

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: P675198

Luminaire Tested: **CCW-SA-2E-840-U-T4FT**

Issue Date: 04/25/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P675198  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 04/25/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: CCW-SA-2E-840-U-T4FT  
Description: INVUE CLEAR CURVE Wall Pack MOUNT LIGHT SQUARE LUMINAIRE @1050mA w/  
T4FT distribution lens  
Light Source: (32) 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

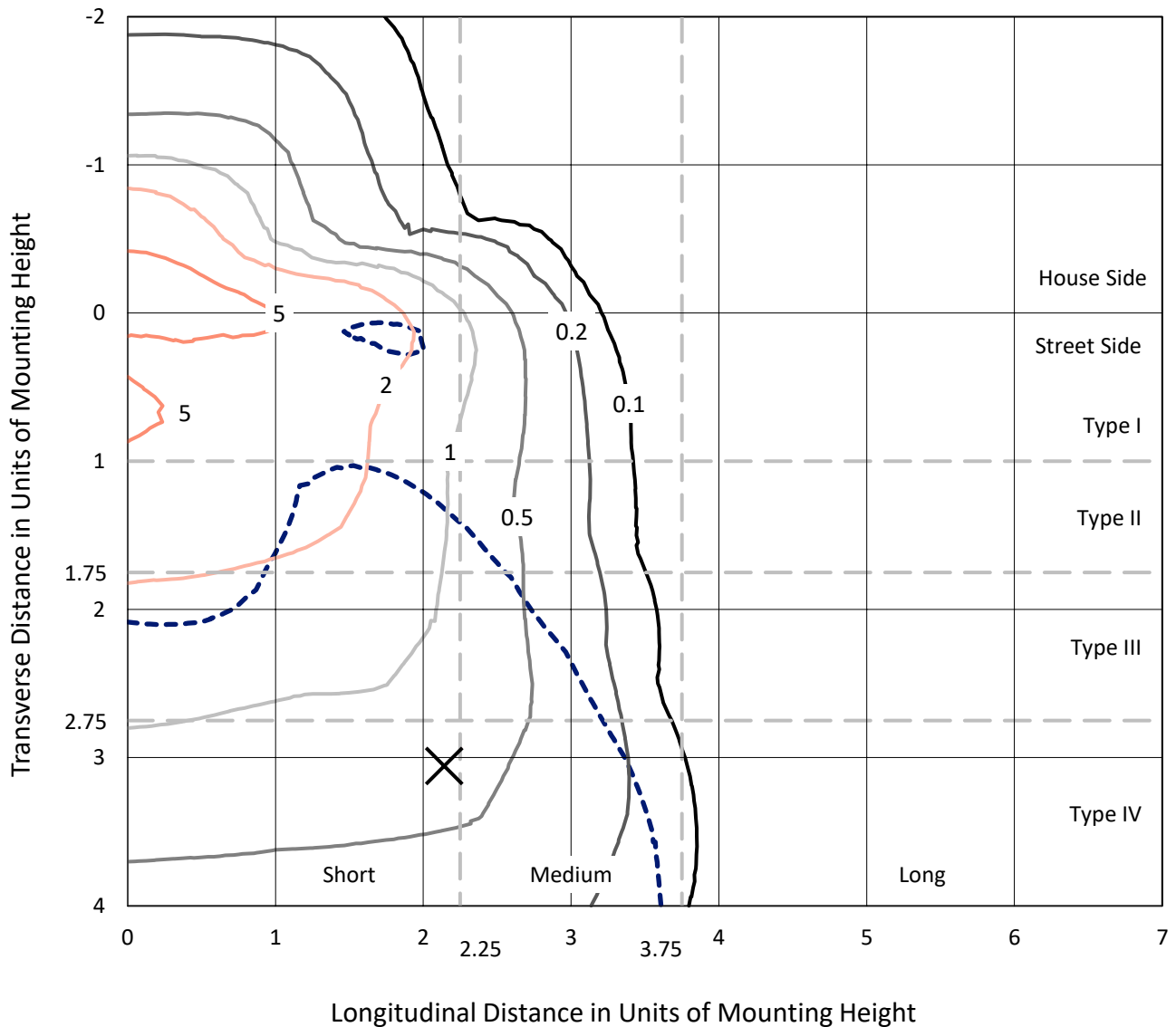
Lumens per Lamp: N/A  
Luminaire Lumens: 11650.5 lumens  
Efficiency: N/A  
Efficacy: 109.3 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B2 - U0 - G3

Input Watts (W): 106.6  
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: 25 FT

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### Iso-Footcandle Lines of Horizontal Illumination

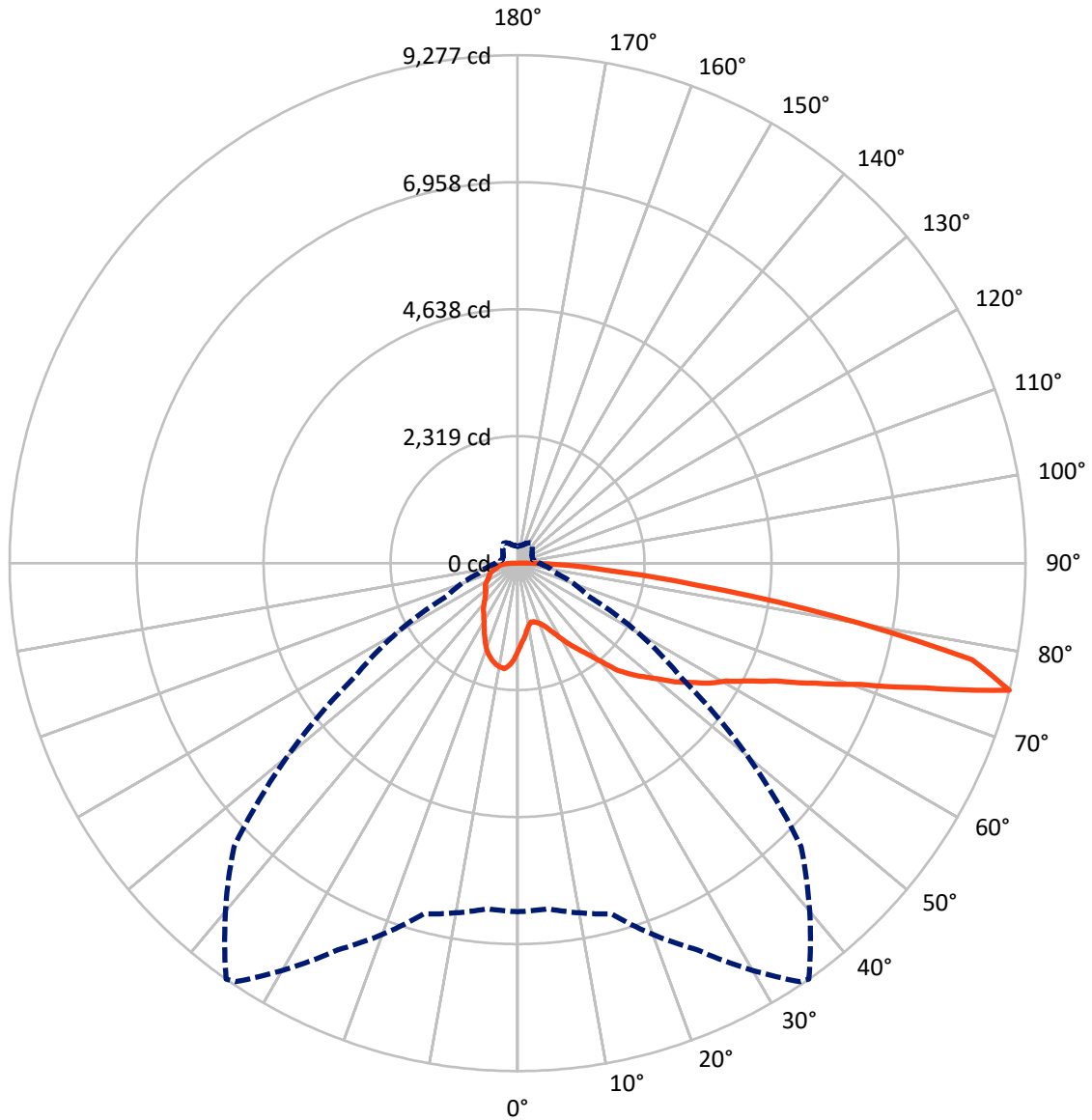
× Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 8.4 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral    - - - Horizontal Cone Through 75-Deg Vertical

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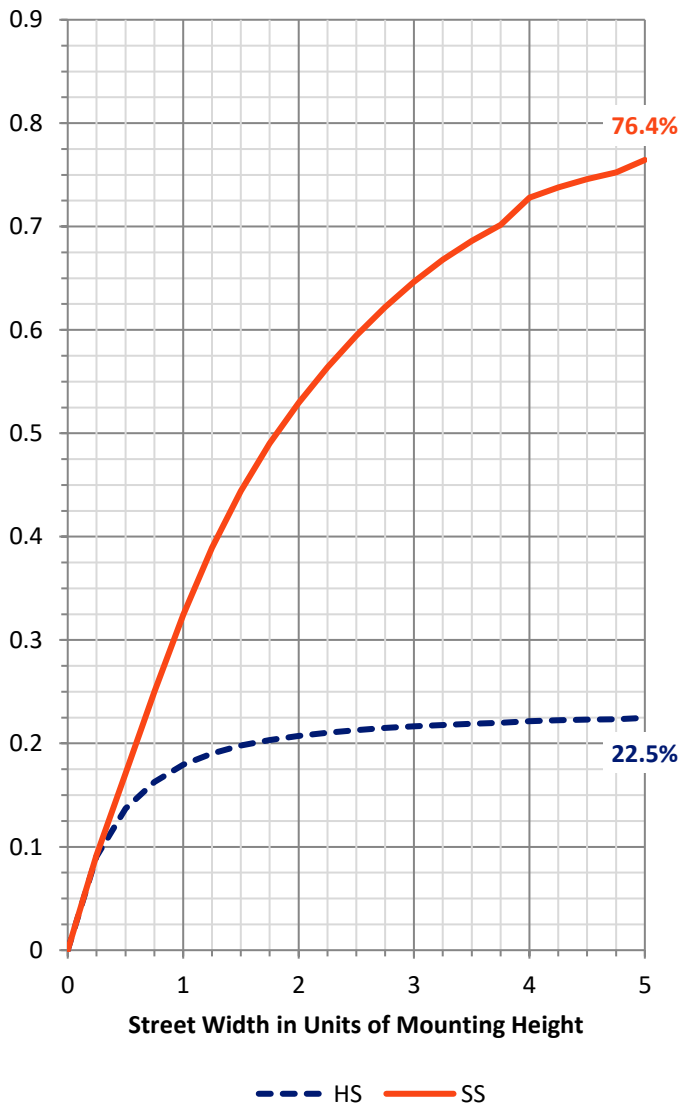
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2677.6	0.0	2677.6
	% Fixture	23.0	0.0	23.0
