

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: P472289

Luminaire Tested: **CCW-VA-1-830-U-T4FT**

Issue Date: 01/27/2021

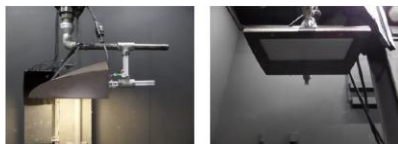
**Test Information**

Test Method: LM-79-08  
Report Number: P472289  
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-T4FT  
Description: INVUE WALL PACK Wave Stream LUMINAIRE WITH T4FT DISTRIBUTION LENS  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3031.7 lumens  
Efficiency: N/A  
Efficacy: 100.1 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G1

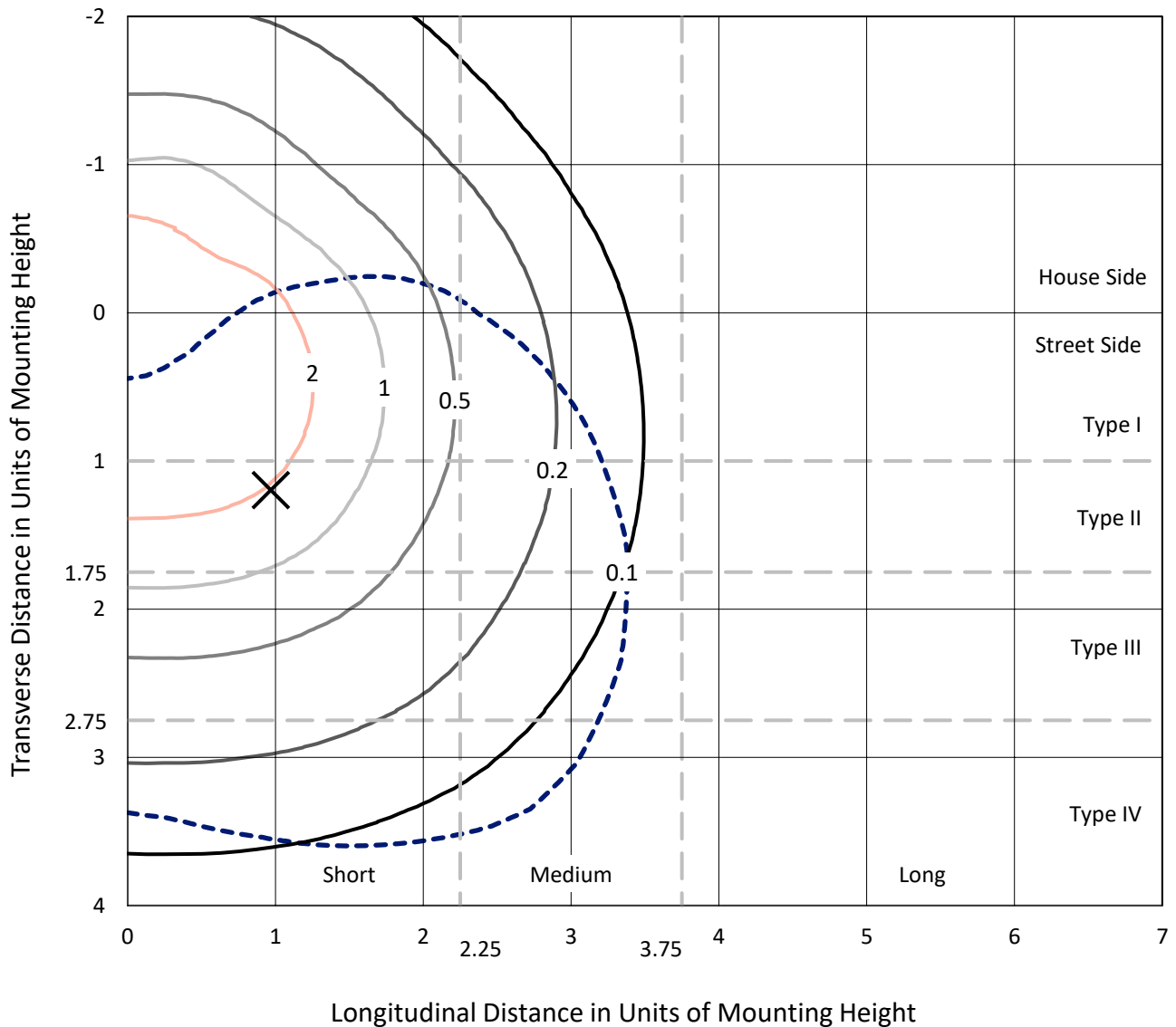
Input Watts (W): 30.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

