

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: P596525

Luminaire Tested: **MSA-SA1C-827-U-SL3-HSS**

Issue Date: 5/27/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P596525  
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-SA1C-827-U-SL3-HSS  
Description: MESA POST TOP DECORATIVE LUMINAIRE. (1) 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: 3786 lumens  
Efficiency: N/A  
Efficacy: 64.2 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B0 - U0 - G1

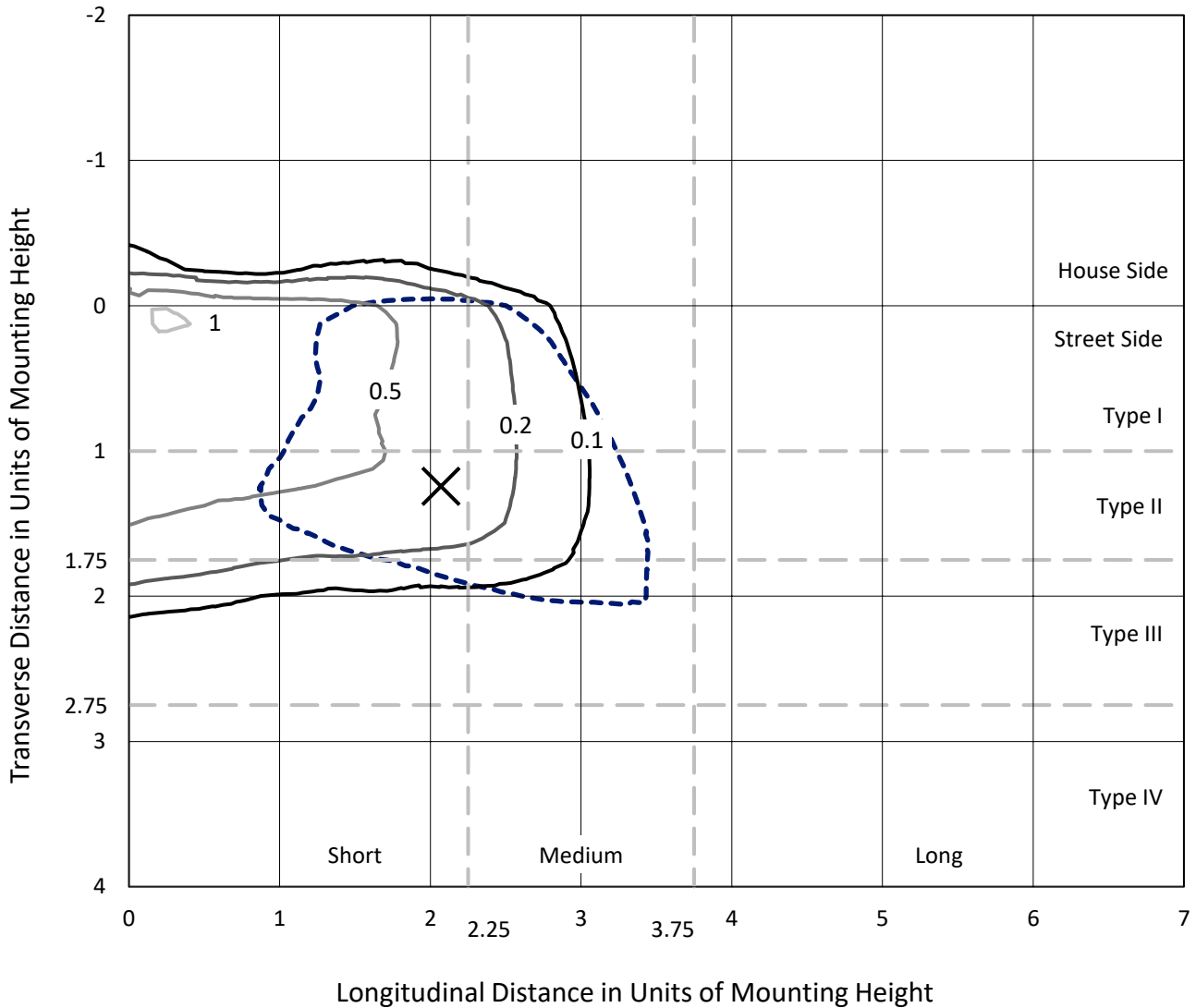
Input Watts (W): 59  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

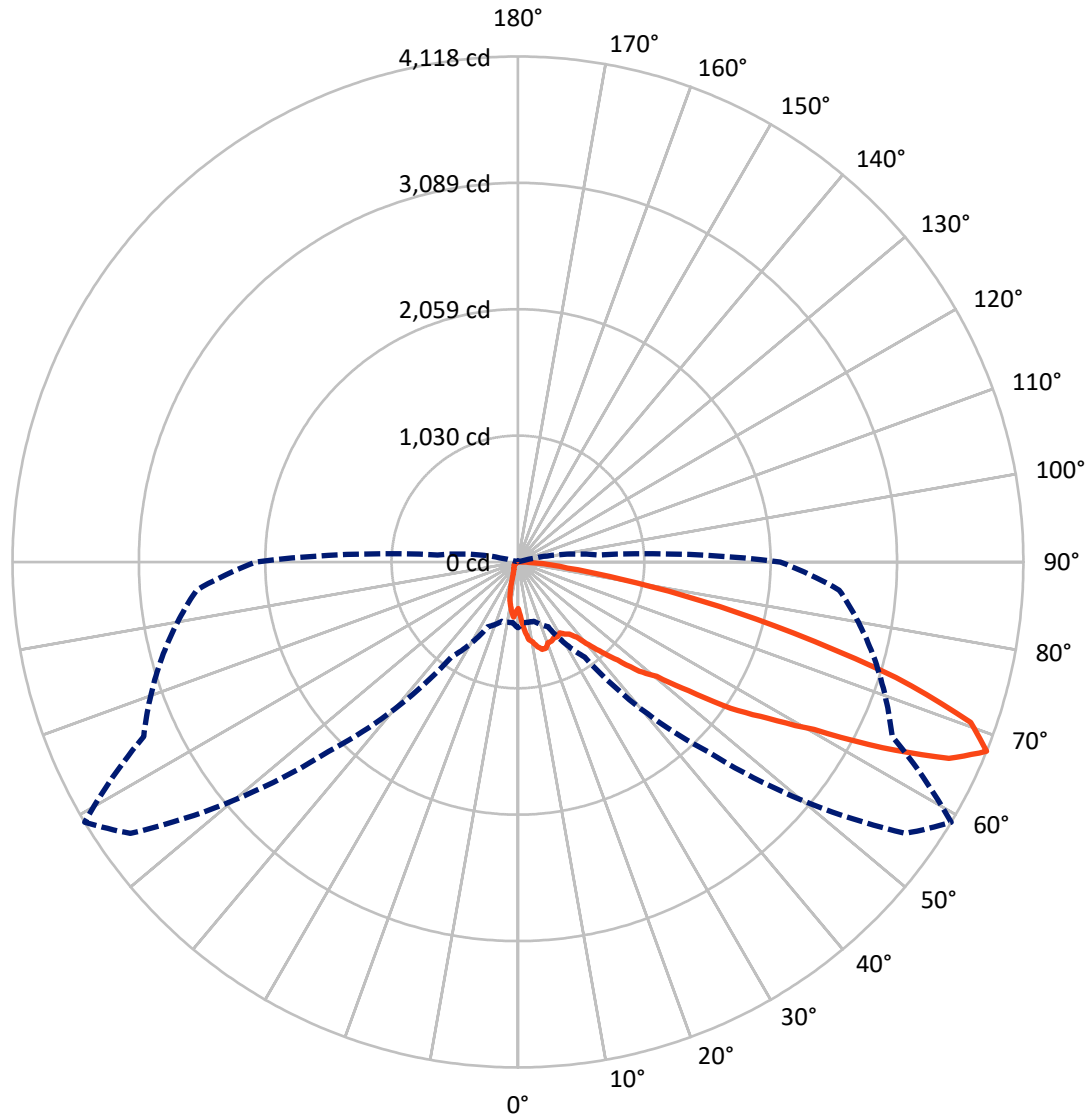
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.1 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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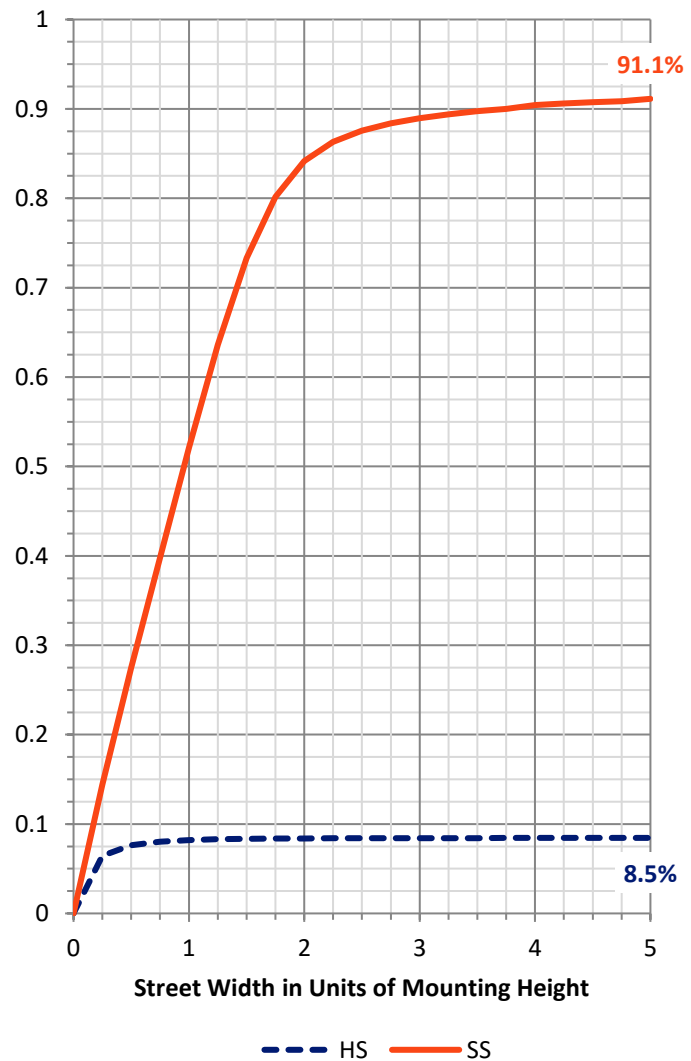
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	322.0	0.0	322.0
	% Fixture	8.5	0.0	8.5
<b>Street Side</b>	Lumens	3464.0	0.0	3464.0
	% Fixture	91.5	0.0	91.5
<b>Total</b>	Lumens	3786.0	0.0	3786.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	46.1	1.2
10°-20°	129.7	3.4
