

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: P368483

Luminaire Tested: **MSA-SA4C-730-U-T2-HSS**

Issue Date: 12/2/2019

Test Information

Test Method: LM-79-08
Report Number: P368483
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-9)
Test Lab: INNOVATION CENTER
Issue Date: 12/2/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: MSA-SA4C-730-U-T2-HSS
Description: MESA POST TOP DECORATIVE LUMINAIRE. (4) 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: 16527 lumens
Efficiency: N/A
Efficacy: 73.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G3

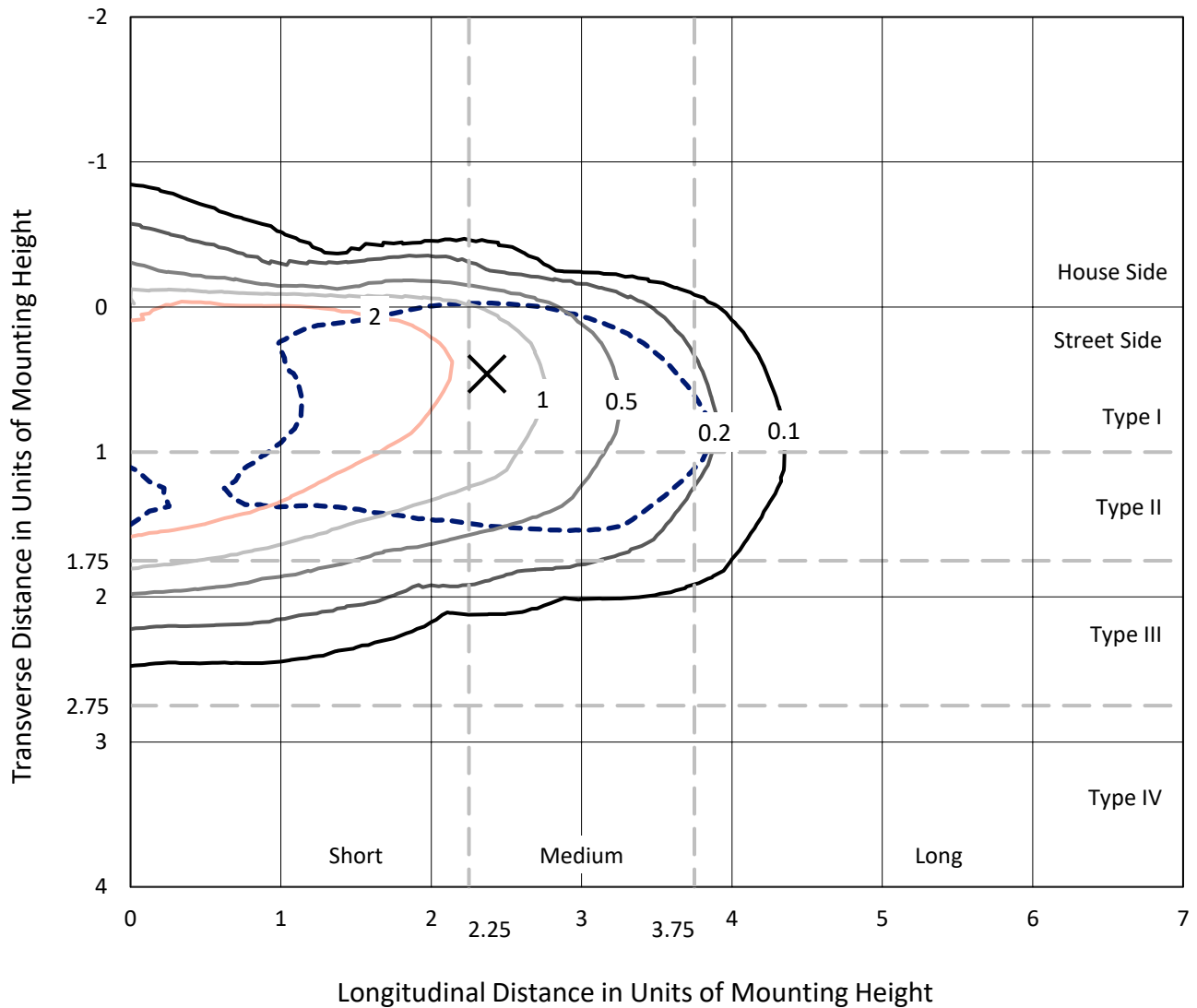
Input Watts (W): 225
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P368483
 CATALOG NUMBER: MSA-SA4C-730-U-T2-HSS