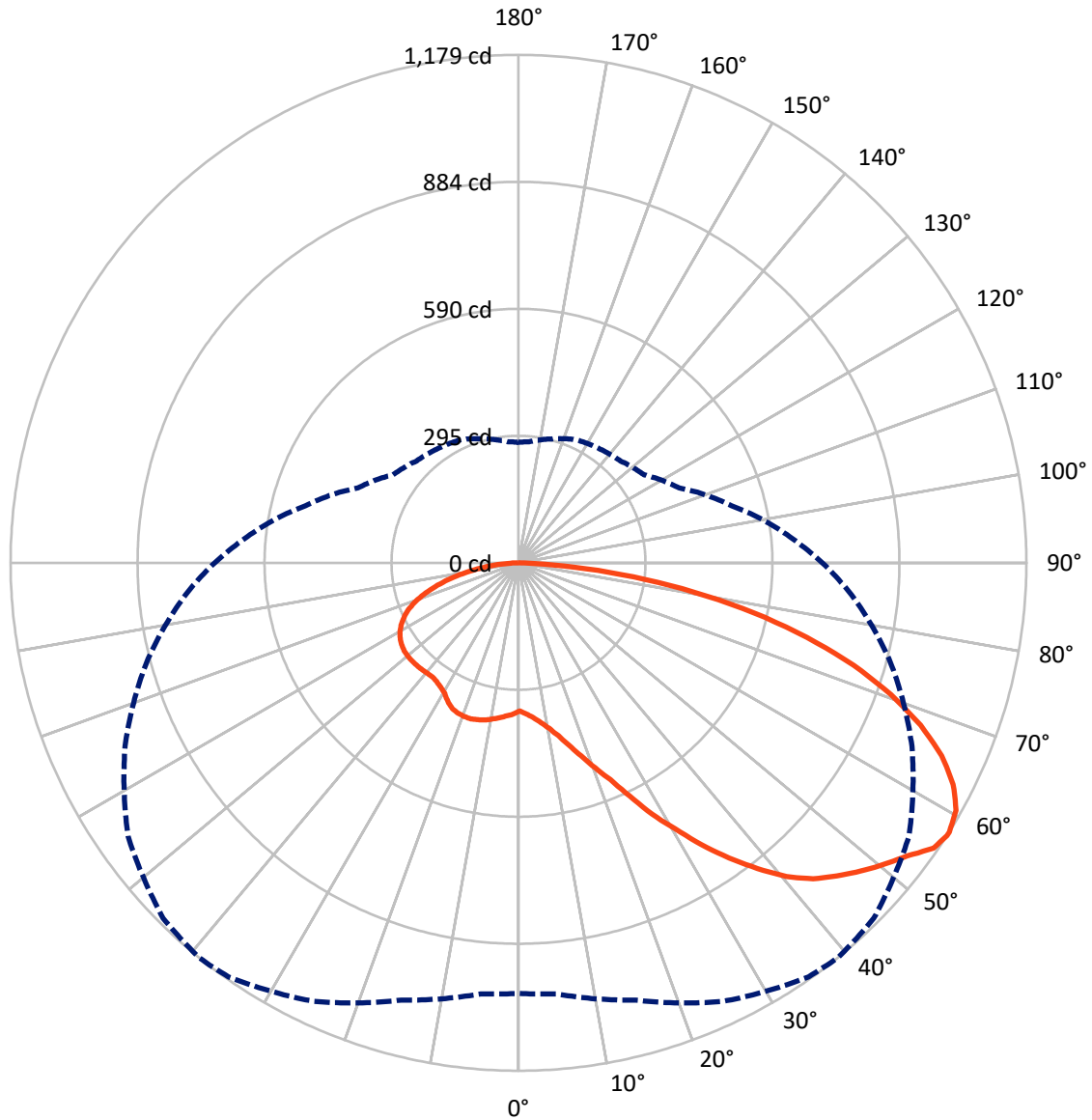
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 4.7 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 39-Deg Lateral      - - - Horizontal Cone Through 57-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	930.2	0.0	930.2
	% Fixture	30.7	0.0	30.7
<b>Street Side</b>	Lumens	2101.5	0.0	2101.5
	% Fixture	69.3	0.0	69.3
<b>Total</b>	Lumens	3031.7	0.0	3031.7
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	34.8	1.1
10°-20°	116.1	3.8
20°-30°	224.2	7.4
30°-40°	362.7	12.0
40°-50°	509.6	16.8
50°-60°	629.5	20.8
60°-70°	625.7	20.6
70°-80°	423.4	14.0
80°-90°	105.7	3.5
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°	3031.7	100.0
0°-180°	3031.7	100.0

