description: MESA POST TOP DECORATIVE LUMINAIRE. (1) 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: 4308 lumens
Efficiency: N/A
Efficacy: 73.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B0 - U0 - G1

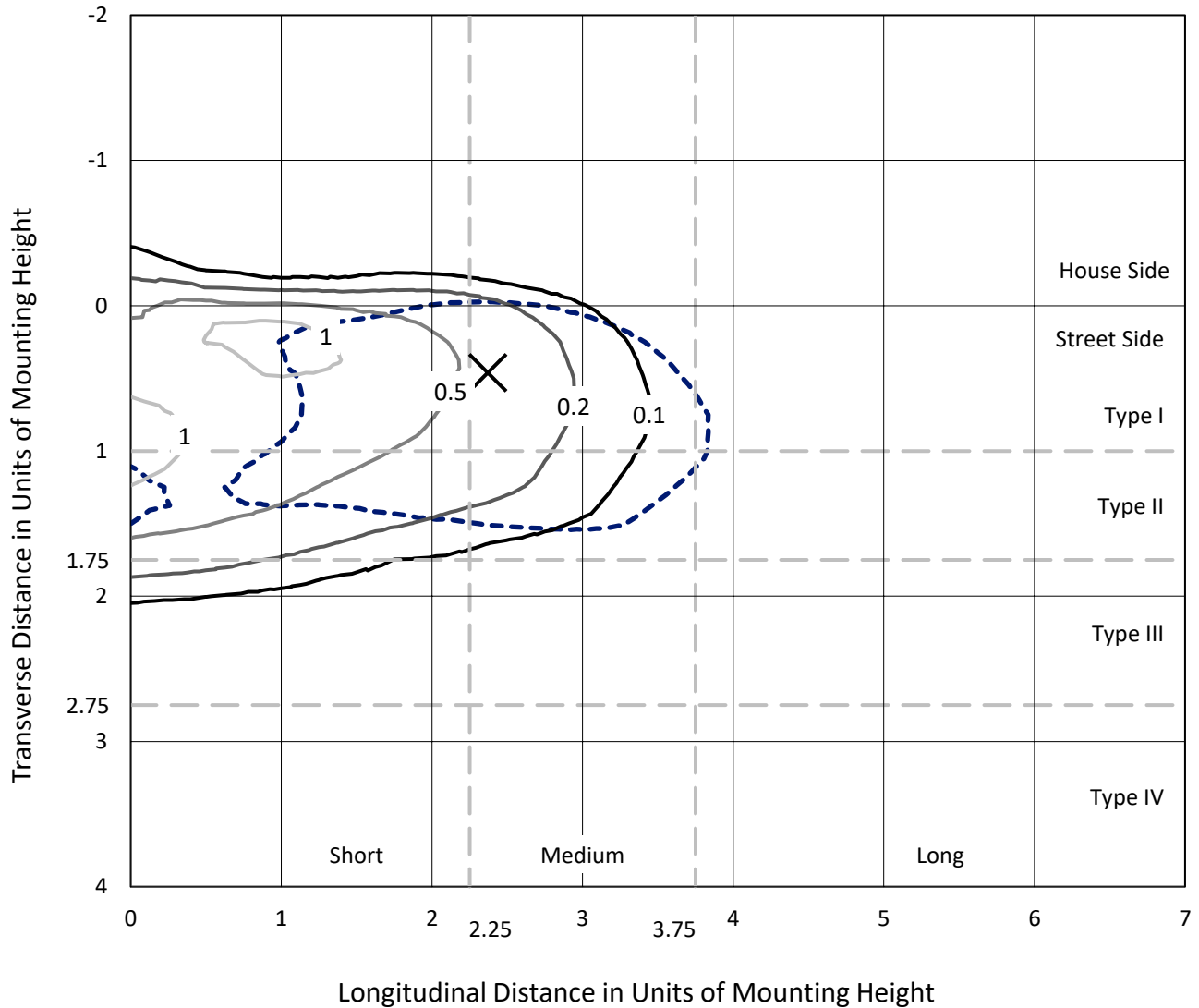
Input Watts (W): 59
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P366899
 CATALOG NUMBER: MSA-SA1C-730-U-T2-HSS

