

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: P596712

Luminaire Tested: **MSA-SA3C-827-U-T3**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P596712
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-10)
Test Lab: INNOVATIONS CENTER
Issue Date: 5/27/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: MSA-SA3C-827-U-T3
Description: MESA POST TOP DECORATIVE LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS.
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13364 lumens
Efficiency: N/A
Efficacy: 80.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G2

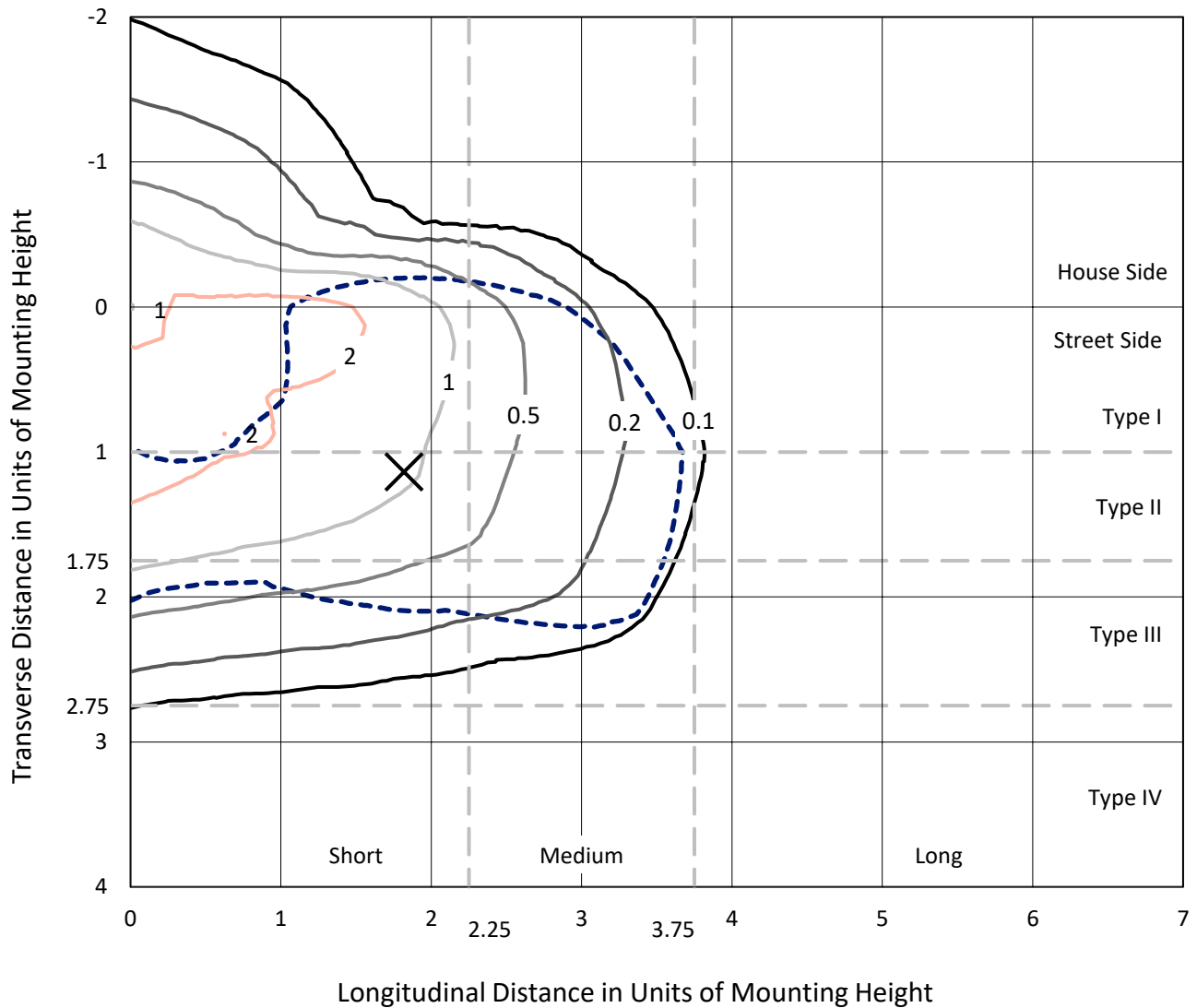
Input Watts (W): 166
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

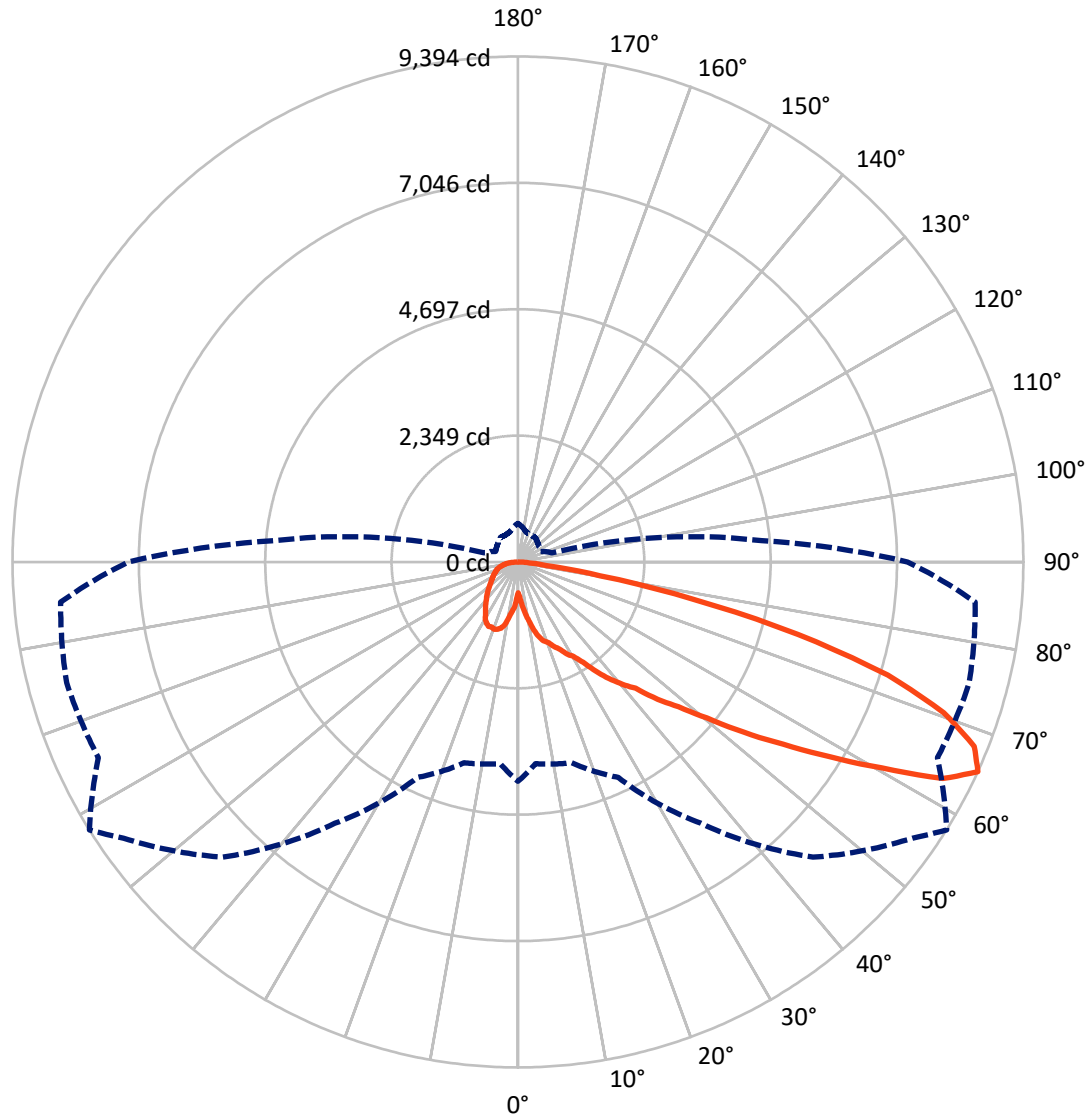
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.8 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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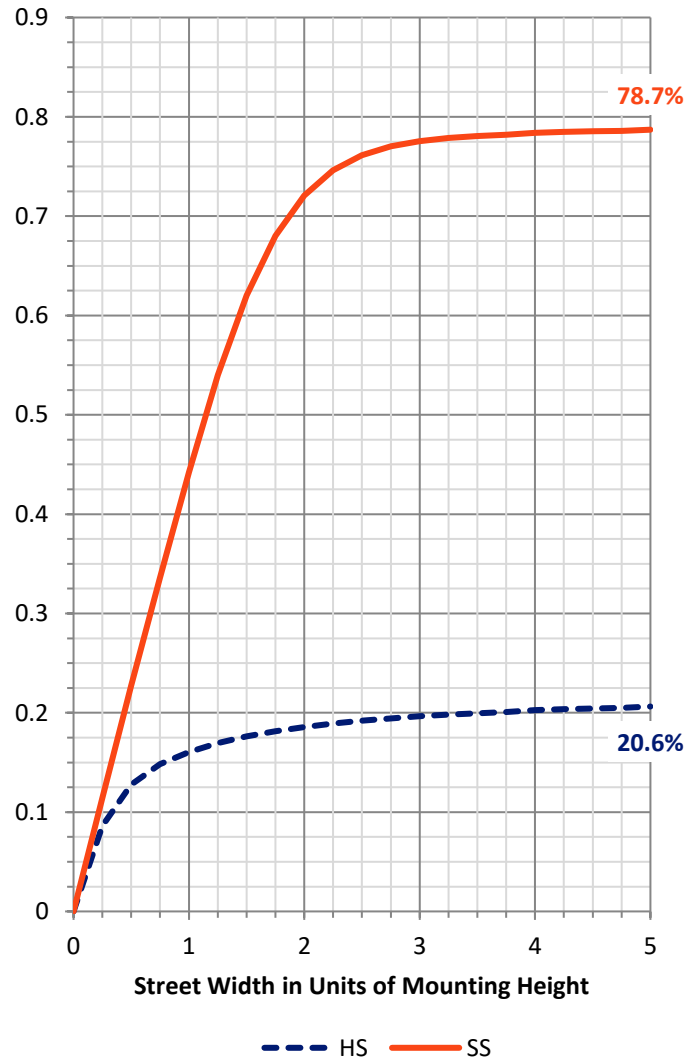
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2814.9	0.0	2814.9
	% Fixture	21.1	0.0	21.1
Street Side	Lumens	10549.1	0.0	10549.1
	% Fixture	78.9	0.0	78.9
Total	Lumens	13364.0	0.0	13364.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.4	0.7
10°-20°	381.4	2.9
20°-30°	731.8	5.5
30°-40°	1208.2	9.0
