

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: P841332

Luminaire Tested: **ARCH4-160-740-U-T4W**

Issue Date: 5/27/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P841332  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/27/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH4-160-740-U-T4W  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 4000K, 1305mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

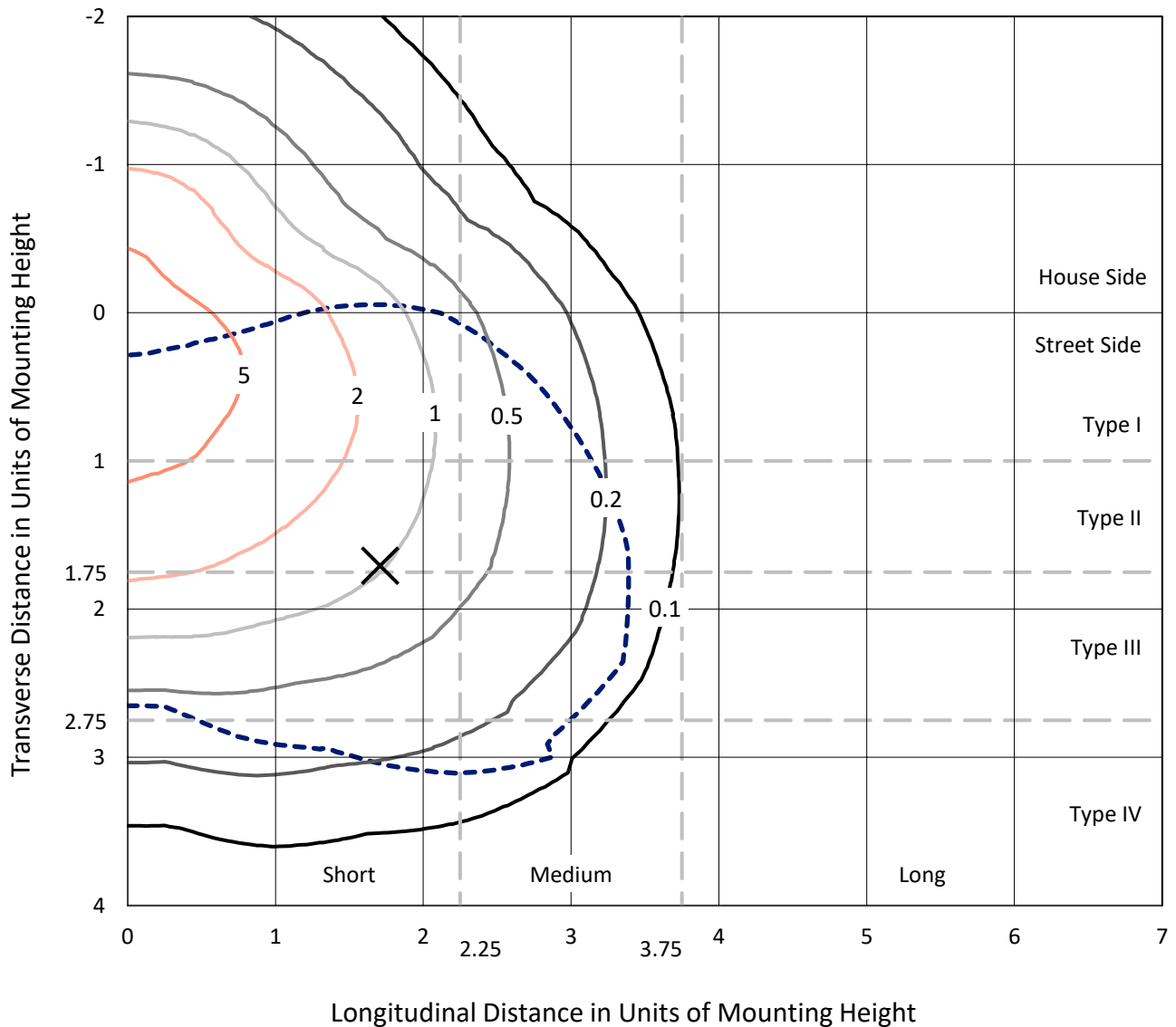
Lumens per Lamp: N/A  
Luminaire Lumens: 26685 lumens  
Efficiency: N/A  
Efficacy: 166.1 lumens/watt  
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B3 - U0 - G3  
  
Input Watts (W): 160.7  
Input Voltage (V): NR  
Input Current (Ain): 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

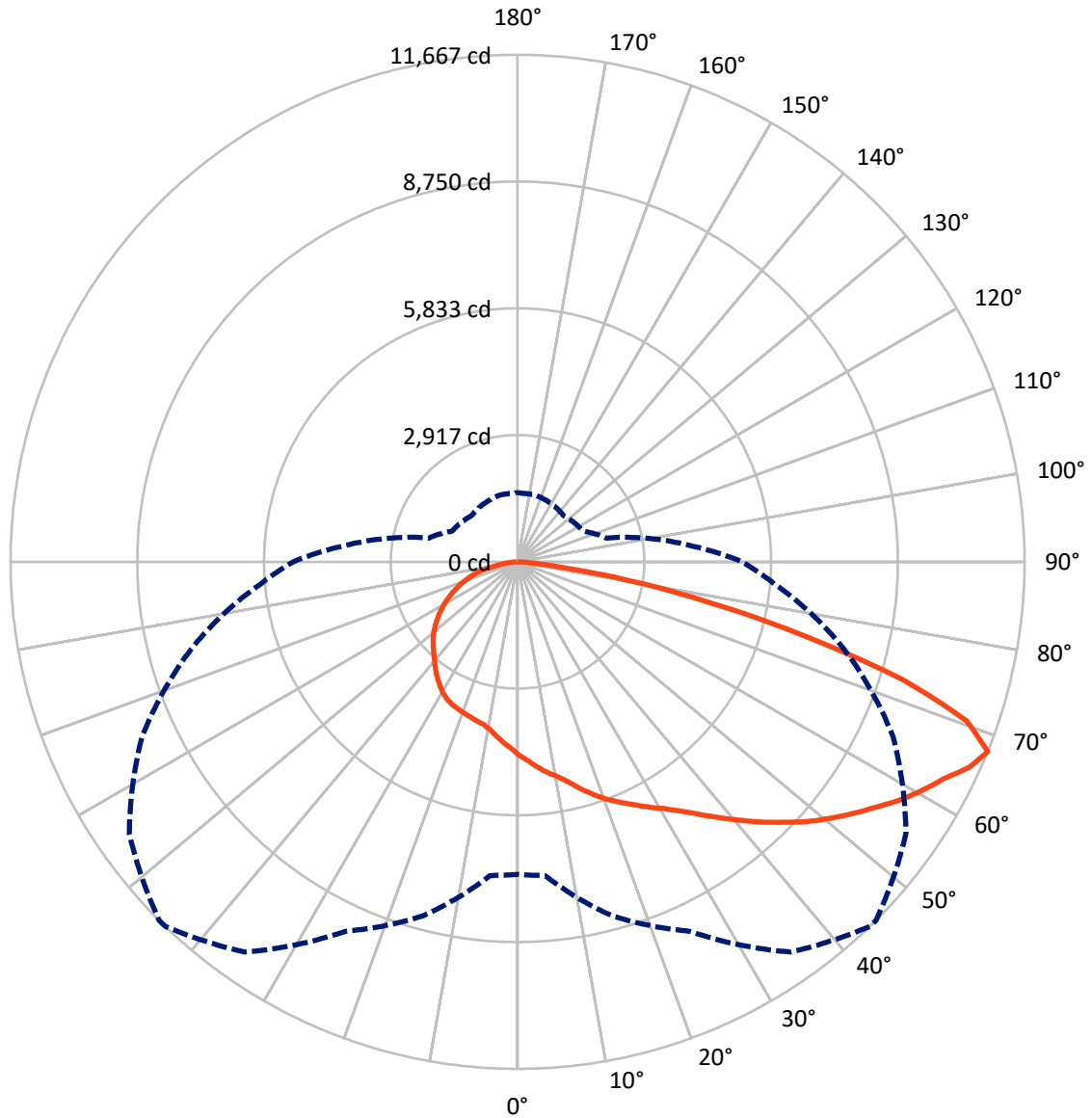
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.3 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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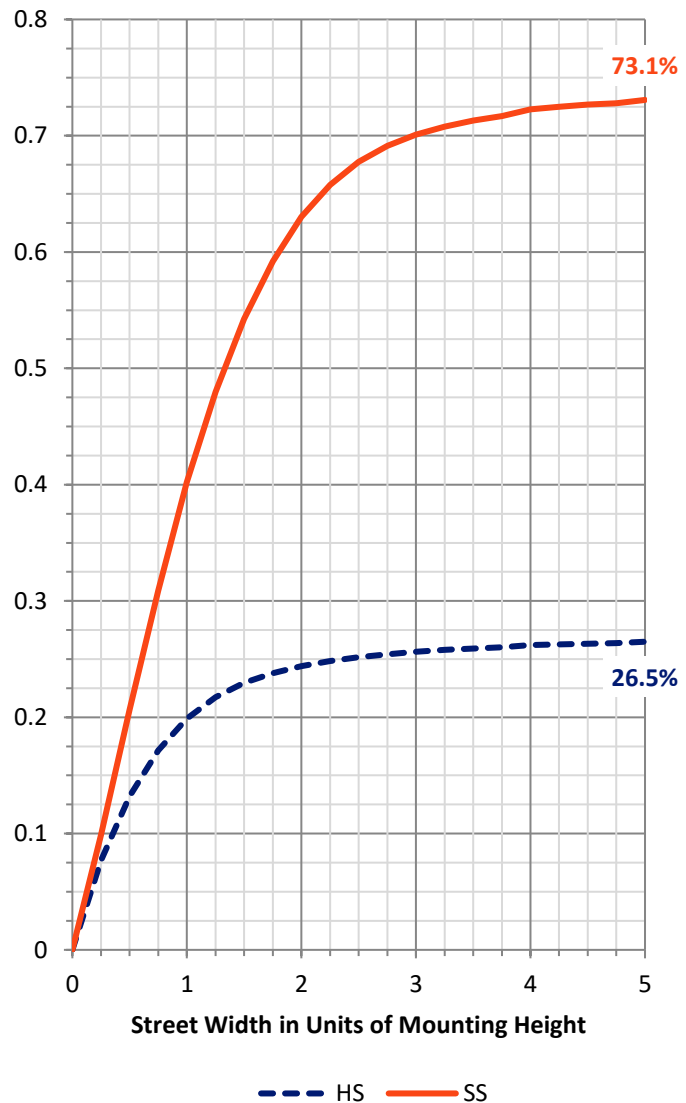
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	7128.9	0.0	7128.9
	% Fixture	26.7	0.0	26.7
<b>Street Side</b>	Lumens	19556.1	0.0	19556.1
	% Fixture	73.3	0.0	73.3
<b>Total</b>	Lumens	26685.0	0.0	26685.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	426.1	1.6
10°-20°	1316.3	4.9
20°-30°	2272.1	8.5
