

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: P400921

Luminaire Tested: **ENT-SA1A-730-U-T3-HSS**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400921  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/20/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ENT-SA1A-730-U-T3-HSS  
Description: ENTRI LED LUMINAIRE  
(1) 70 CRI, 3000K, 350mA LIGHTSQUARE WITH 16 LEDS AND TYPE III OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1913 lumens  
Efficiency: N/A  
Efficacy: 95.2 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 - G0

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

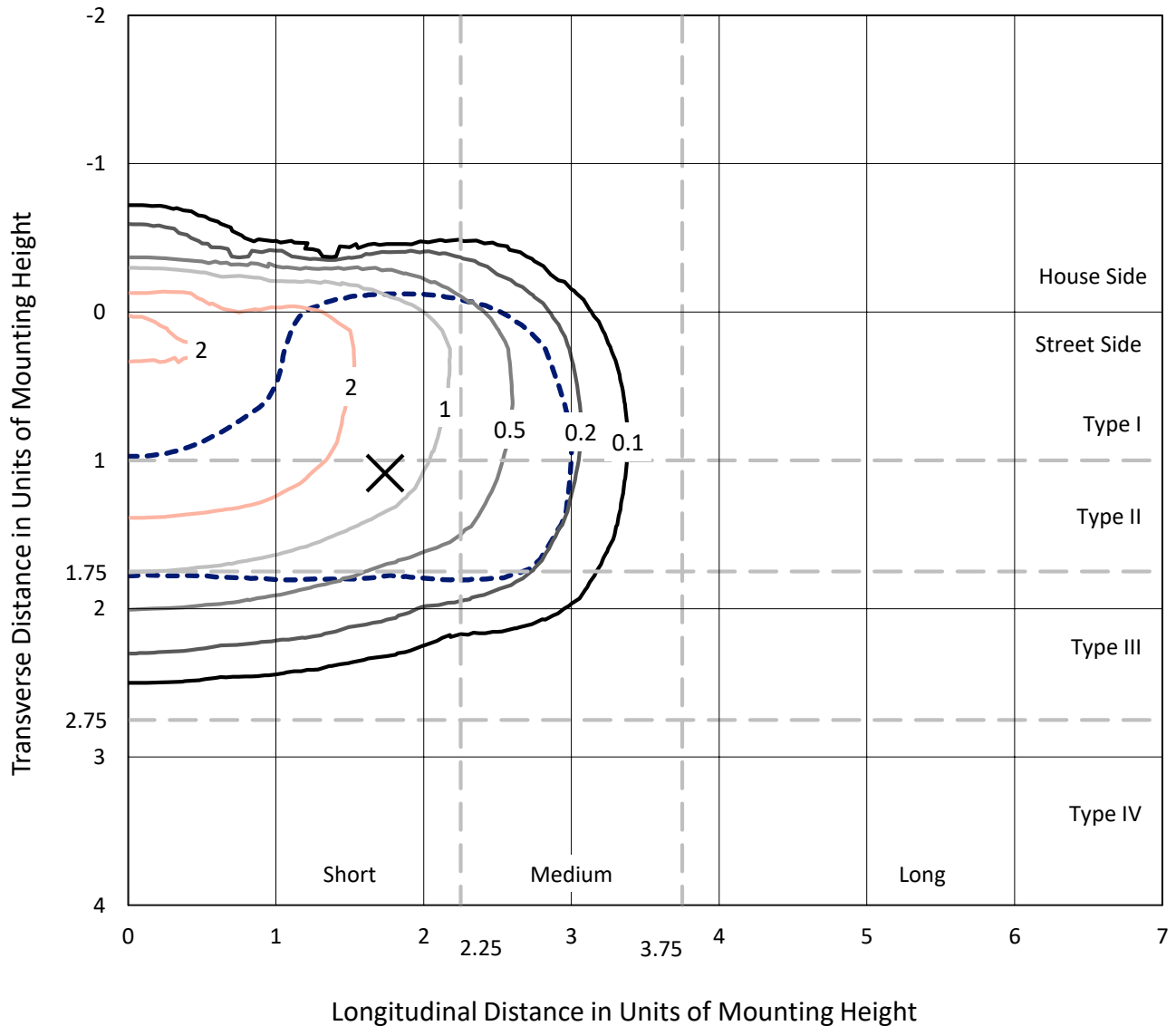


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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

