

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: P472300

Luminaire Tested: **CCW-VA-4-840-U-T4FT**

Issue Date: 01/27/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P472300  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 01/27/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: CCW-VA-4-840-U-T4FT  
Description: INVUE WALL PACK Wave Stream LUMINAIRE WITH T4FT DISTRIBUTION LENS  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6172.2 lumens  
Efficiency: N/A  
Efficacy: 95.5 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B2 - U0 - G2

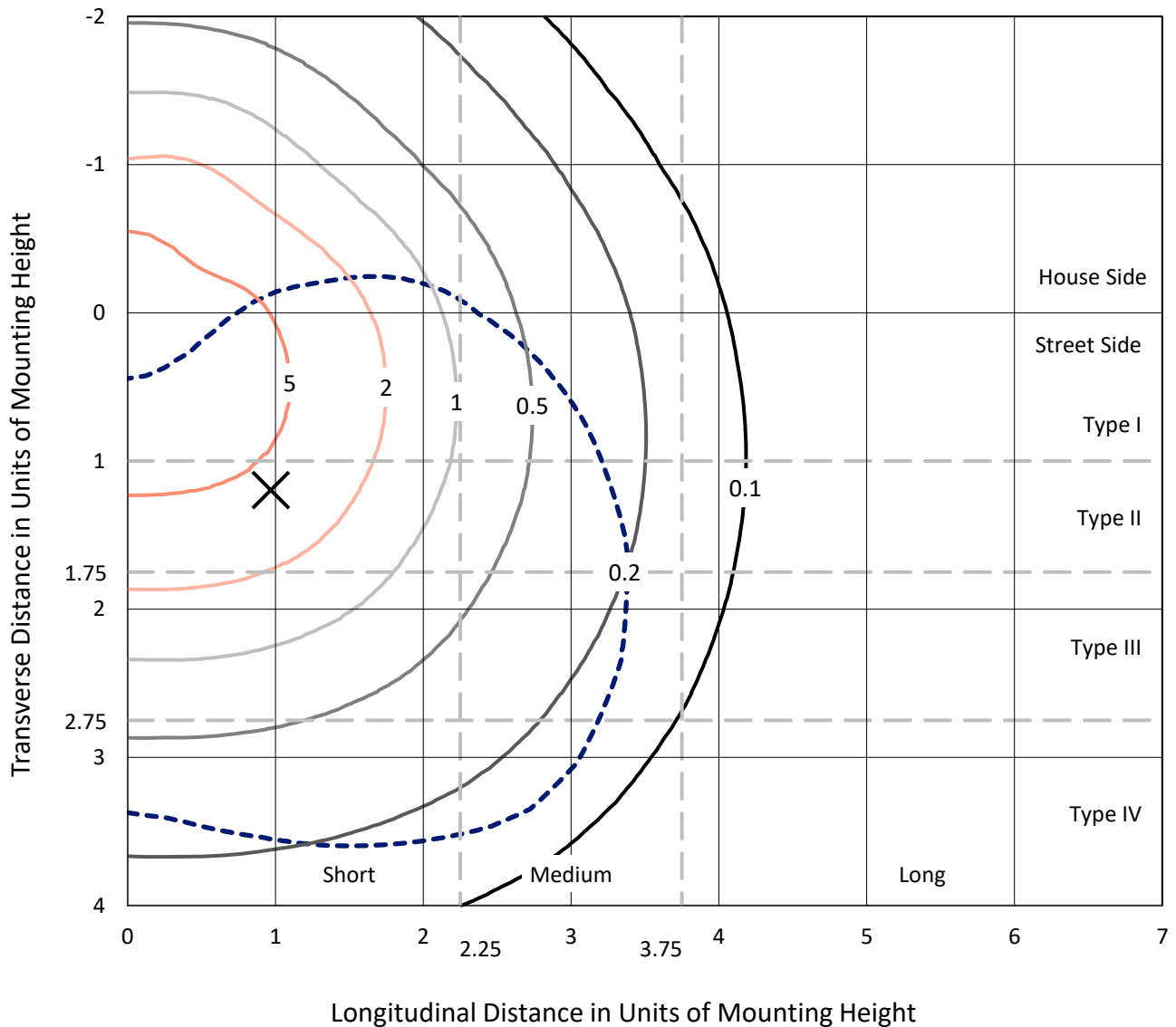
Input Watts (W): 64.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

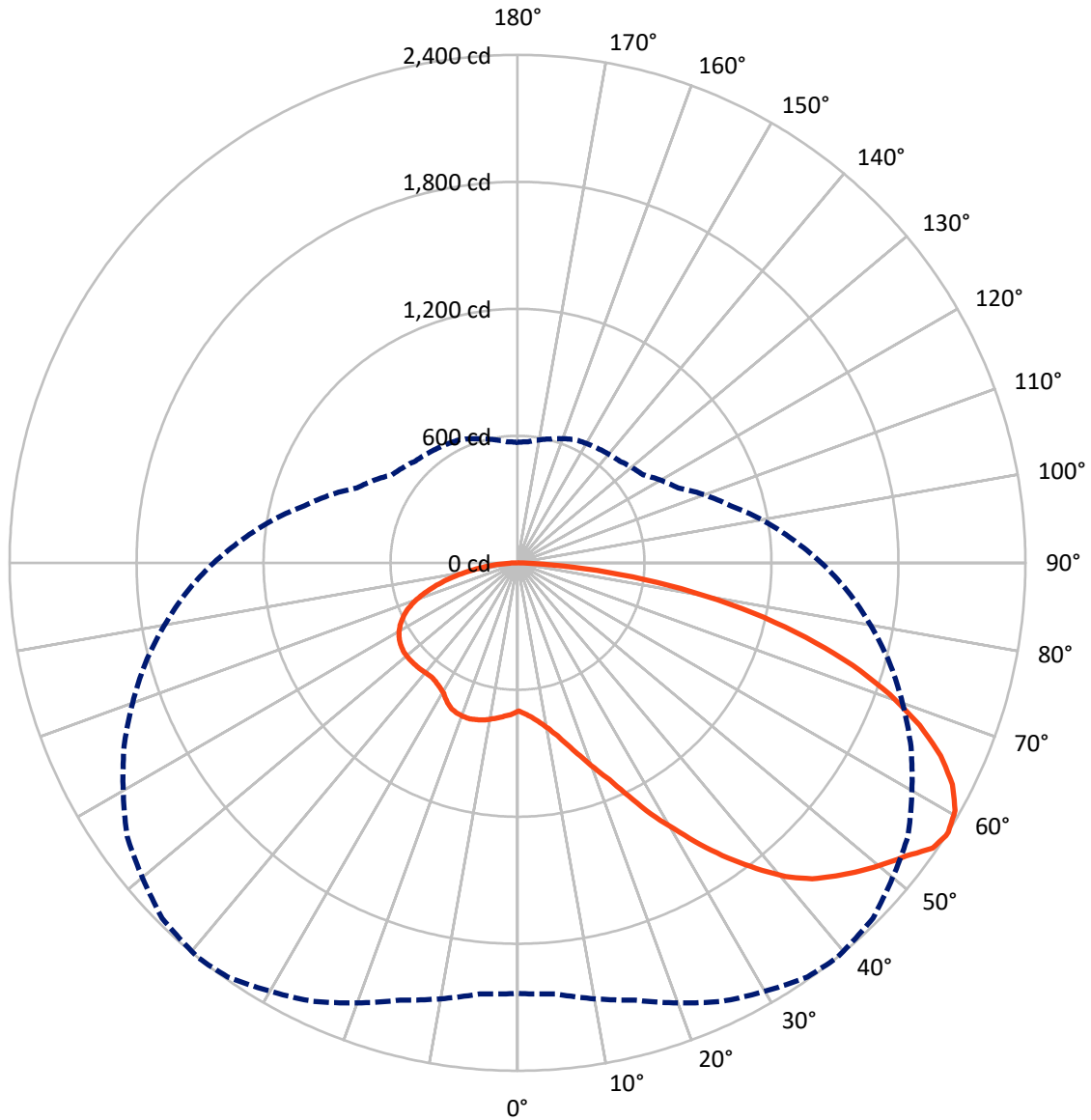
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 9.6 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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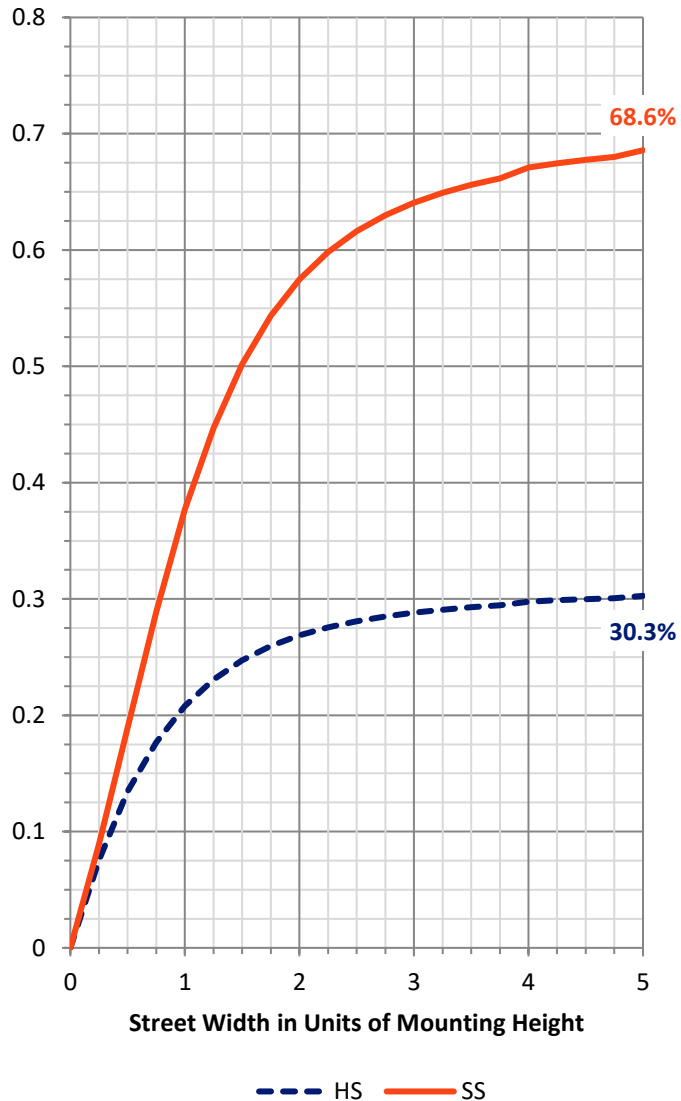
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1893.8	0.0	1893.8
	% Fixture	30.7	0.0	30.7
<b>Street Side</b>	Lumens	4278.3	0.0	4278.3
	% Fixture	69.3	0.0	69.3
<b>Total</b>	Lumens	6172.2	0.0	6172.2
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	70.9	1.1
10°-20°	236.3	3.8
20°-30°	456.5	7.4
30°-40°	738.5	12.0
