

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: P510501

Luminaire Tested: **CST-CA10-310-750-U-T4**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510501
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-CA10-310-750-U-T4
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (10) 5000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 48684 lumens
Efficiency: N/A
Efficacy: 155.8 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B4 - U0 - G5

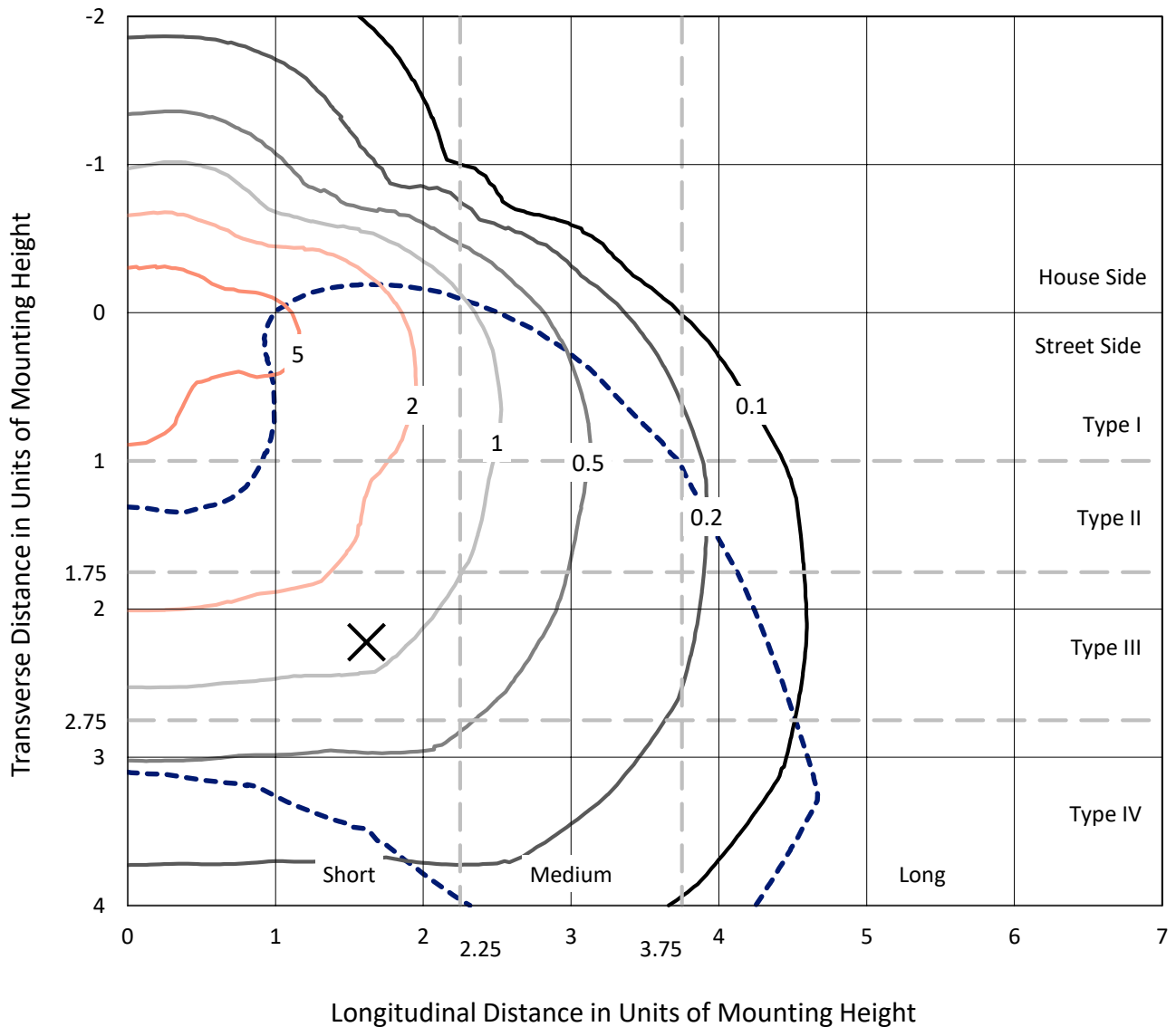
Input Watts (W): 312.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

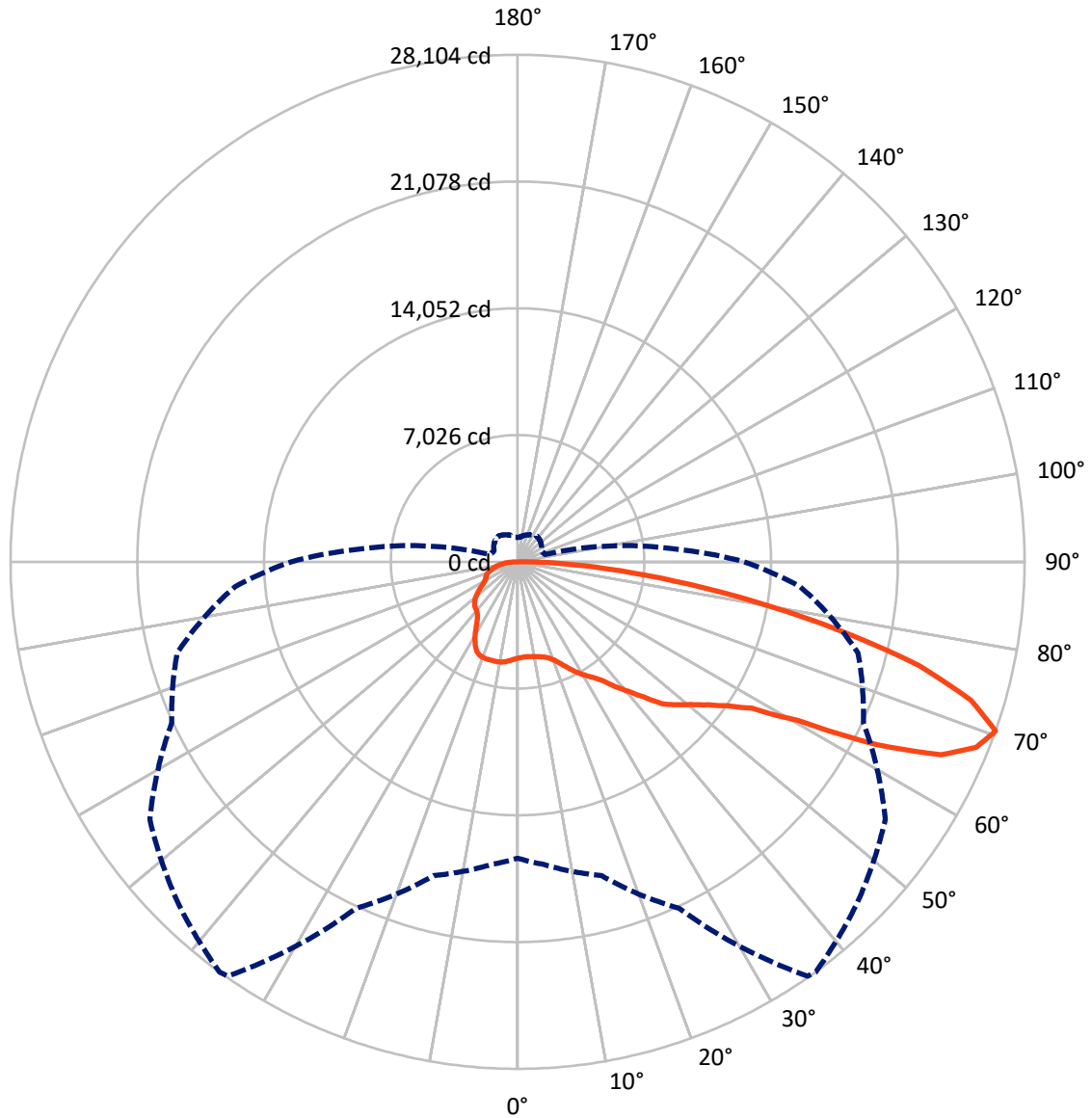
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 6.2 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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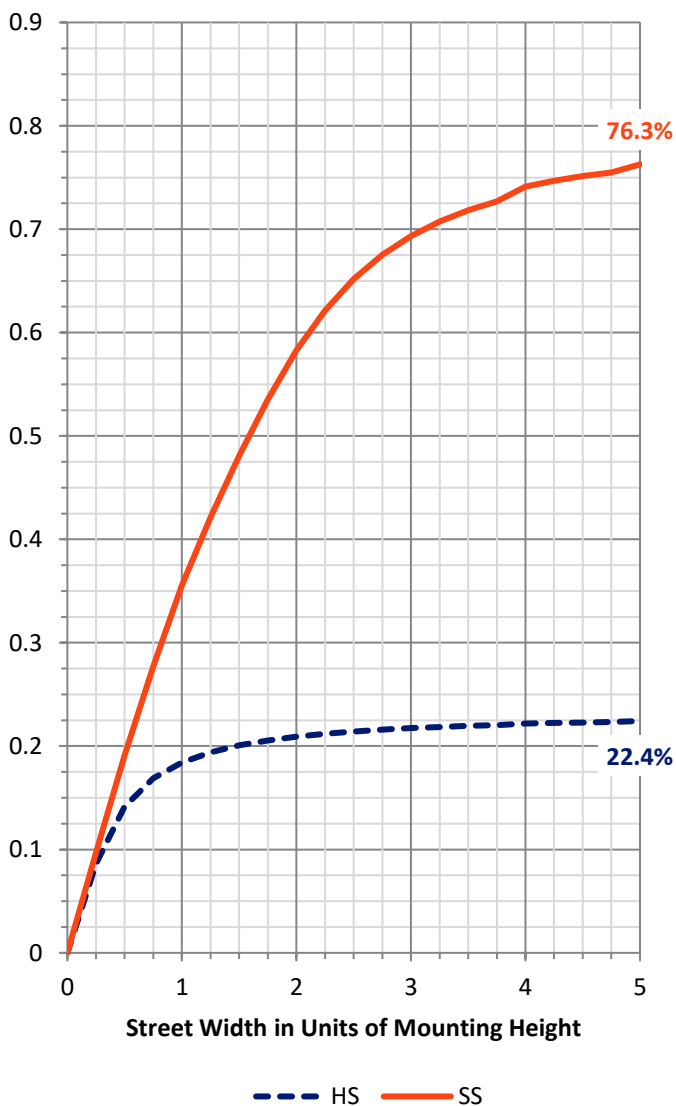
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	11092.4	0.0	11092.4
	% Fixture	22.8	0.0	22.8
Street Side	Lumens	37591.6	0.0	37591.6
	% Fixture	77.2	0.0	77.2
Total	Lumens	48684.0	0.0	48684.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	516.6	1.1
10°-20°	1597.1	3.3
20°-30°	2880.8	5.9
30°-40°	4461.9	9.2
40°-50°	6777.5	13.9
50°-60°	9394.1	19.3
60°-70°	12215.6	25.1
70°-80°	9021.1	18.5
80°-90°	1819.3	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°	48684.0	100.0
