

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: P721922

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

Issue Date: 10/25/2023

Test Information

Test Method: LM-79-08
Report Number: P721922
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-17)
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-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 4000K CCT, 70 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 57706 lumens
Efficiency: N/A
Efficacy: 132.9 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

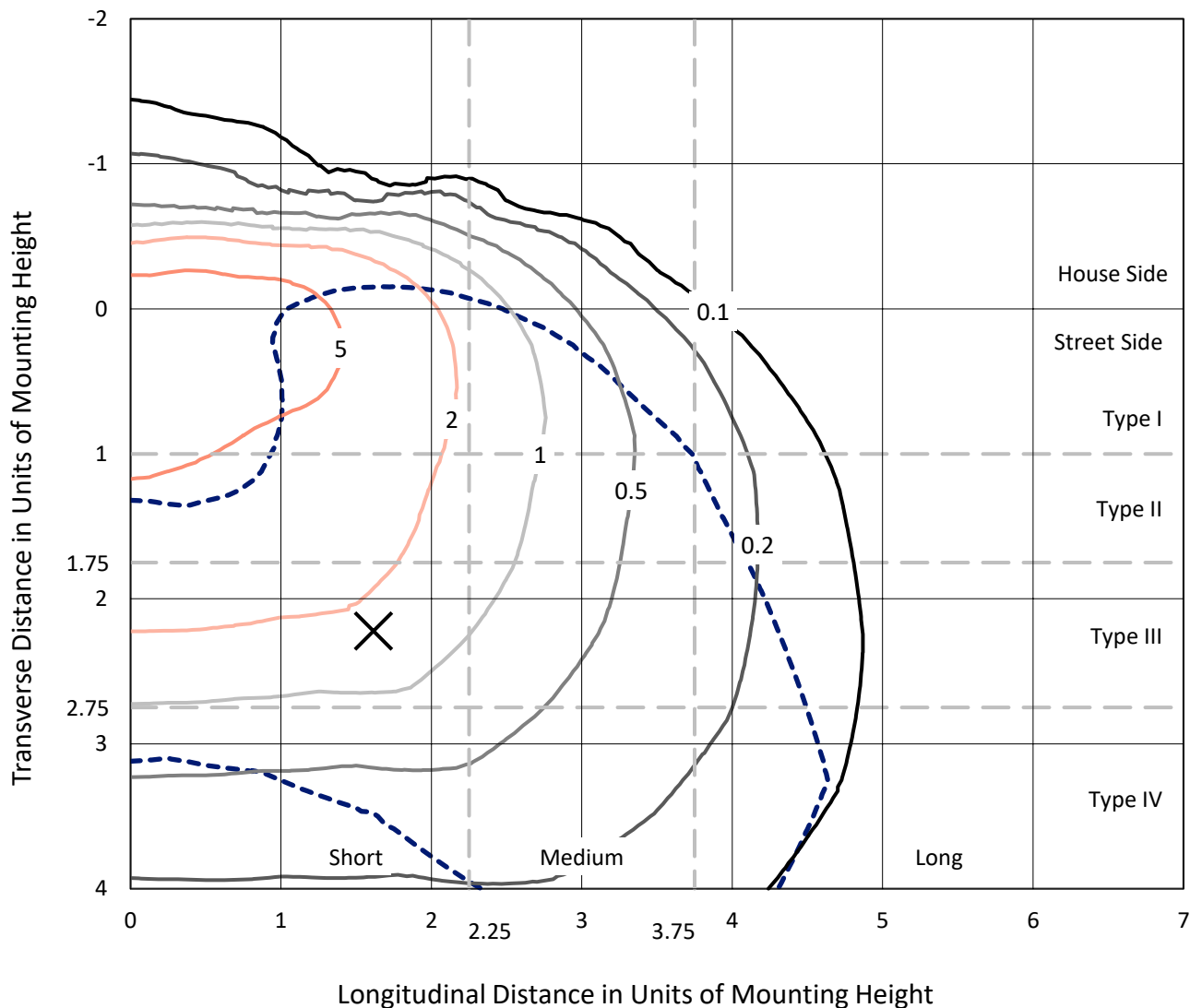
Input Watts (W): 434.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

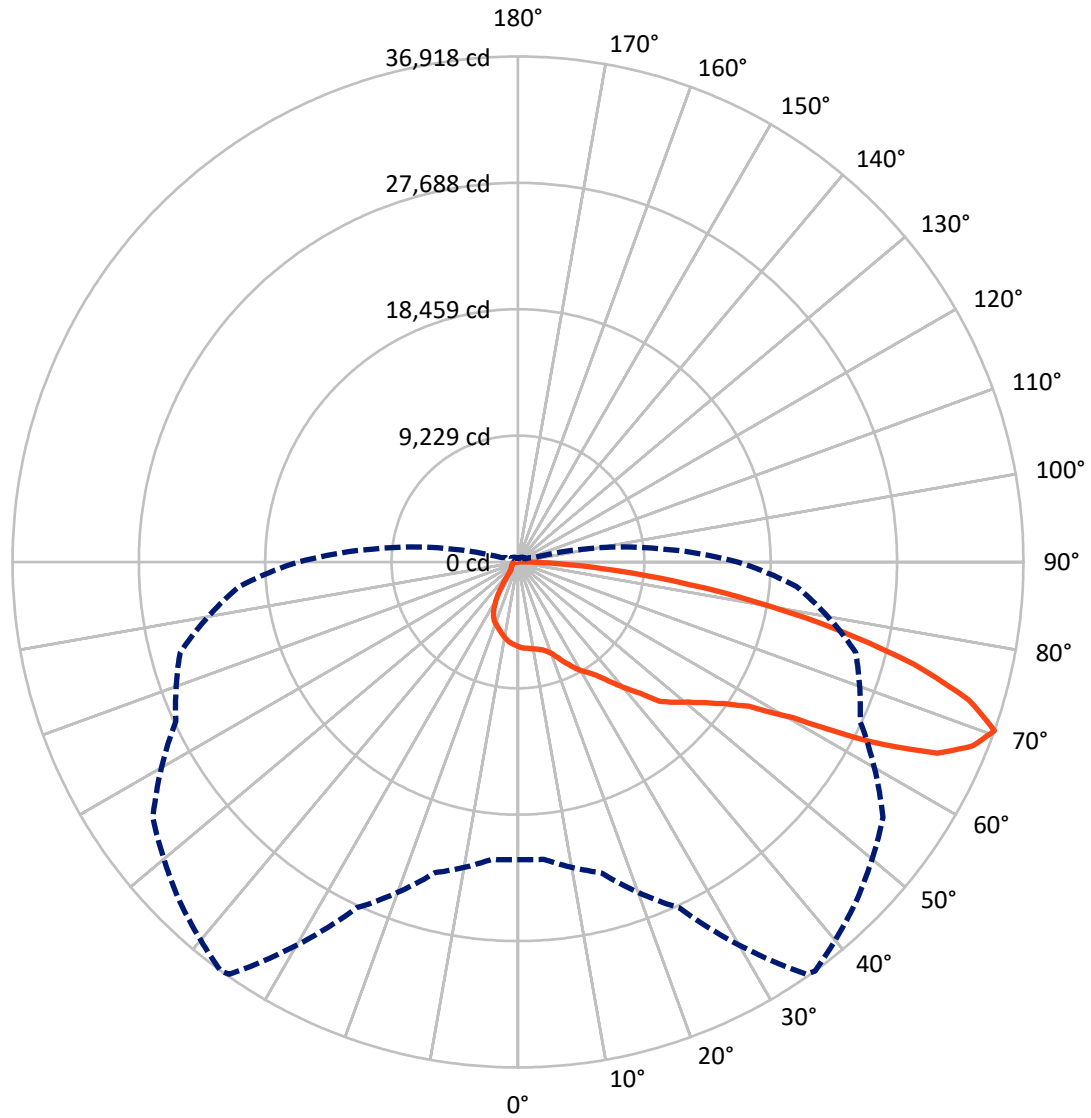
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 7.8 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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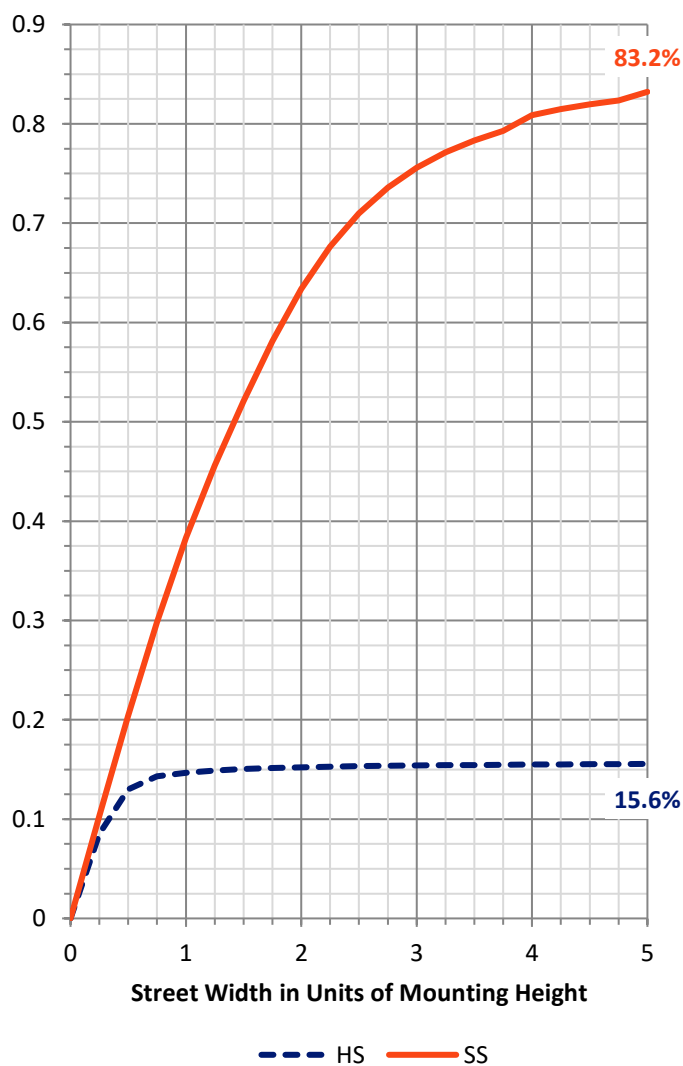
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9106.4	0.0	9106.4
	% Fixture	15.8	0.0	15.8
Street Side	Lumens	48599.6	0.0	48599.6
	% Fixture	84.2	0.0	84.2
Total	Lumens	57706.0	0.0	57706.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	586.4	1.0
10°-20°	1743.8	3.0
20°-30°	3135.9	5.4
30°-40°	4962.5	8.6
40°-50°	7755.5	13.4
50°-60°	11136.7	19.3
60°-70°	15105.9	26.2
70°-80°	11180.0	19.4
80°-90°	2099.3	3.6
