

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: P596679

Luminaire Tested: **MSA-SA3B-827-U-SL3-HSS**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P596679
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-19)
Test Lab: INNOVATIONS CENTER
Issue Date: 5/27/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: MSA-SA3B-827-U-SL3-HSS
Description: MESA POST TOP DECORATIVE LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8874 lumens
Efficiency: N/A
Efficacy: 70.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

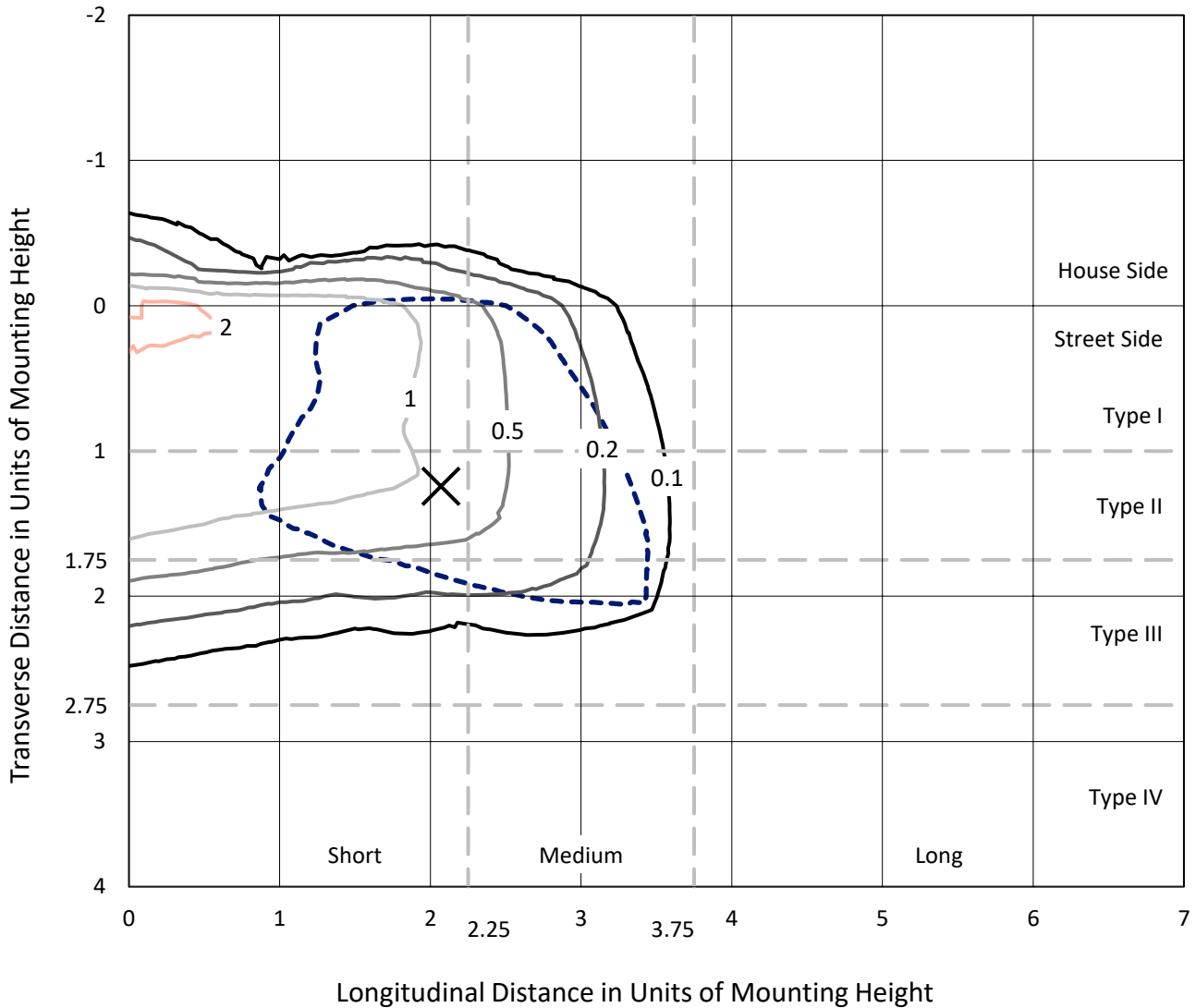
Input Watts (W): 126
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

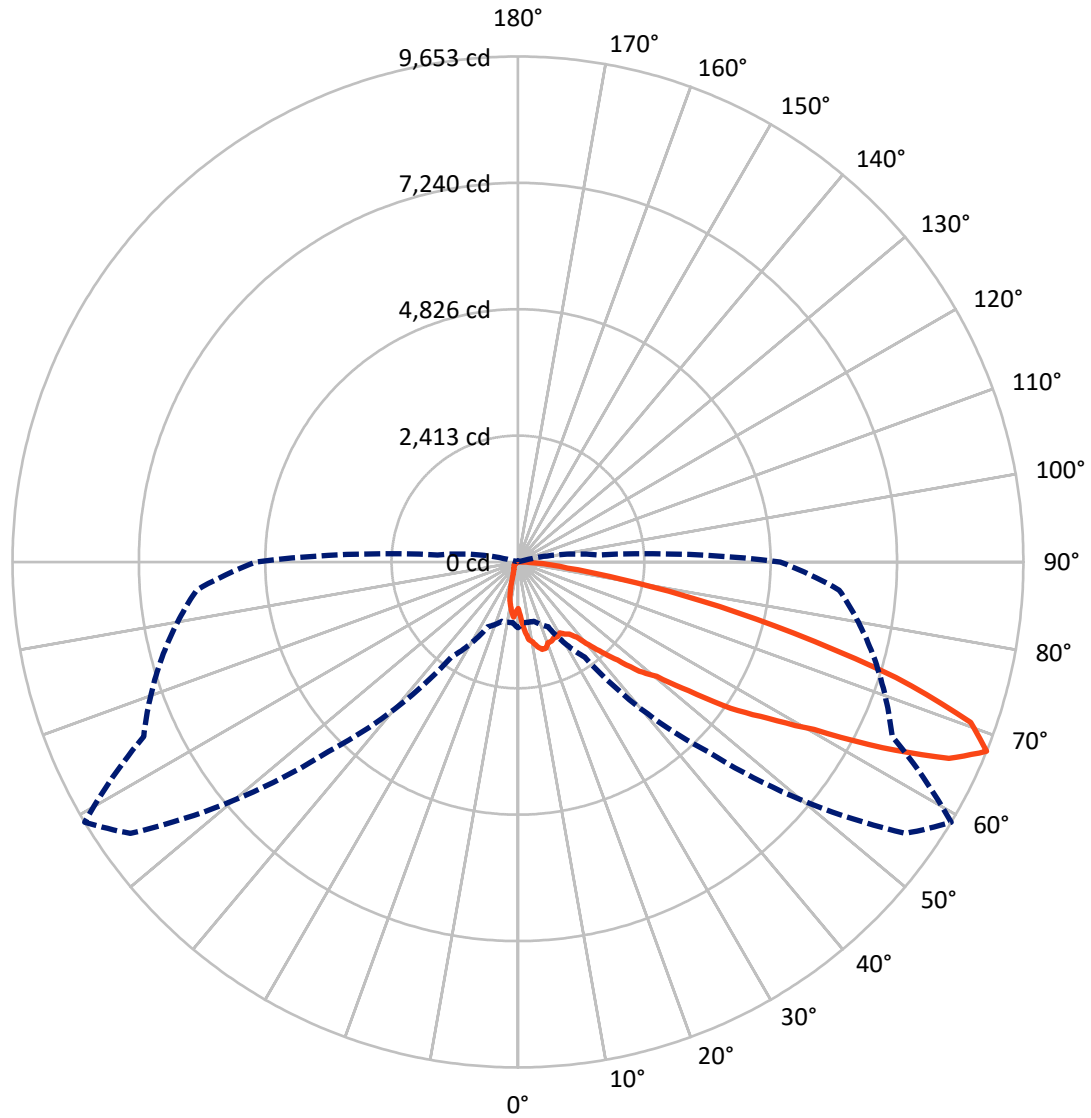
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.5 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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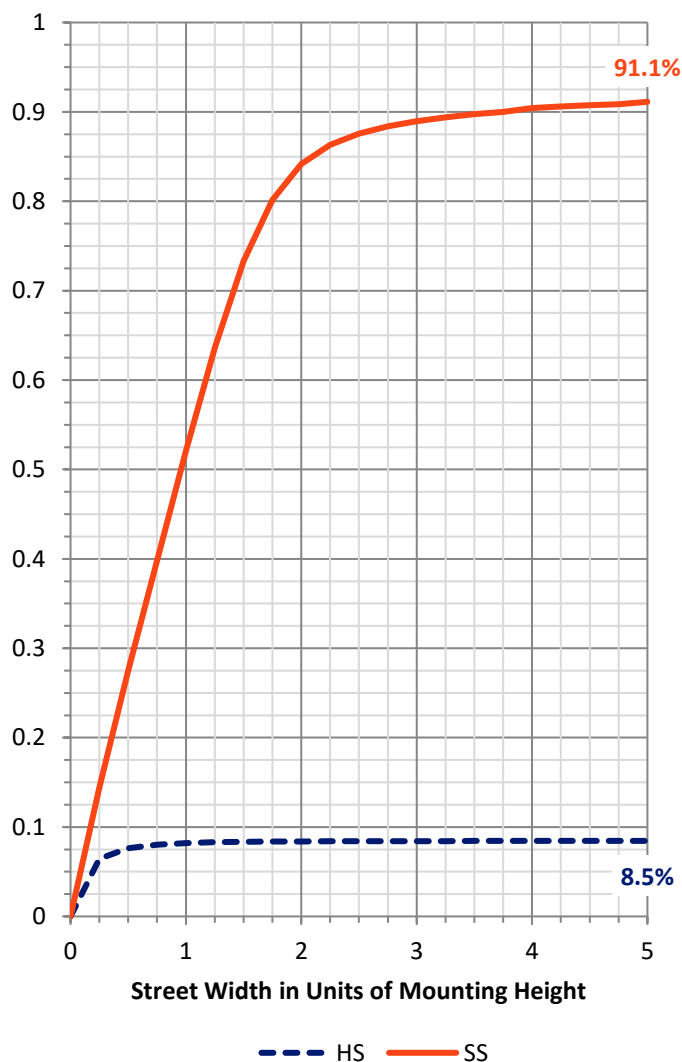
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	754.7	0.0	754.7
	% Fixture	8.5	0.0	8.5
Street Side	Lumens	8119.3	0.0	8119.3
	% Fixture	91.5	0.0	91.5
Total	Lumens	8874.0	0.0	8874.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.0	1.2
10°-20°	304.0	3.4
20°-30°	452.1	5.1
