

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: P597032

Luminaire Tested: **MSA-SA3B-835-U-SL3**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P597032
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-18)
Test Lab: INNOVATIONS CENTER
Issue Date: 5/27/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: MSA-SA3B-835-U-SL3
Description: MESA POST TOP DECORATIVE LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III SPILL LIGHT ELIMINATOR OPTICS.
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11891 lumens
Efficiency: N/A
Efficacy: 94.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B2 - U0 - G3

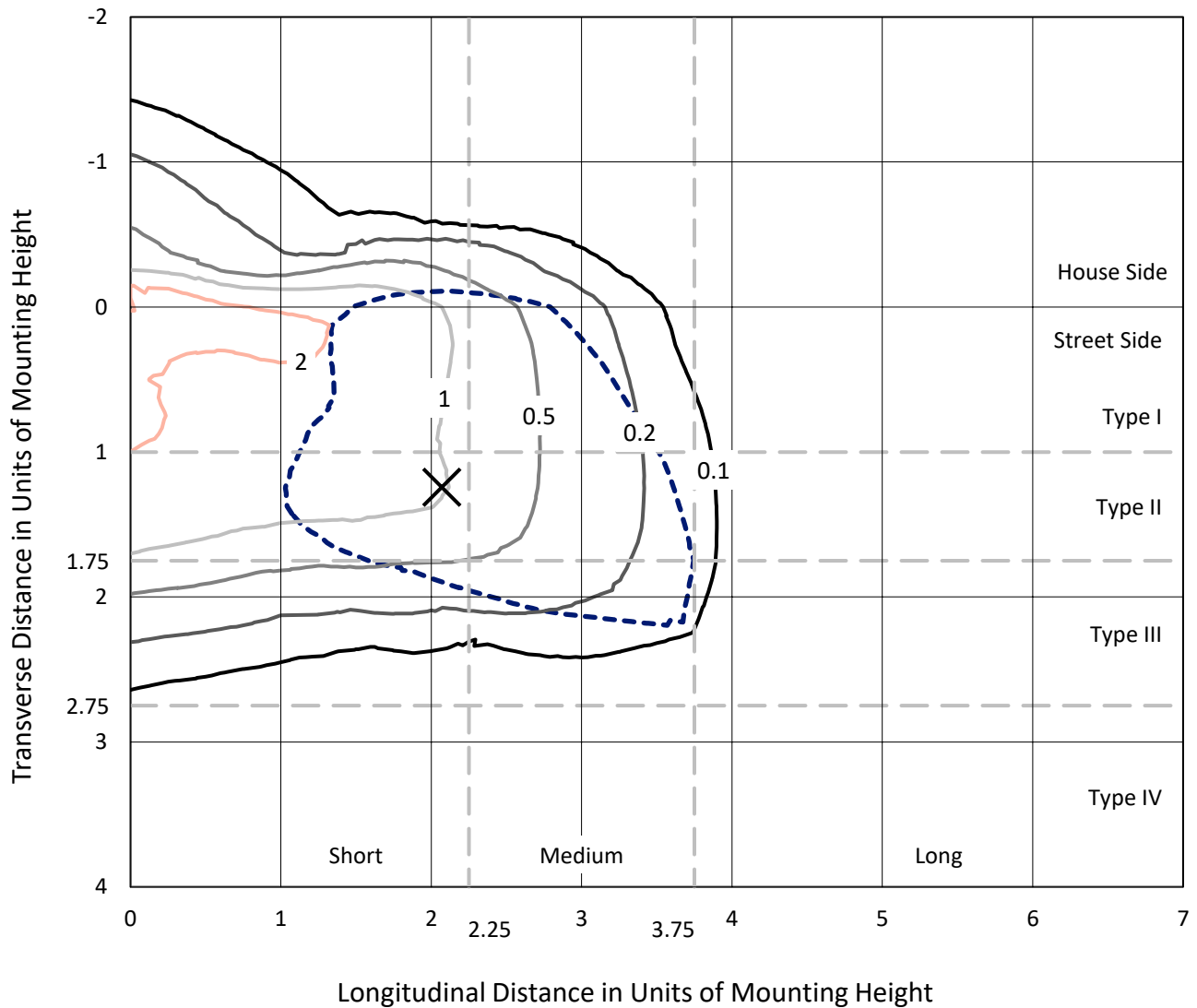
Input Watts (W): 126
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

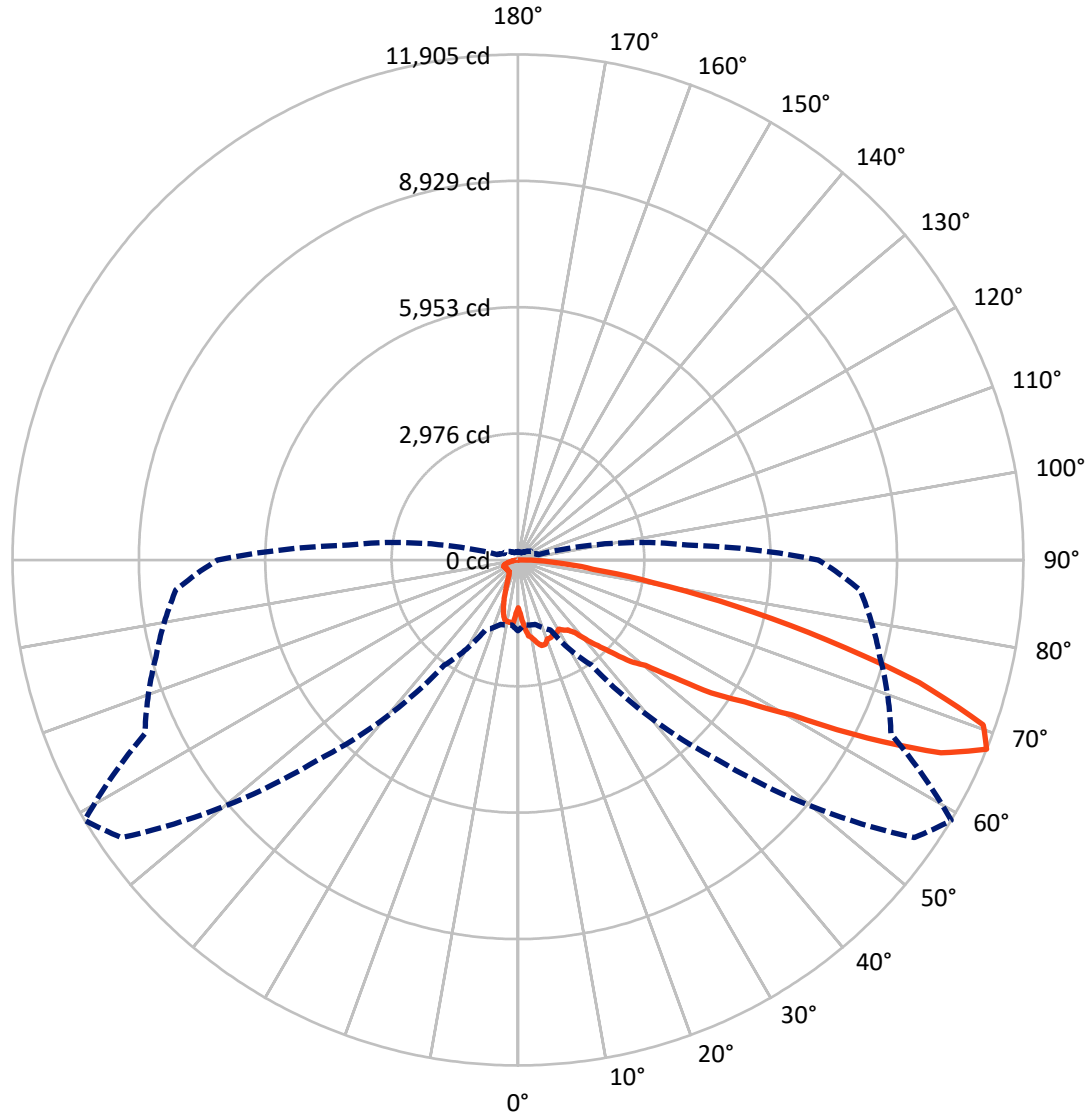
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.1 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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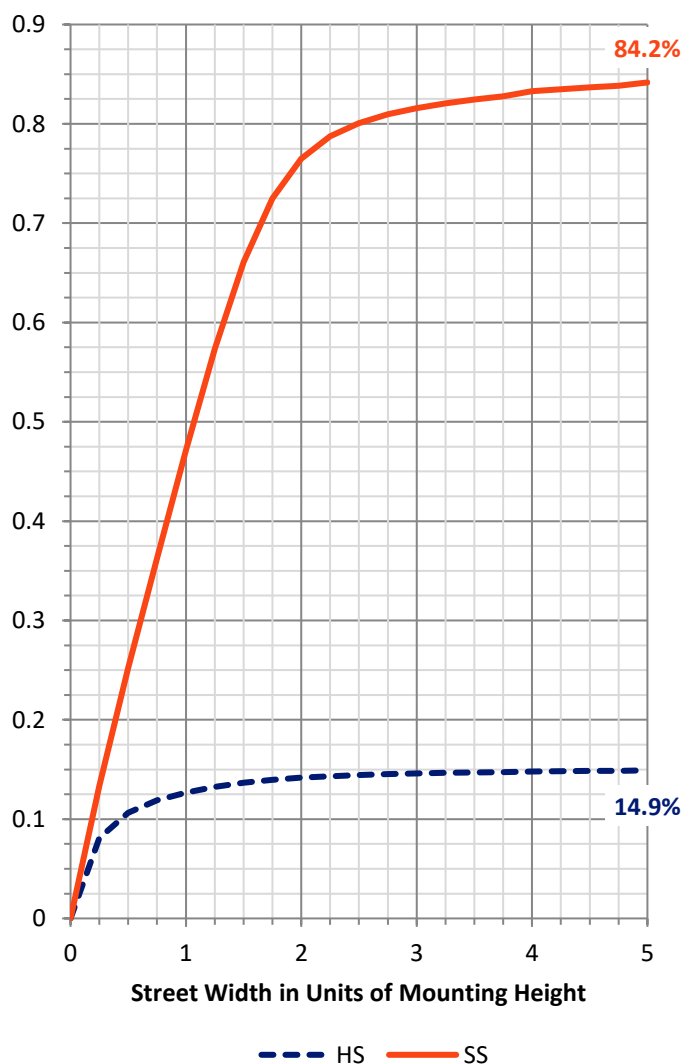
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1789.8	0.0	1789.8
	% Fixture	15.1	0.0	15.1
Street Side	Lumens	10101.2	0.0	10101.2
	% Fixture	84.9	0.0	84.9
Total	Lumens	11891.0	0.0	11891.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.0	1.2
10°-20°	434.9	3.7
20°-30°	621.0	5.2
