

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: P366627

Luminaire Tested: **MSA-SA1A-730-U-SL3-HSS**

Issue Date: 12/2/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P366627  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 12/2/2019  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: MSA-SA1A-730-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: 3022 lumens  
Efficiency: N/A  
Efficacy: 88.9 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

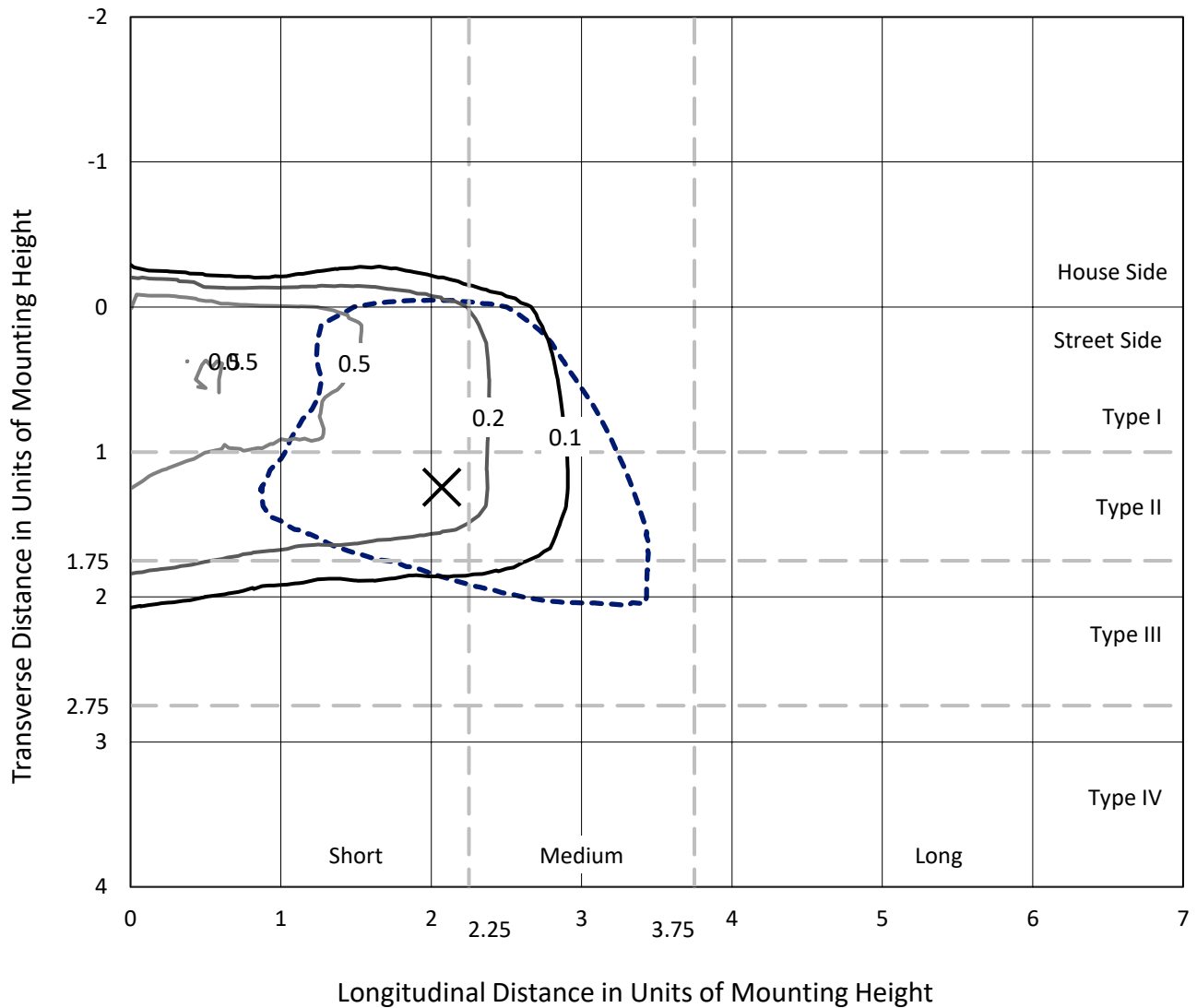
Input Watts (W): 34  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P366627  
 CATALOG NUMBER: MSA-SA1A-730-U-SL3-HSS

