

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: P510420

Luminaire Tested: **CST-CA10-210-730-U-T4-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510420
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-CA10-210-730-U-T4-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (10) 3000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 30326 lumens
Efficiency: N/A
Efficacy: 142.4 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

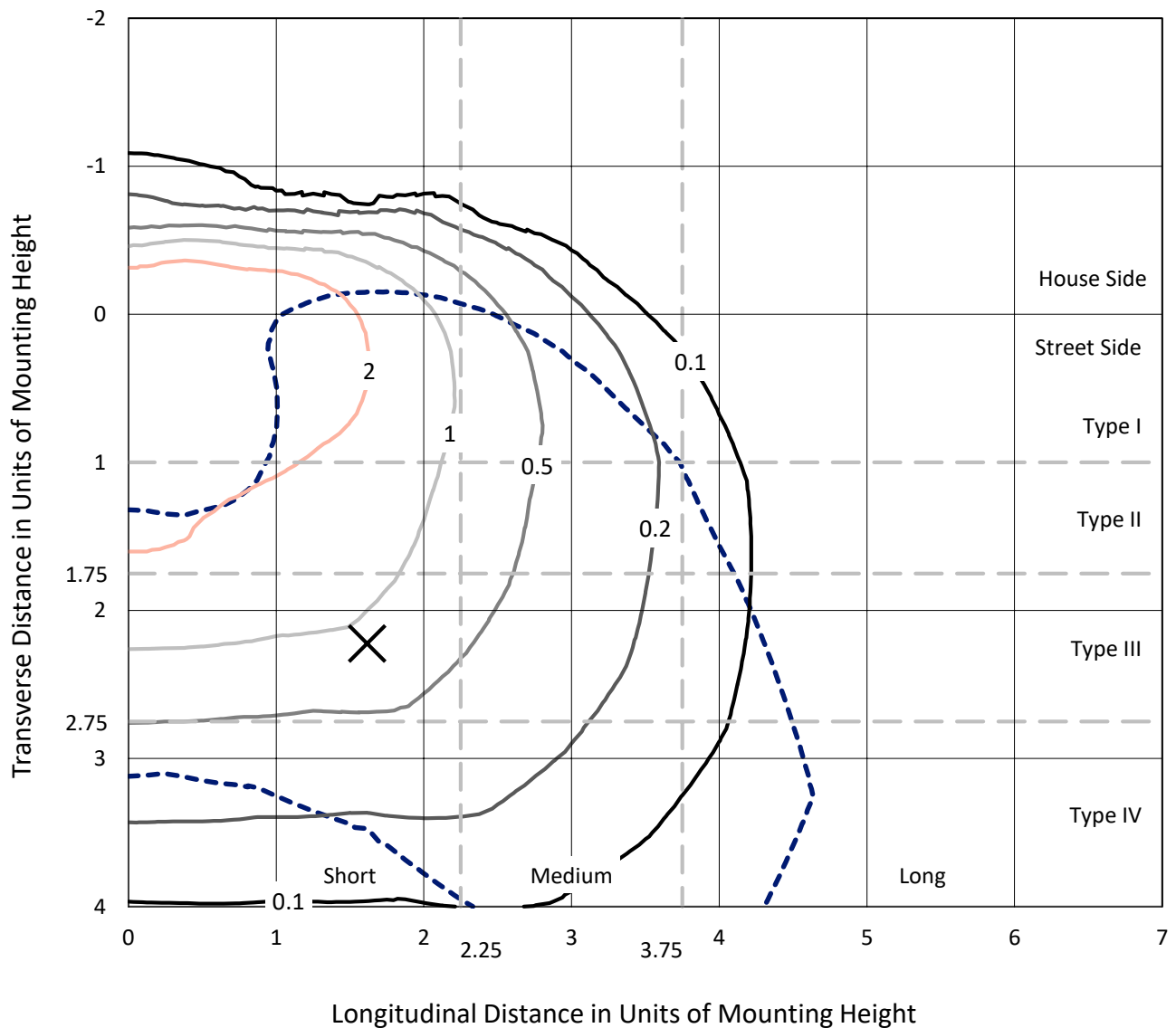
Input Watts (W): 212.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

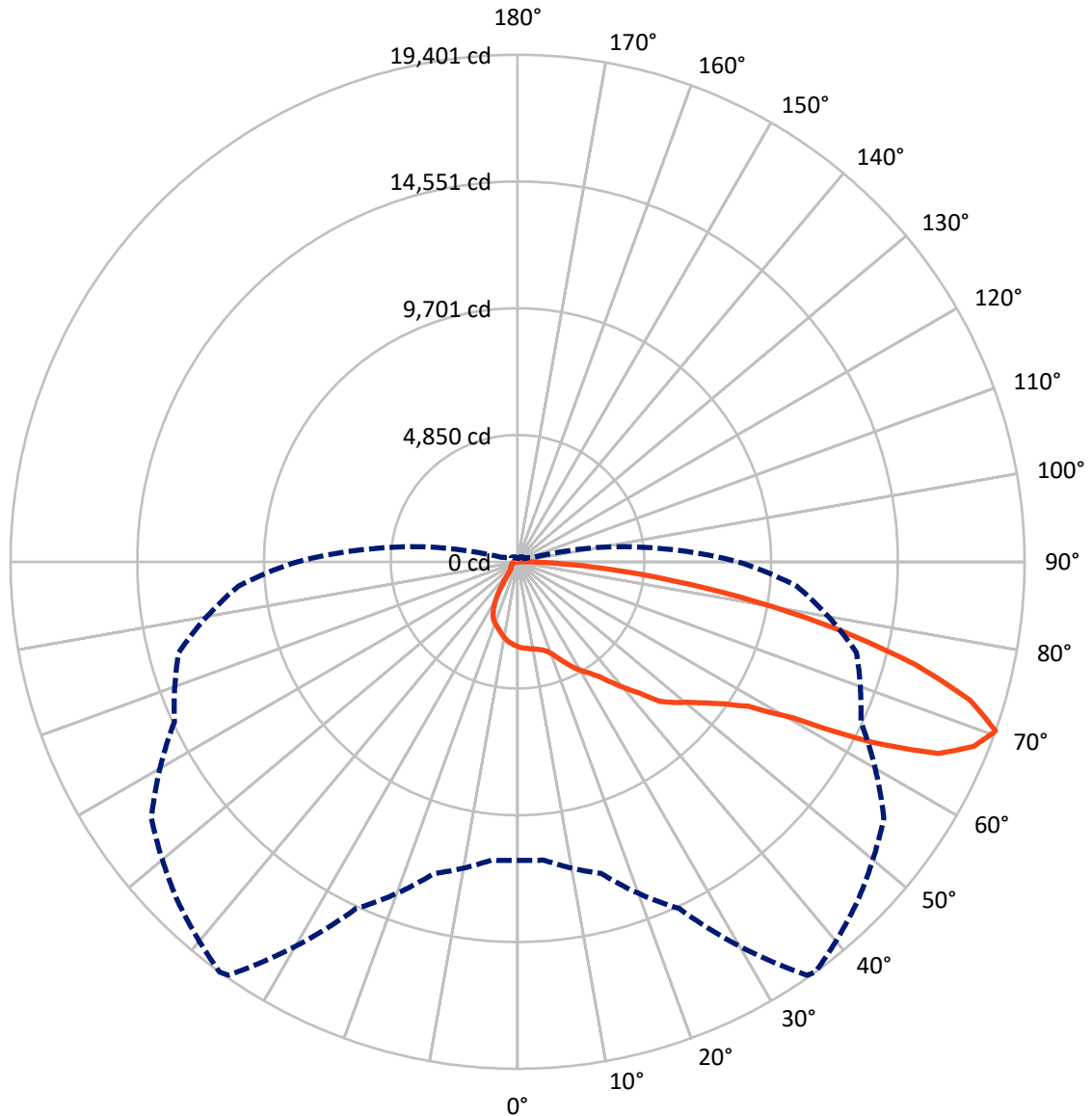
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 4.1 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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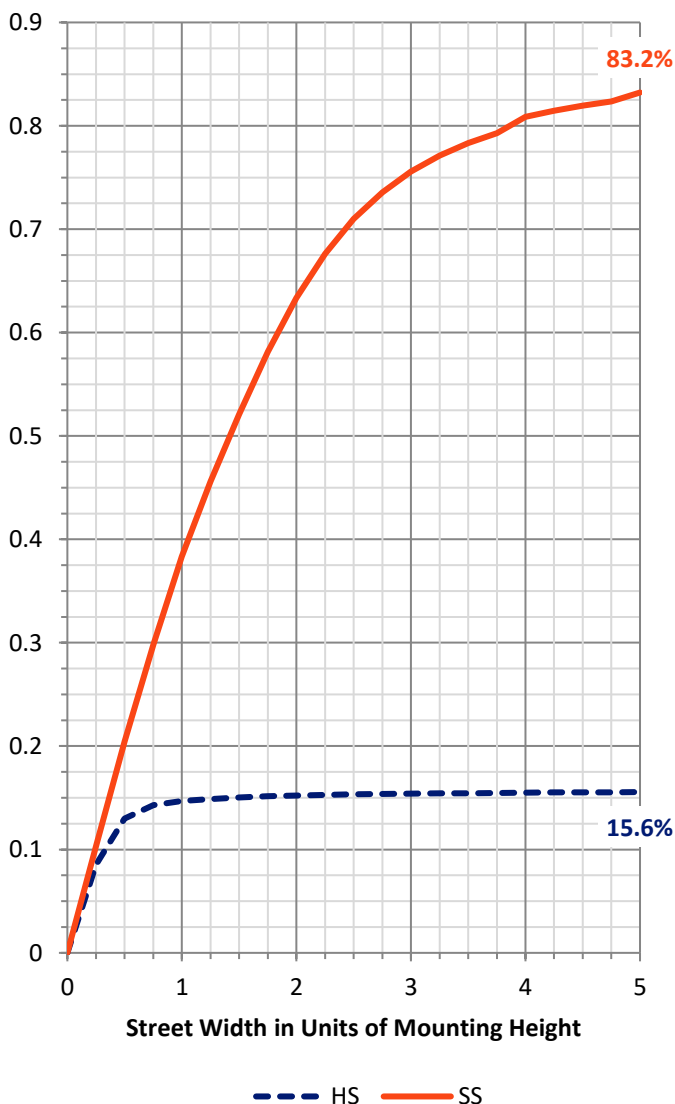
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4785.6	0.0	4785.6
	% Fixture	15.8	0.0	15.8
Street Side	Lumens	25540.3	0.0	25540.3
	% Fixture	84.2	0.0	84.2
Total	Lumens	30326.0	0.0	30326.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	308.2	1.0
10°-20°	916.4	3.0
20°-30°	1648.0	5.4
30°-40°	2607.9	8.6
40°-50°	4075.7	13.4
50°-60°	5852.6	19.3
60°-70°	7938.6	26.2
70°-80°	5875.4	19.4
80°-90°	1103.2	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°	30326.0	100.0
