

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: P596974

Luminaire Tested: **MSA-SA2C-835-U-T2**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P596974
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-SA2C-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: 10143 lumens
Efficiency: N/A
Efficacy: 89.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

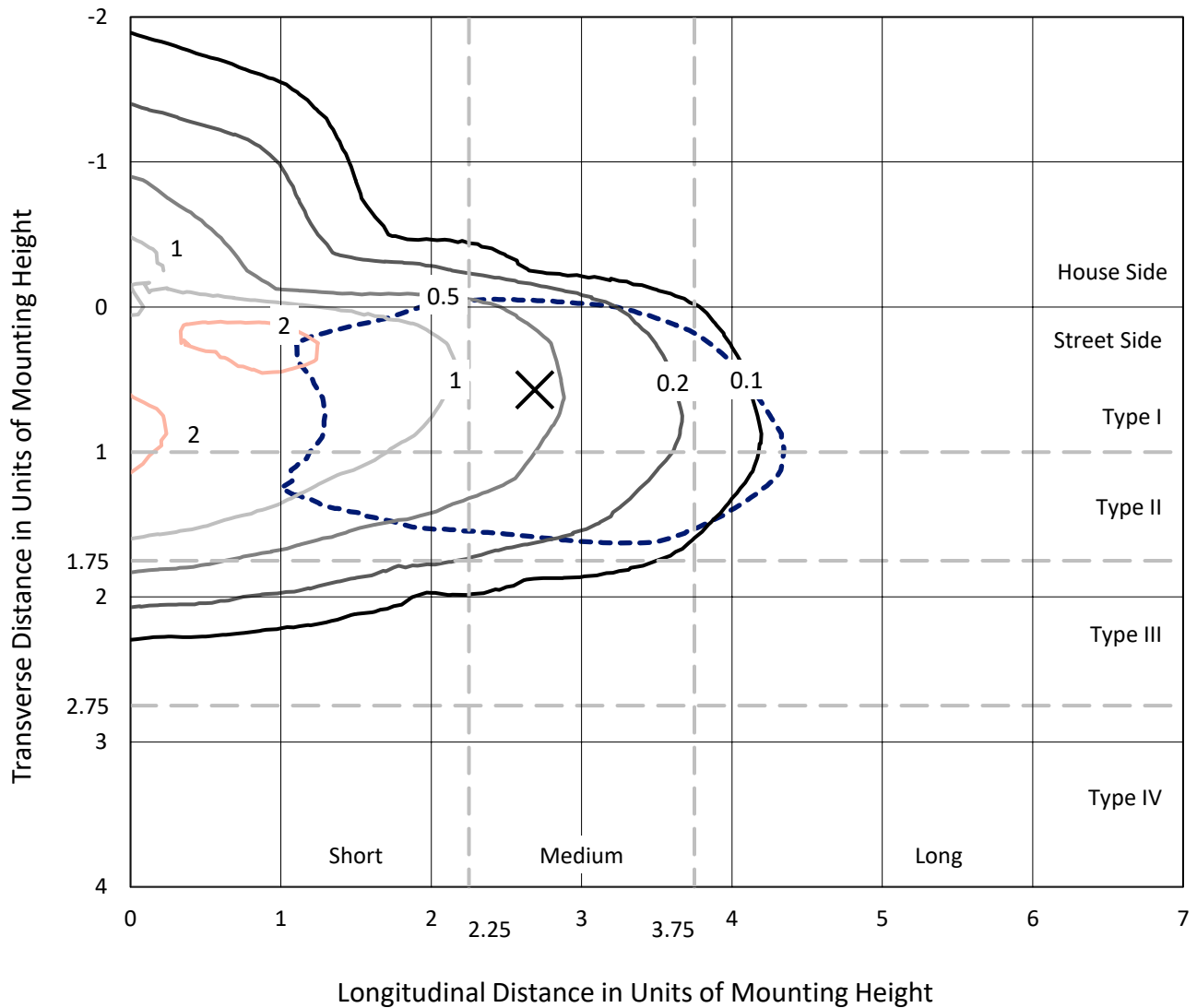
Input Watts (W): 113
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

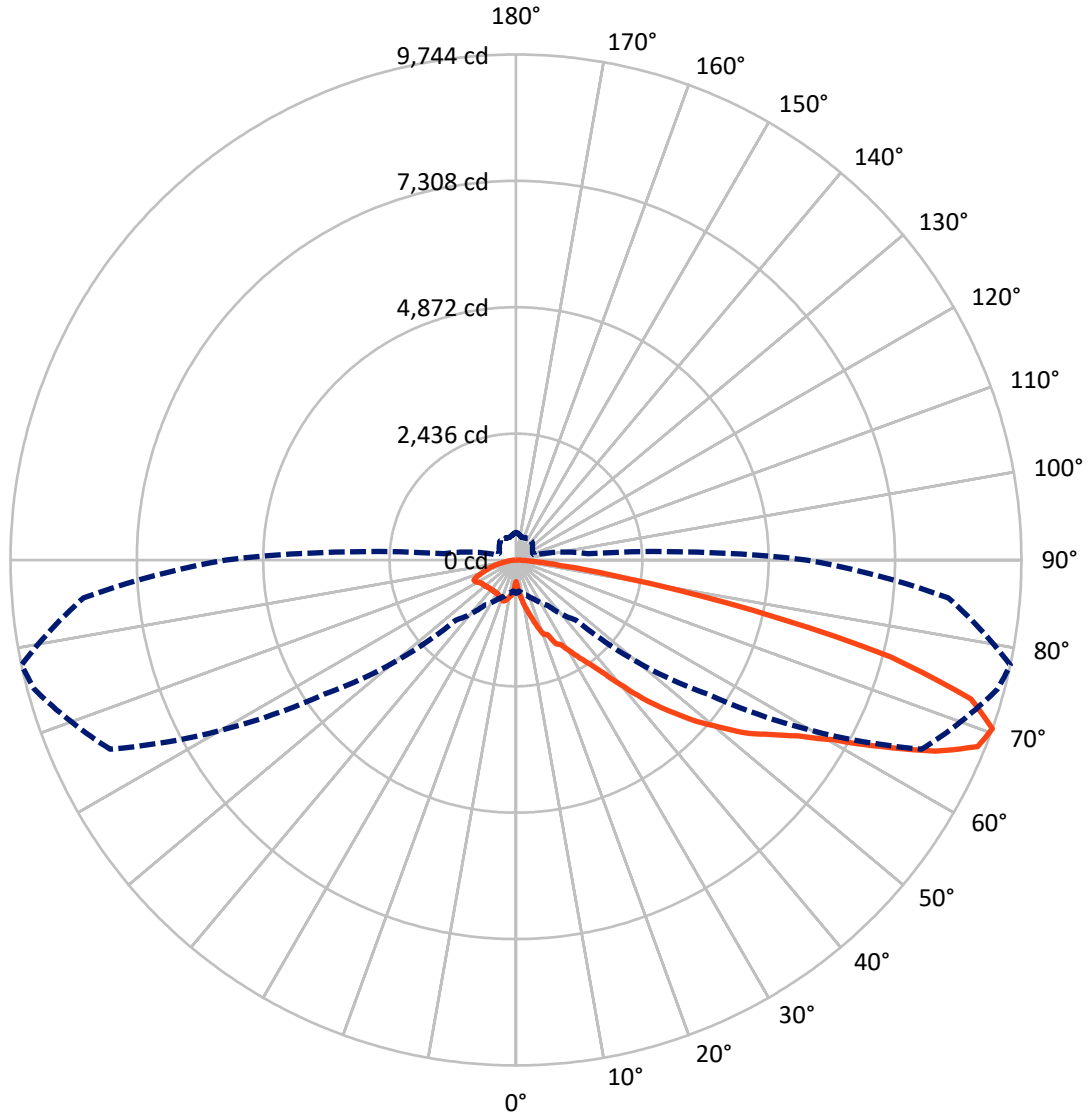
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.4 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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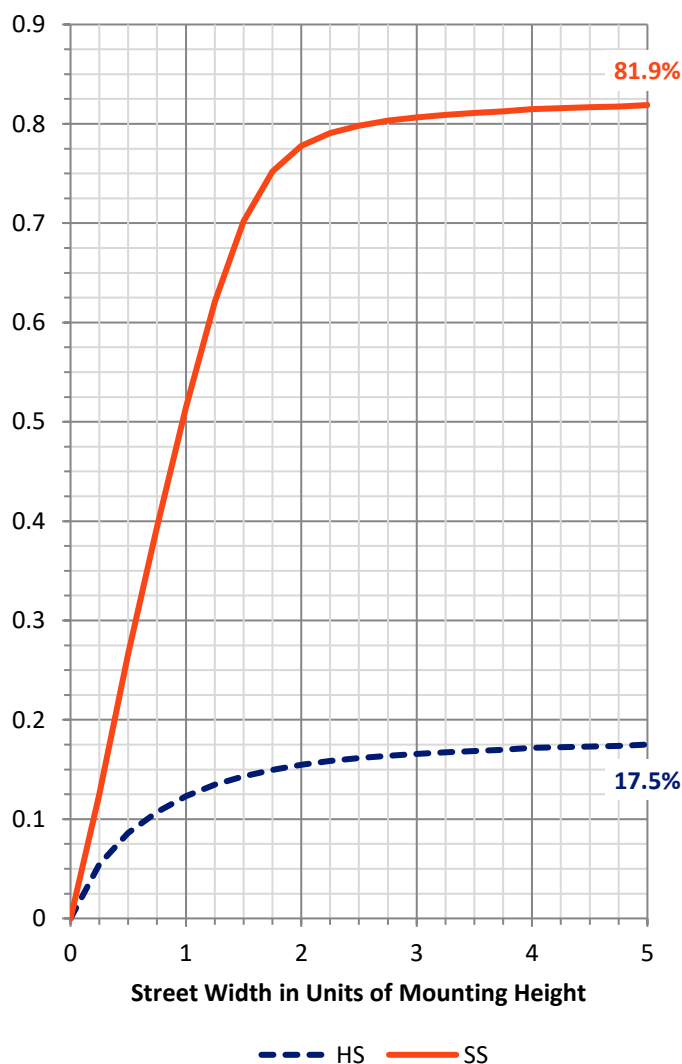
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1810.4	0.0	1810.4
	% Fixture	17.8	0.0	17.8
Street Side	Lumens	8332.6	0.0	8332.6
	% Fixture	82.2	0.0	82.2
Total	Lumens	10143.0	0.0	10143.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.9	0.6
10°-20°	281.6	2.8
20°-30°	542.0	5.3
30°-40°	912.9	9.0
40°-50°	1579.6	15.6
50°-60°	2384.9	23.5
60°-70°	2641.6	26.0
70°-80°	1523.0	15.0
80°-90°	213.6	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°	10143.0	100.0
