

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: P596591

Luminaire Tested: **MSA-SA2B-827-U-SL3-HSS**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P596591
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-19)
Test Lab: INNOVATIONS CENTER
Issue Date: 5/27/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: MSA-SA2B-827-U-SL3-HSS
Description: MESA POST TOP DECORATIVE LUMINAIRE. (2) 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: 6013 lumens
Efficiency: N/A
Efficacy: 70.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

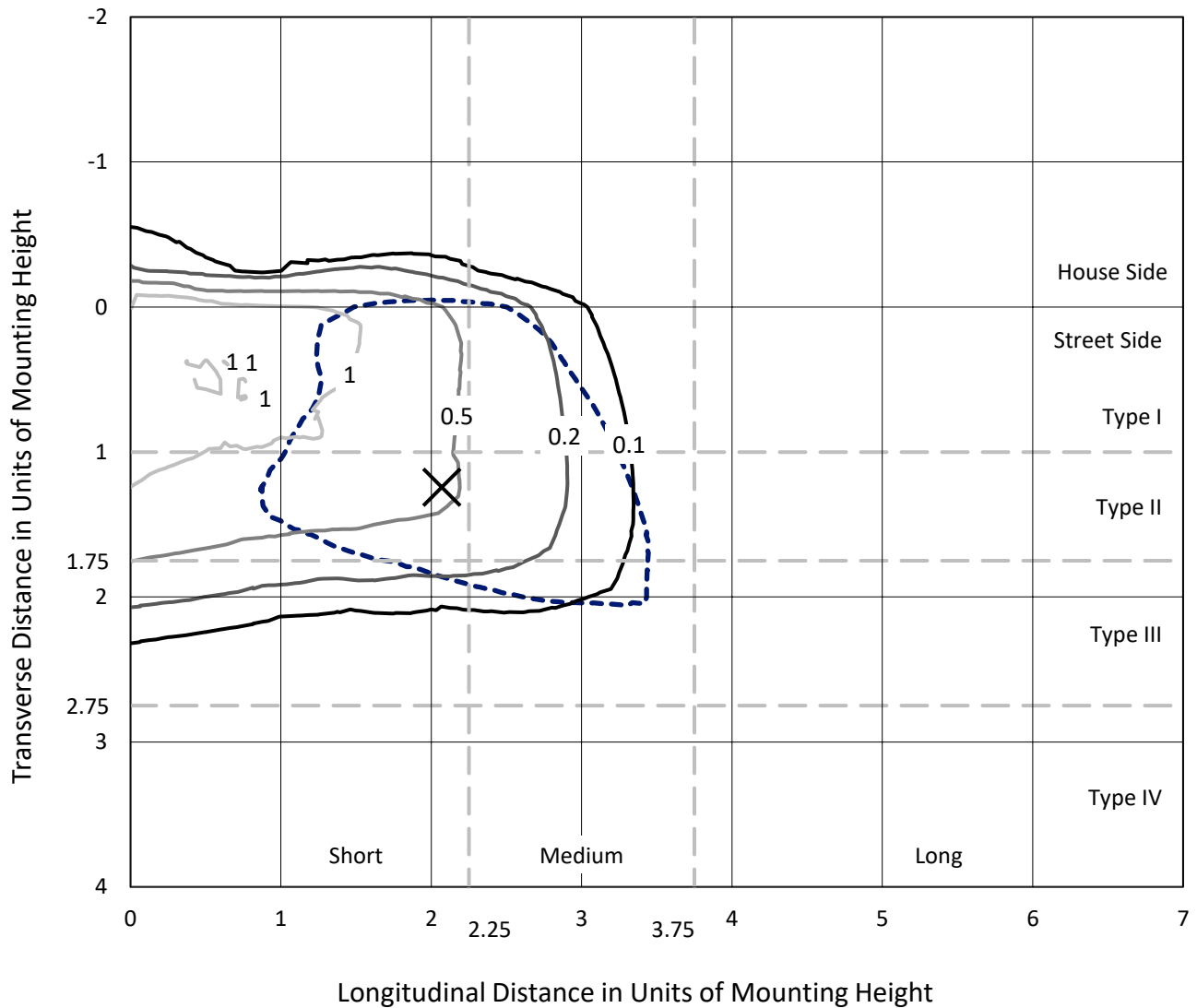
Input Watts (W): 85
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

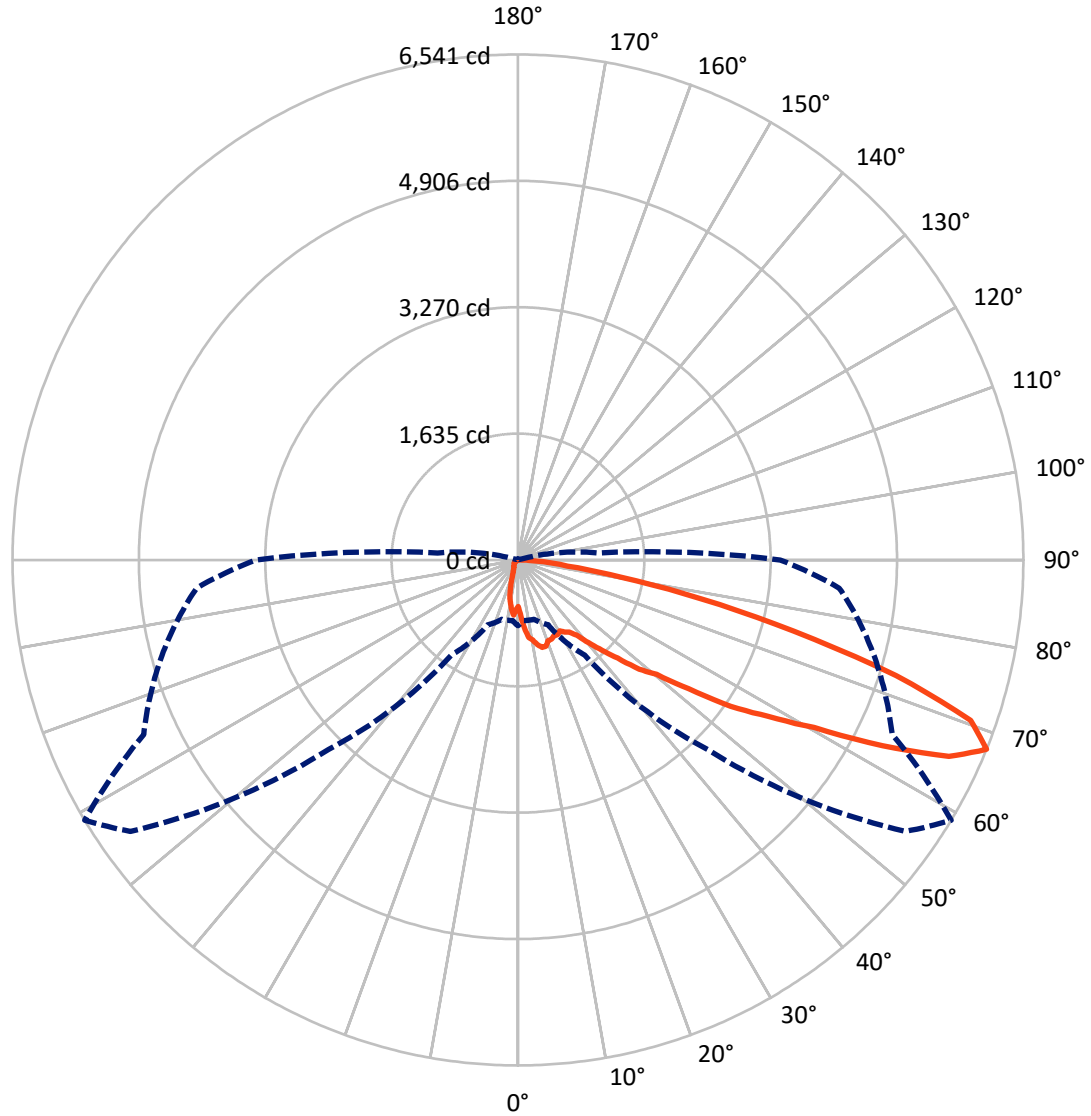
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.7 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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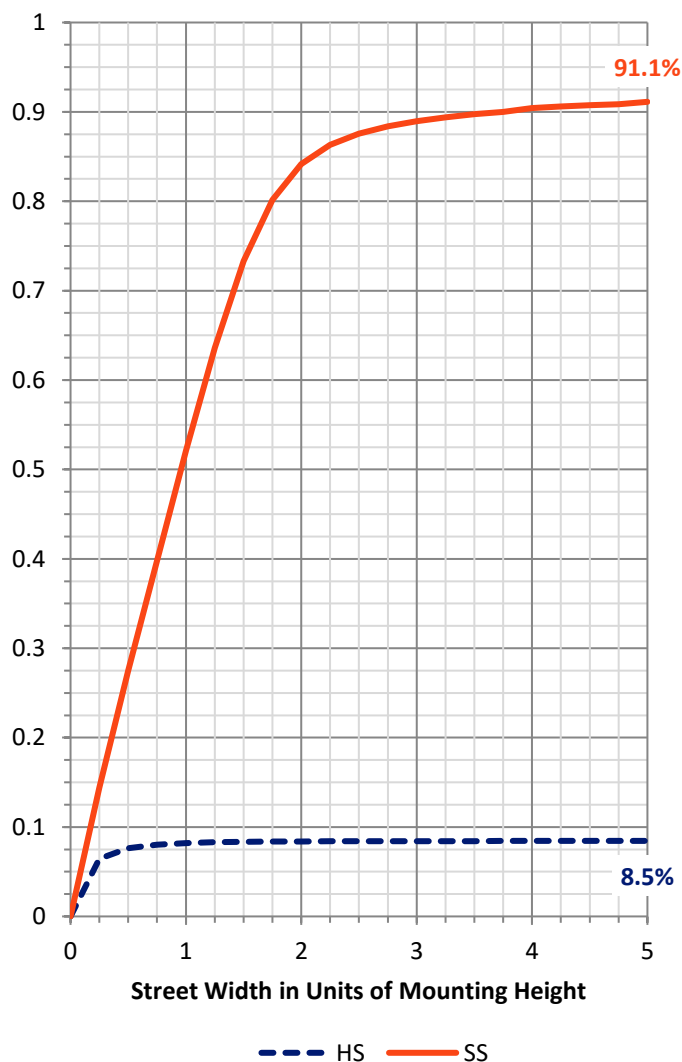
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	511.4	0.0	511.4
	% Fixture	8.5	0.0	8.5
Street Side	Lumens	5501.6	0.0	5501.6
	% Fixture	91.5	0.0	91.5
Total	Lumens	6013.0	0.0	6013.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.1	1.2
