

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: P472242

Luminaire Tested: **CCW-VA-2-830-U-T2**

Issue Date: 01/27/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P472242  
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-T2  
Description: INVUE WALL PACK Wave Stream LUMINAIRE WITH T2 DISTRIBUTION LENS  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3403.4 lumens  
Efficiency: N/A  
Efficacy: 84.0 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.54' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G2

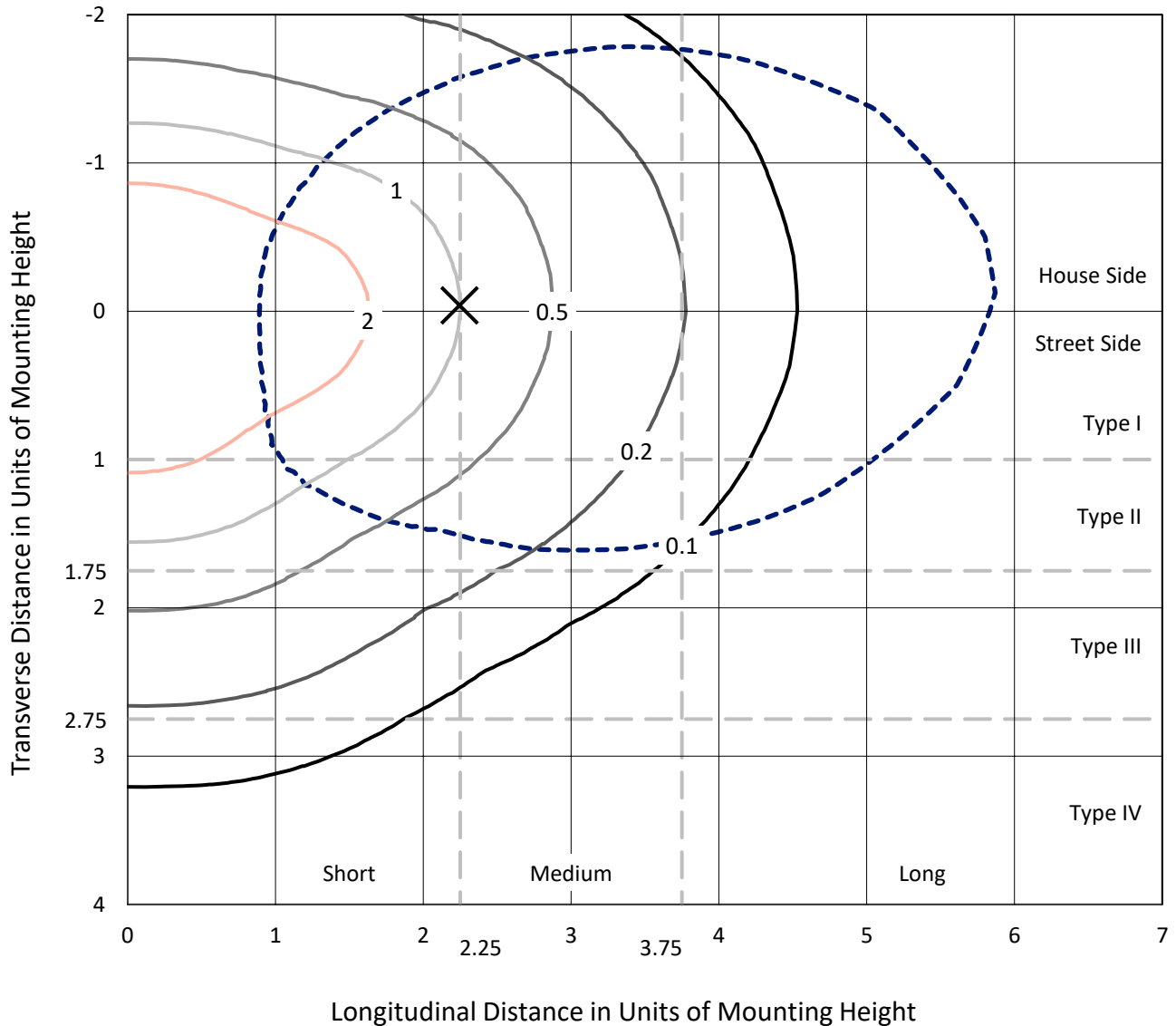
Input Watts (W): 40.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P472242  
 CATALOG NUMBER: CCW-VA-2-830-U-T2

