

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: P510647

Luminaire Tested: **CTN-CA6-230-727-U-T2**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510647
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-CA6-230-727-U-T2
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (6) 2700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28961 lumens
Efficiency: N/A
Efficacy: 127.1 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

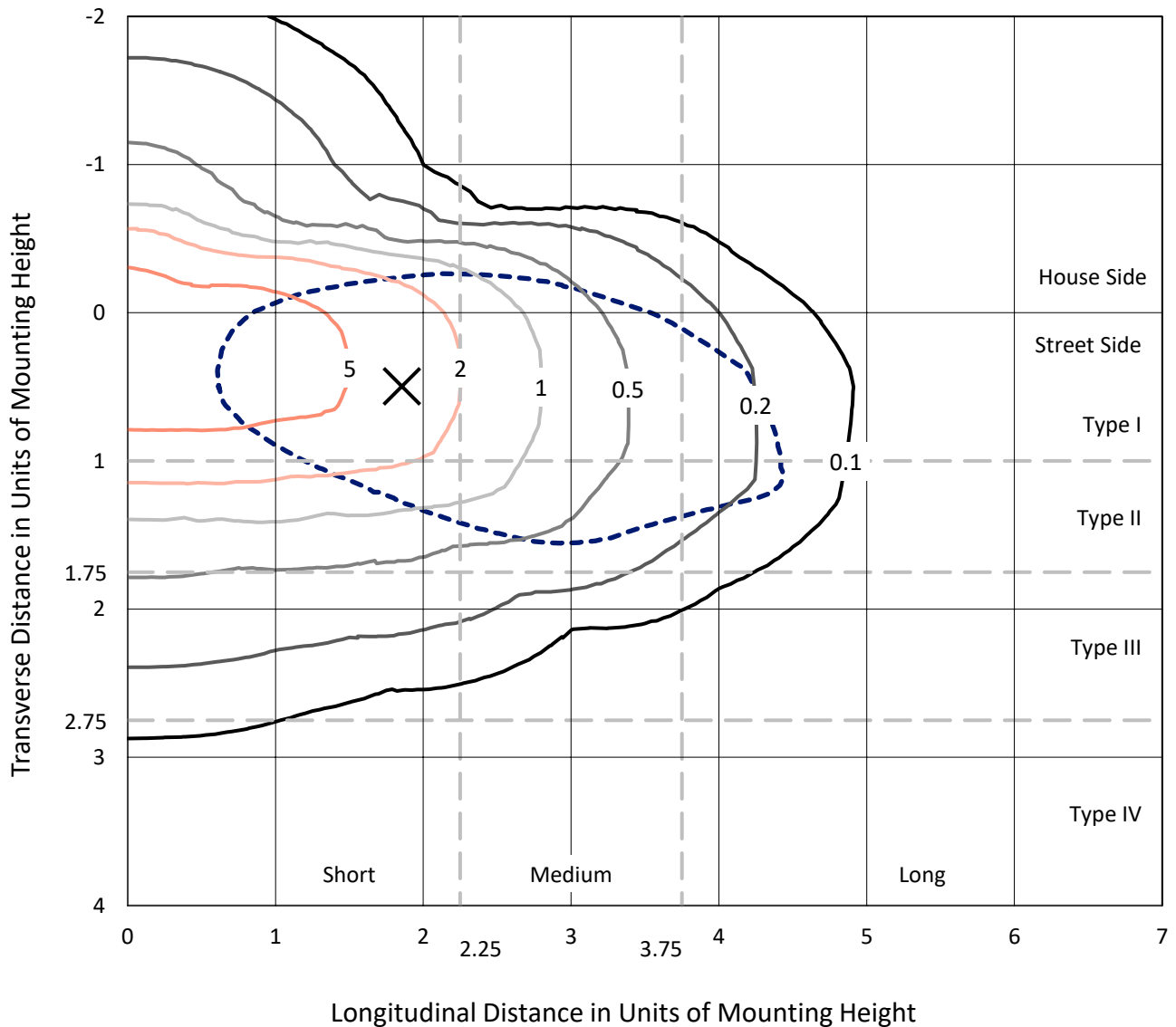
Input Watts (W): 227.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

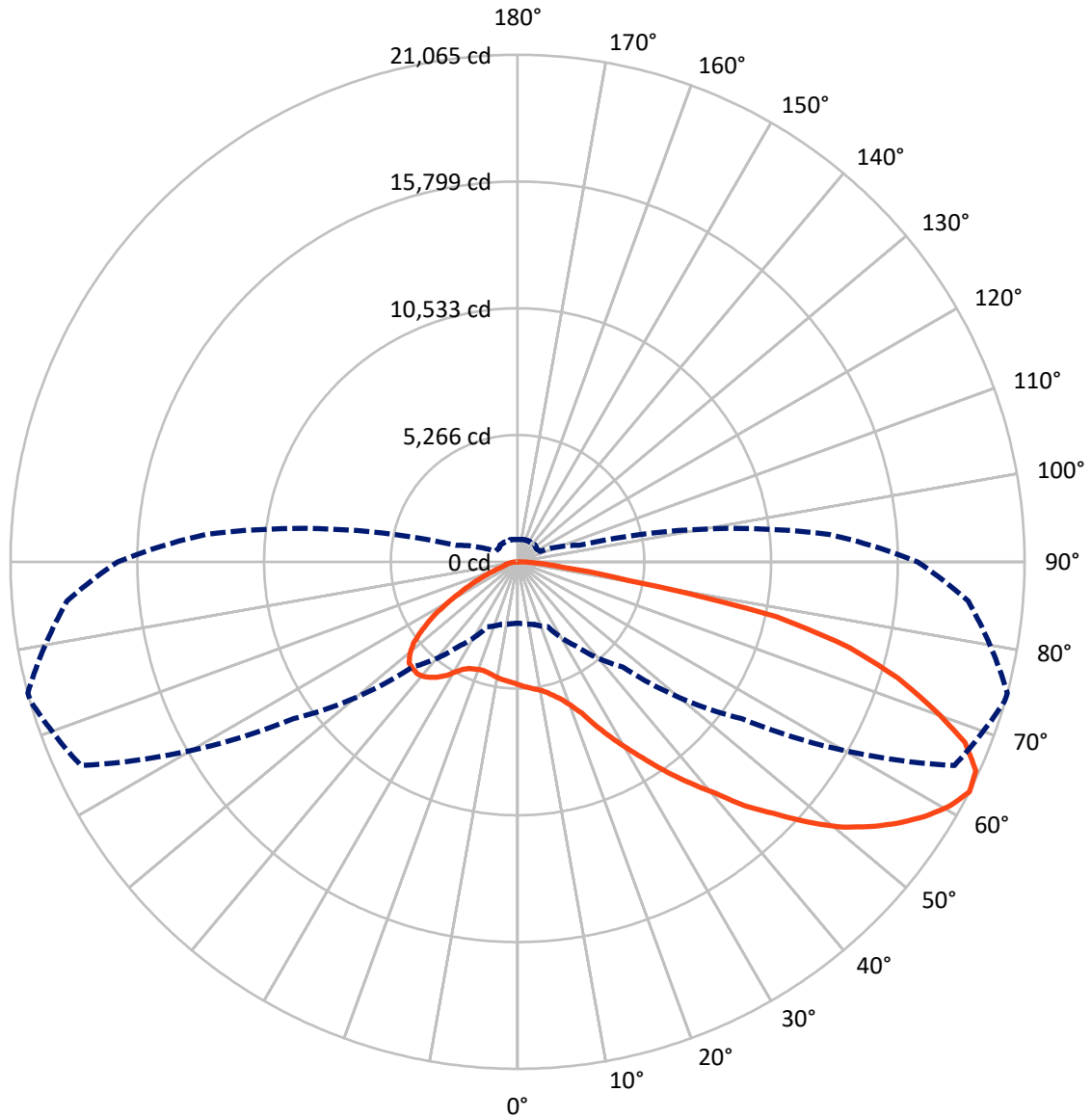
✕ Max cd
 - - - 1/2 Max cd



Based on 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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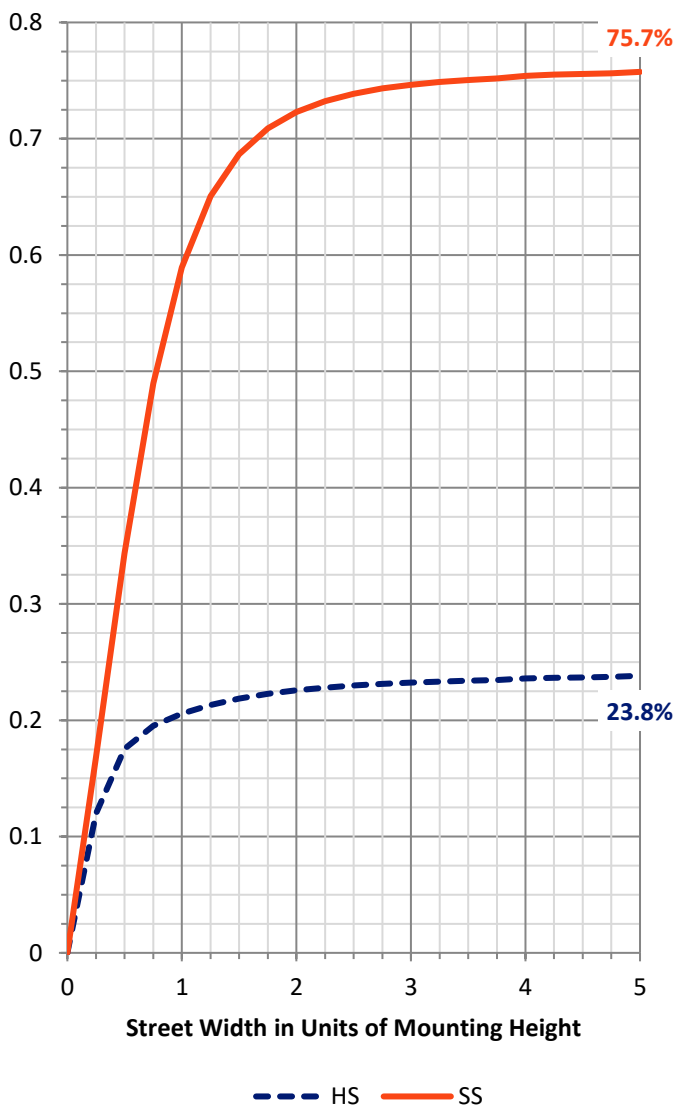
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7016.7	0.0	7016.7
	% Fixture	24.2	0.0	24.2
Street Side	Lumens	21944.3	0.0	21944.3
	% Fixture	75.8	0.0	75.8
Total	Lumens	28961.0	0.0	28961.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	491.1	1.7
10°-20°	1490.6	5.1
20°-30°	2570.8	8.9
30°-40°	3790.7	13.1
40°-50°	4997.0	17.3
50°-60°	5881.1	20.3
60°-70°	5851.1	20.2
70°-80°	3412.2	11.8
80°-90°	476.4	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°	28961.0	100.0
