

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: P400943

Luminaire Tested: **ENT-SA1A-735-U-T4W-HSS**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P400943
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-18)
Test Lab: INNOVATION CENTER
Issue Date: 5/20/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ENT-SA1A-735-U-T4W-HSS
Description: ENTRI LED LUMINAIRE
(1) 70 CRI, 3500K, 350mA LIGHTSQUARE WITH 16 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1915 lumens
Efficiency: N/A
Efficacy: 95.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type III - Short - Full Cutoff
BUG Rating: B0 - U0 - G1

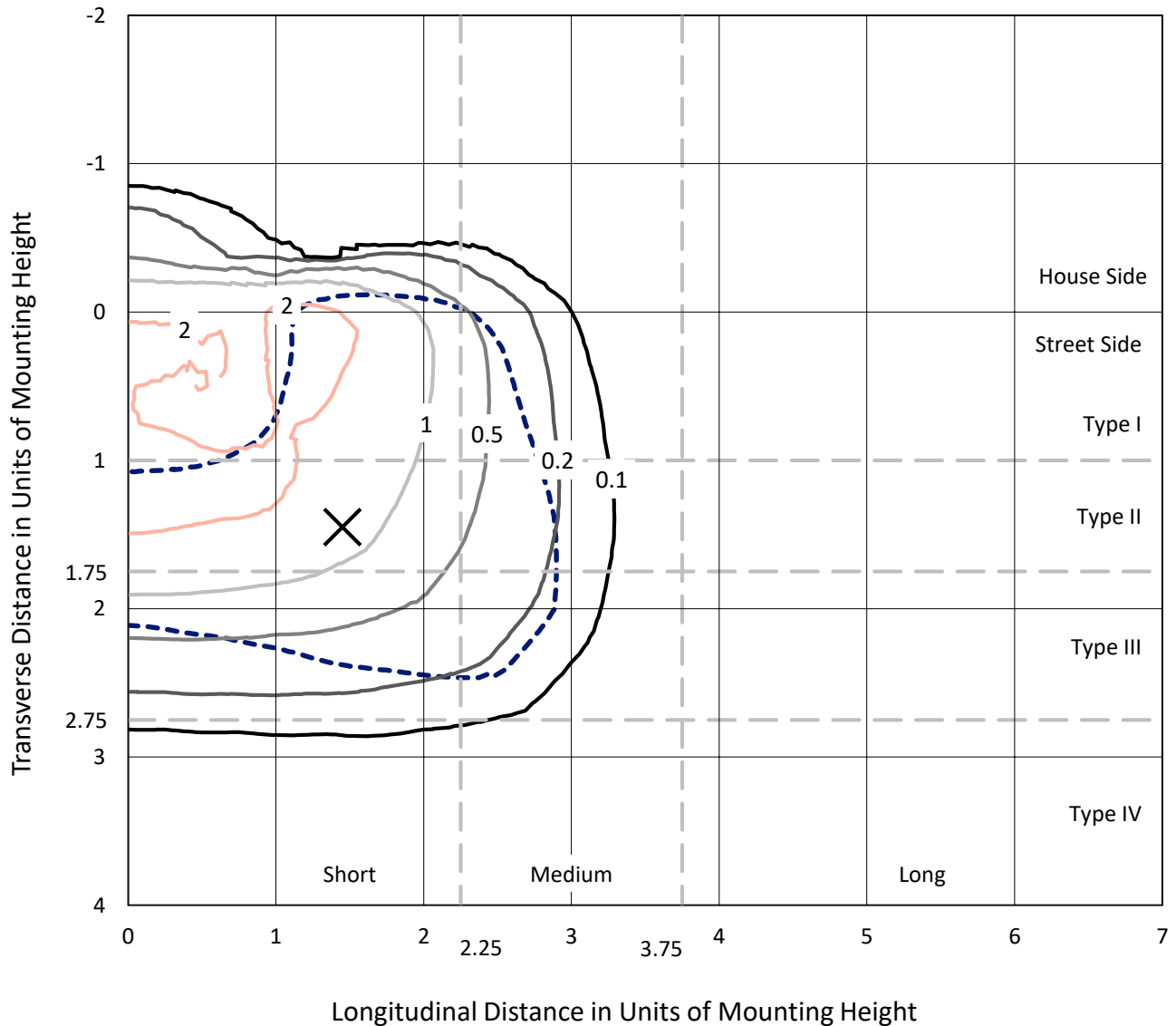
Input Watts (W): 20.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P400943
 CATALOG NUMBER: ENT-SA1A-735-U-T4W-HSS

