

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: P597046

Luminaire Tested: **MSA-SA3B-835-U-T4W**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P597046
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-14)
Test Lab: INNOVATIONS CENTER
Issue Date: 5/27/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: MSA-SA3B-835-U-T4W
Description: MESA POST TOP DECORATIVE LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS.
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12288 lumens
Efficiency: N/A
Efficacy: 97.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G3

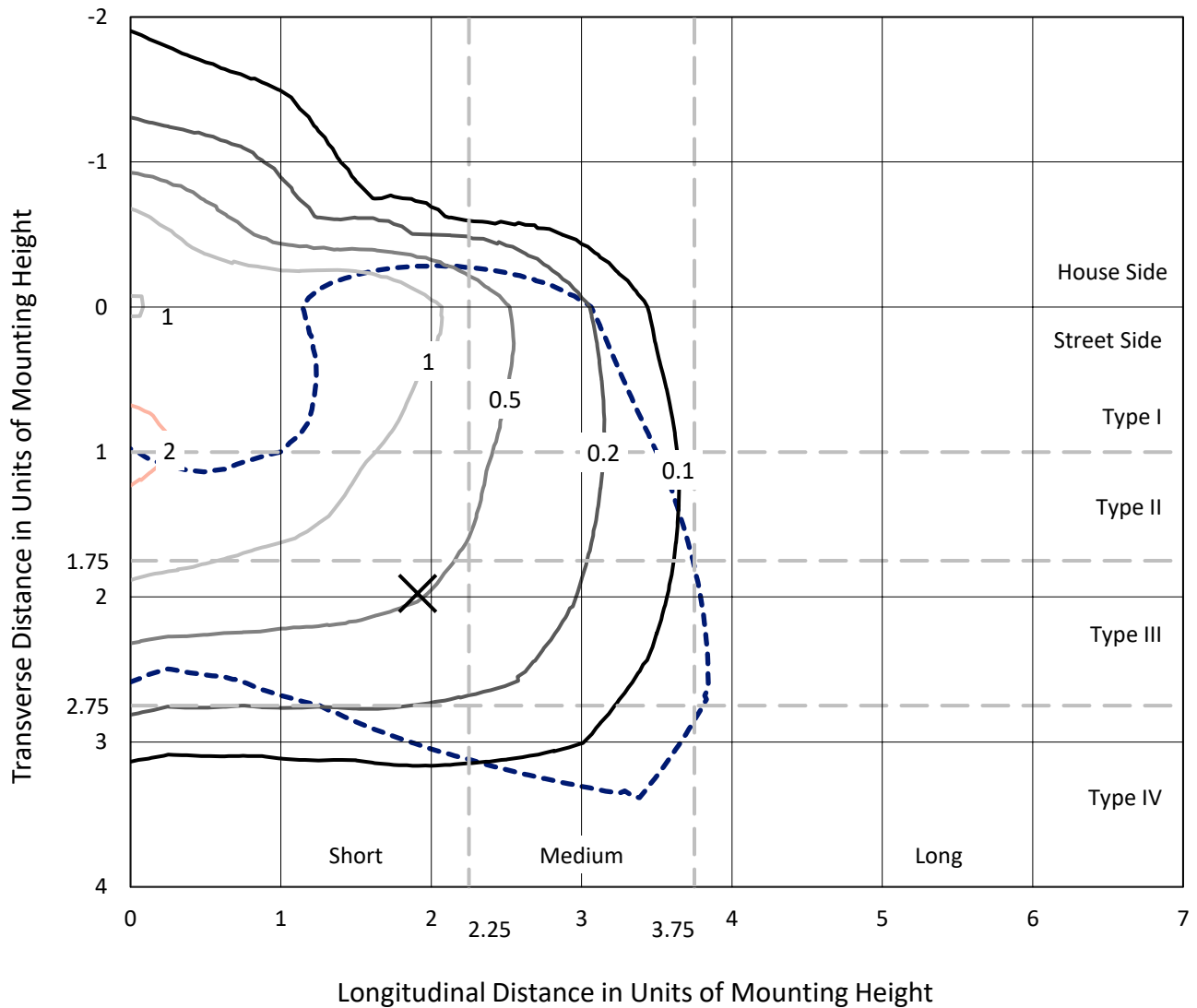
Input Watts (W): 126
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P597046
 CATALOG NUMBER: MSA-SA3B-835-U-T4W

