

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: P400931

Luminaire Tested: **ENT-SA1A-735-U-SL4-HSS**

Issue Date: 5/20/2020

Test Information

Test Method: LM-79-08
Report Number: P400931
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-6)
Test Lab: INNOVATION CENTER
Issue Date: 5/20/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ENT-SA1A-735-U-SL4-HSS
Description: ENTRI LED LUMINAIRE
(1) 70 CRI, 3500K, 350mA LIGHTSQUARE WITH 16 LEDS AND TYPE IV SPILL LIGHT
ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2107 lumens
Efficiency: N/A
Efficacy: 104.8 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

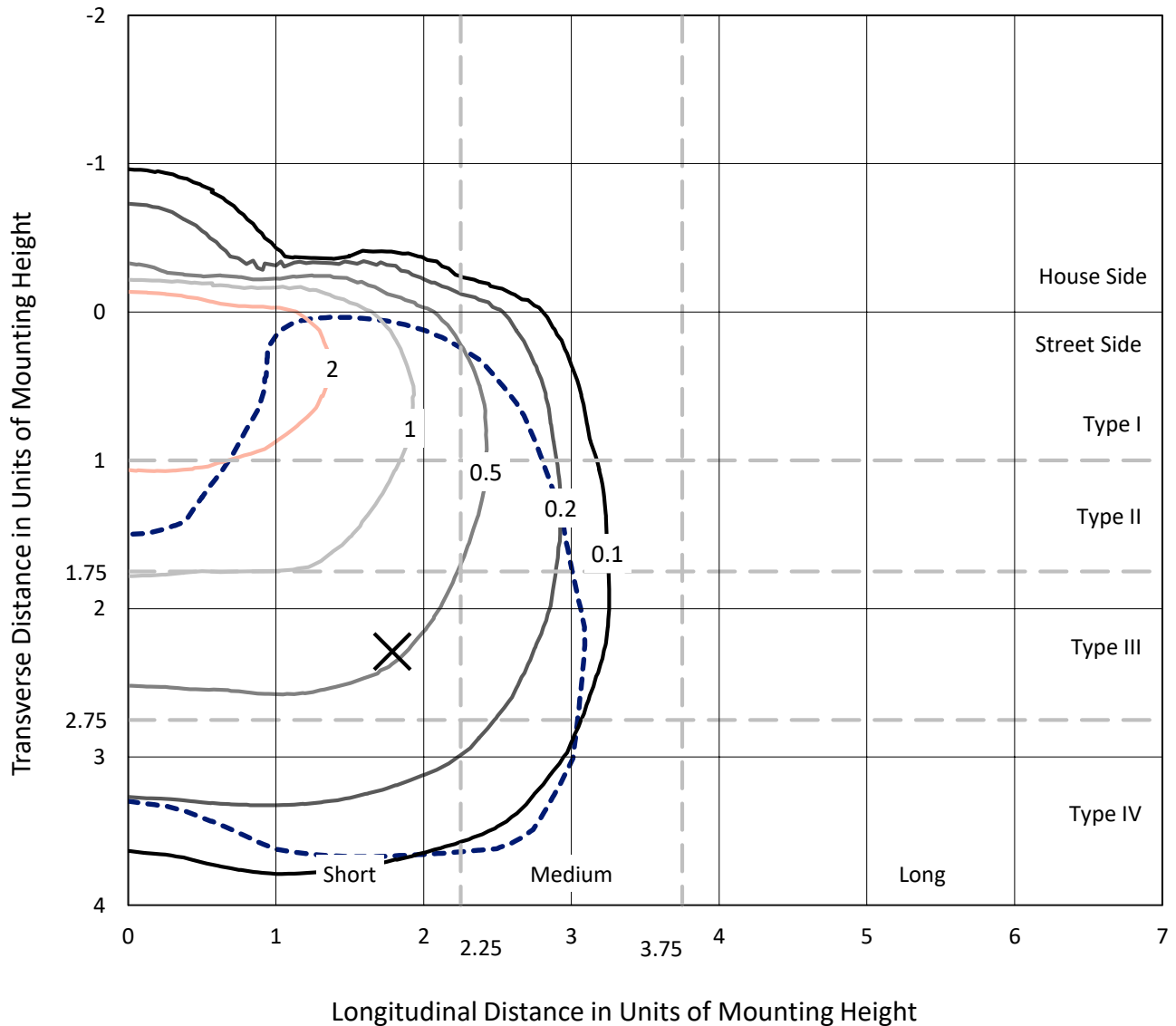
Input Watts (W): 20.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

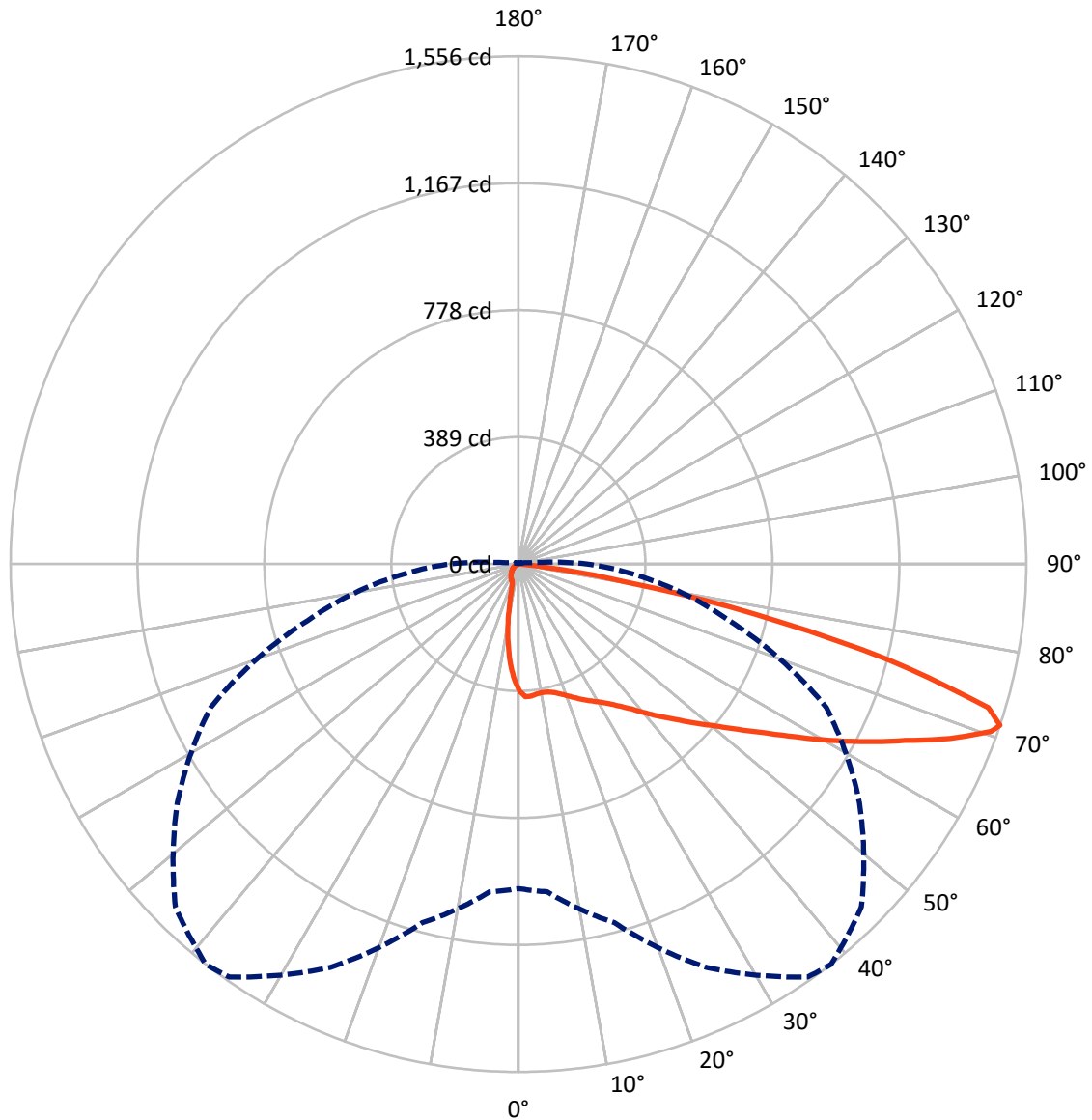
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 4 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 38-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical

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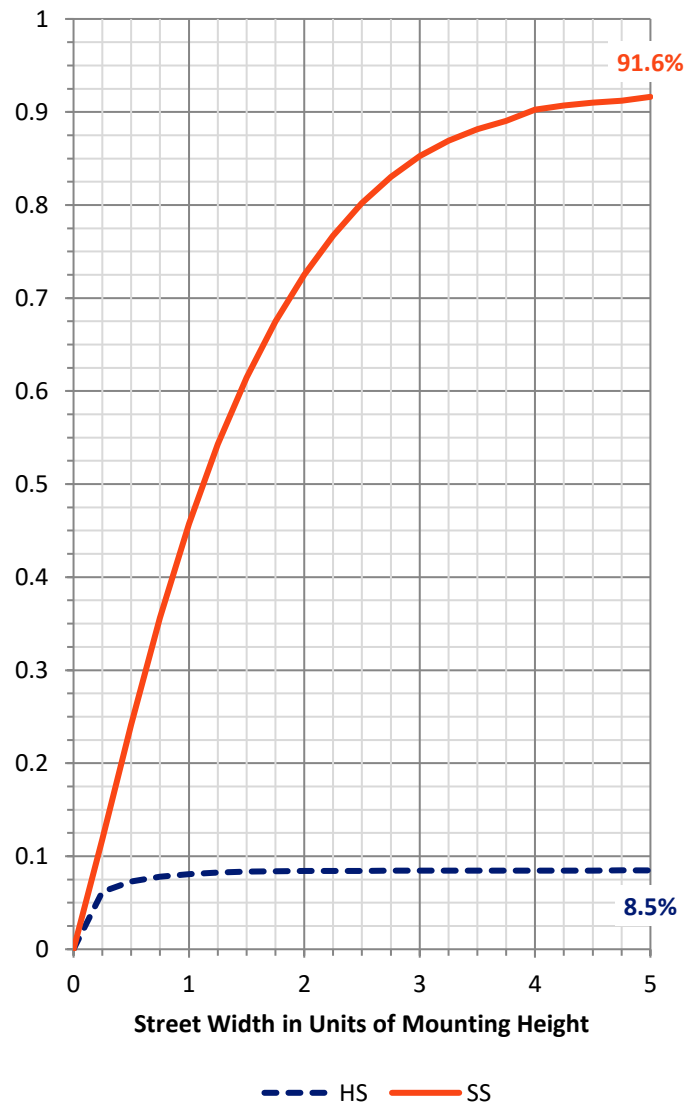
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	180.0	0.0	180.0
	% Fixture	8.5	0.0	8.5
