

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: P597055

Luminaire Tested: **MSA-SA3C-835-U-SL4-HSS**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P597055
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-21)
Test Lab: INNOVATIONS CENTER
Issue Date: 5/27/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: MSA-SA3C-835-U-SL4-HSS
Description: MESA POST TOP DECORATIVE LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12413 lumens
Efficiency: N/A
Efficacy: 74.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G3

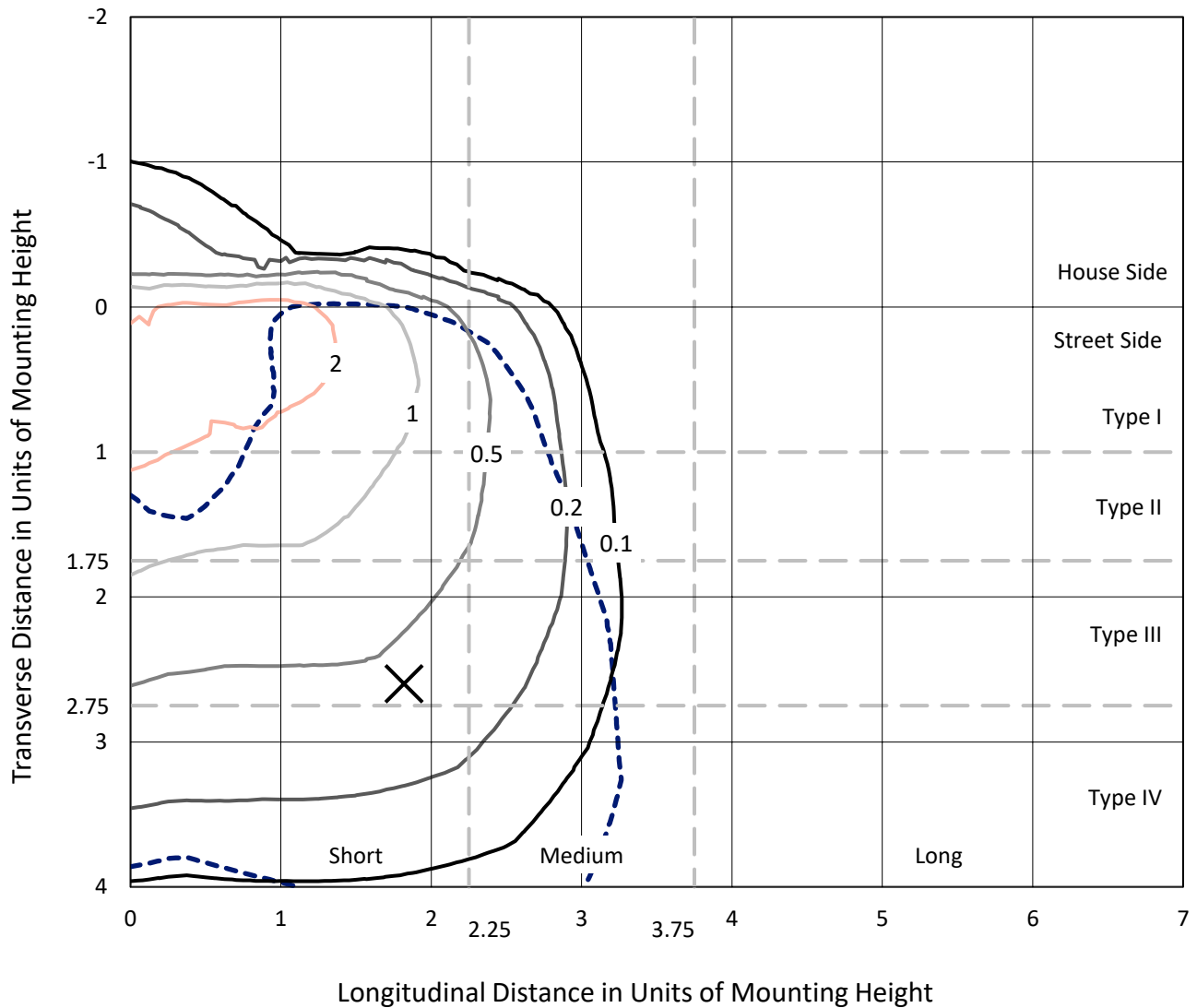
Input Watts (W): 166
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

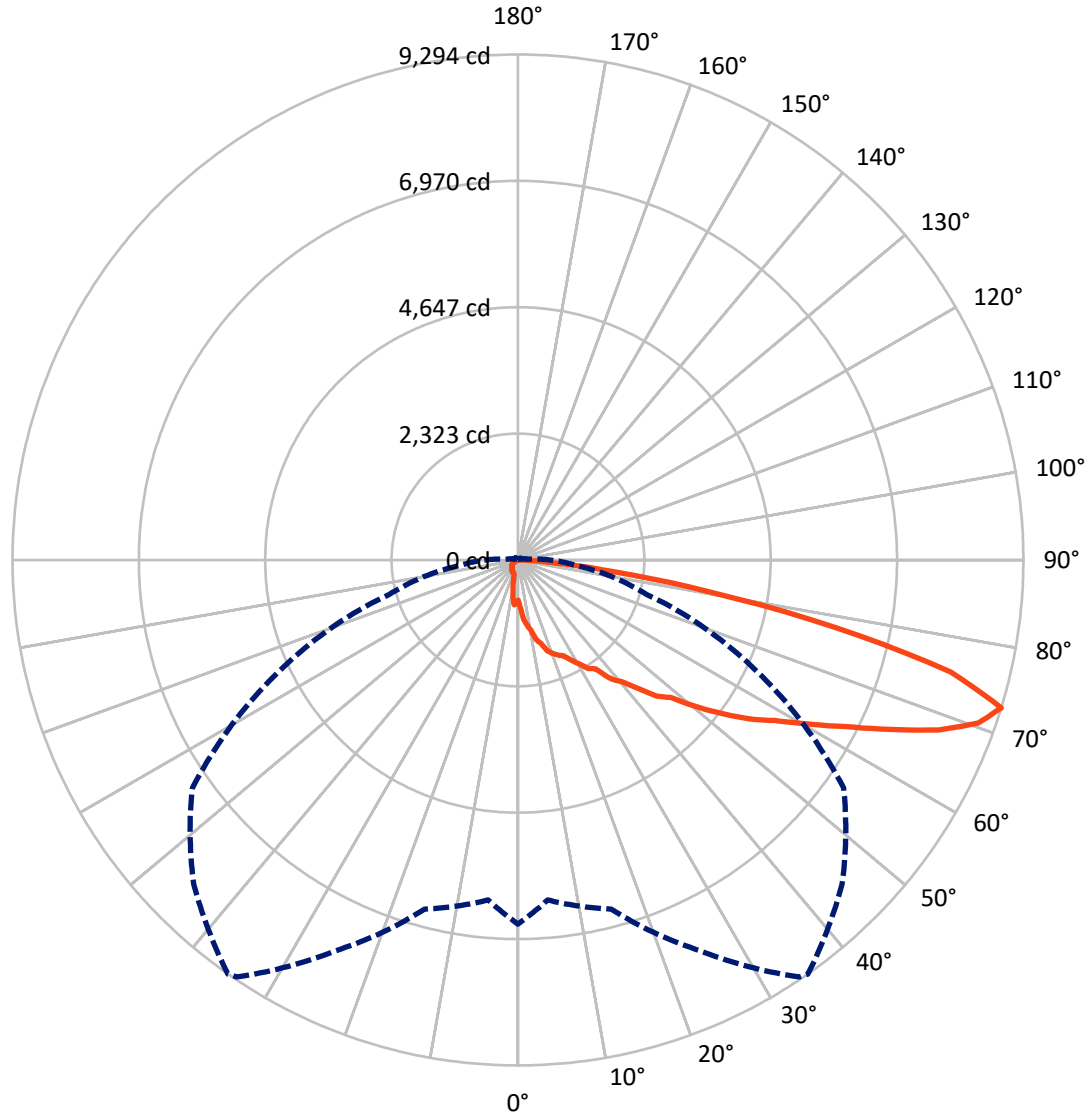
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.8 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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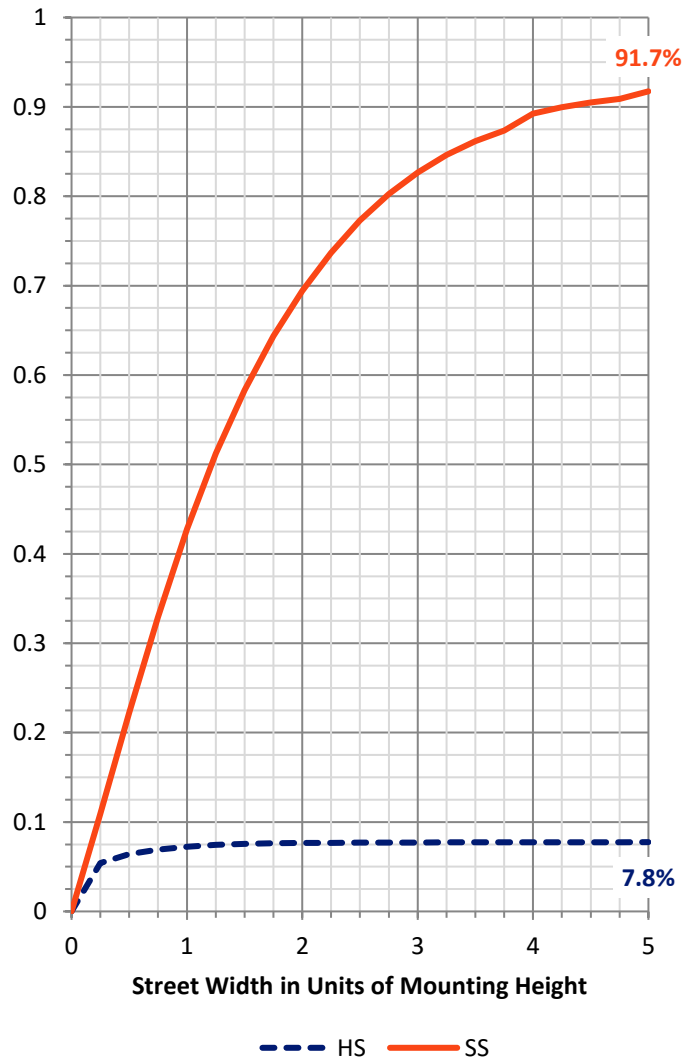
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	968.2	0.0	968.2
	% Fixture	7.8	0.0	7.8
Street Side	Lumens	11444.8	0.0	11444.8
	% Fixture	92.2	0.0	92.2
Total	Lumens	12413.0	0.0	12413.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.3	0.8
10°-20°	317.7	2.6
20°-30°	578.5	4.7
30°-40°	997.9	8.0
