

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: P596952

Luminaire Tested: **MSA-SA2B-835-U-T2**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P596952
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-SA2B-835-U-T2
Description: MESA POST TOP DECORATIVE LUMINAIRE. (2) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS.
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8190 lumens
Efficiency: N/A
Efficacy: 96.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G2

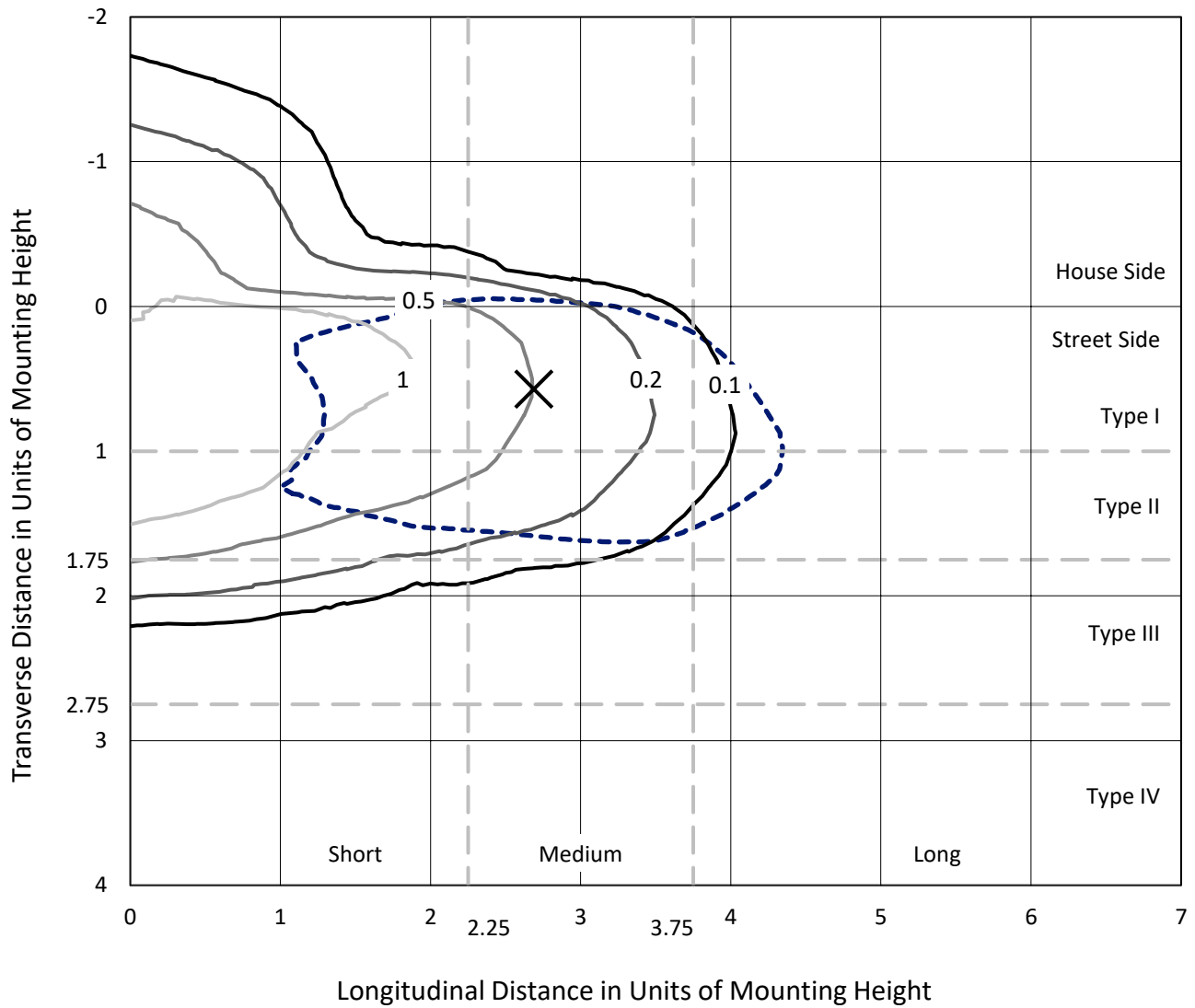
Input Watts (W): 85
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

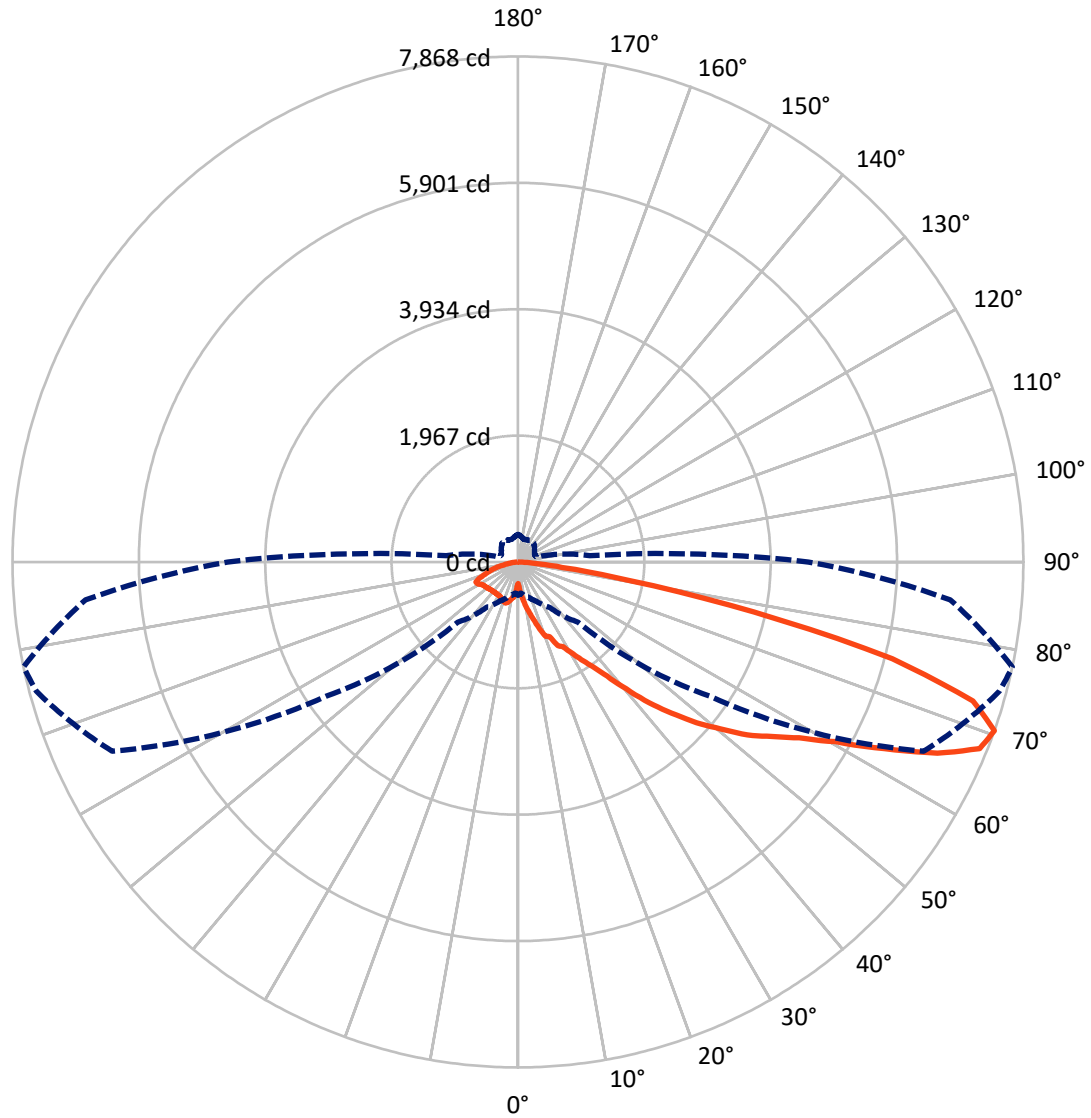
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2 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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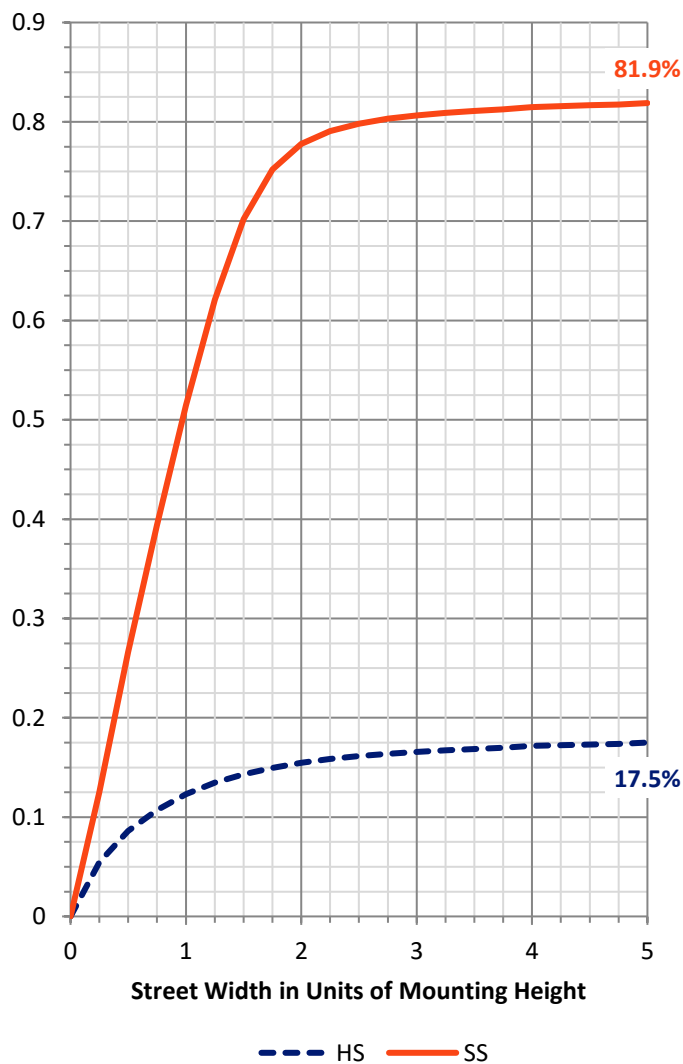
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1461.8	0.0	1461.8
	% Fixture	17.8	0.0	17.8
Street Side	Lumens	6728.2	0.0	6728.2
	% Fixture	82.2	0.0	82.2
Total	Lumens	8190.0	0.0	8190.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.6	0.6
10°-20°	227.4	2.8
20°-30°	437.6	5.3
30°-40°	737.1	9.0
40°-50°	1275.4	15.6
50°-60°	1925.7	23.5
60°-70°	2133.0	26.0
