

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: P401134

Luminaire Tested: **ENT-SA1B-740-U-SL4-HSS**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P401134  
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-SA1B-740-U-SL4-HSS  
Description: ENTRI LED LUMINAIRE  
(1) 70 CRI, 4000K, 450mA 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: 2813 lumens  
Efficiency: N/A  
Efficacy: 110.7 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): 25.4  
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

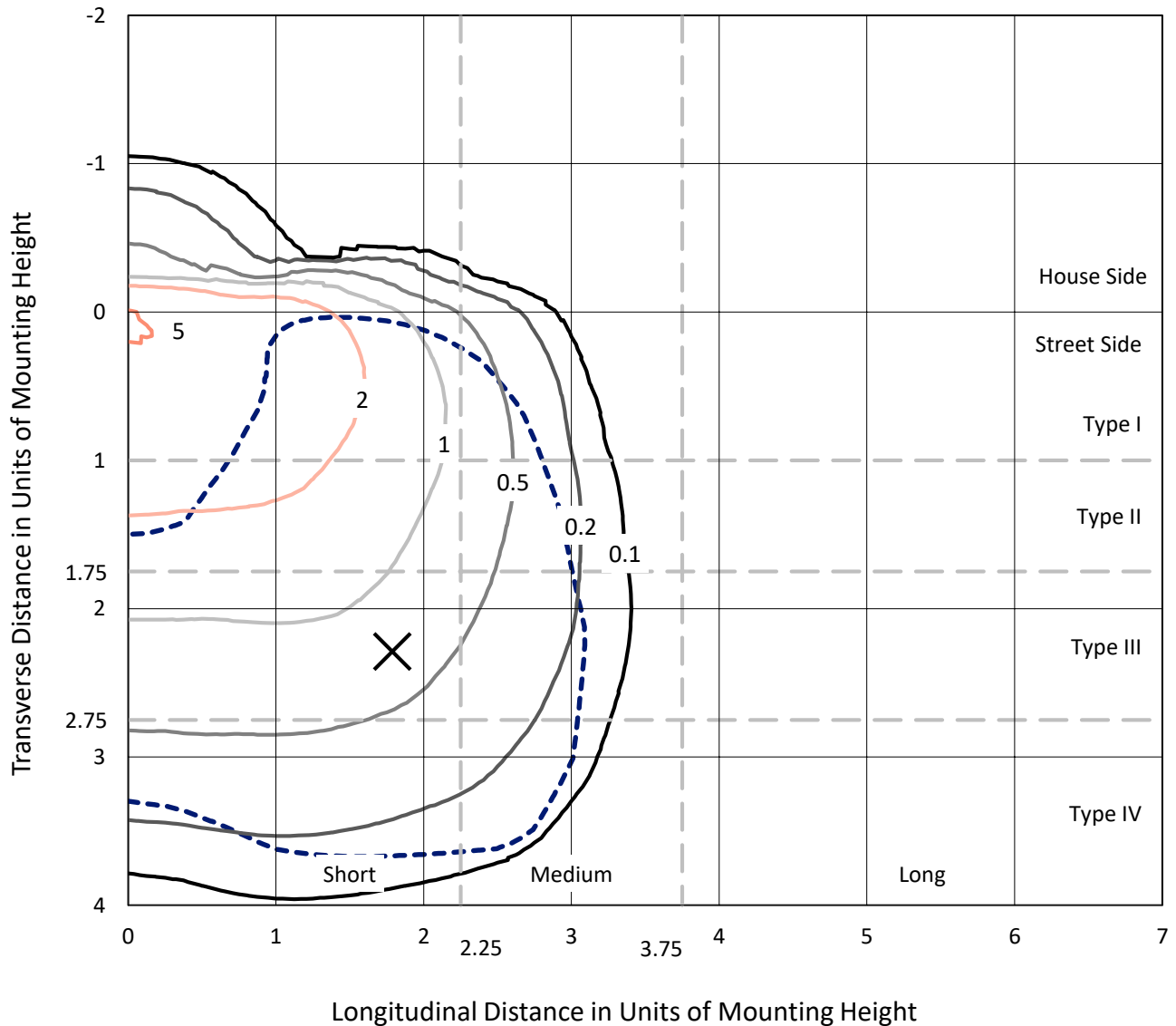


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

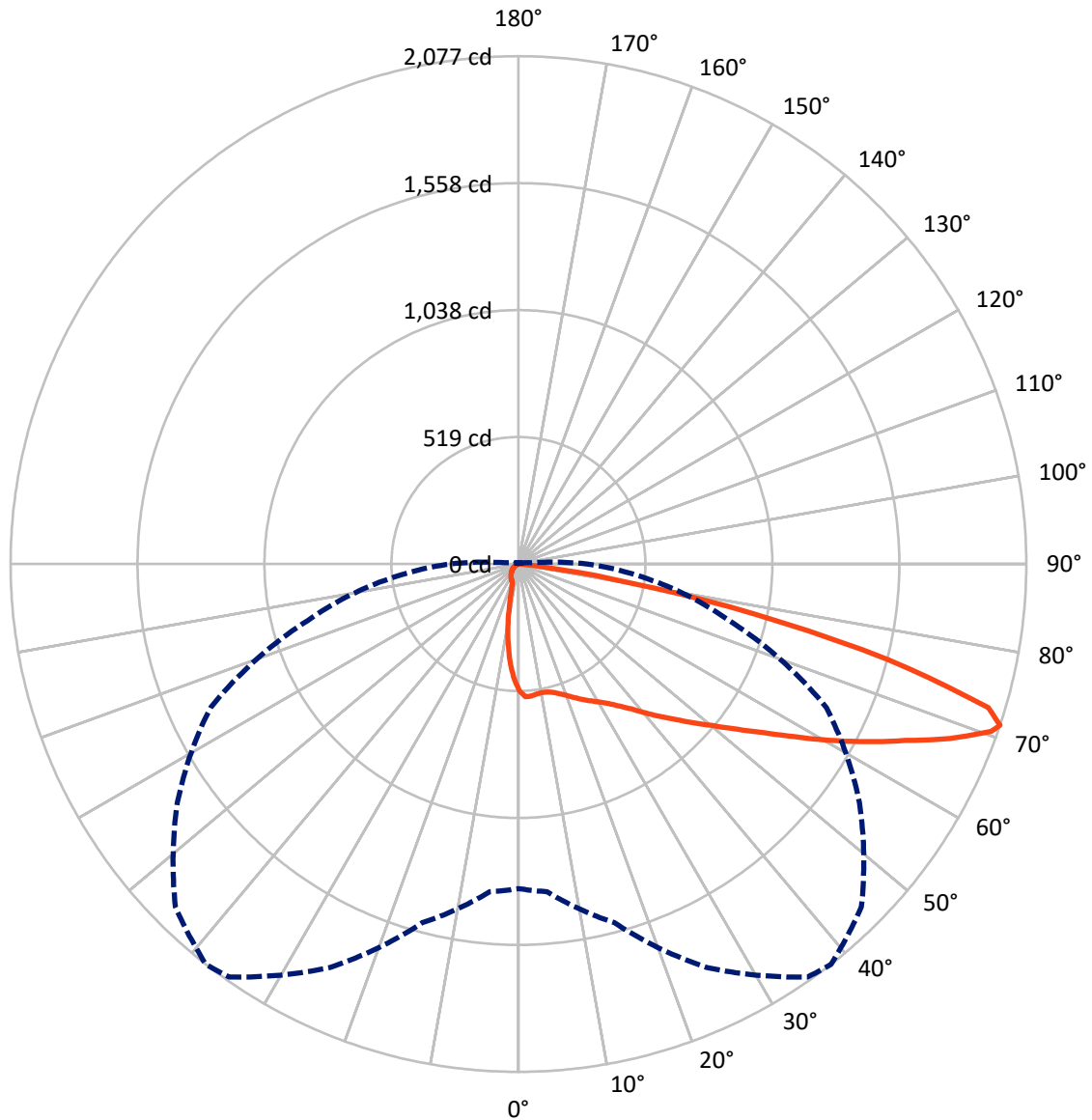


Based on 10 foot mounting height. Maximum calculated value = 5.3 fc  
 Type IV - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



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

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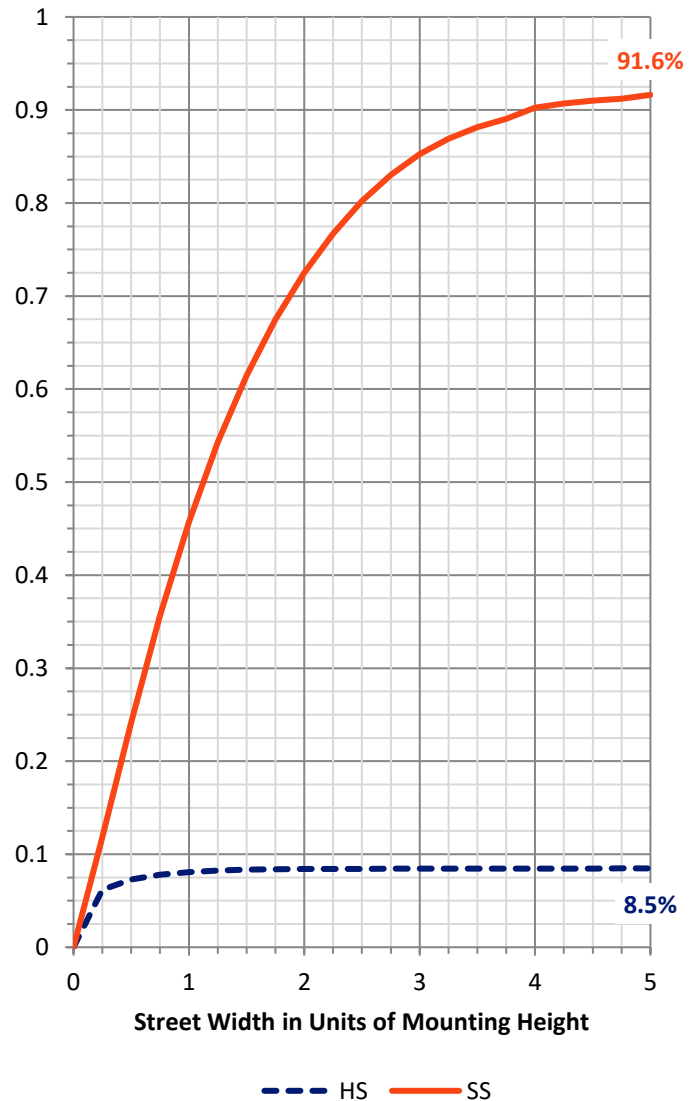
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	240.3	0.0	240.3
	% Fixture	8.5	0.0	8.5
<b>Street Side</b>	Lumens	2572.7	0.0	2572.7
	% Fixture	91.5	0.0	91.5
