

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: P597128

Luminaire Tested: **MSA-SA4B-835-U-T2**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P597128
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-8)
Test Lab: INNOVATIONS CENTER
Issue Date: 5/27/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: MSA-SA4B-835-U-T2
Description: MESA POST TOP DECORATIVE LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS.
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15976 lumens
Efficiency: N/A
Efficacy: 93.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G3

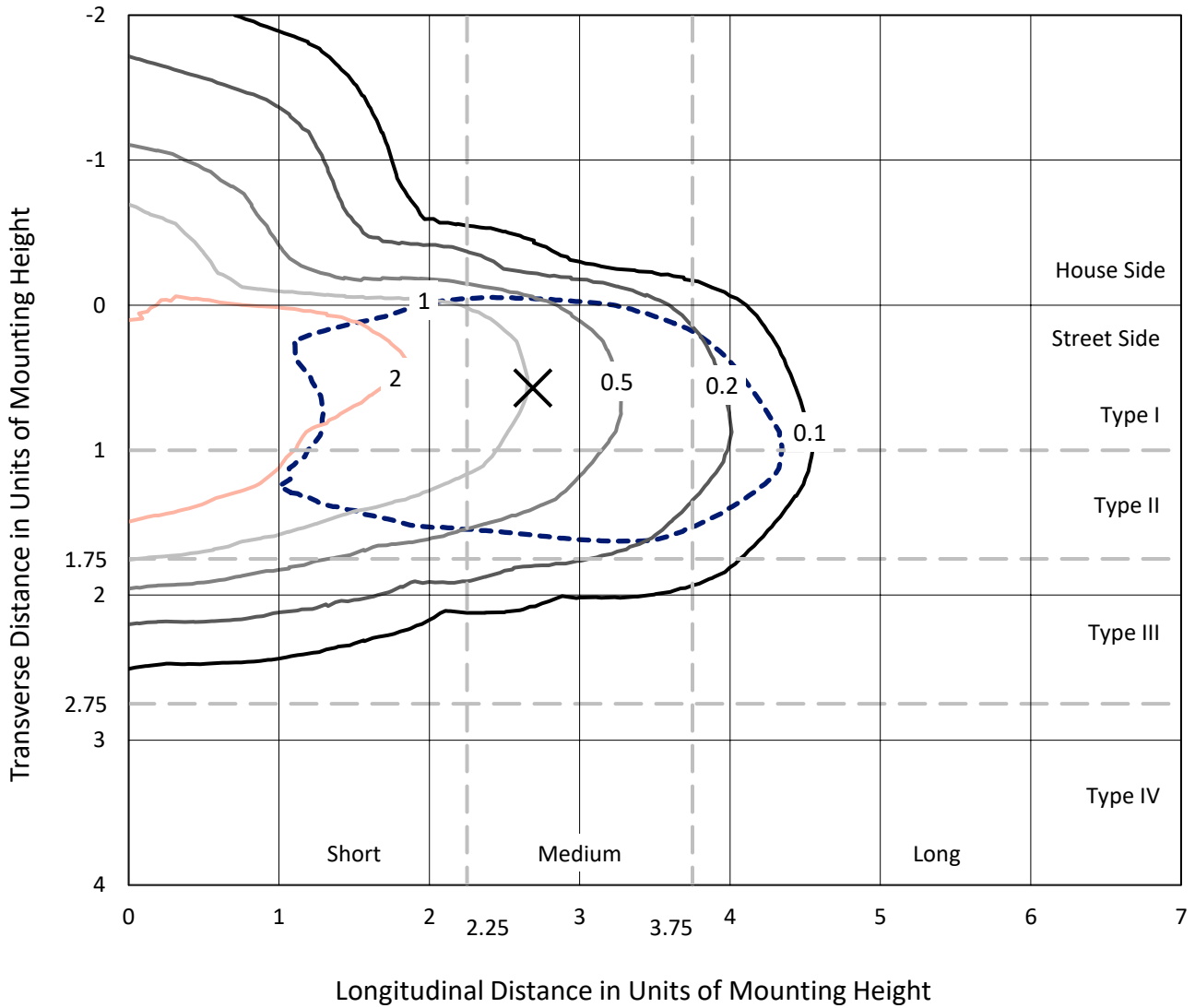
Input Watts (W): 171
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

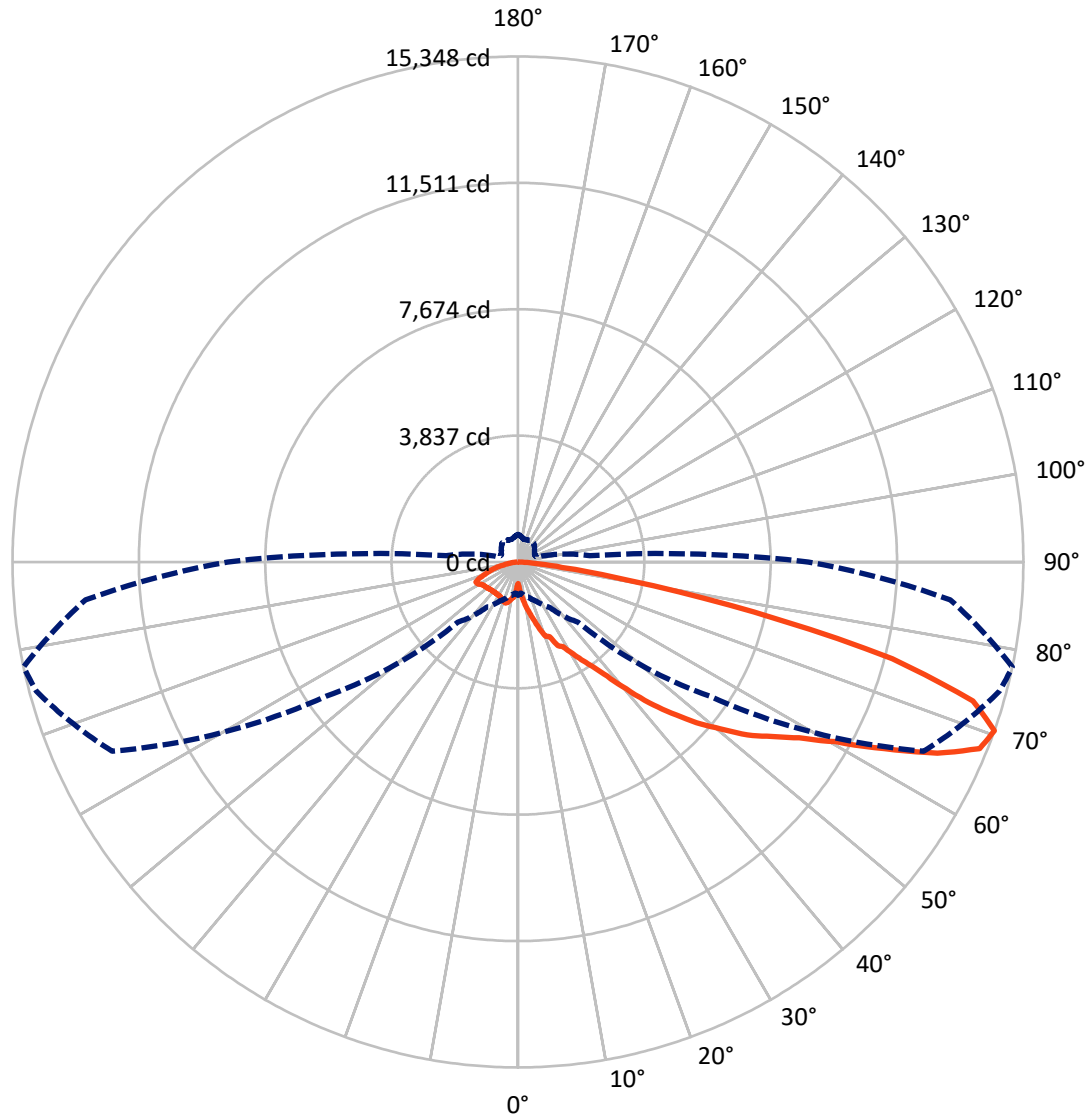
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.8 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 78-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2851.5	0.0	2851.5
	% Fixture	17.8	0.0	17.8
Street Side	Lumens	13124.5	0.0	13124.5
	% Fixture	82.2	0.0	82.2
Total	Lumens	15976.0	0.0	15976.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.7	0.6
10°-20°	443.5	2.8
20°-30°	853.7	5.3
30°-40°	1437.9	9.0
40°-50°	2487.9	15.6
50°-60°	3756.4	23.5
60°-70°	4160.7	26.0
70°-80°	2398.8	15.0
80°-90°	336.4	2.1
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°	15976.0	100.0
0°-180°	15976.0	100.0

Coefficient of Utilization



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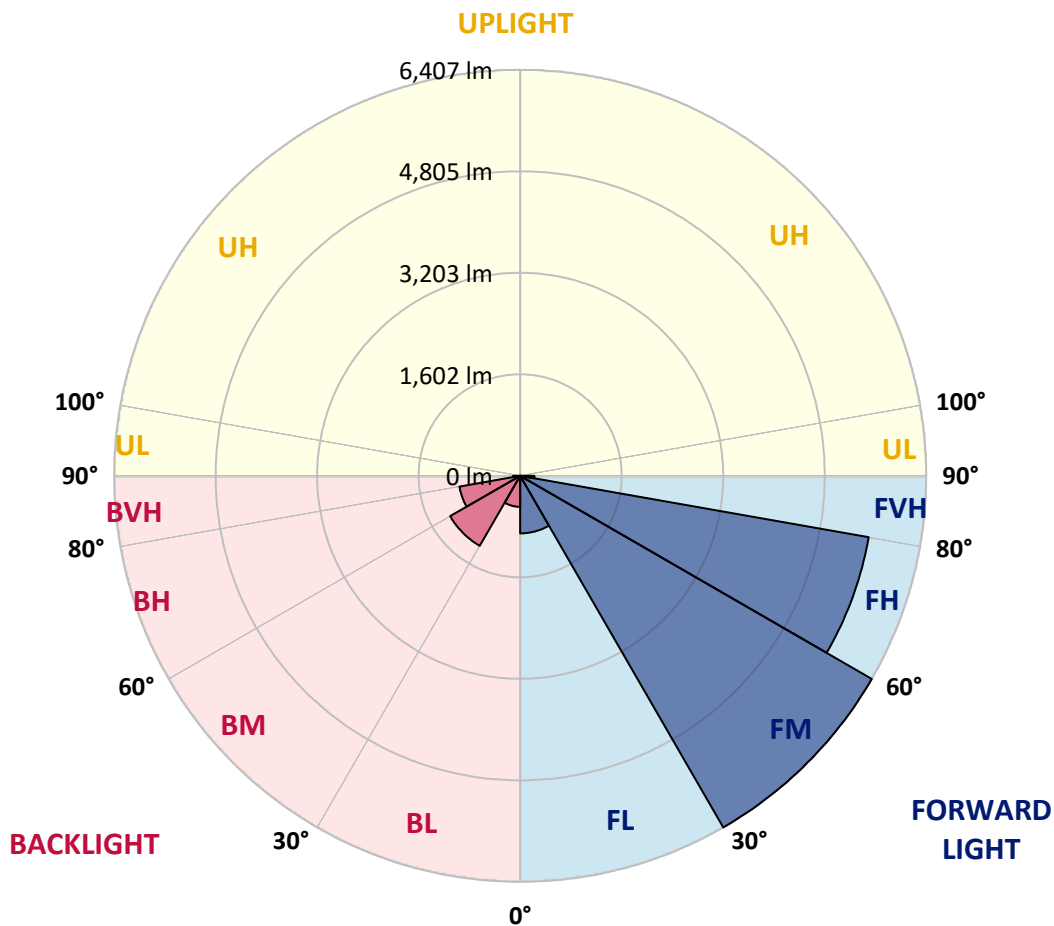