40°-50°	1037.5	16.8
50°-60°	1281.6	20.8
60°-70°	1273.8	20.6
70°-80°	861.9	14.0
80°-90°	215.1	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°	6172.2	100.0
0°-180°	6172.2	100.0

**Coefficient of Utilization**



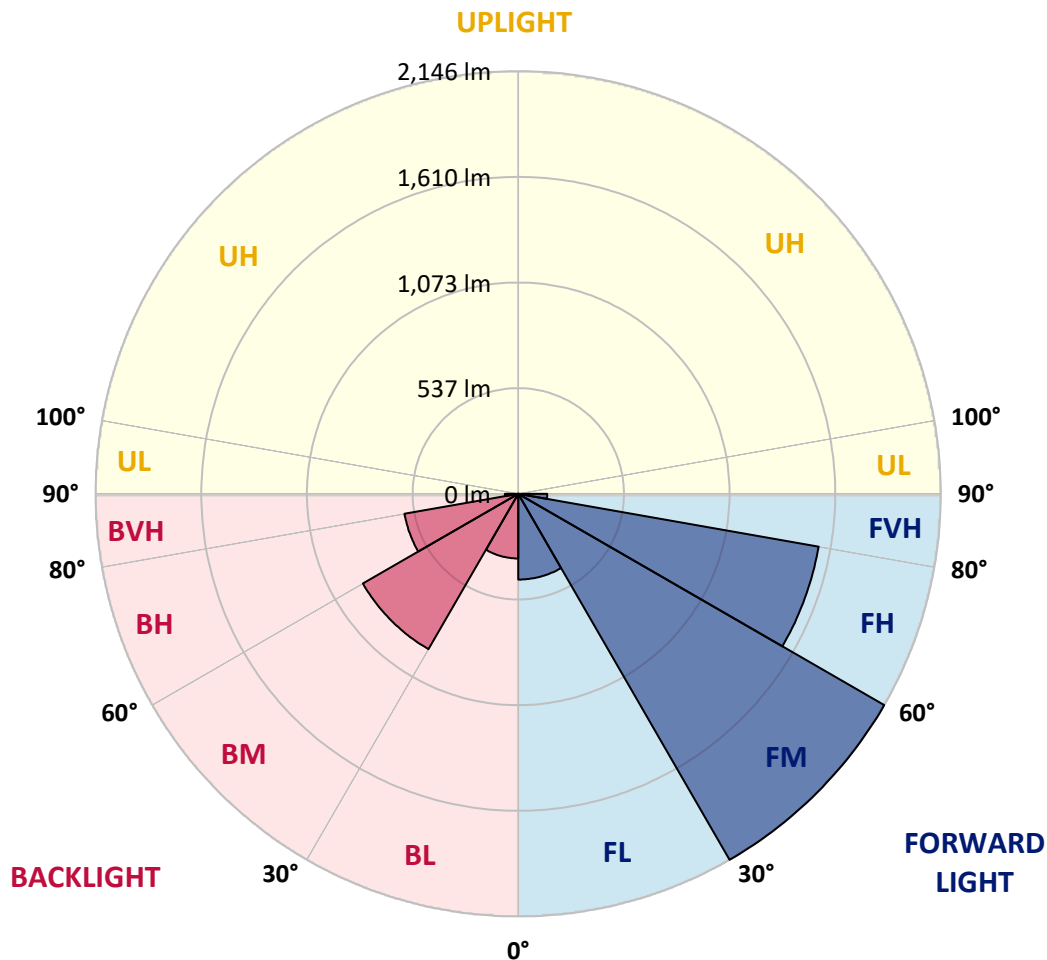
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	435.5	7.1			
FM (30°-60°)	2146.4	34.8			
FH (60°-80°)	1549.2	25.1			G1/1800
FVH (80°-90°)	147.2	2.4			G2/225
BL (0°-30°)	328.2	5.3	B1/500		
BM (30°-60°)	911.2	14.8	B1/1000		
BH (60°-80°)	586.5	9.5	B2/1000		G2/1000
BVH (80°-90°)	67.9	1.1			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	39°	45°	55°	65°	75°	85°
0°	699.9	699.9	699.9	699.9	699.9	699.9	699.9	699.9	699.9	699.9	699.9
2.5°	720.7	719.8	718.8	718.8	716.9	715.0	714.1	712.2	713.1	715.0	716.0
5°	741.5	739.6	739.6	737.7	734.9	734.9	732.0	728.3	727.3	726.4	726.4
7.5°	773.7	770.8	771.8	768.9	766.1	762.3	757.6	752.9	751.0	744.3	738.7
10°	810.6	809.6	806.8	802.0	799.2	795.4	790.7	782.2	775.6	768.0	763.3
12.5°	854.1	852.2	853.1	849.3	844.6	838.0	830.4	821.9	809.6	795.4	786.0
15°	910.8	907.0	907.0	906.1	896.6	894.7	887.2	868.2	851.2	832.3	810.6
17.5°	979.8	978.9	975.1	971.3	965.7	959.0	951.5	930.7	905.1	875.8	846.5
20°	1053.6	1051.7	1054.6	1048.9	1037.5	1034.7	1022.4	998.8	967.6	933.5	889.1