Iso-Footcandle Lines of Horizontal Illumination

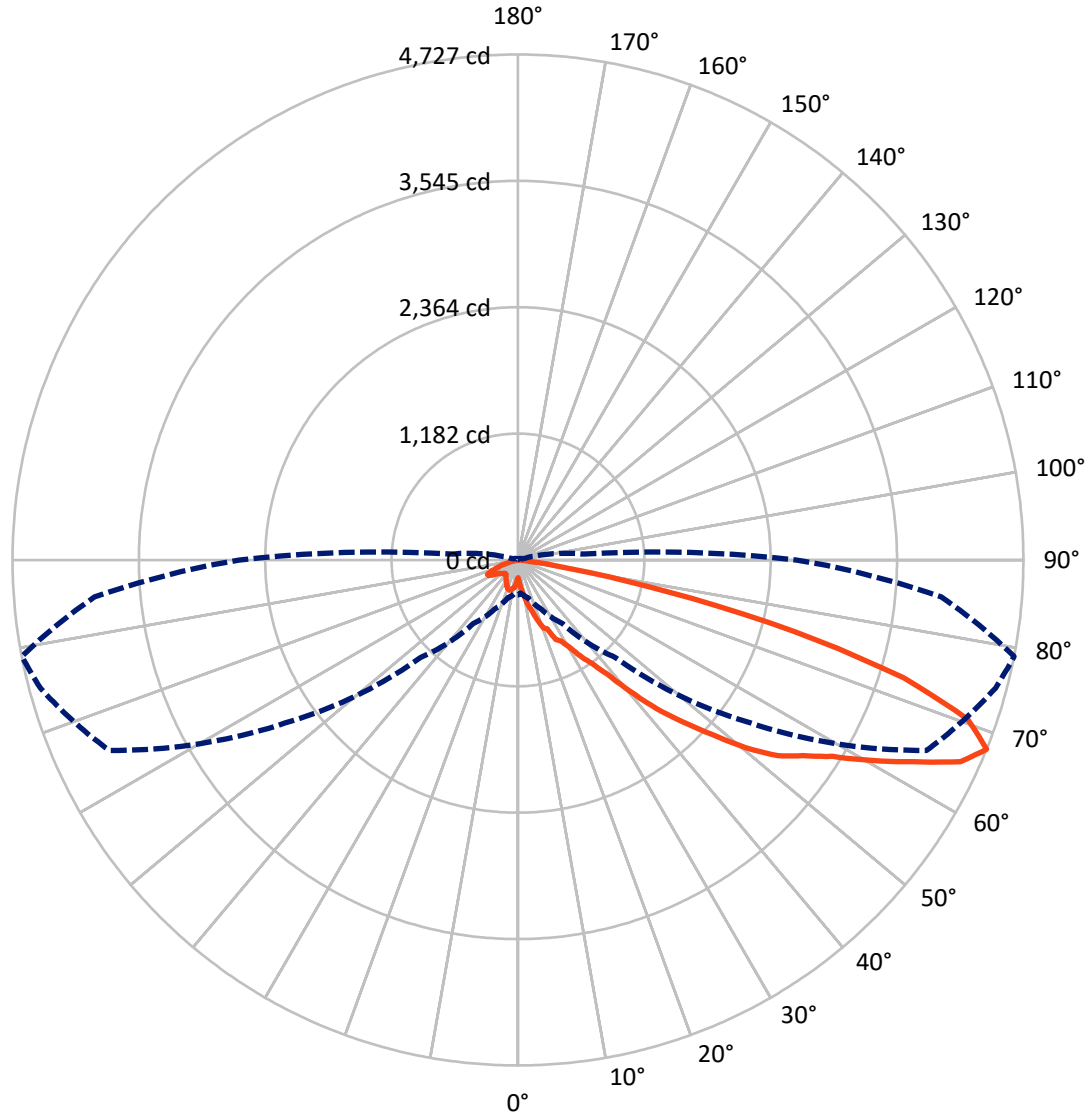
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.3 fc
 Type II - Medium - N/A

