

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: P472207

Luminaire Tested: **CCW-VA-1-860-U-T4W**

Issue Date: 01/27/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P472207  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 01/27/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: CCW-VA-1-860-U-T4W  
Description: INVUE WALL PACK Wave Stream LUMINAIRE WITH T4W DISTRIBUTION LENS  
Light Source: 5700K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3125.2 lumens  
Efficiency: N/A  
Efficacy: 107.8 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.54' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G1

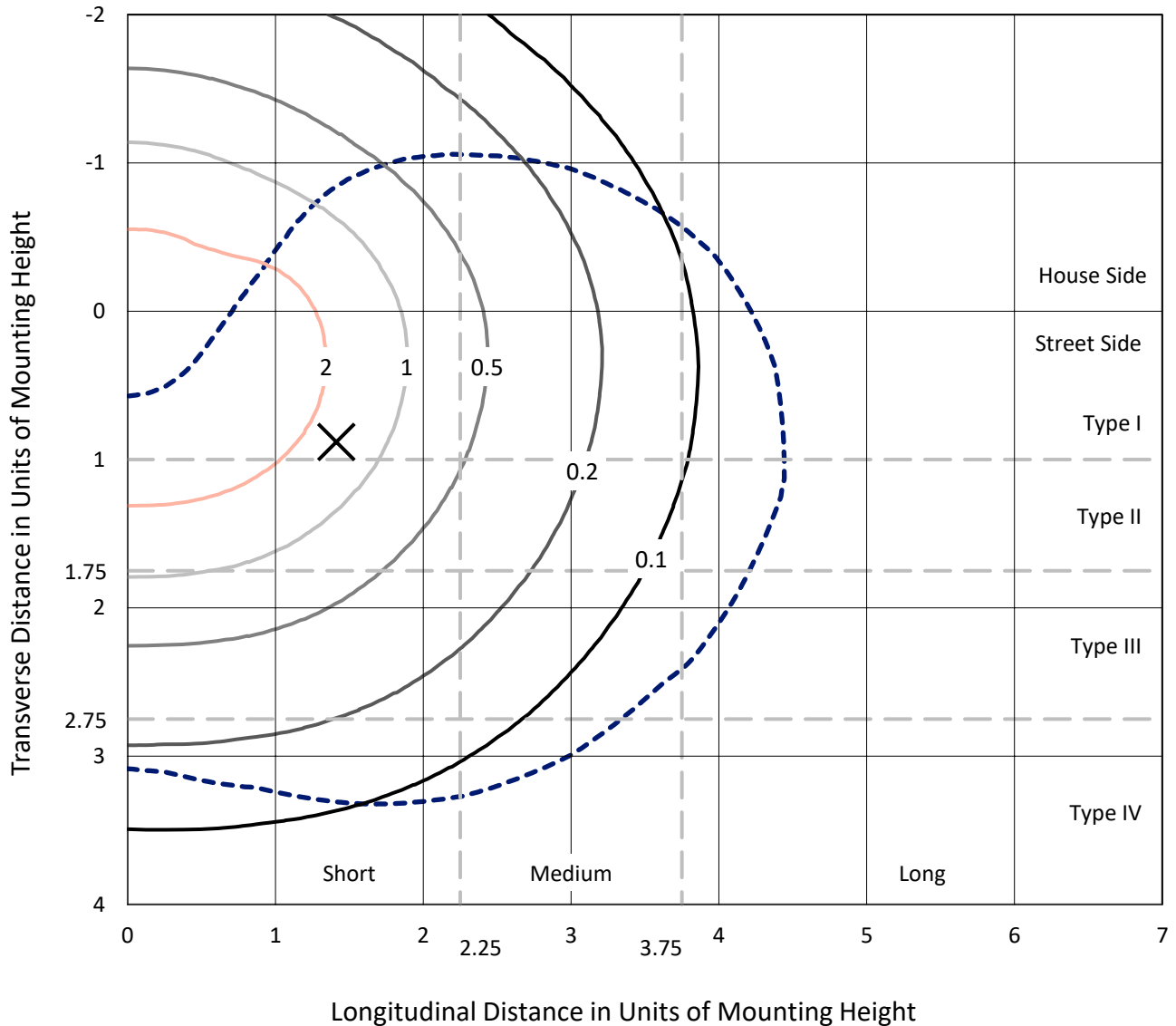
Input Watts (W): 29  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

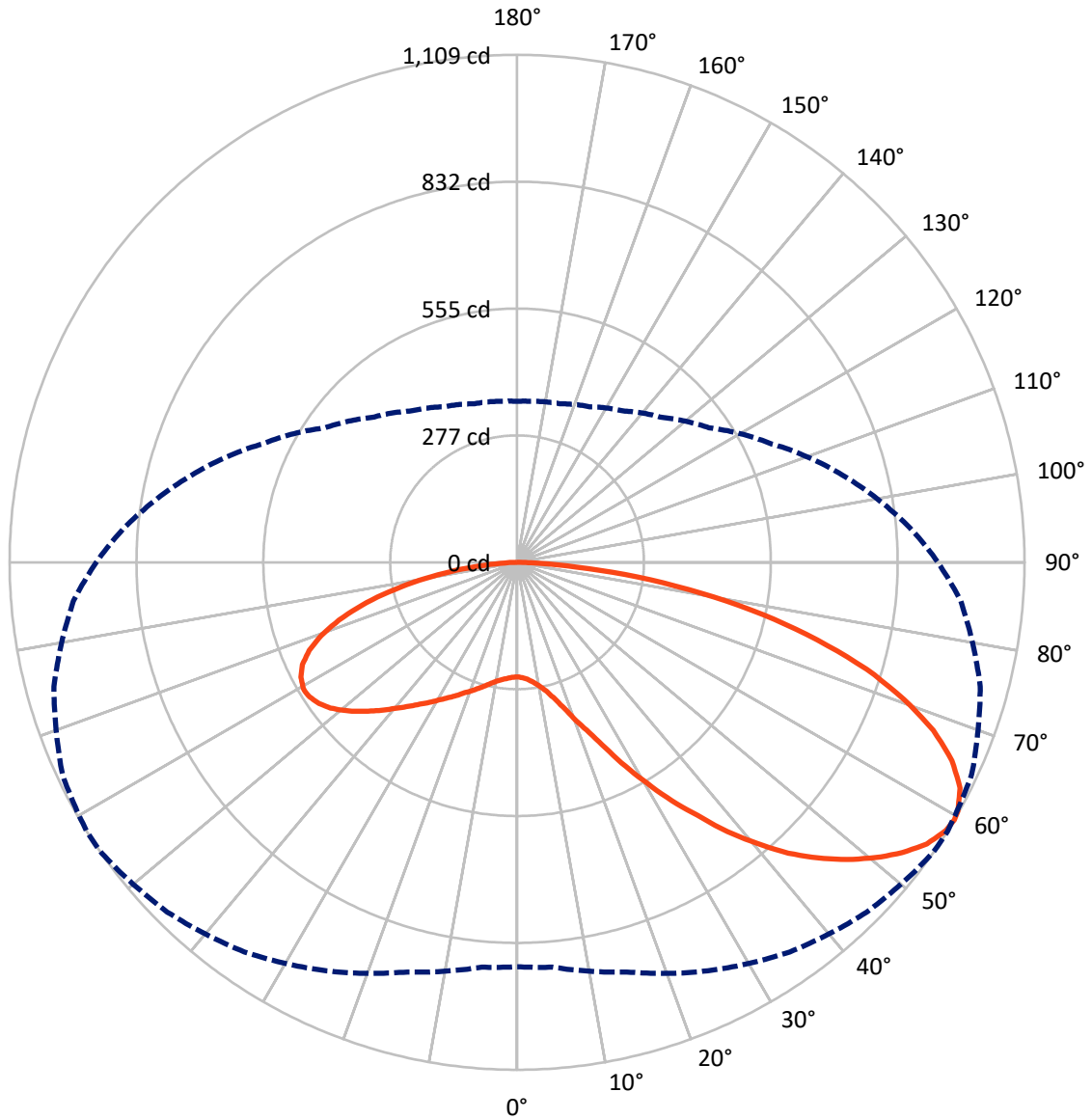
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 3.8 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral      - - - Horizontal Cone Through 59-Deg Vertical

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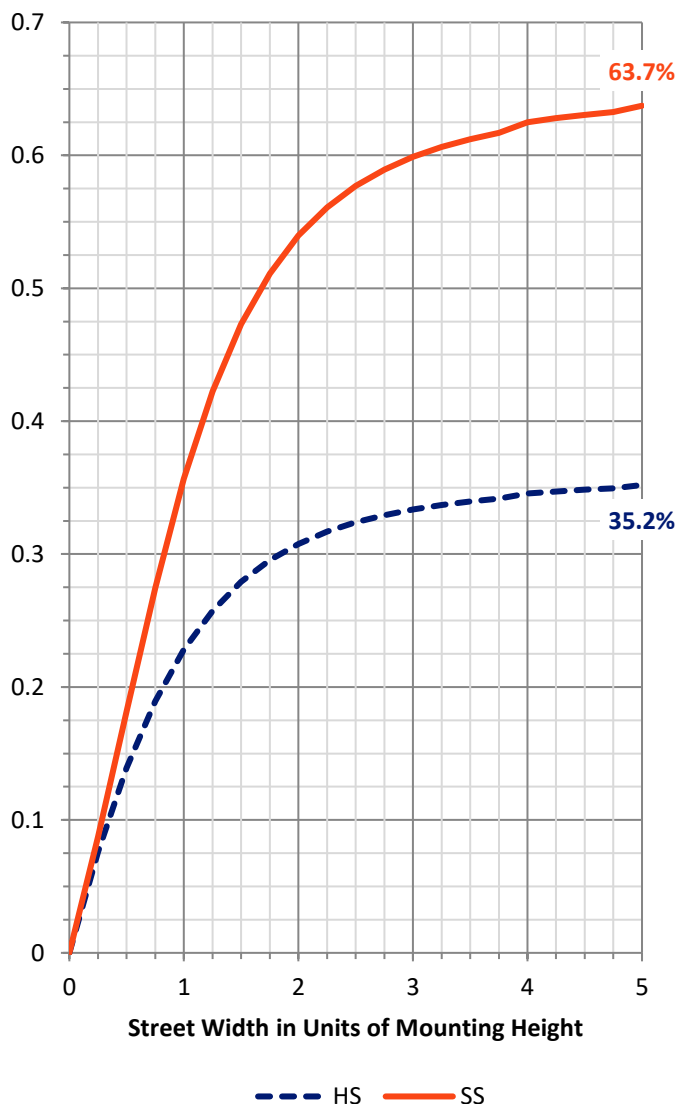
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1114.6	0.0	1114.6
	% Fixture	35.7	0.0	35.7
<b>Street Side</b>	Lumens	2010.6	0.0	2010.6
	% Fixture	64.3	0.0	64.3
