

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: P472253

Luminaire Tested: **CCW-VA-1-850-U-T2**

Issue Date: 01/27/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P472253  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 01/27/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: CCW-VA-1-850-U-T2  
Description: INVUE WALL PACK Wave Stream LUMINAIRE WITH T2 DISTRIBUTION LENS  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2711.4 lumens  
Efficiency: N/A  
Efficacy: 91.0 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.54' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G2

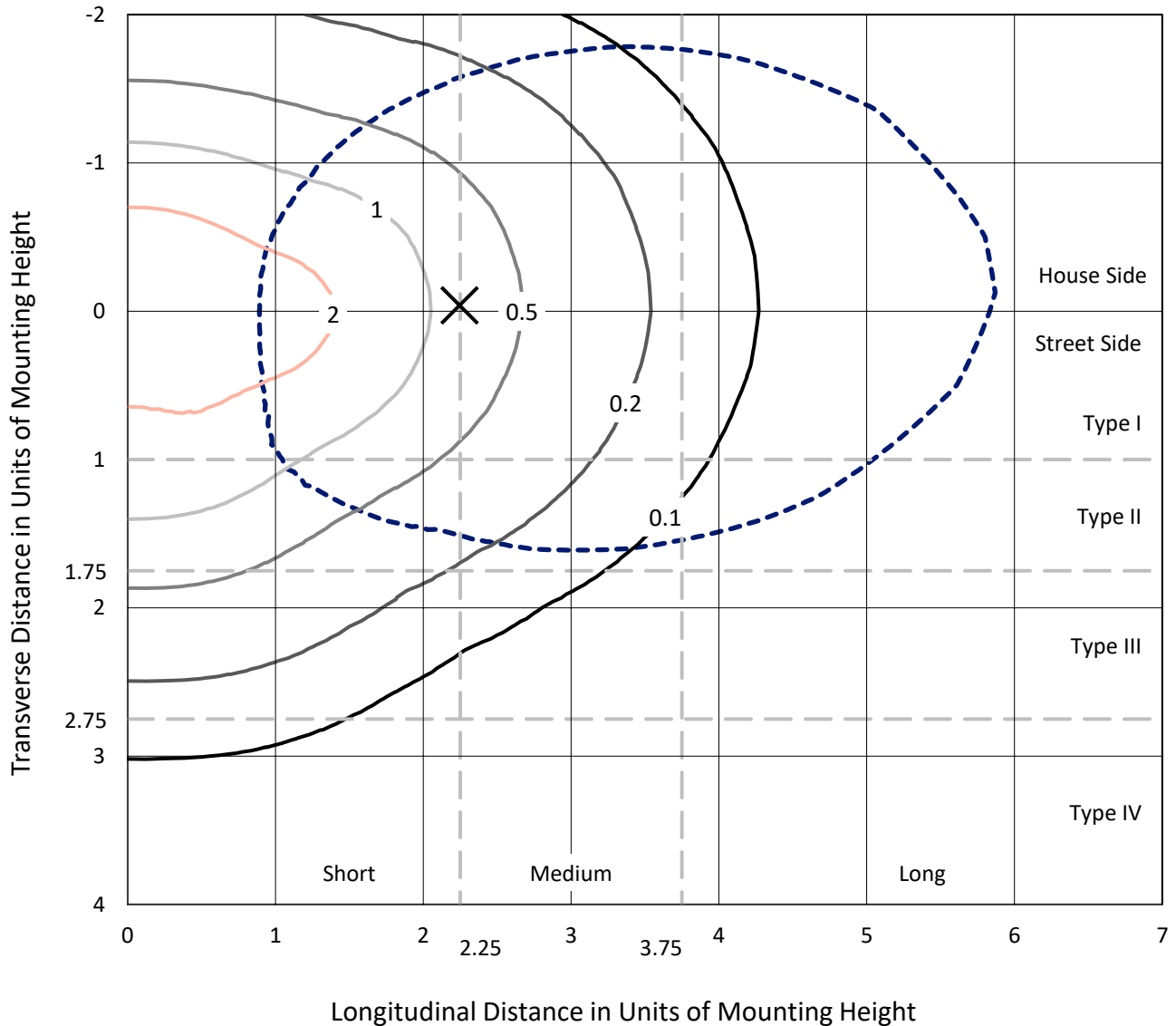
Input Watts (W): 29.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

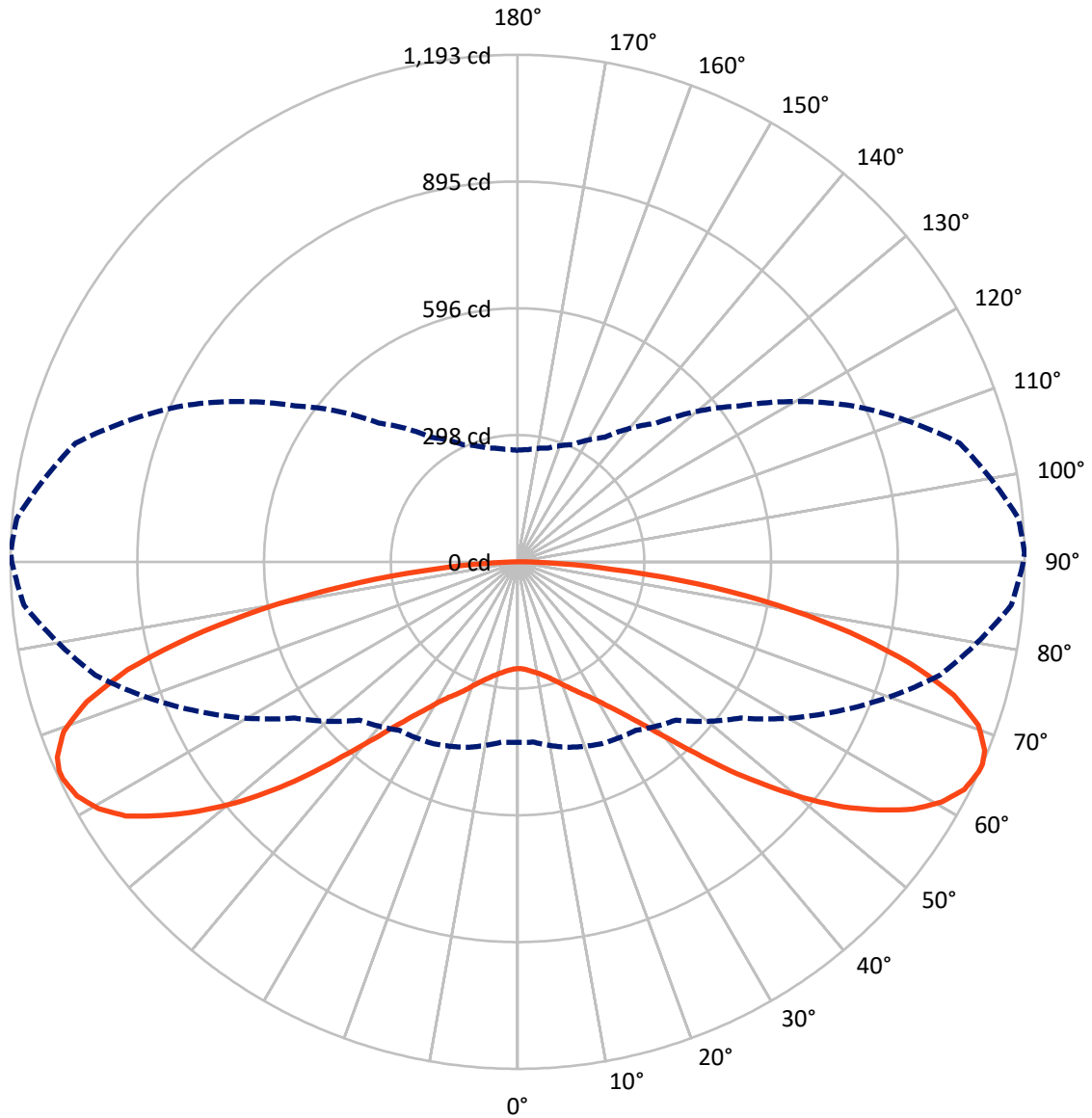
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 2.7 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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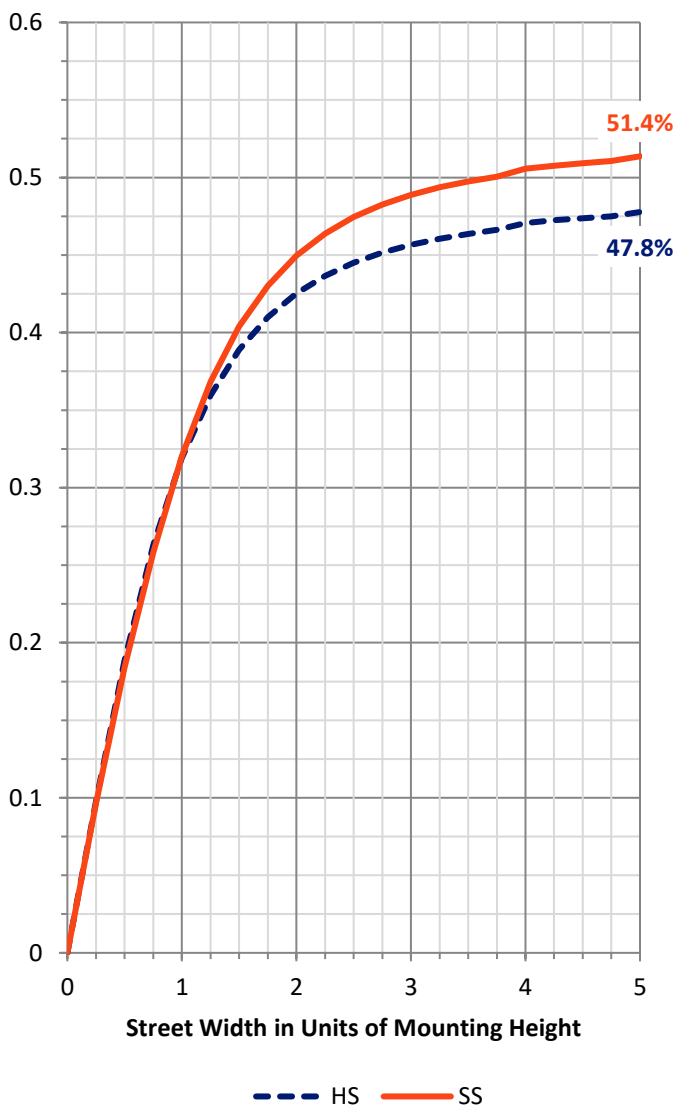
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1308.7	0.0	1308.7
	% Fixture	48.3	0.0	48.3
<b>Street Side</b>	Lumens	1402.7	0.0	1402.7
	% Fixture	51.7	0.0	51.7
<b>Total</b>	Lumens	2711.4	0.0	2711.4
