

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: P671609

Luminaire Tested: **CCP-SA-2D-840-U-SL4**

Issue Date: 04/16/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P671609  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 04/16/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: CCP-SA-2D-840-U-SL4  
Description: INVUE CLEAR CURVE POLE MOUNT LIGHT SQUARE LUMINAIRE @800mA w/ SL4 distribution lens  
Light Source: (32) 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

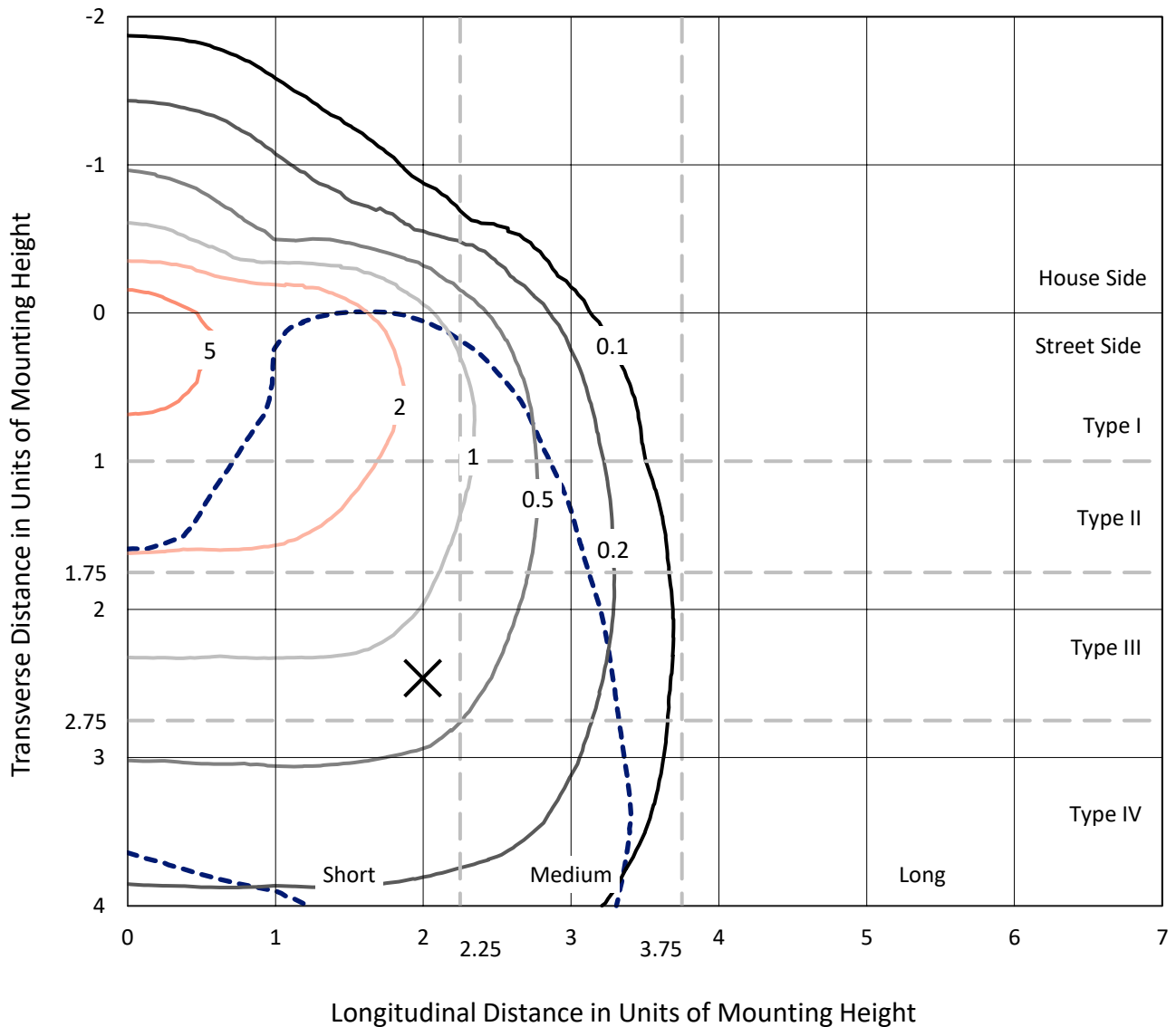
Lumens per Lamp: N/A  
Luminaire Lumens: 9317.9 lumens  
Efficiency: N/A  
Efficacy: 115.3 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G3

Input Watts (W): 80.8  
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

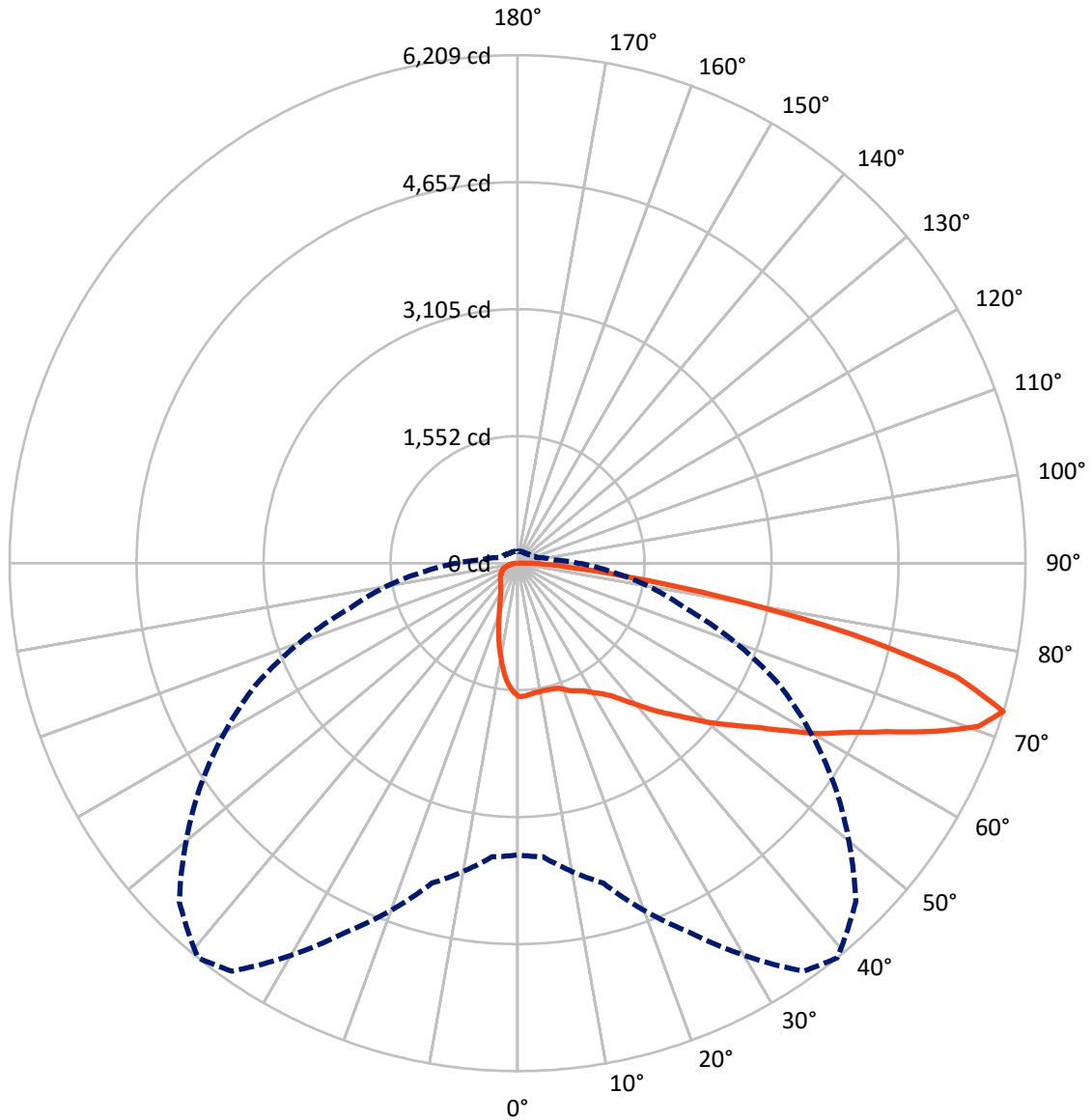
× Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 7.2 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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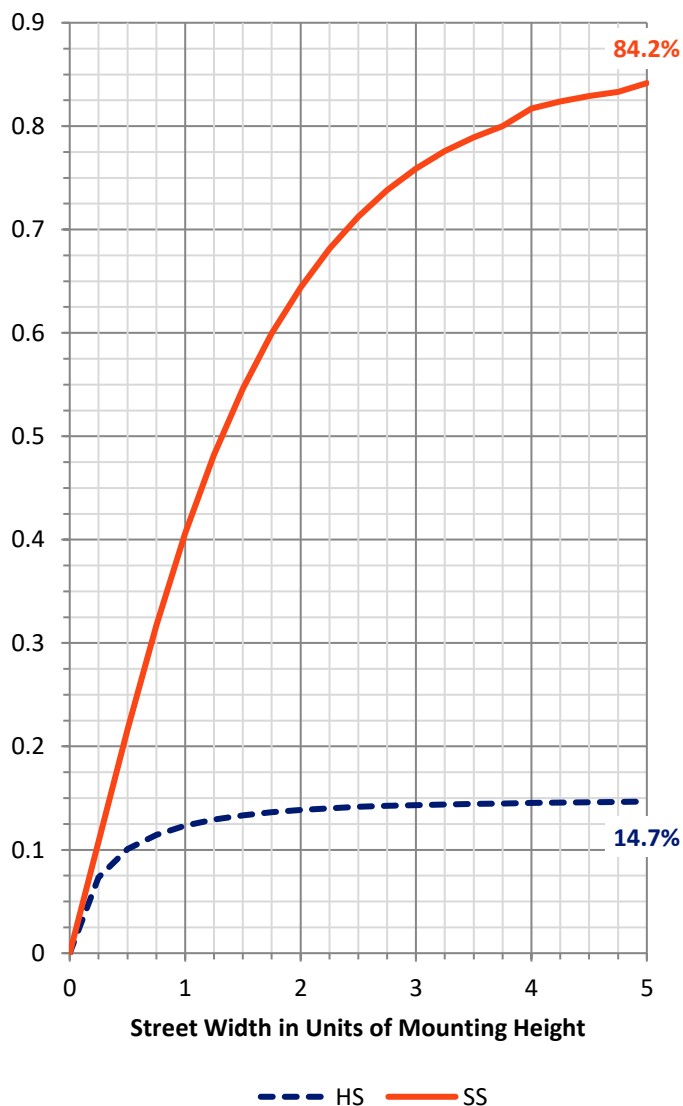
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1384.8	0.0	1384.8
	% Fixture	14.9	0.0	14.9
<b>Street Side</b>	Lumens	7933.1	0.0	7933.1
	% Fixture	85.1	0.0	85.1
<b>Total</b>	Lumens	9317.9	0.0	9317.9
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	144.1	1.5
