

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: P472337

Luminaire Tested: **CCW-VA-1-830-U-T3**

Issue Date: 01/27/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P472337  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 01/27/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: CCW-VA-1-830-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: 2594.2 lumens  
Efficiency: N/A  
Efficacy: 86.2 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.54' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G1

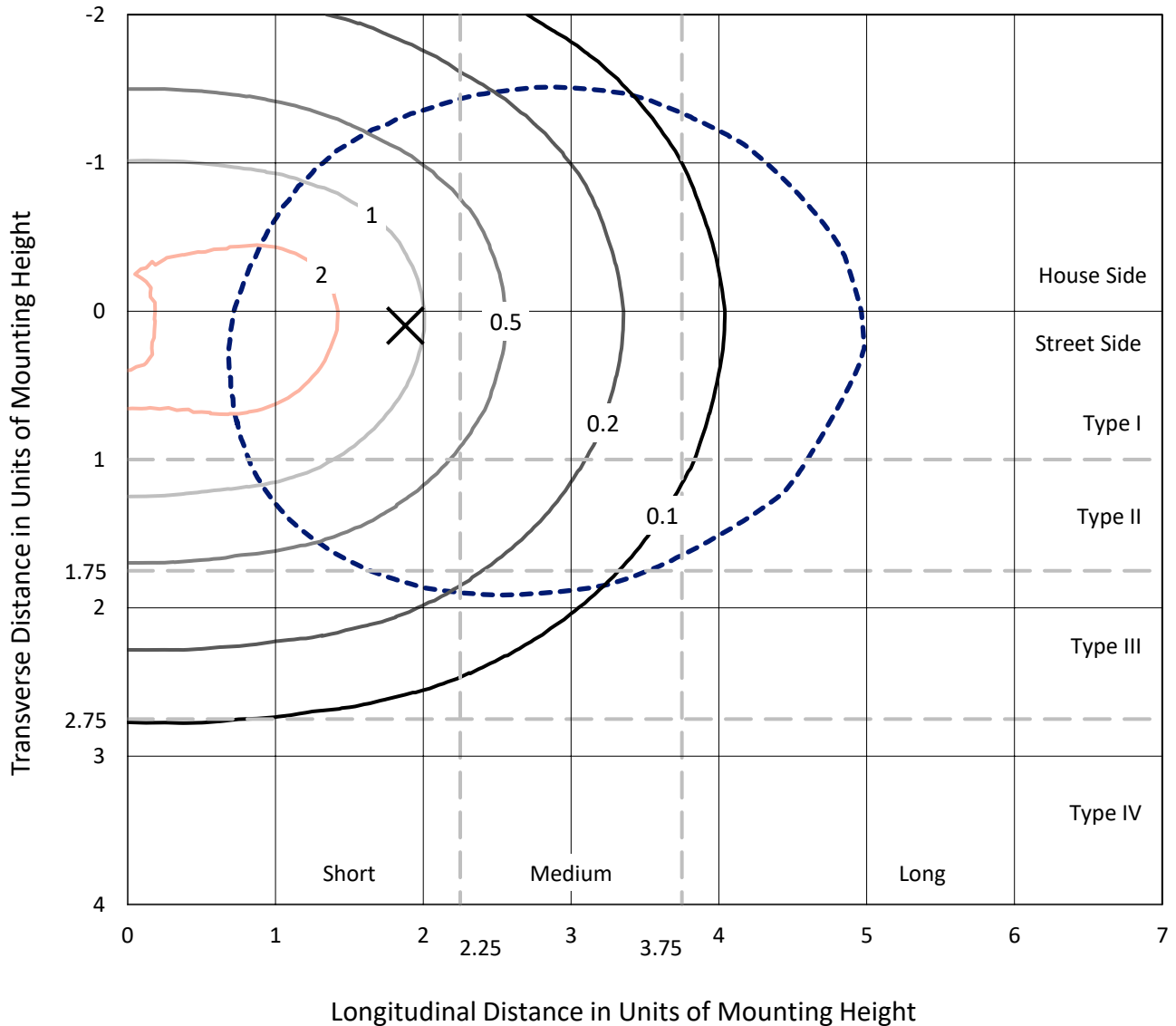
Input Watts (W): 30.1  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

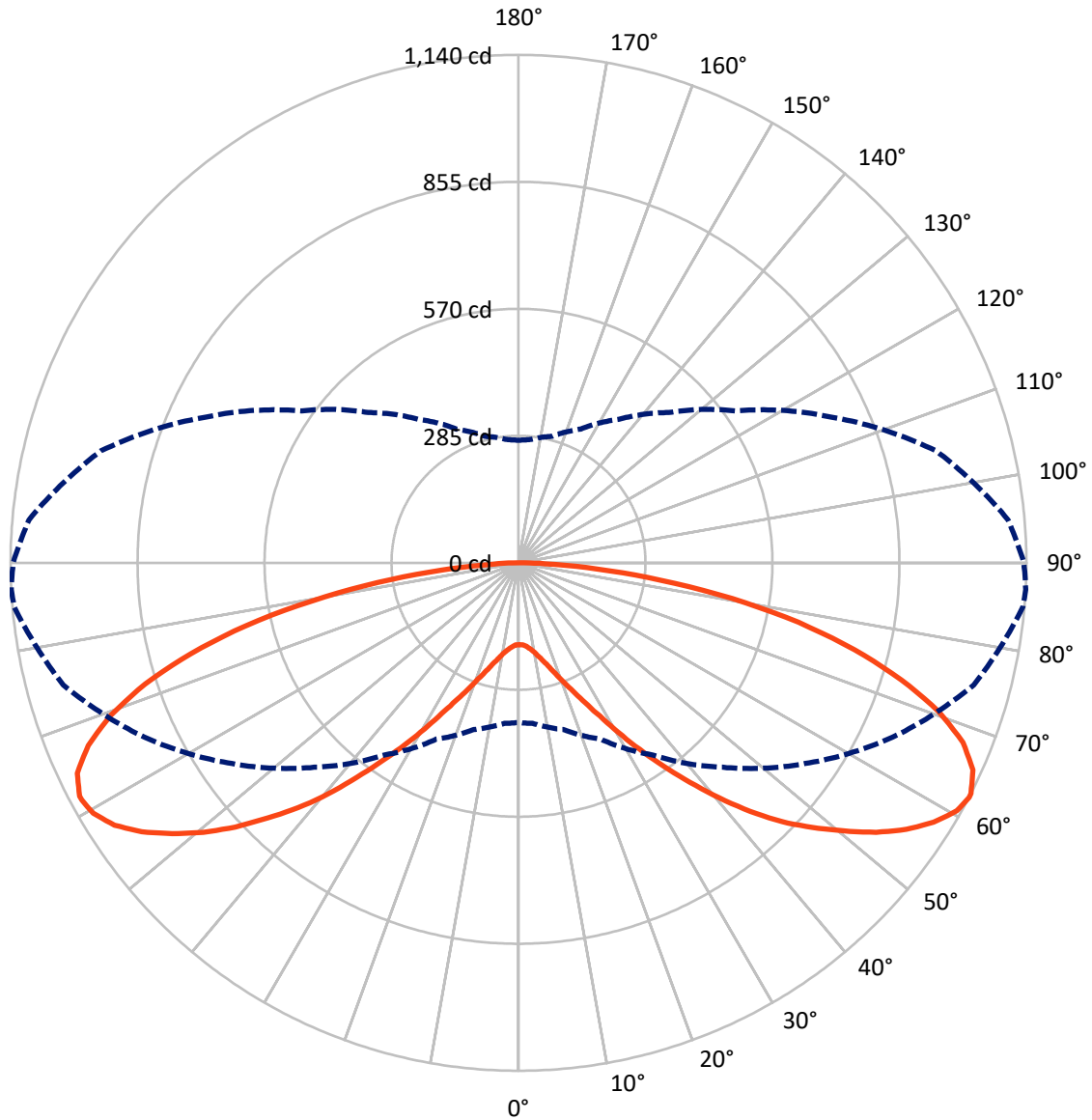
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 3.1 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



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

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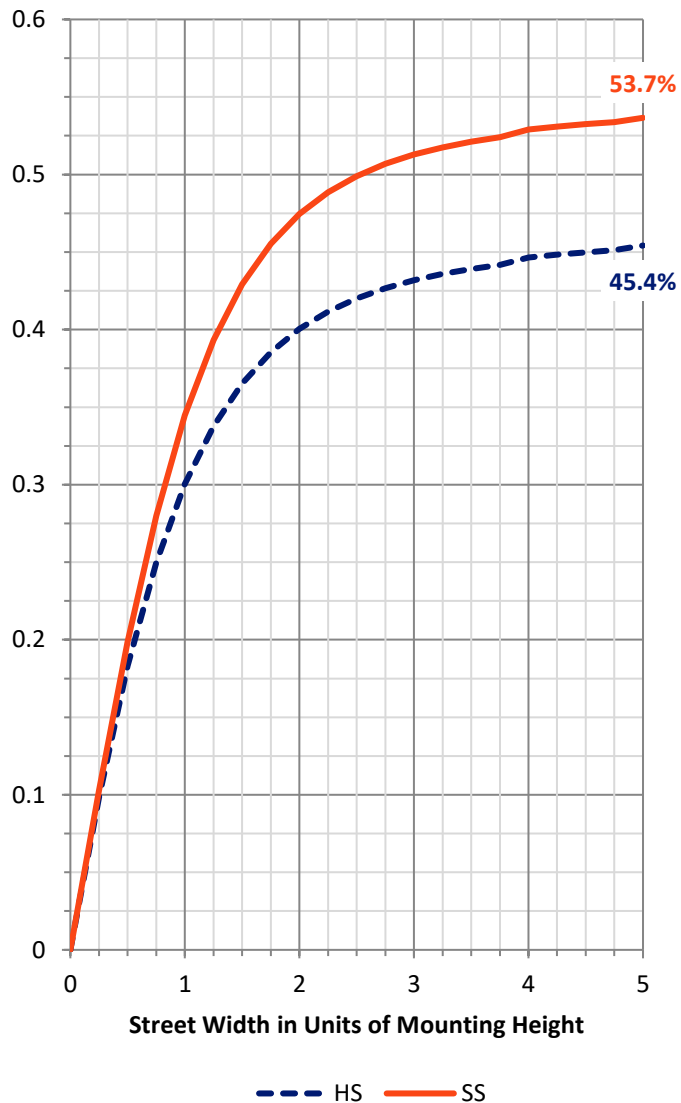
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1194.4	0.0	1194.4
	% Fixture	46.0	0.0	46.0
<b>Street Side</b>	Lumens	1399.8	0.0	1399.8
	% Fixture	54.0	0.0	54.0
<b>Total</b>	Lumens	2594.2	0.0	2594.2
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	18.5	0.7