<b>Street Side</b>	Lumens	8972.9	0.0	8972.9
	% Fixture	77.0	0.0	77.0
<b>Total</b>	Lumens	11650.5	0.0	11650.5
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	152.1	1.3
10°-20°	441.4	3.8
20°-30°	732.4	6.3
30°-40°	1085.8	9.3
40°-50°	1565.5	13.4
50°-60°	2152.9	18.5
60°-70°	2659.3	22.8
70°-80°	2432.8	20.9
80°-90°	428.3	3.7
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°	11650.5	100.0
0°-180°	11650.5	100.0



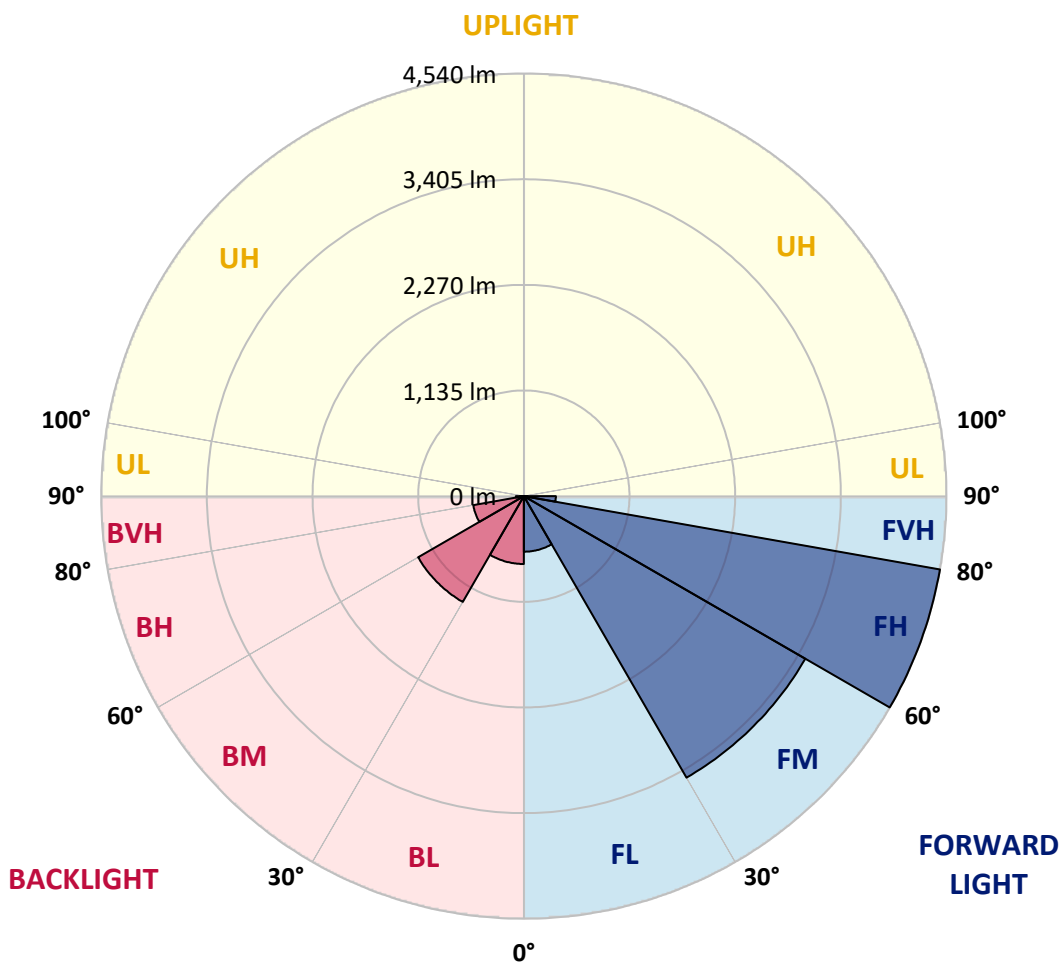
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	597.2	5.1			
FM (30°-60°)	3492.1	30.0			
FH (60°-80°)	4539.9	39.0			G2/5000
FVH (80°-90°)	343.7	3.0			G3/500
BL (0°-30°)	728.8	6.3	B2/1000		
BM (30°-60°)	1312.1	11.3	B2/2500		
BH (60°-80°)	552.1	4.7	B2/1000		G2/1000
BVH (80°-90°)	84.6	0.7			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G3**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	1596.2	1596.2	1596.2	1596.2	1596.2	1596.2	1596.2	1596.2	1596.2	1596.2	1596.2
2.5°	1446.0	1433.1	1446.0	1454.6	1454.6	1454.6	1467.5	1506.1	1531.8	1549.0	1579.0
5°	1295.8	1300.1	1308.7	1330.2	1343.0	1343.0	1373.1	1420.3	1458.9	1514.7	1579.0
7.5°	1162.8	1171.4	1184.3	1205.7	1235.8	1235.8	1278.7	1343.0	1416.0	1488.9	1583.3
10°	1094.2	1111.3	1115.6	1119.9	1149.9	1149.9	1214.3	1287.2	1377.3	1471.7	1583.3
12.5°	1107.0	1107.0	1094.2	1089.9	1107.0	1107.0	1158.5	1244.3	1343.0	1476.0	1600.5
