

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: P597029

Luminaire Tested: **MSA-SA3B-835-U-SL2-HSS**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P597029
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-SA3B-835-U-SL2-HSS
Description: MESA POST TOP DECORATIVE LUMINAIRE. (3) 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: 9933 lumens
Efficiency: N/A
Efficacy: 78.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

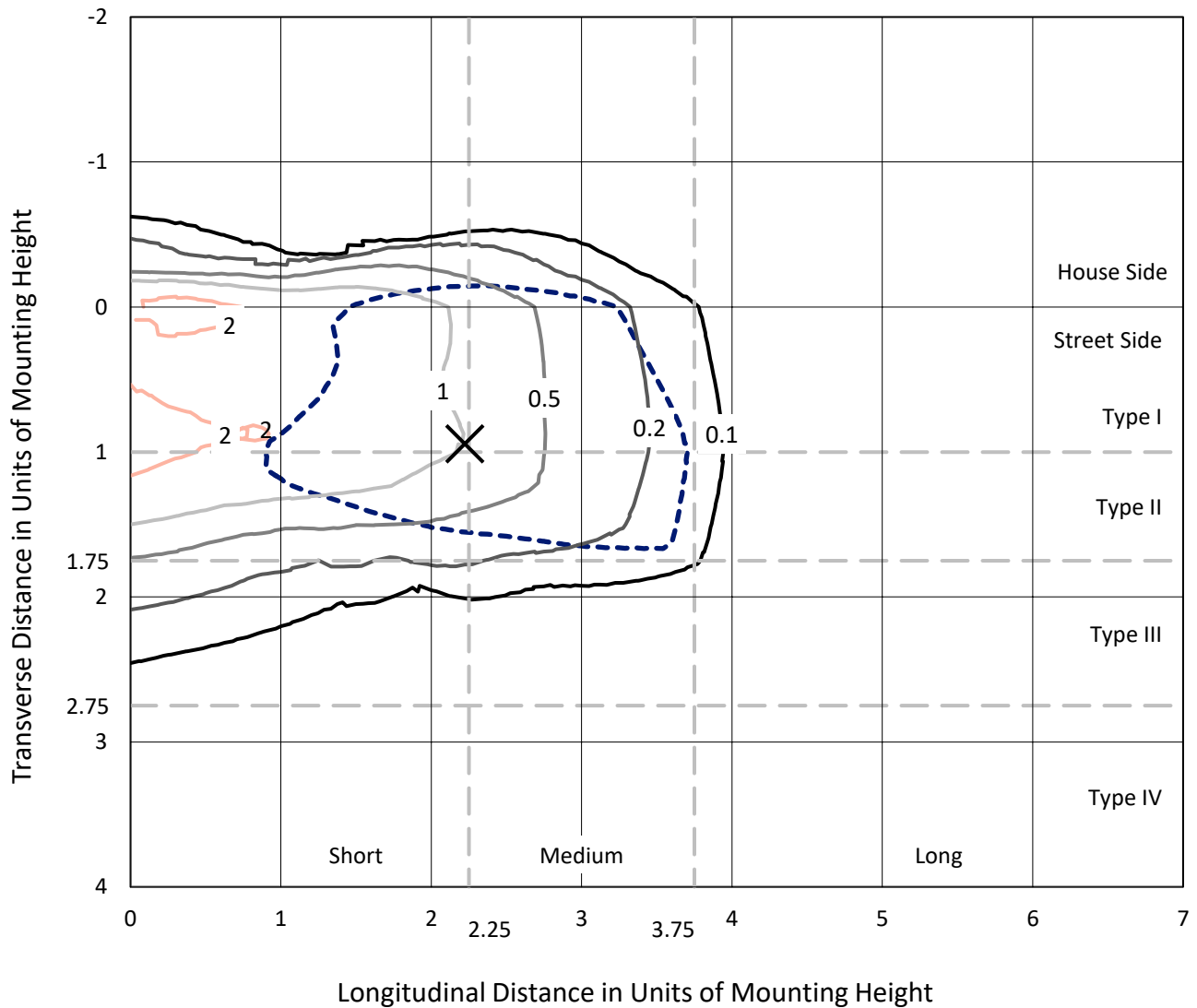
Input Watts (W): 126
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

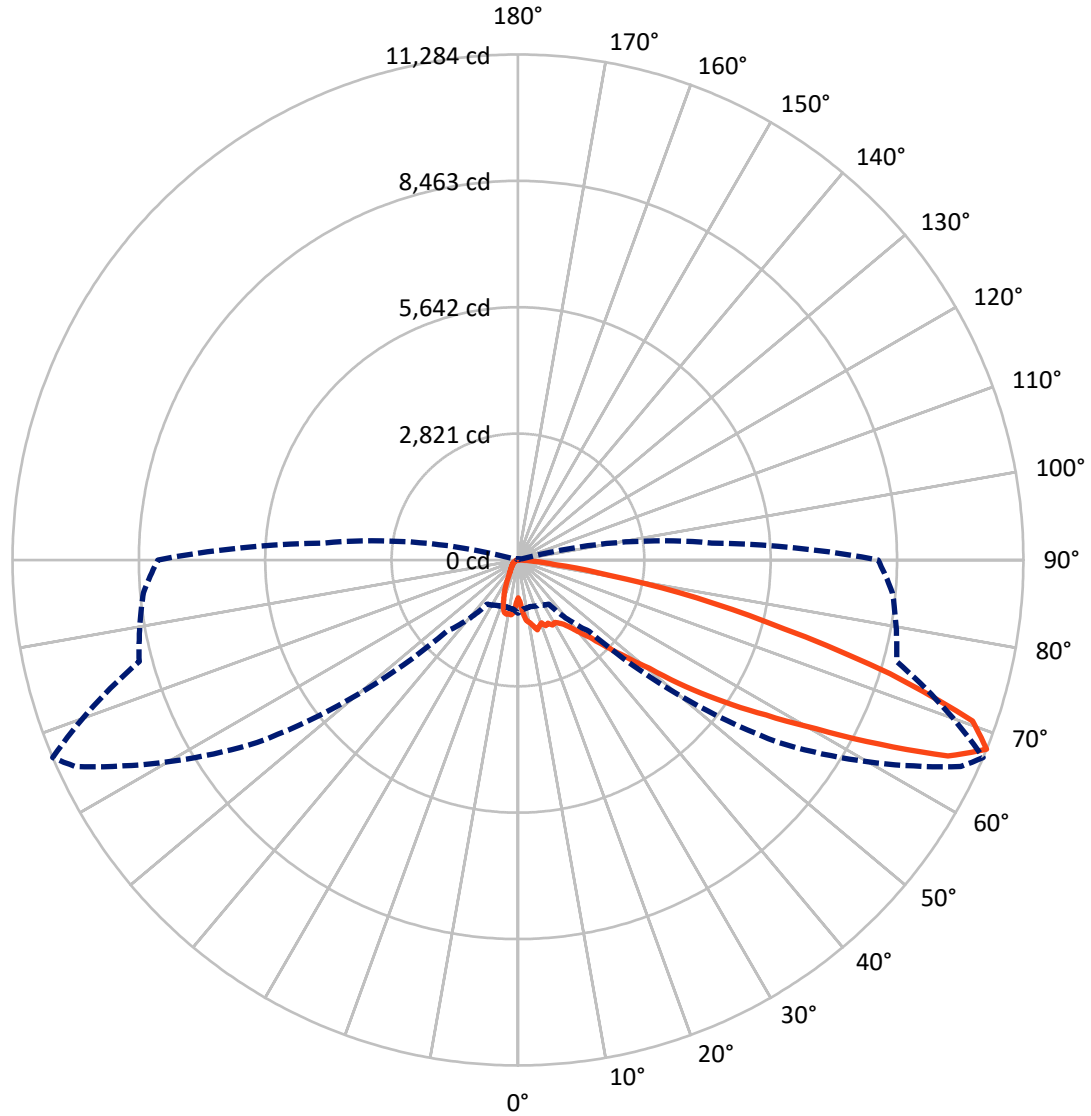
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.6 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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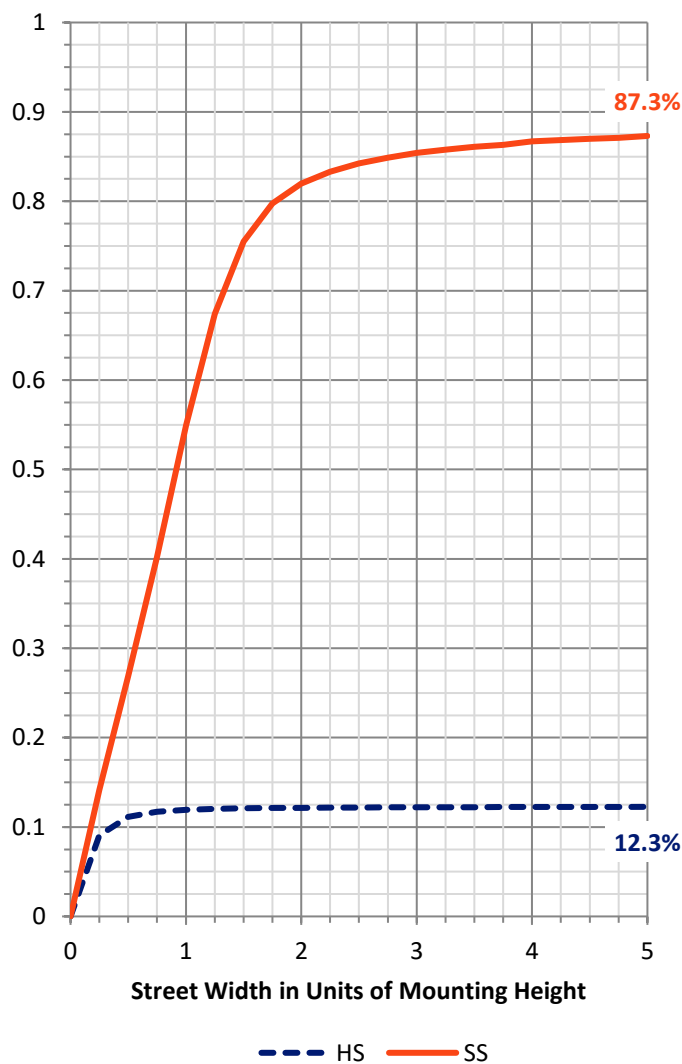
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1228.4	0.0	1228.4
	% Fixture	12.4	0.0	12.4
Street Side	Lumens	8704.6	0.0	8704.6
	% Fixture	87.6	0.0	87.6
Total	Lumens	9933.0	0.0	9933.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.2	1.1
10°-20°	314.2	3.2
20°-30°	492.4	5.0
30°-40°	794.0	8.0
40°-50°	1459.0	14.7
50°-60°	2464.1	24.8
60°-70°	2724.1	27.4
70°-80°	1425.8	14.4
