

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: P596942

Luminaire Tested: **MSA-SA2B-835-U-SL2**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P596942
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-16)
Test Lab: INNOVATIONS CENTER
Issue Date: 5/27/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: MSA-SA2B-835-U-SL2
Description: MESA POST TOP DECORATIVE LUMINAIRE. (2) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II SPILL LIGHT ELIMINATOR OPTICS.
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8158 lumens
Efficiency: N/A
Efficacy: 96.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B2 - U0 - G2

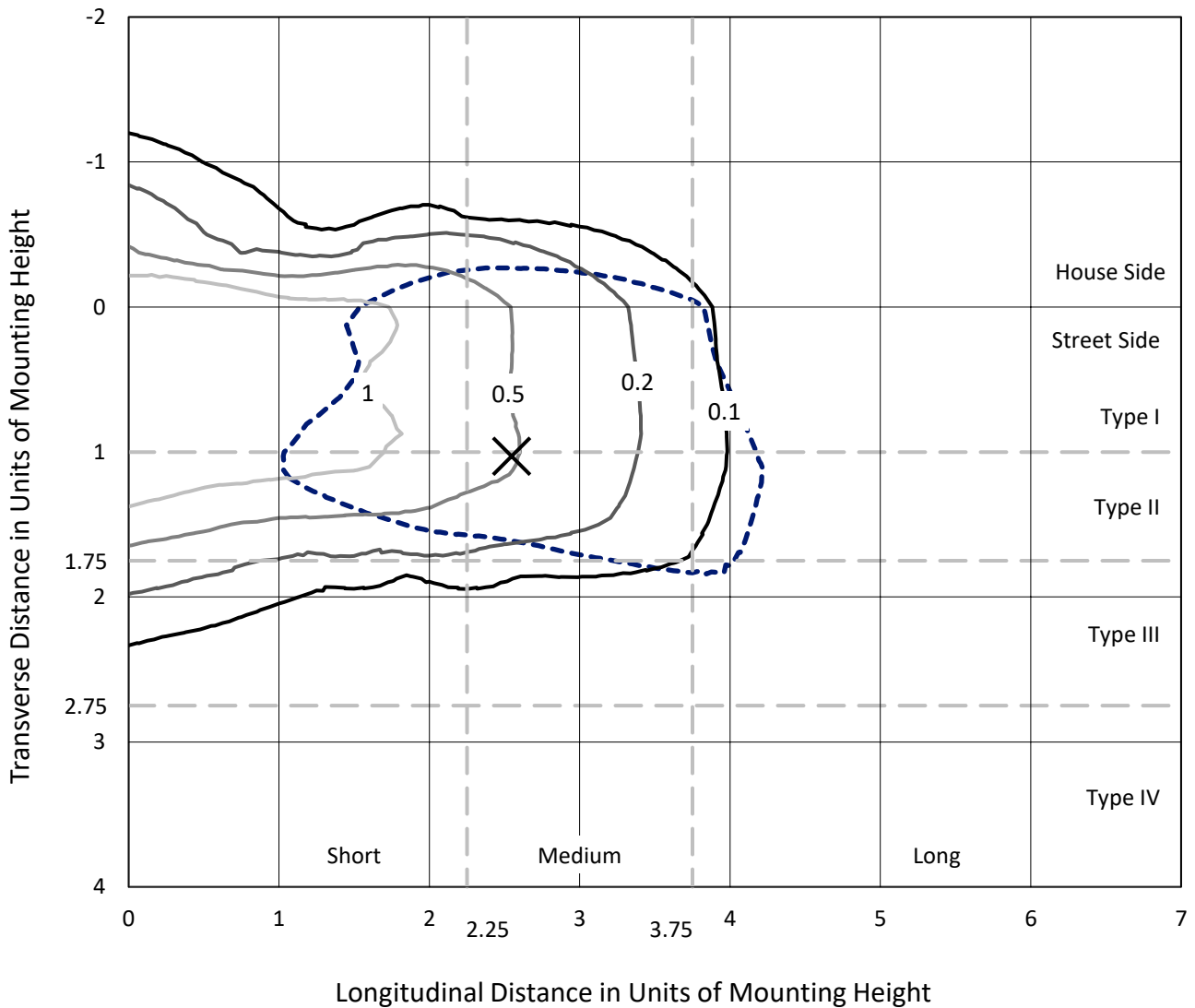
Input Watts (W): 85
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

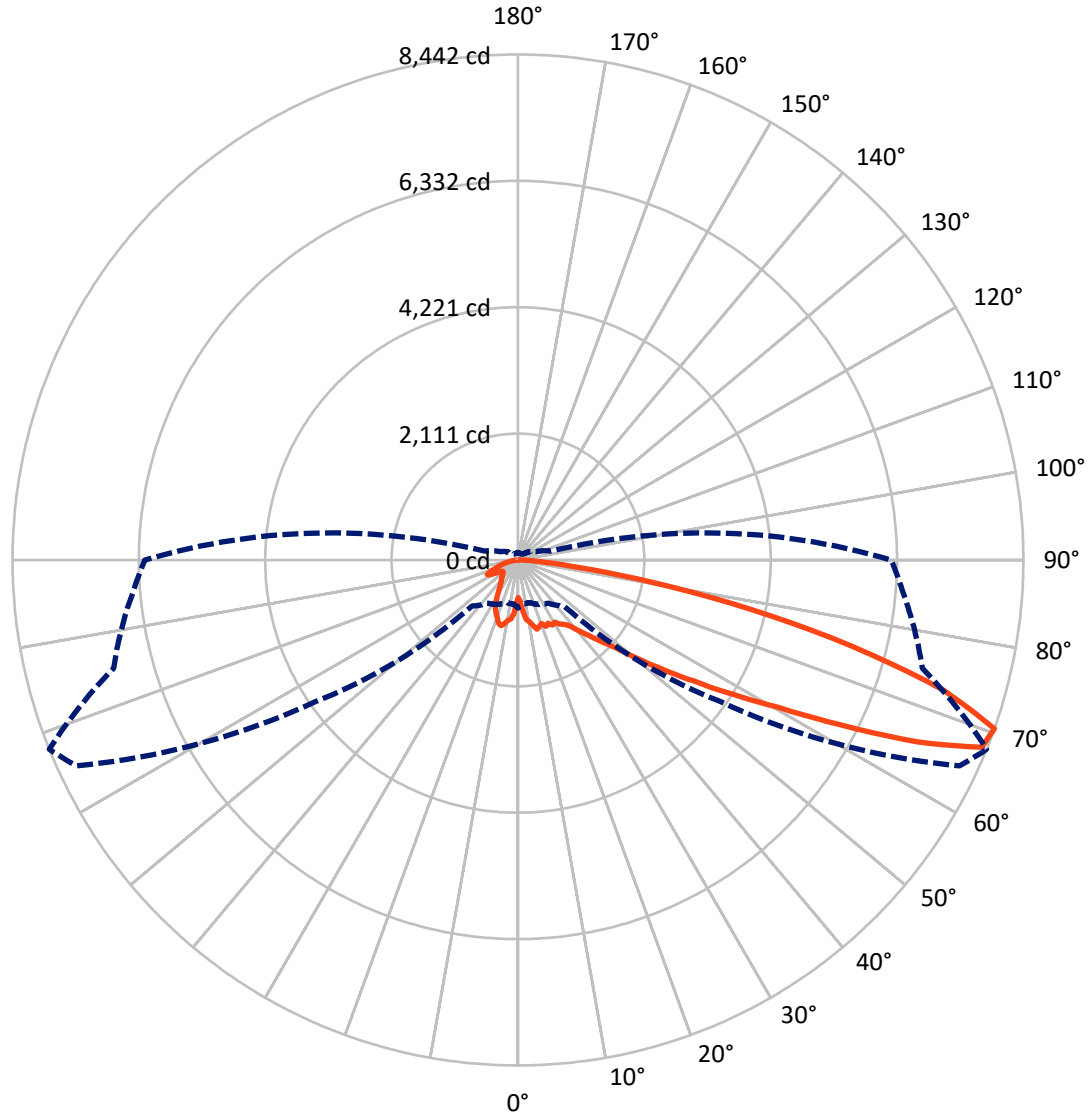
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 68-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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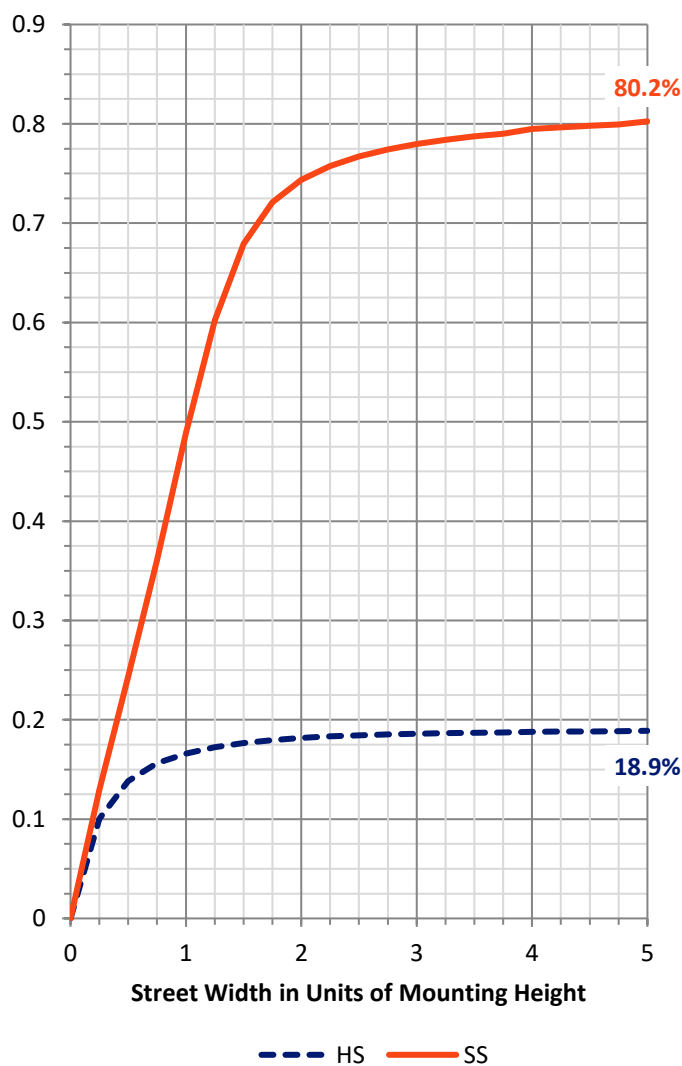
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1557.6	0.0	1557.6
	% Fixture	19.1	0.0	19.1
Street Side	Lumens	6600.5	0.0	6600.5
	% Fixture	80.9	0.0	80.9
Total	Lumens	8158.0	0.0	8158.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.5	1.0
