

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: P721923

Luminaire Tested: **CST-CA8-430-740-U-T4**

Issue Date: 10/25/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P721923  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-12)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 10/25/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: CST-CA8-430-740-U-T4  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (8) 4000K CCT, 70 CRI LEDS  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 64343 lumens  
Efficiency: N/A  
Efficacy: 148.2 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B4 - U0 - G5

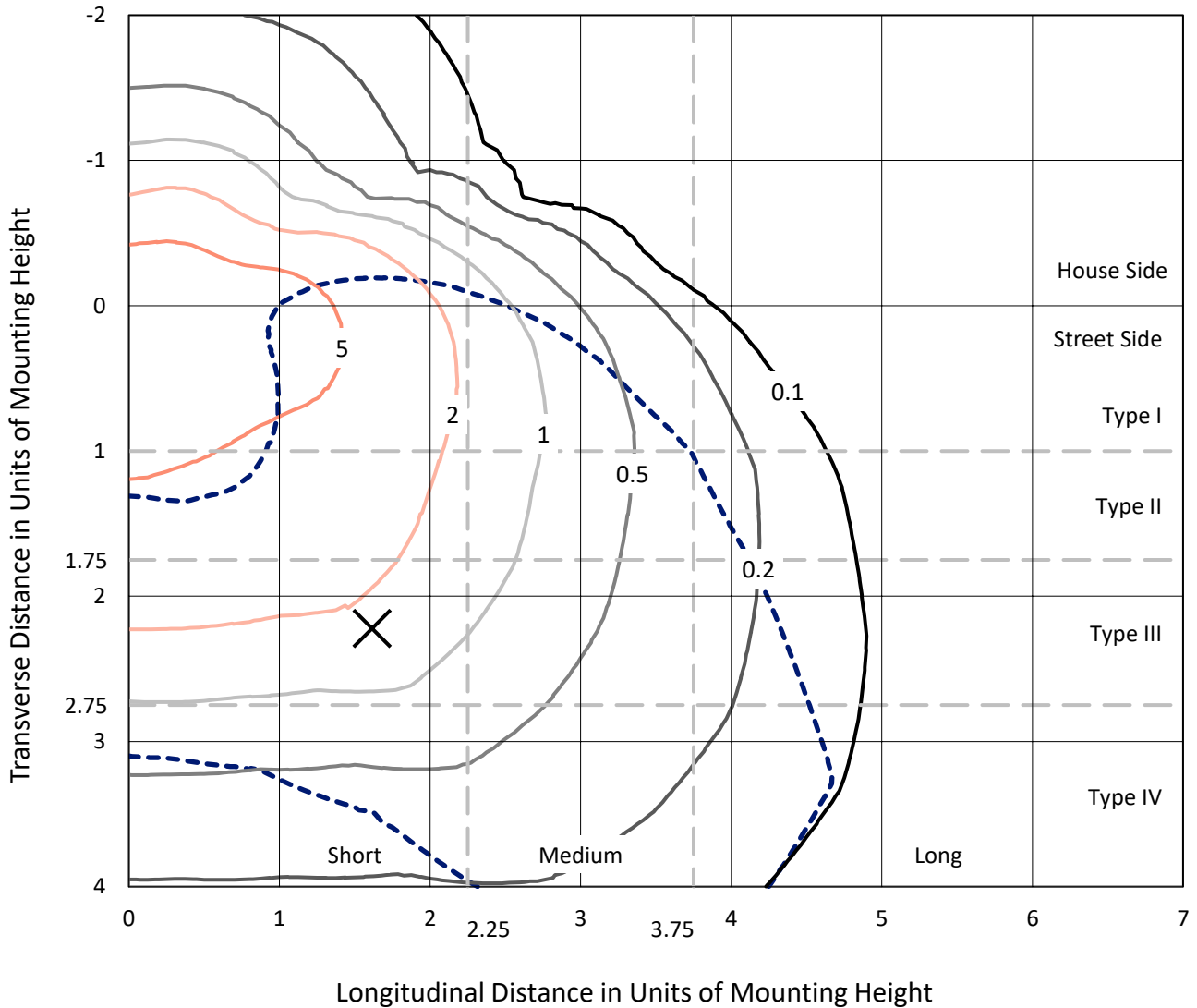
Input Watts (W): 434.1  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

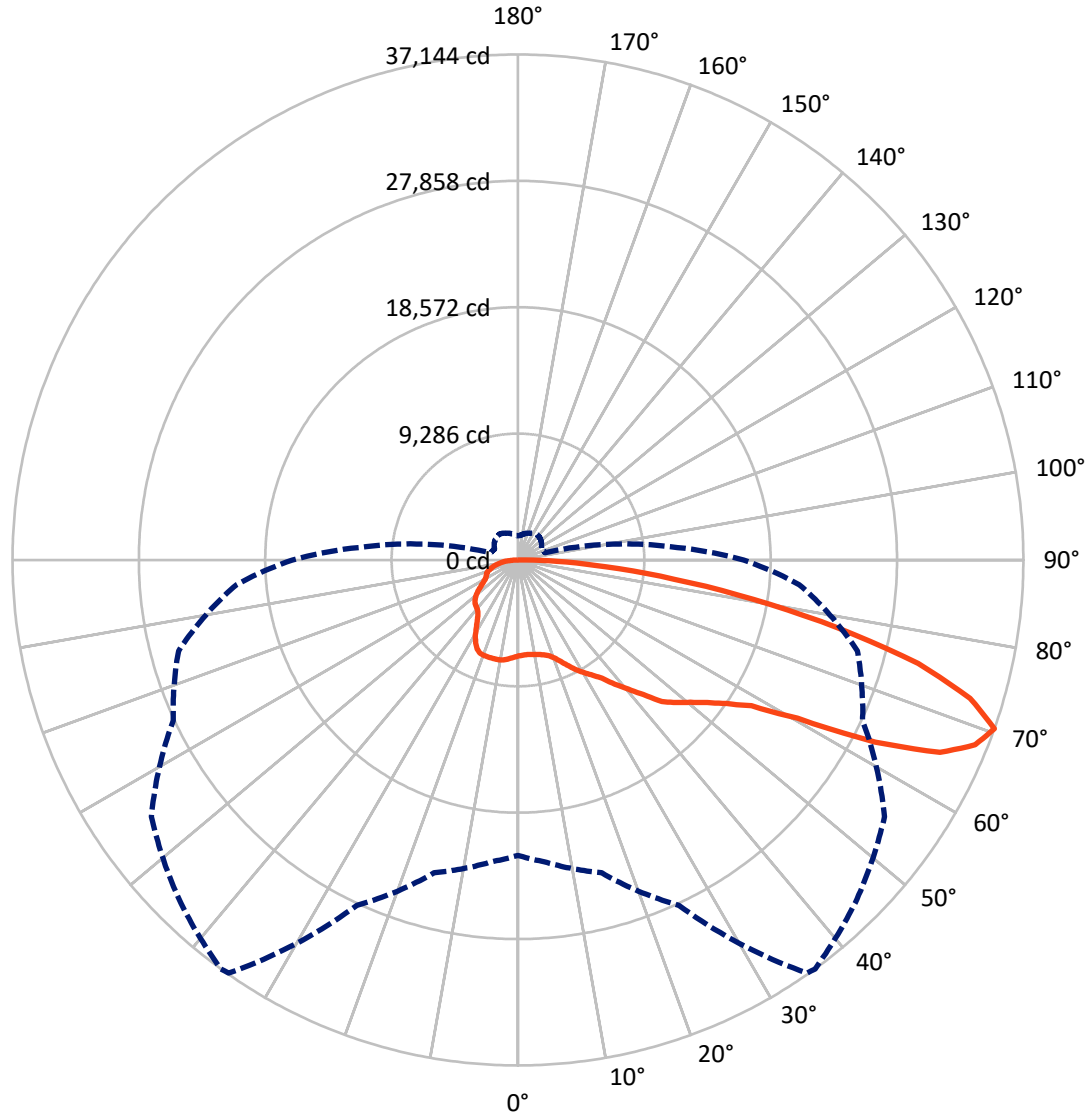
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 8.2 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 36-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical

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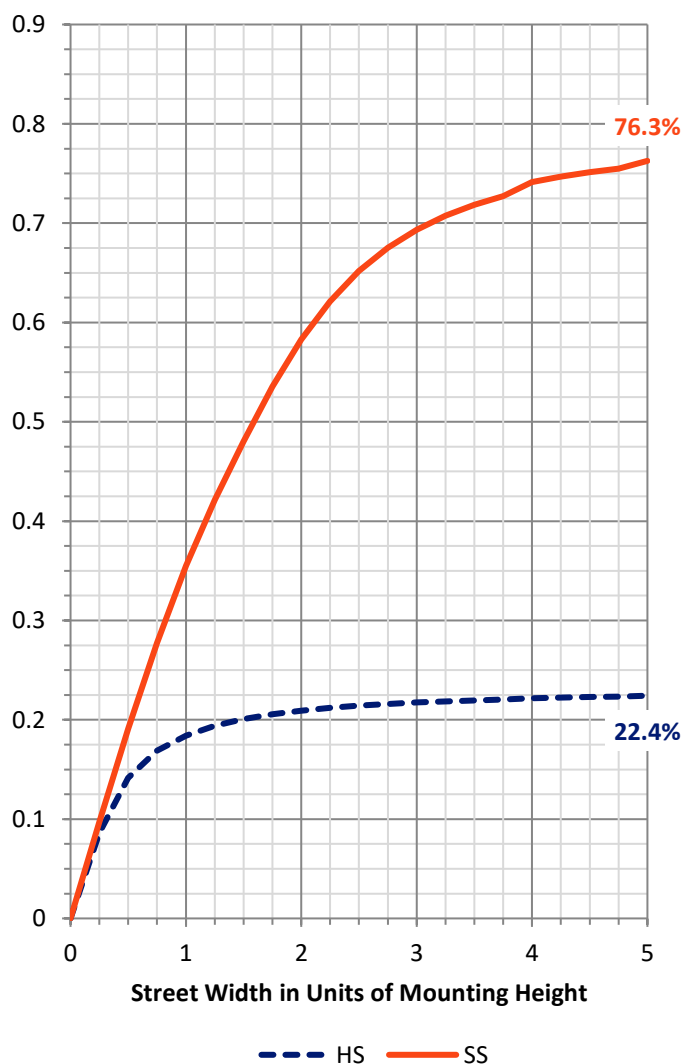
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	14660.1	0.0	14660.1
	% Fixture	22.8	0.0	22.8
<b>Street Side</b>	Lumens	49682.8	0.0	49682.8
	% Fixture	77.2	0.0	77.2
<b>Total</b>	Lumens	64343.0	0.0	64343.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	682.8	1.1
10°-20°	2110.8	3.3
20°-30°	3807.4	5.9
30°-40°	5897.0	9.2
