

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: P510410

Luminaire Tested: **CST-CA10-210-727-U-T4-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510410
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-CA10-210-727-U-T4-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (10) 2700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 26153 lumens
Efficiency: N/A
Efficacy: 122.8 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

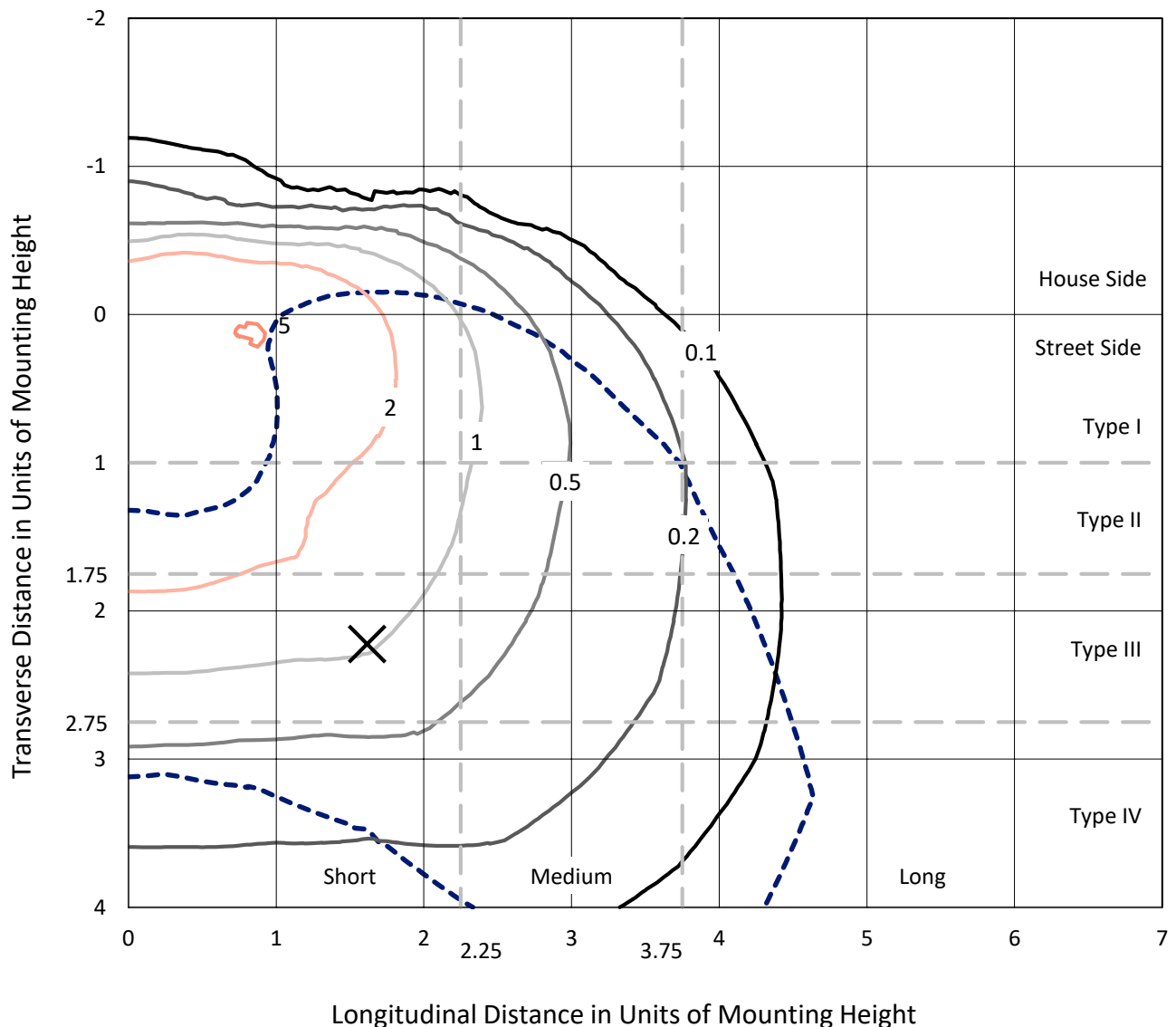
Input Watts (W): 212.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

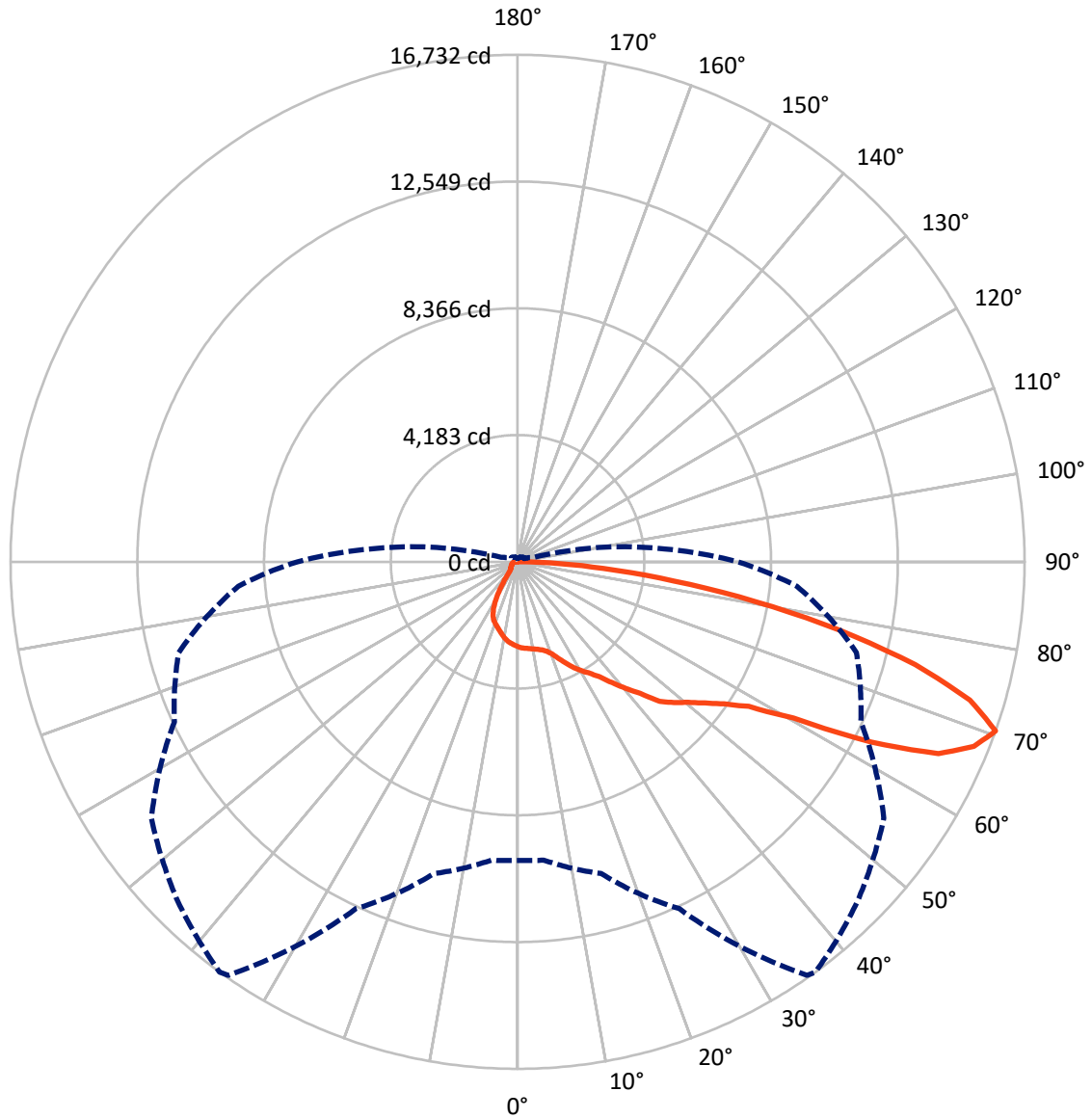
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.1 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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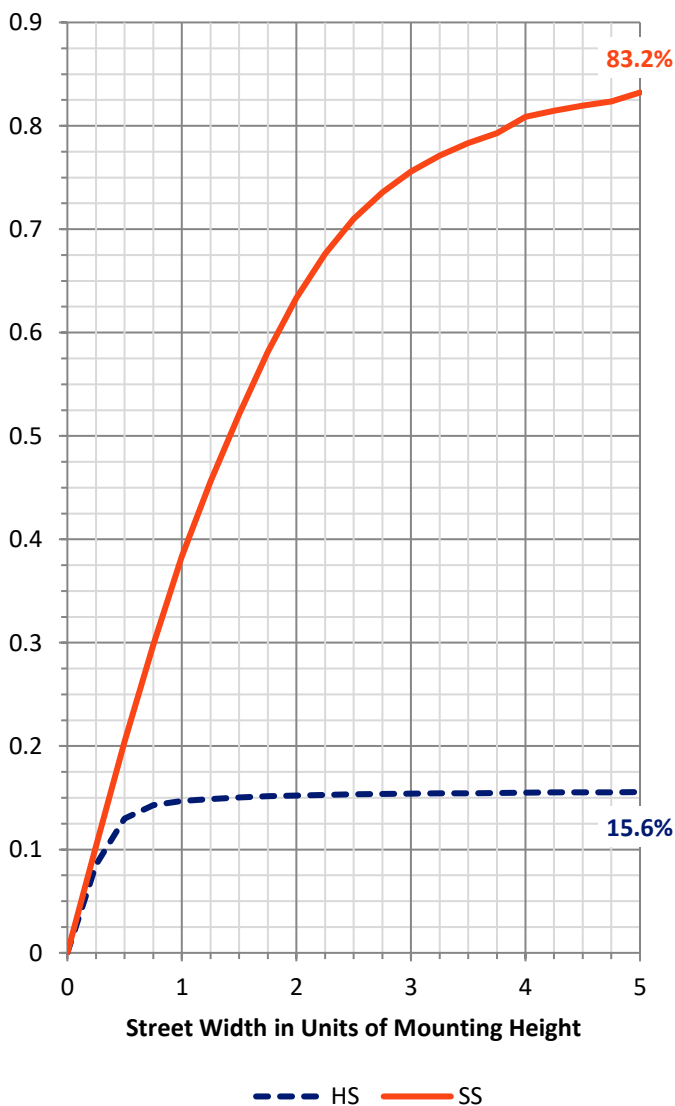
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4127.1	0.0	4127.1
	% Fixture	15.8	0.0	15.8
Street Side	Lumens	22025.9	0.0	22025.9
	% Fixture	84.2	0.0	84.2
Total	Lumens	26153.0	0.0	26153.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	265.8	1.0
10°-20°	790.3	3.0
20°-30°	1421.2	5.4
30°-40°	2249.1	8.6
40°-50°	3514.9	13.4
50°-60°	5047.3	19.3
60°-70°	6846.2	26.2
70°-80°	5066.9	19.4
80°-90°	951.4	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°	26153.0	100.0
