

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: P510796

Luminaire Tested: **CST-CA8-330-750-U-T2-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510796
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-CA8-330-750-U-T2-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 5000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 45367 lumens
Efficiency: N/A
Efficacy: 136.9 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G5

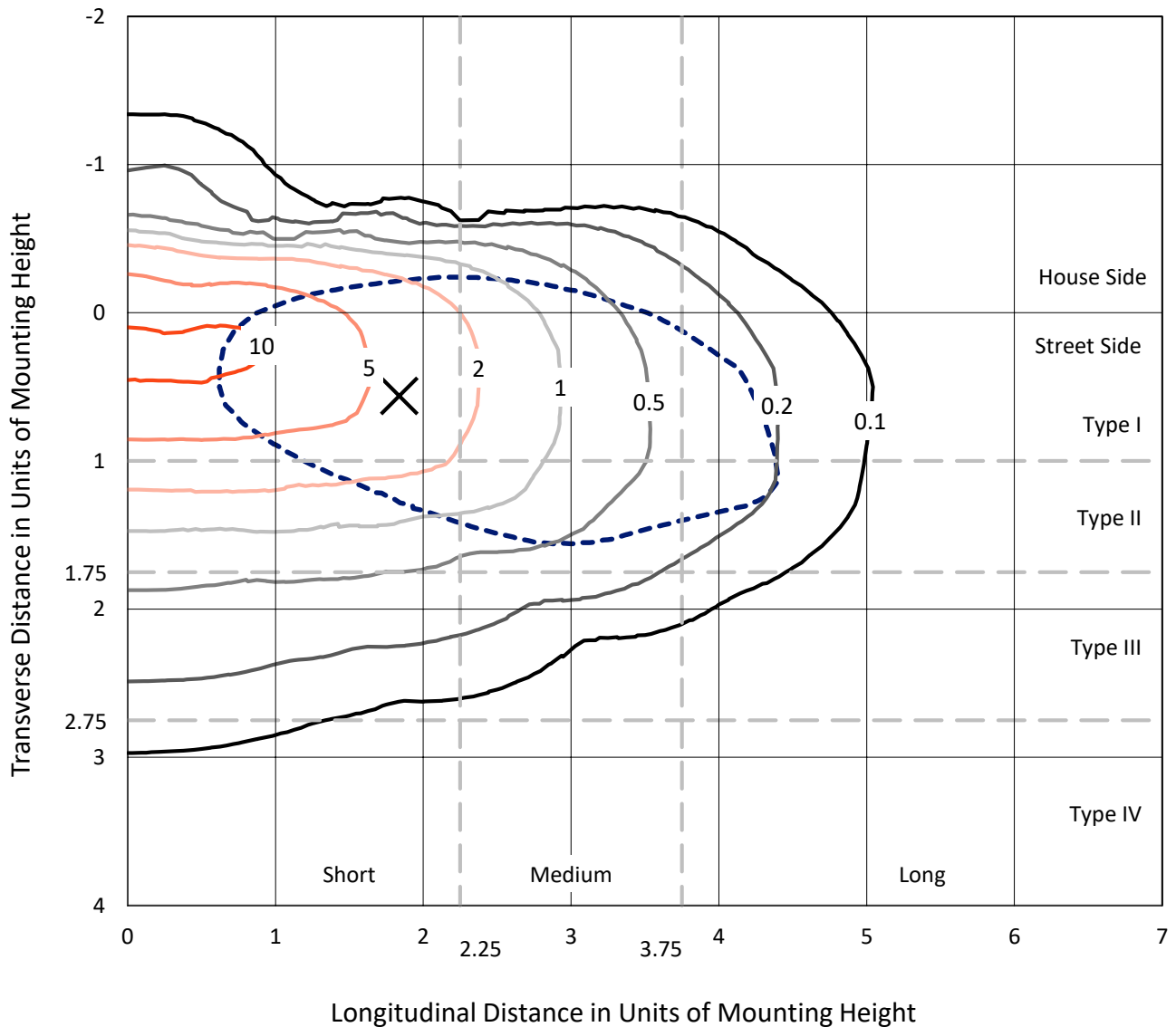
Input Watts (W): 331.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

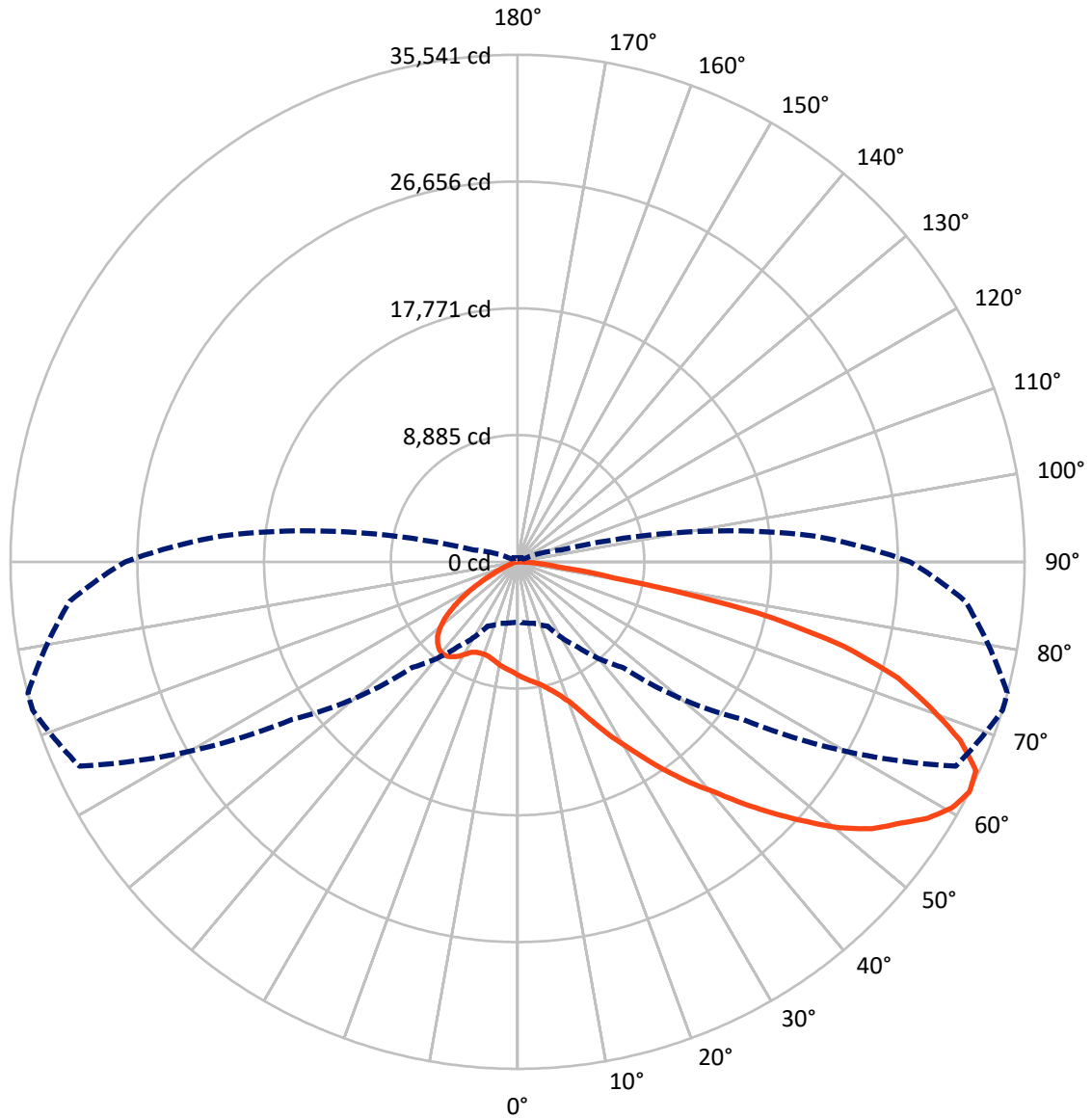
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 11 fc
 Type II - Short - N/A

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CATALOG NUMBER: CST-CA8-330-750-U-T2-HSS

Luminous Intensity Polar Plot



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

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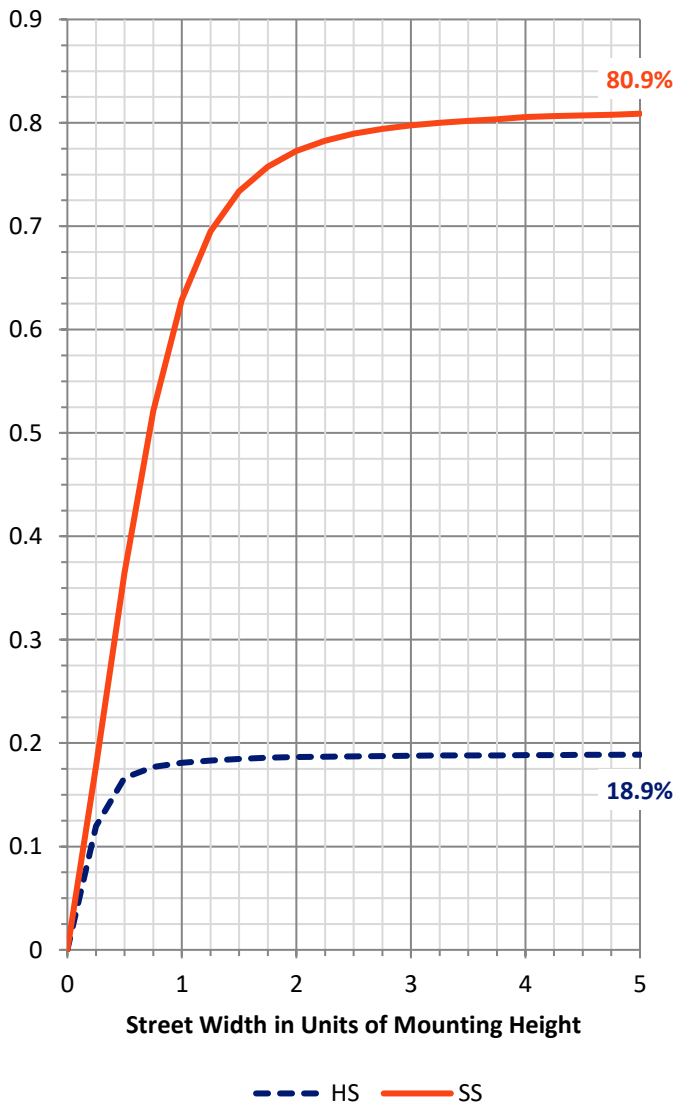
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8678.5	0.0	8678.5
	% Fixture	19.1	0.0	19.1
Street Side	Lumens	36688.5	0.0	36688.5
	% Fixture	80.9	0.0	80.9
Total	Lumens	45367.0	0.0	45367.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	759.9	1.7
10°-20°	2285.7	5.0
20°-30°	3949.2	8.7
30°-40°	5938.7	13.1
40°-50°	7918.6	17.5
50°-60°	9325.8	20.6
