

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: P671621

Luminaire Tested: **CCP-SA-2E-850-U-SL4**

Issue Date: 04/16/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P671621  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 04/16/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: CCP-SA-2E-850-U-SL4  
Description: INVUE CLEAR CURVE POLE MOUNT LIGHT SQUARE LUMINAIRE @1050mA w/ SL4 distribution lens  
Light Source: (32) 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

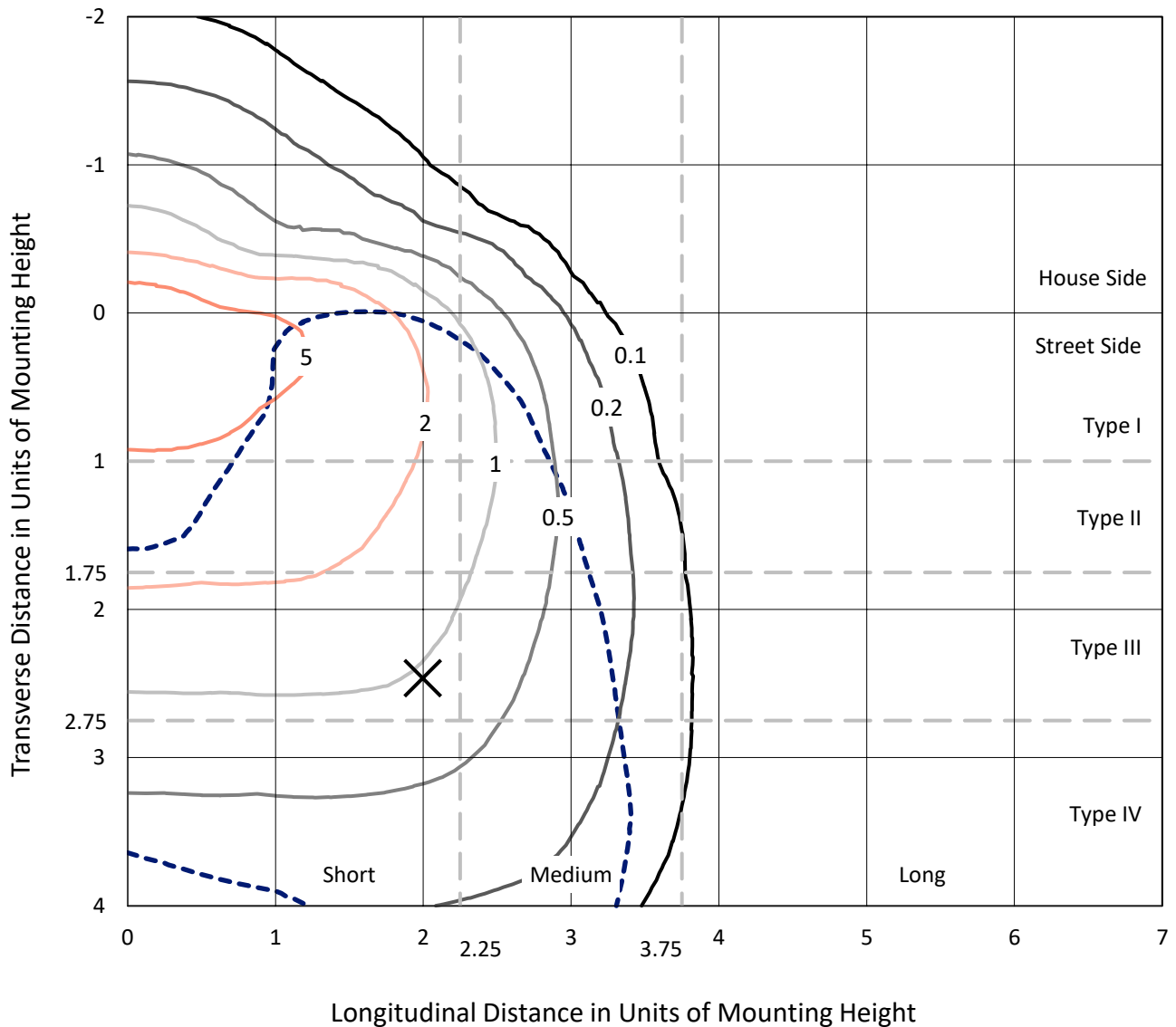
Lumens per Lamp: N/A  
Luminaire Lumens: 11691.5 lumens  
Efficiency: N/A  
Efficacy: 109.7 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G3

Input Watts (W): 106.6  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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

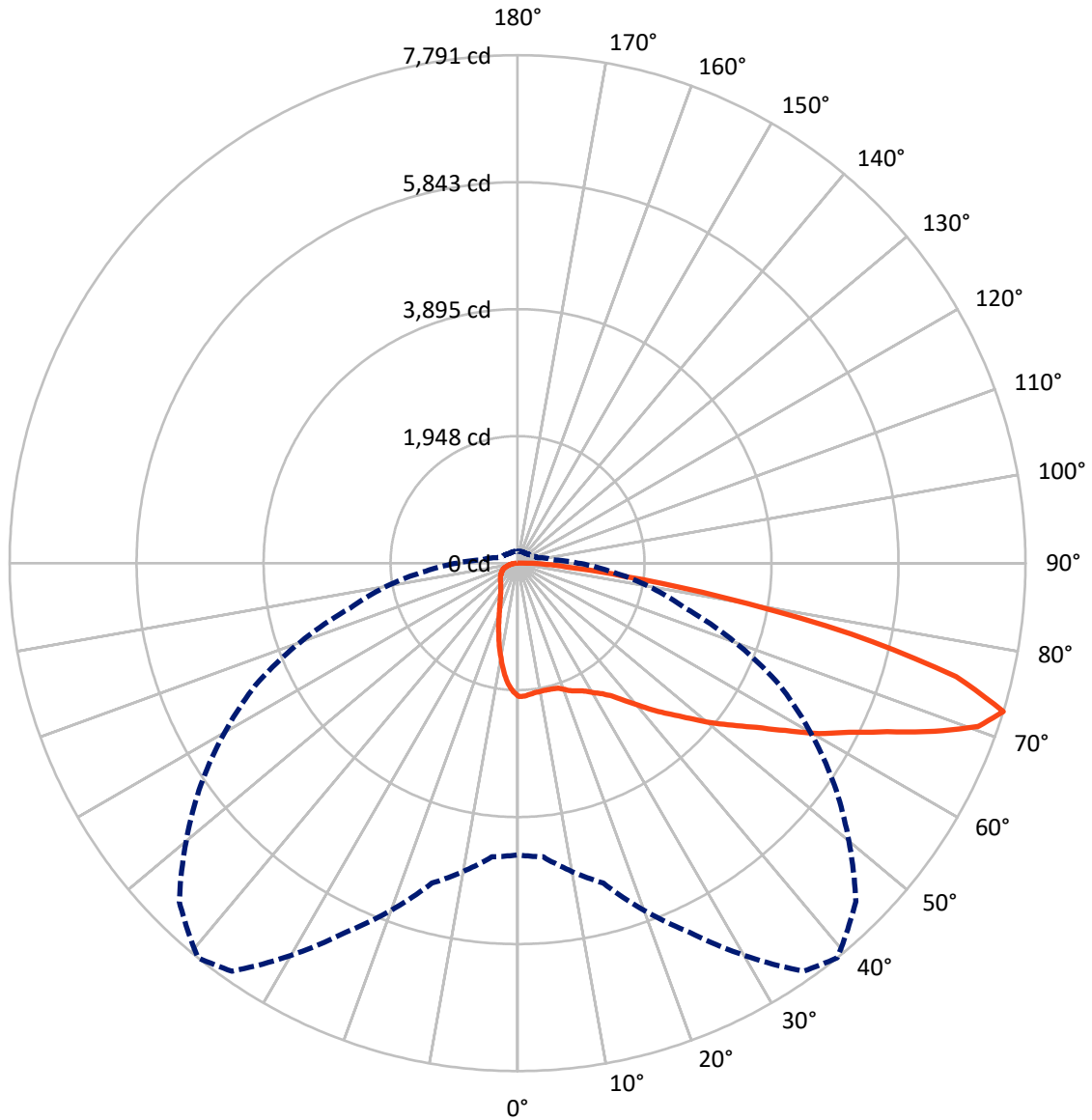
× Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 9.1 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 39-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

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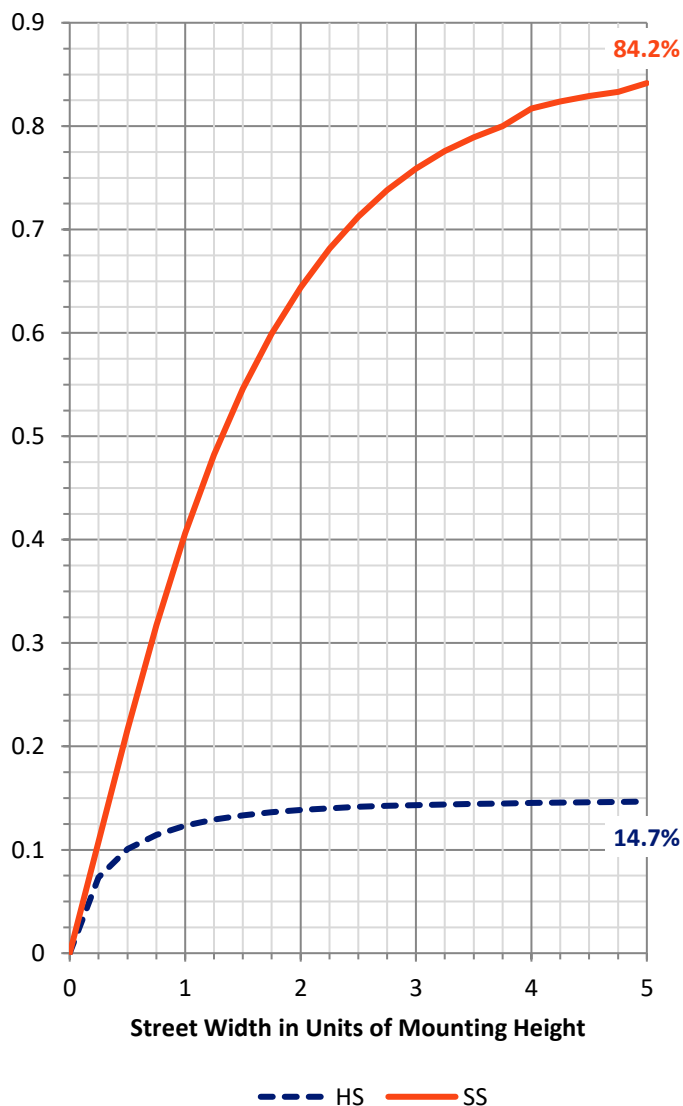
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1737.6	0.0	1737.6
	% Fixture	14.9	0.0	14.9
<b>Street Side</b>	Lumens	9953.9	0.0	9953.9
	% Fixture	85.1	0.0	85.1
