

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: P510511

Luminaire Tested: **CST-CA10-310-760-U-T4**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510511
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-CA10-310-760-U-T4
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: 47652 lumens
Efficiency: N/A
Efficacy: 152.5 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B4 - U0 - G5

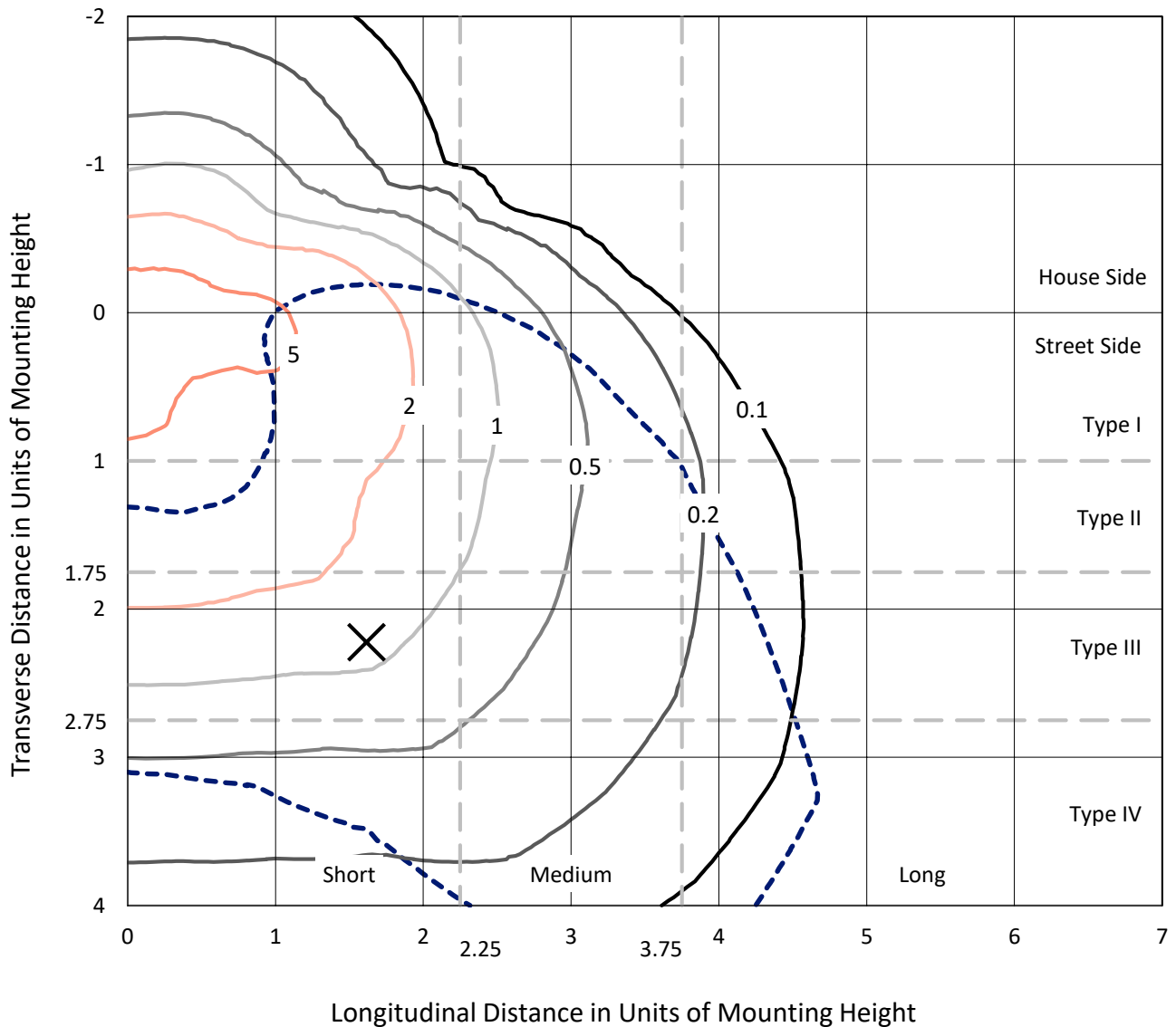
Input Watts (W): 312.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

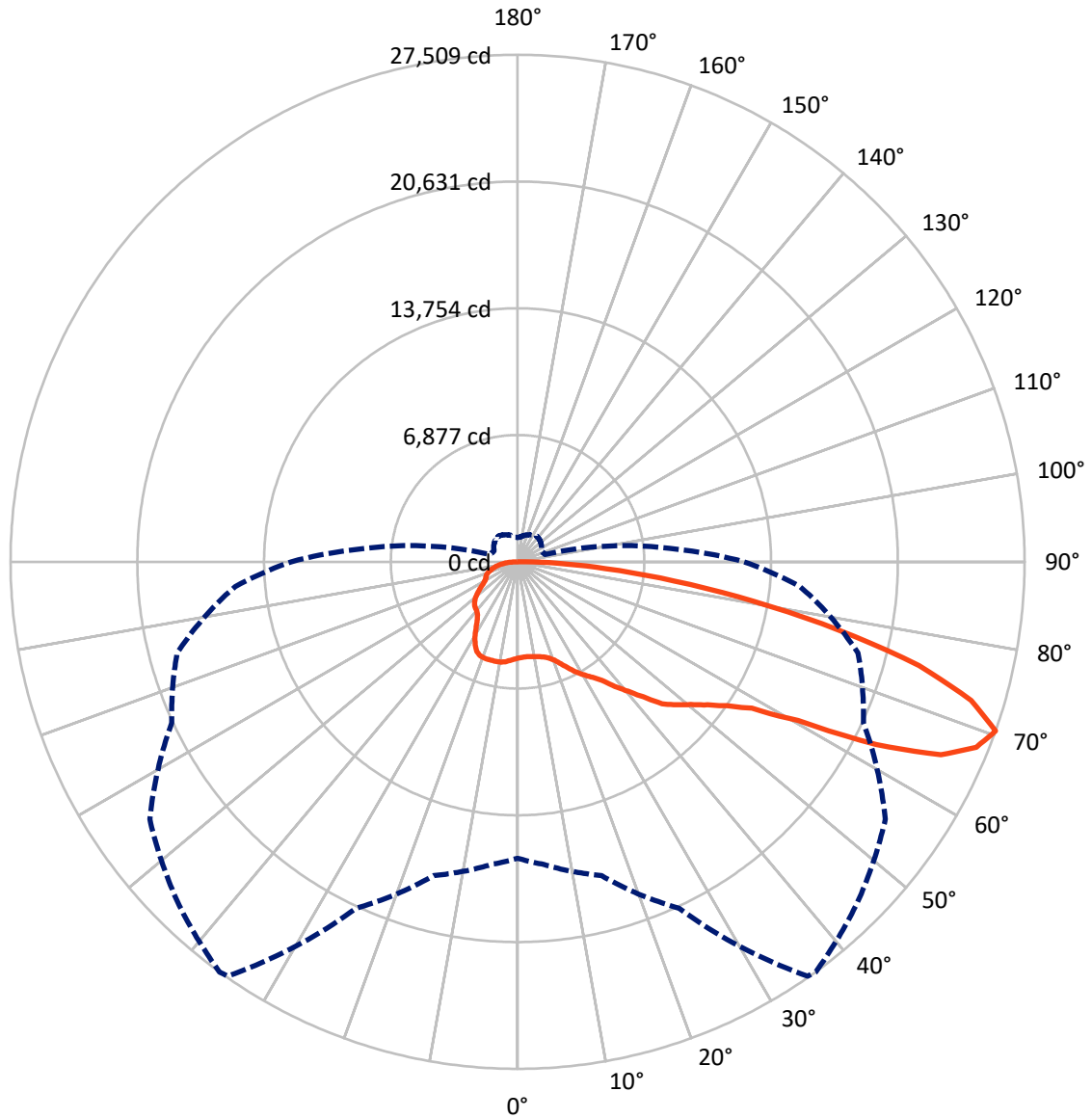
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 6 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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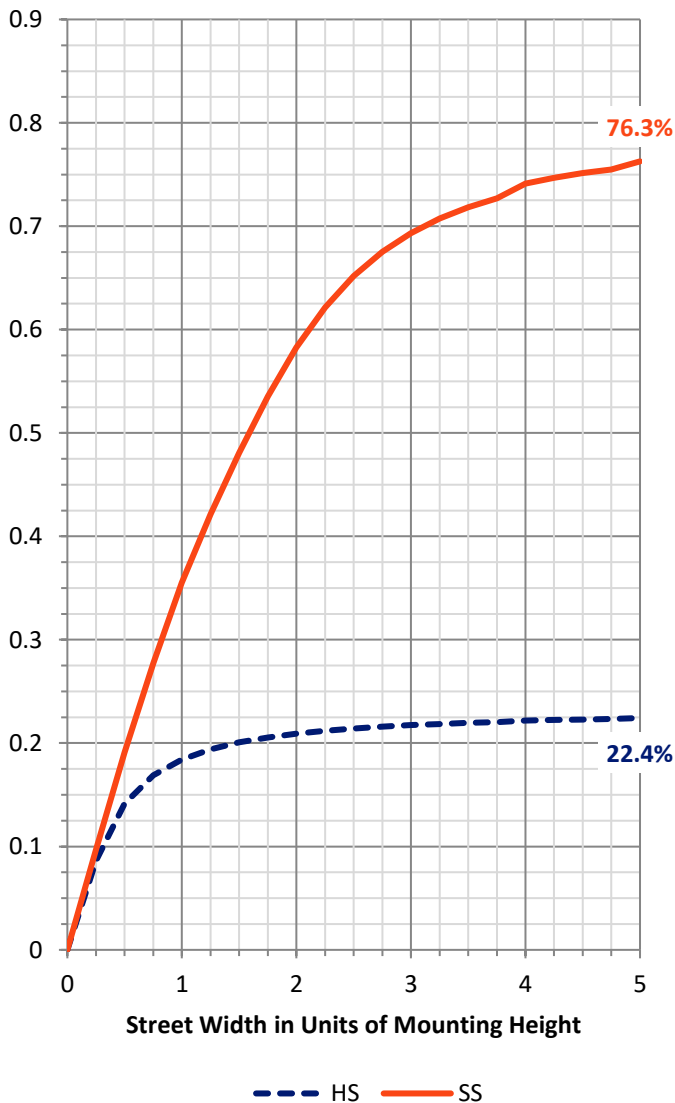
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10857.2	0.0	10857.2
	% Fixture	22.8	0.0	22.8
Street Side	Lumens	36794.8	0.0	36794.8
	% Fixture	77.2	0.0	77.2
Total	Lumens	47652.0	0.0	47652.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	505.7	1.1
10°-20°	1563.2	3.3
20°-30°	2819.8	5.9
30°-40°	4367.3	9.2
40°-50°	6633.9	13.9
50°-60°	9195.0	19.3
60°-70°	11956.6	25.1
70°-80°	8829.8	18.5
80°-90°	1780.8	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°	47652.0	100.0
0°-180°	47652.0	100.0

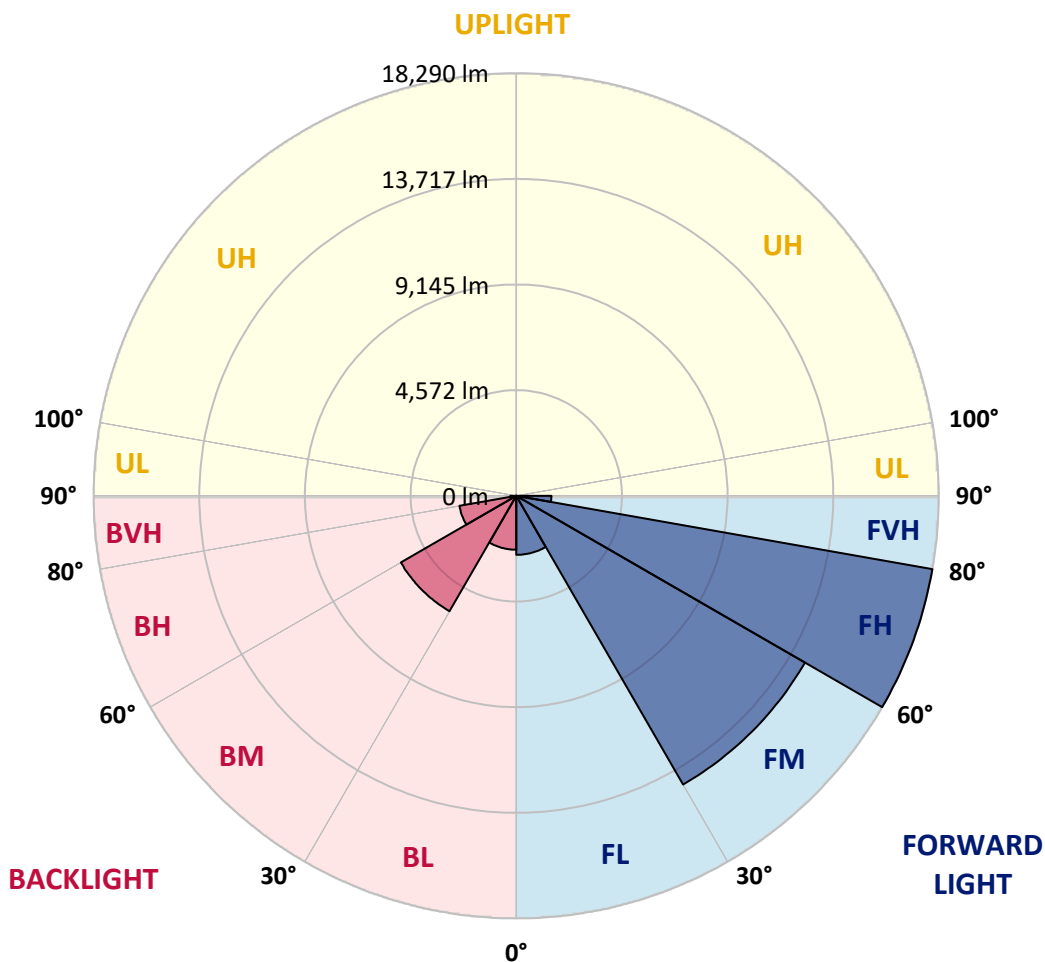


