

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: P367694

Luminaire Tested: **MSA-SA3A-730-U-T3**

Issue Date: 12/2/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P367694  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-10)  
Test Lab: INNOVATION CENTER  
Issue Date: 12/2/2019  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: MSA-SA3A-730-U-T3  
Description: MESA POST TOP DECORATIVE LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS.  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10667 lumens  
Efficiency: N/A  
Efficacy: 111.1 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G2

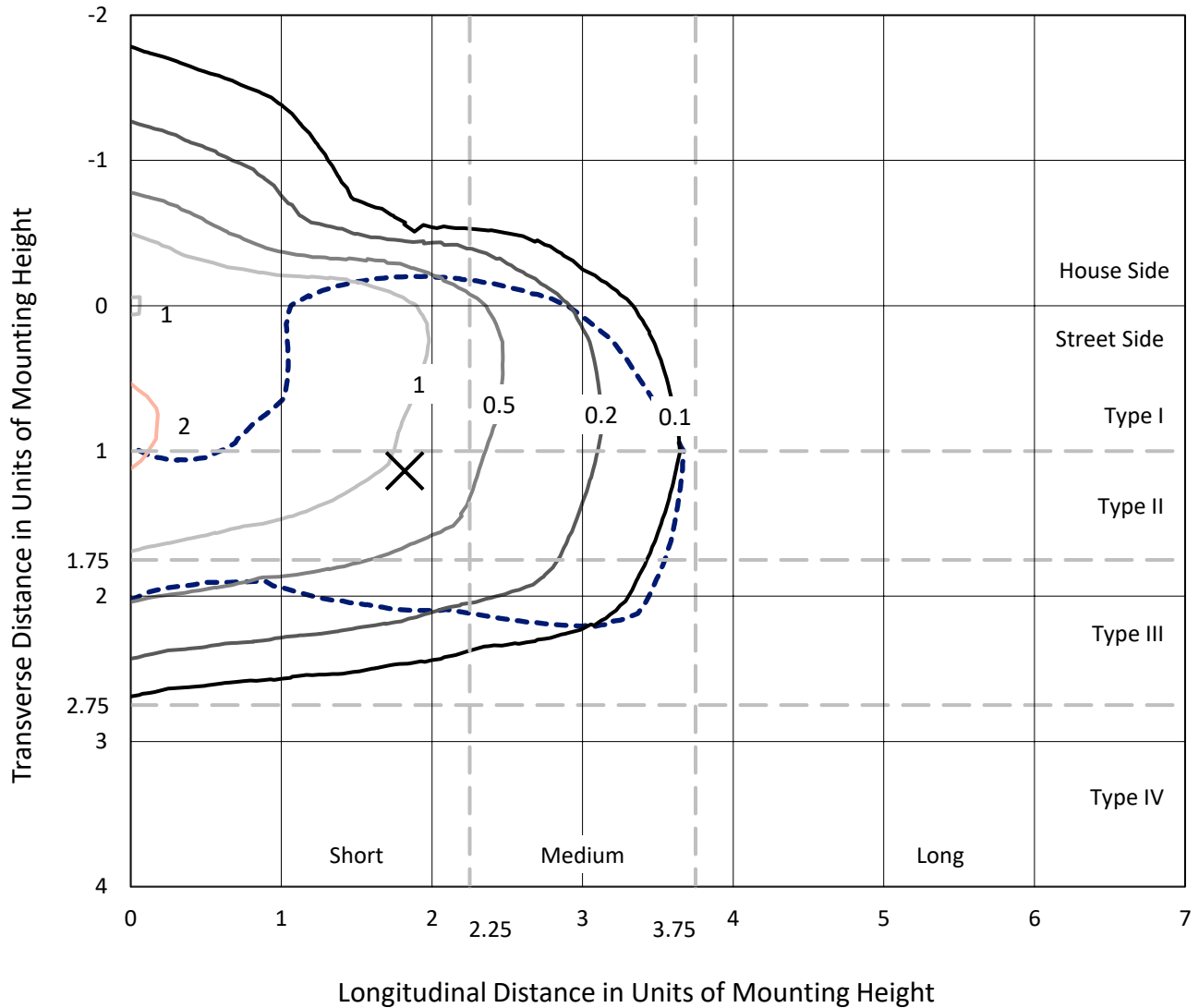
Input Watts (W): 96  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P367694  
 CATALOG NUMBER: MSA-SA3A-730-U-T3

