

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: P472338

Luminaire Tested: **CCW-VA-2-830-U-T3**

Issue Date: 01/27/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P472338  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 01/27/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: CCW-VA-2-830-U-T3  
Description: INVUE WALL PACK Wave Stream LUMINAIRE WITH T3 DISTRIBUTION LENS  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3473.2 lumens  
Efficiency: N/A  
Efficacy: 84.7 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.54' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G2

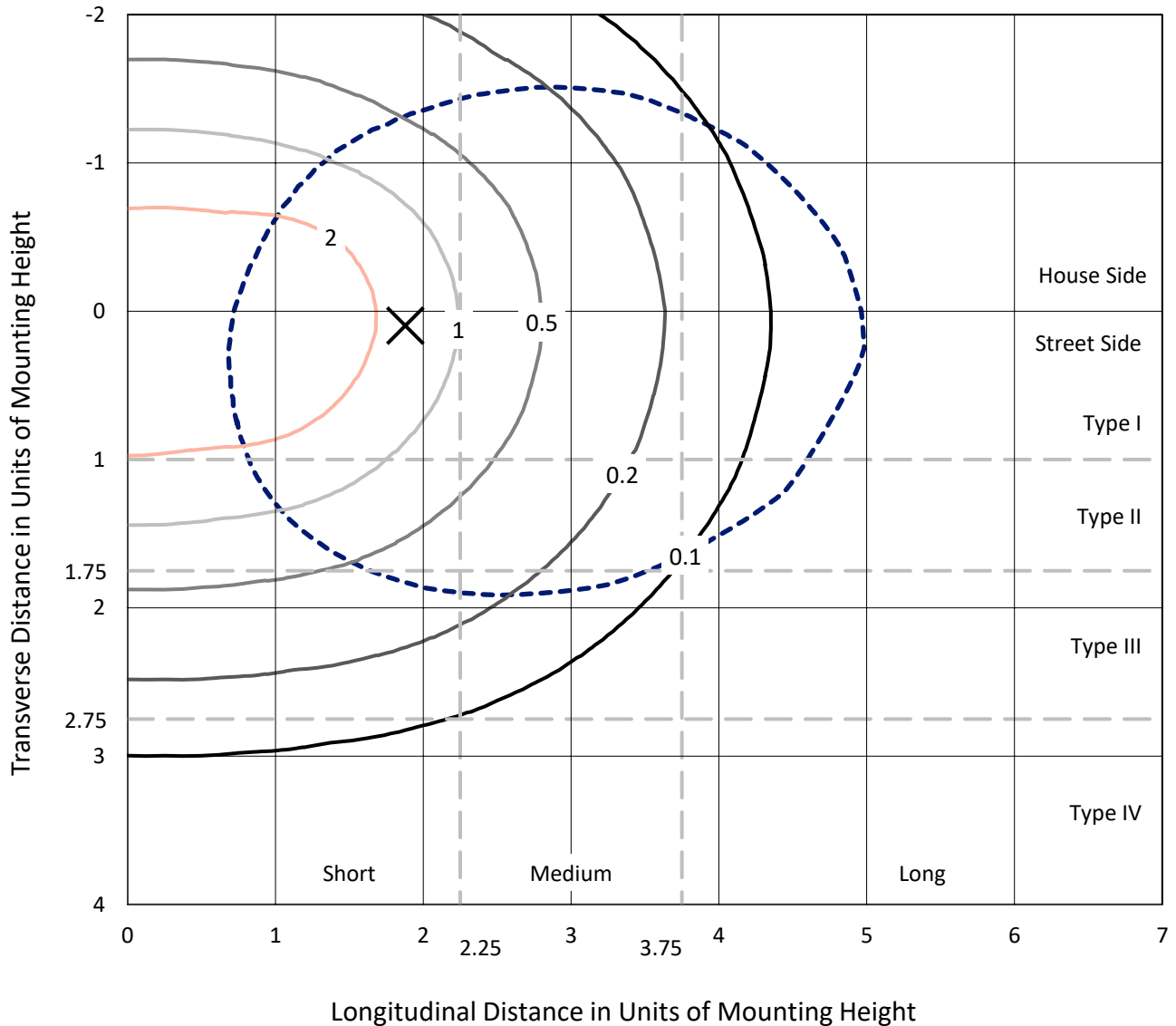
Input Watts (W): 41  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P472338  
 CATALOG NUMBER: CCW-VA-2-830-U-T3

