

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: P472347

Luminaire Tested: **CCW-VA-3-840-U-T3**

Issue Date: 01/27/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P472347  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 01/27/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: CCW-VA-3-840-U-T3  
Description: INVUE WALL PACK Wave Stream LUMINAIRE WITH T3 DISTRIBUTION LENS  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4317.8 lumens  
Efficiency: N/A  
Efficacy: 88.3 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.54' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G2

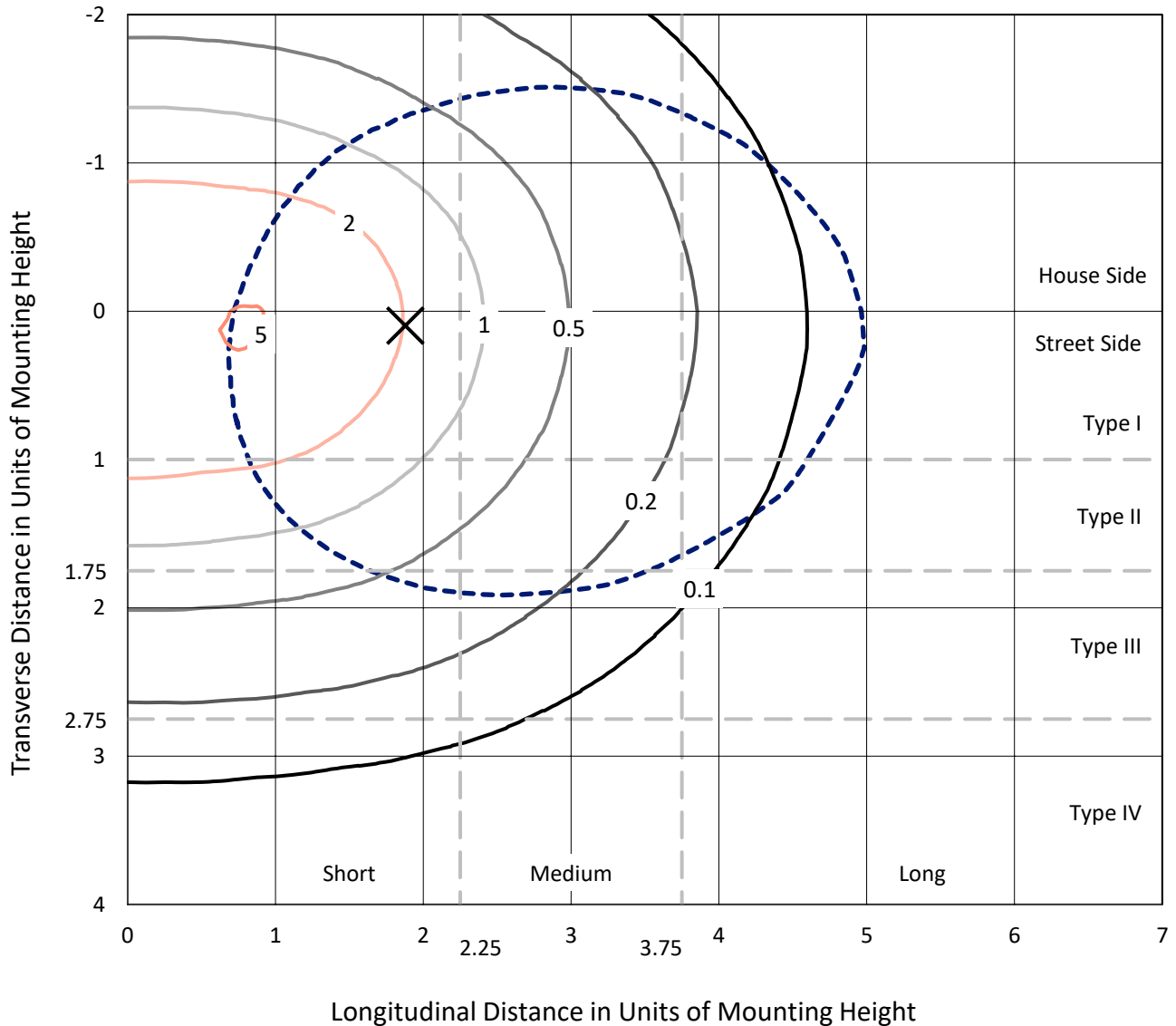
Input Watts (W): 48.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

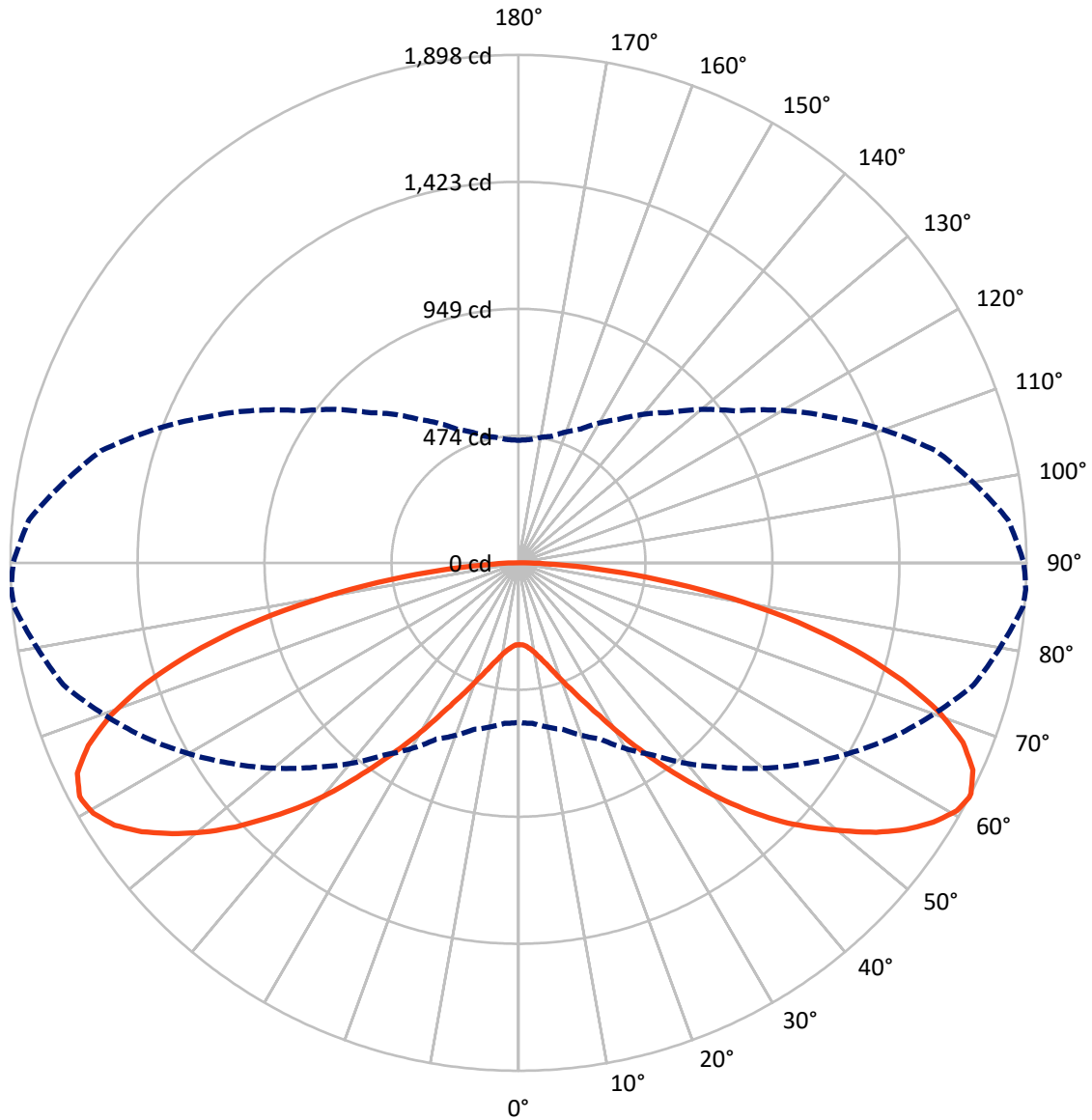
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.2 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 87-Deg Lateral      - - - Horizontal Cone Through 62-Deg Vertical

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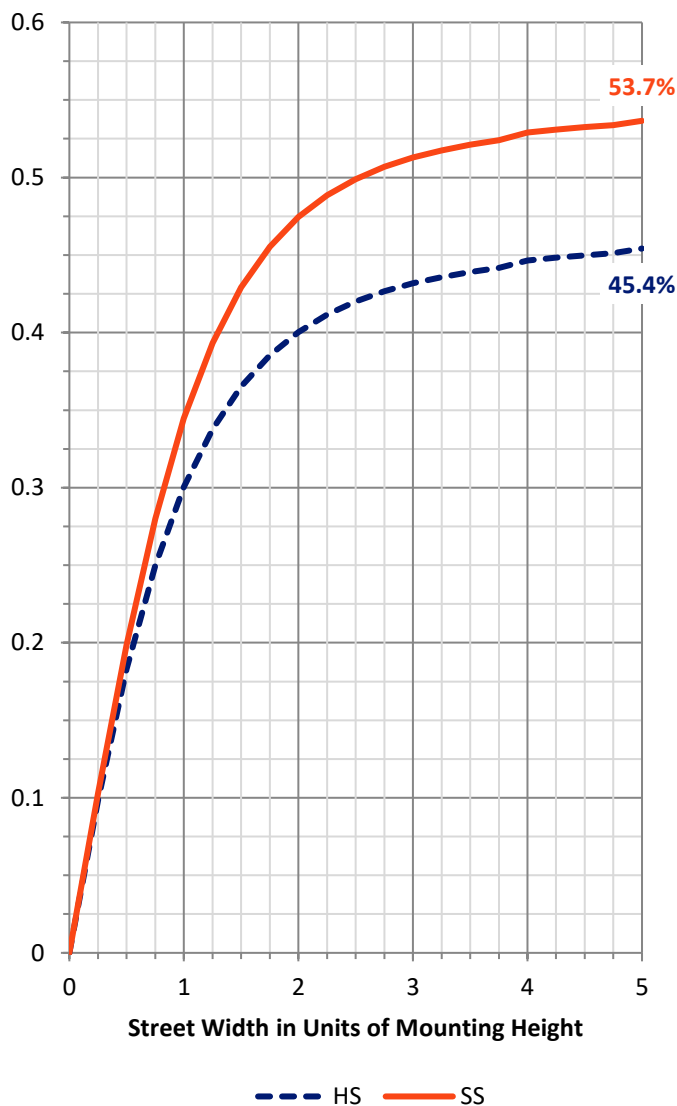
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1988.0	0.0	1988.0
	% Fixture	46.0	0.0	46.0
<b>Street Side</b>	Lumens	2329.8	0.0	2329.8
	% Fixture	54.0	0.0	54.0
<b>Total</b>	Lumens	4317.8	0.0	4317.8