### Iso-Footcandle Lines of Horizontal Illumination

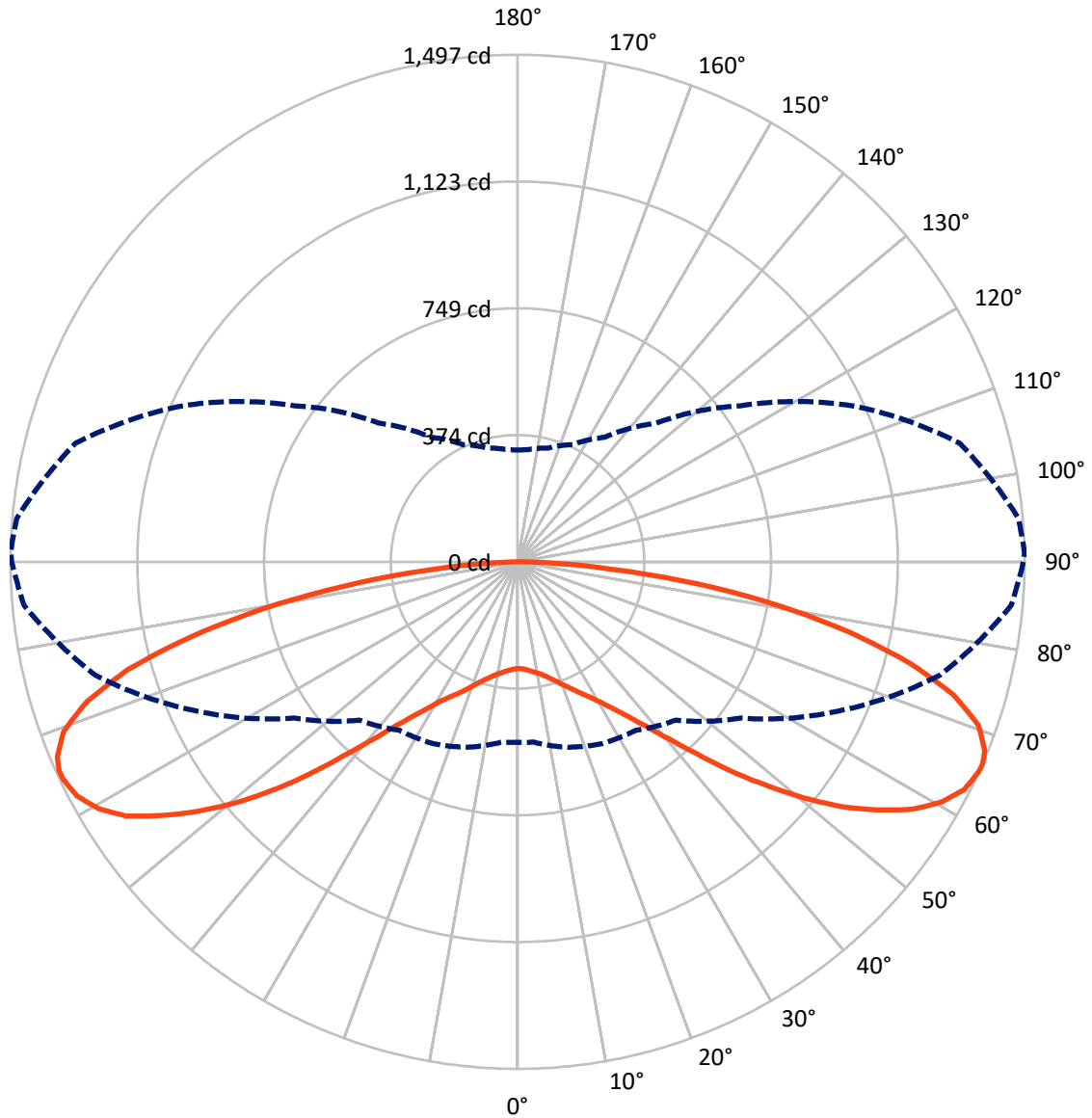
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 3.4 fc  
 Type II - Short - N/A

