

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: P401094

Luminaire Tested: **ENV-SA1B-730-U-SL4**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P401094  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-5)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/20/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ENV-SA1B-730-U-SL4  
Description: ENTRI LED LUMINAIRE  
(1) 70 CRI, 3000K, 450mA LIGHTSQUARE WITH 16 LEDS AND TYPE IV SPILL LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2960 lumens  
Efficiency: N/A  
Efficacy: 116.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B1 - 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

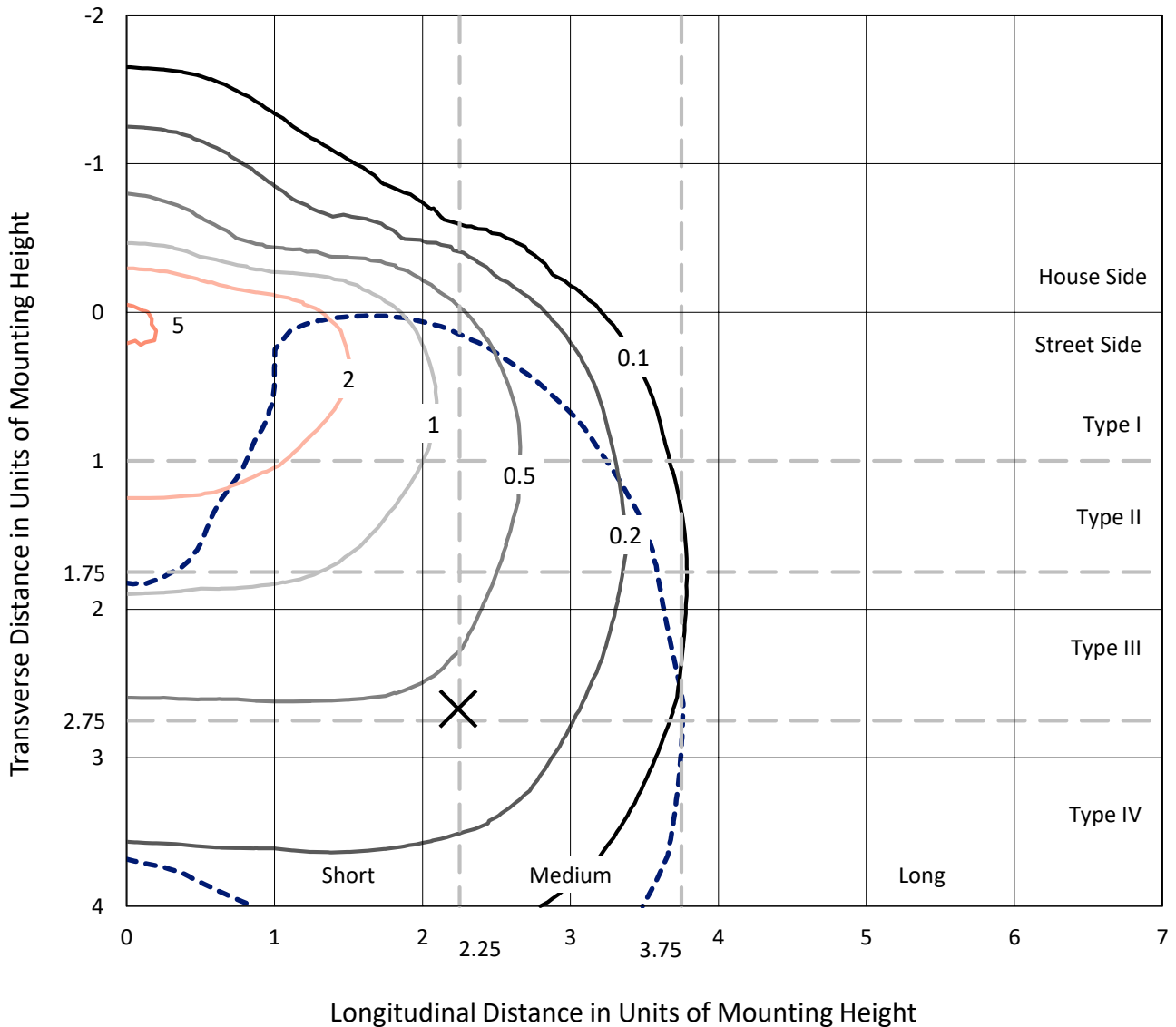


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

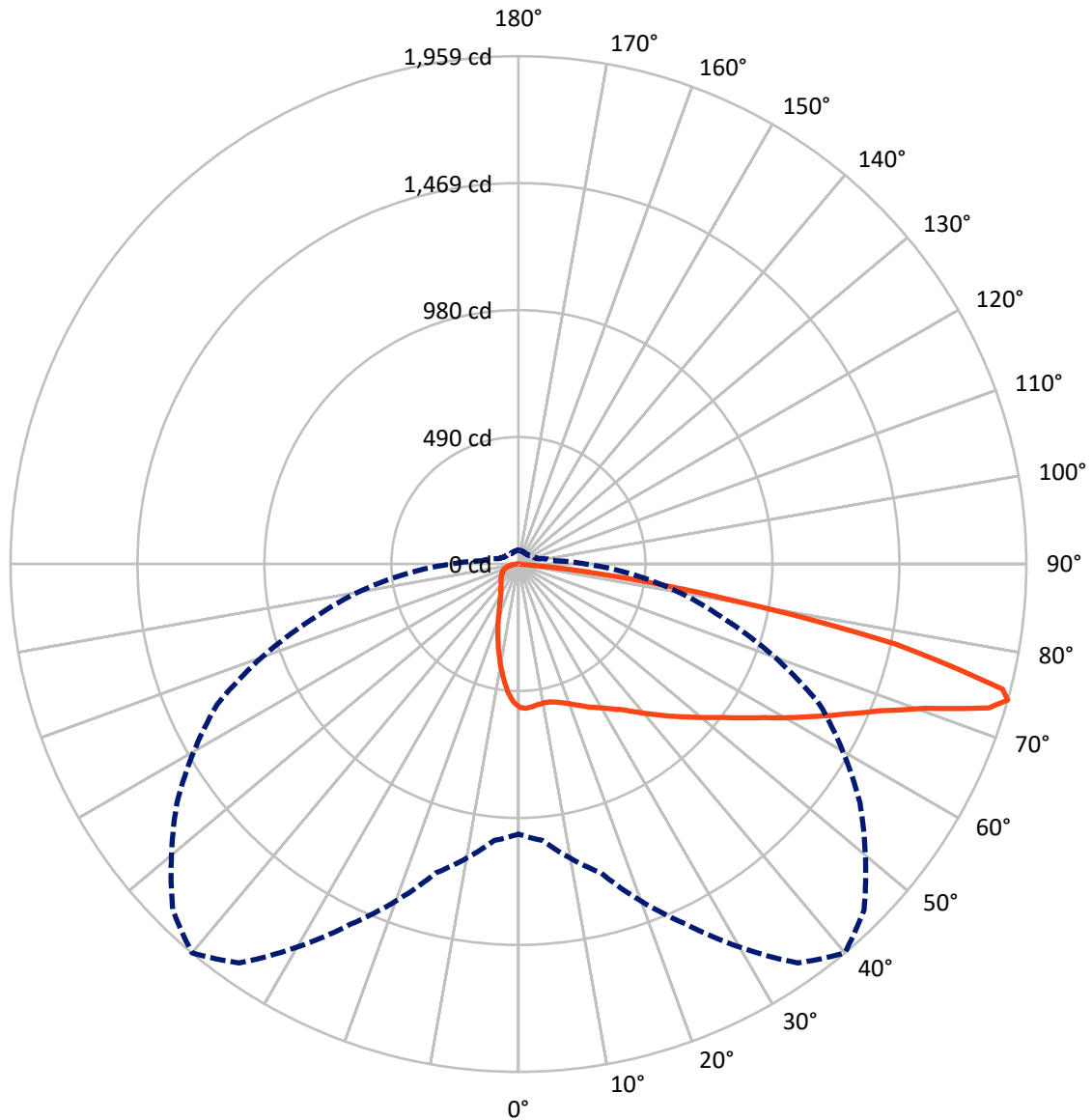


Based on 10 foot mounting height. Maximum calculated value = 5.5 fc  
 Type IV - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral      - - - Horizontal Cone Through 74-Deg Vertical

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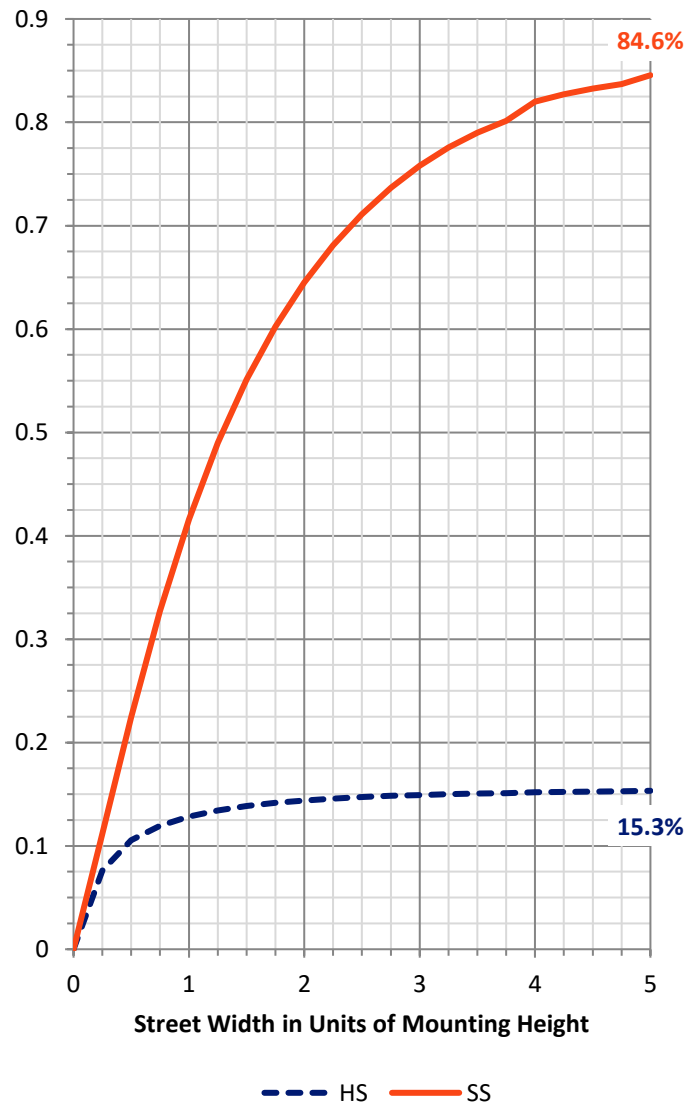
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	461.5	0.0	461.5
	% Fixture	15.6	0.0	15.6
<b>Street Side</b>	Lumens	2498.5	0.0	2498.5