20°-30°	192.9	5.1
30°-40°	297.6	7.9
40°-50°	531.1	14.0
50°-60°	945.1	25.0
60°-70°	1100.8	29.1
70°-80°	489.5	12.9
80°-90°	53.2	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°	3786.0	100.0
0°-180°	3786.0	100.0

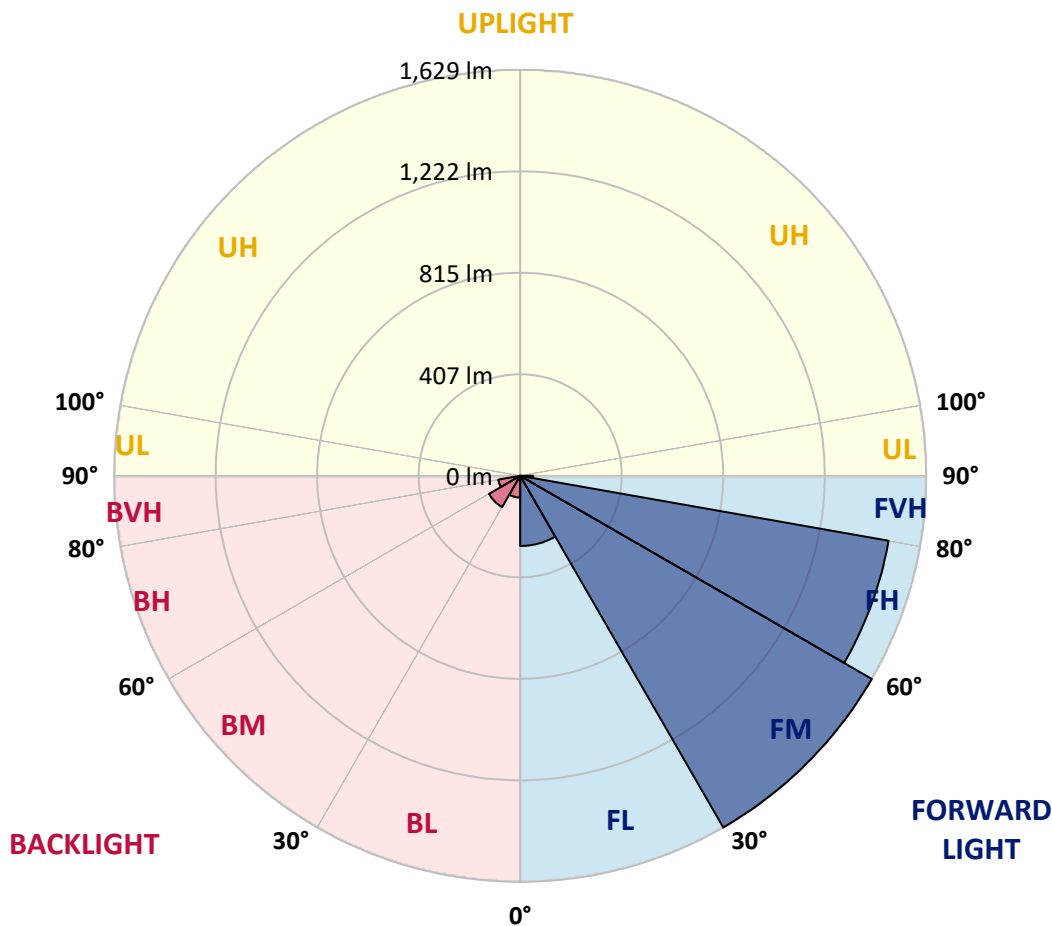


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	281.6	7.4			
FM (30°-60°)	1629.1	43.0			
FH (60°-80°)	1501.1	39.6			G1/1800
FVH (80°-90°)	52.2	1.4			G1/100
BL (0°-30°)	87.1	2.3	B0/110		
BM (30°-60°)	144.8	3.8	B0/220		
BH (60°-80°)	89.2	2.4	B0/110		G0/110
BVH (80°-90°)	1.0	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B0-U0-G1**  
 Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	378.8	378.8	378.8	378.8	378.8	378.8	378.8	378.8	378.8	378.8	378.8
2.5°	493.8	475.2	448.8	456.6	463.7	470.4	459.3	453.0	449.9	422.7	456.8
5°	606.4	583.2	571.1	568.0	560.3	543.3	571.7	559.0	563.2	568.6	579.7
7.5°	640.7	630.1	612.7	619.2	590.1	587.6	626.9	637.8	652.2	642.4	655.8
10°	623.0	604.8	613.1	610.8	609.6	635.3	662.9	663.5	684.9	695.3	649.9
12.5°	588.1	590.2	619.8	617.5	655.8	707.2	713.5	706.8	741.9	723.9	717.0