0°-180°	28961.0	100.0

Coefficient of Utilization



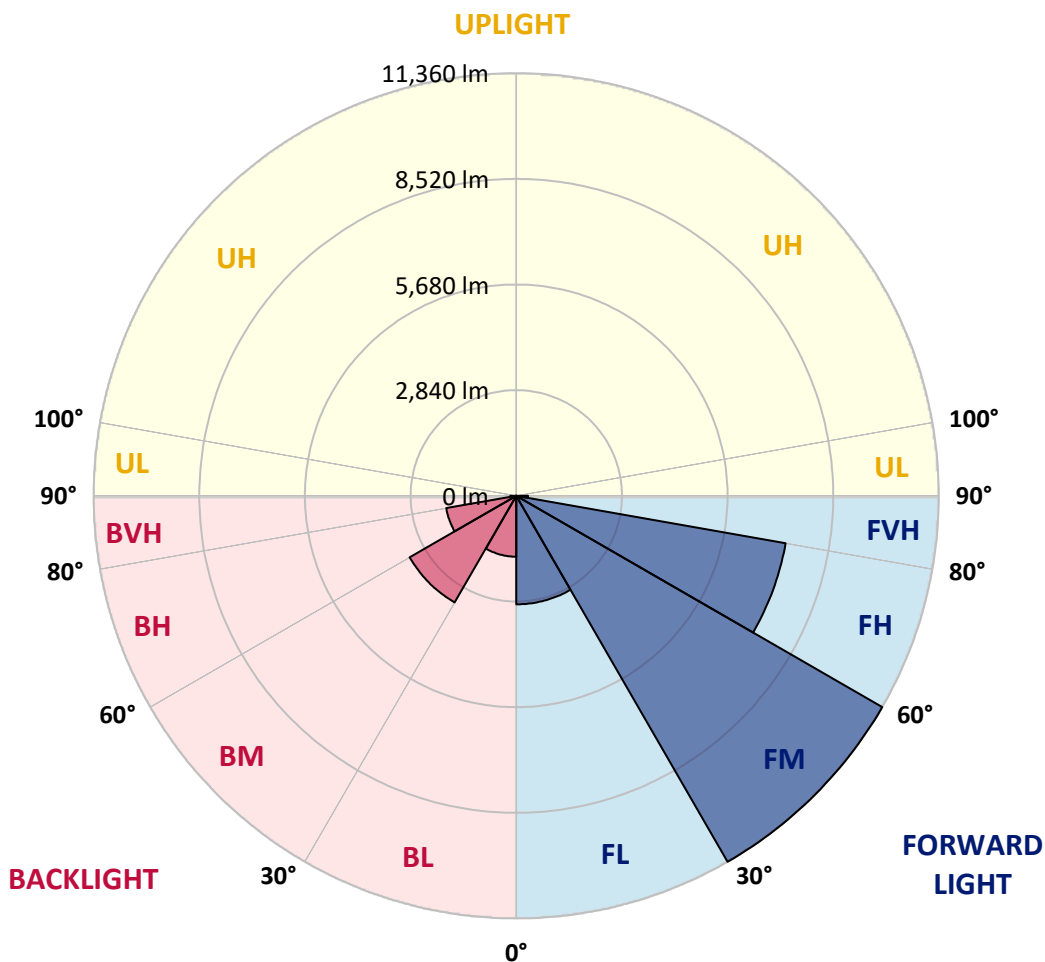
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2916.3	10.1			
FM (30°-60°)	11360.2	39.2			
FH (60°-80°)	7351.6	25.4			G3/7500
FVH (80°-90°)	316.2	1.1			G3/500
BL (0°-30°)	1636.3	5.6	B3/2500		
BM (30°-60°)	3308.6	11.4	B3/5000		
BH (60°-80°)	1911.6	6.6	B3/2500		G3/2500
BVH (80°-90°)	160.3	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°	5105.2	5105.2	5105.2	5105.2	5105.2	5105.2	5105.2	5105.2	5105.2	5105.2	5105.2
2.5°	5384.7	5362.7	5365.6	5350.1	5326.9	5309.6	5264.3	5215.4	5186.2	5183.8	5142.1
5°	5655.3	5662.5	5664.3	5614.8	5565.9	5510.5	5441.3	5347.2	5270.3	5258.3	5177.3
7.5°	5902.1	5901.5	5897.9	5870.5	5847.8	5765.6	5627.3	5479.5	5354.3	5343.0	5211.3
10°	6154.8	6153.0	6117.3	6071.4	6020.1	5944.4	5825.8	5648.8	5446.1	5431.2	5242.9
12.5°	6430.2	6410.5	6387.9	6332.4	6271.6	6140.5	6015.9	5823.4	5611.8	5585.0	5298.9
15°	6657.3	6637.0	6605.4	6567.9	6504.1	6404.0	6271.6	6043.3	5816.2	5790.0	5424.6
17.5°	6882.0	6872.4	6849.8	6809.9	6761.0	6674.6	6553.0	6359.3	6061.8	6029.6	5633.9
20°	7066.2	7043.5	7026.8	7045.3	7049.5	6985.7	6918.9	6756.2	6428.4	6378.9	5890.8
22.5°	7171.1	7166.3	7257.5	7325.4	7352.9	7367.2	7346.3	7215.2	6918.3	6831.9	6248.4
