

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: P596315

Luminaire Tested: **MSA-SA3A-722-U-T3-HSS**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P596315
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-SA3A-722-U-T3-HSS
Description: MESA POST TOP DECORATIVE LUMINAIRE. (3) 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: 6368 lumens
Efficiency: N/A
Efficacy: 66.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

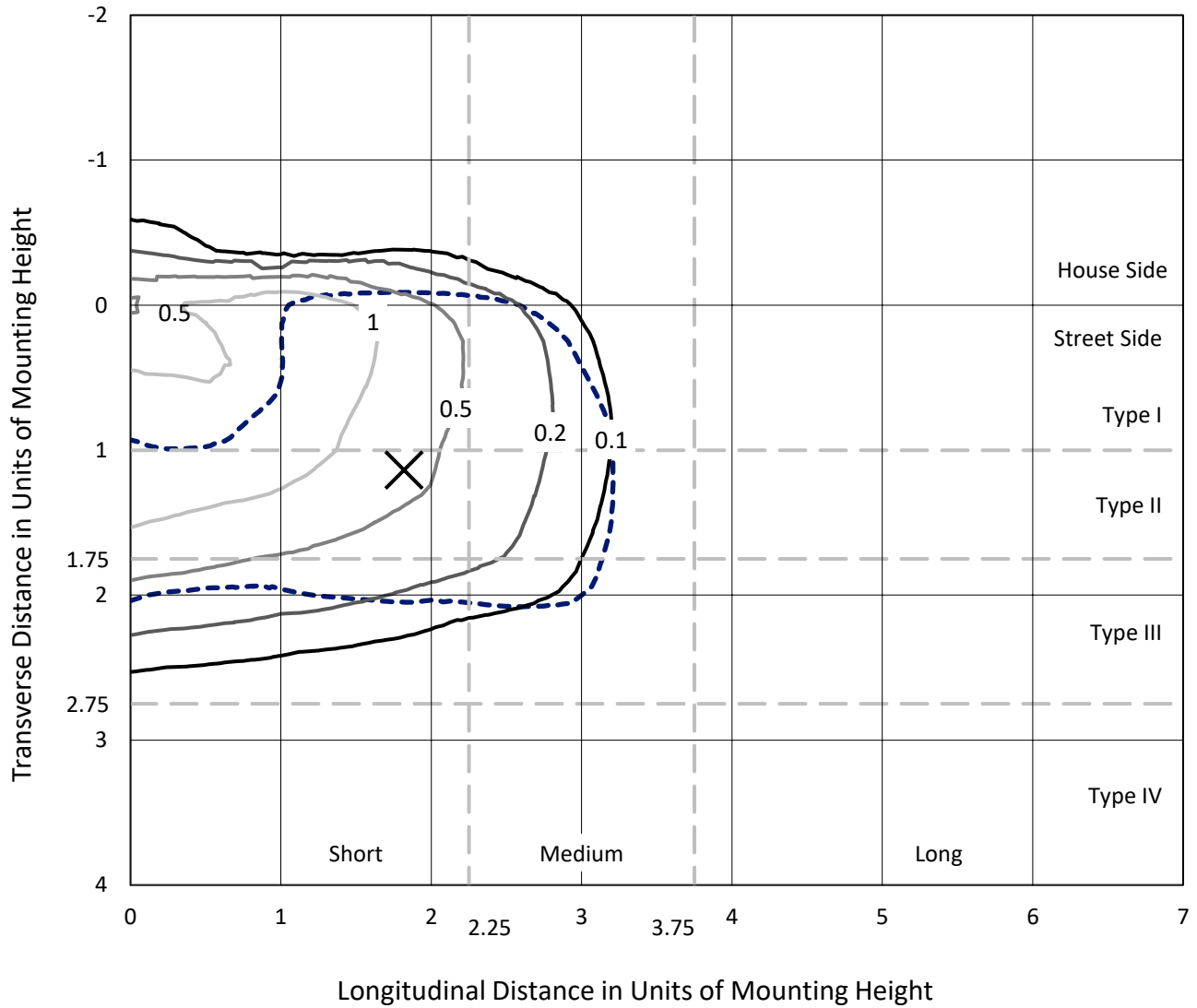
Input Watts (W): 96
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

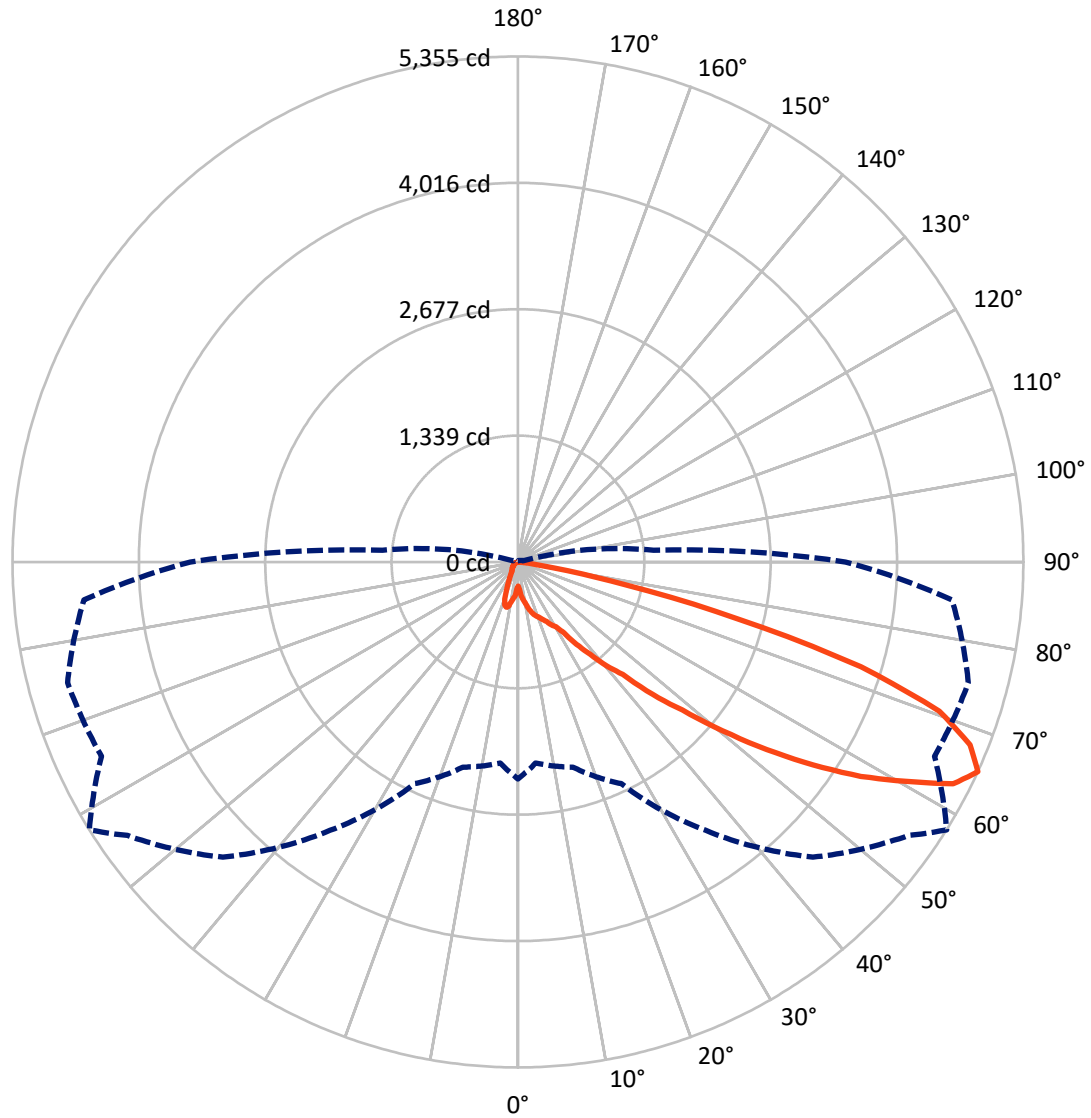
✕ Max cd
 - - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



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

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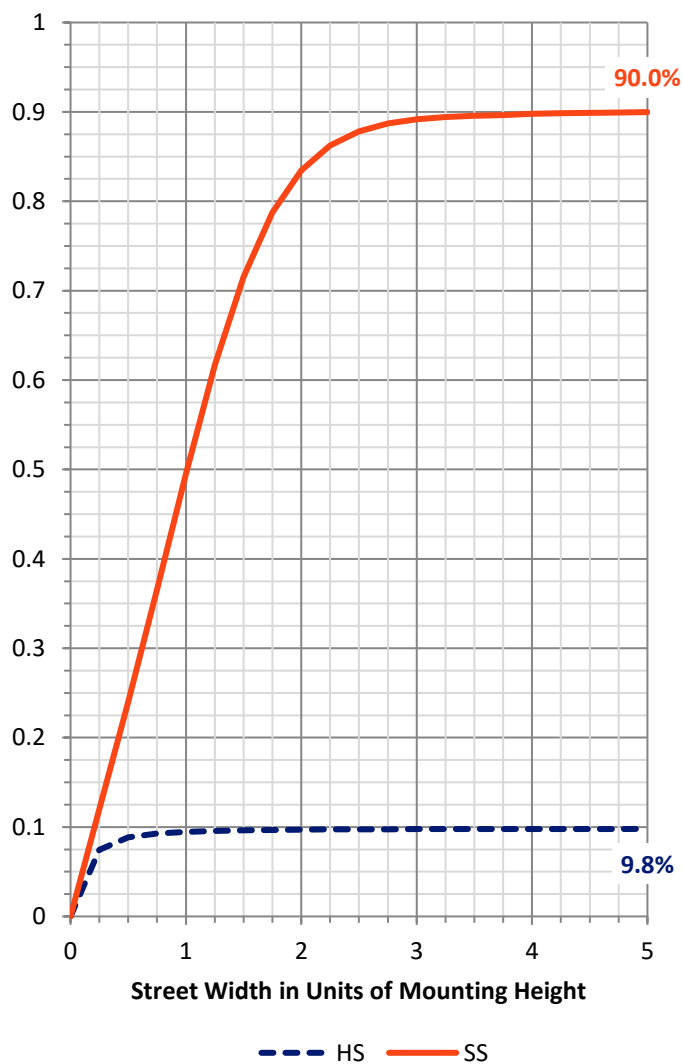
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	628.3	0.0	628.3
	% Fixture	9.9	0.0	9.9
Street Side	Lumens	5739.6	0.0	5739.6
	% Fixture	90.1	0.0	90.1
Total	Lumens	6368.0	0.0	6368.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.8	0.6
10°-20°	130.7	2.1
20°-30°	253.0	4.0
30°-40°	504.8	7.9
40°-50°	1032.0	16.2
