

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: P510440

Luminaire Tested: **CST-CA10-210-750-U-T4-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510440
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-CA10-210-750-U-T4-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (10) 5000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 31451 lumens
Efficiency: N/A
Efficacy: 147.7 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

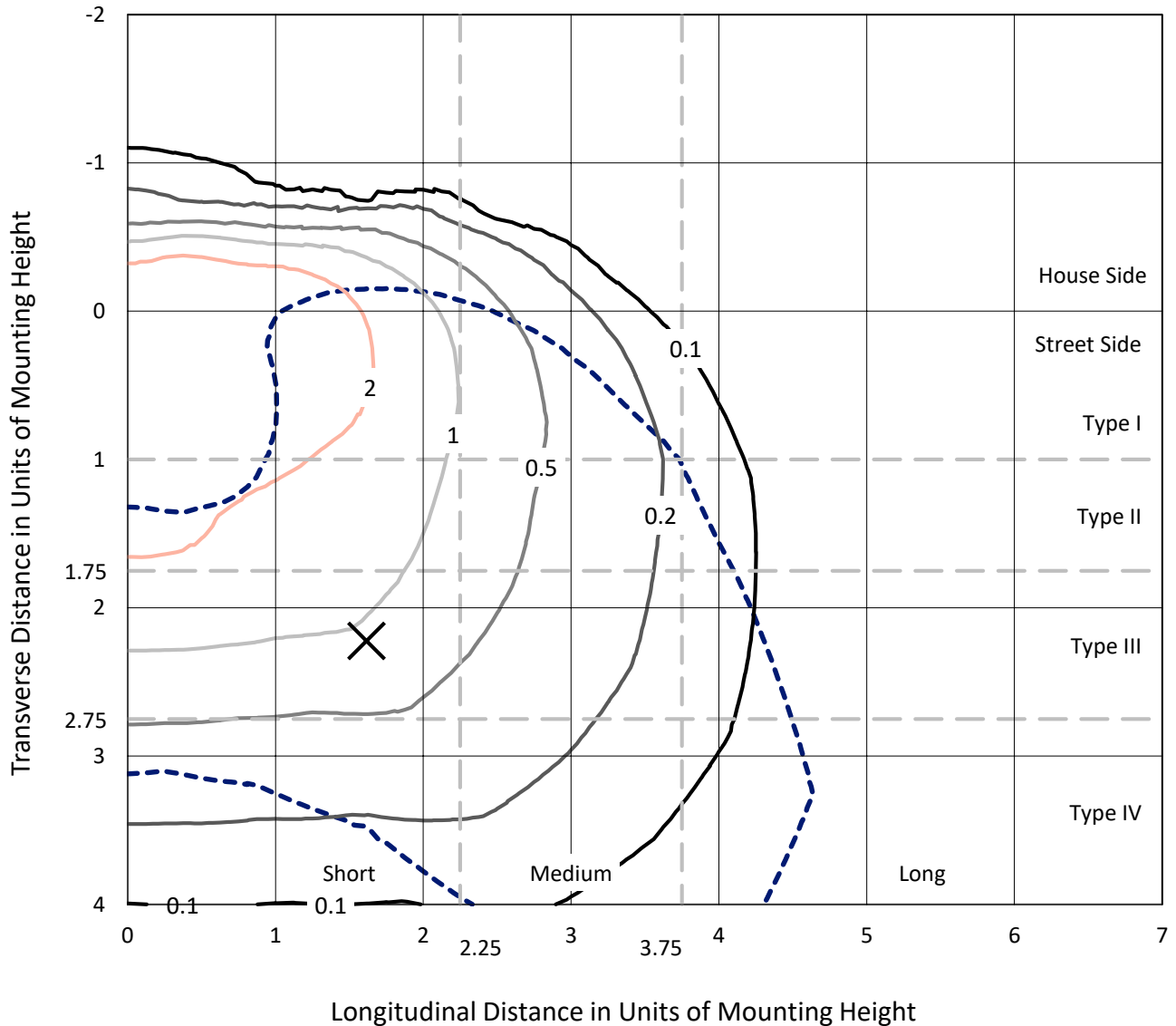
Input Watts (W): 212.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

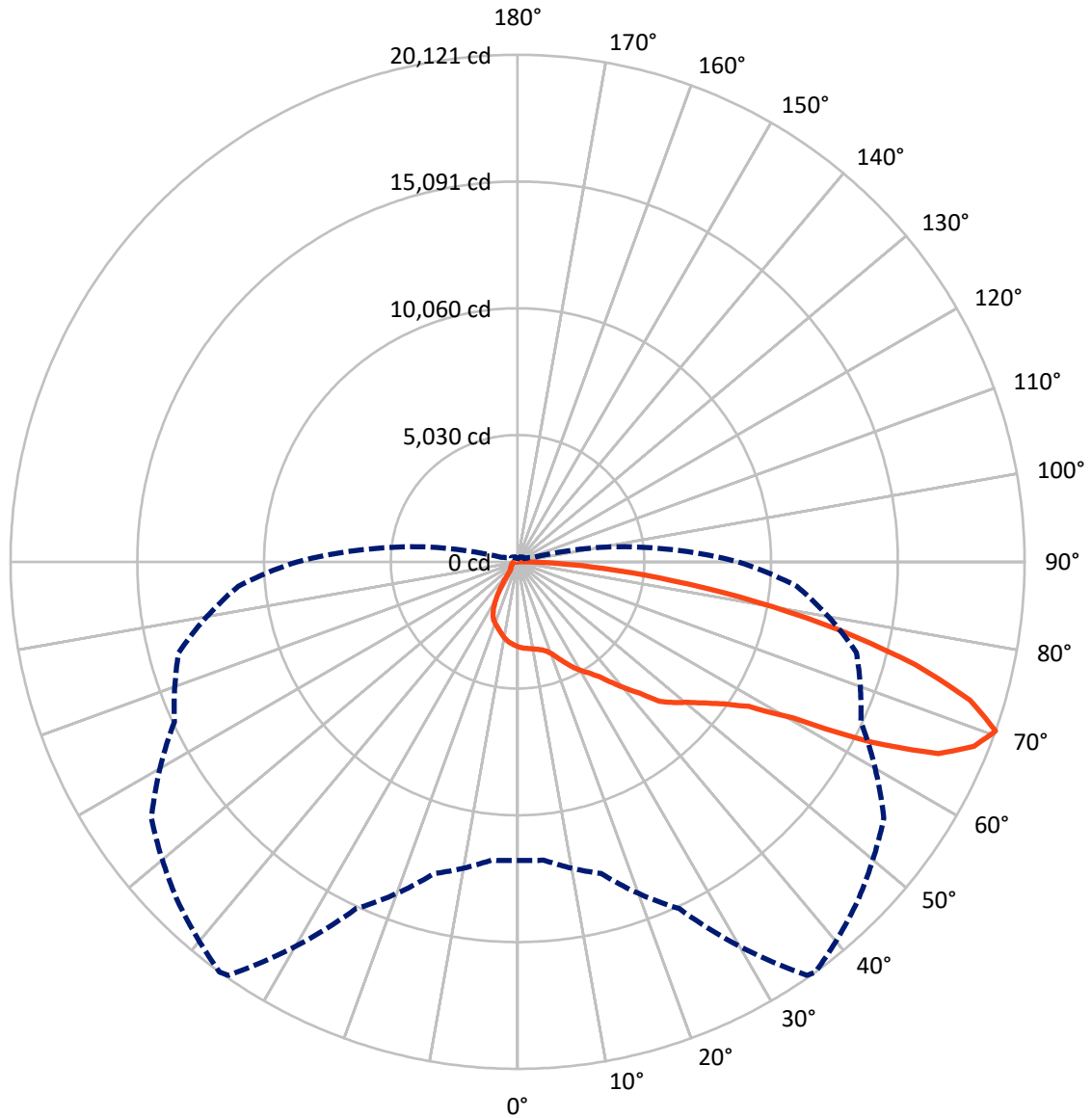
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 4.3 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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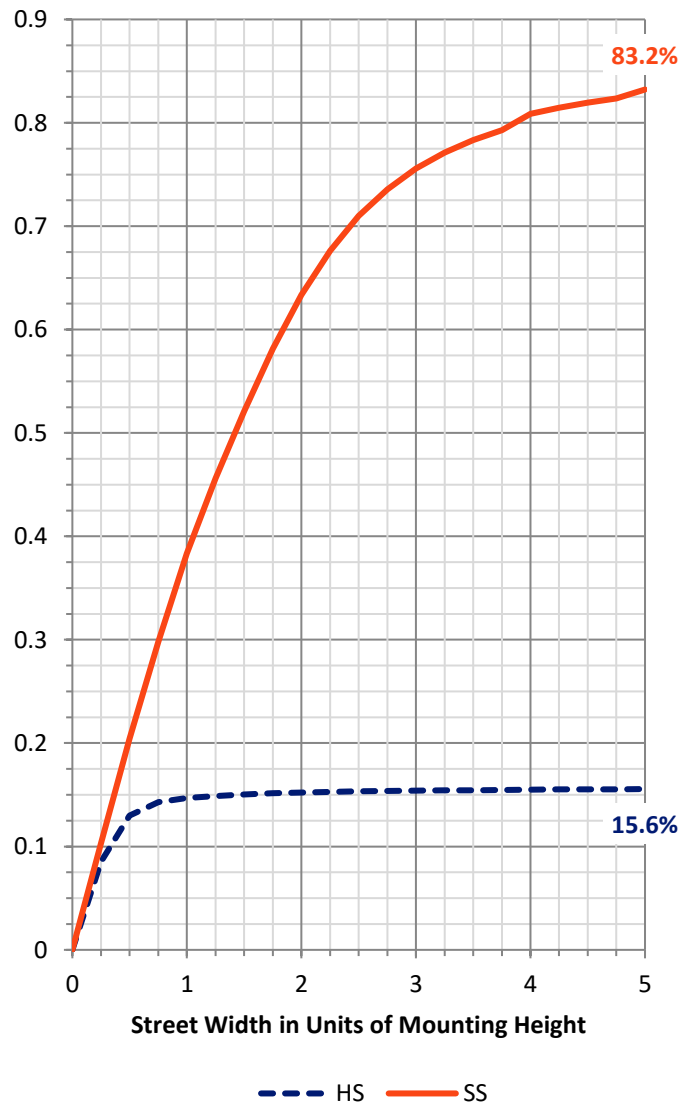
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4963.2	0.0	4963.2
	% Fixture	15.8	0.0	15.8
Street Side	Lumens	26487.8	0.0	26487.8
	% Fixture	84.2	0.0	84.2
Total	Lumens	31451.0	0.0	31451.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	319.6	1.0
10°-20°	950.4	3.0
20°-30°	1709.1	5.4
30°-40°	2704.7	8.6
40°-50°	4226.9	13.4
50°-60°	6069.7	19.3
60°-70°	8233.1	26.2
70°-80°	6093.3	19.4
80°-90°	1144.1	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°	31451.0	100.0