15°	611.3	628.6	612.3	617.9	631.5	695.7	718.1	738.8	772.0	782.7	736.1
17.5°	639.3	641.0	611.3	604.4	638.7	668.7	721.6	738.6	741.9	836.0	779.3
20°	624.2	638.9	603.5	560.0	613.3	653.9	707.6	702.2	724.1	851.7	789.0
22.5°	664.4	643.3	597.9	565.1	583.2	620.2	665.6	700.7	733.4	814.2	801.7
25°	668.3	660.6	620.2	591.0	587.9	597.3	660.6	683.2	734.6	847.9	791.0
27.5°	711.4	702.6	619.8	622.6	593.9	564.9	636.4	689.5	755.5	827.4	813.8
30°	767.0	767.8	661.0	670.0	629.0	582.4	656.2	670.8	769.7	860.2	830.6
32.5°	823.4	846.6	742.5	694.7	681.9	648.5	631.7	698.9	754.2	916.1	872.8
35°	909.0	924.8	809.6	766.8	716.4	678.4	698.4	722.5	809.9	990.3	928.2
37.5°	1054.2	1025.8	929.9	855.6	843.5	787.5	797.5	775.8	866.9	1077.7	1037.9
40°	1135.8	1110.1	1010.5	974.2	897.2	905.8	874.3	887.0	949.5	1168.8	1137.7
42.5°	1220.9	1196.4	1109.0	1083.3	1009.9	974.2	960.0	1005.5	1076.2	1320.4	1280.9
45°	1306.4	1244.1	1207.1	1220.0	1187.0	1116.5	1100.0	1140.4	1214.6	1506.8	1432.0
47.5°	1378.5	1326.0	1298.2	1292.3	1279.4	1377.4	1310.3	1328.1	1360.9	1671.6	1620.3
50°	1508.5	1456.7	1413.2	1401.1	1463.6	1602.6	1499.1	1464.6	1530.2	1870.8	1838.4