Iso-Footcandle Lines of Horizontal Illumination

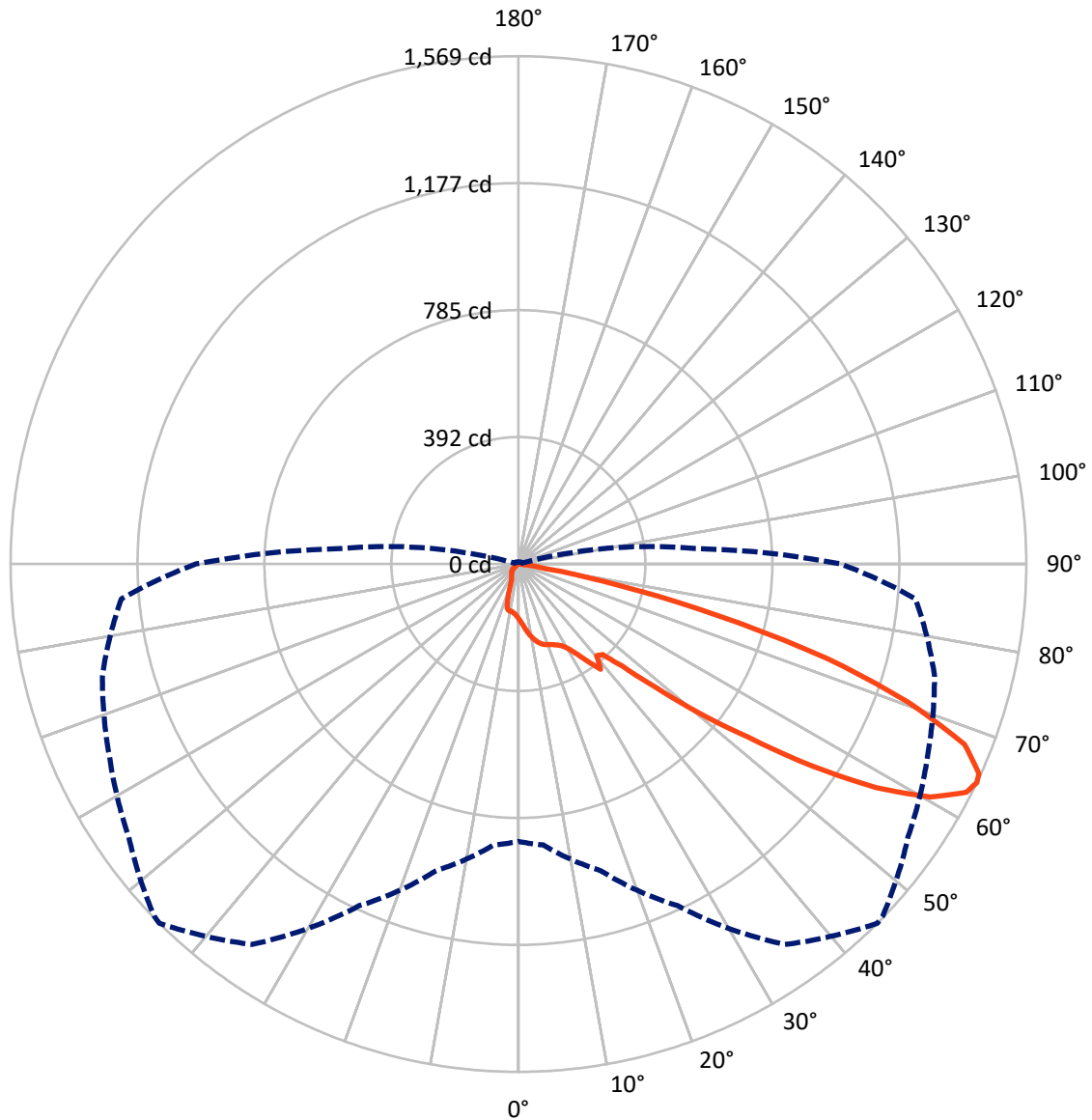
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 2.5 fc
 Type III - Short - Full Cutoff