70°-80°	1229.7	15.0
80°-90°	172.5	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°	8190.0	100.0
0°-180°	8190.0	100.0

Coefficient of Utilization



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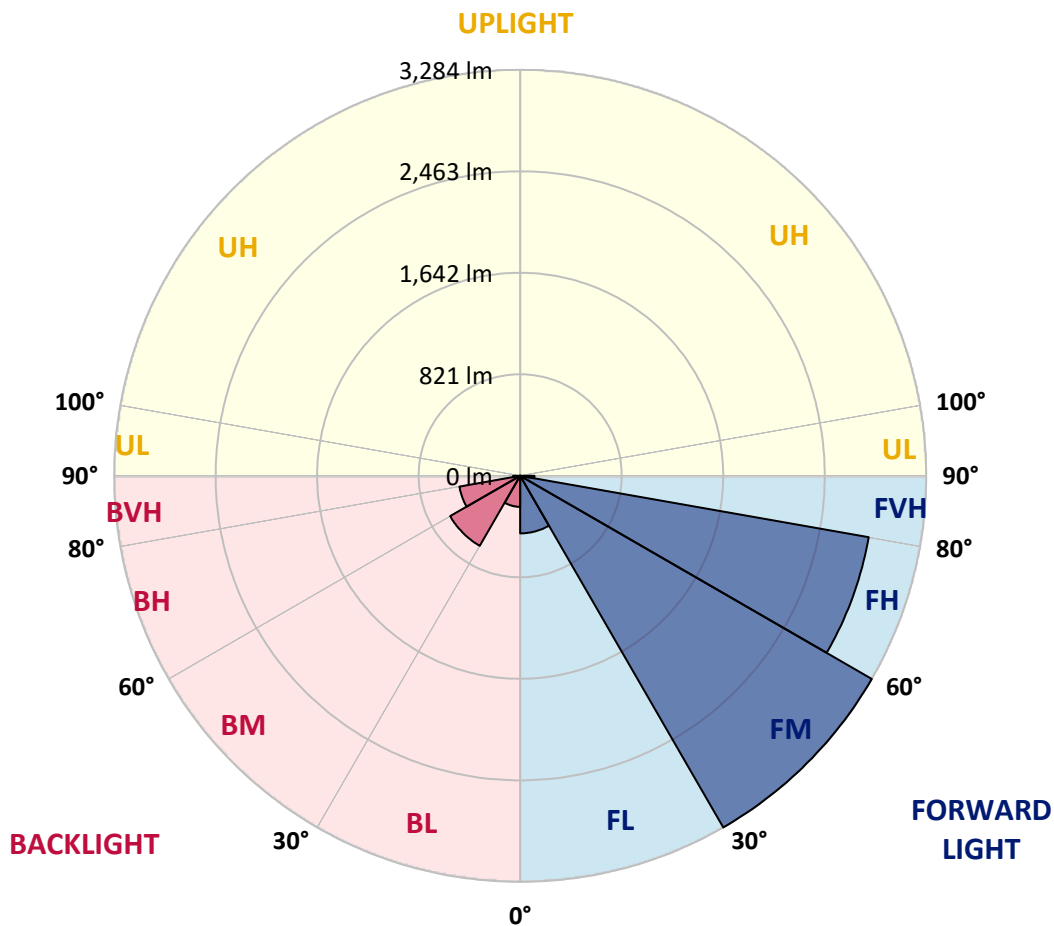
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	465.6	5.7			
FM (30°-60°)	3284.4	40.1			
FH (60°-80°)	2863.1	35.0			G2/5000
FVH (80°-90°)	115.1	1.4			G2/225
BL (0°-30°)	251.0	3.1	B1/500		
BM (30°-60°)	653.8	8.0	B1/1000		
BH (60°-80°)	499.6	6.1	B1/500		G1/500
BVH (80°-90°)	57.4	0.7			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 II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	78°	85°
0°	333.9	333.9	333.9	333.9	333.9	333.9	333.9	333.9	333.9	333.9	333.9
2.5°	429.8	414.5	391.3	400.8	412.4	413.8	410.0	388.9	381.7	397.8	402.5
5°	602.3	576.3	560.6	555.5	538.1	501.9	527.8	514.5	517.3	509.4	524.8
7.5°	747.4	730.0	706.7	700.3	660.3	632.0	649.7	643.9	615.9	605.0	622.4
10°	821.1	802.0	803.0	789.0	778.4	781.2	772.3	746.7	725.9	711.2	669.2
12.5°	865.5	870.3	895.9	888.7	928.7	961.4	936.5	898.6	832.7	819.4	777.8
15°	971.0	988.8	964.9	975.8	992.9	1055.7	1045.4	1037.2	967.6	941.6	864.8
17.5°	1079.6	1083.0	1046.8	1041.0	1082.0	1113.7	1153.7	1107.6	1116.1	1098.0	973.7