80°-90°	153.1	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°	9933.0	100.0
0°-180°	9933.0	100.0

Coefficient of Utilization



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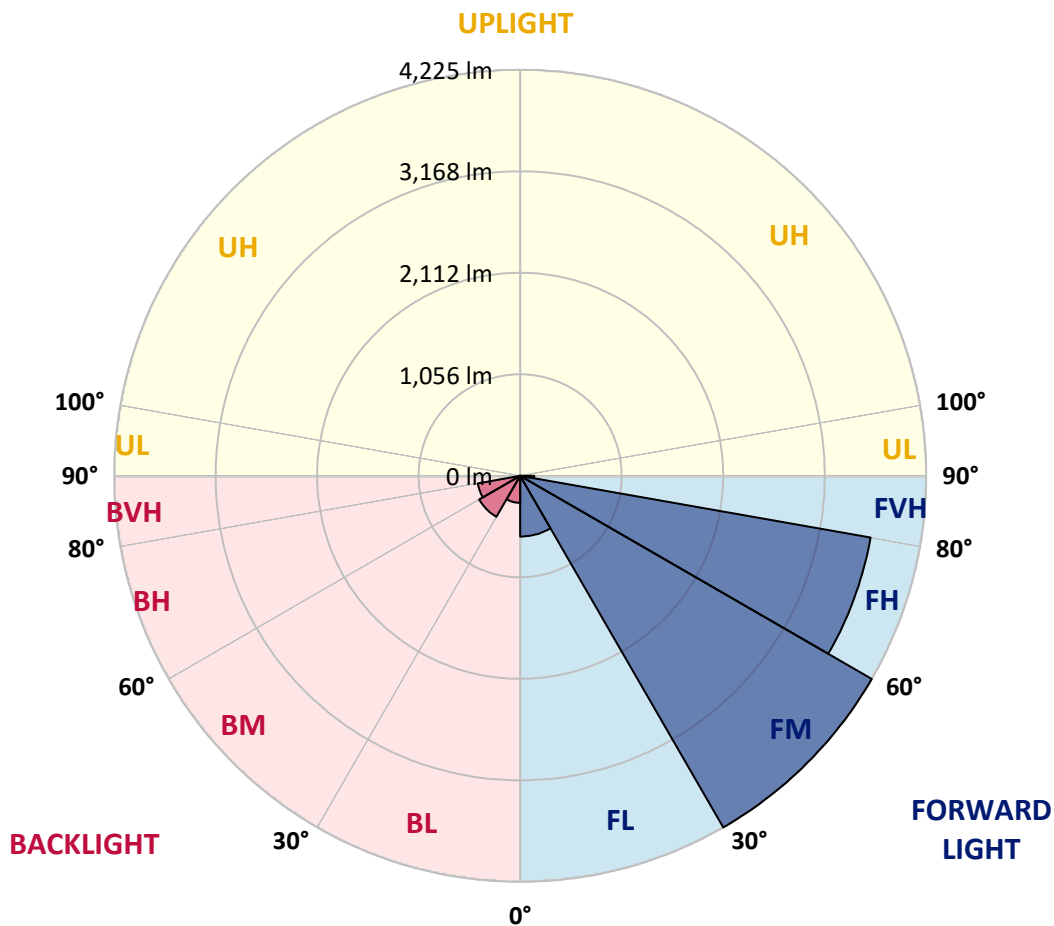
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	631.6	6.4			
FM (30°-60°)	4224.5	42.5			
FH (60°-80°)	3701.9	37.3			G2/5000
FVH (80°-90°)	146.6	1.5			G2/225
BL (0°-30°)	281.3	2.8	B1/500		
BM (30°-60°)	492.6	5.0	B1/1000		
BH (60°-80°)	448.1	4.5	B1/500		G1/500
BVH (80°-90°)	6.5	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-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	846.0	846.0	846.0	846.0	846.0	846.0	846.0	846.0	846.0	846.0	846.0
2.5°	998.7	964.9	907.5	924.1	957.4	985.1	972.0	946.3	946.8	920.6	1014.8
5°	1161.9	1116.6	1083.3	1094.9	1093.4	1092.4	1154.4	1178.1	1188.1	1231.5	1295.5
7.5°	1208.8	1192.7	1157.9	1168.5	1133.7	1136.2	1245.1	1347.9	1364.0	1390.7	1504.6
10°	1190.7	1159.4	1172.0	1172.0	1172.5	1229.0	1302.0	1400.3	1419.9	1522.7	1534.8
12.5°	1171.0	1172.5	1222.4	1213.3	1281.9	1383.1	1407.8	1518.2	1508.6	1597.8	1730.3
15°	1244.1	1282.4	1250.1	1262.7	1269.3	1388.2	1428.0	1574.6	1616.9	1729.8	1816.0
17.5°	1369.5	1374.6	1307.6	1289.4	1336.8	1370.6	1450.7	1521.2	1549.4	1845.7	1967.6
