

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: McGRAW-EDISON

Report Number: P510697

Luminaire Tested: **CTN-CA8-230-722-U-T2**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510697
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-10)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA8-230-722-U-T2
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 2200K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28999 lumens
Efficiency: N/A
Efficacy: 127.0 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

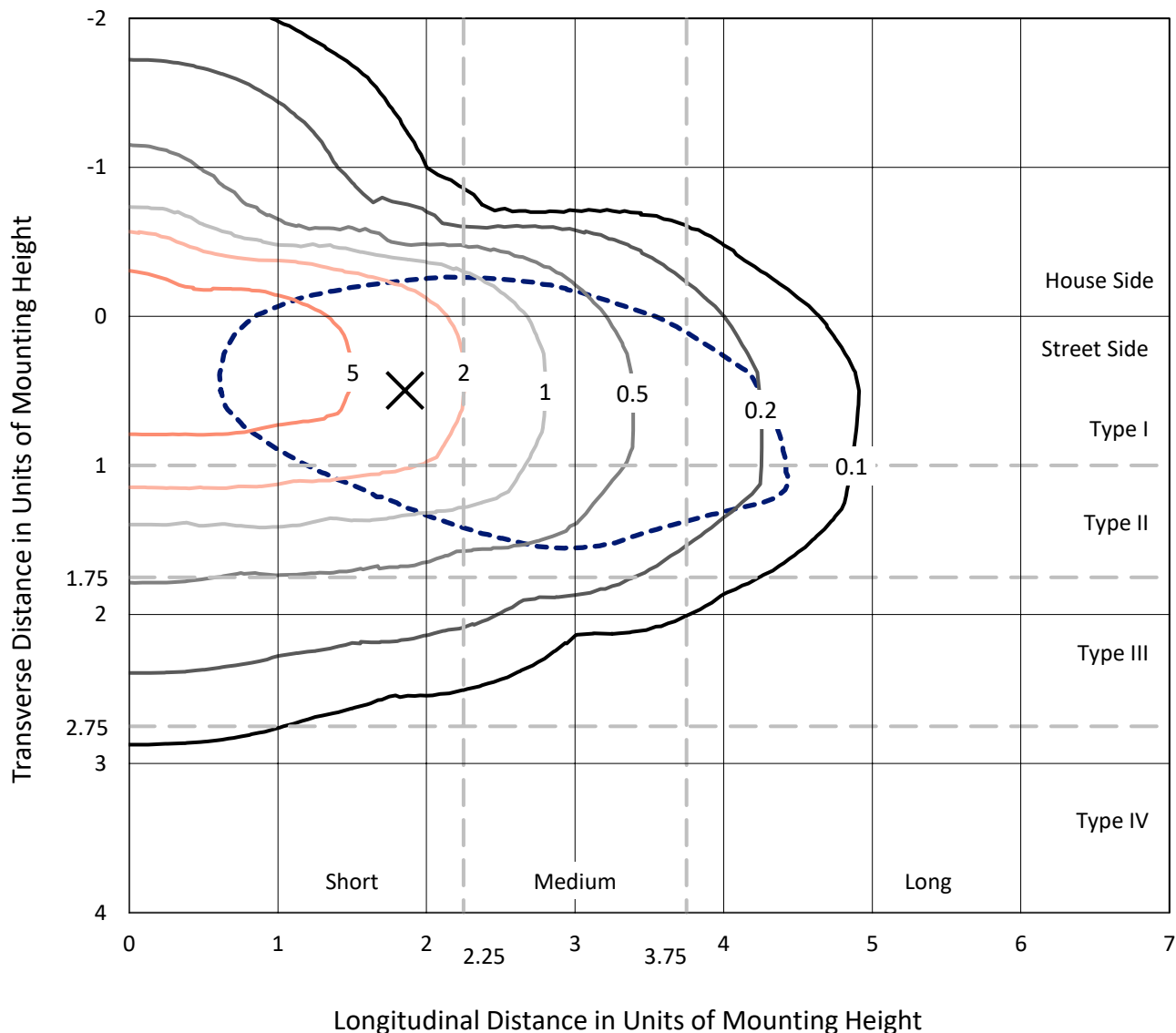
Input Watts (W): 228.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

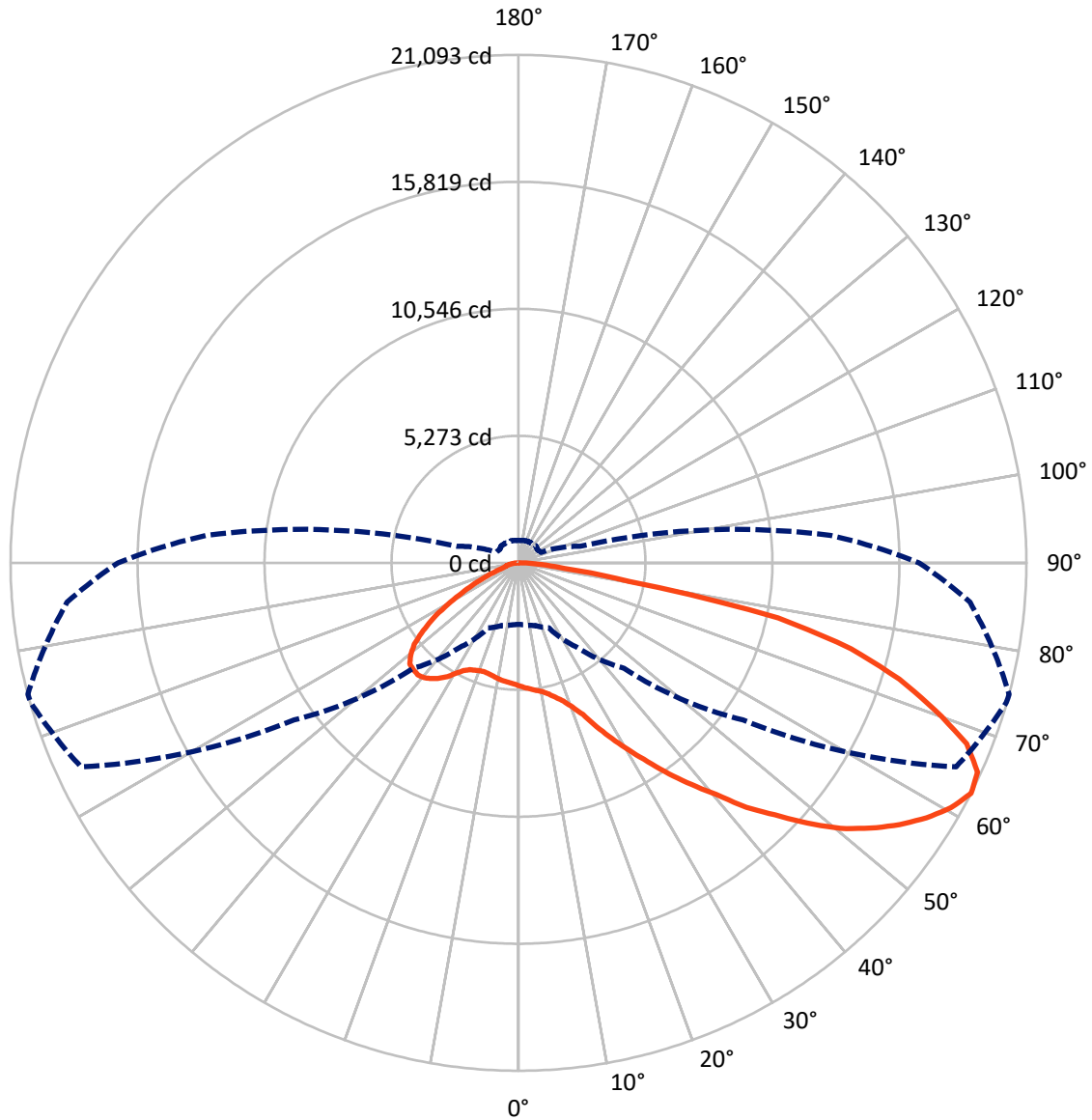
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.6 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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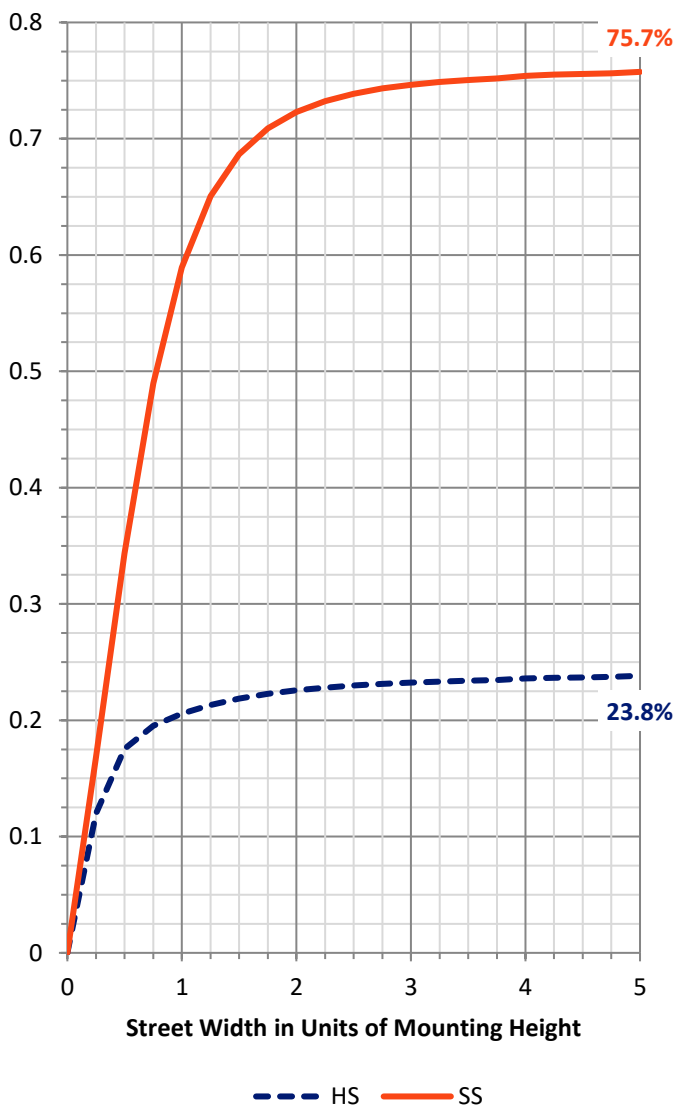
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7025.9	0.0	7025.9
	% Fixture	24.2	0.0	24.2
Street Side	Lumens	21973.1	0.0	21973.1
	% Fixture	75.8	0.0	75.8
Total	Lumens	28999.0	0.0	28999.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	491.8	1.7
10°-20°	1492.5	5.1
20°-30°	2574.2	8.9
30°-40°	3795.7	13.1
40°-50°	5003.6	17.3
50°-60°	5888.8	20.3
60°-70°	5858.7	20.2
70°-80°	3416.6	11.8
80°-90°	477.1	1.6