0°-180°	26153.0	100.0

Coefficient of Utilization

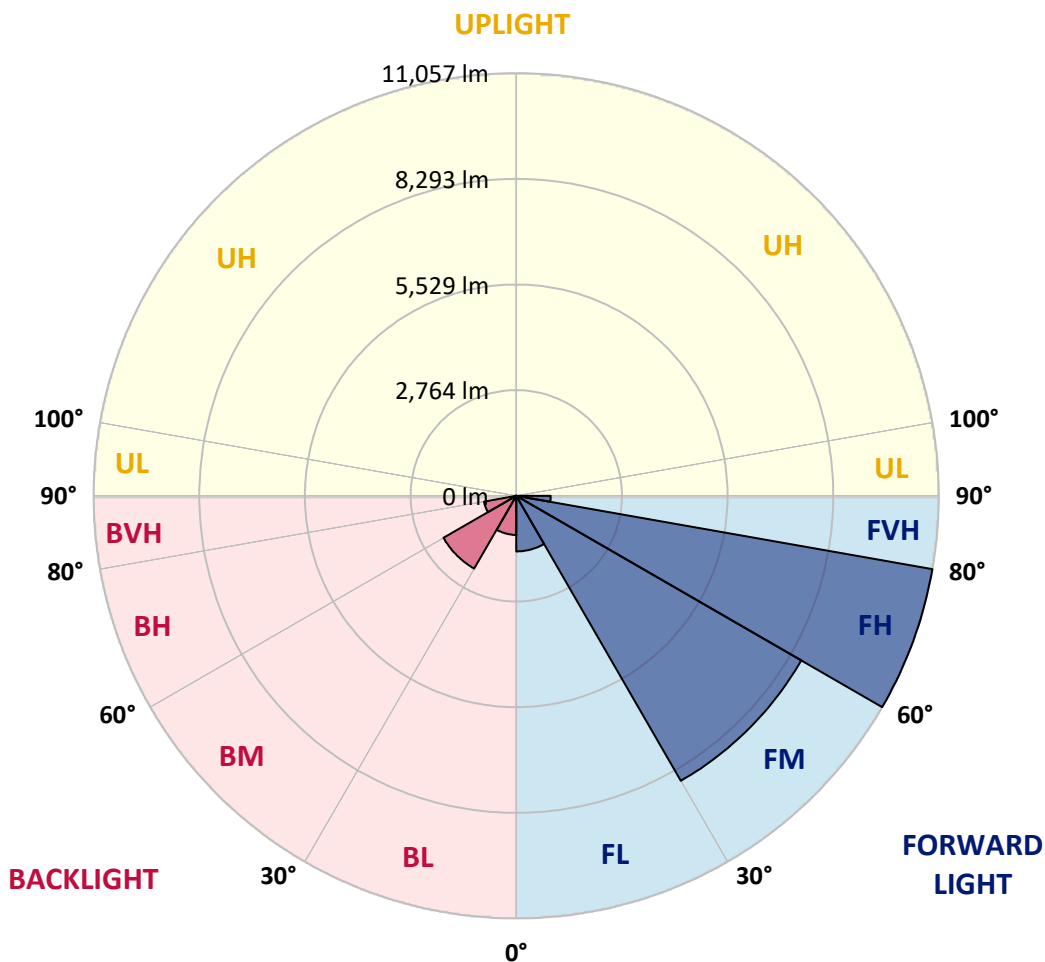


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1454.6	5.6			
FM (30°-60°)	8612.0	32.9			
FH (60°-80°)	11057.2	42.3			G4/12000
FVH (80°-90°)	902.1	3.4			G5
BL (0°-30°)	1022.7	3.9	B3/2500		
BM (30°-60°)	2199.3	8.4	B2/2500		
BH (60°-80°)	855.8	3.3	B2/1000		G2/1000
BVH (80°-90°)	49.3	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°	2802.2	2802.2	2802.2	2802.2	2802.2	2802.2	2802.2	2802.2	2802.2	2802.2	2802.2
2.5°	2858.9	2852.9	2848.1	2849.9	2846.2	2848.7	2843.2	2836.6	2820.9	2814.2	2811.2
5°	2884.3	2882.5	2877.6	2874.0	2867.4	2865.0	2858.9	2864.4	2855.9	2834.2	2821.5
7.5°	2899.4	2898.8	2893.3	2885.5	2889.1	2892.1	2898.2	2889.7	2878.8	2868.6	2842.6
10°	2906.0	2906.0	2899.4	2903.6	2922.3	2924.1	2927.1	2932.6	2922.3	2907.2	2881.3
12.5°	2922.9	2921.7	2924.1	2938.0	2957.3	2961.6	2976.7	2976.7	2977.9	2968.8	2938.6
15°	2965.2	2965.2	2970.6	2983.3	3016.5	3018.9	3041.3	3061.2	3063.6	3050.3	3027.4
17.5°	3063.0	3060.6	3057.6	3065.4	3101.0	3102.2	3140.9	3166.2	3172.9	3187.4	3183.8
20°	3249.0	3246.5	3245.9	3246.5	3244.1	3240.5	3278.5	3305.7	3339.5	3364.9	3377.6
22.5°	3515.2	3509.8	3509.8	3480.2	3457.3	3460.9	3466.9	3482.0	3526.7	3571.4	3619.1