0°-180°	31451.0	100.0

Coefficient of Utilization

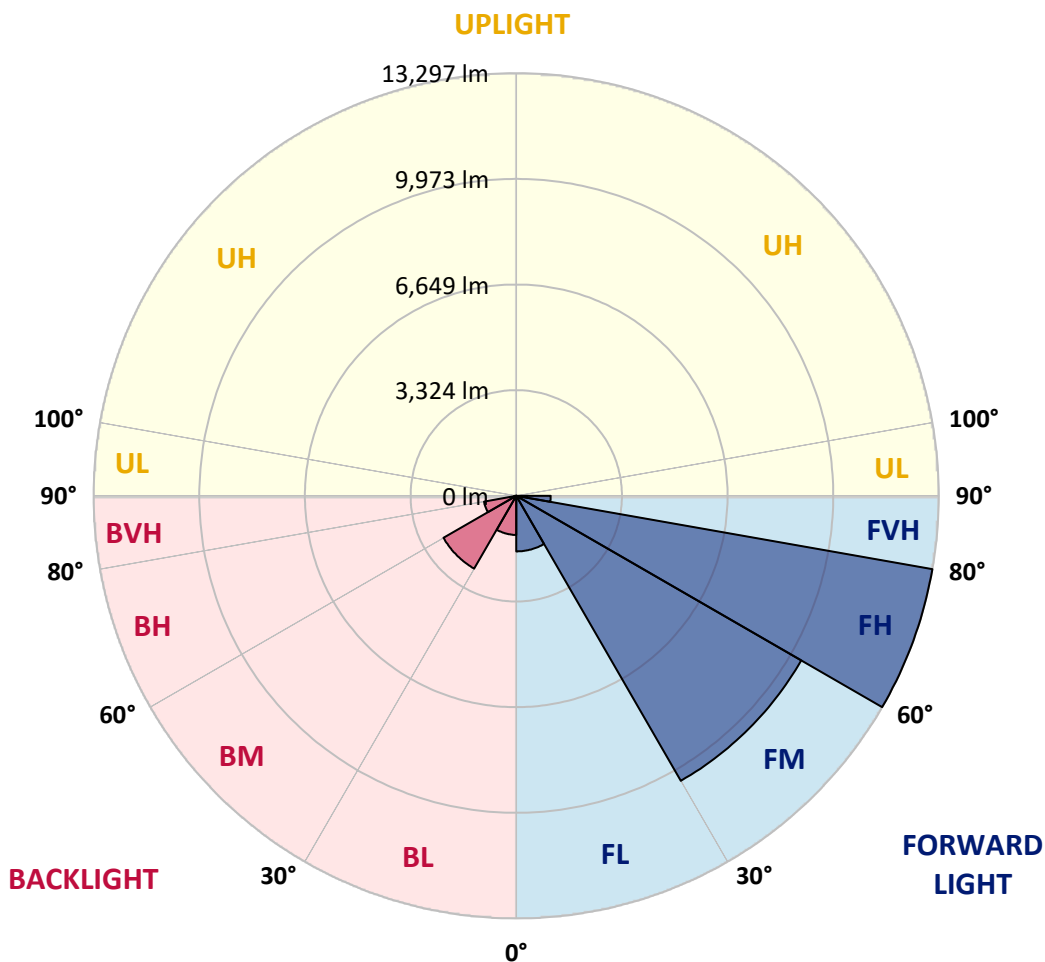


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1749.3	5.6			
FM (30°-60°)	10356.5	32.9			
FH (60°-80°)	13297.2	42.3			G5
FVH (80°-90°)	1084.8	3.4			G5
BL (0°-30°)	1229.9	3.9	B3/2500		
BM (30°-60°)	2644.8	8.4	B3/5000		
BH (60°-80°)	1029.2	3.3	B3/2500		G3/2500
BVH (80°-90°)	59.3	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°	3369.8	3369.8	3369.8	3369.8	3369.8	3369.8	3369.8	3369.8	3369.8	3369.8	3369.8
2.5°	3438.1	3430.8	3425.0	3427.2	3422.8	3425.7	3419.2	3411.2	3392.3	3384.3	3380.7
5°	3468.6	3466.4	3460.6	3456.2	3448.2	3445.3	3438.1	3444.6	3434.4	3408.3	3393.1
7.5°	3486.7	3486.0	3479.5	3470.0	3474.4	3478.0	3485.3	3475.1	3462.0	3449.7	3418.5
10°	3494.7	3494.7	3486.7	3491.8	3514.3	3516.5	3520.1	3526.7	3514.3	3496.2	3464.9
12.5°	3515.0	3513.6	3516.5	3533.2	3556.4	3561.5	3579.7	3579.7	3581.1	3570.2	3533.9
15°	3565.9	3565.9	3572.4	3587.6	3627.6	3630.5	3657.4	3681.3	3684.2	3668.2	3640.7
17.5°	3683.5	3680.6	3677.0	3686.4	3729.2	3730.7	3777.2	3807.7	3815.6	3833.1	3828.7
20°	3907.1	3904.2	3903.5	3904.2	3901.3	3897.0	3942.7	3975.4	4016.0	4046.5	4061.8
22.5°	4227.3	4220.8	4220.8	4185.2	4157.6	4162.0	4169.3	4187.4	4241.1	4294.9	4352.2
