

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: P367285

Luminaire Tested: **MSA-SA2B-730-U-SL2-HSS**

Issue Date: 12/2/2019

Test Information

Test Method: LM-79-08
Report Number: P367285
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-17)
Test Lab: INNOVATION CENTER
Issue Date: 12/2/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: MSA-SA2B-730-U-SL2-HSS
Description: MESA POST TOP DECORATIVE LUMINAIRE. (2) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7435 lumens
Efficiency: N/A
Efficacy: 87.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

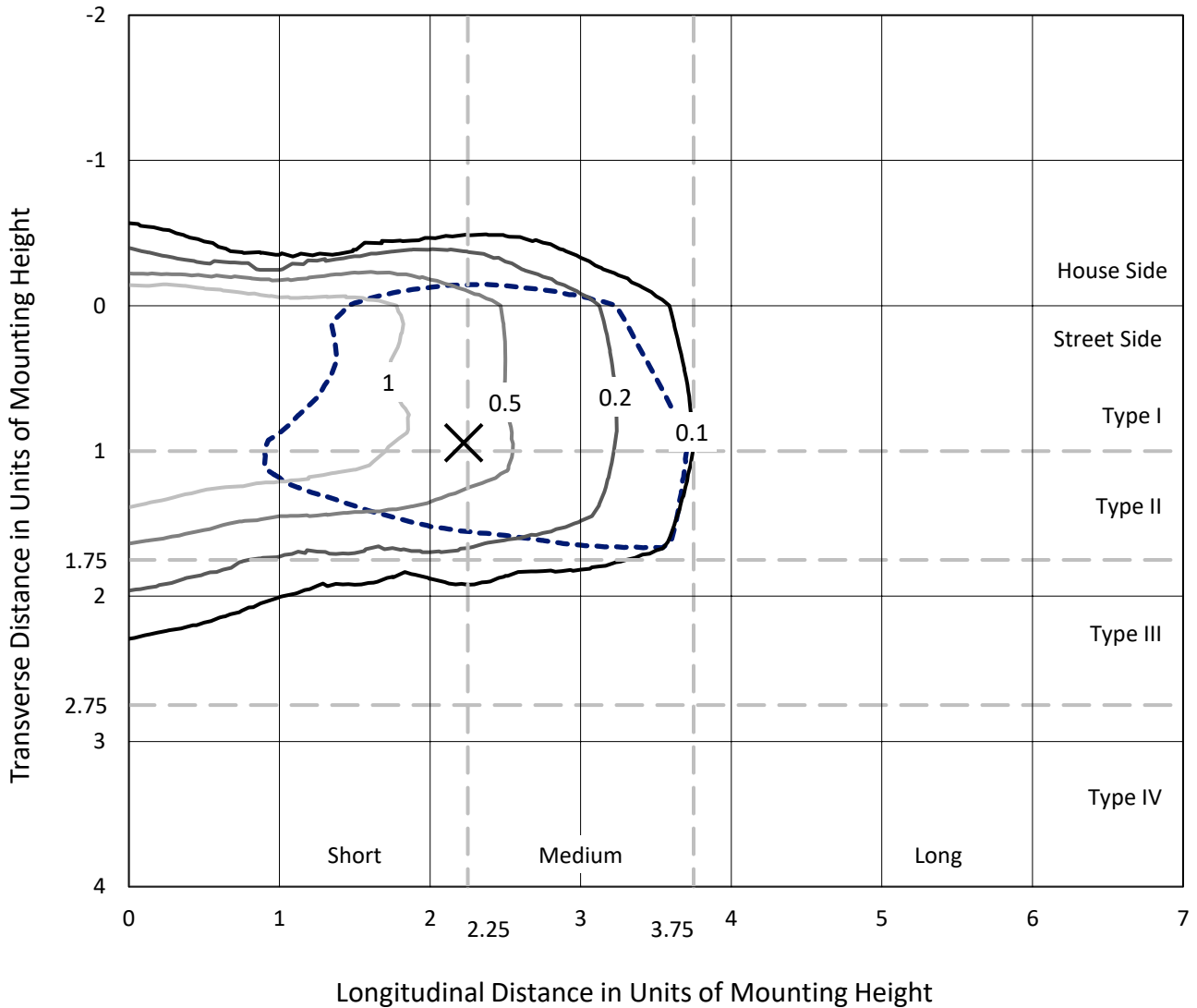
Input Watts (W): 85
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

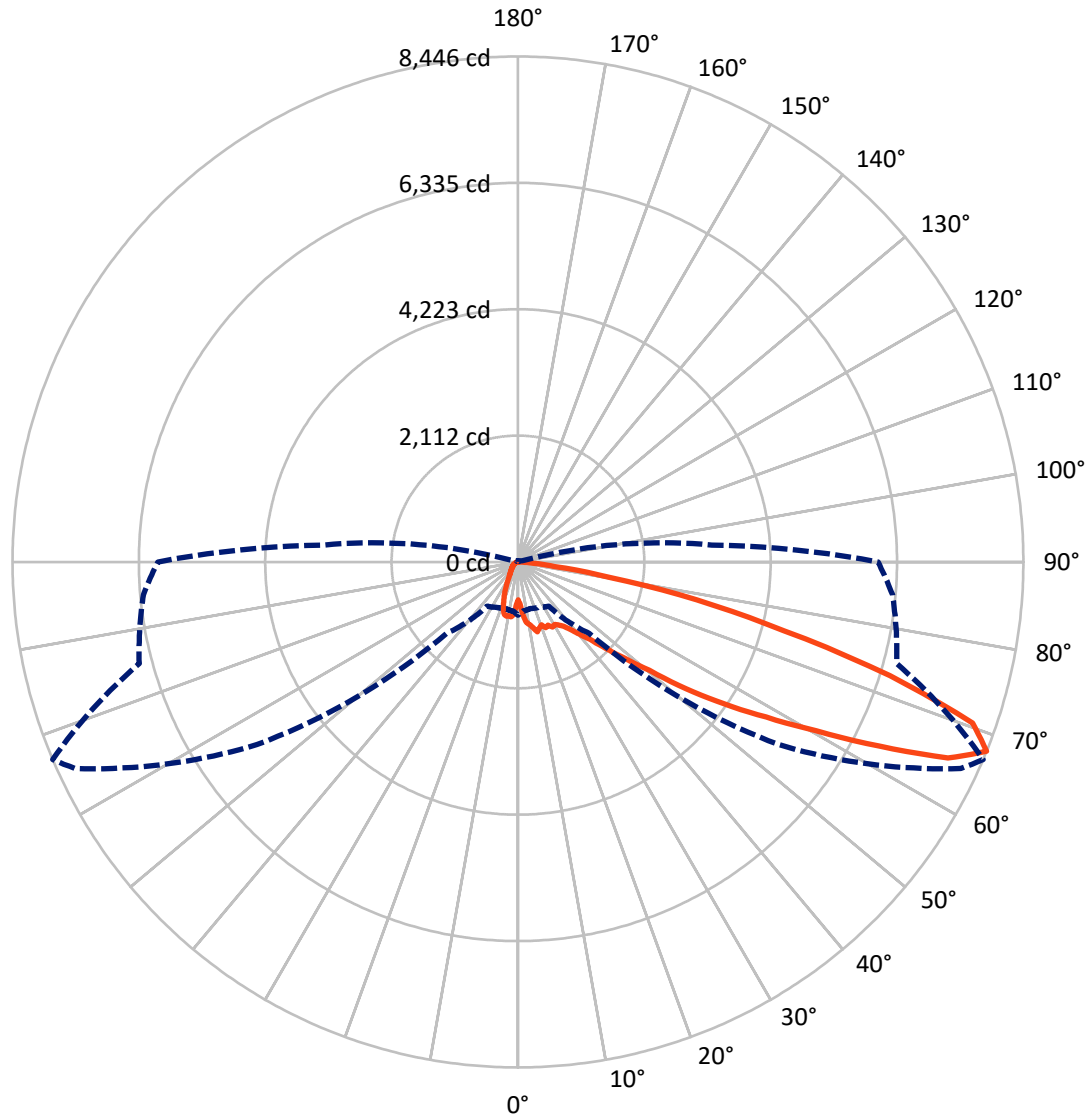
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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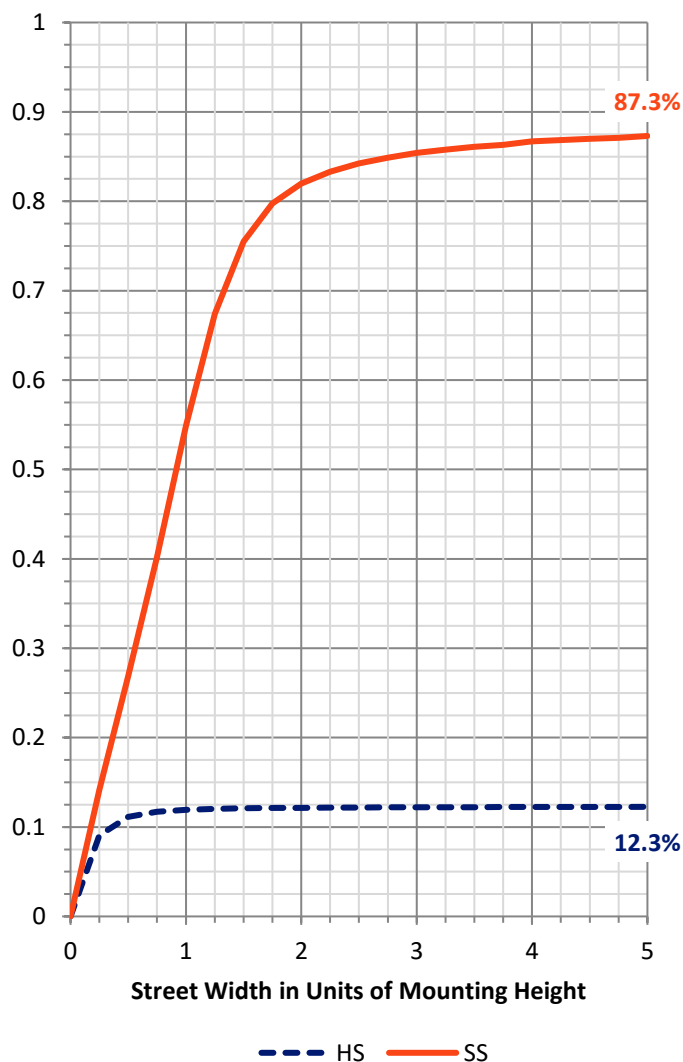
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	919.5	0.0	919.5
	% Fixture	12.4	0.0	12.4
Street Side	Lumens	6515.5	0.0	6515.5
	% Fixture	87.6	0.0	87.6
Total	Lumens	7435.0	0.0	7435.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.5	1.1
10°-20°	235.2	3.2
20°-30°	368.6	5.0
30°-40°	594.3	8.0