Street Side	Lumens	1927.0	0.0	1927.0
	% Fixture	91.5	0.0	91.5
Total	Lumens	2107.0	0.0	2107.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	32.8	1.6
10°-20°	79.4	3.8
20°-30°	127.4	6.0
30°-40°	193.8	9.2
40°-50°	302.0	14.3
50°-60°	441.6	21.0
60°-70°	566.4	26.9
70°-80°	346.2	16.4
80°-90°	17.4	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°	2107.0	100.0
0°-180°	2107.0	100.0



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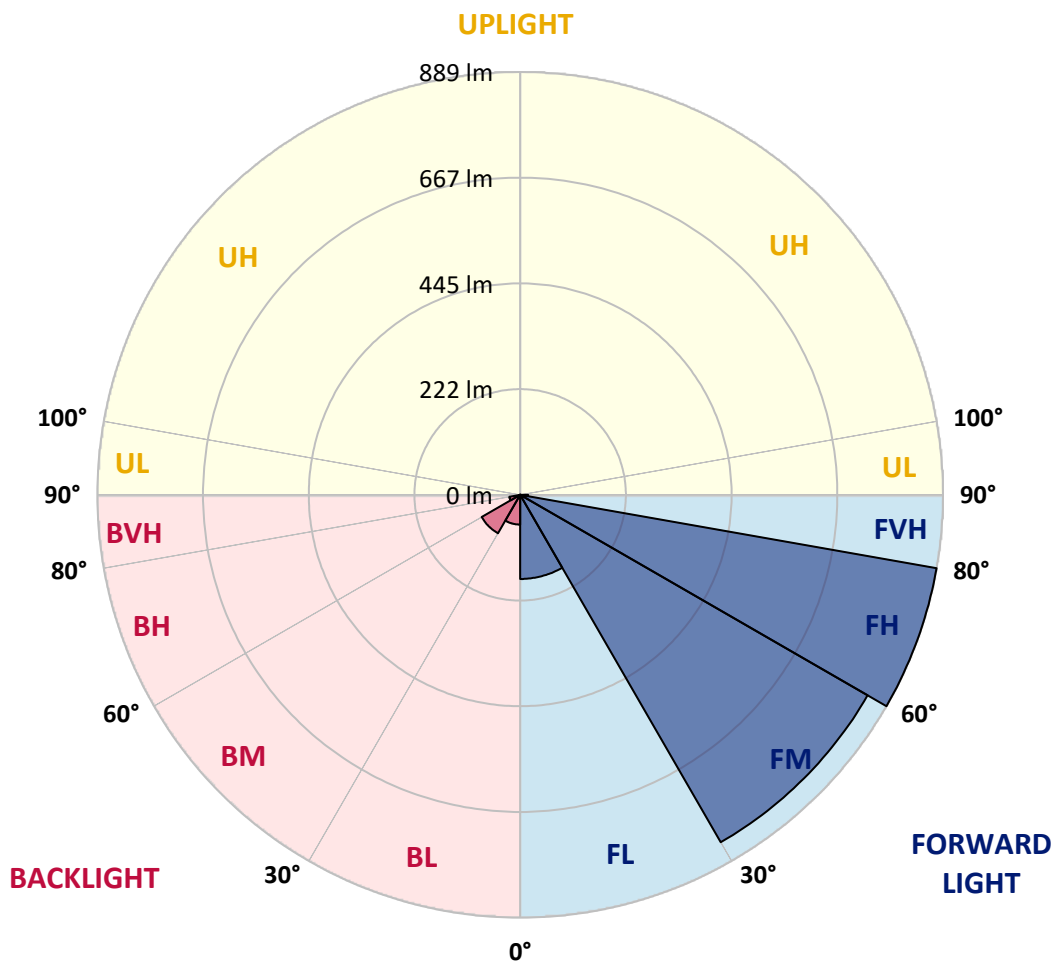
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	177.0	8.4			
FM	(30°-60°)	843.9	40.1			
FH	(60°-80°)	889.5	42.2			G1/1800
FVH	(80°-90°)	16.6	0.8			G1/100
BL	(0°-30°)	62.6	3.0	B0/110		
BM	(30°-60°)	93.5	4.4	B0/220		
BH	(60°-80°)	23.1	1.1	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 IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	38°	45°	55°	65°	75°	85°
0°	388.4	388.4	388.4	388.4	388.4	388.4	388.4	388.4	388.4	388.4	388.4
2.5°	411.4	410.3	411.4	410.3	408.1	407.0	405.6	401.6	397.9	393.5	387.0
5°	412.2	411.4	411.4	410.0	407.4	406.3	404.9	400.8	396.1	389.5	379.7
7.5°	408.1	407.8	407.0	405.6	402.7	401.9	400.8	396.1	391.4	384.4	372.4
10°	401.6	402.3	401.9	401.9	400.8	400.1	399.4	393.9	388.8	380.8	368.0