25°	4572.2	4567.9	4571.5	4480.7	4443.7	4458.2	4448.8	4477.1	4547.5	4594.0	4655.0
27.5°	4854.0	4860.5	4840.2	4769.7	4745.8	4756.7	4734.9	4816.2	4893.9	4975.2	5067.4
30°	5204.7	5169.8	5119.7	5034.0	5025.3	5026.8	5025.3	5156.0	5317.2	5433.4	5561.2
32.5°	5662.8	5668.6	5556.1	5354.2	5280.2	5270.0	5299.1	5490.7	5708.6	5966.3	6134.8
35°	6126.1	6135.5	6053.5	5842.9	5631.6	5599.7	5556.8	5805.9	6120.3	6637.3	6891.4
37.5°	6617.7	6651.1	6553.8	6365.7	6115.2	6085.4	5882.8	6127.5	6592.2	7431.6	7764.9
40°	7275.5	7239.9	7122.3	6883.4	6650.3	6602.4	6367.1	6495.7	7199.3	8426.4	8668.2
42.5°	7760.5	7750.4	7650.9	7414.9	7180.4	7141.9	6952.4	7091.8	7963.8	9434.9	9543.1
45°	8145.4	8207.8	8205.6	8057.5	7925.4	7903.6	7791.8	7997.2	8888.2	10386.8	10333.8
47.5°	8487.4	8525.8	8464.1	8399.5	8337.8	8345.0	8427.8	8850.4	9832.8	11218.2	10983.7
50°	9047.2	8997.8	8721.2	8671.8	8758.9	8762.5	9014.5	9665.1	10873.3	11937.0	11534.1
52.5°	9793.6	9739.9	9171.3	9087.1	9293.3	9308.6	9727.5	10476.9	11946.5	12623.9	12081.5
55°	10904.5	10779.6	10170.4	9792.9	9887.3	9949.0	10456.5	11257.4	12786.6	13229.5	12496.1
57.5°	12268.9	12359.6	12047.4	11194.2	10801.4	10824.7	11290.8	12004.6	13527.9	13759.5	12738.7
60°	13710.9	13689.1	13819.8	13460.4	12708.2	12583.3	12345.8	12767.0	14102.3	14206.1	12988.4
