

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: P366877

Luminaire Tested: **MSA-SA1C-727-U-T2-HSS**

Issue Date: 12/2/2019

Test Information

Test Method: LM-79-08
Report Number: P366877
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-727-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: 3956 lumens
Efficiency: N/A
Efficacy: 67.1 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

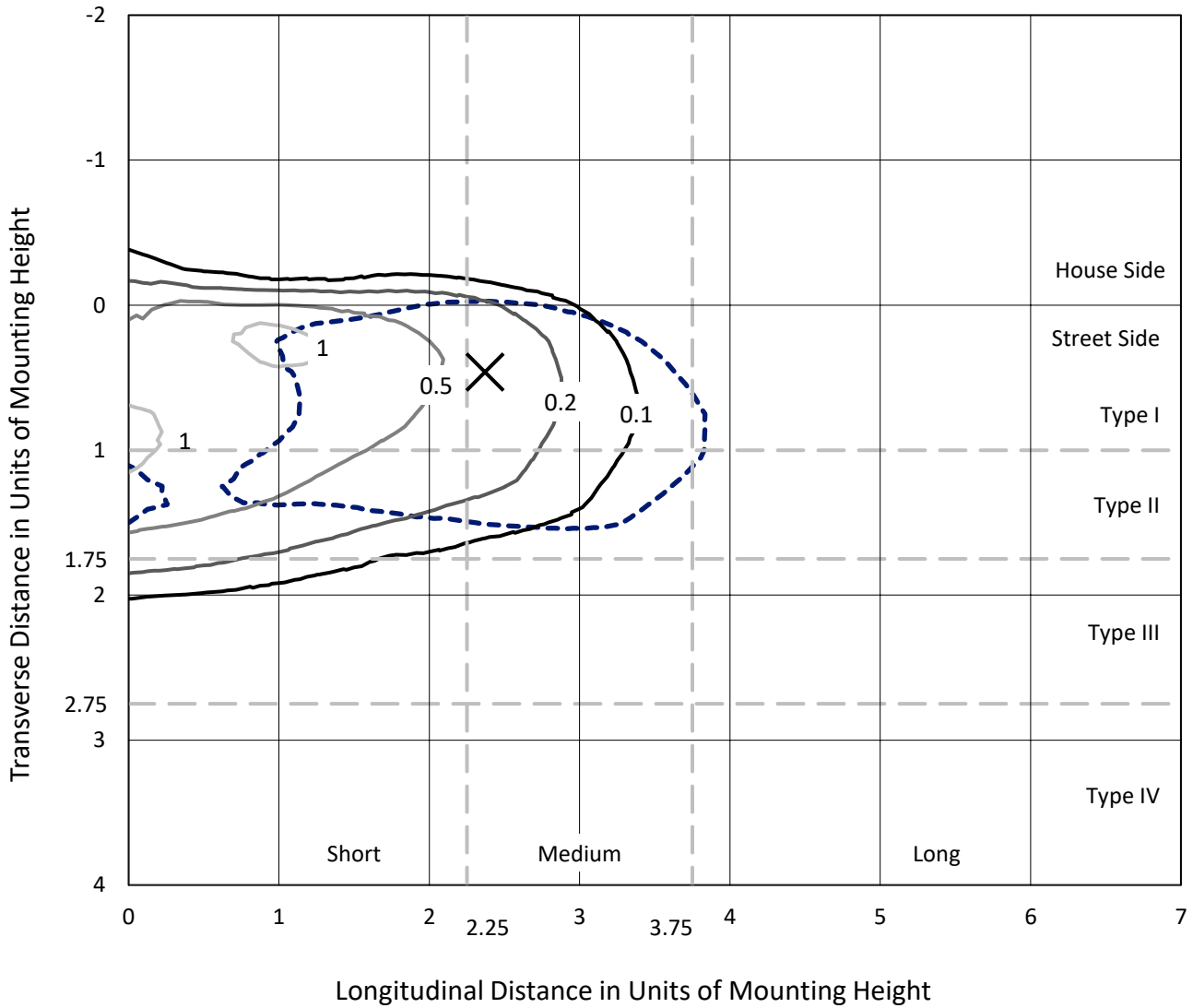
Input Watts (W): 59
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P366877
 CATALOG NUMBER: MSA-SA1C-727-U-T2-HSS

