

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: P721862

Luminaire Tested: **CST-CA8-400-740-U-T4-HSS**

Issue Date: 10/25/2023

Test Information

Test Method: LM-79-08
Report Number: P721862
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-CA8-400-740-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: 53749 lumens
Efficiency: N/A
Efficacy: 134.1 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

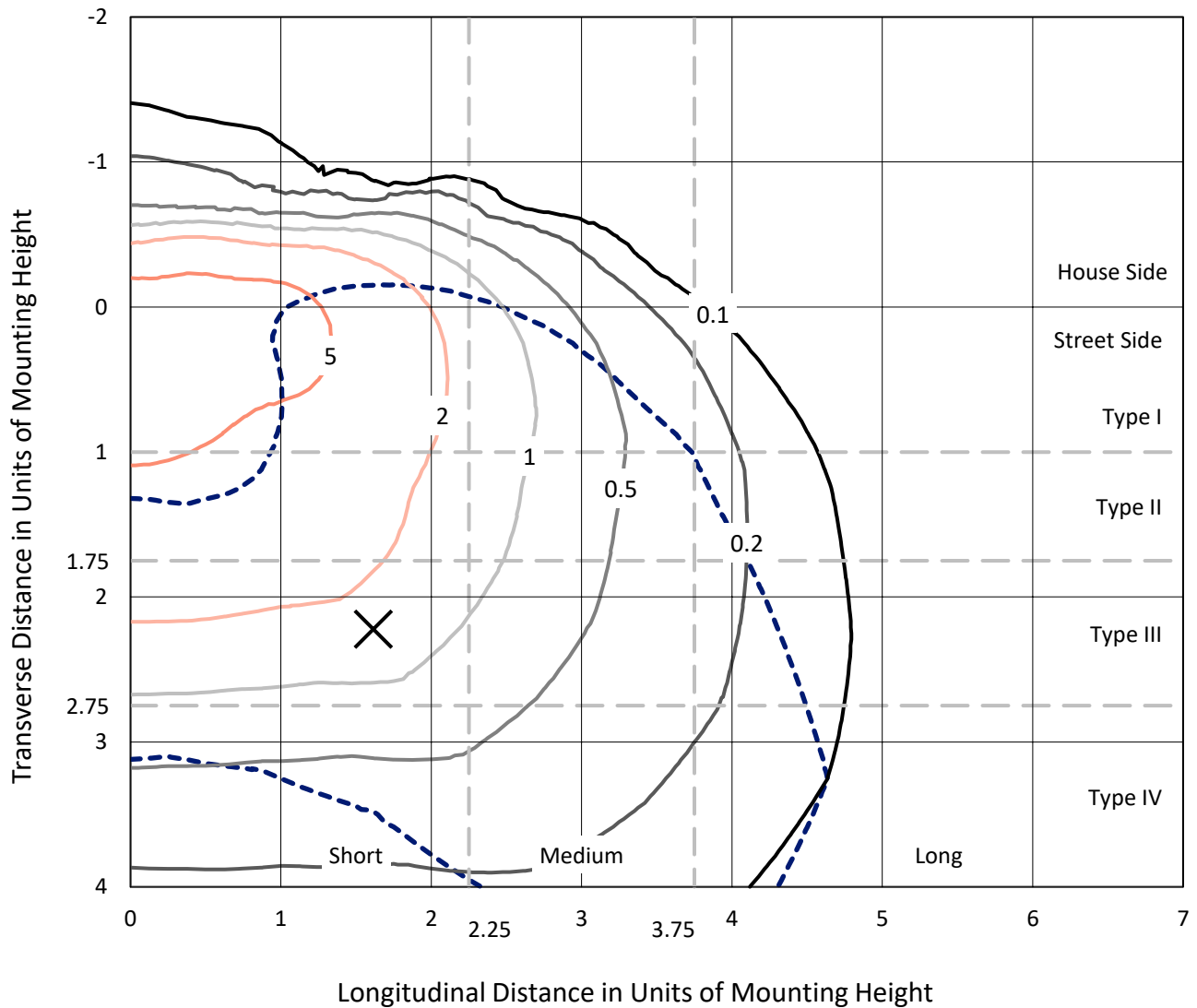
Input Watts (W): 400.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

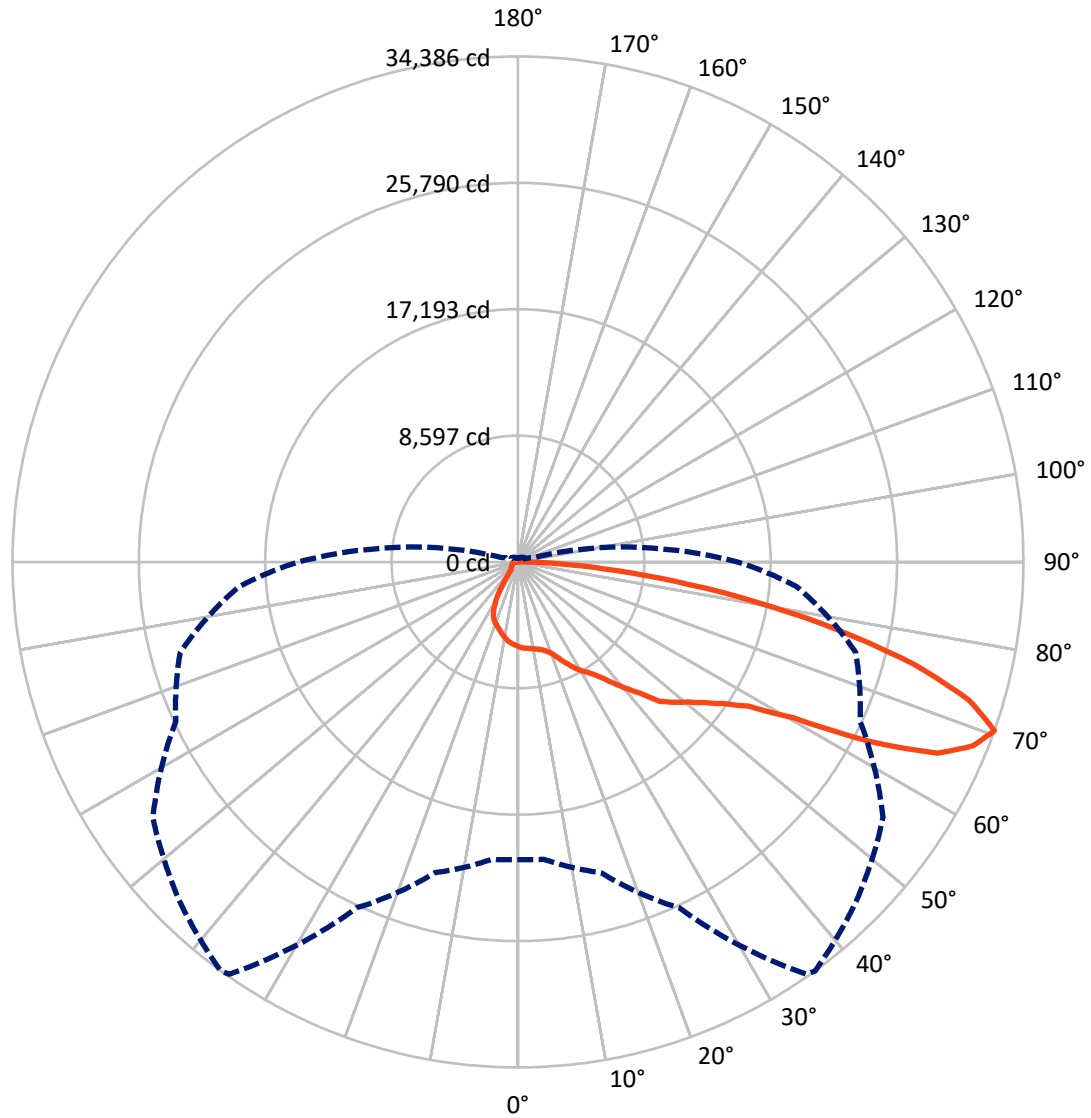
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 7.3 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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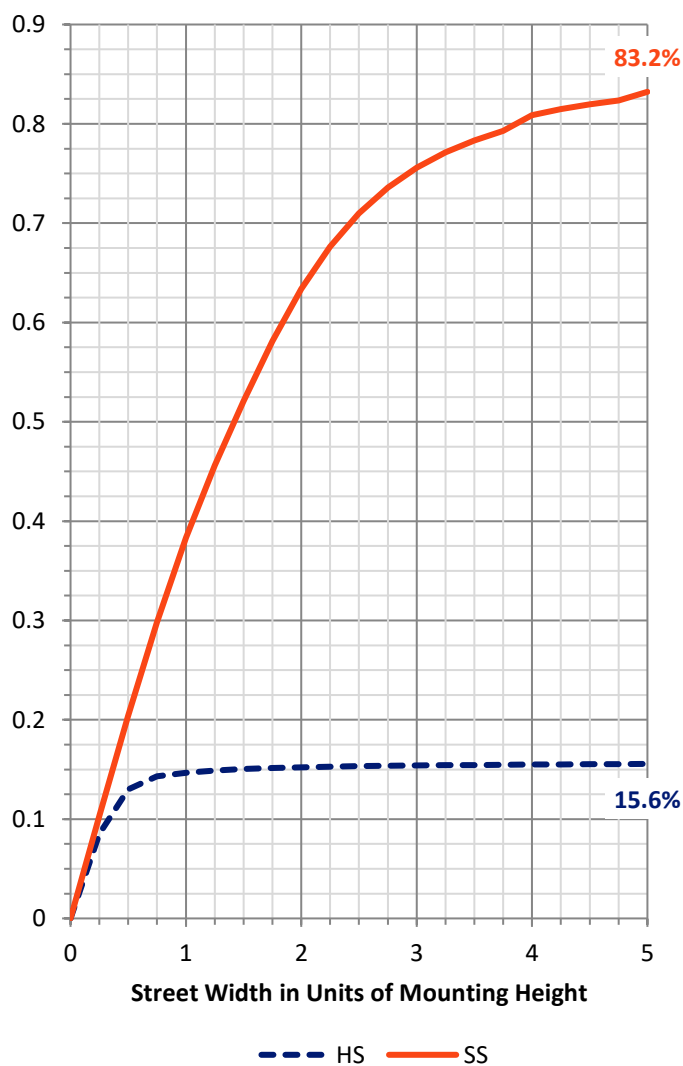
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8482.0	0.0	8482.0
	% Fixture	15.8	0.0	15.8
Street Side	Lumens	45267.0	0.0	45267.0
	% Fixture	84.2	0.0	84.2
Total	Lumens	53749.0	0.0	53749.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	546.2	1.0
10°-20°	1624.3	3.0
20°-30°	2920.9	5.4
30°-40°	4622.2	8.6
40°-50°	7223.7	13.4
50°-60°	10373.0	19.3
60°-70°	14070.1	26.2
70°-80°	10413.4	19.4
80°-90°	1955.3	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°	53749.0	100.0
0°-180°	53749.0	100.0