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	24.7	0.9
10°-20°	80.9	3.0
20°-30°	156.5	5.8
30°-40°	256.9	9.5
40°-50°	406.8	15.0
50°-60°	561.0	20.7
60°-70°	630.0	23.2
70°-80°	470.8	17.4
80°-90°	123.7	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°	2711.4	100.0
0°-180°	2711.4	100.0

**Coefficient of Utilization**

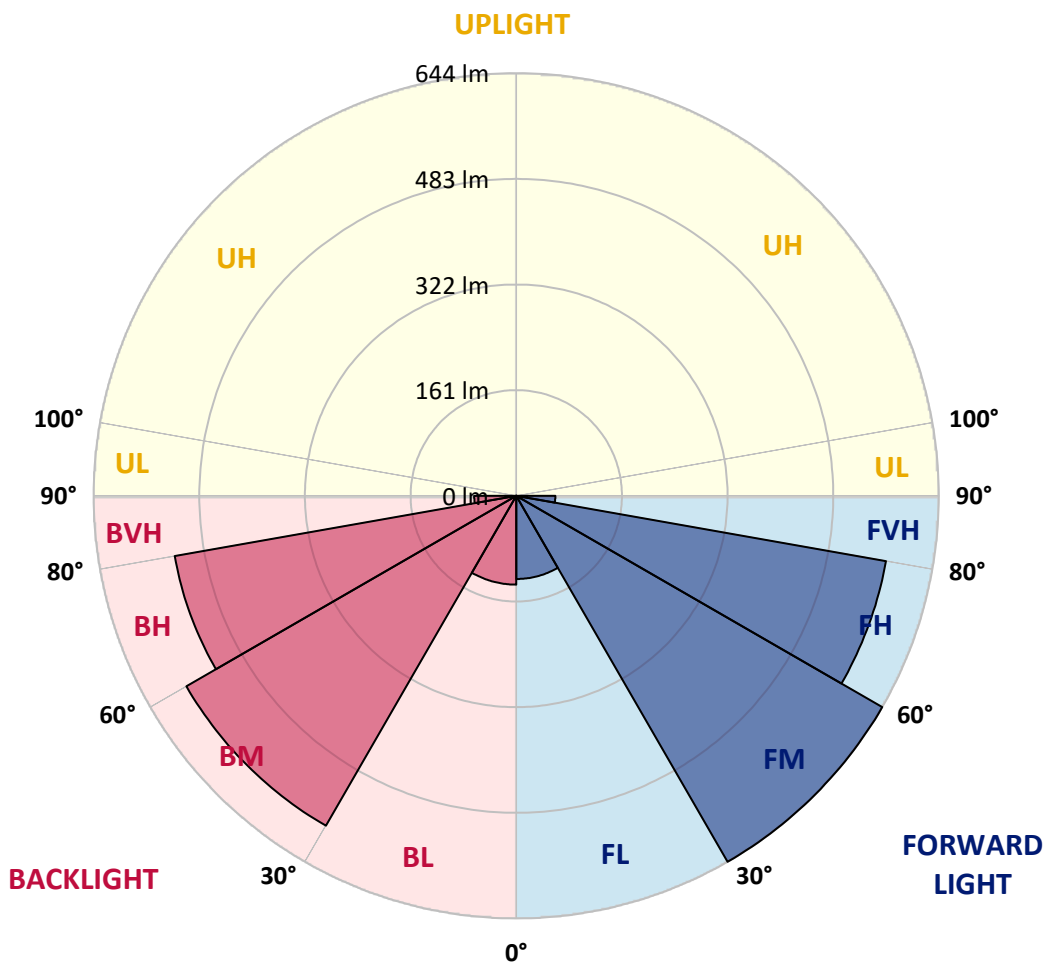


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	126.8	4.7			
FM (30°-60°)	644.1	23.8			
FH (60°-80°)	572.2	21.1			G0/660
FVH (80°-90°)	59.6	2.2			G1/100
BL (0°-30°)	135.4	5.0	B1/500		
BM (30°-60°)	580.5	21.4	B1/1000		
BH (60°-80°)	528.6	19.5	B2/1000		G2/1000
BVH (80°-90°)	64.1	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°	251.2	251.2	251.2	251.2	251.2	251.2	251.2	251.2	251.2	251.2	251.2
2.5°	252.2	252.2	252.2	252.2	253.2	253.2	253.2	253.2	253.2	252.2	252.2
5°	254.1	254.1	254.1	254.1	255.1	255.1	255.1	255.1	256.0	256.0	256.0
7.5°	256.0	256.0	257.0	257.0	258.0	258.0	258.9	258.9	259.9	260.8	260.8
10°	259.9	259.9	260.8	260.8	262.7	263.7	264.7	264.7	266.6	266.6	266.6
12.5°	264.7	265.6	266.6	267.5	269.5	270.4	271.4	272.3	273.3	274.3	274.3
15°	272.3	271.4	273.3	275.2	276.2	278.1	279.0	280.0	281.9	283.8	283.8
