

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: P367947

Luminaire Tested: **MSA-SA3C-730-U-SL3-HSS**

Issue Date: 12/2/2019

Test Information

Test Method: LM-79-08
Report Number: P367947
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-19)
Test Lab: INNOVATION CENTER
Issue Date: 12/2/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: MSA-SA3C-730-U-SL3-HSS
Description: MESA POST TOP DECORATIVE LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13615 lumens
Efficiency: N/A
Efficacy: 82.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G3

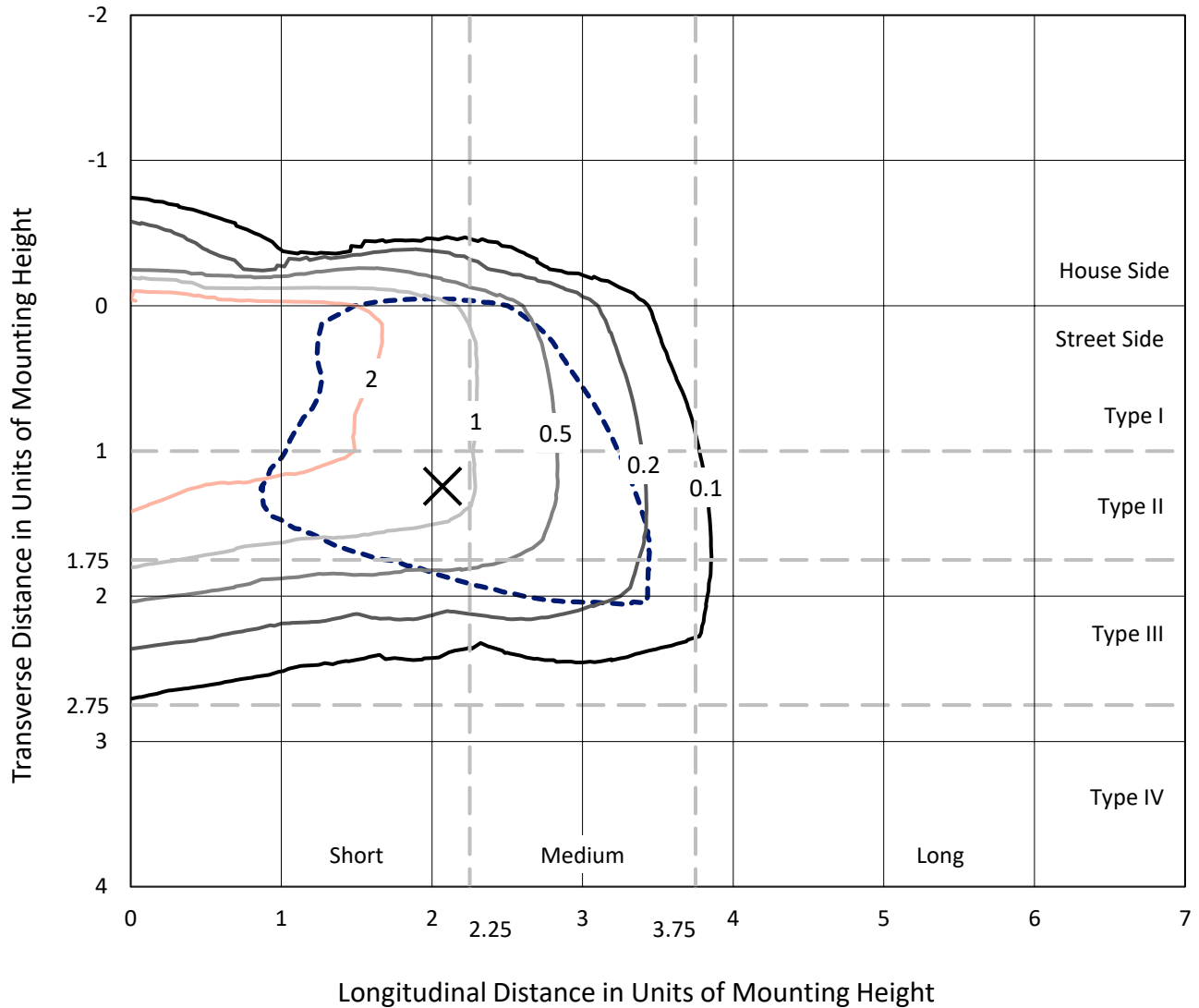
Input Watts (W): 166
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

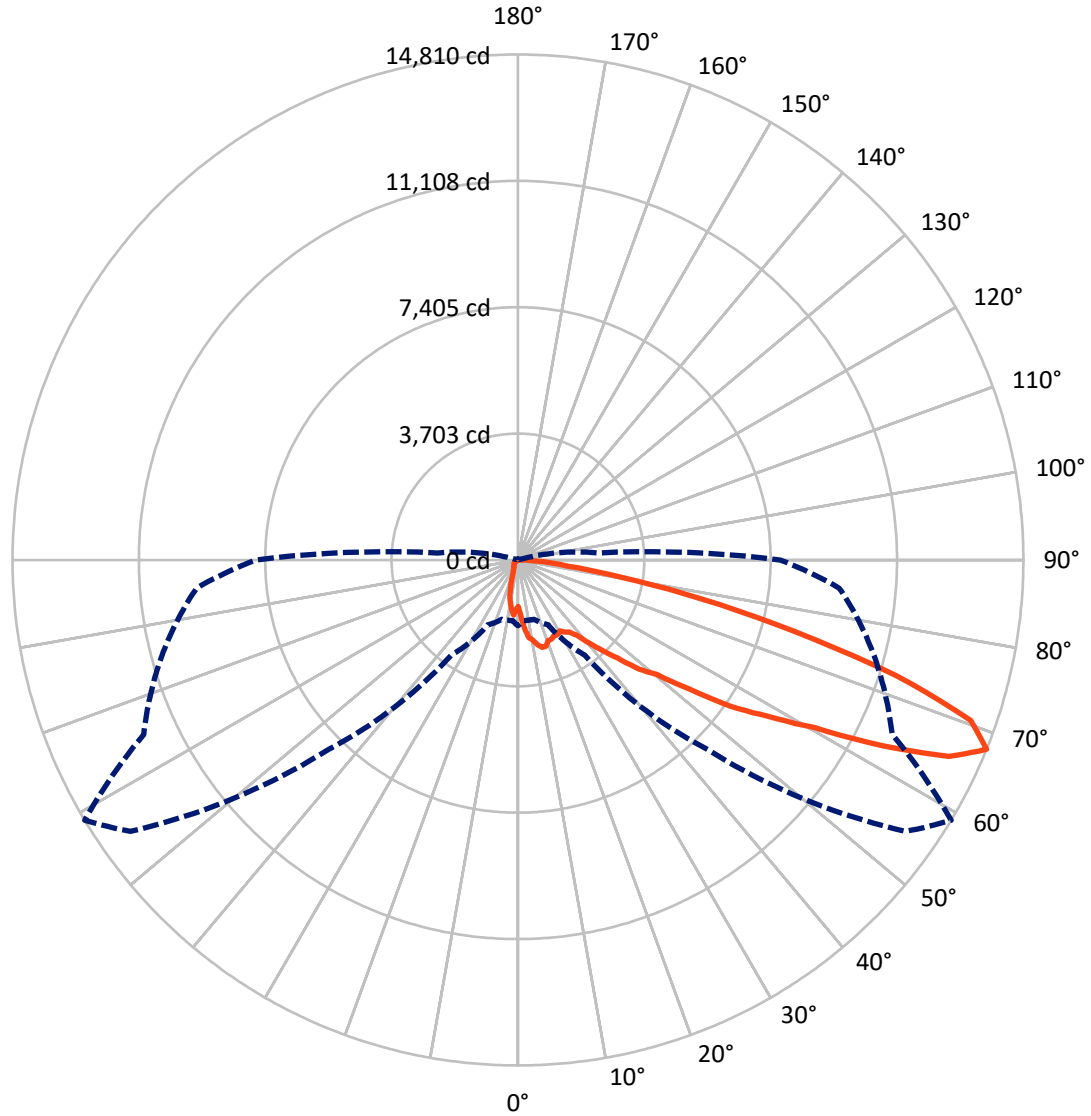
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.9 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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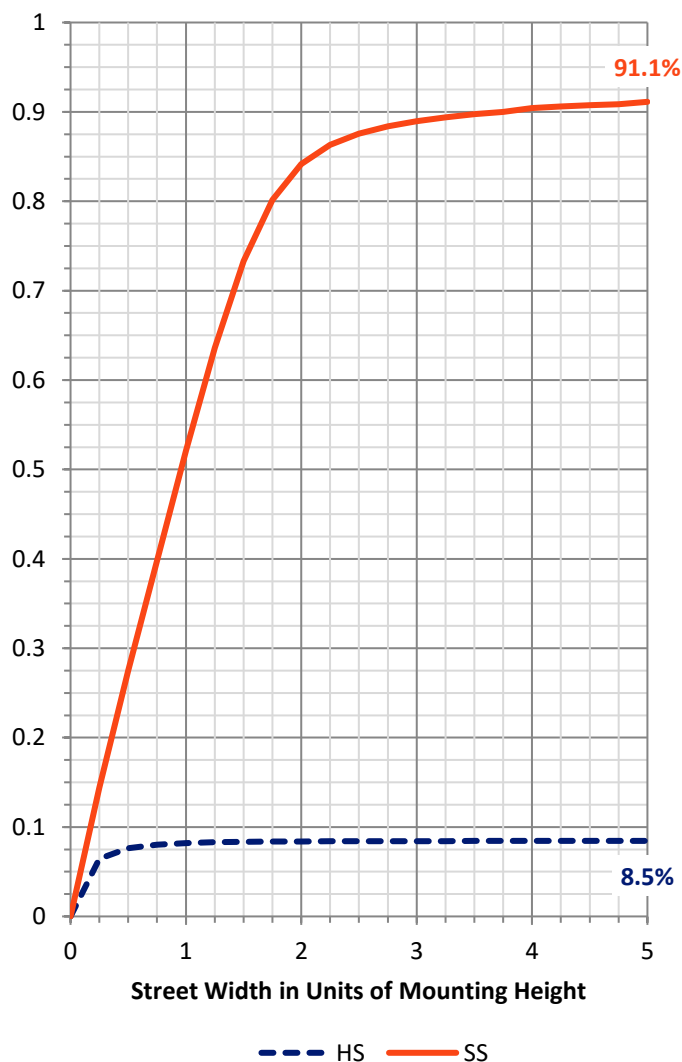
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1157.9	0.0	1157.9
	% Fixture	8.5	0.0	8.5
Street Side	Lumens	12457.1	0.0	12457.1
	% Fixture	91.5	0.0	91.5
Total	Lumens	13615.0	0.0	13615.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	165.6	1.2
10°-20°	466.4	3.4
20°-30°	693.7	5.1
30°-40°	1070.2	7.9
