

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: P472195

Luminaire Tested: **CCW-VA-1-840-U-T4W**

Issue Date: 01/27/2021

Test Information

Test Method: LM-79-08
Report Number: P472195
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/27/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: CCW-VA-1-840-U-T4W
Description: INVUE WALL PACK Wave Stream LUMINAIRE WITH T4W DISTRIBUTION LENS
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3079.8 lumens
Efficiency: N/A
Efficacy: 106.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.54' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G1

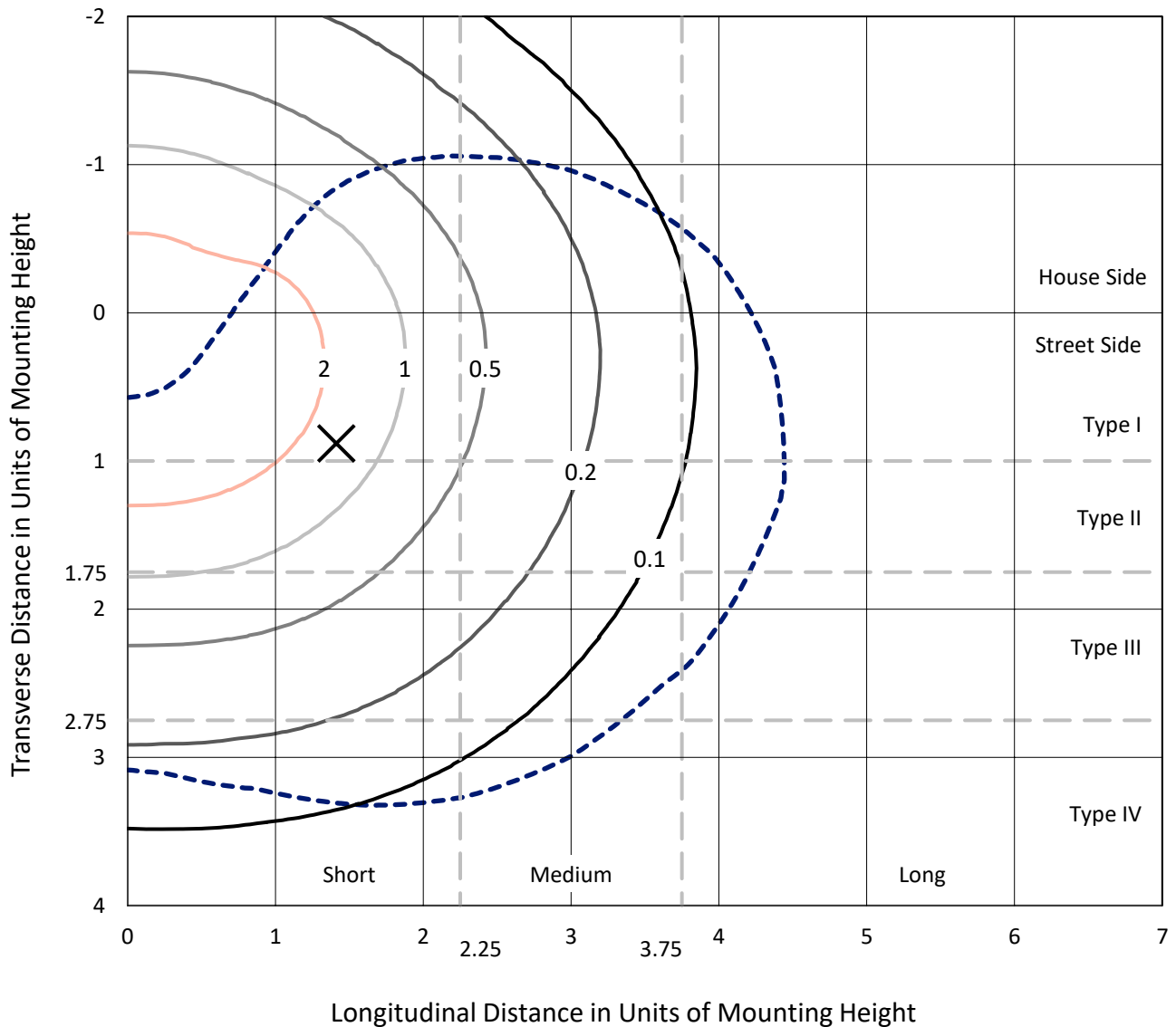
Input Watts (W): 29
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

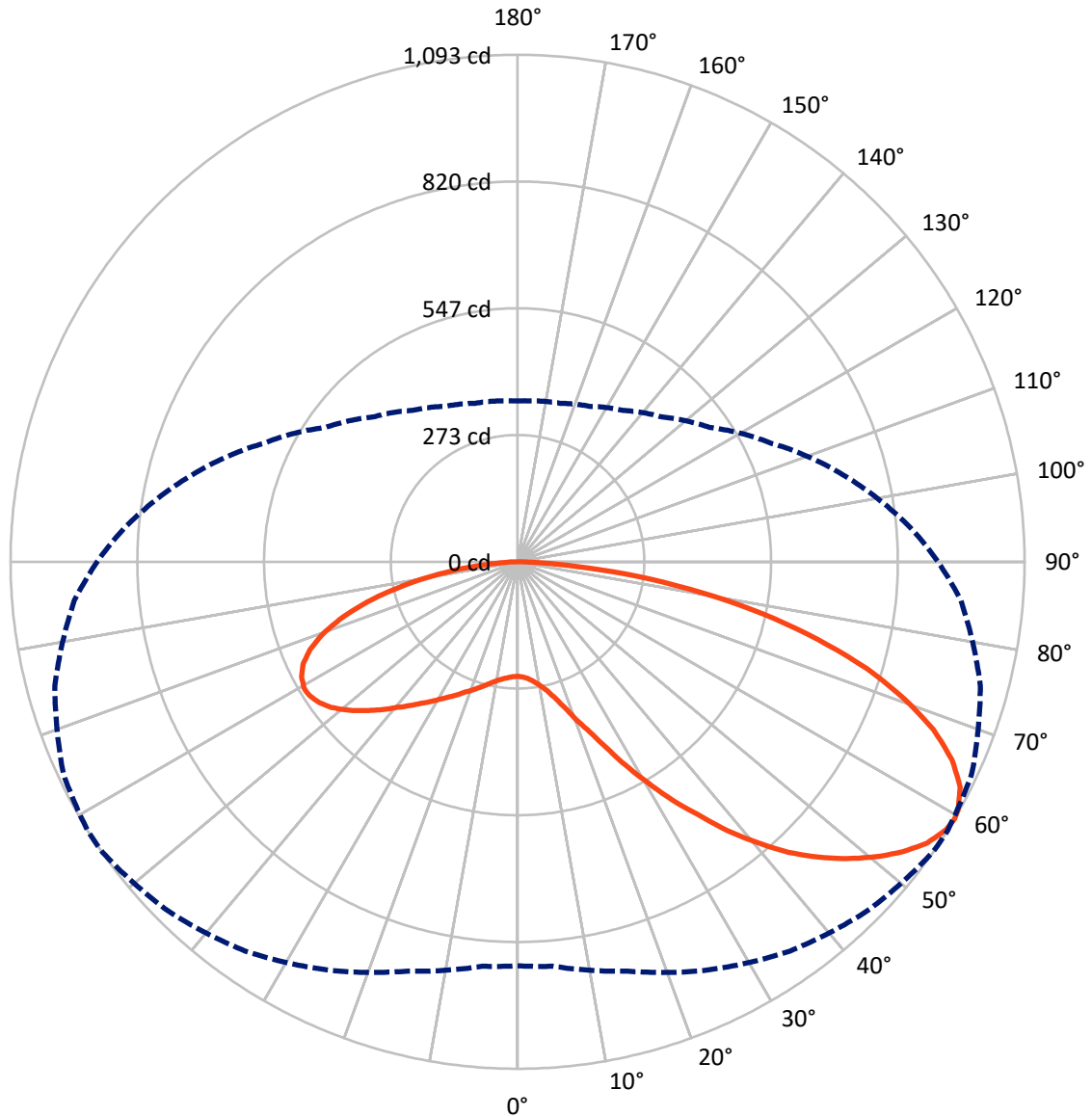
✕ Max cd
 - - - 1/2 Max cd



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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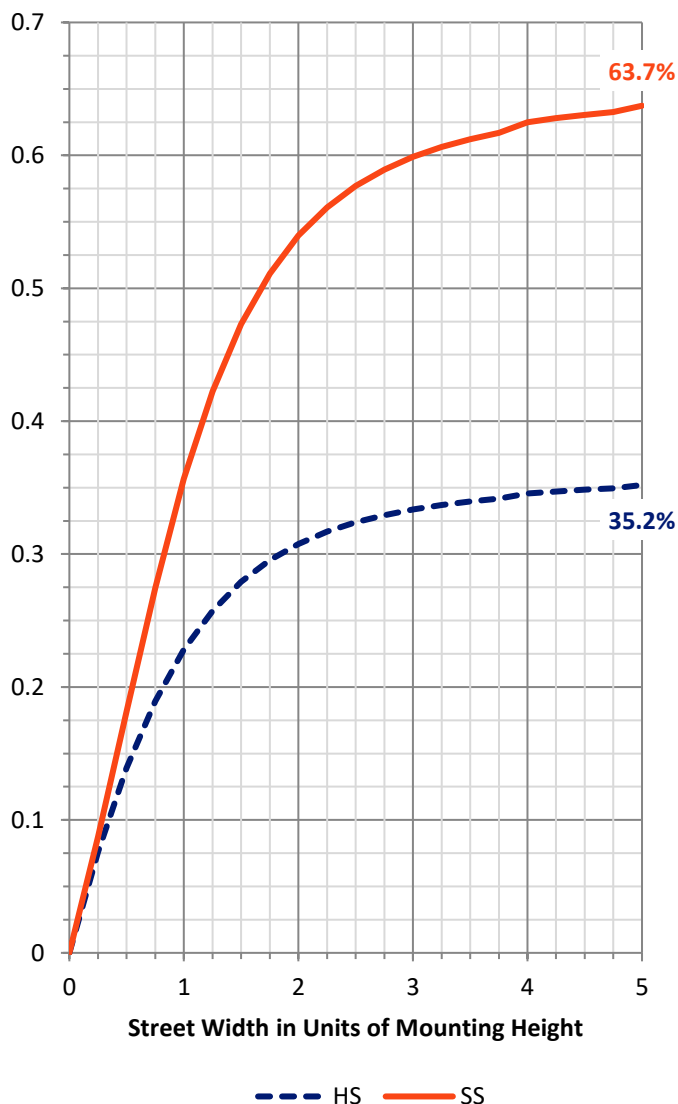
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1098.4	0.0	1098.4
	% Fixture	35.7	0.0	35.7
Street Side	Lumens	1981.4	0.0	1981.4
	% Fixture	64.3	0.0	64.3
Total	Lumens	3079.8	0.0	3079.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	24.5	0.8