62.5°	14500.9	14628.0	15063.6	15135.5	15814.4	15748.3	14129.9	13712.3	14765.9	14486.4	13056.7
65°	14496.5	14551.7	15362.8	16254.4	18375.3	18356.5	17604.2	15079.6	15260.4	14635.9	12920.2
67.5°	13559.9	13645.5	14593.8	16335.7	19558.9	19536.4	19016.5	17001.6	15415.8	14455.9	12283.4
70°	11852.1	11881.1	12806.2	15190.7	20034.5	20120.9	19065.1	17739.3	15029.5	13920.7	11122.4
72.5°	9777.6	9717.4	10622.1	12972.5	18823.3	18771.8	18259.2	16858.5	14378.9	12881.7	9071.1
75°	7199.3	7367.0	8178.8	10415.9	16116.5	16305.2	16532.5	15510.9	12770.6	10616.3	6272.8
77.5°	4753.8	4967.2	5787.7	7809.9	12759.0	13052.3	13641.2	13192.5	10389.0	7615.3	2987.2
80°	2456.4	2617.6	3356.0	5182.2	9146.6	9570.0	10649.7	9991.8	7365.5	3443.2	668.7
82.5°	929.4	908.3	1503.7	2966.1	5864.7	6249.5	7034.4	5991.8	2621.2	604.8	310.8
85°	408.1	432.0	623.0	1352.7	3353.1	3403.2	3984.8	2335.9	384.1	289.0	211.3
87.5°	176.4	202.6	261.4	389.2	1131.3	1306.2	1616.3	742.1	116.2	100.2	106.0
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°	3369.8	3369.8	3369.8	3369.8	3369.8	3369.8	3369.8	3369.8	3369.8	3369.8	3369.8
2.5°	3374.2	3369.8	3362.6	3344.4	3314.6	3311.0	3308.1	3305.2	3299.4	3302.3	3319.0
5°	3381.4	3373.4	3347.3	3321.2	3295.0	3271.8	3243.5	3232.6	3218.1	3208.6	3226.1