### Iso-Footcandle Lines of Horizontal Illumination

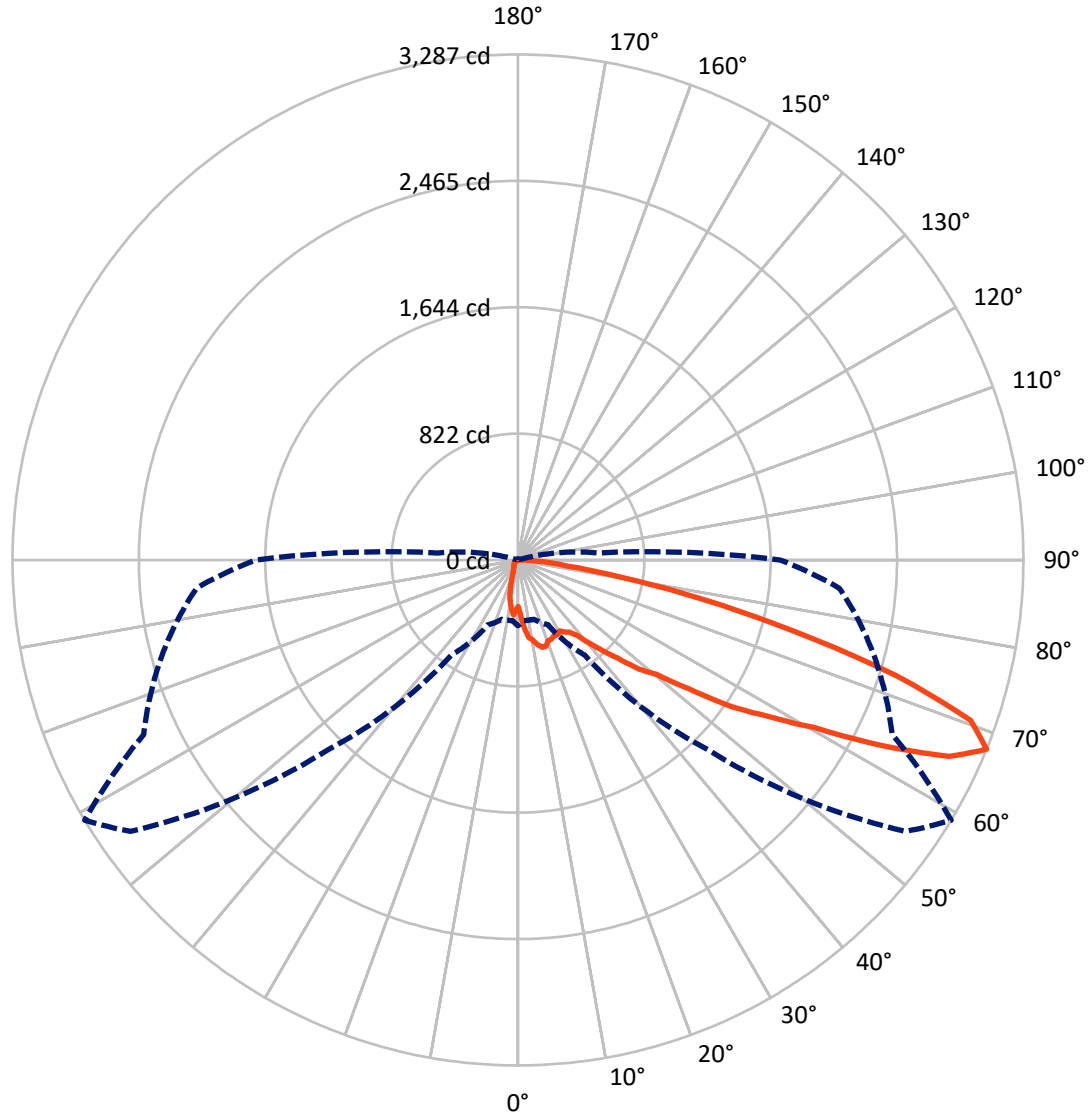
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.9 fc  
 Type III - Short - N/A