Iso-Footcandle Lines of Horizontal Illumination

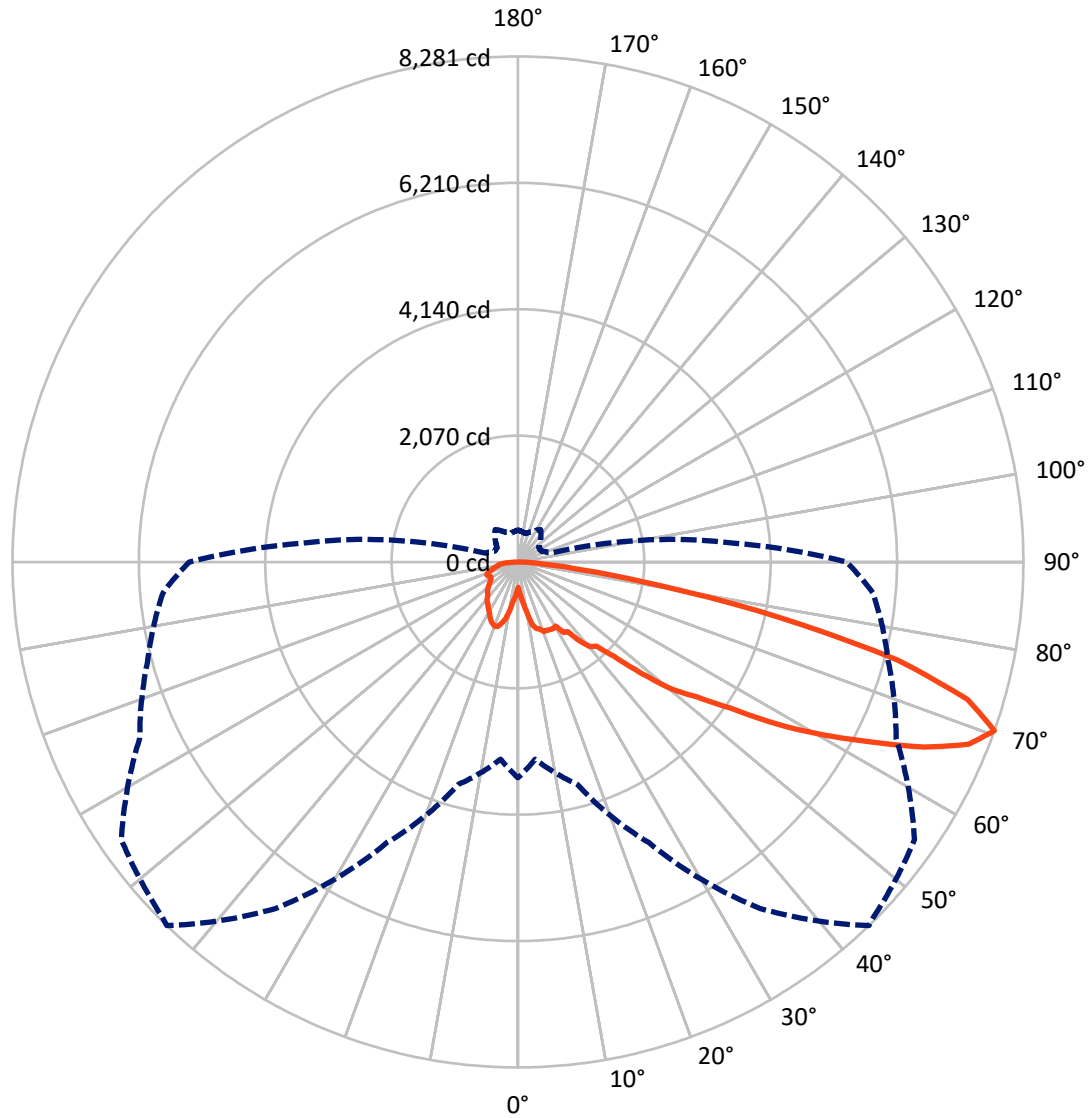
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.4 fc
 Type IV - Short - N/A

