

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: P510861

Luminaire Tested: **CST-CA8-480-750-U-T4**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510861
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-CA8-480-750-U-T4
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 5000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 71407 lumens
Efficiency: N/A
Efficacy: 148.5 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B5 - U0 - G5

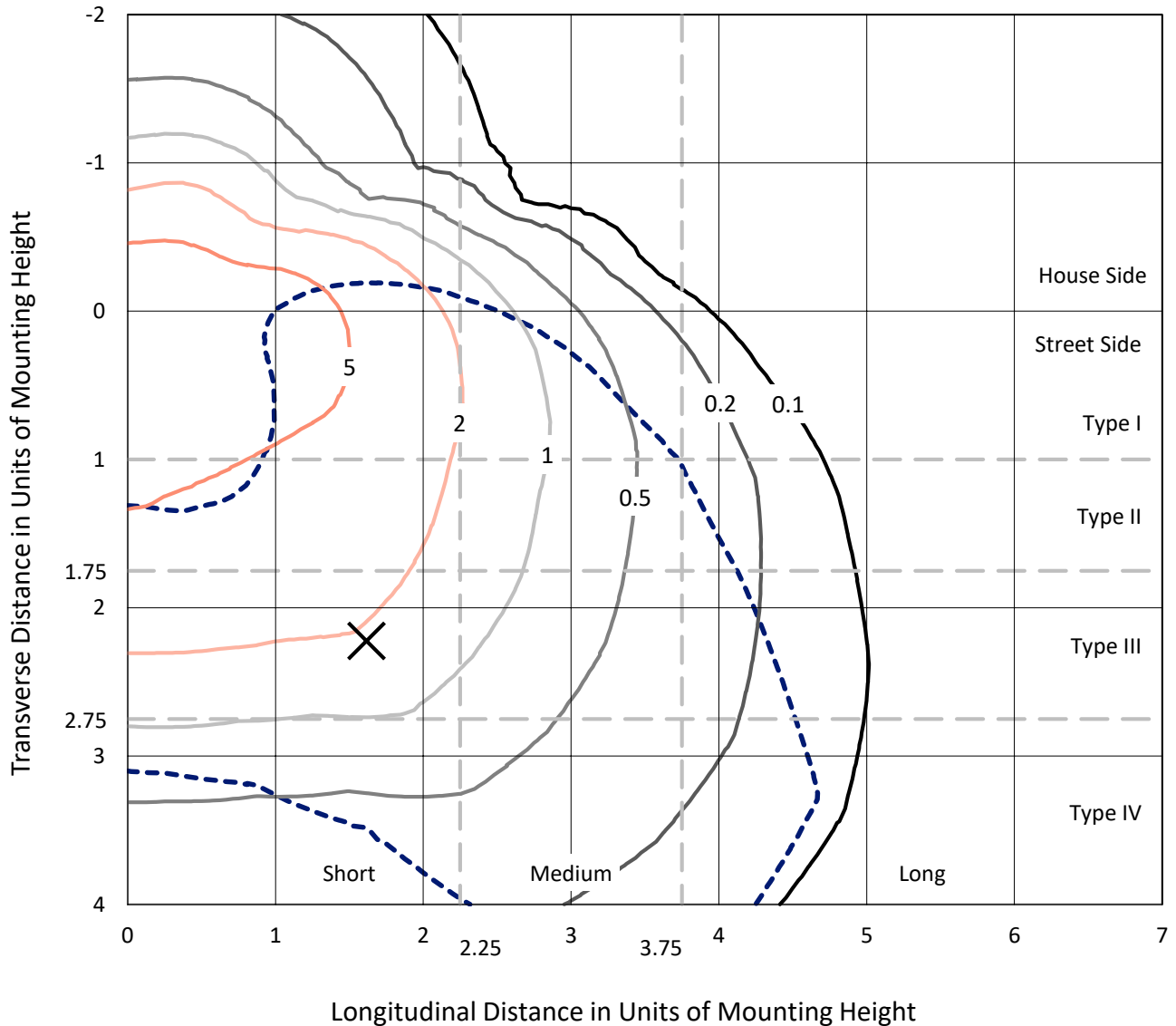
Input Watts (W): 480.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

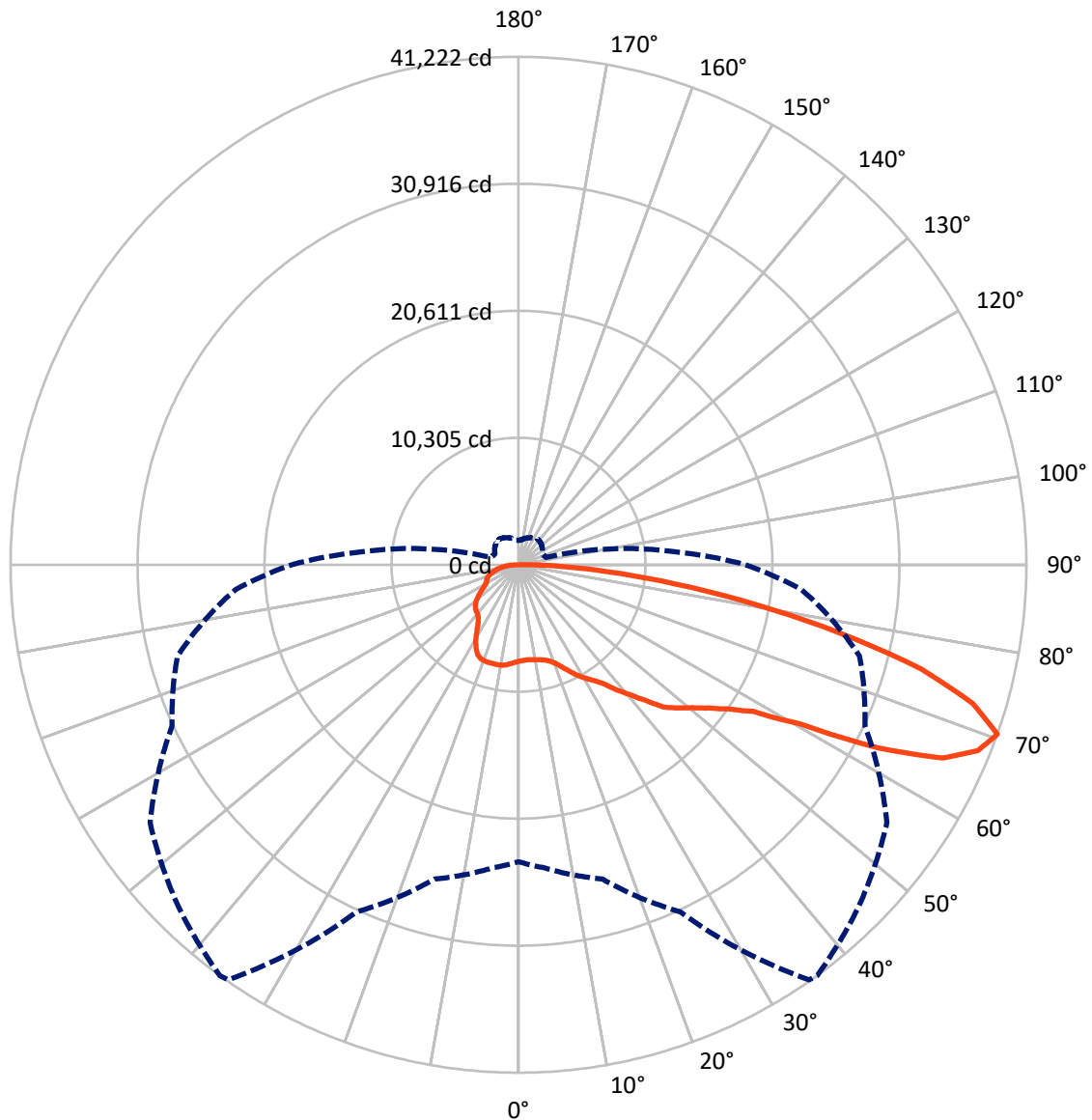
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 9.1 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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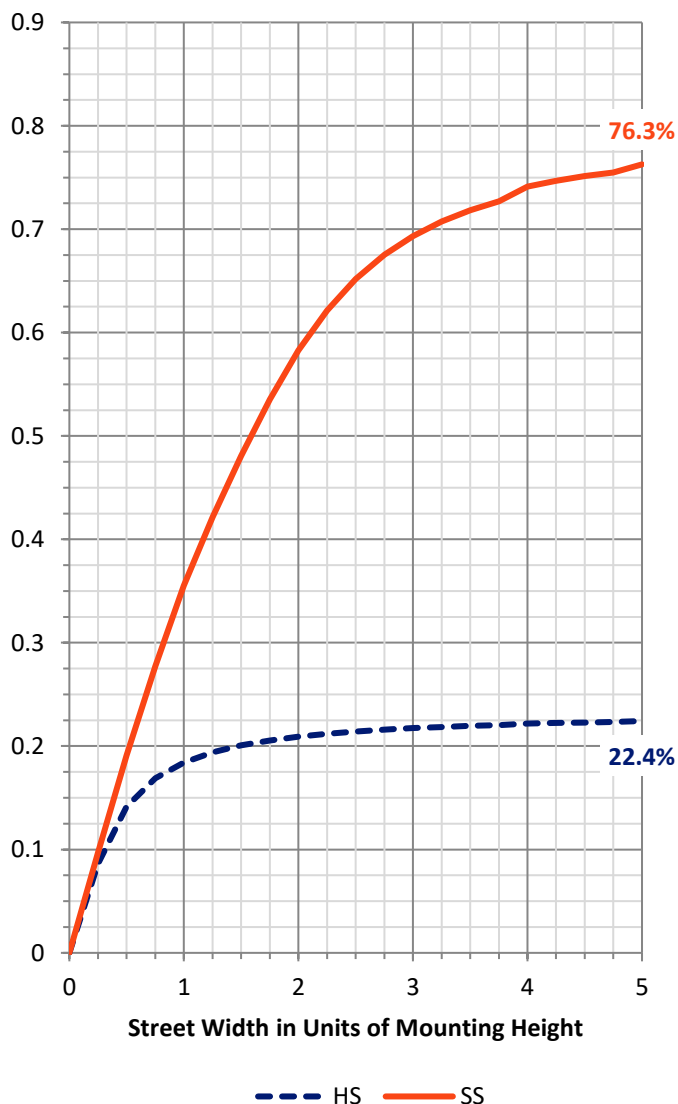
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	16269.6	0.0	16269.6
	% Fixture	22.8	0.0	22.8
Street Side	Lumens	55137.3	0.0	55137.3
	% Fixture	77.2	0.0	77.2
Total	Lumens	71407.0	0.0	71407.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	757.7	1.1
10°-20°	2342.5	3.3
20°-30°	4225.4	5.9
30°-40°	6544.4	9.2
40°-50°	9940.9	13.9
50°-60°	13778.7	19.3
60°-70°	17917.1	25.1
70°-80°	13231.6	18.5
80°-90°	2668.5	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°	71407.0	100.0
0°-180°	71407.0	100.0

