

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: P510656

Luminaire Tested: **CST-CA6-230-730-U-T2-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510656
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-15)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA6-230-730-U-T2-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (6) 3000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 30791 lumens
Efficiency: N/A
Efficacy: 135.2 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G4

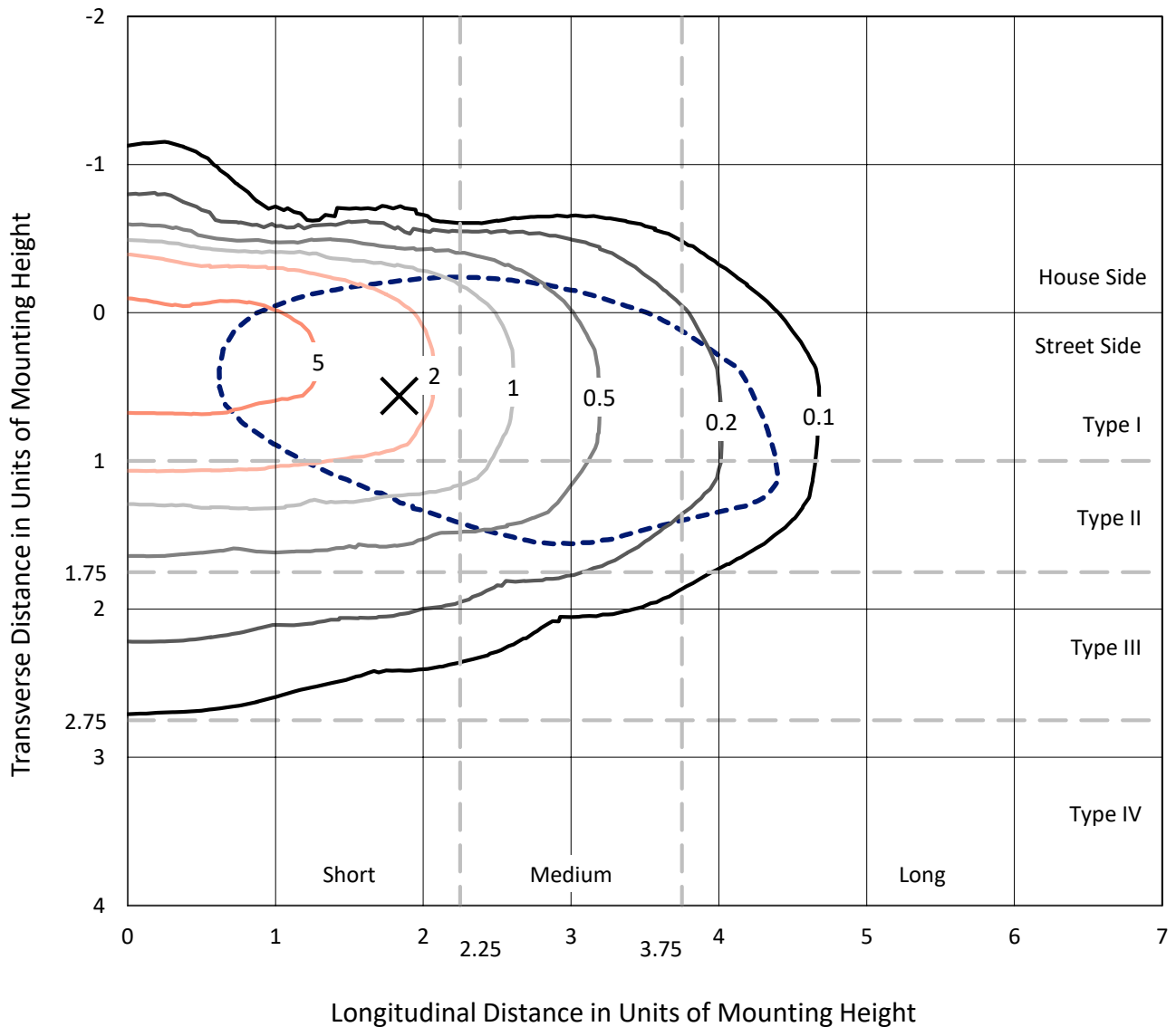
Input Watts (W): 227.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

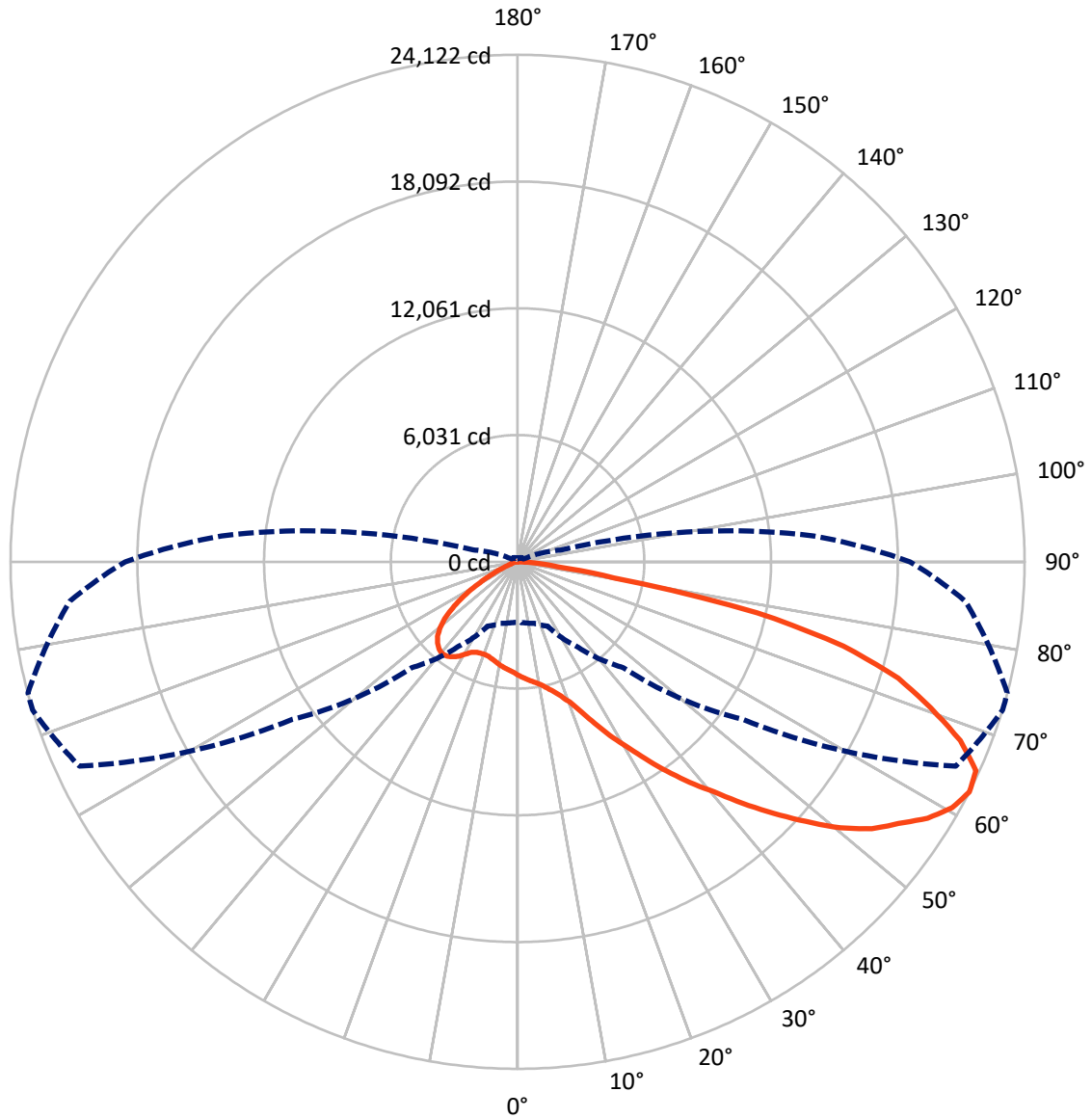
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 7.5 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 73-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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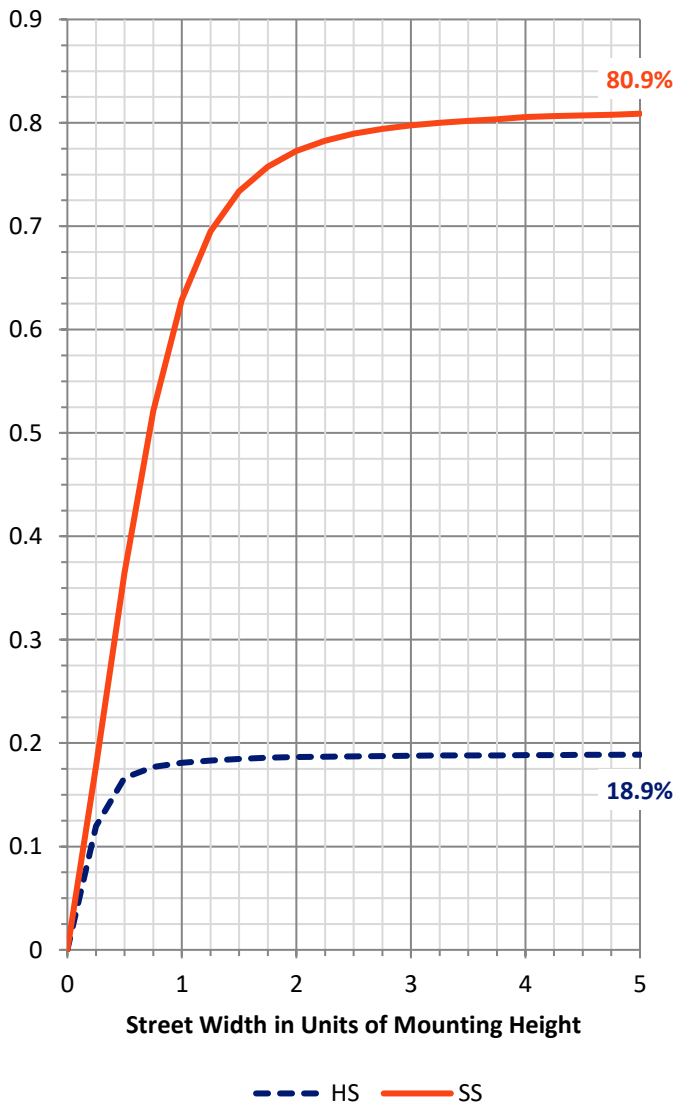
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5890.2	0.0	5890.2
	% Fixture	19.1	0.0	19.1
Street Side	Lumens	24900.8	0.0	24900.8
	% Fixture	80.9	0.0	80.9
Total	Lumens	30791.0	0.0	30791.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	515.8	1.7
10°-20°	1551.3	5.0
20°-30°	2680.4	8.7
30°-40°	4030.6	13.1
40°-50°	5374.4	17.5
50°-60°	6329.5	20.6
