

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: P596193

Luminaire Tested: **MSA-SA1D-722-U-SL2-HSS**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P596193
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-17)
Test Lab: INNOVATIONS CENTER
Issue Date: 5/27/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: MSA-SA1D-722-U-SL2-HSS
Description: MESA POST TOP DECORATIVE LUMINAIRE. (1) 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: 4132 lumens
Efficiency: N/A
Efficacy: 61.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

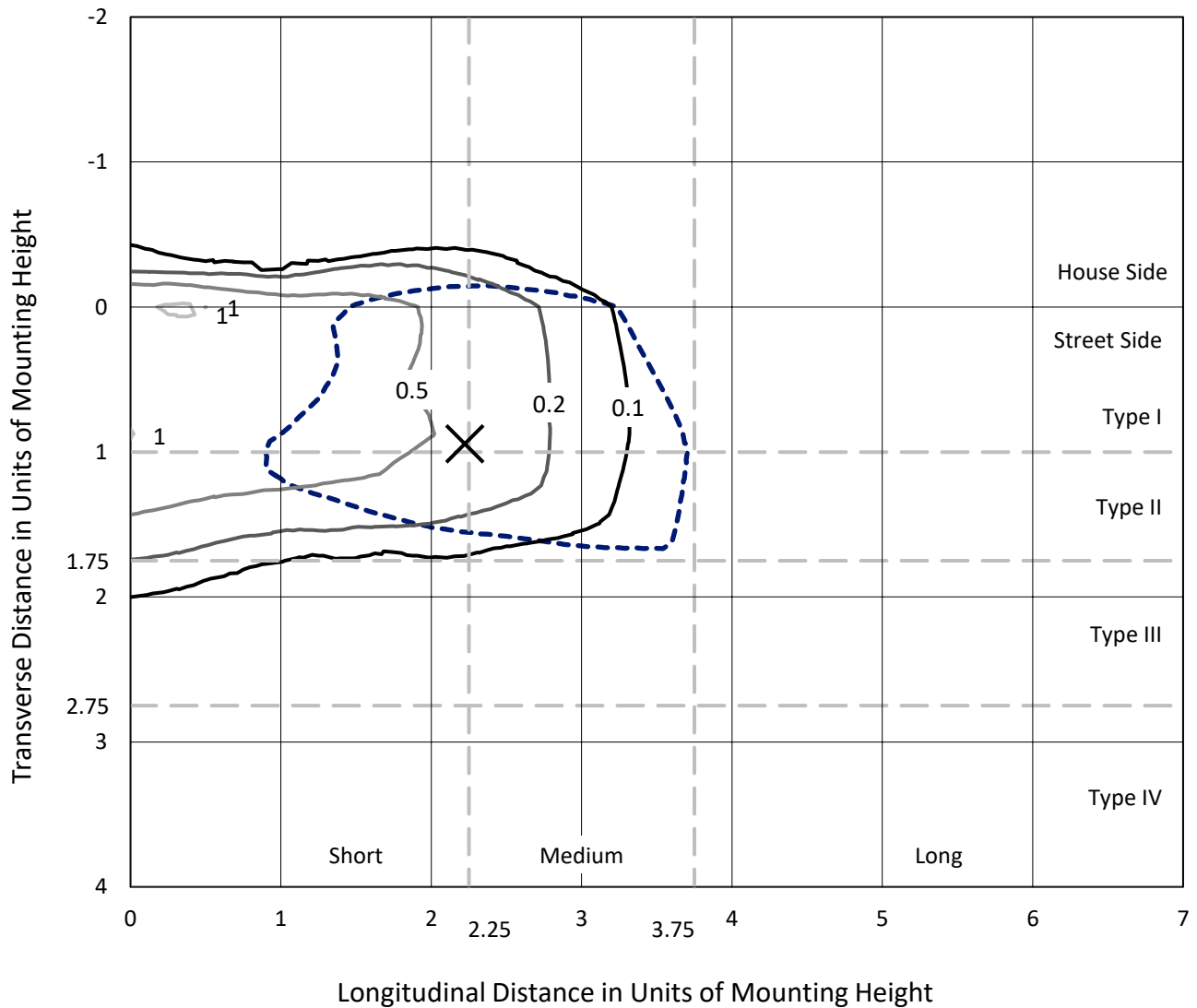
Input Watts (W): 67
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

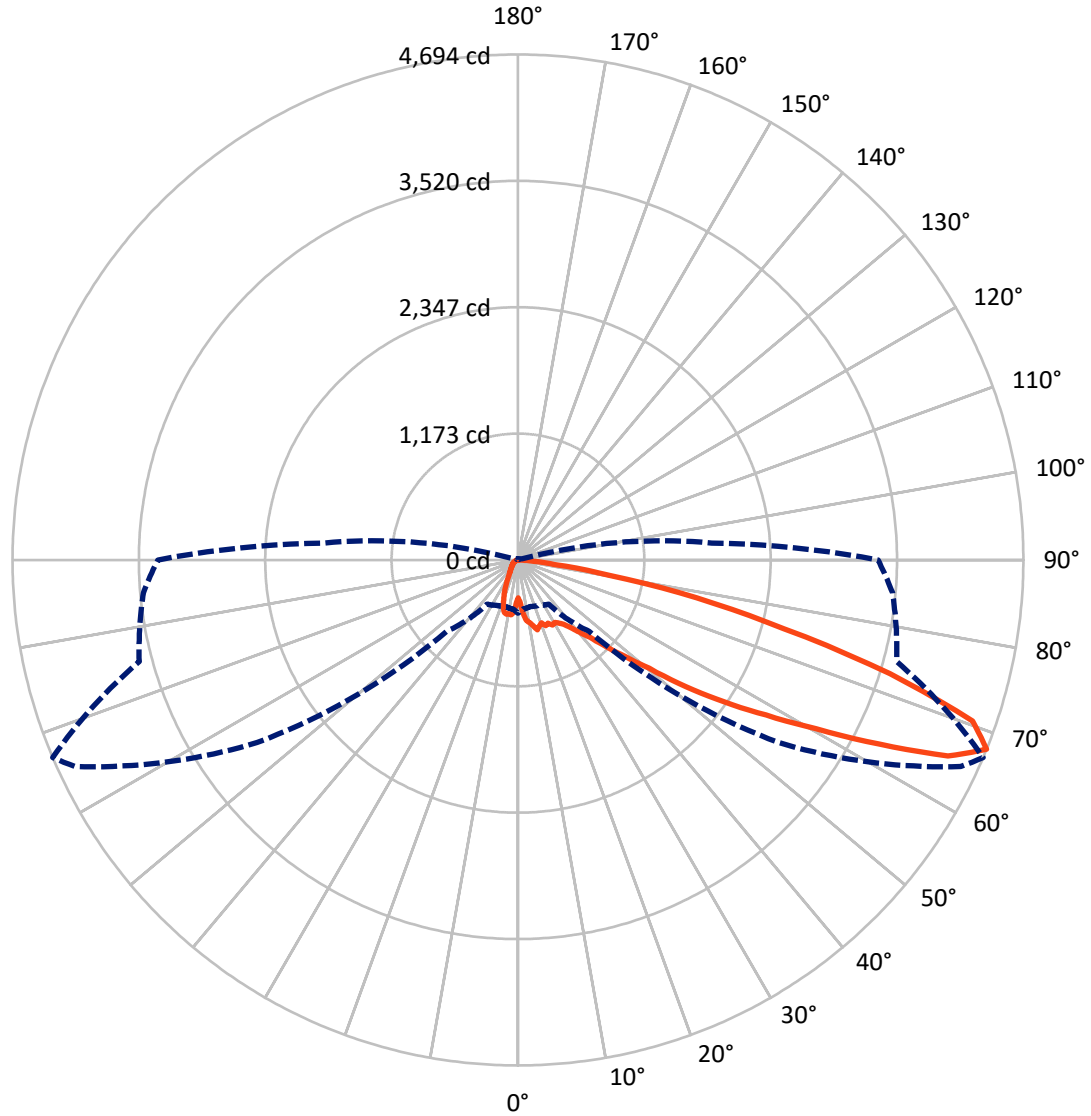
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.1 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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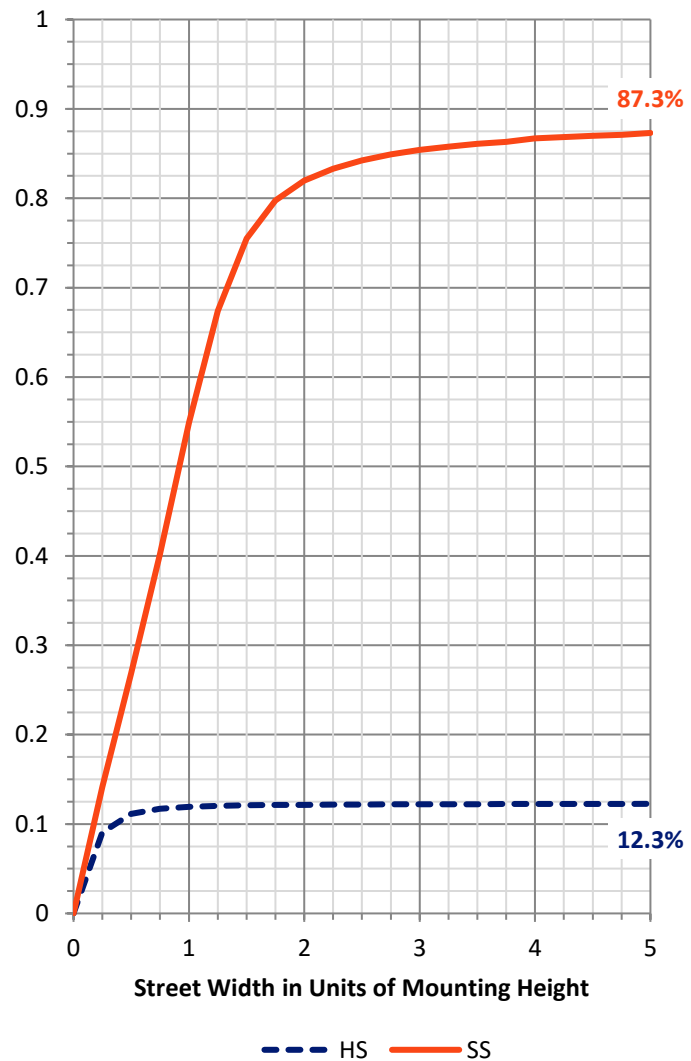
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	511.0	0.0	511.0
	% Fixture	12.4	0.0	12.4
Street Side	Lumens	3621.0	0.0	3621.0
	% Fixture	87.6	0.0	87.6
Total	Lumens	4132.0	0.0	4132.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.2	1.1