10°-20°	65.2	2.5
20°-30°	139.4	5.4
30°-40°	256.9	9.9
40°-50°	409.7	15.8
50°-60°	557.1	21.5
60°-70°	603.6	23.3
70°-80°	431.3	16.6
80°-90°	112.7	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°	2594.2	100.0
0°-180°	2594.2	100.0

**Coefficient of Utilization**

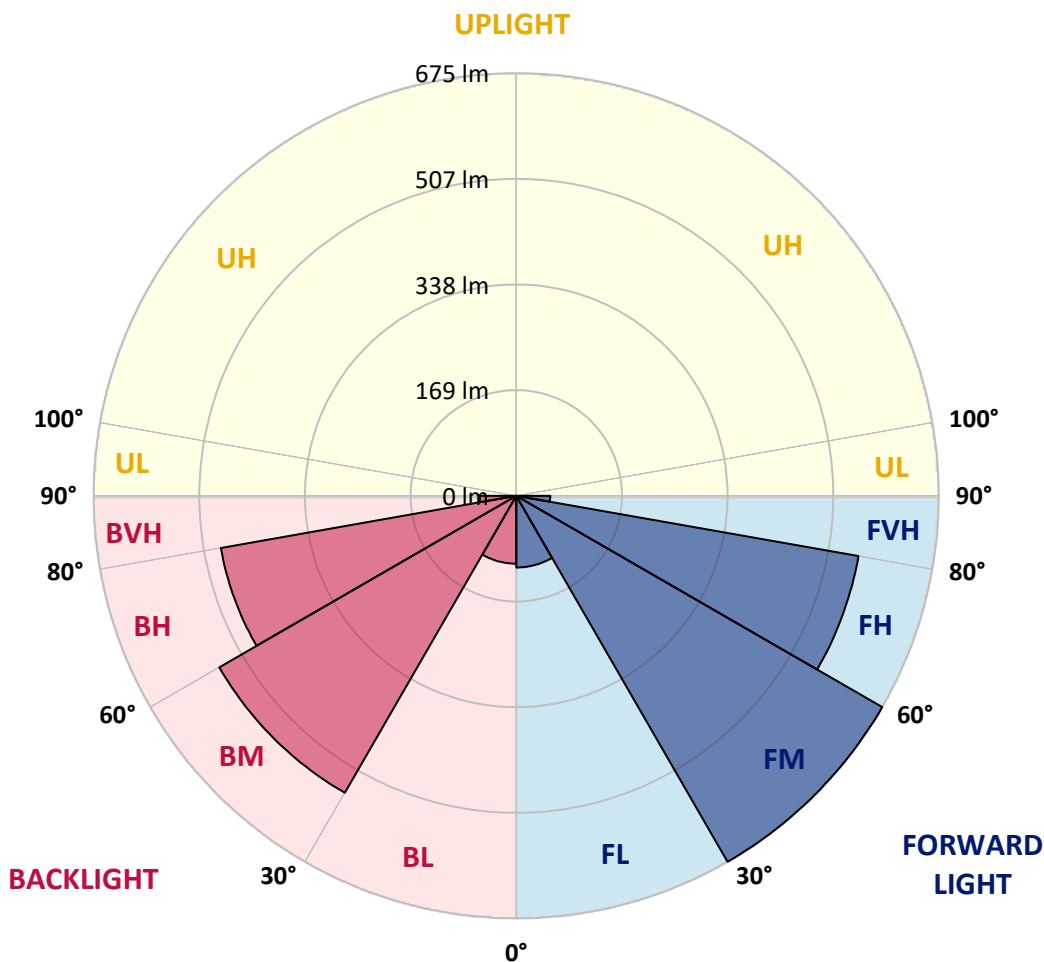


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	114.6	4.4			
FM (30°-60°)	675.5	26.0			
FH (60°-80°)	555.4	21.4			G0/660
FVH (80°-90°)	54.3	2.1			G1/100
BL (0°-30°)	108.5	4.2	B0/110		
BM (30°-60°)	548.1	21.1	B1/1000		
BH (60°-80°)	479.4	18.5	B1/500		G1/500
BVH (80°-90°)	58.4	2.3			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 III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	87°
0°	183.6	183.6	183.6	183.6	183.6	183.6	183.6	183.6	183.6	183.6	183.6
2.5°	184.0	184.0	184.0	184.0	184.0	184.0	184.0	184.0	184.0	184.4	184.4
5°	185.3	184.8	184.8	185.3	185.7	186.1	186.9	187.4	188.2	189.0	188.6
7.5°	189.0	189.0	189.0	189.4	190.7	191.5	192.8	194.0	195.3	196.1	195.7
10°	194.9	194.9	194.9	195.7	197.0	199.5	201.6	203.7	204.9	205.8	206.2
12.5°	201.2	201.2	202.0	203.7	206.2	209.5	213.3	216.2	218.3	219.1	219.6
15°	209.9	210.4	212.0	213.7	217.0	222.1	228.3	232.5	234.6	236.3	235.9