0°-180°	48684.0	100.0

Coefficient of Utilization

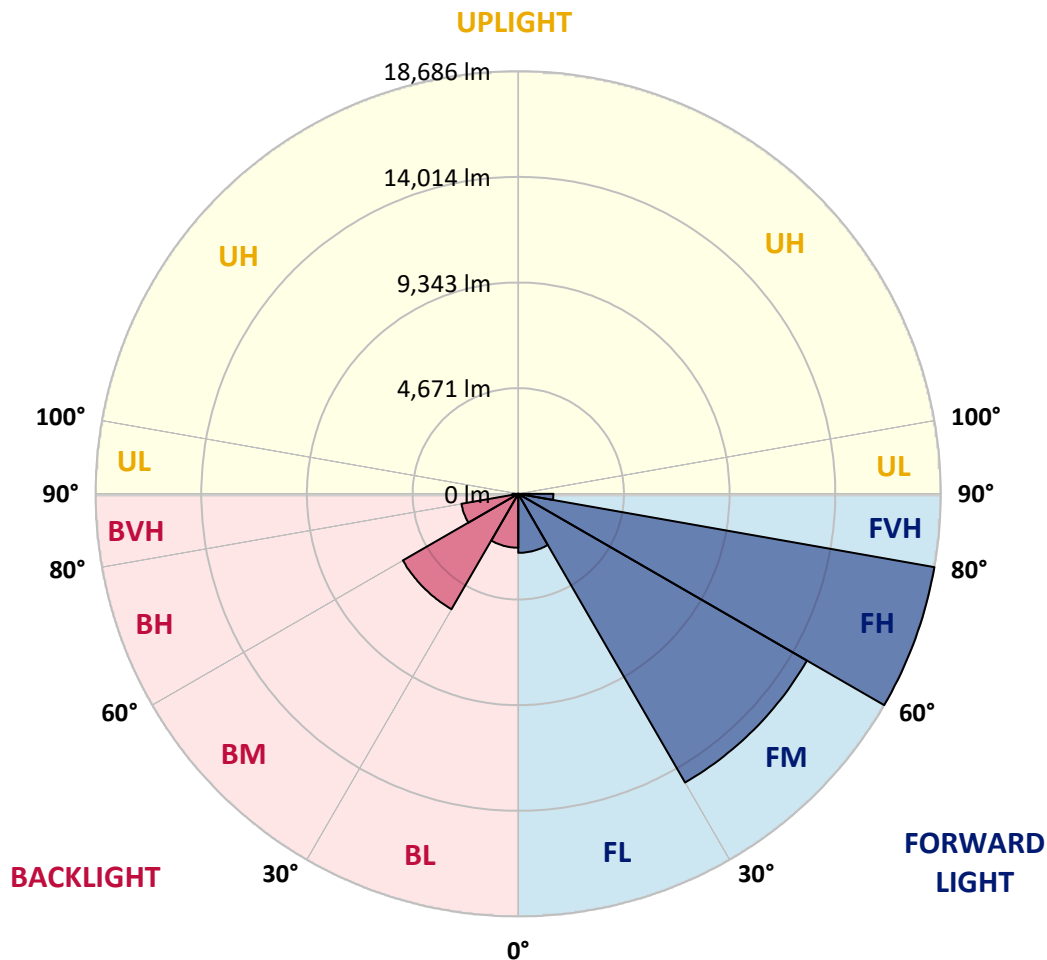


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2610.0	5.4			
FM (30°-60°)	14741.4	30.3			
FH (60°-80°)	18686.0	38.4			G5
FVH (80°-90°)	1554.3	3.2			G5
BL (0°-30°)	2384.6	4.9	B3/2500		
BM (30°-60°)	5892.1	12.1	B4/8500		
BH (60°-80°)	2550.6	5.2	B4/5000		G4/5000
BVH (80°-90°)	265.0	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°	5332.3	5332.3	5332.3	5332.3	5332.3	5332.3	5332.3	5332.3	5332.3	5332.3	5332.3
2.5°	5300.1	5293.0	5289.0	5297.1	5300.1	5301.1	5303.1	5301.1	5296.1	5314.2	5336.4
5°	5301.1	5297.1	5289.0	5281.9	5281.9	5281.9	5283.0	5306.1	5316.2	5314.2	5341.4
7.5°	5309.2	5306.1	5291.0	5286.0	5298.1	5302.1	5322.3	5315.2	5326.3	5344.4	5367.6
10°	5310.2	5306.1	5293.0	5304.1	5338.4	5344.4	5353.5	5373.7	5377.7	5399.9	5423.1
12.5°	5320.3	5320.3	5325.3	5349.5	5385.8	5392.8	5427.1	5443.2	5467.4	5478.5	5506.7
15°	5373.7	5372.7	5384.8	5412.0	5470.4	5474.5	5516.8	5565.2	5583.3	5610.6	5655.9
17.5°	5500.7	5506.7	5507.7	5527.9	5597.5	5599.5	5669.0	5714.4	5755.7	5804.1	5907.9
20°	5802.1	5791.0	5778.9	5778.9	5806.1	5820.2	5873.6	5946.2	6030.9	6116.6	6238.5
22.5°	6181.1	6203.3	6158.9	6135.7	6148.8	6132.7	6173.0	6231.5	6330.3	6458.3	6612.5
25°	6633.7	6635.7	6632.7	6538.9	6509.7	6519.8	6553.0	6607.5	6738.5	6840.3	7064.1