REPORT NUMBER: P366899
CATALOG NUMBER: MSA-SA1C-730-U-T2-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P366899

CATALOG NUMBER: MSA-SA1C-730-U-T2-HSS

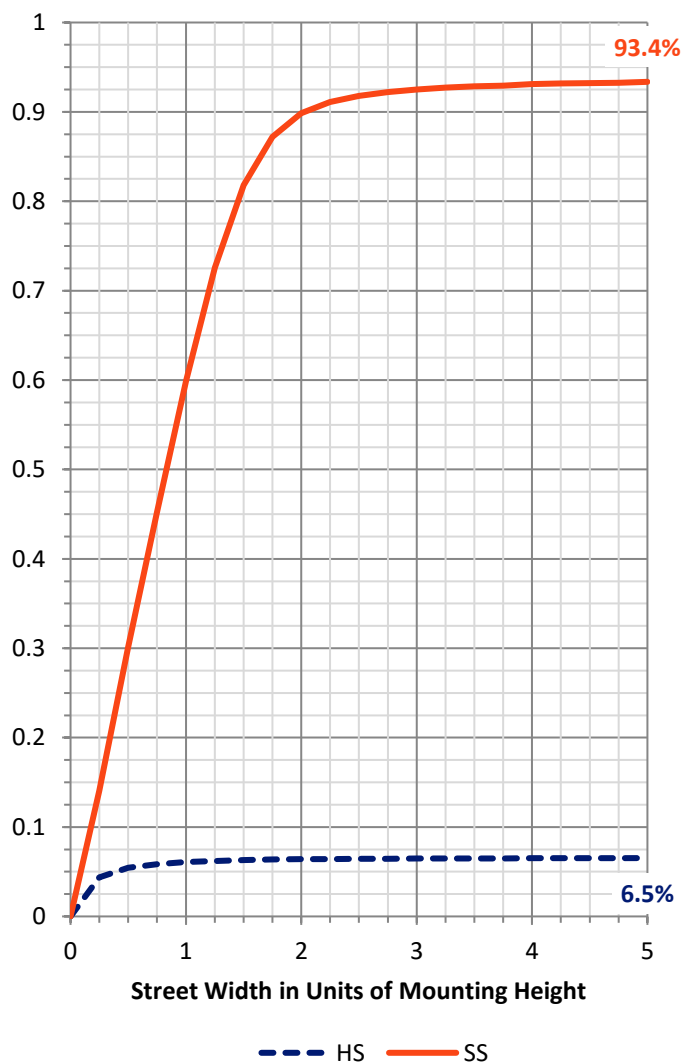
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	283.1	0.0	283.1
	% Fixture	6.6	0.0	6.6
Street Side	Lumens	4024.9	0.0	4024.9
	% Fixture	93.4	0.0	93.4
Total	Lumens	4308.0	0.0	4308.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	24.1	0.6
10°-20°	96.3	2.2
20°-30°	185.7	4.3
30°-40°	364.8	8.5
40°-50°	730.8	17.0
50°-60°	1168.1	27.1
60°-70°	1175.3	27.3
70°-80°	530.2	12.3
80°-90°	32.8	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°	4308.0	100.0
0°-180°	4308.0	100.0

