

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: P510461

Luminaire Tested: **CST-CA10-310-722-U-T4**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510461
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-CA10-310-722-U-T4
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (10) 2200K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 38963 lumens
Efficiency: N/A
Efficacy: 124.7 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

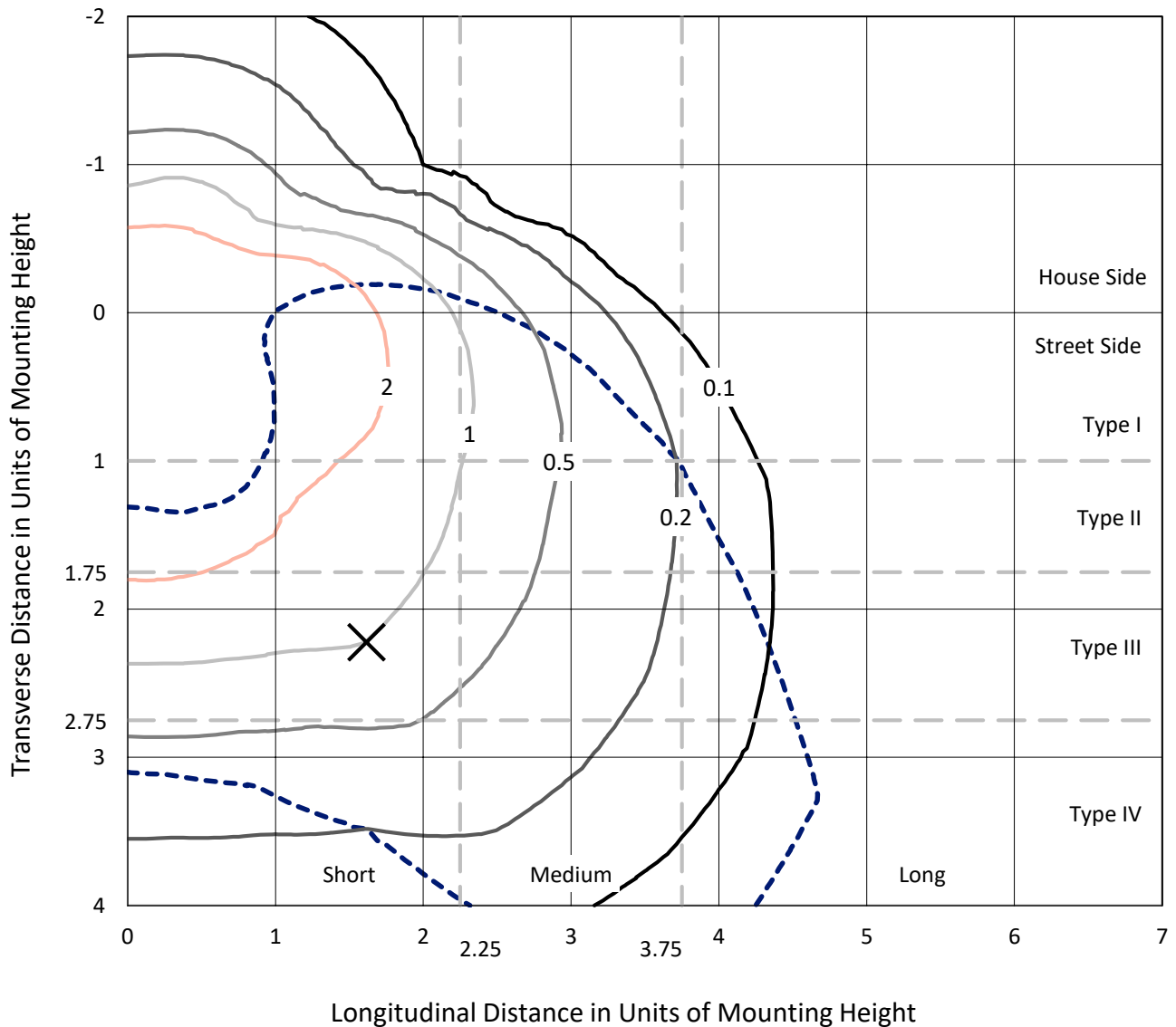
Input Watts (W): 312.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

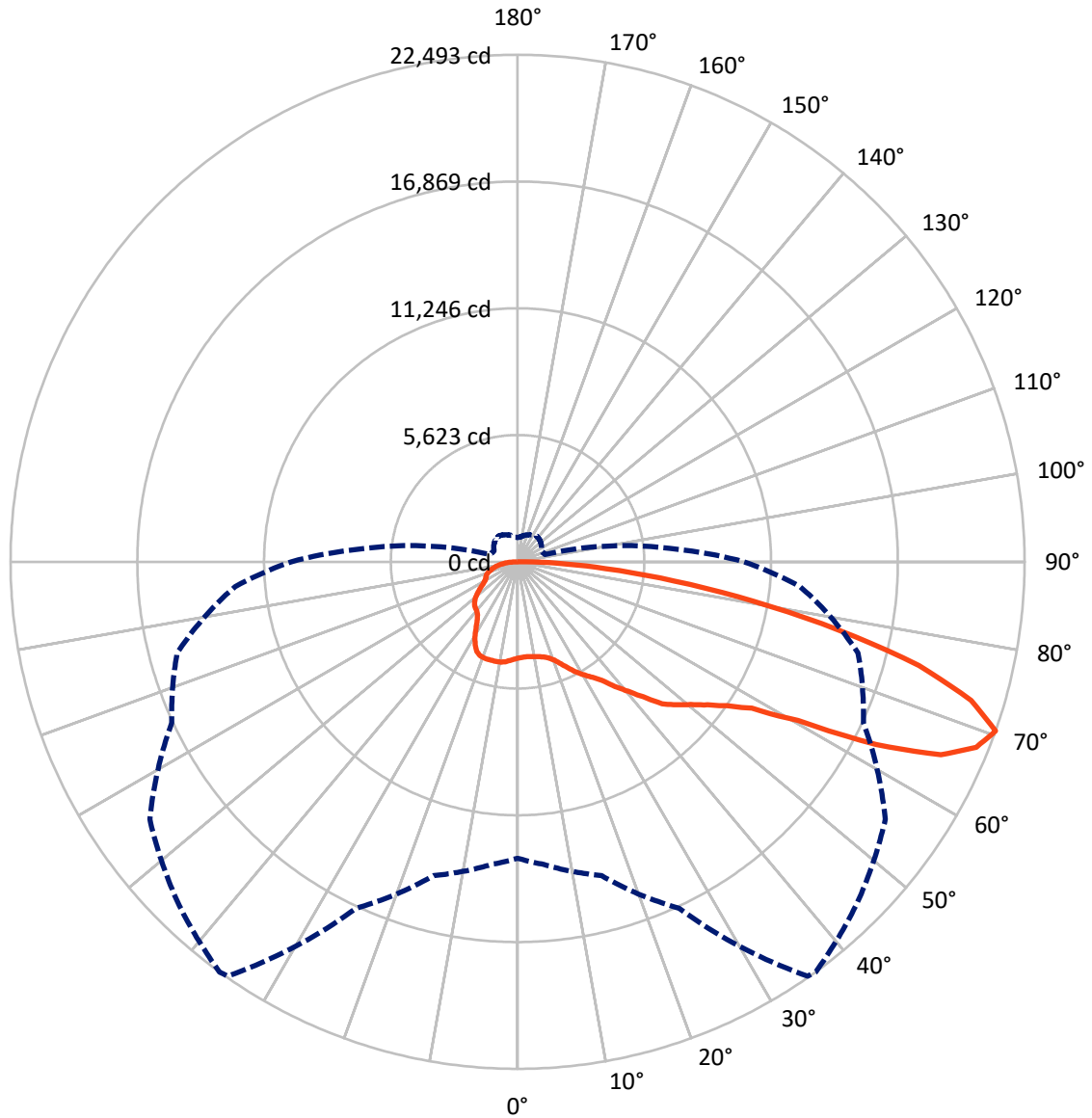
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 4.9 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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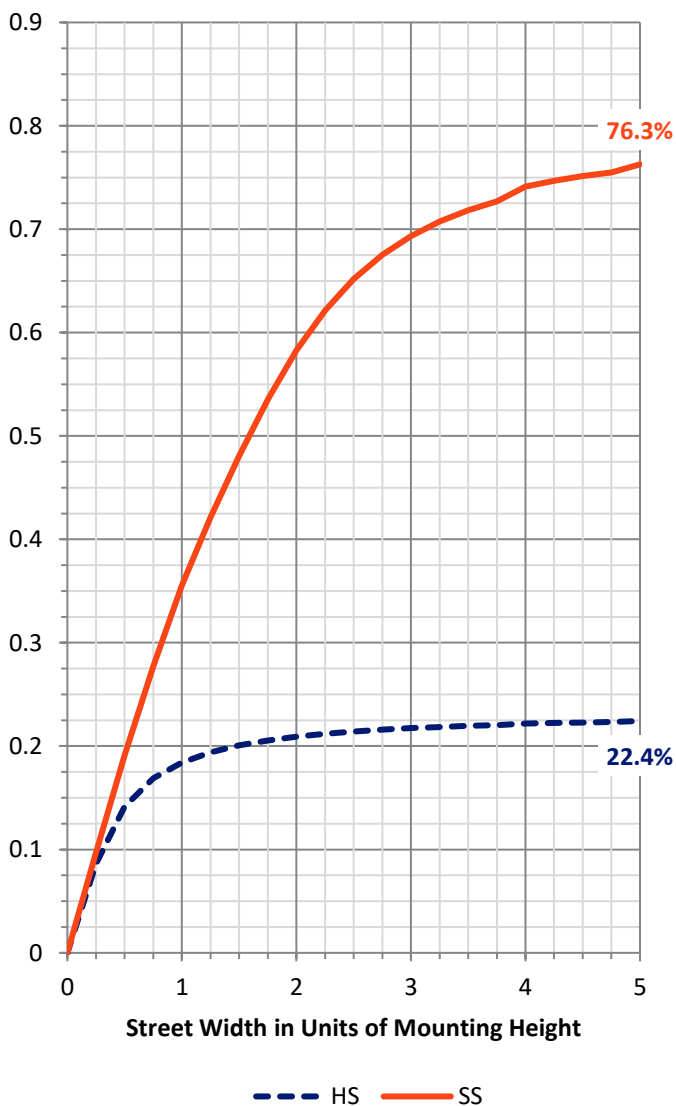
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8877.5	0.0	8877.5
	% Fixture	22.8	0.0	22.8
Street Side	Lumens	30085.5	0.0	30085.5
	% Fixture	77.2	0.0	77.2
Total	Lumens	38963.0	0.0	38963.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	413.5	1.1
10°-20°	1278.2	3.3
20°-30°	2305.6	5.9
30°-40°	3570.9	9.2
40°-50°	5424.2	13.9
50°-60°	7518.3	19.3
60°-70°	9776.4	25.1
70°-80°	7219.8	18.5
80°-90°	1456.1	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°	38963.0	100.0