10°-20°	367.8	3.9
20°-30°	560.4	6.0
30°-40°	819.8	8.8
40°-50°	1255.1	13.5
50°-60°	1840.7	19.8
60°-70°	2347.6	25.2
70°-80°	1696.2	18.2
80°-90°	286.1	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°	9317.9	100.0
0°-180°	9317.9	100.0



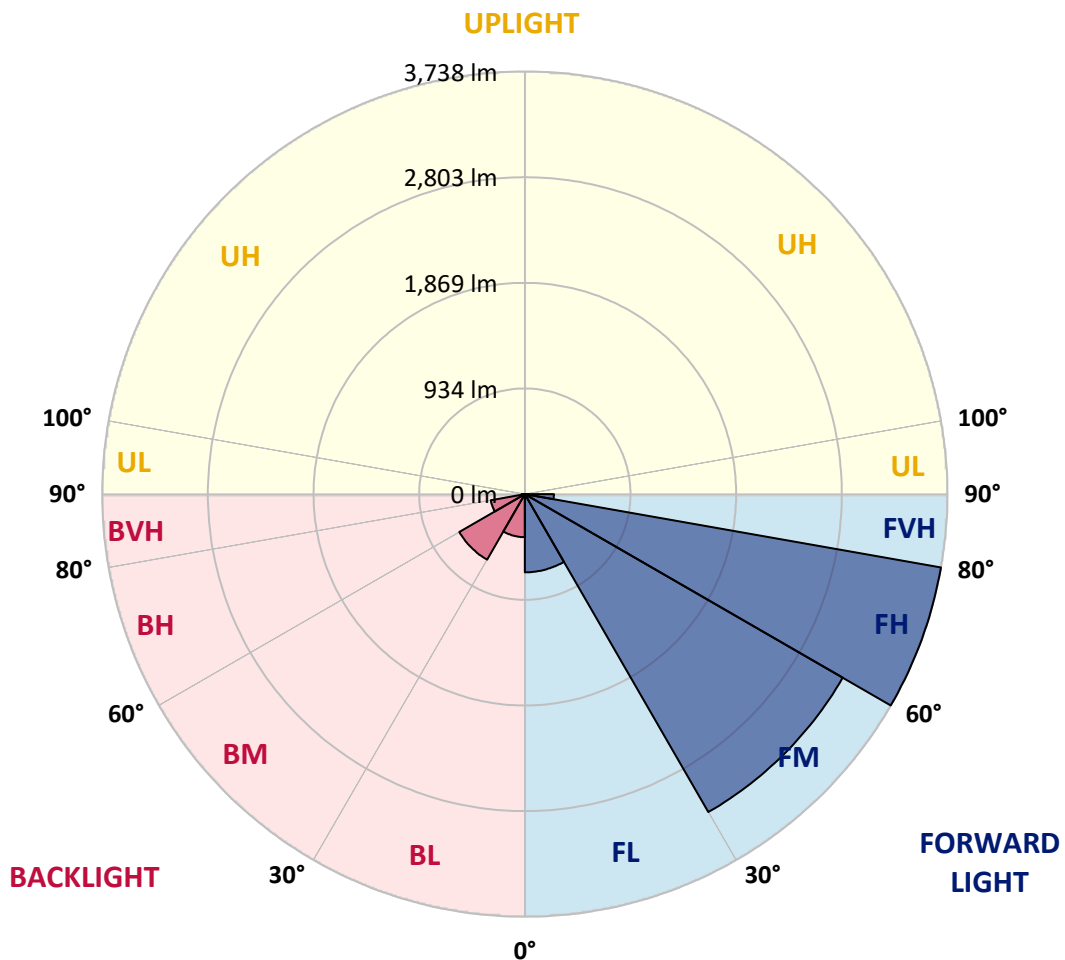
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	691.5	7.4			
FM (30°-60°)	3246.6	34.8			
FH (60°-80°)	3737.8	40.1			G2/5000
FVH (80°-90°)	257.1	2.8			G3/500
BL (0°-30°)	380.8	4.1	B1/500		
BM (30°-60°)	669.0	7.2	B1/1000		
BH (60°-80°)	306.0	3.3	B1/500		G1/500
BVH (80°-90°)	29.0	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°	1631.1	1631.1	1631.1	1631.1	1631.1	1631.1	1631.1	1631.1	1631.1	1631.1	1631.1
2.5°	1655.6	1659.1	1652.1	1645.1	1641.6	1627.6	1641.6	1634.6	1627.6	1627.6	1627.6
5°	1634.6	1638.1	1638.1	1631.1	1634.6	1610.0	1606.5	1610.0	1599.5	1592.5	1589.0
7.5°	1603.0	1610.0	1624.1	1620.5	1606.5	1596.0	1599.5	1596.0	1578.5	1568.0	1540.0
10°	1578.5	1585.5	1592.5	1599.5	1596.0	1592.5	1589.0	1575.0	1571.5	1547.0	1519.0
12.5°	1554.0	1554.0	1557.5	1585.5	1589.0	1589.0	1568.0	1568.0	1557.5	1554.0	1512.0
15°	1529.5	1540.0	1568.0	1575.0	1589.0	1596.0	1585.5	1585.5	1568.0	1543.5	1512.0
17.5°	1536.5	1554.0	1582.0	1599.5	1606.5	1606.5	1620.5	1610.0	1585.5	1571.5	1540.0
