

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: P510671

Luminaire Tested: **CST-CA6-230-740-U-T4**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510671
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-12)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA6-230-740-U-T4
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (6) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 33996 lumens
Efficiency: N/A
Efficacy: 149.2 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

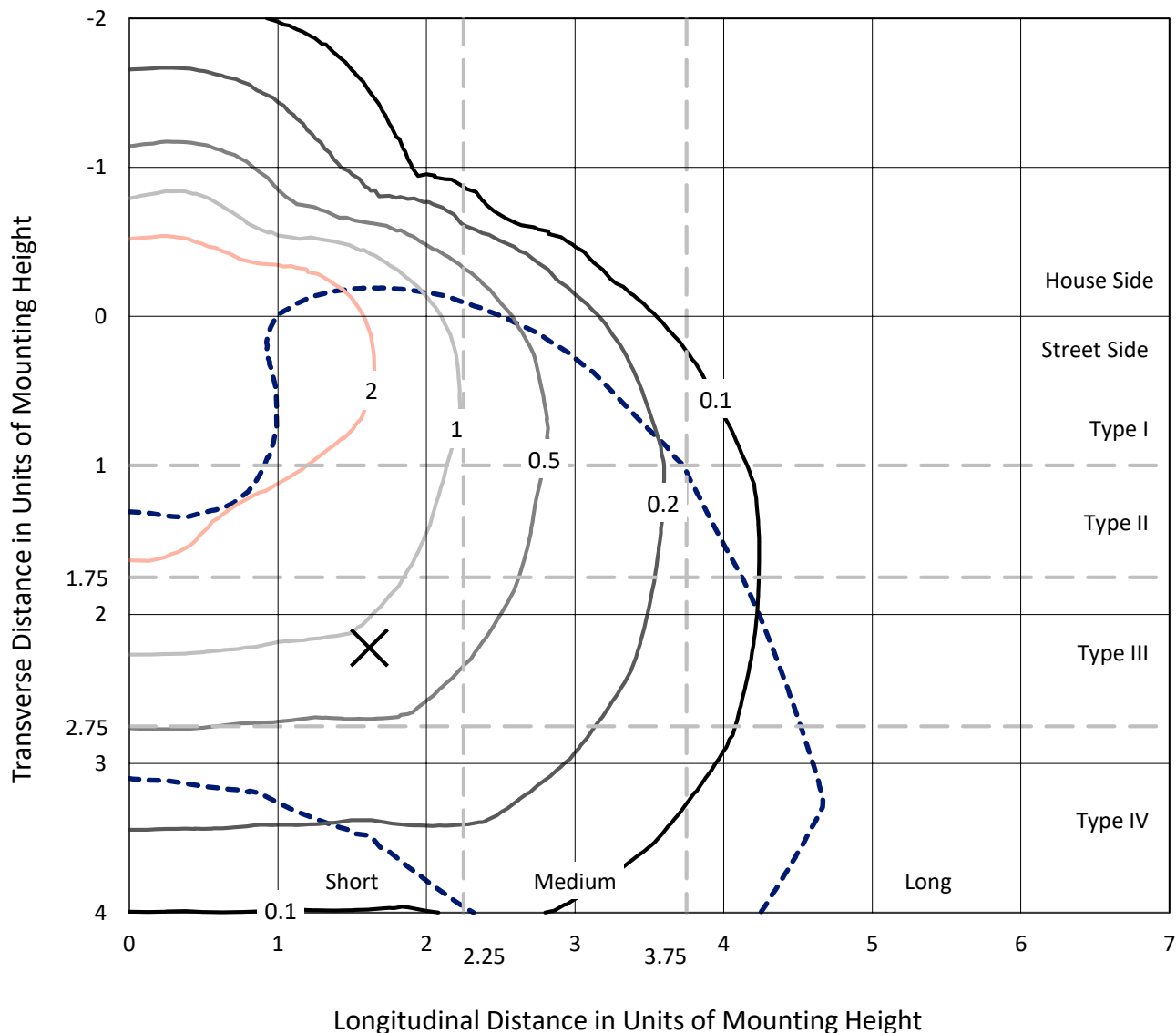
Input Watts (W): 227.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

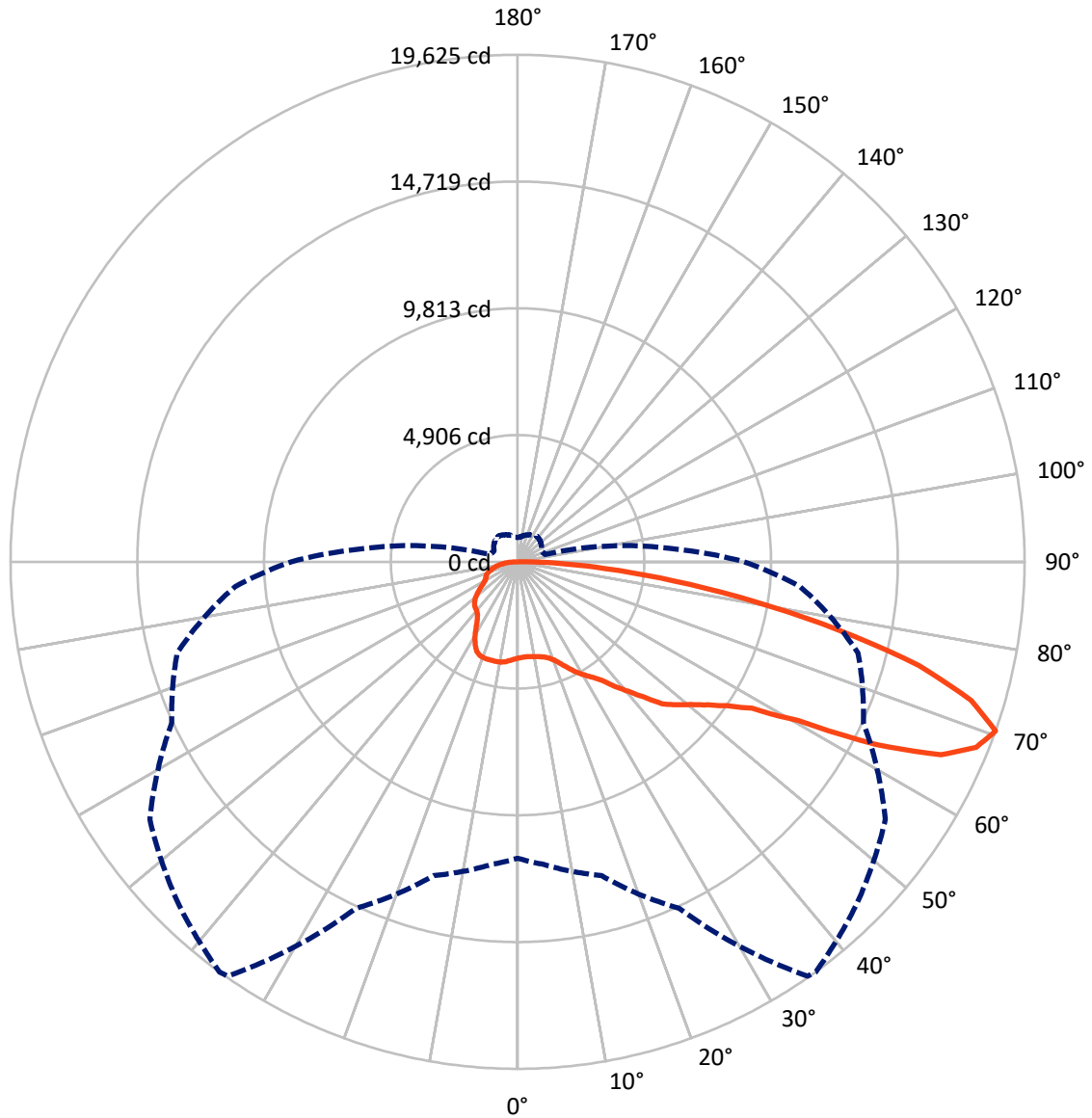
✕ Max cd
 - - - 1/2 Max cd



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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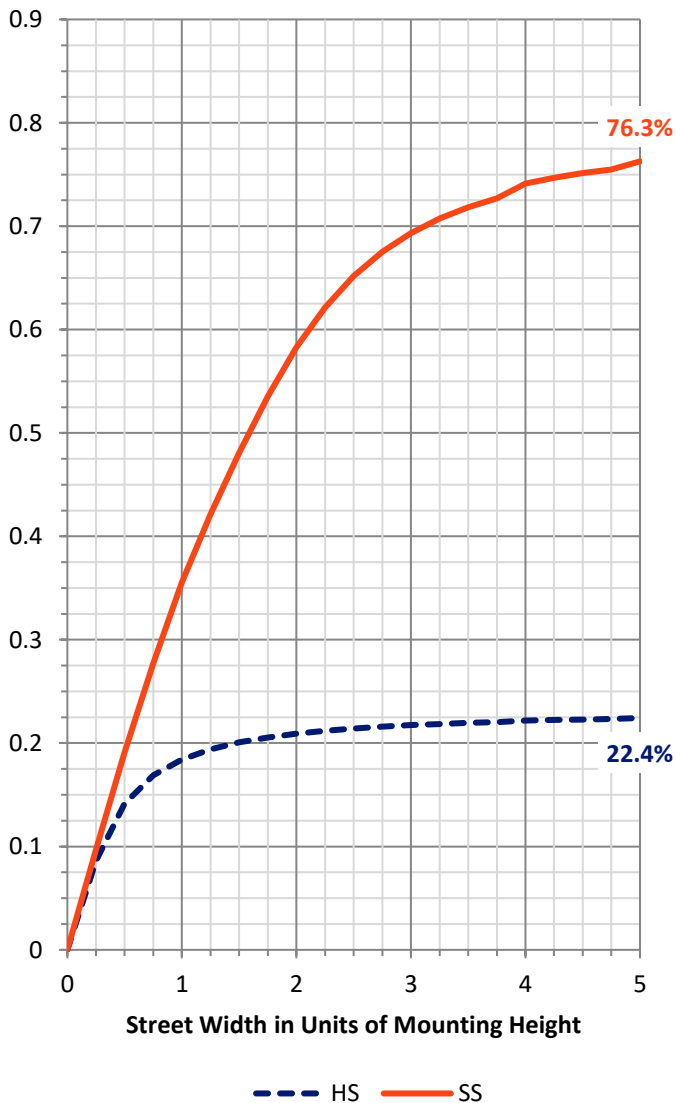
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7745.8	0.0	7745.8
	% Fixture	22.8	0.0	22.8
Street Side	Lumens	26250.2	0.0	26250.2
	% Fixture	77.2	0.0	77.2
Total	Lumens	33996.0	0.0	33996.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	360.8	1.1
10°-20°	1115.2	3.3
20°-30°	2011.7	5.9
30°-40°	3115.7	9.2
40°-50°	4732.8	13.9
50°-60°	6559.9	19.3
60°-70°	8530.1	25.1
70°-80°	6299.4	18.5
80°-90°	1270.4	3.7
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°	33996.0	100.0