0°-180°	38963.0	100.0

Coefficient of Utilization

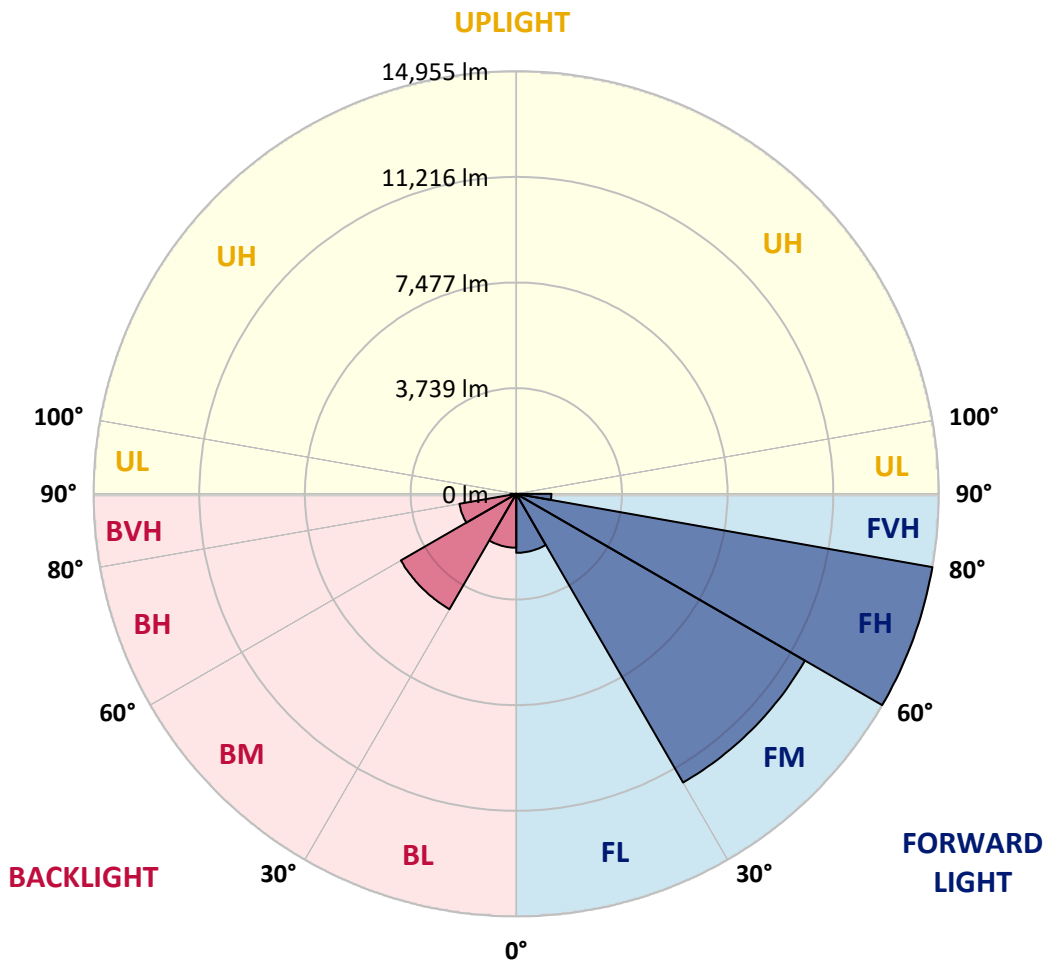


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2088.8	5.4			
FM (30°-60°)	11797.9	30.3			
FH (60°-80°)	14954.9	38.4			G5
FVH (80°-90°)	1243.9	3.2			G5
BL (0°-30°)	1908.4	4.9	B3/2500		
BM (30°-60°)	4715.6	12.1	B3/5000		
BH (60°-80°)	2041.3	5.2	B3/2500		G3/2500
BVH (80°-90°)	212.1	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°	4267.6	4267.6	4267.6	4267.6	4267.6	4267.6	4267.6	4267.6	4267.6	4267.6	4267.6
2.5°	4241.8	4236.1	4232.9	4239.4	4241.8	4242.6	4244.2	4242.6	4238.6	4253.1	4270.8
5°	4242.6	4239.4	4232.9	4227.3	4227.3	4227.3	4228.1	4246.6	4254.7	4253.1	4274.9
7.5°	4249.1	4246.6	4234.5	4230.5	4240.2	4243.4	4259.5	4253.9	4262.8	4277.3	4295.8
10°	4249.9	4246.6	4236.1	4245.0	4272.5	4277.3	4284.6	4300.7	4303.9	4321.7	4340.2
12.5°	4257.9	4257.9	4262.0	4281.3	4310.4	4316.0	4343.4	4356.4	4375.7	4384.6	4407.2
15°	4300.7	4299.9	4309.6	4331.3	4378.1	4381.4	4415.2	4454.0	4468.5	4490.3	4526.6
17.5°	4402.3	4407.2	4408.0	4424.1	4479.8	4481.4	4537.1	4573.4	4606.4	4645.2	4728.3
20°	4643.5	4634.7	4625.0	4625.0	4646.8	4658.1	4700.8	4758.9	4826.7	4895.2	4992.9
22.5°	4946.9	4964.6	4929.1	4910.6	4921.1	4908.2	4940.4	4987.2	5066.3	5168.7	5292.2
25°	5309.1	5310.7	5308.3	5233.3	5209.9	5217.9	5244.6	5288.1	5393.0	5474.5	5653.6