40°-50°	2008.2	15.0
50°-60°	3316.6	24.8
60°-70°	3720.5	27.8
70°-80°	1691.7	12.7
80°-90°	218.2	1.6
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°	13364.0	100.0
0°-180°	13364.0	100.0

Coefficient of Utilization



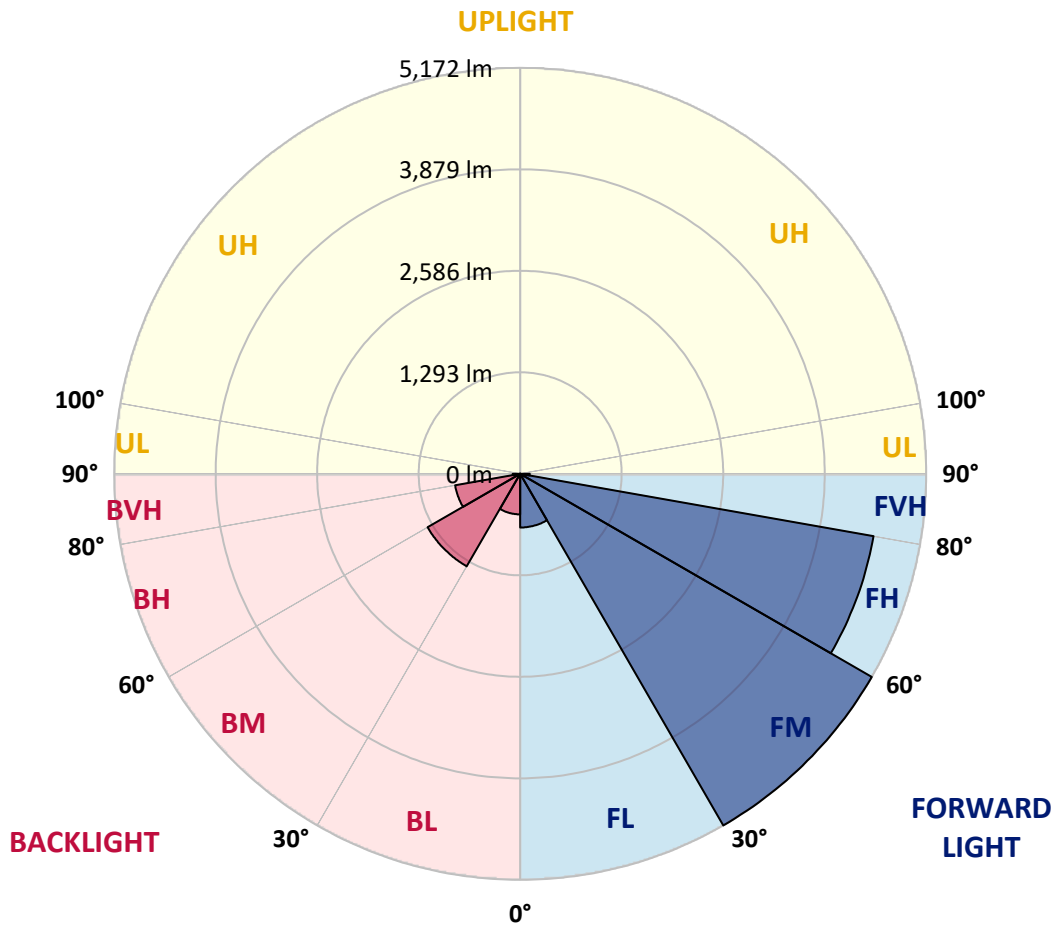
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	683.9	5.1			
FM (30°-60°)	5171.7	38.7			
FH (60°-80°)	4570.8	34.2			G2/5000
FVH (80°-90°)	122.9	0.9			G2/225
BL (0°-30°)	516.8	3.9	B2/1000		
BM (30°-60°)	1361.3	10.2	B2/2500		
BH (60°-80°)	841.4	6.3	B2/1000		G2/1000
BVH (80°-90°)	95.3	0.7			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	573.8	573.8	573.8	573.8	573.8	573.8	573.8	573.8	573.8	573.8	573.8
2.5°	685.1	664.5	630.0	638.3	658.4	669.5	662.8	653.9	642.2	640.0	691.2
5°	887.1	847.6	831.5	824.8	800.3	785.8	810.9	807.5	820.9	845.4	895.5
7.5°	1034.6	1006.8	980.1	977.3	930.0	913.3	946.7	964.5	988.4	989.0	1056.9
10°	1113.6	1089.7	1089.1	1064.1	1060.2	1091.9	1092.5	1105.8	1108.6	1137.0	1123.6
12.5°	1199.3	1197.7	1228.3	1227.7	1263.3	1315.7	1289.5	1289.5	1297.3	1262.8	1305.1
15°	1403.6	1421.4	1364.1	1373.5	1373.5	1424.7	1423.1	1433.1	1457.0	1448.1	1429.2
17.5°	1616.2	1627.3	1563.9	1504.9	1509.3	1498.2	1538.3	1542.2	1519.3	1622.9	1600.0
