

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: P472199

Luminaire Tested: **CCW-VA-5-840-U-T4W**

Issue Date: 01/27/2021

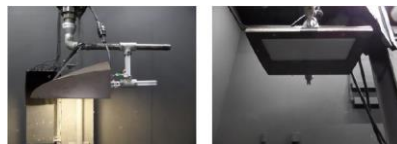
Test Information

Test Method: LM-79-08
Report Number: P472199
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/27/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: CCW-VA-5-840-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: 7614.4 lumens
Efficiency: N/A
Efficacy: 102.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.54' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G3

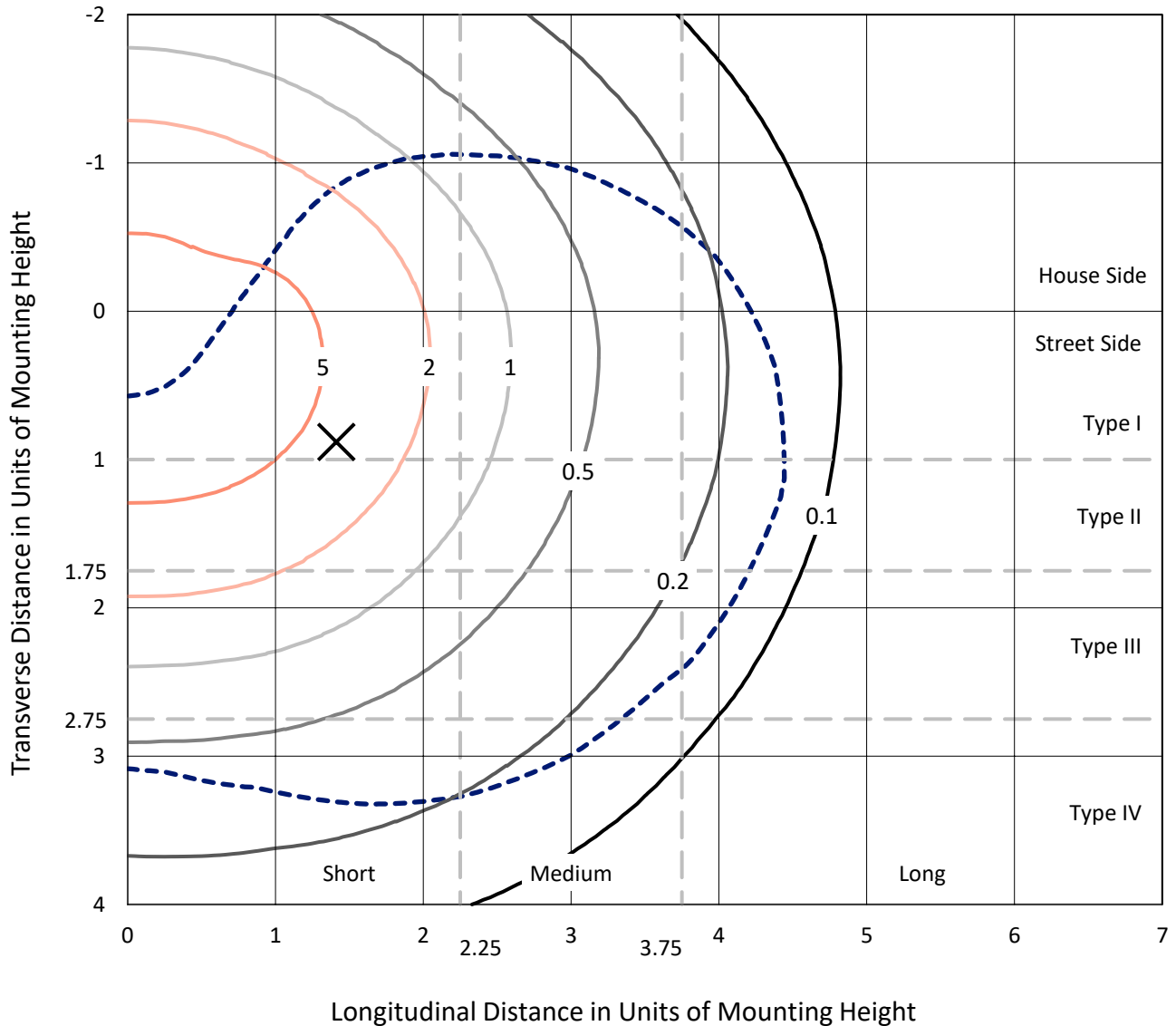
Input Watts (W): 74.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

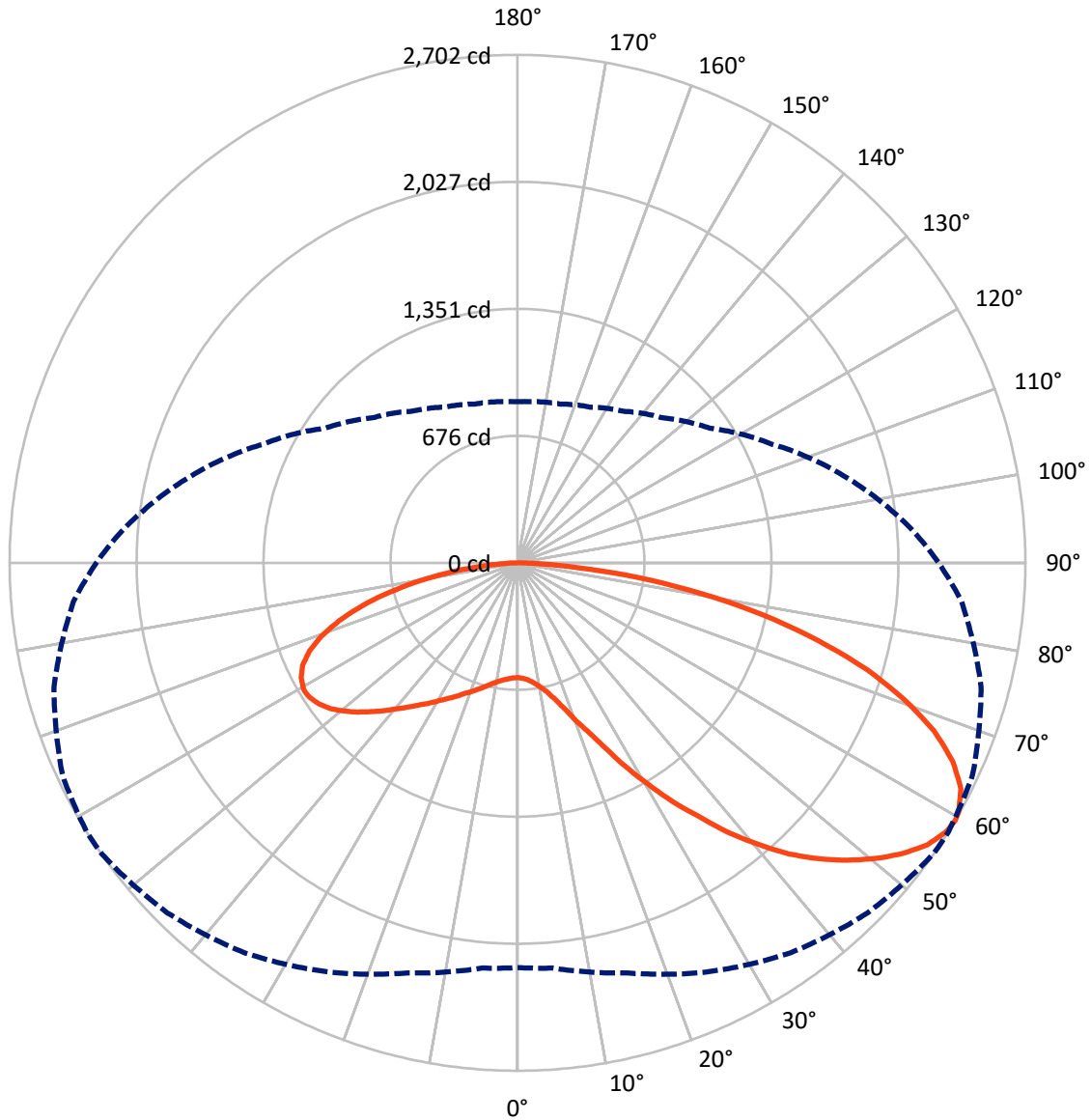
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 9.3 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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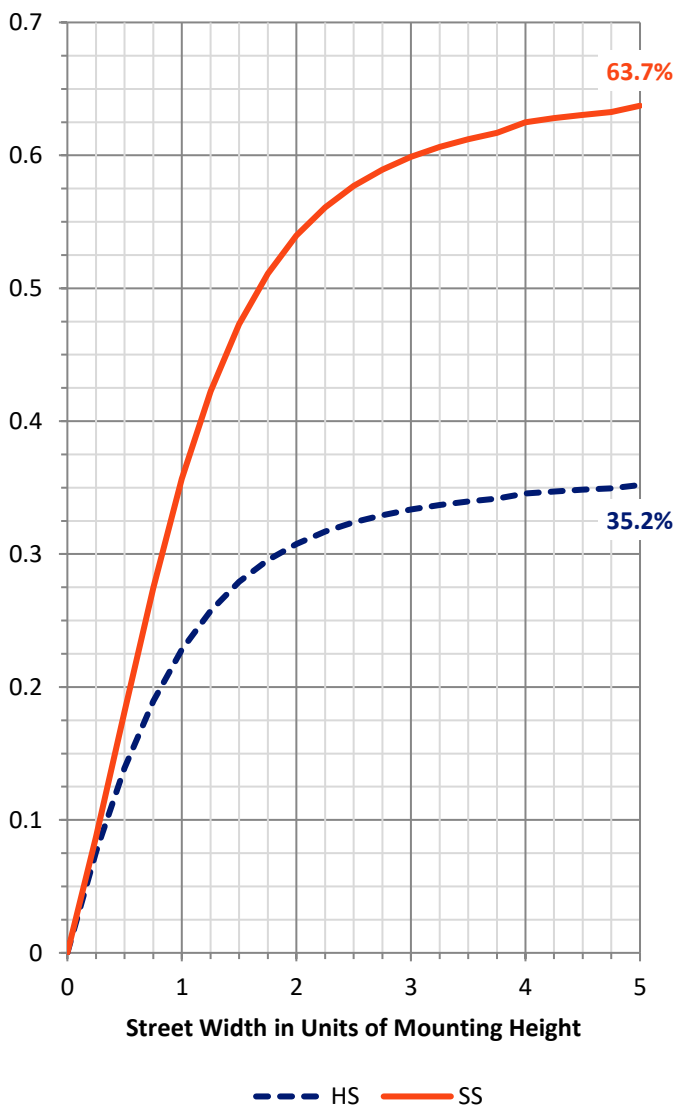
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2715.6	0.0	2715.6
	% Fixture	35.7	0.0	35.7
Street Side	Lumens	4898.8	0.0	4898.8
	% Fixture	64.3	0.0	64.3
Total	Lumens	7614.4	0.0	7614.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.6	0.8
10°-20°	206.5	2.7
20°-30°	435.9	5.7
30°-40°	802.3	10.5
40°-50°	1250.5	16.4