10°-20°	130.7	3.2
20°-30°	204.8	5.0
30°-40°	330.3	8.0
40°-50°	606.9	14.7
50°-60°	1025.0	24.8
60°-70°	1133.2	27.4
70°-80°	593.1	14.4
80°-90°	63.7	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°	4132.0	100.0
0°-180°	4132.0	100.0

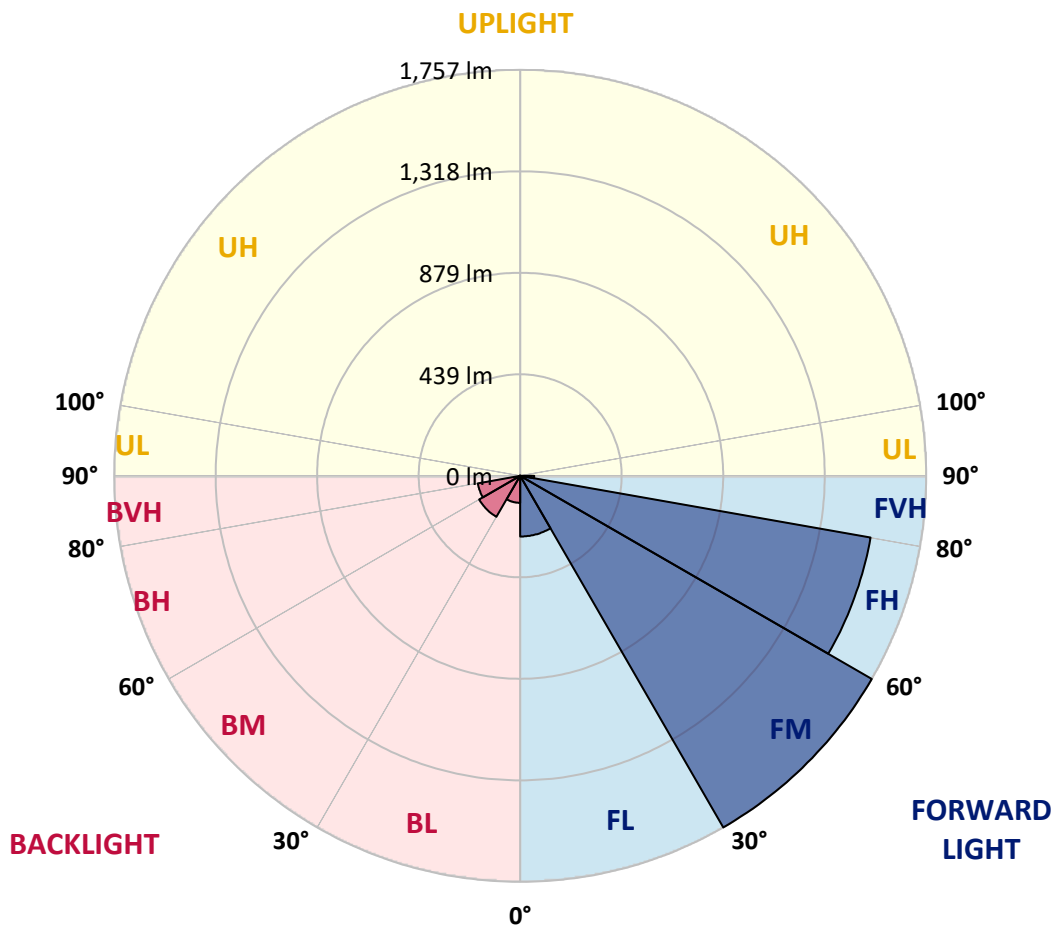


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	262.7	6.4			
FM (30°-60°)	1757.4	42.5			
FH (60°-80°)	1539.9	37.3			G1/1800
FVH (80°-90°)	61.0	1.5			G1/100
BL (0°-30°)	117.0	2.8	B1/500		
BM (30°-60°)	204.9	5.0	B0/220		
BH (60°-80°)	186.4	4.5	B1/500		G1/500
BVH (80°-90°)	2.7	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-G1
 Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	351.9	351.9	351.9	351.9	351.9	351.9	351.9	351.9	351.9	351.9	351.9
2.5°	415.4	401.4	377.5	384.4	398.3	409.8	404.3	393.6	393.9	383.0	422.1
5°	483.4	464.5	450.7	455.5	454.8	454.4	480.2	490.1	494.3	512.3	538.9
7.5°	502.8	496.1	481.7	486.1	471.6	472.7	517.9	560.7	567.4	578.5	625.9
10°	495.3	482.3	487.5	487.5	487.8	511.2	541.6	582.5	590.7	633.4	638.5
12.5°	487.1	487.8	508.5	504.7	533.2	575.4	585.6	631.5	627.6	664.7	719.8