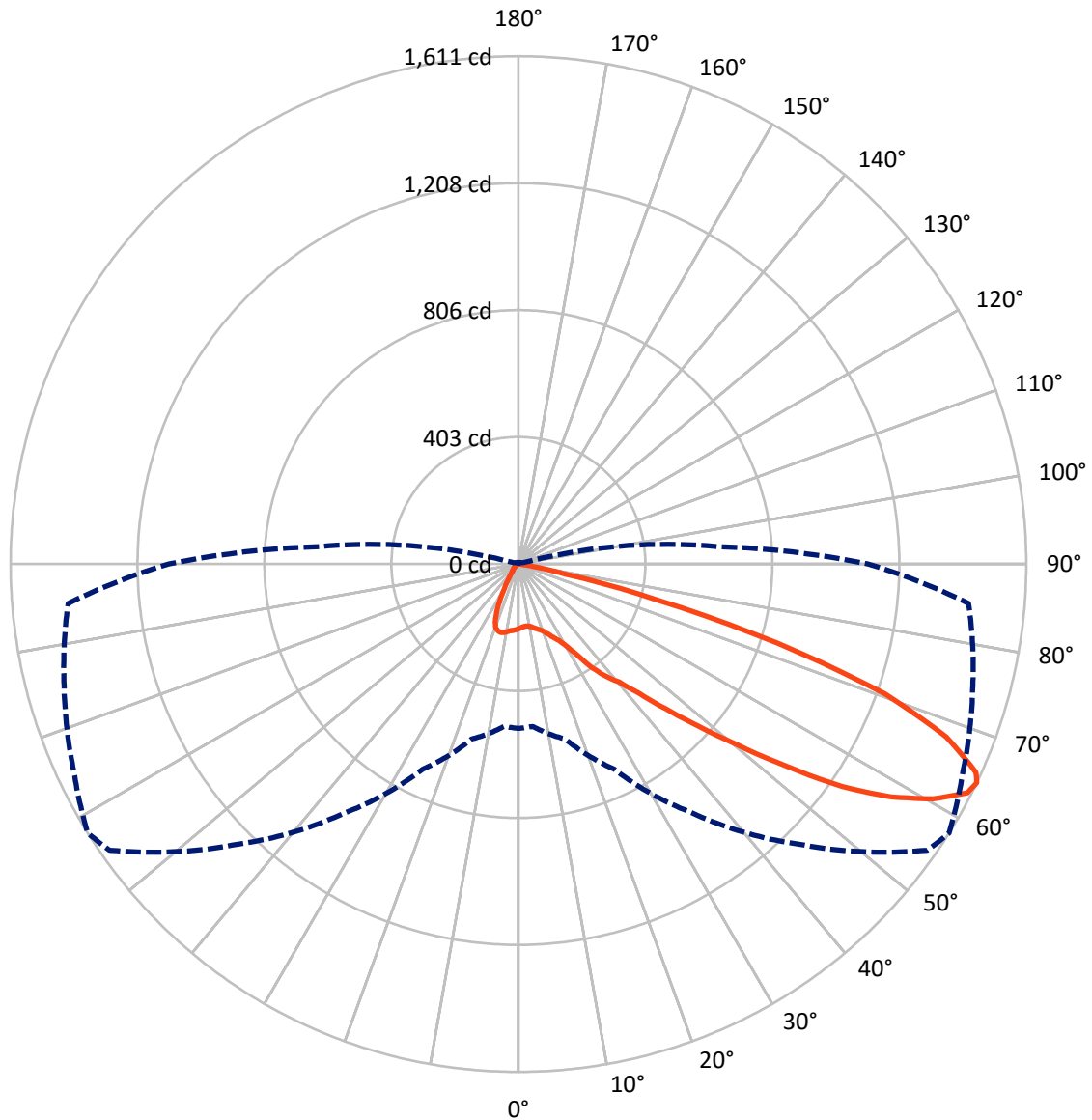


Based on 10 foot mounting height. Maximum calculated value = 3 fc  
 Type III - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral    - - - Horizontal Cone Through 64-Deg Vertical