### Iso-Footcandle Lines of Horizontal Illumination

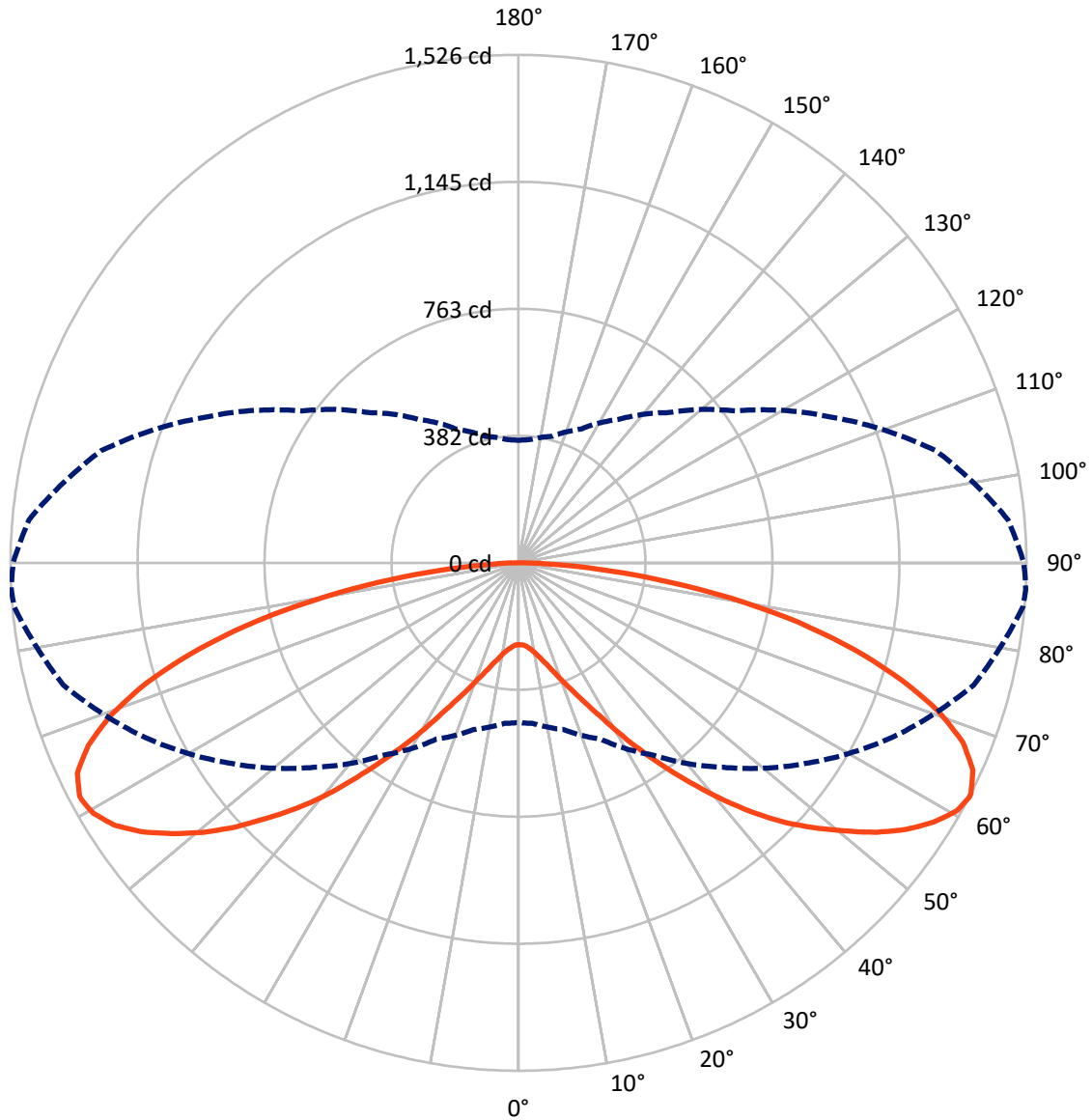
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 4.2 fc  
 Type III - Short - N/A