10°-20°	272.3	3.3
20°-30°	414.2	5.1
30°-40°	632.7	7.8
40°-50°	1087.8	13.3
50°-60°	1800.6	22.1
60°-70°	2219.8	27.2
70°-80°	1426.0	17.5
80°-90°	221.2	2.7
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°	8158.0	100.0
0°-180°	8158.0	100.0

Coefficient of Utilization

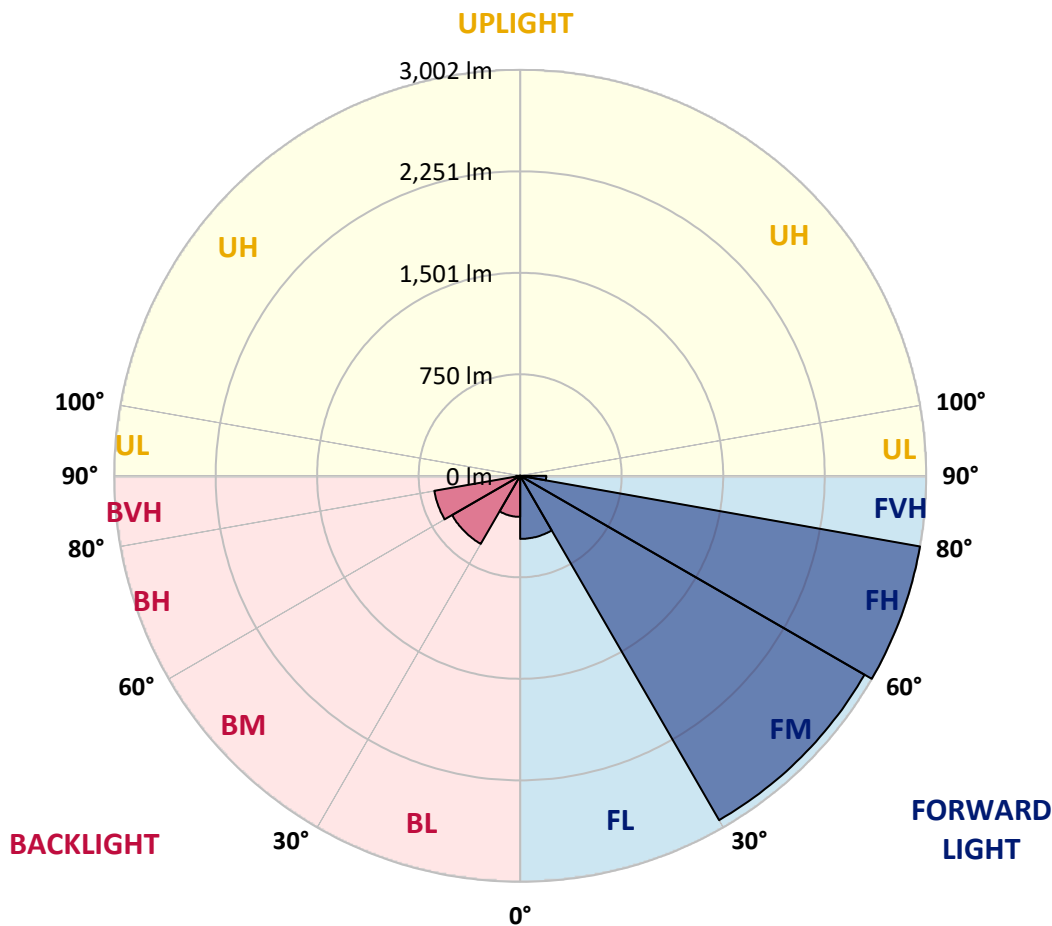


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	466.5	5.7			
FM (30°-60°)	2939.6	36.0			
FH (60°-80°)	3001.5	36.8			G2/5000
FVH (80°-90°)	192.8	2.4			G2/225
BL (0°-30°)	303.5	3.7	B1/500		
BM (30°-60°)	581.4	7.1	B1/1000		
BH (60°-80°)	644.3	7.9	B2/1000		G2/1000
BVH (80°-90°)	28.4	0.3			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 Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	68°	75°	85°
0°	625.5	625.5	625.5	625.5	625.5	625.5	625.5	625.5	625.5	625.5	625.5
2.5°	718.7	689.7	660.3	674.7	697.5	717.7	713.6	716.0	688.3	684.6	757.3
5°	846.8	796.9	795.9	796.6	798.6	775.4	832.1	861.4	867.9	898.0	969.3
7.5°	891.1	871.0	850.5	860.7	834.8	837.2	906.8	983.3	1001.4	1023.3	1120.9
10°	881.9	862.8	868.9	870.7	875.4	914.0	958.7	1032.1	1047.5	1117.2	1142.4
12.5°	883.3	879.9	908.5	909.6	960.8	1030.1	1047.9	1115.5	1121.6	1172.8	1278.3
15°	930.1	953.6	937.6	946.1	956.0	1039.0	1064.6	1161.6	1198.4	1264.3	1343.5