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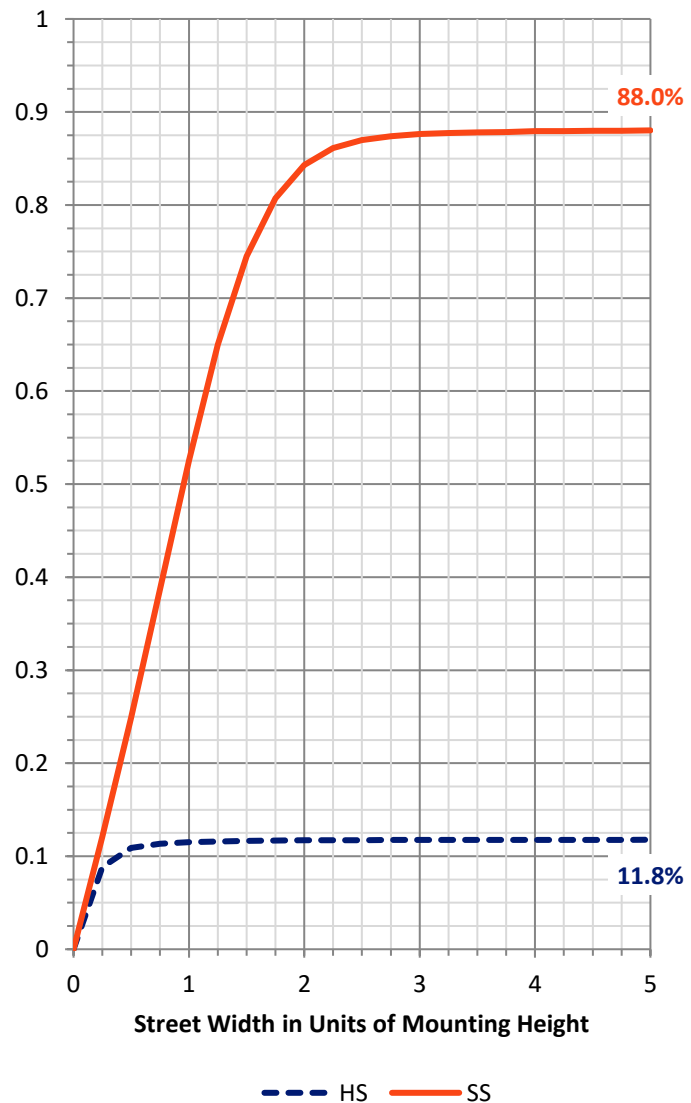
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	228.1	0.0	228.1
	% Fixture	11.9	0.0	11.9
<b>Street Side</b>	Lumens	1684.9	0.0	1684.9
	% Fixture	88.1	0.0	88.1
<b>Total</b>	Lumens	1913.0	0.0	1913.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	19.4	1.0
10°-20°	56.4	3.0
20°-30°	101.4	5.3
30°-40°	177.8	9.3
40°-50°	325.1	17.0
50°-60°	556.1	29.1
60°-70°	539.4	28.2
70°-80°	133.6	7.0
80°-90°	3.8	0.2
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°	1913.0	100.0
0°-180°	1913.0	100.0