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	908.2	5.7			
FM (30°-60°)	6406.8	40.1			
FH (60°-80°)	5585.0	35.0			G3/7500
FVH (80°-90°)	224.4	1.4			G2/225
BL (0°-30°)	489.6	3.1	B1/500		
BM (30°-60°)	1275.4	8.0	B2/2500		
BH (60°-80°)	974.5	6.1	B2/1000		G2/1000
BVH (80°-90°)	112.0	0.7			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	78°	85°
0°	651.3	651.3	651.3	651.3	651.3	651.3	651.3	651.3	651.3	651.3	651.3
2.5°	838.5	808.5	763.2	781.9	804.5	807.2	799.9	758.6	744.6	775.9	785.2
5°	1174.8	1124.2	1093.6	1083.6	1049.6	979.0	1029.6	1003.7	1009.0	993.7	1023.6
7.5°	1457.9	1423.9	1378.6	1366.0	1288.0	1232.8	1267.4	1256.1	1201.5	1180.2	1214.1
10°	1601.7	1564.4	1566.4	1539.1	1518.5	1523.8	1506.5	1456.5	1415.9	1387.3	1305.4
12.5°	1688.3	1697.6	1747.6	1733.6	1811.5	1875.5	1826.8	1752.9	1624.4	1598.4	1517.1
15°	1894.1	1928.7	1882.1	1903.4	1936.7	2059.3	2039.3	2023.3	1887.4	1836.8	1687.0
17.5°	2105.9	2112.6	2042.0	2030.6	2110.6	2172.5	2250.4	2160.5	2177.2	2141.9	1899.4
20°	2151.2	2197.1	2095.9	2026.0	2190.5	2313.0	2409.6	2314.4	2402.3	2411.6	2074.6
22.5°	2317.0	2261.7	2128.5	2059.9	2203.8	2354.3	2511.5	2564.8	2536.8	2458.2	2243.8
25°	2432.2	2402.9	2267.1	2191.1	2245.8	2384.3	2660.0	2799.2	2823.8	2813.2	2404.9
27.5°	2646.0	2660.7	2381.0	2402.3	2326.3	2339.0	2749.3	3110.2	2956.4	2913.8	2604.7
30°	2983.7	2918.4	2604.7	2622.0	2496.2	2474.9	2937.7	3378.6	3240.8	3189.5	2769.2
32.5°	3336.0	3342.0	2961.0	2813.2	2745.9	2724.6	2900.4	3519.1	3600.4	3533.8	3017.6
35°	3832.8	3798.2	3347.3	3152.8	2909.8	2872.5	3166.2	3926.7	4075.9	3889.4	3312.7