<b>Total</b>	Lumens	3125.2	0.0	3125.2
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	24.9	0.8
10°-20°	84.8	2.7
20°-30°	178.9	5.7
30°-40°	329.3	10.5
40°-50°	513.3	16.4
50°-60°	674.4	21.6
60°-70°	706.7	22.6
70°-80°	490.0	15.7
80°-90°	123.0	3.9
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°	3125.2	100.0
0°-180°	3125.2	100.0

**Coefficient of Utilization**

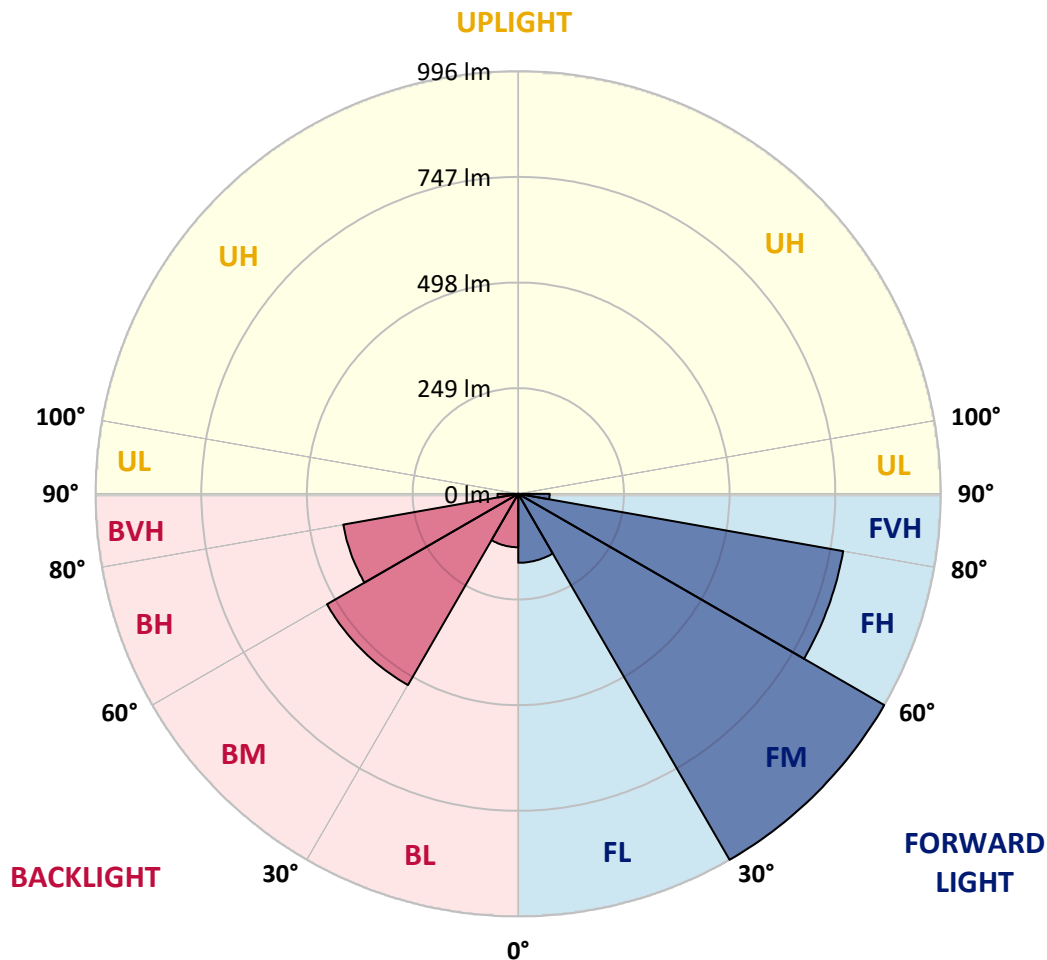


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	162.6	5.2			
FM (30°-60°)	996.3	31.9			
FH (60°-80°)	777.9	24.9			G1/1800
FVH (80°-90°)	73.9	2.4			G1/100
BL (0°-30°)	126.0	4.0	B1/500		
BM (30°-60°)	520.7	16.7	B1/1000		
BH (60°-80°)	418.8	13.4	B1/500		G1/500
BVH (80°-90°)	49.1	1.6			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G1**  
 Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	250.5	250.5	250.5	250.5	250.5	250.5	250.5	250.5	250.5	250.5	250.5
2.5°	254.1	254.1	254.1	253.3	253.3	253.3	252.6	252.6	252.6	251.9	251.2
5°	259.7	259.7	259.0	259.7	259.0	258.3	257.6	257.6	257.6	256.9	256.2
7.5°	267.4	268.1	267.4	268.1	267.4	266.7	265.3	265.3	264.6	263.2	261.8
10°	279.4	279.4	279.4	278.7	278.0	277.3	276.6	275.9	275.2	273.1	270.9
12.5°	294.2	294.2	294.2	292.8	292.8	291.4	290.6	289.9	288.5	285.7	282.9
