

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: P366635

Luminaire Tested: **MSA-SA1A-730-U-T2-HSS**

Issue Date: 12/2/2019

Test Information

Test Method: LM-79-08
Report Number: P366635
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-9)
Test Lab: INNOVATION CENTER
Issue Date: 12/2/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: MSA-SA1A-730-U-T2-HSS
Description: MESA POST TOP DECORATIVE LUMINAIRE. (1) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2776 lumens
Efficiency: N/A
Efficacy: 81.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B0 - U0 - G1

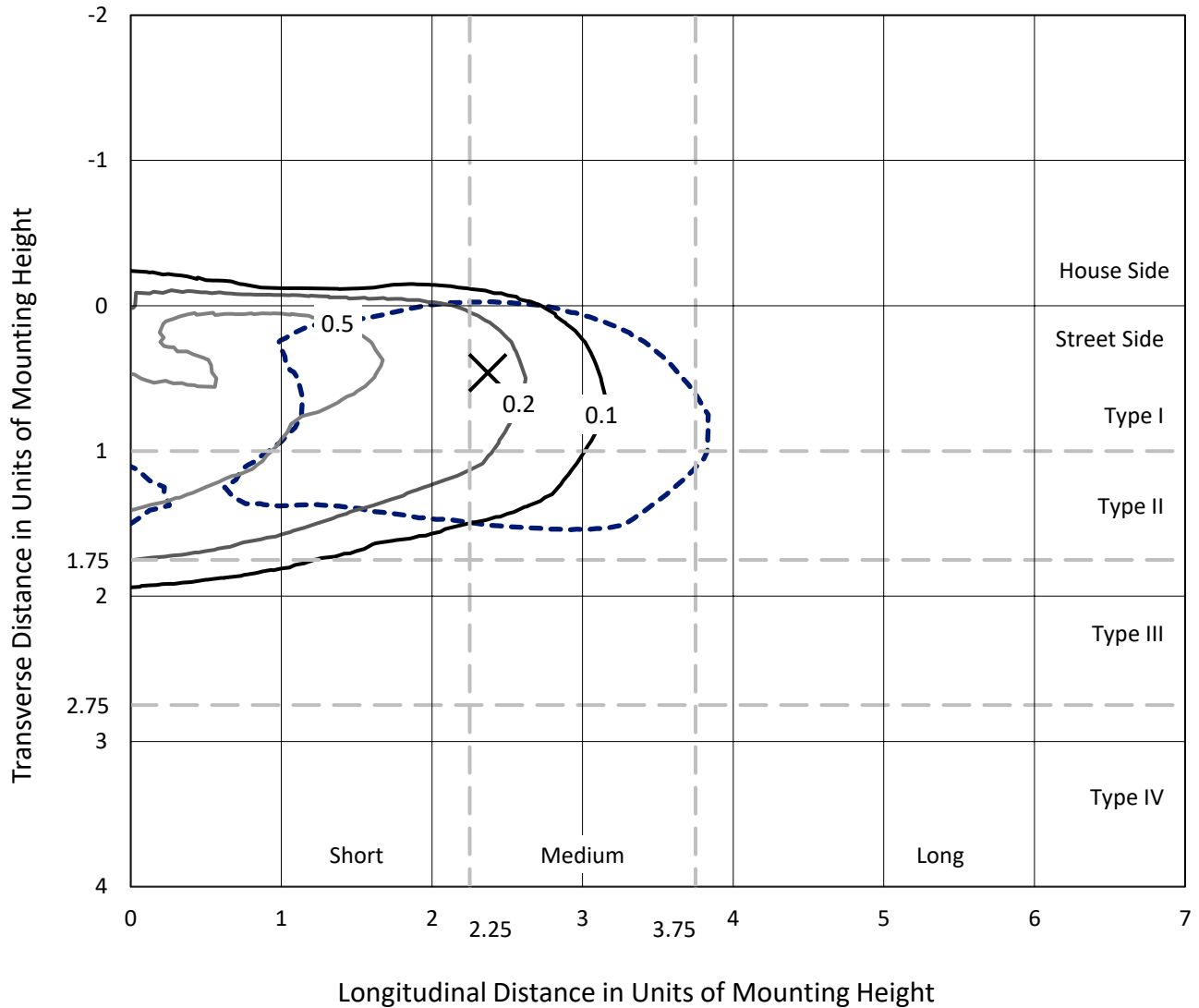
Input Watts (W): 34
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P366635
 CATALOG NUMBER: MSA-SA1A-730-U-T2-HSS

