

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: P721843

Luminaire Tested: **CST-CA8-400-727-U-T4**

Issue Date: 10/25/2023

Test Information

Test Method: LM-79-08
Report Number: P721843
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-12)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 10/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA8-400-727-U-T4
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 2700K CCT, 70 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 50749 lumens
Efficiency: N/A
Efficacy: 126.6 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B4 - U0 - G5

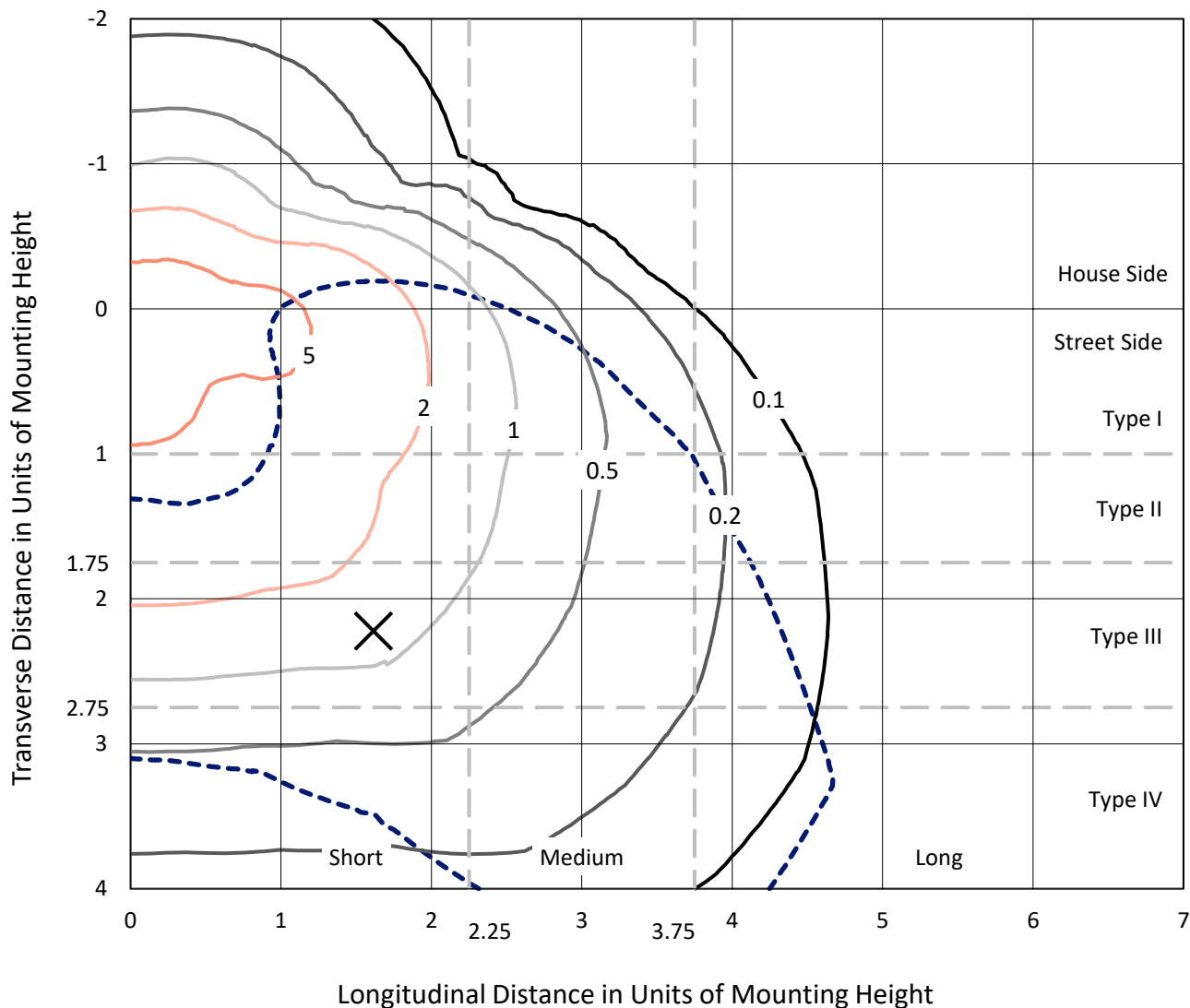
Input Watts (W): 400.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

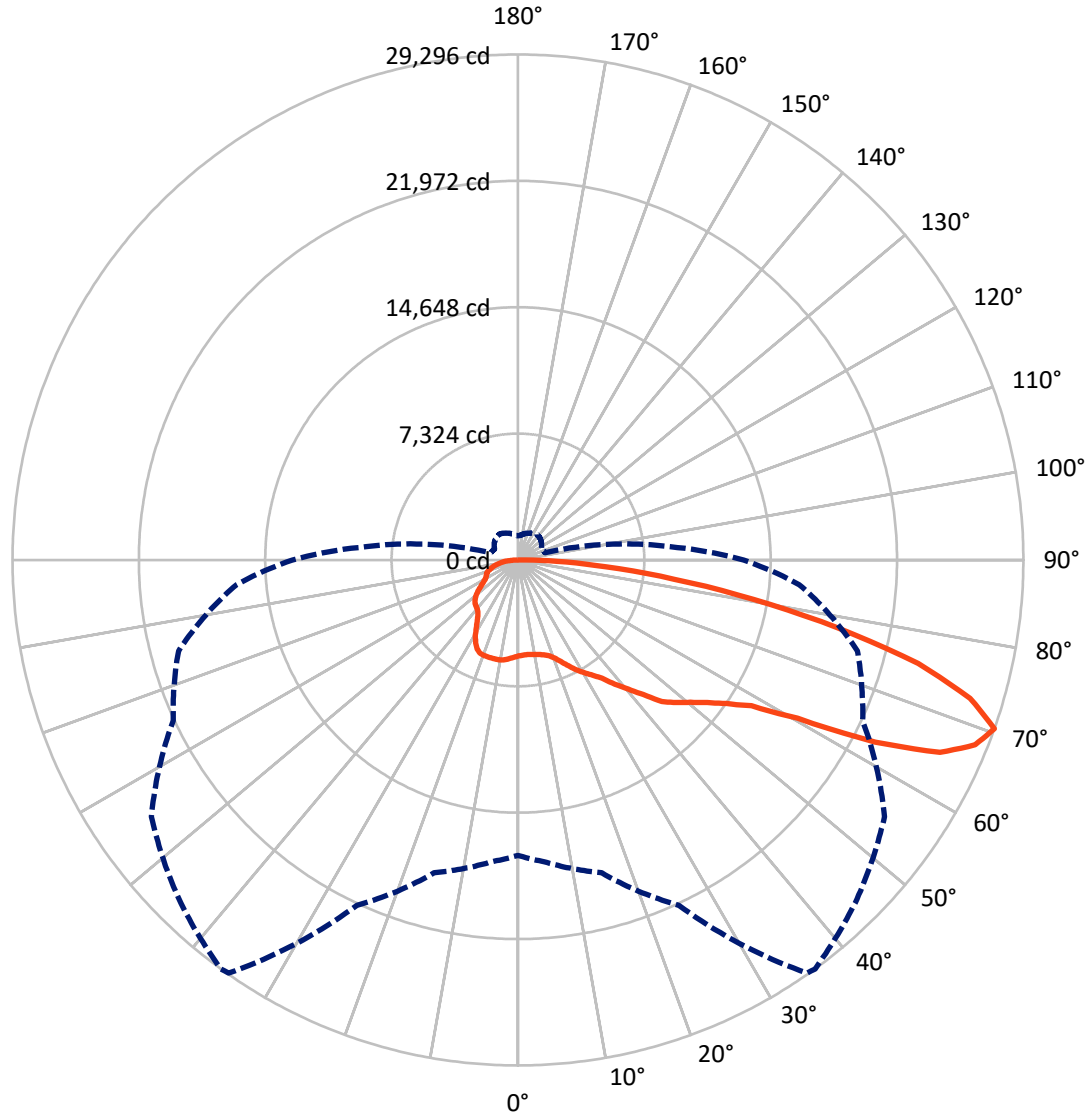
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 6.4 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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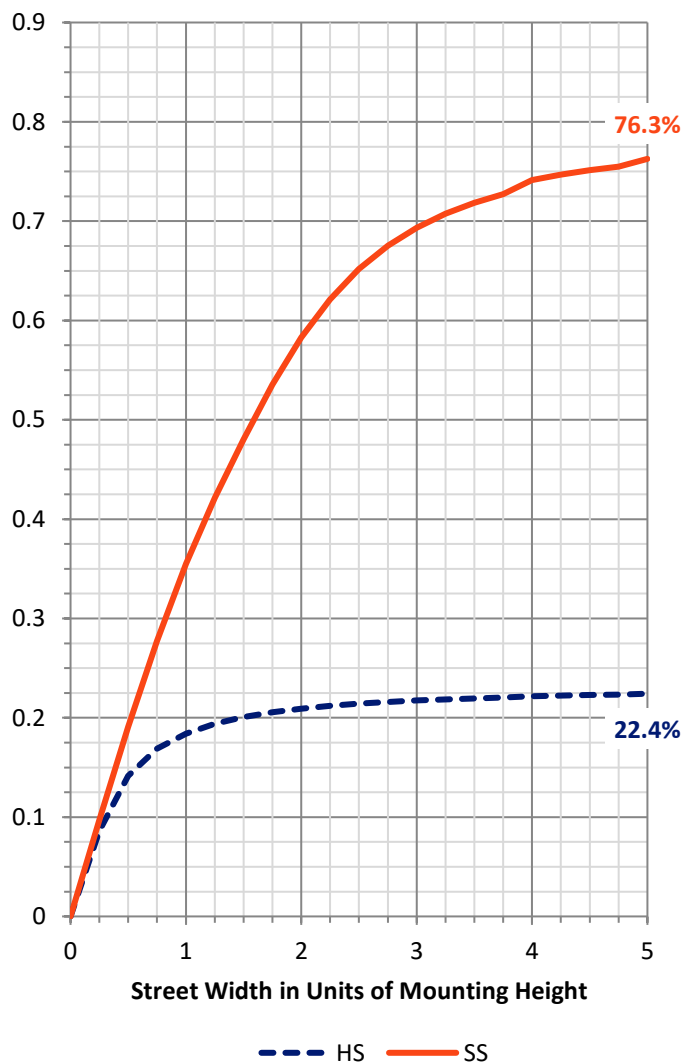
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	11562.8	0.0	11562.8
	% Fixture	22.8	0.0	22.8
Street Side	Lumens	39186.1	0.0	39186.1
	% Fixture	77.2	0.0	77.2
Total	Lumens	50749.0	0.0	50749.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	538.5	1.1
10°-20°	1664.8	3.3
20°-30°	3003.0	5.9
30°-40°	4651.1	9.2
40°-50°	7065.0	13.9
50°-60°	9792.6	19.3
