

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: P472243

Luminaire Tested: **CCW-VA-3-830-U-T2**

Issue Date: 01/27/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P472243  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 01/27/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: CCW-VA-3-830-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: 4024.7 lumens  
Efficiency: N/A  
Efficacy: 83.3 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.54' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G2

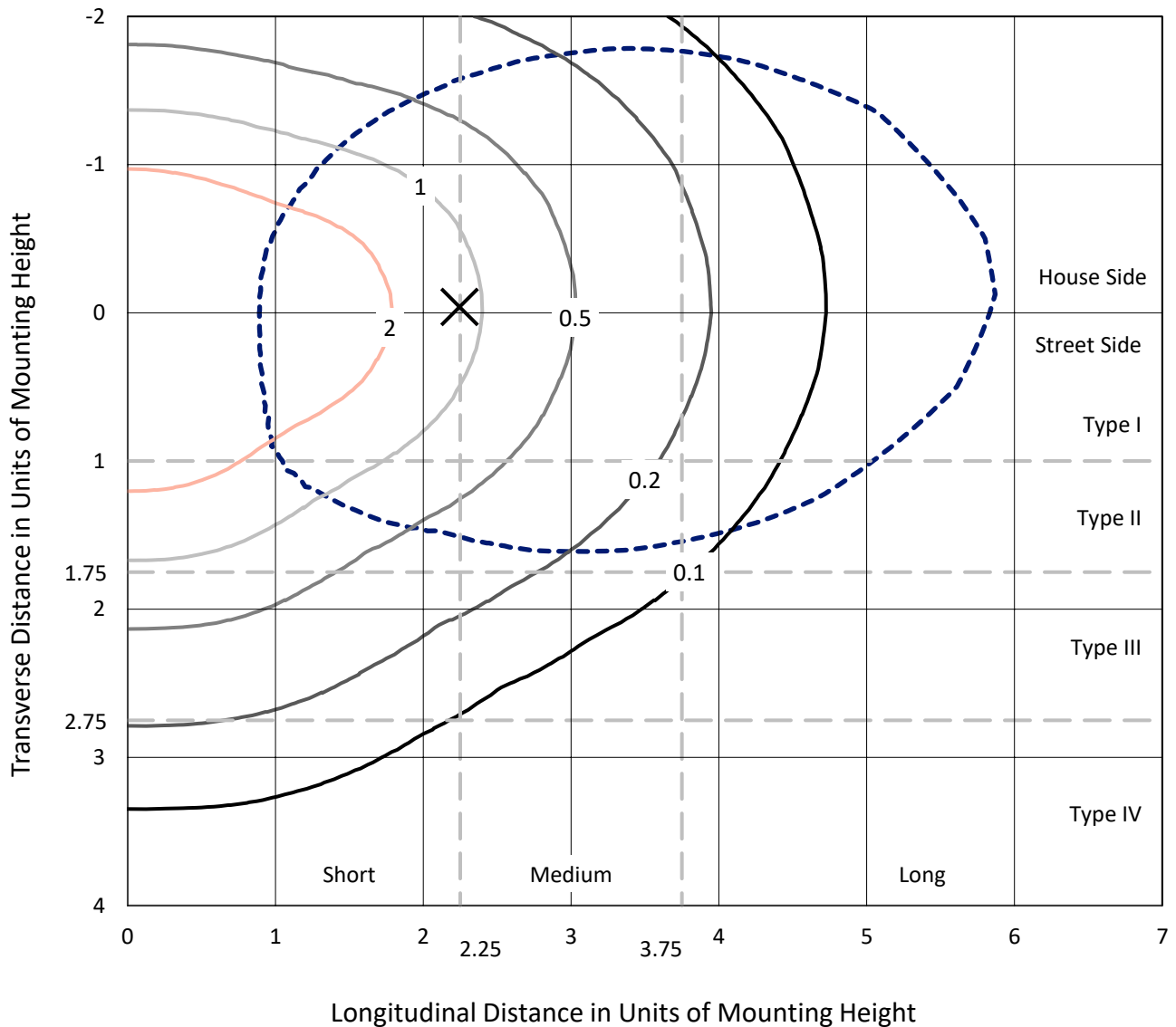
Input Watts (W): 48.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