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2554.6	5.4			
FM (30°-60°)	14428.9	30.3			
FH (60°-80°)	18289.9	38.4			G5
FVH (80°-90°)	1521.4	3.2			G5
BL (0°-30°)	2334.0	4.9	B3/2500		
BM (30°-60°)	5767.2	12.1	B4/8500		
BH (60°-80°)	2496.6	5.2	B3/2500		G3/2500
BVH (80°-90°)	259.4	0.5			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5
 Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	5219.3	5219.3	5219.3	5219.3	5219.3	5219.3	5219.3	5219.3	5219.3	5219.3	5219.3
2.5°	5187.7	5180.8	5176.9	5184.8	5187.7	5188.7	5190.7	5188.7	5183.8	5201.6	5223.3
5°	5188.7	5184.8	5176.9	5170.0	5170.0	5170.0	5171.0	5193.7	5203.5	5201.6	5228.2
7.5°	5196.6	5193.7	5178.9	5173.9	5185.8	5189.7	5209.4	5202.5	5213.4	5231.2	5253.8
10°	5197.6	5193.7	5180.8	5191.7	5225.2	5231.2	5240.0	5259.8	5263.7	5285.4	5308.1
12.5°	5207.5	5207.5	5212.4	5236.1	5271.6	5278.5	5312.1	5327.8	5351.5	5362.4	5390.0
15°	5259.8	5258.8	5270.6	5297.3	5354.5	5358.4	5399.9	5447.2	5465.0	5491.6	5536.0
17.5°	5384.1	5390.0	5391.0	5410.7	5478.8	5480.8	5548.9	5593.3	5633.7	5681.1	5782.7
20°	5679.1	5668.2	5656.4	5656.4	5683.0	5696.8	5749.1	5820.2	5903.1	5986.9	6106.3
22.5°	6050.1	6071.8	6028.4	6005.7	6018.5	6002.7	6042.2	6099.4	6196.1	6321.4	6472.3
25°	6493.1	6495.0	6492.1	6400.3	6371.7	6381.6	6414.1	6467.4	6595.7	6695.3	6914.4