27.5°	5662.4	5655.2	5629.4	5550.3	5527.7	5539.0	5538.2	5658.4	5765.7	5869.8	6080.3
30°	5983.5	6002.9	5956.9	5823.8	5826.2	5824.6	5861.7	6016.6	6212.6	6406.3	6622.5
32.5°	6549.9	6491.0	6428.8	6165.8	6117.4	6111.8	6133.6	6364.3	6654.7	6981.5	7241.2
35°	7083.1	7068.6	7007.3	6740.2	6460.3	6455.5	6425.6	6706.4	7114.6	7719.6	8043.9
37.5°	7628.5	7607.5	7547.0	7319.5	7041.2	7014.5	6763.6	7071.0	7622.8	8582.8	9045.1
40°	8278.7	8265.8	8172.2	7881.0	7595.4	7555.0	7294.5	7454.2	8264.2	9732.4	10058.3
42.5°	8849.0	8846.6	8739.3	8469.1	8226.2	8185.9	7964.1	8130.2	9155.6	10858.6	11050.6
45°	9267.7	9331.5	9336.3	9182.2	9014.4	8978.9	8920.0	9149.1	10186.6	11880.7	11852.5
47.5°	9621.1	9675.9	9618.7	9539.6	9482.3	9484.7	9575.9	10030.9	11204.7	12771.4	12551.9
50°	10211.6	10177.7	9880.0	9833.3	9905.9	9948.6	10213.2	10982.8	12370.4	13607.1	13179.6
52.5°	11063.5	10933.6	10349.6	10254.4	10529.5	10545.6	10966.7	11833.9	13535.3	14324.3	13754.0
55°	12229.2	12121.9	11462.0	11022.4	11161.1	11270.0	11863.0	12706.0	14486.5	14998.8	14196.1
57.5°	13952.4	13960.5	13422.4	12602.8	12130.8	12247.0	12710.1	13553.9	15272.2	15563.5	14472.0
60°	15333.5	15589.3	15428.7	15054.4	14376.8	14297.7	13945.2	14437.3	15943.4	16043.5	14735.8
62.5°	16291.1	16407.3	16959.1	17038.2	17812.6	17845.7	16157.2	15472.3	16680.8	16358.1	14791.4