30°-40°	3350.6	12.6
40°-50°	4539.4	17.0
50°-60°	5548.2	20.8
60°-70°	5722.2	21.4
70°-80°	3134.2	11.7
80°-90°	375.7	1.4
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°	26685.0	100.0
0°-180°	26685.0	100.0

**Coefficient of Utilization**



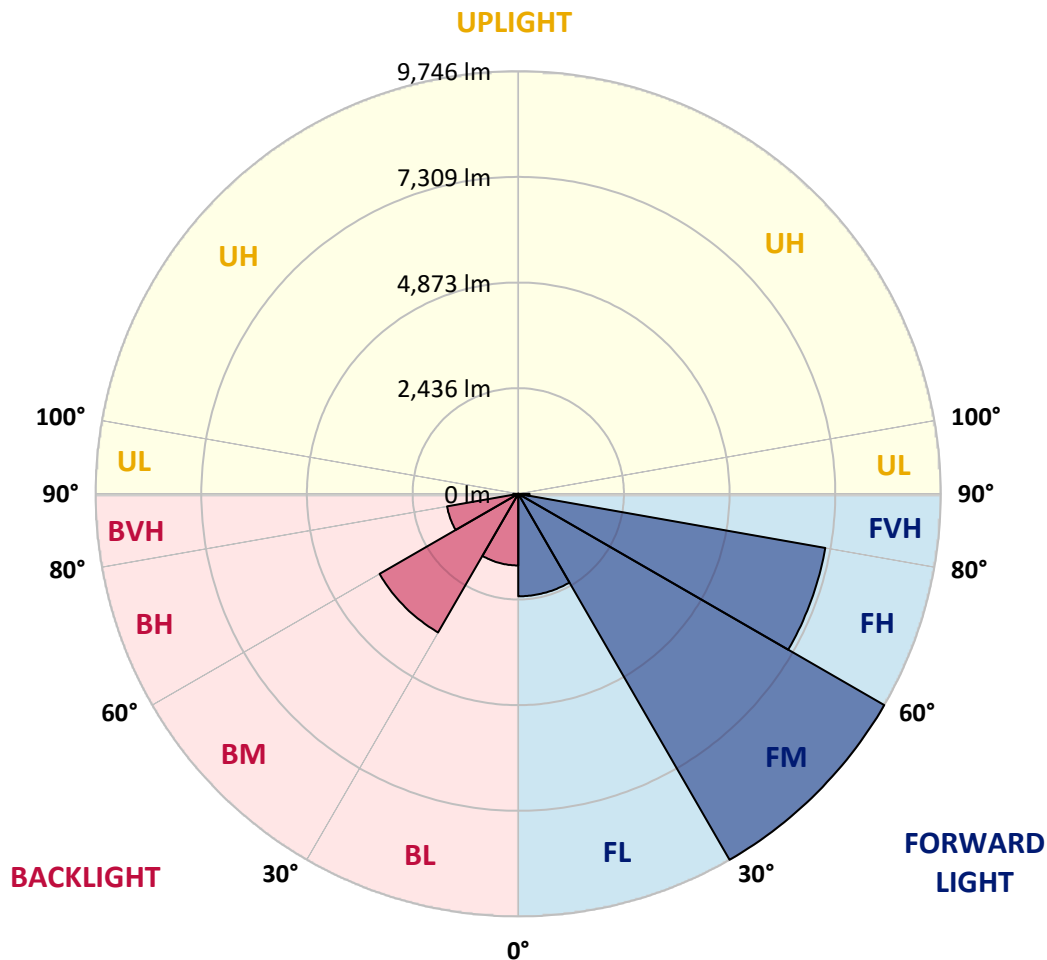
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2362.3	8.9			
FM (30°-60°)	9745.6	36.5			
FH (60°-80°)	7189.3	26.9			G3/7500
FVH (80°-90°)	258.8	1.0			G3/500
BL (0°-30°)	1652.2	6.2	B3/2500		
BM (30°-60°)	3692.7	13.8	B3/5000		
BH (60°-80°)	1667.1	6.2	B3/2500		G3/2500
BVH (80°-90°)	116.9	0.4			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G3**

Type IV Short



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	4450.6	4450.6	4450.6	4450.6	4450.6	4450.6	4450.6	4450.6	4450.6	4450.6	4450.6
2.5°	4645.5	4641.4	4649.5	4621.1	4584.6	4580.5	4580.5	4556.1	4527.7	4470.9	4426.2
5°	4864.7	4856.6	4860.7	4820.1	4771.3	4747.0	4742.9	4690.1	4625.2	4535.8	4454.6
7.5°	5067.8	5059.7	5055.6	5010.9	4937.8	4897.2	4893.2	4816.0	4738.9	4600.8	4483.0
10°	5258.6	5250.5	5242.4	5181.5	5092.1	5031.2	5023.1	4925.7	4828.2	4657.6	4507.4
12.5°	5502.3	5486.0	5477.9	5404.8	5274.9	5209.9	5197.7	5067.8	4946.0	4738.9	4556.1
15°	5758.1	5745.9	5733.7	5664.7	5518.5	5433.2	5412.9	5250.5	5084.0	4844.4	4629.2
17.5°	5949.0	5936.8	5936.8	5875.9	5741.9	5644.4	5628.2	5433.2	5226.1	4941.9	4686.1