REPORT NUMBER: P366627  
CATALOG NUMBER: MSA-SA1A-730-U-SL3-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P366627  
 CATALOG NUMBER: MSA-SA1A-730-U-SL3-HSS

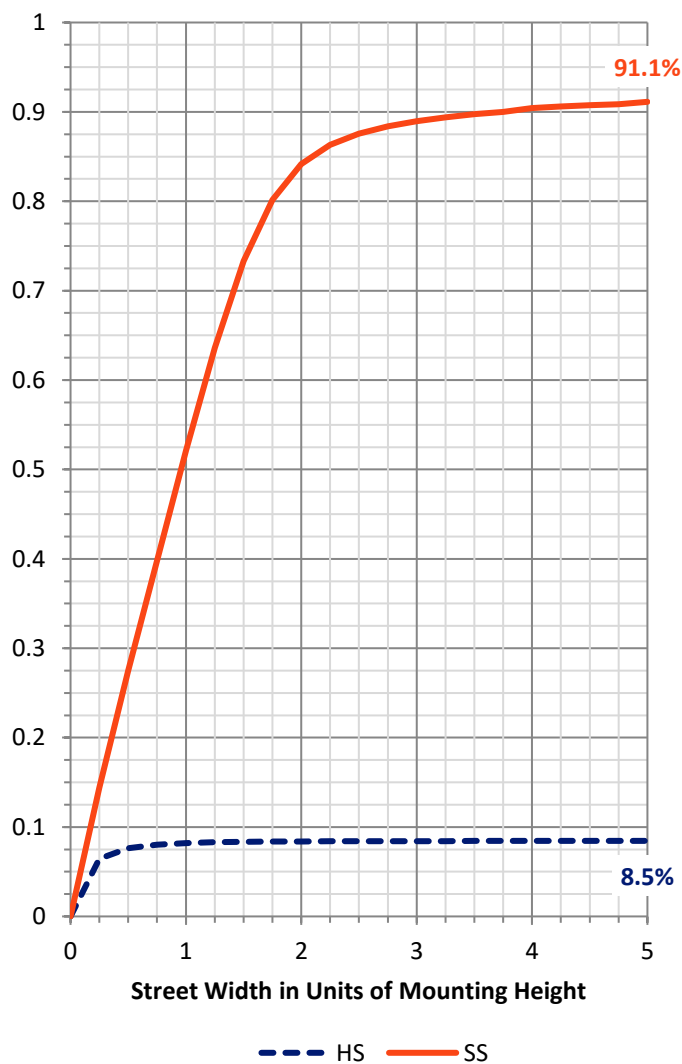
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	257.0	0.0	257.0
	% Fixture	8.5	0.0	8.5
<b>Street Side</b>	Lumens	2765.0	0.0	2765.0
	% Fixture	91.5	0.0	91.5
<b>Total</b>	Lumens	3022.0	0.0	3022.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	36.8	1.2
10°-20°	103.5	3.4
20°-30°	154.0	5.1
30°-40°	237.6	7.9
40°-50°	423.9	14.0
50°-60°	754.4	25.0
60°-70°	878.6	29.1
70°-80°	390.8	12.9
80°-90°	42.4	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°	3022.0	100.0
0°-180°	3022.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P366627