40°-50°	1910.0	14.0
50°-60°	3398.9	25.0
60°-70°	3958.5	29.1
70°-80°	1760.4	12.9
80°-90°	191.2	1.4
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°	13615.0	100.0
0°-180°	13615.0	100.0

Coefficient of Utilization



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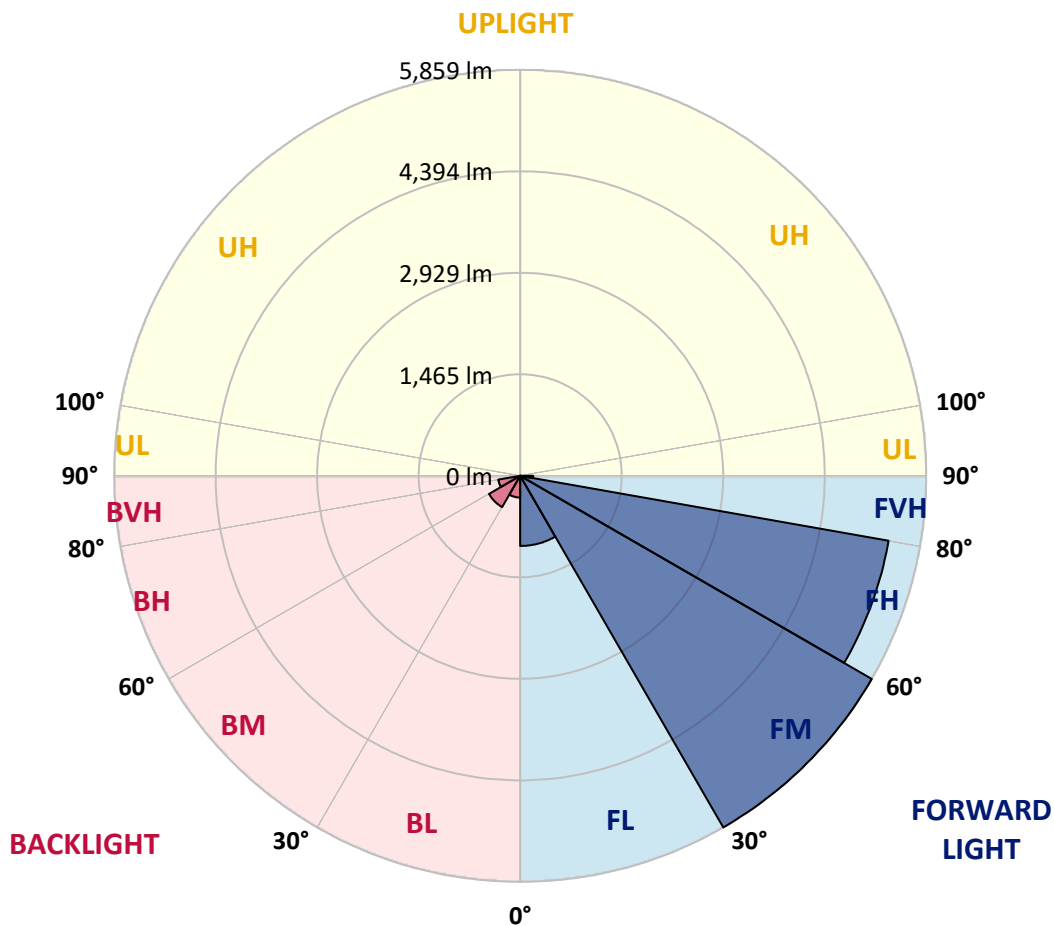
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1012.6	7.4			
FM (30°-60°)	5858.5	43.0			
FH (60°-80°)	5398.2	39.6			G3/7500
FVH (80°-90°)	187.8	1.4			G2/225
BL (0°-30°)	313.1	2.3	B1/500		
BM (30°-60°)	520.6	3.8	B1/1000		
BH (60°-80°)	320.7	2.4	B1/500		G1/500
BVH (80°-90°)	3.4	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G3

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	1362.2	1362.2	1362.2	1362.2	1362.2	1362.2	1362.2	1362.2	1362.2	1362.2	1362.2
2.5°	1775.9	1709.0	1613.8	1642.1	1667.6	1691.8	1651.8	1629.0	1618.0	1520.1	1642.8
5°	2180.5	2097.1	2053.7	2042.6	2015.1	1953.7	2055.7	2010.2	2025.4	2044.7	2084.7
7.5°	2303.9	2266.0	2203.3	2226.7	2121.9	2113.0	2254.3	2293.6	2345.3	2310.1	2358.4
10°	2240.5	2175.0	2204.7	2196.4	2192.2	2284.6	2383.9	2386.0	2463.2	2500.4	2337.0
12.5°	2115.0	2122.6	2228.8	2220.5	2358.4	2543.1	2565.9	2541.8	2667.9	2603.1	2578.3
15°	2198.4	2260.5	2201.9	2221.9	2270.8	2501.8	2582.4	2656.9	2776.2	2814.8	2647.2