15°	312.5	311.8	313.9	313.9	313.2	313.2	311.1	309.6	308.2	304.0	297.7
17.5°	337.1	336.4	338.5	339.9	339.9	340.6	337.1	335.7	330.8	325.1	316.7
20°	370.2	368.8	370.9	372.3	370.9	372.3	368.8	369.5	362.4	352.6	339.2
22.5°	406.1	406.1	408.2	408.2	408.9	410.3	406.1	403.9	398.3	384.2	367.4
25°	450.4	453.9	453.9	453.9	456.7	457.4	453.2	449.7	442.0	423.0	399.7
27.5°	504.6	503.9	503.2	507.4	507.4	508.8	506.0	504.6	495.4	472.2	437.0
30°	562.3	558.1	560.9	562.3	565.1	567.2	564.4	560.2	548.9	523.6	480.0
32.5°	615.1	617.9	622.1	623.5	627.7	628.4	621.4	621.4	610.1	577.8	532.7
35°	674.9	674.9	686.2	691.1	691.1	695.3	684.7	679.1	671.4	637.6	580.6
37.5°	727.0	728.4	737.5	748.8	750.2	756.5	748.8	746.7	732.6	698.1	634.8
40°	775.5	776.9	788.2	801.6	809.3	819.2	811.4	807.9	793.1	753.7	689.0
42.5°	813.5	816.3	830.4	850.1	862.8	874.8	871.2	869.1	848.7	807.2	738.9
45°	842.4	847.3	867.0	890.2	907.8	925.4	926.1	921.9	902.9	856.5	787.5
47.5°	865.6	871.2	893.1	922.6	949.4	971.2	975.4	970.5	952.9	904.3	831.1
50°	884.6	887.4	912.1	950.1	983.1	1010.6	1019.0	1014.8	999.3	944.4	869.1
52.5°	894.5	898.7	926.8	970.5	1010.6	1043.7	1056.3	1054.2	1035.9	981.0	902.9
55°	899.4	903.6	936.7	986.7	1031.7	1070.4	1085.9	1086.6	1069.0	1014.1	934.6