60°-70°	9271.5	20.4
70°-80°	5323.0	11.7
80°-90°	594.6	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°	45367.0	100.0
0°-180°	45367.0	100.0

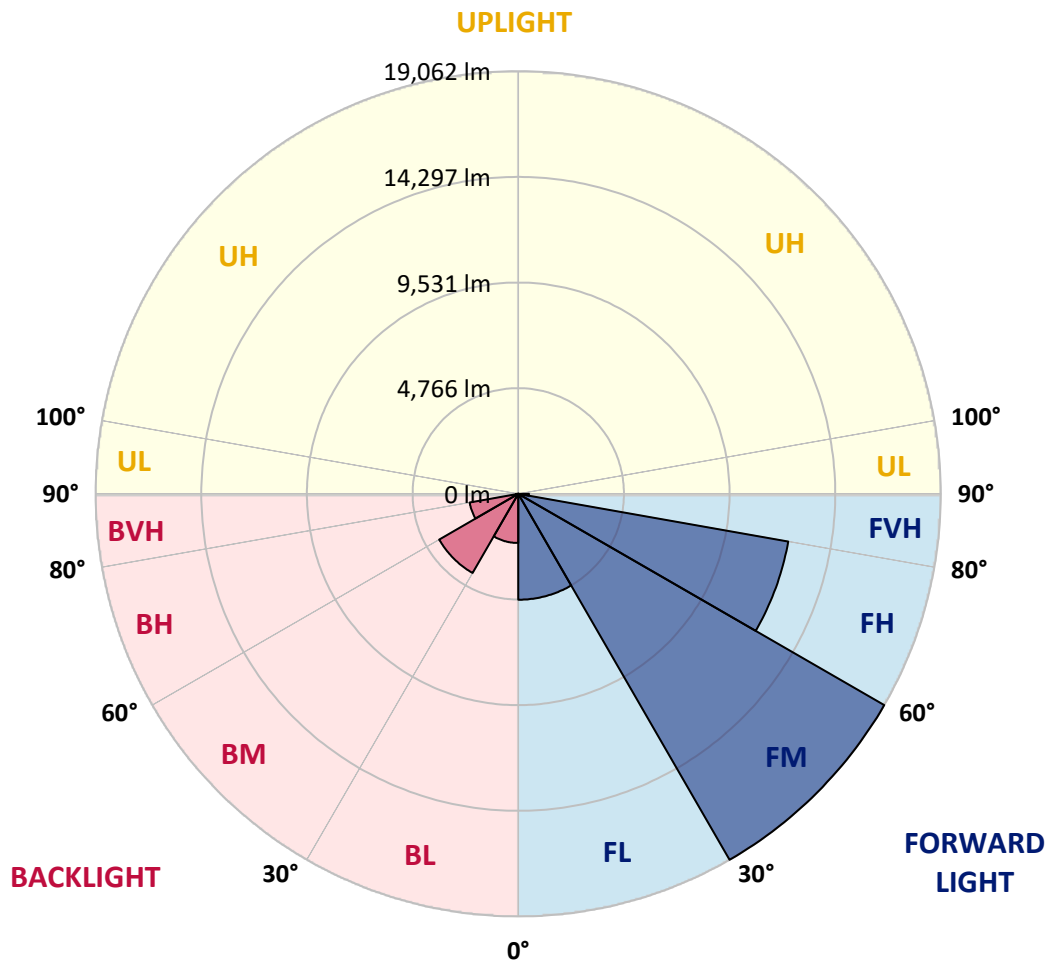


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4777.1	10.5			
FM (30°-60°)	19062.1	42.0			
FH (60°-80°)	12366.3	27.3			G5
FVH (80°-90°)	482.9	1.1			G3/500
BL (0°-30°)	2217.8	4.9	B3/2500		
BM (30°-60°)	4121.0	9.1	B3/5000		
BH (60°-80°)	2228.1	4.9	B3/2500		G3/2500
BVH (80°-90°)	111.7	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 II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	7956.3	7956.3	7956.3	7956.3	7956.3	7956.3	7956.3	7956.3	7956.3	7956.3	7956.3
2.5°	8512.4	8533.7	8508.3	8497.1	8484.9	8405.4	8312.8	8218.1	8141.7	8129.5	8029.7
5°	9110.1	9121.3	9079.6	9031.7	8949.2	8817.9	8651.9	8487.9	8335.2	8294.4	8112.1
7.5°	9569.4	9548.0	9537.8	9497.1	9424.8	9280.2	9028.7	8759.8	8523.6	8466.5	8189.5
10°	10000.2	9991.0	9913.6	9862.7	9747.6	9614.2	9407.5	9066.3	8733.3	8641.7	8256.8
12.5°	10466.6	10446.2	10414.6	10304.6	10211.0	9985.9	9736.4	9425.8	9055.1	8932.9	8371.8
15°	10886.1	10831.1	10813.8	10698.7	10604.0	10431.9	10181.4	9820.9	9424.8	9319.9	8590.8
17.5°	11285.3	11259.9	11221.2	11142.7	11036.8	10904.5	10703.8	10317.9	9908.5	9755.8	8962.5
20°	11624.4	11592.9	11559.2	11580.6	11557.2	11472.7	11346.4	11017.5	10517.5	10369.8	9414.6