10°-20°	83.5	2.7
20°-30°	176.3	5.7
30°-40°	324.5	10.5
40°-50°	505.8	16.4
50°-60°	664.6	21.6
60°-70°	696.4	22.6
70°-80°	482.8	15.7
80°-90°	121.2	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°	3079.8	100.0
0°-180°	3079.8	100.0

Coefficient of Utilization



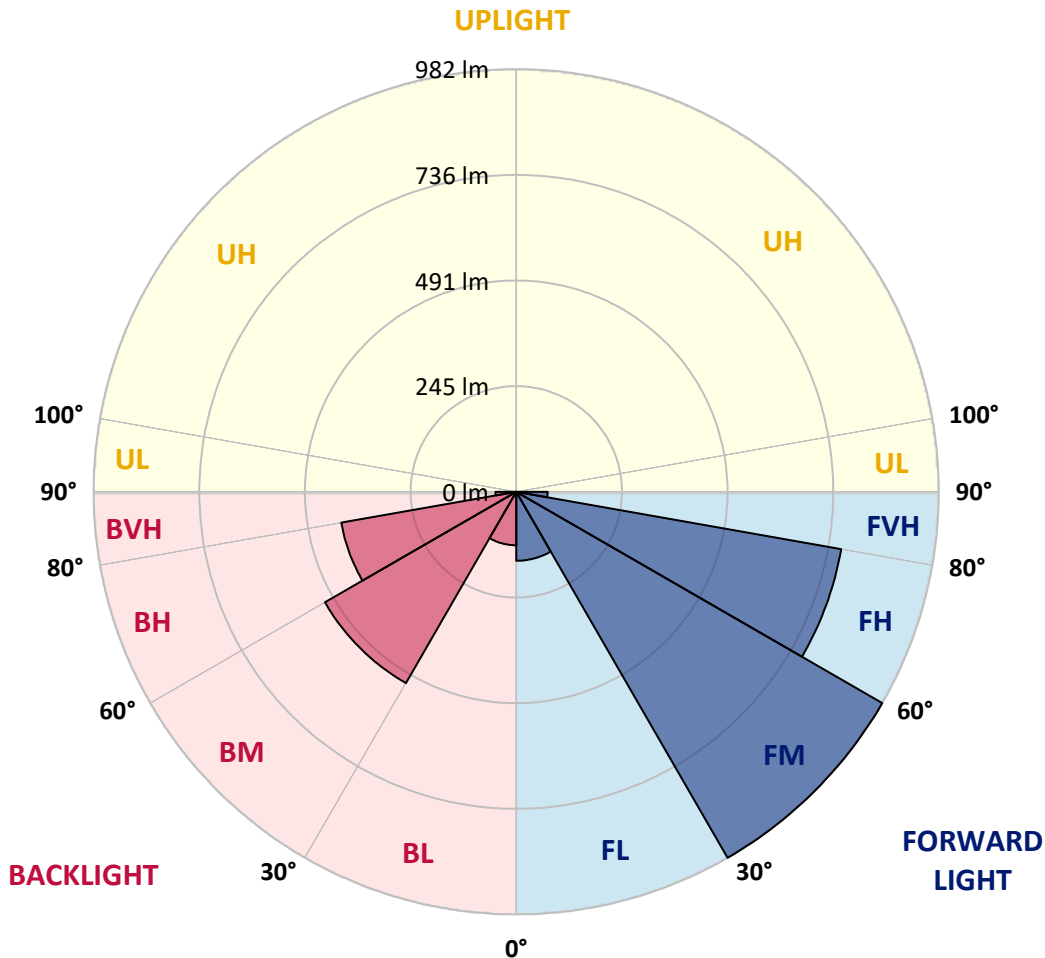
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	160.2	5.2			
FM (30°-60°)	981.8	31.9			
FH (60°-80°)	766.6	24.9			G1/1800
FVH (80°-90°)	72.9	2.4			G1/100
BL (0°-30°)	124.1	4.0	B1/500		
BM (30°-60°)	513.1	16.7	B1/1000		
BH (60°-80°)	412.7	13.4	B1/500		G1/500
BVH (80°-90°)	48.4	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°	246.9	246.9	246.9	246.9	246.9	246.9	246.9	246.9	246.9	246.9	246.9
2.5°	250.4	250.4	250.4	249.7	249.7	249.7	249.0	249.0	249.0	248.3	247.6
5°	255.9	255.9	255.2	255.9	255.2	254.5	253.8	253.8	253.8	253.1	252.4
7.5°	263.5	264.2	263.5	264.2	263.5	262.8	261.5	261.5	260.8	259.4	258.0
10°	275.3	275.3	275.3	274.6	273.9	273.2	272.6	271.9	271.2	269.1	267.0
12.5°	289.9	289.9	289.9	288.5	288.5	287.1	286.4	285.7	284.3	281.6	278.8
15°	307.9	307.2	309.3	309.3	308.6	308.6	306.5	305.1	303.8	299.6	293.4
17.5°	332.2	331.5	333.6	335.0	335.0	335.7	332.2	330.8	326.0	320.4	312.1