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°	57706.0	100.0
0°-180°	57706.0	100.0

Coefficient of Utilization



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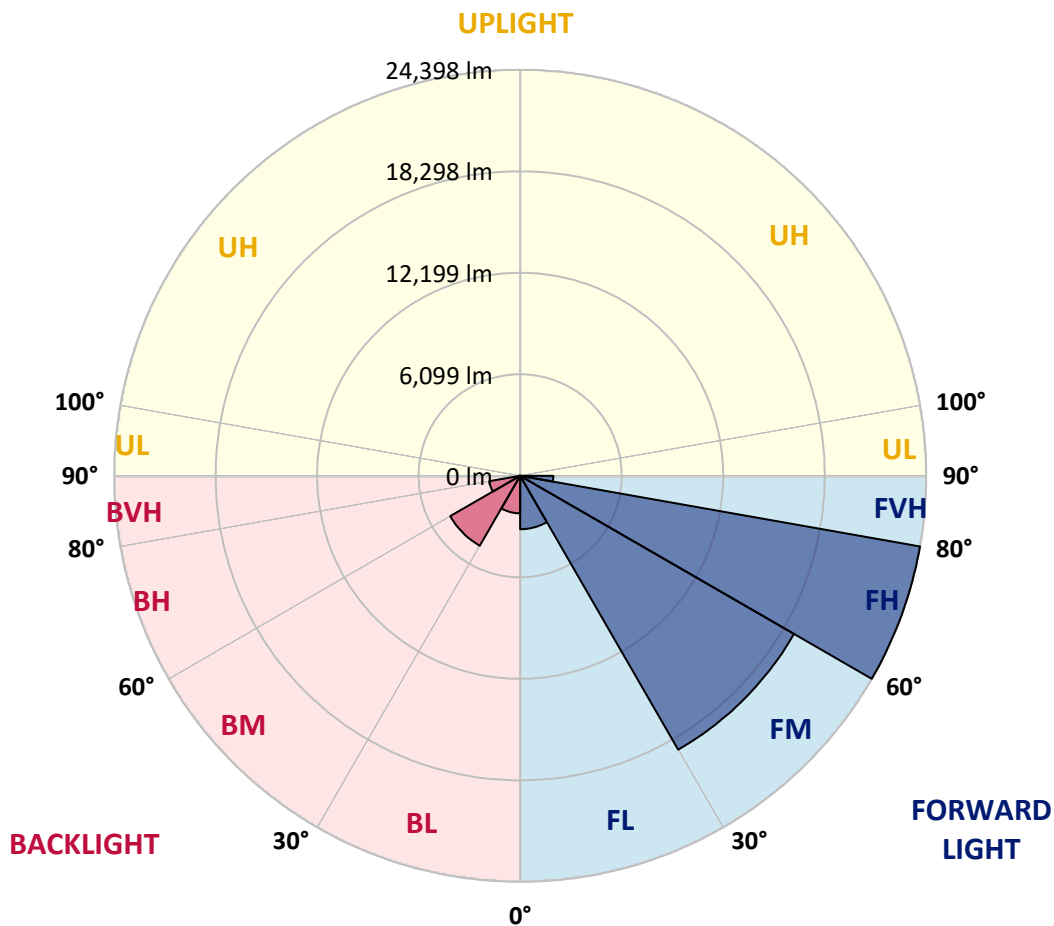
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3209.6	5.6			
FM (30°-60°)	19002.1	32.9			
FH (60°-80°)	24397.5	42.3			G5
FVH (80°-90°)	1990.4	3.4			G5
BL (0°-30°)	2256.5	3.9	B3/2500		
BM (30°-60°)	4852.6	8.4	B3/5000		
BH (60°-80°)	1888.4	3.3	B3/2500		G3/2500
BVH (80°-90°)	108.9	0.2			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	6182.9	6182.9	6182.9	6182.9	6182.9	6182.9	6182.9	6182.9	6182.9	6182.9	6182.9
2.5°	6308.1	6294.8	6284.2	6288.2	6280.2	6285.5	6273.5	6258.8	6224.2	6209.6	6202.9
5°	6364.1	6360.1	6349.4	6341.4	6326.8	6321.5	6308.1	6320.1	6301.5	6253.5	6225.5
7.5°	6397.4	6396.1	6384.1	6366.8	6374.8	6381.4	6394.7	6376.1	6352.1	6329.5	6272.2
10°	6412.1	6412.1	6397.4	6406.7	6448.0	6452.0	6458.7	6470.7	6448.0	6414.7	6357.4
12.5°	6449.4	6446.7	6452.0	6482.7	6525.3	6534.6	6567.9	6567.9	6570.6	6550.6	6484.0
15°	6542.6	6542.6	6554.6	6582.6	6655.9	6661.2	6710.5	6754.4	6759.8	6730.5	6679.8
17.5°	6758.4	6753.1	6746.4	6763.8	6842.4	6845.0	6930.3	6986.2	7000.9	7032.9	7024.9
20°	7168.8	7163.4	7162.1	7163.4	7158.1	7150.1	7234.0	7294.0	7368.6	7424.6	7452.5