20°	1571.5	1575.0	1610.0	1641.6	1648.6	1648.6	1634.6	1624.1	1606.5	1582.0	1540.0
22.5°	1592.5	1617.0	1659.1	1676.6	1697.6	1697.6	1680.1	1655.6	1631.1	1606.5	1561.0
25°	1683.6	1687.1	1704.6	1732.6	1743.1	1729.1	1711.6	1683.6	1652.1	1627.6	1585.5
27.5°	1746.6	1764.1	1785.1	1799.1	1781.6	1771.1	1757.1	1725.6	1701.1	1680.1	1620.5
30°	1862.1	1841.1	1855.1	1862.1	1830.6	1837.6	1799.1	1771.1	1743.1	1743.1	1676.6
32.5°	1932.1	1949.6	1935.6	1932.1	1907.6	1904.1	1879.6	1848.1	1830.6	1851.6	1760.6
35°	2054.6	2044.1	2044.1	2040.6	2012.6	1995.1	1995.1	1939.1	1956.6	2002.1	1890.1
37.5°	2117.6	2114.1	2135.1	2152.6	2124.6	2135.1	2124.6	2100.1	2107.1	2187.6	2051.1
40°	2180.6	2205.1	2247.1	2254.1	2271.6	2285.6	2278.6	2275.1	2303.1	2432.6	2268.1
42.5°	2240.1	2261.1	2324.1	2380.1	2422.1	2467.6	2471.1	2471.1	2562.1	2747.6	2530.6
45°	2317.1	2334.6	2422.1	2534.1	2604.1	2635.6	2663.6	2695.1	2817.6	3038.1	2810.6
47.5°	2422.1	2436.1	2541.1	2681.1	2817.6	2835.1	2891.1	2926.1	3111.6	3335.6	3097.6
50°	2572.6	2562.1	2646.1	2849.1	2982.1	3066.1	3146.6	3209.6	3391.6	3636.6	3321.6
52.5°	2695.1	2695.1	2758.1	3027.6	3209.6	3290.1	3374.1	3461.6	3671.6	3937.6	3503.6
55°	2905.1	2884.1	2922.6	3202.6	3465.1	3542.1	3703.1	3776.6	3979.6	4161.6	3657.6