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	30.8	0.7
10°-20°	108.5	2.5
20°-30°	232.0	5.4
30°-40°	427.5	9.9
40°-50°	681.8	15.8
50°-60°	927.2	21.5
60°-70°	1004.6	23.3
70°-80°	717.8	16.6
80°-90°	187.6	4.3
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°	4317.8	100.0
0°-180°	4317.8	100.0

**Coefficient of Utilization**

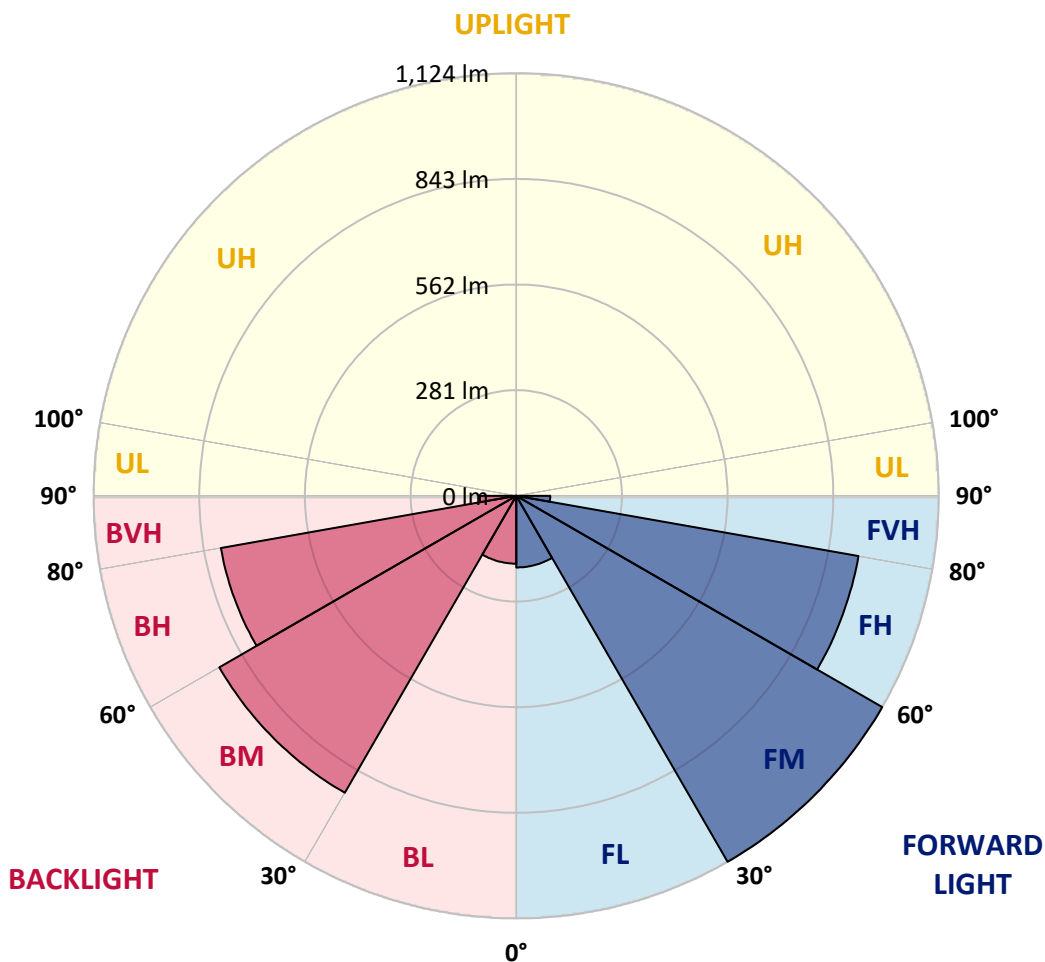


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	190.7	4.4			
FM (30°-60°)	1124.3	26.0			
FH (60°-80°)	924.4	21.4			G1/1800
FVH (80°-90°)	90.4	2.1			G1/100
BL (0°-30°)	180.6	4.2	B1/500		
BM (30°-60°)	912.3	21.1	B1/1000		
BH (60°-80°)	797.9	18.5	B2/1000		G2/1000
BVH (80°-90°)	97.3	2.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**  
 Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	87°
0°	305.6	305.6	305.6	305.6	305.6	305.6	305.6	305.6	305.6	305.6	305.6
2.5°	306.3	306.3	306.3	306.3	306.3	306.3	306.3	306.3	306.3	307.0	307.0
5°	308.4	307.7	307.7	308.4	309.0	309.7	311.1	311.8	313.2	314.6	313.9
7.5°	314.6	314.6	314.6	315.3	317.4	318.8	320.9	323.0	325.1	326.5	325.8
10°	324.4	324.4	324.4	325.8	327.8	332.0	335.5	339.0	341.1	342.5	343.2
12.5°	334.8	334.8	336.2	339.0	343.2	348.7	355.0	359.9	363.3	364.7	365.4
15°	349.4	350.1	352.9	355.7	361.3	369.6	380.0	387.0	390.5	393.3	392.6