15°	517.5	533.5	520.0	525.3	528.0	577.5	594.0	655.0	672.6	719.6	755.4
17.5°	569.7	571.8	543.9	536.4	556.1	570.1	603.5	632.8	644.5	767.8	818.5
20°	579.1	592.6	564.3	520.7	562.4	581.7	604.9	619.0	624.0	782.7	854.1
22.5°	635.9	621.1	575.8	542.7	554.6	575.6	590.0	632.4	662.6	754.6	888.3
25°	665.1	661.1	617.9	589.6	577.5	575.8	608.9	641.0	650.6	783.7	896.7
27.5°	734.9	725.9	642.2	638.7	598.6	563.4	609.5	667.2	685.2	756.3	928.1
30°	829.8	826.5	715.2	712.9	649.2	585.9	643.5	683.3	672.4	770.3	949.1
32.5°	925.4	952.7	838.8	773.9	726.1	668.2	633.9	678.3	697.8	804.5	987.7
35°	1040.9	1060.6	944.7	897.5	791.3	706.8	697.8	726.3	734.7	845.1	1031.5
37.5°	1243.0	1213.2	1114.5	1034.2	978.4	844.5	800.1	777.4	796.9	900.3	1121.0
40°	1392.2	1373.3	1251.8	1203.8	1075.5	997.1	881.0	859.8	881.6	956.9	1183.2
42.5°	1572.3	1533.1	1418.6	1386.1	1254.1	1103.0	985.2	992.5	978.9	1068.6	1292.4
45°	1735.1	1646.7	1583.0	1590.3	1519.9	1315.7	1158.9	1155.4	1144.0	1230.4	1407.3
47.5°	1844.8	1767.4	1705.4	1685.0	1676.6	1689.9	1410.0	1346.7	1338.3	1400.4	1588.2
50°	1903.7	1819.0	1742.3	1746.4	1916.6	2044.7	1669.1	1579.2	1582.3	1647.1	1835.5
52.5°	1864.0	1768.2	1687.3	1765.9	2102.8	2281.4	2098.0	1882.9	1955.8	1939.3	2167.3