20°	1753.1	1796.5	1662.9	1588.9	1603.4	1616.2	1617.9	1593.9	1582.2	1741.4	1710.2
22.5°	1922.3	1885.5	1763.1	1681.3	1703.0	1685.7	1682.4	1700.8	1716.9	1777.0	1827.7
25°	2035.3	2032.5	1885.5	1795.9	1772.0	1767.0	1801.0	1793.7	1832.1	1941.2	1909.5
27.5°	2199.4	2250.6	1990.2	2012.4	1907.3	1796.5	1905.6	1938.4	2007.4	1989.6	2060.3
30°	2517.8	2479.4	2207.2	2201.1	2082.0	1989.1	2064.8	2036.9	2161.0	2157.1	2209.5
32.5°	2777.7	2804.4	2462.1	2398.1	2309.6	2197.8	2147.7	2225.0	2291.8	2401.5	2431.0
35°	3052.6	3046.5	2723.1	2594.0	2447.6	2401.5	2463.2	2495.5	2637.4	2738.2	2668.0
37.5°	3480.0	3431.6	3061.5	2817.2	2707.6	2690.9	2796.6	2749.8	2903.5	2927.4	2966.9
40°	3877.4	3731.6	3370.9	3091.0	2916.8	2979.1	2982.5	2988.6	3071.0	3136.1	3331.4
42.5°	4255.3	4152.9	3685.4	3475.0	3218.5	3157.8	3195.6	3208.4	3416.6	3549.6	3820.1
45°	4771.7	4497.4	4137.3	3921.4	3634.2	3556.8	3530.1	3640.3	3841.2	4144.0	4376.0
47.5°	5208.6	4961.0	4617.6	4333.2	4012.1	4233.0	4081.6	4019.9	4289.8	4664.9	5034.4
50°	5570.9	5298.2	4961.5	4797.3	4746.1	4943.2	4550.2	4557.5	4804.6	5333.8	5757.4
52.5°	5851.4	5560.4	5262.1	5178.6	5464.6	5578.2	5294.3	5251.5	5431.8	6057.3	6566.0
55°	6113.6	5804.7	5574.3	5744.6	6226.5	6239.3	6219.3	5981.7	6198.7	6832.6	7403.0
57.5°	6180.9	5848.1	5695.0	5939.4	6591.1	7098.1	7297.3	6830.9	7051.9	7537.7	8119.9