40°-50°	1773.8	14.3
50°-60°	2647.0	21.3
60°-70°	3381.8	27.2
70°-80°	2352.9	19.0
80°-90°	269.2	2.2
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°	12413.0	100.0
0°-180°	12413.0	100.0

Coefficient of Utilization



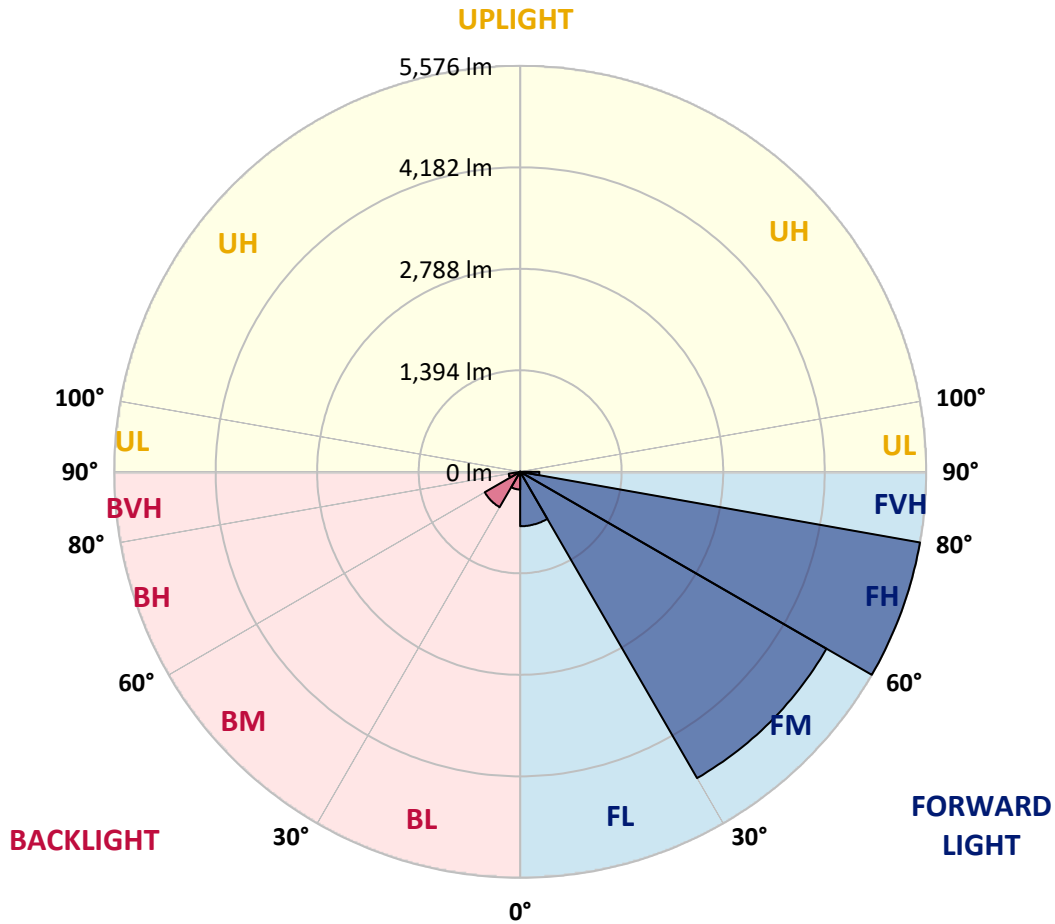
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	747.0	6.0			
FM (30°-60°)	4857.3	39.1			
FH (60°-80°)	5575.9	44.9			G3/7500
FVH (80°-90°)	264.6	2.1			G3/500
BL (0°-30°)	243.5	2.0	B1/500		
BM (30°-60°)	561.4	4.5	B1/1000		
BH (60°-80°)	158.7	1.3	B1/500		G1/500
BVH (80°-90°)	4.5	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 IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	739.4	739.4	739.4	739.4	739.4	739.4	739.4	739.4	739.4	739.4	739.4
2.5°	941.0	904.2	844.3	848.6	875.5	881.1	889.2	868.0	849.3	816.2	880.5
5°	1205.6	1152.5	1118.8	1108.2	1092.6	1093.9	1055.8	1069.5	1065.8	1090.1	1119.5
7.5°	1354.7	1325.4	1282.9	1271.1	1213.7	1207.4	1160.6	1223.7	1229.9	1221.2	1269.2
10°	1414.0	1375.3	1380.3	1336.0	1307.3	1314.8	1322.3	1327.2	1335.4	1343.5	1284.8
12.5°	1448.9	1455.8	1523.8	1477.6	1506.3	1506.3	1556.9	1503.2	1505.1	1446.4	1456.4
15°	1606.2	1644.2	1613.7	1613.0	1581.8	1590.0	1648.6	1606.2	1628.0	1610.5	1543.2