25°	7270.6	7262.9	7386.8	7556.7	7718.2	7800.5	7855.9	7873.2	7600.8	7522.7	6823.6
27.5°	7273.6	7295.0	7475.1	7760.0	8006.1	8257.1	8522.9	8553.3	8314.3	8252.3	7478.0
30°	7289.7	7299.2	7477.4	7804.7	8317.3	8719.6	9065.9	9237.0	9030.7	9002.1	8198.7
32.5°	7085.2	7097.8	7374.9	7882.8	8552.1	9198.2	9657.8	9911.7	9860.4	9824.1	8967.6
35°	6872.4	6883.2	7205.0	7771.9	8726.8	9632.8	10192.4	10691.3	10784.9	10757.5	9825.3
37.5°	6538.7	6574.4	6911.8	7639.6	8757.2	9952.2	10702.7	11468.0	11750.5	11668.3	10732.5
40°	6176.3	6202.5	6595.3	7362.4	8723.2	10162.0	11203.9	12327.5	12669.6	12625.5	11633.1
42.5°	5718.5	5788.8	6182.2	7008.3	8548.5	10292.6	11667.7	13302.0	13799.1	13858.1	12460.4
45°	5332.9	5331.1	5696.4	6495.7	8232.0	10323.6	12094.4	14287.3	15014.5	14903.6	13554.2
47.5°	4879.3	4897.7	5279.2	5985.5	7765.3	10225.2	12427.0	15452.0	16188.1	16127.9	14451.2
50°	3829.6	3962.5	4684.9	5546.8	7134.1	9951.0	12704.2	16586.3	17289.0	17316.4	15266.6
52.5°	3301.5	3352.8	3751.5	5105.2	6573.8	9490.9	13008.2	17862.4	18353.0	18283.2	16192.3
55°	3089.9	3117.3	3308.7	4311.8	6032.0	8778.6	13154.2	19027.7	19182.7	19171.3	16954.0
57.5°	2936.7	2957.6	3093.5	3598.4	5437.2	7864.3	13030.8	19785.9	20026.7	19952.8	17672.9
60°	2715.6	2732.3	2934.9	3242.5	4825.0	6941.0	12272.1	20129.8	20638.8	20611.4	18308.3
