

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: P836420

Luminaire Tested: **ARCH3-180-740-U-T4W-HSS**

Issue Date: 5/16/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P836420  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-27)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/16/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH3-180-740-U-T4W-HSS  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 4000K, 1375mA LIGHTSQUARE WITH 40 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 17142 lumens  
Efficiency: N/A  
Efficacy: 95.0 lumens/watt  
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G2

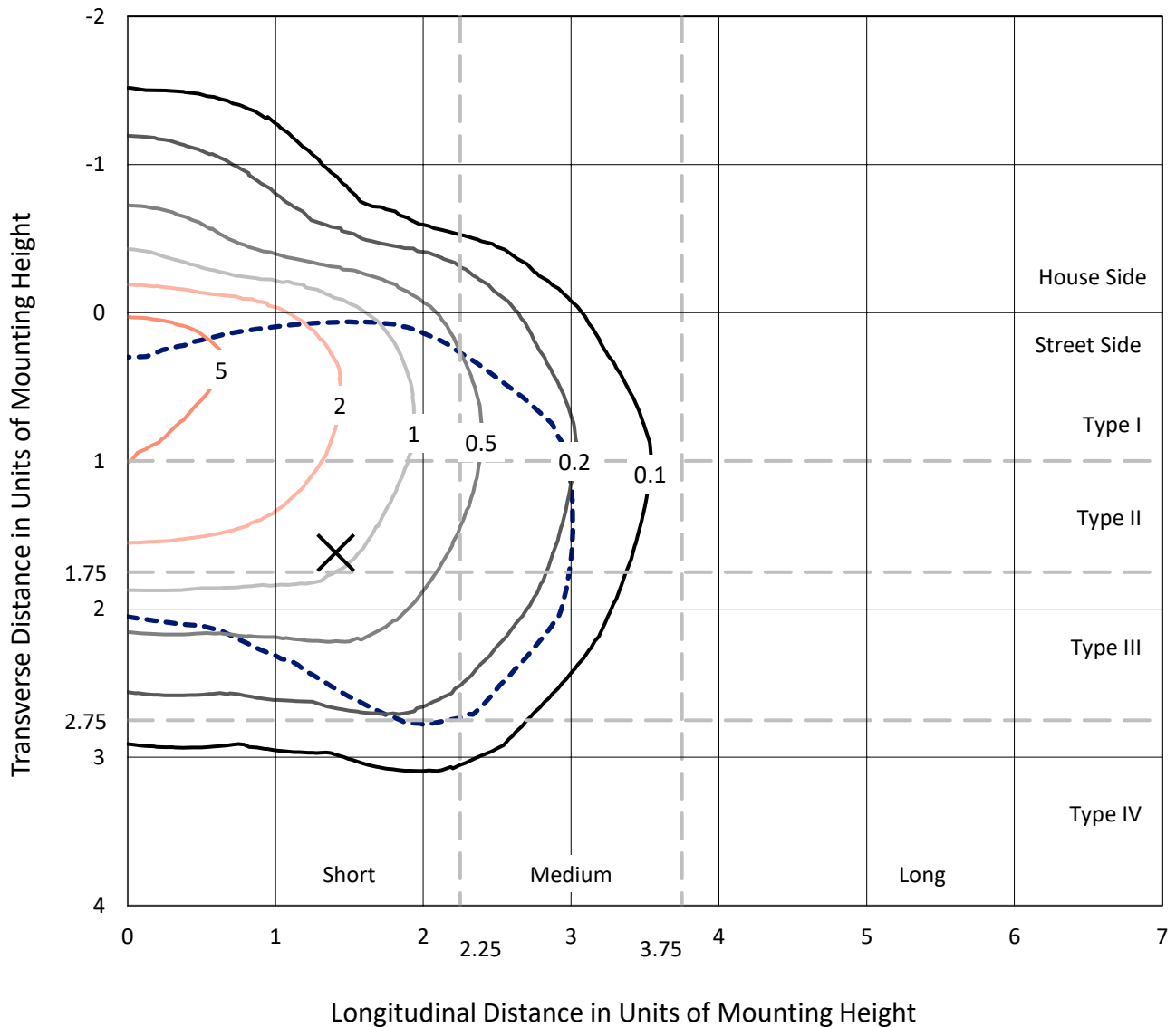
Input Watts (W): 180.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

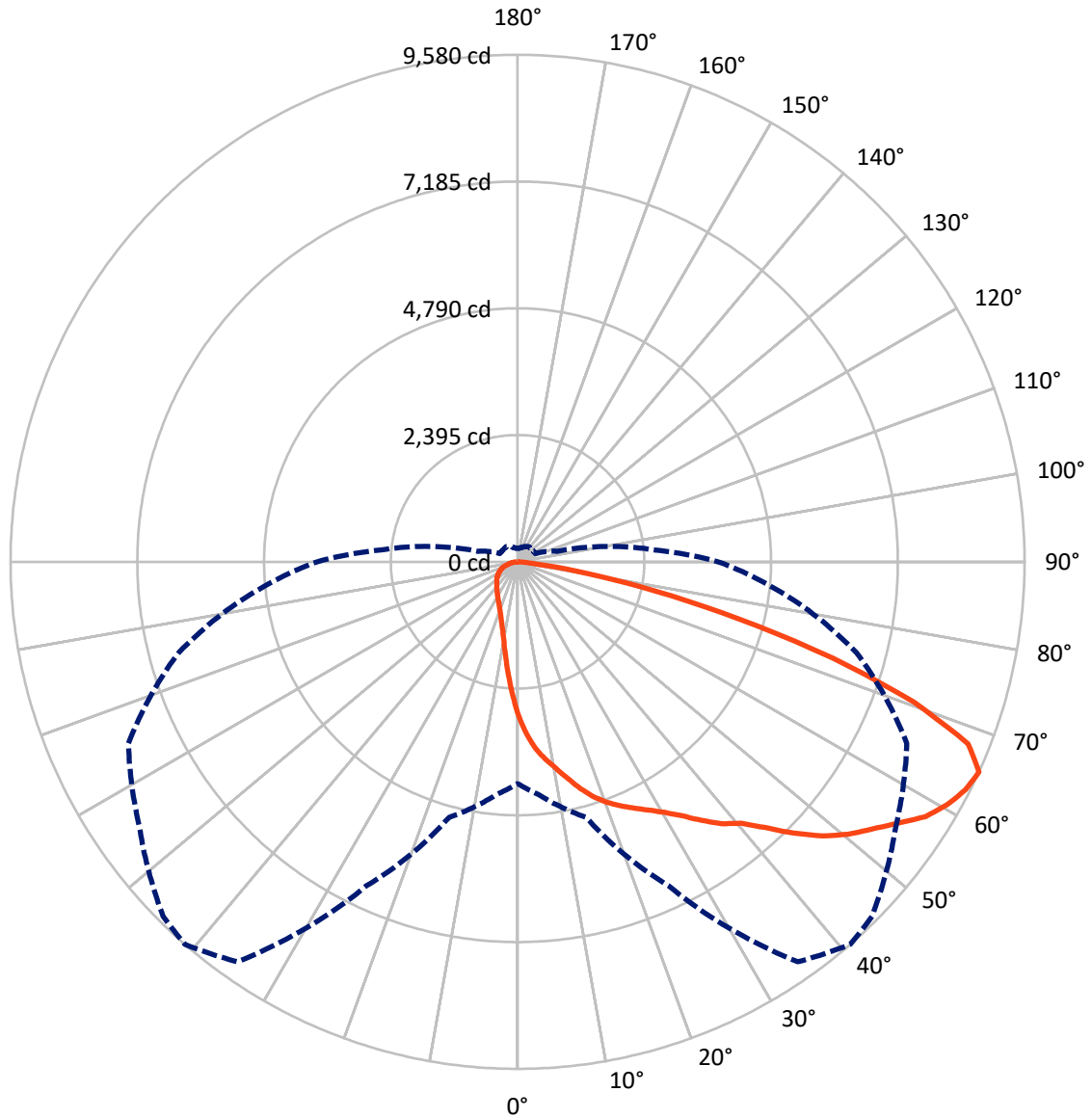
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.8 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 41-Deg Lateral    - - - Horizontal Cone Through 65-Deg Vertical

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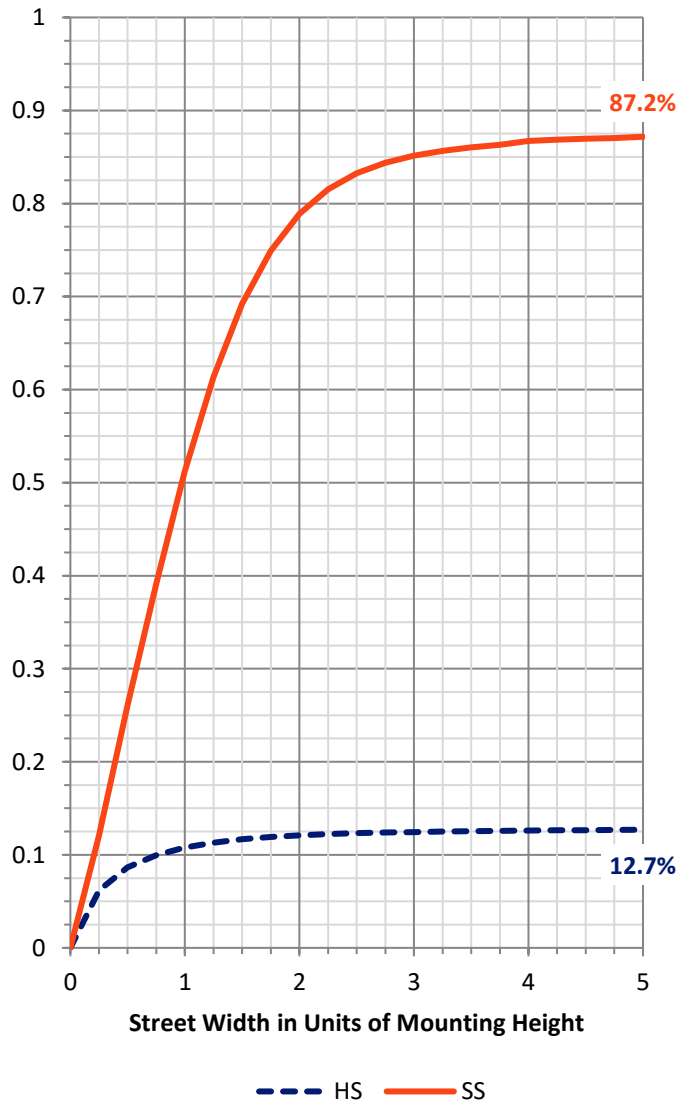
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2200.8	0.0	2200.8
	% Fixture	12.8	0.0	12.8
<b>Street Side</b>	Lumens	14941.2	0.0	14941.2
	% Fixture	87.2	0.0	87.2
<b>Total</b>	Lumens	17142.0	0.0	17142.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	272.2	1.6