12.5°	395.4	396.1	397.9	400.8	401.9	402.3	402.3	396.8	390.6	381.9	368.7
15°	391.4	392.8	397.9	403.8	407.0	408.1	409.2	403.4	396.1	386.6	372.7
17.5°	390.3	392.4	402.3	411.4	417.6	418.4	418.4	411.1	403.4	392.4	377.5
20°	393.9	396.8	409.6	422.4	430.0	430.8	429.3	419.8	410.7	398.7	381.5
22.5°	404.9	407.4	422.0	437.0	444.3	445.0	441.7	428.6	418.7	408.9	387.0
25°	423.8	425.3	441.0	455.2	459.3	460.3	454.9	439.2	427.9	418.7	394.6
27.5°	449.0	449.8	464.0	474.6	475.3	475.0	469.1	452.7	441.4	433.7	406.3
30°	475.3	476.4	488.1	495.0	492.1	490.6	485.5	468.0	457.8	452.0	423.1
32.5°	499.8	500.9	513.6	517.3	510.7	509.6	506.0	487.4	478.6	481.5	447.2
35°	523.9	523.9	538.5	540.3	534.5	534.5	534.5	512.2	510.7	520.6	480.8
37.5°	545.4	549.1	564.4	563.7	562.6	563.3	565.5	548.7	553.8	570.6	525.0
40°	563.7	568.4	588.9	590.7	595.4	599.4	602.7	594.0	606.0	633.4	581.5
42.5°	580.1	585.6	611.8	620.2	633.4	638.9	645.1	642.9	669.5	719.5	653.8
45°	601.3	607.1	634.1	654.2	672.5	679.8	693.6	703.1	747.3	804.2	732.0
47.5°	629.4	633.4	658.2	690.0	714.8	727.9	749.5	773.9	827.6	894.0	801.7
50°	667.7	668.1	686.7	727.9	764.8	779.0	816.3	848.0	915.2	973.3	852.1