	% Fixture	84.4	0.0	84.4
<b>Total</b>	Lumens	2960.0	0.0	2960.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	48.8	1.6
10°-20°	125.6	4.2
20°-30°	192.7	6.5
30°-40°	278.2	9.4
40°-50°	400.3	13.5
50°-60°	552.7	18.7
60°-70°	696.9	23.5
70°-80°	604.3	20.4
80°-90°	60.5	2.0
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°	2960.0	100.0
0°-180°	2960.0	100.0



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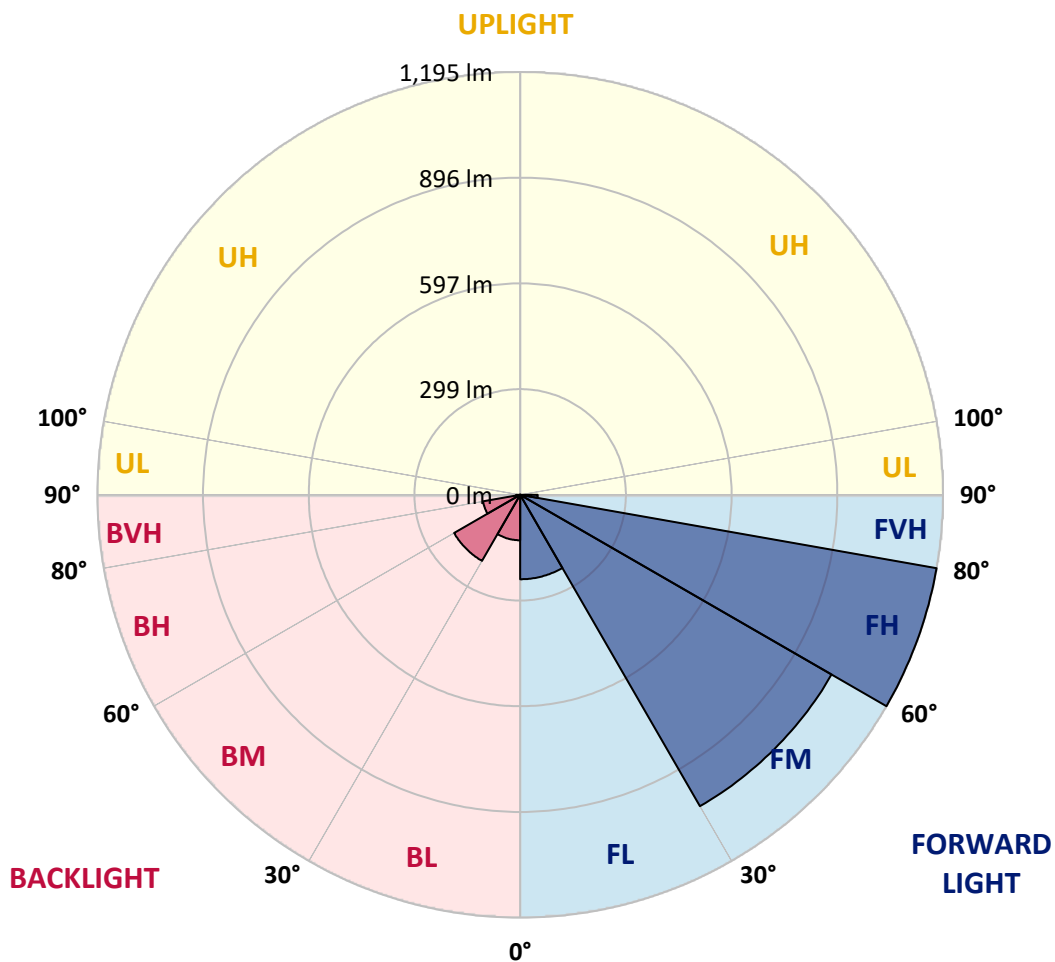
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	238.6	8.1			
FM	(30°-60°)	1015.8	34.3			
FH	(60°-80°)	1194.6	40.4			G1/1800
FVH	(80°-90°)	49.5	1.7			G1/100
BL	(0°-30°)	128.4	4.3	B1/500		
BM	(30°-60°)	215.5	7.3	B0/220		
BH	(60°-80°)	106.5	3.6	B0/110		G0/110
BVH	(80°-90°)	11.0	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G1**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	552.5	552.5	552.5	552.5	552.5	552.5	552.5	552.5	552.5	552.5	552.5
2.5°	559.6	559.2	560.5	559.6	558.3	557.4	557.0	554.3	553.4	550.7	547.2
5°	557.4	557.4	557.4	556.5	553.9	553.0	552.1	548.1	545.4	541.0	534.3
7.5°	549.9	551.2	550.7	550.3	548.1	547.2	545.9	541.0	537.4	530.8	522.3
10°	542.8	542.8	543.2	545.0	544.1	544.5	544.1	538.8	533.9	525.5	514.8