10°-20°	816.1	4.8
20°-30°	1403.9	8.2
30°-40°	2129.3	12.4
40°-50°	3119.4	18.2
50°-60°	3939.2	23.0
60°-70°	3693.7	21.5
70°-80°	1646.3	9.6
80°-90°	122.0	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°	17142.0	100.0
0°-180°	17142.0	100.0

**Coefficient of Utilization**



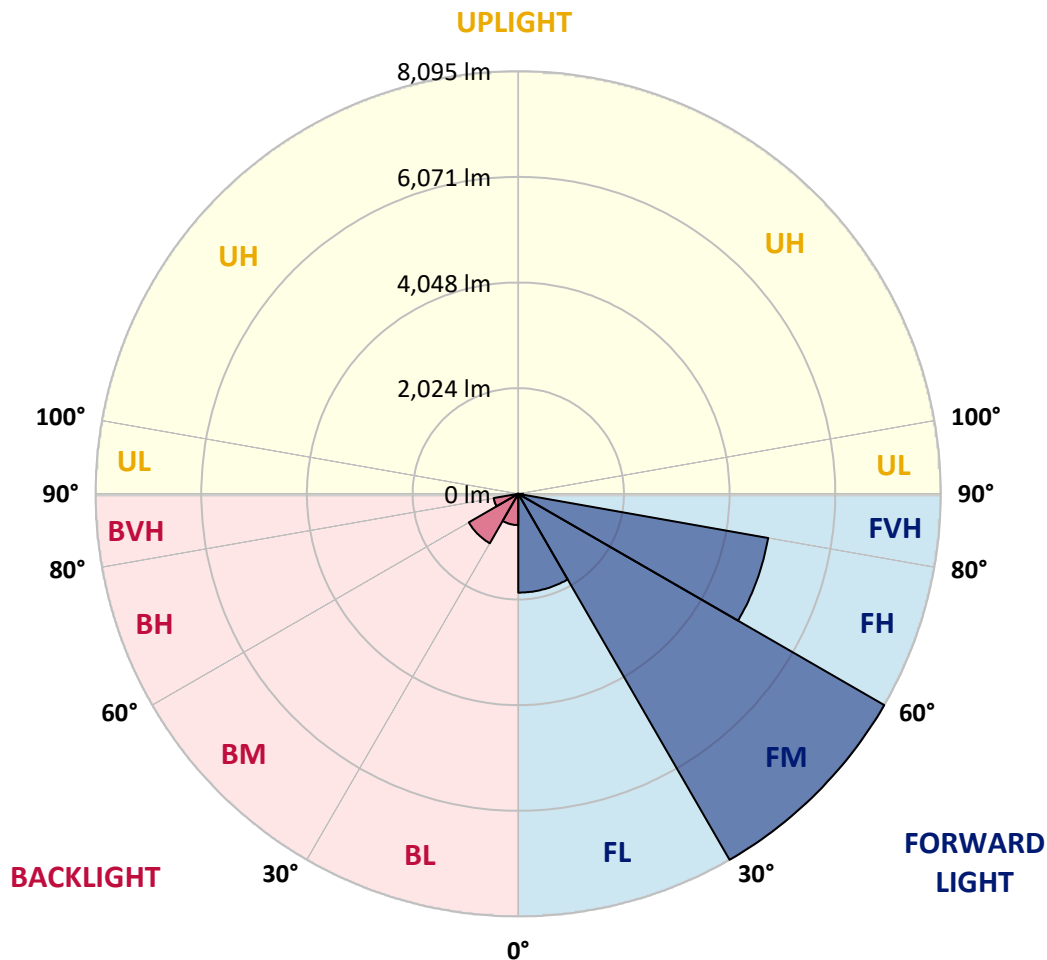
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1893.1	11.0			
FM (30°-60°)	8095.1	47.2			
FH (60°-80°)	4861.9	28.4			G2/5000
FVH (80°-90°)	91.1	0.5			G1/100
BL (0°-30°)	599.0	3.5	B2/1000		
BM (30°-60°)	1092.8	6.4	B2/2500		
BH (60°-80°)	478.1	2.8	B1/500		G1/500
BVH (80°-90°)	30.9	0.2			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 III Short



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	41°	45°	55°	65°	75°	85°
0°	2920.9	2920.9	2920.9	2920.9	2920.9	2920.9	2920.9	2920.9	2920.9	2920.9	2920.9
2.5°	3369.2	3358.3	3351.1	3311.3	3311.3	3257.1	3260.7	3210.1	3148.7	3051.0	2946.2
5°	3687.3	3672.8	3654.7	3615.0	3600.5	3546.3	3539.1	3466.8	3361.9	3192.0	3004.1
7.5°	3965.6	3951.2	3925.9	3868.0	3828.3	3763.2	3745.1	3651.1	3535.5	3325.8	3061.9
10°	4218.7	4207.8	4175.3	4103.0	4048.8	3969.3	3936.7	3810.2	3665.6	3434.2	3108.9
12.5°	4475.4	4460.9	4417.5	4356.1	4291.0	4197.0	4157.2	3994.6	3810.2	3553.5	3177.6