30°-40°	697.6	7.9
40°-50°	1244.9	14.0
50°-60°	2215.3	25.0
60°-70°	2580.1	29.1
70°-80°	1147.4	12.9
80°-90°	124.6	1.4
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°	8874.0	100.0
0°-180°	8874.0	100.0

Coefficient of Utilization

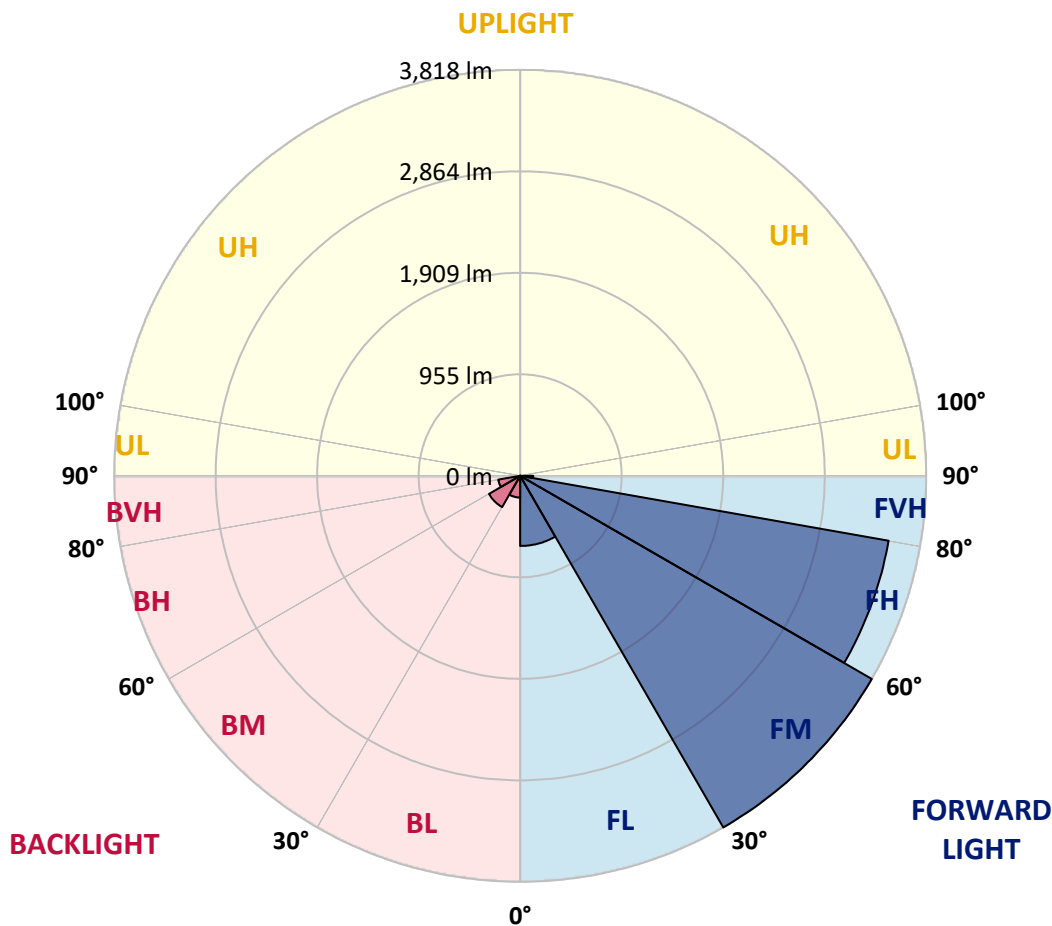


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	660.0	7.4			
FM (30°-60°)	3818.5	43.0			
FH (60°-80°)	3518.5	39.6			G2/5000
FVH (80°-90°)	122.4	1.4			G2/225
BL (0°-30°)	204.1	2.3	B1/500		
BM (30°-60°)	339.3	3.8	B1/1000		
BH (60°-80°)	209.0	2.4	B1/500		G1/500
BVH (80°-90°)	2.2	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°	59°	65°	75°	85°
0°	887.9	887.9	887.9	887.9	887.9	887.9	887.9	887.9	887.9	887.9	887.9
2.5°	1157.5	1113.9	1051.9	1070.3	1086.9	1102.7	1076.6	1061.8	1054.6	990.8	1070.7
5°	1421.2	1366.9	1338.5	1331.4	1313.4	1273.4	1339.9	1310.2	1320.1	1332.7	1358.8
7.5°	1501.7	1476.9	1436.1	1451.3	1383.0	1377.2	1469.3	1494.9	1528.6	1505.7	1537.2
10°	1460.3	1417.6	1437.0	1431.6	1428.9	1489.1	1553.8	1555.1	1605.4	1629.7	1523.2
12.5°	1378.5	1383.5	1452.7	1447.3	1537.2	1657.6	1672.4	1656.7	1738.9	1696.7	1680.5
15°	1432.9	1473.3	1435.2	1448.2	1480.1	1630.6	1683.2	1731.7	1809.4	1834.6	1725.4