22.5°	7756.3	7744.3	7744.3	7679.0	7628.4	7636.4	7649.7	7683.0	7781.6	7880.2	7985.4
25°	8389.1	8381.1	8387.8	8221.2	8153.3	8179.9	8162.6	8214.6	8343.8	8429.1	8541.0
27.5°	8906.0	8918.0	8880.7	8751.5	8707.5	8727.5	8687.5	8836.7	8979.3	9128.5	9297.7
30°	9549.5	9485.5	9393.6	9236.4	9220.4	9223.1	9220.4	9460.2	9756.0	9969.1	10203.6
32.5°	10390.1	10400.8	10194.3	9823.9	9688.0	9669.4	9722.7	10074.4	10474.0	10947.0	11256.1
35°	11240.1	11257.4	11106.9	10720.5	10332.8	10274.2	10195.6	10652.6	11229.4	12178.0	12644.3
37.5°	12142.0	12203.3	12024.8	11679.7	11220.1	11165.5	10793.8	11242.7	12095.4	13635.4	14246.9
40°	13349.0	13283.7	13067.9	12629.6	12202.0	12114.0	11682.4	11918.2	13209.1	15460.6	15904.2
42.5°	14238.9	14220.3	14037.8	13604.8	13174.5	13103.9	12756.2	13012.0	14612.0	17311.1	17509.6
45°	14945.0	15059.6	15055.6	14783.8	14541.4	14501.4	14296.2	14673.3	16307.9	19057.6	18960.4
47.5°	15572.5	15643.1	15529.9	15411.3	15298.1	15311.4	15463.3	16238.6	18041.1	20583.1	20152.7
50°	16599.7	16509.1	16001.5	15910.9	16070.8	16077.4	16539.7	17733.4	19950.2	21902.0	21162.6
52.5°	17969.2	17870.6	16827.5	16672.9	17051.3	17079.3	17848.0	19222.8	21919.3	23162.3	22167.1
55°	20007.5	19778.4	18660.6	17967.9	18141.1	18254.3	19185.5	20655.0	23460.7	24273.4	22927.8
57.5°	22510.8	22677.3	22104.5	20539.1	19818.4	19861.0	20716.3	22025.9	24820.9	25245.9	23372.8
