

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: P400941

Luminaire Tested: **ENT-SA1A-735-U-T4FT-HSS**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P400941
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-16)
Test Lab: INNOVATION CENTER
Issue Date: 5/20/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ENT-SA1A-735-U-T4FT-HSS
Description: ENTRI LED LUMINAIRE
(1) 70 CRI, 3500K, 350mA LIGHTSQUARE WITH 16 LEDS AND TYPE IV FORWARD
THROW OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1819 lumens
Efficiency: N/A
Efficacy: 90.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B0 - U0 - G1

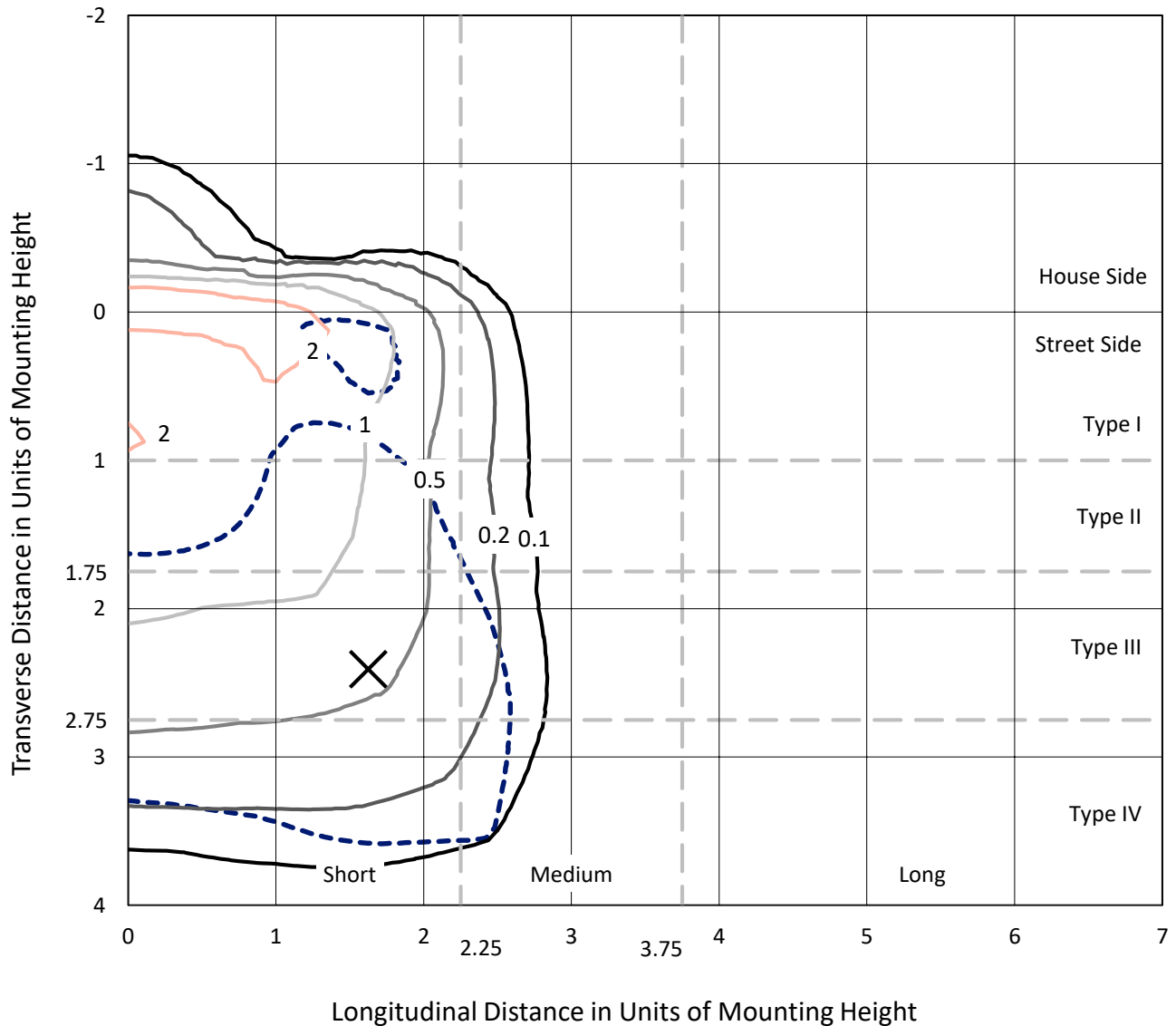
Input Watts (W): 20.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P400941
 CATALOG NUMBER: ENT-SA1A-735-U-T4FT-HSS

