

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: P367451

Luminaire Tested: **MSA-SA2C-740-U-T3-HSS**

Issue Date: 12/2/2019

Test Information

Test Method: LM-79-08
Report Number: P367451
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-11)
Test Lab: INNOVATION CENTER
Issue Date: 12/2/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: MSA-SA2C-740-U-T3-HSS
Description: MESA POST TOP DECORATIVE LUMINAIRE. (2) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9110 lumens
Efficiency: N/A
Efficacy: 80.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

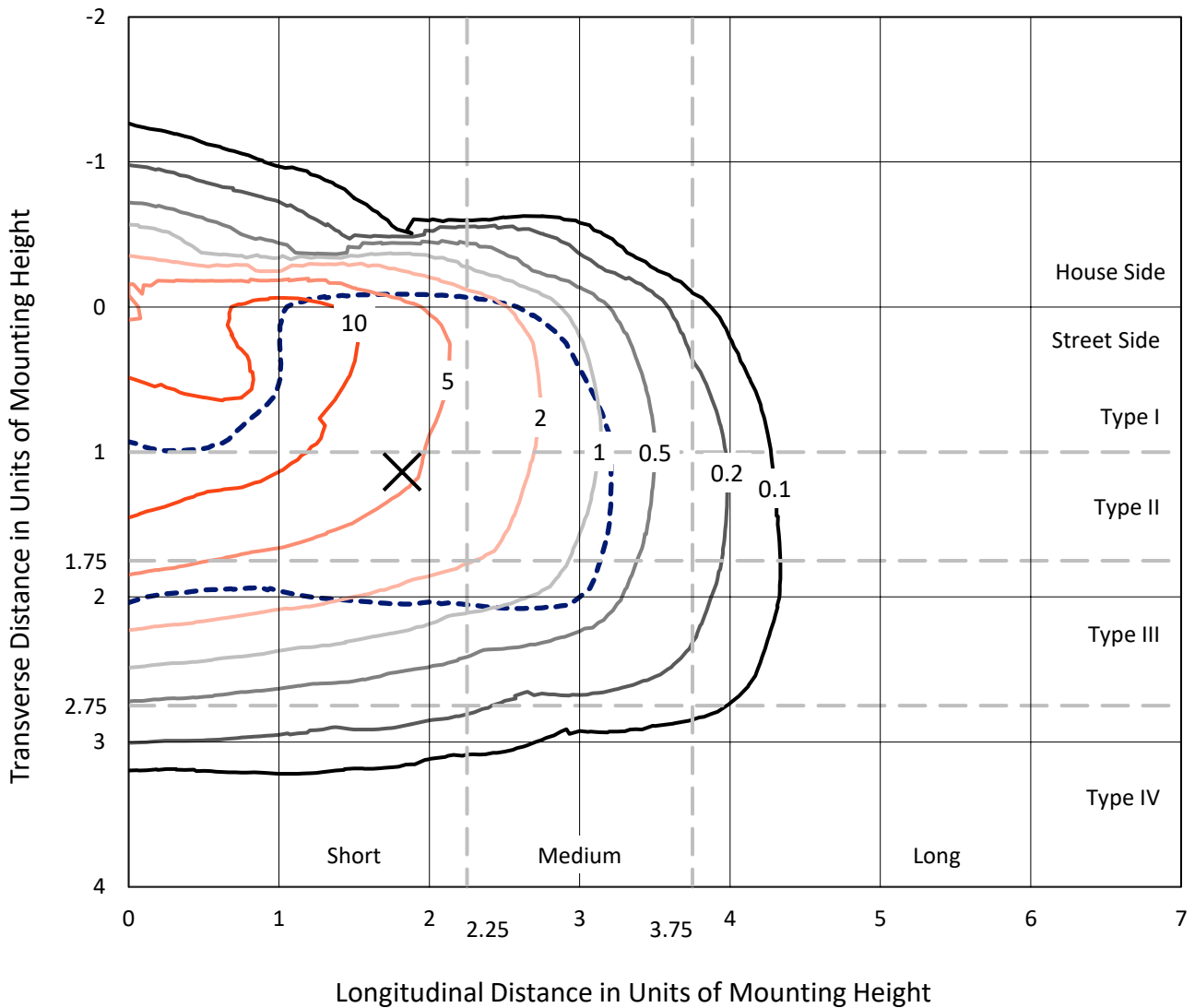
Input Watts (W): 113
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P367451
 CATALOG NUMBER: MSA-SA2C-740-U-T3-HSS