17.5°	1498.5	1502.6	1432.9	1416.7	1497.2	1567.3	1691.3	1731.3	1738.9	1959.5	1826.5
20°	1463.0	1497.6	1414.5	1312.5	1437.4	1532.7	1658.5	1645.9	1697.1	1996.4	1849.4
22.5°	1557.4	1507.9	1401.5	1324.6	1366.9	1453.6	1560.1	1642.3	1719.1	1908.3	1879.1
25°	1566.4	1548.4	1453.6	1385.3	1378.1	1400.1	1548.4	1601.4	1721.8	1987.4	1853.9
27.5°	1667.5	1646.8	1452.7	1459.4	1392.0	1324.2	1491.8	1616.2	1770.8	1939.3	1907.4
30°	1797.8	1799.6	1549.3	1570.4	1474.2	1365.1	1538.0	1572.2	1804.1	2016.1	1946.9
32.5°	1929.9	1984.2	1740.2	1628.4	1598.3	1520.1	1480.5	1638.2	1767.7	2147.3	2045.8
35°	2130.7	2167.6	1897.5	1797.3	1679.1	1590.2	1636.9	1693.5	1898.4	2321.2	2175.6
37.5°	2470.9	2404.4	2179.7	2005.4	1977.0	1845.8	1869.2	1818.4	2031.9	2526.1	2432.7
40°	2662.3	2602.1	2368.4	2283.5	2102.9	2123.1	2049.4	2079.0	2225.5	2739.6	2666.8
42.5°	2861.8	2804.3	2599.4	2539.2	2367.1	2283.5	2250.2	2356.7	2522.5	3095.0	3002.4
45°	3062.2	2916.1	2829.4	2859.5	2782.2	2616.9	2578.2	2673.1	2846.9	3531.7	3356.5
47.5°	3231.1	3108.0	3042.8	3028.9	2998.8	3228.4	3071.2	3112.9	3189.8	3918.1	3797.7
50°	3535.8	3414.4	3312.4	3284.1	3430.6	3756.4	3513.7	3432.9	3586.5	4385.0	4309.1