REPORT NUMBER: P597046
CATALOG NUMBER: MSA-SA3B-835-U-T4W

Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P597046
 CATALOG NUMBER: MSA-SA3B-835-U-T4W

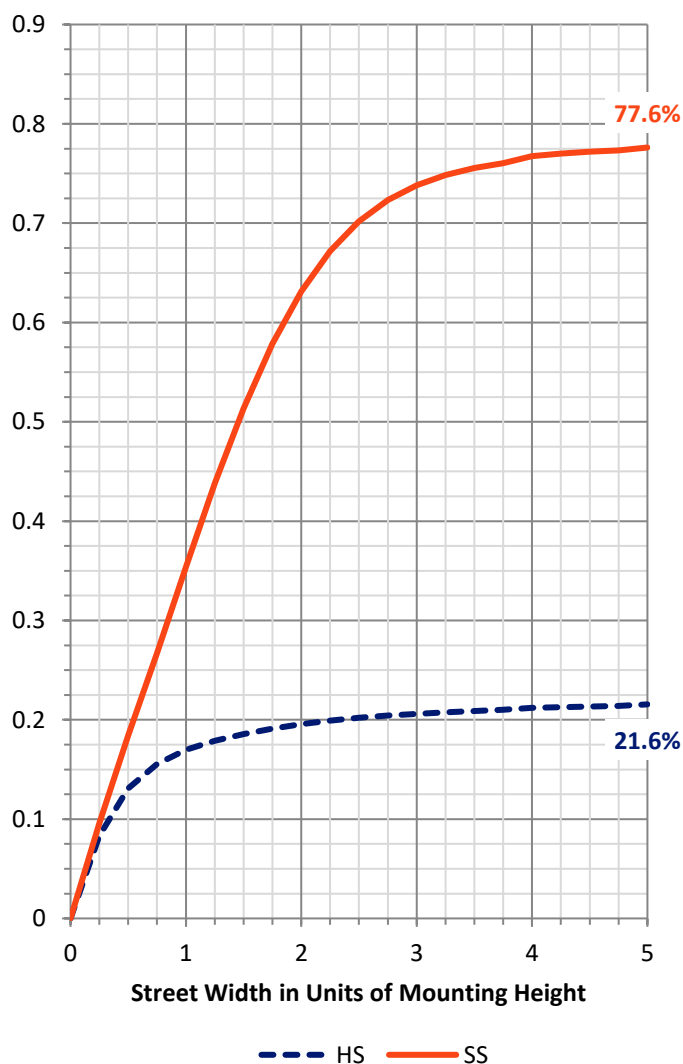
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2711.2	0.0	2711.2
	% Fixture	22.1	0.0	22.1
Street Side	Lumens	9576.8	0.0	9576.8
	% Fixture	77.9	0.0	77.9
Total	Lumens	12288.0	0.0	12288.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.5	0.5
10°-20°	301.6	2.5
20°-30°	563.6	4.6
30°-40°	904.6	7.4
40°-50°	1526.9	12.4
50°-60°	2720.9	22.1
60°-70°	3721.8	30.3
70°-80°	2188.6	17.8
80°-90°	294.7	2.4
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°	12288.0	100.0
0°-180°	12288.0	100.0

