

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: P510480

Luminaire Tested: **CST-CA10-310-730-U-T4-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510480
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-CA10-310-730-U-T4-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (10) 3000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 42100 lumens
Efficiency: N/A
Efficacy: 134.8 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

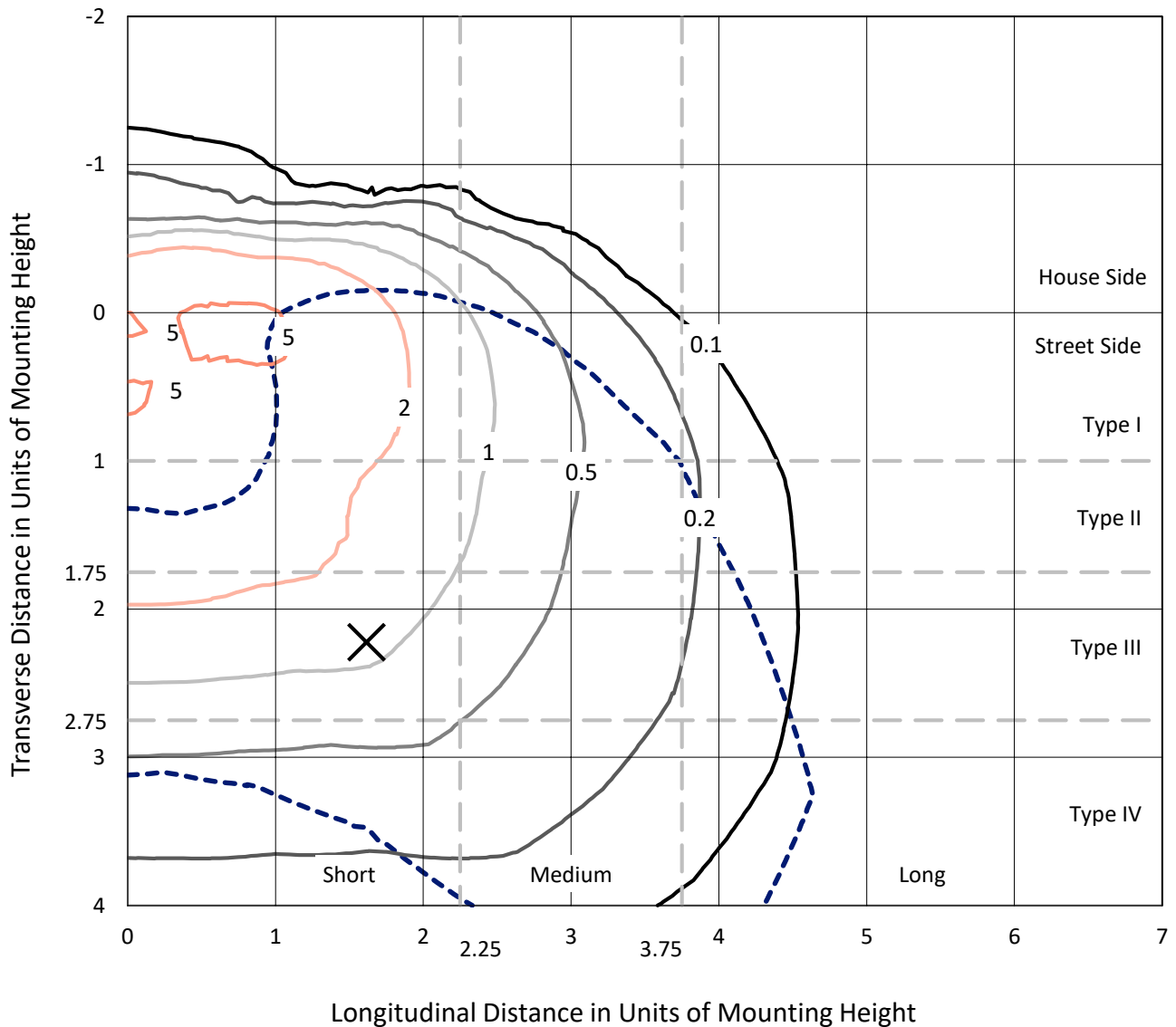
Input Watts (W): 312.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

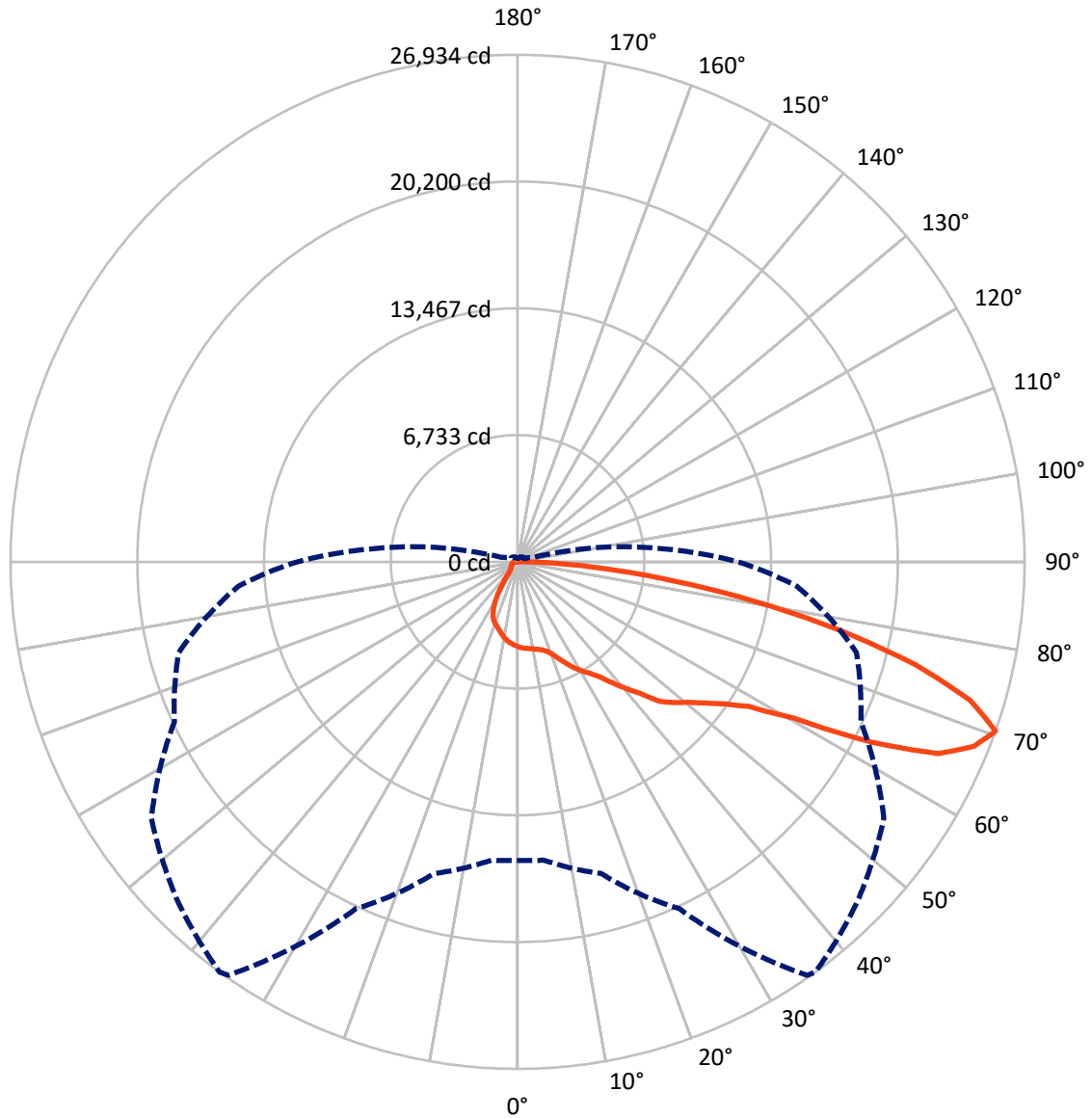
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 5.7 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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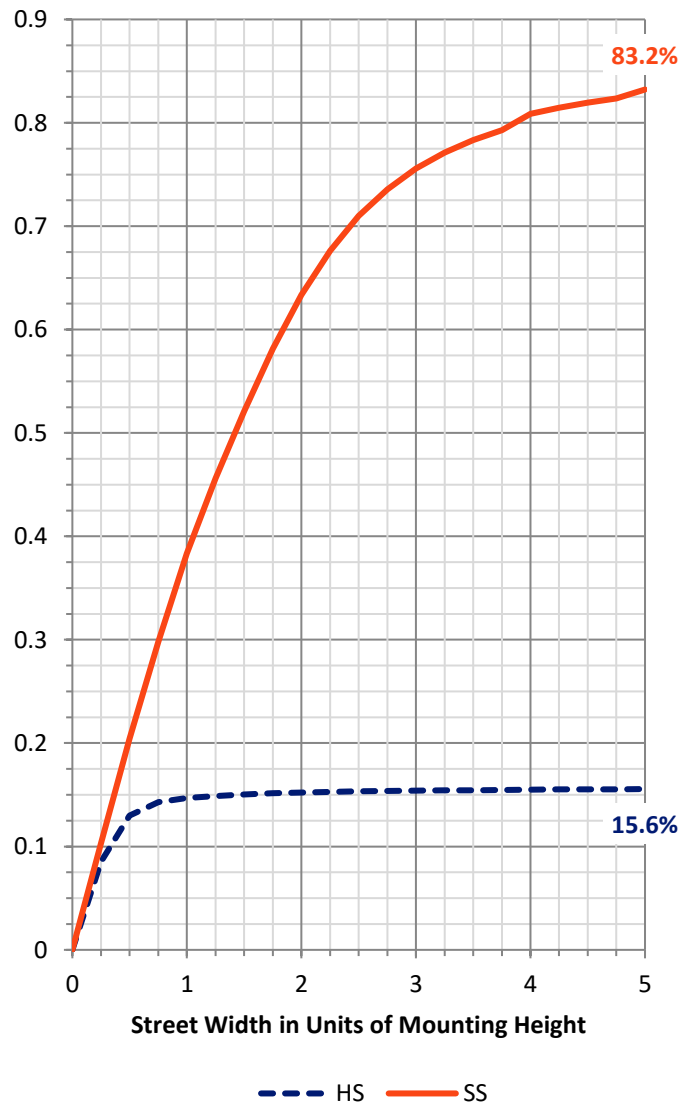
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6643.7	0.0	6643.7
	% Fixture	15.8	0.0	15.8
Street Side	Lumens	35456.3	0.0	35456.3
	% Fixture	84.2	0.0	84.2
Total	Lumens	42100.0	0.0	42100.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	427.8	1.0
10°-20°	1272.2	3.0
20°-30°	2287.8	5.4
30°-40°	3620.4	8.6
40°-50°	5658.1	13.4
50°-60°	8124.9	19.3
60°-70°	11020.7	26.2
70°-80°	8156.5	19.4
80°-90°	1531.5	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°	42100.0	100.0