57.5°	3048.6	3059.1	3104.6	3433.6	3766.1	3860.6	4021.6	4074.1	4252.6	4396.1	3769.6
60°	3237.6	3202.6	3300.6	3689.1	4098.6	4231.6	4364.6	4396.1	4529.1	4546.6	3822.1
62.5°	3419.6	3412.6	3496.6	3944.6	4455.6	4550.1	4686.6	4721.6	4777.6	4665.6	3748.6
65°	3531.6	3577.1	3734.6	4224.6	4861.6	4966.7	5103.2	5033.2	4970.2	4560.6	3388.1
67.5°	3685.6	3706.6	3948.1	4529.1	5330.7	5488.2	5607.2	5330.7	4861.6	4130.1	2852.6
70°	3720.6	3776.6	4091.6	4847.6	5813.7	5974.7	5981.7	5229.2	4466.1	3360.1	2068.6
72.5°	3566.6	3605.1	4049.6	4980.7	6090.2	6209.2	5848.7	4728.6	3538.6	2117.6	1127.0
75°	2999.6	3108.1	3524.6	4571.1	5582.7	5537.2	4956.2	3608.6	2124.6	938.0	476.0
77.5°	2089.6	2093.1	2527.1	3325.1	4179.1	4168.6	3535.1	2093.1	910.0	378.0	280.0
80°	927.5	994.0	1256.5	1792.1	2537.6	2537.6	2061.6	1039.5	455.0	245.0	192.5
82.5°	546.0	567.0	672.0	836.5	1235.5	1302.0	987.0	693.0	311.5	154.0	119.0
85°	402.5	437.5	500.5	504.0	584.5	595.0	546.0	602.0	213.5	84.0	98.0
87.5°	301.0	322.0	399.0	332.5	311.5	294.0	336.0	616.0	80.5	42.0	31.5
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°	1631.1	1631.1	1631.1	1631.1	1631.1	1631.1	1631.1	1631.1	1631.1	1631.1	1631.1
2.5°	1613.5	1613.5	1606.5	1592.5	1592.5	1564.5	1571.5	1578.5	1561.0	1561.0	1564.5