REPORT NUMBER: P472338  
CATALOG NUMBER: CCW-VA-2-830-U-T3

### Luminous Intensity Polar Plot



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

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 CATALOG NUMBER: CCW-VA-2-830-U-T3

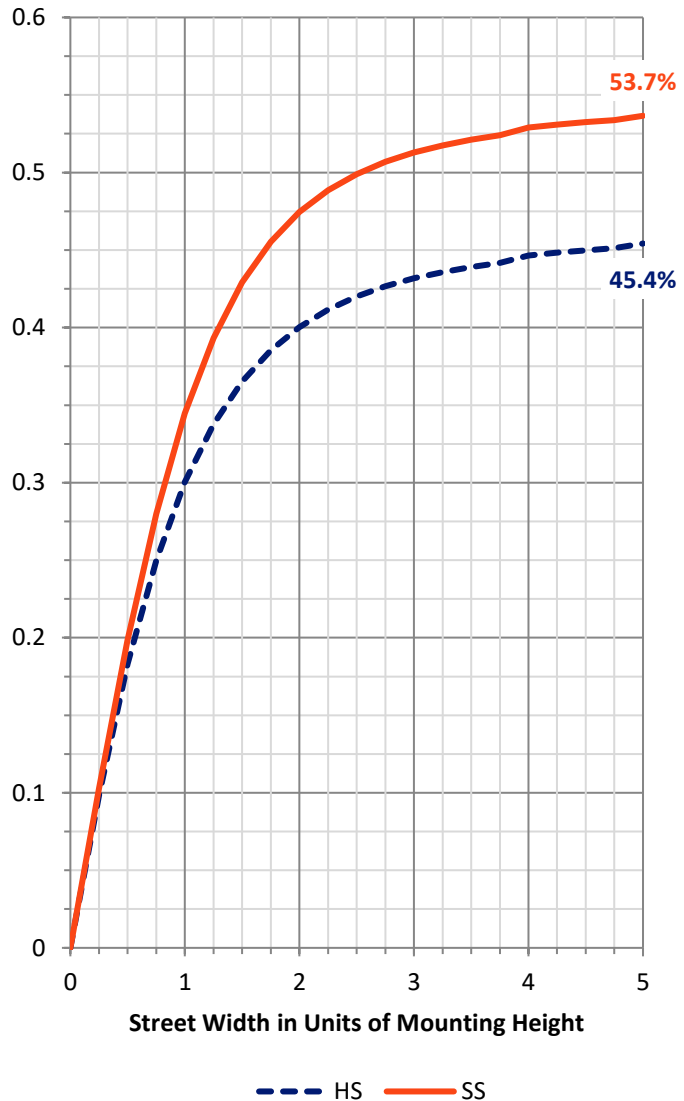
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1599.1	0.0	1599.1
	% Fixture	46.0	0.0	46.0
<b>Street Side</b>	Lumens	1874.1	0.0	1874.1
	% Fixture	54.0	0.0	54.0
<b>Total</b>	Lumens	3473.2	0.0	3473.2
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	24.7	0.7
10°-20°	87.3	2.5
20°-30°	186.6	5.4
30°-40°	343.9	9.9
40°-50°	548.5	15.8
50°-60°	745.8	21.5
60°-70°	808.1	23.3
70°-80°	577.4	16.6
80°-90°	150.9	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°	3473.2	100.0
0°-180°	3473.2	100.0