22.5°	1134.0	1135.9	1135.9	1134.0	1124.6	1113.2	1102.8	1071.6	1035.7	994.0	942.0
25°	1231.4	1232.4	1238.1	1243.7	1238.1	1220.1	1205.9	1157.7	1109.4	1056.5	995.0
27.5°	1341.1	1334.5	1350.6	1361.0	1350.6	1345.9	1314.7	1261.7	1195.5	1129.3	1052.7
30°	1447.1	1447.1	1460.3	1475.4	1468.8	1457.5	1431.9	1363.8	1288.2	1204.0	1111.3
32.5°	1545.4	1556.8	1562.5	1597.5	1593.7	1588.0	1558.7	1468.8	1374.2	1278.7	1168.1
35°	1661.8	1658.0	1681.6	1703.4	1720.4	1712.8	1691.1	1600.3	1476.4	1357.2	1230.5
37.5°	1749.7	1757.3	1778.1	1816.9	1829.2	1833.0	1805.5	1711.9	1571.0	1441.4	1299.5
40°	1816.9	1822.6	1862.3	1911.5	1937.0	1950.2	1922.8	1809.3	1659.9	1508.6	1353.4
42.5°	1870.8	1874.6	1916.2	1986.2	2028.7	2042.0	2017.4	1897.3	1735.5	1562.5	1397.9
45°	1906.7	1913.4	1962.5	2034.4	2100.6	2110.1	2097.8	1974.8	1802.7	1613.5	1430.1
47.5°	1937.9	1945.5	2000.4	2091.2	2164.9	2177.2	2165.9	2042.9	1867.0	1659.9	1457.5
50°	1979.6	1988.1	2042.9	2144.1	2225.5	2239.7	2235.9	2114.8	1927.5	1711.9	1485.9
52.5°	2019.3	2025.9	2091.2	2203.7	2291.7	2301.1	2298.3	2182.0	1989.0	1767.7	1521.8
55°	2050.5	2058.1	2135.6	2274.7	2369.2	2379.6	2359.8	2234.0	2037.3	1808.4	1555.8
57°	2034.4	2044.8	2139.4	2286.9	2389.1	2400.4	2374.9	2252.9	2051.4	1819.7	1568.1