20°	6066.7	6054.5	6066.7	6030.2	5928.7	5847.4	5831.2	5616.0	5368.3	5031.2	4734.8
22.5°	6152.0	6139.8	6160.1	6143.9	6070.8	6022.1	6009.9	5798.7	5514.5	5124.6	4783.5
25°	6302.2	6302.2	6302.2	6273.8	6204.8	6188.5	6188.5	6005.8	5701.3	5246.5	4856.6
27.5°	6602.7	6586.5	6566.2	6485.0	6367.2	6363.2	6387.5	6217.0	5916.5	5404.8	4946.0
30°	7045.4	7037.2	6960.1	6789.5	6590.6	6570.2	6586.5	6444.4	6147.9	5571.3	5047.5
32.5°	7617.9	7589.5	7431.1	7175.3	6891.0	6797.6	6830.1	6679.9	6391.6	5741.9	5144.9
35°	8024.0	8032.1	7918.4	7686.9	7349.9	7102.2	7126.6	6943.8	6655.5	5932.7	5266.8
37.5°	8491.0	8519.4	8348.8	8174.2	7861.6	7439.2	7463.6	7215.9	6919.5	6172.3	5396.7
40°	9136.6	9079.8	8791.5	8584.4	8239.2	7792.5	7812.8	7520.5	7224.0	6399.7	5546.9
42.5°	9676.7	9575.2	9226.0	8962.0	8547.8	8166.1	8186.4	7849.4	7532.6	6651.5	5713.4
45°	10452.3	10172.1	9668.6	9538.6	8864.6	8531.6	8551.9	8198.6	7857.5	6919.5	5892.1
47.5°	10903.0	10456.4	10135.6	10066.5	9213.8	8909.2	8933.6	8568.1	8206.7	7224.0	6078.9
50°	10874.6	10586.3	10492.9	10322.4	9522.4	9262.5	9286.9	8949.8	8560.0	7524.5	6257.6
52.5°	10687.8	10740.6	10691.9	10407.6	9831.0	9603.6	9632.0	9327.5	8921.4	7804.7	6424.1
55°	10976.1	11012.7	10919.3	10545.7	10172.1	9944.7	9977.2	9725.4	9278.8	8052.4	6566.2
57.5°	11321.3	11191.4	11098.0	10789.3	10525.4	10314.2	10350.8	10131.5	9587.4	8251.4	6675.8