15°	1145.6	1145.6	1119.9	1094.2	1119.9	1111.3	1158.5	1227.2	1343.0	1480.3	1634.8
17.5°	1197.1	1201.4	1171.4	1128.5	1137.1	1141.4	1175.7	1240.0	1343.0	1488.9	1682.0
20°	1300.1	1278.7	1231.5	1162.8	1192.8	1180.0	1231.5	1287.2	1368.8	1523.2	1750.6
22.5°	1390.2	1390.2	1300.1	1240.0	1244.3	1244.3	1291.5	1338.7	1407.4	1570.4	1802.1
25°	1536.1	1527.5	1416.0	1325.9	1334.4	1338.7	1364.5	1420.3	1471.7	1596.2	1866.5
27.5°	1720.6	1699.2	1587.6	1484.6	1450.3	1463.2	1476.0	1518.9	1531.8	1639.1	1943.7
30°	1918.0	1888.0	1793.6	1630.5	1613.3	1617.6	1596.2	1621.9	1604.8	1707.7	2021.0
32.5°	2042.4	2042.4	1952.3	1832.2	1785.0	1785.0	1712.0	1729.2	1729.2	1772.1	2158.3
35°	2149.7	2141.1	2081.0	1990.9	1960.9	1943.7	1870.8	1896.5	1853.6	1896.5	2351.4
37.5°	2312.7	2287.0	2261.3	2201.2	2141.1	2128.2	2089.6	2106.8	2046.7	2025.3	2570.2
40°	2501.5	2488.7	2462.9	2437.2	2377.1	2372.8	2329.9	2347.1	2282.7	2201.2	2789.0
42.5°	2780.4	2741.8	2660.3	2638.8	2651.7	2668.9	2651.7	2621.7	2505.8	2402.9	3025.0
45°	3059.3	2999.3	2844.8	2810.5	2909.2	2896.3	2969.2	2956.4	2767.6	2604.5	3273.9
47.5°	3239.6	3188.1	3063.6	3042.2	3085.1	3102.3	3321.1	3282.5	2982.1	2789.0	3514.2
50°	3368.3	3372.6	3209.5	3265.3	3321.1	3321.1	3595.7	3591.4	3243.9	3016.4	3827.4
52.5°	3557.1	3497.0	3428.4	3479.8	3557.1	3600.0	3939.0	3844.6	3406.9	3209.5	4179.2