Iso-Footcandle Lines of Horizontal Illumination

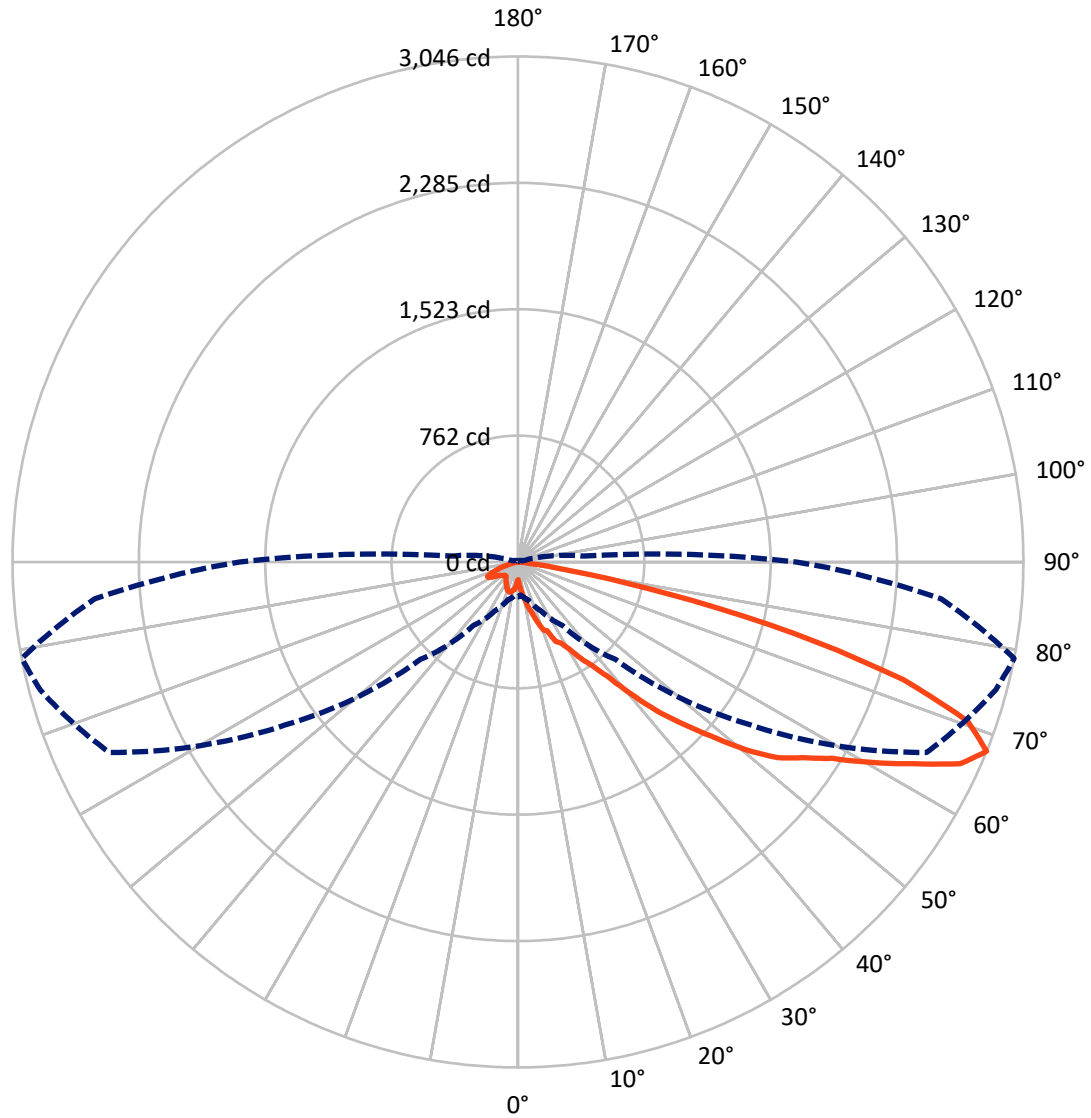
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.8 fc
 Type II - Medium - N/A