Coefficient of Utilization



REPORT NUMBER: P366899

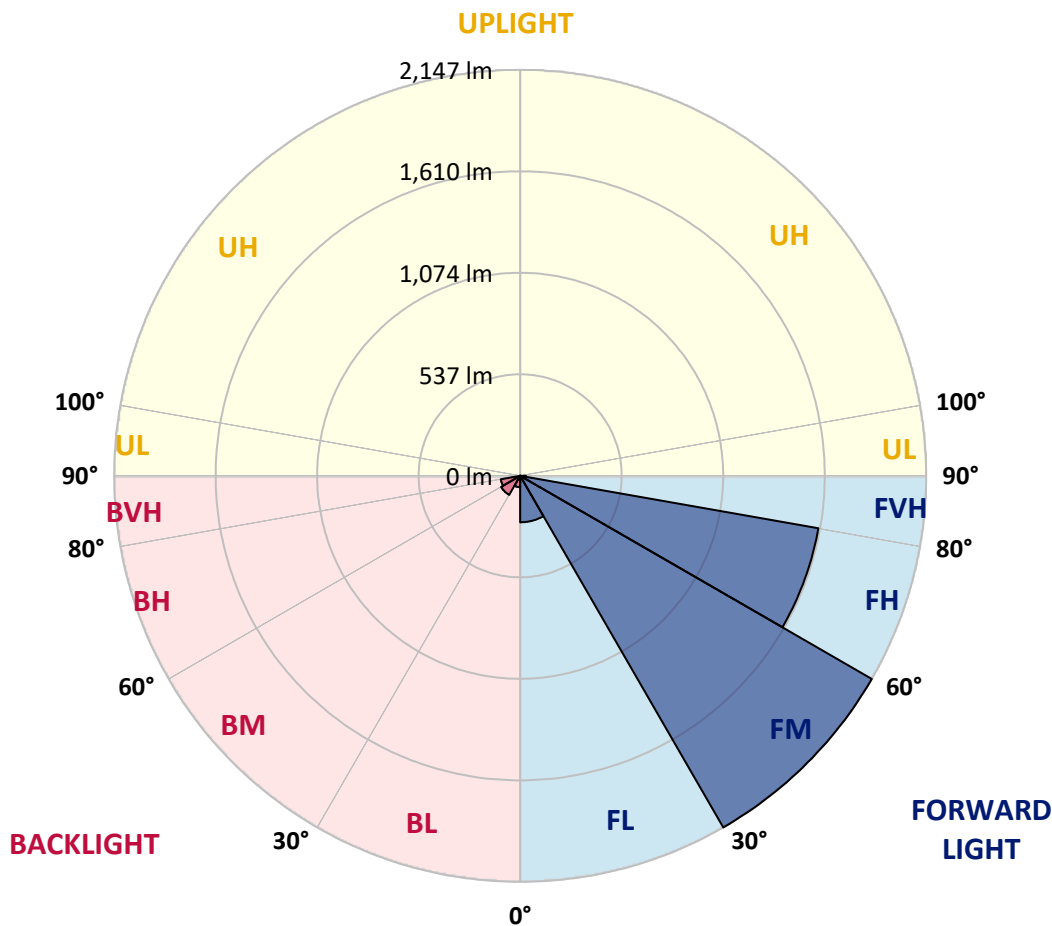
CATALOG NUMBER: MSA-SA1C-730-U-T2-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	245.9	5.7			
FM (30°-60°)	2147.2	49.8			
FH (60°-80°)	1601.1	37.2			G1/1800
FVH (80°-90°)	30.7	0.7			G1/100
BL (0°-30°)	60.2	1.4	B0/110		
BM (30°-60°)	116.5	2.7	B0/220		
BH (60°-80°)	104.3	2.4	B0/110		G0/110
BVH (80°-90°)	2.1	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G1