17.5°	223.3	222.9	224.2	227.9	231.7	238.8	246.3	253.4	257.6	257.6	257.6
20°	238.4	238.0	238.8	241.7	248.0	257.6	269.3	278.9	283.5	282.7	283.5
22.5°	255.1	255.1	255.9	258.5	264.7	278.5	294.8	309.1	315.3	313.2	312.4
25°	273.5	273.5	274.8	276.9	285.6	302.4	324.1	344.6	350.9	348.8	347.9
27.5°	294.8	293.2	295.7	297.8	308.6	330.8	359.2	385.2	399.0	391.9	389.3
30°	317.4	316.2	316.6	320.8	333.3	361.7	395.6	430.3	449.6	445.0	441.2
32.5°	337.1	337.9	339.2	346.3	360.5	394.8	434.1	479.7	501.4	500.2	499.3
35°	359.2	359.2	361.7	368.4	389.3	429.9	477.6	529.0	561.2	562.5	560.0
37.5°	376.8	376.8	380.6	389.3	414.0	462.1	520.7	581.3	620.2	626.9	624.8
40°	392.3	391.4	395.6	408.6	437.4	496.4	562.9	633.2	685.4	696.7	693.8
42.5°	401.5	402.3	408.2	424.5	460.0	526.5	604.3	682.1	743.2	762.4	762.4
45°	408.2	409.0	417.8	437.0	480.5	556.2	641.9	732.3	799.6	827.6	828.9
47.5°	411.1	412.4	423.2	446.6	497.7	583.4	678.3	777.4	850.2	889.9	887.4
50°	411.1	412.8	425.7	453.8	513.1	606.4	712.6	820.5	901.6	946.0	945.6
52.5°	408.6	410.7	426.6	459.2	526.1	628.6	743.2	857.3	951.0	1003.3	1004.9
55°	403.6	406.1	424.5	462.5	536.1	646.1	767.8	891.6	993.7	1052.6	1056.4
57.5°	393.5	396.0	417.0	459.6	539.9	655.3	785.8	915.9	1028.4	1097.4	1098.2