Coefficient of Utilization



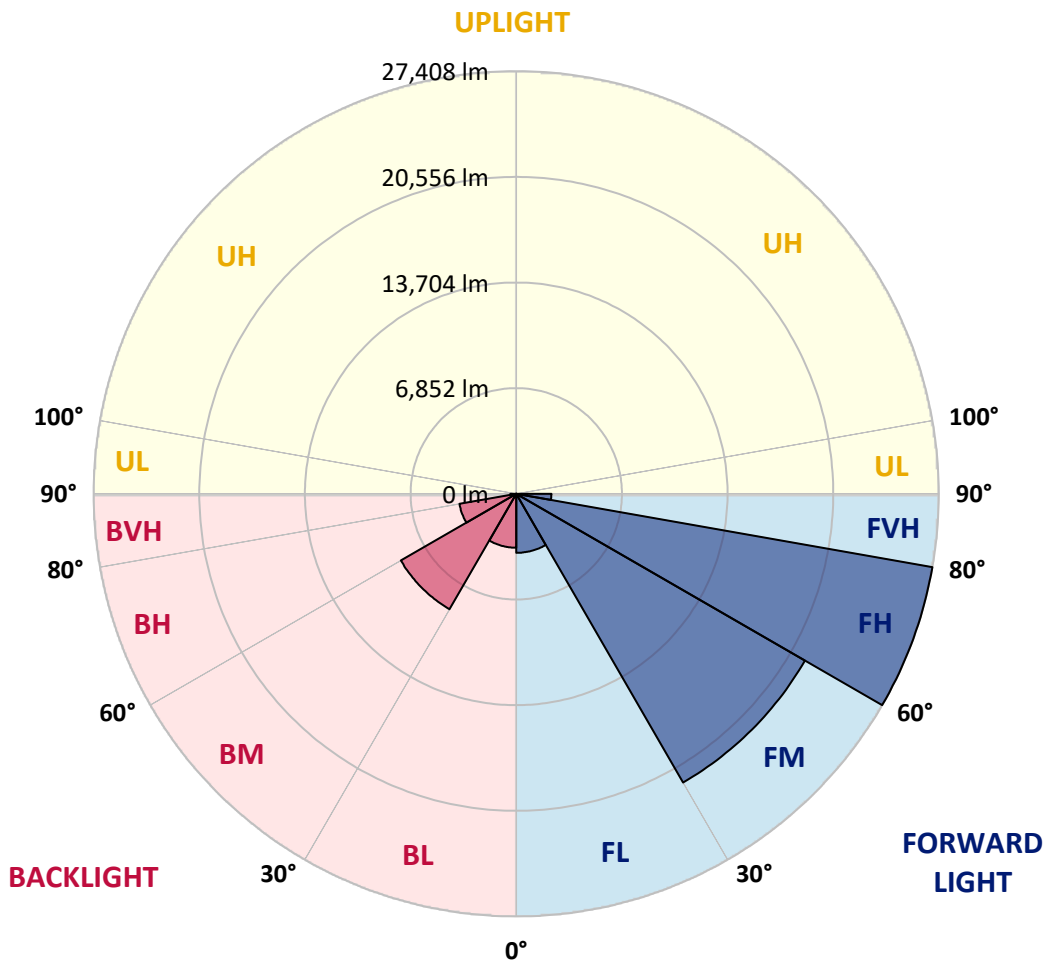
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3828.1	5.4			
FM (30°-60°)	21621.8	30.3			
FH (60°-80°)	27407.6	38.4			G5
FVH (80°-90°)	2279.8	3.2			G5
BL (0°-30°)	3497.5	4.9	B4/5000		
BM (30°-60°)	8642.2	12.1	B5		
BH (60°-80°)	3741.1	5.2	B4/5000		G4/5000
BVH (80°-90°)	388.7	0.5			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G5

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	7821.2	7821.2	7821.2	7821.2	7821.2	7821.2	7821.2	7821.2	7821.2	7821.2	7821.2
2.5°	7773.9	7763.5	7757.6	7769.4	7773.9	7775.4	7778.3	7775.4	7768.0	7794.6	7827.1
5°	7775.4	7769.4	7757.6	7747.3	7747.3	7747.3	7748.7	7782.8	7797.5	7794.6	7834.5
7.5°	7787.2	7782.8	7760.6	7753.2	7770.9	7776.8	7806.4	7796.1	7812.3	7838.9	7872.9
10°	7788.7	7782.8	7763.5	7779.8	7830.1	7838.9	7852.2	7881.8	7887.7	7920.3	7954.3
12.5°	7803.5	7803.5	7810.8	7846.3	7899.6	7909.9	7960.2	7983.8	8019.3	8035.6	8077.0
15°	7881.8	7880.3	7898.1	7938.0	8023.7	8029.7	8091.8	8162.7	8189.3	8229.3	8295.8
17.5°	8068.1	8077.0	8078.5	8108.0	8210.0	8213.0	8315.0	8381.5	8442.2	8513.1	8665.4
20°	8510.2	8493.9	8476.2	8476.2	8516.1	8536.8	8615.1	8721.6	8845.8	8971.5	9150.4
22.5°	9066.1	9098.6	9033.6	8999.5	9018.8	8995.1	9054.3	9140.0	9284.9	9472.7	9698.9
25°	9729.9	9732.9	9728.4	9590.9	9548.1	9562.9	9611.6	9691.5	9883.7	10033.0	10361.2