17.5°	1803.4	1810.8	1752.8	1727.2	1755.3	1755.9	1731.0	1729.1	1653.0	1781.5	1699.8
20°	1866.4	1908.8	1826.4	1726.6	1843.3	1837.7	1835.8	1806.5	1679.8	1858.3	1790.9
22.5°	2038.0	1977.5	1921.3	1855.8	1901.3	1901.3	1894.5	1830.2	1780.9	1851.4	1880.1
25°	2091.7	2099.1	2026.1	2004.9	2006.2	1950.0	1945.0	1917.6	1870.1	1990.6	1933.2
27.5°	2276.4	2273.2	2097.9	2157.2	2081.7	2082.3	1944.4	2006.2	2014.3	1997.4	2061.7
30°	2457.9	2508.5	2243.9	2318.8	2239.5	2215.8	2081.0	2136.0	2150.3	2131.0	2212.1
32.5°	2689.4	2763.7	2506.6	2433.0	2311.9	2379.3	2286.3	2156.5	2227.7	2400.5	2446.1
35°	2934.7	2970.9	2696.9	2594.0	2457.3	2456.7	2453.6	2464.2	2542.8	2737.5	2776.2
37.5°	3375.2	3289.7	3042.0	2806.1	2836.7	2768.7	2721.3	2771.2	2852.9	3173.7	3339.0
40°	3621.1	3559.3	3210.5	3070.7	2919.1	2944.0	3072.6	3067.0	3284.7	3620.5	3868.2
42.5°	3860.1	3801.4	3458.2	3345.3	3150.6	3218.6	3274.8	3345.9	3792.1	4333.7	4469.7
45°	4072.9	3900.6	3658.5	3662.9	3561.8	3569.9	3669.1	3734.6	4379.9	4935.2	5030.7
47.5°	4201.4	4059.7	3827.6	3823.3	3817.0	3778.9	4246.3	4306.2	4848.5	5508.1	5516.8
50°	4382.4	4205.1	4001.7	4005.5	4149.6	4230.1	4788.0	4781.7	5300.9	5986.0	5784.5
52.5°	4607.6	4391.1	4167.1	4333.7	4556.5	4687.5	5140.5	5325.2	5787.0	6286.2	5889.3