<b>Total</b>	Lumens	11691.5	0.0	11691.5
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	180.8	1.5
10°-20°	461.6	3.9
20°-30°	703.2	6.0
30°-40°	1028.6	8.8
40°-50°	1574.8	13.5
50°-60°	2309.6	19.8
60°-70°	2945.6	25.2
70°-80°	2128.3	18.2
80°-90°	359.0	3.1
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°	11691.5	100.0
0°-180°	11691.5	100.0



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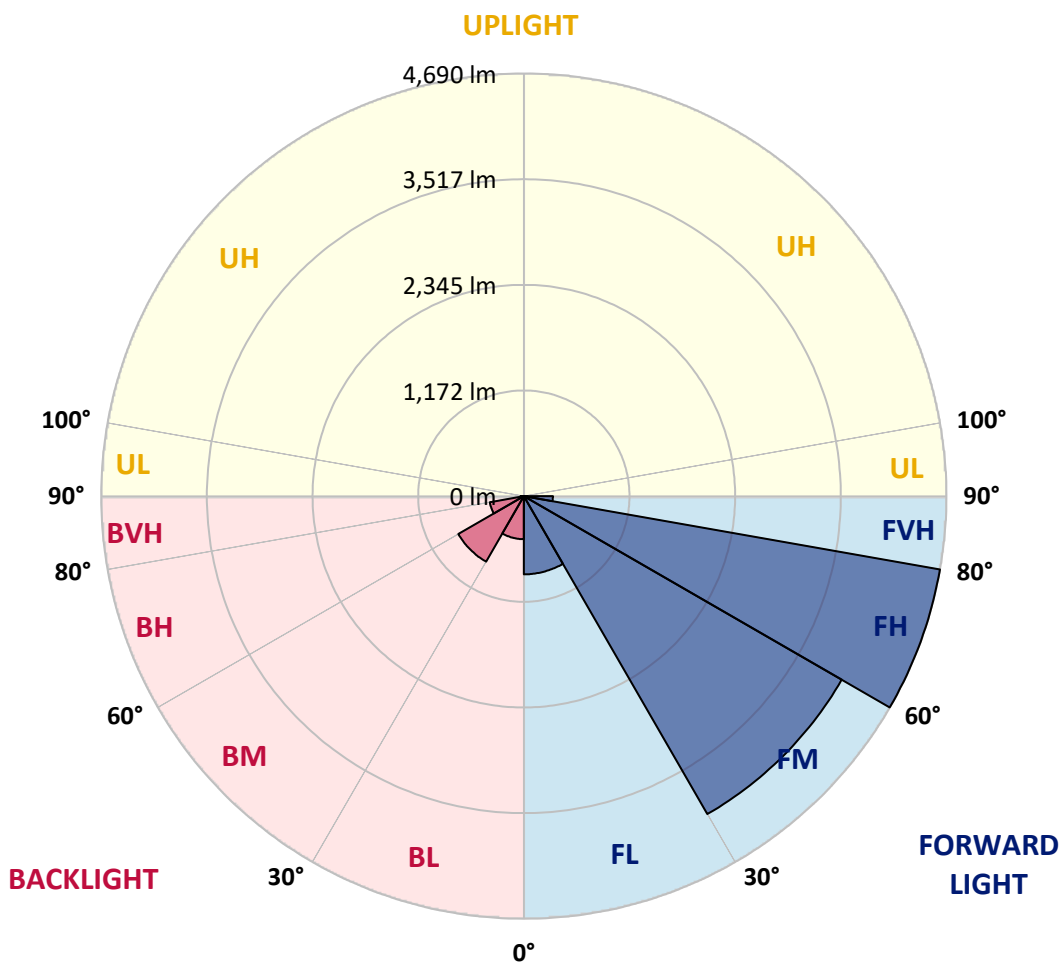
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	867.7	7.4			
FM (30°-60°)	4073.6	34.8			
FH (60°-80°)	4690.0	40.1			G2/5000
FVH (80°-90°)	322.6	2.8			G3/500
BL (0°-30°)	477.9	4.1	B1/500		
BM (30°-60°)	839.4	7.2	B1/1000		
BH (60°-80°)	383.9	3.3	B1/500		G1/500
BVH (80°-90°)	36.4	0.3			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G3**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	39°	45°	55°	65°	75°	85°
0°	2046.5	2046.5	2046.5	2046.5	2046.5	2046.5	2046.5	2046.5	2046.5	2046.5	2046.5
2.5°	2077.3	2081.7	2072.9	2064.1	2059.7	2042.1	2059.7	2050.9	2042.1	2042.1	2042.1
5°	2050.9	2055.3	2055.3	2046.5	2050.9	2020.2	2015.8	2020.2	2007.0	1998.2	1993.8
7.5°	2011.4	2020.2	2037.8	2033.4	2015.8	2002.6	2007.0	2002.6	1980.7	1967.5	1932.4
10°	1980.7	1989.4	1998.2	2007.0	2002.6	1998.2	1993.8	1976.3	1971.9	1941.1	1906.0
12.5°	1949.9	1949.9	1954.3	1989.4	1993.8	1993.8	1967.5	1967.5	1954.3	1949.9	1897.2