30°-40°	915.1	7.7
40°-50°	1546.2	13.0
50°-60°	2690.6	22.6
60°-70°	3428.6	28.8
70°-80°	1815.5	15.3
80°-90°	292.1	2.5
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°	11891.0	100.0
0°-180°	11891.0	100.0

Coefficient of Utilization



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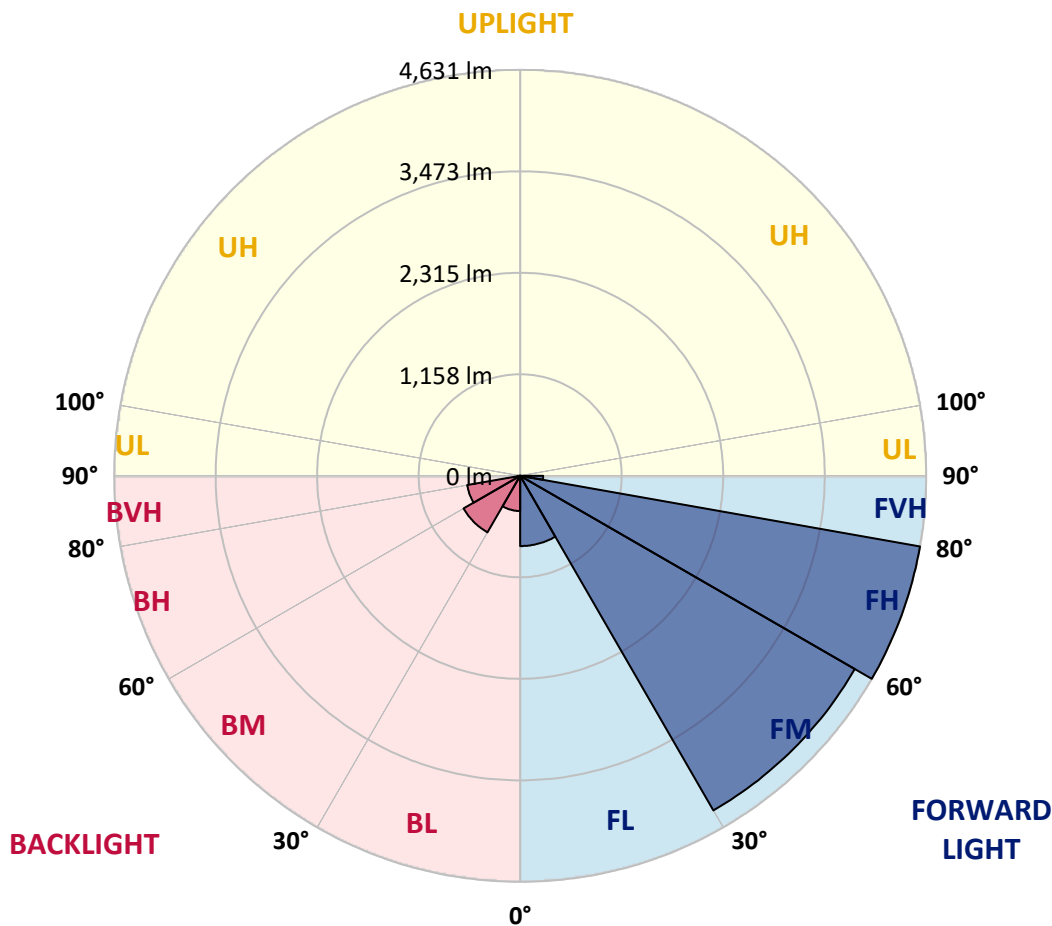
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	801.5	6.7			
FM	(30°-60°)	4406.6	37.1			
FH	(60°-80°)	4630.7	38.9			G2/5000
FVH	(80°-90°)	262.3	2.2			G3/500
BL	(0°-30°)	401.4	3.4	B1/500		
BM	(30°-60°)	745.3	6.3	B1/1000		
BH	(60°-80°)	613.4	5.2	B2/1000		G2/1000
BVH	(80°-90°)	29.7	0.3			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 III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	1125.2	1125.2	1125.2	1125.2	1125.2	1125.2	1125.2	1125.2	1125.2	1125.2	1125.2
2.5°	1404.9	1339.4	1269.8	1289.5	1329.3	1347.4	1327.8	1308.6	1283.9	1254.7	1354.5
5°	1703.7	1606.4	1592.3	1591.8	1577.7	1521.3	1593.8	1588.8	1618.0	1648.2	1725.8
7.5°	1788.8	1752.6	1713.2	1731.9	1660.8	1657.8	1770.7	1802.9	1859.4	1840.7	1945.0
10°	1745.0	1704.2	1724.8	1717.3	1723.8	1798.4	1867.4	1869.5	1929.9	1989.4	1922.4
12.5°	1667.9	1670.9	1753.1	1750.0	1855.9	1994.4	2015.1	1999.0	2097.7	2057.4	2114.9
15°	1722.8	1759.6	1738.9	1756.6	1798.4	1974.8	2032.2	2090.7	2184.4	2220.7	2163.2