37.5°	4589.4	4484.8	3960.0	3510.5	3330.7	3288.0	3545.8	4292.4	4628.0	4396.3	3794.9
40°	5196.8	4984.4	4507.5	3960.0	3655.7	3708.3	3815.5	4735.9	5200.8	5070.3	4241.1
42.5°	5681.0	5492.5	4895.1	4510.2	4096.6	4031.3	4148.5	5285.4	5980.0	5852.1	4797.9
45°	6145.2	5761.6	5330.7	4984.4	4586.7	4666.0	4648.7	5846.2	6935.7	6542.1	5290.0
47.5°	6603.4	6243.1	5792.2	5326.7	4926.4	5419.9	5235.4	6263.1	7580.4	7288.7	5808.2
50°	7192.1	6795.9	6282.4	5814.2	5574.4	5935.4	5625.7	6616.1	8302.4	7960.0	6297.0
52.5°	7583.1	7197.5	6747.3	6412.9	6390.9	6251.7	6172.5	7062.9	8935.1	8727.3	6815.2
55°	7537.1	7165.5	6961.7	6998.3	7270.1	6800.5	6735.9	7724.3	9595.1	9354.6	7374.6
57.5°	6961.0	6555.4	6598.7	6815.9	7545.8	7764.2	7654.3	8430.9	10183.8	10074.6	8066.6
60°	5422.6	5214.1	5566.4	5963.4	7176.8	8046.6	8819.2	9292.7	10908.4	11082.9	9153.5
62.5°	3522.5	3244.1	3800.9	4474.9	6075.9	7860.1	10005.3	10927.1	12095.2	12491.5	10805.2
65°	1824.8	1780.2	2169.8	2789.2	4229.8	6702.0	10423.6	12641.4	13537.8	13999.3	12383.0
67.5°	1326.7	1244.1	1424.6	1788.9	2582.1	4570.1	9631.0	13952.7	14696.0	15118.9	13300.0
70°	1010.3	949.1	1086.9	1312.7	1686.3	2581.4	7109.6	13595.1	15142.9	15348.0	13178.2
72.5°	756.6	704.0	824.5	1035.0	1299.4	1453.2	4202.5	11178.2	14380.3	14450.2	11827.5
75°	604.1	563.4	615.4	817.2	1058.9	989.0	2232.4	8098.6	11683.7	11743.6	9034.3
77.5°	495.5	460.9	482.2	612.7	823.8	743.9	1107.6	5151.5	7417.9	7326.0	5082.9
80°	404.3	374.3	384.3	442.9	627.4	555.4	622.0	2687.3	3538.5	3395.9	2113.9