50°-60°	1643.2	21.6
60°-70°	1721.8	22.6
70°-80°	1193.8	15.7
80°-90°	299.8	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°	7614.4	100.0
0°-180°	7614.4	100.0

Coefficient of Utilization



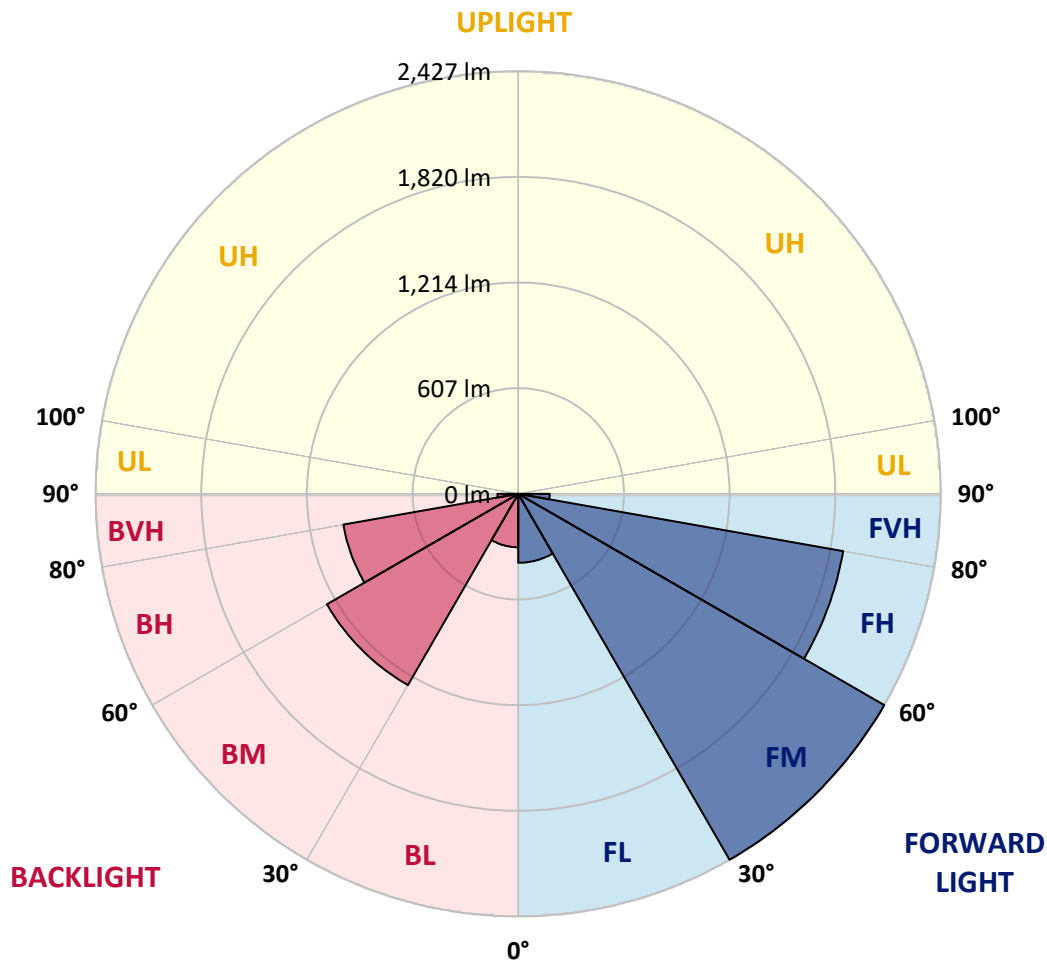
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	396.1	5.2			
FM (30°-60°)	2427.3	31.9			
FH (60°-80°)	1895.2	24.9			G2/5000
FVH (80°-90°)	180.1	2.4			G2/225
BL (0°-30°)	306.9	4.0	B1/500		
BM (30°-60°)	1268.7	16.7	B2/2500		
BH (60°-80°)	1020.3	13.4	B3/2500		G3/2500
BVH (80°-90°)	119.6	1.6			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 IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	610.4	610.4	610.4	610.4	610.4	610.4	610.4	610.4	610.4	610.4	610.4
2.5°	619.0	619.0	619.0	617.3	617.3	617.3	615.6	615.6	615.6	613.8	612.1
5°	632.7	632.7	631.0	632.7	631.0	629.3	627.6	627.6	627.6	625.8	624.1
7.5°	651.6	653.3	651.6	653.3	651.6	649.8	646.4	646.4	644.7	641.3	637.8
10°	680.7	680.7	680.7	679.0	677.3	675.6	673.9	672.1	670.4	665.3	660.1
12.5°	716.7	716.7	716.7	713.3	713.3	709.9	708.1	706.4	703.0	696.1	689.3
15°	761.3	759.6	764.7	764.7	763.0	763.0	757.9	754.4	751.0	740.7	725.3
17.5°	821.3	819.6	824.7	828.2	828.2	829.9	821.3	817.9	805.9	792.2	771.6
20°	901.9	898.5	903.6	907.0	903.6	907.0	898.5	900.2	883.0	859.0	826.5