55°	4895.9	4625.1	4409.2	4622.6	5108.7	5159.2	5485.6	5875.6	6316.8	6592.6	5923.0
57.5°	5234.1	4910.9	4736.2	5080.0	5564.8	5566.1	5987.9	6462.2	6641.9	6717.4	5884.9
60°	5598.5	5221.6	5045.7	5355.2	6067.8	6118.9	6546.4	6786.0	6972.0	6780.4	5816.9
62.5°	5919.3	5503.1	5366.4	5730.2	6619.4	6740.5	7033.1	6998.8	7210.3	6859.6	5644.1
65°	6301.2	5867.5	5777.6	6314.9	7339.5	7506.1	7579.7	7376.3	7290.2	6798.5	5194.2
67.5°	6679.3	6273.7	6271.2	6963.2	8283.6	8341.0	8263.6	7908.6	7197.2	6259.4	4369.9
70°	6945.8	6510.2	6674.3	7673.3	9141.6	8980.6	8654.9	8160.1	6525.8	4797.3	2854.8
72.5°	6695.5	6275.6	6645.6	7926.1	9247.7	9293.9	8428.4	7309.5	4848.5	2453.6	1033.3
75°	5088.1	4831.0	5770.1	7031.9	8210.6	8221.2	7035.0	5155.5	2387.4	666.4	285.8
77.5°	2562.8	2481.0	3652.3	4992.0	5990.4	5972.9	4833.5	2761.8	768.1	221.5	144.1
80°	1297.3	1231.8	1554.4	2693.2	3557.4	3583.6	2760.0	1236.8	387.5	120.4	99.8
82.5°	796.8	756.3	850.5	1218.7	1726.6	1768.4	1047.1	783.1	240.2	71.1	91.1
85°	154.1	162.2	488.6	610.3	689.5	673.3	310.1	644.6	72.4	42.4	66.1
87.5°	0.0	2.5	112.9	199.1	199.7	177.2	70.5	142.9	10.0	11.9	8.1
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°	739.4	739.4	739.4	739.4	739.4	739.4	739.4	739.4	739.4	739.4	739.4