7.5°	3406.1	3389.4	3350.9	3315.4	3244.2	3210.1	3173.8	3130.9	3100.4	3080.8	3098.3
10°	3447.5	3426.5	3378.5	3305.2	3221.7	3128.0	3064.1	2993.0	2934.9	2918.9	2934.9
12.5°	3515.0	3483.8	3427.9	3328.4	3180.3	3057.6	2936.3	2842.7	2749.0	2722.1	2730.1
15°	3624.7	3600.0	3514.3	3377.1	3181.0	2993.7	2813.6	2662.6	2539.9	2497.0	2494.1
17.5°	3800.4	3774.3	3675.5	3473.6	3207.2	2943.6	2693.1	2462.9	2277.0	2182.6	2167.4
20°	4052.3	4016.0	3866.5	3616.0	3263.8	2921.8	2581.3	2272.0	1983.0	1805.8	1778.9
22.5°	4332.6	4294.1	4073.4	3725.6	3304.5	2879.0	2474.5	2060.7	1680.2	1463.8	1433.3
25°	4681.1	4596.9	4271.6	3829.4	3295.0	2788.9	2301.0	1773.9	1361.4	1174.1	1153.8
27.5°	5025.3	4918.6	4473.5	3883.9	3253.6	2645.9	2046.9	1438.4	1065.9	933.0	916.3
30°	5452.3	5246.1	4652.8	3909.3	3149.1	2431.7	1706.3	1093.5	798.0	706.5	690.5
32.5°	5959.8	5647.6	4821.3	3881.0	2974.8	2105.0	1326.6	800.9	593.2	535.9	535.1
35°	6629.3	6139.9	5006.4	3788.1	2707.6	1752.8	930.1	547.5	462.5	442.9	446.5
37.5°	7412.0	6806.4	5194.5	3635.6	2405.6	1341.1	620.1	421.9	406.6	407.3	408.1
40°	8237.6	7542.7	5447.9	3421.4	2038.9	970.8	446.5	379.0	378.3	385.6	387.7
42.5°	9026.1	8257.9	5760.1	3136.0	1654.8	641.9	387.0	361.6	352.2	355.1	357.2
45°	9758.7	8871.5	6025.9	2857.9	1243.1	458.2	379.7	341.3	326.7	325.3	326.7