17.5°	371.7	371.0	373.1	379.4	385.6	397.4	410.0	421.8	428.8	428.8	428.8
20°	396.8	396.1	397.4	402.3	412.8	428.8	448.3	464.3	471.9	470.5	471.9
22.5°	424.6	424.6	426.0	430.2	440.6	463.6	490.7	514.4	524.8	521.3	520.0
25°	455.2	455.2	457.3	460.8	475.4	503.2	539.4	573.6	584.0	580.5	579.1
27.5°	490.7	487.9	492.1	495.6	513.7	550.6	597.9	641.1	664.0	652.2	648.0
30°	528.3	526.2	526.9	533.9	554.8	602.1	658.5	716.2	748.3	740.6	734.3
32.5°	561.0	562.4	564.5	576.3	600.0	657.1	722.5	798.4	834.6	832.5	831.1
35°	597.9	597.9	602.1	613.2	648.0	715.5	794.9	880.5	934.1	936.2	932.0
37.5°	627.1	627.1	633.4	648.0	689.1	769.1	866.6	967.5	1032.3	1043.4	1039.9
40°	652.9	651.5	658.5	680.0	728.1	826.2	936.9	1053.8	1140.8	1159.6	1154.8
42.5°	668.2	669.6	679.4	706.5	765.7	876.3	1005.8	1135.3	1236.9	1268.9	1268.9
45°	679.4	680.7	695.4	727.4	799.8	925.8	1068.4	1218.8	1330.9	1377.5	1379.6
47.5°	684.2	686.3	704.4	743.4	828.3	971.0	1129.0	1294.0	1415.1	1481.2	1477.0
50°	684.2	687.0	708.6	755.2	854.1	1009.3	1186.1	1365.7	1500.7	1574.5	1573.8
52.5°	680.0	683.5	710.0	764.3	875.6	1046.2	1236.9	1426.9	1582.8	1669.8	1672.6
55°	671.7	675.9	706.5	769.8	892.3	1075.4	1278.0	1484.0	1653.8	1752.0	1758.2
57.5°	655.0	659.2	694.0	765.0	898.6	1090.7	1307.9	1524.4	1711.6	1826.5	1827.8