27.5°	10377.5	10364.2	10316.9	10172.0	10130.6	10151.3	10149.8	10370.1	10566.7	10757.5	11143.4
30°	10965.9	11001.4	10917.1	10673.2	10677.6	10674.7	10742.7	11026.6	11385.8	11740.7	12136.9
32.5°	12003.8	11895.9	11782.1	11300.1	11211.4	11201.0	11240.9	11663.8	12196.0	12794.8	13270.9
35°	12981.1	12954.5	12842.1	12352.8	11839.7	11830.9	11776.1	12290.7	13038.8	14147.6	14742.0
37.5°	13980.6	13942.1	13831.2	13414.3	12904.2	12855.4	12395.6	12958.9	13970.2	15729.6	16576.8
40°	15172.2	15148.6	14977.1	14443.3	13920.0	13846.0	13368.5	13661.2	15145.6	17836.5	18433.8
42.5°	16217.5	16213.1	16016.4	15521.2	15076.1	15002.2	14595.6	14900.2	16779.3	19900.4	20252.3
45°	16984.9	17101.7	17110.5	16828.1	16520.6	16455.6	16347.6	16767.5	18668.9	21773.7	21721.9
47.5°	17632.4	17733.0	17628.0	17483.1	17378.1	17382.6	17549.6	18383.5	20534.7	23405.9	23003.8
50°	18714.7	18652.6	18107.0	18021.3	18154.3	18232.7	18717.6	20128.1	22671.1	24937.6	24154.0
52.5°	20276.0	20037.9	18967.5	18793.0	19297.2	19326.8	20098.6	21687.9	24806.1	26252.0	25206.7
55°	22412.4	22215.7	21006.3	20200.6	20454.9	20654.5	21741.1	23286.2	26549.2	27488.0	26016.9
57.5°	25570.4	25585.2	24599.1	23096.9	22232.0	22444.9	23293.6	24840.1	27989.2	28523.0	26522.6
60°	28101.6	28570.3	28276.1	27590.0	26348.1	26203.2	25557.1	26459.0	29219.3	29402.7	27006.0