0°-180°	30326.0	100.0

Coefficient of Utilization

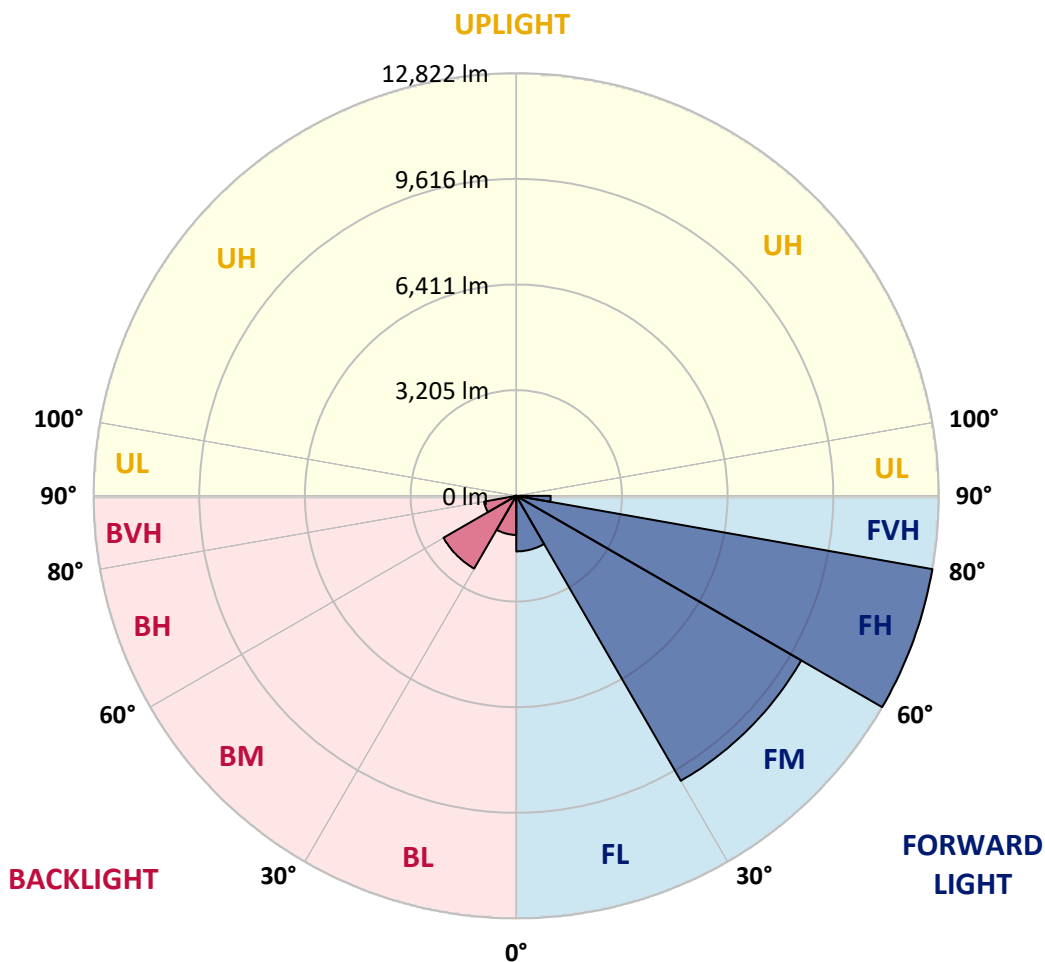


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1686.7	5.6			
FM (30°-60°)	9986.1	32.9			
FH (60°-80°)	12821.5	42.3			G5
FVH (80°-90°)	1046.0	3.4			G5
BL (0°-30°)	1185.9	3.9	B3/2500		
BM (30°-60°)	2550.2	8.4	B3/5000		
BH (60°-80°)	992.4	3.3	B2/1000		G2/1000
BVH (80°-90°)	57.2	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°	3249.3	3249.3	3249.3	3249.3	3249.3	3249.3	3249.3	3249.3	3249.3	3249.3	3249.3
2.5°	3315.1	3308.1	3302.5	3304.6	3300.4	3303.2	3296.9	3289.2	3271.0	3263.3	3259.8
5°	3344.5	3342.4	3336.8	3332.6	3324.9	3322.1	3315.1	3321.4	3311.6	3286.4	3271.7
7.5°	3362.0	3361.3	3355.0	3345.9	3350.1	3353.6	3360.6	3350.8	3338.2	3326.3	3296.2
10°	3369.7	3369.7	3362.0	3366.9	3388.6	3390.7	3394.2	3400.5	3388.6	3371.1	3341.0
12.5°	3389.3	3387.9	3390.7	3406.8	3429.2	3434.1	3451.6	3451.6	3453.0	3442.5	3407.5
15°	3438.3	3438.3	3444.6	3459.3	3497.8	3500.6	3526.5	3549.6	3552.4	3537.0	3510.4
17.5°	3551.7	3548.9	3545.4	3554.5	3595.8	3597.2	3642.0	3671.5	3679.2	3696.0	3691.8
20°	3767.4	3764.6	3763.9	3764.6	3761.8	3757.6	3801.7	3833.2	3872.4	3901.8	3916.5
22.5°	4076.1	4069.8	4069.8	4035.5	4008.9	4013.1	4020.1	4037.6	4089.4	4141.2	4196.5