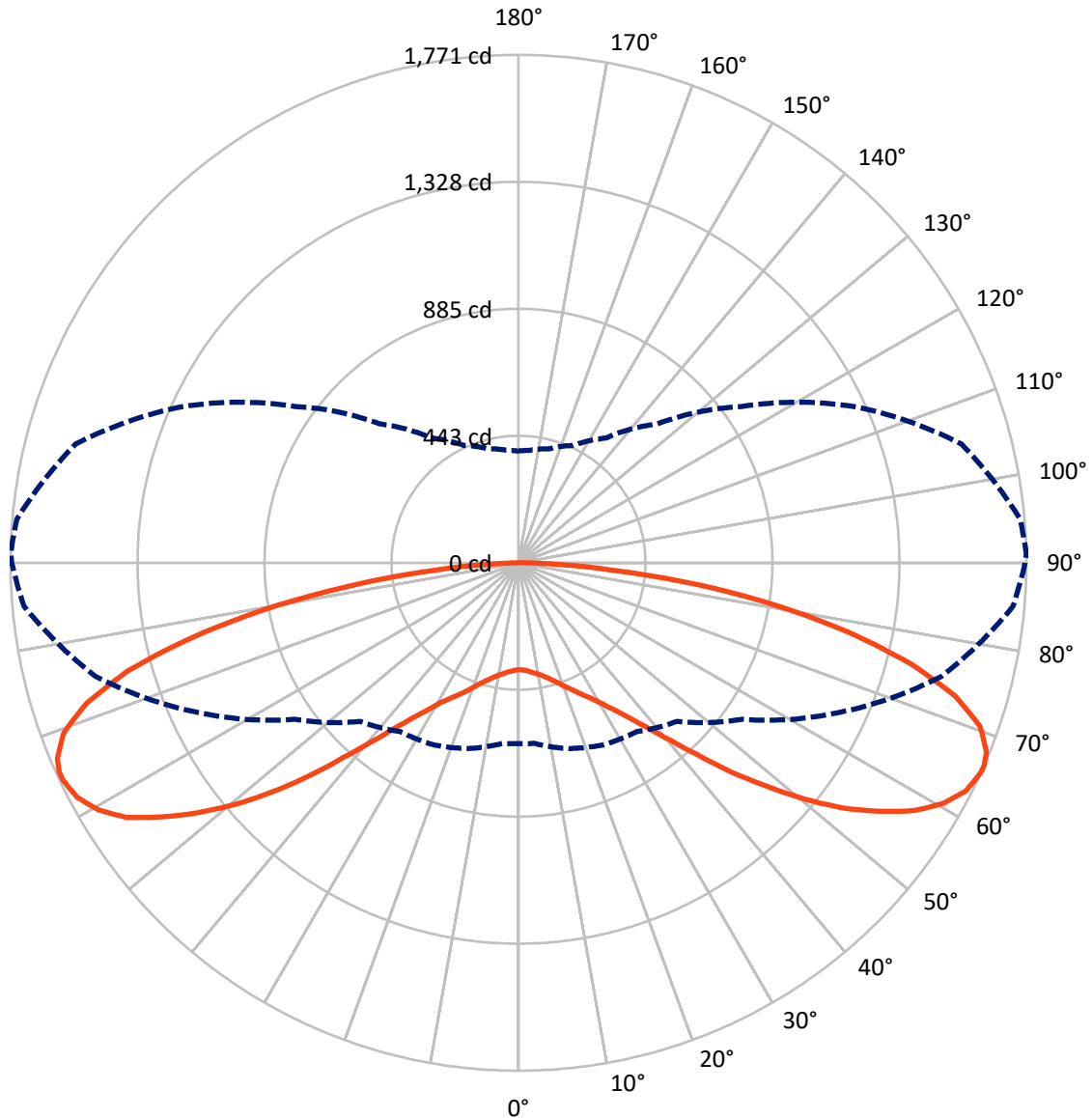
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 4 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