62.5°	2549.3	2577.9	2691.2	2979.7	4302.3	6180.4	11367.9	20022.5	21040.5	21065.0	18793.4
65°	2373.5	2399.1	2495.1	2747.2	3828.4	5680.4	10392.7	19484.9	20855.8	20920.7	18872.1
67.5°	2156.5	2176.2	2290.0	2508.2	3274.7	5180.3	9293.0	18534.2	19830.6	20039.8	18088.9
70°	1883.5	1890.7	2030.1	2178.6	2719.2	4426.3	7389.2	16977.9	18347.0	18351.2	16610.1
72.5°	1499.1	1505.0	1542.0	1654.6	2042.7	3503.0	5431.2	14186.0	16543.4	16513.0	14762.4
75°	1019.2	1071.7	1199.8	1307.1	1473.4	2459.9	3377.8	9557.7	14016.1	14254.5	12126.0
77.5°	805.3	810.0	863.1	961.4	1105.1	1837.6	1893.1	5288.2	10449.3	11016.2	9531.4
80°	561.5	569.8	541.2	565.1	770.7	1257.7	1106.3	2301.3	4357.7	4652.8	5722.7
82.5°	267.6	277.2	318.3	295.6	383.3	534.7	584.1	1189.1	1882.3	1931.8	2228.0
85°	176.4	176.4	177.0	167.5	223.5	233.1	265.2	507.2	919.1	950.1	944.7
87.5°	56.6	62.6	60.8	70.9	85.8	77.5	81.1	159.1	315.3	312.3	261.1
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°	5105.2	5105.2	5105.2	5105.2	5105.2	5105.2	5105.2	5105.2	5105.2	5105.2	5105.2
2.5°	5112.3	5087.9	5030.7	4980.6	4931.1	4893.6	4861.4	4818.5	4798.2	4779.7	4818.5
5°	5127.2	5083.7	4981.2	4878.7	4784.5	4715.3	4673.0	4642.0	4614.0	4614.0	4627.1
7.5°	5144.5	5085.5	4938.9	4793.4	4652.2	4573.5	4513.3	4473.9	4451.3	4452.5	4480.5