15°	4713.9	4692.2	4659.7	4594.6	4536.8	4446.4	4403.1	4211.5	3987.3	3687.3	3267.9
17.5°	4869.4	4851.3	4822.4	4786.2	4739.2	4670.6	4627.2	4439.2	4164.5	3817.4	3361.9
20°	4963.4	4956.1	4945.3	4923.6	4901.9	4854.9	4822.4	4645.3	4356.1	3943.9	3452.3
22.5°	5035.7	5028.4	5024.8	5024.8	5028.4	5010.4	4988.7	4836.8	4540.4	4077.7	3535.5
25°	5147.7	5144.1	5136.9	5129.7	5155.0	5158.6	5151.4	5046.5	4771.8	4254.8	3640.3
27.5°	5303.2	5292.3	5277.9	5270.6	5296.0	5314.0	5328.5	5256.2	5017.6	4435.6	3759.6
30°	5541.8	5509.2	5473.1	5447.8	5465.9	5494.8	5527.3	5483.9	5270.6	4659.7	3882.5
32.5°	5823.7	5784.0	5700.8	5653.8	5700.8	5722.5	5747.8	5726.1	5534.5	4901.9	4005.4
35°	6167.2	6120.2	6033.4	5964.7	6047.9	6000.9	5990.0	5968.3	5784.0	5140.5	4142.8
37.5°	6738.3	6669.6	6532.3	6380.4	6380.4	6279.2	6239.5	6174.4	6008.1	5353.8	4276.5
40°	7399.9	7309.5	7132.4	6908.2	6702.2	6492.5	6467.2	6420.2	6272.0	5599.6	4428.4
42.5°	8126.5	7953.0	7707.1	7436.0	7103.4	6864.9	6807.0	6673.3	6528.7	5849.0	4580.2
45°	8932.6	8571.1	8213.2	8075.9	7526.4	7309.5	7201.0	6958.8	6796.2	6109.3	4739.2
47.5°	9062.8	8780.8	8542.2	8520.5	7920.4	7739.7	7616.8	7269.7	7085.4	6387.7	4905.5
50°	8990.5	8820.6	8845.9	8759.1	8209.6	8090.3	7996.3	7602.3	7371.0	6655.2	5057.4
52.5°	8686.8	8780.8	8925.4	8766.3	8484.4	8386.8	8339.8	7960.2	7638.5	6901.0	5194.7