<b>Total</b>	Lumens	2813.0	0.0	2813.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	43.8	1.6
10°-20°	106.0	3.8
20°-30°	170.1	6.0
30°-40°	258.7	9.2
40°-50°	403.2	14.3
50°-60°	589.6	21.0
60°-70°	756.2	26.9
70°-80°	462.2	16.4
80°-90°	23.2	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°	2813.0	100.0
0°-180°	2813.0	100.0



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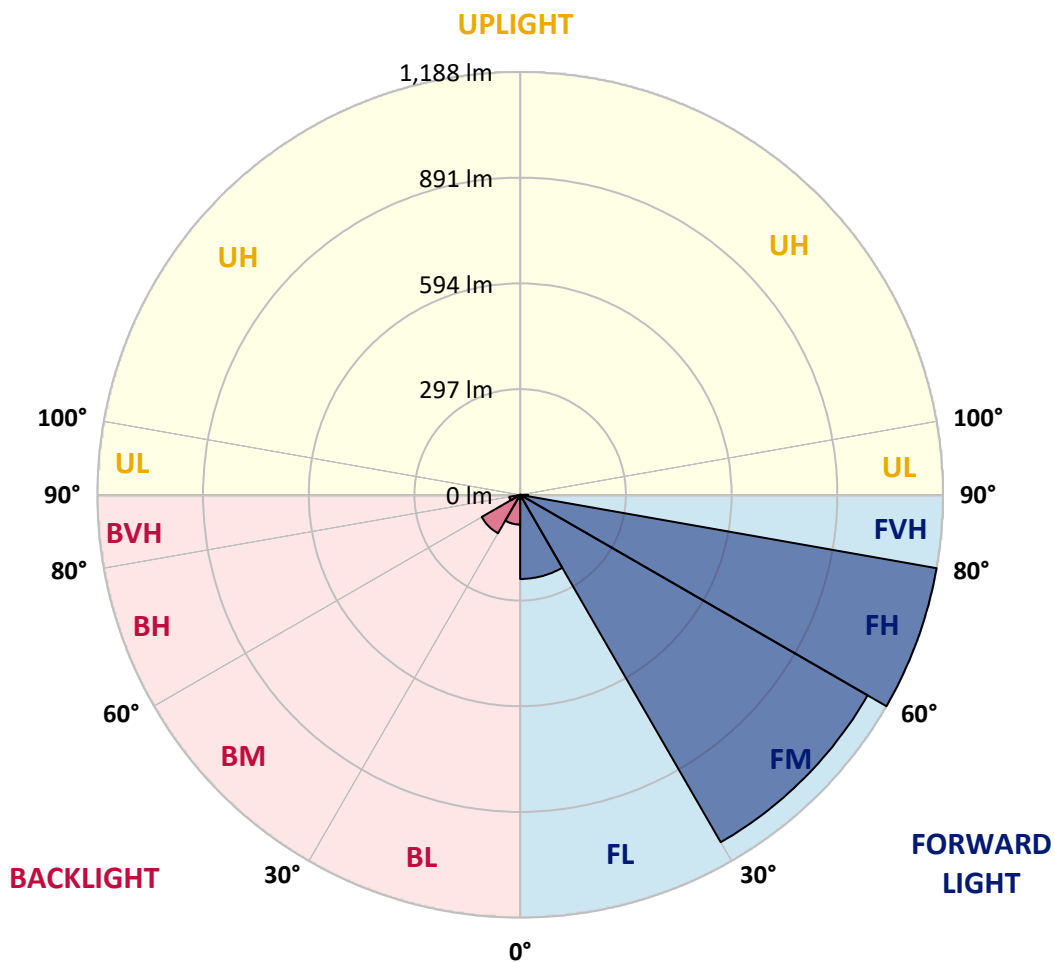
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	236.4	8.4			
FM	(30°-60°)	1126.6	40.1			
FH	(60°-80°)	1187.5	42.2			G1/1800
FVH	(80°-90°)	22.2	0.8			G1/100
BL	(0°-30°)	83.6	3.0	B0/110		
BM	(30°-60°)	124.8	4.4	B0/220		
BH	(60°-80°)	30.9	1.1	B0/110		G0/110
BVH	(80°-90°)	1.0	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°	518.6	518.6	518.6	518.6	518.6	518.6	518.6	518.6	518.6	518.6	518.6
2.5°	549.3	547.8	549.3	547.8	544.9	543.4	541.5	536.1	531.3	525.4	516.6
5°	550.3	549.3	549.3	547.3	543.9	542.5	540.5	535.2	528.8	520.0	506.9
7.5°	544.9	544.4	543.4	541.5	537.6	536.6	535.2	528.8	522.5	513.2	497.1
10°	536.1	537.1	536.6	536.6	535.2	534.2	533.2	525.9	519.1	508.3	491.3
12.5°	527.8	528.8	531.3	535.2	536.6	537.1	537.1	529.8	521.5	509.8	492.3