17.5°	2299.1	2305.3	2198.4	2173.6	2297.0	2404.6	2594.8	2656.2	2667.9	3006.4	2802.3
20°	2244.6	2297.7	2170.2	2013.7	2205.3	2351.5	2544.5	2525.2	2603.8	3062.9	2837.5
22.5°	2389.4	2313.6	2150.2	2032.3	2097.1	2230.2	2393.5	2519.7	2637.6	2927.8	2883.0
25°	2403.2	2375.6	2230.2	2125.4	2114.3	2148.1	2375.6	2457.0	2641.7	3049.1	2844.4
27.5°	2558.3	2526.6	2228.8	2239.1	2135.7	2031.6	2288.8	2479.7	2716.9	2975.4	2926.4
30°	2758.2	2761.0	2377.0	2409.4	2261.9	2094.4	2359.8	2412.2	2767.9	3093.3	2987.1
32.5°	2960.9	3044.3	2670.0	2498.3	2452.1	2332.2	2271.5	2513.5	2712.0	3294.6	3138.8
35°	3269.1	3325.6	2911.3	2757.5	2576.2	2439.7	2511.4	2598.3	2912.7	3561.4	3338.0
37.5°	3790.9	3688.9	3344.2	3076.7	3033.3	2832.0	2867.8	2789.9	3117.4	3875.7	3732.3
40°	4084.6	3992.2	3633.7	3503.5	3226.3	3257.3	3144.3	3189.8	3414.5	4203.2	4091.5
42.5°	4390.7	4302.5	3988.1	3895.7	3631.7	3503.5	3452.4	3615.8	3870.2	4748.5	4606.5
45°	4698.2	4474.1	4341.1	4387.2	4268.7	4015.0	3955.7	4101.2	4367.9	5418.6	5149.7
47.5°	4957.4	4768.5	4668.5	4647.1	4601.0	4953.2	4711.9	4776.1	4893.9	6011.4	5826.7
50°	5424.8	5238.6	5082.1	5038.7	5263.5	5763.3	5391.0	5266.9	5502.7	6727.7	6611.2
52.5°	6099.7	5862.5	5613.7	5614.3	6038.3	6312.7	6489.2	6271.3	6315.5	7515.7	7464.0
