

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: P510450

Luminaire Tested: **CST-CA10-210-760-U-T4-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510450
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-17)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA10-210-760-U-T4-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (10) 5700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 30784 lumens
Efficiency: N/A
Efficacy: 144.6 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

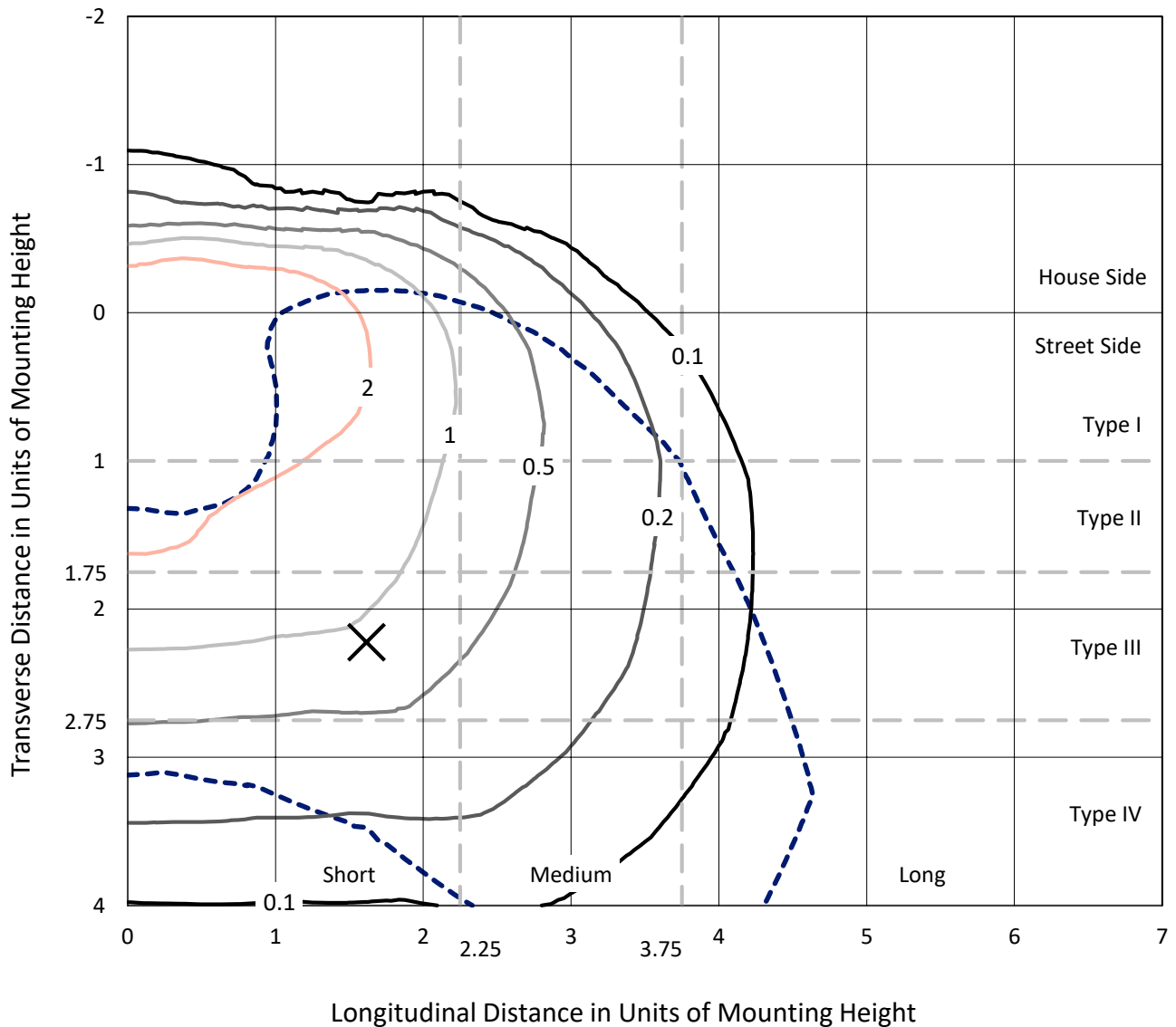
Input Watts (W): 212.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

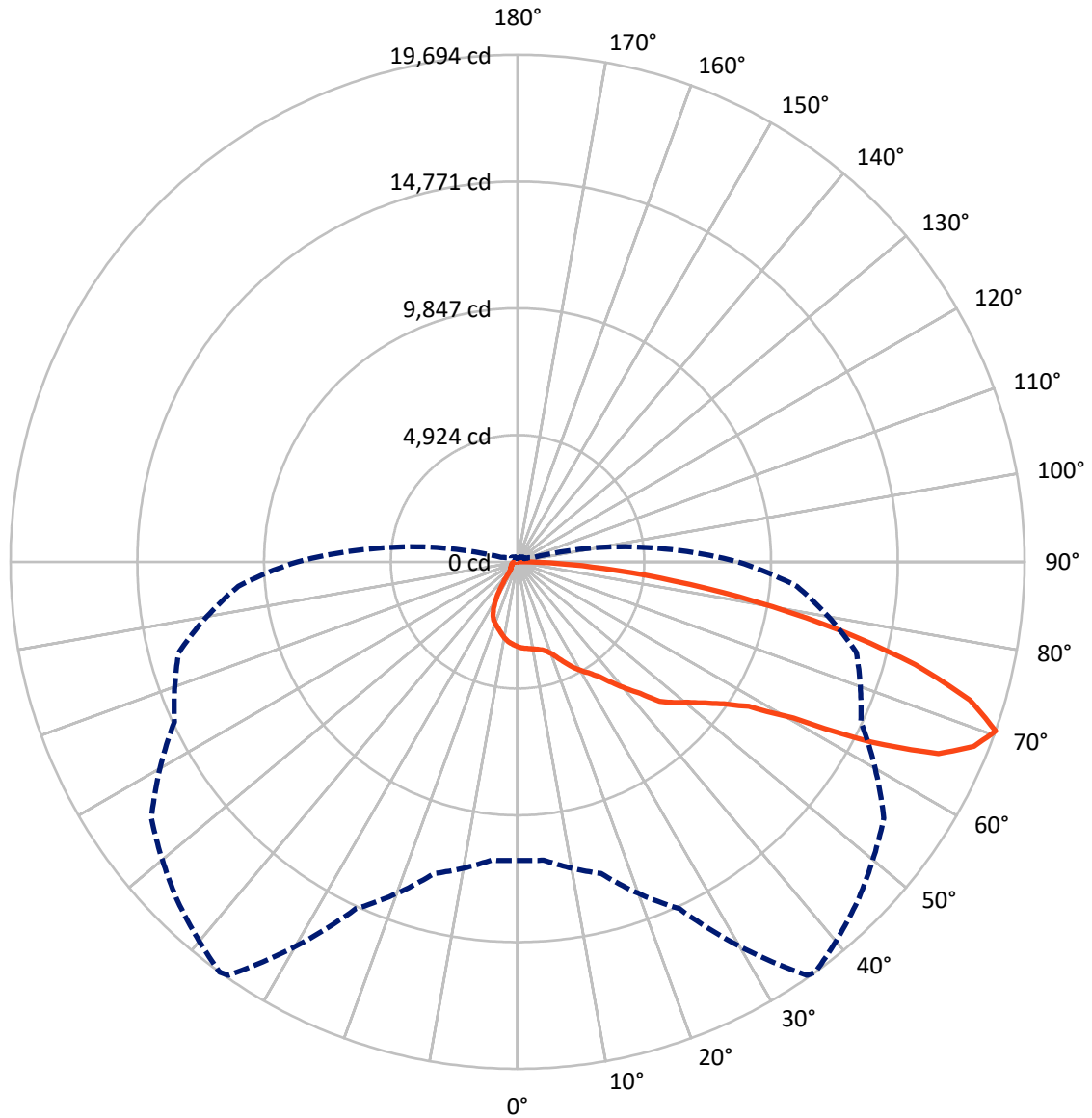
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 4.2 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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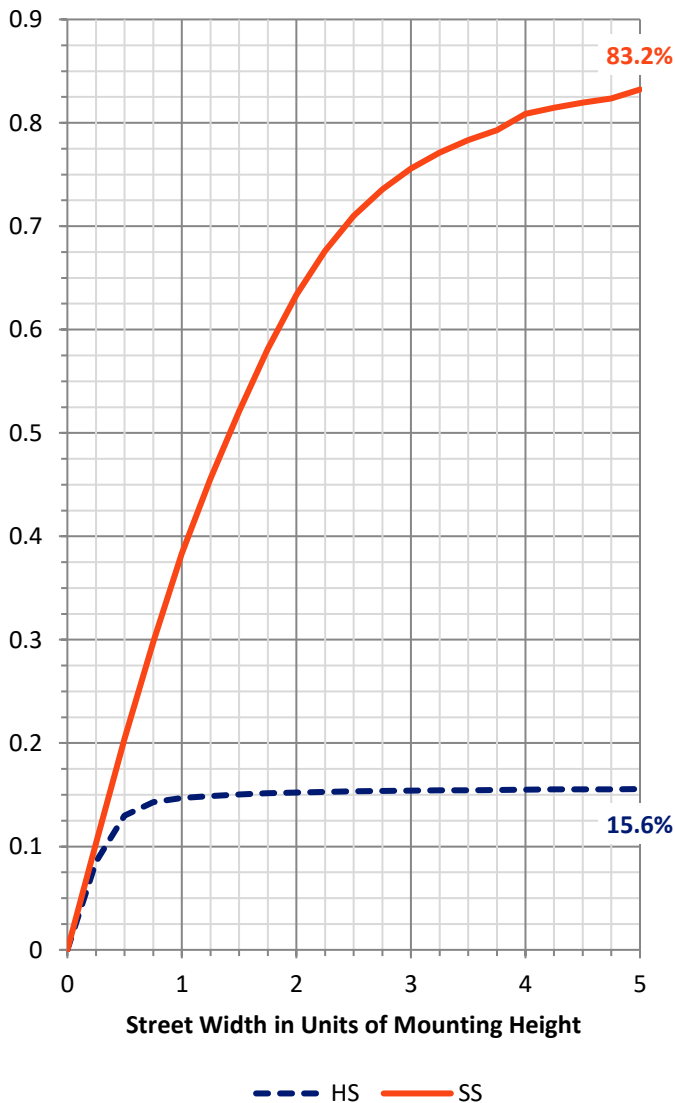
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4857.9	0.0	4857.9
	% Fixture	15.8	0.0	15.8
Street Side	Lumens	25926.1	0.0	25926.1
	% Fixture	84.2	0.0	84.2
Total	Lumens	30784.0	0.0	30784.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	312.8	1.0
10°-20°	930.3	3.0
20°-30°	1672.9	5.4
30°-40°	2647.3	8.6
40°-50°	4137.3	13.4
50°-60°	5941.0	19.3
60°-70°	8058.5	26.2
70°-80°	5964.1	19.4