25°	4408.7	4404.5	4408.0	4320.5	4284.8	4298.8	4289.7	4317.0	4384.9	4429.7	4488.5
27.5°	4680.3	4686.6	4667.0	4599.1	4576.0	4586.5	4565.5	4643.9	4718.8	4797.3	4886.2
30°	5018.5	4984.9	4936.6	4854.0	4845.6	4847.0	4845.6	4971.6	5127.0	5239.0	5362.3
32.5°	5460.3	5465.9	5357.4	5162.7	5091.3	5081.5	5109.5	5294.3	5504.4	5752.9	5915.4
35°	5907.0	5916.1	5836.9	5633.9	5430.2	5399.4	5358.1	5598.2	5901.4	6399.8	6644.9
37.5°	6380.9	6413.1	6319.3	6138.0	5896.5	5867.7	5672.4	5908.4	6356.4	7165.8	7487.1
40°	7015.3	6980.9	6867.5	6637.2	6412.4	6366.2	6139.4	6263.3	6941.7	8124.9	8358.1
42.5°	7482.9	7473.1	7377.2	7149.7	6923.5	6886.4	6703.7	6838.1	7679.0	9097.4	9201.7
45°	7854.0	7914.2	7912.1	7769.3	7641.9	7620.9	7513.0	7711.2	8570.2	10015.3	9964.2
47.5°	8183.8	8220.9	8161.4	8099.0	8039.5	8046.5	8126.4	8533.8	9481.1	10816.9	10590.8
50°	8723.6	8675.9	8409.2	8361.6	8445.6	8449.1	8692.1	9319.4	10484.4	11510.1	11121.5
52.5°	9443.3	9391.5	8843.3	8762.1	8960.9	8975.6	9379.6	10102.1	11519.2	12172.4	11649.4
55°	10514.5	10394.1	9806.6	9442.6	9533.6	9593.1	10082.5	10854.7	12329.2	12756.3	12049.1
57.5°	11830.0	11917.5	11616.5	10793.8	10415.1	10437.5	10886.9	11575.2	13044.0	13267.4	12283.0
60°	13220.5	13199.5	13325.5	12978.9	12253.6	12133.2	11904.2	12310.3	13597.8	13697.9	12523.8