60°	627.1	632.0	669.6	749.0	892.3	1091.4	1315.5	1542.5	1750.6	1876.6	1881.4
62°	596.5	602.1	644.5	726.7	876.3	1080.3	1307.2	1541.8	1761.0	1891.2	1897.5
62.5°	588.9	593.7	636.9	719.0	870.1	1074.7	1302.3	1538.3	1759.6	1891.9	1896.8
65°	541.5	546.4	590.3	677.3	831.8	1040.6	1266.8	1507.7	1734.6	1864.0	1865.4
67.5°	489.3	494.2	538.1	620.2	776.8	983.5	1207.0	1447.1	1667.8	1779.8	1790.3
70°	428.8	435.7	476.1	557.5	704.4	901.4	1112.3	1351.0	1561.3	1656.6	1666.4
72.5°	368.9	373.8	405.8	477.5	610.4	793.5	989.8	1205.6	1397.0	1487.5	1495.8
75°	299.3	303.5	334.8	394.0	505.3	661.3	846.4	1035.0	1209.1	1290.5	1296.8
77.5°	236.0	237.4	259.6	307.0	392.6	518.6	671.7	820.7	978.7	1052.4	1069.1
80°	166.4	173.3	188.6	221.3	275.6	371.7	482.4	609.7	720.4	803.2	808.8
82.5°	107.9	109.3	119.0	130.9	169.8	234.6	307.0	385.6	484.5	538.1	533.9
85°	56.4	56.4	59.9	63.3	76.6	105.1	148.3	203.2	261.0	301.4	295.8
87.5°	9.7	9.0	9.7	9.0	11.8	16.7	31.3	50.8	76.6	90.5	99.5
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°	305.6	305.6	305.6	305.6	305.6	305.6	305.6	305.6	305.6	305.6	305.6
2.5°	307.0	307.0	307.7	309.0	309.0	309.7	310.4	310.4	311.1	311.8	311.8
5°	315.3	315.3	316.0	317.4	318.1	318.1	318.8	319.5	319.5	319.5	320.2