40°-50°	8957.5	13.9
50°-60°	12415.7	19.3
60°-70°	16144.7	25.1
70°-80°	11922.7	18.5
80°-90°	2404.5	3.7
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°	64343.0	100.0
0°-180°	64343.0	100.0

**Coefficient of Utilization**



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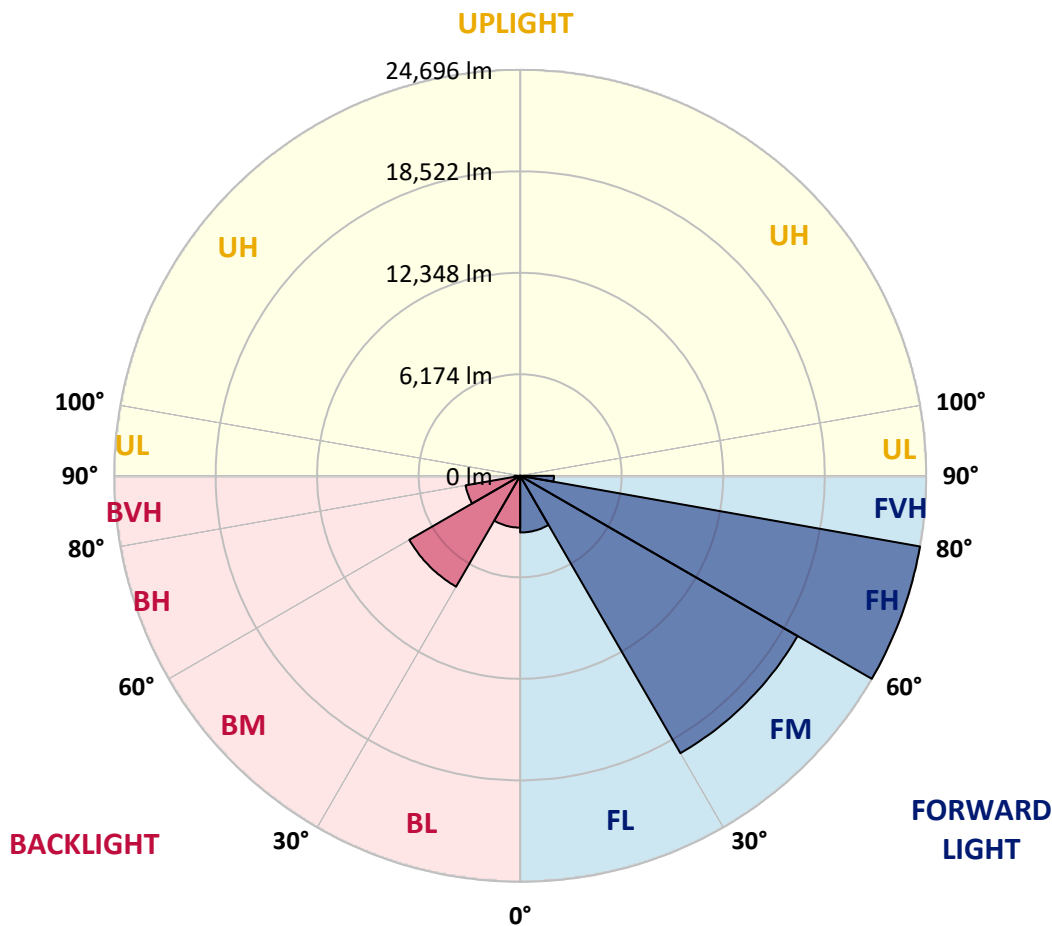
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3449.4	5.4			
FM (30°-60°)	19482.9	30.3			
FH (60°-80°)	24696.3	38.4			G5
FVH (80°-90°)	2054.2	3.2			G5
BL (0°-30°)	3151.5	4.9	B4/5000		
BM (30°-60°)	7787.3	12.1	B4/8500		
BH (60°-80°)	3371.0	5.2	B4/5000		G4/5000
BVH (80°-90°)	350.3	0.5			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B4-U0-G5**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	7047.5	7047.5	7047.5	7047.5	7047.5	7047.5	7047.5	7047.5	7047.5	7047.5	7047.5
2.5°	7004.8	6995.5	6990.2	7000.8	7004.8	7006.2	7008.8	7006.2	6999.5	7023.5	7052.8
5°	7006.2	7000.8	6990.2	6980.9	6980.9	6980.9	6982.2	7012.8	7026.2	7023.5	7059.5
7.5°	7016.8	7012.8	6992.9	6986.2	7002.2	7007.5	7034.2	7024.8	7039.5	7063.5	7094.1
10°	7018.2	7012.8	6995.5	7010.2	7055.5	7063.5	7075.5	7102.1	7107.4	7136.7	7167.4
12.5°	7031.5	7031.5	7038.2	7070.1	7118.1	7127.4	7172.7	7194.0	7226.0	7240.6	7278.0
15°	7102.1	7100.8	7116.8	7152.7	7230.0	7235.3	7291.3	7355.2	7379.2	7415.2	7475.1
17.5°	7270.0	7278.0	7279.3	7305.9	7397.9	7400.5	7492.4	7552.4	7607.0	7671.0	7808.2