0°-180°	10143.0	100.0

Coefficient of Utilization

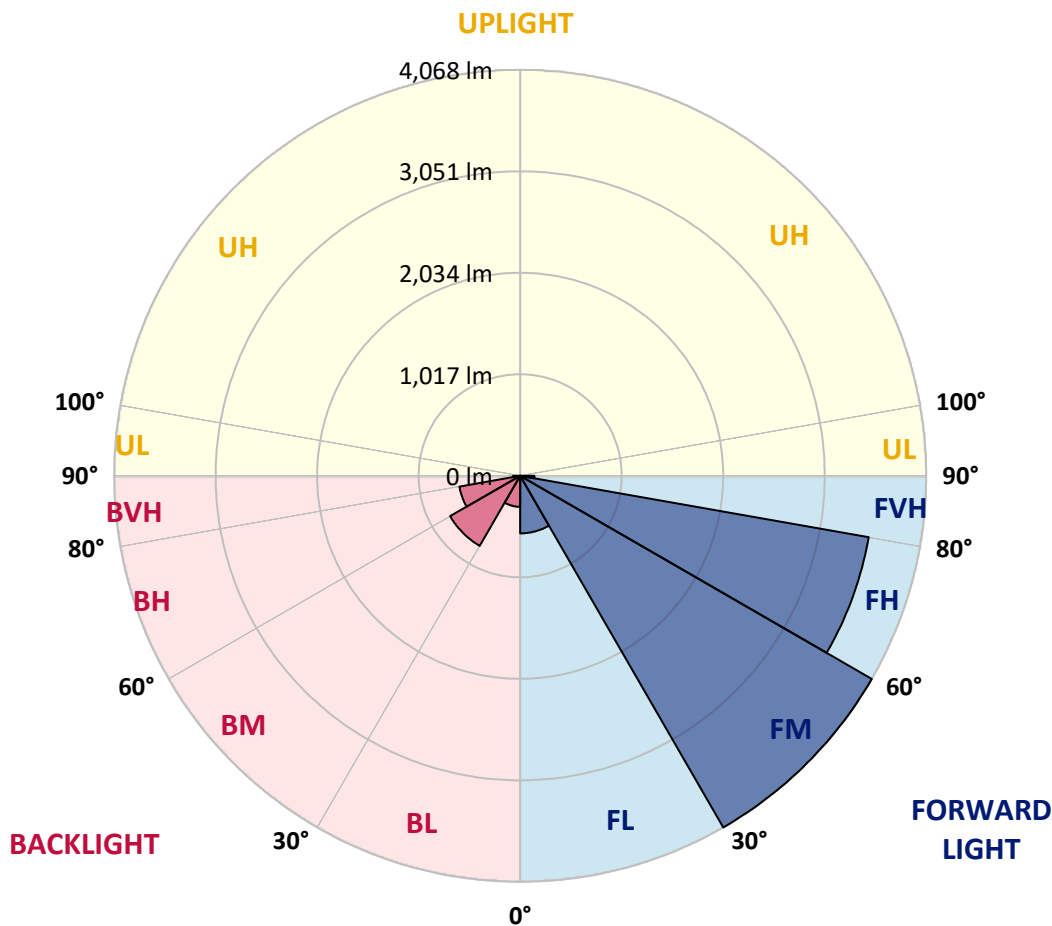


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	576.6	5.7			
FM (30°-60°)	4067.6	40.1			
FH (60°-80°)	3545.9	35.0			G2/5000
FVH (80°-90°)	142.5	1.4			G2/225
BL (0°-30°)	310.9	3.1	B1/500		
BM (30°-60°)	809.7	8.0	B1/1000		
BH (60°-80°)	618.7	6.1	B2/1000		G2/1000
BVH (80°-90°)	71.1	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 II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	78°	85°
0°	413.5	413.5	413.5	413.5	413.5	413.5	413.5	413.5	413.5	413.5	413.5
2.5°	532.4	513.3	484.6	496.4	510.8	512.5	507.8	481.6	472.7	492.6	498.5
5°	745.9	713.7	694.3	688.0	666.4	621.6	653.7	637.2	640.6	630.9	649.9
7.5°	925.6	904.0	875.3	867.2	817.8	782.7	804.7	797.5	762.8	749.3	770.8
10°	1016.9	993.2	994.5	977.2	964.1	967.5	956.5	924.7	899.0	880.8	828.8
12.5°	1071.9	1077.8	1109.5	1100.6	1150.1	1190.7	1159.8	1112.9	1031.3	1014.8	963.2
15°	1202.5	1224.5	1194.9	1208.5	1229.6	1307.4	1294.7	1284.6	1198.3	1166.2	1071.0
17.5°	1337.0	1341.2	1296.4	1289.2	1340.0	1379.3	1428.8	1371.7	1382.3	1359.8	1205.9
20°	1365.8	1394.9	1330.7	1286.3	1390.7	1468.5	1529.8	1469.4	1525.2	1531.1	1317.1