60°	376.8	379.7	402.3	450.0	536.1	655.7	790.4	926.7	1051.8	1127.5	1130.4
62°	358.4	361.7	387.3	436.6	526.5	649.1	785.4	926.3	1058.1	1136.3	1140.0
62.5°	353.8	356.7	382.7	432.0	522.8	645.7	782.5	924.2	1057.2	1136.7	1139.6
65°	325.4	328.3	354.6	406.9	499.8	625.2	761.1	905.8	1042.2	1120.0	1120.8
67.5°	294.0	296.9	323.3	372.6	466.7	590.9	725.2	869.4	1002.0	1069.3	1075.6
70°	257.6	261.8	286.1	335.0	423.2	541.6	668.3	811.7	938.0	995.3	1001.2
72.5°	221.6	224.6	243.8	286.9	366.8	476.8	594.7	724.3	839.3	893.7	898.7
75°	179.8	182.3	201.2	236.7	303.6	397.3	508.5	621.9	726.4	775.4	779.1
77.5°	141.8	142.6	156.0	184.4	235.9	311.6	403.6	493.1	588.0	632.3	642.4
80°	100.0	104.1	113.3	133.0	165.6	223.3	289.8	366.3	432.8	482.6	486.0
82.5°	64.8	65.7	71.5	78.6	102.0	140.9	184.4	231.7	291.1	323.3	320.8
85°	33.9	33.9	36.0	38.1	46.0	63.1	89.1	122.1	156.8	181.1	177.7
87.5°	5.9	5.4	5.9	5.4	7.1	10.0	18.8	30.5	46.0	54.4	59.8
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):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	183.6	183.6	183.6	183.6	183.6	183.6	183.6	183.6	183.6	183.6	183.6
2.5°	184.4	184.4	184.8	185.7	185.7	186.1	186.5	186.5	186.9	187.4	187.4
5°	189.4	189.4	189.9	190.7	191.1	191.1	191.5	192.0	192.0	192.0	192.4