55°	6642.2	6341.0	6134.8	6297.5	6929.7	7083.4	7757.0	7566.0	7508.8	8246.4	8183.0
57.5°	6716.7	6355.4	6257.5	6543.0	7408.1	8389.8	9114.4	8637.3	8549.8	8857.9	8984.1
60°	6021.8	5638.5	5712.2	6171.4	7563.9	9186.1	10360.8	9971.3	9414.9	9574.2	9661.0
62.5°	4491.3	4185.3	4392.1	5000.1	6963.5	9719.6	11803.6	11984.3	10418.7	10111.9	10093.3
65°	2914.0	2722.4	2858.2	3356.6	5269.7	9659.0	13092.8	13875.9	11209.4	10550.3	10229.1
67.5°	1927.5	1782.1	1801.4	2096.4	3407.6	7855.5	13863.5	14810.1	12098.7	10799.2	9450.8
70°	1436.7	1322.2	1329.1	1489.1	2022.7	5180.7	12788.8	14073.1	12423.4	9936.8	7628.0
72.5°	1036.1	959.6	1023.7	1201.6	1611.8	2739.6	9532.1	11589.9	10833.0	7837.6	5139.4
75°	717.6	667.3	772.1	1005.1	1471.1	1700.7	6298.9	8342.9	7592.9	4917.4	2323.2
77.5°	397.8	382.6	533.6	819.0	1335.3	1393.9	3858.5	5482.0	4211.5	1762.8	552.9
80°	173.7	168.2	258.5	614.9	1122.3	1259.5	2172.3	3039.5	1656.6	314.4	178.6
82.5°	74.5	71.7	110.3	370.2	815.5	1053.4	1339.5	1462.9	570.1	97.2	101.3
85°	13.1	14.5	44.1	195.1	496.4	535.0	970.0	865.9	286.8	46.2	72.4
87.5°	0.0	0.0	6.9	37.9	93.1	153.0	420.5	303.3	54.5	15.2	12.4
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°	1362.2	1362.2	1362.2	1362.2	1362.2	1362.2	1362.2	1362.2	1362.2	1362.2	1362.2