60°	5834.2	5549.2	5488.0	5819.7	6788.1	7529.4	8049.7	7770.9	7688.0	8103.7	8621.9
62.5°	5124.0	4793.4	4843.0	5303.8	6580.5	7700.2	8644.1	8861.7	8359.7	8554.0	8841.1
65°	4078.3	3762.7	3862.9	4417.2	5928.8	7757.0	8948.0	9394.3	8602.4	8681.4	8530.6
67.5°	2876.2	2589.6	2715.9	3432.7	4932.0	7030.2	9000.3	9146.1	8344.2	8318.0	7682.4
70°	1629.5	1449.8	1586.7	2184.4	3481.1	5600.4	8590.1	8398.1	7881.1	7510.5	6428.0
72.5°	747.4	685.7	751.3	1112.0	2004.1	3726.6	7012.9	7187.1	6790.9	6327.3	4890.3
75°	397.4	375.7	403.5	555.4	937.8	2027.5	4982.7	5374.5	5163.5	4799.0	3190.1
77.5°	295.5	278.8	292.2	360.1	500.9	793.1	2831.1	3325.3	3405.4	3069.9	1771.5
80°	226.5	213.2	226.5	272.1	346.7	376.8	1210.5	1550.0	1765.3	1426.4	704.0
82.5°	168.1	159.2	179.8	204.2	243.8	235.4	429.6	534.8	689.5	471.4	274.4
85°	133.6	122.4	130.2	138.6	155.8	129.1	196.5	219.8	232.6	194.8	101.3
87.5°	52.3	48.4	94.6	74.6	63.4	39.0	59.0	66.8	68.5	65.7	29.5
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°	573.8	573.8	573.8	573.8	573.8	573.8	573.8	573.8	573.8	573.8	573.8
2.5°	696.8	691.2	658.4	669.0	686.2	689.5	696.8	676.7	666.7	703.5	705.1
5°	899.9	869.9	854.3	856.0	844.8	827.6	853.7	871.0	877.7	904.9	914.9