55°	8325.3	8390.4	8701.3	8896.5	8802.5	8715.7	8672.3	8375.9	7902.4	7107.1	5321.3
57.5°	7797.5	7768.6	8112.0	8874.8	9135.1	9084.5	9037.5	8784.4	8148.2	7255.3	5400.8
60°	7005.8	6944.4	7378.2	8441.0	9243.5	9323.0	9301.4	9055.5	8336.2	7251.7	5368.3
62.5°	5635.8	5787.6	6387.7	7732.5	9290.5	9492.9	9453.2	9077.2	8397.6	7042.0	5162.2
65°	4189.8	4406.7	4995.9	6756.4	9225.4	9579.7	9471.3	8723.0	8112.0	6626.3	4710.3
67.5°	3018.5	3210.1	3640.3	5559.8	8600.0	9182.1	9055.5	8144.6	7454.1	6037.0	4084.9
70°	2064.2	2201.5	2494.3	4048.8	7342.0	7938.5	7859.0	7280.6	6416.6	5335.7	3318.6
72.5°	1456.8	1514.7	1702.7	2671.5	5577.9	6228.6	6134.6	5990.0	5155.0	4435.6	2581.1
75°	1091.7	1127.9	1229.1	1728.0	3763.2	4316.3	4229.5	4312.7	3850.0	3358.3	1879.8
77.5°	412.1	448.3	697.7	1102.6	2226.8	2649.8	2563.0	2613.6	2140.1	1695.4	936.3
80°	112.1	119.3	231.4	524.2	1012.2	1319.5	1200.2	1030.3	795.3	780.8	495.3
82.5°	47.0	54.2	104.8	282.0	361.5	361.5	303.7	376.0	303.7	365.1	238.6
85°	18.1	21.7	25.3	72.3	47.0	50.6	54.2	72.3	61.5	75.9	54.2
87.5°	0.0	0.0	0.0	3.6	3.6	7.2	3.6	7.2	10.8	10.8	10.8
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°	2920.9	2920.9	2920.9	2920.9	2920.9	2920.9	2920.9	2920.9	2920.9	2920.9	2920.9
2.5°	2902.8	2863.1	2805.2	2711.2	2613.6	2559.4	2490.7	2479.9	2407.6	2400.3	2371.4