2.5°	1660.0	1621.4	1474.6	1456.0	1436.0	1406.3	1395.3	1331.9	1323.6	1405.0	1405.0
5°	2066.1	1928.2	1788.3	1678.0	1579.4	1442.9	1404.3	1364.3	1331.9	1323.6	1349.1
7.5°	2280.5	2112.3	1892.4	1611.8	1384.3	1186.4	1103.7	1045.8	981.0	1000.3	1010.6
10°	2268.8	2090.2	1809.6	1449.1	1196.8	978.2	768.0	645.3	577.0	543.2	539.1
12.5°	2383.9	2215.7	1753.8	1319.5	997.5	695.6	483.3	395.7	345.4	346.1	341.9
15°	2450.8	2267.4	1689.0	1155.4	702.5	447.4	335.0	315.7	308.8	316.4	312.3
17.5°	2568.6	2321.8	1542.2	910.7	483.3	337.8	308.2	300.6	309.5	325.4	321.3
20°	2559.7	2227.4	1333.3	641.8	357.1	304.0	291.6	279.9	298.5	315.0	312.3
22.5°	2551.4	2135.0	1136.8	473.6	298.5	277.1	266.8	262.0	271.6	290.9	295.1
25°	2478.3	2089.5	937.6	355.7	270.2	251.6	246.8	242.7	246.1	262.0	261.3
27.5°	2568.0	1974.4	723.9	298.5	250.2	228.2	224.1	217.2	210.3	224.1	226.1
30°	2549.3	1990.3	567.4	262.7	230.3	200.6	202.0	187.5	175.1	187.5	187.5
32.5°	2616.9	1874.4	454.3	238.5	210.3	188.9	171.7	156.5	147.5	155.1	156.5
35°	2715.5	1879.3	355.7	223.4	193.0	168.2	147.5	132.4	124.1	127.5	129.6
37.5°	3045.7	1846.2	297.1	211.6	186.8	155.8	134.4	114.4	108.9	113.1	115.1
40°	3260.8	1934.4	262.0	205.4	171.0	143.4	115.1	100.7	95.8	97.9	101.3