12.5°	532.6	534.3	537.0	541.9	544.1	545.9	545.9	541.9	536.5	526.3	513.9
15°	526.3	528.6	535.2	544.1	549.4	552.5	553.4	548.5	541.9	531.7	517.9
17.5°	523.7	526.3	538.8	551.2	560.5	563.2	563.6	558.3	551.2	538.8	522.8
20°	526.3	529.4	545.9	562.7	573.8	576.0	576.9	569.4	560.5	548.5	527.7
22.5°	536.5	541.0	559.2	577.4	588.9	592.0	591.1	580.5	571.6	558.7	533.9
25°	558.7	561.4	577.8	597.3	606.2	609.8	607.6	595.6	584.0	571.2	542.8
27.5°	584.5	588.0	605.3	620.0	625.7	626.6	624.4	612.0	599.1	588.5	556.5
30°	615.5	618.6	632.8	643.9	644.4	644.8	643.5	629.3	618.6	610.2	576.5
32.5°	648.4	648.8	663.5	668.8	665.2	666.6	665.2	649.7	642.2	639.5	602.7
35°	678.6	679.0	694.1	695.9	690.1	690.5	693.2	675.0	675.0	681.2	641.7
37.5°	707.4	708.7	722.1	720.3	718.1	722.1	725.6	710.1	718.9	736.7	689.2
40°	729.2	732.3	750.0	749.1	754.0	758.0	761.1	753.1	767.3	801.9	747.8
42.5°	743.4	749.6	774.9	781.1	789.5	796.6	801.9	801.5	826.3	874.3	809.9
45°	758.0	764.2	797.9	813.0	827.2	838.3	848.5	853.9	893.4	950.6	882.3
47.5°	775.8	781.1	818.8	848.5	866.7	881.8	900.0	911.6	961.7	1028.3	949.3
50°	802.8	806.4	840.1	886.3	909.3	930.2	952.8	976.3	1035.4	1107.7	1007.9
52.5°	837.9	840.1	865.0	924.4	961.3	983.4	1017.2	1048.2	1110.4	1179.6	1055.8