### Iso-Footcandle Lines of Horizontal Illumination

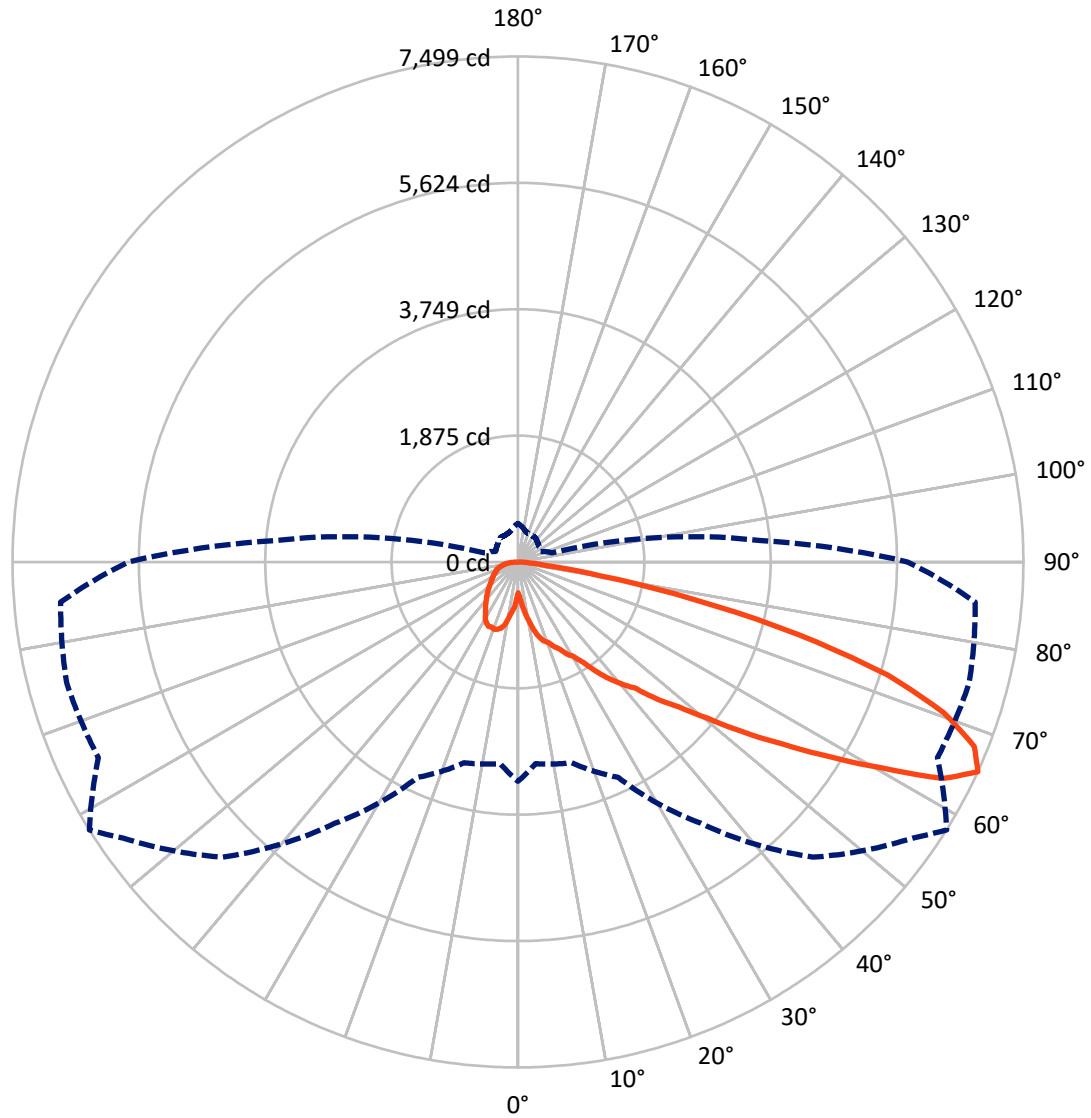
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.2 fc  
 Type III - Short - N/A