52.5°	3975.7	3821.1	3658.9	3659.3	3935.7	4114.5	4229.5	4087.5	4116.3	4898.6	4864.9
55°	4329.3	4132.9	3998.6	4104.6	4516.6	4616.8	5055.8	4931.4	4894.1	5374.9	5333.5
57.5°	4377.8	4142.4	4078.6	4264.6	4828.5	5468.3	5940.6	5629.6	5572.6	5773.4	5855.6
60°	3924.9	3675.1	3723.1	4022.4	4930.0	5987.3	6753.0	6499.1	6136.5	6240.3	6296.9
62.5°	2927.4	2727.9	2862.7	3259.0	4538.7	6335.1	7693.4	7811.1	6790.7	6590.7	6578.6
65°	1899.3	1774.4	1862.9	2187.8	3434.7	6295.5	8533.6	9044.1	7306.1	6876.5	6667.1
67.5°	1256.3	1161.5	1174.1	1366.4	2221.0	5120.1	9036.0	9652.9	7885.7	7038.7	6159.8
70°	936.4	861.8	866.3	970.5	1318.3	3376.7	8335.5	9172.6	8097.3	6476.6	4971.8
72.5°	675.3	625.5	667.3	783.2	1050.5	1785.6	6212.9	7554.1	7060.7	5108.4	3349.7
75°	467.8	434.9	503.2	655.1	958.9	1108.5	4105.5	5437.8	4948.9	3205.1	1514.2
77.5°	259.3	249.4	347.8	533.8	870.3	908.5	2514.9	3573.1	2744.9	1148.9	360.4
80°	113.2	109.6	168.5	400.8	731.5	820.9	1415.8	1981.1	1079.7	204.9	116.4
82.5°	48.5	46.7	71.9	241.3	531.6	686.6	873.0	953.5	371.6	63.4	66.1
85°	8.5	9.4	28.8	127.2	323.5	348.7	632.2	564.4	186.9	30.1	47.2
87.5°	0.0	0.0	4.5	24.7	60.7	99.8	274.1	197.7	35.5	9.9	8.1
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°	887.9	887.9	887.9	887.9	887.9	887.9	887.9	887.9	887.9	887.9	887.9