55°	3655.8	3630.0	3570.0	3660.1	3823.1	3844.6	4205.0	4132.0	3591.4	3436.9	4539.7
57.5°	3694.4	3715.8	3814.5	3853.1	4080.6	4136.3	4445.3	4342.3	3763.0	3720.1	4818.6
60°	3866.0	3836.0	3969.0	4123.5	4342.3	4372.3	4745.6	4522.5	3930.4	3904.6	4908.7
62.5°	4213.6	4136.3	4209.3	4393.8	4698.4	4737.1	5063.2	4762.8	4003.3	4029.1	4904.4
65°	4719.9	4664.1	4556.8	4702.7	5131.8	5187.6	5436.5	4968.8	3981.9	3986.2	4556.8
67.5°	5316.3	5226.2	5114.6	5204.7	5728.2	5857.0	5891.3	5058.9	3831.7	3745.9	3707.3
70°	5839.8	5779.7	5706.8	5861.2	6590.7	6637.9	6457.7	5003.1	3415.5	3007.9	2471.5
72.5°	6328.9	6298.9	6341.8	6921.1	7757.8	7787.8	6989.7	4651.2	2698.9	1823.6	1149.9
75°	6367.6	6337.5	6633.6	7796.4	9220.9	9276.7	7320.1	3647.2	1424.5	742.3	484.9
77.5°	4312.3	4402.4	4955.9	6826.7	8470.1	8482.9	5985.7	1694.9	587.8	437.7	339.0
80°	1059.8	1175.7	1866.5	3531.3	5711.1	5852.7	3278.2	570.7	386.2	334.7	253.2
82.5°	386.2	420.5	759.5	1596.2	3209.5	3265.3	1145.6	308.9	278.9	257.4	184.5
85°	184.5	188.8	360.4	785.2	1621.9	1604.8	411.9	184.5	201.7	175.9	111.6
87.5°	77.2	77.2	158.8	364.7	716.6	695.1	133.0	85.8	115.9	103.0	55.8
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°	1596.2	1596.2	1596.2	1596.2	1596.2	1596.2	1596.2	1596.2	1596.2	1596.2	1596.2
2.5°	1600.5	1609.1	1643.4	1669.1	1694.9	1716.3	1750.6	1750.6	1772.1	1772.1	1772.1
