

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: P596944

Luminaire Tested: **MSA-SA2B-835-U-SL3**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P596944
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-18)
Test Lab: INNOVATIONS CENTER
Issue Date: 5/27/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: MSA-SA2B-835-U-SL3
Description: MESA POST TOP DECORATIVE LUMINAIRE. (2) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III SPILL LIGHT ELIMINATOR OPTICS.
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8058 lumens
Efficiency: N/A
Efficacy: 94.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

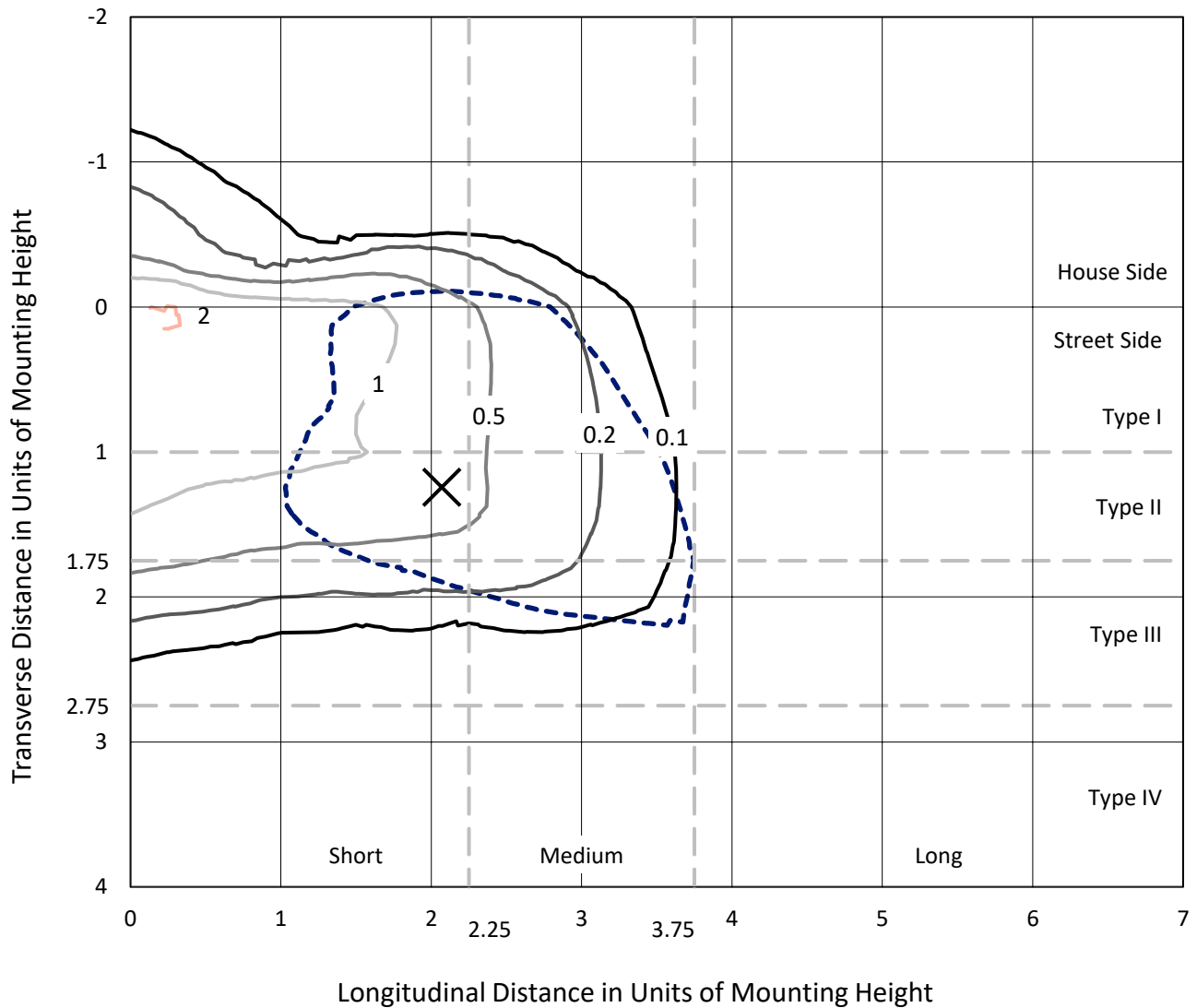
Input Watts (W): 85
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

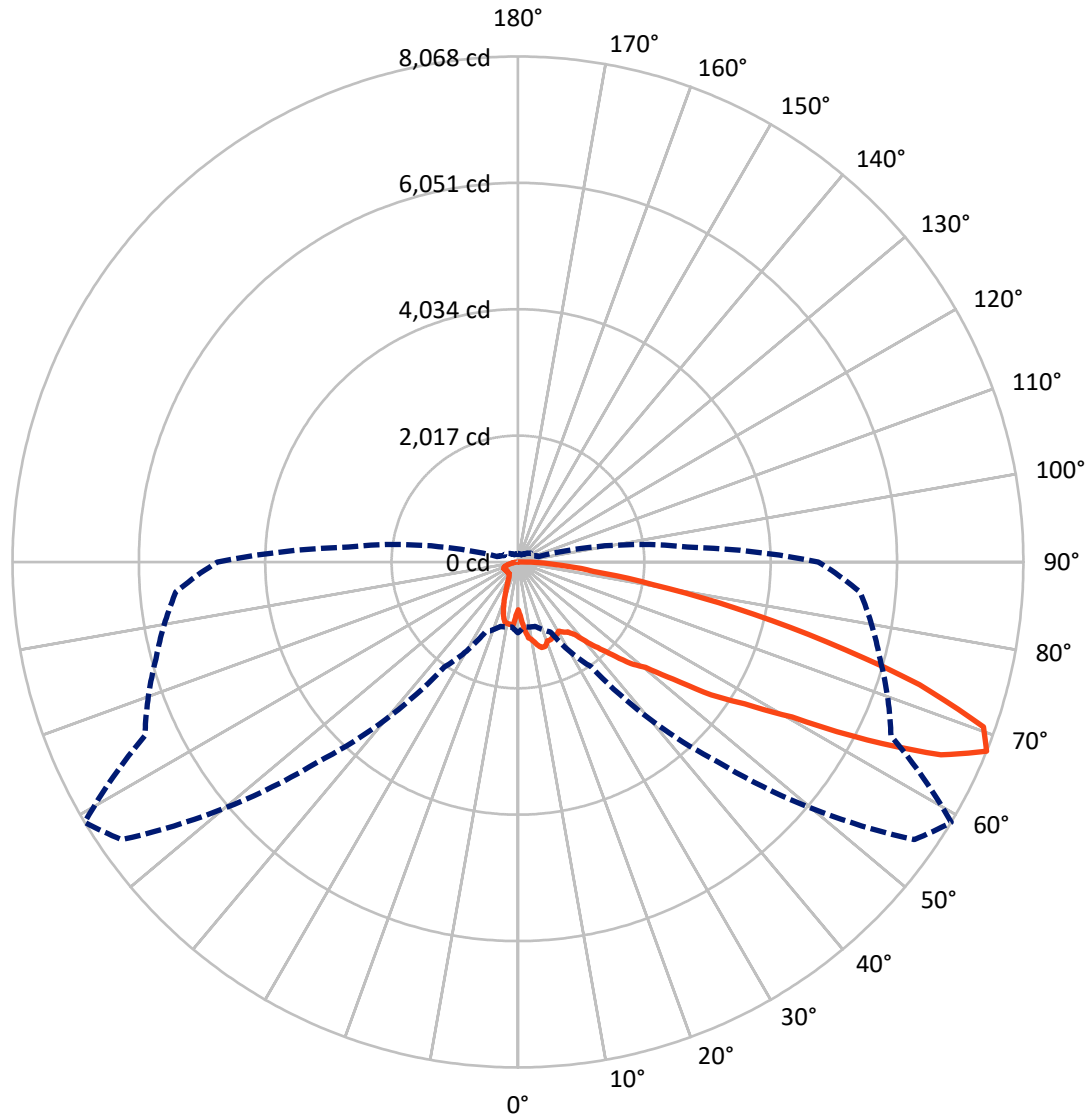
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.1 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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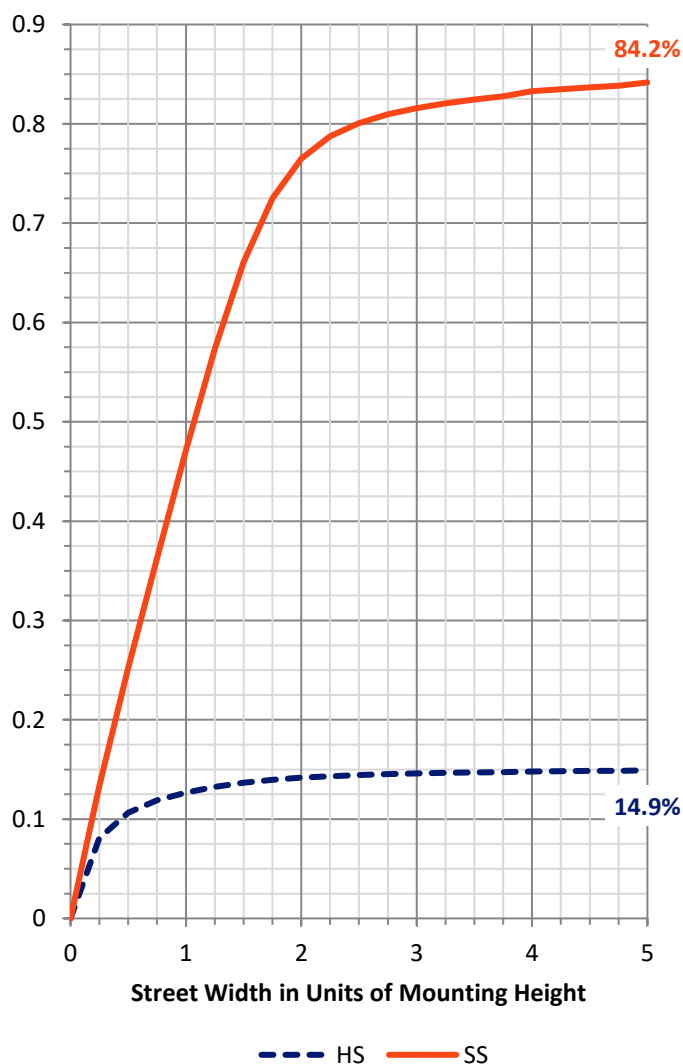
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1212.9	0.0	1212.9
	% Fixture	15.1	0.0	15.1
Street Side	Lumens	6845.1	0.0	6845.1
	% Fixture	84.9	0.0	84.9
Total	Lumens	8058.0	0.0	8058.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.6	1.2