15°	522.5	524.4	531.3	539.1	543.4	544.9	546.4	538.6	528.8	516.1	497.6
17.5°	521.0	523.9	537.1	549.3	557.6	558.5	558.5	548.8	538.6	523.9	504.0
20°	525.9	529.8	546.9	563.9	574.1	575.1	573.2	560.5	548.3	532.2	509.3
22.5°	540.5	543.9	563.4	583.4	593.2	594.1	589.7	572.2	559.0	545.9	516.6
25°	565.9	567.8	588.8	607.8	613.1	614.6	607.3	586.3	571.2	559.0	526.9
27.5°	599.5	600.5	619.5	633.6	634.6	634.1	626.3	604.4	589.3	579.0	542.5
30°	634.6	636.0	651.6	660.9	657.0	655.1	648.2	624.8	611.2	603.4	564.9
32.5°	667.2	668.7	685.8	690.6	681.9	680.4	675.5	650.7	639.0	642.9	597.1
35°	699.4	699.4	718.9	721.3	713.5	713.5	713.5	683.8	681.9	695.0	641.9
37.5°	728.2	733.0	753.5	752.5	751.1	752.0	755.0	732.5	739.4	761.8	700.9
40°	752.5	758.9	786.2	788.6	794.9	800.3	804.7	793.0	809.1	845.6	776.4
42.5°	774.5	781.8	816.9	828.1	845.6	852.9	861.2	858.3	893.9	960.6	872.9
45°	802.7	810.5	846.6	873.4	897.8	907.5	926.0	938.7	997.7	1073.7	977.2
47.5°	840.3	845.6	878.8	921.2	954.3	971.9	1000.6	1033.3	1104.9	1193.6	1070.3
50°	891.4	891.9	916.8	971.9	1021.1	1040.1	1089.8	1132.2	1221.9	1299.4	1137.6
52.5°	948.0	945.0	964.5	1034.2	1096.6	1122.5	1180.9	1239.9	1330.1	1375.9	1167.8