17.5°	1810.5	1830.2	1737.4	1727.9	1814.0	1897.7	2040.3	2090.2	2104.8	2363.3	2282.1
20°	1773.2	1813.0	1722.3	1605.9	1749.0	1859.9	2000.5	1985.4	2056.4	2374.4	2306.8
22.5°	1879.0	1813.0	1697.6	1615.0	1665.4	1767.2	1886.6	1985.9	2070.0	2309.4	2342.6
25°	1899.2	1867.9	1760.1	1678.0	1660.8	1697.1	1867.4	1932.4	2074.5	2398.0	2323.5
27.5°	2022.1	1975.3	1755.6	1758.1	1672.9	1608.9	1807.0	1943.5	2125.9	2343.1	2370.3
30°	2174.8	2139.0	1863.4	1873.5	1755.6	1637.7	1848.3	1889.6	2155.7	2428.8	2429.3
32.5°	2289.2	2352.2	2075.6	1938.5	1896.7	1808.5	1784.8	1970.7	2120.9	2584.0	2530.1
35°	2495.3	2544.2	2238.8	2129.0	1987.4	1888.1	1957.1	2024.2	2265.5	2788.1	2679.7
37.5°	2876.7	2820.3	2542.2	2369.3	2316.4	2173.3	2211.6	2164.7	2422.7	3017.3	2973.0
40°	3097.5	3048.6	2755.8	2660.1	2450.5	2468.6	2420.7	2455.0	2632.9	3261.2	3247.1
42.5°	3315.1	3249.6	3002.2	2935.7	2726.6	2637.9	2646.5	2757.3	2956.9	3655.3	3608.4
45°	3530.3	3362.5	3254.2	3271.8	3171.0	2989.1	3001.7	3106.0	3310.6	4105.8	3997.9
47.5°	3695.1	3556.5	3471.9	3450.2	3400.3	3643.7	3534.8	3577.2	3667.4	4506.9	4466.0
50°	4007.0	3845.2	3734.9	3703.6	3873.0	4211.6	3989.9	3898.7	4090.6	5025.4	5004.2
52.5°	4506.4	4304.8	4120.9	4118.9	4363.7	4583.4	4739.7	4582.4	4653.0	5556.5	5616.9