55°	1681.0	1597.8	1540.4	1681.0	2123.1	2536.0	2626.0	2340.1	2323.7	2286.0	2505.6
57.5°	1373.1	1301.5	1266.0	1414.4	1900.7	2741.2	3156.3	2856.7	2717.3	2559.3	2786.5
60°	1023.1	970.3	933.4	1011.8	1497.6	2541.9	3503.6	3343.7	3182.3	2822.8	3038.9
62.5°	757.7	714.8	675.6	682.7	1031.3	2186.2	3636.9	3859.5	3766.9	3100.9	3277.0
65°	604.7	565.5	538.1	522.3	638.7	1644.8	3451.4	4282.3	4389.2	3362.9	3448.9
67.5°	493.8	460.7	447.1	465.1	501.0	937.6	2955.9	4538.8	4693.9	3640.9	3491.2
70°	401.8	374.6	373.1	421.7	461.3	571.6	2174.3	4361.7	4478.5	3688.2	3237.4
72.5°	280.0	268.1	287.2	356.1	457.2	476.0	1248.6	3609.4	3613.6	3257.5	2662.8
75°	158.5	156.6	186.8	284.0	445.2	471.2	696.1	2550.7	2552.6	2463.7	1844.8
77.5°	87.2	81.5	108.8	192.0	382.3	460.3	449.0	1741.6	1697.0	1371.0	842.6
80°	40.2	37.9	58.9	123.0	279.6	435.4	359.9	957.3	863.2	446.7	205.6
82.5°	16.6	15.7	27.0	79.0	176.7	350.7	303.3	424.7	340.8	84.9	63.5
85°	2.9	3.1	11.1	47.8	98.9	161.6	245.9	201.6	148.2	23.5	34.8
87.5°	0.0	0.0	2.3	11.5	23.9	44.2	99.8	56.4	38.8	6.9	10.3
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°	351.9	351.9	351.9	351.9	351.9	351.9	351.9	351.9	351.9	351.9	351.9