20°	364.8	363.4	365.5	366.9	365.5	366.9	363.4	364.1	357.2	347.5	334.3
22.5°	400.2	400.2	402.2	402.2	402.9	404.3	400.2	398.1	392.5	378.7	362.0
25°	443.9	447.3	447.3	447.3	450.1	450.8	446.6	443.2	435.5	416.8	393.9
27.5°	497.3	496.6	495.9	500.0	500.0	501.4	498.6	497.3	488.2	465.4	430.7
30°	554.1	550.0	552.7	554.1	556.9	559.0	556.2	552.0	540.9	516.0	473.0
32.5°	606.1	608.9	613.1	614.5	618.6	619.3	612.4	612.4	601.3	569.4	525.0
35°	665.1	665.1	676.2	681.0	681.0	685.2	674.8	669.2	661.6	628.3	572.2
37.5°	716.4	717.8	726.8	737.9	739.3	745.5	737.9	735.8	722.0	688.0	625.6
40°	764.3	765.6	776.7	789.9	797.5	807.3	799.6	796.2	781.6	742.8	679.0
42.5°	801.7	804.5	818.4	837.8	850.3	862.0	858.6	856.5	836.4	795.5	728.2
45°	830.1	835.0	854.4	877.3	894.6	912.0	912.7	908.5	889.8	844.0	776.1
47.5°	853.0	858.6	880.1	909.2	935.6	957.1	961.2	956.4	939.0	891.2	819.0
50°	871.8	874.5	898.8	936.3	968.8	995.9	1004.2	1000.1	984.8	930.7	856.5
52.5°	881.5	885.6	913.4	956.4	995.9	1028.5	1041.0	1038.9	1020.9	966.8	889.8
55°	886.3	890.5	923.1	972.3	1016.7	1054.8	1070.1	1070.8	1053.5	999.4	921.0
57.5°	880.8	886.3	921.7	976.5	1025.7	1066.6	1090.2	1089.5	1075.7	1024.3	947.4
59°	871.1	875.2	913.4	970.9	1024.3	1065.2	1092.3	1093.0	1080.5	1032.7	959.1
