

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: P472355

Luminaire Tested: **CCW-VA-3-860-U-T3**

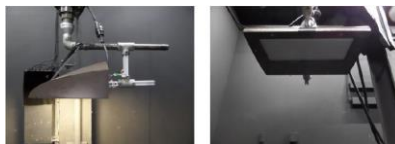
Issue Date: 01/27/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P472355  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 01/27/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: CCW-VA-3-860-U-T3  
Description: INVUE WALL PACK Wave Stream LUMINAIRE WITH T3 DISTRIBUTION LENS  
Light Source: 5700K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

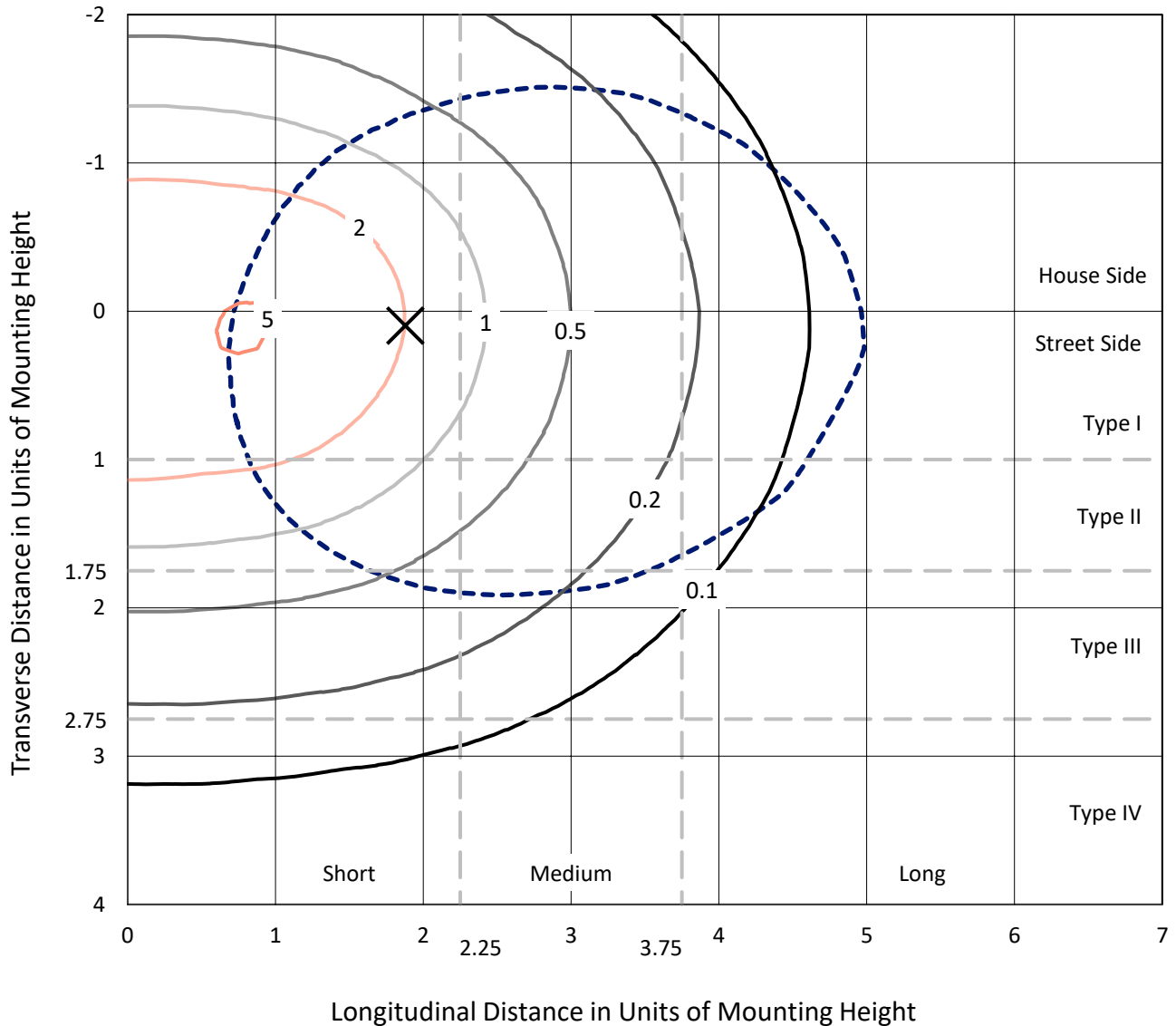
Lumens per Lamp: N/A  
Luminaire Lumens: 4381.4 lumens  
Efficiency: N/A  
Efficacy: 89.6 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.54' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G2  
  
Input Watts (W): 48.9  
Input Voltage (V): 120  
Input Current (Ain): 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

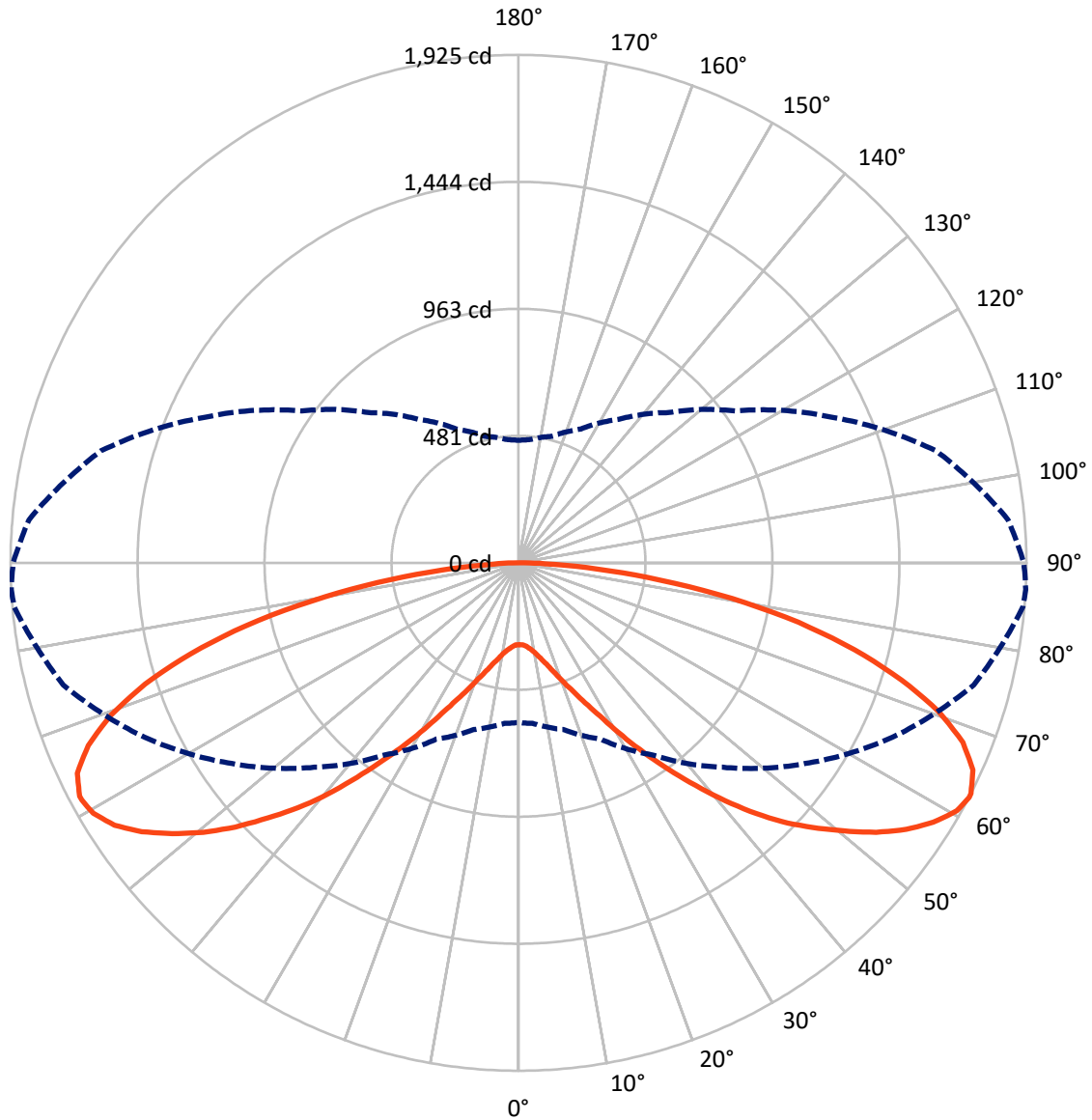
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.3 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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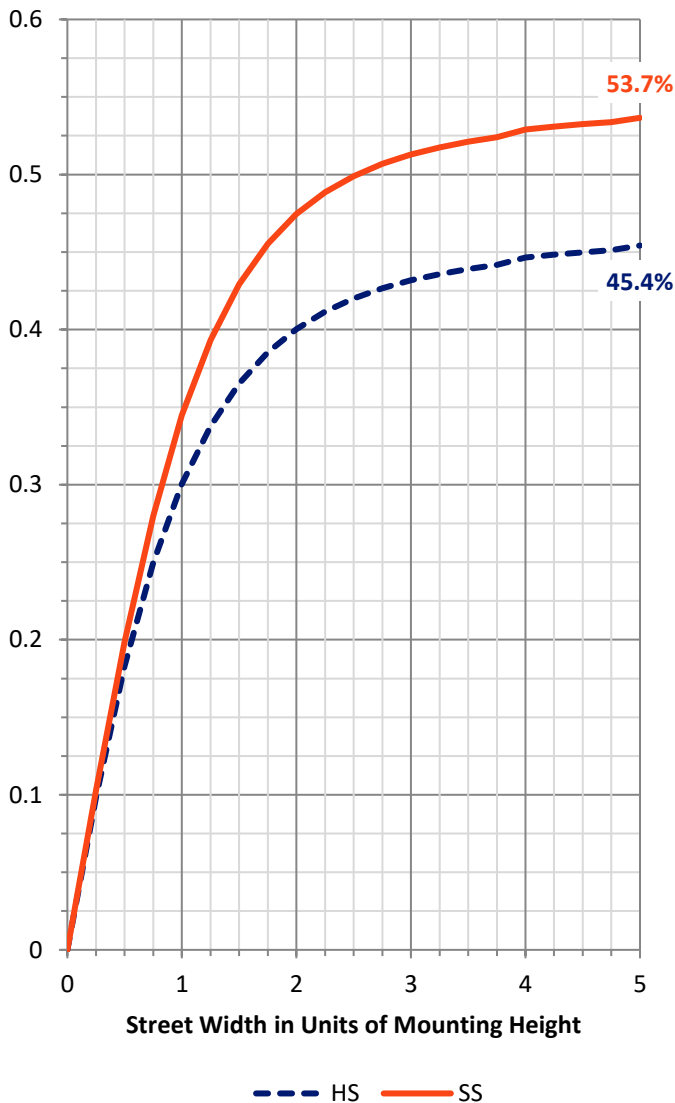
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2017.3	0.0	2017.3
	% Fixture	46.0	0.0	46.0