7.5°	326.5	327.1	327.8	328.5	329.2	329.2	331.3	330.6	330.6	330.6	330.6
10°	342.5	343.9	343.9	343.9	343.9	343.2	343.9	343.2	341.8	341.8	341.1
12.5°	366.1	366.1	364.7	363.3	361.3	360.6	359.9	357.8	355.0	353.6	353.6
15°	393.3	391.9	389.1	386.3	382.8	380.0	375.2	372.4	368.9	367.5	367.5
17.5°	428.1	426.0	418.3	412.8	404.4	398.1	392.6	387.0	382.8	381.4	380.7
20°	467.8	462.9	451.7	439.2	428.1	418.3	407.9	400.9	396.8	393.3	392.6
22.5°	517.9	510.9	491.4	471.9	451.7	437.8	424.6	414.8	407.2	403.7	402.3
25°	572.2	561.7	536.7	507.4	479.6	458.0	441.3	428.1	419.0	413.5	412.1
27.5°	641.1	625.8	588.9	545.0	508.1	481.0	458.0	442.7	430.9	422.5	421.1
30°	721.8	705.8	644.5	586.8	540.1	501.9	476.8	456.6	442.0	432.3	430.2
32.5°	817.9	788.6	718.3	636.9	572.9	526.2	494.2	470.5	452.4	441.3	438.5
35°	915.3	885.4	792.8	689.8	607.7	551.3	513.0	484.5	464.3	450.3	449.0
37.5°	1024.6	988.4	879.8	749.7	645.2	577.7	530.4	497.7	473.3	458.7	457.3
40°	1142.2	1105.3	973.1	818.6	689.8	603.5	547.1	510.2	483.1	467.1	465.0
42.5°	1257.8	1213.9	1067.8	887.5	735.0	632.0	566.6	523.4	491.4	474.7	471.9
45°	1358.0	1319.7	1163.8	966.8	787.2	661.3	586.1	536.0	500.5	481.7	478.9
47.5°	1471.5	1430.4	1268.9	1039.9	837.4	694.7	604.9	547.1	508.1	487.9	485.8
50°	1571.7	1534.8	1362.2	1107.4	885.4	726.0	622.3	557.5	514.4	492.8	490.0