Iso-Footcandle Lines of Horizontal Illumination

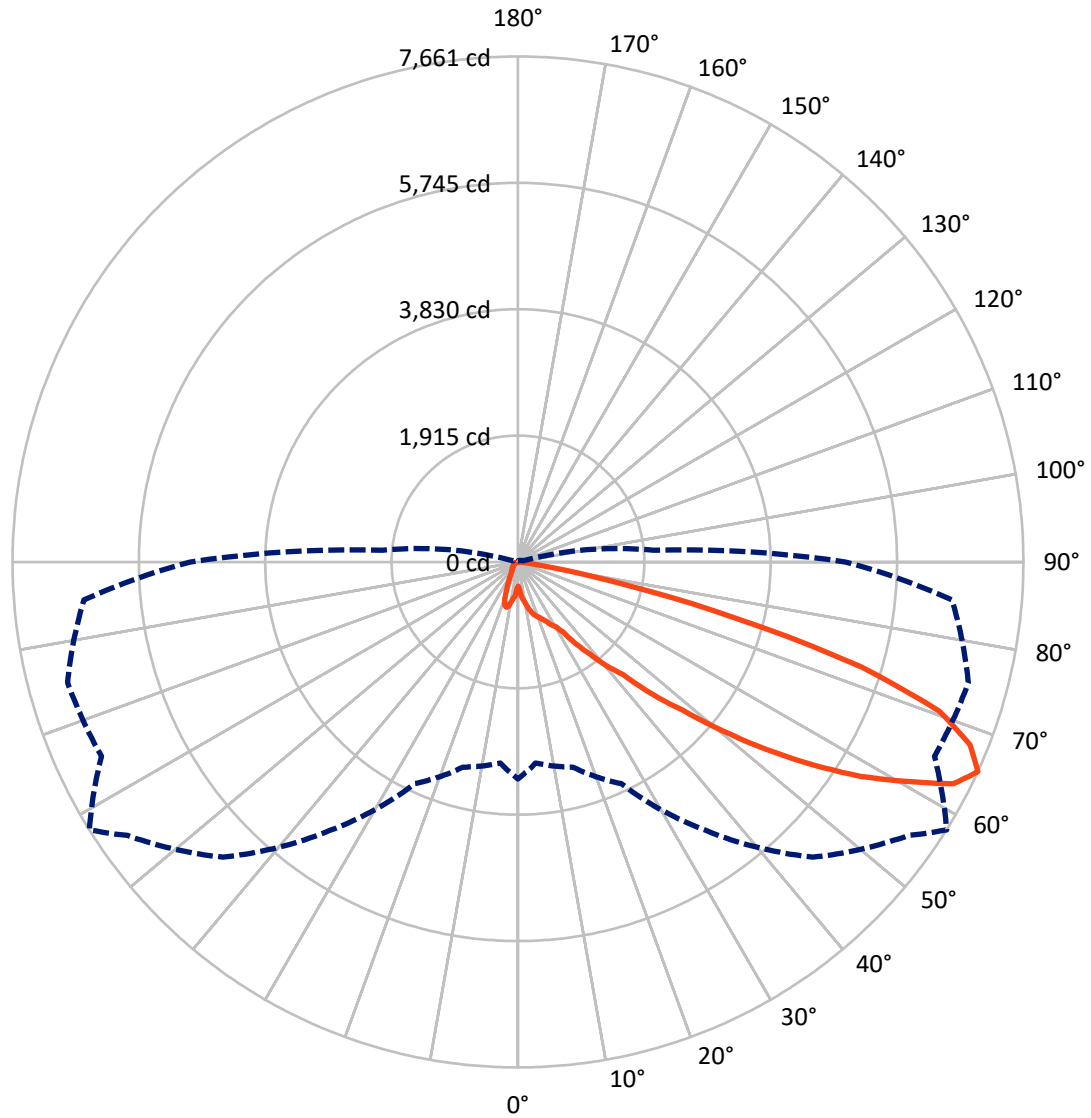
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 14.8 fc
 Type III - Short - N/A