2.5°	891.1	881.7	803.7	795.0	796.8	783.7	779.4	751.9	745.1	787.5	795.0
5°	1107.0	1044.6	972.2	946.0	905.4	836.8	826.8	809.3	790.0	797.5	791.9
7.5°	1239.3	1156.3	1078.9	941.0	826.8	727.0	710.7	680.8	650.8	651.5	670.8
10°	1260.5	1190.6	1083.9	916.0	785.6	660.8	552.2	473.6	438.0	406.2	415.6
12.5°	1383.4	1318.5	1122.0	908.5	725.7	531.0	388.8	312.0	278.3	267.1	265.8
15°	1482.0	1430.8	1186.8	885.5	592.8	373.8	278.3	255.8	249.6	260.2	257.1
17.5°	1628.6	1536.3	1180.0	790.0	451.8	283.9	256.5	253.3	260.8	267.1	268.9
20°	1692.9	1560.0	1133.2	640.2	338.2	260.2	250.2	244.0	257.7	276.4	272.7
22.5°	1757.8	1600.6	1078.3	524.2	272.1	249.0	243.4	238.4	249.0	267.1	271.4
25°	1787.1	1665.5	1017.1	409.3	252.7	235.9	232.1	234.0	242.7	259.0	257.1
27.5°	1935.0	1672.9	900.4	323.2	244.6	226.5	226.5	230.9	230.9	252.7	250.8
30°	2027.4	1799.6	805.6	272.1	235.2	213.4	220.9	222.8	219.6	243.4	245.2
32.5°	2189.6	1834.6	713.2	249.6	220.3	211.5	210.3	211.5	214.0	237.1	237.7
35°	2439.2	2006.8	587.2	240.9	212.8	202.2	193.4	200.3	206.5	223.4	226.5
37.5°	2927.2	2183.4	478.6	234.0	209.0	193.4	190.3	189.1	200.3	219.6	225.9
40°	3322.2	2496.0	389.4	228.4	201.6	188.4	180.3	181.0	190.9	205.3	214.7
42.5°	3881.3	2721.9	330.1	219.6	190.9	177.8	168.5	174.1	178.5	193.4	199.7
