

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: STREETWORKS

Report Number: P800280

Luminaire Tested: **ARCH2-90-730-U-T4W-HSS**

Issue Date: 4/4/2024

Test Information

Test Method: LM-79-08
Report Number: P800280
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-27)
Test Lab: INNOVATION CENTER
Issue Date: 4/4/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH2-90-730-U-T4W-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 3000K, 695mA LIGHTSQUARES WITH 10 LEDS EACH AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8212 lumens
Efficiency: N/A
Efficacy: 87.6 lumens/watt
Luminous Opening: Rectangular (W 0.67' x L: 0.33' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 93.7
Input Voltage (V): NR
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

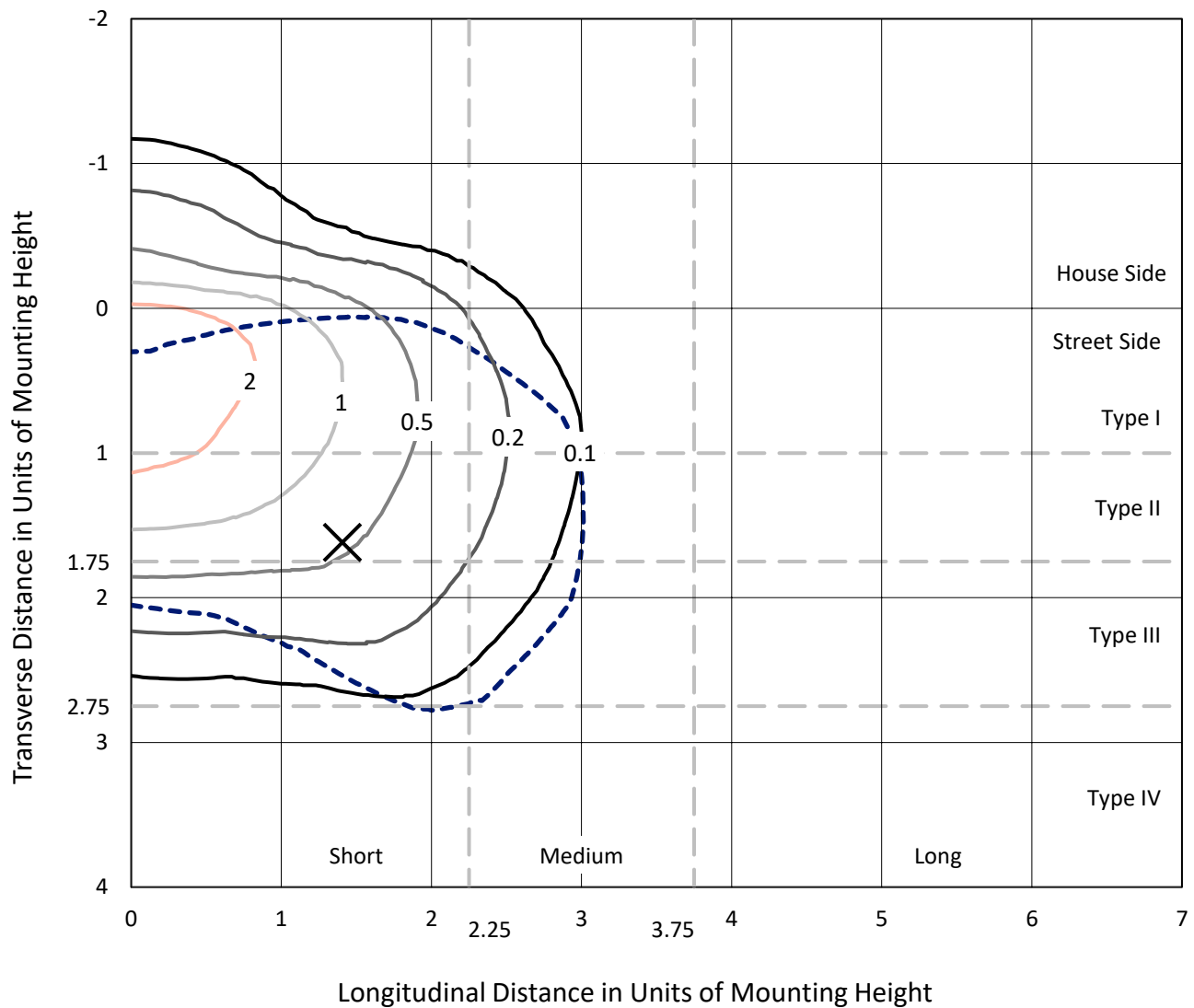


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Iso-Footcandle Lines of Horizontal Illumination