Iso-Footcandle Lines of Horizontal Illumination

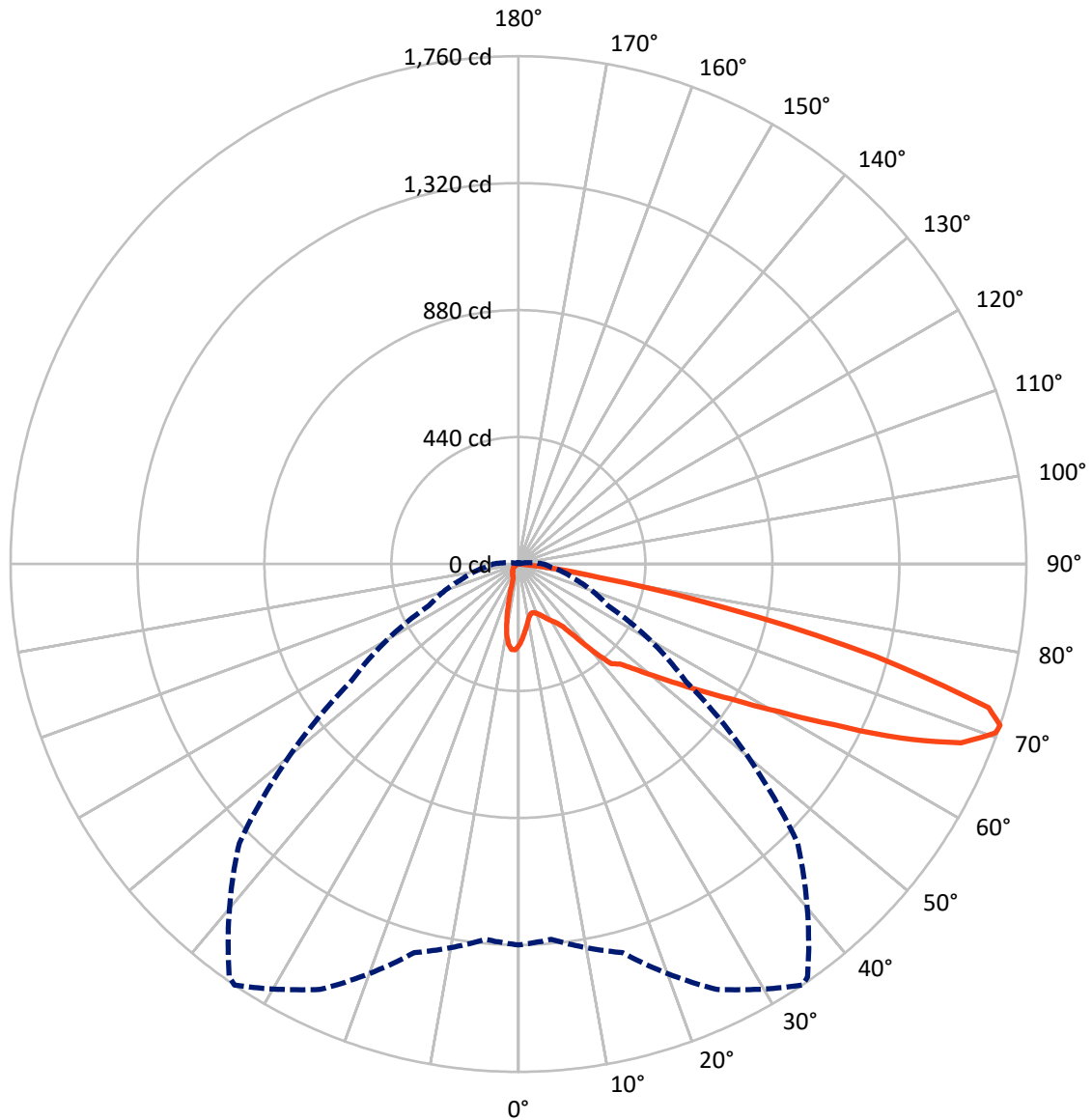
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 2.8 fc
 Type IV - Short - Semi-Cutoff