2.5°	429.9	426.3	390.3	392.0	394.5	392.2	391.8	381.7	372.5	402.9	402.4
5°	543.7	518.4	493.4	483.8	463.0	435.8	436.0	427.4	418.6	431.0	431.0
7.5°	624.8	589.8	558.2	501.8	446.9	397.2	392.8	381.1	367.7	383.8	386.9
10°	643.7	613.3	572.4	489.6	437.7	389.2	336.0	292.2	271.9	262.4	260.8
12.5°	701.8	679.1	587.7	496.1	421.3	339.4	252.2	200.2	164.8	162.0	158.3
15°	740.5	724.6	602.8	480.0	352.1	244.0	158.5	121.6	107.3	106.1	104.2
17.5°	800.7	773.0	588.4	428.6	275.4	161.0	106.5	96.0	97.7	101.4	98.5
20°	825.2	771.1	556.9	354.2	193.5	107.9	92.4	86.8	91.2	94.7	93.1
22.5°	850.4	776.6	529.0	292.0	126.4	89.3	82.4	79.4	79.9	83.4	83.6
25°	850.2	791.7	496.8	227.4	94.1	79.4	74.4	70.6	69.2	71.7	71.1
27.5°	891.5	774.3	437.9	168.7	82.8	71.1	66.2	61.6	56.4	58.9	58.9
30°	891.7	802.6	396.8	121.2	75.9	63.3	59.1	52.0	45.9	48.0	48.2
32.5°	915.4	778.1	358.8	92.6	70.4	58.7	49.5	43.0	39.4	40.7	40.7
35°	942.4	799.0	300.6	81.7	65.0	52.2	42.3	37.1	34.4	35.4	35.4
37.5°	1031.7	794.6	260.1	76.1	61.4	47.2	38.6	32.7	31.4	32.1	32.9
40°	1064.0	825.9	205.2	72.7	55.5	42.6	34.0	29.6	27.9	28.3	28.5