52.5°	1696.2	1630.2	1561.0	1561.2	1679.1	1755.4	1804.5	1743.9	1756.2	2089.9	2075.5
55°	1847.0	1763.3	1705.9	1751.2	1927.0	1969.7	2157.0	2103.9	2088.0	2293.1	2275.5
57.5°	1867.7	1767.3	1740.1	1819.4	2060.0	2333.0	2534.5	2401.8	2377.5	2463.2	2498.2
60°	1674.5	1567.9	1588.4	1716.1	2103.3	2554.4	2881.1	2772.8	2618.1	2662.3	2686.5
62.5°	1248.9	1163.8	1221.3	1390.4	1936.4	2702.8	3282.3	3332.5	2897.2	2811.9	2806.7
65°	810.3	757.0	794.8	933.4	1465.4	2685.9	3640.8	3858.6	3117.1	2933.8	2844.5
67.5°	536.0	495.5	500.9	583.0	947.6	2184.4	3855.1	4118.3	3364.4	3003.0	2628.0
70°	399.5	367.7	369.6	414.1	562.5	1440.6	3556.2	3913.4	3454.6	2763.2	2121.2
72.5°	288.1	266.8	284.7	334.1	448.2	761.8	2650.7	3222.9	3012.4	2179.5	1429.1
75°	199.6	185.6	214.7	279.5	409.1	472.9	1751.6	2320.0	2111.4	1367.4	646.0
77.5°	110.6	106.4	148.4	227.7	371.3	387.6	1073.0	1524.4	1171.1	490.2	153.7
80°	48.3	46.8	71.9	171.0	312.1	350.2	604.1	845.2	460.7	87.4	49.7
82.5°	20.7	19.9	30.7	102.9	226.8	292.9	372.5	406.8	158.5	27.0	28.2
85°	3.6	4.0	12.3	54.3	138.0	148.8	269.7	240.8	79.7	12.8	20.1
87.5°	0.0	0.0	1.9	10.5	25.9	42.6	116.9	84.3	15.1	4.2	3.5