15°	1919.2	1932.4	1967.5	1976.3	1993.8	2002.6	1989.4	1989.4	1967.5	1936.7	1897.2
17.5°	1928.0	1949.9	1985.1	2007.0	2015.8	2015.8	2033.4	2020.2	1989.4	1971.9	1932.4
20°	1971.9	1976.3	2020.2	2059.7	2068.5	2068.5	2050.9	2037.8	2015.8	1985.1	1932.4
22.5°	1998.2	2029.0	2081.7	2103.6	2130.0	2130.0	2108.0	2077.3	2046.5	2015.8	1958.7
25°	2112.4	2116.8	2138.8	2173.9	2187.1	2169.5	2147.5	2112.4	2072.9	2042.1	1989.4
27.5°	2191.5	2213.4	2239.8	2257.3	2235.4	2222.2	2204.6	2165.1	2134.4	2108.0	2033.4
30°	2336.4	2310.0	2327.6	2336.4	2296.9	2305.6	2257.3	2222.2	2187.1	2187.1	2103.6
32.5°	2424.2	2446.2	2428.6	2424.2	2393.5	2389.1	2358.3	2318.8	2296.9	2323.2	2209.0
35°	2577.9	2564.8	2564.8	2560.4	2525.2	2503.3	2503.3	2433.0	2455.0	2512.1	2371.5
37.5°	2657.0	2652.6	2678.9	2700.9	2665.8	2678.9	2665.8	2635.0	2643.8	2744.8	2573.5
40°	2736.0	2766.8	2819.5	2828.3	2850.2	2867.8	2859.0	2854.6	2889.7	3052.2	2845.8
42.5°	2810.7	2837.0	2916.1	2986.4	3039.1	3096.2	3100.5	3100.5	3214.7	3447.5	3175.2
45°	2907.3	2929.3	3039.1	3179.6	3267.4	3307.0	3342.1	3381.6	3535.3	3812.0	3526.5
47.5°	3039.1	3056.6	3188.4	3364.1	3535.3	3557.3	3627.6	3671.5	3904.2	4185.3	3886.7
50°	3227.9	3214.7	3320.1	3574.9	3741.7	3847.1	3948.1	4027.2	4255.6	4563.0	4167.7
52.5°	3381.6	3381.6	3460.7	3798.8	4027.2	4128.2	4233.6	4343.4	4606.9	4940.7	4396.1