**Coefficient of Utilization**

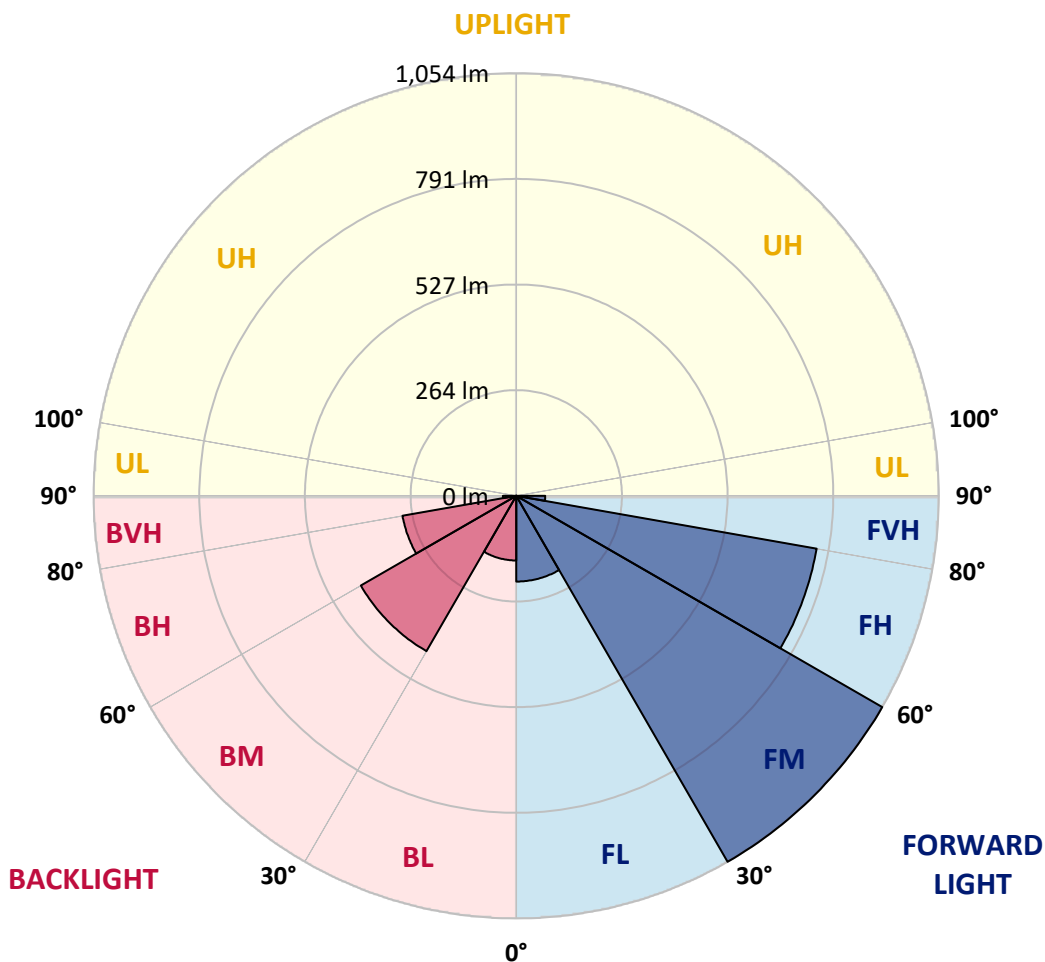


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	213.9	7.1			
FM	(30°-60°)	1054.3	34.8			
FH	(60°-80°)	761.0	25.1			G1/1800
FVH	(80°-90°)	72.3	2.4			G1/100
BL	(0°-30°)	161.2	5.3	B1/500		
BM	(30°-60°)	447.6	14.8	B1/1000		
BH	(60°-80°)	288.1	9.5	B1/500		G1/500
BVH	(80°-90°)	33.4	1.1			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°	39°	45°	55°	65°	75°	85°
0°	343.8	343.8	343.8	343.8	343.8	343.8	343.8	343.8	343.8	343.8	343.8
2.5°	354.0	353.5	353.1	353.1	352.1	351.2	350.8	349.8	350.3	351.2	351.7
5°	364.2	363.3	363.3	362.4	361.0	361.0	359.6	357.7	357.3	356.8	356.8
7.5°	380.0	378.6	379.1	377.7	376.3	374.4	372.1	369.8	368.9	365.6	362.8
10°	398.1	397.7	396.3	394.0	392.6	390.7	388.4	384.2	380.9	377.2	374.9
12.5°	419.5	418.6	419.0	417.2	414.9	411.6	407.9	403.7	397.7	390.7	386.1
15°	447.4	445.5	445.5	445.1	440.4	439.5	435.8	426.5	418.1	408.8	398.1
17.5°	481.3	480.8	479.0	477.1	474.3	471.1	467.4	457.1	444.6	430.2	415.8
20°	517.5	516.6	518.0	515.2	509.6	508.2	502.2	490.6	475.3	458.5	436.7
22.5°	557.0	557.9	557.9	557.0	552.4	546.8	541.7	526.4	508.7	488.3	462.7
25°	604.9	605.3	608.1	610.9	608.1	599.3	592.3	568.6	544.9	518.9	488.7
27.5°	658.8	655.5	663.4	668.5	663.4	661.1	645.8	619.7	587.2	554.7	517.1
30°	710.8	710.8	717.3	724.7	721.5	715.9	703.4	669.9	632.7	591.4	545.9
32.5°	759.1	764.7	767.5	784.7	782.8	780.0	765.6	721.5	675.0	628.1	573.7
35°	816.3	814.4	826.0	836.7	845.1	841.3	830.7	786.1	725.2	666.7	604.4
37.5°	859.5	863.2	873.4	892.4	898.5	900.3	886.9	840.9	771.7	708.0	638.3
40°	892.4	895.2	914.7	938.9	951.4	957.9	944.5	888.7	815.3	741.0	664.8
42.5°	918.9	920.8	941.2	975.6	996.5	1003.0	990.9	931.9	852.5	767.5	686.6
45°	936.6	939.8	964.0	999.3	1031.8	1036.5	1030.4	970.0	885.5	792.6	702.4
47.5°	951.9	955.6	982.6	1027.2	1063.4	1069.4	1063.9	1003.5	917.1	815.3	715.9
50°	972.3	976.5	1003.5	1053.2	1093.1	1100.1	1098.2	1038.8	946.8	840.9	729.8