60°	11305.1	11033.0	11126.4	10805.6	10765.0	10655.3	10687.8	10464.5	9822.9	8397.6	6720.5
62.5°	10472.6	10326.4	10797.5	10687.8	10959.9	10959.9	11000.5	10667.5	9965.0	8458.5	6696.1
65°	9027.0	9035.1	9863.5	10318.3	11191.4	11378.1	11410.6	10793.4	9883.8	8279.8	6468.7
67.5°	7191.5	7244.3	8434.1	9380.3	10959.9	11662.4	11666.5	10907.1	9534.6	7776.3	5940.8
70°	5262.7	5303.3	6708.3	7857.5	9867.6	11033.0	10968.0	10586.3	8775.2	6899.2	5116.5
72.5°	3557.2	3593.7	5039.4	6034.2	8097.1	9396.5	9254.4	9355.9	7479.9	5668.8	4113.5
75°	2391.8	2436.4	3585.6	4316.5	5957.1	7134.7	6818.0	7086.0	5786.5	4292.2	3000.9
77.5°	1506.5	1535.0	2278.1	2830.3	4068.8	4856.6	4539.9	4543.9	3333.9	2310.6	1612.1
80°	958.3	966.5	1380.6	1632.4	2355.2	2919.7	2582.6	2099.4	1502.5	1226.3	962.4
82.5°	556.3	544.1	824.3	921.8	1120.8	1108.6	917.7	869.0	657.8	613.2	491.3
85°	223.3	207.1	361.4	337.0	341.1	361.4	268.0	268.0	215.2	166.5	121.8
87.5°	44.7	44.7	48.7	44.7	44.7	48.7	36.5	36.5	32.5	32.5	32.5
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°	4450.6	4450.6	4450.6	4450.6	4450.6	4450.6	4450.6	4450.6	4450.6	4450.6	4450.6
2.5°	4418.1	4409.9	4389.6	4336.9	4308.4	4292.2	4267.8	4259.7	4255.6	4259.7	4271.9
5°	4430.2	4401.8	4345.0	4259.7	4202.8	4166.3	4125.7	4109.5	4097.3	4097.3	4109.5