Coefficient of Utilization



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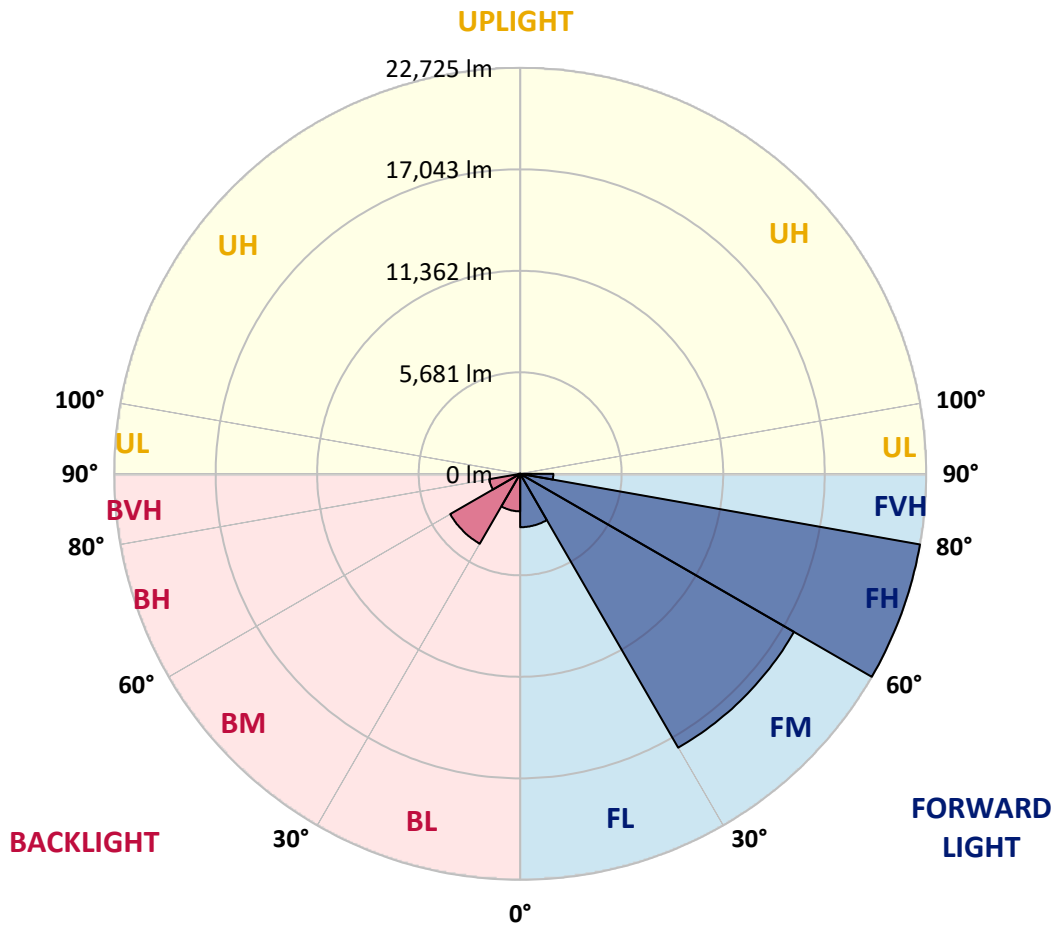
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2989.5	5.6			
FM (30°-60°)	17699.1	32.9			
FH (60°-80°)	22724.6	42.3			G5
FVH (80°-90°)	1853.9	3.4			G5
BL (0°-30°)	2101.8	3.9	B3/2500		
BM (30°-60°)	4519.9	8.4	B3/5000		
BH (60°-80°)	1758.9	3.3	B3/2500		G3/2500
BVH (80°-90°)	101.4	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°	5758.9	5758.9	5758.9	5758.9	5758.9	5758.9	5758.9	5758.9	5758.9	5758.9	5758.9
2.5°	5875.6	5863.2	5853.2	5857.0	5849.5	5854.5	5843.3	5829.7	5797.4	5783.8	5777.6
5°	5927.7	5924.0	5914.0	5906.6	5893.0	5888.0	5875.6	5886.7	5869.4	5824.7	5798.6
7.5°	5958.7	5957.5	5946.3	5930.2	5937.6	5943.8	5956.2	5938.9	5916.5	5895.4	5842.1
10°	5972.4	5972.4	5958.7	5967.4	6005.9	6009.6	6015.8	6027.0	6005.9	5974.9	5921.5
12.5°	6007.1	6004.6	6009.6	6038.1	6077.8	6086.5	6117.6	6117.6	6120.0	6101.4	6039.4
15°	6094.0	6094.0	6105.1	6131.2	6199.5	6204.4	6250.3	6291.3	6296.2	6268.9	6221.8
17.5°	6295.0	6290.0	6283.8	6300.0	6373.2	6375.7	6455.1	6507.2	6520.8	6550.6	6543.2
20°	6677.2	6672.2	6671.0	6672.2	6667.3	6659.8	6738.0	6793.8	6863.3	6915.4	6941.5
22.5°	7224.4	7213.3	7213.3	7152.4	7105.3	7112.7	7125.1	7156.2	7248.0	7339.8	7437.9
