

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: P367263

Luminaire Tested: **MSA-SA2B-727-U-SL2-HSS**

Issue Date: 12/2/2019

Test Information

Test Method: LM-79-08
Report Number: P367263
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-17)
Test Lab: INNOVATION CENTER
Issue Date: 12/2/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: MSA-SA2B-727-U-SL2-HSS
Description: MESA POST TOP DECORATIVE LUMINAIRE. (2) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6828 lumens
Efficiency: N/A
Efficacy: 80.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

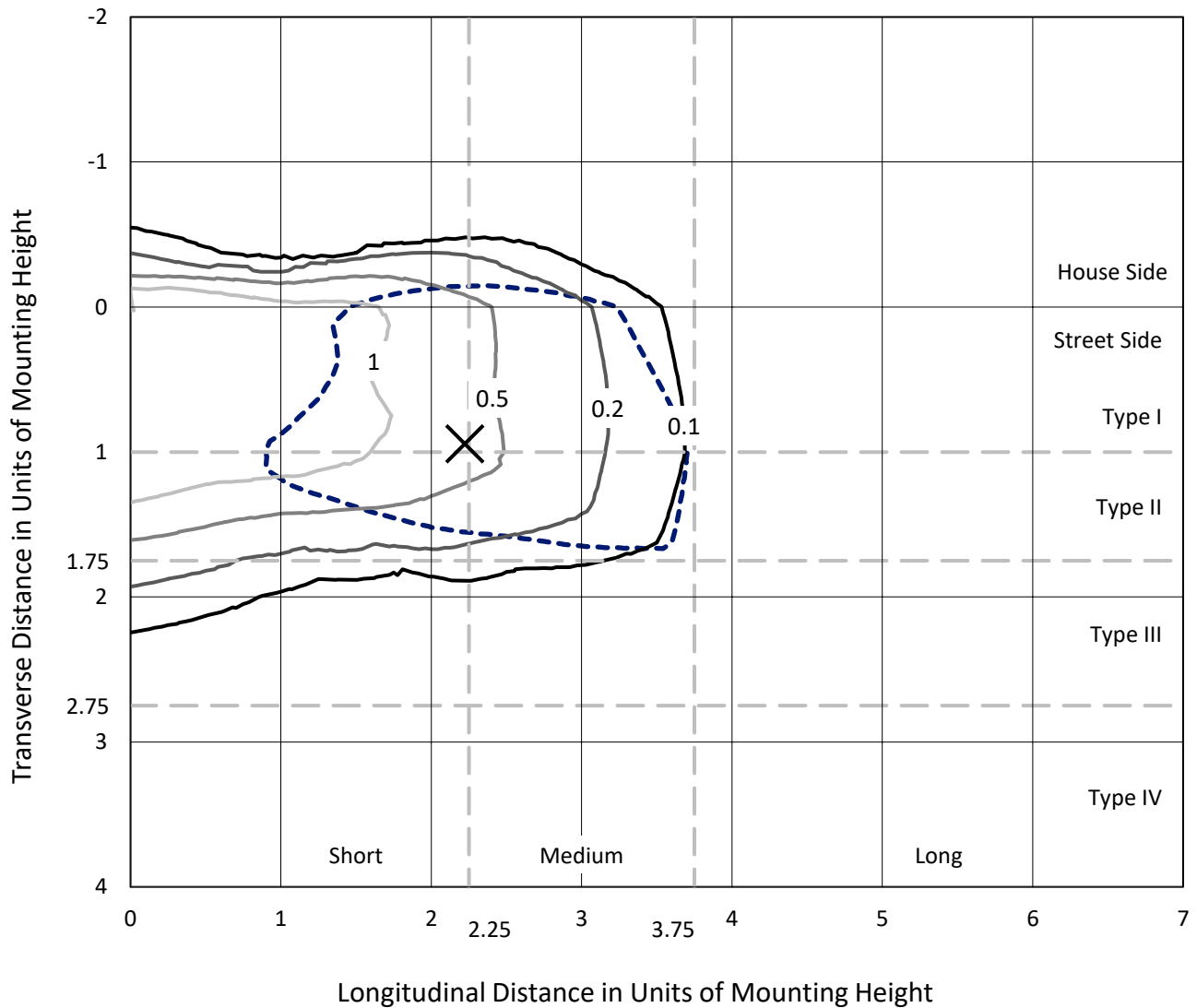
Input Watts (W): 85
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

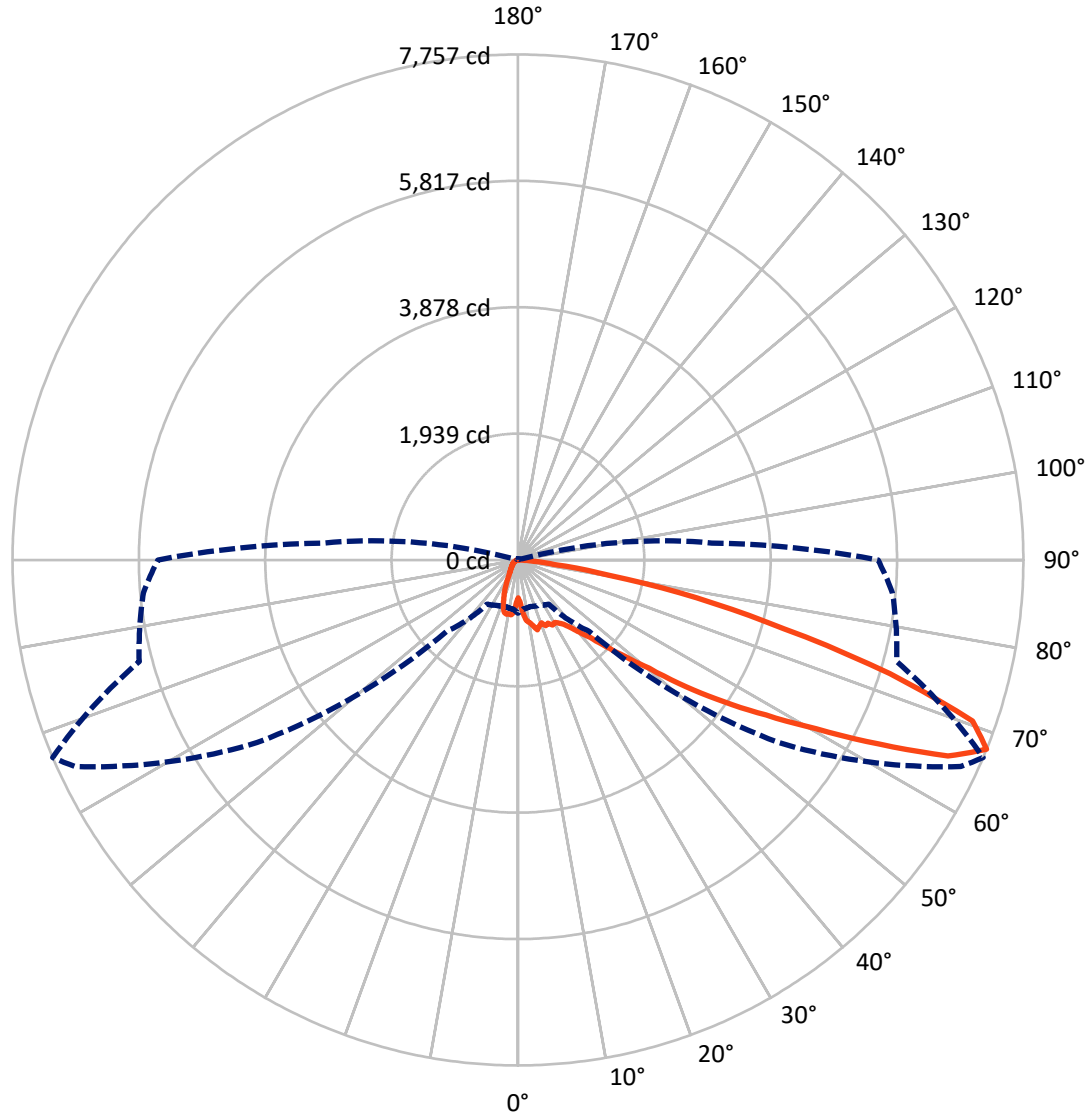
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.8 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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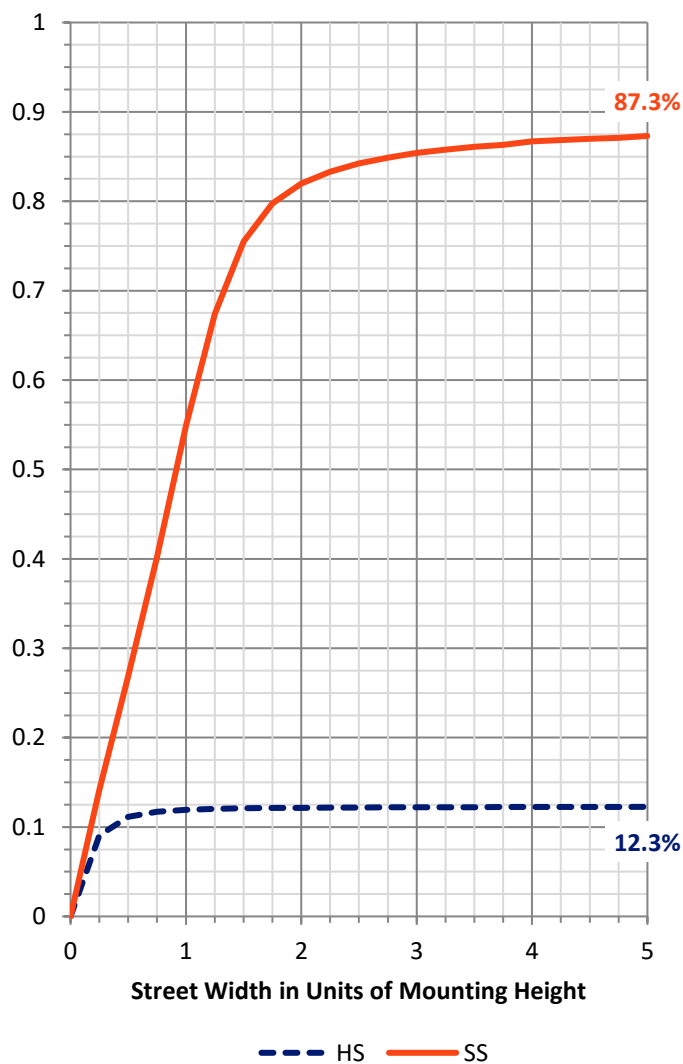
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	844.4	0.0	844.4
	% Fixture	12.4	0.0	12.4
Street Side	Lumens	5983.6	0.0	5983.6
	% Fixture	87.6	0.0	87.6
Total	Lumens	6828.0	0.0	6828.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.0	1.1
10°-20°	216.0	3.2
