

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: P596599

Luminaire Tested: **MSA-SA2B-827-U-T2-HSS**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P596599
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-SA2B-827-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: 5523 lumens
Efficiency: N/A
Efficacy: 65.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G2

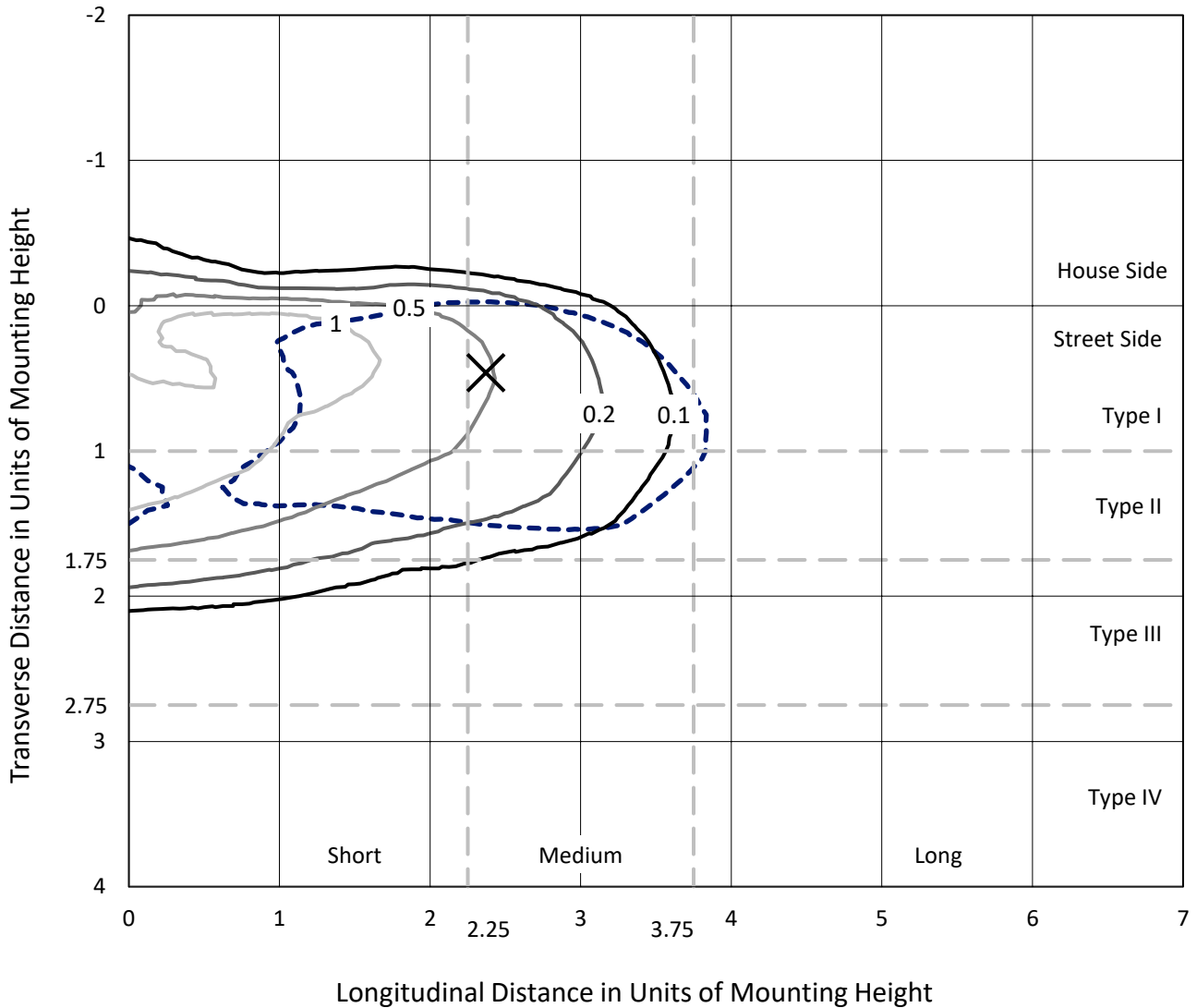
Input Watts (W): 85
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P596599
 CATALOG NUMBER: MSA-SA2B-827-U-T2-HSS