7.5°	196.1	196.6	197.0	197.4	197.8	197.8	199.1	198.6	198.6	198.6	198.6
10°	205.8	206.6	206.6	206.6	206.6	206.2	206.6	206.2	205.3	205.3	204.9
12.5°	220.0	220.0	219.1	218.3	217.0	216.6	216.2	215.0	213.3	212.4	212.4
15°	236.3	235.4	233.8	232.1	230.0	228.3	225.4	223.7	221.6	220.8	220.8
17.5°	257.2	255.9	251.3	248.0	243.0	239.2	235.9	232.5	230.0	229.2	228.8
20°	281.0	278.1	271.4	263.9	257.2	251.3	245.1	240.9	238.4	236.3	235.9
22.5°	311.1	307.0	295.3	283.5	271.4	263.1	255.1	249.3	244.6	242.6	241.7
25°	343.8	337.5	322.4	304.9	288.1	275.2	265.1	257.2	251.8	248.4	247.6
27.5°	385.2	376.0	353.8	327.5	305.3	289.0	275.2	266.0	258.9	253.9	253.0
30°	433.7	424.1	387.3	352.5	324.5	301.5	286.5	274.3	265.6	259.7	258.5
32.5°	491.4	473.8	431.6	382.7	344.2	316.2	296.9	282.7	271.8	265.1	263.5
35°	549.9	532.0	476.3	414.4	365.1	331.2	308.2	291.1	278.9	270.6	269.7
37.5°	615.6	593.9	528.6	450.4	387.7	347.1	318.7	299.0	284.4	275.6	274.8
40°	686.3	664.1	584.7	491.8	414.4	362.6	328.7	306.5	290.2	280.6	279.4
42.5°	755.7	729.3	641.5	533.2	441.6	379.7	340.4	314.5	295.3	285.2	283.5
45°	815.9	792.9	699.2	580.9	473.0	397.3	352.1	322.0	300.7	289.4	287.7
47.5°	884.1	859.4	762.4	624.8	503.1	417.4	363.4	328.7	305.3	293.2	291.9