80°-90°	1119.9	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°	30784.0	100.0
0°-180°	30784.0	100.0

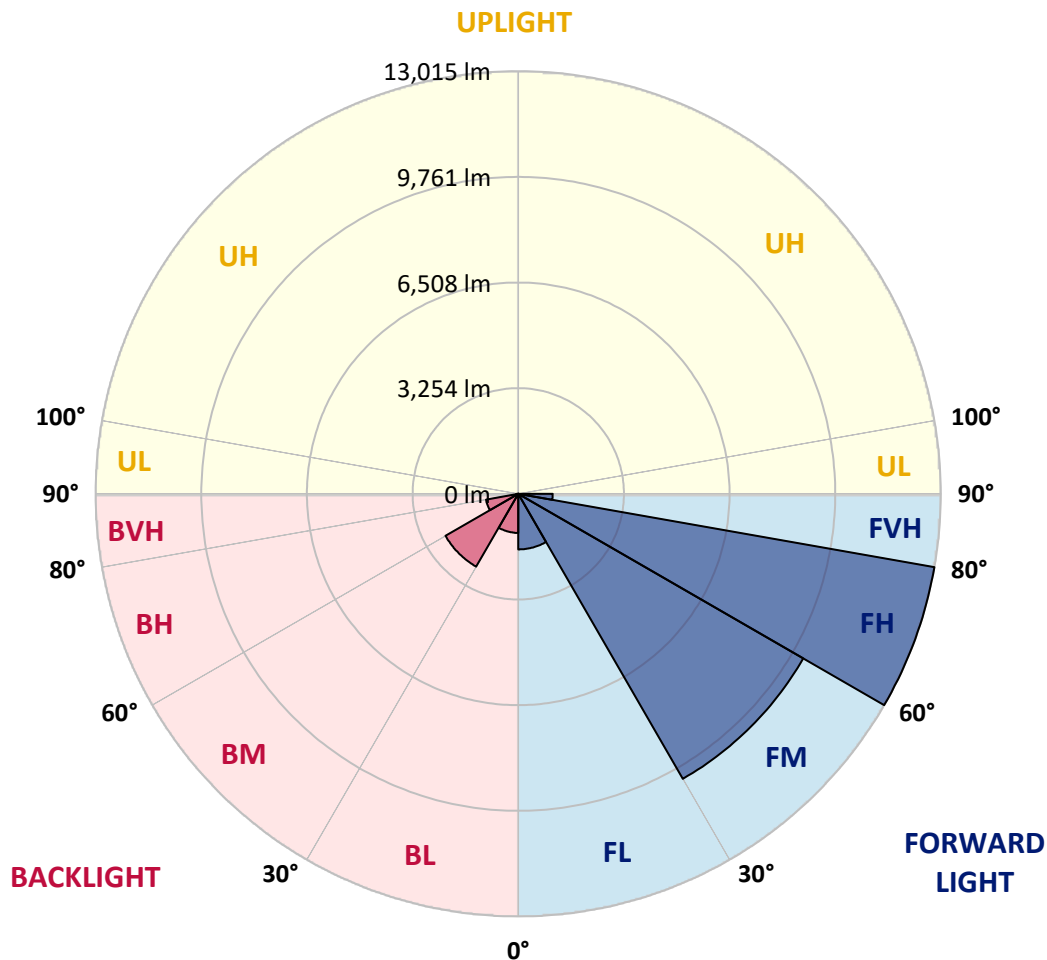


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1712.2	5.6			
FM (30°-60°)	10136.9	32.9			
FH (60°-80°)	13015.2	42.3			G5
FVH (80°-90°)	1061.8	3.4			G5
BL (0°-30°)	1203.8	3.9	B3/2500		
BM (30°-60°)	2588.7	8.4	B3/5000		
BH (60°-80°)	1007.4	3.3	B3/2500		G3/2500
BVH (80°-90°)	58.1	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-G5
 Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	3298.4	3298.4	3298.4	3298.4	3298.4	3298.4	3298.4	3298.4	3298.4	3298.4	3298.4
2.5°	3365.2	3358.1	3352.4	3354.5	3350.2	3353.1	3346.7	3338.9	3320.4	3312.6	3309.0
5°	3395.0	3392.9	3387.2	3382.9	3375.1	3372.3	3365.2	3371.6	3361.6	3336.0	3321.1
7.5°	3412.8	3412.1	3405.7	3396.4	3400.7	3404.2	3411.4	3401.4	3388.6	3376.5	3346.0
10°	3420.6	3420.6	3412.8	3417.7	3439.8	3441.9	3445.5	3451.9	3439.8	3422.0	3391.5
12.5°	3440.5	3439.1	3441.9	3458.3	3481.0	3486.0	3503.7	3503.7	3505.2	3494.5	3459.0
15°	3490.2	3490.2	3496.6	3511.6	3550.7	3553.5	3579.8	3603.2	3606.1	3590.4	3563.4
17.5°	3605.4	3602.5	3599.0	3608.2	3650.1	3651.6	3697.1	3726.9	3734.7	3751.8	3747.5
20°	3824.3	3821.4	3820.7	3821.4	3818.6	3814.3	3859.1	3891.1	3930.9	3960.7	3975.6