60°-70°	6292.6	20.4
70°-80°	3612.7	11.7
80°-90°	403.6	1.3
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°	30791.0	100.0
0°-180°	30791.0	100.0

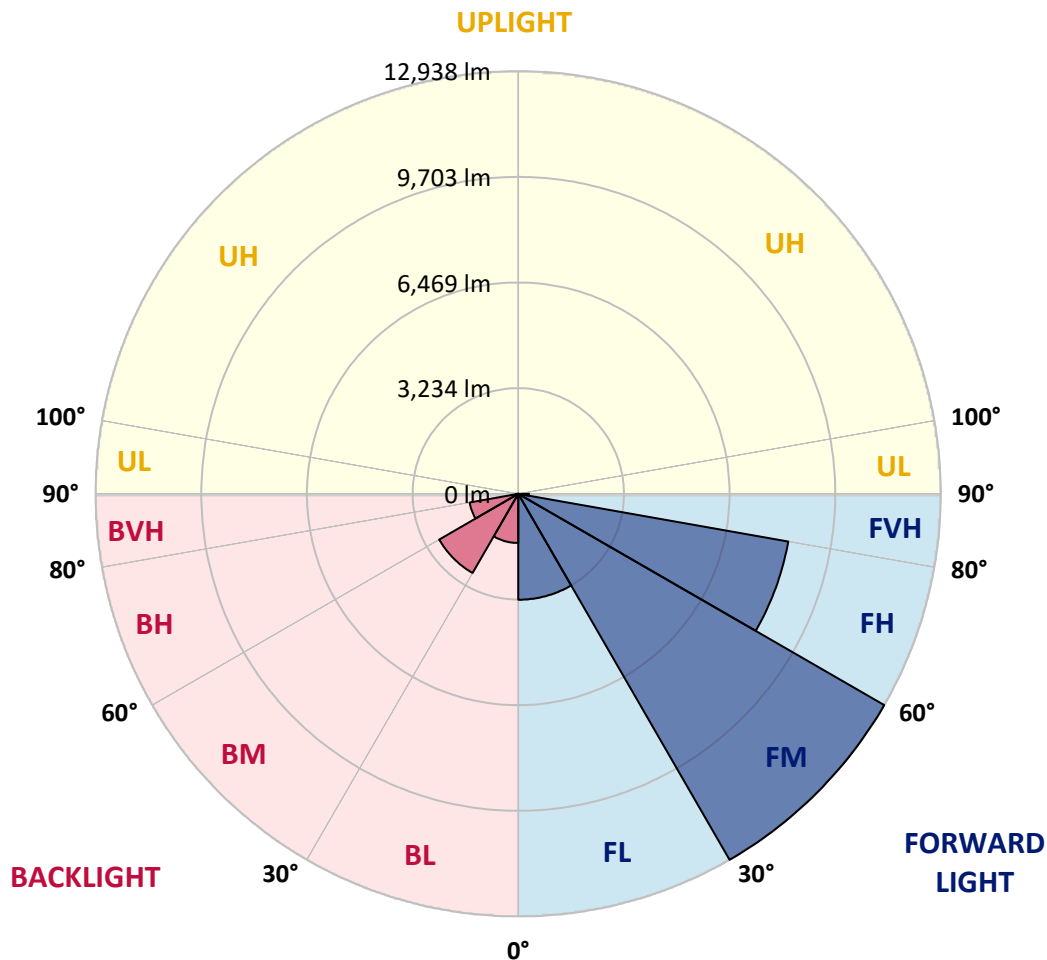


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3242.3	10.5			
FM (30°-60°)	12937.6	42.0			
FH (60°-80°)	8393.1	27.3			G4/12000
FVH (80°-90°)	327.8	1.1			G3/500
BL (0°-30°)	1505.2	4.9	B3/2500		
BM (30°-60°)	2796.9	9.1	B3/5000		
BH (60°-80°)	1512.2	4.9	B3/2500		G3/2500
BVH (80°-90°)	75.8	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4
 Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	5400.0	5400.0	5400.0	5400.0	5400.0	5400.0	5400.0	5400.0	5400.0	5400.0	5400.0
2.5°	5777.4	5791.9	5774.6	5767.0	5758.8	5704.8	5641.9	5577.7	5525.8	5517.5	5449.8
5°	6183.1	6190.7	6162.4	6129.9	6073.9	5984.8	5872.1	5760.8	5657.2	5629.5	5505.8
7.5°	6494.8	6480.3	6473.4	6445.8	6396.7	6298.5	6127.8	5945.4	5785.0	5746.3	5558.3
10°	6787.2	6781.0	6728.5	6693.9	6615.8	6525.3	6384.9	6153.4	5927.4	5865.2	5603.9
12.5°	7103.8	7089.9	7068.5	6993.9	6930.3	6777.5	6608.2	6397.4	6145.8	6062.9	5682.0
15°	7388.5	7351.2	7339.4	7261.3	7197.1	7080.3	6910.2	6665.6	6396.7	6325.5	5830.6
17.5°	7659.4	7642.2	7615.9	7562.7	7490.8	7401.0	7264.8	7002.8	6725.0	6621.3	6082.9
20°	7889.6	7868.2	7845.4	7859.9	7844.0	7786.6	7700.9	7477.7	7138.3	7038.1	6389.8