60°	860.0	864.8	903.7	964.0	1018.8	1060.4	1088.8	1090.2	1079.8	1034.7	964.0
62.5°	821.8	828.1	871.1	935.6	995.2	1034.7	1068.7	1070.8	1065.2	1029.2	967.5
65°	768.4	774.0	820.4	889.1	951.5	992.4	1024.3	1029.2	1028.5	1004.2	953.6
67.5°	703.2	703.9	747.6	822.5	887.7	927.9	958.4	966.8	973.0	957.1	912.7
70°	624.9	624.2	666.5	740.7	805.9	848.2	878.7	884.2	900.2	887.7	851.6
72.5°	527.8	536.1	575.6	638.0	702.5	749.7	776.7	787.1	796.2	798.9	769.1
75°	436.2	445.2	476.4	534.7	590.2	633.9	663.0	667.9	684.5	688.7	660.9
77.5°	348.8	349.5	372.4	418.9	469.5	505.6	529.2	541.6	550.7	559.0	529.9
80°	244.8	248.3	264.2	297.5	337.1	375.2	394.6	402.9	409.2	414.7	405.0
82.5°	153.3	154.7	165.1	185.2	212.2	233.7	253.8	260.8	262.2	274.6	273.2
85°	72.8	73.5	80.4	90.2	101.9	119.3	126.9	126.9	136.6	145.6	145.6
87.5°	9.7	9.7	11.8	13.2	16.6	21.5	29.8	30.5	36.1	40.2	43.7
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°	246.9	246.9	246.9	246.9	246.9	246.9	246.9	246.9	246.9	246.9	246.9
2.5°	247.6	247.6	247.6	247.6	247.6	246.9	247.6	247.6	247.6	247.6	247.6
5°	252.4	251.7	251.1	250.4	250.4	249.7	249.7	249.7	249.7	249.7	249.7
7.5°	257.3	256.6	255.9	254.5	253.8	253.1	253.1	252.4	252.4	252.4	252.4