0°-180°	33996.0	100.0



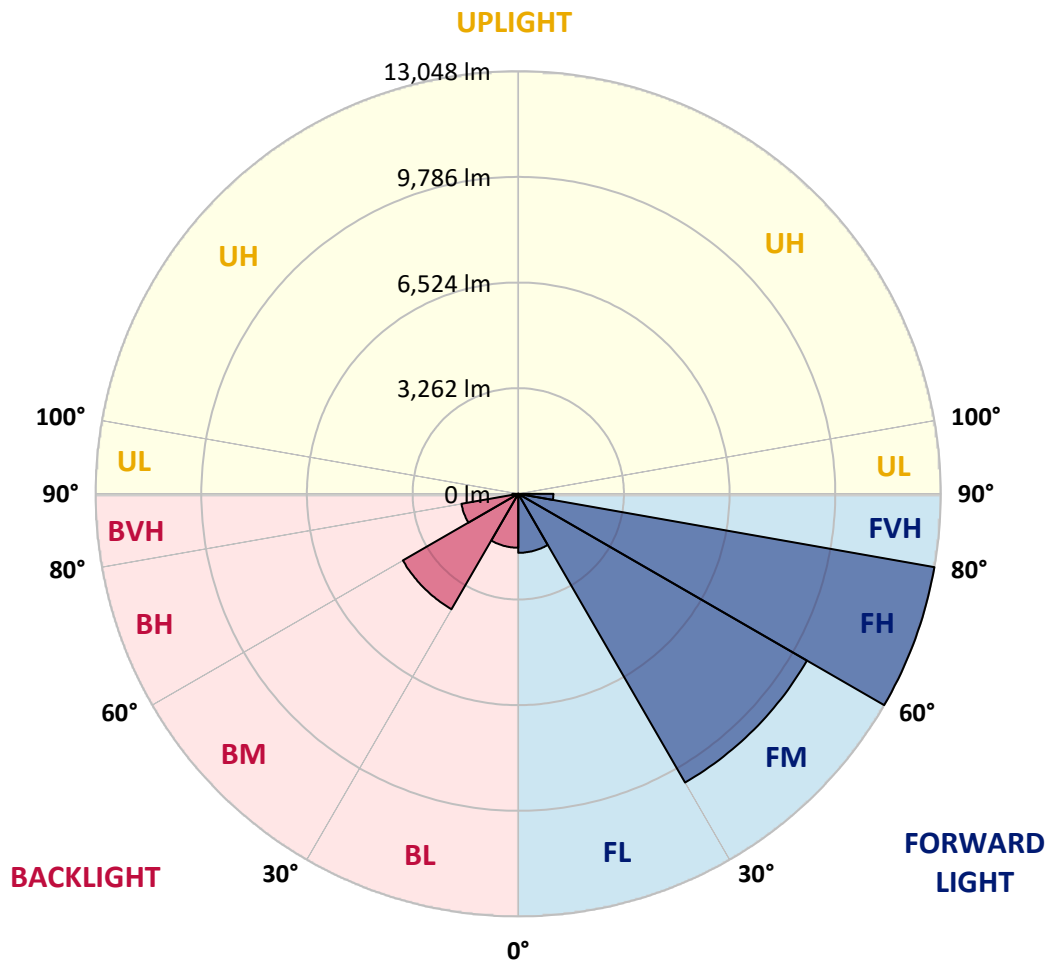
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1822.5	5.4			
FM (30°-60°)	10293.9	30.3			
FH (60°-80°)	13048.4	38.4			G5
FVH (80°-90°)	1085.4	3.2			G5
BL (0°-30°)	1665.1	4.9	B3/2500		
BM (30°-60°)	4114.5	12.1	B3/5000		
BH (60°-80°)	1781.1	5.2	B3/2500		G3/2500
BVH (80°-90°)	185.1	0.5			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 IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	3723.6	3723.6	3723.6	3723.6	3723.6	3723.6	3723.6	3723.6	3723.6	3723.6	3723.6
2.5°	3701.1	3696.1	3693.3	3698.9	3701.1	3701.8	3703.2	3701.8	3698.2	3710.9	3726.4
5°	3701.8	3698.9	3693.3	3688.4	3688.4	3688.4	3689.1	3705.3	3712.3	3710.9	3729.9
7.5°	3707.4	3705.3	3694.7	3691.2	3699.6	3702.5	3716.5	3711.6	3719.4	3732.0	3748.2
10°	3708.1	3705.3	3696.1	3703.9	3727.8	3732.0	3738.4	3752.4	3755.3	3770.7	3786.9
12.5°	3715.1	3715.1	3718.6	3735.5	3760.9	3765.8	3789.7	3801.0	3817.9	3825.6	3845.3
15°	3752.4	3751.7	3760.2	3779.2	3820.0	3822.8	3852.4	3886.2	3898.8	3917.8	3949.5
17.5°	3841.1	3845.3	3846.1	3860.1	3908.7	3910.1	3958.7	3990.3	4019.2	4053.0	4125.5
20°	4051.6	4043.8	4035.4	4035.4	4054.4	4064.3	4101.6	4152.2	4211.4	4271.2	4356.4
22.5°	4316.3	4331.7	4300.8	4284.6	4293.7	4282.5	4310.6	4351.4	4420.4	4509.8	4617.5