57.5°	2029.7	2037.3	2135.6	2286.0	2390.0	2400.4	2374.9	2252.0	2050.5	1818.8	1568.1
60°	1960.6	1978.6	2089.3	2252.0	2362.6	2375.9	2351.3	2214.1	2026.9	1792.3	1542.6
62.5°	1868.0	1892.5	2008.9	2171.6	2296.4	2305.9	2281.3	2150.8	1973.9	1736.5	1489.6
65°	1734.6	1772.4	1894.4	2051.4	2186.7	2198.0	2173.4	2044.8	1885.9	1651.4	1410.2
67.5°	1604.1	1626.8	1757.3	1906.7	2032.5	2049.5	2028.7	1914.3	1764.9	1537.9	1304.3
70°	1455.6	1471.7	1579.5	1726.1	1852.8	1867.0	1849.0	1742.2	1601.2	1396.9	1180.4
72.5°	1276.8	1293.9	1385.6	1520.8	1633.4	1656.1	1643.8	1533.1	1405.5	1228.6	1042.3
75°	1075.4	1094.3	1176.6	1284.4	1394.1	1407.4	1393.2	1311.8	1196.4	1036.6	873.9
77.5°	872.0	884.3	943.9	1025.2	1110.4	1138.7	1135.0	1077.3	960.9	834.2	701.8
80°	652.6	654.5	685.7	752.9	821.0	841.8	846.5	794.5	717.9	622.3	525.9
82.5°	412.4	419.0	436.0	486.1	519.2	547.6	554.2	524.0	475.7	416.2	356.6
85°	192.0	186.3	199.6	216.6	263.9	263.9	272.4	256.3	242.1	222.3	184.4
87.5°	16.1	15.1	15.1	16.1	25.5	27.4	43.5	48.2	52.0	52.0	54.9
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°	699.9	699.9	699.9	699.9	699.9	699.9	699.9	699.9	699.9	699.9	699.9
2.5°	714.1	713.1	710.3	710.3	712.2	715.0	716.0	716.9	717.9	718.8	718.8
5°	725.4	724.5	722.6	720.7	722.6	723.5	726.4	728.3	728.3	730.2	729.2