**Coefficient of Utilization**



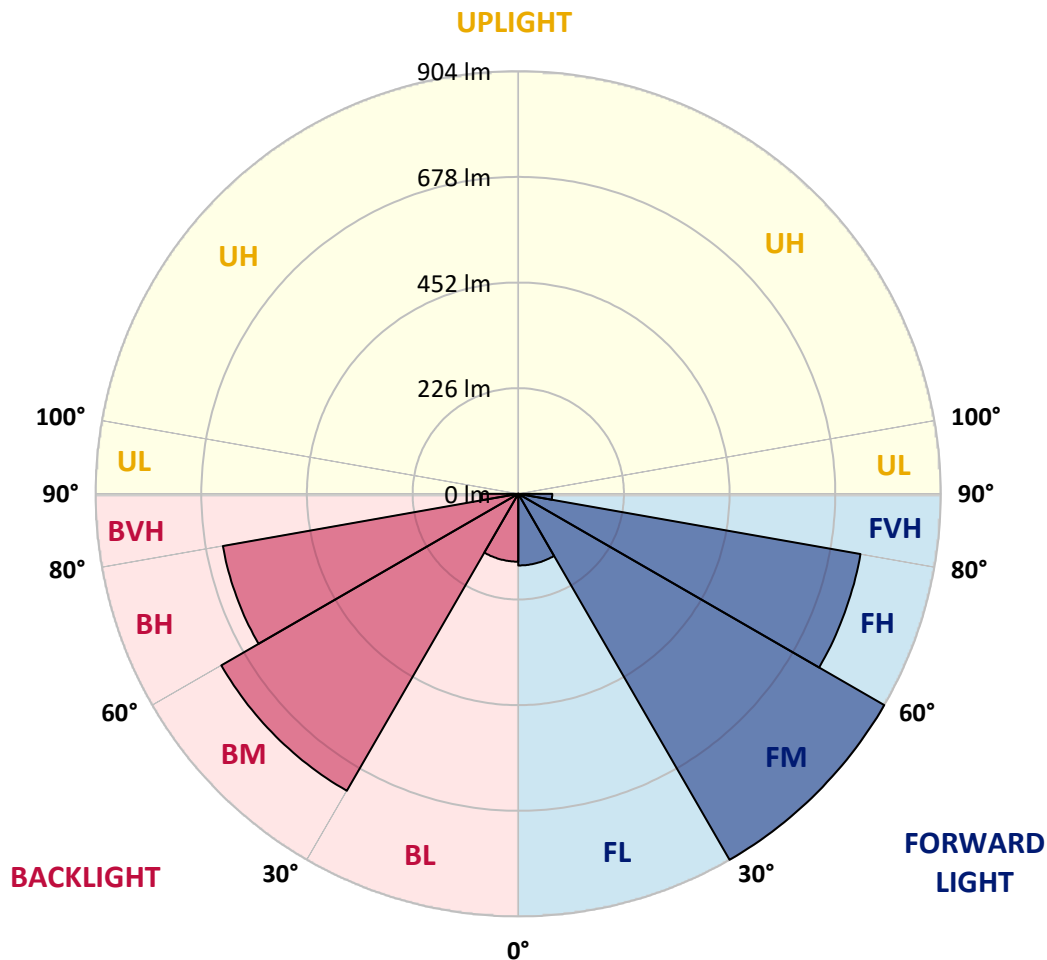
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 CATALOG NUMBER: CCW-VA-2-830-U-T3

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	153.4	4.4			
FM (30°-60°)	904.4	26.0			
FH (60°-80°)	743.6	21.4			G1/1800
FVH (80°-90°)	72.7	2.1			G1/100
BL (0°-30°)	145.2	4.2	B1/500		
BM (30°-60°)	733.8	21.1	B1/1000		
BH (60°-80°)	641.8	18.5	B2/1000		G2/1000
BVH (80°-90°)	78.2	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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 CATALOG NUMBER: CCW-VA-2-830-U-T3