0°-180°	42100.0	100.0

Coefficient of Utilization

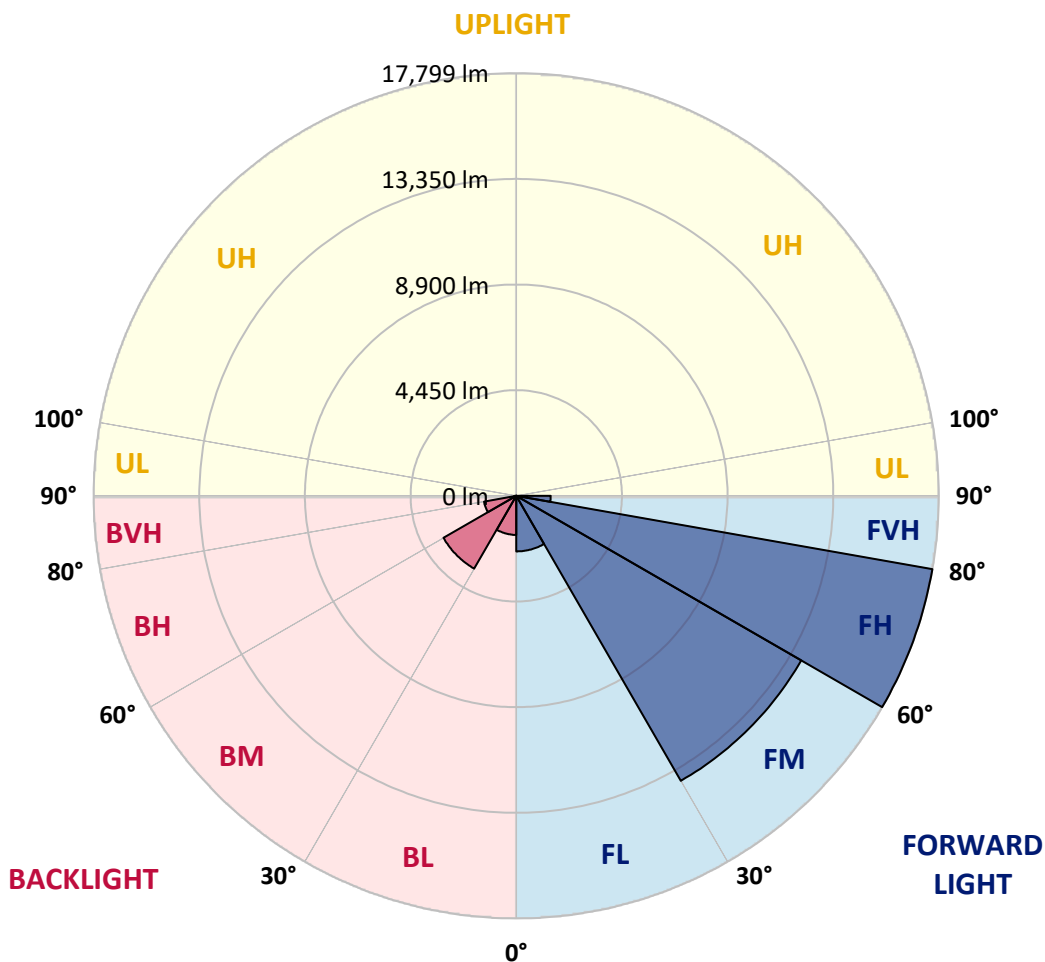


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2341.6	5.6			
FM (30°-60°)	13863.2	32.9			
FH (60°-80°)	17799.5	42.3			G5
FVH (80°-90°)	1452.1	3.4			G5
BL (0°-30°)	1646.3	3.9	B3/2500		
BM (30°-60°)	3540.3	8.4	B3/5000		
BH (60°-80°)	1377.7	3.3	B3/2500		G3/2500
BVH (80°-90°)	79.4	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°	4510.8	4510.8	4510.8	4510.8	4510.8	4510.8	4510.8	4510.8	4510.8	4510.8	4510.8
2.5°	4602.2	4592.4	4584.7	4587.6	4581.8	4585.6	4576.9	4566.2	4540.9	4530.2	4525.4
5°	4643.0	4640.1	4632.3	4626.5	4615.8	4611.9	4602.2	4610.9	4597.3	4562.3	4541.9
7.5°	4667.3	4666.3	4657.6	4644.9	4650.8	4655.6	4665.3	4651.7	4634.2	4617.7	4575.9
10°	4678.0	4678.0	4667.3	4674.1	4704.2	4707.1	4712.0	4720.7	4704.2	4679.9	4638.1
12.5°	4705.2	4703.3	4707.1	4729.5	4760.6	4767.4	4791.7	4791.7	4793.6	4779.1	4730.5
15°	4773.2	4773.2	4782.0	4802.4	4855.8	4859.7	4895.7	4927.8	4931.7	4910.3	4873.3
17.5°	4930.7	4926.8	4921.9	4934.6	4991.9	4993.9	5056.1	5096.9	5107.6	5130.9	5125.1
20°	5230.0	5226.2	5225.2	5226.2	5222.3	5216.4	5277.7	5321.4	5375.8	5416.7	5437.1
22.5°	5658.7	5649.9	5649.9	5602.3	5565.4	5571.2	5580.9	5605.2	5677.1	5749.1	5825.8