52.5°	710.1	707.9	722.5	774.7	821.4	840.7	884.6	928.7	996.3	1030.6	874.7
55°	750.2	751.3	760.4	824.3	892.6	911.2	966.7	1011.6	1070.4	1065.6	887.1
57.5°	796.6	796.2	807.9	878.7	975.8	997.4	1055.4	1092.3	1115.3	1090.8	889.3
60°	840.4	839.3	857.2	943.7	1064.5	1096.3	1148.5	1147.0	1160.2	1106.9	887.5
62.5°	879.4	882.0	913.4	1019.3	1163.8	1198.1	1224.4	1206.2	1209.8	1125.5	864.8
65°	926.9	931.6	982.4	1110.9	1286.5	1302.9	1313.1	1283.6	1247.1	1110.5	796.2
67.5°	986.8	1001.0	1072.6	1246.0	1414.3	1425.6	1425.9	1330.3	1245.6	1035.0	669.5
70°	1010.5	1025.5	1139.4	1352.9	1522.0	1536.2	1491.7	1323.0	1147.4	810.4	452.0
71°	994.1	1007.6	1137.5	1363.2	1544.2	1555.5	1485.8	1275.2	1040.4	667.7	350.1
72.5°	875.4	910.5	1067.5	1298.9	1504.4	1504.8	1391.3	1162.4	827.6	416.9	176.0
75°	472.8	515.1	782.3	988.6	1160.5	1169.7	1070.4	807.2	400.5	108.1	42.7
77.5°	155.9	175.6	350.8	513.3	727.9	742.2	654.6	358.5	126.3	36.5	22.3
80°	97.8	100.0	118.6	215.8	323.8	335.9	269.4	145.3	57.0	20.1	15.3
82.5°	16.4	19.7	55.9	63.5	114.3	90.5	61.3	74.1	26.6	9.1	13.1
85°	0.0	0.0	0.4	0.4	1.8	0.4	0.4	15.0	1.5	1.5	6.9
87.5°	0.0	0.0	0.4	0.4	0.4	0.4	0.4	0.4	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