<b>Street Side</b>	Lumens	2364.1	0.0	2364.1
	% Fixture	54.0	0.0	54.0
<b>Total</b>	Lumens	4381.4	0.0	4381.4
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	31.2	0.7
10°-20°	110.1	2.5
20°-30°	235.4	5.4
30°-40°	433.8	9.9
40°-50°	691.9	15.8
50°-60°	940.9	21.5
60°-70°	1019.4	23.3
70°-80°	728.4	16.6
80°-90°	190.4	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°	4381.4	100.0
0°-180°	4381.4	100.0

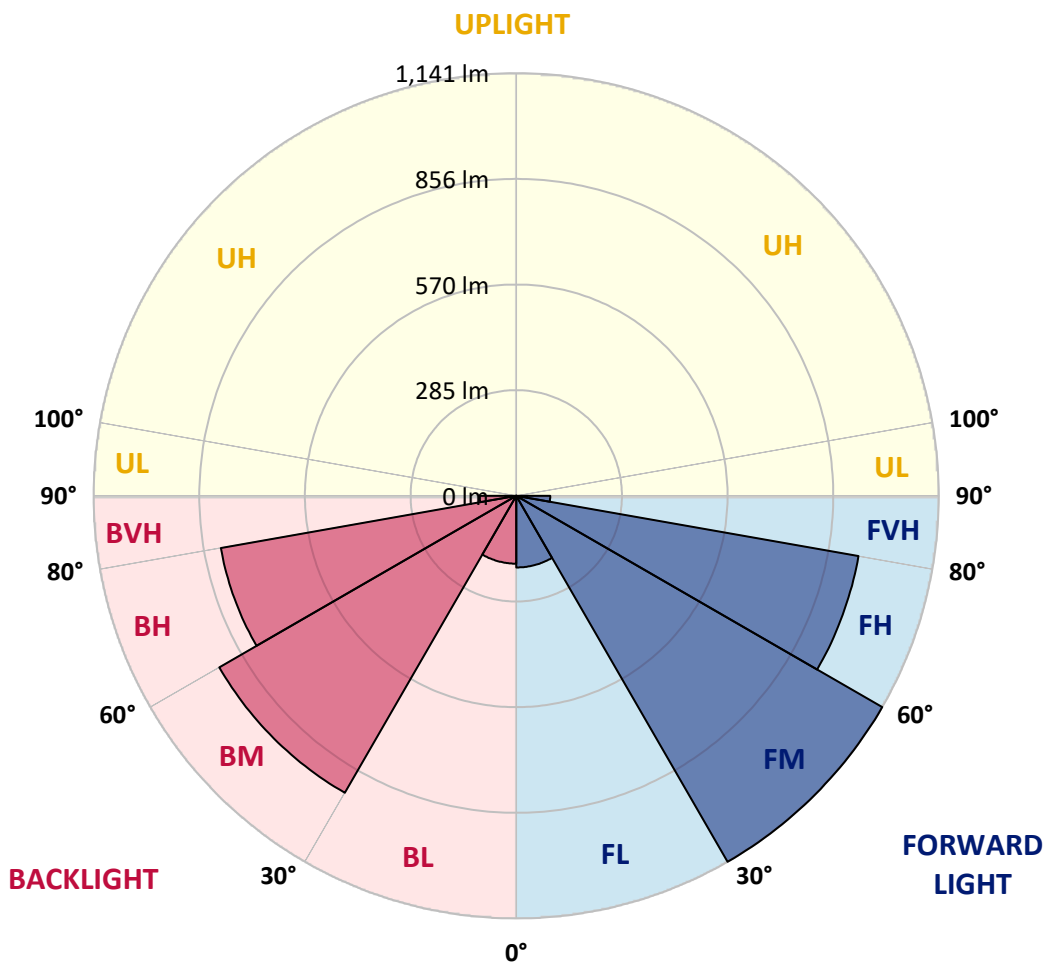


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	193.5	4.4			
FM (30°-60°)	1140.9	26.0			
FH (60°-80°)	938.1	21.4			G1/1800
FVH (80°-90°)	91.7	2.1			G1/100
BL (0°-30°)	183.2	4.2	B1/500		
BM (30°-60°)	925.7	21.1	B1/1000		
BH (60°-80°)	809.7	18.5	B2/1000		G2/1000
BVH (80°-90°)	98.7	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°	310.1	310.1	310.1	310.1	310.1	310.1	310.1	310.1	310.1	310.1	310.1
2.5°	310.8	310.8	310.8	310.8	310.8	310.8	310.8	310.8	310.8	311.5	311.5
5°	312.9	312.2	312.2	312.9	313.6	314.3	315.7	316.4	317.8	319.3	318.5
7.5°	319.3	319.3	319.3	320.0	322.1	323.5	325.6	327.7	329.9	331.3	330.6
10°	329.1	329.1	329.1	330.6	332.7	336.9	340.4	344.0	346.1	347.5	348.2
12.5°	339.7	339.7	341.2	344.0	348.2	353.9	360.2	365.2	368.7	370.1	370.8
15°	354.6	355.3	358.1	360.9	366.6	375.1	385.6	392.7	396.2	399.1	398.4