57.5°	893.8	899.4	935.3	990.9	1040.8	1082.4	1106.3	1105.6	1091.5	1039.4	961.3
59°	883.9	888.1	926.8	985.2	1039.4	1081.0	1108.4	1109.1	1096.4	1047.9	973.3
60°	872.6	877.6	917.0	978.2	1033.8	1076.0	1104.9	1106.3	1095.7	1050.0	978.2
62.5°	833.9	840.3	883.9	949.4	1009.9	1050.0	1084.5	1086.6	1081.0	1044.4	981.7
65°	779.7	785.4	832.5	902.2	965.5	1007.1	1039.4	1044.4	1043.7	1019.0	967.6
67.5°	713.6	714.3	758.6	834.6	900.8	941.6	972.6	981.0	987.4	971.2	926.1
70°	634.1	633.4	676.3	751.6	817.8	860.7	891.6	897.3	913.5	900.8	864.2
72.5°	535.6	544.0	584.1	647.4	712.9	760.7	788.2	798.8	807.9	810.7	780.5
75°	442.7	451.8	483.5	542.6	598.9	643.2	672.8	677.7	694.6	698.8	670.7
77.5°	354.0	354.7	377.9	425.1	476.4	513.0	537.0	549.6	558.8	567.2	537.7
80°	248.4	251.9	268.1	301.9	342.0	380.7	400.4	408.9	415.2	420.8	411.0
82.5°	155.5	156.9	167.5	187.9	215.3	237.2	257.6	264.6	266.0	278.7	277.3
85°	73.9	74.6	81.6	91.5	103.5	121.0	128.8	128.8	138.6	147.8	147.8
87.5°	9.9	9.9	12.0	13.4	16.9	21.8	30.3	31.0	36.6	40.8	44.3
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°	250.5	250.5	250.5	250.5	250.5	250.5	250.5	250.5	250.5	250.5	250.5
2.5°	251.2	251.2	251.2	251.2	251.2	250.5	251.2	251.2	251.2	251.2	251.2
5°	256.2	255.5	254.8	254.1	254.1	253.3	253.3	253.3	253.3	253.3	253.3