62.5°	29856.6	30069.5	31080.8	31225.6	32645.0	32705.6	29611.1	28355.9	30570.7	29979.3	27108.1
65°	29767.9	29899.4	31497.7	33443.4	37636.4	37824.1	36013.0	31225.6	31496.2	30236.5	26810.9
67.5°	27695.0	27893.1	29924.6	33561.7	40296.2	40225.2	39076.4	35220.5	31800.8	29824.0	25394.5
70°	24094.9	24705.5	26411.7	31067.4	41127.1	41221.7	39104.5	36496.4	31015.7	28657.5	23033.3
72.5°	19859.0	20051.2	21662.8	26873.0	38697.9	38558.9	37501.8	34812.5	29596.3	26547.7	18901.0
75°	15102.7	15102.7	17054.3	21415.9	33231.9	33719.8	34130.9	31530.2	26219.5	21637.7	12870.2
77.5°	10025.6	10384.9	11956.5	16093.3	26305.2	26666.0	28085.3	26875.9	21467.6	15867.1	5878.5
80°	5318.1	5362.5	7047.9	10693.9	18815.2	19495.3	21446.9	20728.4	15441.3	7433.8	1485.9
82.5°	1859.9	2030.0	3098.9	6197.8	12397.1	12821.4	14227.5	12317.3	5454.1	1645.6	822.0
85°	924.1	956.6	1364.6	2951.1	6979.9	7185.4	8312.1	4797.7	878.2	718.5	558.9
87.5°	445.0	455.4	523.4	1055.6	3033.9	3174.3	3360.6	1561.3	325.3	273.5	242.5
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°	7821.2	7821.2	7821.2	7821.2	7821.2	7821.2	7821.2	7821.2	7821.2	7821.2	7821.2
2.5°	7834.5	7847.8	7872.9	7880.3	7862.6	7895.1	7926.2	7954.3	7952.8	7963.1	8000.1
5°	7852.2	7880.3	7906.9	7954.3	8000.1	8026.7	8051.8	8075.5	8082.9	8105.1	8127.2
7.5°	7906.9	7935.0	7995.7	8078.5	8081.4	8147.9	8190.8	8198.2	8204.1	8204.1	8255.9