REPORT NUMBER: P366635
CATALOG NUMBER: MSA-SA1A-730-U-T2-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 79-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P366635

CATALOG NUMBER: MSA-SA1A-730-U-T2-HSS

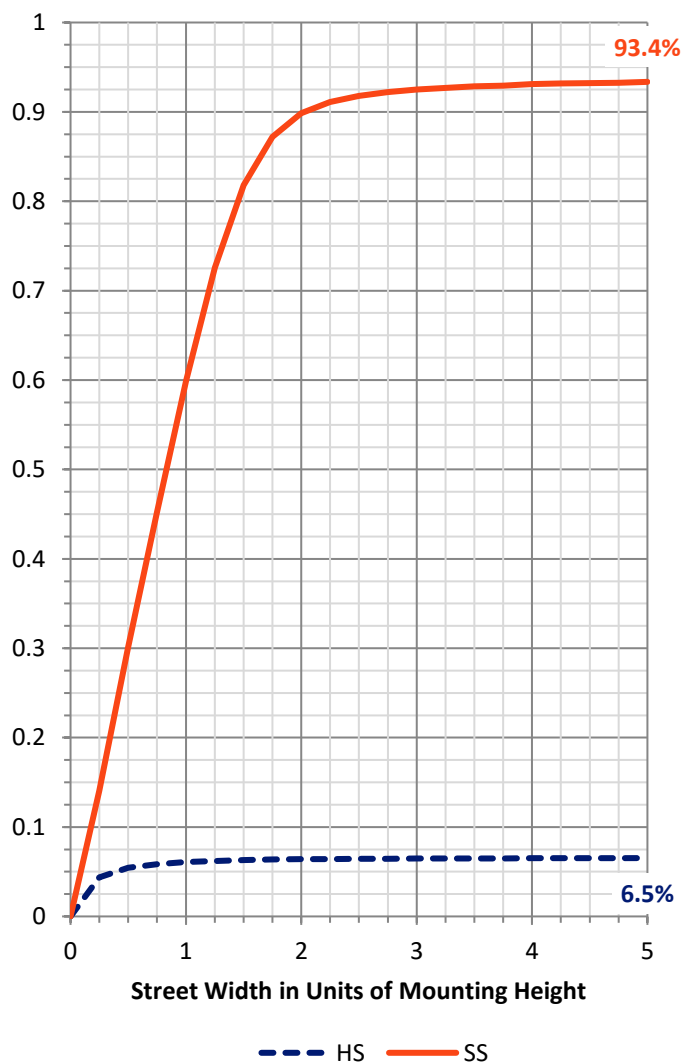
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	182.4	0.0	182.4
	% Fixture	6.6	0.0	6.6
Street Side	Lumens	2593.6	0.0	2593.6
	% Fixture	93.4	0.0	93.4
Total	Lumens	2776.0	0.0	2776.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	15.6	0.6
10°-20°	62.0	2.2
20°-30°	119.7	4.3
30°-40°	235.1	8.5
40°-50°	470.9	17.0
50°-60°	752.7	27.1
60°-70°	757.3	27.3
70°-80°	341.6	12.3
80°-90°	21.1	0.8
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°	2776.0	100.0
0°-180°	2776.0	100.0