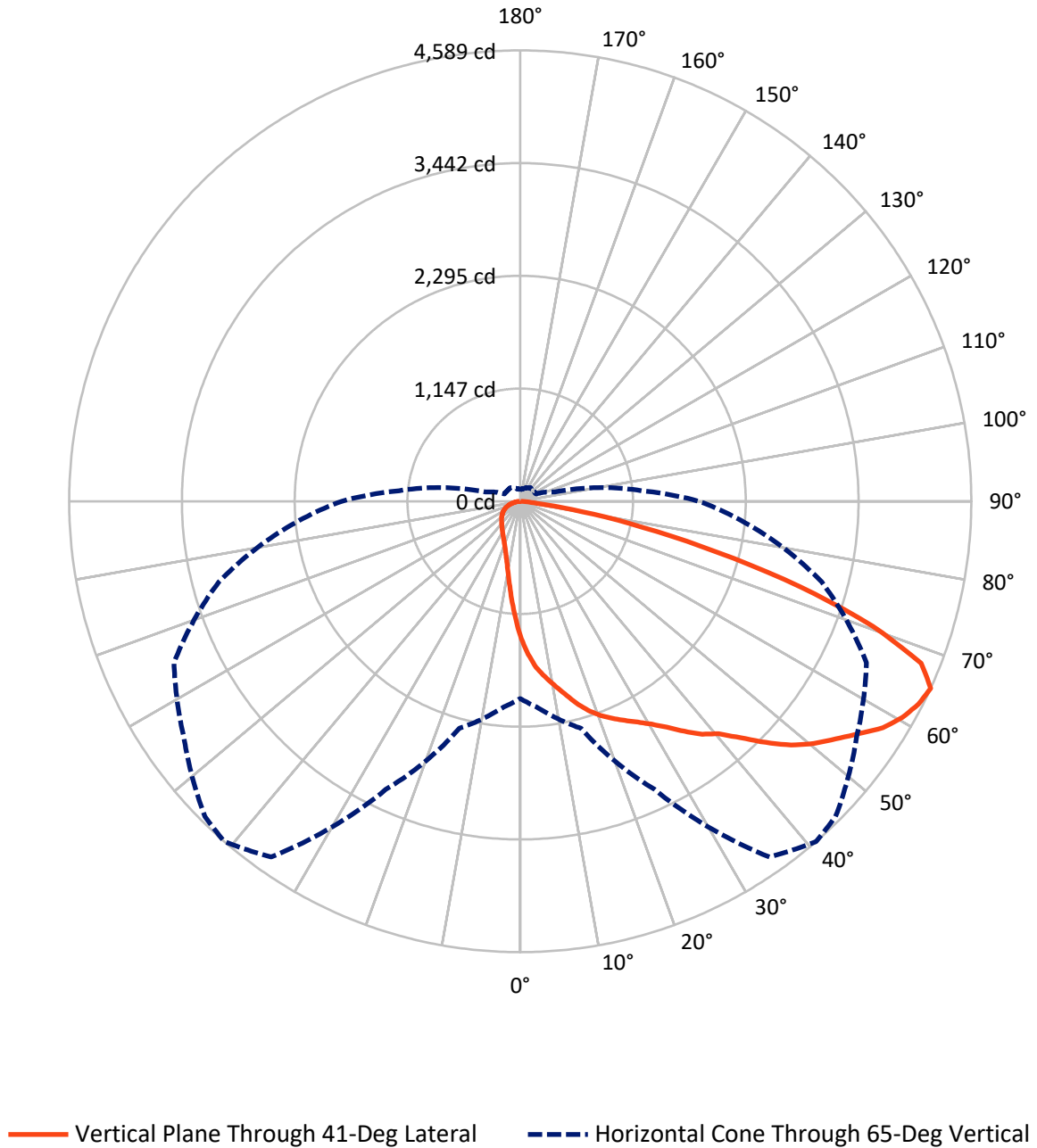
✕ Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.2 fc
Type III - Short - N/A