55°	3645.1	3618.8	3667.1	4018.4	4347.8	4444.4	4646.4	4738.7	4993.4	5221.7	4589.3
57.5°	3825.2	3838.4	3895.4	4308.3	4725.5	4844.1	5046.1	5112.0	5335.9	5516.0	4729.9
60°	4062.3	4018.4	4141.4	4628.9	5142.7	5309.6	5476.5	5516.0	5682.9	5704.8	4795.7
62.5°	4290.7	4281.9	4387.3	4949.5	5590.6	5709.2	5880.5	5924.4	5994.7	5854.2	4703.5
65°	4431.2	4488.3	4686.0	5300.8	6100.1	6231.8	6403.1	6315.3	6236.2	5722.4	4251.2
67.5°	4624.5	4650.8	4953.9	5682.9	6688.6	6886.2	7035.5	6688.6	6100.1	5182.2	3579.2
70°	4668.4	4738.7	5133.9	6082.5	7294.6	7496.7	7505.4	6561.2	5603.8	4216.0	2595.5
72.5°	4475.2	4523.5	5081.2	6249.4	7641.6	7790.9	7338.6	5933.2	4440.0	2657.0	1414.1
75°	3763.7	3899.8	4422.5	5735.6	7004.8	6947.7	6218.7	4527.9	2665.8	1177.0	597.3
77.5°	2621.9	2626.2	3170.8	4172.1	5243.7	5230.5	4435.6	2626.2	1141.8	474.3	351.3
80°	1163.8	1247.2	1576.6	2248.6	3184.0	3184.0	2586.7	1304.3	570.9	307.4	241.5
82.5°	685.1	711.5	843.2	1049.6	1550.3	1633.7	1238.5	869.6	390.9	193.2	149.3
85°	505.0	549.0	628.0	632.4	733.4	746.6	685.1	755.4	267.9	105.4	123.0
87.5°	377.7	404.0	500.7	417.2	390.9	368.9	421.6	772.9	101.0	52.7	39.5
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°	2046.5	2046.5	2046.5	2046.5	2046.5	2046.5	2046.5	2046.5	2046.5	2046.5	2046.5