27.5°	7075.2	7066.1	7033.9	6935.1	6906.9	6921.0	6920.0	7070.2	7204.2	7334.2	7597.3
30°	7476.4	7500.6	7443.1	7276.8	7279.8	7277.8	7324.2	7517.7	7762.7	8004.6	8274.7
32.5°	8184.0	8110.4	8032.8	7704.2	7643.7	7636.7	7663.9	7952.2	8315.0	8723.3	9047.9
35°	8850.3	8832.1	8755.5	8421.9	8072.1	8066.1	8028.8	8379.6	8889.6	9645.6	10050.8
37.5°	9531.7	9505.5	9429.9	9145.6	8797.9	8764.6	8451.1	8835.2	9524.6	10724.2	11301.8
40°	10344.2	10328.0	10211.1	9847.2	9490.4	9440.0	9114.4	9314.0	10326.0	12160.6	12567.8
42.5°	11056.8	11053.8	10919.7	10582.0	10278.6	10228.2	9951.0	10158.7	11439.9	13567.8	13807.7
45°	11580.0	11659.6	11665.6	11473.1	11263.5	11219.1	11145.5	11431.8	12728.1	14844.9	14809.6
47.5°	12021.5	12090.0	12018.5	11919.7	11848.1	11851.1	11965.0	12533.5	14000.2	15957.7	15683.6
50°	12759.3	12717.0	12345.0	12286.6	12377.3	12430.7	12761.4	13723.0	15456.8	17002.0	16467.8
52.5°	13823.8	13661.5	12931.7	12812.8	13156.5	13176.6	13702.8	14786.4	16912.3	17898.1	17185.5
55°	15280.4	15146.3	14321.7	13772.4	13945.8	14081.8	14822.7	15876.1	18100.8	18740.8	17737.9
57.5°	17433.5	17443.5	16771.2	15747.1	15157.4	15302.5	15881.1	16935.5	19082.6	19446.4	18082.6
60°	19159.2	19478.7	19278.1	18810.4	17963.7	17864.9	17424.4	18039.3	19921.2	20046.2	18412.2
62.5°	20355.7	20500.8	21190.3	21289.1	22256.8	22298.1	20188.3	19332.5	20842.5	20439.3	18481.8
