

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: P597040

Luminaire Tested: **MSA-SA3B-835-U-T2**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P597040
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-SA3B-835-U-T2
Description: MESA POST TOP DECORATIVE LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS.
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12087 lumens
Efficiency: N/A
Efficacy: 95.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

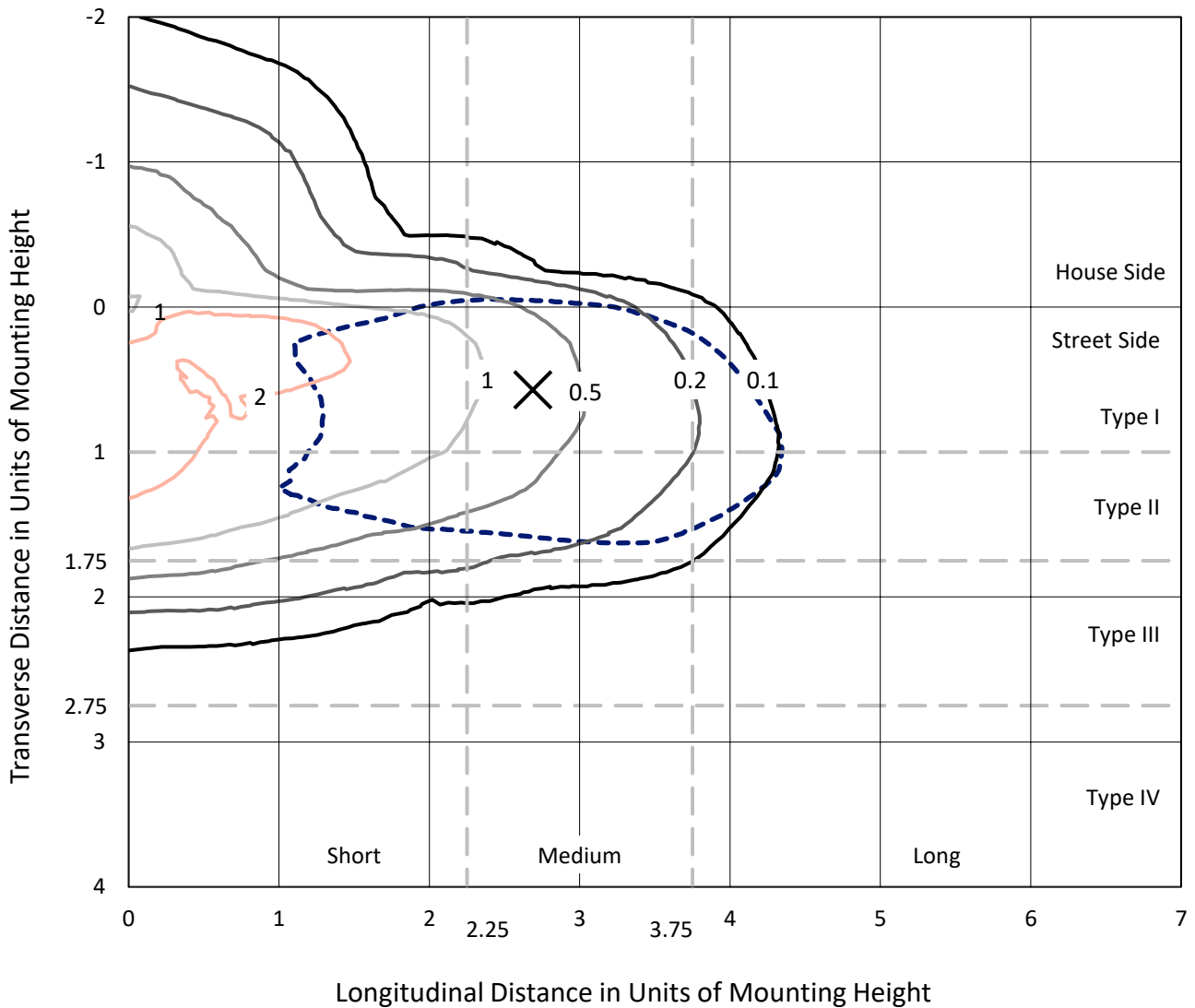
Input Watts (W): 126
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

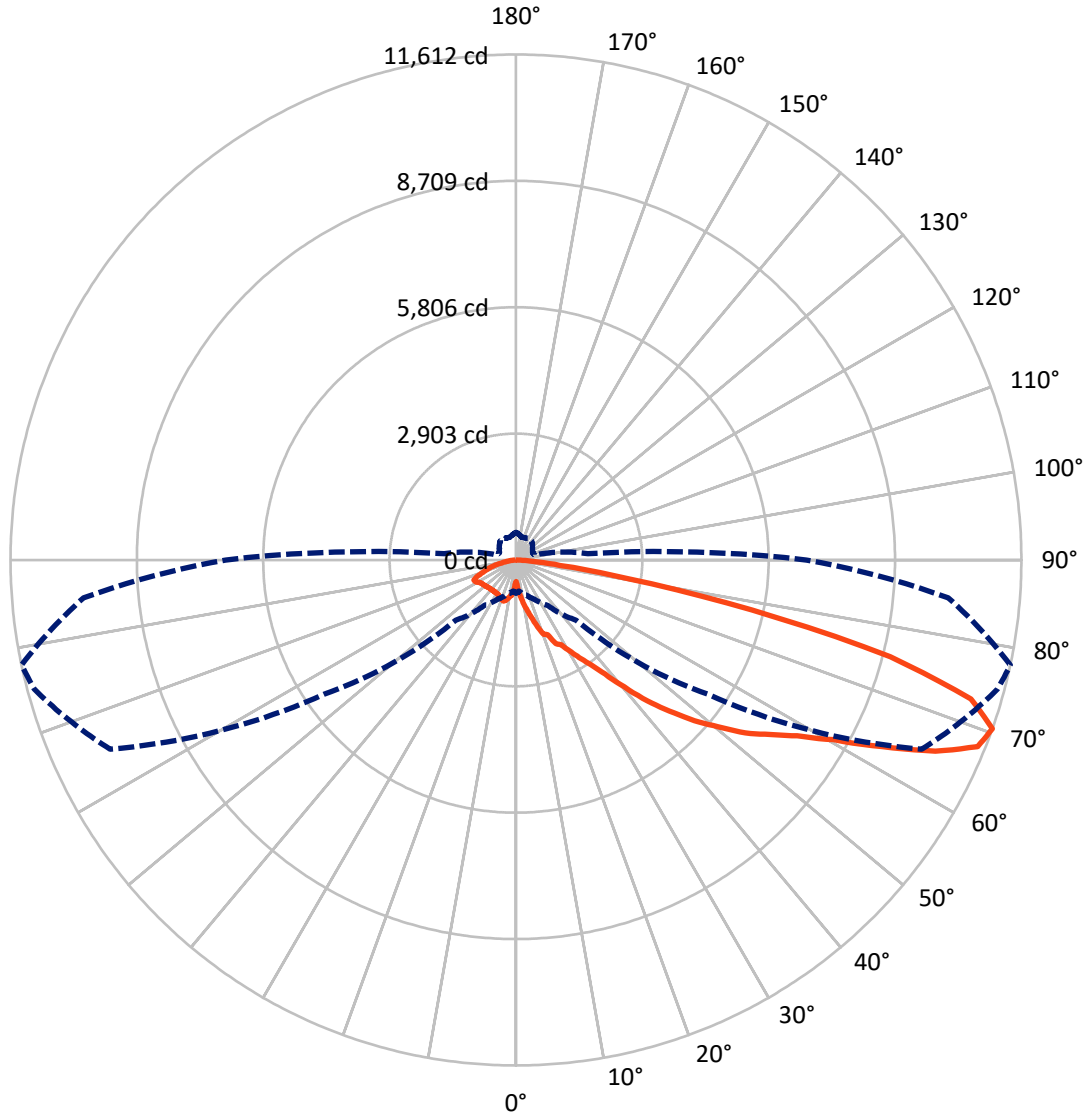
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.9 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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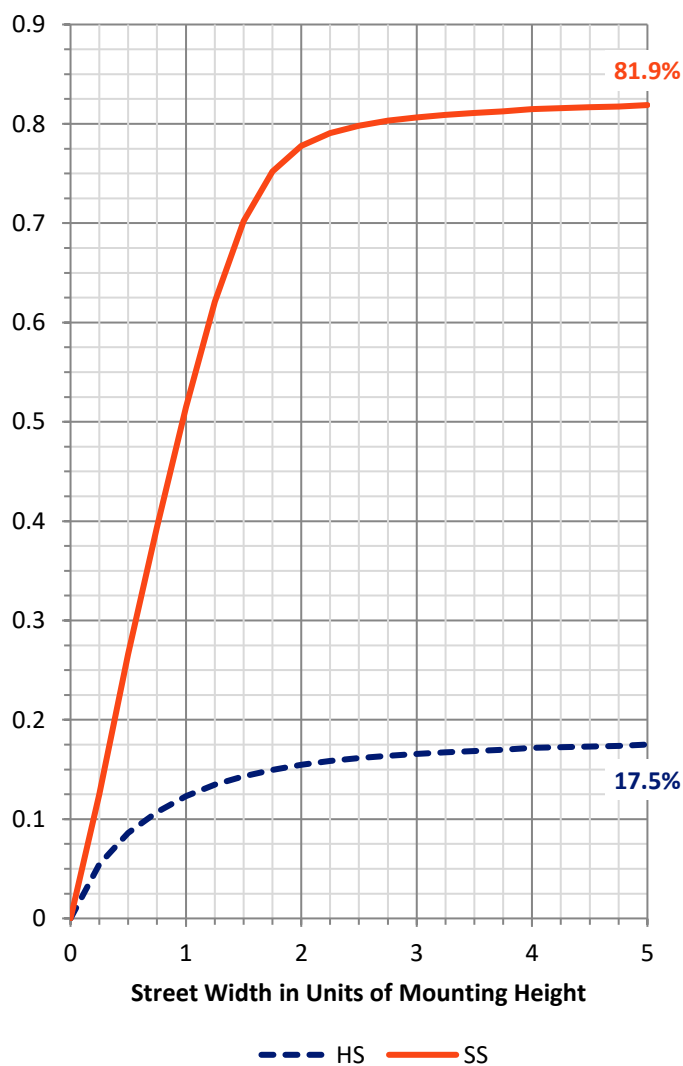
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2157.4	0.0	2157.4
	% Fixture	17.8	0.0	17.8
Street Side	Lumens	9929.6	0.0	9929.6
	% Fixture	82.2	0.0	82.2
Total	Lumens	12087.0	0.0	12087.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.2	0.6
10°-20°	335.5	2.8
20°-30°	645.9	5.3
30°-40°	1087.9	9.0
40°-50°	1882.3	15.6
50°-60°	2842.0	23.5
60°-70°	3147.9	26.0
70°-80°	1814.9	15.0