REPORT NUMBER: P400941
CATALOG NUMBER: ENT-SA1A-735-U-T4FT-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 34-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical

REPORT NUMBER: P400941

CATALOG NUMBER: ENT-SA1A-735-U-T4FT-HSS

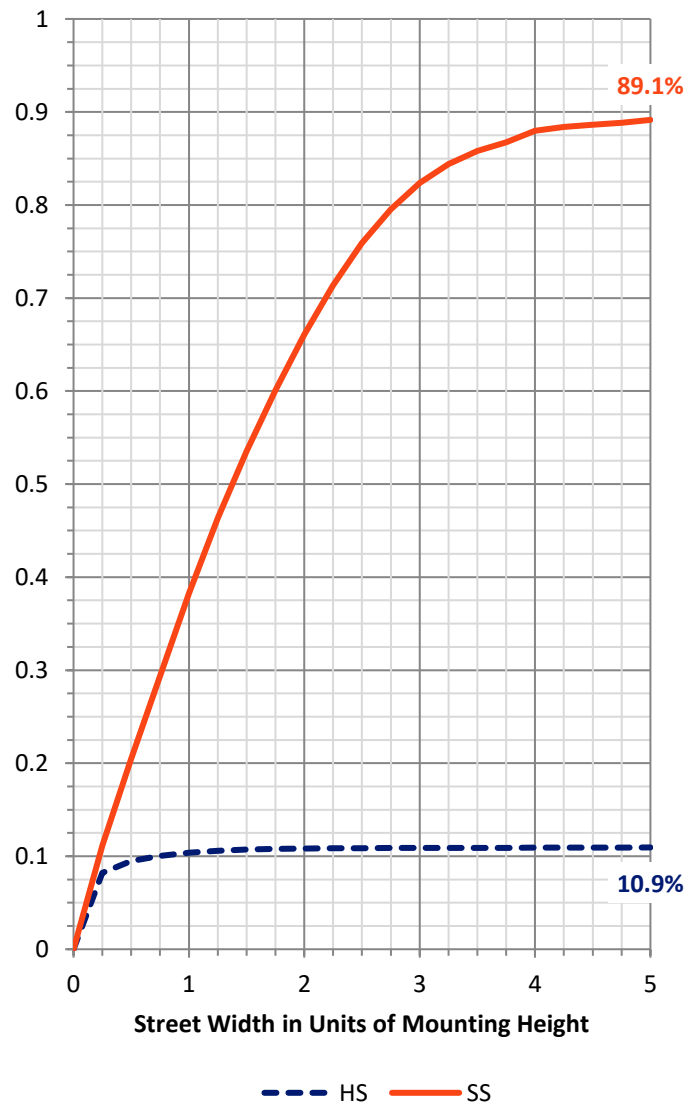
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	201.1	0.0	201.1
	% Fixture	11.1	0.0	11.1
Street Side	Lumens	1617.9	0.0	1617.9
	% Fixture	88.9	0.0	88.9
Total	Lumens	1819.0	0.0	1819.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	24.8	1.4
10°-20°	56.9	3.1
20°-30°	85.0	4.7
30°-40°	141.9	7.8
40°-50°	256.3	14.1
50°-60°	406.7	22.4
60°-70°	546.5	30.0
70°-80°	290.0	15.9
80°-90°	10.7	0.6
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°	1819.0	100.0
0°-180°	1819.0	100.0