55°	4942.2	4708.9	4543.6	4634.8	4983.5	5118.1	5648.7	5525.7	5466.3	6092.6	6265.5
57.5°	5105.0	4832.4	4724.5	4859.1	5373.1	6064.4	6625.2	6301.7	6243.8	6699.3	7061.6
60°	4747.7	4459.5	4466.0	4719.5	5609.9	6759.3	7693.0	7418.4	7078.7	7454.7	7808.4
62.5°	3729.8	3469.3	3639.1	4024.6	5411.4	7434.5	9124.1	9240.0	8032.6	8081.0	8222.6
65°	2535.1	2354.7	2507.9	2885.3	4388.9	7802.8	10487.1	10951.7	8901.3	8491.2	8401.5
67.5°	1668.4	1540.9	1570.6	1821.6	3021.4	6651.9	11398.7	11905.1	9695.5	8827.8	8086.0
70°	1292.0	1189.2	1176.1	1307.6	1791.9	4621.2	10858.5	11628.4	10179.2	8512.3	7048.0
72.5°	1013.8	935.7	942.8	1069.3	1387.7	2563.8	8402.5	9888.5	9450.6	7341.3	5414.9
75°	790.6	726.6	762.4	907.0	1283.4	1593.3	5797.3	7505.0	7306.5	5436.0	3088.4
77.5°	573.9	532.6	583.5	772.5	1206.3	1367.1	3608.9	5236.0	4680.7	2791.1	1059.7
80°	376.4	353.2	395.1	629.9	1094.0	1315.7	2230.2	3208.3	2312.9	784.1	401.1
82.5°	221.7	211.6	246.4	426.3	879.3	1233.0	1487.5	1782.8	946.3	331.6	213.1
85°	116.4	108.8	146.1	244.9	606.2	1125.7	1171.1	1067.3	457.0	144.1	101.8
87.5°	38.8	37.8	62.0	94.7	229.3	597.6	624.8	506.9	188.5	41.8	22.2
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°	1125.2	1125.2	1125.2	1125.2	1125.2	1125.2	1125.2	1125.2	1125.2	1125.2	1125.2
2.5°	1368.1	1347.9	1232.0	1248.2	1263.3	1255.7	1251.2	1198.8	1193.7	1268.3	1262.3