20°	7668.3	7653.6	7637.7	7637.7	7673.6	7692.3	7762.9	7858.8	7970.7	8083.9	8245.1
22.5°	8169.2	8198.5	8139.9	8109.3	8126.6	8105.3	8158.6	8235.8	8366.4	8535.6	8739.4
25°	8767.4	8770.0	8766.0	8642.2	8603.5	8616.8	8660.8	8732.7	8905.9	9040.5	9336.2
27.5°	9350.9	9338.9	9296.3	9165.7	9128.4	9147.1	9145.7	9344.2	9521.4	9693.3	10041.0
30°	9881.1	9913.1	9837.2	9617.3	9621.3	9618.7	9680.0	9935.7	10259.5	10579.2	10936.2
32.5°	10816.3	10719.1	10616.5	10182.2	10102.3	10092.9	10128.9	10509.9	10989.5	11529.1	11958.1
35°	11696.9	11673.0	11571.7	11130.8	10668.5	10660.5	10611.2	11074.8	11748.9	12748.1	13283.6
37.5°	12597.5	12562.9	12463.0	12087.3	11627.7	11583.7	11169.4	11677.0	12588.2	14173.6	14936.9
40°	13671.3	13650.0	13495.5	13014.5	12542.9	12476.3	12046.0	12309.8	13647.3	16072.0	16610.2
42.5°	14613.2	14609.2	14432.0	13985.7	13584.7	13518.1	13151.7	13426.2	15119.4	17931.8	18248.8
45°	15304.6	15409.9	15417.9	15163.4	14886.3	14827.7	14730.4	15108.8	16822.0	19619.7	19573.1
47.5°	15888.1	15978.7	15884.1	15753.6	15659.0	15663.0	15813.5	16564.9	18503.3	21090.5	20728.1
50°	16863.3	16807.4	16315.8	16238.5	16358.4	16429.0	16866.0	18136.9	20428.4	22470.7	21764.6
52.5°	18270.2	18055.7	17091.1	16933.9	17388.2	17414.9	18110.3	19542.4	22352.1	23655.0	22713.1
55°	20195.2	20018.0	18928.3	18202.2	18431.4	18611.2	19590.4	20982.6	23922.8	24768.8	23443.2
57.5°	23040.9	23054.2	22165.6	20812.0	20032.7	20224.5	20989.2	22382.7	25220.4	25701.3	23898.8