Iso-Footcandle Lines of Horizontal Illumination

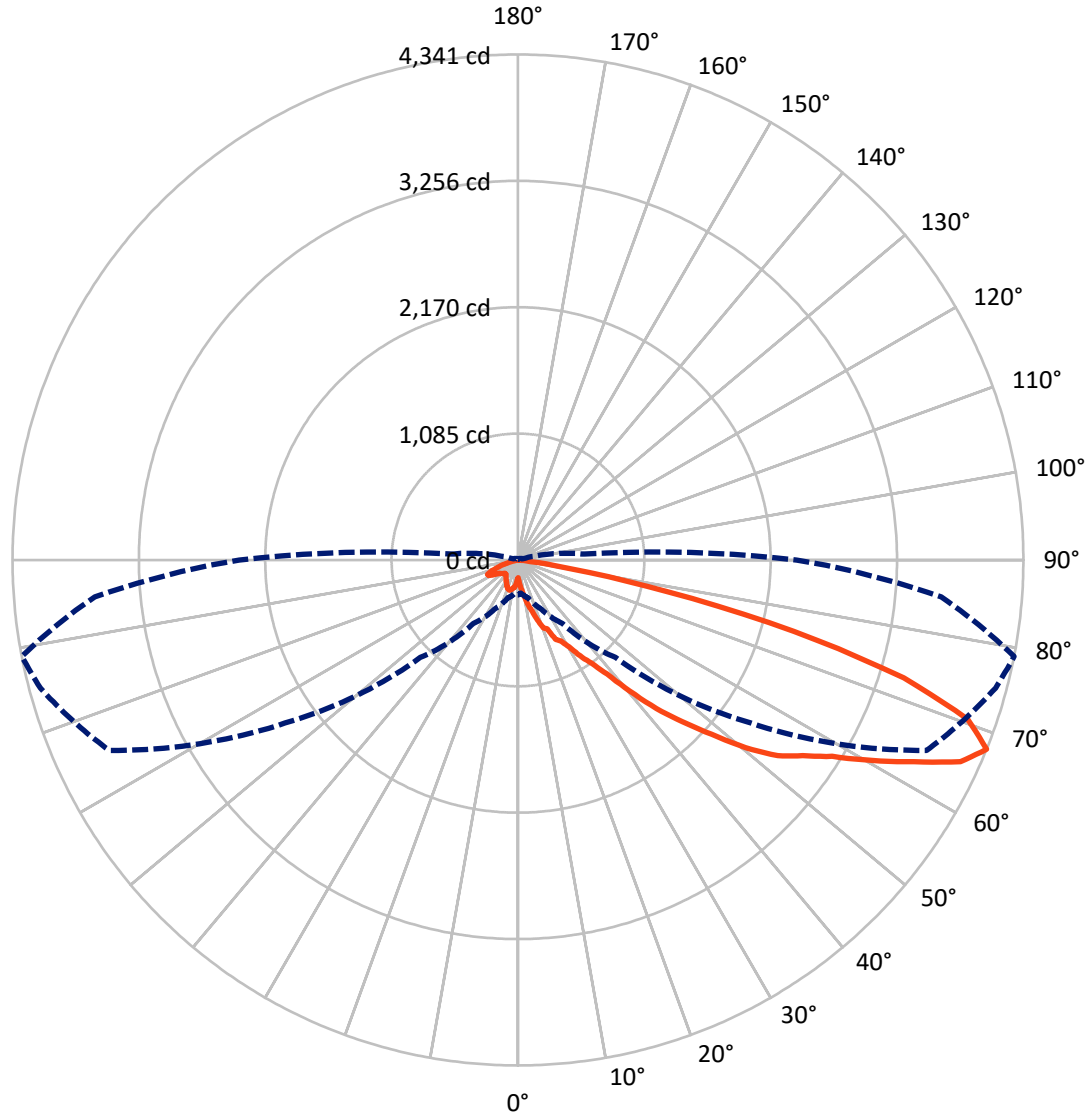
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.2 fc
 Type II - Medium - N/A