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

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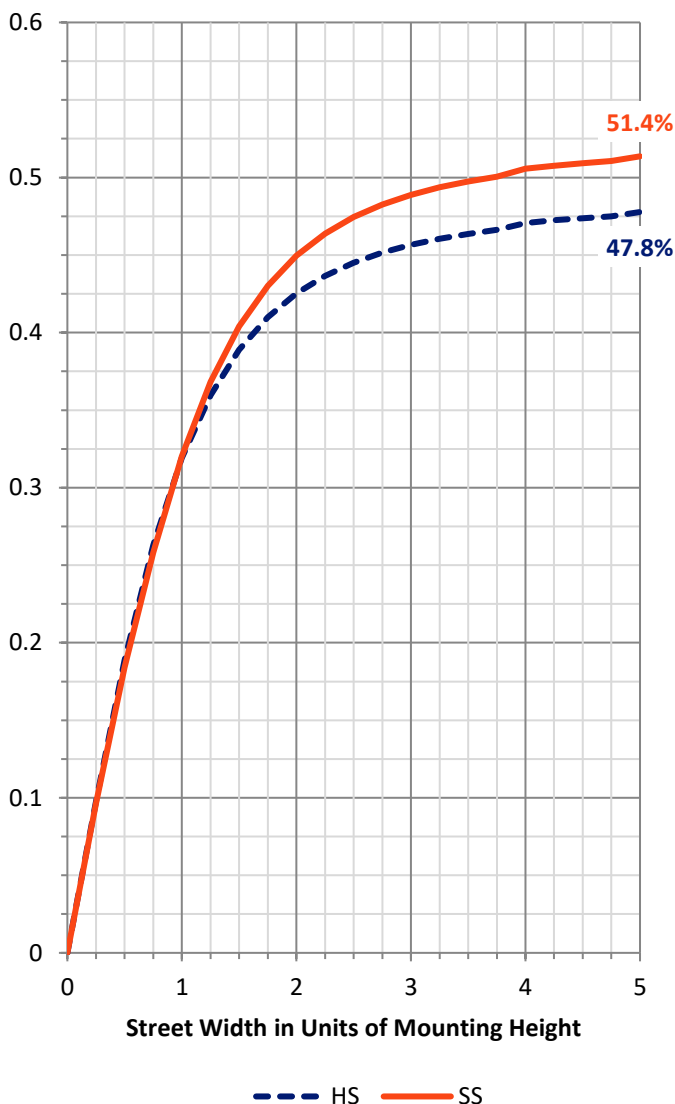
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1942.5	0.0	1942.5
	% Fixture	48.3	0.0	48.3
<b>Street Side</b>	Lumens	2082.2	0.0	2082.2
	% Fixture	51.7	0.0	51.7
<b>Total</b>	Lumens	4024.7	0.0	4024.7
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	36.7	0.9
10°-20°	120.1	3.0
20°-30°	232.4	5.8
30°-40°	381.3	9.5
40°-50°	603.9	15.0
50°-60°	832.7	20.7
60°-70°	935.1	23.2
70°-80°	698.9	17.4
80°-90°	183.6	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°	4024.7	100.0
0°-180°	4024.7	100.0