22.5°	8050.0	8049.3	8140.5	8193.7	8224.1	8222.1	8201.3	8074.8	7733.4	7631.8	6848.7
25°	8183.3	8193.7	8309.1	8511.6	8692.7	8709.3	8855.8	8795.7	8505.4	8399.7	7539.2
27.5°	8222.7	8243.5	8452.9	8771.5	9046.6	9310.6	9525.6	9635.5	9366.6	9240.1	8281.5
30°	8251.1	8259.4	8464.6	8846.2	9426.1	9844.2	10228.5	10414.4	10182.9	10090.3	9108.8
32.5°	8051.3	8054.1	8368.6	8946.4	9704.6	10429.6	10884.4	11234.8	11174.0	11051.7	10013.5
35°	7776.3	7827.4	8188.2	8849.6	9934.1	10967.3	11586.6	12109.1	12230.8	12143.0	10917.6
37.5°	7436.2	7476.3	7862.6	8705.9	9984.5	11337.1	12132.6	12998.0	13315.9	13301.4	12008.9
40°	7018.0	7067.1	7529.5	8396.2	9959.6	11606.0	12773.3	13982.2	14385.8	14340.2	13091.3
42.5°	6523.9	6595.7	7044.3	7998.1	9777.9	11770.5	13297.9	14984.4	15710.8	15681.1	14049.2
45°	6035.2	6073.9	6483.1	7443.8	9443.3	11823.7	13791.4	16365.3	17069.6	17036.4	15203.5
47.5°	5531.4	5565.2	5992.4	6859.8	8862.8	11716.6	14181.9	17551.3	18454.0	18420.8	16350.1
50°	4359.2	4487.0	5362.7	6346.2	8201.3	11413.1	14550.3	19029.0	19902.7	19761.7	17354.4
52.5°	3729.5	3775.8	4229.9	5828.6	7541.3	10895.5	14796.4	20398.2	21094.2	20891.0	18381.4
55°	3486.2	3517.3	3739.9	4874.1	6921.3	10112.4	15086.0	21770.9	21987.9	21936.1	19219.1
57.5°	3301.7	3336.2	3495.2	4070.9	6268.1	9014.8	14995.4	22736.4	23008.1	22842.2	20108.6