20°-30°	338.5	5.0
30°-40°	545.8	8.0
40°-50°	1002.9	14.7
50°-60°	1693.8	24.8
60°-70°	1872.6	27.4
70°-80°	980.1	14.4
80°-90°	105.3	1.5
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°	6828.0	100.0
0°-180°	6828.0	100.0

Coefficient of Utilization



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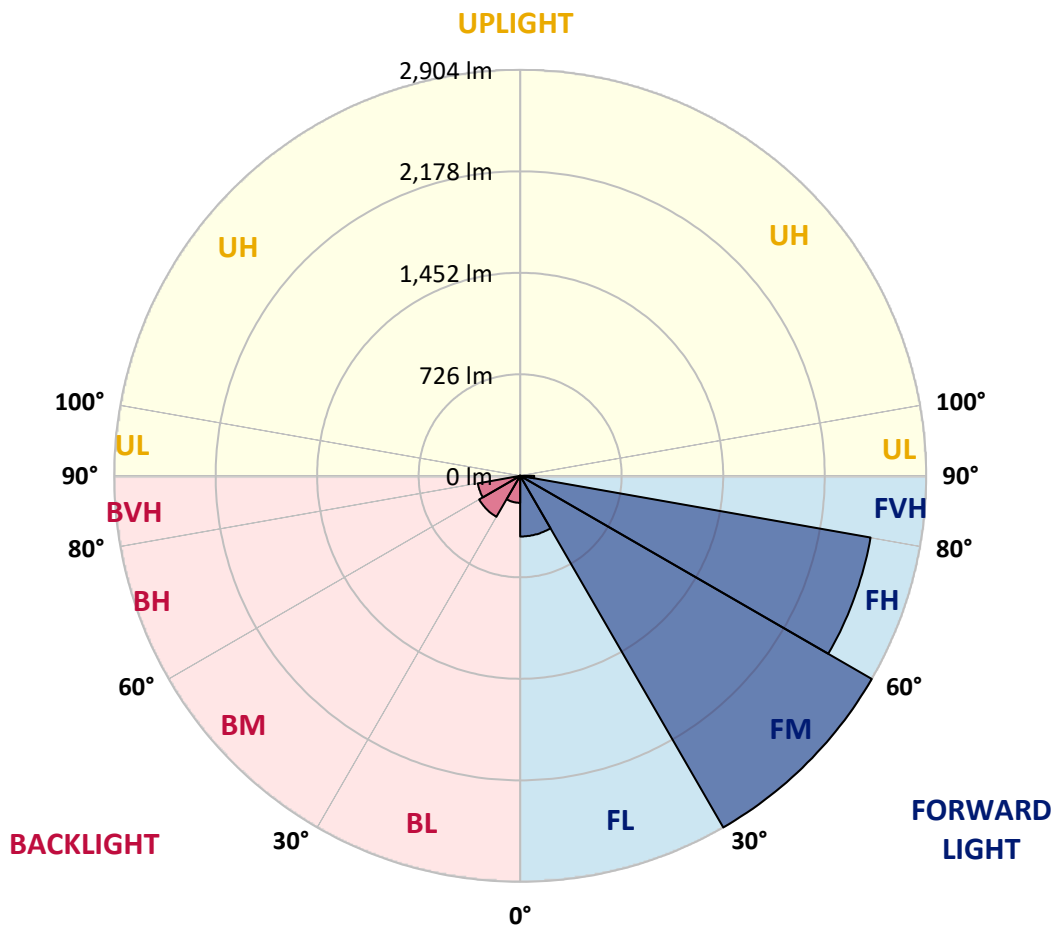
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	434.2	6.4			
FM (30°-60°)	2904.0	42.5			
FH (60°-80°)	2544.7	37.3			G2/5000
FVH (80°-90°)	100.8	1.5			G2/225
BL (0°-30°)	193.3	2.8	B1/500		
BM (30°-60°)	338.6	5.0	B1/1000		
BH (60°-80°)	308.0	4.5	B1/500		G1/500
BVH (80°-90°)	4.5	0.1			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 Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	581.6	581.6	581.6	581.6	581.6	581.6	581.6	581.6	581.6	581.6	581.6
2.5°	686.5	663.3	623.8	635.2	658.1	677.2	668.1	650.5	650.8	632.8	697.6
5°	798.7	767.6	744.7	752.7	751.6	750.9	793.5	809.8	816.7	846.5	890.5
7.5°	830.9	819.9	796.0	803.2	779.3	781.1	855.9	926.5	937.6	956.0	1034.3
10°	818.5	797.0	805.7	805.7	806.0	844.8	895.0	962.6	976.1	1046.7	1055.0
12.5°	805.0	806.0	840.3	834.1	881.2	950.8	967.8	1043.6	1037.0	1098.3	1189.4