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Luminous Intensity Polar Plot



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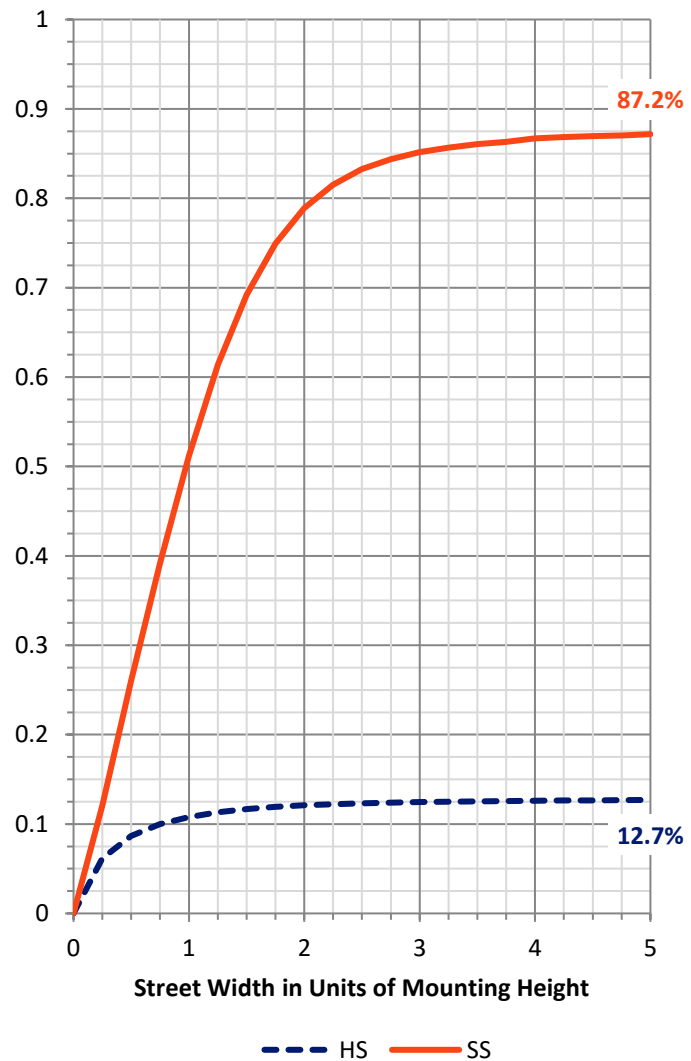
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1054.3	0.0	1054.3
	% Fixture	12.8	0.0	12.8
Street Side	Lumens	7157.7	0.0	7157.7
	% Fixture	87.2	0.0	87.2
Total	Lumens	8212.0	0.0	8212.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.4	1.6
10°-20°	390.9	4.8
20°-30°	672.6	8.2
30°-40°	1020.0	12.4
40°-50°	1494.4	18.2
50°-60°	1887.1	23.0
60°-70°	1769.5	21.5
70°-80°	788.7	9.6
80°-90°	58.4	0.7
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°	8212.0	100.0
0°-180°	8212.0	100.0