REPORT NUMBER: P367451
CATALOG NUMBER: MSA-SA2C-740-U-T3-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P367451

CATALOG NUMBER: MSA-SA2C-740-U-T3-HSS

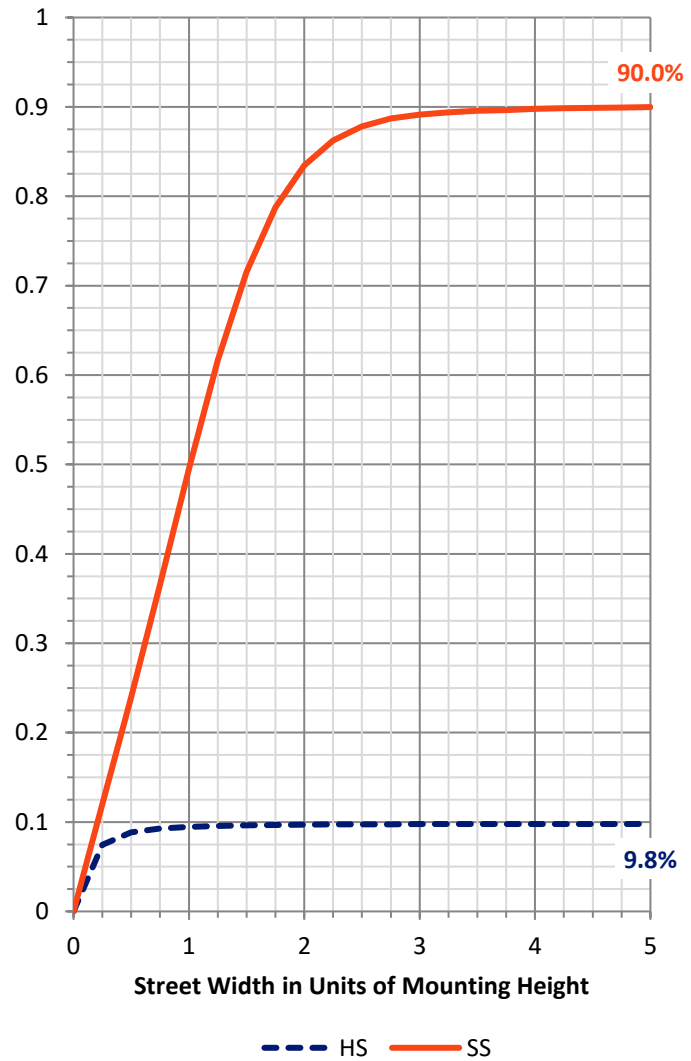
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	898.9	0.0	898.9
	% Fixture	9.9	0.0	9.9
Street Side	Lumens	8211.1	0.0	8211.1
	% Fixture	90.1	0.0	90.1
Total	Lumens	9110.0	0.0	9110.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.2	0.6
10°-20°	187.0	2.1
20°-30°	362.0	4.0
30°-40°	722.2	7.9
40°-50°	1476.4	16.2
50°-60°	2618.7	28.7
60°-70°	2760.8	30.3
70°-80°	895.1	9.8
80°-90°	36.6	0.4
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°	9110.0	100.0
0°-180°	9110.0	100.0