25°	4632.3	4633.7	4631.6	4566.1	4545.7	4552.8	4576.0	4614.0	4705.5	4776.6	4932.9
27.5°	4940.6	4934.3	4911.7	4842.8	4823.1	4832.9	4832.2	4937.1	5030.7	5121.5	5305.2
30°	5220.7	5237.6	5197.5	5081.4	5083.5	5082.1	5114.5	5249.6	5420.7	5589.6	5778.2
32.5°	5714.9	5663.5	5609.3	5379.8	5337.6	5332.7	5351.7	5553.0	5806.4	6091.5	6318.1
35°	6180.1	6167.5	6114.0	5881.0	5636.7	5632.5	5606.5	5851.4	6207.6	6735.5	7018.5
37.5°	6656.0	6637.7	6584.9	6386.4	6143.5	6120.3	5901.4	6169.6	6651.1	7488.7	7892.0
40°	7223.3	7212.1	7130.4	6876.3	6627.1	6591.9	6364.6	6503.9	7210.6	8491.7	8776.1
42.5°	7721.0	7718.9	7625.2	7389.4	7177.6	7142.4	6948.8	7093.8	7988.4	9474.4	9641.9
45°	8086.3	8141.9	8146.1	8011.7	7865.3	7834.3	7782.9	7982.8	8888.0	10366.2	10341.5
47.5°	8394.6	8442.5	8392.5	8323.5	8273.5	8275.6	8355.2	8752.2	9776.3	11143.3	10951.8
50°	8909.8	8880.3	8620.5	8579.7	8643.1	8680.4	8911.2	9582.8	10793.4	11872.5	11499.4
52.5°	9653.1	9539.8	9030.2	8947.1	9187.2	9201.2	9568.7	10325.4	11809.9	12498.3	12000.6
55°	10670.3	10576.6	10000.9	9617.2	9738.3	9833.3	10350.7	11086.3	12639.7	13086.7	12386.3
57.5°	12173.8	12180.8	11711.3	10996.2	10584.4	10685.7	11089.8	11826.0	13325.3	13579.4	12627.1
60°	13378.8	13602.0	13461.9	13135.3	12544.0	12475.0	12167.4	12596.8	13911.0	13998.3	12857.2