52.5°	991.9	995.1	1027.2	1082.4	1125.7	1130.3	1128.9	1071.8	977.0	868.3	747.5
55°	1007.2	1010.9	1049.0	1117.3	1163.7	1168.9	1159.1	1097.3	1000.7	888.3	764.2
57°	999.3	1004.4	1050.9	1123.3	1173.5	1179.1	1166.5	1106.6	1007.7	893.8	770.3
57.5°	997.0	1000.7	1049.0	1122.9	1174.0	1179.1	1166.5	1106.1	1007.2	893.4	770.3
60°	963.1	971.9	1026.2	1106.1	1160.5	1167.0	1154.9	1087.6	995.6	880.4	757.7
62.5°	917.5	929.6	986.7	1066.7	1128.0	1132.6	1120.5	1056.4	969.6	853.0	731.7
65°	852.0	870.6	930.5	1007.7	1074.1	1079.7	1067.6	1004.4	926.4	811.1	692.7
67.5°	787.9	799.1	863.2	936.6	998.4	1006.7	996.5	940.3	866.9	755.4	640.6
70°	715.0	722.9	775.8	847.8	910.1	917.1	908.2	855.7	786.5	686.2	579.8
72.5°	627.2	635.5	680.6	747.0	802.3	813.5	807.4	753.1	690.4	603.5	512.0
75°	528.2	537.5	577.9	630.9	684.8	691.3	684.3	644.4	587.7	509.2	429.3
77.5°	428.3	434.4	463.6	503.6	545.4	559.3	557.5	529.1	472.0	409.8	344.7
80°	320.6	321.5	336.8	369.8	403.2	413.5	415.8	390.2	352.6	305.7	258.3
82.5°	202.6	205.8	214.2	238.8	255.0	269.0	272.2	257.4	233.7	204.4	175.1
85°	94.3	91.5	98.0	106.4	129.6	129.6	133.8	125.9	118.9	109.2	90.6
87.5°	7.9	7.4	7.4	7.9	12.5	13.5	21.4	23.7	25.6	25.6	26.9
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°	343.8	343.8	343.8	343.8	343.8	343.8	343.8	343.8	343.8	343.8	343.8
2.5°	350.8	350.3	348.9	348.9	349.8	351.2	351.7	352.1	352.6	353.1	353.1
5°	356.3	355.9	354.9	354.0	354.9	355.4	356.8	357.7	357.7	358.6	358.2
7.5°	361.4	361.9	361.0	360.5	360.5	361.4	363.3	364.7	365.6	366.1	367.0
10°	373.1	370.3	366.5	364.7	364.7	366.5	368.4	370.3	372.1	373.1	373.1
12.5°	383.3	380.0	373.1	370.3	369.8	371.7	374.0	376.8	378.2	379.6	379.6
15°	392.6	389.8	381.4	374.9	373.1	374.4	377.2	380.5	382.8	384.2	384.2
17.5°	410.2	401.9	390.7	380.0	376.3	376.8	380.0	383.3	386.1	387.0	386.5
20°	426.9	416.3	399.5	384.2	378.2	376.3	379.6	383.7	386.1	387.5	387.5
22.5°	446.0	434.4	408.4	388.4	377.2	374.4	377.2	380.9	383.7	384.7	385.6