Iso-Footcandle Lines of Horizontal Illumination

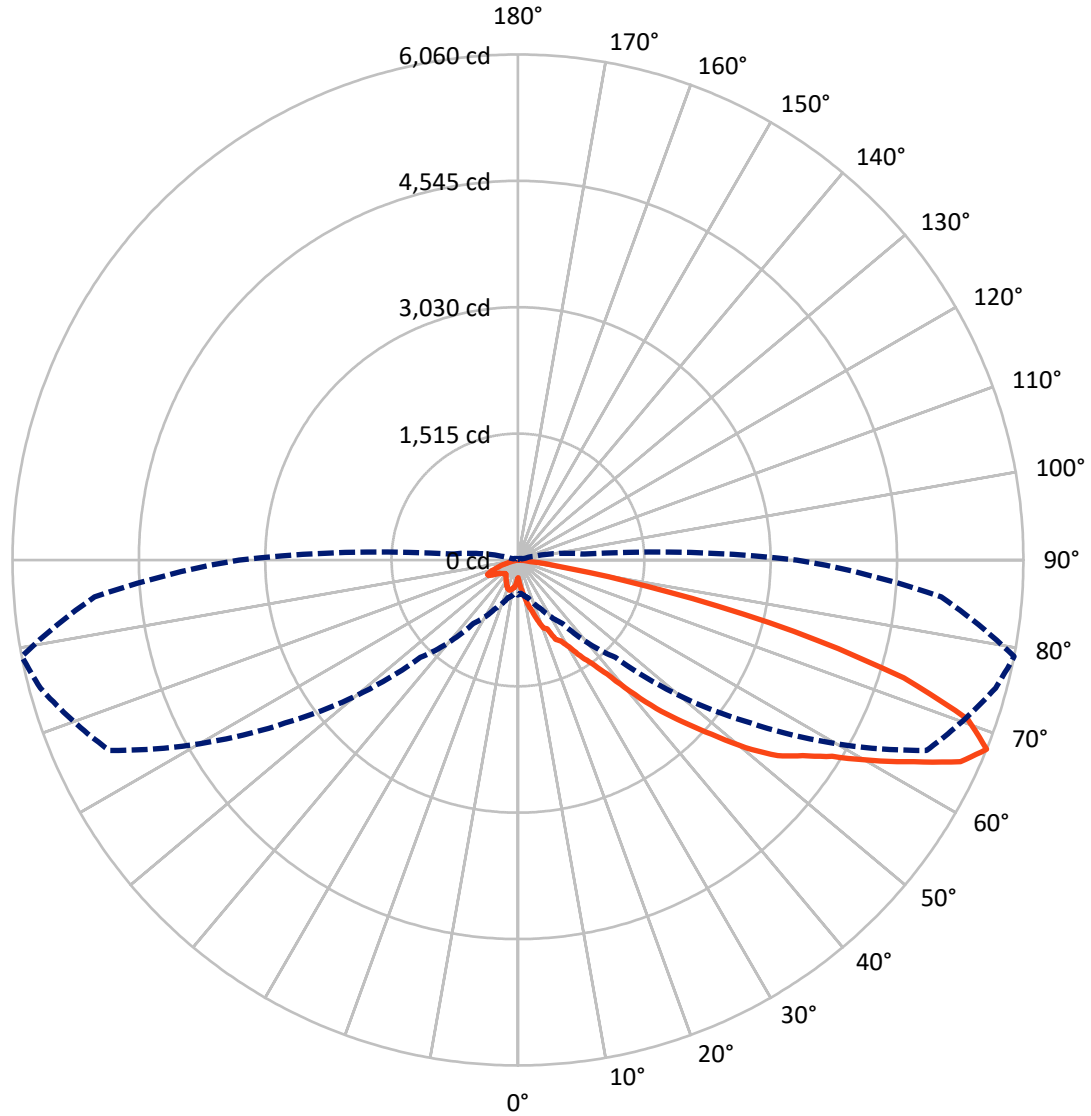
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.7 fc
 Type II - Medium - N/A