REPORT NUMBER: P366877
CATALOG NUMBER: MSA-SA1C-727-U-T2-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P366877

CATALOG NUMBER: MSA-SA1C-727-U-T2-HSS

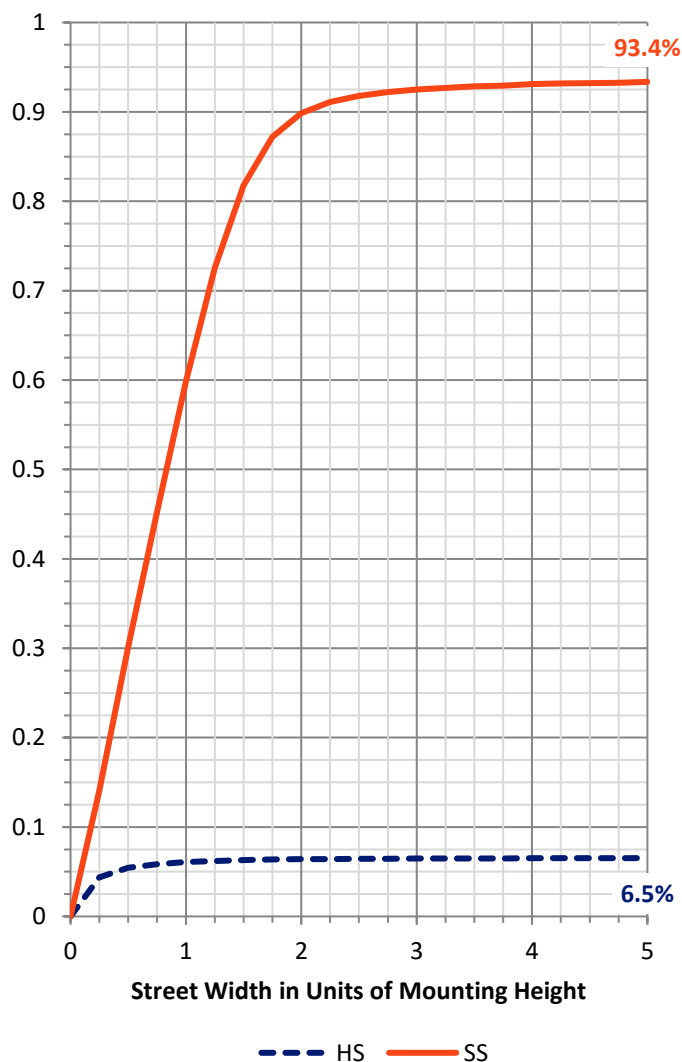
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	259.9	0.0	259.9
	% Fixture	6.6	0.0	6.6
Street Side	Lumens	3696.1	0.0	3696.1
	% Fixture	93.4	0.0	93.4
Total	Lumens	3956.0	0.0	3956.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	22.2	0.6
10°-20°	88.4	2.2
20°-30°	170.5	4.3
30°-40°	335.0	8.5
40°-50°	671.1	17.0
50°-60°	1072.6	27.1
60°-70°	1079.2	27.3
70°-80°	486.9	12.3
80°-90°	30.1	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°	3956.0	100.0
0°-180°	3956.0	100.0