50°-60°	1830.5	28.7
60°-70°	1929.8	30.3
70°-80°	625.7	9.8
80°-90°	25.6	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°	6368.0	100.0
0°-180°	6368.0	100.0

Coefficient of Utilization



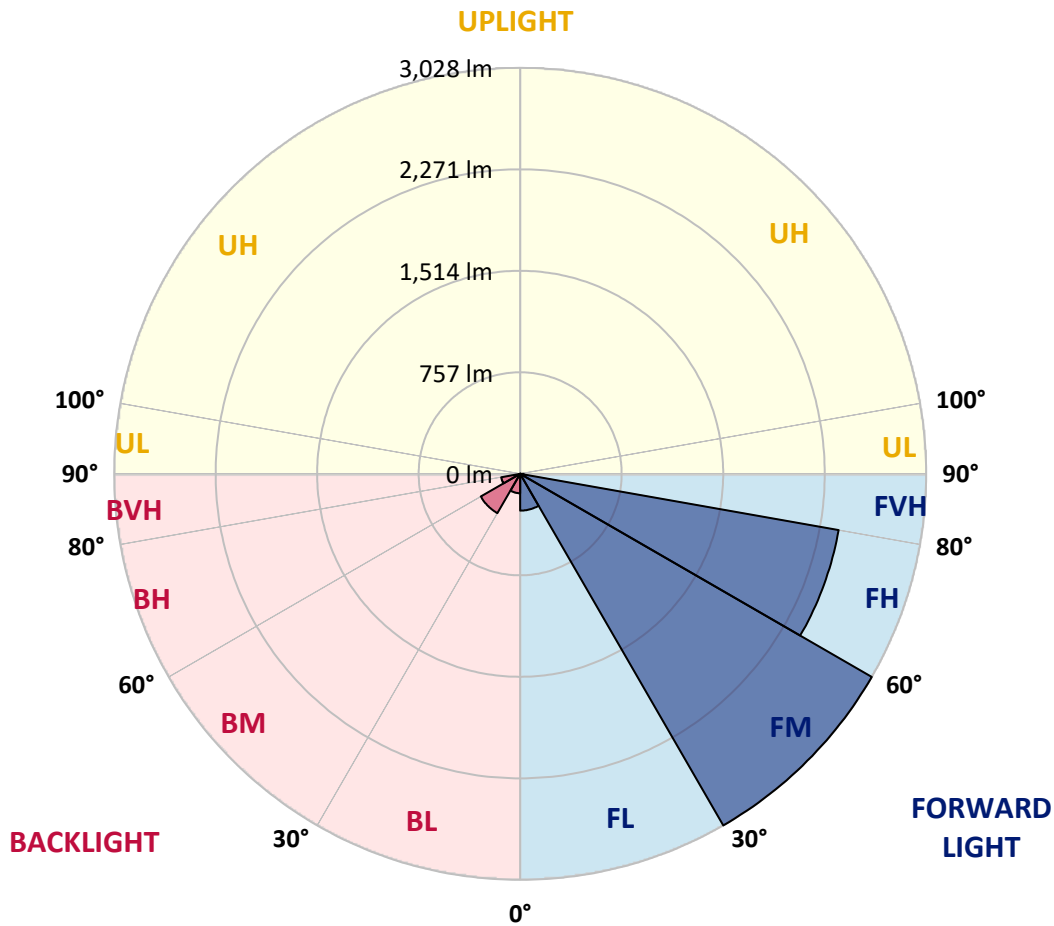
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	274.7	4.3			
FM (30°-60°)	3028.3	47.6			
FH (60°-80°)	2412.1	37.9			G2/5000
FVH (80°-90°)	24.5	0.4			G1/100
BL (0°-30°)	144.8	2.3	B1/500		
BM (30°-60°)	339.0	5.3	B1/1000		
BH (60°-80°)	143.4	2.3	B1/500		G1/500
BVH (80°-90°)	1.1	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	254.9	254.9	254.9	254.9	254.9	254.9	254.9	254.9	254.9	254.9	254.9
2.5°	311.2	301.9	287.2	289.7	292.6	298.3	293.6	289.3	284.7	278.6	301.9
5°	375.7	360.3	358.9	355.7	353.2	352.8	358.5	356.7	359.3	370.7	382.6
7.5°	399.4	393.0	380.8	385.8	377.9	371.8	397.3	405.5	421.3	426.7	457.5
10°	396.9	387.6	392.6	395.1	400.5	422.7	438.9	447.8	461.4	490.8	484.7
12.5°	408.4	416.6	422.0	422.4	450.0	490.8	502.3	509.8	534.2	545.7	575.8
15°	446.7	460.4	451.8	455.3	464.3	514.1	541.0	557.5	591.9	629.2	636.8
17.5°	501.6	510.2	492.3	479.4	504.1	531.4	580.1	597.3	619.2	706.3	722.5