80°-90°	254.5	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°	12087.0	100.0
0°-180°	12087.0	100.0

Coefficient of Utilization

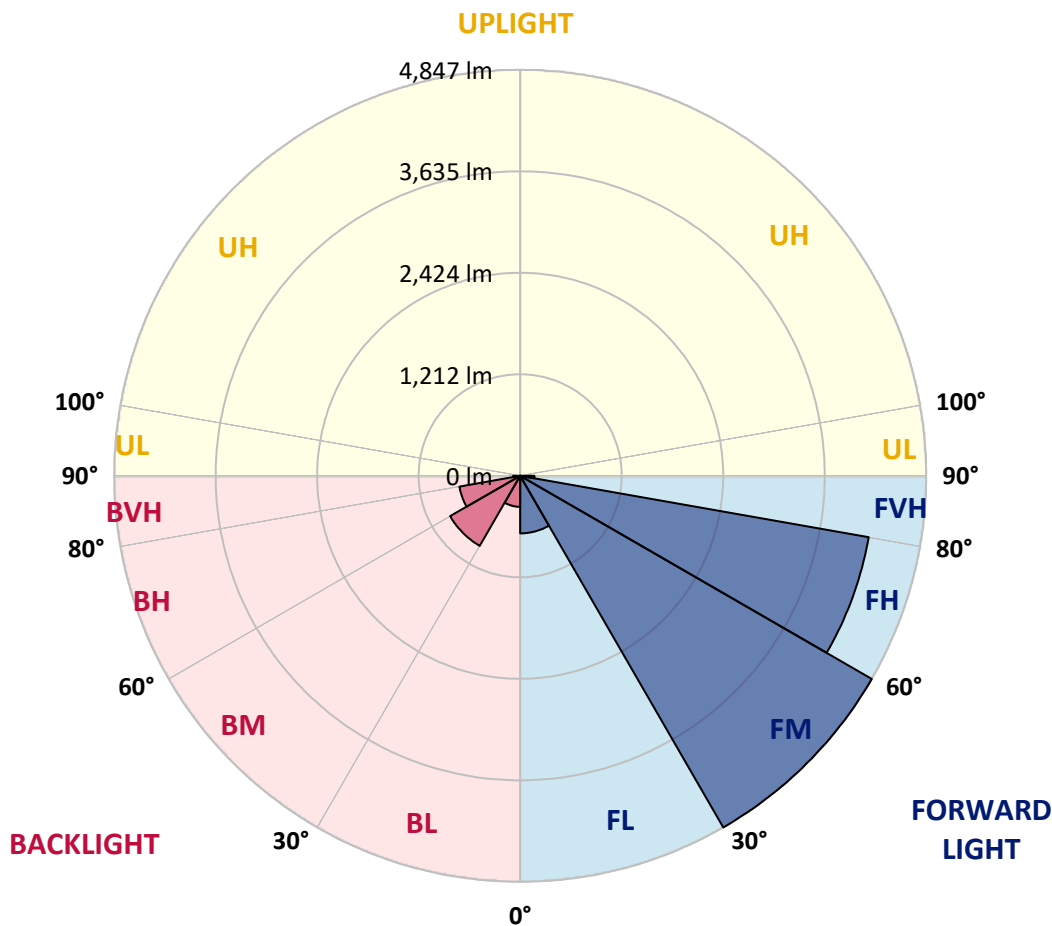


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	687.1	5.7			
FM (30°-60°)	4847.2	40.1			
FH (60°-80°)	4225.5	35.0			G2/5000
FVH (80°-90°)	169.8	1.4			G2/225
BL (0°-30°)	370.4	3.1	B1/500		
BM (30°-60°)	964.9	8.0	B1/1000		
BH (60°-80°)	737.3	6.1	B2/1000		G2/1000
BVH (80°-90°)	84.7	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 II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	78°	85°
0°	492.8	492.8	492.8	492.8	492.8	492.8	492.8	492.8	492.8	492.8	492.8
2.5°	634.4	611.7	577.4	591.6	608.7	610.7	605.2	573.9	563.3	587.0	594.1
5°	888.8	850.5	827.4	819.8	794.1	740.7	779.0	759.3	763.4	751.8	774.5
7.5°	1103.0	1077.3	1043.0	1033.5	974.5	932.7	958.9	950.3	909.0	892.9	918.6
10°	1211.8	1183.6	1185.1	1164.5	1148.8	1152.9	1139.8	1102.0	1071.2	1049.6	987.6
12.5°	1277.3	1284.4	1322.2	1311.6	1370.5	1418.9	1382.1	1326.2	1229.0	1209.3	1147.8
15°	1433.0	1459.2	1424.0	1440.1	1465.3	1558.0	1542.9	1530.8	1428.0	1389.7	1276.3
17.5°	1593.3	1598.3	1544.9	1536.3	1596.8	1643.6	1702.6	1634.6	1647.2	1620.5	1437.1