17.5°	1021.2	1028.1	979.9	967.3	999.7	1025.0	1083.4	1125.4	1163.9	1348.0	1457.2
20°	1042.4	1060.8	1003.5	938.3	1006.9	1042.0	1082.7	1101.8	1131.8	1360.3	1515.3
22.5°	1133.2	1095.0	1025.7	969.0	991.5	1025.7	1055.0	1127.1	1205.9	1325.1	1573.3
25°	1184.8	1162.6	1100.8	1040.0	1020.9	1021.9	1078.6	1143.1	1170.4	1376.7	1584.9
27.5°	1309.4	1273.9	1134.9	1123.3	1051.3	995.3	1082.3	1182.7	1230.5	1336.4	1641.6
30°	1465.4	1438.5	1256.1	1240.8	1130.8	1033.2	1130.1	1212.1	1205.3	1362.7	1680.9
32.5°	1591.8	1636.8	1452.8	1331.6	1253.4	1159.8	1115.1	1207.0	1274.9	1423.8	1747.4
35°	1772.0	1814.4	1606.1	1524.2	1354.5	1218.6	1219.9	1277.3	1319.3	1495.1	1821.9
37.5°	2084.1	2046.9	1879.2	1749.8	1641.3	1438.5	1377.7	1357.5	1391.3	1582.5	1967.7
40°	2309.1	2277.7	2080.3	2006.6	1795.2	1677.5	1510.8	1491.7	1551.5	1672.7	2086.8
42.5°	2575.8	2519.8	2336.1	2275.3	2054.4	1842.0	1674.0	1685.0	1714.0	1842.7	2248.0
45°	2847.2	2711.3	2607.2	2602.4	2454.9	2161.6	1935.9	1927.0	1928.1	2093.0	2428.9
47.5°	3062.6	2940.4	2821.2	2764.6	2690.1	2714.4	2316.3	2212.1	2180.7	2345.0	2700.4
50°	3208.4	3067.8	2932.9	2919.6	3118.3	3249.1	2673.4	2562.1	2581.6	2705.5	3062.3
52.5°	3211.5	3044.5	2903.9	2997.1	3465.2	3652.3	3288.7	2977.6	3039.8	3124.1	3534.5