**Coefficient of Utilization**

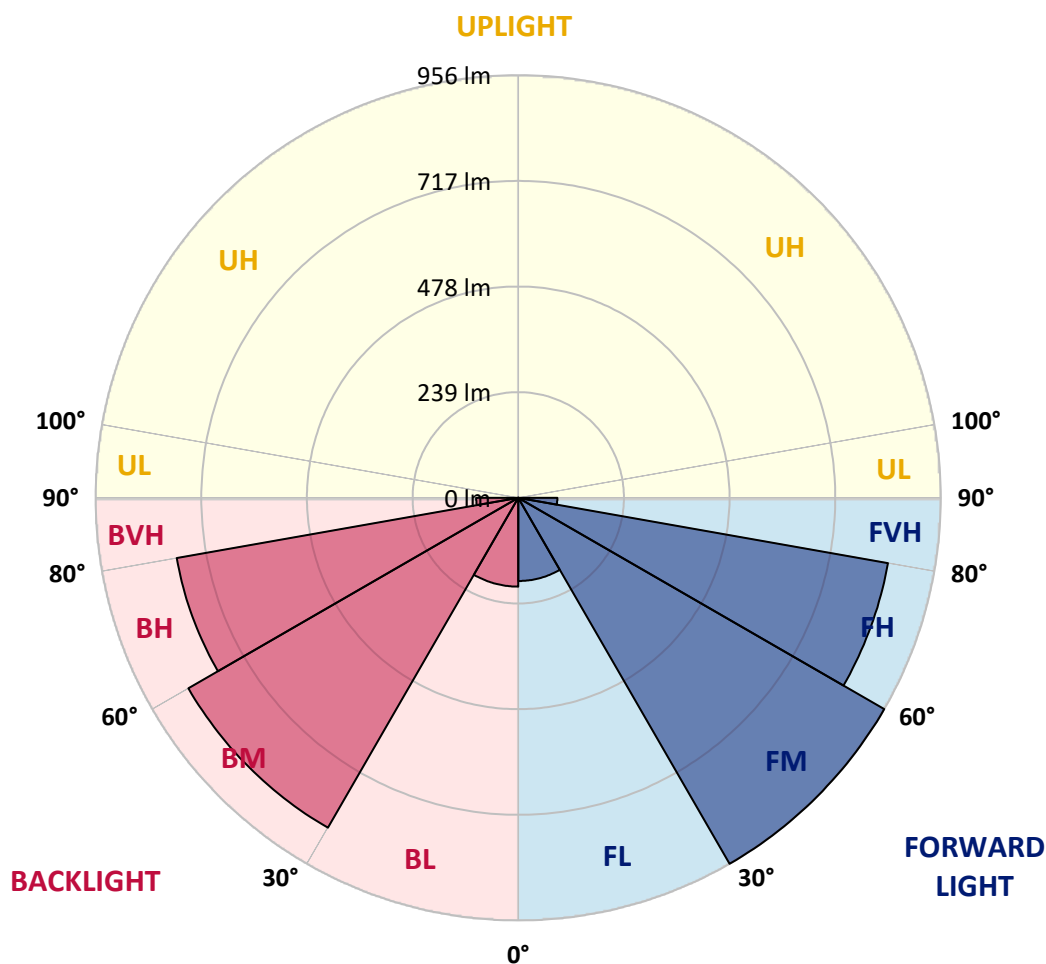


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	188.2	4.7			
FM (30°-60°)	956.1	23.8			
FH (60°-80°)	849.4	21.1			G1/1800
FVH (80°-90°)	88.4	2.2			G1/100
BL (0°-30°)	201.0	5.0	B1/500		
BM (30°-60°)	861.7	21.4	B1/1000		
BH (60°-80°)	784.6	19.5	B2/1000		G2/1000
BVH (80°-90°)	95.2	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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	372.9	372.9	372.9	372.9	372.9	372.9	372.9	372.9	372.9	372.9	372.9
2.5°	374.4	374.4	374.4	374.4	375.8	375.8	375.8	375.8	375.8	374.4	374.4
5°	377.2	377.2	377.2	377.2	378.6	378.6	378.6	378.6	380.0	380.0	380.0
7.5°	380.0	380.0	381.5	381.5	382.9	382.9	384.3	384.3	385.7	387.2	387.2
10°	385.7	385.7	387.2	387.2	390.0	391.4	392.9	392.9	395.7	395.7	395.7
12.5°	392.9	394.3	395.7	397.1	400.0	401.4	402.8	404.2	405.7	407.1	407.1
15°	404.2	402.8	405.7	408.5	409.9	412.8	414.2	415.6	418.5	421.3	421.3
17.5°	412.8	414.2	415.6	418.5	421.3	425.6	428.4	431.3	434.1	437.0	437.0
20°	424.2	422.8	428.4	432.7	435.6	441.3	445.5	451.2	454.1	456.9	458.3
22.5°	434.1	435.6	438.4	444.1	449.8	458.3	466.9	471.1	475.4	478.3	482.5
25°	447.0	448.4	452.6	458.3	466.9	476.8	486.8	492.5	496.8	502.5	506.7
27.5°	459.8	459.8	466.9	475.4	485.4	498.2	509.6	515.3	522.4	529.5	532.4
30°	474.0	474.0	481.1	492.5	506.7	521.0	530.9	542.3	552.3	559.4	565.1
32.5°	495.3	495.3	503.9	515.3	530.9	548.0	562.2	573.6	586.4	599.3	610.6
35°	519.5	521.0	532.4	546.6	565.1	586.4	599.3	614.9	629.1	650.5	661.9
37.5°	558.0	559.4	572.2	590.7	609.2	632.0	653.3	671.8	693.2	717.4	725.9