2.5°	1082.0	1056.8	961.1	949.0	936.0	916.6	909.4	868.1	862.7	915.7	915.7
5°	1346.6	1256.8	1165.6	1093.7	1029.4	940.4	915.3	889.2	868.1	862.7	879.3
7.5°	1486.4	1376.7	1233.4	1050.5	902.3	773.3	719.4	681.6	639.4	652.0	658.7
10°	1478.7	1362.4	1179.5	944.5	780.0	637.6	500.6	420.6	376.1	354.1	351.4
12.5°	1553.8	1444.1	1143.1	860.0	650.2	453.4	315.0	257.9	225.1	225.6	222.9
15°	1597.4	1477.8	1100.9	753.1	457.9	291.6	218.4	205.8	201.3	206.2	203.5
17.5°	1674.2	1513.3	1005.1	593.6	315.0	220.2	200.8	195.9	201.7	212.1	209.4
20°	1668.4	1451.8	869.0	418.3	232.8	198.2	190.1	182.4	194.6	205.3	203.5
22.5°	1663.0	1391.6	740.9	308.7	194.6	180.6	173.9	170.7	177.0	189.6	192.3
25°	1615.3	1361.9	611.1	231.9	176.1	164.0	160.9	158.2	160.4	170.7	170.3
27.5°	1673.7	1286.9	471.8	194.6	163.1	148.7	146.0	141.5	137.0	146.0	147.4
30°	1661.6	1297.2	369.8	171.2	150.1	130.8	131.7	122.2	114.1	122.2	122.2
32.5°	1705.6	1221.7	296.1	155.5	137.0	123.1	111.9	102.0	96.2	101.1	102.0
35°	1769.9	1224.9	231.9	145.6	125.8	109.6	96.2	86.3	80.9	83.1	84.5
37.5°	1985.1	1203.3	193.7	137.9	121.8	101.5	87.6	74.6	71.0	73.7	75.0
40°	2125.3	1260.8	170.7	133.9	111.4	93.5	75.0	65.6	62.5	63.8	66.1