42.5°	3666.1	1983.4	244.7	198.5	156.5	122.7	98.6	90.3	83.4	86.2	88.9
45°	4099.8	2066.8	231.6	191.0	145.5	107.5	86.9	80.0	71.0	71.7	74.5
47.5°	4632.7	2265.3	216.5	177.9	130.3	97.9	77.2	66.9	58.6	57.9	61.4
50°	5348.2	2530.7	202.7	161.3	120.6	89.6	67.6	54.5	47.6	45.5	48.3
52.5°	6112.1	2874.0	188.2	149.6	108.9	78.6	57.9	44.1	37.9	36.5	38.6
55°	6869.0	3203.6	174.4	142.0	96.5	67.6	48.9	36.5	31.0	29.6	31.0
57.5°	7731.5	3560.0	156.5	126.8	84.8	58.6	40.7	30.3	25.5	24.1	24.8
60°	8380.9	3685.5	141.3	110.3	73.8	51.7	34.5	24.1	20.7	19.3	20.0
62.5°	8689.0	3480.7	126.8	95.8	64.8	44.8	29.0	20.0	17.2	15.9	15.9
65°	8609.0	3027.1	112.4	82.0	55.8	37.2	22.7	17.2	15.2	13.1	12.4
67.5°	7685.3	2368.7	95.8	68.9	46.9	30.3	19.3	16.5	13.8	12.4	10.3
70°	6094.9	1715.2	77.9	57.2	39.3	24.8	15.2	15.2	13.1	12.4	9.7
72.5°	3995.0	1079.6	63.4	46.2	32.4	19.3	11.7	13.8	12.4	12.4	9.0
75°	1731.0	386.1	51.0	37.2	26.9	13.1	10.3	12.4	13.1	12.4	10.3
77.5°	405.4	120.0	40.0	29.6	22.1	9.0	10.3	12.4	13.1	11.7	9.0
80°	152.4	51.0	26.2	19.3	17.2	5.5	9.0	7.6	6.9	4.8	1.4
82.5°	92.4	21.4	13.8	9.7	8.3	1.4	4.1	2.8	1.4	1.4	0.0
85°	65.5	10.3	7.6	6.9	4.1	0.0	0.7	0.0	0.0	0.7	0.0
87.5°	9.0	2.8	3.4	3.4	2.8	0.0	0.0	0.0	0.0	0.0	0.0
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)