Coefficient of Utilization



REPORT NUMBER: P366877

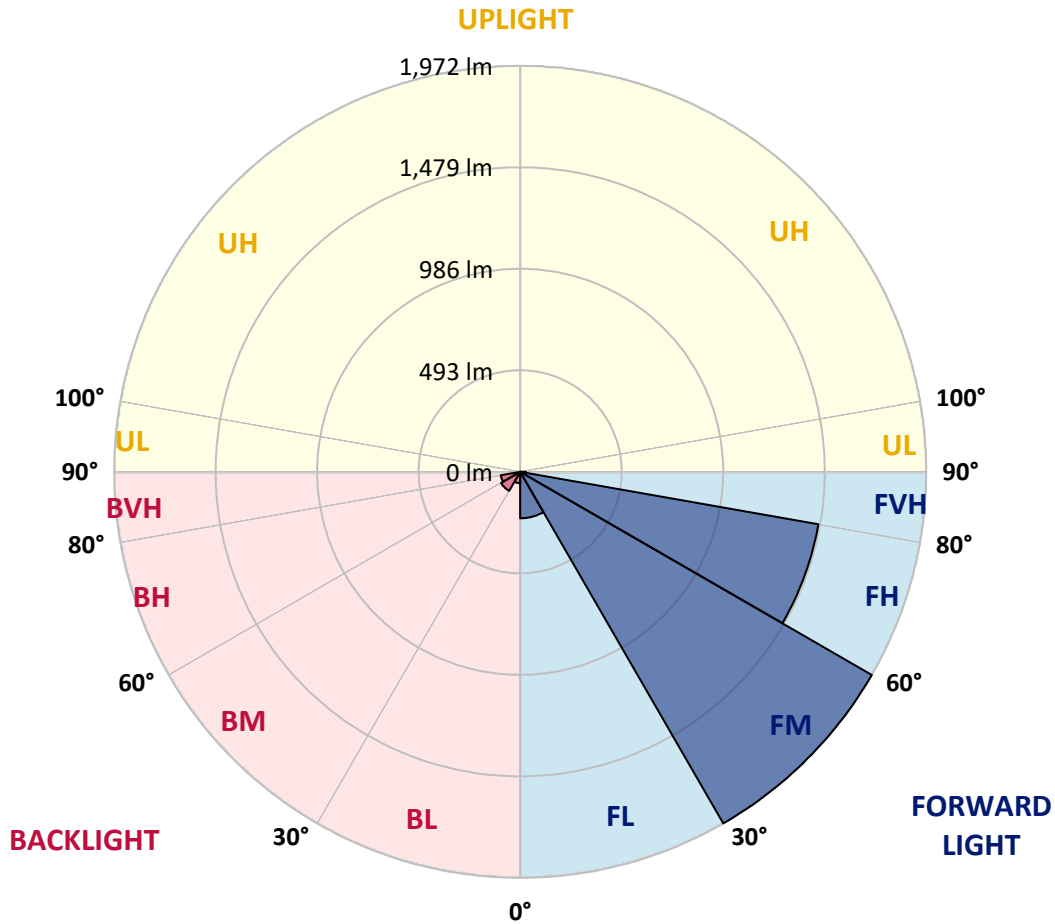
CATALOG NUMBER: MSA-SA1C-727-U-T2-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	225.8	5.7			
FM (30°-60°)	1971.7	49.8			
FH (60°-80°)	1470.3	37.2			G1/1800
FVH (80°-90°)	28.2	0.7			G1/100
BL (0°-30°)	55.3	1.4	B0/110		
BM (30°-60°)	106.9	2.7	B0/220		
BH (60°-80°)	95.8	2.4	B0/110		G0/110
BVH (80°-90°)	1.9	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: P366877

