

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: P472248

Luminaire Tested: **CCW-VA-4-835-U-T2**

Issue Date: 01/27/2021

Test Information

Test Method: LM-79-08
Report Number: P472248
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/27/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: CCW-VA-4-835-U-T2
Description: INVUE WALL PACK Wave Stream LUMINAIRE WITH T2 DISTRIBUTION LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5270.5 lumens
Efficiency: N/A
Efficacy: 81.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.54' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

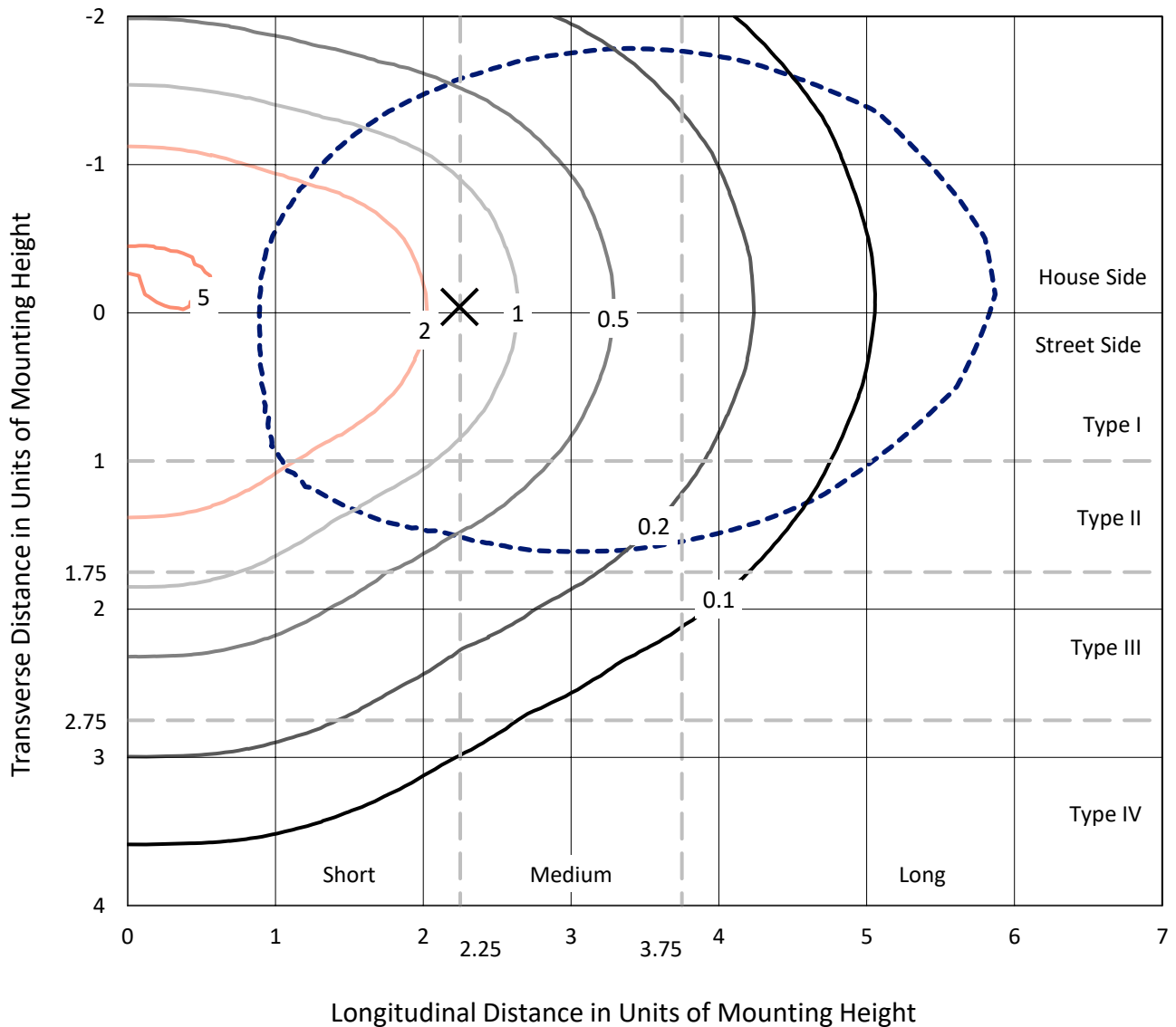
Input Watts (W): 64.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

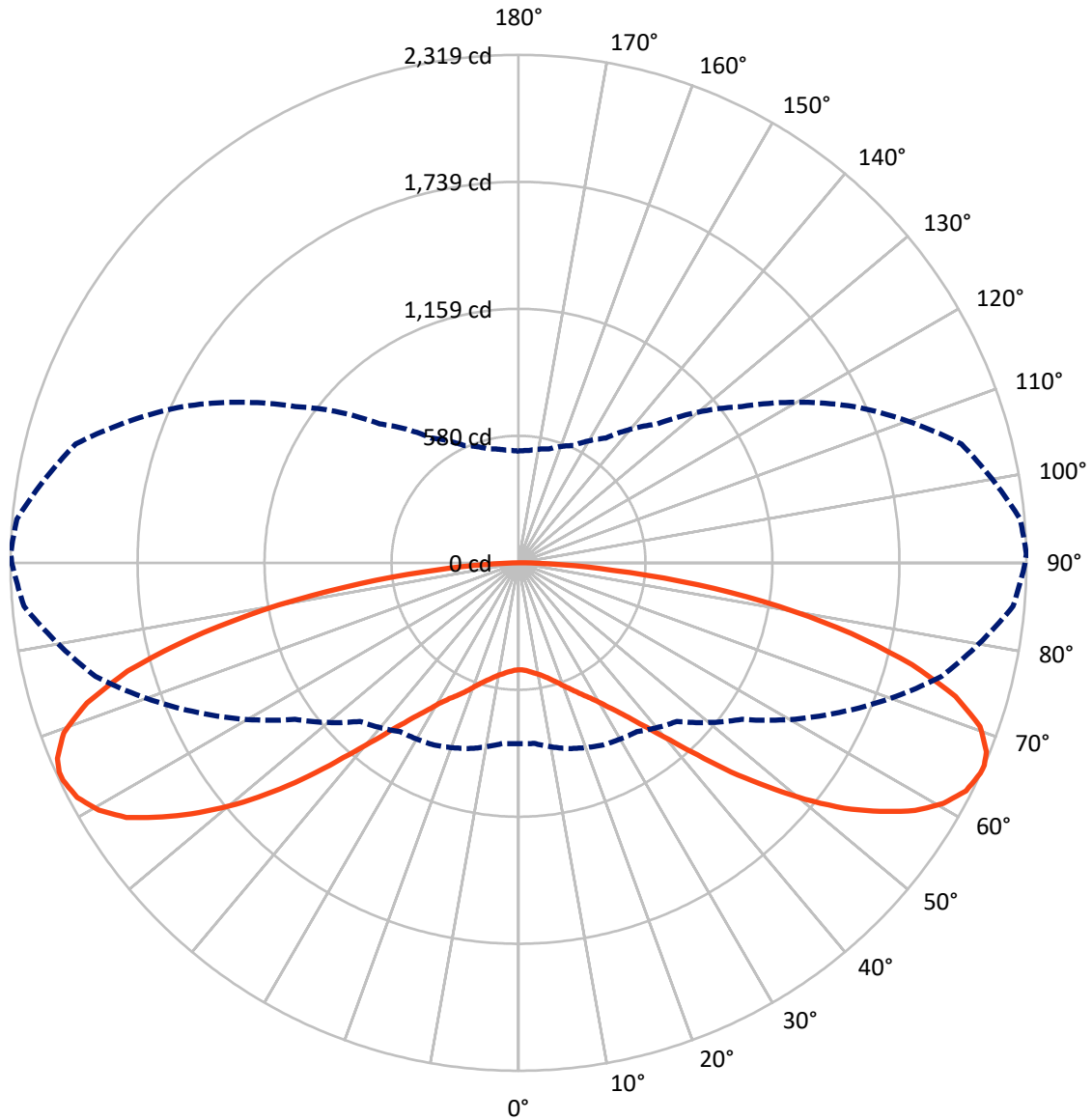
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.2 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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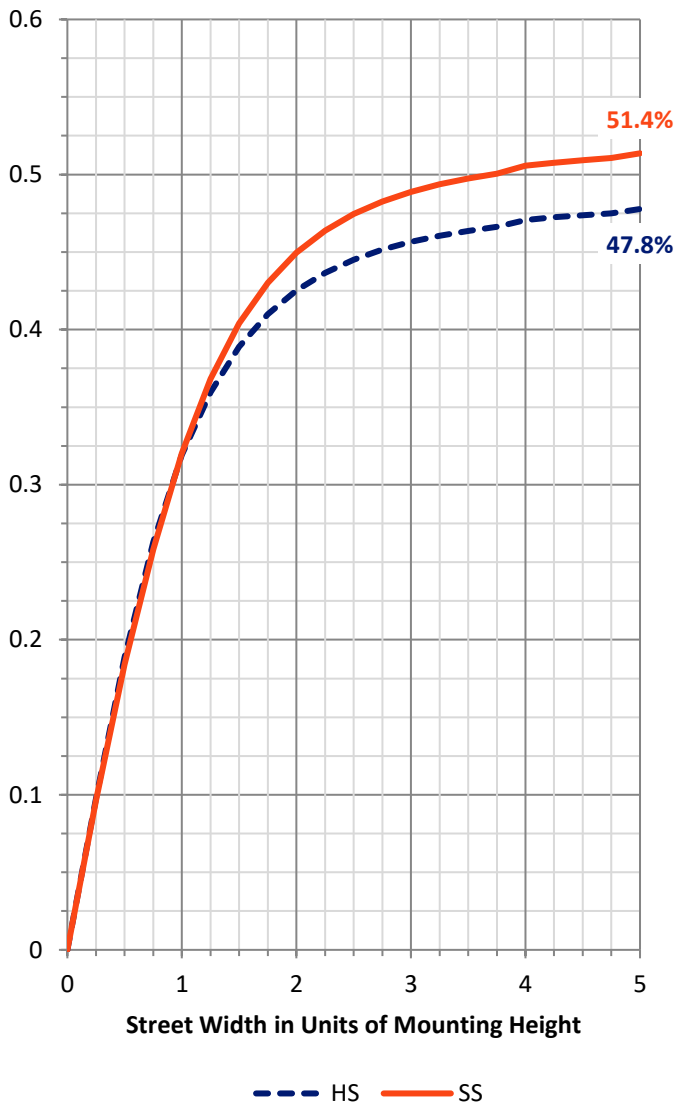
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2543.8	0.0	2543.8
	% Fixture	48.3	0.0	48.3
Street Side	Lumens	2726.6	0.0	2726.6
	% Fixture	51.7	0.0	51.7
Total	Lumens	5270.5	0.0	5270.5
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.1	0.9
10°-20°	157.3	3.0