10°-20°	206.0	3.4
20°-30°	306.4	5.1
30°-40°	472.7	7.9
40°-50°	843.5	14.0
50°-60°	1501.1	25.0
60°-70°	1748.3	29.1
70°-80°	777.5	12.9
80°-90°	84.4	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°	6013.0	100.0
0°-180°	6013.0	100.0

Coefficient of Utilization

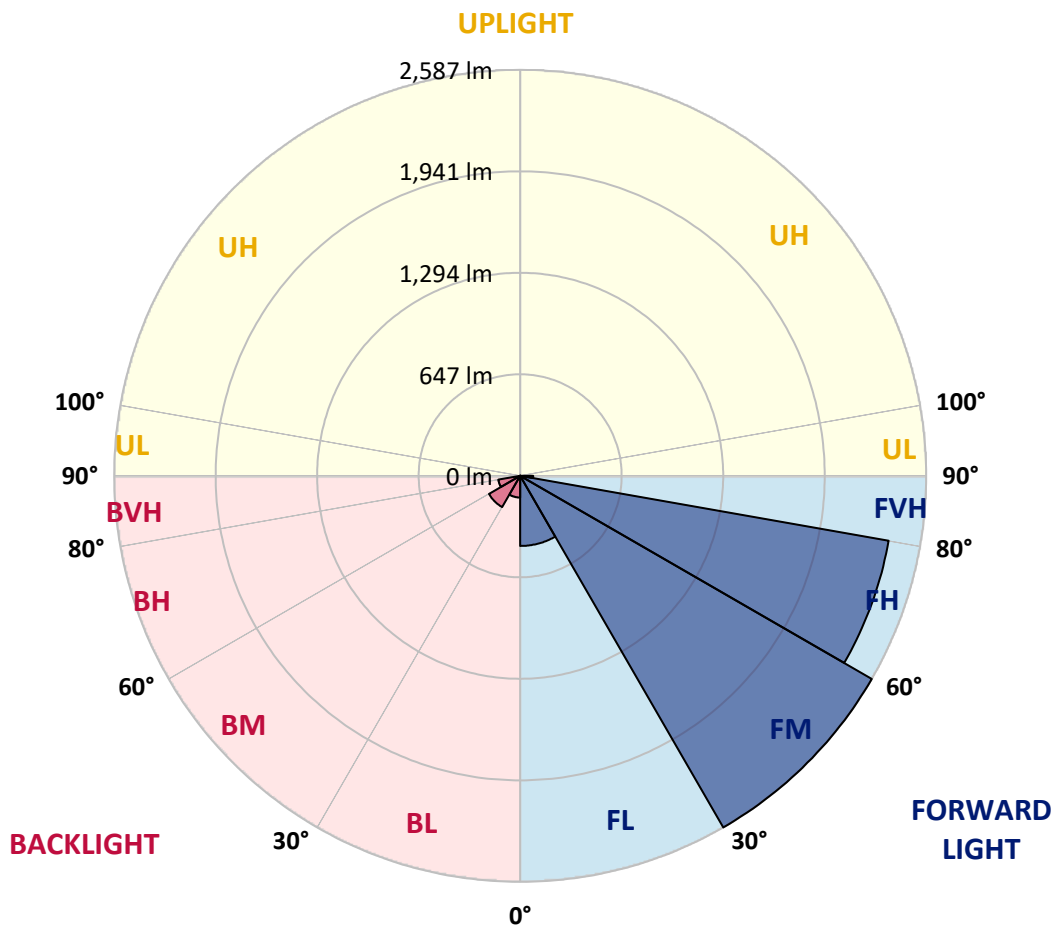


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	447.2	7.4			
FM (30°-60°)	2587.4	43.0			
FH (60°-80°)	2384.1	39.6			G2/5000
FVH (80°-90°)	82.9	1.4			G1/100
BL (0°-30°)	138.3	2.3	B1/500		
BM (30°-60°)	229.9	3.8	B1/1000		
BH (60°-80°)	141.7	2.4	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	601.6	601.6	601.6	601.6	601.6	601.6	601.6	601.6	601.6	601.6	601.6
2.5°	784.3	754.8	712.7	725.2	736.5	747.2	729.5	719.4	714.6	671.3	725.5
5°	963.0	926.2	907.0	902.1	889.9	862.8	907.9	887.8	894.5	903.0	920.7
7.5°	1017.5	1000.8	973.1	983.4	937.1	933.2	995.6	1013.0	1035.8	1020.3	1041.6
10°	989.5	960.6	973.7	970.0	968.2	1009.0	1052.8	1053.7	1087.8	1104.3	1032.1
12.5°	934.1	937.4	984.3	980.7	1041.6	1123.2	1133.2	1122.6	1178.3	1149.7	1138.7
15°	970.9	998.3	972.5	981.3	1002.9	1104.9	1140.5	1173.4	1226.1	1243.1	1169.1