25°	3802.0	3798.4	3801.4	3726.0	3695.2	3707.2	3699.4	3722.9	3781.5	3820.1	3870.9
27.5°	4036.3	4041.7	4024.8	3966.3	3946.3	3955.4	3937.3	4004.9	4069.5	4137.1	4213.8
30°	4327.9	4298.9	4257.3	4186.0	4178.8	4180.0	4178.8	4287.5	4421.5	4518.1	4624.4
32.5°	4708.9	4713.7	4620.2	4452.3	4390.7	4382.3	4406.4	4565.8	4747.0	4961.3	5101.4
35°	5094.1	5102.0	5033.8	4858.7	4683.0	4656.4	4620.8	4827.9	5089.3	5519.2	5730.5
37.5°	5502.9	5530.7	5449.8	5293.4	5085.1	5060.3	4891.9	5095.3	5481.8	6179.7	6456.9
40°	6049.9	6020.3	5922.5	5723.9	5530.1	5490.2	5294.6	5401.5	5986.5	7006.9	7208.0
42.5°	6453.2	6444.8	6362.1	6165.8	5970.8	5938.8	5781.2	5897.2	6622.3	7845.6	7935.5
45°	6773.3	6825.2	6823.4	6700.2	6590.3	6572.2	6479.2	6650.1	7390.9	8637.1	8593.1
47.5°	7057.6	7089.6	7038.3	6984.6	6933.3	6939.3	7008.1	7359.5	8176.4	9328.5	9133.4
50°	7523.2	7482.1	7252.1	7211.0	7283.5	7286.5	7496.0	8037.0	9041.7	9926.2	9591.1
52.5°	8143.8	8099.2	7626.4	7556.4	7727.8	7740.5	8088.9	8712.0	9934.1	10497.4	10046.4
55°	9067.6	8963.8	8457.2	8143.2	8221.7	8273.1	8695.1	9361.1	10632.6	11001.0	10391.1
57.5°	10202.1	10277.6	10018.0	9308.5	8981.9	9001.2	9388.8	9982.4	11249.1	11441.7	10592.8
60°	11401.3	11383.1	11491.8	11193.0	10567.4	10463.6	10266.1	10616.3	11726.7	11813.0	10800.5