22.5°	1471.1	1436.0	1351.4	1307.8	1399.2	1494.7	1594.5	1628.3	1610.6	1560.7	1424.5
25°	1544.2	1525.6	1439.3	1391.1	1425.8	1513.8	1688.8	1777.2	1792.8	1786.1	1526.9
27.5°	1679.9	1689.2	1511.6	1525.2	1477.0	1485.0	1745.5	1974.6	1877.0	1849.9	1653.7
30°	1894.3	1852.9	1653.7	1664.7	1584.8	1571.3	1865.1	2145.1	2057.5	2025.0	1758.2
32.5°	2118.0	2121.8	1879.9	1786.1	1743.4	1729.8	1841.5	2234.3	2285.9	2243.6	1915.9
35°	2433.4	2411.4	2125.2	2001.7	1847.4	1823.7	2010.2	2493.0	2587.8	2469.4	2103.2
37.5°	2913.8	2847.4	2514.2	2228.8	2114.6	2087.5	2251.2	2725.2	2938.3	2791.1	2409.3
40°	3299.4	3164.5	2861.8	2514.2	2321.0	2354.4	2422.4	3006.8	3301.9	3219.1	2692.6
42.5°	3606.8	3487.1	3107.9	2863.5	2600.9	2559.4	2633.9	3355.6	3796.7	3715.5	3046.1
45°	3901.5	3658.0	3384.4	3164.5	2912.1	2962.4	2951.4	3711.7	4403.4	4153.5	3358.6
47.5°	4192.4	3963.7	3677.4	3381.9	3127.7	3441.0	3323.9	3976.4	4812.7	4627.5	3687.6
50°	4566.2	4314.6	3988.6	3691.4	3539.1	3768.3	3571.7	4200.5	5271.1	5053.7	3997.9
52.5°	4814.4	4569.6	4283.8	4071.5	4057.5	3969.2	3918.9	4484.2	5672.8	5540.9	4326.9
55°	4785.2	4549.3	4419.9	4443.2	4615.7	4317.6	4276.6	4904.1	6091.8	5939.2	4682.1
57.5°	4419.5	4162.0	4189.5	4327.3	4790.7	4929.4	4859.7	5352.7	6465.6	6396.3	5121.4