Iso-Footcandle Lines of Horizontal Illumination

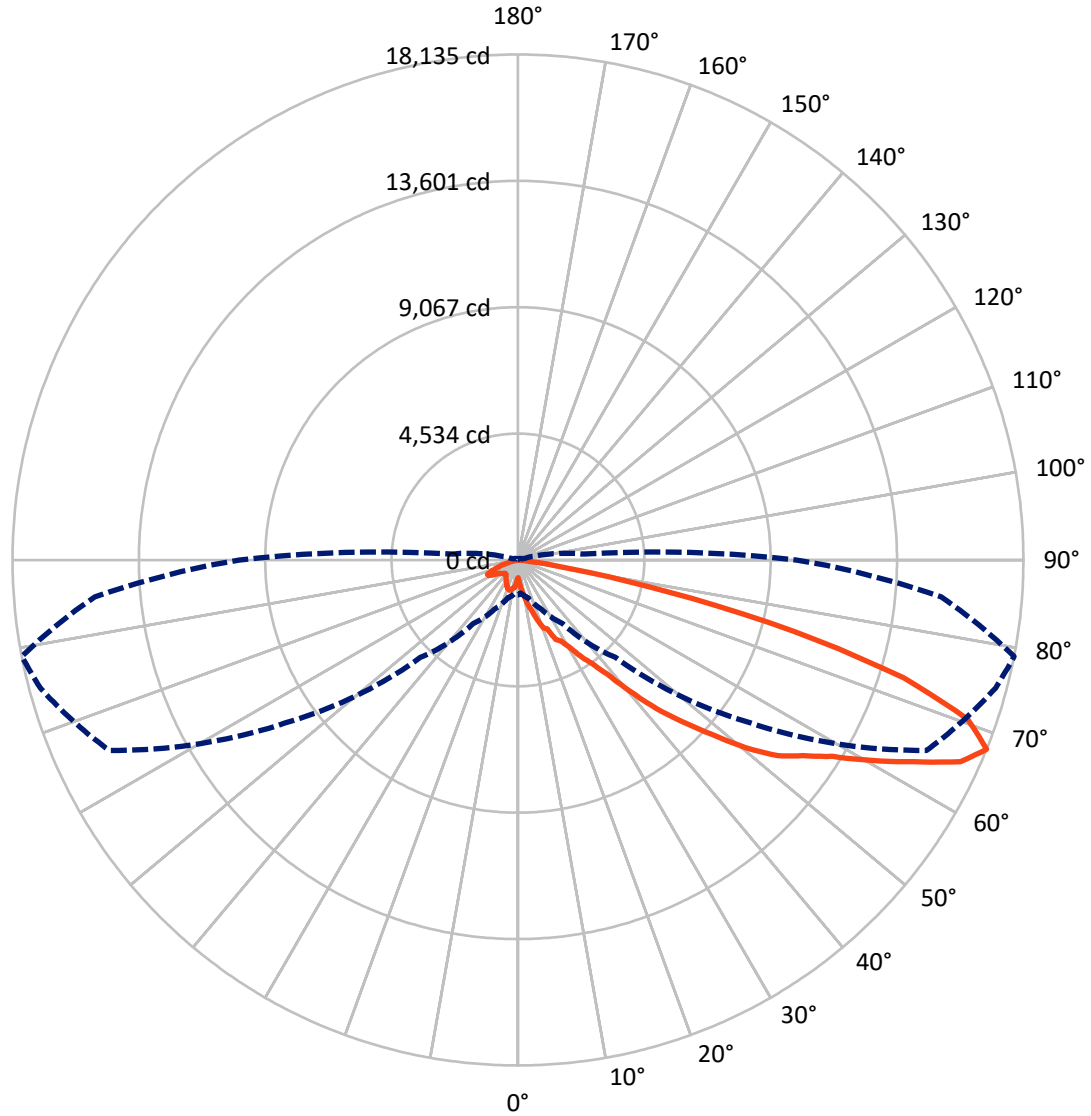
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5 fc
 Type II - Medium - N/A