65°	20295.2	20384.9	21474.6	22801.1	25659.8	25787.8	24553.0	21289.1	21473.5	20614.7	18279.2
67.5°	18882.0	19017.0	20402.0	22881.7	27473.2	27424.8	26641.6	24012.7	21681.2	20333.5	17313.5
70°	16427.5	16843.8	18007.0	21181.2	28039.7	28104.2	26660.7	24882.6	21145.9	19538.2	15703.7
72.5°	13539.5	13670.6	14769.3	18321.5	26383.5	26288.8	25568.1	23734.5	20178.3	18099.7	12886.3
75°	10296.8	10296.8	11627.3	14601.0	22656.9	22989.6	23269.8	21496.7	17876.0	14752.2	8774.7
77.5°	6835.3	7080.2	8151.7	10972.1	17934.4	18180.4	19148.1	18323.5	14636.2	10817.9	4007.8
80°	3625.8	3656.0	4805.2	7290.9	12827.9	13291.6	14622.1	14132.2	10527.6	5068.3	1013.0
82.5°	1268.1	1384.0	2112.8	4225.6	8452.1	8741.4	9700.0	8397.7	3718.5	1121.9	560.5
85°	630.0	652.2	930.4	2012.0	4758.8	4898.9	5667.0	3271.0	598.8	489.9	381.0
87.5°	303.4	310.5	356.8	719.7	2068.4	2164.2	2291.2	1064.5	221.8	186.5	165.3
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°	5332.3	5332.3	5332.3	5332.3	5332.3	5332.3	5332.3	5332.3	5332.3	5332.3	5332.3
2.5°	5341.4	5350.5	5367.6	5372.7	5360.6	5382.7	5403.9	5423.1	5422.1	5429.1	5454.3
5°	5353.5	5372.7	5390.8	5423.1	5454.3	5472.5	5489.6	5505.7	5510.8	5525.9	5541.0
7.5°	5390.8	5410.0	5451.3	5507.7	5509.8	5555.1	5584.4	5589.4	5593.4	5593.4	5628.7