5°	1723.8	1640.2	1541.4	1536.9	1471.9	1405.4	1418.5	1397.3	1403.4	1434.1	1437.1
7.5°	1911.8	1807.5	1713.2	1560.1	1430.1	1324.7	1341.4	1336.3	1322.7	1392.3	1410.9
10°	1908.3	1815.5	1709.2	1523.8	1436.1	1350.4	1247.6	1150.4	1121.7	1087.4	1090.4
12.5°	2034.2	1952.1	1720.3	1531.3	1412.4	1264.8	1072.3	966.0	864.2	862.2	836.5
15°	2073.5	2013.1	1744.0	1488.0	1246.6	1035.0	836.0	720.6	647.0	632.4	610.7
17.5°	2172.8	2078.1	1671.9	1347.9	1054.2	809.3	628.4	547.7	541.7	551.8	540.7
20°	2179.4	2025.7	1541.9	1140.8	847.1	613.2	512.5	472.2	493.8	518.5	517.5
22.5°	2173.8	1959.7	1429.6	964.5	636.4	492.8	449.0	439.9	460.1	496.8	501.4
25°	2117.4	1938.0	1289.0	792.1	516.5	422.3	410.2	415.7	440.9	484.2	484.2
27.5°	2176.3	1849.8	1112.6	644.5	434.4	375.9	384.5	398.6	417.2	466.6	475.7
30°	2157.2	1879.0	970.5	519.0	383.0	343.7	362.8	376.9	398.1	449.5	454.0
32.5°	2208.6	1800.9	851.1	436.4	349.2	331.1	335.6	354.7	382.5	422.8	430.8
35°	2287.2	1829.7	714.0	392.5	332.6	316.4	325.0	340.1	367.8	407.1	413.7
37.5°	2538.1	1828.1	619.3	368.3	329.5	313.4	317.5	328.0	360.3	396.1	411.2
40°	2699.4	1932.9	533.1	362.8	326.0	311.9	308.4	320.0	345.7	388.0	398.6
42.5°	3002.2	1996.9	495.8	360.8	325.5	303.3	299.8	313.4	338.6	377.9	394.0
45°	3322.2	2088.1	466.1	359.8	324.0	301.8	291.3	308.4	329.5	367.3	386.0