42.5°	2389.5	1292.7	159.5	129.4	102.0	80.0	64.3	58.9	54.4	56.2	58.0
45°	2672.2	1347.1	151.0	124.5	94.8	70.1	56.6	52.1	46.3	46.7	48.5
47.5°	3019.5	1476.5	141.1	115.9	84.9	63.8	50.3	43.6	38.2	37.7	40.0
50°	3485.9	1649.5	132.1	105.1	78.6	58.4	44.0	35.5	31.0	29.7	31.5
52.5°	3983.7	1873.2	122.7	97.5	71.0	51.2	37.7	28.8	24.7	23.8	25.2
55°	4477.1	2088.0	113.7	92.6	62.9	44.0	31.9	23.8	20.2	19.3	20.2
57.5°	5039.2	2320.3	102.0	82.7	55.3	38.2	26.5	19.8	16.6	15.7	16.2
60°	5462.5	2402.1	92.1	71.9	48.1	33.7	22.5	15.7	13.5	12.6	13.0
62.5°	5663.3	2268.7	82.7	62.5	42.2	29.2	18.9	13.0	11.2	10.3	10.3
65°	5611.2	1973.0	73.2	53.5	36.4	24.3	14.8	11.2	9.9	8.5	8.1
67.5°	5009.1	1543.9	62.5	44.9	30.6	19.8	12.6	10.8	9.0	8.1	6.7
70°	3972.5	1117.9	50.8	37.3	25.6	16.2	9.9	9.9	8.5	8.1	6.3
72.5°	2603.9	703.6	41.3	30.1	21.1	12.6	7.6	9.0	8.1	8.1	5.8
75°	1128.3	251.6	33.3	24.3	17.5	8.5	6.7	8.1	8.5	8.1	6.7
77.5°	264.2	78.2	26.1	19.3	14.4	5.8	6.7	8.1	8.5	7.6	5.8
80°	99.3	33.3	17.1	12.6	11.2	3.6	5.8	4.9	4.5	3.1	0.9
82.5°	60.2	13.9	9.0	6.3	5.4	0.9	2.7	1.8	0.9	0.9	0.0
85°	42.7	6.7	4.9	4.5	2.7	0.0	0.4	0.0	0.0	0.4	0.0
87.5°	5.8	1.8	2.2	2.2	1.8	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)