20°	1392.2	1424.5	1356.4	1251.6	1351.9	1398.3	1454.2	1488.0	1500.0	1881.5	2053.3
22.5°	1528.8	1493.0	1384.2	1304.5	1333.3	1383.7	1418.4	1520.2	1592.8	1814.0	2135.4
25°	1598.8	1589.2	1485.4	1417.4	1388.2	1384.2	1463.8	1540.9	1564.0	1884.0	2155.6
27.5°	1766.6	1744.9	1543.9	1535.3	1439.1	1354.4	1465.3	1603.8	1647.2	1818.0	2231.2
30°	1994.9	1986.8	1719.2	1713.7	1560.5	1408.3	1546.9	1642.6	1616.4	1851.8	2281.6
32.5°	2224.6	2290.1	2016.5	1860.3	1745.4	1606.4	1523.7	1630.6	1677.4	1933.9	2374.3
35°	2502.3	2549.6	2271.0	2157.6	1902.1	1699.1	1677.4	1745.9	1766.1	2031.6	2479.6
37.5°	2988.0	2916.5	2679.1	2486.1	2352.1	2030.1	1923.3	1868.9	1915.7	2164.2	2694.7
40°	3346.8	3301.4	3009.2	2893.8	2585.4	2397.0	2117.8	2066.9	2119.3	2300.2	2844.4
42.5°	3779.6	3685.4	3410.3	3332.2	3014.7	2651.4	2368.2	2385.9	2353.1	2568.8	3106.9
45°	4171.1	3958.5	3805.3	3822.9	3653.6	3162.8	2785.9	2777.4	2750.2	2957.8	3383.0
47.5°	4434.6	4248.7	4099.6	4050.7	4030.5	4062.3	3389.6	3237.4	3217.3	3366.4	3817.9
50°	4576.2	4372.7	4188.2	4198.3	4607.5	4915.3	4012.4	3796.2	3803.8	3959.5	4412.5
52.5°	4481.0	4250.7	4056.2	4245.2	5054.9	5484.2	5043.3	4526.3	4701.7	4661.9	5210.1