5°	1589.0	1575.0	1557.5	1536.5	1522.5	1484.0	1477.0	1452.5	1449.0	1442.0	1431.5
7.5°	1540.0	1519.0	1487.5	1456.0	1410.5	1375.5	1333.5	1298.5	1284.5	1274.0	1270.5
10°	1494.5	1491.0	1438.5	1375.5	1305.5	1239.0	1176.0	1130.5	1102.5	1085.0	1081.5
12.5°	1494.5	1466.5	1393.0	1305.5	1204.0	1106.0	1025.5	962.5	924.0	896.0	885.5
15°	1487.5	1459.5	1361.5	1228.5	1113.0	980.0	868.0	801.5	745.5	717.5	721.0
17.5°	1494.5	1452.5	1316.0	1172.5	1011.5	868.0	735.0	654.5	598.5	577.5	574.0
20°	1498.0	1445.5	1281.0	1095.5	906.5	745.5	619.5	542.5	500.5	486.5	486.5
22.5°	1491.0	1424.5	1228.5	1004.5	815.5	644.0	539.0	472.5	444.5	427.0	434.0
25°	1522.5	1421.0	1179.5	927.5	710.5	560.0	479.5	430.5	413.0	402.5	406.0
27.5°	1529.5	1421.0	1141.0	840.0	619.5	497.0	434.0	402.5	388.5	381.5	378.0
30°	1557.5	1428.0	1095.5	752.5	546.0	448.0	399.0	381.5	371.0	367.5	367.5
32.5°	1634.6	1449.0	1046.5	679.0	483.0	406.0	374.5	360.5	353.5	350.0	353.5
35°	1725.6	1505.0	994.0	602.0	437.5	378.0	353.5	343.0	339.5	339.5	339.5
37.5°	1865.6	1589.0	948.5	539.0	399.0	350.0	332.5	329.0	325.5	329.0	329.0
40°	2026.6	1680.1	906.5	490.0	371.0	332.5	315.0	315.0	311.5	315.0	318.5
42.5°	2212.1	1792.1	864.5	441.0	346.5	318.5	304.5	301.0	297.5	304.5	308.0
45°	2467.6	1946.1	836.5	413.0	329.0	304.5	290.5	290.5	287.0	287.0	294.0