65°	16242.7	16314.5	17186.6	18248.3	20536.2	20638.6	19650.4	17038.2	17185.8	16498.5	14629.3
67.5°	15111.7	15219.8	16328.2	18312.8	21987.5	21948.7	21321.9	19218.0	17352.0	16273.4	13856.4
70°	13147.3	13480.5	14411.5	16951.9	22440.9	22492.5	21337.2	19914.2	16923.6	15636.9	12568.1
72.5°	10836.0	10940.9	11820.2	14663.2	21115.4	21039.6	20462.7	18995.3	16149.2	14485.7	10313.3
75°	8240.8	8240.8	9305.6	11685.5	18132.9	18399.1	18623.4	17204.4	14306.6	11806.5	7022.6
77.5°	5470.4	5666.5	6524.0	8781.3	14353.4	14550.2	15324.7	14664.8	11713.7	8657.8	3207.6
80°	2901.8	2926.0	3845.7	5835.1	10266.5	10637.6	11702.4	11310.4	8425.5	4056.2	810.8
82.5°	1014.9	1107.6	1690.9	3381.8	6764.4	6996.0	7763.2	6720.9	2976.0	897.9	448.5
85°	504.2	522.0	744.6	1610.2	3808.6	3920.7	4535.4	2617.8	479.2	392.1	304.9
87.5°	242.8	248.5	285.6	576.0	1655.4	1732.1	1833.7	851.9	177.5	149.2	132.3
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°	4267.6	4267.6	4267.6	4267.6	4267.6	4267.6	4267.6	4267.6	4267.6	4267.6	4267.6
2.5°	4274.9	4282.1	4295.8	4299.9	4290.2	4307.9	4324.9	4340.2	4339.4	4345.1	4365.2
5°	4284.6	4299.9	4314.4	4340.2	4365.2	4379.7	4393.5	4406.4	4410.4	4422.5	4434.6
7.5°	4314.4	4329.7	4362.8	4408.0	4409.6	4445.9	4469.3	4473.3	4476.6	4476.6	4504.8