7.5°	4438.4	4393.7	4296.2	4170.4	4089.1	4032.3	3983.6	3963.3	3959.2	3971.4	3975.4
10°	4442.4	4377.5	4239.4	4081.0	3975.4	3902.4	3853.6	3841.4	3853.6	3878.0	3882.1
12.5°	4470.9	4381.5	4206.9	4020.1	3894.2	3821.1	3784.6	3784.6	3817.1	3861.7	3865.8
15°	4519.6	4409.9	4190.7	3971.4	3841.4	3776.5	3764.3	3784.6	3833.3	3902.4	3910.5
17.5°	4556.1	4426.2	4154.1	3906.4	3772.4	3731.8	3752.1	3800.8	3869.9	3963.3	3971.4
20°	4580.5	4426.2	4101.3	3829.3	3703.4	3695.3	3752.1	3829.3	3902.4	4012.0	4024.2
22.5°	4604.9	4418.1	4040.4	3735.9	3626.2	3650.6	3756.2	3853.6	3926.7	4044.5	4064.8
25°	4649.5	4430.2	3979.5	3642.5	3545.0	3614.0	3752.1	3869.9	3947.0	4068.8	4101.3
27.5°	4710.4	4458.7	3934.8	3557.2	3463.8	3557.2	3723.7	3865.8	3947.0	4064.8	4101.3
30°	4775.4	4491.2	3882.1	3463.8	3370.4	3476.0	3662.8	3821.1	3914.5	4024.2	4068.8
32.5°	4844.4	4527.7	3837.4	3362.3	3256.7	3366.3	3573.4	3752.1	3853.6	3955.1	4003.9
35°	4937.8	4592.7	3813.0	3281.1	3155.2	3252.6	3459.7	3662.8	3772.4	3865.8	3922.7
37.5°	5051.5	4673.9	3800.8	3199.8	3045.5	3126.8	3337.9	3553.1	3670.9	3748.0	3800.8
40°	5181.5	4775.4	3796.8	3122.7	2935.9	2996.8	3212.0	3427.2	3541.0	3601.9	3646.5
42.5°	5327.7	4889.1	3788.7	3045.5	2826.3	2875.0	3090.2	3301.4	3398.8	3451.6	3492.2
45°	5482.0	5002.8	3772.4	2952.1	2708.5	2765.4	2964.3	3151.1	3252.6	3297.3	3342.0
47.5°	5636.3	5116.5	3739.9	2846.6	2602.9	2655.7	2830.3	2992.8	3074.0	3114.6	3159.2