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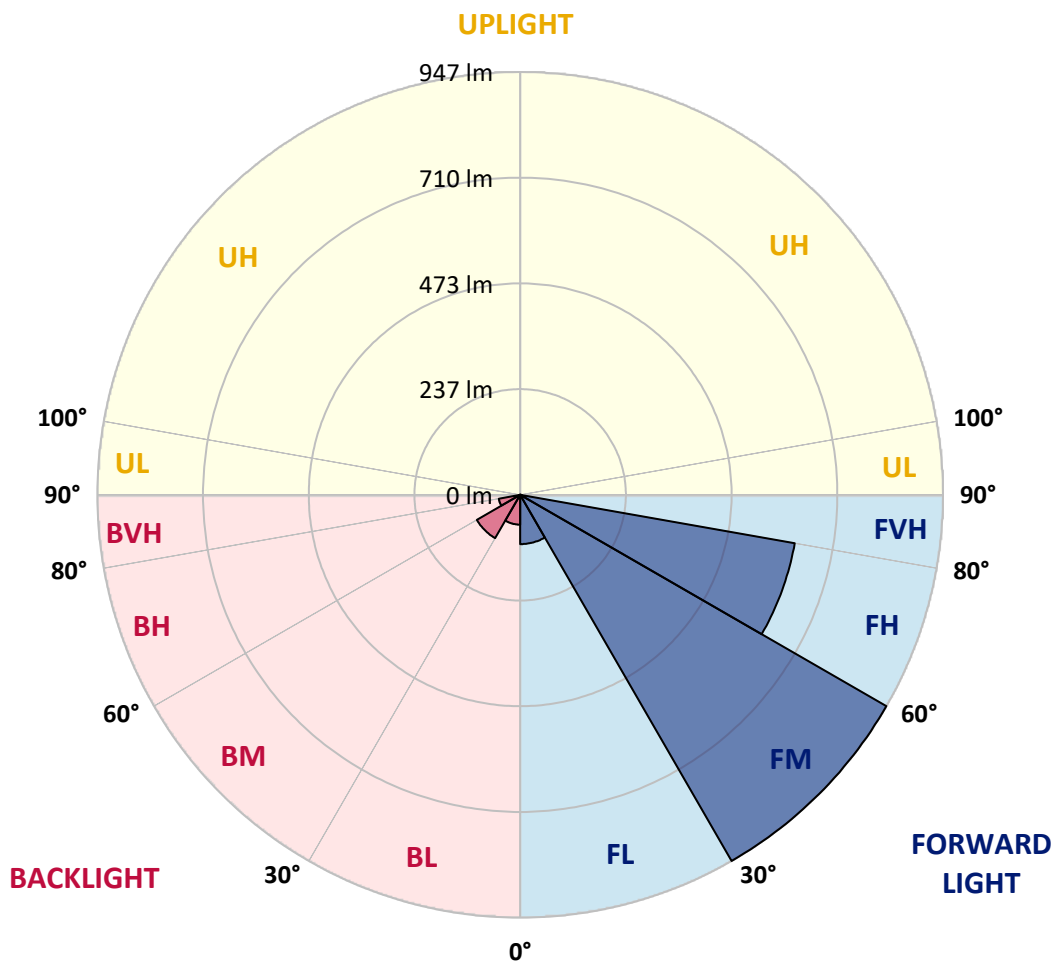
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	110.5	5.8			
FM (30°-60°)	946.9	49.5			
FH (60°-80°)	624.3	32.6			G0/660
FVH (80°-90°)	3.2	0.2			G0/10
BL (0°-30°)	66.8	3.5	B0/110		
BM (30°-60°)	112.0	5.9	B0/220		
BH (60°-80°)	48.7	2.5	B0/110		G0/110
BVH (80°-90°)	0.6	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-G0**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	204.9	204.9	204.9	204.9	204.9	204.9	204.9	204.9	204.9	204.9	204.9
2.5°	196.4	196.4	197.1	197.5	198.5	199.6	201.0	201.4	202.1	203.9	204.6
5°	185.8	186.2	186.9	188.6	191.1	193.9	197.5	198.5	201.4	204.9	207.4
7.5°	181.6	181.9	183.0	185.1	188.3	192.5	196.8	198.2	202.1	207.7	211.3
10°	180.8	180.8	182.3	185.4	189.3	194.7	199.3	201.0	206.3	213.1	218.7
12.5°	180.8	180.8	182.6	186.5	191.1	197.8	204.2	206.7	212.7	221.2	228.3
15°	184.0	184.7	185.8	188.3	193.6	201.0	209.9	212.7	220.1	230.4	239.2
17.5°	206.7	206.0	202.4	199.3	198.2	204.6	215.2	219.1	230.0	243.1	252.7
20°	250.6	250.2	243.8	228.3	214.5	210.9	223.3	227.9	243.8	261.2	268.3
22.5°	303.7	305.4	295.5	274.6	246.3	228.3	235.4	241.7	262.2	283.1	287.4
25°	356.4	358.5	349.3	323.1	288.4	256.9	252.0	257.6	281.0	301.9	300.1
27.5°	418.7	416.9	407.7	378.0	337.6	295.5	274.3	275.3	293.4	316.7	311.1
30°	464.3	461.9	453.0	432.8	395.0	346.8	306.1	302.9	308.3	334.1	328.1
32.5°	506.1	507.9	501.1	474.2	438.5	399.6	353.9	345.4	343.3	365.2	355.3
35°	547.5	547.1	544.7	521.0	485.9	449.1	410.9	404.9	404.2	425.4	398.5