42.5°	1146.1	832.8	163.9	70.0	50.3	36.9	30.2	27.0	24.9	24.9	25.6
45°	1236.9	850.2	130.4	67.7	45.9	33.1	27.2	24.7	21.6	21.2	22.0
47.5°	1368.3	916.8	106.3	63.1	40.7	30.8	25.2	21.4	18.9	18.0	18.9
50°	1588.2	1030.0	93.9	57.4	36.9	28.9	22.2	18.2	16.3	15.3	15.9
52.5°	1898.4	1225.6	87.4	52.2	33.5	26.0	19.9	15.9	14.0	13.2	13.6
55°	2243.0	1449.9	84.3	47.0	30.6	22.8	17.4	14.0	12.4	11.3	11.5
57.5°	2561.6	1660.7	81.1	41.9	27.7	20.3	15.3	12.4	10.7	9.6	9.9
60°	2875.6	1829.0	73.6	36.1	24.9	18.2	13.4	10.7	9.6	8.4	8.4
62.5°	3153.3	1929.6	62.7	31.2	22.4	16.1	11.9	9.6	8.8	7.5	7.5
65°	3342.4	1934.3	50.5	26.8	19.7	13.8	10.5	9.0	8.2	6.7	6.5
67.5°	3345.1	1808.5	40.5	23.9	17.4	12.2	9.4	8.6	7.5	6.3	5.9
70°	2994.0	1494.1	33.7	21.0	15.1	10.7	8.2	8.2	7.3	6.1	5.4
72.5°	2395.0	1141.7	28.3	18.2	13.4	9.2	7.5	7.8	7.1	6.1	5.4
75°	1609.8	654.8	23.5	15.5	11.7	7.8	7.3	7.5	7.3	6.1	5.2
77.5°	741.4	208.6	18.2	12.8	10.1	6.5	7.1	7.1	6.7	5.4	4.6
80°	167.1	51.4	13.2	9.4	8.2	4.8	6.5	5.9	5.2	3.8	2.7
82.5°	60.8	15.7	8.0	5.9	5.0	1.9	4.2	4.2	3.8	2.7	1.7
85°	34.8	8.2	4.4	3.8	2.7	0.8	2.3	2.5	2.1	1.9	0.8
87.5°	11.3	1.9	2.1	2.3	2.1	0.4	0.8	0.8	0.6	0.4	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)