40°-50°	1092.1	14.7
50°-60°	1844.4	24.8
60°-70°	2039.1	27.4
70°-80°	1067.2	14.4
80°-90°	114.6	1.5
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°	7435.0	100.0
0°-180°	7435.0	100.0

Coefficient of Utilization

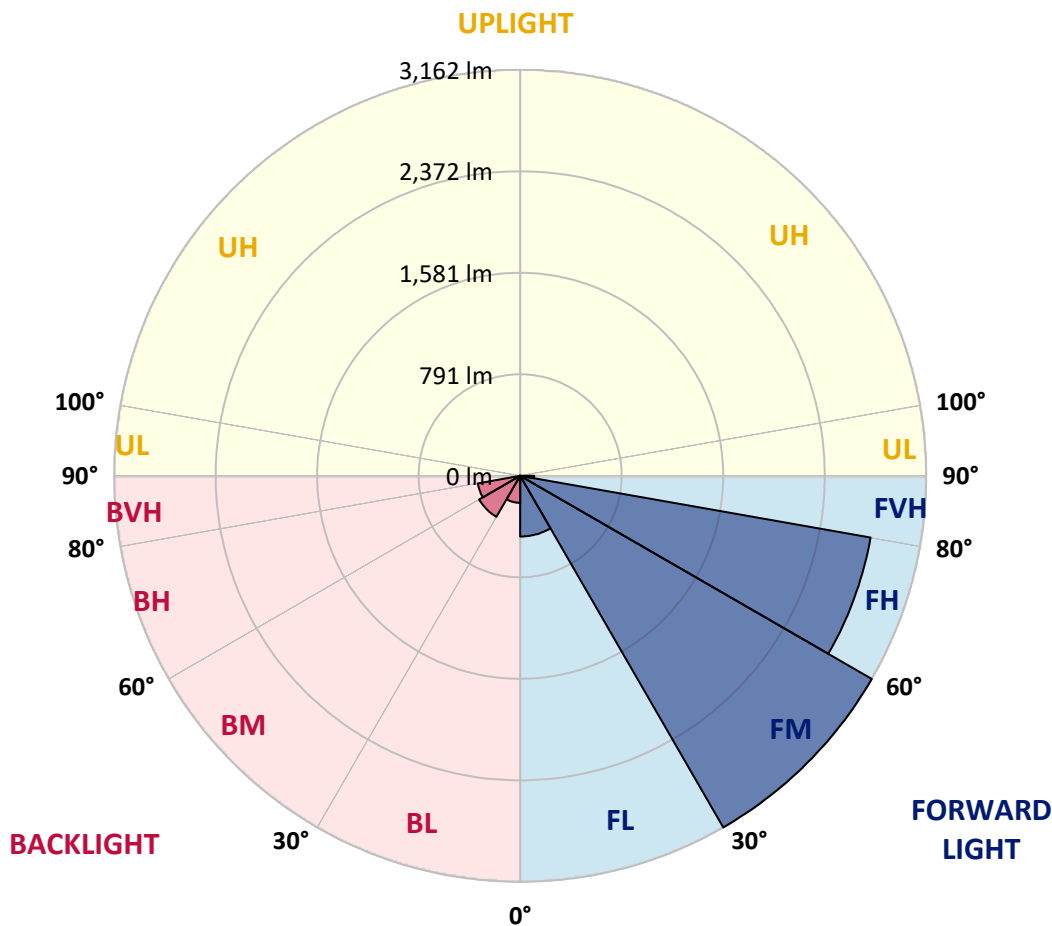


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	472.8	6.4			
FM (30°-60°)	3162.1	42.5			
FH (60°-80°)	2770.9	37.3			G2/5000
FVH (80°-90°)	109.7	1.5			G2/225
BL (0°-30°)	210.5	2.8	B1/500		
BM (30°-60°)	368.7	5.0	B1/1000		
BH (60°-80°)	335.4	4.5	B1/500		G1/500
BVH (80°-90°)	4.9	0.1			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 II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	633.3	633.3	633.3	633.3	633.3	633.3	633.3	633.3	633.3	633.3	633.3
2.5°	747.5	722.3	679.3	691.7	716.6	737.3	727.5	708.3	708.7	689.1	759.6
5°	869.7	835.8	810.9	819.6	818.4	817.7	864.1	881.8	889.3	921.8	969.7
7.5°	904.8	892.7	866.7	874.6	848.6	850.5	932.0	1008.9	1021.0	1041.0	1126.2
10°	891.2	867.8	877.3	877.3	877.7	919.9	974.6	1048.1	1062.8	1139.8	1148.8
12.5°	876.5	877.7	915.0	908.2	959.5	1035.3	1053.8	1136.4	1129.2	1196.0	1295.2
15°	931.2	959.9	935.7	945.2	950.1	1039.1	1068.9	1178.6	1210.3	1294.8	1359.3