10°	265.6	264.9	262.2	260.1	258.7	258.0	257.3	256.6	255.9	255.9	255.9
12.5°	276.7	275.3	270.5	267.7	265.6	264.2	262.8	262.2	261.5	260.8	260.8
15°	290.6	287.1	280.9	276.7	273.9	271.9	269.8	268.4	267.7	267.0	267.0
17.5°	307.2	303.1	294.7	287.1	282.3	278.8	276.0	273.9	273.2	273.2	273.2
20°	328.0	321.1	309.3	298.9	291.3	286.4	282.3	280.2	279.5	278.8	278.1
22.5°	352.3	343.3	326.0	310.0	300.3	293.4	288.5	285.7	283.7	283.0	283.0
25°	380.0	366.9	344.0	324.6	311.4	301.7	295.4	292.0	288.5	287.1	287.1
27.5°	413.3	396.0	365.5	339.8	321.8	310.0	303.1	298.2	294.7	292.0	290.6
30°	449.4	430.0	389.1	356.5	333.6	320.4	312.1	306.5	301.7	296.8	296.1
32.5°	495.2	467.4	417.5	375.2	347.5	330.8	321.1	314.2	307.9	303.1	301.7
35°	541.6	508.4	447.3	394.6	360.6	340.5	328.7	321.1	314.9	309.3	308.6
37.5°	589.5	554.1	479.9	417.5	375.9	351.6	337.1	328.7	321.1	315.6	314.9
40°	639.4	597.8	513.2	441.1	391.8	362.7	346.1	335.7	327.3	322.5	321.8
42.5°	686.6	641.5	549.3	468.8	410.6	374.5	355.1	344.0	333.6	328.7	328.0
45°	731.7	683.1	585.3	494.5	429.3	387.0	364.1	350.9	339.8	335.0	334.3
47.5°	772.6	724.0	618.6	522.2	448.7	400.9	373.8	357.9	345.4	340.5	340.5
50°	809.3	758.7	651.2	547.9	466.7	414.7	382.1	364.1	351.6	346.8	346.1