Coefficient of Utilization

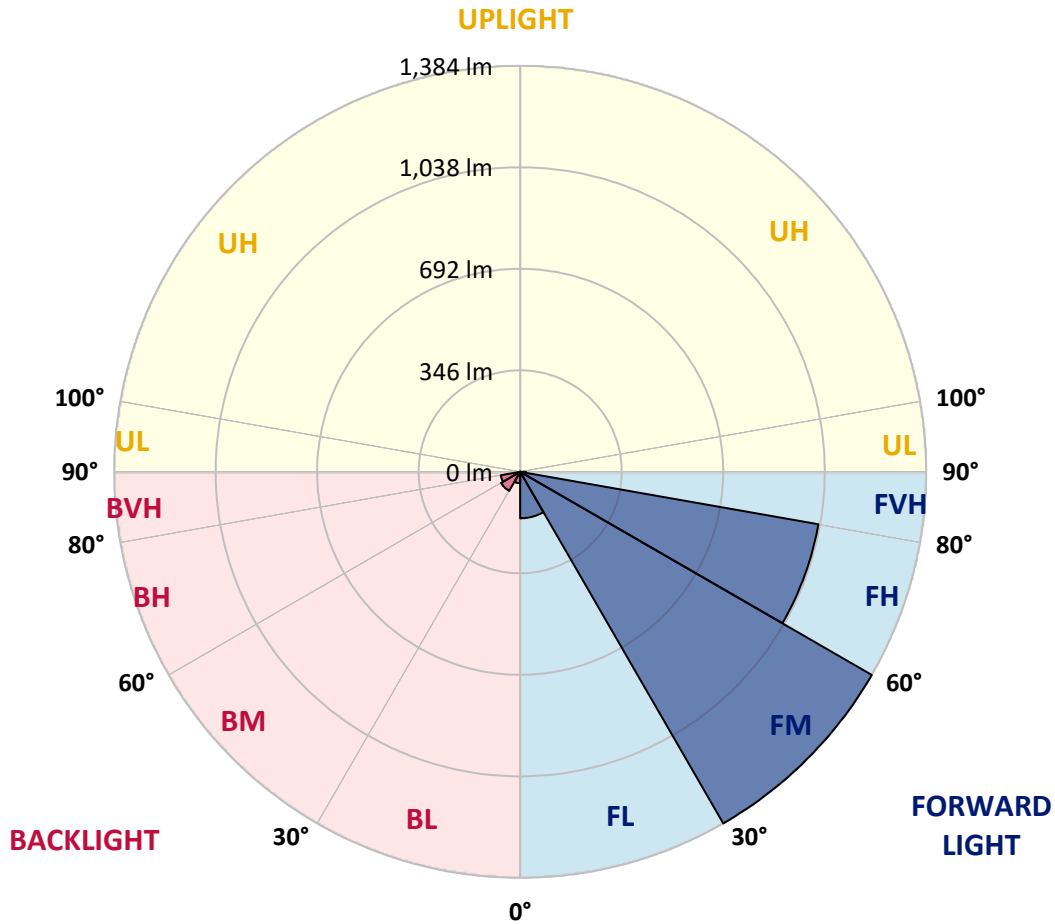


REPORT NUMBER: P366635
 CATALOG NUMBER: MSA-SA1A-730-U-T2-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	158.5	5.7			
FM (30°-60°)	1383.6	49.8			
FH (60°-80°)	1031.7	37.2			G1/1800
FVH (80°-90°)	19.8	0.7			G1/100
BL (0°-30°)	38.8	1.4	B0/110		
BM (30°-60°)	75.0	2.7	B0/220		
BH (60°-80°)	67.2	2.4	B0/110		G0/110
BVH (80°-90°)	1.4	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 II Medium