REPORT NUMBER: P367694  
CATALOG NUMBER: MSA-SA3A-730-U-T3

### Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral    - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P367694

CATALOG NUMBER: MSA-SA3A-730-U-T3

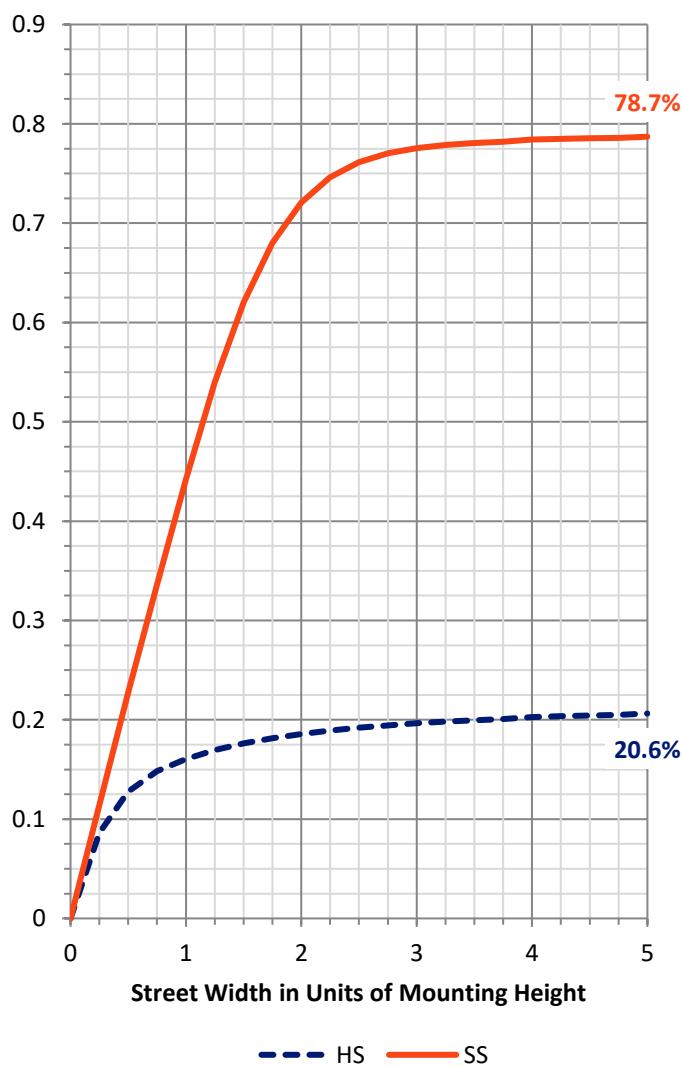
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2246.8	0.0	2246.8
	% Fixture	21.1	0.0	21.1
<b>Street Side</b>	Lumens	8420.2	0.0	8420.2
	% Fixture	78.9	0.0	78.9
<b>Total</b>	Lumens	10667.0	0.0	10667.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	69.8	0.7
10°-20°	304.4	2.9
20°-30°	584.1	5.5
30°-40°	964.4	9.0
40°-50°	1602.9	15.0
50°-60°	2647.2	24.8
60°-70°	2969.7	27.8
70°-80°	1350.3	12.7
80°-90°	174.1	1.6
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°	10667.0	100.0
0°-180°	10667.0	100.0