55°	1001.6	1003.0	1015.2	1100.5	1191.7	1216.5	1290.6	1350.6	1429.0	1422.7	1184.4
57.5°	1063.5	1063.0	1078.6	1173.1	1302.8	1331.5	1409.0	1458.3	1489.0	1456.3	1187.3
60°	1122.0	1120.5	1144.4	1259.9	1421.2	1463.6	1533.3	1531.4	1548.9	1477.8	1184.8
62.5°	1174.1	1177.5	1219.4	1360.8	1553.8	1599.6	1634.7	1610.3	1615.2	1502.6	1154.6
65°	1237.5	1243.8	1311.6	1483.1	1717.6	1739.5	1753.1	1713.7	1664.9	1482.6	1063.0
67.5°	1317.4	1336.4	1431.9	1663.5	1888.1	1903.3	1903.7	1776.0	1663.0	1381.7	893.9
70°	1349.1	1369.1	1521.1	1806.3	2031.9	2050.9	1991.5	1766.3	1531.9	1082.0	603.4
71°	1327.2	1345.2	1518.7	1819.9	2061.7	2076.8	1983.7	1702.5	1389.1	891.4	467.4
72.5°	1168.8	1215.5	1425.1	1734.1	2008.5	2009.0	1857.4	1551.8	1104.9	556.6	234.9
75°	631.2	687.7	1044.5	1319.8	1549.4	1561.6	1429.0	1077.6	534.7	144.3	57.0
77.5°	208.1	234.4	468.4	685.3	971.9	990.9	873.9	478.6	168.6	48.7	29.7
80°	130.6	133.5	158.4	288.0	432.3	448.4	359.7	194.0	76.0	26.8	20.5
82.5°	21.9	26.3	74.6	84.8	152.6	120.9	81.9	98.9	35.6	12.2	17.5
85°	0.0	0.0	0.5	0.5	2.4	0.5	0.5	20.0	1.9	1.9	9.3
87.5°	0.0	0.0	0.5	0.5	0.5	0.5	0.5	0.5	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°	518.6	518.6	518.6	518.6	518.6	518.6	518.6	518.6	518.6	518.6	518.6