CATALOG NUMBER: MSA-SA1C-727-U-T2-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	152.4	152.4	152.4	152.4	152.4	152.4	152.4	152.4	152.4	152.4	152.4
2.5°	205.9	198.4	186.5	193.2	192.8	196.3	189.7	182.5	171.0	182.5	183.4
5°	296.4	282.6	273.9	272.2	262.6	253.6	251.7	244.2	238.6	228.3	237.5
7.5°	369.2	362.9	347.4	345.7	322.1	309.0	313.2	309.9	288.3	277.6	286.6
10°	400.2	389.3	391.4	389.3	379.2	382.9	374.4	364.6	347.4	329.7	307.5
12.5°	412.2	410.4	428.5	426.3	449.9	478.2	459.3	442.9	403.0	398.6	368.3
15°	437.9	448.8	446.2	455.3	470.4	518.6	518.1	522.1	479.8	457.1	413.3
17.5°	460.8	468.9	455.8	466.2	507.2	536.5	575.5	560.2	565.0	541.9	474.1
20°	451.0	460.1	447.1	440.7	512.9	568.3	620.4	609.3	638.1	623.7	530.1
22.5°	512.3	495.0	462.1	441.6	495.5	567.7	636.3	682.8	677.8	642.5	582.3
25°	587.9	577.5	538.0	501.8	506.6	563.7	686.5	754.8	769.6	754.5	631.8
27.5°	690.0	687.6	606.9	591.2	544.5	546.5	694.4	845.5	811.7	788.1	689.6
30°	823.2	804.3	708.5	688.0	619.1	585.3	742.3	923.8	898.9	866.9	743.9
32.5°	966.5	969.3	847.2	779.6	724.2	684.1	723.4	960.4	1006.9	980.9	811.7
35°	1129.2	1141.8	992.5	913.1	805.4	746.3	804.9	1072.9	1156.2	1088.0	902.6
37.5°	1379.8	1379.3	1204.9	1046.8	968.5	904.4	940.8	1175.2	1339.9	1243.9	1065.7
40°	1600.2	1552.3	1390.0	1208.4	1086.2	1068.8	1042.4	1315.2	1535.9	1478.1	1210.8
42.5°	1764.9	1731.1	1535.0	1393.7	1242.4	1187.0	1177.6	1520.4	1825.3	1744.4	1417.7
45°	1961.8	1851.0	1706.7	1579.3	1425.1	1409.0	1387.0	1728.7	2162.0	1979.7	1597.6
47.5°	2138.2	2034.0	1897.5	1733.9	1556.8	1689.9	1605.3	1911.7	2406.9	2235.7	1796.1
50°	2286.7	2176.0	2023.1	1898.6	1822.7	1913.0	1771.9	2062.3	2671.4	2532.7	1981.7
52.5°	2362.4	2237.0	2118.8	2041.8	2088.3	2068.0	1997.8	2244.9	2896.9	2793.1	2146.1
55°	2300.3	2177.7	2128.2	2166.4	2307.5	2248.8	2254.5	2527.7	3109.8	2966.7	2289.1
57.5°	2024.6	1912.7	1934.8	2039.2	2309.6	2463.2	2547.1	2802.5	3280.5	3183.0	2509.8
60°	1531.5	1441.5	1523.0	1708.4	2092.4	2420.4	2754.7	3077.3	3524.5	3494.0	2843.9
62.5°	935.3	886.5	1002.1	1233.2	1667.4	2210.9	2875.8	3443.6	3785.6	3818.1	3198.3
65°	477.1	455.1	551.5	754.8	1126.6	1816.1	2788.3	3671.3	4055.3	4175.3	3536.1
67.5°	300.5	286.3	337.8	460.4	664.7	1184.6	2441.4	3870.4	4245.9	4340.8	3648.8
70°	208.3	199.3	243.8	316.0	419.4	638.1	1812.6	3684.6	4094.8	4099.2	3376.0
72.5°	132.2	125.2	168.6	234.0	309.4	329.5	1039.1	2891.2	3505.1	3464.8	2734.0
75°	85.7	82.2	107.1	171.4	237.7	203.2	513.6	1950.9	2513.3	2450.1	1815.9
77.5°	61.5	59.3	71.7	114.5	169.2	142.2	230.3	1162.8	1441.0	1302.8	881.5
80°	37.1	36.9	51.9	71.7	120.4	100.3	106.4	528.0	558.7	455.6	269.3