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°	378.8	378.8	378.8	378.8	378.8	378.8	378.8	378.8	378.8	378.8	378.8
2.5°	461.6	450.9	410.0	404.9	399.3	391.1	388.0	370.4	368.1	390.7	390.7
5°	574.5	536.2	497.3	466.6	439.2	401.2	390.5	379.4	370.4	368.1	375.2
7.5°	634.1	587.4	526.2	448.2	384.9	329.9	306.9	290.8	272.8	278.2	281.0
10°	630.9	581.2	503.2	403.0	332.8	272.0	213.6	179.4	160.5	151.1	149.9
12.5°	662.9	616.1	487.7	366.9	277.4	193.4	134.4	110.0	96.0	96.2	95.1
15°	681.5	630.5	469.7	321.3	195.3	124.4	93.2	87.8	85.9	88.0	86.8
17.5°	714.3	645.6	428.8	253.2	134.4	93.9	85.7	83.6	86.1	90.5	89.3
20°	711.8	619.4	370.7	178.5	99.3	84.5	81.1	77.8	83.0	87.6	86.8
22.5°	709.5	593.7	316.1	131.7	83.0	77.1	74.2	72.8	75.5	80.9	82.0
25°	689.2	581.0	260.7	98.9	75.1	70.0	68.6	67.5	68.4	72.8	72.7
27.5°	714.1	549.0	201.3	83.0	69.6	63.5	62.3	60.4	58.5	62.3	62.9
30°	708.9	553.4	157.8	73.0	64.0	55.8	56.2	52.1	48.7	52.1	52.1
32.5°	727.7	521.2	126.3	66.3	58.5	52.5	47.7	43.5	41.0	43.1	43.5
35°	755.1	522.6	98.9	62.1	53.7	46.8	41.0	36.8	34.5	35.5	36.0
37.5°	846.9	513.4	82.6	58.9	52.0	43.3	37.4	31.8	30.3	31.4	32.0
40°	906.7	537.9	72.8	57.1	47.5	39.9	32.0	28.0	26.6	27.2	28.2