22.5°	989.3	989.3	994.5	994.5	996.2	999.6	989.3	984.2	970.5	936.2	895.0
25°	1097.4	1105.9	1105.9	1105.9	1112.8	1114.5	1104.2	1095.7	1076.8	1030.5	973.9
27.5°	1229.4	1227.7	1226.0	1236.3	1236.3	1239.7	1232.8	1229.4	1207.1	1150.5	1064.8
30°	1370.0	1359.7	1366.6	1370.0	1376.9	1382.0	1375.1	1364.8	1337.4	1275.7	1169.4
32.5°	1498.6	1505.5	1515.7	1519.2	1529.5	1531.2	1514.0	1514.0	1486.6	1407.7	1298.0
35°	1644.3	1644.3	1671.8	1683.8	1683.8	1694.1	1668.3	1654.6	1635.8	1553.5	1414.6
37.5°	1771.2	1774.6	1796.9	1824.4	1827.8	1843.2	1824.4	1819.2	1784.9	1700.9	1546.6
40°	1889.5	1893.0	1920.4	1953.0	1971.8	1995.8	1977.0	1968.4	1932.4	1836.4	1678.6
42.5°	1982.1	1989.0	2023.3	2071.3	2102.1	2131.3	2122.7	2117.6	2067.9	1966.7	1800.4
45°	2052.4	2064.4	2112.4	2169.0	2211.9	2254.7	2256.5	2246.2	2199.9	2086.7	1918.7
47.5°	2109.0	2122.7	2175.9	2247.9	2313.0	2366.2	2376.5	2364.5	2321.6	2203.3	2025.0
50°	2155.3	2162.2	2222.2	2314.8	2395.3	2462.2	2482.8	2472.5	2434.8	2301.0	2117.6
52.5°	2179.3	2189.6	2258.2	2364.5	2462.2	2542.8	2573.7	2568.5	2523.9	2390.2	2199.9
55°	2191.3	2201.6	2282.2	2403.9	2513.7	2608.0	2645.7	2647.4	2604.5	2470.8	2277.0
57.5°	2177.6	2191.3	2278.8	2414.2	2535.9	2637.1	2695.4	2693.7	2659.4	2532.5	2342.2