5°	2920.9	2837.8	2689.5	2508.8	2331.7	2194.3	2093.1	2038.9	1934.0	1934.0	1905.1
7.5°	2935.4	2805.2	2566.6	2299.1	2056.9	1872.6	1735.2	1677.4	1583.4	1576.1	1554.4
10°	2939.0	2765.5	2432.9	2085.8	1789.4	1601.4	1467.7	1402.6	1319.5	1312.2	1297.8
12.5°	2967.9	2743.8	2313.6	1901.5	1597.8	1395.4	1265.2	1211.0	1145.9	1138.7	1124.3
15°	3014.9	2743.8	2212.4	1746.0	1427.9	1239.9	1127.9	1077.3	1030.3	1023.0	1015.8
17.5°	3061.9	2736.5	2111.2	1601.4	1286.9	1117.0	1019.4	979.7	943.5	939.9	932.7
20°	3105.3	2732.9	2009.9	1478.5	1178.5	1015.8	939.9	903.7	874.8	874.8	871.2
22.5°	3148.7	2725.7	1912.3	1362.8	1084.5	939.9	874.8	835.1	813.4	813.4	809.8
25°	3213.7	2725.7	1822.0	1265.2	1008.6	882.1	817.0	788.1	770.0	766.4	766.4
27.5°	3289.6	2747.4	1742.4	1178.5	943.5	824.2	773.6	744.7	723.0	715.8	719.4
30°	3372.8	2765.5	1670.1	1102.6	882.1	780.8	726.6	697.7	676.0	668.8	672.4
32.5°	3455.9	2787.2	1605.1	1033.9	820.6	741.1	686.8	654.3	632.6	629.0	629.0
35°	3546.3	2808.8	1540.0	976.0	770.0	701.3	650.7	614.5	600.1	592.9	596.5
37.5°	3636.7	2845.0	1478.5	921.8	733.8	665.2	618.2	582.0	571.2	567.6	567.6
40°	3745.1	2899.2	1453.2	885.7	701.3	632.6	592.9	556.7	545.9	545.9	545.9
42.5°	3835.5	2942.6	1431.5	845.9	676.0	603.7	567.6	538.6	531.4	527.8	531.4