25°	472.9	452.5	418.1	391.6	375.8	370.3	372.1	375.8	379.1	379.6	379.1
27.5°	497.1	473.9	431.1	394.9	372.6	362.4	360.5	363.3	368.4	371.7	372.6
30°	518.0	496.6	444.6	397.7	366.5	349.4	347.0	348.0	351.2	360.0	360.5
32.5°	549.1	516.1	458.1	400.0	359.6	342.4	339.1	338.2	339.1	343.8	343.8
35°	570.5	538.0	471.5	404.2	354.5	336.8	333.6	332.2	331.2	326.6	325.2
37.5°	598.4	562.1	484.5	407.9	352.1	334.5	329.8	330.8	326.1	313.1	309.4
40°	629.0	584.0	497.6	411.6	353.1	335.0	330.8	330.3	322.4	304.3	300.6
42.5°	643.9	602.5	511.0	416.7	356.8	336.3	332.6	331.2	321.5	301.0	295.9
45°	658.3	616.0	520.8	420.9	360.5	338.2	333.6	332.2	321.0	298.3	294.5
47.5°	671.3	624.4	525.4	423.2	363.3	339.6	334.0	331.7	318.7	296.9	293.1
50°	677.3	629.0	525.4	423.2	364.2	341.0	333.1	329.8	315.0	294.5	291.3
52.5°	686.6	631.8	521.2	420.4	362.8	341.0	331.2	326.1	310.3	291.3	288.5
55°	700.6	636.9	515.7	416.3	359.6	338.2	328.0	321.0	303.8	286.6	284.3
57°	705.2	638.8	512.0	411.1	355.9	334.5	324.3	315.4	297.8	282.0	279.7
57.5°	704.3	637.9	510.6	409.8	354.5	333.1	323.3	314.0	296.4	281.1	278.7
60°	691.7	629.0	501.7	400.9	347.0	325.7	315.0	304.8	286.6	273.2	271.3
62.5°	671.3	609.1	485.9	389.3	336.8	315.4	304.3	292.7	274.6	262.9	262.0
65°	636.5	575.6	463.2	372.6	323.8	302.0	289.9	277.3	261.6	251.3	248.5
67.5°	578.4	531.0	431.1	349.4	303.8	285.2	272.2	259.2	244.8	236.0	234.1
70°	530.1	482.2	390.2	320.1	279.7	262.0	249.9	237.4	224.9	217.0	216.5
72.5°	468.8	422.8	339.1	283.9	249.0	231.8	222.5	211.4	201.6	194.7	194.7
75°	394.4	358.2	286.2	240.6	212.3	199.8	191.9	183.0	174.7	170.0	171.0
77.5°	313.6	286.2	233.7	194.7	173.7	165.4	158.0	152.8	147.7	143.6	144.0
80°	231.4	210.9	171.9	143.1	132.9	125.4	124.0	120.8	118.0	116.6	114.3
82.5°	158.4	140.3	114.3	98.0	90.6	88.3	88.7	88.7	89.2	89.2	88.3
85°	82.2	75.3	58.1	52.5	51.6	53.9	56.7	58.5	58.1	58.1	56.7
87.5°	23.7	21.4	18.6	16.7	17.7	19.0	16.7	16.3	15.8	15.3	15.3
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)