20°	1627.5	1662.3	1585.7	1532.8	1657.3	1750.0	1823.0	1751.0	1817.5	1824.5	1569.6
22.5°	1753.0	1711.2	1610.4	1558.5	1667.3	1781.2	1900.1	1940.4	1919.3	1859.8	1697.6
25°	1840.2	1818.0	1715.2	1657.8	1699.1	1803.9	2012.5	2117.8	2136.4	2128.4	1819.5
27.5°	2001.9	2013.0	1801.4	1817.5	1760.0	1769.6	2080.0	2353.1	2236.7	2204.5	1970.7
30°	2257.4	2208.0	1970.7	1983.8	1888.5	1872.4	2222.6	2556.2	2451.9	2413.1	2095.1
32.5°	2523.9	2528.5	2240.2	2128.4	2077.5	2061.4	2194.4	2662.5	2724.0	2673.6	2283.1
35°	2899.8	2873.6	2532.5	2385.4	2201.4	2173.2	2395.4	2970.9	3083.7	2942.6	2506.3
37.5°	3472.2	3393.1	2996.1	2655.9	2519.9	2487.6	2682.6	3247.5	3501.4	3326.1	2871.1
40°	3931.8	3771.0	3410.2	2996.1	2765.8	2805.6	2886.7	3583.1	3934.8	3836.0	3208.7
42.5°	4298.1	4155.5	3703.5	3412.3	3099.4	3050.0	3138.7	3998.8	4524.3	4427.6	3629.9
45°	4649.3	4359.0	4033.0	3771.0	3470.2	3530.2	3517.1	4423.0	5247.4	4949.6	4002.3
47.5°	4995.9	4723.4	4382.2	4030.0	3727.2	4100.6	3961.0	4738.5	5735.1	5514.4	4394.3
50°	5441.4	5141.6	4753.1	4398.9	4217.5	4490.6	4256.3	5005.5	6281.3	6022.3	4764.2
52.5°	5737.2	5445.4	5104.8	4851.8	4835.2	4729.9	4669.9	5343.6	6760.0	6602.8	5156.2
55°	5702.4	5421.2	5267.0	5294.7	5500.3	5145.1	5096.2	5844.0	7259.4	7077.5	5579.4
