

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: P596953

Luminaire Tested: **MSA-SA2B-835-U-T3-HSS**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P596953
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-11)
Test Lab: INNOVATIONS CENTER
Issue Date: 5/27/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: MSA-SA2B-835-U-T3-HSS
Description: MESA POST TOP DECORATIVE LUMINAIRE. (2) LIGHTSQUARES WITH 16 LEDS
EACH AND TYPE III OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6064 lumens
Efficiency: N/A
Efficacy: 71.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

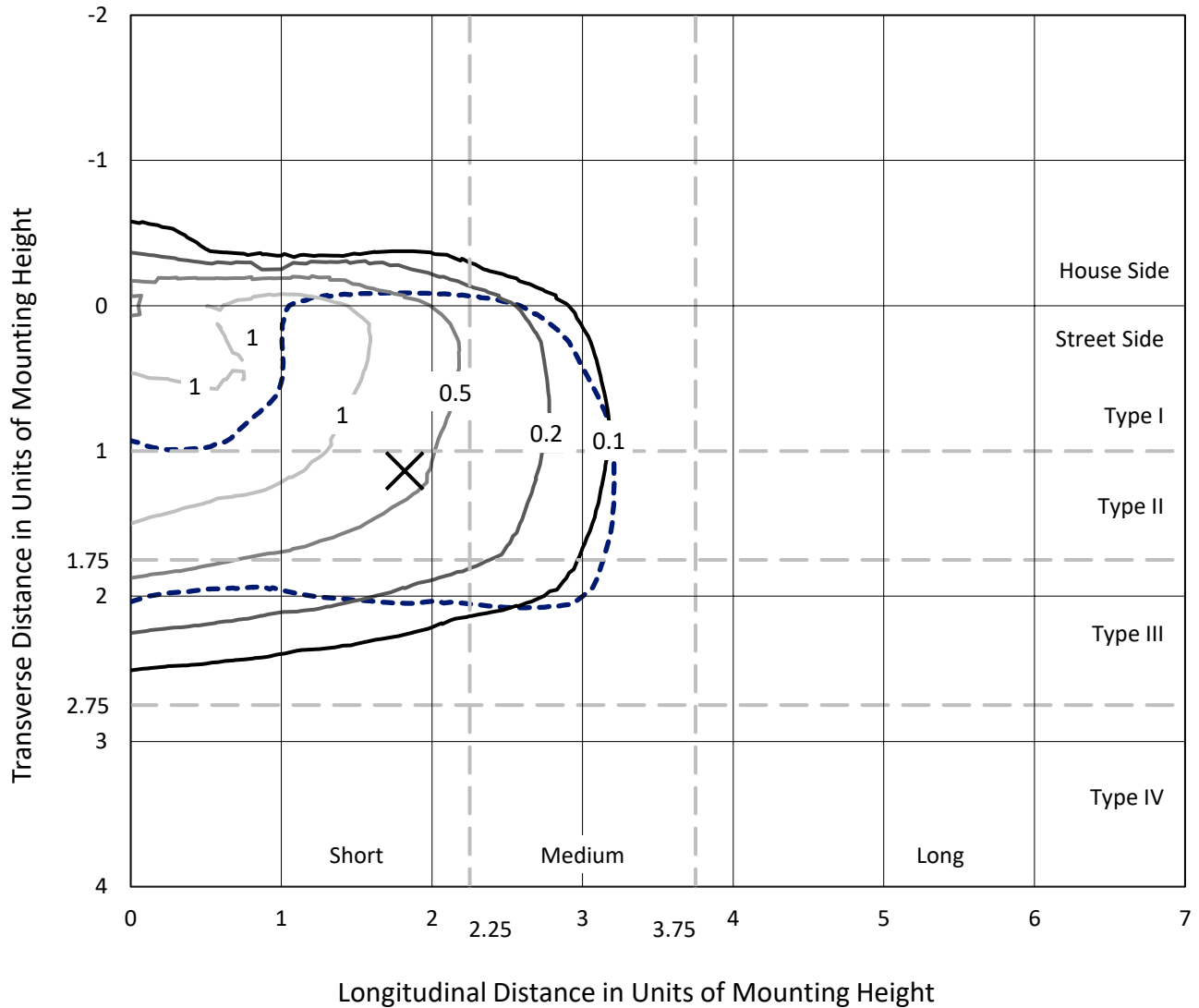
Input Watts (W): 85
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P596953
 CATALOG NUMBER: MSA-SA2B-835-U-T3-HSS