60°-70°	12733.7	25.1
70°-80°	9403.7	18.5
80°-90°	1896.5	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°	50749.0	100.0
0°-180°	50749.0	100.0

Coefficient of Utilization

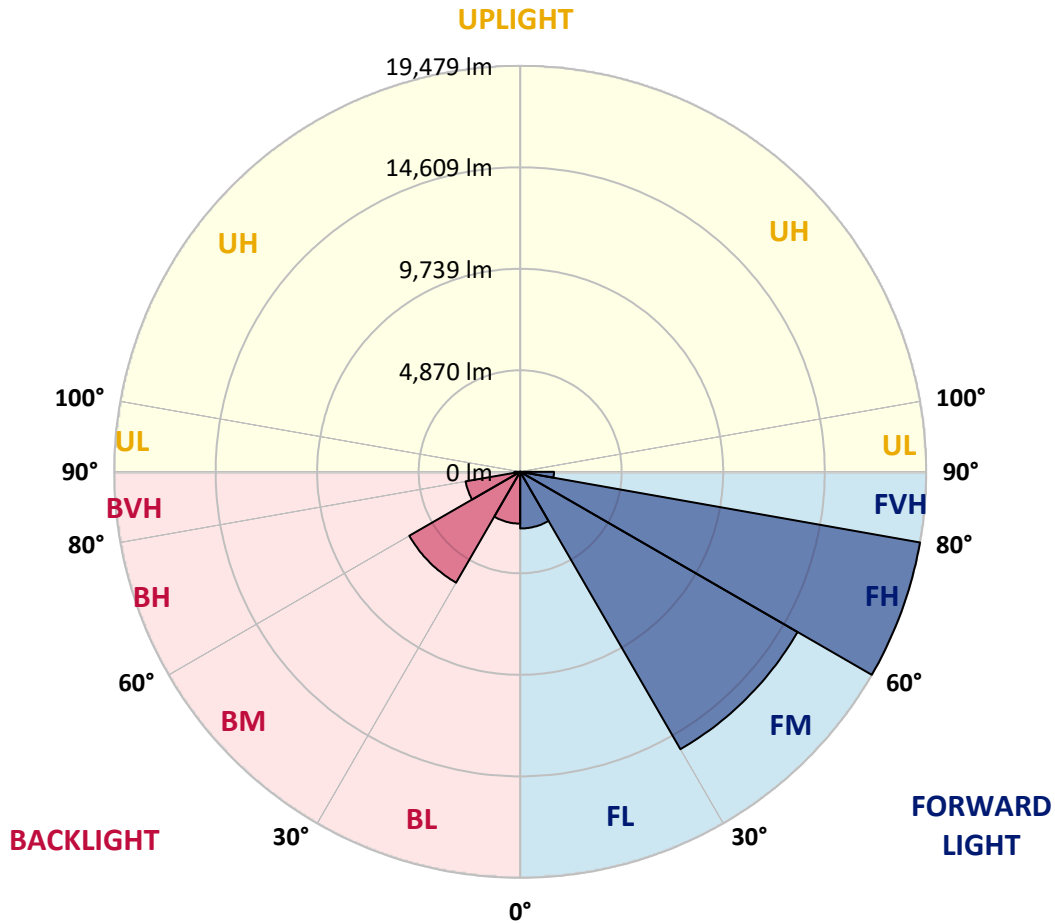


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2720.7	5.4			
FM (30°-60°)	15366.7	30.3			
FH (60°-80°)	19478.6	38.4			G5
FVH (80°-90°)	1620.2	3.2			G5
BL (0°-30°)	2485.7	4.9	B3/2500		
BM (30°-60°)	6142.0	12.1	B4/8500		
BH (60°-80°)	2658.8	5.2	B4/5000		G4/5000
BVH (80°-90°)	276.3	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°	5558.5	5558.5	5558.5	5558.5	5558.5	5558.5	5558.5	5558.5	5558.5	5558.5	5558.5
2.5°	5524.9	5517.5	5513.3	5521.8	5524.9	5526.0	5528.1	5526.0	5520.7	5539.6	5562.7
5°	5526.0	5521.8	5513.3	5506.0	5506.0	5506.0	5507.0	5531.2	5541.7	5539.6	5568.0
7.5°	5534.4	5531.2	5515.4	5510.2	5522.8	5527.0	5548.0	5540.7	5552.2	5571.1	5595.3
10°	5535.4	5531.2	5517.5	5529.1	5564.8	5571.1	5580.6	5601.6	5605.8	5628.9	5653.1
12.5°	5545.9	5545.9	5551.2	5576.4	5614.2	5621.6	5657.3	5674.1	5699.3	5710.9	5740.3
15°	5601.6	5600.6	5613.2	5641.5	5702.5	5706.7	5750.8	5801.3	5820.2	5848.5	5895.8
17.5°	5734.0	5740.3	5741.4	5762.4	5834.9	5837.0	5909.5	5956.8	5999.8	6050.3	6158.5
20°	6048.2	6036.6	6024.0	6024.0	6052.4	6067.1	6122.8	6198.4	6286.7	6376.0	6503.2
22.5°	6443.3	6466.4	6420.2	6396.0	6409.6	6392.8	6434.9	6495.8	6598.8	6732.2	6893.0