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	388.4	388.4	388.4	388.4	388.4	388.4	388.4	388.4	388.4	388.4	388.4
2.5°	384.0	381.1	375.3	369.1	361.4	354.8	352.7	347.9	345.7	343.9	343.9
5°	373.5	368.4	355.9	343.2	330.7	317.6	305.6	294.2	288.8	281.1	284.8
7.5°	364.7	355.9	338.4	318.3	292.8	266.9	246.8	229.3	214.7	209.9	206.6
10°	358.5	347.5	322.0	291.3	254.1	217.2	186.2	157.3	140.6	130.3	130.3
12.5°	357.8	343.9	310.7	263.6	209.9	159.9	121.6	94.2	80.7	74.5	74.1
15°	360.3	343.5	300.4	238.4	169.4	111.0	75.9	63.9	60.6	59.9	59.9
17.5°	362.5	343.2	288.4	209.9	124.9	73.0	60.2	58.0	57.3	57.0	57.0
20°	364.7	341.3	274.5	177.8	88.3	59.5	56.2	55.1	54.8	54.4	54.4
22.5°	367.6	339.5	260.3	141.3	65.3	55.5	53.7	52.6	52.2	52.2	52.2
25°	371.6	338.4	242.8	107.0	56.2	52.6	50.7	50.0	50.0	49.6	49.6
27.5°	379.3	339.5	223.8	76.7	52.6	49.6	48.6	47.8	47.8	47.5	47.5
30°	389.9	342.8	200.1	59.9	49.6	46.7	45.6	45.3	44.9	44.9	44.9
32.5°	404.9	347.9	174.1	51.1	46.0	43.8	42.7	42.3	42.3	42.3	42.0
35°	427.9	358.5	142.4	46.7	42.7	40.5	39.4	39.4	39.4	39.1	39.4
37.5°	462.9	375.7	110.2	43.1	39.1	37.2	36.5	36.1	36.1	36.1	36.1
40°	507.1	403.4	80.3	39.8	35.8	34.0	33.2	32.9	32.5	32.5	32.5