20°	1102.8	1126.3	1074.5	1038.6	1122.9	1185.8	1235.3	1186.4	1231.5	1236.3	1063.5
22.5°	1187.8	1159.5	1091.2	1056.0	1129.8	1206.9	1287.5	1314.8	1300.5	1260.2	1150.2
25°	1246.9	1231.8	1162.2	1123.3	1151.3	1222.3	1363.6	1435.0	1447.6	1442.2	1232.9
27.5°	1356.5	1364.0	1220.6	1231.5	1192.6	1199.1	1409.4	1594.4	1515.6	1493.7	1335.3
30°	1529.6	1496.1	1335.3	1344.2	1279.6	1268.7	1506.0	1732.0	1661.4	1635.1	1419.6
32.5°	1710.2	1713.3	1518.0	1442.2	1407.7	1396.8	1486.9	1804.1	1845.7	1811.6	1547.0
35°	1964.9	1947.1	1716.0	1616.3	1491.7	1472.6	1623.1	2013.0	2089.5	1993.9	1698.2
37.5°	2352.7	2299.1	2030.1	1799.6	1707.4	1685.6	1817.7	2200.5	2372.5	2253.7	1945.4
40°	2664.1	2555.2	2310.7	2030.1	1874.1	1901.0	1956.0	2427.8	2666.2	2599.2	2174.2
42.5°	2912.3	2815.7	2509.4	2312.1	2100.1	2066.6	2126.7	2709.5	3065.6	3000.1	2459.6
45°	3150.3	2953.6	2732.7	2555.2	2351.4	2392.0	2383.1	2997.0	3555.6	3353.8	2711.9
47.5°	3385.2	3200.5	2969.3	2730.7	2525.5	2778.5	2683.9	3210.7	3886.1	3736.5	2977.5
50°	3687.0	3483.9	3220.6	2980.6	2857.7	3042.7	2884.0	3391.7	4256.2	4080.7	3228.1
52.5°	3887.4	3689.7	3458.9	3287.5	3276.3	3204.9	3164.3	3620.8	4580.5	4474.0	3493.8
55°	3863.9	3673.4	3568.9	3587.7	3727.0	3486.3	3453.1	3959.8	4918.9	4795.6	3780.6