17.5°	1025.1	1028.9	978.7	965.2	1000.6	1025.9	1085.8	1138.6	1159.8	1381.5	1472.8
20°	1042.1	1066.2	1015.3	936.9	1011.9	1046.6	1088.5	1113.8	1122.8	1408.3	1536.9
22.5°	1144.3	1117.5	1036.1	976.5	998.0	1035.7	1061.7	1137.9	1192.2	1357.8	1598.4
25°	1196.7	1189.6	1111.9	1061.0	1039.1	1036.1	1095.7	1153.4	1170.7	1410.2	1613.5
27.5°	1322.3	1306.1	1155.6	1149.2	1077.2	1013.8	1096.8	1200.5	1232.9	1360.8	1670.1
30°	1493.2	1487.1	1286.9	1282.7	1168.1	1054.2	1157.9	1229.5	1209.9	1386.1	1707.8
32.5°	1665.2	1714.2	1509.4	1392.5	1306.5	1202.4	1140.5	1220.5	1255.6	1447.5	1777.2
35°	1873.0	1908.4	1699.9	1615.0	1423.8	1271.8	1255.6	1306.9	1321.9	1520.7	1856.0
37.5°	2236.6	2183.0	2005.4	1860.9	1760.6	1519.6	1439.6	1398.9	1434.0	1619.9	2017.1
40°	2505.1	2471.2	2252.4	2166.0	1935.2	1794.2	1585.2	1547.1	1586.3	1721.7	2129.1
42.5°	2829.1	2758.6	2552.6	2494.2	2256.6	1984.6	1772.7	1785.9	1761.3	1922.8	2325.6
45°	3122.1	2963.0	2848.3	2861.5	2734.8	2367.4	2085.3	2078.9	2058.5	2213.9	2532.3
47.5°	3319.4	3180.2	3068.6	3032.0	3016.9	3040.7	2537.2	2423.3	2408.2	2519.8	2857.7
50°	3425.4	3273.0	3135.0	3142.5	3448.8	3679.2	3003.3	2841.5	2847.2	2963.7	3302.8
52.5°	3354.1	3181.7	3036.1	3177.6	3783.7	4105.0	3775.0	3388.0	3519.3	3489.5	3899.8
