

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: P472296

Luminaire Tested: **CCW-VA-4-835-U-T4FT**

Issue Date: 01/27/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P472296  
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-T4FT  
Description: INVUE WALL PACK Wave Stream LUMINAIRE WITH T4FT DISTRIBUTION LENS  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5976 lumens  
Efficiency: N/A  
Efficacy: 92.5 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B2 - U0 - G2

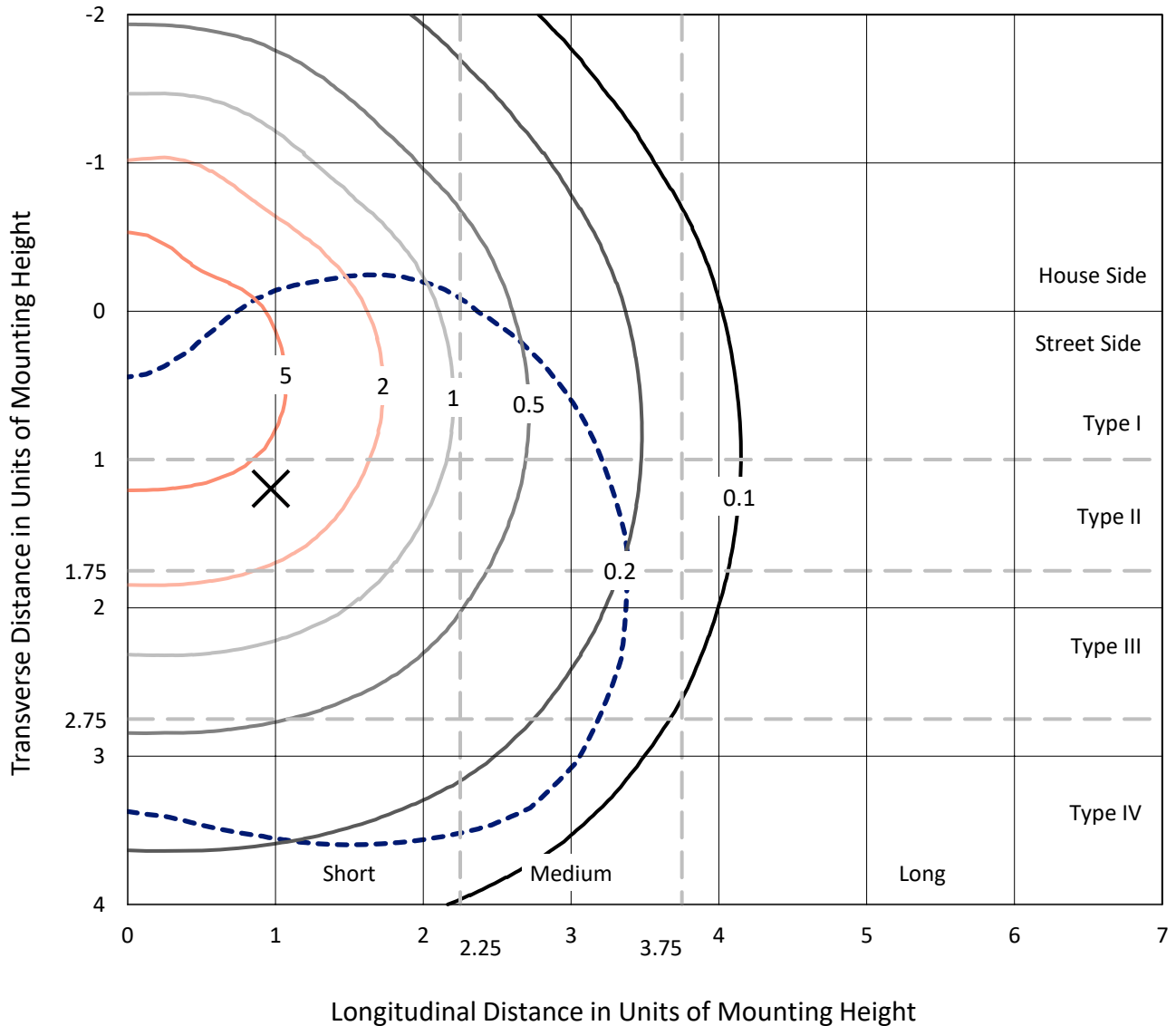
Input Watts (W): 64.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

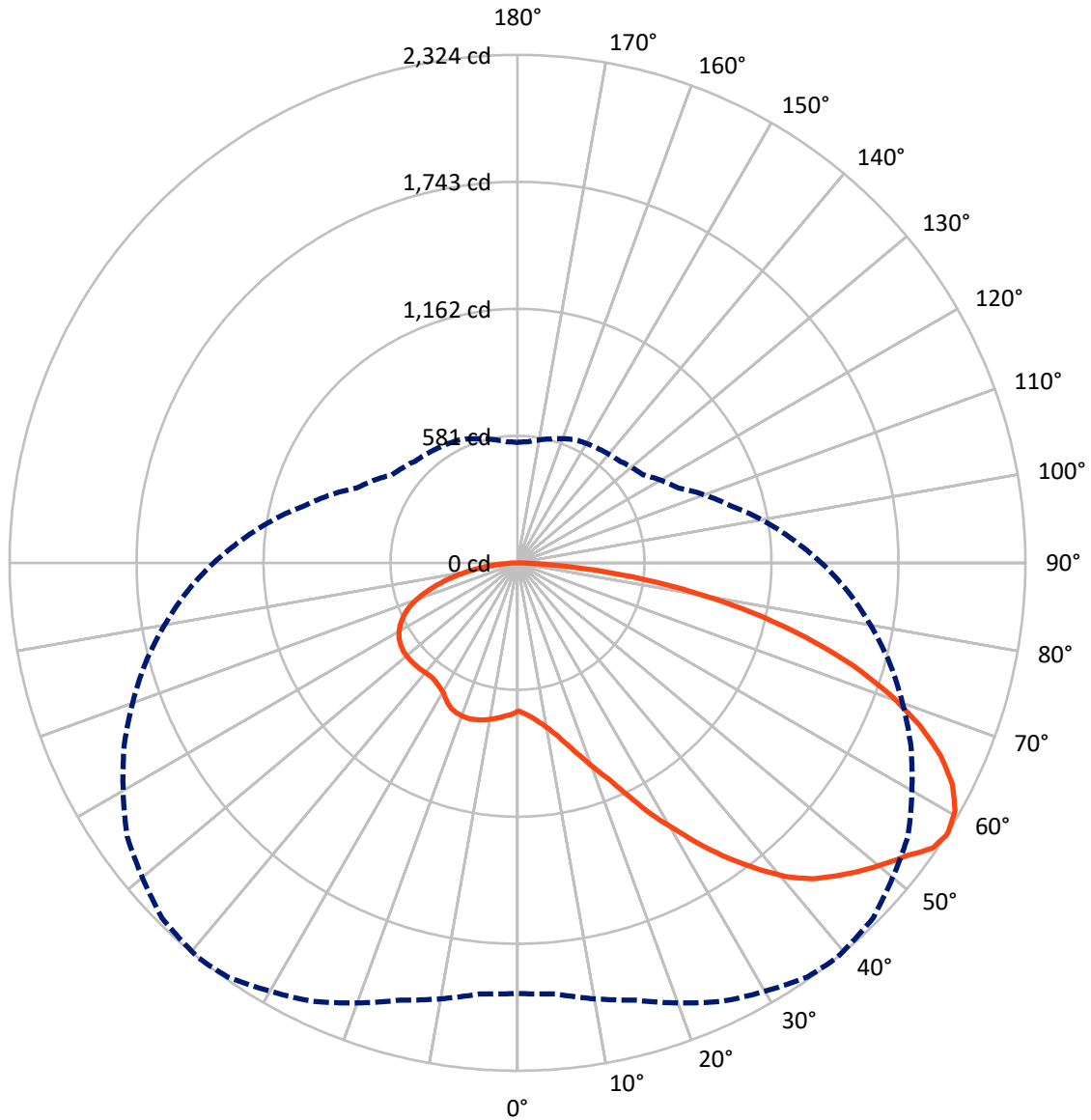
✕ Max cd  
 - - - 1/2 Max cd



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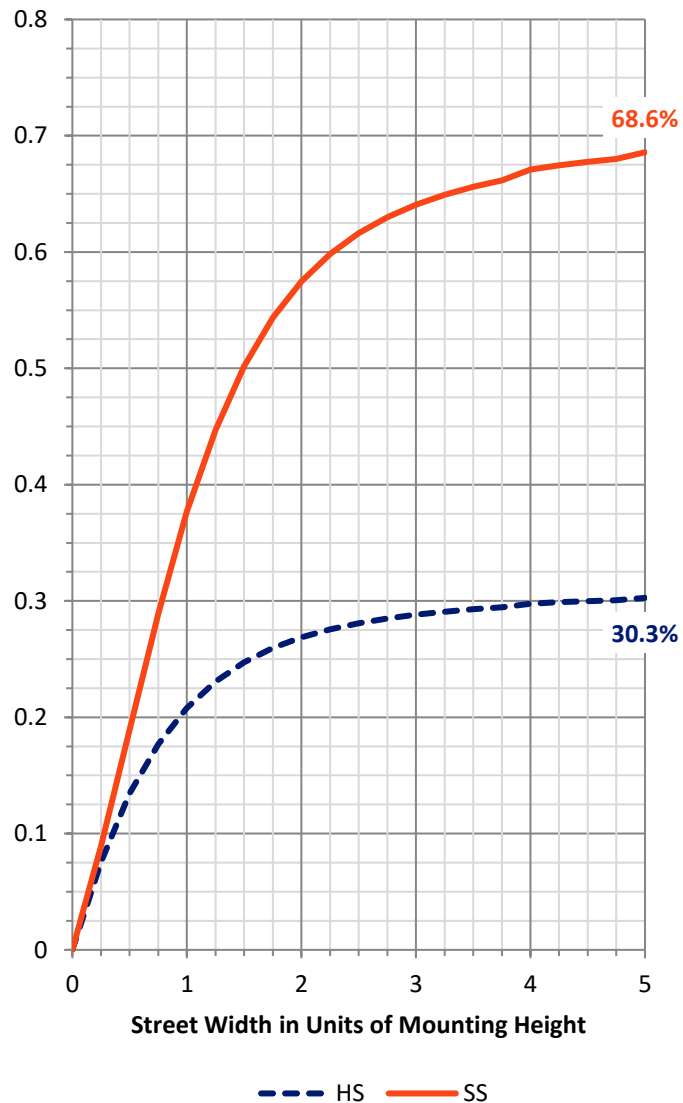
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1833.6	0.0	1833.6
	% Fixture	30.7	0.0	30.7
<b>Street Side</b>	Lumens	4142.3	0.0	4142.3
	% Fixture	69.3	0.0	69.3
<b>Total</b>	Lumens	5976.0	0.0	5976.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	68.6	1.1
10°-20°	228.8	3.8
20°-30°	442.0	7.4
30°-40°	715.0	12.0
40°-50°	1004.5	16.8
50°-60°	1240.9	20.8
60°-70°	1233.3	20.6
70°-80°	834.5	14.0
80°-90°	208.3	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°	5976.0	100.0