2.5°	512.7	508.8	501.0	492.8	482.5	473.7	470.8	464.5	461.6	459.1	459.1
5°	498.6	491.8	475.2	458.1	441.6	424.0	407.9	392.8	385.5	375.3	380.2
7.5°	486.9	475.2	451.8	425.0	390.9	356.3	329.5	306.1	286.6	280.2	275.9
10°	478.6	464.0	429.9	388.9	339.2	290.0	248.6	210.1	187.6	174.0	174.0
12.5°	477.6	459.1	414.8	351.9	280.2	213.5	162.3	125.7	107.7	99.4	98.9
15°	481.1	458.6	401.1	318.3	226.1	148.2	101.4	85.3	80.9	79.9	79.9
17.5°	484.0	458.1	385.0	280.2	166.7	97.5	80.4	77.5	76.5	76.0	76.0
20°	486.9	455.7	366.5	237.4	117.9	79.4	75.1	73.6	73.1	72.6	72.6
22.5°	490.8	453.3	347.5	188.6	87.2	74.1	71.6	70.2	69.7	69.7	69.7
25°	496.2	451.8	324.1	142.8	75.1	70.2	67.7	66.8	66.8	66.3	66.3
27.5°	506.4	453.3	298.8	102.4	70.2	66.3	64.8	63.8	63.8	63.4	63.4
30°	520.5	457.7	267.1	79.9	66.3	62.4	60.9	60.4	59.9	59.9	59.9
32.5°	540.5	464.5	232.5	68.2	61.4	58.5	57.0	56.5	56.5	56.5	56.0
35°	571.2	478.6	190.1	62.4	57.0	54.1	52.6	52.6	52.6	52.2	52.6
37.5°	618.0	501.5	147.2	57.5	52.2	49.7	48.7	48.3	48.3	48.3	48.3
40°	677.0	538.6	107.2	53.1	47.8	45.3	44.4	43.9	43.4	43.4	43.4