17.5°	1015.4	1018.1	970.9	960.0	1014.5	1062.0	1146.0	1173.1	1178.3	1327.8	1237.6
20°	991.3	1014.8	958.5	889.3	974.0	1038.5	1123.8	1115.2	1150.0	1352.7	1253.2
22.5°	1055.3	1021.8	949.6	897.6	926.2	984.9	1057.1	1112.8	1164.9	1293.1	1273.3
25°	1061.4	1049.2	984.9	938.7	933.8	948.7	1049.2	1085.1	1166.7	1346.6	1256.2
27.5°	1129.9	1115.9	984.3	988.9	943.2	897.3	1010.8	1095.2	1199.9	1314.1	1292.4
30°	1218.2	1219.4	1049.8	1064.1	998.9	925.0	1042.2	1065.3	1222.4	1366.1	1319.2
32.5°	1307.7	1344.5	1179.2	1103.4	1083.0	1030.0	1003.2	1110.1	1197.8	1455.0	1386.2
35°	1443.8	1468.7	1285.7	1217.9	1137.8	1077.5	1109.2	1147.5	1286.4	1572.9	1474.2
37.5°	1674.2	1629.2	1477.0	1358.8	1339.6	1250.7	1266.6	1232.2	1376.8	1711.7	1648.4
40°	1803.9	1763.1	1604.8	1547.3	1424.9	1438.6	1388.7	1408.8	1508.0	1856.3	1807.0
42.5°	1939.1	1900.2	1761.3	1720.5	1603.9	1547.3	1524.8	1596.9	1709.3	2097.1	2034.4
45°	2074.9	1976.0	1917.2	1937.6	1885.2	1773.2	1747.0	1811.3	1929.1	2393.1	2274.3
47.5°	2189.4	2106.0	2061.8	2052.4	2032.0	2187.6	2081.0	2109.3	2161.4	2654.9	2573.3
50°	2395.8	2313.6	2244.5	2225.3	2324.6	2545.3	2380.9	2326.1	2430.2	2971.3	2919.8
52.5°	2693.9	2589.2	2479.2	2479.6	2666.8	2788.0	2865.9	2769.7	2789.2	3319.3	3296.4