10°	7991.2	8043.0	8140.5	8198.2	8250.0	8227.8	8272.1	8244.0	8223.3	8232.2	8267.7
12.5°	8136.1	8181.9	8322.4	8386.0	8338.7	8329.8	8285.4	8221.9	8149.4	8142.0	8174.6
15°	8363.8	8449.6	8575.2	8635.8	8517.6	8412.6	8263.3	8133.2	7992.7	7941.0	7961.7
17.5°	8730.5	8834.0	8971.5	8930.1	8714.2	8507.2	8260.3	7985.3	7713.3	7524.0	7572.8
20°	9267.2	9344.0	9456.4	9289.3	8974.4	8632.9	8227.8	7793.1	7333.3	6988.8	6948.9
22.5°	9830.5	9947.3	9879.2	9570.2	9157.7	8681.7	8159.8	7513.7	6802.5	6370.8	6305.7
25°	10509.1	10547.5	10312.4	9846.7	9209.5	8604.8	7939.5	7105.6	6259.9	5853.3	5834.1
27.5°	11229.1	11141.9	10704.2	9973.9	9151.8	8377.1	7497.4	6461.0	5769.1	5409.8	5353.6
30°	12042.3	11839.7	11028.0	9987.2	8934.5	7933.6	6938.5	5956.8	5369.9	5009.1	4951.5
32.5°	13089.0	12611.5	11328.2	9849.7	8476.2	7283.0	6267.3	5526.6	5010.6	4648.4	4596.6
35°	14427.1	13621.3	11646.0	9601.3	7911.4	6632.5	5711.4	5161.4	4719.3	4283.2	4213.7
37.5°	15969.1	15030.3	12026.0	9287.9	7291.9	6060.3	5335.9	4929.3	4503.5	4009.7	3926.9
40°	17761.1	16440.8	12611.5	8913.8	6736.0	5647.8	5154.0	4849.4	4383.7	3869.2	3774.6
42.5°	19313.5	17932.6	13307.9	8511.6	6211.1	5304.8	5072.7	4796.2	4308.3	3764.2	3656.3
45°	20749.1	19164.1	13988.0	8023.7	5658.2	5069.7	4975.1	4663.1	4175.2	3634.1	3521.8
47.5°	21915.6	20159.2	14579.4	7575.8	5216.1	4853.9	4762.2	4410.3	3952.0	3477.4	3394.6