50°	944.3	922.1	818.4	665.4	532.0	436.2	373.9	335.0	309.1	296.1	294.4
52.5°	999.1	979.4	869.9	703.4	556.6	453.8	383.5	339.6	311.6	297.3	295.3
55°	1054.3	1028.8	914.6	736.9	576.3	467.6	391.4	341.7	311.1	296.5	294.4
57.5°	1095.7	1071.4	947.2	760.7	590.9	476.8	396.0	341.3	308.6	292.7	290.2
60°	1123.7	1097.0	966.5	772.4	595.9	479.7	396.0	337.5	302.4	285.2	282.7
62°	1134.2	1103.2	970.2	774.1	593.9	476.8	393.1	331.2	294.0	277.3	274.8
62.5°	1134.6	1102.8	969.0	772.8	592.6	475.5	391.4	329.1	291.9	274.8	272.3
65°	1116.2	1084.4	953.9	759.9	578.4	464.2	379.7	317.0	277.3	260.5	258.0
67.5°	1063.5	1039.2	918.0	729.8	554.1	443.3	362.6	299.4	260.1	242.6	241.3
70°	990.3	968.1	859.4	684.2	519.0	413.2	337.1	276.0	238.4	222.5	219.6
72.5°	898.3	869.4	776.2	623.1	468.4	371.8	303.6	246.7	213.3	199.1	197.4
75°	784.1	749.4	671.6	542.4	407.7	322.0	264.7	214.1	184.4	172.3	173.6
77.5°	638.6	622.3	542.8	432.4	332.1	266.4	217.0	181.5	156.0	146.0	145.1
80°	482.2	466.7	411.1	328.3	250.9	201.6	168.1	143.0	125.5	116.7	116.3
82.5°	327.0	312.4	270.2	220.4	171.0	142.6	121.7	105.4	94.5	90.3	90.3
85°	179.8	167.3	143.0	119.2	96.6	81.5	78.6	70.3	67.3	66.5	67.3
87.5°	56.0	55.6	47.3	38.9	33.9	34.3	30.9	31.8	30.1	29.7	31.8
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)