25°	6915.1	6917.2	6914.0	6816.3	6785.8	6796.3	6831.0	6887.7	7024.3	7130.5	7363.7
27.5°	7375.3	7365.8	7332.2	7229.2	7199.8	7214.5	7213.5	7370.0	7509.8	7645.3	7919.6
30°	7793.5	7818.7	7758.8	7585.4	7588.6	7586.5	7634.8	7836.6	8091.9	8344.1	8625.7
32.5°	8531.1	8454.4	8373.5	8031.0	7967.9	7960.6	7988.9	8289.5	8667.7	9093.3	9431.6
35°	9225.7	9206.8	9126.9	8779.1	8414.5	8408.2	8369.3	8735.0	9266.7	10054.7	10477.1
37.5°	9936.0	9908.7	9829.9	9533.6	9171.0	9136.4	8809.6	9209.9	9928.6	11179.1	11781.1
40°	10782.9	10766.1	10644.2	10264.9	9892.9	9840.4	9501.0	9709.0	10764.0	12676.4	13100.9
42.5°	11525.8	11522.7	11382.9	11030.9	10714.6	10662.1	10373.1	10589.6	11925.1	14143.3	14393.3
45°	12071.1	12154.2	12160.5	11959.8	11741.2	11695.0	11618.3	11916.7	13268.0	15474.6	15437.8
47.5°	12531.4	12602.8	12528.2	12425.3	12350.7	12353.8	12472.5	13065.2	14594.0	16634.6	16348.8
50°	13300.5	13256.4	12868.7	12807.7	12902.3	12958.0	13302.6	14305.1	16112.4	17723.2	17166.3
52.5°	14410.1	14241.0	13480.2	13356.2	13714.5	13735.6	14284.1	15413.6	17629.7	18657.3	17914.4
55°	15928.5	15788.7	14929.2	14356.6	14537.3	14679.1	15451.4	16549.5	18868.5	19535.8	18490.3
57.5°	18172.9	18183.4	17482.6	16415.0	15800.3	15951.6	16554.7	17653.8	19892.0	20271.3	18849.6
60°	19971.8	20304.9	20095.8	19608.3	18725.6	18622.6	18163.5	18804.4	20766.2	20896.5	19193.2