15°	855.2	881.5	859.3	868.0	872.5	954.2	981.6	1082.4	1111.5	1189.1	1248.3
17.5°	941.4	944.9	898.8	886.4	918.9	942.1	997.2	1045.7	1065.1	1268.8	1352.6
20°	957.0	979.2	932.4	860.4	929.3	961.2	999.6	1022.8	1031.1	1293.3	1411.5
22.5°	1050.9	1026.3	951.5	896.8	916.5	951.1	975.0	1045.0	1094.9	1246.9	1467.9
25°	1099.0	1092.4	1021.1	974.3	954.2	951.5	1006.2	1059.2	1075.1	1295.1	1481.8
27.5°	1214.4	1199.5	1061.3	1055.4	989.2	931.0	1007.2	1102.5	1132.3	1249.7	1533.7
30°	1371.3	1365.7	1181.8	1178.0	1072.7	968.1	1063.4	1129.2	1111.2	1272.9	1568.4
32.5°	1529.2	1574.2	1386.2	1278.8	1199.8	1104.2	1047.4	1120.9	1153.1	1329.4	1632.1
35°	1720.1	1752.6	1561.1	1483.2	1307.5	1168.0	1153.1	1200.2	1214.0	1396.6	1704.5
37.5°	2054.0	2004.8	1841.6	1709.0	1616.9	1395.5	1322.1	1284.7	1316.9	1487.7	1852.4
40°	2300.6	2269.4	2068.5	1989.2	1777.2	1647.7	1455.8	1420.8	1456.8	1581.2	1955.3
42.5°	2598.1	2533.3	2344.2	2290.5	2072.3	1822.6	1627.9	1640.1	1617.5	1765.8	2135.7
45°	2867.2	2721.1	2615.8	2627.9	2511.5	2174.2	1915.1	1909.2	1890.5	2033.2	2325.5
47.5°	3048.4	2920.6	2818.1	2784.5	2770.6	2792.4	2330.0	2225.4	2211.6	2314.1	2624.4
50°	3145.7	3005.8	2879.0	2885.9	3167.2	3378.8	2758.1	2609.5	2614.7	2721.8	3033.2