17.5°	377.2	376.5	378.6	384.9	391.3	403.3	416.0	428.0	435.1	435.1	435.1
20°	402.6	401.9	403.3	408.3	418.8	435.1	454.9	471.1	478.9	477.5	478.9
22.5°	430.9	430.9	432.3	436.5	447.1	470.4	498.0	522.0	532.6	529.0	527.6
25°	461.9	461.9	464.1	467.6	482.4	510.7	547.4	582.0	592.6	589.1	587.7
27.5°	498.0	495.1	499.4	502.9	521.3	558.7	606.7	650.5	673.8	661.8	657.6
30°	536.1	534.0	534.7	541.7	562.9	611.0	668.2	726.8	759.3	751.5	745.2
32.5°	569.3	570.7	572.8	584.8	608.8	666.8	733.2	810.1	846.9	844.8	843.3
35°	606.7	606.7	611.0	622.3	657.6	726.1	806.6	893.5	947.9	950.0	945.8
37.5°	636.4	636.4	642.7	657.6	699.3	780.5	879.4	981.8	1047.5	1058.8	1055.2
40°	662.5	661.1	668.2	690.1	738.8	838.4	950.7	1069.4	1157.7	1176.7	1171.8
42.5°	678.1	679.5	689.4	716.9	776.9	889.3	1020.6	1152.0	1255.1	1287.6	1287.6
45°	689.4	690.8	705.6	738.1	811.6	939.4	1084.2	1236.8	1350.5	1397.8	1399.9
47.5°	694.3	696.4	714.8	754.3	840.5	985.3	1145.6	1313.0	1435.9	1503.0	1498.8
50°	694.3	697.1	719.0	766.4	866.7	1024.2	1203.6	1385.8	1522.8	1597.7	1597.0
52.5°	690.1	693.6	720.4	775.5	888.5	1061.6	1255.1	1448.0	1606.2	1694.5	1697.3
55°	681.6	685.8	716.9	781.2	905.5	1091.3	1296.8	1505.9	1678.2	1777.8	1784.2
57.5°	664.6	668.9	704.2	776.2	911.9	1106.8	1327.2	1546.8	1736.8	1853.4	1854.8