55°	877.8	876.0	895.1	970.1	1013.2	1046.5	1088.2	1119.7	1189.4	1242.2	1093.9
57.5°	917.8	916.4	931.5	1014.1	1078.9	1117.9	1161.0	1194.2	1261.7	1300.8	1121.5
60°	955.9	951.0	972.4	1065.5	1158.3	1203.1	1241.7	1272.4	1330.0	1342.9	1136.1
62.5°	989.7	989.7	1020.7	1129.0	1253.3	1293.7	1324.3	1344.7	1395.3	1374.0	1130.3
65°	1020.7	1024.7	1069.1	1200.0	1351.8	1393.1	1419.7	1427.7	1460.1	1375.3	1081.5
67.5°	1055.8	1062.0	1124.6	1283.0	1465.4	1509.3	1532.4	1529.8	1506.2	1354.9	976.8
70°	1090.0	1100.2	1193.4	1390.0	1605.6	1665.1	1690.4	1638.0	1530.2	1241.7	811.3
72.5°	1114.8	1132.1	1249.7	1496.9	1806.7	1898.1	1887.9	1667.8	1417.9	1023.4	613.8
74°	1042.0	1070.9	1234.2	1533.7	1879.0	1959.3	1886.1	1608.7	1282.6	824.1	434.9
75°	957.3	985.2	1155.6	1519.1	1892.8	1928.7	1794.7	1504.9	1150.3	638.6	284.0
77.5°	708.7	730.5	887.6	1197.8	1496.9	1486.3	1336.3	1019.8	566.7	192.6	119.8
80°	312.9	329.3	438.0	602.7	810.8	807.7	752.2	468.6	182.8	100.7	73.2
82.5°	94.5	94.1	126.0	175.7	308.0	313.8	266.7	161.5	87.4	41.7	35.5
85°	0.4	0.4	0.4	0.4	1.3	11.5	9.8	31.1	16.0	7.5	12.9
87.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	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°	552.5	552.5	552.5	552.5	552.5	552.5	552.5	552.5	552.5	552.5	552.5