0°-180°	5976.0	100.0

**Coefficient of Utilization**

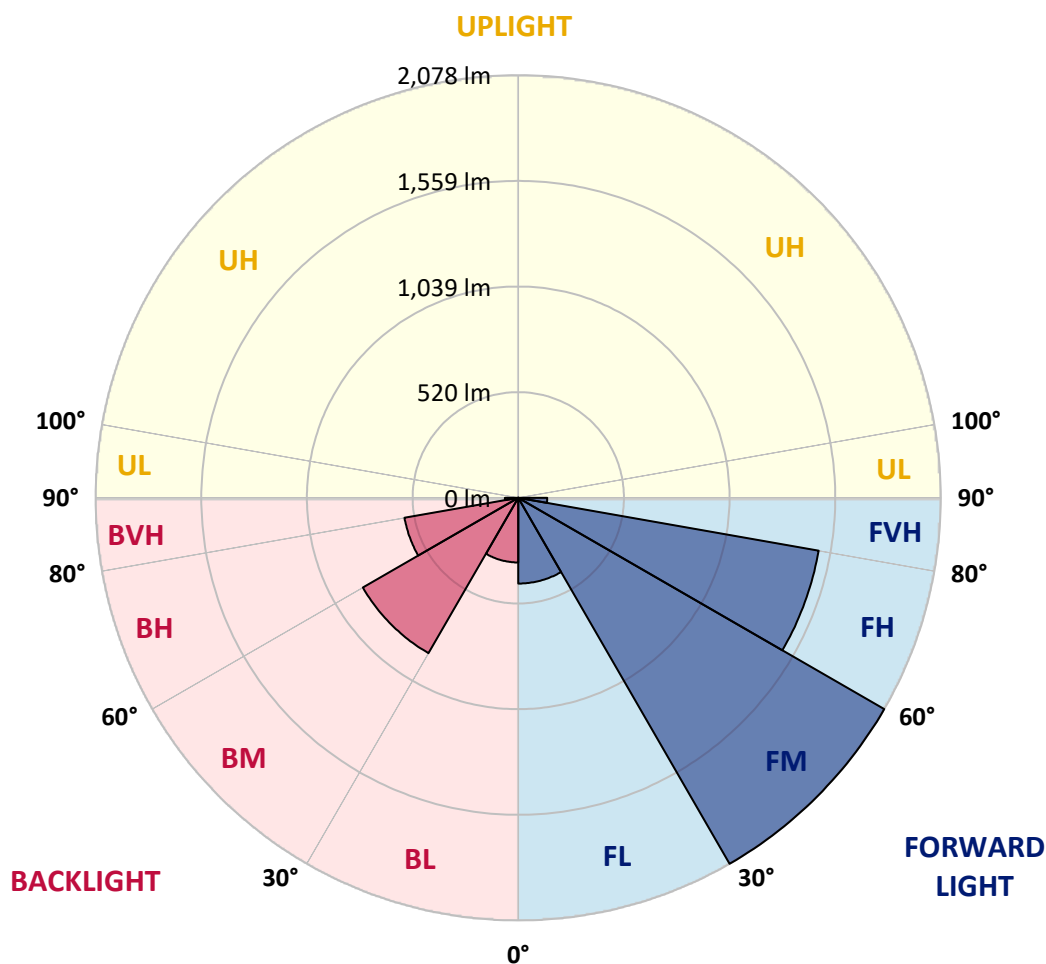


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	421.7	7.1			
FM (30°-60°)	2078.2	34.8			
FH (60°-80°)	1500.0	25.1			G1/1800
FVH (80°-90°)	142.5	2.4			G2/225
BL (0°-30°)	317.8	5.3	B1/500		
BM (30°-60°)	882.2	14.8	B1/1000		
BH (60°-80°)	567.9	9.5	B2/1000		G2/1000
BVH (80°-90°)	65.8	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°	677.6	677.6	677.6	677.6	677.6	677.6	677.6	677.6	677.6	677.6	677.6
2.5°	697.8	696.9	696.0	696.0	694.1	692.3	691.4	689.6	690.5	692.3	693.2
5°	717.9	716.1	716.1	714.3	711.5	711.5	708.8	705.1	704.2	703.3	703.3
7.5°	749.1	746.3	747.2	744.5	741.7	738.1	733.5	728.9	727.1	720.7	715.2
10°	784.8	783.9	781.1	776.5	773.8	770.1	765.6	757.3	750.9	743.6	739.0
12.5°	826.9	825.1	826.0	822.3	817.8	811.3	804.0	795.8	783.9	770.1	761.0
15°	881.9	878.2	878.2	877.3	868.1	866.3	859.0	840.6	824.2	805.9	784.8
17.5°	948.7	947.8	944.1	940.5	935.0	928.6	921.2	901.1	876.4	848.0	819.6
20°	1020.1	1018.3	1021.1	1015.6	1004.6	1001.8	989.9	967.0	936.8	903.8	860.8
22.5°	1098.0	1099.8	1099.8	1098.0	1088.8	1077.8	1067.8	1037.5	1002.7	962.4	912.1