REPORT NUMBER: P472242  
CATALOG NUMBER: CCW-VA-2-830-U-T2

### Luminous Intensity Polar Plot



— Vertical Plane Through 91-Deg Lateral      - - - Horizontal Cone Through 66-Deg Vertical

REPORT NUMBER: P472242  
 CATALOG NUMBER: CCW-VA-2-830-U-T2

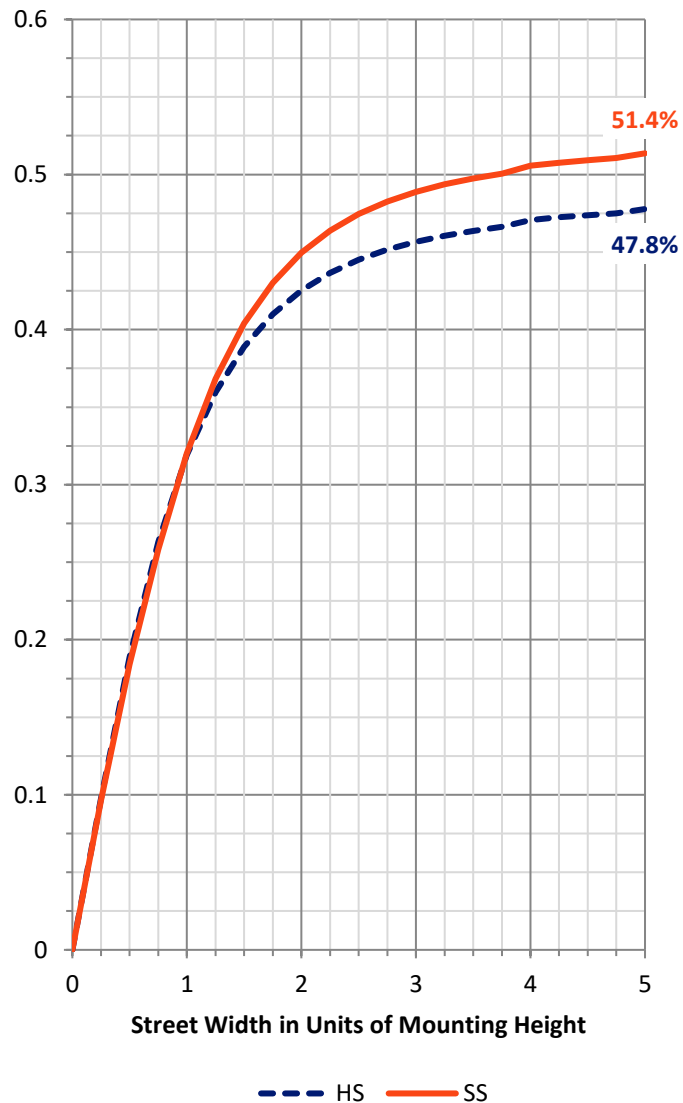
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1642.6	0.0	1642.6
	% Fixture	48.3	0.0	48.3
<b>Street Side</b>	Lumens	1760.7	0.0	1760.7
	% Fixture	51.7	0.0	51.7
<b>Total</b>	Lumens	3403.4	0.0	3403.4
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	31.0	0.9
10°-20°	101.6	3.0
20°-30°	196.5	5.8
30°-40°	322.4	9.5
40°-50°	510.7	15.0
50°-60°	704.2	20.7
60°-70°	790.7	23.2
70°-80°	591.0	17.4
80°-90°	155.3	4.6
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°	3403.4	100.0
0°-180°	3403.4	100.0