27.5°	6925.2	6916.3	6884.8	6788.1	6760.4	6774.3	6773.3	6920.3	7051.5	7178.8	7436.3
30°	7317.9	7341.6	7285.3	7122.5	7125.5	7123.5	7168.9	7358.3	7598.1	7834.9	8099.3
32.5°	8010.5	7938.5	7862.5	7540.9	7481.7	7474.8	7501.4	7783.6	8138.8	8538.4	8856.1
35°	8662.7	8644.9	8569.9	8243.4	7901.0	7895.1	7858.6	8201.9	8701.2	9441.1	9837.8
37.5°	9329.6	9304.0	9230.0	8951.8	8611.4	8578.8	8272.0	8647.9	9322.7	10496.8	11062.2
40°	10124.9	10109.1	9994.6	9638.5	9289.2	9239.9	8921.2	9116.5	10107.1	11902.8	12301.4
42.5°	10822.4	10819.5	10688.2	10357.7	10060.7	10011.4	9740.1	9943.3	11197.4	13280.1	13515.0
45°	11334.5	11412.4	11418.4	11229.9	11024.7	10981.3	10909.3	11189.5	12458.3	14530.2	14495.7
47.5°	11766.6	11833.7	11763.7	11667.0	11596.9	11599.9	11711.4	12267.9	13703.4	15619.5	15351.1
50°	12488.9	12447.4	12083.4	12026.1	12114.9	12167.2	12490.8	13432.1	15129.1	16641.6	16118.7
52.5°	13530.8	13371.9	12657.6	12541.2	12877.6	12897.3	13412.4	14473.0	16553.8	17518.7	16821.2
55°	14956.4	14825.2	14018.2	13480.4	13650.1	13783.3	14508.5	15539.5	17717.1	18343.6	17361.9
57.5°	17063.9	17073.8	16415.7	15413.3	14836.1	14978.2	15544.5	16576.5	18678.0	19034.2	17699.3
60°	18753.0	19065.8	18869.5	18411.7	17582.9	17486.2	17055.0	17656.9	19498.9	19621.3	18021.9
62.5°	19924.2	20066.2	20741.1	20837.8	21785.0	21825.4	19760.4	18922.7	20400.7	20006.1	18090.0