57.5°	3568.5	3360.6	3382.8	3494.1	3868.3	3980.3	3924.0	4322.1	5220.7	5164.7	4135.3
60°	2779.9	2673.0	2853.6	3057.1	3679.2	4125.1	4521.1	4763.9	5592.1	5681.6	4692.5
62.5°	1805.8	1663.1	1948.5	2294.0	3114.8	4029.5	5129.2	5601.7	6200.6	6403.7	5539.2
65°	935.5	912.6	1112.4	1429.9	2168.4	3435.7	5343.6	6480.5	6940.1	7176.7	6348.0
67.5°	680.1	637.8	730.3	917.1	1323.7	2342.8	4937.3	7152.8	7533.8	7750.6	6818.2
70°	517.9	486.5	557.2	672.9	864.5	1323.3	3644.7	6969.4	7762.9	7868.1	6755.7
72.5°	387.9	360.9	422.7	530.6	666.1	745.0	2154.4	5730.4	7372.0	7407.8	6063.3
75°	309.7	288.8	315.5	418.9	542.9	507.0	1144.4	4151.7	5989.6	6020.3	4631.4
77.5°	254.0	236.3	247.2	314.1	422.3	381.4	567.8	2640.9	3802.8	3755.6	2605.7
80°	207.2	191.9	197.0	227.0	321.6	284.7	318.9	1377.6	1814.0	1740.9	1083.7
82.5°	159.4	146.5	156.7	167.0	232.8	204.5	186.1	626.8	742.9	692.1	397.4
85°	106.9	94.9	136.2	125.3	152.3	125.6	101.7	249.6	276.9	258.1	139.6
87.5°	29.4	27.7	45.8	62.5	62.5	47.5	37.2	60.4	77.2	67.6	32.8
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°	333.9	333.9	333.9	333.9	333.9	333.9	333.9	333.9	333.9	333.9	333.9
2.5°	404.6	397.1	377.3	375.6	380.3	381.0	378.0	370.8	367.0	387.5	384.4
5°	521.0	494.4	478.3	463.7	443.2	428.5	432.2	442.5	445.9	461.3	463.0