10°-20°	294.7	3.7
20°-30°	420.9	5.2
30°-40°	620.2	7.7
40°-50°	1047.8	13.0
50°-60°	1823.3	22.6
60°-70°	2323.4	28.8
70°-80°	1230.3	15.3
80°-90°	197.9	2.5
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°	8058.0	100.0
0°-180°	8058.0	100.0

Coefficient of Utilization



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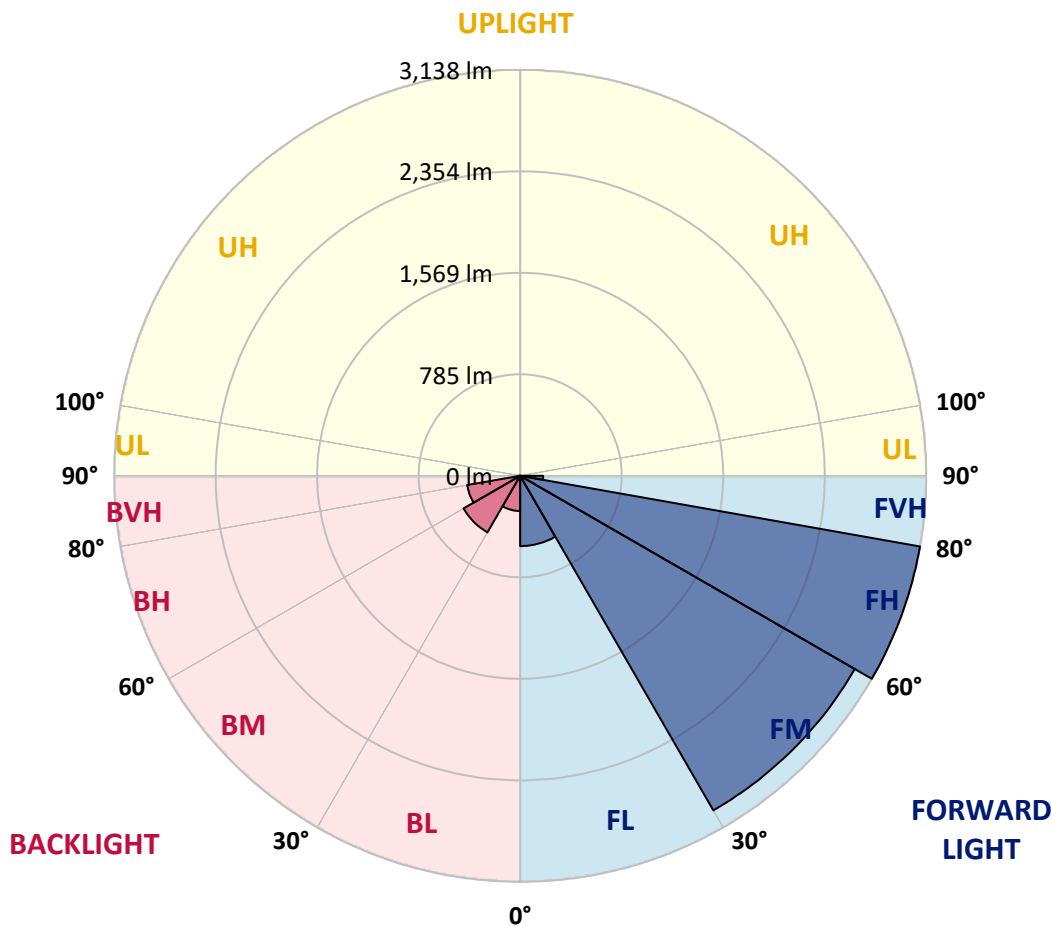
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	543.1	6.7			
FM (30°-60°)	2986.2	37.1			
FH (60°-80°)	3138.0	38.9			G2/5000
FVH (80°-90°)	177.8	2.2			G2/225
BL (0°-30°)	272.0	3.4	B1/500		
BM (30°-60°)	505.0	6.3	B1/1000		
BH (60°-80°)	415.7	5.2	B1/500		G1/500
BVH (80°-90°)	20.2	0.3			G1/100
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°	762.5	762.5	762.5	762.5	762.5	762.5	762.5	762.5	762.5	762.5	762.5
2.5°	952.0	907.6	860.5	873.8	900.8	913.1	899.8	886.8	870.1	850.3	917.9
5°	1154.5	1088.6	1079.0	1078.7	1069.1	1030.9	1080.1	1076.7	1096.5	1116.9	1169.5
7.5°	1212.2	1187.6	1161.0	1173.6	1125.5	1123.4	1199.9	1221.8	1260.0	1247.4	1318.1
10°	1182.5	1154.8	1168.8	1163.7	1168.2	1218.7	1265.5	1266.8	1307.8	1348.1	1302.7
12.5°	1130.3	1132.3	1188.0	1185.9	1257.6	1351.5	1365.5	1354.6	1421.5	1394.2	1433.1
15°	1167.5	1192.4	1178.4	1190.4	1218.7	1338.2	1377.1	1416.8	1480.3	1504.9	1465.9