62.5°	21219.1	21370.4	22089.1	22192.1	23200.8	23243.9	21044.7	20152.6	21726.6	21306.3	19265.7
65°	21156.0	21249.6	22385.4	23768.2	26748.2	26881.6	25594.4	22192.1	22384.4	21489.1	19054.5
67.5°	19682.9	19823.7	21267.4	23852.3	28638.5	28588.1	27771.6	25031.2	22600.8	21196.0	18047.9
70°	17124.3	17558.2	18770.8	22079.7	29229.0	29296.3	27791.6	25938.0	22042.9	20366.9	16369.8
72.5°	14113.8	14250.4	15395.8	19098.6	27502.6	27403.9	26652.6	24741.2	21034.1	18867.5	13432.9
75°	10733.5	10733.5	12120.5	15220.3	23618.0	23964.7	24256.8	22408.5	18634.2	15377.9	9146.9
77.5°	7125.2	7380.5	8497.5	11437.5	18695.1	18951.5	19960.3	19100.7	15257.1	11276.8	4177.8
80°	3779.6	3811.1	5009.0	7600.2	13372.0	13855.3	15242.3	14731.7	10974.2	5283.2	1056.0
82.5°	1321.9	1442.7	2202.4	4404.8	8810.6	9112.2	10111.5	8753.9	3876.3	1169.5	584.2
85°	656.7	679.8	969.9	2097.3	4960.6	5106.7	5907.4	3409.7	624.2	510.7	397.2
87.5°	316.3	323.6	372.0	750.2	2156.2	2256.0	2388.4	1109.6	231.2	194.4	172.3
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°	5558.5	5558.5	5558.5	5558.5	5558.5	5558.5	5558.5	5558.5	5558.5	5558.5	5558.5
2.5°	5568.0	5577.4	5595.3	5600.6	5587.9	5611.1	5633.1	5653.1	5652.0	5659.4	5685.7
5°	5580.6	5600.6	5619.5	5653.1	5685.7	5704.6	5722.4	5739.3	5744.5	5760.3	5776.0
7.5°	5619.5	5639.4	5682.5	5741.4	5743.5	5790.7	5821.2	5826.5	5830.7	5830.7	5867.5