55°	2933.5	2800.5	2709.4	2781.3	3060.5	3128.4	3425.8	3341.5	3316.2	3642.0	3614.0
57.5°	2966.4	2806.8	2763.6	2889.7	3271.8	3705.3	4025.3	3814.6	3776.0	3912.1	3967.8
60°	2659.5	2490.2	2522.8	2725.6	3340.6	4057.0	4575.8	4403.8	4158.1	4228.4	4266.8
62.5°	1983.6	1848.4	1939.7	2208.3	3075.4	4292.6	5213.0	5292.8	4601.4	4465.9	4457.7
65°	1287.0	1202.3	1262.3	1482.4	2327.3	4265.8	5782.4	6128.2	4950.6	4659.5	4517.6
67.5°	851.3	787.0	795.6	925.9	1505.0	3469.4	6122.8	6540.8	5343.3	4769.4	4173.9
70°	634.5	584.0	587.0	657.6	893.3	2288.0	5648.1	6215.3	5486.7	4388.5	3368.9
72.5°	457.6	423.8	452.1	530.7	711.8	1209.9	4209.8	5118.6	4784.3	3461.4	2269.8
75°	316.9	294.7	341.0	443.9	649.7	751.1	2781.9	3684.6	3353.4	2171.7	1026.0
77.5°	175.7	169.0	235.7	361.7	589.7	615.6	1704.1	2421.1	1860.0	778.5	244.2
80°	76.7	74.3	114.2	271.6	495.7	556.3	959.4	1342.4	731.6	138.8	78.9
82.5°	32.9	31.7	48.7	163.5	360.2	465.2	591.6	646.1	251.8	42.9	44.8
85°	5.8	6.4	19.5	86.2	219.2	236.3	428.4	382.4	126.7	20.4	32.0
87.5°	0.0	0.0	3.0	16.7	41.1	67.6	185.7	134.0	24.1	6.7	5.5
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°	601.6	601.6	601.6	601.6	601.6	601.6	601.6	601.6	601.6	601.6	601.6