REPORT NUMBER: P366635
 CATALOG NUMBER: MSA-SA1A-730-U-T2-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	107.0	107.0	107.0	107.0	107.0	107.0	107.0	107.0	107.0	107.0	107.0
2.5°	144.5	139.3	130.8	135.6	135.3	137.7	133.1	128.1	120.0	128.1	128.7
5°	208.0	198.3	192.2	191.0	184.2	178.0	176.6	171.4	167.4	160.2	166.6
7.5°	259.1	254.6	243.8	242.5	226.0	216.8	219.7	217.5	202.3	194.8	201.1
10°	280.8	273.2	274.7	273.2	266.1	268.7	262.7	255.9	243.8	231.4	215.8
12.5°	289.2	288.0	300.7	299.2	315.7	335.6	322.3	310.8	282.8	279.7	258.5
15°	307.3	314.9	313.1	319.5	330.1	363.9	363.6	366.3	336.7	320.7	290.0
17.5°	323.3	329.0	319.8	327.2	355.9	376.4	403.8	393.1	396.5	380.3	332.7
20°	316.5	322.9	313.7	309.3	359.9	398.8	435.4	427.6	447.8	437.7	372.0
22.5°	359.5	347.4	324.3	309.9	347.7	398.3	446.5	479.1	475.6	450.8	408.6
25°	412.6	405.2	377.5	352.1	355.5	395.6	481.7	529.6	540.0	529.5	443.3
27.5°	484.2	482.5	425.9	414.9	382.1	383.5	487.2	593.3	569.6	553.0	483.9
30°	577.7	564.4	497.2	482.8	434.4	410.7	520.9	648.2	630.8	608.3	522.0
32.5°	678.2	680.2	594.5	547.1	508.2	480.0	507.6	673.9	706.5	688.3	569.6
35°	792.4	801.3	696.4	640.7	565.1	523.7	564.8	752.9	811.4	763.5	633.4
37.5°	968.2	967.9	845.5	734.5	679.6	634.6	660.2	824.7	940.2	872.9	747.8
40°	1122.9	1089.3	975.4	847.9	762.2	750.0	731.5	922.9	1077.8	1037.2	849.6
42.5°	1238.5	1214.7	1077.2	978.0	871.8	832.9	826.4	1066.9	1280.8	1224.1	994.8
45°	1376.6	1298.9	1197.6	1108.2	1000.0	988.7	973.3	1213.1	1517.1	1389.2	1121.1
47.5°	1500.4	1427.3	1331.5	1216.7	1092.5	1185.8	1126.4	1341.4	1689.0	1568.8	1260.3
50°	1604.7	1526.9	1419.6	1332.3	1279.0	1342.4	1243.4	1447.2	1874.6	1777.3	1390.6
52.5°	1657.8	1569.8	1486.8	1432.8	1465.4	1451.2	1401.9	1575.3	2032.8	1960.0	1505.9
55°	1614.1	1528.1	1493.4	1520.2	1619.2	1578.0	1582.0	1773.7	2182.2	2081.8	1606.3
57.5°	1420.7	1342.2	1357.7	1431.0	1620.7	1728.5	1787.4	1966.6	2302.0	2233.6	1761.2
60°	1074.7	1011.5	1068.7	1198.8	1468.3	1698.5	1933.0	2159.4	2473.2	2451.8	1995.6
62.5°	656.3	622.1	703.2	865.4	1170.1	1551.4	2018.0	2416.5	2656.4	2679.2	2244.3
65°	334.8	319.4	387.0	529.6	790.5	1274.4	1956.6	2576.2	2845.7	2929.9	2481.3
67.5°	210.9	200.9	237.0	323.0	466.4	831.2	1713.1	2715.9	2979.5	3046.0	2560.5
70°	146.1	139.9	171.1	221.7	294.3	447.8	1272.0	2585.6	2873.4	2876.5	2369.0
72.5°	92.7	87.8	118.3	164.2	217.1	231.2	729.2	2028.8	2459.6	2431.3	1918.5
75°	60.1	57.7	75.1	120.3	166.8	142.6	360.4	1369.0	1763.6	1719.3	1274.3
77.5°	43.2	41.6	50.3	80.3	118.7	99.8	161.6	815.9	1011.2	914.2	618.5
80°	26.0	25.9	36.4	50.3	84.5	70.4	74.7	370.5	392.1	319.7	189.0