25°	6120.3	6114.5	6119.4	5997.9	5948.3	5967.8	5955.1	5993.0	6087.3	6149.5	6231.2
27.5°	6497.5	6506.2	6479.0	6384.7	6352.6	6367.2	6338.1	6446.9	6550.9	6659.8	6783.2
30°	6966.9	6920.3	6853.2	6738.5	6726.8	6728.8	6726.8	6901.8	7117.6	7273.1	7444.1
32.5°	7580.2	7588.0	7437.3	7167.1	7068.0	7054.4	7093.3	7349.9	7641.4	7986.5	8212.0
35°	8200.3	8213.0	8103.1	7821.3	7538.4	7495.7	7438.3	7771.7	8192.5	8884.6	9224.7
37.5°	8858.3	8903.0	8772.8	8521.1	8185.7	8145.9	7874.7	8202.3	8824.3	9947.9	10394.0
40°	9738.9	9691.3	9533.8	9214.1	8902.1	8837.9	8523.0	8695.0	9636.9	11279.4	11603.1
42.5°	10388.2	10374.6	10241.4	9925.5	9611.6	9560.1	9306.4	9493.0	10660.3	12629.5	12774.3
45°	10903.3	10986.9	10984.0	10785.7	10608.8	10579.6	10430.0	10705.0	11897.6	13903.7	13832.7
47.5°	11361.1	11412.6	11330.0	11243.5	11160.9	11170.6	11281.4	11847.1	13162.1	15016.6	14702.6
50°	12110.5	12044.4	11674.1	11608.0	11724.6	11729.5	12066.7	12937.6	14554.9	15978.8	15439.4
52.5°	13109.6	13037.7	12276.7	12163.9	12439.9	12460.4	13021.2	14024.2	15991.4	16898.3	16172.2
55°	14596.7	14429.5	13614.1	13108.6	13235.0	13317.6	13997.0	15069.1	17116.0	17708.9	16727.2
57.5°	16423.0	16544.5	16126.5	14984.5	14458.7	14489.8	15113.8	16069.2	18108.3	18418.4	17051.8
60°	18353.3	18324.1	18499.1	18018.0	17011.0	16843.8	16526.0	17089.7	18877.2	19016.1	17386.2