7.5°	735.8	736.8	734.9	733.9	733.9	735.8	739.6	742.5	744.3	745.3	747.2
10°	759.5	753.8	746.2	742.5	742.5	746.2	750.0	753.8	757.6	759.5	759.5
12.5°	780.3	773.7	759.5	753.8	752.9	756.6	761.4	767.0	769.9	772.7	772.7
15°	799.2	793.5	776.5	763.3	759.5	762.3	768.0	774.6	779.3	782.2	782.2
17.5°	835.1	818.1	795.4	773.7	766.1	767.0	773.7	780.3	786.0	787.9	786.9
20°	869.2	847.4	813.4	782.2	769.9	766.1	772.7	781.2	786.0	788.8	788.8
22.5°	908.0	884.3	831.4	790.7	768.0	762.3	768.0	775.6	781.2	783.1	785.0
25°	962.8	921.2	851.2	797.3	765.2	753.8	757.6	765.2	771.8	772.7	771.8
27.5°	1012.0	964.7	877.7	803.9	758.5	737.7	733.9	739.6	750.0	756.6	758.5
30°	1054.6	1011.1	905.1	809.6	746.2	711.2	706.5	708.4	715.0	733.0	733.9
32.5°	1117.9	1050.8	932.6	814.3	732.0	697.1	690.4	688.5	690.4	699.9	699.9
35°	1161.4	1095.2	960.0	822.8	721.6	685.7	679.1	676.2	674.4	664.9	662.1
37.5°	1218.2	1144.4	986.5	830.4	716.9	681.0	671.5	673.4	664.0	637.5	629.9
40°	1280.6	1188.9	1013.0	838.0	718.8	681.9	673.4	672.5	656.4	619.5	611.9
42.5°	1310.9	1226.7	1040.4	848.4	726.4	684.8	677.2	674.4	654.5	612.9	602.5
45°	1340.2	1254.1	1060.2	856.9	733.9	688.5	679.1	676.2	653.5	607.2	599.6
47.5°	1366.7	1271.2	1069.7	861.6	739.6	691.4	680.0	675.3	648.8	604.4	596.8