10°	5679.4	5716.1	5785.5	5826.5	5863.2	5847.5	5879.0	5859.0	5844.3	5850.6	5875.9
12.5°	5782.3	5814.9	5914.7	5959.9	5926.3	5920.0	5888.5	5843.3	5791.8	5786.5	5809.7
15°	5944.2	6005.1	6094.4	6137.5	6053.4	5978.8	5872.7	5780.2	5680.4	5643.6	5658.4
17.5°	6204.7	6278.3	6376.0	6346.6	6193.2	6046.1	5870.6	5675.2	5481.8	5347.3	5382.0
20°	6586.2	6640.8	6720.7	6601.9	6378.1	6135.4	5847.5	5538.6	5211.8	4966.9	4938.6
22.5°	6986.5	7069.5	7021.2	6801.6	6508.4	6170.1	5799.2	5340.0	4834.6	4527.7	4481.5
25°	7468.8	7496.1	7329.1	6998.1	6545.2	6115.4	5642.6	5050.0	4448.9	4160.0	4146.3
27.5°	7980.5	7918.5	7607.5	7088.4	6504.2	5953.6	5328.4	4591.8	4100.1	3844.7	3804.8
30°	8558.5	8414.5	7837.6	7097.9	6349.8	5638.4	4931.2	4233.5	3816.4	3560.0	3519.0
32.5°	9302.4	8963.0	8050.9	7000.2	6024.0	5176.1	4454.2	3927.7	3561.0	3303.6	3266.8
35°	10253.3	9680.7	8276.8	6823.6	5622.6	4713.7	4059.1	3668.2	3354.0	3044.1	2994.7
37.5°	11349.3	10682.0	8546.9	6600.9	5182.4	4307.1	3792.2	3503.2	3200.6	2849.7	2790.8
40°	12622.8	11684.5	8963.0	6335.0	4787.3	4013.9	3663.0	3446.5	3115.5	2749.8	2682.6
42.5°	13726.1	12744.7	9457.9	6049.2	4414.2	3770.1	3605.2	3408.7	3061.9	2675.2	2598.5
45°	14746.4	13620.0	9941.3	5702.5	4021.3	3603.1	3535.8	3314.1	2967.4	2582.8	2502.9
47.5°	15575.4	14327.1	10361.6	5384.1	3707.1	3449.7	3384.5	3134.4	2808.7	2471.4	2412.5