20°-30°	304.3	5.8
30°-40°	499.3	9.5
40°-50°	790.8	15.0
50°-60°	1090.5	20.7
60°-70°	1224.5	23.2
70°-80°	915.2	17.4
80°-90°	240.5	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°	5270.5	100.0
0°-180°	5270.5	100.0



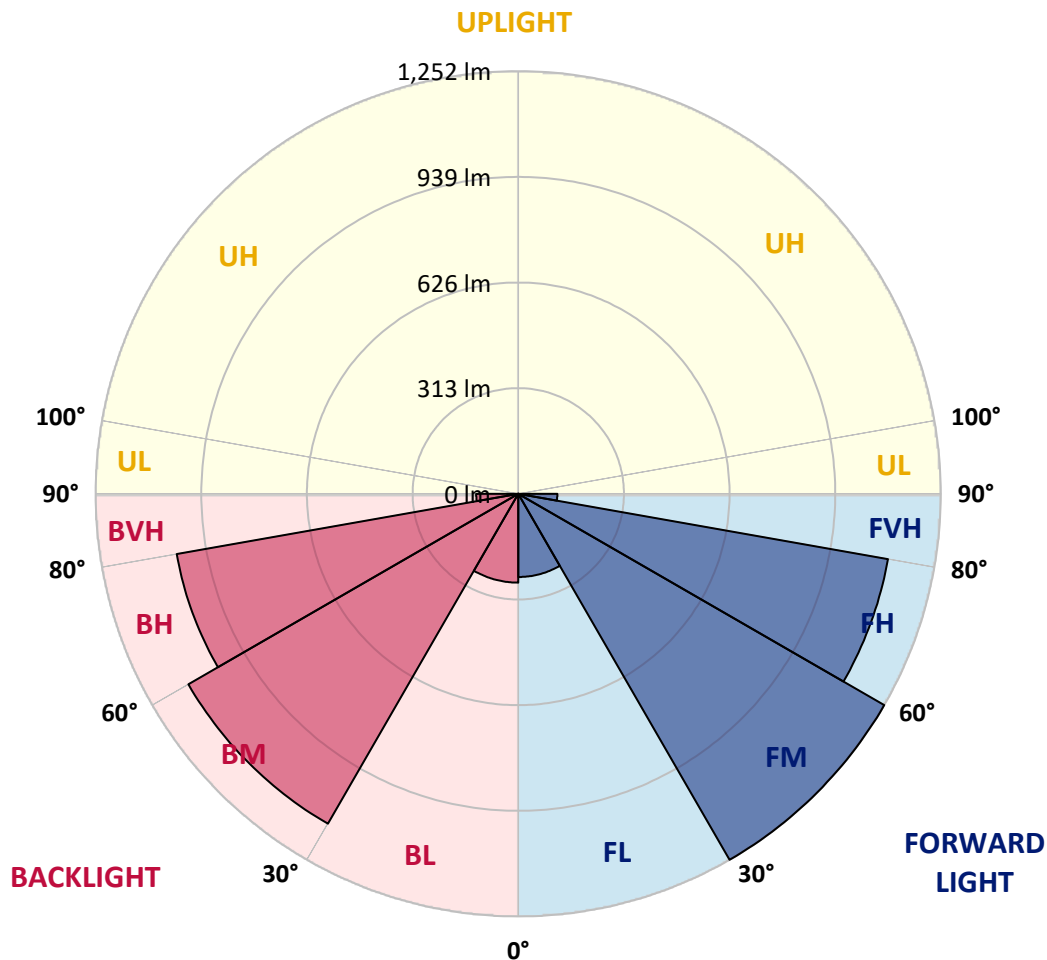
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	246.4	4.7			
FM (30°-60°)	1252.1	23.8			
FH (60°-80°)	1112.3	21.1			G1/1800
FVH (80°-90°)	115.8	2.2			G2/225
BL (0°-30°)	263.3	5.0	B1/500		
BM (30°-60°)	1128.5	21.4	B2/2500		
BH (60°-80°)	1027.4	19.5	B3/2500		G3/2500
BVH (80°-90°)	124.7	2.4			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	488.4	488.4	488.4	488.4	488.4	488.4	488.4	488.4	488.4	488.4	488.4
2.5°	490.2	490.2	490.2	490.2	492.1	492.1	492.1	492.1	492.1	490.2	490.2
5°	494.0	494.0	494.0	494.0	495.8	495.8	495.8	495.8	497.7	497.7	497.7
7.5°	497.7	497.7	499.5	499.5	501.4	501.4	503.3	503.3	505.1	507.0	507.0
10°	505.1	505.1	507.0	507.0	510.7	512.6	514.5	514.5	518.2	518.2	518.2
12.5°	514.5	516.3	518.2	520.1	523.8	525.6	527.5	529.4	531.2	533.1	533.1
15°	529.4	527.5	531.2	535.0	536.8	540.6	542.4	544.3	548.0	551.7	551.7
17.5°	540.6	542.4	544.3	548.0	551.7	557.3	561.1	564.8	568.5	572.2	572.2
20°	555.5	553.6	561.1	566.7	570.4	577.8	583.4	590.9	594.6	598.3	600.2