2.5°	733.1	716.1	651.2	643.0	634.2	621.1	616.2	588.2	584.6	620.5	620.5
5°	912.5	851.6	789.8	741.1	697.5	637.2	620.2	602.5	588.2	584.6	595.8
7.5°	1007.2	932.9	835.8	711.8	611.4	524.0	487.4	461.9	433.3	441.8	446.3
10°	1002.0	923.1	799.2	640.0	528.5	432.0	339.2	285.0	254.8	239.9	238.1
12.5°	1052.8	978.5	774.6	582.7	440.6	307.2	213.4	174.8	152.5	152.8	151.0
15°	1082.4	1001.4	745.9	510.3	310.2	197.6	148.0	139.4	136.4	139.7	137.9
17.5°	1134.4	1025.4	681.1	402.2	213.4	149.2	136.1	132.7	136.7	143.7	141.9
20°	1130.5	983.7	588.8	283.5	157.7	134.3	128.8	123.6	131.8	139.1	137.9
22.5°	1126.8	942.9	502.1	209.2	131.8	122.4	117.8	115.7	120.0	128.5	130.3
25°	1094.5	922.8	414.1	157.1	119.3	111.1	109.0	107.2	108.7	115.7	115.4
27.5°	1134.1	872.0	319.7	131.8	110.5	100.8	99.0	95.9	92.9	99.0	99.9
30°	1125.9	879.0	250.6	116.0	101.7	88.6	89.2	82.8	77.3	82.8	82.8
32.5°	1155.7	827.8	200.6	105.3	92.9	83.4	75.8	69.1	65.2	68.5	69.1
35°	1199.3	830.0	157.1	98.6	85.2	74.3	65.2	58.5	54.8	56.3	57.2
37.5°	1345.1	815.4	131.2	93.5	82.5	68.8	59.4	50.5	48.1	49.9	50.8
40°	1440.1	854.3	115.7	90.7	75.5	63.3	50.8	44.5	42.3	43.2	44.8