55°	4041.1	3841.1	3703.0	4041.1	5103.8	6096.4	6312.6	5625.3	5586.0	5495.3	6023.4
57.5°	3300.9	3128.6	3043.4	3400.2	4569.2	6589.7	7587.4	6867.4	6532.3	6152.4	6698.6
60°	2459.4	2332.5	2243.8	2432.2	3600.2	6110.5	8422.3	8037.9	7649.9	6785.7	7305.2
62.5°	1821.5	1718.2	1624.0	1641.1	2479.1	5255.5	8742.8	9277.9	9055.2	7454.4	7877.6
65°	1453.7	1359.5	1293.5	1255.7	1535.3	3953.9	8296.9	10294.2	10551.2	8084.2	8290.8
67.5°	1187.1	1107.5	1074.8	1118.1	1204.3	2253.9	7105.7	10911.0	11283.9	8752.4	8392.6
70°	965.9	900.4	896.9	1013.8	1109.0	1374.1	5226.7	10485.2	10765.9	8866.3	7782.4
72.5°	673.2	644.5	690.3	856.1	1099.0	1144.3	3001.6	8676.8	8686.9	7830.8	6401.3
75°	380.9	376.4	449.0	682.8	1070.2	1132.7	1673.4	6131.7	6136.2	5922.6	4434.6
77.5°	209.6	196.0	261.5	461.6	919.1	1106.5	1079.3	4186.7	4079.4	3295.9	2025.6
80°	96.7	91.2	141.6	295.8	672.2	1046.6	865.2	2301.2	2075.0	1073.8	494.3
82.5°	39.8	37.8	65.0	190.0	424.8	843.0	729.1	1020.9	819.3	204.1	152.7
85°	7.1	7.6	26.7	114.9	237.8	388.5	591.1	484.7	356.2	56.4	83.6
87.5°	0.0	0.0	5.5	27.7	57.4	106.3	239.8	135.5	93.2	16.6	24.7
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°	846.0	846.0	846.0	846.0	846.0	846.0	846.0	846.0	846.0	846.0	846.0