Iso-Footcandle Lines of Horizontal Illumination

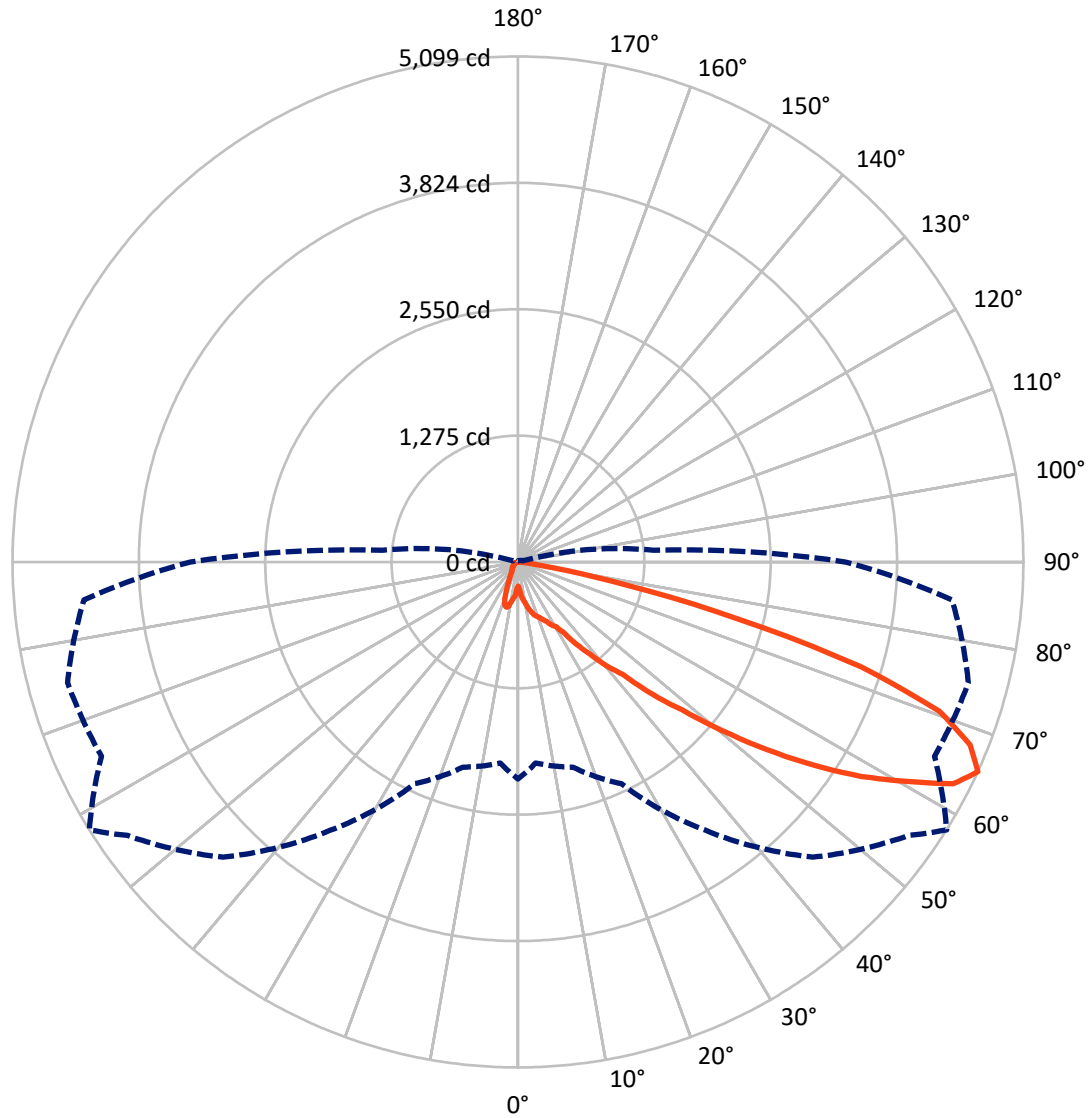
✕ Max cd
 - - - 1/2 Max cd



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

REPORT NUMBER: P596953
CATALOG NUMBER: MSA-SA2B-835-U-T3-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P596953