59°	2153.6	2163.9	2258.2	2400.5	2532.5	2633.7	2700.6	2702.3	2671.4	2553.1	2371.3
60°	2126.1	2138.2	2234.2	2383.3	2518.8	2621.7	2692.0	2695.4	2669.7	2558.2	2383.3
62.5°	2031.8	2047.3	2153.6	2313.0	2460.5	2558.2	2642.3	2647.4	2633.7	2544.5	2391.9
65°	1899.8	1913.5	2028.4	2198.2	2352.5	2453.6	2532.5	2544.5	2542.8	2482.8	2357.6
67.5°	1738.6	1740.4	1848.4	2033.6	2194.7	2294.2	2369.6	2390.2	2405.6	2366.2	2256.5
70°	1544.9	1543.2	1647.8	1831.2	1992.4	2097.0	2172.4	2186.2	2225.6	2194.7	2105.6
72.5°	1304.8	1325.4	1423.1	1577.5	1736.9	1853.5	1920.4	1946.1	1968.4	1975.3	1901.5
75°	1078.5	1100.8	1178.0	1322.0	1459.2	1567.2	1639.2	1651.2	1692.3	1702.6	1634.0
77.5°	862.5	864.2	920.8	1035.6	1160.8	1250.0	1308.3	1339.1	1361.4	1382.0	1310.0
80°	605.3	613.8	653.3	735.6	833.3	927.6	975.6	996.2	1011.6	1025.4	1001.3
82.5°	378.9	382.4	408.1	457.8	524.7	577.8	627.6	644.7	648.1	679.0	675.6
85°	180.0	181.8	198.9	222.9	252.1	294.9	313.8	313.8	337.8	360.1	360.1
87.5°	24.0	24.0	29.1	32.6	41.2	53.2	73.7	75.4	89.2	99.4	108.0
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°	610.4	610.4	610.4	610.4	610.4	610.4	610.4	610.4	610.4	610.4	610.4
2.5°	612.1	612.1	612.1	612.1	612.1	610.4	612.1	612.1	612.1	612.1	612.1
5°	624.1	622.4	620.7	619.0	619.0	617.3	617.3	617.3	617.3	617.3	617.3