10°	4360.4	4388.6	4441.9	4473.3	4501.6	4489.5	4513.7	4498.3	4487.0	4491.9	4511.2
12.5°	4439.4	4464.5	4541.1	4575.8	4550.0	4545.1	4520.9	4486.2	4446.7	4442.7	4460.4
15°	4563.7	4610.5	4679.0	4712.1	4647.6	4590.3	4508.8	4437.8	4361.2	4333.0	4344.2
17.5°	4763.8	4820.2	4895.2	4872.7	4754.9	4641.9	4507.2	4357.2	4208.7	4105.5	4132.1
20°	5056.6	5098.5	5159.9	5068.7	4896.9	4710.5	4489.5	4252.3	4001.4	3813.4	3791.6
22.5°	5364.0	5427.7	5390.6	5222.0	4996.9	4737.1	4452.4	4099.8	3711.8	3476.2	3440.7
25°	5734.2	5755.2	5627.0	5372.8	5025.1	4695.2	4332.1	3877.2	3415.7	3193.9	3183.4
27.5°	6127.1	6079.5	5840.7	5442.2	4993.7	4570.9	4090.9	3525.4	3147.9	2951.8	2921.2
30°	6570.8	6460.3	6017.4	5449.5	4875.1	4328.9	3786.0	3250.3	2930.0	2733.2	2701.7
32.5°	7142.0	6881.4	6181.2	5374.4	4625.0	3974.0	3419.7	3015.6	2734.0	2536.4	2508.1
35°	7872.1	7432.4	6354.6	5238.9	4316.8	3619.0	3116.4	2816.3	2575.1	2337.1	2299.2
37.5°	8713.5	8201.2	6562.0	5067.9	3978.8	3306.8	2911.5	2689.6	2457.3	2187.9	2142.7
40°	9691.3	8970.9	6881.4	4863.8	3675.5	3081.7	2812.3	2646.1	2392.0	2111.2	2059.6
42.5°	10538.3	9784.8	7261.4	4644.4	3389.1	2894.6	2767.9	2617.0	2350.8	2053.9	1995.0
45°	11321.7	10456.9	7632.5	4378.1	3087.4	2766.3	2714.7	2544.4	2278.2	1982.9	1921.6
47.5°	11958.2	10999.8	7955.2	4133.7	2846.1	2648.5	2598.5	2406.5	2156.4	1897.4	1852.3