Coefficient of Utilization



REPORT NUMBER: P367451

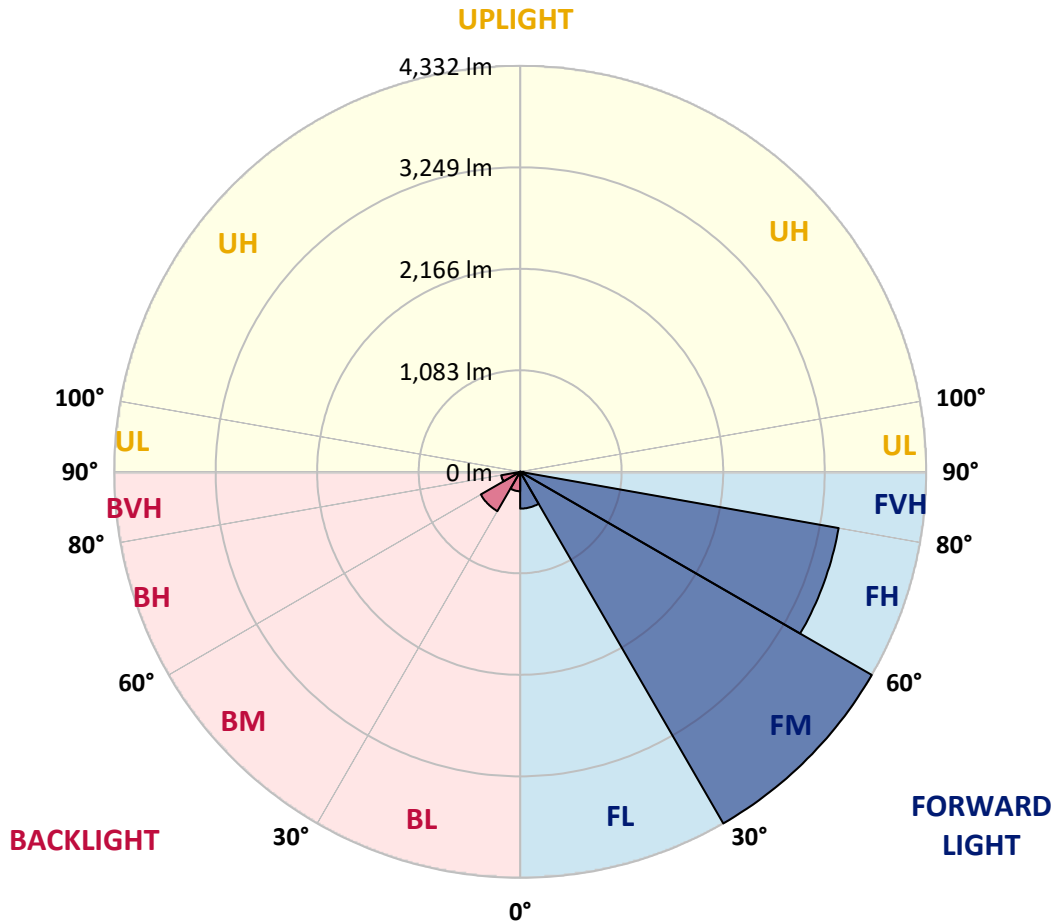
CATALOG NUMBER: MSA-SA2C-740-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	393.0	4.3			
FM (30°-60°)	4332.3	47.6			
FH (60°-80°)	3450.7	37.9			G2/5000
FVH (80°-90°)	35.0	0.4			G1/100
BL (0°-30°)	207.2	2.3	B1/500		
BM (30°-60°)	485.0	5.3	B1/1000		
BH (60°-80°)	205.2	2.3	B1/500		G1/500
BVH (80°-90°)	1.5	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-G2