Type II Medium





REPORT NUMBER: P366899

CATALOG NUMBER: MSA-SA1C-730-U-T2-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	166.0	166.0	166.0	166.0	166.0	166.0	166.0	166.0	166.0	166.0	166.0
2.5°	224.2	216.1	203.0	210.4	209.9	213.7	206.6	198.8	186.2	198.8	199.7
5°	322.7	307.8	298.3	296.4	285.9	276.2	274.1	266.0	259.8	248.6	258.6
7.5°	402.1	395.2	378.3	376.4	350.8	336.5	341.0	337.5	313.9	302.3	312.0
10°	435.8	423.9	426.3	423.9	413.0	417.0	407.8	397.1	378.3	359.1	334.8
12.5°	448.8	446.9	466.6	464.3	489.9	520.8	500.1	482.3	438.9	434.1	401.1
15°	476.9	488.7	485.9	495.9	512.2	564.7	564.3	568.5	522.5	497.8	450.0
17.5°	501.8	510.6	496.3	507.7	552.4	584.2	626.7	610.1	615.3	590.1	516.3
20°	491.1	501.1	486.8	479.9	558.6	618.9	675.6	663.5	694.9	679.2	577.3
22.5°	557.8	539.1	503.2	480.9	539.6	618.2	693.0	743.5	738.1	699.6	634.1
25°	640.2	628.8	585.9	546.4	551.7	613.9	747.6	821.9	838.1	821.7	688.0
27.5°	751.4	748.8	660.9	643.8	593.0	595.1	756.1	920.7	883.9	858.3	750.9
30°	896.5	875.8	771.6	749.2	674.2	637.4	808.4	1006.0	978.9	944.0	810.0
32.5°	1052.5	1055.6	922.6	849.0	788.7	745.0	787.7	1045.9	1096.4	1068.2	883.9
35°	1229.7	1243.4	1080.8	994.3	877.0	812.7	876.5	1168.4	1259.1	1184.8	982.9
37.5°	1502.5	1502.1	1312.1	1139.9	1054.6	984.8	1024.5	1279.8	1459.1	1354.6	1160.6
40°	1742.6	1690.4	1513.7	1315.9	1182.9	1163.9	1135.2	1432.2	1672.6	1609.6	1318.5
42.5°	1921.9	1885.1	1671.6	1517.7	1352.9	1292.6	1282.4	1655.7	1987.7	1899.6	1543.9
45°	2136.4	2015.7	1858.5	1719.8	1551.9	1534.4	1510.4	1882.5	2354.4	2155.8	1739.8
47.5°	2328.5	2215.0	2066.3	1888.2	1695.4	1840.2	1748.1	2081.7	2621.1	2434.6	1955.9
50°	2490.2	2369.6	2203.1	2067.5	1984.9	2083.2	1929.5	2245.8	2909.1	2758.1	2158.0
52.5°	2572.6	2436.1	2307.4	2223.5	2274.1	2252.0	2175.6	2444.6	3154.7	3041.6	2337.0
55°	2504.9	2371.5	2317.6	2359.1	2512.8	2448.9	2455.1	2752.6	3386.5	3230.7	2492.8
57.5°	2204.8	2082.9	2106.9	2220.7	2515.1	2682.3	2773.8	3051.9	3572.4	3466.3	2733.2
60°	1667.8	1569.7	1658.6	1860.4	2278.6	2635.8	2999.8	3351.1	3838.2	3804.9	3097.0
62.5°	1018.6	965.4	1091.2	1342.9	1815.8	2407.6	3131.6	3750.0	4122.4	4157.8	3482.9
65°	519.6	495.6	600.6	821.9	1226.8	1977.7	3036.4	3998.0	4416.2	4546.8	3850.7
67.5°	327.2	311.8	367.9	501.3	723.8	1290.0	2658.6	4214.8	4623.7	4727.0	3973.5
70°	226.8	217.1	265.5	344.1	456.7	694.9	1973.9	4012.5	4459.2	4463.9	3676.4
72.5°	143.9	136.3	183.6	254.8	337.0	358.8	1131.6	3148.5	3817.0	3773.1	2977.3
75°	93.3	89.5	116.6	186.7	258.9	221.3	559.3	2124.5	2737.0	2668.1	1977.5
77.5°	67.0	64.6	78.1	124.7	184.3	154.8	250.8	1266.2	1569.3	1418.7	959.9
80°	40.4	40.1	56.5	78.1	131.1	109.2	115.9	574.9	608.4	496.1	293.3