20°	570.8	585.5	546.8	495.5	528.1	560.4	613.5	621.7	645.0	758.7	784.1
22.5°	732.5	710.6	651.5	571.5	561.8	576.2	626.7	659.0	698.4	788.1	847.2
25°	892.0	884.5	797.4	708.1	643.6	611.3	678.4	696.3	760.8	858.0	890.6
27.5°	1069.5	1084.6	939.0	884.9	758.3	652.9	710.6	755.4	831.8	883.4	962.0
30°	1303.6	1279.6	1109.0	1054.8	910.3	767.3	794.2	797.0	909.3	967.3	1041.9
32.5°	1487.2	1502.6	1288.2	1205.0	1089.6	943.3	856.9	894.2	974.5	1103.9	1174.6
35°	1685.8	1684.4	1475.4	1363.5	1212.6	1087.1	1043.0	1070.2	1171.0	1317.6	1336.3
37.5°	1982.7	1957.3	1710.6	1546.7	1418.4	1311.2	1277.5	1241.3	1345.2	1485.1	1555.0
40°	2262.7	2174.9	1946.9	1752.5	1588.3	1544.6	1422.7	1444.9	1475.7	1660.4	1853.6
42.5°	2545.6	2491.1	2186.4	2023.6	1821.7	1717.8	1638.2	1627.8	1774.4	1993.1	2192.8
45°	2918.9	2752.1	2508.3	2365.3	2131.5	2027.2	1963.0	2001.4	2133.3	2452.8	2585.8
47.5°	3232.2	3078.8	2869.4	2652.1	2406.9	2524.1	2403.6	2343.0	2524.1	2854.3	3031.1
50°	3501.5	3330.5	3118.6	2957.6	2917.8	3030.4	2786.6	2808.8	2926.4	3314.3	3414.0
52.5°	3697.2	3517.3	3332.3	3254.5	3417.6	3474.2	3352.0	3302.9	3409.7	3706.6	3755.0
55°	3844.6	3660.3	3515.8	3623.0	3938.5	3919.9	3962.9	3795.1	3897.3	4115.7	4092.7