25°	1192.3	1193.2	1198.7	1204.2	1198.7	1181.3	1167.6	1120.9	1074.2	1022.9	963.4
27.5°	1298.5	1292.1	1307.7	1317.8	1307.7	1303.1	1272.9	1221.6	1157.5	1093.4	1019.2
30°	1401.1	1401.1	1413.9	1428.6	1422.1	1411.2	1386.4	1320.5	1247.2	1165.7	1076.0
32.5°	1496.3	1507.3	1512.8	1546.7	1543.0	1537.5	1509.1	1422.1	1330.6	1238.1	1130.9
35°	1609.0	1605.3	1628.2	1649.2	1665.7	1658.4	1637.3	1549.4	1429.5	1314.1	1191.4
37.5°	1694.1	1701.4	1721.6	1759.1	1771.0	1774.7	1748.1	1657.5	1521.0	1395.6	1258.2
40°	1759.1	1764.6	1803.1	1850.7	1875.4	1888.3	1861.7	1751.8	1607.1	1460.6	1310.4
42.5°	1811.3	1815.0	1855.3	1923.1	1964.3	1977.1	1953.3	1837.0	1680.4	1512.8	1353.5
45°	1846.1	1852.5	1900.2	1969.8	2033.9	2043.0	2031.1	1912.1	1745.4	1562.3	1384.6
47.5°	1876.4	1883.7	1936.8	2024.7	2096.1	2108.0	2097.0	1978.0	1807.7	1607.1	1411.2
50°	1916.6	1924.9	1978.0	2076.0	2154.7	2168.5	2164.8	2047.6	1866.3	1657.5	1438.6
52.5°	1955.1	1961.5	2024.7	2133.7	2218.8	2228.0	2225.2	2112.6	1925.8	1711.5	1473.4
55°	1985.3	1992.7	2067.7	2202.4	2293.9	2304.0	2284.8	2163.0	1972.5	1750.9	1506.4
57°	1969.8	1979.8	2071.4	2214.3	2313.2	2324.1	2299.4	2181.3	1986.2	1761.9	1518.3
57.5°	1965.2	1972.5	2067.7	2213.3	2314.1	2324.1	2299.4	2180.4	1985.3	1761.0	1518.3