60°	636.4	641.3	679.5	760.0	905.5	1107.5	1334.9	1565.2	1776.4	1904.2	1909.2
62°	605.3	611.0	654.1	737.4	889.3	1096.2	1326.5	1564.5	1787.0	1919.1	1925.4
62.5°	597.5	602.5	646.3	729.6	882.9	1090.6	1321.5	1561.0	1785.6	1919.8	1924.7
65°	549.5	554.5	599.0	687.2	844.0	1055.9	1285.5	1529.9	1760.1	1891.5	1892.9
67.5°	496.5	501.5	546.0	629.3	788.3	998.0	1224.8	1468.4	1692.3	1806.1	1816.6
70°	435.1	442.2	483.1	565.8	714.8	914.7	1128.7	1371.0	1584.3	1681.0	1690.9
72.5°	374.3	379.3	411.8	484.5	619.4	805.2	1004.4	1223.3	1417.6	1509.4	1517.9
75°	303.7	308.0	339.7	399.8	512.8	671.0	858.9	1050.3	1226.9	1309.5	1315.9
77.5°	239.4	240.9	263.5	311.5	398.4	526.2	681.6	832.7	993.1	1068.0	1084.9
80°	168.8	175.9	191.4	224.6	279.7	377.2	489.5	618.7	731.0	815.1	820.7
82.5°	109.5	110.9	120.8	132.8	172.3	238.0	311.5	391.3	491.6	546.0	541.7
85°	57.2	57.2	60.7	64.3	77.7	106.7	150.4	206.2	264.9	305.8	300.2
87.5°	9.9	9.2	9.9	9.2	12.0	17.0	31.8	51.6	77.7	91.8	101.0
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°	310.1	310.1	310.1	310.1	310.1	310.1	310.1	310.1	310.1	310.1	310.1
2.5°	311.5	311.5	312.2	313.6	313.6	314.3	315.0	315.0	315.7	316.4	316.4
5°	320.0	320.0	320.7	322.1	322.8	322.8	323.5	324.2	324.2	324.2	324.9