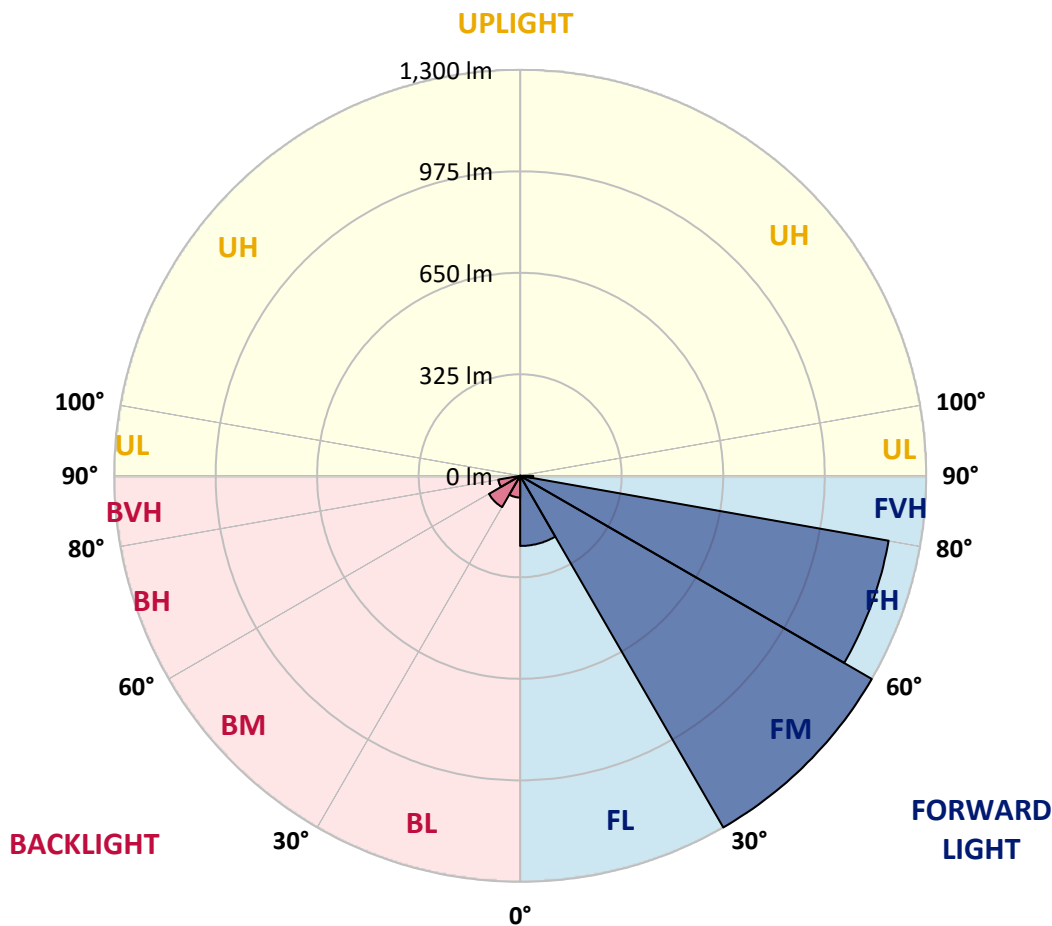
CATALOG NUMBER: MSA-SA1A-730-U-SL3-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	224.8	7.4			
FM (30°-60°)	1300.4	43.0			
FH (60°-80°)	1198.2	39.6			G1/1800
FVH (80°-90°)	41.7	1.4			G1/100
BL (0°-30°)	69.5	2.3	B0/110		
BM (30°-60°)	115.6	3.8	B0/220		
BH (60°-80°)	71.2	2.4	B0/110		G0/110
BVH (80°-90°)	0.8	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