7.5°	636.1	634.4	632.7	629.3	627.6	625.8	625.8	624.1	624.1	624.1	624.1
10°	656.7	655.0	648.1	643.0	639.6	637.8	636.1	634.4	632.7	632.7	632.7
12.5°	684.1	680.7	668.7	661.8	656.7	653.3	649.8	648.1	646.4	644.7	644.7
15°	718.4	709.9	694.4	684.1	677.3	672.1	667.0	663.6	661.8	660.1	660.1
17.5°	759.6	749.3	728.7	709.9	697.9	689.3	682.4	677.3	675.6	675.6	675.6
20°	811.0	793.9	764.7	739.0	720.1	708.1	697.9	692.7	691.0	689.3	687.6
22.5°	871.0	848.7	805.9	766.4	742.4	725.3	713.3	706.4	701.3	699.6	699.6
25°	939.6	907.0	850.5	802.4	769.9	745.9	730.4	721.9	713.3	709.9	709.9
27.5°	1021.9	979.1	903.6	840.2	795.6	766.4	749.3	737.3	728.7	721.9	718.4
30°	1111.1	1063.1	961.9	881.3	824.7	792.2	771.6	757.9	745.9	733.9	732.1
32.5°	1224.2	1155.7	1032.2	927.6	859.0	817.9	793.9	776.7	761.3	749.3	745.9
35°	1339.1	1256.8	1105.9	975.6	891.6	841.9	812.7	793.9	778.4	764.7	763.0
37.5°	1457.4	1370.0	1186.5	1032.2	929.3	869.3	833.3	812.7	793.9	780.2	778.4
40°	1580.9	1478.0	1268.8	1090.5	968.8	896.8	855.6	829.9	809.3	797.3	795.6
42.5°	1697.5	1586.0	1358.0	1159.1	1015.1	925.9	877.9	850.5	824.7	812.7	811.0
45°	1808.9	1688.9	1447.2	1222.5	1061.4	956.8	900.2	867.6	840.2	828.2	826.5
47.5°	1910.1	1790.1	1529.5	1291.1	1109.4	991.1	924.2	884.8	853.9	841.9	841.9
50°	2001.0	1875.8	1610.0	1354.6	1153.9	1025.4	944.8	900.2	869.3	857.3	855.6