42.5°	564.0	434.1	58.4	36.1	32.9	31.0	30.3	29.6	28.8	28.5	28.5
45°	623.2	470.6	45.6	33.2	29.9	28.5	27.7	26.6	25.6	24.5	24.5
47.5°	680.5	498.7	39.1	29.9	27.4	25.9	25.2	23.7	21.9	20.8	20.8
50°	716.6	507.4	35.0	27.0	24.8	23.7	22.6	20.8	18.3	17.2	17.2
52.5°	727.9	491.4	31.4	24.5	22.6	21.5	20.1	17.5	15.0	13.5	13.5
55°	732.3	460.3	27.7	22.6	20.4	19.0	17.2	14.6	12.0	10.6	10.6
57.5°	726.8	416.5	24.8	20.4	18.3	16.8	14.6	11.7	9.1	8.0	8.0
60°	708.2	353.0	22.3	18.3	16.1	14.2	12.0	9.1	6.9	5.5	5.8
62.5°	657.8	273.1	19.3	15.3	13.9	12.0	9.5	6.9	4.4	3.7	3.7
65°	577.5	189.1	16.4	12.8	11.7	9.9	7.3	4.7	2.6	2.2	2.2
67.5°	469.1	122.3	12.8	10.6	9.9	8.0	5.5	2.9	1.5	1.5	1.1
70°	294.6	60.6	10.2	8.0	8.0	6.2	4.0	1.8	1.1	1.1	1.1
71°	208.5	41.3	9.1	7.3	7.3	5.8	3.7	1.5	1.1	1.1	1.1
72.5°	94.2	25.9	7.7	6.6	6.2	4.7	3.3	1.5	1.5	1.5	1.5
75°	29.6	14.2	5.5	5.1	5.1	4.0	2.9	1.8	1.8	1.8	1.8
77.5°	19.7	11.0	3.7	3.3	4.0	4.0	2.9	2.2	2.2	2.2	2.2
80°	16.1	5.8	2.2	2.2	2.9	3.7	2.9	2.2	2.6	2.2	2.2
82.5°	15.7	2.9	0.7	1.1	1.8	2.2	2.2	1.8	2.2	2.2	2.2
85°	6.6	0.7	0.4	0.7	0.7	1.1	1.1	1.5	1.8	1.8	1.8
87.5°	0.0	0.0	0.0	0.0	0.4	0.4	0.7	0.7	1.1	1.5	1.5
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)