62.5°	13982.2	14104.7	14524.8	14594.1	15248.7	15185.0	13624.4	13221.9	14237.7	13968.2	12589.6
65°	13978.0	14031.2	14813.2	15673.0	17718.1	17699.9	16974.5	14540.2	14714.5	14112.4	12458.0
67.5°	13074.8	13157.4	14071.8	15751.4	18859.3	18837.6	18336.3	16393.4	14864.4	13938.8	11844.0
70°	11428.1	11456.1	12348.1	14647.3	19317.8	19401.2	18383.2	17104.8	14491.9	13422.8	10724.5
72.5°	9427.9	9369.8	10242.1	12508.4	18150.0	18100.3	17606.0	16255.5	13864.6	12420.9	8746.7
75°	6941.7	7103.5	7886.2	10043.3	15540.0	15722.0	15941.1	14956.1	12313.8	10236.5	6048.4
77.5°	4583.7	4789.6	5580.7	7530.5	12302.6	12585.4	13153.2	12720.6	10017.4	7342.9	2880.3
80°	2368.5	2524.0	3236.0	4996.8	8819.5	9227.6	10268.7	9634.4	7102.1	3320.0	644.8
82.5°	896.2	875.9	1450.0	2860.0	5654.9	6026.0	6782.8	5777.4	2527.5	583.2	299.7
85°	393.5	416.6	600.7	1304.3	3233.2	3281.5	3842.3	2252.3	370.4	278.6	203.7
87.5°	170.1	195.3	252.0	375.3	1090.8	1259.5	1558.5	715.5	112.0	96.6	102.2
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°	3249.3	3249.3	3249.3	3249.3	3249.3	3249.3	3249.3	3249.3	3249.3	3249.3	3249.3
2.5°	3253.5	3249.3	3242.3	3224.8	3196.1	3192.6	3189.8	3187.0	3181.4	3184.2	3200.3
5°	3260.5	3252.8	3227.6	3202.4	3177.2	3154.8	3127.5	3117.0	3103.0	3093.9	3110.7