57.5°	5266.5	4959.7	4992.4	5156.7	5708.9	5874.2	5791.1	6378.6	7704.8	7622.2	6103.0
60°	4102.6	3944.9	4211.4	4511.7	5429.8	6087.9	6672.4	7030.6	8253.0	8385.0	6925.3
62.5°	2665.0	2454.4	2875.6	3385.6	4596.9	5946.8	7569.8	8267.1	9150.9	9450.7	8174.9
65°	1380.6	1346.9	1641.6	2110.2	3200.1	5070.5	7886.2	9564.1	10242.3	10591.5	9368.6
67.5°	1003.7	941.2	1077.8	1353.4	1953.5	3457.6	7286.6	10556.2	11118.6	11438.5	10062.4
70°	764.4	718.0	822.3	993.1	1275.8	1953.0	5378.9	10285.7	11456.7	11611.9	9970.2
72.5°	572.4	532.6	623.8	783.0	983.1	1099.5	3179.5	8457.1	10879.7	10932.6	8948.4
75°	457.0	426.3	465.6	618.3	801.2	748.3	1689.0	6127.2	8839.5	8884.9	6835.1
77.5°	374.9	348.7	364.8	463.6	623.3	562.8	837.9	3897.5	5612.2	5542.7	3845.6
80°	305.9	283.2	290.7	335.1	474.7	420.2	470.6	2033.1	2677.1	2569.3	1599.3
82.5°	235.3	216.2	231.3	246.4	343.6	301.8	274.6	925.1	1096.4	1021.4	586.5
85°	157.7	140.1	201.0	184.9	224.7	185.4	150.2	368.3	408.6	380.9	206.1
87.5°	43.3	40.8	67.5	92.2	92.2	70.0	54.9	89.2	113.9	99.8	48.4
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°	492.8	492.8	492.8	492.8	492.8	492.8	492.8	492.8	492.8	492.8	492.8
2.5°	597.1	586.0	556.8	554.3	561.3	562.3	557.8	547.2	541.7	571.9	567.4
5°	768.9	729.6	705.9	684.3	654.0	632.4	637.9	653.0	658.1	680.7	683.3