7.5°	1057.4	1021.2	995.1	965.0	922.7	895.5	941.1	974.5	992.3	1049.1	1071.3
10°	1127.5	1098.6	1093.0	1055.2	1054.1	1053.5	1051.3	1039.6	1078.0	1072.4	1088.0
12.5°	1272.2	1266.1	1213.2	1198.2	1199.9	1198.2	1151.5	1149.2	1149.8	1201.0	1182.6
15°	1406.9	1408.0	1359.6	1305.1	1256.1	1241.1	1222.7	1214.4	1226.6	1255.5	1237.7
17.5°	1573.3	1578.9	1440.3	1354.1	1289.5	1287.8	1243.9	1192.1	1266.7	1284.5	1265.0
20°	1680.7	1657.4	1487.1	1342.4	1324.0	1273.9	1219.4	1148.1	1212.7	1256.1	1268.3
22.5°	1782.6	1742.0	1530.5	1363.0	1275.0	1215.5	1162.6	1116.4	1137.0	1185.4	1177.6
25°	1851.6	1840.5	1590.6	1412.5	1273.4	1140.9	1069.7	1040.2	1050.7	1125.9	1118.6
27.5°	2016.3	1896.1	1580.0	1425.3	1219.9	1039.1	1003.4	971.7	961.1	1042.4	1064.7
30°	2126.5	2077.0	1650.7	1405.3	1152.6	955.6	903.3	896.6	899.9	992.3	998.4
32.5°	2313.5	2185.0	1766.4	1328.5	1054.6	893.8	833.7	836.5	851.5	918.8	932.8
35°	2508.3	2431.5	1782.0	1273.4	975.1	828.1	803.6	784.2	792.5	851.5	854.3
37.5°	2870.1	2604.6	1877.8	1188.2	916.6	803.1	756.3	739.1	743.5	776.9	800.9
40°	3188.4	2952.4	1833.2	1105.8	844.3	769.7	711.3	698.5	685.1	717.9	733.0
42.5°	3698.7	3200.6	1818.2	1015.1	810.3	724.6	684.5	650.6	637.8	665.6	692.9
45°	4209.1	3463.9	1736.4	923.3	762.5	721.3	645.6	613.3	616.6	641.7	669.5