65°	19865.0	19952.8	21019.3	22317.8	25115.9	25241.2	24032.5	20837.8	21018.3	20177.7	17891.7
67.5°	18481.7	18613.9	19969.6	22396.7	26890.8	26843.5	26076.8	23503.7	21221.6	19902.5	16946.5
70°	16079.2	16486.7	17625.3	20732.2	27445.3	27508.5	26095.6	24355.2	20697.7	19124.0	15370.8
72.5°	13252.5	13380.8	14456.2	17933.1	25824.3	25731.5	25026.1	23231.4	19750.5	17716.1	12613.2
75°	10078.5	10078.5	11380.9	14291.5	22176.7	22502.3	22776.5	21041.0	17497.0	14439.4	8588.7
77.5°	6690.4	6930.1	7978.9	10739.6	17554.3	17795.0	18742.2	17935.1	14326.0	10588.6	3922.9
80°	3548.9	3578.5	4703.3	7136.4	12556.0	13009.8	14312.2	13832.7	10304.4	4960.8	991.6
82.5°	1241.2	1354.7	2068.0	4136.0	8273.0	8556.1	9494.4	8219.7	3639.7	1098.1	548.6
85°	616.6	638.4	910.7	1969.3	4657.9	4795.1	5546.9	3201.6	586.1	479.5	372.9
87.5°	297.0	303.9	349.3	704.5	2024.6	2118.3	2242.6	1041.9	217.1	182.5	161.8
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°	5219.3	5219.3	5219.3	5219.3	5219.3	5219.3	5219.3	5219.3	5219.3	5219.3	5219.3
2.5°	5228.2	5237.1	5253.8	5258.8	5246.9	5268.6	5289.4	5308.1	5307.1	5314.0	5338.7
5°	5240.0	5258.8	5276.5	5308.1	5338.7	5356.5	5373.2	5389.0	5393.9	5408.7	5423.5
7.5°	5276.5	5295.3	5335.7	5391.0	5393.0	5437.4	5466.0	5470.9	5474.9	5474.9	5509.4
10°	5332.8	5367.3	5432.4	5470.9	5505.4	5490.6	5520.2	5501.5	5487.7	5493.6	5517.3