25°	7813.8	7806.4	7812.6	7657.5	7594.2	7619.0	7602.9	7651.3	7771.6	7851.1	7955.3
27.5°	8295.3	8306.5	8271.7	8151.4	8110.4	8129.0	8091.8	8230.8	8363.6	8502.5	8660.1
30°	8894.6	8835.1	8749.5	8603.0	8588.2	8590.6	8588.2	8811.5	9087.0	9285.5	9503.9
32.5°	9677.6	9687.6	9495.2	9150.3	9023.7	9006.3	9056.0	9383.6	9755.8	10196.3	10484.2
35°	10469.3	10485.5	10345.2	9985.4	9624.3	9569.7	9496.5	9922.1	10459.4	11342.9	11777.2
37.5°	11309.4	11366.5	11200.2	10878.8	10450.7	10399.8	10053.6	10471.8	11266.0	12700.4	13270.0
40°	12433.6	12372.8	12171.8	11763.6	11365.2	11283.3	10881.3	11100.9	12303.4	14400.4	14813.7
42.5°	13262.6	13245.2	13075.2	12671.9	12271.1	12205.3	11881.5	12119.7	13610.0	16124.0	16308.9
45°	13920.2	14026.9	14023.2	13770.1	13544.2	13507.0	13315.9	13667.1	15189.6	17750.8	17660.2
47.5°	14504.7	14570.4	14465.0	14354.5	14249.1	14261.5	14402.9	15125.1	16804.0	19171.6	18770.8
50°	15461.4	15377.0	14904.2	14819.9	14968.8	14975.0	15405.6	16517.4	18582.2	20400.1	19711.4
52.5°	16737.0	16645.2	15673.6	15529.6	15882.1	15908.1	16624.1	17904.7	20416.2	21574.0	20647.1
55°	18635.6	18422.1	17381.0	16735.8	16897.1	17002.6	17870.0	19238.6	21851.9	22608.9	21355.6
57.5°	20967.2	21122.3	20588.7	19130.7	18459.4	18499.1	19295.7	20515.5	23118.9	23514.7	21770.0
60°	23431.6	23394.4	23617.7	23003.5	21717.9	21504.5	21098.7	21818.4	24100.4	24277.9	22196.9