REPORT NUMBER: P368483
CATALOG NUMBER: MSA-SA4C-730-U-T2-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P368483

CATALOG NUMBER: MSA-SA4C-730-U-T2-HSS

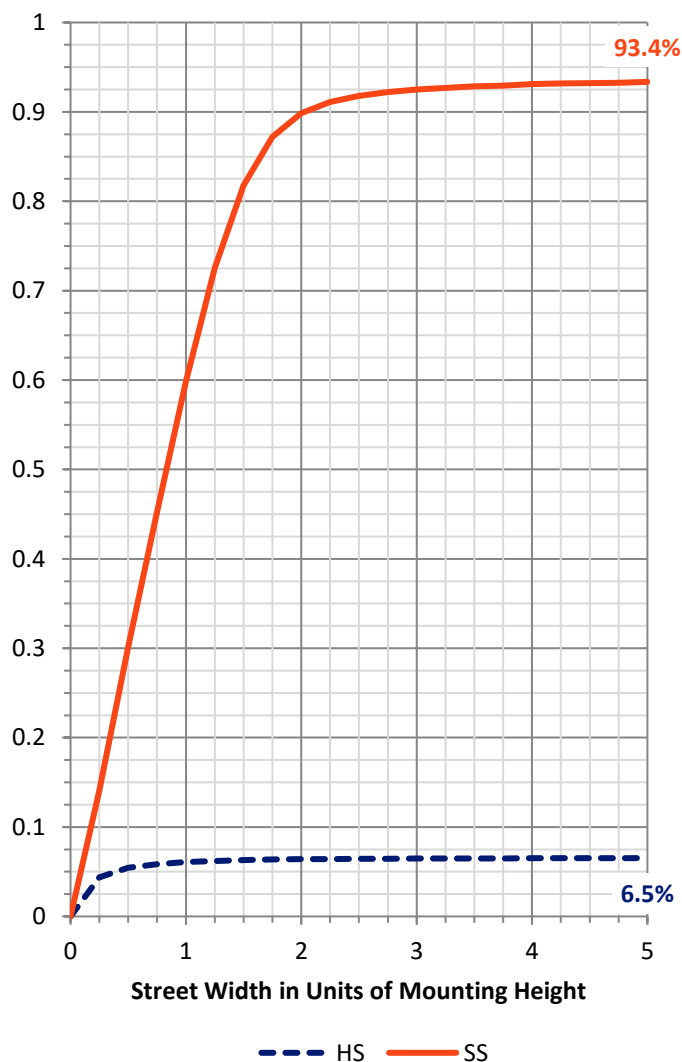
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1085.9	0.0	1085.9
	% Fixture	6.6	0.0	6.6
Street Side	Lumens	15441.1	0.0	15441.1
	% Fixture	93.4	0.0	93.4
Total	Lumens	16527.0	0.0	16527.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.6	0.6
10°-20°	369.3	2.2
20°-30°	712.4	4.3
30°-40°	1399.5	8.5
40°-50°	2803.5	17.0
50°-60°	4481.1	27.1
60°-70°	4508.7	27.3
70°-80°	2034.0	12.3
80°-90°	125.8	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°	16527.0	100.0
0°-180°	16527.0	100.0