2.5°	545.0	544.5	543.2	540.1	537.9	531.2	533.4	529.0	528.6	527.7	527.2
5°	531.2	529.4	524.1	517.9	510.8	499.7	496.2	489.5	485.5	484.2	485.1
7.5°	517.0	513.0	502.8	489.5	475.3	458.9	446.9	437.6	430.9	428.7	425.6
10°	508.1	501.5	484.2	462.0	438.9	415.8	395.9	382.1	371.9	363.9	363.9
12.5°	505.0	496.2	470.9	438.5	405.2	372.3	343.5	325.3	308.0	299.6	298.2
15°	506.8	494.4	459.8	417.2	372.8	330.2	294.7	268.5	252.1	241.9	245.4
17.5°	508.6	493.1	448.2	394.5	341.3	292.0	250.7	221.0	201.0	195.7	193.5
20°	510.8	490.4	433.6	370.1	308.9	255.2	211.7	181.5	166.4	159.8	159.8
22.5°	513.9	486.8	418.5	343.1	275.6	219.2	178.8	156.2	144.2	140.2	140.2
25°	518.4	484.6	403.0	316.0	244.1	190.8	157.1	139.4	133.1	130.5	130.0
27.5°	526.8	485.1	387.9	288.5	213.0	166.9	141.6	130.0	125.1	123.8	123.4
30°	539.7	489.5	371.9	259.2	185.5	148.7	130.9	122.9	119.8	118.9	118.9
32.5°	557.4	497.5	358.6	233.0	165.1	134.0	122.0	116.7	114.9	114.1	114.5
35°	584.9	511.2	342.6	209.0	146.0	123.8	114.9	110.9	109.6	109.6	110.1
37.5°	620.9	532.6	327.1	186.8	133.1	114.9	108.3	106.1	104.7	105.6	106.1
40°	666.1	557.8	312.4	166.9	122.5	107.8	102.5	100.7	100.3	101.2	102.1
42.5°	715.0	588.5	299.1	150.4	114.1	102.1	97.6	96.7	96.3	96.7	98.1