60°	3442.7	3310.4	3534.1	3786.1	4556.5	5108.7	5599.2	5899.8	6925.6	7036.4	5811.5
62.5°	2236.4	2059.6	2413.1	2841.0	3857.5	4990.3	6352.3	6937.5	7679.1	7930.7	6860.1
65°	1158.6	1130.2	1377.6	1770.8	2685.4	4255.0	6617.8	8025.9	8595.0	8888.0	7861.8
67.5°	842.3	789.9	904.4	1135.7	1639.3	2901.5	6114.6	8858.4	9330.3	9598.8	8444.1
70°	641.4	602.5	690.1	833.4	1070.6	1638.9	4513.8	8631.4	9614.0	9744.3	8366.7
72.5°	480.3	446.9	523.5	657.1	825.0	922.6	2668.1	7096.9	9129.9	9174.3	7509.2
75°	383.5	357.7	390.7	518.8	672.3	627.9	1417.4	5141.7	7417.8	7455.9	5735.8
77.5°	314.6	292.6	306.1	389.0	523.0	472.3	703.2	3270.6	4709.6	4651.2	3227.1
80°	256.7	237.6	244.0	281.2	398.3	352.6	394.9	1706.1	2246.5	2156.0	1342.1
82.5°	197.5	181.4	194.1	206.8	288.4	253.3	230.4	776.3	920.1	857.1	492.2
85°	132.3	117.5	168.7	155.2	188.6	155.6	126.0	309.1	342.9	319.7	172.9
87.5°	36.4	34.2	56.7	77.4	77.4	58.8	46.1	74.8	95.6	83.7	40.6
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°	413.5	413.5	413.5	413.5	413.5	413.5	413.5	413.5	413.5	413.5	413.5
2.5°	501.1	491.8	467.2	465.1	471.0	471.9	468.1	459.2	454.5	479.9	476.1
5°	645.2	612.3	592.4	574.2	548.8	530.7	535.3	548.0	552.2	571.3	573.4