12.5°	5429.5	5460.1	5553.8	5596.2	5564.6	5558.7	5529.1	5486.7	5438.3	5433.4	5455.1
15°	5581.4	5638.6	5722.5	5763.0	5684.0	5614.0	5514.3	5427.5	5333.8	5299.2	5313.0
17.5°	5826.1	5895.2	5986.9	5959.3	5815.2	5677.1	5512.3	5328.8	5147.3	5021.0	5053.6
20°	6184.2	6235.6	6310.5	6199.0	5988.9	5761.0	5490.6	5200.6	4893.7	4663.8	4637.2
22.5°	6560.2	6638.1	6592.7	6386.5	6111.2	5793.5	5445.3	5014.1	4539.5	4251.4	4208.0
25°	7013.0	7038.7	6881.8	6571.0	6145.8	5742.2	5298.2	4741.8	4177.4	3906.1	3893.3
27.5°	7493.5	7435.3	7143.3	6655.9	6107.3	5590.3	5003.2	4311.6	3849.9	3610.1	3572.6
30°	8036.2	7901.0	7359.3	6664.7	5962.3	5294.3	4630.3	3975.2	3583.5	3342.7	3304.3
32.5°	8734.7	8416.0	7559.6	6573.0	5656.4	4860.2	4182.4	3688.1	3343.7	3102.0	3067.5
35°	9627.6	9089.9	7771.7	6407.2	5279.5	4426.1	3811.4	3444.4	3149.3	2858.3	2811.9
37.5°	10656.7	10030.2	8025.3	6198.1	4866.1	4044.2	3560.8	3289.5	3005.3	2675.8	2620.5
40°	11852.5	10971.4	8416.0	5948.4	4495.1	3769.0	3439.4	3236.2	2925.4	2582.0	2518.9
42.5°	12888.5	11966.9	8880.7	5680.1	4144.9	3540.1	3385.2	3200.7	2875.1	2512.0	2440.0
45°	13846.5	12788.8	9334.6	5354.5	3775.9	3383.2	3320.0	3111.9	2786.3	2425.2	2350.2
47.5°	14624.9	13452.8	9729.2	5055.5	3480.9	3239.1	3178.0	2943.1	2637.3	2320.6	2265.3