REPORT NUMBER: P400941

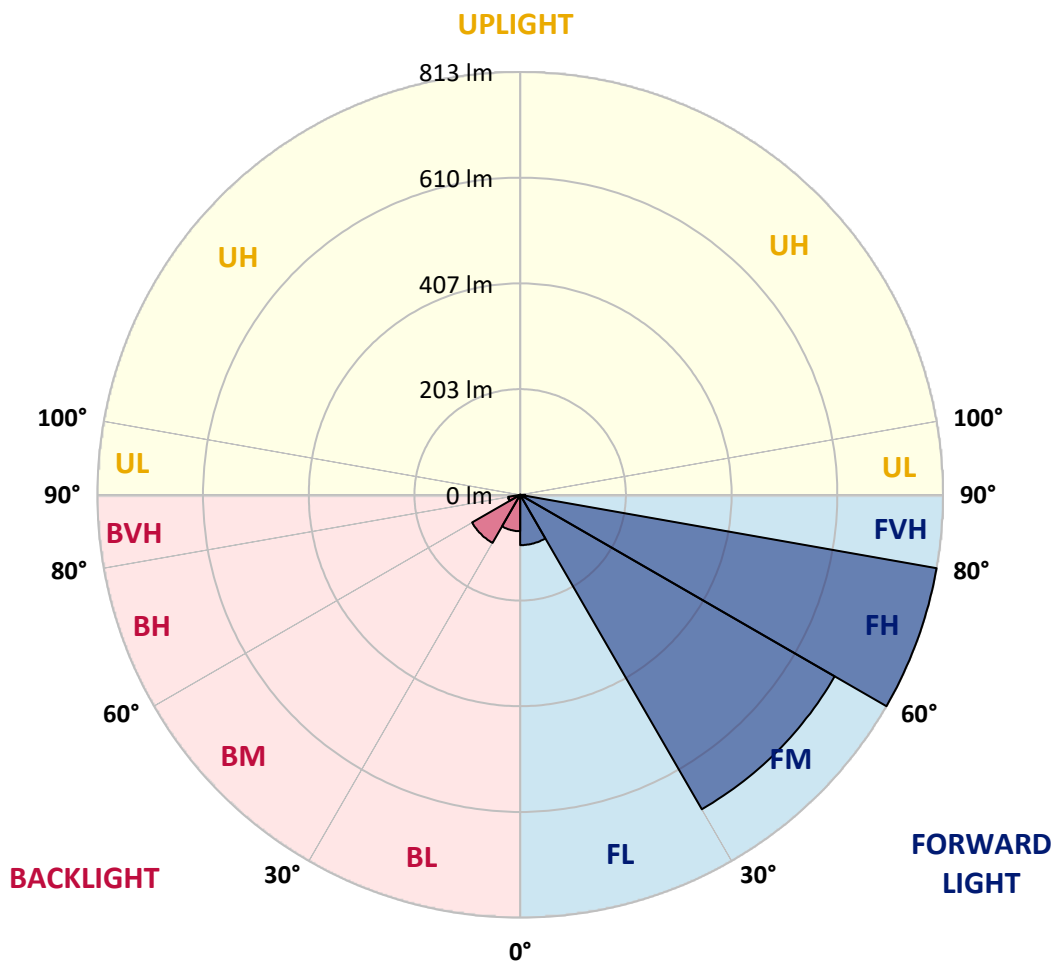
CATALOG NUMBER: ENT-SA1A-735-U-T4FT-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	96.8	5.3			
FM	(30°-60°)	698.3	38.4			
FH	(60°-80°)	813.1	44.7			G1/1800
FVH	(80°-90°)	9.7	0.5			G0/10
BL	(0°-30°)	70.0	3.8	B0/110		
BM	(30°-60°)	106.7	5.9	B0/220		
BH	(60°-80°)	23.5	1.3	B0/110		G0/110
BVH	(80°-90°)	1.0	0.1			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 IV Short