47.5°	2681.1	2093.1	836.5	385.0	318.5	294.0	280.0	280.0	273.0	276.5	276.5
50°	2859.6	2219.1	854.0	378.0	304.5	283.5	273.0	266.0	262.5	262.5	262.5
52.5°	2978.6	2296.1	868.0	371.0	297.5	269.5	262.5	259.0	252.0	248.5	252.0
55°	3097.6	2348.6	871.5	371.0	287.0	255.5	248.5	248.5	241.5	238.0	238.0
57.5°	3143.1	2327.6	822.5	364.0	280.0	245.0	238.0	234.5	231.0	227.5	227.5
60°	3122.1	2250.6	714.0	346.5	273.0	238.0	224.0	224.0	224.0	217.0	220.5
62.5°	2978.6	1988.1	574.0	318.5	262.5	224.0	210.0	217.0	217.0	213.5	213.5
65°	2600.6	1641.6	465.5	294.0	248.5	213.5	199.5	210.0	213.5	210.0	206.5
67.5°	2079.1	1263.5	385.0	266.0	231.0	196.0	185.5	196.0	199.5	196.0	196.0
70°	1428.0	815.5	311.5	238.0	206.5	178.5	168.0	175.0	175.0	178.5	178.5
72.5°	738.5	441.0	255.5	203.0	178.5	161.0	150.5	150.5	147.0	147.0	147.0
75°	367.5	301.0	213.5	171.5	150.5	136.5	129.5	122.5	122.5	122.5	122.5
77.5°	255.5	231.0	175.0	136.5	122.5	112.0	112.0	101.5	101.5	101.5	101.5
80°	192.5	182.0	133.0	105.0	94.5	87.5	87.5	84.0	84.0	80.5	80.5
82.5°	136.5	147.0	101.5	77.0	70.0	66.5	66.5	63.0	63.0	56.0	56.0
85°	108.5	122.5	77.0	56.0	52.5	45.5	45.5	42.0	42.0	38.5	35.0
87.5°	31.5	66.5	31.5	21.0	21.0	21.0	21.0	17.5	17.5	14.0	14.0
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)