REPORT NUMBER: P400943
CATALOG NUMBER: ENT-SA1A-735-U-T4W-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 64-Deg Vertical

REPORT NUMBER: P400943

CATALOG NUMBER: ENT-SA1A-735-U-T4W-HSS

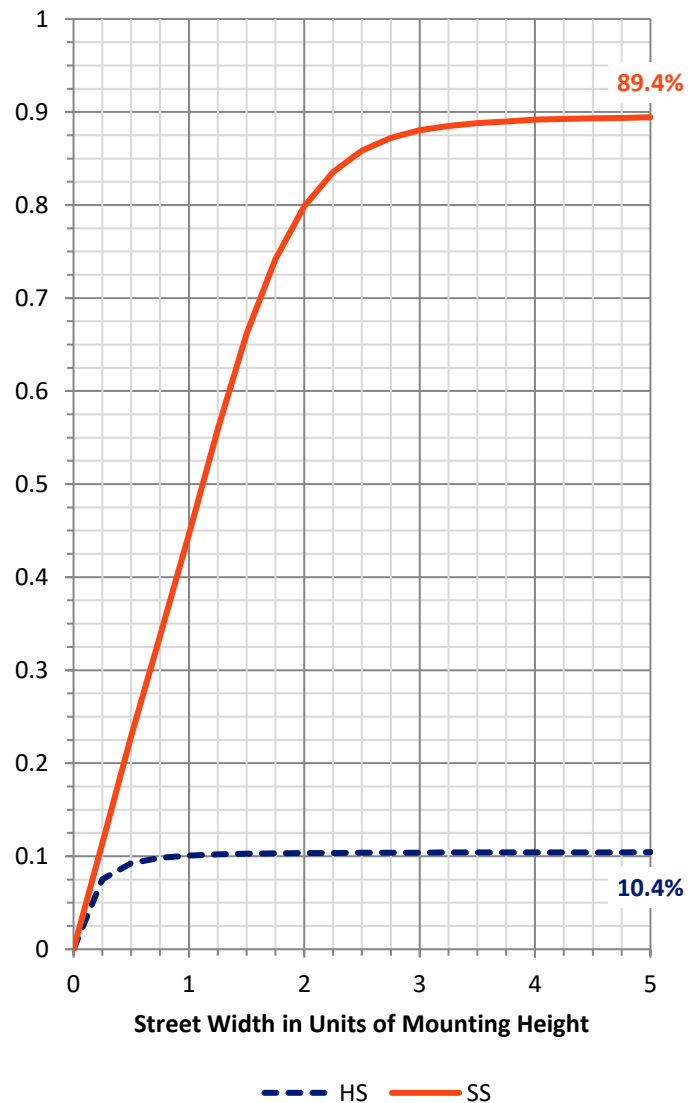
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	202.1	0.0	202.1
	% Fixture	10.6	0.0	10.6
Street Side	Lumens	1712.9	0.0	1712.9
	% Fixture	89.4	0.0	89.4
Total	Lumens	1915.0	0.0	1915.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	17.2	0.9
10°-20°	53.7	2.8
20°-30°	87.4	4.6
30°-40°	138.8	7.2
40°-50°	264.4	13.8
50°-60°	544.9	28.5
60°-70°	608.6	31.8
70°-80°	192.2	10.0
80°-90°	7.8	0.4
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°	1915.0	100.0
0°-180°	1915.0	100.0