CATALOG NUMBER: MSA-SA2B-835-U-T3-HSS

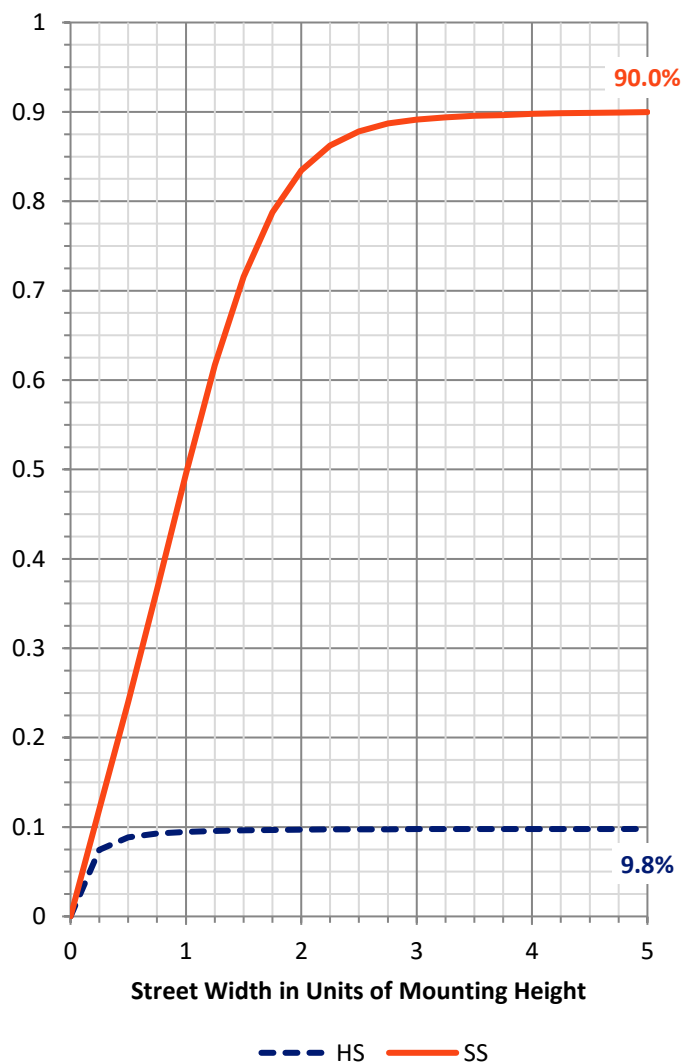
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	598.4	0.0	598.4
	% Fixture	9.9	0.0	9.9
Street Side	Lumens	5465.6	0.0	5465.6
	% Fixture	90.1	0.0	90.1
Total	Lumens	6064.0	0.0	6064.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.1	0.6
10°-20°	124.5	2.1
20°-30°	240.9	4.0
30°-40°	480.7	7.9
40°-50°	982.8	16.2
50°-60°	1743.1	28.7
60°-70°	1837.7	30.3
70°-80°	595.8	9.8
80°-90°	24.4	0.4
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°	6064.0	100.0
0°-180°	6064.0	100.0