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°	28999.0	100.0
0°-180°	28999.0	100.0

Coefficient of Utilization

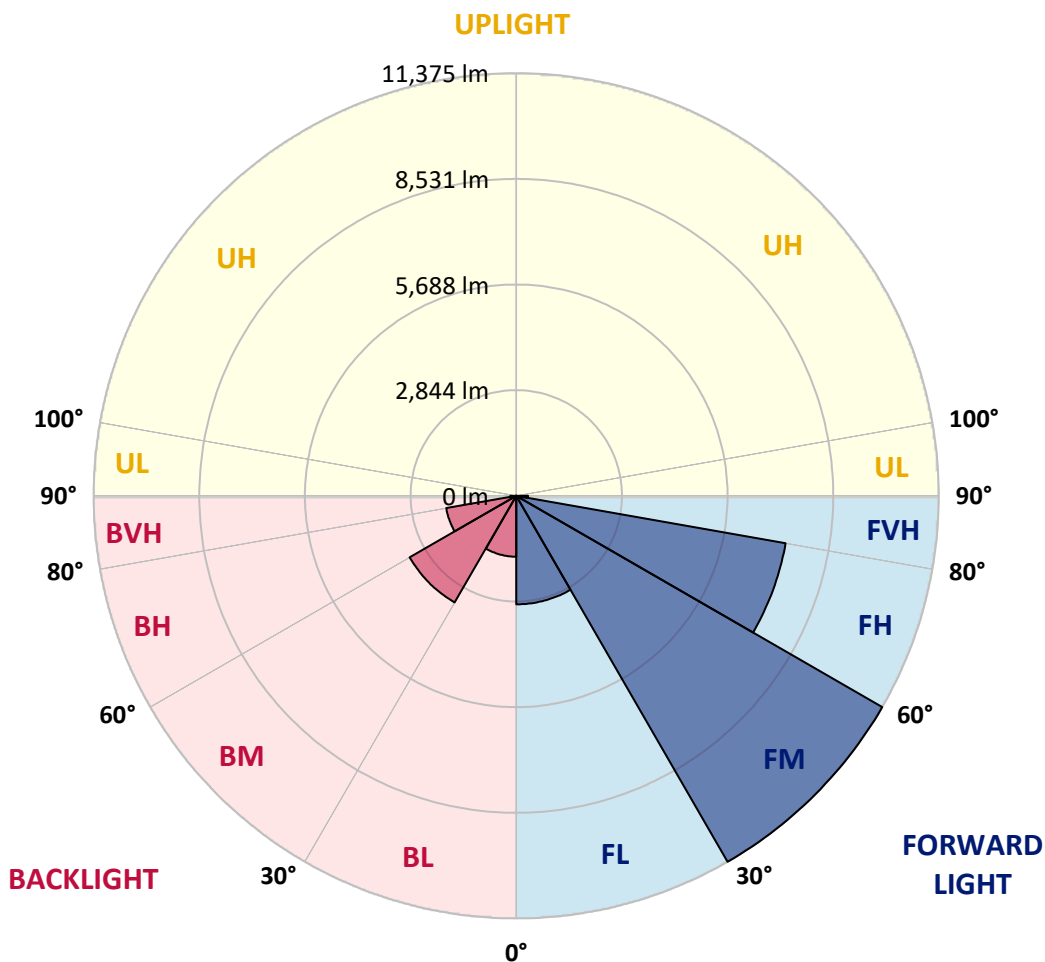


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2920.1	10.1			
FM (30°-60°)	11375.1	39.2			
FH (60°-80°)	7361.3	25.4			G3/7500
FVH (80°-90°)	316.6	1.1			G3/500
BL (0°-30°)	1638.4	5.6	B3/2500		
BM (30°-60°)	3312.9	11.4	B3/5000		
BH (60°-80°)	1914.1	6.6	B3/2500		G3/2500
BVH (80°-90°)	160.5	0.6			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3
 Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	5111.9	5111.9	5111.9	5111.9	5111.9	5111.9	5111.9	5111.9	5111.9	5111.9	5111.9
2.5°	5391.8	5369.7	5372.7	5357.2	5333.9	5316.6	5271.2	5222.3	5193.0	5190.6	5148.9
5°	5662.7	5669.9	5671.7	5622.2	5573.2	5517.7	5448.5	5354.2	5277.2	5265.2	5184.1
7.5°	5909.8	5909.2	5905.6	5878.2	5855.5	5773.2	5634.7	5486.7	5361.3	5350.0	5218.1
10°	6162.9	6161.1	6125.3	6079.3	6028.0	5952.2	5833.4	5656.2	5453.2	5438.3	5249.7
12.5°	6438.6	6418.9	6396.2	6340.7	6279.9	6148.6	6023.8	5831.0	5619.2	5592.3	5305.8
15°	6666.0	6645.7	6614.1	6576.5	6512.6	6412.4	6279.9	6051.3	5823.9	5797.6	5431.8
17.5°	6891.0	6881.5	6858.8	6818.8	6769.9	6683.3	6561.6	6367.6	6069.8	6037.5	5641.3
20°	7075.4	7052.8	7036.0	7054.5	7058.7	6994.9	6928.0	6765.1	6436.8	6387.3	5898.5