42.5°	753.0	579.5	78.0	48.3	43.9	41.4	40.5	39.5	38.5	38.0	38.0
45°	832.0	628.2	60.9	44.4	40.0	38.0	37.0	35.6	34.1	32.7	32.7
47.5°	908.5	665.8	52.2	40.0	36.6	34.6	33.6	31.7	29.2	27.8	27.8
50°	956.7	677.5	46.8	36.1	33.1	31.7	30.2	27.8	24.4	22.9	22.9
52.5°	971.9	656.0	41.9	32.7	30.2	28.8	26.8	23.4	20.0	18.0	18.0
55°	977.7	614.6	37.0	30.2	27.3	25.3	22.9	19.5	16.1	14.1	14.1
57.5°	970.4	556.1	33.1	27.3	24.4	22.4	19.5	15.6	12.2	10.7	10.7
60°	945.5	471.3	29.7	24.4	21.4	19.0	16.1	12.2	9.3	7.3	7.8
62.5°	878.3	364.6	25.8	20.5	18.5	16.1	12.7	9.3	5.8	4.9	4.9
65°	771.0	252.5	21.9	17.1	15.6	13.2	9.7	6.3	3.4	2.9	2.9
67.5°	626.3	163.3	17.1	14.1	13.2	10.7	7.3	3.9	1.9	1.9	1.5
70°	393.3	80.9	13.6	10.7	10.7	8.3	5.4	2.4	1.5	1.5	1.5
71°	278.3	55.1	12.2	9.7	9.7	7.8	4.9	1.9	1.5	1.5	1.5
72.5°	125.7	34.6	10.2	8.8	8.3	6.3	4.4	1.9	1.9	1.9	1.9
75°	39.5	19.0	7.3	6.8	6.8	5.4	3.9	2.4	2.4	2.4	2.4
77.5°	26.3	14.6	4.9	4.4	5.4	5.4	3.9	2.9	2.9	2.9	2.9
80°	21.4	7.8	2.9	2.9	3.9	4.9	3.9	2.9	3.4	2.9	2.9
82.5°	21.0	3.9	1.0	1.5	2.4	2.9	2.9	2.4	2.9	2.9	2.9
85°	8.8	1.0	0.5	1.0	1.0	1.5	1.5	1.9	2.4	2.4	2.4
87.5°	0.0	0.0	0.0	0.0	0.5	0.5	1.0	1.0	1.5	1.9	1.9
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)