**Coefficient of Utilization**

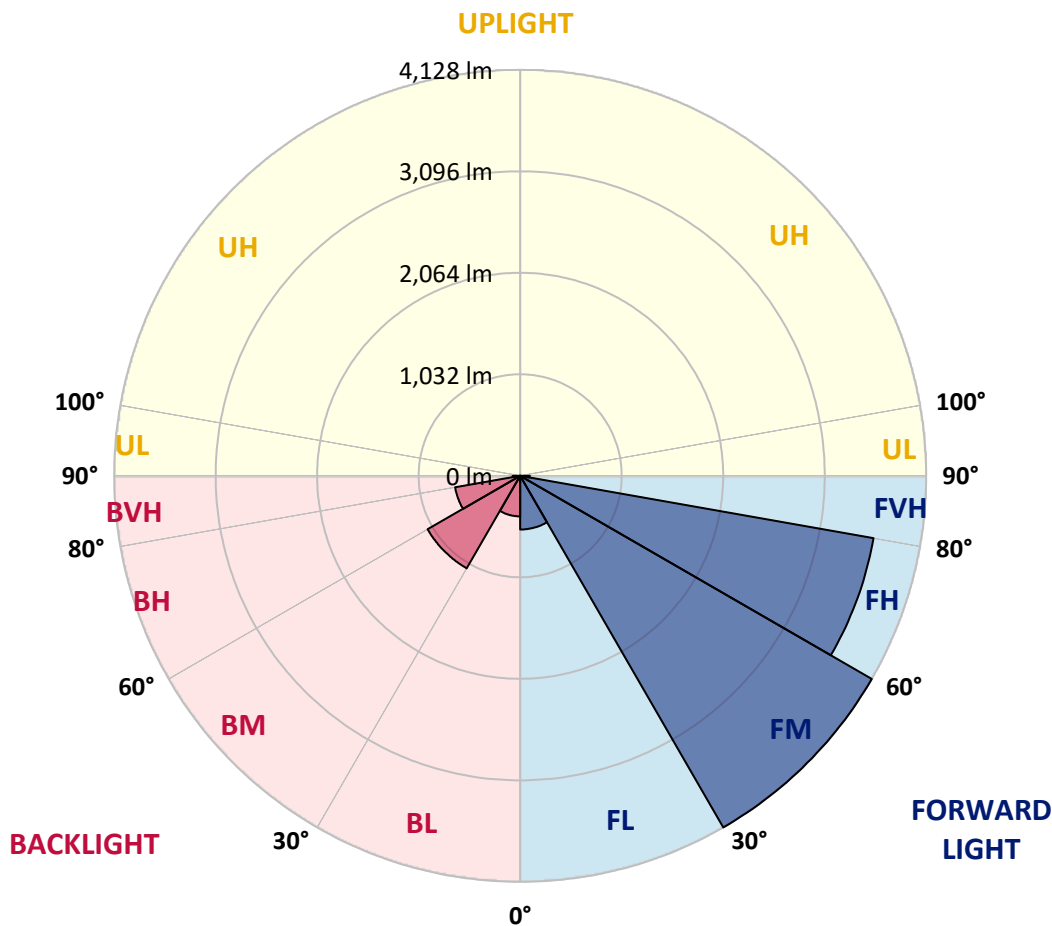


REPORT NUMBER: P367694  
 CATALOG NUMBER: MSA-SA3A-730-U-T3

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	545.9	5.1			
FM (30°-60°)	4128.0	38.7			
FH (60°-80°)	3648.3	34.2			G2/5000
FVH (80°-90°)	98.1	0.9			G1/100
BL (0°-30°)	412.5	3.9	B1/500		
BM (30°-60°)	1086.6	10.2	B2/2500		
BH (60°-80°)	671.6	6.3	B2/1000		G2/1000
BVH (80°-90°)	76.1	0.7			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**  
 Type III Short