17.5°	1226.9	1240.2	1177.4	1170.9	1229.3	1286.0	1382.6	1416.4	1426.3	1601.5	1546.5
20°	1201.6	1228.6	1167.1	1088.3	1185.2	1260.4	1355.6	1345.4	1393.5	1609.0	1563.2
22.5°	1273.3	1228.6	1150.4	1094.4	1128.6	1197.5	1278.5	1345.7	1402.8	1565.0	1587.5
25°	1287.0	1265.8	1192.7	1137.1	1125.5	1150.1	1265.5	1309.5	1405.8	1625.0	1574.5
27.5°	1370.3	1338.6	1189.7	1191.4	1133.7	1090.3	1224.5	1317.0	1440.7	1587.8	1606.3
30°	1473.8	1449.5	1262.8	1269.6	1189.7	1109.8	1252.5	1280.5	1460.8	1645.9	1646.2
32.5°	1551.3	1594.0	1406.5	1313.6	1285.3	1225.5	1209.5	1335.5	1437.2	1751.1	1714.5
35°	1691.0	1724.1	1517.1	1442.7	1346.8	1279.5	1326.3	1371.7	1535.2	1889.3	1815.9
37.5°	1949.4	1911.2	1722.7	1605.6	1569.7	1472.8	1498.7	1466.9	1641.8	2044.7	2014.7
40°	2099.0	2065.9	1867.5	1802.6	1660.6	1672.9	1640.4	1663.6	1784.2	2210.0	2200.4
42.5°	2246.5	2202.1	2034.5	1989.4	1847.7	1787.6	1793.4	1868.5	2003.7	2477.0	2445.3
45°	2392.3	2278.6	2205.2	2217.2	2148.9	2025.6	2034.1	2104.8	2243.4	2782.3	2709.2
47.5°	2504.0	2410.1	2352.7	2338.0	2304.2	2469.2	2395.4	2424.1	2485.2	3054.1	3026.4
50°	2715.4	2605.7	2531.0	2509.8	2624.5	2854.0	2703.7	2641.9	2772.0	3405.5	3391.1
52.5°	3053.8	2917.2	2792.5	2791.2	2957.1	3106.0	3211.9	3105.3	3153.1	3765.4	3806.3