60°	3040.4	3082.6	3293.4	3654.9	5525.8	7900.7	14198.5	23131.8	23749.7	23563.1	20785.3
62.5°	2875.9	2903.6	3024.5	3374.9	4910.7	7116.9	13064.3	23004.6	24122.2	24115.3	21372.1
65°	2652.7	2693.5	2822.7	3106.8	4363.3	6509.4	11994.4	22376.3	23961.9	23968.1	21493.0
67.5°	2419.1	2435.7	2571.1	2799.2	3718.4	5953.0	10610.0	21301.6	22712.9	22855.3	20656.0
70°	2127.4	2119.1	2265.6	2432.2	3039.0	5054.5	8540.0	19389.8	20867.5	20926.3	18963.4
72.5°	1674.0	1681.6	1722.4	1837.8	2307.1	3977.6	6196.9	16381.9	18938.5	19042.9	16800.0
75°	1125.2	1137.7	1327.7	1440.4	1659.5	2858.6	3896.8	11057.9	16010.1	16304.5	13750.0
77.5°	858.4	866.0	921.3	1044.3	1200.5	2037.5	2112.2	6025.5	11655.7	12354.5	10756.5
80°	608.2	611.0	556.4	494.9	639.3	1382.3	1247.5	2566.3	4644.6	5488.5	6317.9
82.5°	272.3	268.2	315.9	262.6	368.4	535.0	588.9	1245.5	1929.0	2073.5	2257.3
85°	126.5	141.7	162.4	136.2	219.1	206.7	229.5	530.8	904.0	998.0	992.5
87.5°	31.1	33.9	42.9	54.6	79.5	70.5	69.1	156.2	201.8	201.1	308.9
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°	5400.0	5400.0	5400.0	5400.0	5400.0	5400.0	5400.0	5400.0	5400.0	5400.0	5400.0
2.5°	5403.5	5367.6	5282.5	5200.3	5122.2	5070.4	5012.3	4951.5	4914.8	4897.6	4934.9
5°	5430.5	5362.0	5199.6	5036.5	4898.3	4780.1	4697.1	4626.6	4588.6	4592.1	4594.1