7.5°	757.3	713.7	670.2	611.8	573.4	548.8	567.4	581.0	591.5	618.6	629.6
10°	805.9	758.6	696.8	635.5	625.0	629.2	618.6	622.0	638.5	639.8	645.2
12.5°	896.4	842.7	731.5	676.1	673.2	682.0	678.2	693.9	705.3	736.2	723.1
15°	983.1	914.6	757.7	701.1	688.8	706.6	727.3	753.5	778.0	807.2	792.4
17.5°	1088.4	985.2	759.0	689.6	691.8	729.8	751.4	765.8	838.9	879.1	858.8
20°	1154.8	992.4	730.7	661.3	691.8	726.0	756.0	771.7	853.7	914.2	928.1
22.5°	1214.8	994.9	708.7	646.1	665.5	710.8	756.0	790.7	843.1	901.1	903.2
25°	1247.8	992.8	680.3	647.4	665.1	687.5	727.7	759.4	798.3	879.1	881.2
27.5°	1332.4	965.3	652.4	652.4	661.7	662.6	713.7	732.4	737.9	811.4	824.5
30°	1356.9	971.3	649.1	651.6	656.2	647.8	670.2	682.5	690.5	753.9	756.0
32.5°	1396.2	923.9	659.2	644.0	638.1	636.8	642.3	653.3	656.7	695.6	702.8
35°	1444.0	904.9	662.6	641.9	630.0	623.7	640.2	626.6	637.2	682.9	688.0
37.5°	1599.6	878.7	679.9	641.9	626.6	619.5	611.4	617.8	655.4	699.4	726.4
40°	1699.0	886.7	675.7	648.2	615.2	608.5	594.9	618.2	676.5	754.3	774.6
42.5°	1873.2	891.3	680.8	645.2	619.0	592.8	601.7	627.1	688.4	732.8	764.1
45°	2053.3	905.7	677.4	636.4	610.6	622.8	610.6	633.4	662.6	663.9	687.5
47.5°	2230.0	963.6	670.2	618.2	608.5	640.6	609.3	613.1	615.2	622.8	650.7