62.5°	19410.8	19580.8	20164.0	20260.2	21169.0	21080.6	18914.1	18355.2	19765.5	19391.3	17477.5
65°	19404.9	19478.8	20564.5	21758.0	24597.1	24571.8	23564.9	20185.4	20427.4	19591.5	17294.8
67.5°	18151.1	18265.8	19535.2	21866.9	26181.3	26151.2	25455.3	22758.1	20635.4	19350.5	16442.4
70°	15865.1	15904.0	17142.2	20334.1	26818.0	26933.6	25520.4	23745.6	20118.3	18634.2	14888.3
72.5°	13088.2	13007.6	14218.6	17364.8	25196.7	25127.7	24441.5	22566.7	19247.5	17243.3	12142.5
75°	9636.9	9861.4	10948.0	13942.6	21573.3	21826.0	22130.3	20762.7	17094.6	14210.8	8396.6
77.5°	6363.3	6649.1	7747.4	10454.3	17079.0	17471.7	18260.0	17659.3	13906.6	10193.8	3998.6
80°	3288.1	3503.9	4492.3	6936.8	12243.6	12810.3	14255.5	13375.0	9859.4	4609.0	895.2
82.5°	1244.1	1215.9	2012.9	3970.4	7850.4	8365.5	9416.2	8020.5	3508.7	809.6	416.0
85°	546.2	578.3	833.9	1810.7	4488.5	4555.5	5334.0	3126.8	514.2	386.8	282.8
87.5°	236.2	271.2	349.9	521.0	1514.3	1748.5	2163.6	993.3	155.5	134.1	141.9
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°	4510.8	4510.8	4510.8	4510.8	4510.8	4510.8	4510.8	4510.8	4510.8	4510.8	4510.8
2.5°	4516.6	4510.8	4501.1	4476.8	4436.9	4432.1	4428.2	4424.3	4416.5	4420.4	4442.8
5°	4526.4	4515.7	4480.7	4445.7	4410.7	4379.6	4341.7	4327.1	4307.7	4295.0	4318.4