60°	1898.3	1915.7	2022.9	2180.4	2287.5	2300.3	2276.5	2143.7	1962.4	1735.3	1493.6
62.5°	1808.6	1832.4	1945.0	2102.5	2223.4	2232.6	2208.8	2082.4	1911.2	1681.3	1442.3
65°	1679.5	1716.1	1834.2	1986.2	2117.2	2128.2	2104.4	1979.8	1826.0	1598.9	1365.4
67.5°	1553.1	1575.1	1701.4	1846.1	1967.9	1984.4	1964.3	1853.5	1708.8	1489.0	1262.8
70°	1409.3	1424.9	1529.3	1671.2	1793.9	1807.7	1790.3	1686.8	1550.3	1352.5	1142.8
72.5°	1236.2	1252.7	1341.6	1472.5	1581.5	1603.5	1591.6	1484.4	1360.8	1189.5	1009.1
75°	1041.2	1059.5	1139.2	1243.6	1349.8	1362.6	1348.9	1270.1	1158.4	1003.7	846.1
77.5°	844.3	856.2	913.9	992.7	1075.1	1102.6	1098.9	1043.0	930.4	807.7	679.5
80°	631.9	633.7	663.9	728.9	794.9	815.0	819.6	769.2	695.0	602.6	509.2
82.5°	399.3	405.7	422.2	470.7	502.7	530.2	536.6	507.3	460.6	402.9	345.2
85°	185.9	180.4	193.2	209.7	255.5	255.5	263.7	248.2	234.4	215.2	178.6
87.5°	15.6	14.7	14.7	15.6	24.7	26.6	42.1	46.7	50.4	50.4	53.1
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°	677.6	677.6	677.6	677.6	677.6	677.6	677.6	677.6	677.6	677.6	677.6
2.5°	691.4	690.5	687.7	687.7	689.6	692.3	693.2	694.1	695.0	696.0	696.0
5°	702.4	701.5	699.6	697.8	699.6	700.5	703.3	705.1	705.1	707.0	706.0
7.5°	712.4	713.4	711.5	710.6	710.6	712.4	716.1	718.9	720.7	721.6	723.4