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	87°
0°	245.8	245.8	245.8	245.8	245.8	245.8	245.8	245.8	245.8	245.8	245.8
2.5°	246.4	246.4	246.4	246.4	246.4	246.4	246.4	246.4	246.4	246.9	246.9
5°	248.0	247.5	247.5	248.0	248.6	249.2	250.3	250.8	252.0	253.1	252.5
7.5°	253.1	253.1	253.1	253.6	255.3	256.4	258.1	259.8	261.5	262.6	262.0
10°	260.9	260.9	260.9	262.0	263.7	267.1	269.9	272.7	274.4	275.5	276.0
12.5°	269.3	269.3	270.4	272.7	276.0	280.5	285.6	289.5	292.3	293.4	293.9
15°	281.1	281.6	283.9	286.1	290.6	297.3	305.7	311.3	314.1	316.3	315.8
17.5°	299.0	298.4	300.1	305.1	310.2	319.7	329.8	339.3	344.9	344.9	344.9
20°	319.1	318.6	319.7	323.6	332.0	344.9	360.6	373.5	379.6	378.5	379.6
22.5°	341.5	341.5	342.7	346.0	354.4	372.9	394.7	413.8	422.2	419.4	418.2
25°	366.2	366.2	367.9	370.7	382.4	404.8	433.9	461.4	469.8	467.0	465.8
27.5°	394.7	392.5	395.9	398.7	413.2	442.9	481.0	515.7	534.1	524.6	521.3
30°	425.0	423.3	423.8	429.4	446.2	484.3	529.7	576.1	601.9	595.7	590.7
32.5°	451.3	452.4	454.1	463.6	482.6	528.5	581.2	642.2	671.3	669.6	668.5
35°	481.0	481.0	484.3	493.3	521.3	575.6	639.4	708.3	751.4	753.1	749.7
37.5°	504.5	504.5	509.5	521.3	554.3	618.7	697.1	778.3	830.3	839.3	836.5
40°	525.2	524.1	529.7	547.0	585.7	664.6	753.6	847.7	917.7	932.8	928.9
42.5°	537.5	538.6	546.5	568.3	615.9	704.9	809.1	913.2	995.0	1020.7	1020.7
45°	546.5	547.6	559.3	585.1	643.3	744.7	859.5	980.4	1070.5	1108.1	1109.7
47.5°	550.4	552.1	566.6	598.0	666.3	781.1	908.2	1040.9	1138.3	1191.5	1188.1
50°	550.4	552.6	570.0	607.5	687.0	811.9	954.1	1098.5	1207.2	1266.5	1265.9
52.5°	547.0	549.8	571.1	614.8	704.4	841.5	995.0	1147.8	1273.2	1343.2	1345.5
55°	540.3	543.7	568.3	619.3	717.8	865.1	1028.0	1193.7	1330.3	1409.3	1414.3
57.5°	526.9	530.2	558.2	615.3	722.8	877.4	1052.1	1226.2	1376.8	1469.2	1470.3
60°	504.5	508.4	538.6	602.5	717.8	877.9	1058.2	1240.7	1408.2	1509.5	1513.4
62°	479.8	484.3	518.5	584.5	704.9	869.0	1051.5	1240.2	1416.6	1521.3	1526.3
62.5°	473.7	477.6	512.3	578.4	699.9	864.5	1047.6	1237.4	1415.4	1521.8	1525.7
65°	435.6	439.5	474.8	544.8	669.1	837.1	1019.0	1212.8	1395.3	1499.4	1500.5
67.5°	393.6	397.5	432.8	498.9	624.9	791.1	970.9	1164.0	1341.5	1431.7	1440.1
70°	344.9	350.5	383.0	448.5	566.6	725.1	894.7	1086.8	1255.9	1332.6	1340.4
72.5°	296.7	300.7	326.4	384.1	491.0	638.3	796.2	969.8	1123.7	1196.5	1203.2
75°	240.8	244.1	269.3	316.9	406.5	531.9	680.8	832.6	972.6	1038.1	1043.1
77.5°	189.8	190.9	208.8	246.9	315.8	417.1	540.3	660.1	787.2	846.6	860.0
80°	133.8	139.4	151.7	178.0	221.7	299.0	388.0	490.5	579.5	646.1	650.6
82.5°	86.8	87.9	95.7	105.3	136.6	188.7	246.9	310.2	389.7	432.8	429.4
85°	45.4	45.4	48.2	51.0	61.6	84.5	119.3	163.5	210.0	242.4	238.0
87.5°	7.8	7.3	7.8	7.3	9.5	13.4	25.2	40.9	61.6	72.8	80.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P472338  
 CATALOG NUMBER: CCW-VA-2-830-U-T3