7.5°	611.5	576.3	541.2	494.0	463.0	443.2	458.2	469.1	477.6	499.5	508.4
10°	650.7	612.5	562.7	513.2	504.6	508.0	499.5	502.2	515.5	516.6	521.0
12.5°	723.8	680.5	590.7	545.9	543.5	550.7	547.6	560.3	569.5	594.4	583.8
15°	793.8	738.5	611.8	566.1	556.2	570.5	587.2	608.4	628.2	651.8	639.8
17.5°	878.8	795.5	612.9	556.9	558.6	589.3	606.7	618.3	677.4	709.8	693.4
20°	932.4	801.3	590.0	534.0	558.6	586.2	610.5	623.1	689.3	738.2	749.4
22.5°	980.9	803.4	572.2	521.7	537.4	573.9	610.5	638.5	680.8	727.6	729.3
25°	1007.5	801.7	549.3	522.7	537.1	555.2	587.6	613.2	644.6	709.8	711.5
27.5°	1075.8	779.5	526.8	526.8	534.3	535.0	576.3	591.3	595.8	655.2	665.8
30°	1095.6	784.2	524.1	526.1	529.9	523.1	541.2	551.1	557.5	608.8	610.5
32.5°	1127.4	746.0	532.3	520.0	515.2	514.2	518.6	527.5	530.2	561.6	567.4
35°	1166.0	730.6	535.0	518.3	508.7	503.6	516.9	506.0	514.5	551.4	555.5
37.5°	1291.6	709.5	549.0	518.3	506.0	500.2	493.7	498.8	529.2	564.7	586.6
40°	1371.8	716.0	545.6	523.4	496.8	491.3	480.4	499.2	546.3	609.1	625.5
42.5°	1512.5	719.7	549.7	521.0	499.8	478.7	485.8	506.3	555.8	591.7	616.9
45°	1657.9	731.3	547.0	513.8	493.0	502.9	493.0	511.4	535.0	536.0	555.2
47.5°	1800.7	778.1	541.2	499.2	491.3	517.3	492.0	495.1	496.8	502.9	525.4