10°	735.3	729.8	722.5	718.9	718.9	722.5	726.2	729.8	733.5	735.3	735.3
12.5°	755.5	749.1	735.3	729.8	728.9	732.6	737.2	742.7	745.4	748.2	748.2
15°	773.8	768.3	751.8	739.0	735.3	738.1	743.6	750.0	754.6	757.3	757.3
17.5°	808.6	792.1	770.1	749.1	741.7	742.7	749.1	755.5	761.0	762.8	761.9
20°	841.6	820.5	787.5	757.3	745.4	741.7	748.2	756.4	761.0	763.7	763.7
22.5°	879.1	856.2	804.9	765.6	743.6	738.1	743.6	750.9	756.4	758.2	760.1
25°	932.2	891.9	824.2	772.0	740.8	729.8	733.5	740.8	747.2	748.2	747.2
27.5°	979.8	934.1	849.8	778.4	734.4	714.3	710.6	716.1	726.2	732.6	734.4
30°	1021.1	978.9	876.4	783.9	722.5	688.6	684.1	685.9	692.3	709.7	710.6
32.5°	1082.4	1017.4	902.9	788.5	708.8	674.9	668.5	666.7	668.5	677.6	677.6
35°	1124.5	1060.4	929.5	796.7	698.7	663.9	657.5	654.8	652.9	643.8	641.0
37.5°	1179.5	1108.0	955.1	804.0	694.1	659.3	650.2	652.0	642.8	617.2	609.9
40°	1239.9	1151.1	980.8	811.3	696.0	660.2	652.0	651.1	635.5	599.8	592.5
42.5°	1269.2	1187.7	1007.3	821.4	703.3	663.0	655.7	652.9	633.7	593.4	583.3
45°	1297.6	1214.3	1026.5	829.7	710.6	666.7	657.5	654.8	632.8	587.9	580.6
47.5°	1323.2	1230.8	1035.7	834.2	716.1	669.4	658.4	653.8	628.2	585.2	577.8
50°	1335.1	1239.9	1035.7	834.2	717.9	672.2	656.6	650.2	620.9	580.6	574.2