62.5°	12058.2	12163.8	12526.1	12585.9	13150.4	13095.5	11749.6	11402.5	12278.6	12046.1	10857.3
65°	12054.6	12100.4	12774.9	13516.3	15280.0	15264.3	14638.8	12539.4	12689.7	12170.5	10743.7
67.5°	11275.7	11346.9	12135.5	13583.9	16264.1	16245.4	15813.1	14137.6	12818.9	12020.7	10214.2
70°	9855.6	9879.7	10648.9	12631.8	16659.6	16731.5	15853.6	14751.1	12497.7	11575.8	9248.8
72.5°	8130.6	8080.4	8832.8	10787.2	15652.5	15609.6	15183.4	14018.7	11956.7	10711.7	7543.1
75°	5986.5	6126.0	6801.0	8661.3	13401.6	13558.6	13747.6	12898.0	10619.4	8827.9	5216.1
77.5°	3953.0	4130.5	4812.8	6494.3	10609.7	10853.6	11343.3	10970.2	8638.9	6332.5	2484.0
80°	2042.6	2176.6	2790.7	4309.2	7605.9	7957.9	8855.7	8308.7	6124.8	2863.1	556.1
82.5°	772.8	755.3	1250.4	2466.5	4876.8	5196.8	5849.5	4982.4	2179.7	503.0	258.4
85°	339.3	359.3	518.0	1124.9	2788.3	2829.9	3313.6	1942.4	319.4	240.3	175.7
87.5°	146.7	168.5	217.4	323.6	940.7	1086.2	1344.0	617.1	96.6	83.3	88.2
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°	2802.2	2802.2	2802.2	2802.2	2802.2	2802.2	2802.2	2802.2	2802.2	2802.2	2802.2
2.5°	2805.8	2802.2	2796.1	2781.0	2756.3	2753.3	2750.8	2748.4	2743.6	2746.0	2759.9
5°	2811.8	2805.2	2783.4	2761.7	2740.0	2720.7	2697.1	2688.0	2676.0	2668.1	2682.6