60°	25156.6	25116.7	25356.5	24697.0	23316.8	23087.7	22652.0	23424.7	25874.7	26065.2	23831.0
62.5°	26606.1	26839.2	27638.6	27770.5	29016.1	28894.9	25925.3	25159.3	27092.4	26579.5	23956.3
65°	26598.1	26699.4	28187.5	29823.4	33714.9	33680.3	32300.1	27667.9	27999.6	26853.9	23705.8
67.5°	24879.5	25036.7	26776.6	29972.7	35886.5	35845.2	34891.3	31194.3	28284.7	26523.5	22537.4
70°	21746.1	21799.4	23496.7	27871.7	36759.1	36917.6	34980.5	32547.9	27576.0	25541.6	20407.2
72.5°	17939.9	17829.3	19489.3	23801.7	34536.9	34442.3	33501.8	30931.9	26382.3	23635.2	16643.6
75°	13209.1	13516.9	15006.3	19110.9	29570.3	29916.7	30333.7	28459.2	23431.4	19478.6	11509.2
77.5°	8722.2	9113.8	10619.3	14329.5	23410.1	23948.3	25028.7	24205.4	19061.6	13972.5	5480.8
80°	4507.0	4802.7	6157.6	9508.2	16782.2	17558.9	19539.9	18332.9	13514.2	6317.5	1227.0
82.5°	1705.3	1666.6	2759.1	5442.2	10760.5	11466.6	12906.7	10993.6	4809.4	1109.8	570.2
85°	748.7	792.7	1143.1	2482.0	6152.3	6244.2	7311.3	4285.8	704.8	530.2	387.7
87.5°	323.7	371.7	479.6	714.1	2075.6	2396.7	2965.6	1361.5	213.2	183.8	194.5
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°	6182.9	6182.9	6182.9	6182.9	6182.9	6182.9	6182.9	6182.9	6182.9	6182.9	6182.9
2.5°	6190.9	6182.9	6169.6	6136.3	6081.7	6075.0	6069.7	6064.3	6053.7	6059.0	6089.7
5°	6204.2	6189.6	6141.6	6093.7	6045.7	6003.1	5951.1	5931.1	5904.5	5887.2	5919.1