62.5°	14214.3	14315.7	14797.2	14866.1	15541.9	15570.7	14097.5	13499.9	14554.3	14272.8	12905.8
65°	14172.1	14234.8	14995.7	15922.0	17918.2	18007.6	17145.3	14866.1	14995.0	14395.2	12764.3
67.5°	13185.3	13279.6	14246.7	15978.3	19184.5	19150.7	18603.8	16768.1	15140.0	14198.9	12090.0
70°	11471.3	11762.0	12574.3	14790.8	19580.1	19625.1	18617.2	17375.5	14766.2	13643.5	10965.9
72.5°	9454.6	9546.1	10313.4	12793.9	18423.6	18357.4	17854.2	16573.8	14090.5	12639.0	8998.5
75°	7190.2	7190.2	8119.4	10195.8	15821.3	16053.6	16249.3	15011.1	12482.8	10301.4	6127.4
77.5°	4773.1	4944.1	5692.4	7661.8	12523.6	12695.4	13371.1	12795.3	10220.5	7554.1	2798.7
80°	2531.9	2553.0	3355.4	5091.2	8957.7	9281.5	10210.6	9868.5	7351.4	3539.2	707.4
82.5°	885.5	966.4	1475.4	2950.7	5902.1	6104.1	6773.5	5864.1	2596.6	783.4	391.4
85°	439.9	455.4	649.7	1405.0	3323.1	3420.9	3957.3	2284.1	418.1	342.1	266.1
87.5°	211.9	216.8	249.2	502.6	1444.4	1511.3	1599.9	743.3	154.9	130.2	115.4
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°	3723.6	3723.6	3723.6	3723.6	3723.6	3723.6	3723.6	3723.6	3723.6	3723.6	3723.6
2.5°	3729.9	3736.2	3748.2	3751.7	3743.3	3758.8	3773.6	3786.9	3786.2	3791.1	3808.7
5°	3738.4	3751.7	3764.4	3786.9	3808.7	3821.4	3833.4	3844.6	3848.2	3858.7	3869.3
7.5°	3764.4	3777.8	3806.6	3846.1	3847.5	3879.1	3899.5	3903.1	3905.9	3905.9	3930.5