50°	12447.1	11408.0	8131.9	3939.3	2591.2	2514.6	2448.4	2250.8	2010.4	1786.9	1748.2
52.5°	12947.2	11817.0	8219.0	3949.0	2354.0	2315.3	2247.6	2078.1	1894.2	1722.4	1680.4
55°	13238.5	11984.8	8127.0	3714.2	2136.2	2091.0	2032.2	1944.2	1834.5	1682.0	1642.5
57.5°	13408.7	12088.9	7847.1	3029.3	1874.0	1831.3	1841.0	1833.7	1743.3	1582.8	1546.5
60°	13531.3	11863.0	7273.5	2226.6	1650.6	1618.3	1698.2	1672.4	1594.1	1469.1	1438.4
62.5°	13432.1	11433.0	6240.9	1674.0	1468.3	1536.8	1607.0	1559.4	1452.9	1339.2	1303.7
65°	12827.0	10589.2	4743.6	1344.8	1409.4	1503.7	1560.2	1483.6	1375.5	1240.8	1224.6
67.5°	11725.8	9059.6	2797.7	1232.7	1365.0	1465.0	1511.8	1410.2	1315.0	1185.9	1166.5
70°	10045.4	6782.2	1249.6	1148.0	1287.5	1386.8	1417.4	1321.4	1218.2	1097.2	1077.8
72.5°	7476.8	4089.3	842.2	1060.0	1173.0	1260.9	1294.8	1193.2	1119.7	1064.9	1059.2
75°	4152.2	1419.8	776.9	960.0	1047.9	1127.0	1169.0	1097.2	1039.1	964.0	933.4
77.5°	1322.2	603.4	738.2	858.4	969.7	1035.0	1028.6	920.5	901.9	810.8	802.7
80°	527.6	526.0	682.5	702.7	827.7	882.6	868.0	731.7	755.9	702.7	681.7
82.5°	413.9	481.6	547.0	536.5	643.8	708.3	688.1	537.3	607.5	558.3	510.7
85°	314.6	421.9	350.9	349.3	449.3	526.0	538.9	413.0	413.9	376.7	335.6
87.5°	162.2	155.7	134.7	133.9	150.1	213.8	262.2	234.8	185.5	139.6	133.9
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)