60°	25321.6	25743.9	25478.8	24860.7	23741.6	23611.0	23028.9	23841.5	26328.8	26494.0	24334.4
62.5°	26903.0	27094.8	28006.1	28136.6	29415.6	29470.2	26681.8	25550.8	27546.4	27013.6	24426.4
65°	26823.0	26941.6	28381.7	30135.0	33913.2	34082.3	32450.4	28136.6	28380.4	27245.4	24158.6
67.5°	24955.3	25133.8	26964.3	30241.5	36309.8	36245.9	35210.7	31736.3	28654.9	26873.7	22882.3
70°	21711.3	22261.5	23798.9	27994.1	37058.5	37143.8	35236.1	32886.0	27947.4	25822.5	20754.8
72.5°	17894.5	18067.7	19519.8	24214.5	34869.7	34744.5	33791.9	31368.6	26668.5	23921.5	17031.2
75°	13608.7	13608.7	15367.2	19297.3	29944.4	30384.1	30754.4	28411.1	23625.7	19497.1	11597.0
77.5°	9033.8	9357.6	10773.7	14501.3	23703.0	24028.0	25307.0	24217.2	19343.9	14297.5	5296.9
80°	4792.0	4832.0	6350.7	9636.0	16953.9	17566.7	19325.3	18677.8	13913.8	6698.4	1338.9
82.5°	1675.9	1829.1	2792.3	5584.7	11170.7	11553.1	12820.0	11098.8	4914.6	1482.8	740.7
85°	832.6	862.0	1229.6	2659.1	6289.4	6474.6	7489.8	4323.1	791.3	647.5	503.6
87.5°	401.0	410.3	471.6	951.2	2733.7	2860.3	3028.2	1406.8	293.1	246.5	218.5
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°	7047.5	7047.5	7047.5	7047.5	7047.5	7047.5	7047.5	7047.5	7047.5	7047.5	7047.5
2.5°	7059.5	7071.5	7094.1	7100.8	7084.8	7114.1	7142.1	7167.4	7166.0	7175.4	7208.7
5°	7075.5	7100.8	7124.7	7167.4	7208.7	7232.7	7255.3	7276.6	7283.3	7303.3	7323.2