50°	1968.3	827.9	533.0	478.7	493.7	517.9	495.7	480.7	479.0	499.2	524.4
52.5°	2158.8	884.3	522.4	458.9	479.7	511.4	508.7	481.7	467.1	486.5	511.8
55°	2383.1	948.5	510.1	439.1	464.3	512.1	515.9	474.6	467.4	488.6	515.5
57.5°	2681.2	1041.3	486.2	410.4	445.6	501.5	497.5	466.4	459.6	482.1	510.1
60°	3189.9	1219.9	452.0	382.1	425.4	475.6	482.4	451.7	444.9	469.8	499.2
62.5°	3871.0	1434.7	410.7	354.4	400.8	447.6	463.7	430.5	429.8	461.6	492.3
65°	4505.1	1556.5	368.1	329.1	375.6	421.7	442.5	410.7	412.1	452.0	482.8
67.5°	4768.6	1413.1	329.8	306.6	346.5	392.0	425.1	395.4	390.9	439.1	467.4
70°	4521.1	1122.6	296.7	282.7	313.8	359.9	400.8	374.9	364.6	408.3	430.5
72.5°	4000.4	935.8	265.6	254.7	285.1	326.1	368.1	347.2	333.9	367.4	387.2
75°	3127.1	767.9	230.1	227.0	252.3	295.3	333.9	319.6	302.5	323.7	343.5
77.5°	1780.5	485.8	193.2	195.3	213.4	258.8	292.9	281.7	264.3	273.1	296.0
80°	712.5	245.1	155.3	156.7	172.1	212.7	242.8	238.7	220.6	227.7	243.4
82.5°	266.3	134.5	114.7	115.4	130.8	168.3	207.2	205.2	188.1	183.0	191.9
85°	105.8	66.6	70.3	73.4	88.1	121.2	166.3	147.5	127.4	111.6	117.1
87.5°	25.3	21.2	24.6	25.9	28.7	37.9	60.8	48.8	50.2	40.3	30.0
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)