22.5°	568.5	570.4	574.1	581.6	589.0	600.2	611.4	617.0	622.6	626.3	631.9
25°	585.3	587.2	592.7	600.2	611.4	624.4	637.5	644.9	650.5	658.0	663.6
27.5°	602.1	602.1	611.4	622.6	635.6	652.4	667.3	674.8	684.1	693.4	697.1
30°	620.7	620.7	630.0	644.9	663.6	682.2	695.3	710.2	723.2	732.5	740.0
32.5°	648.7	648.7	659.9	674.8	695.3	717.6	736.3	751.2	768.0	784.7	799.7
35°	680.4	682.2	697.1	715.8	740.0	768.0	784.7	805.2	823.9	851.8	866.8
37.5°	730.7	732.5	749.3	773.6	797.8	827.6	855.6	879.8	907.8	939.5	950.6
40°	805.2	810.8	827.6	838.8	861.2	883.5	924.5	965.5	1014.0	1056.9	1064.3
42.5°	939.5	933.9	922.7	918.9	924.5	948.8	993.5	1056.9	1142.6	1196.7	1196.7
45°	991.6	991.6	993.5	989.8	986.1	1002.8	1055.0	1155.7	1276.8	1351.4	1366.3
47.5°	1001.0	1002.8	1019.6	1034.5	1038.2	1056.9	1120.3	1252.6	1414.8	1524.7	1534.1
50°	1001.0	1004.7	1027.1	1053.2	1071.8	1097.9	1176.2	1338.3	1550.8	1677.6	1701.8
52.5°	997.2	1001.0	1025.2	1056.9	1086.7	1124.0	1224.6	1427.8	1672.0	1843.5	1854.7
55°	987.9	991.6	1021.5	1055.0	1088.6	1138.9	1263.8	1504.2	1789.4	1981.4	2001.9
57.5°	976.7	982.3	1014.0	1049.4	1081.1	1142.6	1289.9	1563.9	1884.5	2104.4	2141.7
60°	954.4	963.7	999.1	1034.5	1064.3	1129.6	1302.9	1610.5	1955.3	2193.9	2231.2