82.5°	13.0	13.5	20.4	32.4	54.3	46.1	34.1	123.3	105.3	77.6	38.3
85°	3.1	3.8	10.7	22.3	27.2	18.4	16.2	32.3	28.9	21.9	11.2
87.5°	0.0	0.0	3.4	5.4	7.3	3.1	5.5	6.1	7.8	6.1	2.3
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: P366635
 CATALOG NUMBER: MSA-SA1A-730-U-T2-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	107.0	107.0	107.0	107.0	107.0	107.0	107.0	107.0	107.0	107.0	107.0
2.5°	128.8	127.0	115.8	112.9	112.6	109.4	110.2	107.1	107.3	114.2	114.2
5°	164.2	153.5	142.8	133.3	126.9	117.7	114.3	112.9	111.7	114.5	116.1
7.5°	192.8	177.1	157.8	137.1	118.0	104.8	103.0	99.6	98.4	101.2	103.3
10°	205.5	185.9	159.5	129.3	111.4	100.7	91.8	87.1	86.2	86.0	86.8
12.5°	232.4	208.1	161.3	126.4	107.0	95.2	85.1	77.1	69.8	70.5	69.8
15°	254.0	225.3	161.3	119.4	96.3	84.5	66.7	62.7	61.7	63.4	62.0
17.5°	286.6	242.2	153.2	106.8	87.1	65.6	58.9	58.6	60.8	63.2	61.7
20°	306.2	244.5	139.6	92.4	71.5	56.9	54.5	52.0	55.1	57.1	56.3
22.5°	326.6	244.7	125.9	84.8	57.5	51.9	47.9	45.9	46.4	48.2	48.5
25°	335.3	238.7	113.2	74.7	52.2	46.4	42.2	40.1	39.3	40.2	39.9
27.5°	359.0	227.2	99.5	63.7	49.6	41.2	37.3	34.7	32.4	34.0	34.3
30°	362.4	223.6	92.0	56.6	46.2	36.4	33.1	30.3	28.6	30.8	30.8
32.5°	373.1	203.4	88.1	53.7	42.7	33.7	29.1	27.1	26.8	28.2	28.3
35°	389.6	194.5	82.5	51.4	39.5	30.5	26.2	25.2	24.9	26.0	26.0
37.5°	445.6	183.5	76.2	49.4	36.7	28.8	25.4	23.9	24.0	24.9	25.6
40°	482.8	184.9	66.9	47.0	33.5	27.2	23.9	22.8	22.6	23.1	23.6
42.5°	551.8	185.9	62.7	44.4	31.1	25.4	22.3	21.6	21.0	21.4	21.9
45°	628.9	191.6	60.6	42.2	29.7	24.3	21.0	20.5	19.1	19.4	20.0
47.5°	703.3	212.2	58.0	39.2	28.5	23.7	19.6	18.5	17.6	17.4	18.1
50°	787.8	232.3	55.1	35.8	27.2	22.8	18.2	16.5	15.9	15.9	16.4
52.5°	863.4	251.4	52.3	33.5	26.3	21.1	17.0	15.3	14.8	14.8	15.5
55°	943.0	271.5	49.9	31.4	25.1	19.4	15.9	14.4	14.2	13.9	14.4
57.5°	1083.4	315.2	46.8	29.5	23.4	18.1	15.0	13.5	13.2	12.7	13.2
60°	1288.0	382.4	42.8	27.7	21.4	17.1	14.2	12.4	11.9	11.2	11.3
62.5°	1488.0	436.7	38.3	25.4	19.6	16.2	13.0	11.2	10.4	9.5	9.6
65°	1659.4	458.2	33.4	22.6	17.8	14.1	11.3	9.8	8.7	7.5	7.3
67.5°	1679.6	404.6	28.6	20.0	15.9	11.9	9.6	8.7	7.0	6.0	5.7
70°	1511.6	301.5	23.9	17.8	13.8	10.1	8.3	7.7	6.6	5.7	5.2
72.5°	1203.7	222.5	20.0	15.8	12.1	8.6	7.0	7.2	6.6	5.5	4.9
75°	796.1	127.3	16.4	13.2	10.1	6.9	6.4	6.4	6.3	5.2	4.6
77.5°	383.0	54.9	12.5	10.4	8.1	5.2	5.8	5.8	6.0	4.7	3.8
80°	108.6	16.5	7.8	7.0	6.0	3.5	4.6	4.4	4.0	2.8	1.7
82.5°	19.4	6.4	3.5	3.7	3.4	1.4	2.6	2.4	2.0	1.1	0.2
85°	5.4	2.4	2.0	2.1	1.7	0.5	1.1	1.4	1.1	0.6	0.0
87.5°	1.4	1.1	1.4	1.5	1.2	0.2	0.5	0.2	0.5	0.2	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)