55°	3349.1	3191.0	3079.0	3140.8	3377.1	3468.3	3827.9	3744.5	3704.3	4128.7	4245.8
57.5°	3459.4	3274.7	3201.6	3292.8	3641.1	4109.6	4489.6	4270.4	4231.1	4539.8	4785.3
60°	3217.3	3022.0	3026.4	3198.2	3801.6	4580.5	5213.2	5027.1	4796.9	5051.7	5291.4
62.5°	2527.6	2351.0	2466.1	2727.3	3667.0	5038.0	6183.0	6261.5	5443.3	5476.1	5572.1
65°	1717.9	1595.7	1699.5	1955.2	2974.2	5287.6	7106.6	7421.5	6032.0	5754.1	5693.3
67.5°	1130.6	1044.2	1064.4	1234.4	2047.4	4507.7	7724.4	8067.5	6570.2	5982.2	5479.5
70°	875.5	805.9	797.0	886.1	1214.3	3131.6	7358.3	7880.1	6898.0	5768.4	4776.1
72.5°	687.0	634.1	638.9	724.6	940.4	1737.4	5694.0	6701.0	6404.2	4974.9	3669.4
75°	535.8	492.4	516.6	614.6	869.7	1079.7	3928.6	5085.8	4951.3	3683.8	2092.9
77.5°	388.9	360.9	395.4	523.5	817.5	926.4	2445.6	3548.2	3171.9	1891.4	718.1
80°	255.1	239.4	267.7	426.8	741.3	891.6	1511.3	2174.1	1567.3	531.3	271.8
82.5°	150.2	143.4	167.0	288.9	595.9	835.6	1008.0	1208.1	641.3	224.7	144.4
85°	78.9	73.8	99.0	166.0	410.8	762.8	793.6	723.2	309.7	97.7	69.0
87.5°	26.3	25.6	42.0	64.2	155.4	405.0	423.4	343.5	127.7	28.3	15.0
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°	762.5	762.5	762.5	762.5	762.5	762.5	762.5	762.5	762.5	762.5	762.5
2.5°	927.1	913.4	834.9	845.8	856.1	850.9	847.9	812.4	808.9	859.5	855.4