37.5°	597.0	594.6	590.0	565.9	537.9	502.9	462.2	452.7	450.9	455.1	423.6
40°	650.1	653.3	645.9	620.8	590.3	564.1	507.2	492.6	480.6	493.0	472.8
42.5°	729.1	731.5	718.4	701.1	661.8	637.4	579.7	559.9	554.2	573.0	550.3
45°	828.1	823.5	814.7	802.7	770.1	732.9	672.8	654.0	648.0	680.2	643.1
47.5°	905.3	904.6	904.9	902.5	897.5	852.9	781.4	768.7	762.7	809.0	768.0
50°	954.1	957.0	969.0	999.8	1022.4	1003.7	919.8	904.2	899.6	947.8	892.2
52.5°	990.9	997.7	1017.8	1078.7	1151.3	1157.6	1088.3	1066.3	1055.7	1069.2	992.0
55°	1009.7	1012.9	1043.7	1133.6	1247.2	1292.8	1263.8	1245.4	1202.6	1177.1	1109.2
57.5°	965.8	960.9	1014.0	1128.3	1296.7	1401.8	1414.2	1393.3	1324.7	1304.9	1251.4
60°	850.8	848.7	908.5	1045.8	1253.5	1427.3	1525.7	1512.6	1449.6	1402.5	1352.3
62.5°	649.1	652.6	716.0	855.8	1099.6	1354.1	1587.6	1598.3	1531.4	1461.3	1427.0
64°	521.3	517.1	575.1	717.4	964.8	1256.4	1583.0	1611.0	1556.1	1492.1	1433.7
65°	437.8	428.6	484.1	613.0	850.8	1185.6	1550.5	1595.4	1557.9	1499.5	1409.3
67.5°	230.4	235.4	259.1	372.3	574.4	896.5	1396.2	1464.1	1479.3	1397.9	1228.1
70°	103.3	104.0	119.3	190.0	317.8	581.5	1123.0	1233.0	1241.5	1148.4	889.7
72.5°	34.3	34.7	52.7	76.1	133.4	269.3	758.4	858.6	877.0	744.6	482.7
75°	21.2	21.9	28.0	41.1	61.9	94.1	384.3	452.3	456.2	330.2	175.5
77.5°	13.4	14.2	17.0	24.4	34.0	35.7	126.0	152.5	172.7	118.9	54.5
80°	8.5	8.5	11.0	14.9	17.7	15.2	34.3	45.3	54.5	40.0	18.4
82.5°	3.2	3.2	5.7	8.1	7.4	5.3	9.2	12.0	20.9	19.8	8.8
85°	0.0	0.0	0.4	0.7	0.4	0.7	1.8	2.5	3.9	5.7	2.8
87.5°	0.0	0.0	0.0	0.0	0.4	0.4	0.7	0.7	0.7	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