2.5°	2024.6	2024.6	2015.8	1998.2	1998.2	1963.1	1971.9	1980.7	1958.7	1958.7	1963.1
5°	1993.8	1976.3	1954.3	1928.0	1910.4	1862.1	1853.3	1822.6	1818.2	1809.4	1796.2
7.5°	1932.4	1906.0	1866.5	1827.0	1769.9	1725.9	1673.2	1629.3	1611.8	1598.6	1594.2
10°	1875.3	1870.9	1805.0	1725.9	1638.1	1554.7	1475.6	1418.5	1383.4	1361.4	1357.0
12.5°	1875.3	1840.1	1747.9	1638.1	1510.7	1387.8	1286.8	1207.7	1159.4	1124.3	1111.1
15°	1866.5	1831.3	1708.4	1541.5	1396.6	1229.7	1089.1	1005.7	935.4	900.3	904.7
17.5°	1875.3	1822.6	1651.3	1471.2	1269.2	1089.1	922.3	821.3	751.0	724.6	720.2
20°	1879.7	1813.8	1607.4	1374.6	1137.5	935.4	777.3	680.7	628.0	610.4	610.4
22.5°	1870.9	1787.4	1541.5	1260.4	1023.3	808.1	676.3	592.9	557.7	535.8	544.6
25°	1910.4	1783.0	1480.0	1163.8	891.5	702.7	601.7	540.2	518.2	505.0	509.4
27.5°	1919.2	1783.0	1431.7	1054.0	777.3	623.6	544.6	505.0	487.5	478.7	474.3
30°	1954.3	1791.8	1374.6	944.2	685.1	562.1	500.7	478.7	465.5	461.1	461.1
32.5°	2050.9	1818.2	1313.1	852.0	606.1	509.4	469.9	452.3	443.6	439.2	443.6
35°	2165.1	1888.4	1247.2	755.4	549.0	474.3	443.6	430.4	426.0	426.0	426.0
37.5°	2340.8	1993.8	1190.2	676.3	500.7	439.2	417.2	412.8	408.4	412.8	412.8
40°	2542.8	2108.0	1137.5	614.8	465.5	417.2	395.3	395.3	390.9	395.3	399.6
42.5°	2775.6	2248.6	1084.8	553.4	434.8	399.6	382.1	377.7	373.3	382.1	386.5