22.5°	4137.7	4131.3	4131.3	4096.5	4069.5	4073.7	4080.8	4098.6	4151.2	4203.8	4259.9
25°	4475.3	4471.0	4474.6	4385.7	4349.5	4363.7	4354.5	4382.2	4451.1	4496.6	4556.3
27.5°	4751.0	4757.4	4737.5	4668.6	4645.1	4655.8	4634.5	4714.1	4790.1	4869.7	4960.0
30°	5094.3	5060.2	5011.1	4927.3	4918.7	4920.2	4918.7	5046.7	5204.4	5318.2	5443.2
32.5°	5542.7	5548.4	5438.3	5240.7	5168.2	5158.3	5186.7	5374.3	5587.5	5839.8	6004.7
35°	5996.2	6005.4	5925.1	5719.0	5512.2	5480.9	5439.0	5682.7	5990.5	6496.5	6745.2
37.5°	6477.3	6510.0	6414.8	6230.7	5985.5	5956.4	5758.1	5997.6	6452.4	7274.0	7600.2
40°	7121.2	7086.4	6971.2	6737.4	6509.3	6462.4	6232.1	6357.9	7046.6	8247.7	8484.3
42.5°	7595.9	7586.0	7488.6	7257.7	7028.1	6990.4	6804.9	6941.4	7794.9	9234.8	9340.7
45°	7972.6	8033.7	8031.6	7886.6	7757.3	7736.0	7626.5	7827.6	8699.7	10166.5	10114.7
47.5°	8307.4	8345.0	8284.6	8221.4	8161.0	8168.1	8249.1	8662.7	9624.3	10980.3	10750.7
50°	8855.3	8807.0	8536.2	8487.9	8573.2	8576.7	8823.3	9460.1	10642.7	11683.9	11289.4
52.5°	9585.9	9533.3	8976.8	8894.4	9096.2	9111.2	9521.2	10254.7	11693.1	12356.2	11825.3
55°	10673.3	10551.0	9954.8	9585.2	9677.6	9738.0	10234.8	11018.7	12515.4	12948.9	12231.1
57.5°	12008.7	12097.5	11791.9	10956.8	10572.4	10595.1	11051.4	11750.0	13241.0	13467.7	12468.5
60°	13420.1	13398.8	13526.7	13174.9	12438.6	12316.4	12084.0	12496.2	13803.2	13904.8	12713.0