5°	1168.2	1111.5	1044.6	1041.5	997.4	952.4	961.2	946.9	951.0	971.8	973.9
7.5°	1295.5	1224.8	1161.0	1057.2	969.1	897.7	909.0	905.6	896.4	943.5	956.1
10°	1293.1	1230.3	1158.3	1032.6	973.2	915.1	845.5	779.6	760.1	736.9	738.9
12.5°	1378.5	1322.8	1165.8	1037.7	957.1	857.1	726.6	654.6	585.6	584.3	566.8
15°	1405.1	1364.2	1181.8	1008.4	844.8	701.4	566.5	488.3	438.4	428.5	413.9
17.5°	1472.4	1408.2	1133.0	913.4	714.4	548.4	425.8	371.2	367.1	373.9	366.4
20°	1476.9	1372.7	1044.9	773.1	574.0	415.6	347.3	320.0	334.6	351.4	350.7
22.5°	1473.1	1328.0	968.7	653.6	431.3	334.0	304.2	298.1	311.8	336.7	339.8
25°	1434.9	1313.3	873.5	536.8	350.0	286.2	278.0	281.7	298.8	328.2	328.2
27.5°	1474.8	1253.5	754.0	436.7	294.3	254.7	260.5	270.1	282.7	316.2	322.3
30°	1461.8	1273.3	657.7	351.7	259.5	232.9	245.9	255.4	269.8	304.6	307.7
32.5°	1496.7	1220.4	576.7	295.7	236.6	224.3	227.4	240.4	259.2	286.5	292.0
35°	1549.9	1239.9	483.9	266.0	225.4	214.4	220.2	230.5	249.3	275.9	280.3
37.5°	1720.0	1238.8	419.7	249.6	223.3	212.4	215.1	222.3	244.1	268.4	278.6
40°	1829.2	1309.9	361.3	245.9	220.9	211.4	209.0	216.8	234.2	262.9	270.1
42.5°	2034.5	1353.2	336.0	244.5	220.6	205.6	203.2	212.4	229.5	256.1	267.0
45°	2251.3	1415.0	315.9	243.8	219.6	204.5	197.4	209.0	223.3	248.9	261.6