7.5°	5453.3	5357.2	5129.8	4899.6	4684.0	4537.5	4429.0	4352.9	4309.4	4276.2	4301.1
10°	5473.3	5337.1	5048.2	4741.4	4507.1	4290.0	4142.8	4050.9	3970.7	3925.8	3961.0
12.5°	5494.7	5329.5	4957.0	4599.7	4296.3	4053.7	3851.8	3760.6	3681.8	3647.9	3669.4
15°	5588.0	5358.6	4872.0	4433.1	4088.2	3774.4	3556.7	3444.7	3382.5	3341.8	3350.7
17.5°	5748.4	5435.3	4817.4	4258.9	3856.0	3524.2	3242.2	3111.6	3008.6	2979.6	2972.0
20°	5976.5	5581.1	4817.4	4111.7	3592.7	3246.4	2921.5	2701.1	2540.7	2480.6	2526.9
22.5°	6359.4	5829.3	4865.1	3978.3	3366.0	2958.2	2571.1	2234.5	2018.2	1930.4	1981.6
25°	6895.0	6212.8	4942.5	3861.5	3159.3	2626.4	2126.7	1739.7	1501.2	1396.8	1395.5
27.5°	7594.5	6799.6	5098.7	3766.1	2911.9	2197.2	1662.9	1290.4	1066.5	1003.6	1012.6
30°	8370.0	7435.5	5393.8	3627.9	2611.2	1716.8	1210.9	948.3	790.7	707.7	709.1
32.5°	9117.8	8094.2	5744.2	3538.1	2220.7	1294.5	863.3	676.6	578.5	529.4	537.0
35°	9919.5	8662.3	6004.8	3387.4	1762.5	935.8	610.3	507.3	466.5	441.0	442.3
37.5°	10785.6	9287.1	6219.1	3185.6	1332.6	642.8	450.6	434.7	417.5	385.0	382.2
40°	11690.3	10010.8	6346.9	2859.3	926.2	445.1	382.9	400.9	391.2	349.0	345.6
42.5°	12457.5	10569.2	6378.7	2427.4	599.2	360.8	347.0	374.6	376.7	333.8	328.3
45°	13194.3	11066.9	6316.5	1858.5	415.4	339.4	324.8	362.9	365.6	326.9	317.9