40°	614.9	619.2	632.0	640.5	657.6	674.7	706.0	737.3	774.3	807.1	812.8
42.5°	717.4	713.1	704.6	701.7	706.0	724.5	758.7	807.1	872.5	913.8	913.8
45°	757.3	757.3	758.7	755.8	753.0	765.8	805.6	882.5	975.0	1032.0	1043.4
47.5°	764.4	765.8	778.6	790.0	792.8	807.1	855.5	956.5	1080.4	1164.3	1171.5
50°	764.4	767.2	784.3	804.2	818.5	838.4	898.2	1022.0	1184.3	1281.1	1299.6
52.5°	761.5	764.4	782.9	807.1	829.8	858.3	935.2	1090.3	1276.8	1407.8	1416.3
55°	754.4	757.3	780.0	805.6	831.3	869.7	965.1	1148.7	1366.5	1513.1	1528.7
57.5°	745.9	750.1	774.3	801.4	825.6	872.5	985.0	1194.2	1439.1	1607.0	1635.5
60°	728.8	735.9	762.9	790.0	812.8	862.6	995.0	1229.8	1493.2	1675.4	1703.8
62.5°	694.6	701.7	731.6	761.5	784.3	838.4	989.3	1246.9	1524.5	1718.1	1747.9
65°	651.9	654.8	687.5	718.8	741.6	798.5	965.1	1244.1	1531.6	1732.3	1766.4
66°	630.6	632.0	670.4	700.3	718.8	781.5	950.8	1234.1	1527.3	1730.9	1766.4
67.5°	592.1	599.3	632.0	663.3	684.7	743.0	916.7	1211.3	1510.2	1716.6	1753.6
70°	525.2	530.9	558.0	589.3	612.1	667.6	842.7	1144.4	1447.6	1658.3	1701.0
72.5°	452.6	456.9	485.4	508.2	522.4	582.2	753.0	1034.8	1338.0	1548.7	1589.9
75°	375.8	378.6	404.2	419.9	432.7	485.4	633.4	893.9	1165.8	1370.7	1424.8
77.5°	296.1	297.5	318.8	333.1	333.1	378.6	502.5	724.5	956.5	1145.8	1185.7
80°	217.8	216.4	229.2	236.3	240.6	270.4	361.5	532.4	728.8	876.8	915.3
82.5°	142.3	140.9	149.5	152.3	152.3	170.8	227.7	337.3	478.3	595.0	617.8
85°	75.4	78.3	76.9	76.9	76.9	84.0	113.9	176.5	254.8	318.8	334.5
87.5°	12.8	12.8	12.8	14.2	17.1	22.8	29.9	49.8	72.6	98.2	111.0
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):**