57.5°	3853.6	3635.2	3550.6	3723.1	4156.2	4444.8	4570.6	4285.3	4343.3	4435.5	4383.9
60°	3571.8	3354.5	3347.7	3592.6	4219.3	4580.7	4856.0	4716.9	4639.1	4707.6	4609.7
62.5°	3010.3	2858.3	2929.3	3200.0	3984.4	4505.8	5008.1	5175.5	4872.5	4888.0	4748.8
65°	2298.6	2139.0	2250.2	2591.2	3471.0	4421.9	5051.1	5354.8	4868.2	4939.2	4615.5
67.5°	1522.4	1429.9	1555.7	1931.4	2759.7	3903.4	5028.9	5166.5	4713.7	4738.8	4120.3
70°	785.9	763.3	865.2	1161.7	1855.4	2998.8	4810.5	4735.2	4400.0	4082.3	3178.1
72.5°	251.7	252.8	350.7	530.6	1000.3	1825.7	3697.6	3800.9	3520.8	2986.3	1940.4
75°	111.5	109.7	146.6	222.7	417.0	818.5	2297.2	2408.7	2192.1	1642.8	815.7
77.5°	80.3	77.8	93.9	130.1	206.5	277.5	1077.0	1162.4	993.9	569.4	186.8
80°	56.6	56.3	68.1	91.4	129.1	123.3	340.3	381.5	305.5	138.0	54.9
82.5°	31.9	33.0	47.3	64.5	78.5	61.7	95.7	105.4	102.9	73.5	24.0
85°	15.4	17.2	30.8	46.6	41.2	24.0	34.1	36.9	43.0	42.7	12.2
87.5°	0.0	0.0	12.5	21.2	11.1	3.6	10.4	11.8	11.5	13.6	2.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	254.9	254.9	254.9	254.9	254.9	254.9	254.9	254.9	254.9	254.9	254.9