50°	15222.8	13952.0	9945.3	4817.8	3169.1	3075.4	2994.4	2752.7	2458.7	2185.4	2138.0
52.5°	15834.6	14452.3	10051.9	4829.6	2879.0	2831.7	2748.8	2541.6	2316.6	2106.5	2055.2
55°	16190.7	14657.5	9939.4	4542.5	2612.6	2557.4	2485.3	2377.8	2243.6	2057.1	2008.8
57.5°	16398.9	14784.8	9597.0	3704.8	2292.0	2239.7	2251.5	2242.6	2132.1	1935.8	1891.4
60°	16548.9	14508.5	8895.5	2723.1	2018.7	1979.2	2076.9	2045.3	1949.6	1796.7	1759.2
62.5°	16427.5	13982.6	7632.6	2047.3	1795.7	1879.5	1965.4	1907.2	1776.9	1637.8	1594.4
65°	15687.5	12950.6	5801.4	1644.7	1723.7	1839.1	1908.2	1814.4	1682.2	1517.4	1497.7
67.5°	14340.8	11079.9	3421.7	1507.6	1669.4	1791.7	1849.0	1724.6	1608.2	1450.4	1426.7
70°	12285.6	8294.7	1528.3	1404.0	1574.7	1696.0	1733.5	1616.1	1489.8	1341.8	1318.1
72.5°	9144.2	5001.3	1030.1	1296.4	1434.6	1542.1	1583.6	1459.2	1369.5	1302.4	1295.5
75°	5078.2	1736.5	950.1	1174.1	1281.6	1378.3	1429.6	1341.8	1270.8	1179.0	1141.5
77.5°	1617.1	738.0	902.8	1049.8	1185.9	1265.9	1258.0	1125.8	1103.1	991.6	981.7
80°	645.3	643.3	834.7	859.4	1012.3	1079.4	1061.6	894.9	924.5	859.4	833.7
82.5°	506.1	589.0	668.9	656.1	787.3	866.3	841.6	657.1	742.9	682.8	624.5
85°	384.8	516.0	429.2	427.2	549.6	643.3	659.1	505.2	506.1	460.8	410.4
87.5°	198.3	190.4	164.8	163.8	183.5	261.5	320.7	287.1	226.9	170.7	163.8
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)