45°	771.8	623.5	288.0	138.0	107.8	97.2	93.2	92.3	91.9	92.8	93.6
47.5°	824.1	655.0	279.1	129.6	102.5	93.6	89.6	88.3	88.3	88.3	89.2
50°	866.7	679.9	273.8	123.8	98.1	89.6	86.1	84.8	84.3	83.9	84.3
52.5°	903.6	698.5	272.0	120.3	94.5	86.1	82.5	81.7	80.8	79.9	80.3
55°	928.0	707.8	268.5	117.2	91.4	82.1	79.0	78.1	77.2	75.9	75.9
57.5°	942.2	707.0	260.5	115.4	89.6	78.6	75.4	75.4	74.6	72.3	72.8
60°	943.5	691.4	241.0	113.2	88.3	75.0	71.5	72.3	72.3	70.6	70.6
62.5°	920.9	650.6	203.3	107.4	86.5	72.3	68.3	70.6	71.5	69.7	69.7
65°	851.2	554.3	163.3	99.0	82.1	69.2	64.8	69.2	71.9	70.6	70.1
67.5°	717.6	438.9	134.9	89.6	77.2	65.2	61.2	67.0	70.6	70.6	70.1
70°	576.0	333.3	110.9	79.4	69.7	60.4	57.2	62.1	65.2	66.1	66.1
72.5°	396.8	203.7	90.1	68.3	61.2	54.6	51.9	55.0	56.8	58.6	58.1
74°	256.1	142.9	79.0	62.1	55.9	50.1	48.8	50.1	51.0	52.8	53.3
75°	171.3	116.7	73.7	57.7	52.8	47.0	46.2	47.5	48.4	49.7	49.7
77.5°	98.5	83.4	59.5	47.9	43.9	40.4	39.9	40.4	41.7	43.0	42.6
80°	68.3	63.5	47.0	37.3	34.6	32.8	33.3	33.7	35.9	36.4	35.9
82.5°	41.3	45.7	33.3	28.0	26.2	25.7	27.1	28.0	29.7	30.2	29.7
85°	16.4	21.7	16.4	15.5	17.3	19.1	21.3	22.6	23.5	23.5	23.5
87.5°	0.0	3.1	4.0	6.2	9.8	11.5	15.1	16.4	17.3	16.9	16.4
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)