7.5°	4559.4	4537.0	4485.5	4437.9	4342.7	4297.0	4248.4	4191.0	4150.2	4124.0	4147.3
10°	4614.8	4586.6	4522.5	4424.3	4312.5	4187.1	4101.6	4006.4	3928.6	3907.2	3928.6
12.5°	4705.2	4663.4	4588.6	4455.4	4257.1	4092.9	3930.6	3805.2	3679.8	3643.8	3654.5
15°	4852.0	4818.9	4704.2	4520.5	4258.1	4007.3	3766.3	3564.1	3399.9	3342.5	3338.6
17.5°	5087.2	5052.2	4920.0	4649.8	4293.1	3940.3	3605.0	3296.8	3048.0	2921.7	2901.3
20°	5424.4	5375.8	5175.6	4840.3	4368.9	3911.1	3455.3	3041.2	2654.4	2417.2	2381.3
22.5°	5799.6	5748.1	5452.6	4987.1	4423.3	3853.8	3312.4	2758.4	2249.1	1959.4	1918.6
25°	6266.1	6153.4	5718.0	5126.0	4410.7	3733.2	3080.1	2374.5	1822.4	1571.6	1544.4
27.5°	6726.8	6584.0	5988.2	5198.9	4355.3	3541.8	2739.9	1925.4	1426.8	1249.0	1226.6
30°	7298.3	7022.3	6228.2	5233.0	4215.3	3255.0	2284.1	1463.8	1068.2	945.7	924.3
32.5°	7977.7	7559.8	6453.7	5195.1	3982.1	2817.7	1775.7	1072.1	794.1	717.3	716.3
35°	8873.9	8218.8	6701.6	5070.6	3624.4	2346.3	1245.1	732.8	619.1	592.9	597.7
37.5°	9921.6	9111.0	6953.3	4866.5	3220.1	1795.2	830.0	564.7	544.3	545.3	546.2
40°	11026.7	10096.6	7292.5	4579.8	2729.2	1299.5	597.7	507.4	506.4	516.1	519.0
42.5°	12082.3	11054.0	7710.5	4197.8	2215.1	859.2	518.0	484.0	471.4	475.3	478.2
45°	13063.0	11875.2	8066.2	3825.6	1664.0	613.3	508.3	456.8	437.4	435.4	437.4