52.5°	3080.3	2922.0	2788.3	2918.2	3474.8	3769.9	3466.8	3111.4	3232.0	3204.6	3581.5
55°	2777.9	2640.4	2545.5	2777.9	3508.4	4190.7	4339.3	3866.9	3839.8	3777.5	4140.5
57.5°	2269.1	2150.6	2092.1	2337.3	3140.9	4529.8	5215.6	4720.7	4490.3	4229.2	4604.6
60°	1690.6	1603.3	1542.4	1671.9	2474.8	4200.4	5789.6	5525.3	5258.6	4664.6	5021.7
62.5°	1252.1	1181.1	1116.3	1128.1	1704.1	3612.6	6009.9	6377.7	6224.6	5124.2	5415.1
65°	999.3	934.5	889.1	863.2	1055.4	2718.0	5703.3	7076.3	7253.0	5557.1	5699.2
67.5°	816.0	761.3	738.8	768.6	827.8	1549.3	4884.5	7500.3	7756.6	6016.4	5769.1
70°	664.0	619.0	616.5	696.9	762.4	944.5	3592.9	7207.6	7400.5	6094.7	5349.7
72.5°	462.7	443.0	474.5	588.5	755.4	786.6	2063.3	5964.5	5971.4	5382.9	4400.3
75°	261.9	258.7	308.6	469.3	735.7	778.6	1150.3	4215.0	4218.1	4071.2	3048.4
77.5°	144.1	134.7	179.8	317.3	631.8	760.6	741.9	2878.0	2804.2	2265.6	1392.4
80°	66.5	62.7	97.3	203.3	462.1	719.4	594.7	1581.9	1426.3	738.1	339.8
82.5°	27.4	26.0	44.7	130.6	292.0	579.5	501.2	701.7	563.2	140.3	104.9
85°	4.8	5.2	18.4	79.0	163.5	267.1	406.3	333.2	244.9	38.8	57.5
87.5°	0.0	0.0	3.8	19.1	39.5	73.1	164.9	93.2	64.1	11.4	17.0
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°	581.6	581.6	581.6	581.6	581.6	581.6	581.6	581.6	581.6	581.6	581.6