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	245.8	245.8	245.8	245.8	245.8	245.8	245.8	245.8	245.8	245.8	245.8
2.5°	246.9	246.9	247.5	248.6	248.6	249.2	249.7	249.7	250.3	250.8	250.8
5°	253.6	253.6	254.2	255.3	255.9	255.9	256.4	257.0	257.0	257.0	257.6
7.5°	262.6	263.2	263.7	264.3	264.8	264.8	266.5	266.0	266.0	266.0	266.0
10°	275.5	276.6	276.6	276.6	276.6	276.0	276.6	276.0	274.9	274.9	274.4
12.5°	294.5	294.5	293.4	292.3	290.6	290.0	289.5	287.8	285.6	284.4	284.4
15°	316.3	315.2	313.0	310.7	307.9	305.7	301.8	299.5	296.7	295.6	295.6
17.5°	344.3	342.7	336.5	332.0	325.3	320.3	315.8	311.3	307.9	306.8	306.3
20°	376.3	372.3	363.4	353.3	344.3	336.5	328.1	322.5	319.1	316.3	315.8
22.5°	416.6	411.0	395.3	379.6	363.4	352.2	341.5	333.7	327.5	324.7	323.6
25°	460.2	451.8	431.7	408.2	385.8	368.4	355.0	344.3	337.1	332.6	331.5
27.5°	515.7	503.4	473.7	438.4	408.7	386.9	368.4	356.1	346.6	339.9	338.7
30°	580.6	567.7	518.5	472.0	434.5	403.7	383.5	367.3	355.5	347.7	346.0
32.5°	657.9	634.4	577.8	512.3	460.8	423.3	397.5	378.5	363.9	355.0	352.7
35°	736.3	712.2	637.7	554.9	488.8	443.4	412.6	389.7	373.5	362.3	361.1
37.5°	824.2	795.1	707.7	603.0	519.0	464.7	426.6	400.3	380.7	369.0	367.9
40°	918.8	889.1	782.7	658.4	554.9	485.4	440.1	410.4	388.6	375.7	374.0
42.5°	1011.7	976.5	858.9	713.9	591.3	508.4	455.8	421.0	395.3	381.9	379.6
45°	1092.4	1061.6	936.2	777.7	633.3	531.9	471.4	431.1	402.6	387.5	385.2
47.5°	1183.6	1150.6	1020.7	836.5	673.6	558.8	486.6	440.1	408.7	392.5	390.8
50°	1264.3	1234.6	1095.7	890.8	712.2	584.0	500.6	448.5	413.8	396.4	394.2
52.5°	1337.6	1311.3	1164.6	941.8	745.2	607.5	513.4	454.6	417.1	398.1	395.3
55°	1411.5	1377.4	1224.5	986.6	771.5	626.0	524.1	457.4	416.6	397.0	394.2
57.5°	1467.0	1434.5	1268.2	1018.5	791.1	638.3	530.2	456.9	413.2	391.9	388.6
60°	1504.5	1468.6	1293.9	1034.1	797.9	642.2	530.2	451.8	404.8	381.9	378.5
62°	1518.5	1477.0	1299.0	1036.4	795.1	638.3	526.3	443.4	393.6	371.2	367.9
62.5°	1519.0	1476.5	1297.3	1034.7	793.4	636.6	524.1	440.6	390.8	367.9	364.5
65°	1494.4	1451.8	1277.1	1017.3	774.3	621.5	508.4	424.4	371.2	348.8	345.5
67.5°	1423.8	1391.4	1229.0	977.0	741.9	593.5	485.4	400.9	348.3	324.7	323.1
70°	1325.9	1296.2	1150.6	916.0	694.8	553.2	451.3	369.5	319.1	297.9	293.9
72.5°	1202.7	1164.0	1039.2	834.3	627.1	497.8	406.5	330.3	285.6	266.5	264.3
75°	1049.8	1003.3	899.2	726.2	545.9	431.1	354.4	286.7	246.9	230.7	232.4
77.5°	855.0	833.1	726.8	578.9	444.6	356.7	290.6	243.0	208.8	195.4	194.3
80°	645.6	624.9	550.4	439.5	335.9	269.9	225.1	191.5	168.0	156.2	155.7
82.5°	437.8	418.2	361.7	295.1	229.0	190.9	162.9	141.1	126.5	120.9	120.9
85°	240.8	224.0	191.5	159.6	129.3	109.2	105.3	94.1	90.1	89.0	90.1
87.5°	75.0	74.5	63.3	52.1	45.4	45.9	41.4	42.6	40.3	39.8	42.6
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)