**Coefficient of Utilization**

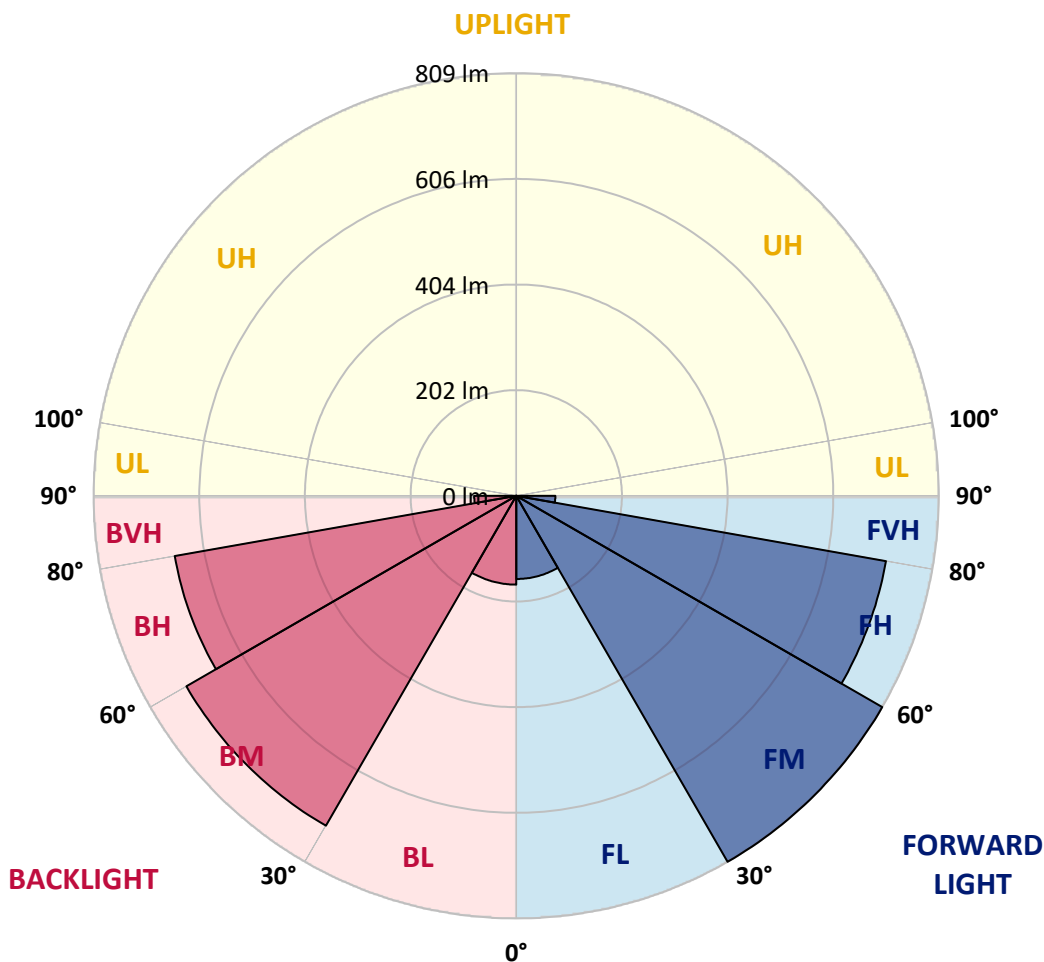


REPORT NUMBER: P472242  
 CATALOG NUMBER: CCW-VA-2-830-U-T2

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	159.1	4.7			
FM (30°-60°)	808.5	23.8			
FH (60°-80°)	718.3	21.1			G1/1800
FVH (80°-90°)	74.8	2.2			G1/100
BL (0°-30°)	170.0	5.0	B1/500		
BM (30°-60°)	728.7	21.4	B1/1000		
BH (60°-80°)	663.4	19.5	B2/1000		G2/1000
BVH (80°-90°)	80.5	2.4			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 II Short