Coefficient of Utilization

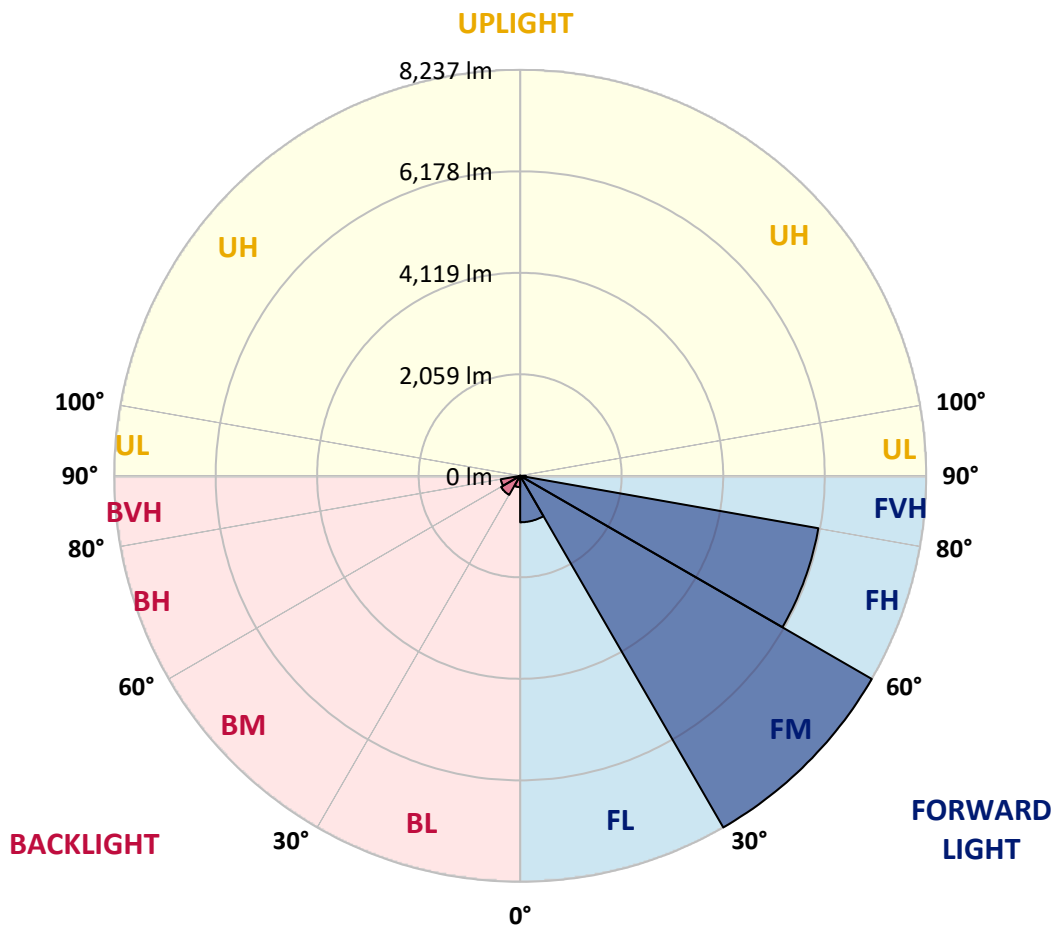


REPORT NUMBER: P368483
 CATALOG NUMBER: MSA-SA4C-730-U-T2-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	943.5	5.7			
FM (30°-60°)	8237.3	49.8			
FH (60°-80°)	6142.4	37.2			G3/7500
FVH (80°-90°)	117.8	0.7			G2/225
BL (0°-30°)	230.8	1.4	B1/500		
BM (30°-60°)	446.8	2.7	B1/1000		
BH (60°-80°)	400.3	2.4	B1/500		G1/500
BVH (80°-90°)	8.0	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-G3
 Type II Medium