10°	5448.3	5483.6	5550.1	5589.4	5624.7	5609.6	5639.8	5620.6	5606.5	5612.6	5636.8
12.5°	5547.1	5578.3	5674.1	5717.4	5685.2	5679.1	5648.9	5605.5	5556.1	5551.1	5573.3
15°	5702.3	5760.8	5846.4	5887.8	5807.1	5735.6	5633.7	5545.0	5449.3	5414.0	5428.1
17.5°	5952.3	6022.8	6116.6	6088.4	5941.2	5800.1	5631.7	5444.2	5258.8	5129.7	5163.0
20°	6318.2	6370.6	6447.2	6333.3	6118.6	5885.7	5609.6	5313.2	4999.7	4764.8	4737.6
22.5°	6702.2	6781.9	6735.5	6524.8	6243.6	5919.0	5563.2	5122.7	4637.8	4343.5	4299.1
25°	7164.9	7191.1	7030.8	6713.3	6278.9	5866.6	5413.0	4844.5	4267.9	3990.7	3977.6
27.5°	7655.8	7596.3	7298.0	6800.0	6239.6	5711.4	5111.6	4405.0	3933.2	3688.3	3650.0
30°	8210.2	8072.1	7518.7	6809.1	6091.4	5409.0	4730.6	4061.3	3661.1	3415.1	3375.8
32.5°	8923.9	8598.3	7723.3	6715.3	5778.9	4965.4	4272.9	3767.9	3416.1	3169.2	3133.9
35°	9836.1	9286.8	7940.1	6546.0	5393.8	4521.9	3893.9	3518.9	3217.6	2920.2	2872.8
37.5°	10887.5	10247.4	8199.1	6332.3	4971.5	4131.8	3637.9	3360.7	3070.4	2733.7	2677.3
40°	12109.2	11209.0	8598.3	6077.3	4592.5	3850.6	3513.9	3306.3	2988.7	2638.0	2573.4
42.5°	13167.6	12226.1	9073.1	5803.1	4234.6	3616.7	3458.5	3270.0	2937.3	2566.4	2492.8
45°	14146.4	13065.8	9536.7	5470.4	3857.6	3456.5	3391.9	3179.2	2846.6	2477.7	2401.1
47.5°	14941.7	13744.2	9939.9	5165.0	3556.2	3309.3	3246.8	3006.9	2694.4	2370.8	2314.4