REPORT NUMBER: P472242  
 CATALOG NUMBER: CCW-VA-2-830-U-T2

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	315.4	315.4	315.4	315.4	315.4	315.4	315.4	315.4	315.4	315.4	315.4
2.5°	316.6	316.6	316.6	316.6	317.8	317.8	317.8	317.8	317.8	316.6	316.6
5°	319.0	319.0	319.0	319.0	320.2	320.2	320.2	320.2	321.4	321.4	321.4
7.5°	321.4	321.4	322.6	322.6	323.8	323.8	325.0	325.0	326.2	327.4	327.4
10°	326.2	326.2	327.4	327.4	329.8	331.0	332.2	332.2	334.6	334.6	334.6
12.5°	332.2	333.4	334.6	335.8	338.2	339.4	340.6	341.8	343.0	344.2	344.2
15°	341.8	340.6	343.0	345.4	346.7	349.1	350.3	351.5	353.9	356.3	356.3
17.5°	349.1	350.3	351.5	353.9	356.3	359.9	362.3	364.7	367.1	369.5	369.5
20°	358.7	357.5	362.3	365.9	368.3	373.1	376.7	381.6	384.0	386.4	387.6
22.5°	367.1	368.3	370.7	375.5	380.4	387.6	394.8	398.4	402.0	404.4	408.0
25°	377.9	379.2	382.8	387.6	394.8	403.2	411.6	416.5	420.1	424.9	428.5
27.5°	388.8	388.8	394.8	402.0	410.4	421.3	430.9	435.7	441.7	447.8	450.2
30°	400.8	400.8	406.8	416.5	428.5	440.5	449.0	458.6	467.0	473.0	477.9
32.5°	418.9	418.9	426.1	435.7	449.0	463.4	475.4	485.1	495.9	506.7	516.4
35°	439.3	440.5	450.2	462.2	477.9	495.9	506.7	520.0	532.0	550.1	559.7
37.5°	471.8	473.0	483.9	499.5	515.2	534.4	552.5	568.1	586.2	606.6	613.9
40°	520.0	523.6	534.4	541.6	556.1	570.5	597.0	623.5	654.8	682.5	687.3
42.5°	606.6	603.0	595.8	593.4	597.0	612.7	641.5	682.5	737.8	772.7	772.7
45°	640.3	640.3	641.5	639.1	636.7	647.6	681.3	746.3	824.5	872.6	882.3
47.5°	646.4	647.6	658.4	668.0	670.4	682.5	723.4	808.9	913.6	984.6	990.6
50°	646.4	648.8	663.2	680.1	692.1	709.0	759.5	864.2	1001.4	1083.3	1098.9
52.5°	644.0	646.4	662.0	682.5	701.7	725.8	790.8	922.0	1079.7	1190.4	1197.6
55°	637.9	640.3	659.6	681.3	702.9	735.4	816.1	971.3	1155.5	1279.5	1292.7
57.5°	630.7	634.3	654.8	677.7	698.1	737.8	832.9	1009.9	1216.9	1358.9	1383.0
60°	616.3	622.3	645.2	668.0	687.3	729.4	841.4	1040.0	1262.6	1416.7	1440.8
62.5°	587.4	593.4	618.7	644.0	663.2	709.0	836.5	1054.4	1289.1	1452.8	1478.1
65°	551.3	553.7	581.4	607.8	627.1	675.3	816.1	1052.0	1295.1	1464.8	1493.7
66°	533.2	534.4	566.9	592.2	607.8	660.8	804.0	1043.6	1291.5	1463.6	1493.7
67.5°	500.7	506.7	534.4	560.9	579.0	628.3	775.2	1024.3	1277.1	1451.6	1482.9
70°	444.1	449.0	471.8	498.3	517.6	564.5	712.6	967.7	1224.1	1402.3	1438.4
72.5°	382.8	386.4	410.4	429.7	441.7	492.3	636.7	875.1	1131.4	1309.6	1344.5
75°	317.8	320.2	341.8	355.1	365.9	410.4	535.6	755.9	985.8	1159.1	1204.9
77.5°	250.4	251.6	269.6	281.7	281.7	320.2	424.9	612.7	808.9	968.9	1002.6
80°	184.2	183.0	193.8	199.8	203.4	228.7	305.7	450.2	616.3	741.5	774.0
82.5°	120.4	119.2	126.4	128.8	128.8	144.4	192.6	285.3	404.4	503.1	522.4
85°	63.8	66.2	65.0	65.0	65.0	71.0	96.3	149.3	215.5	269.6	282.9
87.5°	10.8	10.8	10.8	12.0	14.4	19.3	25.3	42.1	61.4	83.1	93.9
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: P472242  
 CATALOG NUMBER: CCW-VA-2-830-U-T2