55°	3024.8	2875.1	2771.8	3024.8	3820.3	4563.3	4725.1	4210.6	4181.2	4113.3	4508.6
57.5°	2470.8	2341.8	2278.1	2545.1	3420.1	4932.5	5679.3	5140.3	4889.5	4605.1	5014.0
60°	1840.9	1745.9	1679.5	1820.6	2694.8	4573.8	6304.2	6016.5	5726.1	5079.2	5468.1
62.5°	1363.4	1286.1	1215.6	1228.4	1855.6	3933.8	6544.1	6944.7	6778.0	5579.7	5896.5
65°	1088.1	1017.6	968.2	939.9	1149.2	2959.6	6210.3	7705.4	7897.8	6051.2	6205.8
67.5°	888.6	829.0	804.5	836.9	901.4	1687.0	5318.7	8167.0	8446.1	6551.3	6282.0
70°	723.0	674.0	671.3	758.8	830.1	1028.5	3912.3	7848.3	8058.4	6636.5	5825.3
72.5°	503.9	482.4	516.7	640.8	822.6	856.5	2246.7	6494.7	6502.3	5861.5	4791.5
75°	285.1	281.7	336.1	511.1	801.1	847.9	1252.6	4589.7	4593.1	4433.2	3319.4
77.5°	156.9	146.7	195.7	345.5	687.9	828.2	807.9	3133.8	3053.5	2467.0	1516.2
80°	72.4	68.3	106.0	221.4	503.1	783.4	647.6	1722.5	1553.1	803.7	370.0
82.5°	29.8	28.3	48.7	142.2	317.9	631.0	545.8	764.1	613.3	152.8	114.3
85°	5.3	5.7	20.0	86.0	178.0	290.8	442.4	362.8	266.7	42.2	62.6
87.5°	0.0	0.0	4.1	20.7	43.0	79.6	179.5	101.5	69.8	12.4	18.5
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°	633.3	633.3	633.3	633.3	633.3	633.3	633.3	633.3	633.3	633.3	633.3