50°	16212.2	14858.8	10591.7	5130.9	3375.0	3275.2	3189.1	2931.6	2618.5	2327.4	2277.0
52.5°	16863.7	15391.6	10705.2	5143.5	3066.1	3015.7	2927.4	2706.8	2467.2	2243.4	2188.7
55°	17243.0	15610.1	10585.4	4837.7	2782.4	2723.6	2646.9	2532.3	2389.4	2190.8	2139.4
57.5°	17464.7	15745.7	10220.8	3945.6	2440.9	2385.2	2397.8	2388.4	2270.7	2061.6	2014.3
60°	17624.4	15451.4	9473.7	2900.1	2149.9	2107.8	2211.9	2178.2	2076.3	1913.4	1873.5
62.5°	17495.2	14891.4	8128.7	2180.3	1912.4	2001.7	2093.1	2031.1	1892.4	1744.3	1698.0
65°	16707.1	13792.3	6178.5	1751.6	1835.7	1958.6	2032.2	1932.4	1791.5	1616.1	1595.1
67.5°	15272.8	11800.1	3644.0	1605.6	1777.9	1908.2	1969.1	1836.7	1712.7	1544.6	1519.4
70°	13084.1	8833.8	1627.6	1495.2	1677.0	1806.3	1846.2	1721.1	1586.6	1429.0	1403.8
72.5°	9738.5	5326.3	1097.0	1380.7	1527.8	1642.3	1686.5	1554.1	1458.5	1387.0	1379.6
75°	5408.3	1849.3	1011.9	1250.4	1364.9	1467.9	1522.6	1429.0	1353.4	1255.7	1215.7
77.5°	1722.2	786.0	961.4	1118.0	1263.0	1348.1	1339.7	1198.9	1174.8	1056.0	1045.5
80°	687.2	685.1	888.9	915.2	1078.1	1149.5	1130.6	953.0	984.6	915.2	887.9
82.5°	539.0	627.3	712.4	698.8	838.5	922.6	896.3	699.8	791.2	727.1	665.1
85°	409.8	549.5	457.1	455.0	585.3	685.1	701.9	538.0	539.0	490.7	437.1
87.5°	211.2	202.8	175.5	174.4	195.4	278.5	341.5	305.8	241.7	181.8	174.4
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)