2.5°	306.6	304.4	277.2	279.3	285.4	282.9	285.0	280.0	274.3	297.6	297.2
5°	387.6	371.4	362.8	355.0	356.4	340.3	349.6	353.9	353.2	366.4	370.0
7.5°	458.6	437.1	419.8	403.4	378.3	355.7	369.7	378.6	384.7	407.7	416.6
10°	491.9	474.3	467.5	435.3	417.3	403.4	386.5	374.3	379.3	373.2	379.3
12.5°	565.1	553.2	527.1	494.4	472.9	444.2	381.5	329.1	296.9	297.2	295.1
15°	631.7	631.0	591.9	537.8	475.4	393.7	295.8	229.8	199.3	190.7	187.9
17.5°	718.9	708.1	636.8	556.8	444.6	304.8	201.5	157.4	154.5	159.5	157.4
20°	774.4	758.7	659.0	529.2	366.4	206.2	152.0	139.5	148.1	155.2	153.5
22.5°	830.0	806.4	675.8	495.5	260.7	150.9	137.3	135.2	140.5	149.5	150.9
25°	860.5	855.8	708.8	432.4	178.6	132.3	132.3	131.6	133.4	139.8	138.8
27.5°	949.1	885.9	684.1	337.4	138.0	121.5	123.3	122.6	116.2	122.6	123.0
30°	1004.3	975.2	685.9	240.2	121.5	107.6	112.2	106.5	96.8	102.2	101.1
32.5°	1115.4	1043.0	680.5	162.1	110.8	102.5	95.4	87.1	80.0	82.1	80.3
35°	1244.8	1189.6	607.7	130.1	103.3	90.7	79.2	71.0	63.5	65.3	64.9
37.5°	1502.3	1327.0	547.5	117.2	98.2	83.2	69.9	58.4	54.5	55.6	56.6
40°	1740.7	1556.1	435.3	111.5	89.6	74.2	57.7	49.5	47.0	47.7	48.8
42.5°	2097.1	1738.2	328.8	105.8	81.0	62.7	48.0	42.7	40.2	41.6	42.3