2.5°	773.6	767.1	702.3	705.3	709.8	705.7	704.9	686.8	670.2	724.9	724.1
5°	978.4	932.7	887.8	870.5	833.1	784.1	784.5	769.0	753.2	775.4	775.4
7.5°	1124.3	1061.3	1004.4	902.9	804.1	714.7	706.8	685.7	661.5	690.6	696.2
10°	1158.3	1103.6	1030.0	881.0	787.5	700.4	604.6	525.8	489.2	472.2	469.2
12.5°	1262.7	1222.0	1057.6	892.7	758.1	610.6	453.7	360.2	296.4	291.5	284.8
15°	1332.5	1303.8	1084.7	863.7	633.6	439.0	285.1	218.8	193.1	190.8	187.4
17.5°	1440.8	1391.0	1058.7	771.3	495.6	289.7	191.6	172.7	175.8	182.5	177.3
20°	1484.9	1387.6	1002.1	637.4	348.1	194.2	166.3	156.1	164.1	170.5	167.5
22.5°	1530.1	1397.4	952.0	525.4	227.4	160.7	148.2	142.9	143.7	150.1	150.5
25°	1529.8	1424.5	893.9	409.2	169.3	142.9	133.9	127.1	124.5	129.0	127.9
27.5°	1604.1	1393.2	787.9	303.6	149.0	127.9	119.2	110.9	101.5	106.0	106.0
30°	1604.4	1444.1	714.0	218.0	136.5	113.9	106.4	93.5	82.6	86.4	86.7
32.5°	1647.1	1400.0	645.7	166.7	126.7	105.6	89.0	77.3	70.9	73.2	73.2
35°	1695.7	1437.7	540.8	147.1	116.9	93.9	76.2	66.8	61.9	63.7	63.7
37.5°	1856.4	1429.8	468.1	136.9	110.5	84.9	69.4	58.8	56.6	57.7	59.2
40°	1914.5	1486.0	369.2	130.9	99.9	76.6	61.1	53.2	50.2	50.9	51.3
42.5°	2062.3	1498.5	294.9	126.0	90.5	66.4	54.3	48.7	44.9	44.9	46.0