Type III Short





REPORT NUMBER: P367451
 CATALOG NUMBER: MSA-SA2C-740-U-T3-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	364.7	364.7	364.7	364.7	364.7	364.7	364.7	364.7	364.7	364.7	364.7
2.5°	445.2	431.9	410.9	414.4	418.5	426.8	420.1	413.9	407.3	398.5	431.9
5°	537.5	515.5	513.4	508.8	505.2	504.7	512.9	510.4	513.9	530.4	547.3
7.5°	571.4	562.2	544.7	551.9	540.6	531.9	568.3	580.1	602.7	610.4	654.5
10°	567.8	554.5	561.6	565.2	572.9	604.7	627.8	640.6	660.1	702.2	693.5
12.5°	584.2	596.0	603.7	604.2	643.7	702.2	718.6	729.4	764.3	780.7	823.8
15°	639.1	658.6	646.3	651.4	664.2	735.5	774.0	797.6	846.8	900.2	910.9
17.5°	717.6	729.9	704.2	685.8	721.2	760.2	829.9	854.5	885.8	1010.5	1033.5
20°	816.6	837.6	782.2	708.9	755.5	801.7	877.6	889.4	922.7	1085.3	1121.8
22.5°	1047.9	1016.6	932.0	817.6	803.7	824.3	896.6	942.8	999.2	1127.4	1212.0
25°	1276.1	1265.4	1140.7	1013.0	920.7	874.5	970.4	996.1	1088.4	1227.4	1274.1
27.5°	1530.0	1551.6	1343.3	1265.9	1084.8	934.0	1016.6	1080.7	1190.0	1263.8	1376.2
30°	1865.0	1830.6	1586.5	1509.0	1302.3	1097.7	1136.1	1140.2	1300.8	1383.9	1490.6
32.5°	2127.6	2149.7	1842.9	1723.9	1558.8	1349.5	1225.9	1279.2	1394.1	1579.3	1680.3
35°	2411.8	2409.7	2110.7	1950.6	1734.7	1555.2	1492.1	1531.1	1675.2	1885.0	1911.7
37.5°	2836.5	2800.0	2447.2	2212.7	2029.1	1875.8	1827.5	1775.7	1924.5	2124.5	2224.5
40°	3237.0	3111.4	2785.2	2507.2	2272.2	2209.7	2035.3	2067.1	2111.2	2375.3	2651.8
42.5°	3641.7	3563.8	3127.8	2894.9	2606.2	2457.4	2343.5	2328.7	2538.5	2851.3	3137.0
45°	4175.7	3937.2	3588.4	3383.7	3049.3	2900.1	2808.2	2863.1	3051.9	3508.9	3699.2
47.5°	4624.0	4404.5	4104.9	3794.1	3443.2	3611.0	3438.6	3351.9	3611.0	4083.4	4336.2
50°	5009.2	4764.5	4461.4	4231.1	4174.2	4335.2	3986.4	4018.2	4186.5	4741.4	4884.0
52.5°	5289.2	5031.8	4767.1	4655.8	4889.2	4970.2	4795.3	4725.0	4877.9	5302.6	5371.8
55°	5500.1	5236.4	5029.7	5183.1	5634.4	5607.8	5669.3	5429.3	5575.5	5887.8	5855.0
57.5°	5512.9	5200.5	5079.5	5326.2	5945.8	6358.7	6538.7	6130.4	6213.5	6345.4	6271.5
60°	5109.7	4798.9	4789.2	5139.5	6036.1	6553.1	6947.0	6748.0	6636.7	6734.7	6594.6
62.5°	4306.5	4089.0	4190.6	4577.8	5700.1	6445.9	7164.5	7404.0	6970.6	6992.7	6793.6
65°	3288.3	3060.1	3219.1	3706.9	4965.6	6325.9	7226.0	7660.5	6964.5	7066.0	6602.8
67.5°	2177.9	2045.5	2225.6	2763.1	3948.0	5584.2	7194.2	7391.2	6743.4	6779.3	5894.5
70°	1124.3	1092.0	1237.7	1661.9	2654.4	4290.1	6881.9	6774.2	6294.6	5840.1	4546.5
72.5°	360.1	361.6	501.6	759.1	1431.1	2611.8	5289.8	5437.5	5036.9	4272.1	2775.9
75°	159.5	157.0	209.8	318.5	596.5	1171.0	3286.3	3445.8	3136.0	2350.2	1166.9
77.5°	114.9	111.3	134.4	186.2	295.4	397.0	1540.8	1662.9	1421.8	814.5	267.2
80°	81.0	80.5	97.5	130.8	184.7	176.4	486.8	545.7	437.0	197.5	78.5