17.5°	278.1	279.0	280.0	281.9	283.8	286.7	288.6	290.6	292.5	294.4	294.4
20°	285.8	284.8	288.6	291.5	293.4	297.3	300.1	304.0	305.9	307.8	308.8
22.5°	292.5	293.4	295.4	299.2	303.0	308.8	314.5	317.4	320.3	322.2	325.1
25°	301.1	302.1	304.9	308.8	314.5	321.2	328.0	331.8	334.7	338.5	341.4
27.5°	309.7	309.7	314.5	320.3	327.0	335.6	343.3	347.1	351.9	356.7	358.6
30°	319.3	319.3	324.1	331.8	341.4	351.0	357.7	365.4	372.1	376.9	380.7
32.5°	333.7	333.7	339.5	347.1	357.7	369.2	378.8	386.4	395.1	403.7	411.4
35°	350.0	351.0	358.6	368.2	380.7	395.1	403.7	414.3	423.8	438.2	445.9
37.5°	375.9	376.9	385.5	398.0	410.4	425.8	440.1	452.6	467.0	483.3	489.1
40°	414.3	417.1	425.8	431.5	443.0	454.5	475.6	496.7	521.7	543.7	547.5
42.5°	483.3	480.4	474.7	472.8	475.6	488.1	511.1	543.7	587.8	615.6	615.6
45°	510.2	510.2	511.1	509.2	507.3	515.9	542.8	594.5	656.9	695.2	702.9
47.5°	514.9	515.9	524.5	532.2	534.1	543.7	576.3	644.4	727.8	784.4	789.2
50°	514.9	516.9	528.4	541.8	551.4	564.8	605.1	688.5	797.8	863.0	875.5
52.5°	513.0	514.9	527.4	543.7	559.1	578.2	630.0	734.5	860.2	948.4	954.1
55°	508.2	510.2	525.5	542.8	560.0	585.9	650.2	773.9	920.6	1019.3	1029.9
57.5°	502.5	505.4	521.7	539.9	556.2	587.8	663.6	804.5	969.5	1082.6	1101.8