47.5°	4777.9	3817.3	1597.8	834.2	710.1	705.1	606.6	592.7	602.7	630.6	658.4
50°	5450.2	4192.4	1483.2	754.1	672.9	656.7	601.6	584.9	594.4	627.2	654.5
52.5°	6185.3	4603.7	1399.7	680.1	630.6	618.3	608.3	592.2	603.3	631.7	660.1
55°	6916.1	4979.3	1342.9	629.4	594.4	602.2	622.2	610.5	616.1	637.2	665.6
57.5°	7458.1	5177.5	1228.8	575.5	564.9	592.7	623.9	604.4	607.7	637.2	667.8
60°	7773.1	5215.3	1041.3	531.5	541.5	573.8	606.6	581.6	579.4	627.8	666.2
62.5°	7738.6	4995.5	825.9	491.4	514.8	545.4	580.5	556.5	562.7	628.9	669.5
65°	7244.4	4546.3	656.7	457.5	482.5	514.2	558.8	549.3	578.8	673.4	717.4
67.5°	6376.2	3890.2	527.6	425.8	452.5	493.1	573.8	598.8	611.6	719.0	764.1
70°	5167.4	3022.6	439.7	397.9	428.5	503.1	617.2	612.2	601.6	697.3	733.0
72.5°	3733.2	2072.0	386.8	370.7	399.0	473.1	618.3	591.6	578.2	636.7	662.3
75°	2335.8	1236.1	337.8	336.1	354.0	424.1	590.5	566.6	530.4	559.3	592.7
77.5°	1334.0	632.8	284.4	299.4	310.0	367.9	528.7	507.0	474.7	487.0	519.8
80°	509.2	306.1	239.9	266.0	263.2	311.7	448.0	443.0	406.3	410.2	430.2
82.5°	239.9	171.4	199.2	228.7	213.7	248.2	364.0	362.3	330.0	298.9	315.0
85°	89.0	91.3	145.8	174.2	148.6	160.3	263.2	256.0	224.8	189.8	209.8
87.5°	20.0	32.8	71.8	90.7	51.8	49.5	106.3	92.4	89.0	52.9	55.7
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)