50°	5786.5	5218.0	3662.8	2724.7	2493.3	2542.0	2676.0	2785.7	2846.6	2879.1	2923.7
52.5°	5920.5	5287.1	3553.1	2582.6	2383.6	2408.0	2497.3	2590.7	2639.5	2643.5	2684.1
55°	6034.2	5323.6	3394.8	2436.4	2265.9	2269.9	2318.7	2391.8	2412.1	2395.8	2424.3
57.5°	6099.2	5303.3	3220.2	2286.2	2144.1	2127.8	2164.4	2200.9	2205.0	2164.4	2192.8
60°	6115.4	5209.9	2992.8	2135.9	2022.2	1977.6	1989.8	1981.6	1973.5	1957.3	1981.6
62.5°	6034.2	5010.9	2741.0	1989.8	1892.3	1823.3	1819.2	1815.1	1827.3	1831.4	1835.4
65°	5737.8	4637.3	2440.5	1839.5	1754.2	1660.8	1656.8	1705.5	1721.7	1697.4	1705.5
67.5°	5165.2	4064.8	2111.6	1664.9	1579.6	1498.4	1530.9	1559.3	1587.7	1579.6	1587.7
70°	4353.1	3337.9	1811.1	1470.0	1388.8	1344.1	1380.6	1405.0	1409.1	1400.9	1409.1
72.5°	3423.2	2607.0	1530.9	1271.0	1197.9	1177.6	1222.3	1242.6	1279.1	1295.4	1299.4
75°	2473.0	1924.8	1254.8	1055.8	994.9	994.9	1035.5	1072.0	1104.5	1084.2	1072.0
77.5°	1380.6	1149.2	901.5	726.9	739.1	795.9	812.1	852.8	885.2	881.2	873.1
80°	836.5	718.7	609.1	471.0	467.0	511.7	617.2	686.3	702.5	666.0	661.9
82.5°	434.5	377.6	324.9	263.9	292.4	341.1	357.3	430.4	475.1	458.9	479.2
85°	109.6	105.6	117.8	121.8	150.2	166.5	182.7	215.2	142.1	69.0	69.0
87.5°	32.5	32.5	40.6	40.6	52.8	65.0	60.9	60.9	32.5	4.1	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)