62.5°	909.6	918.9	958.1	997.2	1027.1	1097.9	1295.5	1632.9	1996.3	2249.8	2289.0
65°	853.7	857.4	900.3	941.3	971.1	1045.7	1263.8	1629.1	2005.7	2268.5	2313.2
66°	825.7	827.6	877.9	917.1	941.3	1023.3	1245.1	1616.1	2000.1	2266.6	2313.2
67.5°	775.4	784.7	827.6	868.6	896.6	973.0	1200.4	1586.3	1977.7	2248.0	2296.4
70°	687.8	695.3	730.7	771.7	801.5	874.2	1103.5	1498.6	1895.7	2171.5	2227.5
72.5°	592.7	598.3	635.6	665.4	684.1	762.4	986.1	1355.1	1752.1	2028.0	2082.1
75°	492.1	495.8	529.4	549.9	566.7	635.6	829.5	1170.6	1526.6	1795.0	1865.9
77.5°	387.7	389.6	417.5	436.2	436.2	495.8	658.0	948.8	1252.6	1500.5	1552.7
80°	285.2	283.3	300.1	309.4	315.0	354.2	473.5	697.1	954.4	1148.2	1198.5
82.5°	186.4	184.5	195.7	199.4	199.4	223.7	298.2	441.8	626.3	779.1	809.0
85°	98.8	102.5	100.7	100.7	100.7	110.0	149.1	231.1	333.7	417.5	438.0
87.5°	16.8	16.8	16.8	18.6	22.4	29.8	39.1	65.2	95.1	128.6	145.4
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°	488.4	488.4	488.4	488.4	488.4	488.4	488.4	488.4	488.4	488.4	488.4
2.5°	490.2	492.1	492.1	492.1	492.1	492.1	492.1	492.1	492.1	492.1	492.1
5°	497.7	497.7	497.7	499.5	499.5	499.5	499.5	499.5	499.5	499.5	499.5
7.5°	507.0	507.0	508.9	508.9	508.9	510.7	510.7	508.9	508.9	508.9	508.9