7.5°	7124.7	7150.1	7204.7	7279.3	7281.9	7341.9	7380.5	7387.2	7392.5	7392.5	7439.2
10°	7200.7	7247.3	7335.2	7387.2	7433.8	7413.8	7453.8	7428.5	7409.8	7417.8	7449.8
12.5°	7331.2	7372.5	7499.1	7556.4	7513.8	7505.8	7465.8	7408.5	7343.2	7336.6	7365.9
15°	7536.4	7613.7	7726.9	7781.5	7675.0	7580.4	7445.8	7328.6	7202.0	7155.4	7174.0
17.5°	7866.8	7960.1	8083.9	8046.6	7852.1	7665.6	7443.1	7195.4	6950.2	6779.7	6823.7
20°	8350.4	8419.7	8520.9	8370.4	8086.6	7778.9	7413.8	7022.2	6607.8	6297.4	6261.5
22.5°	8858.0	8963.2	8901.9	8623.5	8251.8	7822.8	7352.6	6770.4	6129.6	5740.6	5681.9
25°	9469.5	9504.1	9292.3	8872.6	8298.4	7753.6	7154.1	6402.7	5640.6	5274.3	5257.0
27.5°	10118.3	10039.7	9645.3	8987.2	8246.5	7548.4	6755.7	5821.8	5198.3	4874.6	4824.0
30°	10851.0	10668.5	9937.1	8999.2	8050.6	7148.7	6252.1	5367.5	4838.6	4513.6	4461.6
32.5°	11794.2	11363.9	10207.5	8875.3	7637.7	6562.5	5647.3	4979.9	4514.9	4188.5	4141.9
35°	12999.9	12273.8	10493.9	8651.5	7128.7	5976.4	5146.4	4650.8	4252.5	3859.5	3796.8
37.5°	14389.4	13543.4	10836.3	8369.0	6570.5	5460.8	4808.0	4441.6	4058.0	3613.0	3538.4
40°	16004.0	14814.4	11363.9	8032.0	6069.6	5089.1	4644.1	4369.7	3950.1	3486.4	3401.2
42.5°	17402.9	16158.6	11991.4	7669.6	5596.7	4780.0	4570.9	4321.7	3882.1	3391.8	3294.6
45°	18696.5	17268.3	12604.2	7230.0	5098.4	4568.2	4482.9	4201.8	3762.2	3274.6	3173.4
47.5°	19747.6	18164.9	13137.1	6826.3	4700.1	4373.7	4291.1	3974.0	3561.0	3133.4	3058.8