REPORT NUMBER: P596599
CATALOG NUMBER: MSA-SA2B-827-U-T2-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P596599

CATALOG NUMBER: MSA-SA2B-827-U-T2-HSS

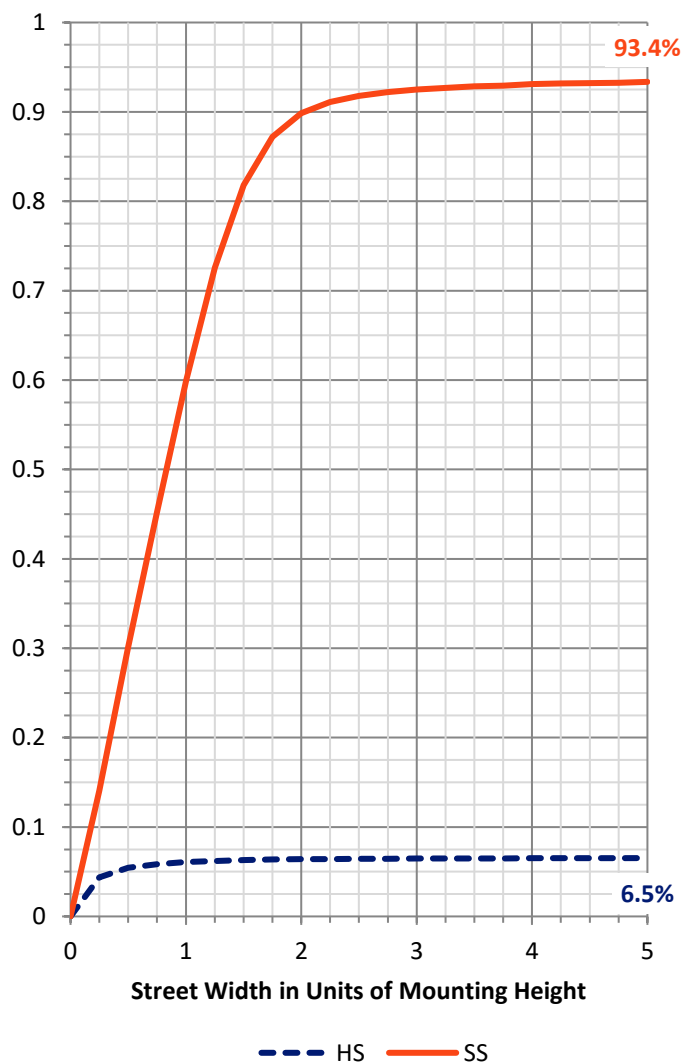
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	362.9	0.0	362.9
	% Fixture	6.6	0.0	6.6
Street Side	Lumens	5160.1	0.0	5160.1
	% Fixture	93.4	0.0	93.4
Total	Lumens	5523.0	0.0	5523.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	31.0	0.6
10°-20°	123.4	2.2
20°-30°	238.1	4.3
30°-40°	467.7	8.5
40°-50°	936.9	17.0
50°-60°	1497.5	27.1
60°-70°	1506.7	27.3
70°-80°	679.7	12.3
80°-90°	42.1	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°	5523.0	100.0
0°-180°	5523.0	100.0