22.5°	11860.7	11859.7	11994.1	12072.5	12117.3	12114.2	12083.7	11897.3	11394.3	11244.6	10090.8
25°	12057.2	12072.5	12242.6	12540.9	12807.7	12832.2	13048.1	12959.5	12531.8	12376.0	11108.1
27.5°	12115.3	12145.8	12454.4	12923.8	13329.1	13718.1	14034.8	14196.8	13800.6	13614.3	12201.8
30°	12157.0	12169.2	12471.7	13033.8	13888.2	14504.3	15070.5	15344.4	15003.3	14866.8	13420.8
32.5°	11862.7	11866.8	12330.1	13181.5	14298.6	15366.8	16036.9	16553.2	16463.6	16283.4	14753.8
35°	11457.4	11532.8	12064.3	13038.9	14636.7	16159.1	17071.6	17841.4	18020.7	17891.3	16085.8
37.5°	10956.4	11015.5	11584.7	12827.1	14711.0	16703.9	17876.0	19151.0	19619.5	19598.1	17693.8
40°	10340.3	10412.6	11093.9	12370.9	14674.4	17100.1	18820.1	20601.1	21195.9	21128.6	19288.5
42.5°	9612.2	9718.1	10379.0	11784.3	14406.5	17342.4	19593.0	22077.7	23148.0	23104.2	20699.9
45°	8892.2	8949.2	9552.1	10967.6	13913.7	17420.8	20320.1	24112.4	25150.1	25101.2	22400.6
47.5°	8149.8	8199.7	8829.1	10107.1	13058.3	17263.0	20895.4	25859.9	27189.8	27141.0	24090.0
50°	6422.7	6611.1	7901.3	9350.5	12083.7	16816.0	21438.2	28037.1	29324.3	29116.6	25569.7
52.5°	5495.0	5563.2	6232.3	8587.7	11111.2	16053.2	21800.8	30054.5	31079.9	30780.5	27082.9
55°	5136.5	5182.4	5510.3	7181.4	10197.7	14899.4	22227.4	32076.9	32396.6	32320.3	28317.2