62.5°	14193.4	14317.7	14744.2	14814.5	15479.0	15414.3	13830.2	13421.5	14452.8	14179.1	12779.8
65°	14189.1	14243.1	15037.0	15909.7	17985.6	17967.2	17230.9	14759.8	14936.8	14325.6	12646.2
67.5°	13272.3	13356.2	14284.3	15989.3	19144.1	19122.1	18613.2	16641.0	15088.8	14149.3	12022.9
70°	11600.7	11629.2	12534.6	14868.5	19609.6	19694.2	18660.8	17363.1	14710.8	13625.5	10886.5
72.5°	9570.3	9511.3	10396.8	12697.3	18424.2	18373.7	17871.9	16501.0	14074.0	12608.5	8878.8
75°	7046.6	7210.7	8005.3	10195.0	15774.7	15959.4	16181.9	15181.9	12499.8	10391.1	6139.7
77.5°	4652.9	4861.9	5665.0	7644.3	12488.4	12775.5	13351.9	12912.7	10168.7	7453.8	2923.8
80°	2404.3	2562.1	3284.8	5072.3	8952.7	9367.0	10423.8	9779.9	7209.3	3370.1	654.6
82.5°	909.7	889.1	1471.9	2903.2	5740.3	6117.0	6885.2	5864.7	2565.6	592.0	304.2
85°	399.4	422.9	609.8	1324.0	3282.0	3331.0	3900.3	2286.3	376.0	282.9	206.8
87.5°	172.7	198.3	255.9	380.9	1107.3	1278.5	1582.0	726.3	113.7	98.1	103.8
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°	3298.4	3298.4	3298.4	3298.4	3298.4	3298.4	3298.4	3298.4	3298.4	3298.4	3298.4
2.5°	3302.6	3298.4	3291.2	3273.5	3244.3	3240.8	3237.9	3235.1	3229.4	3232.3	3248.6
5°	3309.7	3301.9	3276.3	3250.7	3225.2	3202.4	3174.7	3164.0	3149.8	3140.6	3157.6