7.5°	331.3	332.0	332.7	333.4	334.1	334.1	336.2	335.5	335.5	335.5	335.5
10°	347.5	348.9	348.9	348.9	348.9	348.2	348.9	348.2	346.8	346.8	346.1
12.5°	371.5	371.5	370.1	368.7	366.6	365.9	365.2	363.0	360.2	358.8	358.8
15°	399.1	397.7	394.8	392.0	388.5	385.6	380.7	377.9	374.3	372.9	372.9
17.5°	434.4	432.3	424.5	418.8	410.4	404.0	398.4	392.7	388.5	387.1	386.4
20°	474.6	469.7	458.4	445.7	434.4	424.5	413.9	406.8	402.6	399.1	398.4
22.5°	525.5	518.4	498.7	478.9	458.4	444.3	430.9	421.0	413.2	409.7	408.3
25°	580.6	570.0	544.6	514.9	486.7	464.8	447.8	434.4	425.2	419.6	418.1
27.5°	650.5	635.0	597.5	553.0	515.6	488.1	464.8	449.2	437.2	428.7	427.3
30°	732.5	716.2	654.1	595.4	548.1	509.3	483.8	463.3	448.5	438.6	436.5
32.5°	829.9	800.3	728.9	646.3	581.3	534.0	501.5	477.5	459.1	447.8	445.0
35°	928.8	898.4	804.5	700.0	616.6	559.4	520.6	491.6	471.1	457.0	455.6
37.5°	1039.7	1003.0	892.8	760.7	654.8	586.2	538.2	505.0	480.3	465.5	464.1
40°	1159.1	1121.6	987.4	830.6	700.0	612.4	555.2	517.7	490.2	473.9	471.8
42.5°	1276.3	1231.8	1083.5	900.6	745.9	641.3	574.9	531.2	498.7	481.7	478.9
45°	1378.0	1339.2	1181.0	981.1	798.8	671.0	594.7	543.9	507.8	488.8	485.9
47.5°	1493.2	1451.5	1287.6	1055.2	849.7	704.9	613.8	555.2	515.6	495.1	493.0
50°	1594.9	1557.4	1382.3	1123.8	898.4	736.7	631.4	565.8	522.0	500.1	497.2