Coefficient of Utilization



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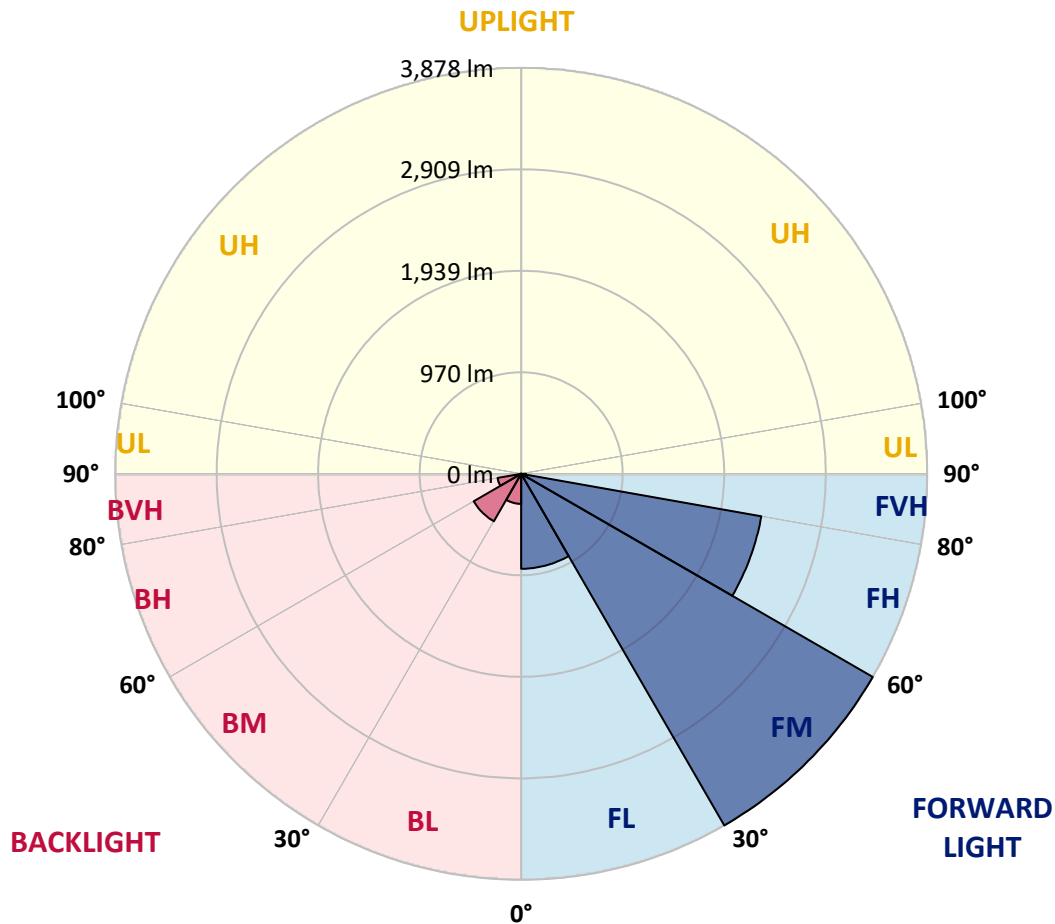
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	906.9	11.0			
FM	(30°-60°)	3878.0	47.2			
FH	(60°-80°)	2329.1	28.4			G2/5000
FVH	(80°-90°)	43.6	0.5			G1/100
BL	(0°-30°)	287.0	3.5	B1/500		
BM	(30°-60°)	523.5	6.4	B1/1000		
BH	(60°-80°)	229.0	2.8	B1/500		G1/500
BVH	(80°-90°)	14.8	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type III Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	41°	45°	55°	65°	75°	85°
0°	1399.3	1399.3	1399.3	1399.3	1399.3	1399.3	1399.3	1399.3	1399.3	1399.3	1399.3
2.5°	1614.0	1608.8	1605.4	1586.3	1586.3	1560.3	1562.1	1537.8	1508.4	1461.6	1411.4
5°	1766.4	1759.5	1750.8	1731.8	1724.9	1698.9	1695.4	1660.8	1610.6	1529.2	1439.1
7.5°	1899.8	1892.8	1880.7	1853.0	1834.0	1802.8	1794.1	1749.1	1693.7	1593.2	1466.8
10°	2021.0	2015.8	2000.2	1965.6	1939.6	1901.5	1885.9	1825.3	1756.0	1645.2	1489.3
12.5°	2143.9	2137.0	2116.2	2086.8	2055.6	2010.6	1991.6	1913.6	1825.3	1702.3	1522.2
15°	2258.2	2247.9	2232.3	2201.1	2173.4	2130.1	2109.3	2017.5	1910.2	1766.4	1565.5
17.5°	2332.7	2324.1	2310.2	2292.9	2270.4	2237.5	2216.7	2126.6	1995.0	1828.8	1610.6
20°	2377.7	2374.3	2369.1	2358.7	2348.3	2325.8	2310.2	2225.3	2086.8	1889.4	1653.9
22.5°	2412.4	2408.9	2407.2	2407.2	2408.9	2400.3	2389.9	2317.1	2175.1	1953.5	1693.7
25°	2466.1	2464.3	2460.9	2457.4	2469.5	2471.3	2467.8	2417.6	2286.0	2038.3	1743.9
27.5°	2540.5	2535.3	2528.4	2524.9	2537.1	2545.7	2552.7	2518.0	2403.7	2124.9	1801.1
30°	2654.8	2639.2	2621.9	2609.8	2618.5	2632.3	2647.9	2627.1	2524.9	2232.3	1859.9
32.5°	2789.9	2770.9	2731.0	2708.5	2731.0	2741.4	2753.5	2743.1	2651.4	2348.3	1918.8
35°	2954.4	2931.9	2890.3	2857.4	2897.3	2874.8	2869.6	2859.2	2770.9	2462.6	1984.6
37.5°	3228.0	3195.1	3129.3	3056.6	3056.6	3008.1	2989.1	2957.9	2878.2	2564.8	2048.7
40°	3545.0	3501.7	3416.8	3309.4	3210.7	3110.3	3098.2	3075.6	3004.6	2682.5	2121.4
42.5°	3893.1	3809.9	3692.2	3562.3	3403.0	3288.7	3261.0	3196.9	3127.6	2802.0	2194.2