50°	2437.7	1025.4	660.0	592.8	611.4	641.4	614.0	595.4	593.2	618.2	649.5
52.5°	2673.6	1095.1	646.9	568.3	594.1	633.4	630.0	596.6	578.4	602.5	633.8
55°	2951.4	1174.6	631.7	543.8	575.1	634.3	638.9	587.7	578.9	605.1	638.5
57.5°	3320.5	1289.7	602.1	508.3	551.8	621.1	616.1	577.6	569.1	597.0	631.7
60°	3950.6	1510.8	559.8	473.2	526.9	589.0	597.5	559.4	551.0	581.8	618.2
62.5°	4794.1	1776.8	508.7	438.9	496.4	554.3	574.2	533.2	532.4	571.7	609.7
65°	5579.3	1927.7	455.8	407.6	465.1	522.2	548.0	508.7	510.4	559.8	597.9
67.5°	5905.8	1750.1	408.5	379.7	429.2	485.4	526.4	489.6	484.1	543.8	578.9
70°	5599.2	1390.3	367.4	350.1	388.6	445.7	496.4	464.3	451.6	505.7	533.2
72.5°	4954.4	1159.0	329.0	315.4	353.1	403.8	455.8	430.0	413.5	455.0	479.5
75°	3872.8	951.0	285.0	281.2	312.5	365.8	413.5	395.8	374.6	400.8	425.4
77.5°	2205.1	601.7	239.3	241.9	264.3	320.5	362.8	348.8	327.3	338.3	366.6
80°	882.5	303.6	192.4	194.1	213.1	263.4	300.6	295.6	273.2	282.0	301.5
82.5°	329.8	166.6	142.1	142.9	161.9	208.5	256.7	254.1	233.0	226.6	237.6
85°	131.1	82.5	87.1	90.9	109.1	150.1	205.9	182.7	157.7	138.3	145.0
87.5°	31.3	26.2	30.4	32.1	35.5	46.9	75.3	60.5	62.2	49.9	37.2
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)