60°	491.0	495.8	514.0	532.2	547.5	581.1	670.3	828.5	1005.9	1128.7	1147.8
62.5°	468.0	472.8	492.9	513.0	528.4	564.8	666.5	840.0	1027.0	1157.4	1177.6
65°	439.2	441.1	463.2	484.3	499.6	538.0	650.2	838.1	1031.8	1167.0	1190.0
66°	424.8	425.8	451.7	471.8	484.3	526.5	640.6	831.4	1028.9	1166.1	1190.0
67.5°	398.9	403.7	425.8	446.9	461.2	500.6	617.6	816.1	1017.4	1156.5	1181.4
70°	353.8	357.7	375.9	397.0	412.3	449.7	567.7	771.0	975.2	1117.2	1145.9
72.5°	304.9	307.8	327.0	342.3	351.9	392.2	507.3	697.1	901.4	1043.3	1071.1
75°	253.2	255.1	272.3	282.9	291.5	327.0	426.7	602.2	785.4	923.5	959.9
77.5°	199.5	200.4	214.8	224.4	224.4	255.1	338.5	488.1	644.4	771.9	798.8
80°	146.7	145.8	154.4	159.2	162.1	182.2	243.6	358.6	491.0	590.7	616.6
82.5°	95.9	94.9	100.7	102.6	102.6	115.1	153.4	227.3	322.2	400.8	416.2
85°	50.8	52.7	51.8	51.8	51.8	56.6	76.7	118.9	171.6	214.8	225.3
87.5°	8.6	8.6	8.6	9.6	11.5	15.3	20.1	33.6	48.9	66.2	74.8
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°	251.2	251.2	251.2	251.2	251.2	251.2	251.2	251.2	251.2	251.2	251.2
2.5°	252.2	253.2	253.2	253.2	253.2	253.2	253.2	253.2	253.2	253.2	253.2
5°	256.0	256.0	256.0	257.0	257.0	257.0	257.0	257.0	257.0	257.0	257.0
7.5°	260.8	260.8	261.8	261.8	261.8	262.7	262.7	261.8	261.8	261.8	261.8