45°	4279.2	4106.1	3934.6	3868.8	3605.6	3501.7	3449.7	3333.7	3255.8	2926.7	2270.4
47.5°	4341.6	4206.5	4092.2	4081.8	3794.3	3707.8	3648.9	3482.6	3394.3	3060.1	2350.0
50°	4306.9	4225.6	4237.7	4196.1	3932.9	3875.7	3830.7	3641.9	3531.1	3188.2	2422.8
52.5°	4161.5	4206.5	4275.8	4199.6	4064.5	4017.7	3995.2	3813.4	3659.3	3306.0	2488.6
55°	3988.3	4019.5	4168.4	4261.9	4216.9	4175.3	4154.6	4012.5	3785.7	3404.7	2549.2
57.5°	3735.5	3721.6	3886.1	4251.5	4376.2	4352.0	4329.5	4208.2	3903.4	3475.7	2587.3
60°	3356.2	3326.8	3534.6	4043.7	4428.2	4466.3	4455.9	4338.1	3993.5	3474.0	2571.7
62.5°	2699.9	2772.6	3060.1	3704.3	4450.7	4547.7	4528.6	4348.5	4022.9	3373.5	2473.0
65°	2007.1	2111.0	2393.3	3236.7	4419.5	4589.2	4537.3	4178.8	3886.1	3174.4	2256.5
67.5°	1446.0	1537.8	1743.9	2663.5	4119.9	4398.7	4338.1	3901.7	3570.9	2892.1	1956.9
70°	988.8	1054.7	1194.9	1939.6	3517.3	3803.0	3764.9	3487.8	3073.9	2556.1	1589.8
72.5°	697.9	725.6	815.7	1279.8	2672.1	2983.9	2938.8	2869.6	2469.5	2124.9	1236.5
75°	523.0	540.3	588.8	827.8	1802.8	2067.8	2026.2	2066.0	1844.4	1608.8	900.5
77.5°	197.4	214.7	334.2	528.2	1066.8	1269.4	1227.8	1252.1	1025.2	812.2	448.5
80°	53.7	57.1	110.8	251.1	484.9	632.1	575.0	493.6	381.0	374.1	237.3
82.5°	22.5	26.0	50.2	135.1	173.2	173.2	145.5	180.1	145.5	174.9	114.3
85°	8.7	10.4	12.1	34.6	22.5	24.2	26.0	34.6	29.4	36.4	26.0
87.5°	0.0	0.0	0.0	1.7	1.7	3.5	1.7	3.5	5.2	5.2	5.2
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°	1399.3	1399.3	1399.3	1399.3	1399.3	1399.3	1399.3	1399.3	1399.3	1399.3	1399.3
2.5°	1390.6	1371.6	1343.9	1298.8	1252.1	1226.1	1193.2	1188.0	1153.4	1149.9	1136.1
5°	1399.3	1359.5	1288.4	1201.9	1117.0	1051.2	1002.7	976.7	926.5	926.5	912.7
7.5°	1406.2	1343.9	1229.6	1101.4	985.4	897.1	831.3	803.5	758.5	755.1	744.7
10°	1407.9	1324.8	1165.5	999.2	857.2	767.2	703.1	671.9	632.1	628.6	621.7
12.5°	1421.8	1314.4	1108.3	910.9	765.4	668.5	606.1	580.1	549.0	545.5	538.6
15°	1444.3	1314.4	1059.9	836.5	684.1	594.0	540.3	516.1	493.6	490.1	486.6
17.5°	1466.8	1311.0	1011.4	767.2	616.5	535.1	488.4	469.3	452.0	450.3	446.8