22.5°	7180.5	7175.7	7267.0	7335.1	7362.5	7376.8	7355.9	7224.6	6927.4	6840.9	6256.6
25°	7280.2	7272.4	7396.5	7566.6	7728.4	7810.7	7866.2	7883.5	7610.8	7532.6	6832.5
27.5°	7283.1	7304.6	7484.9	7770.1	8016.6	8267.9	8534.1	8564.5	8325.2	8263.1	7487.8
30°	7299.2	7308.8	7487.3	7814.9	8328.2	8731.0	9077.8	9249.1	9042.6	9013.9	8209.4
32.5°	7094.5	7107.1	7384.6	7893.1	8563.3	9210.3	9670.5	9924.7	9873.4	9837.0	8979.3
35°	6881.5	6892.2	7214.5	7782.1	8738.2	9645.4	10205.8	10705.4	10799.1	10771.6	9838.2
37.5°	6547.2	6583.1	6920.9	7649.6	8768.6	9965.3	10716.7	11483.0	11765.9	11683.6	10746.5
40°	6184.4	6210.6	6603.9	7372.1	8734.6	10175.4	11218.6	12343.7	12686.2	12642.1	11648.4
42.5°	5726.0	5796.4	6190.3	7017.5	8559.8	10306.1	11683.0	13319.5	13817.2	13876.3	12476.8
45°	5339.9	5338.1	5703.9	6504.3	8242.8	10337.1	12110.3	14306.1	15034.2	14923.2	13571.9
47.5°	4885.7	4904.2	5286.1	5993.4	7775.5	10238.6	12443.3	15472.3	16209.3	16149.1	14470.2
50°	3834.6	3967.7	4691.1	5554.1	7143.5	9964.1	12720.9	16608.0	17311.7	17339.1	15286.6
52.5°	3305.8	3357.2	3756.5	5111.9	6582.5	9503.3	13025.2	17885.8	18377.0	18307.2	16213.5
55°	3094.0	3121.4	3313.0	4317.5	6039.9	8790.1	13171.5	19052.7	19207.8	19196.5	16976.3
57.5°	2940.6	2961.5	3097.6	3603.1	5444.3	7874.6	13047.9	19811.8	20052.9	19978.9	17696.1