Coefficient of Utilization



REPORT NUMBER: P596599

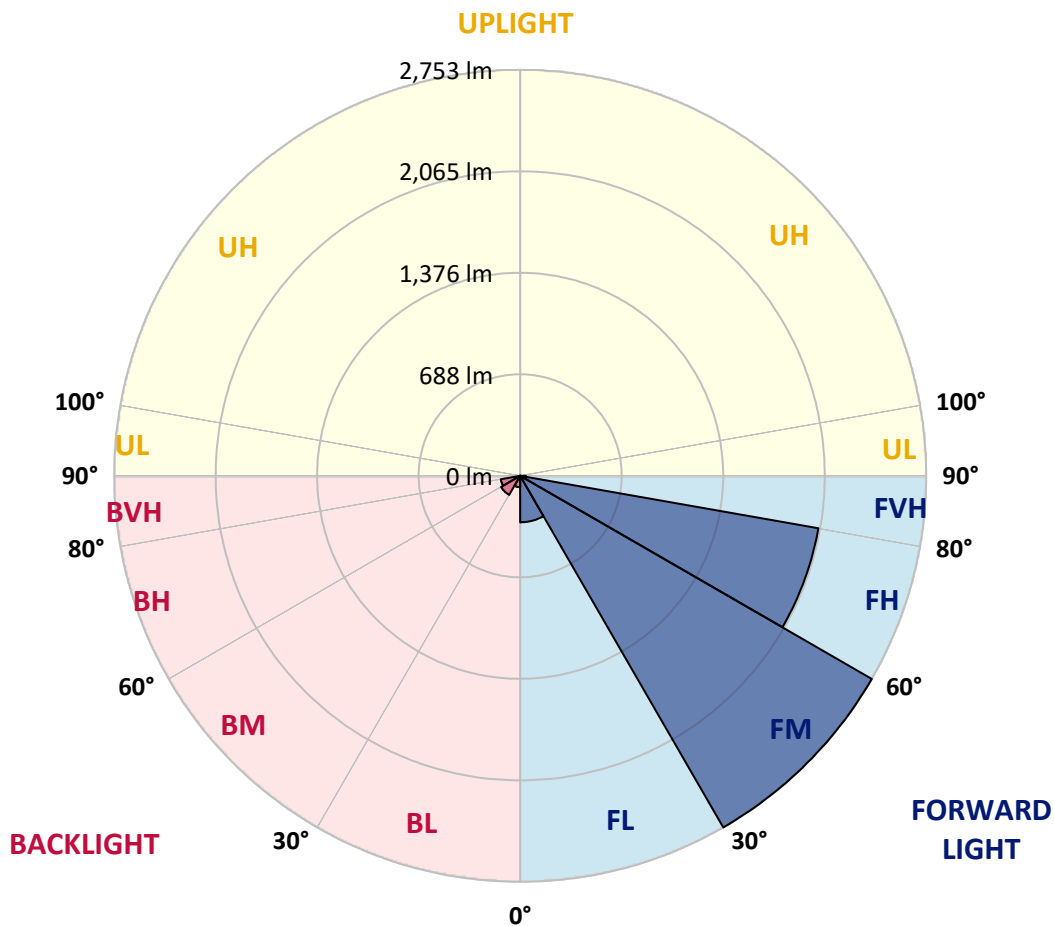
CATALOG NUMBER: MSA-SA2B-827-U-T2-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	315.3	5.7			
FM (30°-60°)	2752.7	49.8			
FH (60°-80°)	2052.7	37.2			G2/5000
FVH (80°-90°)	39.4	0.7			G1/100
BL (0°-30°)	77.1	1.4	B0/110		
BM (30°-60°)	149.3	2.7	B0/220		
BH (60°-80°)	133.8	2.4	B1/500		G1/500
BVH (80°-90°)	2.7	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: P596599
 CATALOG NUMBER: MSA-SA2B-827-U-T2-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	212.8	212.8	212.8	212.8	212.8	212.8	212.8	212.8	212.8	212.8	212.8
2.5°	287.4	277.1	260.3	269.7	269.1	274.0	264.9	254.8	238.7	254.8	256.0
5°	413.8	394.6	382.4	380.0	366.6	354.1	351.3	341.0	333.1	318.8	331.6
7.5°	515.4	506.6	485.0	482.6	449.7	431.4	437.2	432.6	402.5	387.6	400.1
10°	558.7	543.5	546.5	543.5	529.5	534.6	522.8	509.1	485.0	460.3	429.3
12.5°	575.4	573.0	598.3	595.2	628.1	667.7	641.2	618.4	562.6	556.5	514.2
15°	611.4	626.6	622.9	635.7	656.7	724.0	723.4	728.9	669.8	638.1	576.9
17.5°	643.3	654.6	636.3	650.9	708.2	749.0	803.5	782.2	788.8	756.6	661.9
20°	629.6	642.4	624.1	615.3	716.1	793.4	866.2	850.7	890.8	870.7	740.1
22.5°	715.2	691.1	645.1	616.5	691.7	792.5	888.4	953.3	946.3	896.9	812.9
25°	820.8	806.2	751.1	700.6	707.3	787.0	958.4	1053.7	1074.4	1053.4	882.0
27.5°	963.3	960.0	847.3	825.4	760.2	763.0	969.4	1180.4	1133.2	1100.3	962.7
30°	1149.3	1122.8	989.2	960.6	864.4	817.2	1036.4	1289.7	1255.0	1210.2	1038.5
32.5°	1349.4	1353.3	1182.8	1088.4	1011.1	955.1	1009.9	1340.8	1405.7	1369.4	1133.2
35°	1576.5	1594.1	1385.6	1274.8	1124.4	1041.9	1123.8	1497.9	1614.2	1518.9	1260.1
37.5°	1926.3	1925.7	1682.1	1461.4	1352.1	1262.6	1313.4	1640.7	1870.6	1736.6	1487.9
40°	2234.1	2167.1	1940.6	1687.0	1516.5	1492.1	1455.3	1836.2	2144.3	2063.6	1690.3
42.5°	2464.0	2416.8	2143.1	1945.8	1734.5	1657.2	1644.1	2122.7	2548.3	2435.4	1979.3