REPORT NUMBER: P366627

CATALOG NUMBER: MSA-SA1A-730-U-SL3-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	302.4	302.4	302.4	302.4	302.4	302.4	302.4	302.4	302.4	302.4	302.4
2.5°	394.2	379.3	358.2	364.5	370.1	375.5	366.6	361.6	359.1	337.4	364.6
5°	484.0	465.5	455.8	453.4	447.3	433.6	456.3	446.2	449.6	453.8	462.7
7.5°	511.4	503.0	489.0	494.2	471.0	469.0	500.4	509.1	520.6	512.8	523.5
10°	497.3	482.8	489.3	487.5	486.6	507.1	529.1	529.6	546.7	555.0	518.7
12.5°	469.5	471.1	494.7	492.9	523.5	564.5	569.5	564.2	592.2	577.8	572.3
15°	488.0	501.7	488.7	493.2	504.0	555.3	573.2	589.7	616.2	624.8	587.6
17.5°	510.3	511.7	488.0	482.5	509.9	533.7	576.0	589.6	592.2	667.3	622.0
20°	498.2	510.0	481.7	447.0	489.5	521.9	564.8	560.5	577.9	679.9	629.8
22.5°	530.4	513.5	477.3	451.1	465.5	495.0	531.3	559.3	585.4	649.9	639.9
25°	533.4	527.3	495.0	471.8	469.3	476.8	527.3	545.4	586.4	676.8	631.3
27.5°	567.8	560.8	494.7	497.0	474.0	450.9	508.0	550.4	603.0	660.4	649.6
30°	612.2	612.8	527.6	534.8	502.0	464.9	523.8	535.4	614.4	686.6	663.0
32.5°	657.2	675.7	592.6	554.5	544.3	517.7	504.2	557.9	602.0	731.3	696.7
35°	725.6	738.2	646.2	612.1	571.8	541.5	557.4	576.7	646.5	790.5	740.9
37.5°	841.4	818.8	742.3	682.9	673.3	628.6	636.5	619.3	691.9	860.3	828.4
40°	906.6	886.1	806.6	777.6	716.1	723.0	697.9	708.0	757.9	932.9	908.2
42.5°	974.6	955.0	885.2	864.7	806.1	777.6	766.3	802.6	859.0	1054.0	1022.5
45°	1042.8	993.1	963.5	973.8	947.5	891.2	878.0	910.3	969.5	1202.7	1143.0
47.5°	1100.3	1058.4	1036.2	1031.5	1021.2	1099.4	1045.9	1060.1	1086.3	1334.3	1293.3
50°	1204.1	1162.8	1128.0	1118.4	1168.3	1279.2	1196.6	1169.0	1221.4	1493.3	1467.4
52.5°	1353.9	1301.3	1246.0	1246.2	1340.3	1401.2	1440.3	1392.0	1401.8	1668.2	1656.7
55°	1474.3	1407.4	1361.7	1397.8	1538.1	1572.2	1721.7	1679.4	1666.7	1830.4	1816.3
57.5°	1490.8	1410.7	1388.9	1452.3	1644.3	1862.2	2023.0	1917.1	1897.7	1966.1	1994.1
60°	1336.6	1251.5	1267.9	1369.8	1678.9	2038.9	2299.7	2213.2	2089.7	2125.1	2144.4
62.5°	996.9	929.0	974.9	1109.8	1545.6	2157.4	2620.0	2660.0	2312.5	2244.4	2240.3
65°	646.8	604.3	634.4	745.0	1169.7	2143.9	2906.1	3079.9	2488.0	2341.8	2270.5
67.5°	427.8	395.5	399.8	465.3	756.4	1743.6	3077.2	3287.3	2685.4	2397.0	2097.7
70°	318.9	293.5	295.0	330.5	449.0	1149.9	2838.6	3123.7	2757.5	2205.6	1693.1
72.5°	230.0	213.0	227.2	266.7	357.8	608.1	2115.8	2572.5	2404.5	1739.6	1140.7
75°	159.3	148.1	171.4	223.1	326.5	377.5	1398.1	1851.8	1685.3	1091.5	515.7
77.5°	88.3	84.9	118.4	181.8	296.4	309.4	856.4	1216.8	934.8	391.3	122.7
80°	38.6	37.3	57.4	136.5	249.1	279.6	482.2	674.7	367.7	69.8	39.6