57.5°	4864.6	4915.6	5149.8	5998.1	9235.4	13282.3	22094.0	33499.5	33899.7	33655.3	29627.8
60°	4479.7	4541.8	4852.4	5385.0	8141.7	11640.7	20919.9	34082.0	34992.4	34717.5	30624.7
62.5°	4237.3	4278.1	4456.3	4972.6	7235.3	10485.9	19248.8	33894.6	35541.3	35531.1	31489.3
65°	3908.4	3968.5	4158.9	4577.5	6428.8	9590.8	17672.4	32969.0	35305.0	35314.2	31667.5
67.5°	3564.2	3588.7	3788.2	4124.3	5478.7	8771.0	15632.6	31385.4	33464.9	33674.7	30434.3
70°	3134.5	3122.2	3338.1	3583.6	4477.7	7447.2	12582.7	28568.7	30745.9	30832.5	27940.4
72.5°	2466.4	2477.6	2537.7	2707.8	3399.2	5860.6	9130.5	24136.8	27903.7	28057.5	24752.9
75°	1657.9	1676.2	1956.2	2122.2	2445.0	4211.9	5741.4	16292.5	23589.0	24022.8	20259.0
77.5°	1264.8	1276.0	1357.5	1538.7	1768.9	3002.1	3112.1	8877.9	17173.4	18202.9	15848.5
80°	896.1	900.2	819.8	729.1	942.0	2036.7	1838.1	3781.1	6843.3	8086.7	9308.7
82.5°	401.2	395.1	465.4	387.0	542.8	788.2	867.6	1835.1	2842.2	3055.0	3325.9
85°	186.4	208.8	239.3	200.6	322.8	304.5	338.1	782.1	1332.0	1470.5	1462.3
87.5°	45.8	49.9	63.1	80.4	117.1	103.9	101.8	230.1	297.4	296.3	455.2
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°	7956.3	7956.3	7956.3	7956.3	7956.3	7956.3	7956.3	7956.3	7956.3	7956.3	7956.3
2.5°	7961.4	7908.5	7783.2	7662.0	7547.0	7470.6	7385.0	7295.4	7241.5	7216.0	7271.0