7.5°	6249.5	6218.9	6148.3	6083.0	5952.4	5889.8	5823.2	5744.6	5688.7	5652.7	5684.7
10°	6325.5	6286.8	6198.9	6064.3	5911.1	5739.3	5622.0	5491.5	5384.9	5355.6	5384.9
12.5°	6449.4	6392.1	6289.5	6107.0	5835.2	5610.0	5387.6	5215.7	5043.8	4994.6	5009.2
15°	6650.5	6605.2	6448.0	6196.2	5836.5	5492.8	5162.4	4885.3	4660.2	4581.6	4576.2
17.5°	6972.9	6925.0	6743.8	6373.4	5884.5	5400.9	4941.3	4518.9	4177.9	4004.7	3976.7
20°	7435.2	7368.6	7094.2	6634.5	5988.4	5360.9	4736.1	4168.6	3638.3	3313.3	3264.0
22.5°	7949.5	7878.8	7473.8	6835.7	6063.0	5282.3	4540.3	3780.9	3082.8	2685.8	2629.8
25°	8588.9	8434.4	7837.5	7026.2	6045.7	5117.1	4221.9	3254.7	2497.9	2154.2	2116.9
27.5°	9220.4	9024.6	8207.9	7126.1	5969.8	4854.7	3755.6	2639.2	1955.7	1711.9	1681.3
30°	10003.8	9625.4	8537.0	7172.8	5777.9	4461.7	3130.8	2006.3	1464.1	1296.3	1267.0
32.5°	10935.0	10362.1	8846.1	7120.8	5458.2	3862.2	2434.0	1469.5	1088.4	983.2	981.9
35°	12163.3	11265.4	9185.8	6950.3	4967.9	3216.0	1706.6	1004.5	848.6	812.7	819.3
37.5°	13599.5	12488.4	9530.8	6670.5	4413.7	2460.6	1137.7	774.0	746.1	747.4	748.7
40°	15114.2	13839.3	9995.8	6277.5	3740.9	1781.2	819.3	695.4	694.1	707.4	711.4
42.5°	16561.0	15151.5	10568.6	5753.9	3036.2	1177.7	710.1	663.5	646.1	651.5	655.5
45°	17905.3	16277.3	11056.2	5243.7	2280.8	840.6	696.8	626.2	599.5	596.8	599.5