42.5°	1619.1	875.9	108.1	87.7	69.1	54.2	43.5	39.9	36.8	38.1	39.3
45°	1810.6	912.8	102.3	84.3	64.2	47.5	38.4	35.3	31.4	31.7	32.9
47.5°	2046.0	1000.5	95.6	78.6	57.5	43.2	34.1	29.5	25.9	25.6	27.1
50°	2362.0	1117.7	89.5	71.2	53.3	39.6	29.8	24.1	21.0	20.1	21.3
52.5°	2699.4	1269.3	83.1	66.1	48.1	34.7	25.6	19.5	16.7	16.1	17.0
55°	3033.7	1414.8	77.0	62.7	42.6	29.8	21.6	16.1	13.7	13.1	13.7
57.5°	3414.6	1572.2	69.1	56.0	37.4	25.9	18.0	13.4	11.3	10.7	11.0
60°	3701.4	1627.7	62.4	48.7	32.6	22.8	15.2	10.7	9.1	8.5	8.8
62.5°	3837.5	1537.2	56.0	42.3	28.6	19.8	12.8	8.8	7.6	7.0	7.0
65°	3802.1	1336.9	49.6	36.2	24.7	16.4	10.0	7.6	6.7	5.8	5.5
67.5°	3394.2	1046.1	42.3	30.4	20.7	13.4	8.5	7.3	6.1	5.5	4.6
70°	2691.8	757.5	34.4	25.3	17.4	11.0	6.7	6.7	5.8	5.5	4.3
72.5°	1764.4	476.8	28.0	20.4	14.3	8.5	5.2	6.1	5.5	5.5	4.0
75°	764.5	170.5	22.5	16.4	11.9	5.8	4.6	5.5	5.8	5.5	4.6
77.5°	179.0	53.0	17.7	13.1	9.7	4.0	4.6	5.5	5.8	5.2	4.0
80°	67.3	22.5	11.6	8.5	7.6	2.4	4.0	3.3	3.0	2.1	0.6
82.5°	40.8	9.4	6.1	4.3	3.7	0.6	1.8	1.2	0.6	0.6	0.0
85°	28.9	4.6	3.3	3.0	1.8	0.0	0.3	0.0	0.0	0.3	0.0
87.5°	4.0	1.2	1.5	1.5	1.2	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)