7.5°	3284.3	3268.2	3231.1	3196.8	3128.2	3095.3	3060.2	3018.9	2989.5	2970.6	2987.4
10°	3324.2	3303.9	3257.7	3187.0	3106.5	3016.1	2954.5	2885.9	2829.9	2814.5	2829.9
12.5°	3389.3	3359.2	3305.3	3209.4	3066.5	2948.2	2831.3	2741.0	2650.7	2624.8	2632.5
15°	3495.0	3471.2	3388.6	3256.3	3067.2	2886.6	2713.0	2567.4	2449.0	2407.7	2404.9
17.5°	3664.5	3639.2	3544.0	3349.4	3092.5	2838.3	2596.8	2374.8	2195.6	2104.6	2089.9
20°	3907.4	3872.4	3728.2	3486.6	3147.1	2817.3	2488.9	2190.7	1912.0	1741.2	1715.3
22.5°	4177.6	4140.5	3927.7	3592.3	3186.3	2776.0	2386.0	1987.0	1620.1	1411.5	1382.0
25°	4513.7	4432.5	4118.8	3692.5	3177.2	2689.2	2218.7	1710.4	1312.7	1132.1	1112.5
27.5°	4845.6	4742.6	4313.5	3745.0	3137.3	2551.3	1973.7	1386.9	1027.8	899.7	883.6
30°	5257.2	5058.4	4486.4	3769.5	3036.4	2344.7	1645.3	1054.4	769.4	681.2	665.8
32.5°	5746.6	5445.6	4648.8	3742.2	2868.4	2029.7	1279.1	772.2	572.0	516.7	516.0
35°	6392.1	5920.3	4827.4	3652.6	2610.8	1690.1	896.9	527.9	446.0	427.1	430.6
37.5°	7146.9	6563.0	5008.7	3505.5	2319.5	1293.1	597.9	406.8	392.1	392.8	393.5
40°	7942.9	7272.9	5253.0	3299.0	1966.0	936.1	430.6	365.5	364.8	371.8	373.9
42.5°	8703.3	7962.5	5554.1	3023.8	1595.6	618.9	373.2	348.7	339.6	342.4	344.5
45°	9409.7	8554.1	5810.3	2755.7	1198.6	441.8	366.2	329.1	315.1	313.7	315.1