47.5°	3698.6	2281.1	449.5	356.3	321.0	303.8	288.2	296.8	320.5	358.3	376.9
50°	4191.4	2536.6	453.0	351.2	325.5	304.4	283.7	287.7	309.4	346.2	365.3
52.5°	4790.5	2932.2	475.7	353.2	328.5	301.8	281.7	279.7	298.3	330.6	349.7
55°	5512.6	3493.5	543.7	362.8	328.5	301.3	278.7	269.6	283.7	309.9	328.5
57.5°	6383.9	4143.5	676.7	367.3	326.0	298.3	272.1	256.0	264.5	286.2	303.8
60°	7132.2	4668.1	813.8	370.4	331.1	291.3	259.0	238.8	244.4	261.0	276.6
62.5°	7513.6	4815.2	855.1	367.8	344.7	286.7	243.4	220.7	221.2	235.3	249.4
65°	7585.2	4619.2	689.3	365.3	362.3	286.2	232.3	205.1	201.6	211.6	223.7
67.5°	7075.2	4009.5	497.3	359.8	364.3	283.2	224.7	192.5	183.4	190.5	200.6
70°	6007.5	3229.0	417.7	348.7	340.1	268.1	211.6	179.4	167.3	172.3	179.9
72.5°	4478.6	2389.0	364.3	325.0	296.3	229.3	191.5	164.8	152.2	155.7	161.2
75°	2488.2	1274.4	304.9	282.7	241.9	185.4	163.3	146.1	135.0	136.6	142.6
77.5°	826.4	470.1	223.7	224.2	182.9	143.1	134.5	125.0	116.4	116.9	121.9
80°	374.4	260.0	160.2	161.2	127.5	103.8	103.3	100.3	94.7	93.2	96.7
82.5°	217.2	157.7	109.8	104.8	82.1	67.5	75.1	73.6	72.1	66.5	67.5
85°	106.8	84.7	57.4	54.4	45.4	33.8	40.3	41.8	40.3	34.3	33.8
87.5°	26.2	27.7	14.1	13.1	7.6	3.5	6.0	6.0	7.6	5.0	2.5
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)