10°	518.2	518.2	520.1	521.9	521.9	523.8	523.8	521.9	521.9	520.1	520.1
12.5°	533.1	535.0	536.8	538.7	540.6	540.6	538.7	536.8	535.0	533.1	533.1
15°	551.7	553.6	555.5	559.2	559.2	559.2	557.3	555.5	551.7	549.9	551.7
17.5°	574.1	576.0	579.7	581.6	583.4	581.6	581.6	579.7	579.7	577.8	577.8
20°	602.1	603.9	609.5	611.4	611.4	613.3	618.8	622.6	628.2	630.0	630.0
22.5°	630.0	633.8	639.3	646.8	650.5	658.0	659.9	663.6	661.7	656.1	656.1
25°	663.6	667.3	678.5	687.8	695.3	699.0	695.3	689.7	680.4	672.9	671.0
27.5°	699.0	704.6	721.4	734.4	738.1	734.4	719.5	706.5	695.3	685.9	682.2
30°	743.7	753.1	771.7	779.1	777.3	762.4	740.0	723.2	706.5	695.3	693.4
32.5°	799.7	809.0	825.7	827.6	816.4	788.5	758.6	736.3	715.8	702.7	700.9
35°	866.8	876.1	885.4	879.8	848.1	812.7	775.4	743.7	723.2	708.3	708.3
37.5°	952.5	958.1	958.1	930.1	881.7	835.1	788.5	751.2	728.8	713.9	712.0
40°	1064.3	1062.5	1036.4	982.3	918.9	855.6	797.8	758.6	730.7	715.8	713.9
42.5°	1198.5	1185.5	1129.6	1042.0	954.4	874.2	809.0	760.5	728.8	713.9	712.0
45°	1362.6	1340.2	1239.6	1110.9	991.6	891.0	814.6	758.6	723.2	706.5	704.6
47.5°	1524.7	1511.7	1373.8	1183.6	1028.9	909.6	818.3	753.1	712.0	687.8	687.8
50°	1696.2	1664.5	1508.0	1271.2	1068.1	922.7	818.3	743.7	693.4	667.3	663.6