50°	1379.0	1280.6	1069.7	861.6	741.5	694.2	678.1	671.5	641.3	599.6	593.0
52.5°	1397.9	1286.3	1061.2	855.9	738.7	694.2	674.4	664.0	631.8	593.0	587.3
55°	1426.3	1296.7	1049.8	847.4	732.0	688.5	667.7	653.5	618.6	583.6	578.8
57°	1435.7	1300.5	1042.3	837.0	724.5	681.0	660.2	642.2	606.3	574.1	569.4
57.5°	1433.8	1298.6	1039.4	834.2	721.6	678.1	658.3	639.4	603.4	572.2	567.5
60°	1408.3	1280.6	1021.5	816.2	706.5	663.0	641.3	620.4	583.6	556.1	552.3
62.5°	1366.7	1239.9	989.3	792.6	685.7	642.2	619.5	595.9	559.0	535.3	533.4
65°	1295.7	1171.8	943.0	758.5	659.2	614.8	590.2	564.6	532.5	511.7	506.0
67.5°	1177.5	1081.1	877.7	711.2	618.6	580.7	554.2	527.8	498.4	480.5	476.7
70°	1079.2	981.7	794.5	651.7	569.4	533.4	508.8	483.3	457.8	441.7	440.7
72.5°	954.3	860.7	690.4	577.9	506.9	472.0	453.0	430.3	410.5	396.3	396.3
75°	803.0	729.2	582.6	489.9	432.2	406.7	390.6	372.6	355.6	346.2	348.1
77.5°	638.4	582.6	475.7	396.3	353.7	336.7	321.6	311.2	300.8	292.3	293.2
80°	471.0	429.4	349.9	291.3	270.5	255.4	252.5	245.9	240.2	237.4	232.7
82.5°	322.5	285.6	232.7	199.6	184.4	179.7	180.6	180.6	181.6	181.6	179.7
85°	167.4	153.2	118.2	106.9	105.0	109.7	115.4	119.2	118.2	118.2	115.4
87.5°	48.2	43.5	37.8	34.0	35.9	38.8	34.0	33.1	32.2	31.2	31.2
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)