10°	5155.8	5065.2	4890.6	4694.5	4540.7	4414.3	4355.3	4298.7	4255.8	4230.2	4258.8
12.5°	5168.9	5058.7	4825.6	4604.5	4417.3	4274.3	4151.5	4109.2	4067.4	4035.3	4050.8
15°	5250.0	5083.7	4771.4	4490.0	4273.1	4094.9	3933.9	3856.4	3844.5	3822.5	3827.8
17.5°	5382.3	5151.1	4736.2	4350.0	4099.6	3889.2	3685.4	3585.2	3561.4	3550.1	3556.0
20°	5579.6	5279.2	4746.9	4251.6	3904.1	3668.7	3405.2	3287.8	3208.5	3213.3	3236.5
22.5°	5881.2	5486.0	4805.4	4143.7	3692.5	3383.8	3117.9	2958.2	2878.3	2861.0	2887.3
25°	6361.6	5819.2	4869.7	4040.6	3488.1	3076.2	2781.8	2608.9	2506.4	2499.8	2529.0
27.5°	6977.4	6330.0	5009.8	3951.2	3234.2	2706.7	2414.0	2266.2	2157.1	2144.0	2134.5
30°	7607.4	6897.5	5263.1	3815.3	2937.9	2325.2	2070.7	1955.0	1832.9	1783.4	1794.1
32.5°	8275.0	7426.2	5559.9	3719.9	2606.5	1989.6	1768.5	1658.2	1546.2	1474.6	1457.9
35°	8947.3	7951.9	5809.7	3577.5	2292.4	1723.2	1511.6	1397.7	1300.0	1241.6	1237.4
37.5°	9734.1	8499.1	6010.0	3426.1	1966.4	1514.6	1260.0	1194.5	1147.4	1096.1	1101.5
40°	10522.1	9136.8	6170.3	3175.8	1695.8	1290.4	1072.3	1085.4	1095.5	1052.6	1049.0
42.5°	11176.5	9672.7	6243.6	2851.5	1456.1	1095.5	989.4	1049.0	1093.2	1065.1	1061.6
45°	11841.1	10123.9	6215.0	2449.2	1257.1	1002.6	982.9	1043.7	1100.3	1093.8	1090.8
47.5°	12563.5	10715.2	6165.5	1990.8	1114.6	993.6	997.2	1025.8	1097.3	1109.2	1104.5