55°	2988.2	2815.1	2723.6	2936.0	3600.7	4130.6	4153.2	3643.4	3571.7	3602.8	4098.9
57.5°	2517.4	2342.6	2289.3	2543.7	3343.6	4591.9	5197.3	4439.0	4228.6	4098.9	4677.3
60°	1894.9	1743.7	1710.6	1872.8	2772.1	4456.4	6042.7	5429.1	5000.6	4653.0	5257.4
62.5°	1421.0	1312.5	1262.6	1285.8	1918.2	4015.6	6597.8	6680.1	6073.4	5258.0	5824.1
65°	1154.7	1067.0	1022.6	992.5	1193.0	3105.0	6497.4	7733.1	7326.4	5893.5	6265.3
67.5°	964.5	886.7	866.2	895.6	943.0	1801.4	5712.2	8322.1	8349.7	6520.3	6523.1
70°	800.7	743.0	735.4	818.8	881.2	1087.1	4125.9	8137.0	8442.2	6990.5	6462.6
72.5°	618.7	587.6	586.6	717.3	875.4	926.6	2456.9	7029.4	7439.5	6840.2	5871.3
75°	429.2	407.7	424.1	589.7	855.3	940.0	1402.3	5475.2	5782.1	5820.7	4703.2
77.5°	295.3	277.2	295.0	426.4	763.8	962.5	980.9	3958.9	3993.0	3903.2	2693.9
80°	205.5	192.9	206.6	301.8	594.4	952.6	835.1	2492.5	2286.9	1742.0	862.5
82.5°	127.4	123.6	138.6	215.1	418.6	866.6	791.4	1286.2	982.0	480.7	308.0
85°	66.9	61.5	80.6	140.3	261.9	680.1	741.6	586.9	379.0	170.7	123.6
87.5°	19.8	17.8	31.1	56.7	111.0	304.9	424.4	248.9	141.4	50.2	38.6
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°	625.5	625.5	625.5	625.5	625.5	625.5	625.5	625.5	625.5	625.5	625.5
2.5°	762.4	758.7	708.1	714.6	725.5	728.3	727.9	709.5	690.0	744.3	742.6