Coefficient of Utilization



REPORT NUMBER: P596953

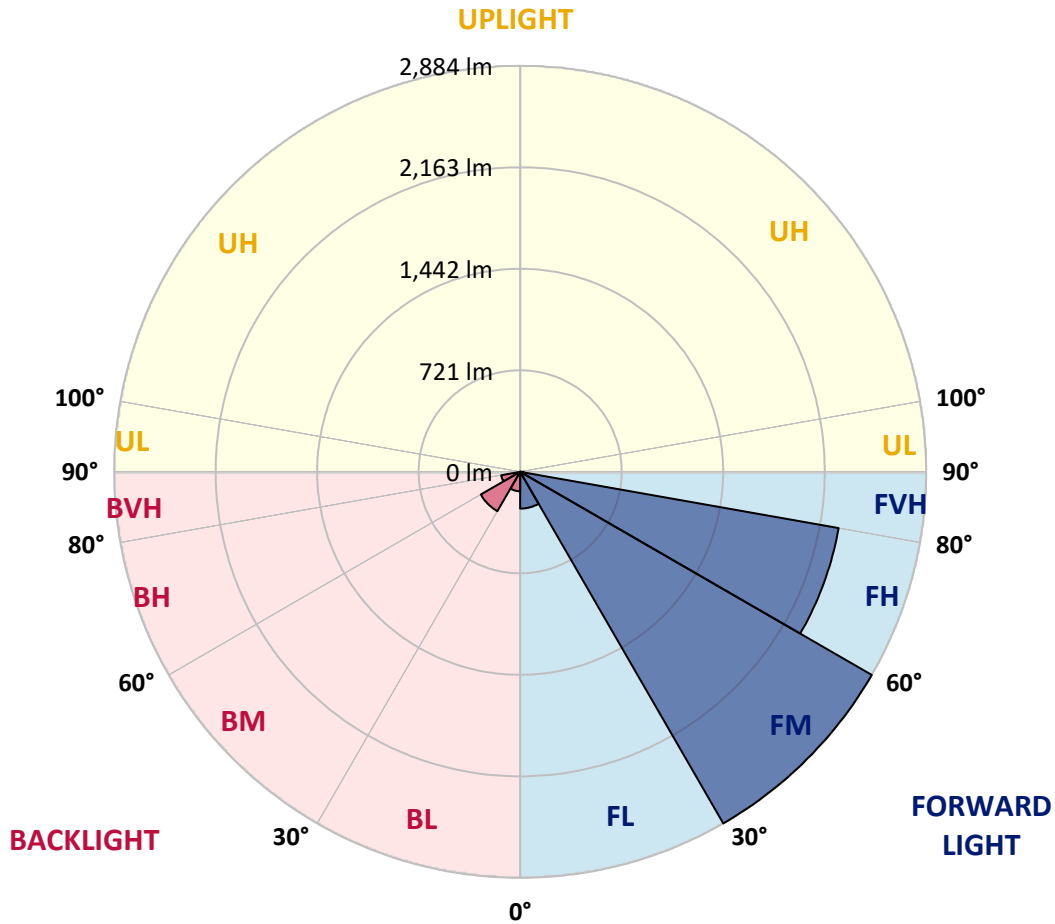
CATALOG NUMBER: MSA-SA2B-835-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	261.6	4.3			
FM (30°-60°)	2883.8	47.6			
FH (60°-80°)	2297.0	37.9			G2/5000
FVH (80°-90°)	23.3	0.4			G1/100
BL (0°-30°)	137.9	2.3	B1/500		
BM (30°-60°)	322.8	5.3	B1/1000		
BH (60°-80°)	136.6	2.3	B1/500		G1/500
BVH (80°-90°)	1.0	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 III Short