50°	13446.9	11259.4	5872.9	1550.3	1045.5	1007.9	1029.4	1014.5	1075.3	1099.7	1103.9
52.5°	14326.0	11678.4	5481.3	1343.5	1018.1	1021.6	1074.1	1023.4	1050.2	1071.7	1091.4
55°	15004.4	12105.2	4847.7	1218.9	1009.1	1028.2	1086.6	1042.5	1041.9	1041.9	1048.5
57.5°	15698.7	12676.8	4214.1	1138.5	993.6	1035.3	1071.7	1046.1	1037.7	1025.8	1018.1
60°	16182.1	12888.4	3399.9	1085.4	977.5	1025.2	1030.0	1026.4	1000.8	989.4	980.5
62.5°	16611.3	13003.4	2647.1	1024.6	955.5	1001.4	976.3	968.6	953.7	926.3	931.0
65°	16496.3	12756.6	2017.0	956.1	940.0	972.8	929.2	910.8	912.0	883.3	892.9
67.5°	15756.0	11649.8	1448.4	851.2	897.7	916.1	875.6	861.9	841.6	827.3	840.4
70°	14260.5	10327.2	976.9	706.3	801.1	841.0	814.2	790.4	758.8	749.2	763.5
72.5°	12002.6	8620.7	674.1	568.0	691.4	743.3	733.1	708.7	686.1	709.3	737.3
75°	9860.4	6377.7	550.2	465.5	531.7	619.3	649.1	656.3	724.2	950.7	973.9
77.5°	7097.8	3953.6	494.7	378.5	424.4	495.3	554.9	579.4	884.5	847.0	845.2
80°	4138.4	2304.3	377.3	298.6	343.3	363.0	433.9	680.1	762.9	654.5	638.4
82.5°	1888.3	1016.9	262.9	239.0	238.4	240.2	295.6	654.5	585.3	515.6	496.5
85°	694.4	357.6	159.7	138.3	158.5	137.7	193.7	479.8	339.2	333.8	278.4
87.5°	171.1	73.3	54.2	45.3	37.0	35.2	59.0	158.0	82.9	75.7	72.7
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)