5°	971.0	937.2	912.0	906.5	875.4	844.4	855.3	851.5	846.8	871.3	874.4
7.5°	1121.3	1074.5	1045.1	969.7	898.0	835.8	855.6	861.8	849.5	893.9	907.2
10°	1160.9	1124.0	1092.2	995.3	955.7	919.5	865.9	804.8	796.6	771.0	774.0
12.5°	1263.0	1257.8	1149.6	1064.2	1012.7	940.6	824.9	750.8	687.3	690.4	671.9
15°	1343.5	1346.3	1216.2	1096.7	958.4	848.5	712.2	620.0	554.8	541.9	528.5
17.5°	1451.8	1446.3	1221.6	1057.8	882.6	721.4	554.5	463.0	452.1	459.6	448.0
20°	1498.9	1450.7	1186.8	961.1	764.1	548.0	418.9	370.5	391.6	421.7	422.4
22.5°	1541.2	1458.9	1168.7	883.3	606.4	398.5	336.3	327.4	352.4	393.0	396.4
25°	1539.5	1496.8	1136.3	804.8	470.2	311.0	292.3	298.8	328.5	370.8	373.2
27.5°	1617.0	1467.8	1052.0	701.6	354.1	266.3	271.1	283.0	297.0	337.3	345.2
30°	1616.3	1521.8	1009.6	576.3	284.4	244.1	256.4	266.7	278.3	315.1	319.6
32.5°	1654.6	1486.6	984.0	448.3	255.0	238.7	241.7	252.0	268.7	293.6	296.7
35°	1700.7	1526.5	902.1	356.1	244.1	233.9	236.3	242.1	257.4	280.3	283.4
37.5°	1848.5	1534.1	869.6	300.1	243.4	231.8	231.5	234.6	252.0	272.8	282.0
40°	1906.2	1602.7	775.0	280.3	241.1	231.8	227.1	228.8	243.1	269.7	276.9
42.5°	2044.5	1625.6	705.1	273.5	241.1	227.7	220.2	223.0	239.7	263.2	274.5
45°	2186.9	1658.0	621.7	272.1	240.7	227.4	213.1	219.2	232.9	252.7	265.0