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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	204.9	204.9	204.9	204.9	204.9	204.9	204.9	204.9	204.9	204.9	204.9
2.5°	205.6	206.3	207.7	208.1	208.5	207.4	208.5	207.4	208.1	208.1	208.1
5°	208.8	209.9	210.9	211.3	210.9	208.5	209.2	207.4	207.0	207.0	207.0
7.5°	213.1	214.1	215.9	214.8	212.7	209.2	208.8	206.3	205.3	205.3	205.6
10°	220.8	221.9	222.6	220.5	216.2	210.9	207.0	201.7	199.3	198.2	198.2
12.5°	230.7	231.8	231.5	227.9	220.1	209.2	198.2	187.9	180.5	177.7	174.8
15°	241.4	242.8	242.1	234.6	219.8	200.3	179.1	155.0	140.1	130.6	128.8
17.5°	253.8	255.2	251.6	238.2	214.5	181.6	141.2	108.7	87.1	78.9	78.6
20°	269.0	268.3	259.8	238.5	204.9	146.9	94.5	68.0	58.7	56.6	56.3
22.5°	286.3	283.1	267.6	236.4	178.7	99.8	60.9	53.8	52.7	52.0	52.0
25°	296.2	290.6	270.4	230.4	137.7	63.7	51.7	50.3	48.8	47.4	47.1
27.5°	304.0	295.5	271.4	210.6	91.7	48.8	46.7	45.3	43.2	41.1	40.7
30°	318.2	305.4	273.2	175.9	56.3	41.8	40.7	38.2	35.0	32.9	32.2
32.5°	343.6	325.2	280.3	131.7	41.1	36.8	34.0	30.8	27.3	25.1	25.1
35°	370.9	344.0	283.8	86.7	35.7	32.2	28.0	24.1	20.9	19.1	18.8
37.5°	396.0	370.9	282.8	53.1	31.9	27.6	23.0	19.1	16.3	14.9	14.9
40°	447.3	418.0	268.3	36.5	28.0	23.4	18.8	14.9	13.1	12.0	12.0
42.5°	520.6	469.6	236.1	31.1	24.4	19.5	14.9	12.4	11.0	9.9	9.9
45°	602.7	526.6	188.3	28.0	21.2	16.3	12.4	10.3	8.8	8.5	8.5
47.5°	710.3	595.6	138.4	25.1	18.4	13.8	10.3	8.5	7.8	7.4	7.4
50°	804.4	651.5	94.5	21.9	16.3	11.7	8.8	7.8	7.1	6.7	6.7
52.5°	890.1	690.5	62.3	19.1	14.5	9.6	8.1	7.1	6.7	6.4	6.4
55°	990.9	720.2	42.1	16.6	12.7	8.8	7.8	7.1	6.4	6.4	6.0
57.5°	1076.6	737.9	30.1	14.2	11.3	8.1	7.4	6.7	6.0	5.7	5.7
60°	1126.5	717.0	21.9	12.4	9.9	7.4	6.7	6.0	5.7	5.3	5.3
62.5°	1140.3	676.7	17.0	10.6	8.5	6.7	6.0	5.3	5.0	4.6	4.6
64°	1108.4	633.5	14.5	9.2	7.4	6.0	5.7	5.0	4.2	3.5	3.5
65°	1063.5	593.5	13.1	8.5	6.7	5.7	5.3	4.6	3.5	2.8	2.8
67.5°	886.2	473.2	10.6	7.1	5.3	5.0	4.2	3.5	2.5	1.8	1.8
70°	629.3	330.9	8.1	5.7	4.6	4.6	3.9	2.8	1.4	0.7	0.7
72.5°	333.0	172.0	6.7	4.6	3.5	3.5	3.2	1.8	1.1	0.7	0.4
75°	116.4	56.6	5.7	3.9	3.2	2.5	2.1	1.4	1.1	0.7	0.4
77.5°	35.4	18.8	5.0	3.9	2.8	2.1	2.5	2.1	2.1	1.4	1.1
80°	11.3	6.7	2.8	2.5	2.8	2.8	2.5	2.1	2.5	1.8	1.4
82.5°	4.2	2.5	1.1	1.4	1.4	1.8	1.8	1.4	1.1	0.4	0.0
85°	1.4	1.1	0.7	1.1	1.1	1.1	0.7	0.7	0.4	0.0	0.0
87.5°	0.7	0.7	0.7	0.7	0.7	0.7	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

(END OF REPORT)