60°	2719.2	2735.9	2938.8	3246.8	4831.4	6950.1	12288.2	20156.2	20665.9	20638.4	18332.3
62.5°	2552.6	2581.3	2694.7	2983.6	4307.9	6188.5	11382.8	20048.8	21068.2	21092.6	18818.1
65°	2376.6	2402.2	2498.3	2750.8	3833.4	5687.8	10406.4	19510.4	20883.1	20948.2	18896.9
67.5°	2159.3	2179.0	2293.0	2511.5	3279.0	5187.1	9305.2	18558.5	19856.6	20066.1	18112.6
70°	1886.0	1893.1	2032.8	2181.4	2722.7	4432.1	7398.9	17000.1	18371.1	18375.2	16631.9
72.5°	1501.0	1507.0	1544.0	1656.8	2045.3	3507.6	5438.3	14204.6	16565.1	16534.6	14781.7
75°	1020.6	1073.1	1201.4	1308.9	1475.4	2463.1	3382.2	9570.2	14034.5	14273.2	12141.9
77.5°	806.3	811.1	864.2	962.7	1106.5	1840.0	1895.5	5295.1	10463.1	11030.6	9543.9
80°	562.2	570.6	541.9	565.8	771.7	1259.3	1107.7	2304.4	4363.4	4658.9	5730.2
82.5°	268.0	277.5	318.7	296.0	383.8	535.4	584.9	1190.7	1884.8	1934.3	2231.0
85°	176.7	176.7	177.3	167.7	223.8	233.4	265.6	507.9	920.3	951.3	946.0
87.5°	56.7	62.7	60.9	71.0	85.9	77.6	81.2	159.4	315.7	312.7	261.4
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°	5111.9	5111.9	5111.9	5111.9	5111.9	5111.9	5111.9	5111.9	5111.9	5111.9	5111.9
2.5°	5119.0	5094.6	5037.3	4987.1	4937.6	4900.0	4867.8	4824.8	4804.5	4786.0	4824.8
5°	5133.9	5090.4	4987.7	4885.1	4790.8	4721.5	4679.2	4648.1	4620.1	4620.1	4633.2
7.5°	5151.3	5092.2	4945.3	4799.7	4658.3	4579.5	4519.2	4479.8	4457.1	4458.3	4486.4