45°	2738.9	2584.2	2382.7	2204.9	1989.6	1967.1	1936.3	2413.4	3018.4	2763.9	2230.5
47.5°	2985.2	2839.7	2649.1	2420.7	2173.5	2359.2	2241.1	2668.9	3360.3	3121.3	2507.5
50°	3192.5	3037.9	2824.4	2650.6	2544.7	2670.7	2473.7	2879.3	3729.6	3536.0	2766.6
52.5°	3298.2	3123.1	2958.1	2850.6	2915.5	2887.2	2789.1	3134.1	4044.4	3899.5	2996.2
55°	3211.4	3040.3	2971.2	3024.5	3221.5	3139.6	3147.5	3529.0	4341.6	4141.8	3195.9
57.5°	2826.6	2670.4	2701.1	2847.0	3224.5	3438.8	3556.1	3912.6	4579.9	4443.9	3504.0
60°	2138.2	2012.5	2126.3	2385.1	2921.3	3379.2	3845.9	4296.2	4920.6	4878.0	3970.4
62.5°	1305.8	1237.6	1399.0	1721.7	2327.9	3086.6	4014.9	4807.7	5285.1	5330.4	4465.2
65°	666.2	635.4	770.0	1053.7	1572.8	2535.5	3892.8	5125.5	5661.7	5829.1	4936.8
67.5°	419.5	399.8	471.6	642.7	928.0	1653.8	3408.4	5403.5	5927.8	6060.2	5094.2
70°	290.8	278.3	340.4	441.2	585.5	890.8	2530.6	5144.1	5716.8	5722.9	4713.3
72.5°	184.5	174.8	235.3	326.7	432.0	460.0	1450.7	4036.5	4893.5	4837.2	3817.0
75°	119.7	114.8	149.5	239.3	331.9	283.8	717.0	2723.7	3508.9	3420.6	2535.2
77.5°	85.9	82.8	100.2	159.8	236.3	198.5	321.5	1623.4	2011.9	1818.8	1230.6
80°	51.8	51.5	72.5	100.2	168.1	140.1	148.6	737.1	780.0	636.0	376.0
82.5°	25.9	26.8	40.5	64.5	108.1	91.6	67.9	245.4	209.5	154.4	76.1
85°	6.1	7.6	21.3	44.5	54.2	36.5	32.3	64.2	57.5	43.5	22.2
87.5°	0.0	0.0	6.7	10.7	14.6	6.1	11.0	12.2	15.5	12.2	4.6
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: P596599
 CATALOG NUMBER: MSA-SA2B-827-U-T2-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	212.8	212.8	212.8	212.8	212.8	212.8	212.8	212.8	212.8	212.8	212.8
2.5°	256.4	252.7	230.5	224.7	224.1	217.7	219.2	213.1	213.4	227.1	227.1
5°	326.7	305.4	284.1	265.2	252.4	234.1	227.4	224.7	222.3	227.7	231.1
7.5°	383.6	352.3	313.9	272.8	234.7	208.6	204.9	198.2	195.8	201.2	205.5
10°	408.9	369.9	317.2	257.3	221.6	200.3	182.7	173.2	171.4	171.1	172.6