52.5°	2086.7	1951.3	1680.3	1409.4	1196.8	1056.2	965.3	912.2	879.6	865.9	864.2
55°	2155.3	2019.8	1738.6	1454.0	1226.0	1076.8	979.1	919.0	883.0	871.0	869.3
57.5°	2215.3	2076.4	1779.8	1484.9	1244.8	1088.8	985.9	919.0	881.3	867.6	865.9
59°	2241.0	2100.4	1793.5	1493.4	1248.3	1090.5	984.2	913.9	874.5	860.7	857.3
60°	2254.7	2110.7	1798.7	1495.2	1246.5	1087.1	982.5	908.8	867.6	852.2	852.2
62.5°	2268.5	2119.3	1791.8	1481.4	1227.7	1068.2	965.3	888.2	841.9	824.7	824.7
65°	2239.3	2088.4	1752.4	1443.7	1190.0	1035.6	932.8	853.9	802.4	785.3	785.3
67.5°	2153.6	2013.0	1680.3	1373.4	1128.2	979.1	879.6	799.0	751.0	732.1	727.0
70°	2007.8	1889.5	1567.2	1272.3	1044.2	907.0	812.7	735.6	685.9	667.0	660.1
72.5°	1812.4	1695.8	1416.3	1148.8	932.8	812.7	730.4	656.7	601.8	583.0	584.7
75°	1543.2	1460.9	1220.8	992.8	804.2	692.7	624.1	562.4	516.1	500.7	502.4
77.5°	1251.7	1183.1	989.3	809.3	656.7	571.0	512.7	463.0	432.1	423.5	418.4
80°	958.5	891.6	742.4	603.6	499.0	438.9	399.5	365.2	341.2	329.2	332.6
82.5°	643.0	601.8	492.1	399.5	339.5	296.6	282.9	260.6	252.1	245.2	250.3
85°	346.4	310.3	257.2	214.3	186.9	174.9	178.3	176.6	169.7	168.0	173.2
87.5°	113.2	97.7	75.4	63.4	65.2	58.3	58.3	54.9	49.7	48.0	51.4
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)