7.5°	3333.9	3317.5	3279.9	3245.0	3175.4	3142.0	3106.5	3064.5	3034.7	3015.5	3032.6
10°	3374.4	3353.8	3306.9	3235.1	3153.4	3061.7	2999.1	2929.5	2872.6	2857.0	2872.6
12.5°	3440.5	3409.9	3355.2	3257.8	3112.9	2992.8	2874.1	2782.4	2690.7	2664.4	2672.2
15°	3547.8	3523.6	3439.8	3305.5	3113.6	2930.2	2754.0	2606.1	2486.0	2444.1	2441.2
17.5°	3719.8	3694.2	3597.6	3400.0	3139.2	2881.2	2636.0	2410.7	2228.8	2136.4	2121.4
20°	3966.4	3930.9	3784.5	3539.3	3194.6	2859.9	2526.5	2223.8	1940.9	1767.5	1741.2
22.5°	4240.7	4203.1	3987.0	3646.6	3234.4	2817.9	2422.1	2017.0	1644.6	1432.8	1402.9
25°	4581.9	4499.4	4181.0	3748.2	3225.2	2729.8	2252.2	1736.2	1332.6	1149.2	1129.3
27.5°	4918.7	4814.3	4378.6	3801.5	3184.6	2589.8	2003.5	1407.9	1043.3	913.2	896.9
30°	5336.6	5134.8	4554.2	3826.4	3082.3	2380.1	1670.1	1070.3	781.1	691.5	675.9
32.5°	5833.4	5527.8	4719.0	3798.7	2911.7	2060.3	1298.4	783.9	580.6	524.5	523.8
35°	6488.7	6009.7	4900.3	3707.7	2650.2	1715.6	910.4	535.9	452.7	433.5	437.1
37.5°	7254.8	6662.1	5084.3	3558.5	2354.5	1312.7	606.9	412.9	398.0	398.7	399.4
40°	8062.9	7382.7	5332.4	3348.8	1995.6	950.2	437.1	371.0	370.3	377.4	379.5
42.5°	8834.7	8082.8	5638.0	3069.5	1619.7	628.3	378.8	353.9	344.7	347.5	349.7
45°	9551.8	8683.3	5898.1	2797.3	1216.7	448.5	371.7	334.0	319.8	318.4	319.8