5°	8001.1	7900.3	7661.0	7420.7	7217.0	7042.9	6920.7	6816.8	6760.8	6765.9	6768.9
7.5°	8034.8	7893.2	7558.2	7219.1	6901.3	6685.4	6525.6	6413.5	6349.4	6300.5	6337.2
10°	8064.3	7863.7	7438.0	6985.9	6640.6	6320.9	6104.0	5968.5	5850.4	5784.2	5836.1
12.5°	8095.9	7852.5	7303.6	6777.1	6330.0	5972.6	5675.2	5540.8	5424.7	5374.8	5406.4
15°	8233.3	7895.2	7178.3	6531.7	6023.5	5561.2	5240.4	5075.4	4983.8	4923.7	4936.9
17.5°	8469.6	8008.3	7097.9	6275.0	5681.4	5192.5	4777.1	4584.6	4432.9	4390.1	4378.9
20°	8805.6	8223.1	7097.9	6058.1	5293.4	4783.2	4304.5	3979.7	3743.4	3654.8	3723.1
22.5°	9369.8	8588.7	7168.1	5861.6	4959.3	4358.5	3788.2	3292.3	2973.6	2844.2	2919.6
25°	10159.0	9153.9	7282.2	5689.5	4654.9	3869.7	3133.5	2563.2	2211.8	2058.1	2056.0
27.5°	11189.6	10018.5	7512.3	5549.0	4290.3	3237.3	2450.1	1901.3	1571.3	1478.6	1491.9
30°	12332.2	10955.4	7947.2	5345.3	3847.3	2529.6	1784.1	1397.2	1165.0	1042.8	1044.8
32.5°	13434.0	11925.9	8463.5	5212.9	3271.9	1907.4	1271.9	997.0	852.4	780.1	791.3
35°	14615.3	12762.9	8847.4	4990.9	2596.8	1378.8	899.2	747.5	687.4	649.7	651.7
37.5°	15891.3	13683.5	9163.1	4693.6	1963.4	947.1	664.0	640.5	615.1	567.2	563.1
40°	17224.3	14749.7	9351.5	4212.9	1364.6	655.8	564.2	590.6	576.4	514.3	509.2
42.5°	18354.7	15572.5	9398.3	3576.4	882.9	531.6	511.2	551.9	555.0	491.9	483.7
45°	19440.2	16305.8	9306.7	2738.3	612.0	500.0	478.6	534.6	538.7	481.7	468.4