REPORT NUMBER: P596953
 CATALOG NUMBER: MSA-SA2B-835-U-T3-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	242.8	242.8	242.8	242.8	242.8	242.8	242.8	242.8	242.8	242.8	242.8
2.5°	296.4	287.5	273.5	275.9	278.6	284.1	279.6	275.5	271.1	265.3	287.5
5°	357.8	343.1	341.8	338.7	336.3	336.0	341.4	339.7	342.1	353.0	364.3
7.5°	380.3	374.2	362.6	367.4	359.9	354.1	378.3	386.1	401.2	406.3	435.7
10°	378.0	369.1	373.9	376.2	381.4	402.5	417.9	426.4	439.4	467.4	461.6
12.5°	388.9	396.7	401.9	402.2	428.5	467.4	478.3	485.5	508.7	519.6	548.3
15°	425.4	438.4	430.2	433.6	442.1	489.6	515.2	530.9	563.7	599.2	606.4
17.5°	477.6	485.8	468.8	456.5	480.0	506.0	552.4	568.8	589.6	672.6	688.0
20°	543.5	557.5	520.7	471.8	502.9	533.6	584.2	592.0	614.2	722.4	746.7
22.5°	697.5	676.7	620.4	544.2	535.0	548.7	596.8	627.5	665.1	750.4	806.8
25°	849.5	842.3	759.3	674.3	612.9	582.1	646.0	663.0	724.5	817.0	848.1
27.5°	1018.5	1032.8	894.2	842.6	722.1	621.7	676.7	719.4	792.1	841.3	916.0
30°	1241.4	1218.5	1056.0	1004.5	866.9	730.6	756.3	759.0	865.8	921.2	992.2
32.5°	1416.2	1430.9	1226.7	1147.5	1037.6	898.3	816.0	851.5	928.0	1051.2	1118.5
35°	1605.4	1604.0	1405.0	1298.4	1154.7	1035.2	993.2	1019.1	1115.1	1254.7	1272.5
37.5°	1888.1	1863.8	1628.9	1472.9	1350.7	1248.6	1216.5	1182.0	1281.0	1414.2	1480.7
40°	2154.7	2071.1	1853.9	1668.9	1512.5	1470.8	1354.8	1375.9	1405.3	1581.1	1765.2
42.5°	2424.1	2372.2	2082.0	1927.0	1734.8	1635.8	1560.0	1550.1	1689.7	1898.0	2088.1
45°	2779.5	2620.8	2388.6	2252.4	2029.8	1930.4	1869.3	1905.8	2031.5	2335.7	2462.3
47.5°	3077.9	2931.8	2732.4	2525.5	2292.0	2403.6	2288.9	2231.2	2403.6	2718.1	2886.4
50°	3334.3	3171.5	2969.7	2816.4	2778.5	2885.7	2653.5	2674.7	2786.7	3156.1	3251.0
52.5°	3520.7	3349.4	3173.2	3099.1	3254.4	3308.4	3192.0	3145.2	3246.9	3529.6	3575.7
55°	3661.1	3485.6	3348.0	3450.1	3750.5	3732.8	3773.7	3614.0	3711.3	3919.2	3897.3
57.5°	3669.6	3461.7	3381.1	3545.3	3957.8	4232.6	4352.5	4080.7	4136.0	4223.7	4174.6
60°	3401.2	3194.3	3187.9	3421.1	4017.9	4362.0	4624.2	4491.8	4417.7	4482.9	4389.7
62.5°	2866.6	2721.8	2789.4	3047.2	3794.2	4290.7	4769.0	4928.4	4639.9	4654.6	4522.1
65°	2188.9	2036.9	2142.8	2467.5	3305.3	4210.8	4810.0	5099.1	4635.8	4703.4	4395.1
67.5°	1449.7	1361.6	1481.4	1839.2	2627.9	3717.1	4788.8	4919.9	4488.7	4512.6	3923.6
70°	748.4	726.9	823.9	1106.2	1766.9	2855.7	4580.9	4509.2	4189.9	3887.4	3026.4
72.5°	239.7	240.7	333.9	505.3	952.6	1738.5	3521.1	3619.4	3352.8	2843.7	1847.8
75°	106.2	104.5	139.6	212.0	397.1	779.5	2187.5	2293.7	2087.5	1564.4	776.7
77.5°	76.5	74.1	89.5	123.9	196.7	264.3	1025.6	1106.9	946.4	542.2	177.9
80°	53.9	53.6	64.9	87.1	122.9	117.4	324.0	363.3	290.9	131.4	52.2
82.5°	30.4	31.4	45.1	61.5	74.8	58.7	91.2	100.4	98.0	70.0	22.9