REPORT NUMBER: P368483

CATALOG NUMBER: MSA-SA4C-730-U-T2-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	636.8	636.8	636.8	636.8	636.8	636.8	636.8	636.8	636.8	636.8	636.8
2.5°	860.0	829.1	779.0	807.2	805.4	820.0	792.6	762.6	714.3	762.6	766.2
5°	1238.1	1180.7	1144.3	1137.0	1096.9	1059.6	1051.4	1020.4	996.7	953.9	992.1
7.5°	1542.4	1516.0	1451.3	1444.0	1345.6	1291.0	1308.3	1294.6	1204.4	1159.8	1197.1
10°	1671.8	1626.2	1635.3	1626.2	1584.3	1599.8	1564.3	1523.3	1451.3	1377.5	1284.6
12.5°	1721.9	1714.6	1790.2	1781.1	1879.5	1997.9	1918.7	1850.4	1683.6	1665.4	1538.8
15°	1829.4	1875.0	1864.0	1902.3	1965.1	2166.5	2164.7	2181.1	2004.3	1909.6	1726.5
17.5°	1925.1	1958.8	1904.1	1947.8	2119.1	2241.2	2404.3	2340.5	2360.5	2264.0	1980.6
20°	1884.1	1922.3	1867.7	1841.2	2142.8	2374.2	2592.0	2545.5	2665.8	2605.6	2214.8
22.5°	2140.1	2068.1	1930.5	1844.9	2069.9	2371.5	2658.5	2852.5	2831.6	2684.0	2432.5
25°	2456.2	2412.5	2247.6	2096.3	2116.4	2355.1	2868.0	3153.2	3215.1	3152.3	2639.3
27.5°	2882.6	2872.6	2535.5	2469.9	2274.9	2283.1	2900.8	3532.2	3391.0	3292.6	2880.8
30°	3439.2	3360.0	2960.0	2874.4	2586.5	2445.3	3101.2	3859.2	3755.4	3621.4	3107.6
32.5°	4037.8	4049.6	3539.5	3257.0	3025.6	2858.0	3022.0	4012.3	4206.3	4097.9	3391.0
35°	4717.4	4770.3	4146.2	3814.6	3364.5	3117.6	3362.7	4482.4	4830.4	4545.3	3770.9
37.5°	5764.3	5762.4	5033.6	4373.1	4046.0	3778.2	3930.3	4909.7	5597.5	5196.7	4452.3
40°	6685.3	6484.9	5807.1	5048.2	4538.0	4465.1	4354.8	5494.6	6416.6	6175.1	5058.2
42.5°	7373.2	7232.0	6412.9	5822.6	5190.3	4958.9	4919.7	6351.9	7625.5	7287.5	5922.8
45°	8195.9	7733.0	7129.9	6597.9	5953.8	5886.3	5794.3	7221.9	9032.2	8270.6	6674.4
47.5°	8932.9	8497.4	7927.1	7243.8	6504.0	7059.8	6706.3	7986.3	10055.3	9340.1	7503.5
50°	9553.3	9090.5	8451.9	7931.7	7614.6	7991.8	7402.3	8615.9	11160.4	10581.0	8278.8
52.5°	9869.5	9345.6	8851.8	8530.2	8724.3	8639.5	8346.2	9378.4	12102.5	11668.8	8965.7
55°	9609.8	9097.8	8891.0	9050.4	9639.9	9394.8	9418.5	10560.1	12991.7	12394.0	9563.4
57.5°	8458.2	7990.9	8082.9	8519.3	9649.0	10290.4	10641.1	11708.0	13705.0	13297.8	10485.3
60°	6398.3	6022.1	6362.8	7137.2	8741.6	10111.8	11508.5	12855.9	14724.5	14596.9	11881.1
62.5°	3907.5	3703.4	4186.3	5152.0	6965.9	9236.3	12014.1	14386.5	15815.0	15950.8	13361.6
65°	1993.4	1901.4	2304.1	3153.2	4706.5	7587.3	11648.8	15337.6	16942.0	17443.1	14772.8
67.5°	1255.4	1196.2	1411.2	1923.2	2776.9	4948.9	10199.3	16169.4	17738.3	18134.6	15243.8
70°	870.1	832.7	1018.6	1320.1	1752.0	2665.8	7572.7	15393.2	17106.9	17125.1	14104.1
72.5°	552.1	522.9	704.2	977.6	1292.8	1376.6	4341.2	12078.8	14643.4	14474.9	11421.9
75°	358.0	343.5	447.3	716.1	993.1	849.1	2145.5	8150.3	10499.9	10235.7	7586.4
77.5°	256.9	247.8	299.7	478.3	707.0	594.0	962.1	4857.8	6020.3	5442.7	3682.5
80°	154.9	154.0	216.8	299.7	502.9	419.1	444.6	2205.7	2334.1	1903.2	1125.2