47.5°	18988.4	17179.2	11353.3	4644.2	1625.3	698.1	668.8	591.5	554.2	546.2	542.2
50°	19813.0	17849.3	11461.2	3964.7	1099.1	666.1	631.5	551.5	506.2	507.6	507.6
52.5°	20617.7	18458.1	11336.0	3280.0	808.7	638.1	606.2	519.6	471.6	496.9	503.6
55°	21197.2	18713.9	10971.0	2539.2	674.1	603.5	578.2	482.3	449.0	490.3	503.6
57.5°	21535.6	18915.1	10300.9	1833.2	618.2	570.2	542.2	447.6	417.0	427.6	434.3
60°	21746.1	18634.0	9414.9	1253.6	588.8	543.6	506.2	425.0	383.7	358.4	354.4
62.5°	21630.2	17930.6	8247.9	862.0	558.2	514.2	475.6	403.7	349.0	315.7	313.1
65°	20685.6	16629.0	6332.1	698.1	539.6	500.9	457.0	383.7	325.1	293.1	289.1
67.5°	18933.7	14289.6	3698.3	620.8	531.6	487.6	442.3	365.0	311.7	277.1	271.8
70°	16054.8	10748.5	1239.0	554.2	530.2	486.3	430.3	351.7	297.1	261.1	255.8
72.5°	11582.5	6485.3	603.5	487.6	495.6	466.3	421.0	341.1	287.8	242.5	233.1
75°	6582.6	2111.6	544.9	421.0	461.0	445.0	415.7	342.4	291.8	219.8	209.2
77.5°	1873.1	616.8	526.2	358.4	435.6	459.6	389.0	309.1	298.4	203.8	190.5
80°	632.8	548.9	507.6	278.4	351.7	379.7	337.1	271.8	301.1	185.2	171.9
82.5°	507.6	551.5	426.3	222.5	267.8	287.8	267.8	243.8	243.8	165.2	154.5
85°	406.3	511.6	270.4	177.2	199.8	221.2	189.2	182.5	170.5	138.6	134.6
87.5°	235.8	159.9	111.9	90.6	83.9	85.3	73.3	87.9	107.9	94.6	93.3
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)