82.5°	20.2	20.9	31.6	50.3	84.3	71.5	53.0	191.4	163.4	120.4	59.4
85°	4.7	5.9	16.6	34.7	42.3	28.5	25.2	50.1	44.9	34.0	17.3
87.5°	0.0	0.0	5.2	8.3	11.4	4.7	8.5	9.5	12.1	9.5	3.6
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: P366899
 CATALOG NUMBER: MSA-SA1C-730-U-T2-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	166.0	166.0	166.0	166.0	166.0	166.0	166.0	166.0	166.0	166.0	166.0
2.5°	200.0	197.1	179.8	175.3	174.8	169.8	171.0	166.2	166.5	177.2	177.2
5°	254.8	238.2	221.6	206.8	196.9	182.6	177.4	175.3	173.4	177.6	180.2
7.5°	299.2	274.8	244.8	212.8	183.1	162.7	159.8	154.6	152.7	157.0	160.3
10°	318.9	288.5	247.5	200.7	172.9	156.3	142.5	135.1	133.7	133.5	134.7
12.5°	360.7	323.0	250.3	196.2	166.0	147.7	132.0	119.7	108.3	109.5	108.3
15°	394.2	349.6	250.3	185.2	149.4	131.1	103.5	97.4	95.7	98.3	96.2
17.5°	444.8	375.9	237.7	165.8	135.1	101.9	91.4	91.0	94.3	98.1	95.7
20°	475.2	379.5	216.6	143.4	110.9	88.3	84.5	80.7	85.5	88.6	87.4
22.5°	506.8	379.7	195.4	131.6	89.3	80.5	74.3	71.2	72.0	74.8	75.3
25°	520.3	370.5	175.7	115.9	81.0	72.0	65.5	62.2	61.0	62.5	62.0
27.5°	557.1	352.7	154.4	98.8	76.9	63.9	57.9	53.9	50.3	52.7	53.2
30°	562.4	347.0	142.7	87.9	71.7	56.5	51.3	47.0	44.4	47.7	47.7
32.5°	579.0	315.6	136.8	83.4	66.3	52.2	45.1	42.0	41.6	43.7	43.9
35°	604.6	301.8	128.0	79.8	61.3	47.3	40.6	39.2	38.7	40.4	40.4
37.5°	691.5	284.7	118.3	76.7	57.0	44.6	39.4	37.0	37.3	38.7	39.7
40°	749.2	286.9	103.8	72.9	52.0	42.3	37.0	35.4	35.1	35.9	36.6
42.5°	856.4	288.5	97.4	68.9	48.2	39.4	34.7	33.5	32.5	33.2	34.0
45°	976.0	297.3	94.0	65.5	46.1	37.8	32.5	31.8	29.7	30.2	31.1
47.5°	1091.5	329.4	90.0	60.8	44.2	36.8	30.4	28.7	27.3	27.1	28.0
50°	1222.5	360.5	85.5	55.6	42.3	35.4	28.3	25.6	24.7	24.7	25.4
52.5°	1339.9	390.2	81.2	52.0	40.8	32.8	26.4	23.7	23.0	23.0	24.0
55°	1463.4	421.3	77.4	48.7	38.9	30.2	24.7	22.3	22.1	21.6	22.3
57.5°	1681.4	489.2	72.7	45.8	36.3	28.0	23.3	20.9	20.4	19.7	20.4
60°	1998.9	593.5	66.5	43.0	33.2	26.6	22.1	19.2	18.5	17.3	17.6
62.5°	2309.3	677.8	59.4	39.4	30.4	25.2	20.2	17.3	16.1	14.7	15.0
65°	2575.2	711.0	51.8	35.1	27.5	21.8	17.6	15.2	13.5	11.6	11.4
67.5°	2606.6	627.9	44.4	31.1	24.7	18.5	15.0	13.5	10.9	9.3	8.8
70°	2345.8	467.8	37.0	27.5	21.4	15.7	12.8	11.9	10.2	8.8	8.1
72.5°	1868.0	345.3	31.1	24.5	18.8	13.3	10.9	11.2	10.2	8.5	7.6
75°	1235.4	197.6	25.4	20.4	15.7	10.7	10.0	10.0	9.7	8.1	7.1
77.5°	594.4	85.3	19.5	16.1	12.6	8.1	9.0	9.0	9.3	7.4	5.9
80°	168.6	25.6	12.1	10.9	9.3	5.5	7.1	6.9	6.2	4.3	2.6
82.5°	30.2	10.0	5.5	5.7	5.2	2.1	4.0	3.8	3.1	1.7	0.2
85°	8.3	3.8	3.1	3.3	2.6	0.7	1.7	2.1	1.7	0.9	0.0
87.5°	2.1	1.7	2.1	2.4	1.9	0.2	0.7	0.2	0.7	0.2	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)