Coefficient of Utilization



REPORT NUMBER: P597046

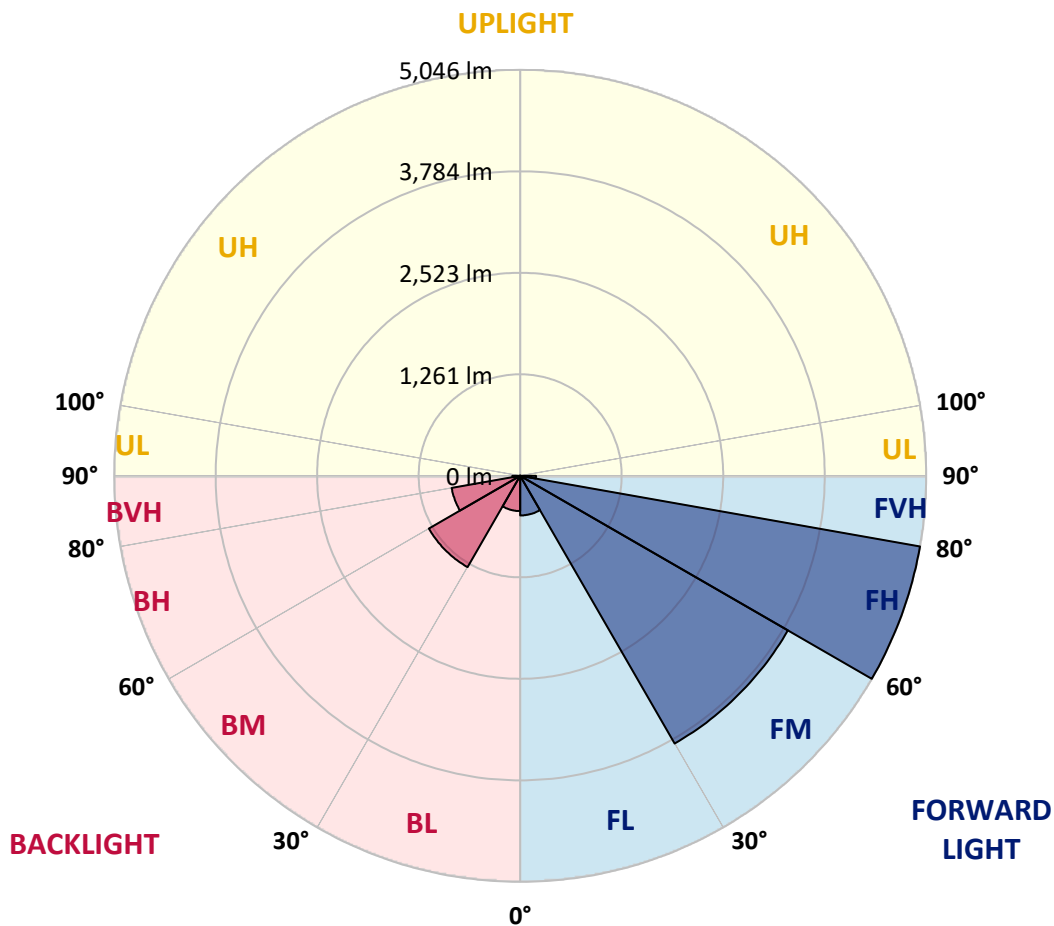
CATALOG NUMBER: MSA-SA3B-835-U-T4W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	492.4	4.0			
FM (30°-60°)	3842.1	31.3			
FH (60°-80°)	5045.8	41.1			G3/7500
FVH (80°-90°)	196.4	1.6			G2/225
BL (0°-30°)	438.2	3.6	B1/500		
BM (30°-60°)	1310.2	10.7	B2/2500		
BH (60°-80°)	864.5	7.0	B2/1000		G2/1000
BVH (80°-90°)	98.3	0.8			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	417.7	417.7	417.7	417.7	417.7	417.7	417.7	417.7	417.7	417.7	417.7
2.5°	506.9	496.8	472.6	480.7	490.7	494.8	493.8	492.8	477.1	471.6	499.3
5°	688.8	666.6	648.9	641.9	618.7	600.6	589.5	618.7	614.2	621.7	640.9
7.5°	860.1	846.0	806.1	792.0	744.7	713.4	709.9	733.1	739.1	727.0	759.8
10°	970.4	946.2	938.2	904.4	871.6	866.6	863.6	853.0	838.4	837.4	808.2
12.5°	1056.1	1068.6	1075.2	1036.4	1037.4	1055.5	1046.0	1003.2	978.5	935.1	938.7
15°	1209.7	1227.9	1176.0	1151.3	1103.9	1131.1	1127.6	1091.8	1088.3	1060.1	1027.3
17.5°	1343.7	1351.8	1265.1	1208.7	1192.6	1153.3	1163.9	1164.9	1118.5	1168.9	1139.7
20°	1354.8	1383.6	1283.8	1171.4	1219.8	1214.8	1216.3	1206.2	1145.2	1228.4	1217.3
22.5°	1409.2	1365.4	1275.7	1193.6	1206.2	1213.8	1220.8	1208.7	1205.2	1251.5	1285.3
25°	1399.2	1385.1	1294.4	1224.8	1226.4	1227.9	1231.4	1267.7	1263.6	1326.6	1344.3
27.5°	1493.4	1471.7	1299.9	1282.8	1243.5	1234.9	1210.7	1286.3	1345.3	1343.7	1441.0
30°	1672.8	1650.6	1428.9	1379.0	1308.0	1220.3	1266.7	1367.4	1413.8	1429.4	1552.8
32.5°	1952.9	1989.2	1682.8	1481.8	1393.6	1374.5	1369.4	1359.4	1474.2	1551.3	1663.7
35°	2355.0	2326.2	1982.1	1702.0	1483.8	1401.7	1412.8	1474.2	1610.8	1660.7	1764.5
37.5°	2815.5	2756.0	2365.5	1951.4	1743.8	1641.0	1604.2	1663.7	1693.9	1733.2	1945.3