62.5°	24781.7	24998.8	25743.4	25866.2	27026.4	26913.5	24147.6	23434.1	25234.6	24756.9	22313.6
65°	24774.2	24868.5	26254.6	27778.4	31403.0	31370.8	30085.2	25770.7	26079.6	25012.5	22080.3
67.5°	23173.5	23319.9	24940.5	27917.4	33425.7	33387.2	32498.7	29055.3	26345.2	24704.7	20992.0
70°	20254.9	20304.6	21885.5	25960.5	34238.4	34386.1	32581.9	30316.0	25685.0	23790.2	19007.8
72.5°	16709.7	16606.7	18152.9	22169.6	32168.6	32080.5	31204.5	28810.8	24573.2	22014.5	15502.4
75°	12303.4	12590.0	13977.3	17800.5	27542.6	27865.3	28253.7	26507.7	21824.6	18142.9	10720.0
77.5°	8124.1	8488.9	9891.1	13346.9	21804.8	22306.1	23312.5	22545.6	17754.6	13014.4	5105.0
80°	4197.9	4473.4	5735.4	8856.2	15631.4	16354.8	18200.0	17075.8	12587.5	5884.3	1142.9
82.5°	1588.3	1552.3	2569.9	5069.0	10022.6	10680.3	12021.7	10239.8	4479.6	1033.7	531.1
85°	697.4	738.3	1064.7	2311.8	5730.4	5816.0	6810.0	3991.9	656.4	493.9	361.1
87.5°	301.5	346.2	446.7	665.1	1933.3	2232.3	2762.2	1268.2	198.5	171.2	181.2
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°	5758.9	5758.9	5758.9	5758.9	5758.9	5758.9	5758.9	5758.9	5758.9	5758.9	5758.9
2.5°	5766.4	5758.9	5746.5	5715.5	5664.6	5658.4	5653.5	5648.5	5638.6	5643.5	5672.1
5°	5778.8	5765.1	5720.5	5675.8	5631.1	5591.4	5543.0	5524.4	5499.6	5483.5	5513.2