2.5°	1033.5	1024.9	938.2	942.3	948.3	942.8	941.7	917.6	895.4	968.5	967.4
5°	1307.1	1246.1	1186.1	1163.0	1113.1	1047.6	1048.1	1027.4	1006.2	1036.0	1036.0
7.5°	1502.1	1417.9	1341.8	1206.3	1074.3	954.9	944.3	916.1	883.8	922.6	930.2
10°	1547.4	1474.4	1376.1	1177.1	1052.1	935.7	807.7	702.4	653.5	630.9	626.8
12.5°	1687.0	1632.6	1412.9	1192.7	1012.8	815.8	606.2	481.2	396.0	389.5	380.4
15°	1780.2	1741.9	1449.2	1153.9	846.5	586.5	380.9	292.2	258.0	255.0	250.4
17.5°	1924.8	1858.3	1414.4	1030.4	662.1	387.0	256.0	230.8	234.8	243.9	236.8
20°	1983.8	1853.8	1338.8	851.6	465.1	259.5	222.2	208.6	219.2	227.8	223.7
22.5°	2044.2	1866.9	1271.8	701.9	303.8	214.7	198.0	191.0	192.0	200.5	201.0
25°	2043.7	1903.2	1194.2	546.7	226.2	191.0	178.9	169.8	166.3	172.3	170.8
27.5°	2143.0	1861.3	1052.6	405.6	199.0	170.8	159.2	148.1	135.5	141.6	141.6
30°	2143.5	1929.4	953.8	291.2	182.4	152.2	142.1	125.0	110.3	115.4	115.9
32.5°	2200.4	1870.4	862.6	222.7	169.3	141.1	118.9	103.3	94.7	97.8	97.8
35°	2265.4	1920.8	722.6	196.5	156.2	125.5	101.8	89.2	82.6	85.2	85.2
37.5°	2480.1	1910.2	625.3	182.9	147.6	113.4	92.7	78.6	75.6	77.1	79.1
40°	2557.7	1985.3	493.3	174.8	133.5	102.3	81.6	71.0	67.0	68.0	68.5
42.5°	2755.2	2001.9	394.0	168.3	120.9	88.7	72.6	65.0	60.0	60.0	61.5