82.5°	18.5	19.2	29.0	46.2	77.4	65.6	48.6	175.8	150.0	110.6	54.5
85°	4.4	5.5	15.3	31.8	38.8	26.2	23.1	46.0	41.2	31.2	15.9
87.5°	0.0	0.0	4.8	7.6	10.5	4.4	7.9	8.7	11.1	8.7	3.3
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: P366877
 CATALOG NUMBER: MSA-SA1C-727-U-T2-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	152.4	152.4	152.4	152.4	152.4	152.4	152.4	152.4	152.4	152.4	152.4
2.5°	183.6	181.0	165.1	160.9	160.5	155.9	157.0	152.7	152.9	162.7	162.7
5°	234.0	218.7	203.5	189.9	180.8	167.7	162.9	160.9	159.2	163.1	165.5
7.5°	274.8	252.3	224.8	195.4	168.1	149.4	146.8	142.0	140.2	144.1	147.2
10°	292.9	265.0	227.2	184.3	158.8	143.5	130.8	124.1	122.8	122.6	123.6
12.5°	331.3	296.6	229.9	180.1	152.4	135.6	121.3	109.9	99.4	100.5	99.4
15°	362.0	321.0	229.9	170.1	137.2	120.4	95.1	89.4	87.9	90.3	88.3
17.5°	408.5	345.2	218.3	152.2	124.1	93.6	84.0	83.5	86.6	90.1	87.9
20°	436.4	348.5	198.9	131.7	101.8	81.1	77.6	74.1	78.5	81.3	80.3
22.5°	465.4	348.7	179.5	120.8	82.0	73.9	68.3	65.4	66.1	68.7	69.1
25°	477.8	340.2	161.4	106.4	74.4	66.1	60.2	57.1	56.0	57.4	56.9
27.5°	511.6	323.8	141.7	90.7	70.7	58.7	53.2	49.5	46.2	48.4	48.8
30°	516.4	318.6	131.1	80.7	65.9	51.9	47.1	43.2	40.8	43.8	43.8
32.5°	531.7	289.8	125.6	76.5	60.8	48.0	41.4	38.6	38.2	40.1	40.3
35°	555.2	277.2	117.5	73.3	56.3	43.4	37.3	36.0	35.5	37.1	37.1
37.5°	635.0	261.5	108.6	70.4	52.3	41.0	36.2	34.0	34.2	35.5	36.4
40°	688.0	263.4	95.3	66.9	47.8	38.8	34.0	32.5	32.3	32.9	33.6
42.5°	786.4	265.0	89.4	63.2	44.3	36.2	31.8	30.7	29.9	30.5	31.2
45°	896.3	273.0	86.4	60.2	42.3	34.7	29.9	29.2	27.3	27.7	28.6
47.5°	1002.3	302.5	82.7	55.8	40.6	33.8	27.9	26.4	25.1	24.9	25.7
50°	1122.7	331.0	78.5	51.0	38.8	32.5	26.0	23.6	22.7	22.7	23.3
52.5°	1230.4	358.3	74.6	47.8	37.5	30.1	24.2	21.8	21.2	21.2	22.0
55°	1343.8	386.9	71.1	44.7	35.8	27.7	22.7	20.5	20.3	19.8	20.5
57.5°	1544.0	449.2	66.7	42.1	33.4	25.7	21.4	19.2	18.8	18.1	18.8
60°	1835.5	545.0	61.1	39.5	30.5	24.4	20.3	17.7	17.0	15.9	16.1
62.5°	2120.6	622.4	54.5	36.2	27.9	23.1	18.5	15.9	14.8	13.5	13.7
65°	2364.8	652.9	47.5	32.3	25.3	20.1	16.1	14.0	12.4	10.7	10.5
67.5°	2393.6	576.6	40.8	28.6	22.7	17.0	13.7	12.4	10.0	8.5	8.1
70°	2154.2	429.6	34.0	25.3	19.6	14.4	11.8	10.9	9.4	8.1	7.4
72.5°	1715.4	317.1	28.6	22.5	17.2	12.2	10.0	10.2	9.4	7.9	7.0
75°	1134.4	181.4	23.3	18.8	14.4	9.8	9.2	9.2	8.9	7.4	6.5
77.5°	545.8	78.3	17.9	14.8	11.6	7.4	8.3	8.3	8.5	6.8	5.5
80°	154.8	23.6	11.1	10.0	8.5	5.0	6.5	6.3	5.7	3.9	2.4
82.5°	27.7	9.2	5.0	5.2	4.8	2.0	3.7	3.5	2.8	1.5	0.2
85°	7.6	3.5	2.8	3.1	2.4	0.7	1.5	2.0	1.5	0.9	0.0
87.5°	2.0	1.5	2.0	2.2	1.7	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)