47.5°	13853.2	12533.3	8282.9	3388.2	1185.8	509.3	487.9	431.5	404.3	398.5	395.6
50°	14454.8	13022.1	8361.7	2892.5	801.9	486.0	460.7	402.4	369.3	370.3	370.3
52.5°	15041.8	13466.3	8270.3	2392.9	590.0	465.6	442.2	379.1	344.1	362.5	367.4
55°	15464.6	13652.9	8004.0	1852.5	491.8	440.3	421.8	351.8	327.5	357.7	367.4
57.5°	15711.5	13799.7	7515.1	1337.4	451.0	416.0	395.6	326.6	304.2	312.0	316.9
60°	15865.1	13594.6	6868.7	914.6	429.6	396.6	369.3	310.1	279.9	261.5	258.5
62.5°	15780.5	13081.4	6017.3	628.8	407.2	375.2	347.0	294.5	254.7	230.4	228.4
65°	15091.4	12131.8	4619.7	509.3	393.6	365.5	333.4	279.9	237.2	213.8	210.9
67.5°	13813.3	10425.1	2698.1	452.9	387.8	355.7	322.7	266.3	227.4	202.2	198.3
70°	11712.9	7841.7	903.9	404.3	386.8	354.8	313.9	256.6	216.7	190.5	186.6
72.5°	8450.1	4731.4	440.3	355.7	361.6	340.2	307.1	248.8	209.9	176.9	170.1
75°	4802.4	1540.5	397.5	307.1	336.3	324.6	303.2	249.8	212.9	160.4	152.6
77.5°	1366.6	450.0	383.9	261.5	317.8	335.3	283.8	225.5	217.7	148.7	139.0
80°	461.7	400.4	370.3	203.1	256.6	277.0	245.9	198.3	219.7	135.1	125.4
82.5°	370.3	402.4	311.0	162.3	195.4	209.9	195.4	177.9	177.9	120.5	112.7
85°	296.4	373.2	197.3	129.3	145.8	161.3	138.0	133.2	124.4	101.1	98.2
87.5°	172.0	116.6	81.6	66.1	61.2	62.2	53.5	64.1	78.7	69.0	68.0
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)