5°	1596.2	1643.4	1699.2	1759.2	1797.8	1836.5	1870.8	1875.1	1888.0	1905.1	1909.4
7.5°	1613.3	1660.5	1750.6	1836.5	1883.7	1900.8	1943.7	1930.9	1930.9	1930.9	1943.7
10°	1647.7	1699.2	1823.6	1900.8	1935.2	1939.4	1926.6	1918.0	1892.2	1883.7	1870.8
12.5°	1673.4	1763.5	1888.0	1948.0	1935.2	1922.3	1892.2	1849.3	1819.3	1810.7	1810.7
15°	1737.8	1827.9	1943.7	1965.2	1943.7	1875.1	1836.5	1789.3	1763.5	1724.9	1742.1
17.5°	1793.6	1896.5	1999.5	1973.8	1930.9	1823.6	1767.8	1699.2	1664.8	1621.9	1621.9
20°	1866.5	1960.9	2051.0	1982.4	1888.0	1772.1	1682.0	1596.2	1549.0	1506.1	1514.7
22.5°	1948.0	2033.8	2081.0	1948.0	1823.6	1690.6	1566.1	1484.6	1424.5	1398.8	1407.4
25°	2012.4	2106.8	2098.2	1892.2	1746.4	1587.6	1450.3	1373.1	1360.2	1334.4	1334.4
27.5°	2093.9	2192.6	2085.3	1823.6	1617.6	1424.5	1338.7	1308.7	1308.7	1295.8	1304.4
30°	2201.2	2269.8	2055.3	1724.9	1454.6	1278.7	1235.8	1252.9	1283.0	1270.1	1274.4
32.5°	2377.1	2368.5	2029.6	1613.3	1283.0	1137.1	1167.1	1201.4	1227.2	1240.0	1248.6
35°	2548.7	2493.0	1999.5	1463.2	1124.2	1068.4	1094.2	1132.8	1180.0	1192.8	1197.1
37.5°	2720.4	2621.7	1948.0	1278.7	1025.5	1008.3	1034.1	1055.5	1094.2	1102.7	1111.3
40°	2900.6	2707.5	1857.9	1098.4	944.0	944.0	961.1	965.4	986.9	999.8	1008.3
42.5°	3059.3	2789.0	1694.9	931.1	858.2	888.2	892.5	883.9	866.7	875.3	879.6