7.5°	2832.4	2818.5	2786.5	2756.9	2697.7	2669.3	2639.1	2603.5	2578.2	2561.9	2576.3
10°	2866.8	2849.3	2809.4	2748.4	2679.0	2601.1	2548.0	2488.8	2440.5	2427.2	2440.5
12.5°	2922.9	2897.0	2850.5	2767.7	2644.6	2542.5	2441.7	2363.8	2285.9	2263.6	2270.2
15°	3014.1	2993.6	2922.3	2808.2	2645.2	2489.4	2339.7	2214.1	2112.0	2076.4	2074.0
17.5°	3160.2	3138.5	3056.4	2888.5	2666.9	2447.7	2239.4	2048.0	1893.5	1815.0	1802.3
20°	3369.7	3339.5	3215.2	3006.8	2714.0	2429.6	2146.5	1889.2	1648.9	1501.6	1479.3
22.5°	3602.8	3570.8	3387.2	3098.0	2747.8	2394.0	2057.7	1713.5	1397.2	1217.2	1191.9
25°	3892.6	3822.6	3552.1	3184.4	2740.0	2319.1	1913.4	1475.0	1132.1	976.3	959.4
27.5°	4178.8	4090.0	3719.9	3229.6	2705.6	2200.2	1702.1	1196.1	886.4	775.9	762.0
30°	4533.8	4362.3	3869.1	3250.8	2618.6	2022.1	1418.9	909.3	663.6	587.5	574.2
32.5°	4955.9	4696.2	4009.1	3227.2	2473.7	1750.4	1103.1	666.0	493.3	445.6	445.0
35°	5512.6	5105.6	4163.1	3149.9	2251.5	1457.5	773.4	455.3	384.6	368.3	371.3
37.5°	6163.4	5659.9	4319.5	3023.1	2000.3	1115.2	515.6	350.8	338.1	338.7	339.3
40°	6849.9	6272.1	4530.2	2845.0	1695.4	807.3	371.3	315.2	314.6	320.6	322.4
42.5°	7505.6	6866.8	4789.8	2607.7	1376.0	533.7	321.8	300.7	292.8	295.3	297.1
45°	8114.9	7377.0	5010.8	2376.5	1033.7	381.0	315.8	283.8	271.7	270.5	271.7