REPORT NUMBER: P400943

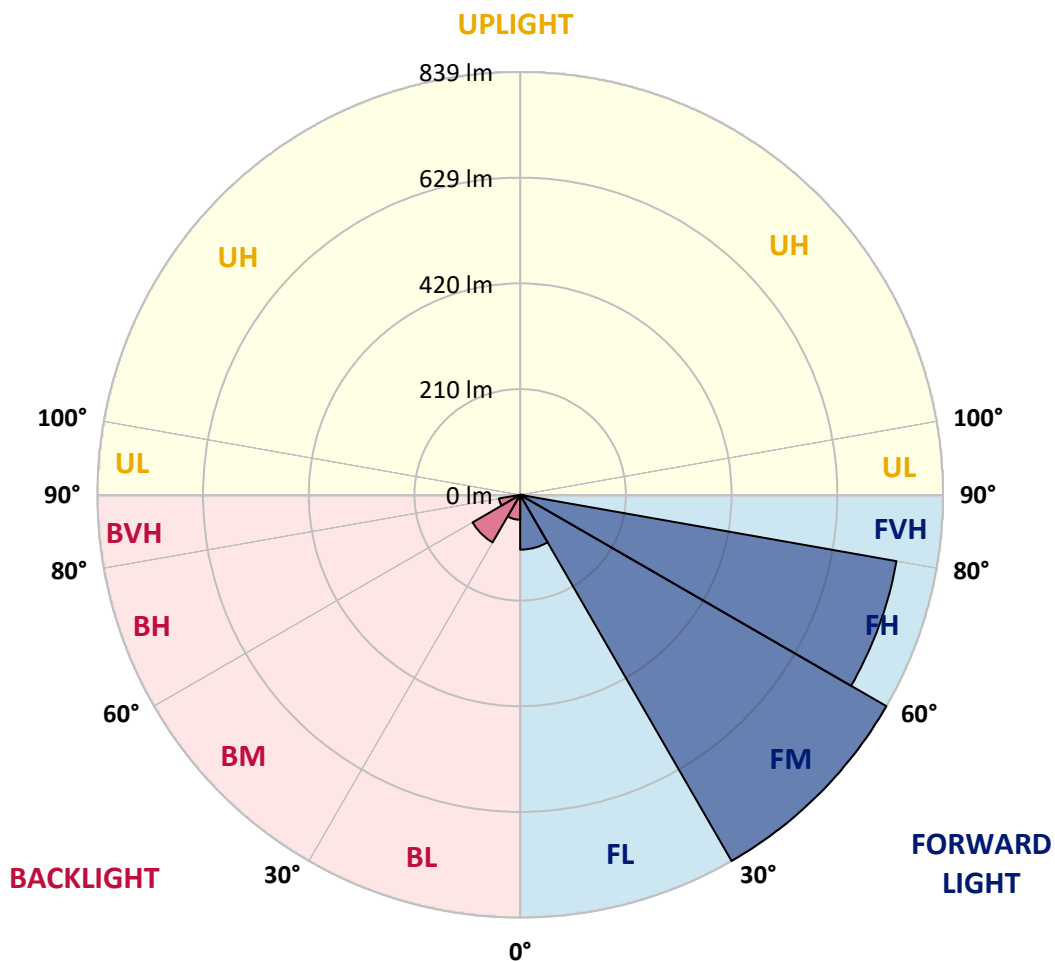
CATALOG NUMBER: ENT-SA1A-735-U-T4W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	108.8	5.7			
FM	(30°-60°)	839.1	43.8			
FH	(60°-80°)	758.2	39.6			G1/1800
FVH	(80°-90°)	6.9	0.4			G0/10
BL	(0°-30°)	49.5	2.6	B0/110		
BM	(30°-60°)	109.0	5.7	B0/220		
BH	(60°-80°)	42.6	2.2	B0/110		G0/110
BVH	(80°-90°)	0.9	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: P400943