12.5°	462.5	414.1	320.9	251.5	212.8	189.4	169.3	153.4	138.8	140.4	138.8
15°	505.4	448.2	320.9	237.5	191.5	168.1	132.7	124.8	122.7	126.0	123.3
17.5°	570.2	482.0	304.8	212.5	173.2	130.6	117.2	116.6	120.9	125.7	122.7
20°	609.2	486.5	277.7	183.9	142.2	113.3	108.4	103.5	109.6	113.6	112.0
22.5°	649.7	486.8	250.6	168.7	114.5	103.2	95.3	91.3	92.3	95.9	96.5
25°	667.1	475.0	225.3	148.6	103.8	92.3	84.0	79.8	78.2	80.1	79.5
27.5°	714.3	452.1	197.9	126.7	98.6	81.9	74.3	69.1	64.5	67.6	68.2
30°	721.0	444.8	183.0	112.6	91.9	72.5	65.8	60.3	56.9	61.2	61.2
32.5°	742.3	404.6	175.4	106.9	84.9	67.0	57.8	53.9	53.3	56.0	56.3
35°	775.1	387.0	164.1	102.3	78.5	60.6	52.1	50.2	49.6	51.8	51.8
37.5°	886.6	365.0	151.6	98.3	73.1	57.2	50.5	47.5	47.8	49.6	50.8
40°	960.6	367.8	133.0	93.5	66.7	54.2	47.5	45.4	45.1	46.0	46.9
42.5°	1097.9	369.9	124.8	88.3	61.8	50.5	44.5	42.9	41.7	42.6	43.5
45°	1251.3	381.2	120.6	84.0	59.1	48.4	41.7	40.8	38.1	38.7	39.9
47.5°	1399.3	422.3	115.4	77.9	56.6	47.2	39.0	36.8	35.0	34.7	35.9
50°	1567.3	462.2	109.6	71.2	54.2	45.4	36.2	32.9	31.7	31.7	32.6
52.5°	1717.7	500.2	104.1	66.7	52.4	42.0	33.8	30.4	29.5	29.5	30.8
55°	1876.1	540.1	99.3	62.4	49.9	38.7	31.7	28.6	28.3	27.7	28.6
57.5°	2155.6	627.2	93.2	58.8	46.6	35.9	29.8	26.8	26.2	25.3	26.2
60°	2562.6	760.8	85.2	55.1	42.6	34.1	28.3	24.7	23.7	22.2	22.5
62.5°	2960.5	868.9	76.1	50.5	39.0	32.3	25.9	22.2	20.7	18.9	19.2
65°	3301.5	911.5	66.4	45.1	35.3	28.0	22.5	19.5	17.4	14.9	14.6
67.5°	3341.7	805.0	56.9	39.9	31.7	23.7	19.2	17.4	14.0	11.9	11.3
70°	3007.4	599.8	47.5	35.3	27.4	20.1	16.4	15.2	13.1	11.3	10.4
72.5°	2394.9	442.7	39.9	31.4	24.1	17.0	14.0	14.3	13.1	11.0	9.7
75°	1583.8	253.3	32.6	26.2	20.1	13.7	12.8	12.8	12.5	10.4	9.1
77.5°	762.1	109.3	25.0	20.7	16.1	10.4	11.6	11.6	11.9	9.4	7.6
80°	216.2	32.9	15.5	14.0	11.9	7.0	9.1	8.8	7.9	5.5	3.3
82.5°	38.7	12.8	7.0	7.3	6.7	2.7	5.2	4.9	4.0	2.1	0.3
85°	10.7	4.9	4.0	4.3	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)