52.5°	1687.4	1654.2	1469.1	1188.0	940.1	766.4	647.7	573.5	526.2	502.2	498.7
55°	1780.6	1737.5	1544.7	1244.5	973.3	789.7	661.1	577.1	525.5	500.8	497.2
57.5°	1850.6	1809.6	1599.8	1284.8	998.0	805.2	668.9	576.4	521.3	494.4	490.2
60°	1897.9	1852.7	1632.3	1304.6	1006.5	810.1	668.9	570.0	510.7	481.7	477.5
62°	1915.5	1863.3	1638.7	1307.4	1003.0	805.2	663.9	559.4	496.5	468.3	464.1
62.5°	1916.2	1862.6	1636.5	1305.3	1000.9	803.1	661.1	555.9	493.0	464.1	459.8
65°	1885.2	1831.5	1611.1	1283.4	976.8	784.0	641.3	535.4	468.3	440.0	435.8
67.5°	1796.2	1755.2	1550.4	1232.5	935.9	748.7	612.4	505.7	439.3	409.7	407.5
70°	1672.6	1635.1	1451.5	1155.5	876.5	697.8	569.3	466.2	402.6	375.8	370.8
72.5°	1517.2	1468.4	1310.9	1052.4	791.1	627.9	512.8	416.7	360.2	336.2	333.4
75°	1324.3	1265.7	1134.3	916.1	688.7	543.9	447.1	361.6	311.5	291.0	293.1
77.5°	1078.5	1051.0	916.8	730.3	560.8	449.9	366.6	306.5	263.5	246.5	245.1
80°	814.4	788.3	694.3	554.5	423.8	340.4	283.9	241.6	211.9	197.1	196.4
82.5°	552.3	527.6	456.3	372.2	288.9	240.9	205.5	178.0	159.6	152.6	152.6
85°	303.7	282.5	241.6	201.3	163.2	137.7	132.8	118.7	113.7	112.3	113.7
87.5°	94.6	93.9	79.8	65.7	57.2	57.9	52.3	53.7	50.9	50.1	53.7
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)