82.5°	16.5	15.9	24.5	82.2	181.0	233.8	297.3	324.7	126.5	21.6	22.5
85°	2.9	3.2	9.8	43.3	110.2	118.7	215.3	192.2	63.7	10.3	16.1
87.5°	0.0	0.0	1.5	8.4	20.7	34.0	93.3	67.3	12.1	3.4	2.8
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: P366627  
 CATALOG NUMBER: MSA-SA1A-730-U-SL3-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	302.4	302.4	302.4	302.4	302.4	302.4	302.4	302.4	302.4	302.4	302.4
2.5°	368.5	359.9	327.3	323.2	318.7	312.2	309.7	295.6	293.8	311.8	311.8
5°	458.6	428.0	396.9	372.4	350.6	320.3	311.7	302.8	295.6	293.8	299.5
7.5°	506.2	468.8	420.0	357.8	307.3	263.3	245.0	232.1	217.7	222.0	224.3
10°	503.6	463.9	401.7	321.6	265.6	217.1	170.5	143.2	128.1	120.6	119.7
12.5°	529.1	491.8	389.3	292.9	221.4	154.4	107.3	87.8	76.7	76.8	75.9
15°	544.0	503.3	374.9	256.5	155.9	99.3	74.4	70.1	68.6	70.2	69.3
17.5°	570.1	515.4	342.3	202.1	107.3	75.0	68.4	66.7	68.7	72.2	71.3
20°	568.2	494.4	295.9	142.5	79.3	67.5	64.7	62.1	66.3	69.9	69.3
22.5°	566.3	473.9	252.3	105.1	66.3	61.5	59.2	58.1	60.3	64.6	65.5
25°	550.1	463.8	208.1	79.0	60.0	55.9	54.8	53.9	54.6	58.1	58.0
27.5°	570.0	438.2	160.7	66.3	55.5	50.6	49.7	48.2	46.7	49.7	50.2
30°	565.9	441.8	125.9	58.3	51.1	44.5	44.8	41.6	38.9	41.6	41.6
32.5°	580.9	416.1	100.8	52.9	46.7	41.9	38.1	34.7	32.7	34.4	34.7
35°	602.7	417.1	79.0	49.6	42.8	37.3	32.7	29.4	27.5	28.3	28.8
37.5°	676.0	409.8	66.0	47.0	41.5	34.6	29.8	25.4	24.2	25.1	25.6
40°	723.8	429.4	58.1	45.6	37.9	31.8	25.6	22.3	21.3	21.7	22.5
42.5°	813.7	440.2	54.3	44.1	34.7	27.2	21.9	20.0	18.5	19.1	19.7
45°	910.0	458.7	51.4	42.4	32.3	23.9	19.3	17.7	15.8	15.9	16.5
47.5°	1028.3	502.8	48.0	39.5	28.9	21.7	17.1	14.8	13.0	12.9	13.6
50°	1187.1	561.7	45.0	35.8	26.8	19.9	15.0	12.1	10.6	10.1	10.7
52.5°	1356.6	637.9	41.8	33.2	24.2	17.4	12.9	9.8	8.4	8.1	8.6
55°	1524.7	711.1	38.7	31.5	21.4	15.0	10.9	8.1	6.9	6.6	6.9
57.5°	1716.1	790.2	34.7	28.2	18.8	13.0	9.0	6.7	5.7	5.4	5.5
60°	1860.2	818.0	31.4	24.5	16.4	11.5	7.7	5.4	4.6	4.3	4.4
62.5°	1928.6	772.6	28.2	21.3	14.4	9.9	6.4	4.4	3.8	3.5	3.5
65°	1910.9	671.9	24.9	18.2	12.4	8.3	5.0	3.8	3.4	2.9	2.8
67.5°	1705.8	525.8	21.3	15.3	10.4	6.7	4.3	3.7	3.1	2.8	2.3
70°	1352.8	380.7	17.3	12.7	8.7	5.5	3.4	3.4	2.9	2.8	2.1
72.5°	886.7	239.6	14.1	10.3	7.2	4.3	2.6	3.1	2.8	2.8	2.0
75°	384.2	85.7	11.3	8.3	6.0	2.9	2.3	2.8	2.9	2.8	2.3
77.5°	90.0	26.6	8.9	6.6	4.9	2.0	2.3	2.8	2.9	2.6	2.0
80°	33.8	11.3	5.8	4.3	3.8	1.2	2.0	1.7	1.5	1.1	0.3
82.5°	20.5	4.7	3.1	2.1	1.8	0.3	0.9	0.6	0.3	0.3	0.0
85°	14.5	2.3	1.7	1.5	0.9	0.0	0.2	0.0	0.0	0.2	0.0
87.5°	2.0	0.6	0.8	0.8	0.6	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)