	91°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	372.9	372.9	372.9	372.9	372.9	372.9	372.9	372.9	372.9	372.9	372.9
2.5°	374.4	375.8	375.8	375.8	375.8	375.8	375.8	375.8	375.8	375.8	375.8
5°	380.0	380.0	380.0	381.5	381.5	381.5	381.5	381.5	381.5	381.5	381.5
7.5°	387.2	387.2	388.6	388.6	388.6	390.0	390.0	388.6	388.6	388.6	388.6
10°	395.7	395.7	397.1	398.6	398.6	400.0	400.0	398.6	398.6	397.1	397.1
12.5°	407.1	408.5	409.9	411.4	412.8	412.8	411.4	409.9	408.5	407.1	407.1
15°	421.3	422.8	424.2	427.0	427.0	427.0	425.6	424.2	421.3	419.9	421.3
17.5°	438.4	439.8	442.7	444.1	445.5	444.1	444.1	442.7	442.7	441.3	441.3
20°	459.8	461.2	465.5	466.9	466.9	468.3	472.6	475.4	479.7	481.1	481.1
22.5°	481.1	484.0	488.2	493.9	496.8	502.5	503.9	506.7	505.3	501.0	501.0
25°	506.7	509.6	518.1	525.2	530.9	533.8	530.9	526.7	519.5	513.9	512.4
27.5°	533.8	538.0	550.9	560.8	563.7	560.8	549.4	539.5	530.9	523.8	521.0
30°	567.9	575.1	589.3	595.0	593.6	582.2	565.1	552.3	539.5	530.9	529.5
32.5°	610.6	617.8	630.6	632.0	623.5	602.1	579.3	562.2	546.6	536.6	535.2
35°	661.9	669.0	676.1	671.8	647.7	620.6	592.1	567.9	552.3	540.9	540.9
37.5°	727.4	731.6	731.6	710.3	673.3	637.7	602.1	573.6	556.6	545.2	543.7
40°	812.8	811.3	791.4	750.1	701.7	653.3	609.2	579.3	558.0	546.6	545.2
42.5°	915.3	905.3	862.6	795.7	728.8	667.6	617.8	580.8	556.6	545.2	543.7
45°	1040.5	1023.4	946.6	848.4	757.3	680.4	622.0	579.3	552.3	539.5	538.0
47.5°	1164.3	1154.4	1049.1	903.9	785.7	694.6	624.9	575.1	543.7	525.2	525.2
50°	1295.3	1271.1	1151.5	970.8	815.6	704.6	624.9	567.9	529.5	509.6	506.7
52.5°	1422.0	1397.8	1255.4	1037.7	848.4	714.6	622.0	558.0	516.7	495.3	492.5
55°	1530.2	1510.2	1356.5	1113.1	882.5	721.7	617.8	546.6	503.9	484.0	481.1
57.5°	1629.8	1609.9	1444.8	1177.2	915.3	725.9	607.8	532.4	488.2	468.3	466.9
60°	1702.4	1686.7	1520.2	1236.9	942.3	725.9	593.6	515.3	471.1	451.2	449.8
62.5°	1750.8	1735.1	1574.3	1276.8	959.4	716.0	572.2	492.5	449.8	431.3	427.0
65°	1769.3	1755.1	1598.5	1292.5	956.5	696.0	543.7	464.0	422.8	404.2	401.4
66°	1770.7	1755.1	1598.5	1289.6	949.4	684.7	530.9	451.2	411.4	392.9	390.0
67.5°	1759.3	1745.1	1588.5	1275.4	929.5	663.3	505.3	429.9	390.0	371.5	370.1
70°	1706.7	1695.3	1534.4	1221.3	882.5	616.3	462.6	388.6	350.2	337.3	333.1
72.5°	1592.8	1580.0	1426.3	1120.2	805.6	552.3	408.5	340.2	308.9	293.2	291.8
75°	1416.3	1410.6	1261.1	986.4	694.6	475.4	345.9	287.5	261.9	250.5	250.5
77.5°	1185.7	1174.3	1047.6	815.6	570.8	384.3	277.6	233.4	213.5	203.5	205.0
80°	922.4	913.8	807.1	612.1	431.3	289.0	207.8	177.9	163.7	158.0	155.2
82.5°	632.0	609.2	538.0	405.7	280.4	195.0	143.8	123.8	116.7	115.3	113.9
85°	328.8	337.3	283.3	214.9	152.3	108.2	86.8	79.7	76.9	78.3	78.3
87.5°	108.2	111.0	85.4	65.5	49.8	38.4	32.7	31.3	27.0	29.9	31.3
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)