50°	15552.5	14254.2	10160.7	4922.1	3237.7	3142.0	3059.3	2812.3	2511.9	2232.7	2184.3
52.5°	16177.5	14765.3	10269.6	4934.2	2941.4	2893.0	2808.3	2596.6	2366.8	2152.1	2099.7
55°	16541.4	14974.9	10154.6	4640.9	2669.2	2612.8	2539.2	2429.3	2292.2	2101.7	2052.3
57.5°	16754.1	15105.0	9804.9	3785.1	2341.6	2288.2	2300.3	2291.2	2178.3	1977.7	1932.3
60°	16907.3	14822.7	9088.2	2782.1	2062.4	2022.1	2121.9	2089.6	1991.8	1835.6	1797.3
62.5°	16783.3	14285.5	7797.9	2091.6	1834.6	1920.3	2007.9	1948.5	1815.4	1673.3	1628.9
65°	16027.3	13231.1	5927.1	1680.3	1761.0	1878.9	1949.5	1853.7	1718.6	1550.3	1530.2
67.5°	14651.4	11319.9	3495.8	1540.2	1705.5	1830.5	1889.0	1762.0	1643.0	1481.8	1457.6
70°	12551.7	8474.3	1561.4	1434.4	1608.8	1732.8	1771.1	1651.1	1522.1	1370.9	1346.7
72.5°	9342.2	5109.6	1052.4	1324.5	1465.6	1575.5	1617.8	1490.8	1399.1	1330.6	1323.5
75°	5188.2	1774.1	970.7	1199.5	1309.4	1408.2	1460.6	1370.9	1298.3	1204.6	1166.3
77.5°	1652.1	754.0	922.3	1072.5	1211.6	1293.3	1285.2	1150.1	1127.0	1013.0	1003.0
80°	659.2	657.2	852.8	878.0	1034.2	1102.8	1084.6	914.3	944.5	878.0	851.8
82.5°	517.1	601.8	683.4	670.3	804.4	885.0	859.8	671.3	759.0	697.5	638.1
85°	393.1	527.2	438.5	436.5	561.5	657.2	673.3	516.1	517.1	470.7	419.3
87.5°	202.6	194.5	168.3	167.3	187.5	267.1	327.6	293.3	231.8	174.4	167.3
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)