82.5°	45.7	47.2	67.7	92.3	112.3	88.2	137.0	150.8	147.2	105.1	34.4
85°	22.1	24.6	44.1	66.7	59.0	34.4	48.7	52.8	61.6	61.0	17.4
87.5°	0.0	0.0	18.0	30.3	15.9	5.1	14.9	16.9	16.4	19.5	4.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P367451
 CATALOG NUMBER: MSA-SA2C-740-U-T3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	364.7	364.7	364.7	364.7	364.7	364.7	364.7	364.7	364.7	364.7	364.7
2.5°	438.5	435.5	396.5	399.6	408.3	404.7	407.8	400.6	392.4	425.7	425.2
5°	554.5	531.4	519.1	507.8	509.8	486.8	500.1	506.3	505.2	524.2	529.3
7.5°	656.0	625.3	600.6	577.0	541.1	508.8	528.8	541.6	550.4	583.2	596.0
10°	703.7	678.6	668.9	622.7	597.0	577.0	552.9	535.5	542.7	534.0	542.7
12.5°	808.4	791.4	754.0	707.3	676.5	635.5	545.7	470.9	424.7	425.2	422.1
15°	903.8	902.7	846.8	769.4	680.1	563.2	423.2	328.8	285.2	272.9	268.8
17.5°	1028.4	1013.0	910.9	796.6	636.0	436.0	288.3	225.2	221.1	228.3	225.2
20°	1107.9	1085.3	942.8	757.1	524.2	294.9	217.5	199.5	211.8	222.1	219.5
22.5°	1187.4	1153.6	966.9	708.9	372.9	215.9	196.4	193.4	201.1	213.9	215.9
25°	1231.0	1224.3	1014.0	618.6	255.4	189.3	189.3	188.2	190.8	200.0	198.5
27.5°	1357.7	1267.4	978.7	482.7	197.5	173.9	176.4	175.4	166.2	175.4	175.9
30°	1436.7	1395.1	981.2	343.7	173.9	153.9	160.5	152.3	138.5	146.2	144.6
32.5°	1595.7	1492.1	973.5	231.8	158.5	146.7	136.4	124.6	114.4	117.5	114.9
35°	1780.9	1701.9	869.4	186.2	147.7	129.8	113.4	101.6	90.8	93.4	92.8
37.5°	2149.1	1898.3	783.2	167.7	140.5	119.0	100.0	83.6	78.0	79.5	81.0
40°	2490.2	2226.1	622.7	159.5	128.2	106.2	82.6	70.8	67.2	68.2	69.8
42.5°	3000.1	2486.6	470.3	151.3	115.9	89.8	68.7	61.0	57.4	59.5	60.5
45°	3493.5	2708.2	351.4	144.1	105.7	77.5	58.0	52.8	48.7	50.3	52.3
47.5°	3986.4	2954.4	262.1	132.8	94.4	66.7	49.8	46.2	43.6	44.1	46.7
50°	4427.5	3069.3	206.2	119.0	85.1	58.0	45.1	41.5	40.5	41.0	43.1
52.5°	4751.7	3070.4	173.9	106.7	76.4	51.3	42.6	38.5	38.0	39.0	41.0
55°	5044.6	2988.3	150.8	95.9	68.7	46.7	40.5	36.9	36.9	38.0	40.0
57.5°	5239.0	2837.5	130.8	84.6	62.1	44.1	39.0	35.4	34.9	34.4	35.9
60°	5333.9	2631.8	110.8	74.4	55.9	42.6	38.0	31.3	30.8	29.7	30.8
62.5°	5273.9	2374.3	92.8	64.1	49.8	40.5	33.3	27.2	26.2	24.1	25.6
65°	4967.1	2061.4	78.5	54.9	43.1	34.4	28.2	23.1	20.5	18.0	17.4
67.5°	4339.8	1674.7	65.7	47.2	36.9	28.2	23.1	20.5	15.9	13.8	13.3
70°	3252.4	1143.3	54.4	40.5	30.8	24.1	19.5	18.5	14.9	13.3	12.3
72.5°	1908.1	617.0	45.7	35.4	26.2	20.0	15.9	16.9	14.9	12.3	11.3
75°	762.2	205.2	36.4	28.2	21.0	14.4	13.3	13.8	13.3	11.3	9.2
77.5°	173.9	64.6	28.2	22.1	16.4	9.2	10.8	11.8	11.8	9.2	6.7
80°	54.4	25.6	16.4	13.8	11.8	5.1	7.7	8.2	5.6	2.6	0.0
82.5°	17.4	7.2	5.6	5.6	5.1	1.0	1.5	1.0	0.0	0.0	0.0
85°	6.7	4.6	3.6	3.6	2.1	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.6	2.1	1.5	2.1	1.0	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)