CATALOG NUMBER: ENT-SA1A-735-U-T4W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	169.7	169.7	169.7	169.7	169.7	169.7	169.7	169.7	169.7	169.7	169.7
2.5°	187.3	188.0	186.9	185.4	184.0	181.4	181.8	178.5	175.9	174.1	171.2
5°	211.0	210.6	208.4	205.1	201.9	197.1	196.4	191.3	185.8	180.0	174.5
7.5°	235.1	234.0	231.8	227.4	221.2	215.0	213.2	205.9	197.8	189.1	179.6
10°	254.8	254.1	251.5	246.8	239.5	230.0	230.0	219.7	209.2	198.6	187.3
12.5°	270.9	270.1	267.2	261.4	252.6	244.2	243.1	234.0	222.3	209.9	196.0
15°	280.7	280.0	276.7	270.1	262.5	254.8	253.7	244.9	234.4	220.1	204.1
17.5°	283.3	282.5	280.0	274.1	268.3	261.7	260.3	252.6	243.5	228.9	212.4
20°	282.2	280.7	279.3	274.5	269.8	265.4	264.6	259.2	251.1	238.7	221.2
22.5°	279.3	277.8	276.7	273.4	270.9	270.5	269.8	266.5	261.4	250.8	234.4
25°	278.2	277.1	276.0	273.8	273.4	277.1	276.7	276.3	274.1	265.0	247.9
27.5°	284.4	284.0	281.4	277.8	279.6	285.8	286.2	288.0	286.6	280.7	267.6
30°	306.3	304.4	298.6	290.6	295.3	303.3	304.8	310.6	311.0	311.7	293.9
32.5°	335.8	332.9	323.1	312.8	315.8	330.7	331.1	340.2	359.6	347.5	308.1
35°	356.3	352.6	337.7	332.2	346.8	370.5	373.8	392.4	393.9	350.1	307.0
37.5°	413.6	408.1	380.7	347.5	361.7	412.9	416.5	413.2	382.6	346.4	322.7
40°	490.2	485.1	460.7	404.8	364.7	372.3	374.2	384.0	389.9	372.0	373.1
42.5°	589.9	583.3	558.1	489.9	410.3	382.2	385.8	405.9	444.2	452.6	495.7
45°	691.7	688.1	662.5	588.8	493.5	449.4	451.2	475.6	544.3	597.2	633.7
47.5°	791.4	792.1	770.2	707.8	614.7	565.8	563.6	595.4	682.2	719.8	757.1
50°	931.9	931.2	892.1	853.4	780.8	722.8	719.1	737.0	820.6	834.5	892.1
52.5°	1091.8	1091.1	1032.3	1014.1	983.4	890.0	899.8	884.5	944.7	969.5	1051.3
55°	1167.7	1161.2	1136.3	1159.3	1195.8	1102.0	1100.6	1042.2	1089.3	1110.4	1186.7
57.5°	1160.1	1162.6	1186.4	1262.6	1382.4	1303.9	1306.1	1197.7	1225.1	1238.2	1294.0
60°	1116.6	1118.5	1173.6	1300.6	1475.5	1462.0	1454.3	1343.0	1325.1	1319.6	1346.2
62.5°	992.5	993.3	1082.7	1245.9	1474.7	1553.2	1545.9	1445.2	1389.3	1354.3	1305.7
64°	857.5	871.3	980.8	1165.2	1434.9	1569.3	1565.3	1470.0	1395.2	1330.9	1231.3
65°	746.5	767.3	899.8	1093.6	1390.0	1563.8	1559.1	1465.6	1387.1	1287.1	1154.2
67.5°	509.2	520.2	639.2	860.7	1218.8	1486.8	1485.3	1409.4	1299.9	1111.9	905.6
70°	300.4	308.5	396.4	600.8	936.7	1277.3	1296.6	1269.2	1079.0	798.7	576.8
72.5°	93.4	98.2	174.9	333.6	614.0	995.1	1020.3	1000.6	785.6	499.0	319.8
75°	35.0	36.5	57.7	144.9	305.5	636.3	643.9	666.9	478.6	263.6	139.8
77.5°	19.3	19.7	28.5	54.4	134.3	312.5	319.8	316.8	254.4	124.5	44.5
80°	9.5	9.9	13.9	24.1	52.2	88.3	104.8	138.3	89.8	61.3	14.2
82.5°	3.3	2.9	6.2	11.0	17.5	23.7	26.6	38.3	37.6	33.6	5.1
85°	0.0	0.0	0.4	0.4	0.4	0.7	0.7	4.7	9.5	11.0	1.5
87.5°	0.0	0.0	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.7	0.7
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: P400943