2.5°	710.4	704.5	644.9	647.7	651.9	648.1	647.4	630.7	615.5	665.7	665.0
5°	898.5	856.6	815.4	799.4	765.1	720.1	720.4	706.2	691.7	712.1	712.1
7.5°	1032.5	974.7	922.4	829.2	738.5	656.4	649.1	629.7	607.5	634.2	639.4
10°	1063.7	1013.5	945.9	809.1	723.2	643.2	555.2	482.8	449.2	433.7	430.9
12.5°	1159.6	1122.2	971.2	819.9	696.2	560.8	416.7	330.8	272.2	267.7	261.5
15°	1223.7	1197.4	996.2	793.2	581.9	403.2	261.9	200.9	177.3	175.3	172.1
17.5°	1323.1	1277.4	972.3	708.3	455.1	266.0	176.0	158.6	161.4	167.6	162.8
20°	1363.7	1274.3	920.3	585.4	319.7	178.4	152.7	143.4	150.7	156.6	153.8
22.5°	1405.2	1283.3	874.2	482.5	208.9	147.6	136.1	131.3	132.0	137.9	138.2
25°	1404.9	1308.2	820.9	375.8	155.5	131.3	123.0	116.7	114.3	118.5	117.4
27.5°	1473.1	1279.5	723.6	278.8	136.8	117.4	109.5	101.8	93.2	97.3	97.3
30°	1473.5	1326.2	655.7	200.2	125.4	104.6	97.7	85.9	75.9	79.3	79.7
32.5°	1512.6	1285.7	593.0	153.1	116.4	97.0	81.7	71.0	65.1	67.2	67.2
35°	1557.3	1320.4	496.7	135.1	107.4	86.2	70.0	61.3	56.8	58.5	58.5
37.5°	1704.8	1313.1	429.8	125.7	101.5	77.9	63.7	54.0	52.0	53.0	54.4
40°	1758.2	1364.7	339.1	120.2	91.8	70.3	56.1	48.8	46.1	46.8	47.1