45°	4348.0	2897.2	290.8	214.0	180.3	167.9	160.4	166.6	162.2	169.7	178.5
47.5°	4719.3	3050.1	261.5	200.3	173.5	162.2	152.9	151.0	143.5	145.4	153.5
50°	4923.4	3024.5	237.1	186.6	164.7	156.6	143.5	130.4	120.4	119.8	124.8
52.5°	4995.7	2887.9	217.2	174.7	154.1	144.1	129.2	111.1	101.1	98.0	102.3
55°	5015.7	2691.3	199.1	161.6	144.1	128.5	112.9	93.6	83.0	78.0	82.4
57.5°	4950.8	2388.7	181.6	149.1	132.3	113.6	96.7	76.8	66.8	60.5	64.3
60°	4790.5	2004.3	166.0	133.5	119.8	100.5	81.7	61.8	51.2	45.6	47.4
62.5°	4435.4	1571.2	149.1	119.2	106.7	88.0	68.6	48.7	38.7	33.7	34.3
65°	3895.0	1171.2	129.8	105.5	94.8	76.1	54.9	37.4	29.3	25.0	24.3
67.5°	3103.2	793.7	110.4	91.1	84.2	64.3	43.7	29.3	23.1	20.0	18.7
70°	1824.0	400.0	91.7	78.6	72.4	53.7	34.3	23.7	21.2	18.7	17.5
72.5°	601.5	172.8	71.8	64.9	59.9	43.1	26.8	21.8	20.6	18.1	16.8
75°	209.7	99.8	53.0	49.9	47.4	32.4	22.5	20.0	20.0	17.5	15.6
77.5°	137.3	77.4	39.3	36.2	35.6	23.7	19.3	18.7	17.5	14.4	11.9
80°	114.2	43.7	27.5	25.6	25.0	15.0	15.6	13.7	10.6	6.2	2.5
82.5°	105.5	26.2	14.4	15.6	14.4	5.6	8.7	7.5	5.6	2.5	0.0
85°	61.8	11.9	8.1	8.1	6.2	1.2	4.4	4.4	2.5	0.6	0.0
87.5°	6.9	5.6	4.4	4.4	3.1	0.0	1.9	1.2	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)