10°	266.6	266.6	267.5	268.5	268.5	269.5	269.5	268.5	268.5	267.5	267.5
12.5°	274.3	275.2	276.2	277.1	278.1	278.1	277.1	276.2	275.2	274.3	274.3
15°	283.8	284.8	285.8	287.7	287.7	287.7	286.7	285.8	283.8	282.9	283.8
17.5°	295.4	296.3	298.2	299.2	300.1	299.2	299.2	298.2	298.2	297.3	297.3
20°	309.7	310.7	313.6	314.5	314.5	315.5	318.4	320.3	323.2	324.1	324.1
22.5°	324.1	326.0	328.9	332.7	334.7	338.5	339.5	341.4	340.4	337.5	337.5
25°	341.4	343.3	349.1	353.8	357.7	359.6	357.7	354.8	350.0	346.2	345.2
27.5°	359.6	362.5	371.1	377.8	379.7	377.8	370.1	363.4	357.7	352.9	351.0
30°	382.6	387.4	397.0	400.8	399.9	392.2	380.7	372.1	363.4	357.7	356.7
32.5°	411.4	416.2	424.8	425.8	420.0	405.6	390.3	378.8	368.2	361.5	360.6
35°	445.9	450.7	455.5	452.6	436.3	418.1	398.9	382.6	372.1	364.4	364.4
37.5°	490.0	492.9	492.9	478.5	453.6	429.6	405.6	386.4	374.9	367.3	366.3
40°	547.5	546.6	533.2	505.4	472.8	440.1	410.4	390.3	375.9	368.2	367.3
42.5°	616.6	609.9	581.1	536.0	491.0	449.7	416.2	391.2	374.9	367.3	366.3
45°	701.0	689.5	637.7	571.5	510.2	458.4	419.1	390.3	372.1	363.4	362.5
47.5°	784.4	777.7	706.7	608.9	529.3	468.0	421.0	387.4	366.3	353.8	353.8
50°	872.6	856.3	775.8	654.0	549.5	474.7	421.0	382.6	356.7	343.3	341.4