47.5°	8605.7	7785.8	5145.5	2104.8	736.6	316.4	303.1	268.1	251.2	247.6	245.7
50°	8979.5	8089.5	5194.4	1796.9	498.1	301.9	286.2	250.0	229.4	230.0	230.0
52.5°	9344.2	8365.4	5137.6	1486.5	366.5	289.2	274.7	235.5	213.7	225.2	228.2
55°	9606.8	8481.4	4972.2	1150.8	305.5	273.5	262.0	218.6	203.5	222.2	228.2
57.5°	9760.2	8572.5	4668.5	830.8	280.2	258.4	245.7	202.9	189.0	193.8	196.8
60°	9855.6	8445.1	4266.9	568.2	266.9	246.3	229.4	192.6	173.9	162.4	160.6
62.5°	9803.0	8126.3	3738.0	390.6	253.0	233.1	215.6	182.9	158.2	143.1	141.9
65°	9375.0	7536.4	2869.8	316.4	244.5	227.0	207.1	173.9	147.3	132.8	131.0
67.5°	8581.0	6476.2	1676.1	281.4	240.9	221.0	200.5	165.4	141.3	125.6	123.2
70°	7276.2	4871.3	561.5	251.2	240.3	220.4	195.0	159.4	134.6	118.3	115.9
72.5°	5249.3	2939.2	273.5	221.0	224.6	211.3	190.8	154.6	130.4	109.9	105.7
75°	2983.3	957.0	246.9	190.8	208.9	201.7	188.4	155.2	132.2	99.6	94.8
77.5°	848.9	279.6	238.5	162.4	197.4	208.3	176.3	140.1	135.2	92.4	86.3
80°	286.8	248.8	230.0	126.2	159.4	172.1	152.8	123.2	136.5	83.9	77.9
82.5°	230.0	250.0	193.2	100.8	121.4	130.4	121.4	110.5	110.5	74.9	70.0
85°	184.2	231.9	122.6	80.3	90.6	100.2	85.7	82.7	77.3	62.8	61.0
87.5°	106.9	72.5	50.7	41.1	38.0	38.6	33.2	39.8	48.9	42.9	42.3
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)