45°	2973.4	2043.7	313.4	162.8	110.3	79.6	65.5	59.5	51.9	50.9	52.9
47.5°	3289.3	2204.0	255.5	151.7	97.8	74.1	60.5	51.4	45.3	43.3	45.3
50°	3817.9	2476.1	225.7	138.1	88.7	69.5	53.4	43.8	39.3	36.8	38.3
52.5°	4563.6	2946.2	210.1	125.5	80.6	62.5	47.9	38.3	33.8	31.7	32.8
55°	5392.0	3485.3	202.6	112.9	73.6	54.9	41.8	33.8	29.7	27.2	27.7
57.5°	6157.9	3992.2	195.0	100.8	66.5	48.9	36.8	29.7	25.7	23.2	23.7
60°	6912.7	4396.8	176.9	86.7	60.0	43.8	32.2	25.7	23.2	20.2	20.2
62.5°	7580.4	4638.7	150.7	75.1	53.9	38.8	28.7	23.2	21.2	18.1	18.1
65°	8034.9	4649.8	121.4	64.5	47.4	33.3	25.2	21.7	19.7	16.1	15.6
67.5°	8041.4	4347.5	97.2	57.4	41.8	29.2	22.7	20.7	18.1	15.1	14.1
70°	7197.4	3591.6	81.1	50.4	36.3	25.7	19.7	19.7	17.6	14.6	13.1
72.5°	5757.3	2744.6	68.0	43.8	32.2	22.2	18.1	18.6	17.1	14.6	13.1
75°	3869.8	1574.1	56.4	37.3	28.2	18.6	17.6	18.1	17.6	14.6	12.6
77.5°	1782.2	501.4	43.8	30.7	24.2	15.6	17.1	17.1	16.1	13.1	11.1
80°	401.6	123.5	31.7	22.7	19.7	11.6	15.6	14.1	12.6	9.1	6.6
82.5°	146.1	37.8	19.1	14.1	12.1	4.5	10.1	10.1	9.1	6.6	4.0
85°	83.6	19.7	10.6	9.1	6.6	2.0	5.5	6.0	5.0	4.5	2.0
87.5°	27.2	4.5	5.0	5.5	5.0	1.0	2.0	2.0	1.5	1.0	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)