7.5°	261.1	260.4	259.7	258.3	257.6	256.9	256.9	256.2	256.2	256.2	256.2
10°	269.5	268.8	266.0	263.9	262.5	261.8	261.1	260.4	259.7	259.7	259.7
12.5°	280.8	279.4	274.5	271.6	269.5	268.1	266.7	266.0	265.3	264.6	264.6
15°	294.9	291.4	285.0	280.8	278.0	275.9	273.8	272.3	271.6	270.9	270.9
17.5°	311.8	307.5	299.1	291.4	286.4	282.9	280.1	278.0	277.3	277.3	277.3
20°	332.9	325.8	313.9	303.3	295.6	290.6	286.4	284.3	283.6	282.9	282.2
22.5°	357.5	348.4	330.8	314.6	304.7	297.7	292.8	289.9	287.8	287.1	287.1
25°	385.7	372.3	349.1	329.4	316.0	306.1	299.8	296.3	292.8	291.4	291.4
27.5°	419.4	401.8	370.9	344.8	326.5	314.6	307.5	302.6	299.1	296.3	294.9
30°	456.0	436.3	394.8	361.7	338.5	325.1	316.7	311.1	306.1	301.2	300.5
32.5°	502.5	474.3	423.7	380.7	352.6	335.7	325.8	318.8	312.5	307.5	306.1
35°	549.6	515.8	453.9	400.4	365.9	345.5	333.6	325.8	319.5	313.9	313.2
37.5°	598.2	562.3	487.0	423.7	381.4	356.8	342.0	333.6	325.8	320.2	319.5
40°	648.9	606.6	520.8	447.6	397.6	368.1	351.2	340.6	332.2	327.2	326.5
42.5°	696.7	651.0	557.4	475.7	416.6	380.0	360.3	349.1	338.5	333.6	332.9
45°	742.5	693.2	594.0	501.8	435.6	392.7	369.5	356.1	344.8	339.9	339.2
47.5°	784.0	734.7	627.7	529.9	455.3	406.8	379.3	363.1	350.5	345.5	345.5