47.5°	9978.9	9028.1	5966.5	2440.6	854.2	366.9	351.5	310.9	291.3	287.1	285.0
50°	10412.3	9380.3	6023.2	2083.6	577.6	350.1	331.9	289.9	266.0	266.7	266.7
52.5°	10835.1	9700.2	5957.4	1723.7	425.0	335.4	318.6	273.0	247.8	261.1	264.6
55°	11139.7	9834.7	5765.5	1334.4	354.3	317.2	303.9	253.4	235.9	257.6	264.6
57.5°	11317.5	9940.4	5413.4	963.4	324.9	299.7	285.0	235.2	219.1	224.7	228.2
60°	11428.1	9792.6	4947.8	658.8	309.5	285.7	266.0	223.3	201.6	188.3	186.2
62.5°	11367.2	9423.0	4334.5	453.0	293.4	270.2	249.9	212.1	183.4	165.9	164.5
65°	10870.8	8739.0	3327.7	366.9	283.6	263.2	240.1	201.6	170.8	154.0	151.9
67.5°	9950.2	7509.5	1943.5	326.3	279.3	256.2	232.4	191.8	163.8	145.6	142.8
70°	8437.2	5648.6	651.1	291.3	278.6	255.5	226.1	184.8	156.1	137.2	134.4
72.5°	6086.9	3408.2	317.2	256.2	260.4	245.0	221.2	179.2	151.2	127.4	122.5
75°	3459.3	1109.7	286.4	221.2	242.2	233.8	218.4	179.9	153.3	115.5	109.9
77.5°	984.4	324.2	276.5	188.3	228.9	241.5	204.4	162.4	156.8	107.1	100.1
80°	332.6	288.5	266.7	146.3	184.8	199.5	177.1	142.8	158.2	97.3	90.3
82.5°	266.7	289.9	224.0	116.9	140.7	151.2	140.7	128.1	128.1	86.8	81.2
85°	213.5	268.8	142.1	93.1	105.0	116.2	99.4	95.9	89.6	72.8	70.7
87.5°	123.9	84.0	58.8	47.6	44.1	44.8	38.5	46.2	56.7	49.7	49.0
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)