82.5°	77.4	80.2	121.2	193.1	323.4	274.2	203.2	734.3	626.8	461.9	227.8
85°	18.2	22.8	63.8	133.0	162.2	109.3	96.6	192.2	172.2	130.3	66.5
87.5°	0.0	0.0	20.0	31.9	43.7	18.2	32.8	36.4	46.5	36.4	13.7
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: P368483
 CATALOG NUMBER: MSA-SA4C-730-U-T2-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	636.8	636.8	636.8	636.8	636.8	636.8	636.8	636.8	636.8	636.8	636.8
2.5°	767.1	756.2	689.7	672.4	670.5	651.4	656.0	637.7	638.7	679.6	679.6
5°	977.6	913.8	850.0	793.5	755.3	700.6	680.6	672.4	665.1	681.5	691.5
7.5°	1147.9	1054.1	939.3	816.3	702.4	624.1	613.1	593.1	585.8	602.2	615.0
10°	1223.5	1106.9	949.3	769.8	663.2	599.5	546.6	518.4	512.9	512.0	516.6
12.5°	1383.9	1239.0	960.3	752.5	636.8	566.7	506.5	459.2	415.4	420.0	415.4
15°	1512.4	1341.1	960.3	710.6	573.1	502.9	397.2	373.5	367.2	377.2	369.0
17.5°	1706.4	1442.2	912.0	635.9	518.4	390.8	350.8	348.9	361.7	376.3	367.2
20°	1823.0	1455.9	830.9	550.3	425.5	338.9	324.3	309.8	328.0	339.8	335.3
22.5°	1944.2	1456.8	749.8	504.7	342.6	308.8	285.2	273.3	276.1	287.0	288.8
25°	1996.1	1421.2	674.2	444.6	310.7	276.1	251.5	238.7	234.1	239.6	237.8
27.5°	2137.3	1352.9	592.2	379.0	295.2	245.1	222.3	206.8	193.1	202.3	204.1
30°	2157.4	1331.1	547.5	337.1	275.1	216.8	196.8	180.4	170.4	183.1	183.1
32.5°	2221.2	1210.8	524.8	319.8	254.2	200.4	173.1	161.3	159.4	167.6	168.5
35°	2319.5	1158.0	491.1	306.1	235.1	181.3	155.8	150.3	148.5	154.9	154.9
37.5°	2653.0	1092.4	453.7	294.3	218.7	171.3	151.2	142.1	143.0	148.5	152.1
40°	2874.4	1100.6	398.1	279.7	199.5	162.2	142.1	135.7	134.8	137.6	140.3
42.5°	3285.3	1106.9	373.5	264.2	184.9	151.2	133.0	128.5	124.8	127.5	130.3
45°	3744.4	1140.6	360.8	251.5	176.7	144.9	124.8	122.1	113.9	115.7	119.3
47.5°	4187.2	1263.6	345.3	233.2	169.5	141.2	116.6	110.2	104.8	103.9	107.5
50°	4690.1	1383.0	328.0	213.2	162.2	135.7	108.4	98.4	94.7	94.7	97.5
52.5°	5140.2	1496.9	311.6	199.5	156.7	125.7	101.1	91.1	88.4	88.4	92.0
55°	5613.9	1616.2	297.0	186.8	149.4	115.7	94.7	85.6	84.7	82.9	85.6
57.5°	6450.3	1876.8	278.8	175.8	139.4	107.5	89.3	80.2	78.4	75.6	78.4
60°	7668.4	2276.7	255.1	164.9	127.5	102.0	84.7	73.8	71.1	66.5	67.4
62.5°	8859.1	2600.2	227.8	151.2	116.6	96.6	77.4	66.5	62.0	56.5	57.4
65°	9879.5	2727.7	198.6	134.8	105.7	83.8	67.4	58.3	51.9	44.6	43.7
67.5°	9999.8	2408.8	170.4	119.3	94.7	71.1	57.4	51.9	41.9	35.5	33.7
70°	8999.4	1794.8	142.1	105.7	82.0	60.1	49.2	45.6	39.2	33.7	31.0
72.5°	7166.4	1324.7	119.3	93.8	72.0	51.0	41.9	42.8	39.2	32.8	29.2
75°	4739.3	758.0	97.5	78.4	60.1	41.0	38.3	38.3	37.4	31.0	27.3
77.5°	2280.4	327.1	74.7	62.0	48.3	31.0	34.6	34.6	35.5	28.2	22.8
80°	646.8	98.4	46.5	41.9	35.5	21.0	27.3	26.4	23.7	16.4	10.0
82.5°	115.7	38.3	21.0	21.9	20.0	8.2	15.5	14.6	11.8	6.4	0.9
85°	31.9	14.6	11.8	12.8	10.0	2.7	6.4	8.2	6.4	3.6	0.0
87.5°	8.2	6.4	8.2	9.1	7.3	0.9	2.7	0.9	2.7	0.9	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)