82.5°	311.0	285.7	305.7	325.7	454.2	398.9	363.0	1222.8	1449.2	1350.0	775.2
85°	208.5	185.1	265.7	244.4	297.0	245.1	198.5	486.8	540.1	503.5	272.4
87.5°	57.3	53.9	89.2	121.9	121.9	92.6	72.6	117.9	150.5	131.9	63.9
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°	651.3	651.3	651.3	651.3	651.3	651.3	651.3	651.3	651.3	651.3	651.3
2.5°	789.2	774.6	735.9	732.6	741.9	743.3	737.3	723.3	716.0	755.9	749.9
5°	1016.3	964.4	933.1	904.4	864.5	835.8	843.2	863.1	869.8	899.8	903.1
7.5°	1192.8	1124.2	1055.6	963.7	903.1	864.5	893.8	915.1	931.7	974.4	991.7
10°	1269.4	1194.8	1097.6	1001.0	984.3	991.0	974.4	979.7	1005.7	1007.7	1016.3
12.5°	1411.9	1327.3	1152.2	1064.9	1060.3	1074.3	1068.3	1092.9	1110.9	1159.5	1138.9
15°	1548.5	1440.6	1193.5	1104.2	1084.9	1112.9	1145.5	1186.8	1225.4	1271.4	1248.1
17.5°	1714.3	1551.8	1195.5	1086.2	1089.6	1149.5	1183.5	1206.1	1321.3	1384.6	1352.6
20°	1818.8	1563.1	1150.8	1041.6	1089.6	1143.5	1190.8	1215.5	1344.7	1439.9	1461.9
22.5°	1913.4	1567.1	1116.2	1017.6	1048.3	1119.5	1190.8	1245.4	1328.0	1419.2	1422.6
25°	1965.4	1563.8	1071.6	1019.6	1047.6	1082.9	1146.2	1196.1	1257.4	1384.6	1387.9
27.5°	2098.6	1520.5	1027.6	1027.6	1042.3	1043.6	1124.2	1153.5	1162.2	1278.1	1298.7
30°	2137.2	1529.8	1022.3	1026.3	1033.6	1020.3	1055.6	1074.9	1087.6	1187.5	1190.8
32.5°	2199.1	1455.2	1038.3	1014.3	1005.0	1003.0	1011.7	1029.0	1034.3	1095.6	1106.9
35°	2274.4	1425.2	1043.6	1011.0	992.3	982.4	1008.3	987.0	1003.7	1075.6	1083.6
37.5°	2519.5	1383.9	1070.9	1011.0	987.0	975.7	963.0	973.0	1032.3	1101.6	1144.2