52.5°	958.0	941.7	845.8	699.1	571.5	481.4	419.1	375.9	348.1	333.7	331.8
55°	1030.9	1017.4	913.9	749.9	594.5	486.2	416.2	368.2	339.5	326.0	324.1
57.5°	1098.0	1084.6	973.3	793.0	616.6	489.1	409.5	358.6	328.9	315.5	314.5
60°	1146.9	1136.3	1024.1	833.3	634.8	489.1	399.9	347.1	317.4	304.0	303.0
62.5°	1179.5	1168.9	1060.6	860.2	646.3	482.3	385.5	331.8	303.0	290.6	287.7
65°	1192.0	1182.4	1076.9	870.7	644.4	468.9	366.3	312.6	284.8	272.3	270.4
66°	1192.9	1182.4	1076.9	868.8	639.6	461.2	357.7	304.0	277.1	264.7	262.7
67.5°	1185.2	1175.6	1070.2	859.2	626.2	446.9	340.4	289.6	262.7	250.3	249.3
70°	1149.8	1142.1	1033.7	822.8	594.5	415.2	311.7	261.8	235.9	227.3	224.4
72.5°	1073.0	1064.4	960.8	754.7	542.8	372.1	275.2	229.2	208.1	197.5	196.6
75°	954.1	950.3	849.6	664.5	468.0	320.3	233.0	193.7	176.4	168.8	168.8
77.5°	798.8	791.1	705.8	549.5	384.5	258.9	187.0	157.3	143.8	137.1	138.1
80°	621.4	615.6	543.7	412.3	290.6	194.7	140.0	119.9	110.3	106.4	104.5
82.5°	425.8	410.4	362.5	273.3	188.9	131.4	96.9	83.4	78.6	77.7	76.7
85°	221.5	227.3	190.8	144.8	102.6	72.9	58.5	53.7	51.8	52.7	52.7
87.5°	72.9	74.8	57.5	44.1	33.6	25.9	22.1	21.1	18.2	20.1	21.1
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)