45°	3252.4	2879.1	1506.1	811.0	793.8	832.4	841.0	806.7	776.6	759.5	750.9
47.5°	3441.2	2973.5	1343.0	712.3	733.7	793.8	793.8	755.2	703.7	660.8	643.6
50°	3612.9	3067.9	1210.0	652.2	673.7	763.8	772.3	699.4	643.6	592.1	583.5
52.5°	3900.3	3226.7	1072.7	605.0	639.3	742.3	738.0	673.7	600.7	544.9	540.6
55°	4153.5	3385.4	892.5	557.8	605.0	712.3	725.1	647.9	549.2	497.7	489.2
57.5°	4338.0	3424.1	712.3	510.6	570.7	677.9	695.1	596.4	514.9	472.0	467.7
60°	4372.3	3273.9	579.3	472.0	523.5	630.7	643.6	566.4	489.2	454.8	446.2
62.5°	4213.6	2986.4	493.4	437.7	484.9	583.5	609.3	532.1	463.4	433.4	429.1
65°	3853.1	2565.9	433.4	407.6	459.1	549.2	579.3	506.3	442.0	416.2	411.9
67.5°	3050.8	1969.5	386.2	386.2	424.8	514.9	557.8	489.2	420.5	403.3	399.0
70°	1995.2	1184.3	351.8	356.1	399.0	484.9	532.1	467.7	394.8	390.5	381.9
72.5°	858.2	544.9	313.2	326.1	360.4	433.4	493.4	437.7	364.7	351.8	339.0
75°	394.8	330.4	283.2	291.8	321.8	381.9	446.2	403.3	339.0	317.5	304.6
77.5°	278.9	240.3	236.0	253.2	274.6	330.4	394.8	377.6	313.2	296.1	287.5
80°	206.0	184.5	197.4	214.5	227.4	304.6	373.3	347.6	287.5	261.7	248.9
82.5°	145.9	137.3	154.5	171.6	184.5	266.0	343.3	304.6	240.3	218.8	197.4
85°	85.8	90.1	107.3	115.9	128.7	197.4	287.5	244.6	184.5	141.6	137.3
87.5°	38.6	38.6	51.5	55.8	64.4	115.9	193.1	154.5	115.9	90.1	85.8
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)