REPORT NUMBER: P367694

CATALOG NUMBER: MSA-SA3A-730-U-T3

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	458.0	458.0	458.0	458.0	458.0	458.0	458.0	458.0	458.0	458.0	458.0
2.5°	546.8	530.4	502.9	509.5	525.5	534.4	529.1	522.0	512.6	510.9	551.7
5°	708.1	676.5	663.7	658.3	638.8	627.2	647.2	644.6	655.2	674.8	714.8
7.5°	825.8	803.6	782.3	780.1	742.3	729.0	755.6	769.8	788.9	789.4	843.6
10°	888.9	869.8	869.3	849.4	846.2	871.6	872.0	882.7	884.9	907.5	896.9
12.5°	957.3	956.0	980.4	980.0	1008.4	1050.1	1029.3	1029.3	1035.5	1007.9	1041.7
15°	1120.3	1134.5	1088.8	1096.3	1096.3	1137.2	1135.9	1143.9	1163.0	1155.9	1140.8
17.5°	1290.0	1298.9	1248.3	1201.2	1204.7	1195.8	1227.8	1230.9	1212.7	1295.3	1277.1
20°	1399.3	1433.9	1327.3	1268.3	1279.8	1290.0	1291.4	1272.3	1262.9	1390.0	1365.1
22.5°	1534.3	1505.0	1407.3	1342.0	1359.3	1345.5	1342.9	1357.5	1370.4	1418.4	1458.8
25°	1624.5	1622.3	1505.0	1433.5	1414.4	1410.4	1437.5	1431.7	1462.4	1549.4	1524.1
27.5°	1755.6	1796.4	1588.5	1606.3	1522.3	1433.9	1521.0	1547.2	1602.3	1588.1	1644.5
30°	2009.7	1979.0	1761.8	1756.9	1661.8	1587.6	1648.1	1625.9	1724.9	1721.8	1763.6
32.5°	2217.1	2238.4	1965.2	1914.2	1843.5	1754.2	1714.3	1776.0	1829.3	1916.8	1940.4
35°	2436.6	2431.7	2173.6	2070.5	1953.7	1916.8	1966.1	1991.9	2105.2	2185.6	2129.6
37.5°	2777.7	2739.1	2443.7	2248.6	2161.1	2147.8	2232.2	2194.9	2317.5	2336.6	2368.1
40°	3094.9	2978.5	2690.6	2467.2	2328.2	2377.9	2380.6	2385.5	2451.2	2503.2	2659.1
42.5°	3396.5	3314.8	2941.6	2773.7	2568.9	2520.5	2550.7	2560.9	2727.1	2833.2	3049.1
45°	3808.8	3589.8	3302.3	3130.0	2900.8	2839.0	2817.7	2905.7	3066.0	3307.7	3492.9
47.5°	4157.5	3959.8	3685.7	3458.7	3202.4	3378.7	3257.9	3208.6	3424.1	3723.5	4018.4
50°	4446.7	4229.0	3960.2	3829.2	3788.3	3945.6	3632.0	3637.7	3835.0	4257.4	4595.5
52.5°	4670.5	4438.2	4200.1	4133.5	4361.8	4452.4	4225.9	4191.7	4335.6	4834.9	5240.9
55°	4879.8	4633.2	4449.3	4585.3	4969.9	4980.2	4964.2	4774.5	4947.7	5453.7	5909.0
57.5°	4933.5	4667.9	4545.7	4740.7	5260.9	5665.6	5824.6	5452.4	5628.7	6016.5	6481.2
60°	4656.8	4429.3	4380.5	4645.2	5418.2	6009.9	6425.2	6202.7	6136.5	6468.3	6881.9
62.5°	4089.9	3826.1	3865.6	4233.4	5252.5	6146.2	6899.6	7073.3	6672.7	6827.7	7056.9
65°	3255.3	3003.4	3083.3	3525.8	4732.3	6191.6	7142.2	7498.5	6866.3	6929.4	6809.0
67.5°	2295.7	2067.0	2167.8	2740.0	3936.7	5611.4	7183.9	7300.3	6660.2	6639.3	6132.0
70°	1300.7	1157.2	1266.5	1743.6	2778.6	4470.2	6856.6	6703.3	6290.6	5994.8	5130.8
72.5°	596.6	547.3	599.7	887.6	1599.6	2974.5	5597.6	5736.7	5420.4	5050.4	3903.4
75°	317.2	299.8	322.1	443.3	748.5	1618.3	3977.1	4289.8	4121.5	3830.5	2546.3
77.5°	235.9	222.6	233.2	287.4	399.8	633.0	2259.8	2654.2	2718.2	2450.3	1414.0
80°	180.8	170.1	180.8	217.2	276.7	300.7	966.2	1237.2	1409.1	1138.5	561.9
82.5°	134.2	127.0	143.5	163.0	194.6	187.9	342.9	426.9	550.4	376.3	219.0
85°	106.6	97.7	103.9	110.6	124.4	103.1	156.8	175.5	185.7	155.5	80.8
87.5°	41.8	38.6	75.5	59.5	50.6	31.1	47.1	53.3	54.6	52.4	23.5
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: P367694