47.5°	10349.1	9363.0	6187.8	2531.2	885.8	380.5	364.5	322.4	302.1	297.7	295.5
50°	10798.5	9728.3	6246.6	2160.9	599.0	363.0	344.2	300.6	275.9	276.6	276.6
52.5°	11237.1	10060.1	6178.4	1787.7	440.7	347.8	330.4	283.2	257.0	270.8	274.5
55°	11552.9	10199.5	5979.4	1383.9	367.4	328.9	315.1	262.8	244.7	267.2	274.5
57.5°	11737.4	10309.1	5614.2	999.1	336.9	310.8	295.5	244.0	227.3	233.1	236.7
60°	11852.1	10155.9	5131.3	683.3	320.9	296.2	275.9	231.6	209.1	195.3	193.1
62.5°	11788.9	9772.5	4495.3	469.8	304.2	280.3	259.2	220.0	190.2	172.1	170.6
65°	11274.1	9063.1	3451.1	380.5	294.1	273.0	249.1	209.1	177.2	159.7	157.6
67.5°	10319.3	7788.1	2015.6	338.4	289.7	265.8	241.1	199.0	169.9	151.0	148.1
70°	8750.2	5858.2	675.3	302.1	289.0	265.0	234.5	191.7	161.9	142.3	139.4
72.5°	6312.7	3534.6	328.9	265.8	270.1	254.1	229.4	185.9	156.8	132.1	127.1
75°	3587.6	1150.9	297.0	229.4	251.2	242.5	226.5	186.6	159.0	119.8	114.0
77.5°	1020.9	336.2	286.8	195.3	237.4	250.5	212.0	168.5	162.6	111.1	103.8
80°	344.9	299.2	276.6	151.8	191.7	206.9	183.7	148.1	164.1	100.9	93.7
82.5°	276.6	300.6	232.4	121.3	145.9	156.8	145.9	132.9	132.9	90.0	84.2
85°	221.5	278.8	147.4	96.6	108.9	120.5	103.1	99.5	92.9	75.5	73.3
87.5°	128.5	87.1	61.0	49.4	45.7	46.5	39.9	47.9	58.8	51.6	50.8
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)