50°	22811.6	20907.3	14903.1	7219.5	4748.9	4608.4	4487.2	4125.0	3684.4	3274.8	3203.9
52.5°	23728.2	21656.9	15062.8	7237.2	4314.2	4243.3	4119.1	3808.6	3471.5	3156.6	3079.7
55°	24262.0	21964.4	14894.3	6807.0	3915.0	3832.2	3724.3	3563.2	3362.1	3082.6	3010.2
57.5°	24573.9	22155.1	14381.2	5551.7	3434.5	3356.2	3373.9	3360.6	3195.0	2900.8	2834.3
60°	24798.7	21741.1	13330.0	4080.6	3025.0	2965.8	3112.2	3064.9	2921.5	2692.3	2636.1
62.5°	24616.8	20953.1	11437.6	3067.9	2690.8	2816.5	2945.1	2857.9	2662.8	2454.3	2389.2
65°	23507.9	19406.6	8693.5	2464.6	2582.9	2755.9	2859.4	2718.9	2520.8	2273.9	2244.3
67.5°	21489.8	16603.4	5127.4	2259.1	2501.6	2684.9	2770.7	2584.4	2409.9	2173.4	2137.9
70°	18410.1	12429.6	2290.2	2103.9	2359.7	2541.5	2597.7	2421.8	2232.5	2010.7	1975.3
72.5°	13702.6	7494.4	1543.5	1942.7	2149.7	2310.9	2373.0	2186.7	2052.1	1951.6	1941.3
75°	7609.8	2602.1	1423.8	1759.4	1920.6	2065.4	2142.3	2010.7	1904.3	1766.8	1710.6
77.5°	2423.2	1105.9	1352.8	1573.1	1777.1	1896.9	1885.1	1687.0	1652.9	1485.9	1471.1
80°	966.9	964.0	1250.8	1287.8	1516.9	1617.5	1590.9	1341.0	1385.3	1287.8	1249.3
82.5°	758.5	882.7	1002.4	983.2	1179.8	1298.1	1261.1	984.7	1113.3	1023.1	935.9
85°	576.6	773.2	643.1	640.2	823.5	964.0	987.6	757.0	758.5	690.5	615.1
87.5°	297.2	285.3	246.9	245.4	275.0	391.8	480.5	430.2	340.1	255.8	245.4
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)