10°	5162.6	5071.9	4897.0	4700.6	4546.7	4420.1	4361.0	4304.3	4261.4	4235.7	4264.4
12.5°	5175.7	5065.3	4831.9	4610.5	4423.1	4279.9	4156.9	4114.6	4072.8	4040.5	4056.1
15°	5256.9	5090.4	4777.6	4495.9	4278.7	4100.2	3939.1	3861.5	3849.6	3827.5	3832.9
17.5°	5389.4	5157.8	4742.4	4355.7	4105.0	3894.3	3690.2	3589.9	3566.1	3554.7	3560.7
20°	5586.9	5286.1	4753.2	4257.2	3909.2	3673.5	3409.7	3292.1	3212.7	3217.5	3240.8
22.5°	5888.9	5493.2	4811.7	4149.2	3697.4	3388.2	3122.0	2962.1	2882.1	2864.8	2891.1
25°	6370.0	5826.9	4876.1	4045.9	3492.7	3080.2	2785.4	2612.3	2509.7	2503.1	2532.4
27.5°	6986.5	6338.4	5016.4	3956.4	3238.4	2710.2	2417.2	2269.2	2159.9	2146.8	2137.3
30°	7617.4	6906.5	5270.0	3820.3	2941.8	2328.2	2073.4	1957.6	1835.3	1785.7	1796.5
32.5°	8285.8	7435.9	5567.2	3724.8	2609.9	1992.2	1770.8	1660.4	1548.2	1476.6	1459.8
35°	8959.0	7962.3	5817.3	3582.2	2295.4	1725.4	1513.6	1399.6	1301.7	1243.2	1239.0
37.5°	9746.9	8510.2	6017.9	3430.6	1968.9	1516.5	1261.7	1196.1	1148.9	1097.6	1102.9
40°	10535.9	9148.8	6178.4	3179.9	1698.0	1292.1	1073.7	1086.8	1097.0	1054.0	1050.4
42.5°	11191.2	9685.4	6251.8	2855.2	1458.1	1097.0	990.7	1050.4	1094.6	1066.5	1063.0
45°	11856.7	10137.2	6223.2	2452.4	1258.7	1003.9	984.2	1045.1	1101.8	1095.2	1092.2
47.5°	12580.0	10729.2	6173.6	1993.4	1116.1	994.9	998.5	1027.1	1098.8	1110.7	1105.9