REPORT NUMBER: P400941

CATALOG NUMBER: ENT-SA1A-735-U-T4FT-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	281.8	281.8	281.8	281.8	281.8	281.8	281.8	281.8	281.8	281.8	281.8
2.5°	256.7	253.4	256.3	257.7	258.8	260.3	262.5	266.5	270.9	276.0	278.9
5°	223.8	225.6	226.7	230.7	234.7	235.5	242.4	250.4	260.7	270.9	279.7
7.5°	197.1	197.1	200.4	206.6	213.2	213.9	226.0	236.6	251.2	266.9	281.1
10°	176.0	176.7	179.3	185.5	193.9	195.7	209.2	223.8	242.1	262.5	282.6
12.5°	169.0	168.7	168.3	172.7	179.6	181.4	196.4	213.9	235.5	260.3	286.2
15°	173.4	172.3	169.8	170.5	174.9	176.7	189.8	207.4	231.5	259.9	292.4
17.5°	180.4	178.9	174.1	172.7	177.4	179.3	190.2	205.5	230.0	261.8	299.7
20°	188.7	187.3	180.0	178.2	182.9	184.4	195.7	208.8	230.7	265.4	309.6
22.5°	200.8	199.0	188.4	186.2	190.9	192.4	204.4	216.5	235.1	272.0	323.1
25°	215.4	213.2	199.7	196.8	202.6	204.1	216.1	227.4	242.4	280.7	340.3
27.5°	231.5	228.9	214.7	208.8	215.4	217.6	228.9	241.3	253.0	291.7	362.9
30°	246.1	243.1	229.3	222.7	229.3	230.4	243.9	257.7	270.2	310.3	396.1
32.5°	286.6	279.3	257.7	238.8	243.1	245.3	261.8	283.7	302.3	332.6	438.8
35°	347.2	341.4	315.1	282.2	266.9	267.6	288.8	316.5	324.9	358.5	491.8
37.5°	405.6	400.5	377.5	347.2	318.0	319.1	322.7	349.4	359.2	403.4	556.4
40°	469.5	461.5	443.2	414.4	394.3	389.5	371.7	390.3	411.8	460.0	626.8
42.5°	499.1	491.4	472.4	474.2	472.1	463.7	428.2	454.2	478.3	542.1	704.6
45°	548.0	533.0	494.0	496.9	494.0	494.7	503.4	541.1	561.9	629.0	792.6
47.5°	593.3	576.1	535.2	532.3	545.1	551.6	598.7	644.4	646.2	704.6	861.6
50°	634.5	622.1	584.5	584.9	608.2	615.5	709.7	751.3	714.5	762.7	915.6
52.5°	689.3	671.8	638.2	650.2	686.7	693.3	820.3	845.2	763.8	815.2	958.0
55°	740.0	730.5	705.7	723.6	779.5	796.6	932.8	917.5	798.4	862.0	978.4
57.5°	823.3	814.1	807.6	816.7	891.5	913.1	1046.7	968.6	825.5	893.0	968.9
60°	962.0	952.9	933.2	941.5	1039.0	1050.0	1136.1	1020.4	836.0	901.8	931.7
62.5°	1133.2	1121.9	1090.1	1128.8	1226.7	1226.3	1228.9	1047.8	822.5	875.8	833.5
65°	1287.6	1272.0	1255.5	1334.4	1453.4	1437.0	1327.4	1051.1	779.8	750.6	644.7
67.5°	1400.1	1393.9	1403.0	1526.0	1654.2	1637.8	1423.1	1005.8	649.1	541.8	398.3
70°	1395.7	1382.9	1441.0	1637.4	1753.9	1740.4	1419.1	826.5	433.0	287.0	166.8
71°	1320.1	1305.5	1393.9	1626.4	1759.7	1746.9	1368.0	707.2	342.4	202.6	109.9
72.5°	1020.0	1064.2	1204.8	1509.3	1703.5	1687.0	1228.9	541.4	216.9	117.2	55.1
75°	431.5	455.6	715.2	1077.4	1277.8	1269.4	828.4	250.1	99.7	52.9	21.2
77.5°	111.0	109.5	219.0	462.2	744.0	757.2	381.9	85.8	51.8	37.6	12.0
80°	21.5	23.4	62.4	160.6	284.0	291.7	124.5	37.6	34.7	29.6	6.2
82.5°	2.2	2.6	11.0	49.7	95.3	92.0	27.4	14.2	21.2	20.1	2.9
85°	0.0	0.0	0.4	0.4	0.4	0.4	0.4	1.5	5.1	5.5	0.7
87.5°	0.0	0.0	0.4	0.4	0.0	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