45°	2442.0	1893.1	245.6	100.7	73.9	54.1	40.5	36.9	34.1	35.1	36.6
47.5°	2786.6	2065.2	183.2	92.9	66.0	46.6	34.8	32.3	30.5	30.8	32.6
50°	3094.9	2145.5	144.1	83.2	59.5	40.5	31.6	29.0	28.3	28.7	30.1
52.5°	3321.5	2146.2	121.5	74.6	53.4	35.9	29.8	26.9	26.5	27.2	28.7
55°	3526.2	2088.8	105.4	67.0	48.0	32.6	28.3	25.8	25.8	26.5	28.0
57.5°	3662.1	1983.4	91.4	59.2	43.4	30.8	27.2	24.7	24.4	24.0	25.1
60°	3728.4	1839.7	77.4	52.0	39.1	29.8	26.5	21.9	21.5	20.8	21.5
62.5°	3686.5	1659.7	64.9	44.8	34.8	28.3	23.3	19.0	18.3	16.9	17.9
65°	3472.1	1441.0	54.9	38.4	30.1	24.0	19.7	16.1	14.3	12.5	12.2
67.5°	3033.6	1170.6	45.9	33.0	25.8	19.7	16.1	14.3	11.1	9.7	9.3
70°	2273.5	799.2	38.0	28.3	21.5	16.9	13.6	12.9	10.4	9.3	8.6
72.5°	1333.8	431.3	31.9	24.7	18.3	14.0	11.1	11.8	10.4	8.6	7.9
75°	532.8	143.4	25.5	19.7	14.7	10.0	9.3	9.7	9.3	7.9	6.5
77.5°	121.5	45.2	19.7	15.4	11.5	6.5	7.5	8.2	8.2	6.5	4.7
80°	38.0	17.9	11.5	9.7	8.2	3.6	5.4	5.7	3.9	1.8	0.0
82.5°	12.2	5.0	3.9	3.9	3.6	0.7	1.1	0.7	0.0	0.0	0.0
85°	4.7	3.2	2.5	2.5	1.4	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.8	1.4	1.1	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)