50°	13464.5	11274.1	5880.6	1552.4	1046.8	1009.2	1030.7	1015.8	1076.7	1101.2	1105.3
52.5°	14344.8	11693.7	5488.5	1345.3	1019.4	1023.0	1075.5	1024.8	1051.6	1073.1	1092.8
55°	15024.0	12121.1	4854.0	1220.5	1010.4	1029.5	1088.0	1043.9	1043.3	1043.3	1049.8
57.5°	15719.3	12693.4	4219.6	1139.9	994.9	1036.7	1073.1	1047.4	1039.1	1027.1	1019.4
60°	16203.4	12905.3	3404.3	1086.8	978.8	1026.6	1031.3	1027.7	1002.1	990.7	981.8
62.5°	16633.1	13020.5	2650.5	1026.0	956.7	1002.7	977.6	969.9	954.9	927.5	932.3
65°	16517.9	12773.4	2019.7	957.3	941.2	974.0	930.5	912.0	913.2	884.5	894.1
67.5°	15776.6	11665.1	1450.3	852.3	898.8	917.3	876.7	863.0	842.7	828.4	841.5
70°	14279.2	10340.7	978.2	707.2	802.1	842.1	815.3	791.4	759.8	750.2	764.5
72.5°	12018.4	8632.0	675.0	568.8	692.3	744.2	734.1	709.6	687.0	710.2	738.3
75°	9873.4	6386.1	550.9	466.1	532.4	620.1	649.9	657.1	725.2	951.9	975.2
77.5°	7107.1	3958.8	495.4	379.0	424.9	496.0	555.7	580.1	885.7	848.1	846.3
80°	4143.8	2307.4	377.8	299.0	343.8	363.5	434.5	681.0	763.9	655.3	639.2
82.5°	1890.8	1018.2	263.2	239.3	238.7	240.5	296.0	655.3	586.1	516.3	497.2
85°	695.3	358.1	160.0	138.5	158.8	137.9	194.0	480.4	339.6	334.2	278.7
87.5°	171.3	73.4	54.3	45.4	37.0	35.2	59.1	158.2	83.0	75.8	72.8
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)