52.5°	1353.5	1245.4	1027.5	828.7	715.2	672.2	652.9	642.8	611.7	574.2	568.7
55°	1380.9	1255.5	1016.5	820.5	708.8	666.7	646.5	632.8	598.9	565.0	560.4
57°	1390.1	1259.1	1009.1	810.4	701.5	659.3	639.2	621.8	587.0	555.9	551.3
57.5°	1388.3	1257.3	1006.4	807.7	698.7	656.6	637.4	619.0	584.2	554.0	549.4
60°	1363.5	1239.9	989.0	790.3	684.1	641.9	620.9	600.7	565.0	538.5	534.8
62.5°	1323.2	1200.5	957.9	767.4	663.9	621.8	599.8	576.9	541.2	518.3	516.5
65°	1254.6	1134.6	913.0	734.4	638.3	595.2	571.4	546.7	515.6	495.4	489.9
67.5°	1140.1	1046.7	849.8	688.6	598.9	562.3	536.6	511.0	482.6	465.2	461.5
70°	1044.9	950.5	769.2	630.9	551.3	516.5	492.7	467.9	443.2	427.7	426.7
72.5°	924.0	833.3	668.5	559.5	490.8	457.0	438.6	416.7	397.4	383.7	383.7
75°	777.5	706.0	564.1	474.4	418.5	393.8	378.2	360.8	344.3	335.2	337.0
77.5°	618.1	564.1	460.6	383.7	342.5	326.0	311.4	301.3	291.2	283.0	283.9
80°	456.0	415.7	338.8	282.0	261.9	247.2	244.5	238.1	232.6	229.9	225.3
82.5°	312.3	276.6	225.3	193.2	178.6	174.0	174.9	174.9	175.8	175.8	174.0
85°	162.1	148.3	114.5	103.5	101.6	106.2	111.7	115.4	114.5	114.5	111.7
87.5°	46.7	42.1	36.6	33.0	34.8	37.5	33.0	32.1	31.1	30.2	30.2
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)