47.5°	2389.7	1774.8	538.4	268.0	238.0	229.1	211.3	211.0	223.0	240.0	251.6
50°	2720.5	1957.1	473.9	262.9	238.3	227.7	207.9	203.2	211.0	226.0	237.3
52.5°	3181.1	2267.8	448.6	260.2	235.6	222.3	202.1	194.6	199.1	211.0	221.9
55°	3715.8	2687.4	473.6	260.2	230.1	213.7	193.9	185.1	187.4	195.6	206.2
57.5°	4340.6	3208.8	594.1	256.4	223.3	203.5	184.0	173.8	174.5	181.6	191.2
60°	4993.1	3791.3	864.2	253.3	218.5	192.2	172.4	161.8	160.8	167.6	176.2
62.5°	5646.6	4328.7	1148.2	260.5	217.2	182.7	160.1	149.5	149.2	155.4	162.5
65°	6166.3	4696.1	1218.9	289.5	226.0	171.7	147.5	137.6	136.9	142.0	149.9
67.5°	6421.3	4749.3	926.0	325.7	244.8	161.5	135.2	126.0	125.3	130.8	137.6
70°	6232.5	4385.3	571.6	329.5	243.8	149.5	122.6	114.7	113.4	119.2	124.3
72.5°	5533.9	3836.0	434.3	291.6	211.0	132.5	109.9	103.1	101.1	106.2	111.0
75°	4441.7	3045.6	347.9	235.2	166.3	111.6	97.3	90.8	88.4	93.2	97.3
77.5°	2587.4	1713.3	254.4	183.7	125.6	91.2	83.0	77.2	74.4	79.6	82.6
80°	841.3	570.9	159.8	131.8	91.8	71.4	67.3	63.2	60.4	63.8	64.9
82.5°	302.2	212.4	88.4	80.9	61.1	51.2	50.9	48.5	45.1	46.4	46.4
85°	133.8	97.0	52.6	43.4	36.5	27.3	32.1	30.4	27.0	26.3	25.3
87.5°	37.6	32.1	19.1	14.7	12.0	4.4	10.2	9.2	7.5	6.8	4.8
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)