52.5°	1662.9	1630.2	1447.8	1170.8	926.5	755.2	638.3	565.2	518.6	494.9	491.4
55°	1754.8	1712.3	1522.3	1226.5	959.2	778.2	651.5	568.7	517.9	493.5	490.0
57.5°	1823.7	1783.3	1576.6	1266.1	983.5	793.5	659.2	568.0	513.7	487.2	483.1
60°	1870.3	1825.8	1608.6	1285.6	991.9	798.4	659.2	561.7	503.2	474.7	470.5
62°	1887.7	1836.2	1614.9	1288.4	988.4	793.5	654.3	551.3	489.3	461.5	457.3
62.5°	1888.4	1835.5	1612.8	1286.3	986.3	791.4	651.5	547.8	485.8	457.3	453.1
65°	1857.8	1804.9	1587.7	1264.7	962.6	772.6	632.0	527.6	461.5	433.6	429.5
67.5°	1770.1	1729.7	1527.8	1214.6	922.3	737.8	603.5	498.4	432.9	403.7	401.6
70°	1648.3	1611.4	1430.4	1138.7	863.8	687.7	561.0	459.4	396.8	370.3	365.4
72.5°	1495.1	1447.1	1291.9	1037.1	779.6	618.8	505.3	410.7	355.0	331.3	328.5
75°	1305.1	1247.3	1117.9	902.8	678.7	536.0	440.6	356.4	307.0	286.8	288.9
77.5°	1062.9	1035.7	903.5	719.7	552.7	443.4	361.3	302.1	259.6	242.9	241.5
80°	802.6	776.8	684.2	546.4	417.6	335.5	279.8	238.1	208.8	194.2	193.5
82.5°	544.3	520.0	449.7	366.8	284.7	237.4	202.6	175.4	157.3	150.3	150.3
85°	299.3	278.4	238.1	198.4	160.8	135.7	130.9	116.9	112.1	110.7	112.1
87.5°	93.3	92.6	78.7	64.7	56.4	57.1	51.5	52.9	50.1	49.4	52.9
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)