CATALOG NUMBER: ENT-SA1A-735-U-T4W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	169.7	169.7	169.7	169.7	169.7	169.7	169.7	169.7	169.7	169.7	169.7
2.5°	169.7	169.0	166.5	163.9	162.1	159.9	159.5	158.1	157.7	157.7	157.7
5°	171.6	169.4	164.6	160.6	157.0	153.7	152.2	150.8	149.7	149.3	149.3
7.5°	175.6	172.3	164.6	158.8	153.3	149.3	147.1	145.6	144.6	144.6	144.6
10°	181.4	176.3	166.8	158.8	152.2	147.1	143.8	141.6	140.2	139.8	140.2
12.5°	188.7	182.2	170.5	160.6	152.9	146.4	139.4	126.7	118.3	113.5	112.8
15°	195.7	188.0	174.5	163.2	154.0	139.4	114.3	94.5	81.4	77.4	76.7
17.5°	203.3	195.3	180.0	166.8	150.0	112.4	81.4	65.0	62.4	63.2	63.2
20°	212.8	203.3	185.8	170.5	129.2	79.9	59.5	57.3	58.0	59.5	59.5
22.5°	223.8	213.5	193.8	168.3	98.6	58.4	54.4	54.8	55.5	56.9	56.9
25°	238.0	227.4	202.6	151.9	68.6	51.1	51.5	51.8	52.9	54.4	54.8
27.5°	259.2	246.4	213.2	127.4	51.8	47.5	47.8	48.9	50.0	51.8	51.8
30°	281.8	266.1	222.7	98.2	45.3	43.4	43.8	44.9	46.7	48.2	48.9
32.5°	291.7	277.8	224.5	67.2	42.0	40.2	39.4	40.5	42.0	43.4	43.8
35°	297.1	291.3	215.7	48.5	39.4	37.2	35.8	35.4	35.8	36.9	36.9
37.5°	324.1	320.1	198.2	41.6	36.9	34.7	32.5	30.7	29.9	29.6	29.9
40°	376.0	367.2	175.2	38.3	34.7	32.1	29.2	26.3	23.7	22.6	22.6
42.5°	490.2	446.1	142.4	36.1	32.5	29.6	25.2	21.2	18.3	17.5	17.5
45°	613.3	543.9	107.0	34.3	30.3	26.6	21.2	16.8	14.2	13.5	13.5
47.5°	731.5	616.2	74.8	32.1	27.7	23.4	17.5	13.5	11.7	11.3	11.3
50°	855.6	679.0	52.2	29.6	25.2	20.1	14.2	11.0	9.9	9.9	9.9
52.5°	976.5	725.3	38.3	27.0	21.9	16.8	12.0	9.9	9.1	9.1	9.1
55°	1067.7	743.2	29.2	23.7	18.6	14.2	11.0	9.5	8.8	8.4	8.4
57.5°	1128.7	728.2	23.7	19.7	15.7	12.4	9.9	8.8	8.0	7.7	7.7
60°	1127.2	678.6	19.0	16.1	12.8	10.6	9.1	8.0	7.3	6.9	6.9
62.5°	1061.2	597.9	15.0	12.8	10.6	9.1	8.0	7.3	6.6	6.2	5.8
64°	996.5	547.9	12.8	11.0	9.5	8.4	7.3	6.6	5.8	5.1	5.1
65°	926.5	500.5	11.7	9.9	8.4	7.7	6.9	6.2	5.1	4.4	4.4
67.5°	704.5	370.5	9.5	7.7	6.6	6.2	5.5	4.7	3.7	2.9	2.9
70°	457.4	239.8	8.0	6.2	5.5	5.5	5.1	4.0	2.9	2.6	2.2
72.5°	234.4	119.4	6.6	5.1	4.7	4.7	4.4	3.3	2.6	2.2	1.8
75°	99.3	48.5	5.5	4.4	4.0	3.7	3.3	2.9	2.2	1.8	1.8
77.5°	34.7	18.3	5.1	4.4	3.3	2.9	2.9	2.9	2.9	2.6	2.2
80°	11.7	6.9	3.3	3.3	3.7	4.0	4.0	3.7	4.0	3.3	2.6
82.5°	4.7	2.6	1.1	1.5	2.6	2.9	3.3	3.3	3.3	2.6	2.2
85°	1.1	0.7	0.7	1.1	1.1	1.5	1.5	1.8	1.8	1.5	1.5
87.5°	0.7	0.7	0.7	0.7	0.7	0.7	1.1	0.7	1.1	1.1	1.1
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)