52.5°	844.0	789.2	679.7	570.1	484.1	427.2	390.5	369.0	355.8	350.2	349.5
55°	871.8	817.0	703.2	588.1	495.9	435.5	396.0	371.7	357.2	352.3	351.6
57.5°	896.0	839.9	719.9	600.6	503.5	440.4	398.8	371.7	356.5	350.9	350.2
59°	906.4	849.6	725.4	604.1	504.9	441.1	398.1	369.6	353.7	348.1	346.8
60°	912.0	853.7	727.5	604.8	504.2	439.7	397.4	367.6	350.9	344.7	344.7
62.5°	917.5	857.2	724.7	599.2	496.6	432.1	390.5	359.2	340.5	333.6	333.6
65°	905.7	844.7	708.8	583.9	481.3	418.9	377.3	345.4	324.6	317.6	317.6
67.5°	871.1	814.2	679.7	555.5	456.3	396.0	355.8	323.2	303.8	296.1	294.1
70°	812.1	764.3	633.9	514.6	422.4	366.9	328.7	297.5	277.4	269.8	267.0
72.5°	733.1	685.9	572.8	464.7	377.3	328.7	295.4	265.6	243.4	235.8	236.5
75°	624.2	590.9	493.8	401.5	325.3	280.2	252.4	227.5	208.8	202.5	203.2
77.5°	506.3	478.5	400.2	327.3	265.6	230.9	207.4	187.3	174.8	171.3	169.2
80°	387.7	360.6	300.3	244.1	201.8	177.5	161.6	147.7	138.0	133.2	134.5
82.5°	260.1	243.4	199.0	161.6	137.3	120.0	114.4	105.4	101.9	99.2	101.3
85°	140.1	125.5	104.0	86.7	75.6	70.7	72.1	71.4	68.7	68.0	70.0
87.5°	45.8	39.5	30.5	25.7	26.4	23.6	23.6	22.2	20.1	19.4	20.8
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)