20°	1487.6	1309.2	962.9	708.3	564.6	486.6	450.3	432.9	419.1	419.1	417.4
22.5°	1508.4	1305.8	916.1	652.9	519.5	450.3	419.1	400.0	389.7	389.7	387.9
25°	1539.6	1305.8	872.8	606.1	483.2	422.6	391.4	377.5	368.9	367.1	367.1
27.5°	1575.9	1316.2	834.7	564.6	452.0	394.8	370.6	356.7	346.4	342.9	344.6
30°	1615.8	1324.8	800.1	528.2	422.6	374.1	348.1	334.2	323.8	320.4	322.1
32.5°	1655.6	1335.2	768.9	495.3	393.1	355.0	329.0	313.5	303.1	301.3	301.3
35°	1698.9	1345.6	737.7	467.6	368.9	336.0	311.7	294.4	287.5	284.0	285.7
37.5°	1742.2	1362.9	708.3	441.6	351.6	318.6	296.1	278.8	273.6	271.9	271.9
40°	1794.1	1388.9	696.2	424.3	336.0	303.1	284.0	266.7	261.5	261.5	261.5
42.5°	1837.4	1409.7	685.8	405.2	323.8	289.2	271.9	258.0	254.6	252.8	254.6
45°	1880.7	1428.7	671.9	387.9	308.3	275.4	261.5	247.6	244.2	244.2	244.2
47.5°	1924.0	1439.1	652.9	370.6	294.4	263.2	251.1	239.0	235.5	235.5	235.5
50°	1958.6	1447.8	625.2	351.6	278.8	252.8	240.7	228.6	225.1	225.1	225.1
52.5°	1993.3	1449.5	595.7	329.0	263.2	240.7	230.3	218.2	214.7	213.0	213.0
55°	2024.5	1447.8	561.1	303.1	245.9	226.9	218.2	207.8	200.9	194.0	197.4
57.5°	2047.0	1446.0	521.3	277.1	228.6	213.0	209.5	195.7	181.8	164.5	168.0
60°	2038.3	1427.0	478.0	244.2	209.5	199.2	199.2	180.1	155.9	147.2	148.9
62.5°	1982.9	1373.3	432.9	209.5	190.5	185.3	183.6	162.8	143.7	135.1	136.8
65°	1816.6	1238.2	367.1	178.4	171.4	169.7	169.7	150.7	133.3	123.0	124.7
67.5°	1563.8	1039.1	299.6	150.7	152.4	155.9	155.9	138.5	121.2	110.8	112.6
70°	1253.8	812.2	239.0	129.9	131.6	136.8	140.3	124.7	109.1	98.7	98.7
72.5°	943.8	616.5	192.2	109.1	117.8	117.8	123.0	110.8	95.2	84.9	86.6
75°	684.1	441.6	152.4	91.8	102.2	100.4	100.4	93.5	81.4	74.5	74.5
77.5°	323.8	232.1	121.2	65.8	79.7	77.9	79.7	74.5	69.3	62.3	64.1
80°	159.3	114.3	77.9	46.8	55.4	57.1	62.3	58.9	57.1	52.0	52.0
82.5°	76.2	45.0	36.4	32.9	38.1	39.8	43.3	43.3	45.0	41.6	41.6
85°	20.8	12.1	15.6	20.8	24.2	26.0	29.4	31.2	31.2	29.4	31.2
87.5°	5.2	5.2	6.9	10.4	12.1	13.9	15.6	15.6	6.9	0.0	0.0
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)