7.5°	902.4	850.5	798.6	729.1	683.3	654.0	676.2	692.3	704.9	737.2	750.3
10°	960.4	904.0	830.4	757.3	744.7	749.8	737.2	741.2	760.9	762.4	768.9
12.5°	1068.2	1004.2	871.7	805.7	802.2	812.8	808.2	826.9	840.5	877.3	861.6
15°	1171.5	1089.9	902.9	835.4	820.8	842.0	866.7	897.9	927.1	961.9	944.3
17.5°	1297.0	1174.0	904.5	821.8	824.3	869.7	895.4	912.5	999.7	1047.6	1023.4
20°	1376.1	1182.6	870.7	788.1	824.3	865.2	900.9	919.6	1017.3	1089.4	1106.0
22.5°	1447.6	1185.6	844.5	769.9	793.1	847.0	900.9	942.3	1004.7	1073.8	1076.3
25°	1486.9	1183.1	810.7	771.4	792.6	819.3	867.2	905.0	951.3	1047.6	1050.1
27.5°	1587.7	1150.4	777.5	777.5	788.6	789.6	850.5	872.7	879.3	966.9	982.6
30°	1616.9	1157.4	773.5	776.5	782.0	771.9	798.6	813.3	822.8	898.4	900.9
32.5°	1663.8	1101.0	785.5	767.4	760.4	758.8	765.4	778.5	782.5	828.9	837.4
35°	1720.7	1078.3	789.6	764.9	750.8	743.2	762.9	746.7	759.3	813.8	819.8
37.5°	1906.2	1047.1	810.2	764.9	746.7	738.2	728.6	736.2	781.0	833.4	865.7
40°	2024.6	1056.6	805.2	772.4	733.1	725.1	709.0	736.7	806.2	898.9	923.1
42.5°	2232.2	1062.2	811.2	768.9	737.7	706.4	717.0	747.3	820.3	873.2	910.5
45°	2446.8	1079.3	807.2	758.3	727.6	742.2	727.6	754.8	789.6	791.1	819.3
47.5°	2657.5	1148.3	798.6	736.7	725.1	763.4	726.1	730.6	733.1	742.2	775.5