47.5°	20655.1	17308.8	9140.7	1826.9	506.1	472.5	467.4	506.1	520.4	473.5	457.2
50°	22130.7	18124.5	8648.8	1122.2	477.6	455.2	455.2	478.6	498.0	457.2	449.1
52.5°	23644.0	18835.3	7920.7	769.9	460.3	436.9	450.1	460.3	467.4	430.8	437.9
55°	24728.5	19465.7	6835.1	619.2	450.1	424.7	456.2	435.9	425.7	394.1	387.0
57.5°	25932.2	20215.2	5725.1	548.9	436.9	431.8	435.9	397.2	368.6	336.1	328.9
60°	26772.3	20618.5	4366.7	516.3	421.6	424.7	402.2	350.3	298.4	275.0	269.9
62.5°	27505.5	20848.6	3200.7	474.5	407.3	406.3	364.6	299.4	245.4	220.0	215.9
65°	27394.5	20489.1	2074.4	440.9	396.1	382.9	326.9	256.6	204.7	185.3	183.3
67.5°	26173.5	18898.5	1306.5	406.3	376.8	353.4	293.3	229.1	188.4	166.0	164.0
70°	23610.4	16701.9	799.4	361.5	335.0	312.6	259.7	214.9	178.2	151.7	146.6
72.5°	20067.5	14304.7	565.2	318.7	292.3	265.8	220.0	204.7	170.1	136.5	132.4
75°	16487.0	10536.8	473.5	278.0	249.5	213.9	187.4	190.4	159.9	124.2	121.2
77.5°	11610.2	6569.4	440.9	227.1	196.5	170.1	161.9	174.1	146.6	114.1	111.0
80°	6776.1	3689.5	364.6	179.2	147.7	131.4	135.4	147.7	128.3	102.9	98.8
82.5°	2735.3	1460.3	256.6	139.5	107.9	104.9	111.0	120.2	105.9	86.6	84.5
85°	976.6	456.2	145.6	91.7	69.2	72.3	71.3	85.5	76.4	63.1	62.1
87.5°	256.6	90.6	65.2	36.7	29.5	29.5	27.5	39.7	36.7	28.5	31.6
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)