52.5°	1862.1	1830.4	1644.0	1358.8	1110.9	935.7	814.6	730.7	676.6	648.7	644.9
55°	2003.8	1977.7	1776.4	1457.6	1155.7	945.0	809.0	715.8	659.9	633.8	630.0
57.5°	2134.3	2108.2	1891.9	1541.5	1198.5	950.6	795.9	697.1	639.3	613.3	611.4
60°	2229.3	2208.8	1990.7	1619.8	1234.0	950.6	777.3	674.8	617.0	590.9	589.0
62.5°	2292.7	2272.2	2061.6	1672.0	1256.3	937.6	749.3	644.9	589.0	564.8	559.2
65°	2316.9	2298.3	2093.3	1692.5	1252.6	911.5	712.0	607.7	553.6	529.4	525.6
66°	2318.8	2298.3	2093.3	1688.8	1243.3	896.6	695.3	590.9	538.7	514.5	510.7
67.5°	2303.9	2285.3	2080.2	1670.1	1217.2	868.6	661.7	562.9	510.7	486.5	484.6
70°	2234.9	2220.0	2009.4	1599.3	1155.7	807.1	605.8	508.9	458.5	441.8	436.2
72.5°	2085.8	2069.0	1867.7	1467.0	1055.0	723.2	535.0	445.5	404.5	384.0	382.1
75°	1854.7	1847.2	1651.5	1291.7	909.6	622.6	452.9	376.5	343.0	328.1	328.1
77.5°	1552.7	1537.8	1371.9	1068.1	747.5	503.3	363.5	305.7	279.6	266.6	268.4
80°	1207.9	1196.7	1056.9	801.5	564.8	378.4	272.1	233.0	214.4	206.9	203.2
82.5°	827.6	797.8	704.6	531.2	367.2	255.4	188.3	162.2	152.8	151.0	149.1
85°	430.6	441.8	370.9	281.5	199.4	141.7	113.7	104.4	100.7	102.5	102.5
87.5°	141.7	145.4	111.8	85.7	65.2	50.3	42.9	41.0	35.4	39.1	41.0
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)