CATALOG NUMBER: MSA-SA3A-730-U-T3

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	458.0	458.0	458.0	458.0	458.0	458.0	458.0	458.0	458.0	458.0	458.0
2.5°	556.2	551.7	525.5	534.0	547.7	550.4	556.2	540.2	532.2	561.5	562.8
5°	718.3	694.3	681.9	683.2	674.3	660.6	681.4	695.2	700.5	722.3	730.3
7.5°	844.0	815.1	794.3	770.3	736.5	714.8	751.2	777.8	792.0	837.4	855.1
10°	900.0	876.9	872.5	842.2	841.4	840.9	839.1	829.8	860.5	856.0	868.5
12.5°	1015.5	1010.6	968.4	956.4	957.7	956.4	919.1	917.3	917.8	958.6	944.0
15°	1123.0	1123.9	1085.2	1041.7	1002.6	990.6	976.0	969.3	979.1	1002.2	987.9
17.5°	1255.8	1260.3	1149.6	1080.8	1029.3	1027.9	992.8	951.5	1011.0	1025.3	1009.7
20°	1341.5	1322.9	1187.0	1071.5	1056.8	1016.8	973.3	916.4	968.0	1002.6	1012.4
22.5°	1422.8	1390.4	1221.6	1087.9	1017.7	970.2	928.0	891.1	907.5	946.2	940.0
25°	1477.9	1469.0	1269.6	1127.4	1016.4	910.7	853.8	830.2	838.7	898.7	892.9
27.5°	1609.4	1513.5	1261.1	1137.7	973.7	829.4	800.9	775.6	767.2	832.0	849.8
30°	1697.4	1657.8	1317.6	1121.7	920.0	762.7	721.0	715.6	718.3	792.0	796.9
32.5°	1846.6	1744.0	1410.0	1060.4	841.8	713.4	665.4	667.7	679.7	733.4	744.5
35°	2002.1	1940.8	1422.4	1016.4	778.3	661.0	641.5	625.9	632.6	679.7	681.9
37.5°	2290.9	2079.0	1498.8	948.4	731.6	641.0	603.7	589.9	593.5	620.1	639.2
40°	2544.9	2356.6	1463.3	882.7	673.9	614.4	567.7	557.5	546.8	573.0	585.0
42.5°	2952.3	2554.7	1451.3	810.3	646.8	578.4	546.4	519.3	509.1	531.3	553.1
45°	3359.6	2764.8	1386.0	737.0	608.6	575.7	515.3	489.5	492.2	512.2	534.4
47.5°	3813.6	3046.9	1275.4	665.9	566.8	562.8	484.2	473.1	481.1	503.3	525.5
50°	4350.3	3346.3	1183.9	601.9	537.1	524.2	480.2	466.9	474.4	500.6	522.4
52.5°	4937.1	3674.6	1117.2	542.8	503.3	493.5	485.5	472.7	481.5	504.2	526.8
55°	5520.3	3974.4	1071.9	502.4	474.4	480.6	496.6	487.3	491.8	508.6	531.3
57.5°	5953.0	4132.6	980.8	459.3	450.9	473.1	498.0	482.4	485.1	508.6	533.1
60°	6204.4	4162.8	831.1	424.2	432.2	458.0	484.2	464.2	462.4	501.1	531.7
62.5°	6176.9	3987.3	659.2	392.2	410.9	435.3	463.3	444.2	449.1	502.0	534.4
65°	5782.4	3628.8	524.2	365.2	385.1	410.5	446.0	438.4	462.0	537.5	572.6
67.5°	5089.4	3105.1	421.1	339.8	361.2	393.6	458.0	478.0	488.2	573.9	609.9
70°	4124.6	2412.6	350.9	317.6	342.1	401.6	492.6	488.6	480.2	556.6	585.0
72.5°	2979.8	1653.8	308.7	295.9	318.5	377.6	493.5	472.2	461.5	508.2	528.6
75°	1864.4	986.6	269.6	268.3	282.5	338.5	471.3	452.2	423.3	446.4	473.1
77.5°	1064.8	505.1	227.0	239.0	247.4	293.6	422.0	404.7	378.9	388.7	414.9
80°	406.5	244.3	191.5	212.3	210.1	248.8	357.6	353.6	324.3	327.4	343.4
82.5°	191.5	136.8	159.0	182.6	170.6	198.1	290.5	289.2	263.4	238.5	251.4
85°	71.1	72.9	116.4	139.0	118.6	127.9	210.1	204.3	179.5	151.5	167.5
87.5°	16.0	26.2	57.3	72.4	41.3	39.5	84.8	73.7	71.1	42.2	44.4
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)