50°	821.3	769.9	660.8	556.0	473.6	420.8	387.8	369.5	356.8	351.9	351.2
52.5°	856.5	800.9	689.7	578.5	491.2	433.5	396.2	374.4	361.0	355.4	354.7
55°	884.6	829.0	713.6	596.8	503.2	442.0	401.8	377.2	362.4	357.5	356.8
57.5°	909.2	852.2	730.5	609.4	510.9	446.9	404.7	377.2	361.7	356.1	355.4
59°	919.8	862.1	736.1	613.0	512.3	447.6	403.9	375.1	358.9	353.3	351.9
60°	925.4	866.3	738.2	613.7	511.6	446.2	403.2	373.0	356.1	349.8	349.8
62.5°	931.1	869.8	735.4	608.0	503.9	438.4	396.2	364.5	345.5	338.5	338.5
65°	919.1	857.2	719.2	592.6	488.4	425.1	382.8	350.5	329.4	322.3	322.3
67.5°	883.9	826.2	689.7	563.7	463.1	401.8	361.0	327.9	308.2	300.5	298.4
70°	824.1	775.5	643.2	522.2	428.6	372.3	333.6	301.9	281.5	273.8	270.9
72.5°	743.9	696.0	581.3	471.5	382.8	333.6	299.8	269.5	247.0	239.3	240.0
75°	633.4	599.6	501.1	407.5	330.1	284.3	256.2	230.8	211.8	205.5	206.2
77.5°	513.7	485.6	406.1	332.2	269.5	234.3	210.4	190.0	177.3	173.8	171.7
80°	393.4	365.9	304.7	247.7	204.8	180.2	164.0	149.9	140.0	135.1	136.5
82.5°	263.9	247.0	202.0	164.0	139.3	121.7	116.1	107.0	103.5	100.6	102.7
85°	142.2	127.4	105.6	88.0	76.7	71.8	73.2	72.5	69.7	69.0	71.1
87.5°	46.4	40.1	31.0	26.0	26.7	23.9	23.9	22.5	20.4	19.7	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)