50°	20554.9	18839.0	13428.8	6505.3	4279.1	4152.5	4043.3	3716.9	3319.9	2950.9	2886.9
52.5°	21380.9	19514.4	13572.7	6521.2	3887.4	3823.5	3711.6	3431.8	3128.1	2844.3	2775.0
55°	21861.8	19791.6	13420.8	6133.6	3527.7	3453.1	3355.9	3210.7	3029.5	2777.7	2712.4
57.5°	22142.9	19963.4	12958.6	5002.5	3094.8	3024.2	3040.1	3028.2	2878.9	2613.8	2553.9
60°	22345.4	19590.4	12011.4	3676.9	2725.7	2672.4	2804.3	2761.7	2632.5	2426.0	2375.4
62.5°	22181.6	18880.3	10306.1	2764.4	2424.7	2537.9	2653.8	2575.2	2399.3	2211.5	2152.9
65°	21182.4	17486.8	7833.5	2220.8	2327.4	2483.3	2576.5	2450.0	2271.4	2049.0	2022.3
67.5°	19363.9	14960.9	4620.2	2035.6	2254.1	2419.3	2496.6	2328.7	2171.5	1958.4	1926.4
70°	16588.9	11200.0	2063.6	1895.8	2126.2	2290.1	2340.7	2182.2	2011.7	1811.8	1779.9
72.5°	12347.1	6753.1	1390.8	1750.5	1937.1	2082.3	2138.2	1970.4	1849.1	1758.5	1749.2
75°	6857.0	2344.7	1282.9	1585.3	1730.6	1861.1	1930.4	1811.8	1715.9	1592.0	1541.4
77.5°	2183.5	996.5	1219.0	1417.5	1601.3	1709.2	1698.6	1520.1	1489.4	1338.9	1325.6
80°	871.3	868.6	1127.1	1160.4	1366.9	1457.5	1433.5	1208.3	1248.3	1160.4	1125.7
82.5°	683.4	795.3	903.2	885.9	1063.1	1169.7	1136.4	887.3	1003.2	921.9	843.3
85°	519.6	696.8	579.5	576.9	742.1	868.6	889.9	682.1	683.4	622.1	554.2
87.5°	267.8	257.1	222.5	221.1	247.8	353.0	433.0	387.7	306.4	230.5	221.1
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)