7.5°	5821.0	5792.4	5726.7	5665.9	5544.3	5485.9	5423.9	5350.7	5298.6	5265.1	5294.8
10°	5891.7	5855.7	5773.8	5648.5	5505.8	5345.7	5236.5	5114.9	5015.6	4988.3	5015.6
12.5°	6007.1	5953.8	5858.2	5688.2	5435.1	5225.4	5018.1	4858.1	4698.0	4652.1	4665.7
15°	6194.5	6152.3	6005.9	5771.3	5436.3	5116.2	4808.4	4550.3	4340.6	4267.4	4262.4
17.5°	6494.8	6450.1	6281.3	5936.4	5481.0	5030.5	4602.4	4209.1	3891.4	3730.1	3704.0
20°	6925.4	6863.3	6607.7	6179.6	5577.8	4993.3	4411.3	3882.7	3388.9	3086.1	3040.2
22.5°	7404.3	7338.6	6961.4	6367.0	5647.3	4920.1	4228.9	3521.6	2871.4	2501.6	2449.5
25°	8000.0	7856.0	7300.1	6544.4	5631.1	4766.2	3932.4	3031.5	2326.7	2006.5	1971.8
27.5°	8588.2	8405.7	7645.1	6637.5	5560.4	4521.8	3498.0	2458.2	1821.6	1594.5	1566.0
30°	9317.8	8965.4	7951.6	6680.9	5381.7	4155.7	2916.1	1868.8	1363.7	1207.4	1180.1
32.5°	10185.2	9651.6	8239.5	6632.5	5083.9	3597.3	2267.1	1368.7	1013.8	915.8	914.5
35°	11329.3	10492.9	8555.9	6473.7	4627.3	2995.5	1589.6	935.6	790.4	756.9	763.1
37.5°	12666.9	11632.0	8877.3	6213.1	4111.0	2291.9	1059.7	721.0	694.9	696.1	697.4
40°	14077.8	12890.3	9310.3	5847.0	3484.4	1659.1	763.1	647.7	646.5	658.9	662.6
42.5°	15425.4	14112.6	9843.9	5359.4	2828.0	1096.9	661.4	618.0	601.8	606.8	610.5
45°	16677.5	15161.1	10298.1	4884.1	2124.4	783.0	649.0	583.2	558.4	555.9	558.4