REPORT NUMBER: P400941

CATALOG NUMBER: ENT-SA1A-735-U-T4FT-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	281.8	281.8	281.8	281.8	281.8	281.8	281.8	281.8	281.8	281.8	281.8
2.5°	281.1	284.4	288.1	290.6	293.2	293.5	297.2	296.4	297.5	297.9	297.5
5°	284.4	288.8	295.7	299.4	300.8	298.3	297.5	293.5	292.1	290.2	288.4
7.5°	288.1	293.5	301.6	303.4	298.3	288.8	281.1	271.3	262.1	256.3	257.0
10°	292.1	299.0	305.6	300.8	287.7	269.1	247.5	225.6	206.3	199.0	201.5
12.5°	297.2	305.6	308.5	295.4	269.8	232.2	193.1	159.9	139.8	127.8	126.3
15°	304.8	313.2	310.0	286.6	241.3	182.5	134.0	100.4	81.0	74.8	71.6
17.5°	314.3	322.4	310.0	270.9	200.8	130.7	81.4	61.0	54.8	53.3	53.7
20°	326.0	333.7	308.5	247.2	154.8	80.3	54.4	50.4	50.4	50.4	50.0
22.5°	341.7	345.7	306.3	215.8	106.6	54.4	48.2	47.8	48.2	48.2	48.2
25°	360.7	360.0	302.3	178.2	67.2	46.4	46.0	46.0	46.4	46.7	46.7
27.5°	385.9	378.2	295.4	133.3	47.5	43.1	43.8	44.5	45.3	46.0	46.0
30°	420.9	402.3	284.0	90.2	40.2	39.8	41.3	43.4	44.5	45.3	45.3
32.5°	458.5	427.1	264.7	57.7	36.9	36.5	38.0	41.3	44.2	44.9	44.9
35°	506.0	453.8	235.8	41.6	34.7	34.0	35.4	38.3	42.7	44.9	44.9
37.5°	556.0	482.3	193.9	35.0	32.5	31.8	32.9	35.0	40.2	44.2	44.5
40°	609.3	507.5	145.7	32.5	30.3	29.9	30.3	32.5	36.5	42.0	43.1
42.5°	663.0	528.6	101.9	29.9	28.5	27.7	28.5	29.9	33.6	38.3	39.1
45°	722.1	552.0	67.9	27.7	27.0	26.3	27.0	28.1	30.7	33.2	33.6
47.5°	765.2	560.4	46.7	25.2	24.8	25.2	25.6	26.3	27.7	28.1	27.7
50°	793.7	556.0	33.6	22.6	23.0	24.1	24.1	24.5	24.5	23.4	23.0
52.5°	814.5	540.0	25.9	19.3	21.5	22.6	22.6	21.9	21.2	19.7	19.3
55°	816.7	503.8	20.4	16.8	19.3	21.2	20.8	19.3	17.9	16.4	16.4
57.5°	788.9	449.1	16.8	14.2	16.8	18.6	17.9	16.4	14.6	13.5	13.5
60°	744.0	392.8	14.2	12.0	13.9	15.7	14.6	13.5	11.7	10.6	10.6
62.5°	661.2	337.3	11.7	9.9	11.3	12.4	12.0	11.0	9.1	8.4	8.0
65°	506.7	256.7	8.8	7.7	8.8	10.2	9.5	8.4	7.3	6.2	5.8
67.5°	304.5	154.4	6.9	5.8	6.9	8.0	7.3	6.2	5.1	4.4	4.4
70°	128.9	66.1	5.5	4.4	5.1	6.2	5.8	5.1	4.0	3.7	3.7
71°	87.6	47.1	4.7	4.0	4.7	5.8	5.5	4.7	4.0	3.7	3.7
72.5°	44.9	24.1	4.0	3.3	4.4	5.1	5.1	4.4	3.7	3.7	3.7
75°	16.1	10.2	3.3	2.9	3.7	3.7	4.0	4.0	4.0	4.0	3.7
77.5°	9.1	6.2	2.9	2.9	2.9	3.3	4.0	4.4	4.7	4.7	4.4
80°	5.1	3.3	1.8	2.2	2.9	3.3	4.0	4.4	5.1	5.1	4.7
82.5°	2.6	1.1	0.4	1.1	1.8	2.9	3.3	3.7	4.4	4.0	4.0
85°	0.4	0.0	0.0	0.4	1.1	1.5	2.2	2.9	3.7	3.7	3.3
87.5°	0.0	0.0	0.0	0.0	0.4	0.7	1.1	1.8	2.6	2.9	2.6
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)