45°	2225.6	1529.8	234.6	121.8	82.6	59.6	49.0	44.5	38.8	38.1	39.6
47.5°	2462.1	1649.7	191.2	113.5	73.2	55.4	45.3	38.5	33.9	32.4	33.9
50°	2857.7	1853.4	169.0	103.3	66.4	52.0	40.0	32.8	29.4	27.5	28.7
52.5°	3415.9	2205.3	157.3	93.9	60.3	46.8	35.8	28.7	25.3	23.8	24.5
55°	4036.0	2608.8	151.6	84.5	55.1	41.1	31.3	25.3	22.3	20.4	20.7
57.5°	4609.3	2988.2	146.0	75.4	49.8	36.6	27.5	22.3	19.2	17.3	17.7
60°	5174.3	3291.1	132.4	64.9	44.9	32.8	24.1	19.2	17.3	15.1	15.1
62.5°	5674.0	3472.1	112.8	56.2	40.4	29.0	21.5	17.3	15.8	13.6	13.6
65°	6014.2	3480.4	90.9	48.3	35.5	24.9	18.9	16.2	14.7	12.1	11.7
67.5°	6019.1	3254.1	72.8	43.0	31.3	21.9	17.0	15.5	13.6	11.3	10.6
70°	5387.4	2688.4	60.7	37.7	27.2	19.2	14.7	14.7	13.2	10.9	9.8
72.5°	4309.4	2054.4	50.9	32.8	24.1	16.6	13.6	14.0	12.8	10.9	9.8
75°	2896.6	1178.3	42.2	27.9	21.1	14.0	13.2	13.6	13.2	10.9	9.4
77.5°	1334.0	375.3	32.8	23.0	18.1	11.7	12.8	12.8	12.1	9.8	8.3
80°	300.6	92.4	23.8	17.0	14.7	8.7	11.7	10.6	9.4	6.8	4.9
82.5°	109.4	28.3	14.3	10.6	9.1	3.4	7.5	7.5	6.8	4.9	3.0
85°	62.6	14.7	7.9	6.8	4.9	1.5	4.1	4.5	3.8	3.4	1.5
87.5°	20.4	3.4	3.8	4.1	3.8	0.8	1.5	1.5	1.1	0.8	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)