40°	3283.5	3138.4	2741.9	2279.4	1900.0	1822.4	1790.2	1717.1	1788.1	1867.7	2137.3
42.5°	3735.5	3623.1	3151.5	2670.9	2163.0	1886.4	1868.8	1797.2	2017.4	2101.5	2414.4
45°	4209.1	3948.6	3571.2	3112.7	2547.4	2200.3	2174.1	2045.6	2327.8	2503.1	2805.4
47.5°	4527.5	4286.2	3955.7	3471.5	2869.4	2725.3	2675.4	2455.7	2711.7	2939.4	3409.5
50°	4828.8	4580.4	4233.3	3864.0	3452.3	3286.6	3180.3	2814.5	3189.8	3560.7	4183.9
52.5°	5260.1	5037.9	4555.7	4259.5	4078.6	3671.0	3591.9	3390.9	3749.1	4249.4	5030.4
55°	5721.1	5418.3	4981.5	4817.2	4744.2	4222.2	4157.7	4029.7	4493.8	4954.3	5853.1
57.5°	5924.7	5608.8	5367.9	5269.7	5263.6	5023.3	4949.2	4860.1	5255.1	5558.9	6627.5
60°	6086.4	5747.3	5651.1	5706.0	5905.5	5747.3	5651.1	5572.5	5874.8	6156.5	7259.4
62.5°	6056.7	5716.6	5766.0	5933.2	6442.6	6489.0	6414.9	6224.5	6489.0	6646.2	7621.6
65°	5577.0	5262.6	5550.3	5947.4	6941.9	7312.3	7308.2	6809.9	6901.6	6901.6	7583.3
67.5°	4736.6	4411.1	4882.2	5822.9	7287.1	7964.7	7965.7	7430.7	6939.4	6875.9	6990.8
70°	3537.0	3242.2	3771.8	5071.2	6930.9	8280.6	8234.8	7931.5	6835.6	6280.9	5839.5
72.5°	2112.6	1922.2	2409.4	3691.7	5912.1	7699.7	7821.6	7354.6	6257.7	5223.3	4174.3
75°	959.3	876.7	1132.1	2120.7	4220.7	6422.5	6555.0	6206.8	4970.4	3756.6	2412.4
77.5°	410.6	388.5	494.3	940.7	2327.2	4392.0	4663.6	4435.8	3367.7	2183.1	1067.1
80°	264.0	249.9	303.8	452.5	1080.7	2373.1	2606.9	2521.7	1715.6	849.0	375.9
82.5°	157.7	153.2	203.0	284.2	589.5	1044.5	1177.0	1208.2	712.4	380.9	215.1
85°	86.2	87.2	111.3	172.3	353.7	406.6	435.3	473.6	335.6	220.7	104.3
87.5°	28.7	33.3	44.8	70.0	126.0	114.9	115.4	134.0	141.6	91.7	33.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P597046