50°	2904.9	1221.9	786.6	706.4	728.6	764.4	731.6	709.5	706.9	736.7	774.0
52.5°	3186.0	1305.0	770.9	677.2	707.9	754.8	750.8	711.0	689.3	718.0	755.3
55°	3517.1	1399.8	752.8	648.0	685.3	755.8	761.4	700.4	689.8	721.0	760.9
57.5°	3957.0	1536.8	717.5	605.7	657.6	740.2	734.1	688.3	678.2	711.5	752.8
60°	4707.7	1800.4	667.1	563.8	627.8	701.9	712.0	666.6	656.6	693.3	736.7
62.5°	5713.0	2117.3	606.2	523.0	591.6	660.6	684.3	635.4	634.4	681.2	726.6
65°	6648.7	2297.2	543.2	485.7	554.3	622.3	653.0	606.2	608.2	667.1	712.5
67.5°	7037.7	2085.6	486.7	452.5	511.4	578.5	627.3	583.5	576.9	648.0	689.8
70°	6672.4	1656.8	437.9	417.2	463.1	531.1	591.6	553.3	538.1	602.6	635.4
72.5°	5903.9	1381.1	392.0	375.9	420.7	481.2	543.2	512.4	492.8	542.2	571.4
75°	4615.0	1133.2	339.6	335.1	372.4	435.9	492.8	471.6	446.4	477.7	506.9
77.5°	2627.7	717.0	285.2	288.2	314.9	381.9	432.3	415.7	390.0	403.1	436.9
80°	1051.6	361.8	229.3	231.3	254.0	313.9	358.3	352.2	325.5	336.1	359.3
82.5°	393.0	198.5	169.3	170.3	193.0	248.4	305.9	302.8	277.6	270.1	283.2
85°	156.2	98.3	103.8	108.3	130.0	178.9	245.4	217.7	187.9	164.8	172.8
87.5°	37.3	31.2	36.3	38.3	42.3	55.9	89.7	72.1	74.1	59.5	44.3
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)