10°	3804.5	3829.2	3875.6	3903.1	3927.7	3917.1	3938.3	3924.9	3915.0	3919.3	3936.2
12.5°	3873.5	3895.3	3962.2	3992.5	3969.9	3965.7	3944.6	3914.3	3879.8	3876.3	3891.8
15°	3981.9	4022.7	4082.6	4111.4	4055.1	4005.1	3934.0	3872.1	3805.2	3780.6	3790.4
17.5°	4156.5	4205.7	4271.2	4251.5	4148.7	4050.2	3932.6	3801.7	3672.2	3582.1	3605.3
20°	4412.0	4448.6	4502.1	4422.5	4272.6	4110.0	3917.1	3710.2	3491.3	3327.3	3308.3
22.5°	4680.2	4735.8	4703.4	4556.3	4359.9	4133.2	3884.8	3577.2	3238.6	3033.1	3002.1
25°	5003.2	5021.5	4909.6	4687.9	4384.5	4096.6	3779.9	3382.9	2980.3	2786.7	2777.5
27.5°	5346.0	5304.5	5096.2	4748.4	4357.1	3988.2	3569.4	3076.0	2746.6	2575.5	2548.8
30°	5733.2	5636.7	5250.3	4754.8	4253.6	3777.1	3303.4	2836.0	2556.5	2384.8	2357.3
32.5°	6231.5	6004.2	5393.2	4689.3	4035.4	3467.4	2983.8	2631.1	2385.5	2213.0	2188.4
35°	6868.6	6484.9	5544.5	4571.1	3766.5	3157.6	2719.1	2457.3	2246.8	2039.2	2006.1
37.5°	7602.7	7155.7	5725.4	4421.8	3471.6	2885.2	2540.3	2346.8	2144.0	1908.9	1869.5
40°	8455.8	7827.3	6004.2	4243.7	3206.9	2688.9	2453.8	2308.8	2087.0	1842.1	1797.0
42.5°	9194.9	8537.5	6335.7	4052.3	2957.0	2525.6	2415.0	2283.4	2051.1	1792.1	1740.7
45°	9878.4	9123.8	6659.5	3820.0	2693.8	2413.6	2368.6	2220.1	1987.8	1730.2	1676.7
47.5°	10433.8	9597.5	6941.1	3606.7	2483.3	2310.9	2267.2	2099.7	1881.5	1655.5	1616.1