47.5°	17686.3	16001.2	10574.8	4325.7	1513.9	650.2	622.9	551.0	516.2	508.8	505.0
50°	18454.4	16625.3	10675.3	3692.9	1023.7	620.4	588.2	513.7	471.5	472.8	472.8
52.5°	19203.9	17192.4	10558.7	3055.1	753.2	594.4	564.6	483.9	439.3	462.8	469.1
55°	19743.7	17430.7	10218.7	2365.1	627.9	562.1	538.5	449.2	418.2	456.6	469.1
57.5°	20058.9	17618.1	9594.5	1707.5	575.8	531.1	505.0	416.9	388.4	398.3	404.5
60°	20254.9	17356.2	8769.3	1167.7	548.5	506.3	471.5	395.8	357.4	333.8	330.1
62.5°	20147.0	16701.0	7682.3	802.9	519.9	479.0	443.0	376.0	325.1	294.1	291.6
65°	19267.2	15488.7	5897.9	650.2	502.6	466.6	425.6	357.4	302.8	273.0	269.3
67.5°	17635.4	13309.7	3444.7	578.3	495.1	454.2	412.0	340.0	290.4	258.1	253.1
70°	14953.9	10011.4	1154.0	516.2	493.9	452.9	400.8	327.6	276.7	243.2	238.2
72.5°	10788.2	6040.6	562.1	454.2	461.6	434.3	392.1	317.7	268.0	225.8	217.2
75°	6131.2	1966.8	507.5	392.1	429.3	414.5	387.2	318.9	271.8	204.7	194.8
77.5°	1744.7	574.5	490.1	333.8	405.8	428.1	362.3	287.9	278.0	189.9	177.4
80°	589.4	511.2	472.8	259.3	327.6	353.7	313.9	253.1	280.4	172.5	160.1
82.5°	472.8	513.7	397.1	207.2	249.4	268.0	249.4	227.1	227.1	153.9	143.9
85°	378.5	476.5	251.9	165.0	186.1	206.0	176.2	170.0	158.8	129.1	125.3
87.5°	219.6	148.9	104.2	84.4	78.2	79.4	68.2	81.9	100.5	88.1	86.9
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)