40°	2676.0	1396.6	1064.3	1021.0	969.0	958.4	937.1	973.7	1065.6	1188.1	1220.1
42.5°	2950.4	1403.9	1072.3	1016.3	975.0	933.7	947.7	987.7	1084.2	1154.2	1203.5
45°	3234.1	1426.6	1066.9	1002.3	961.7	981.0	961.7	997.7	1043.6	1045.6	1082.9
47.5°	3512.5	1517.8	1055.6	973.7	958.4	1009.0	959.7	965.7	969.0	981.0	1025.0
50°	3839.5	1615.1	1039.6	933.7	963.0	1010.3	967.0	937.7	934.4	973.7	1023.0
52.5°	4211.1	1724.9	1019.0	895.1	935.7	997.7	992.3	939.7	911.1	949.1	998.3
55°	4648.7	1850.2	995.0	856.5	905.8	999.0	1006.3	925.7	911.8	953.0	1005.7
57.5°	5230.1	2031.3	948.4	800.5	869.1	978.4	970.4	909.8	896.4	940.4	995.0
60°	6222.4	2379.6	881.8	745.3	829.8	927.7	941.1	881.1	867.8	916.4	973.7
62.5°	7551.1	2798.5	801.2	691.3	781.9	873.1	904.4	839.8	838.5	900.4	960.4
65°	8787.9	3036.3	717.9	642.0	732.6	822.5	863.1	801.2	803.9	881.8	941.7
67.5°	9302.0	2756.6	643.4	598.1	676.0	764.6	829.2	771.2	762.6	856.5	911.8
70°	8819.2	2189.8	578.8	551.4	612.1	702.0	781.9	731.3	711.3	796.5	839.8
72.5°	7803.5	1825.5	518.1	496.8	556.1	636.0	717.9	677.3	651.3	716.6	755.2
75°	6099.9	1497.8	448.9	442.9	492.2	576.1	651.3	623.4	590.1	631.4	670.0
77.5°	3473.2	947.7	377.0	381.0	416.3	504.8	571.4	549.5	515.5	532.8	577.4
80°	1389.9	478.2	303.0	305.7	335.7	414.9	473.5	465.5	430.2	444.2	474.9
82.5°	519.5	262.4	223.8	225.1	255.1	328.3	404.3	400.3	367.0	357.0	374.3
85°	206.5	129.9	137.2	143.2	171.8	236.4	324.3	287.7	248.4	217.8	228.4
87.5°	49.3	41.3	48.0	50.6	55.9	73.9	118.5	95.2	97.9	78.6	58.6
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)