CATALOG NUMBER: MSA-SA3B-835-U-T4W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	417.7	417.7	417.7	417.7	417.7	417.7	417.7	417.7	417.7	417.7	417.7
2.5°	503.8	494.8	471.6	473.1	481.7	483.7	486.2	471.6	468.6	496.3	498.8
5°	643.9	614.2	600.6	596.0	582.9	578.4	602.6	613.7	624.8	646.4	657.0
7.5°	756.3	723.0	698.3	675.7	656.5	645.4	686.2	717.5	736.6	781.0	801.1
10°	807.7	778.9	769.9	751.7	766.3	799.6	807.2	808.2	850.5	849.5	858.0
12.5°	909.9	891.3	861.6	868.1	906.4	940.7	931.1	945.7	960.8	997.1	980.5
15°	1003.2	998.1	970.4	974.9	982.5	1025.3	1030.9	1045.5	1068.6	1097.4	1077.7
17.5°	1118.0	1116.0	1048.5	1042.4	1060.1	1101.9	1088.8	1063.1	1139.7	1170.4	1162.4
20°	1196.1	1181.0	1094.3	1068.6	1113.5	1119.0	1103.9	1063.1	1129.6	1196.6	1214.8
22.5°	1261.1	1243.5	1154.3	1103.9	1094.8	1097.4	1097.4	1089.8	1122.6	1177.5	1177.0
25°	1313.5	1330.1	1216.8	1168.4	1120.0	1059.6	1052.0	1058.6	1077.2	1183.0	1179.5
27.5°	1445.0	1399.2	1237.9	1201.7	1102.4	1007.2	1027.8	1037.9	1044.0	1159.8	1179.0
30°	1530.7	1544.8	1313.5	1221.3	1076.7	948.7	955.8	985.0	1020.3	1157.3	1162.9
32.5°	1646.1	1615.8	1431.4	1188.6	1008.2	913.5	900.4	939.7	992.1	1116.5	1131.6
35°	1753.4	1789.1	1481.3	1182.5	960.3	860.6	874.7	888.3	942.7	1071.2	1088.8
37.5°	2005.3	1923.7	1621.4	1153.3	920.5	833.9	818.7	839.4	885.8	985.0	1025.8
40°	2196.8	2201.8	1651.6	1116.5	844.4	795.6	763.3	784.0	803.6	882.7	900.4
42.5°	2556.0	2446.2	1725.7	1035.9	796.6	738.1	720.0	729.1	732.1	765.3	794.6
45°	3013.0	2755.5	1754.9	927.6	733.6	714.4	677.7	673.1	656.5	661.0	686.7
47.5°	3645.3	3238.2	1733.7	812.2	677.7	683.7	630.8	610.2	587.0	592.5	616.7
50°	4463.0	3854.9	1732.2	714.4	639.4	643.4	600.1	562.8	539.6	551.2	572.4
52.5°	5380.5	4473.6	1739.3	647.4	597.6	595.5	579.9	534.6	515.9	528.0	552.2
55°	6258.2	5005.7	1791.7	605.1	554.2	557.8	563.8	525.5	504.9	515.9	541.1
57.5°	7022.1	5425.9	1772.0	560.3	513.9	530.0	546.2	512.9	497.3	513.4	538.6
60°	7556.1	5620.9	1616.8	517.4	484.2	506.4	537.6	511.4	509.4	544.1	574.4
62.5°	7751.1	5548.8	1314.5	483.7	466.6	503.3	557.2	544.7	546.7	589.5	631.3
65°	7466.4	5169.9	980.5	462.0	453.0	517.9	602.6	564.3	536.6	571.9	610.2
67.5°	6656.8	4496.3	716.5	443.4	437.3	541.1	644.4	562.3	510.9	546.7	577.9
70°	5385.6	3549.1	554.7	419.7	416.7	525.5	648.4	547.2	483.2	506.4	524.0
72.5°	3690.1	2430.0	459.5	397.0	380.9	465.6	615.7	513.4	449.9	463.5	478.1
75°	2062.2	1363.9	386.4	368.8	333.5	414.7	577.4	493.3	425.2	429.3	449.4
77.5°	925.6	590.0	328.0	331.5	290.7	366.8	527.5	461.0	387.5	378.4	398.5
80°	350.2	287.7	266.0	280.1	244.4	317.9	475.6	431.8	347.7	336.1	347.7
82.5°	203.0	174.3	197.5	215.6	194.0	292.2	454.0	405.1	306.3	277.1	287.2
85°	94.2	90.2	118.4	140.1	135.5	227.7	388.5	304.8	218.2	184.4	204.1
87.5°	24.7	27.7	41.8	49.4	50.4	78.1	149.6	113.4	85.1	64.5	62.0
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)