47.5°	10129.6	9164.5	6056.6	2477.5	867.1	372.4	356.8	315.6	295.7	291.4	289.3
50°	10569.5	9521.9	6114.1	2115.0	586.3	355.3	336.9	294.2	270.1	270.8	270.8
52.5°	10998.8	9846.7	6047.3	1749.7	431.4	340.4	323.4	277.2	251.6	265.1	268.6
55°	11307.9	9983.2	5852.6	1354.6	359.6	321.9	308.4	257.3	239.5	261.5	268.6
57.5°	11488.4	10090.5	5495.1	977.9	329.8	304.2	289.3	238.8	222.4	228.1	231.7
60°	11600.7	9940.5	5022.5	668.8	314.1	290.0	270.1	226.7	204.7	191.2	189.0
62.5°	11538.9	9565.3	4399.9	459.8	297.8	274.3	253.7	215.3	186.2	168.4	167.0
65°	11035.0	8870.9	3378.0	372.4	287.8	267.2	243.8	204.7	173.4	156.4	154.2
67.5°	10100.4	7623.0	1972.9	331.2	283.6	260.1	236.0	194.7	166.3	147.8	145.0
70°	8564.6	5733.9	660.9	295.7	282.9	259.4	229.6	187.6	158.5	139.3	136.5
72.5°	6178.8	3459.7	321.9	260.1	264.4	248.7	224.6	181.9	153.5	129.3	124.4
75°	3511.6	1126.5	290.7	224.6	245.9	237.4	221.7	182.6	155.6	117.3	111.6
77.5°	999.2	329.1	280.7	191.2	232.4	245.2	207.5	164.9	159.2	108.7	101.6
80°	337.6	292.8	270.8	148.5	187.6	202.5	179.8	145.0	160.6	98.8	91.7
82.5°	270.8	294.2	227.4	118.7	142.9	153.5	142.9	130.1	130.1	88.1	82.4
85°	216.8	272.9	144.3	94.5	106.6	118.0	100.9	97.4	91.0	73.9	71.8
87.5°	125.8	85.3	59.7	48.3	44.8	45.5	39.1	46.9	57.6	50.5	49.7
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)