42.5°	1019.5	551.5	68.1	55.2	43.5	34.1	27.4	25.1	23.2	24.0	24.7
45°	1140.0	574.7	64.4	53.1	40.4	29.9	24.2	22.2	19.7	19.9	20.7
47.5°	1288.2	629.9	60.2	49.5	36.2	27.2	21.5	18.6	16.3	16.1	17.1
50°	1487.2	703.7	56.4	44.9	33.5	24.9	18.8	15.1	13.2	12.7	13.4
52.5°	1699.6	799.2	52.3	41.6	30.3	21.9	16.1	12.3	10.5	10.2	10.7
55°	1910.1	890.8	48.5	39.5	26.8	18.8	13.6	10.2	8.6	8.2	8.6
57.5°	2149.9	989.9	43.5	35.3	23.6	16.3	11.3	8.4	7.1	6.7	6.9
60°	2330.5	1024.8	39.3	30.7	20.5	14.4	9.6	6.7	5.8	5.4	5.6
62.5°	2416.2	967.9	35.3	26.6	18.0	12.5	8.1	5.6	4.8	4.4	4.4
65°	2394.0	841.8	31.2	22.8	15.5	10.4	6.3	4.8	4.2	3.6	3.5
67.5°	2137.1	658.7	26.6	19.2	13.0	8.4	5.4	4.6	3.8	3.5	2.9
70°	1694.8	477.0	21.7	15.9	10.9	6.9	4.2	4.2	3.6	3.5	2.7
72.5°	1110.9	300.2	17.6	12.8	9.0	5.4	3.3	3.8	3.5	3.5	2.5
75°	481.4	107.4	14.2	10.4	7.5	3.6	2.9	3.5	3.6	3.5	2.9
77.5°	112.7	33.4	11.1	8.2	6.1	2.5	2.9	3.5	3.6	3.3	2.5
80°	42.4	14.2	7.3	5.4	4.8	1.5	2.5	2.1	1.9	1.3	0.4
82.5°	25.7	5.9	3.8	2.7	2.3	0.4	1.2	0.8	0.4	0.4	0.0
85°	18.2	2.9	2.1	1.9	1.2	0.0	0.2	0.0	0.0	0.2	0.0
87.5°	2.5	0.8	1.0	1.0	0.8	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)