85°	14.7	16.4	29.4	44.4	39.3	22.9	32.4	35.2	41.0	40.6	11.6
87.5°	0.0	0.0	11.9	20.1	10.6	3.4	9.9	11.3	10.9	13.0	2.7
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: P596953
 CATALOG NUMBER: MSA-SA2B-835-U-T3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	242.8	242.8	242.8	242.8	242.8	242.8	242.8	242.8	242.8	242.8	242.8
2.5°	291.9	289.9	263.9	266.0	271.8	269.4	271.4	266.7	261.2	283.4	283.0
5°	369.1	353.7	345.5	338.0	339.4	324.0	332.9	337.0	336.3	348.9	352.3
7.5°	436.7	416.2	399.8	384.1	360.2	338.7	352.0	360.5	366.3	388.2	396.7
10°	468.4	451.7	445.2	414.5	397.4	384.1	368.1	356.4	361.2	355.4	361.2
12.5°	538.1	526.8	501.9	470.8	450.3	423.0	363.3	313.4	282.7	283.0	281.0
15°	601.6	600.9	563.7	512.1	452.7	374.9	281.7	218.9	189.8	181.6	178.9
17.5°	684.6	674.3	606.4	530.2	423.4	290.2	191.9	149.9	147.2	151.9	149.9
20°	737.5	722.4	627.5	503.9	348.9	196.3	144.8	132.8	141.0	147.8	146.1
22.5°	790.4	767.9	643.6	471.8	248.2	143.7	130.8	128.7	133.8	142.4	143.7
25°	819.4	815.0	675.0	411.8	170.0	126.0	126.0	125.3	127.0	133.2	132.1
27.5°	903.7	843.7	651.4	321.3	131.4	115.7	117.4	116.8	110.6	116.8	117.1
30°	956.3	928.7	653.1	228.8	115.7	102.4	106.9	101.4	92.2	97.3	96.3
32.5°	1062.2	993.2	648.0	154.3	105.5	97.6	90.8	83.0	76.1	78.2	76.5
35°	1185.4	1132.8	578.7	123.9	98.3	86.4	75.5	67.6	60.4	62.1	61.8
37.5°	1430.6	1263.6	521.4	111.6	93.5	79.2	66.6	55.7	51.9	52.9	53.9
40°	1657.6	1481.8	414.5	106.2	85.4	70.7	55.0	47.1	44.7	45.4	46.4
42.5°	1997.0	1655.2	313.1	100.7	77.2	59.7	45.8	40.6	38.2	39.6	40.3
45°	2325.4	1802.7	233.9	95.9	70.3	51.6	38.6	35.2	32.4	33.5	34.8
47.5°	2653.5	1966.6	174.5	88.4	62.8	44.4	33.1	30.7	29.0	29.4	31.1
50°	2947.2	2043.1	137.3	79.2	56.7	38.6	30.0	27.7	27.0	27.3	28.7
52.5°	3162.9	2043.8	115.7	71.0	50.9	34.1	28.3	25.6	25.3	25.9	27.3
55°	3357.9	1989.1	100.4	63.8	45.8	31.1	27.0	24.6	24.6	25.3	26.6
57.5°	3487.3	1888.7	87.1	56.3	41.3	29.4	25.9	23.6	23.2	22.9	23.9
60°	3550.5	1751.8	73.7	49.5	37.2	28.3	25.3	20.8	20.5	19.8	20.5
62.5°	3510.5	1580.4	61.8	42.7	33.1	27.0	22.2	18.1	17.4	16.0	17.1
65°	3306.3	1372.2	52.2	36.5	28.7	22.9	18.8	15.4	13.7	11.9	11.6
67.5°	2888.8	1114.7	43.7	31.4	24.6	18.8	15.4	13.7	10.6	9.2	8.9
70°	2165.0	761.0	36.2	27.0	20.5	16.0	13.0	12.3	9.9	8.9	8.2
72.5°	1270.1	410.7	30.4	23.6	17.4	13.3	10.6	11.3	9.9	8.2	7.5
75°	507.4	136.6	24.2	18.8	14.0	9.6	8.9	9.2	8.9	7.5	6.1
77.5°	115.7	43.0	18.8	14.7	10.9	6.1	7.2	7.9	7.9	6.1	4.4
80°	36.2	17.1	10.9	9.2	7.9	3.4	5.1	5.5	3.8	1.7	0.0
82.5°	11.6	4.8	3.8	3.8	3.4	0.7	1.0	0.7	0.0	0.0	0.0
85°	4.4	3.1	2.4	2.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.7	1.4	1.0	1.4	0.7	0.0	0.0	0.0	0.0	0.0	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)