45°	3925.9	2982.4	1402.6	809.8	643.5	574.8	545.9	516.9	509.7	509.7	509.7
47.5°	4016.2	3004.1	1362.8	773.6	614.5	549.5	524.2	498.9	491.6	491.6	491.6
50°	4088.5	3022.1	1305.0	733.8	582.0	527.8	502.5	477.2	469.9	469.9	469.9
52.5°	4160.8	3025.7	1243.6	686.8	549.5	502.5	480.8	455.5	448.3	444.6	444.6
55°	4225.9	3022.1	1171.3	632.6	513.3	473.6	455.5	433.8	419.3	404.9	412.1
57.5°	4272.9	3018.5	1088.1	578.4	477.2	444.6	437.4	408.5	379.6	343.4	350.7
60°	4254.8	2978.7	997.7	509.7	437.4	415.7	415.7	376.0	325.3	307.3	310.9
62.5°	4139.2	2866.7	903.7	437.4	397.6	386.8	383.2	339.8	300.0	282.0	285.6
65°	3792.1	2584.7	766.4	372.3	357.9	354.3	354.3	314.5	278.4	256.7	260.3
67.5°	3264.3	2169.0	625.4	314.5	318.1	325.3	325.3	289.2	253.0	231.4	235.0
70°	2617.2	1695.4	498.9	271.1	274.7	285.6	292.8	260.3	227.7	206.1	206.1
72.5°	1970.2	1286.9	401.3	227.7	245.8	245.8	256.7	231.4	198.8	177.1	180.7
75°	1427.9	921.8	318.1	191.6	213.3	209.7	209.7	195.2	169.9	155.4	155.4
77.5°	676.0	484.4	253.0	137.4	166.3	162.7	166.3	155.4	144.6	130.1	133.8
80°	332.6	238.6	162.7	97.6	115.7	119.3	130.1	122.9	119.3	108.4	108.4
82.5°	159.1	94.0	75.9	68.7	79.5	83.1	90.4	90.4	94.0	86.8	86.8
85°	43.4	25.3	32.5	43.4	50.6	54.2	61.5	65.1	65.1	61.5	65.1
87.5°	10.8	10.8	14.5	21.7	25.3	28.9	32.5	32.5	14.5	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)