**CANDELA DISTRIBUTION (continued):**

	91°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	315.4	315.4	315.4	315.4	315.4	315.4	315.4	315.4	315.4	315.4	315.4
2.5°	316.6	317.8	317.8	317.8	317.8	317.8	317.8	317.8	317.8	317.8	317.8
5°	321.4	321.4	321.4	322.6	322.6	322.6	322.6	322.6	322.6	322.6	322.6
7.5°	327.4	327.4	328.6	328.6	328.6	329.8	329.8	328.6	328.6	328.6	328.6
10°	334.6	334.6	335.8	337.0	337.0	338.2	338.2	337.0	337.0	335.8	335.8
12.5°	344.2	345.4	346.7	347.9	349.1	349.1	347.9	346.7	345.4	344.2	344.2
15°	356.3	357.5	358.7	361.1	361.1	361.1	359.9	358.7	356.3	355.1	356.3
17.5°	370.7	371.9	374.3	375.5	376.7	375.5	375.5	374.3	374.3	373.1	373.1
20°	388.8	390.0	393.6	394.8	394.8	396.0	399.6	402.0	405.6	406.8	406.8
22.5°	406.8	409.2	412.9	417.7	420.1	424.9	426.1	428.5	427.3	423.7	423.7
25°	428.5	430.9	438.1	444.1	449.0	451.4	449.0	445.4	439.3	434.5	433.3
27.5°	451.4	455.0	465.8	474.2	476.6	474.2	464.6	456.2	449.0	442.9	440.5
30°	480.3	486.3	498.3	503.1	501.9	492.3	477.9	467.0	456.2	449.0	447.8
32.5°	516.4	522.4	533.2	534.4	527.2	509.1	489.9	475.4	462.2	453.8	452.6
35°	559.7	565.7	571.7	568.1	547.7	524.8	500.7	480.3	467.0	457.4	457.4
37.5°	615.1	618.7	618.7	600.6	569.3	539.2	509.1	485.1	470.6	461.0	459.8
40°	687.3	686.1	669.2	634.3	593.4	552.5	515.2	489.9	471.8	462.2	461.0
42.5°	774.0	765.5	729.4	672.8	616.3	564.5	522.4	491.1	470.6	461.0	459.8
45°	879.9	865.4	800.4	717.4	640.3	575.3	526.0	489.9	467.0	456.2	455.0
47.5°	984.6	976.2	887.1	764.3	664.4	587.4	528.4	486.3	459.8	444.1	444.1
50°	1095.3	1074.9	973.8	820.9	689.7	595.8	528.4	480.3	447.8	430.9	428.5
52.5°	1202.5	1182.0	1061.6	877.5	717.4	604.2	526.0	471.8	436.9	418.9	416.5
55°	1293.9	1277.1	1147.1	941.3	746.3	610.3	522.4	462.2	426.1	409.2	406.8
57.5°	1378.2	1361.3	1221.7	995.4	774.0	613.9	514.0	450.2	412.9	396.0	394.8
60°	1439.6	1426.3	1285.5	1046.0	796.8	613.9	501.9	435.7	398.4	381.6	380.4
62.5°	1480.5	1467.3	1331.2	1079.7	811.3	605.4	483.9	416.5	380.4	364.7	361.1
65°	1496.1	1484.1	1351.7	1092.9	808.9	588.6	459.8	392.4	357.5	341.8	339.4
66°	1497.3	1484.1	1351.7	1090.5	802.8	579.0	449.0	381.6	347.9	332.2	329.8
67.5°	1487.7	1475.7	1343.3	1078.5	786.0	560.9	427.3	363.5	329.8	314.2	313.0
70°	1443.2	1433.6	1297.5	1032.7	746.3	521.2	391.2	328.6	296.1	285.3	281.7
72.5°	1346.9	1336.1	1206.1	947.3	681.3	467.0	345.4	287.7	261.2	248.0	246.7
75°	1197.6	1192.8	1066.4	834.1	587.4	402.0	292.5	243.1	221.5	211.8	211.8
77.5°	1002.6	993.0	885.9	689.7	482.7	325.0	234.7	197.4	180.5	172.1	173.3
80°	780.0	772.7	682.5	517.6	364.7	244.3	175.7	150.5	138.4	133.6	131.2
82.5°	534.4	515.2	455.0	343.0	237.1	164.9	121.6	104.7	98.7	97.5	96.3
85°	278.0	285.3	239.5	181.8	128.8	91.5	73.4	67.4	65.0	66.2	66.2
87.5°	91.5	93.9	72.2	55.4	42.1	32.5	27.7	26.5	22.9	25.3	26.5
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)