45°	3096.2	2441.8	1049.6	518.2	412.8	382.1	364.5	364.5	360.1	360.1	368.9
47.5°	3364.1	2626.2	1049.6	483.1	399.6	368.9	351.3	351.3	342.6	346.9	346.9
50°	3588.0	2784.3	1071.6	474.3	382.1	355.7	342.6	333.8	329.4	329.4	329.4
52.5°	3737.3	2881.0	1089.1	465.5	373.3	338.2	329.4	325.0	316.2	311.8	316.2
55°	3886.7	2946.8	1093.5	465.5	360.1	320.6	311.8	311.8	303.0	298.6	298.6
57.5°	3943.8	2920.5	1032.1	456.7	351.3	307.4	298.6	294.2	289.9	285.5	285.5
60°	3917.4	2823.9	895.9	434.8	342.6	298.6	281.1	281.1	281.1	272.3	276.7
62.5°	3737.3	2494.5	720.2	399.6	329.4	281.1	263.5	272.3	272.3	267.9	267.9
65°	3263.0	2059.7	584.1	368.9	311.8	267.9	250.3	263.5	267.9	263.5	259.1
67.5°	2608.7	1585.4	483.1	333.8	289.9	245.9	232.8	245.9	250.3	245.9	245.9
70°	1791.8	1023.3	390.9	298.6	259.1	224.0	210.8	219.6	219.6	224.0	224.0
72.5°	926.7	553.4	320.6	254.7	224.0	202.0	188.8	188.8	184.5	184.5	184.5
75°	461.1	377.7	267.9	215.2	188.8	171.3	162.5	153.7	153.7	153.7	153.7
77.5°	320.6	289.9	219.6	171.3	153.7	140.5	140.5	127.4	127.4	127.4	127.4
80°	241.5	228.4	166.9	131.8	118.6	109.8	109.8	105.4	105.4	101.0	101.0
82.5°	171.3	184.5	127.4	96.6	87.8	83.4	83.4	79.1	79.1	70.3	70.3
85°	136.1	153.7	96.6	70.3	65.9	57.1	57.1	52.7	52.7	48.3	43.9
87.5°	39.5	83.4	39.5	26.4	26.4	26.4	26.4	22.0	22.0	17.6	17.6
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)