42.5°	1893.9	1376.1	270.9	115.7	83.1	61.0	49.9	44.7	41.2	41.2	42.3
45°	2043.9	1404.9	215.4	111.9	75.9	54.7	45.0	40.9	35.7	35.0	36.4
47.5°	2261.1	1515.0	175.6	104.3	67.2	50.9	41.6	35.3	31.2	29.8	31.2
50°	2624.4	1702.1	155.2	94.9	61.0	47.8	36.7	30.1	27.0	25.3	26.3
52.5°	3137.1	2025.2	144.4	86.2	55.4	42.9	32.9	26.3	23.2	21.8	22.5
55°	3706.5	2395.8	139.2	77.6	50.6	37.8	28.7	23.2	20.4	18.7	19.1
57.5°	4233.0	2744.3	134.0	69.3	45.7	33.6	25.3	20.4	17.7	15.9	16.3
60°	4751.8	3022.4	121.6	59.6	41.2	30.1	22.2	17.7	15.9	13.9	13.9
62.5°	5210.8	3188.7	103.6	51.6	37.1	26.7	19.7	15.9	14.5	12.5	12.5
65°	5523.2	3196.3	83.5	44.3	32.6	22.9	17.3	14.9	13.5	11.1	10.7
67.5°	5527.7	2988.5	66.8	39.5	28.7	20.1	15.6	14.2	12.5	10.4	9.7
70°	4947.5	2468.9	55.8	34.6	24.9	17.7	13.5	13.5	12.1	10.0	9.0
72.5°	3957.6	1886.7	46.8	30.1	22.2	15.2	12.5	12.8	11.8	10.0	9.0
75°	2660.1	1082.1	38.8	25.6	19.4	12.8	12.1	12.5	12.1	10.0	8.7
77.5°	1225.1	344.6	30.1	21.1	16.6	10.7	11.8	11.8	11.1	9.0	7.6
80°	276.1	84.9	21.8	15.6	13.5	8.0	10.7	9.7	8.7	6.2	4.5
82.5°	100.4	26.0	13.2	9.7	8.3	3.1	6.9	6.9	6.2	4.5	2.8
85°	57.5	13.5	7.3	6.2	4.5	1.4	3.8	4.2	3.5	3.1	1.4
87.5°	18.7	3.1	3.5	3.8	3.5	0.7	1.4	1.4	1.0	0.7	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)