50°	10860.3	9953.7	7095.2	3437.1	2260.9	2194.0	2136.3	1963.9	1754.1	1559.1	1525.3
52.5°	11296.7	10310.6	7171.2	3445.5	2053.9	2020.2	1961.0	1813.2	1652.7	1502.8	1466.2
55°	11550.8	10457.0	7091.0	3240.7	1863.9	1824.5	1773.1	1696.4	1600.6	1467.6	1433.1
57.5°	11699.3	10547.8	6846.7	2643.1	1635.1	1597.8	1606.3	1599.9	1521.1	1381.0	1349.4
60°	11806.3	10350.7	6346.3	1942.7	1440.2	1412.0	1481.7	1459.2	1390.9	1281.8	1255.0
62.5°	11719.8	9975.5	5445.3	1460.6	1281.1	1340.9	1402.1	1360.6	1267.7	1168.5	1137.5
65°	11191.8	9239.3	4138.9	1173.4	1229.7	1312.1	1361.3	1294.5	1200.1	1082.6	1068.5
67.5°	10231.0	7904.7	2441.1	1075.5	1191.0	1278.3	1319.1	1230.4	1147.3	1034.7	1017.8
70°	8764.8	5917.6	1090.3	1001.6	1123.4	1210.0	1236.7	1153.0	1062.9	957.3	940.4
72.5°	6523.6	3568.0	734.9	924.9	1023.5	1100.2	1129.7	1041.1	977.0	929.1	924.2
75°	3622.9	1238.8	677.8	837.6	914.4	983.3	1019.9	957.3	906.6	841.1	814.4
77.5°	1153.7	526.5	644.1	748.9	846.1	903.1	897.5	803.1	786.9	707.4	700.4
80°	460.3	458.9	595.5	613.1	722.2	770.1	757.4	638.4	659.5	613.1	594.8
82.5°	361.1	420.2	477.2	468.1	561.7	618.0	600.4	468.8	530.0	487.1	445.6
85°	274.5	368.1	306.2	304.8	392.1	458.9	470.2	360.4	361.1	328.7	292.8
87.5°	141.5	135.9	117.5	116.8	130.9	186.5	228.8	204.8	161.9	121.8	116.8
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)