47.5°	2506.4	1545.8	304.6	241.4	217.5	205.9	195.3	201.1	217.2	242.8	255.4
50°	2840.3	1719.0	307.0	238.0	220.6	206.2	192.2	195.0	209.7	234.6	247.6
52.5°	3246.3	1987.0	322.3	239.4	222.6	204.5	190.9	189.5	202.1	224.0	237.0
55°	3735.7	2367.4	368.4	245.9	222.6	204.2	188.8	182.7	192.2	210.0	222.6
57.5°	4326.1	2807.9	458.6	248.9	220.9	202.1	184.4	173.5	179.3	194.0	205.9
60°	4833.1	3163.4	551.5	251.0	224.3	197.4	175.5	161.9	165.6	176.9	187.5
62.5°	5091.6	3263.1	579.5	249.3	233.6	194.3	164.9	149.6	149.9	159.5	169.0
65°	5140.1	3130.2	467.1	247.6	245.5	194.0	157.4	139.0	136.6	143.4	151.6
67.5°	4794.6	2717.1	337.0	243.8	246.9	191.9	152.3	130.4	124.3	129.1	135.9
70°	4071.0	2188.1	283.1	236.3	230.5	181.7	143.4	121.6	113.4	116.8	121.9
72.5°	3035.0	1618.9	246.9	220.2	200.8	155.4	129.8	111.7	103.1	105.5	109.3
75°	1686.2	863.6	206.6	191.6	163.9	125.7	110.6	99.0	91.5	92.5	96.6
77.5°	560.0	318.6	151.6	152.0	124.0	97.0	91.2	84.7	78.9	79.2	82.6
80°	253.7	176.2	108.6	109.3	86.4	70.3	70.0	68.0	64.2	63.2	65.6
82.5°	147.2	106.9	74.4	71.0	55.7	45.8	50.9	49.9	48.8	45.1	45.8
85°	72.4	57.4	38.9	36.9	30.7	22.9	27.3	28.3	27.3	23.2	22.9
87.5°	17.8	18.8	9.6	8.9	5.1	2.4	4.1	4.1	5.1	3.4	1.7
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)