47.5°	14018.8	11747.7	6203.9	1239.9	343.5	320.7	317.2	343.5	353.2	321.4	310.3
50°	15020.3	12301.3	5870.0	761.7	324.2	308.9	308.9	324.8	338.0	310.3	304.8
52.5°	16047.4	12783.7	5375.8	522.5	312.4	296.5	305.5	312.4	317.2	292.4	297.2
55°	16783.5	13211.5	4639.1	420.2	305.5	288.2	309.6	295.8	288.9	267.5	262.6
57.5°	17600.4	13720.2	3885.7	372.5	296.5	293.1	295.8	269.6	250.2	228.1	223.2
60°	18170.6	13993.9	2963.7	350.4	286.1	288.2	273.0	237.8	202.5	186.6	183.2
62.5°	18668.3	14150.1	2172.3	322.1	276.5	275.8	247.4	203.2	166.6	149.3	146.5
65°	18592.9	13906.2	1407.9	299.3	268.9	259.9	221.9	174.2	138.9	125.8	124.4
67.5°	17764.2	12826.6	886.8	275.8	255.7	239.8	199.1	155.5	127.9	112.7	111.3
70°	16024.6	11335.7	542.6	245.4	227.4	212.2	176.2	145.8	121.0	103.0	99.5
72.5°	13620.0	9708.7	383.6	216.3	198.4	180.4	149.3	138.9	115.4	92.6	89.9
75°	11189.9	7151.4	321.4	188.7	169.3	145.1	127.2	129.2	108.5	84.3	82.2
77.5°	7879.9	4458.7	299.3	154.1	133.4	115.4	109.9	118.2	99.5	77.4	75.3
80°	4599.0	2504.1	247.4	121.6	100.2	89.2	91.9	100.2	87.1	69.8	67.0
82.5°	1856.5	991.1	174.2	94.7	73.3	71.2	75.3	81.6	71.9	58.7	57.4
85°	662.8	309.6	98.8	62.2	47.0	49.1	48.4	58.1	51.8	42.9	42.2
87.5°	174.2	61.5	44.2	24.9	20.0	20.0	18.7	27.0	24.9	19.4	21.4
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)