

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: P591179

Luminaire Tested: **CTN-CA8-480-722-U-T1-SSS-HM-EX120**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591179
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2201-495-2)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/19/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: CTN-CA8-480-722-U-T1-SSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE, 120D FIELD INSTALLED SHIELD ON STREET SIDE
Light Source: (8) 2200K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 33697 lumens
Efficiency: N/A
Efficacy: 70.1 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type I - Short
BUG Rating: B5 - U0 - G5

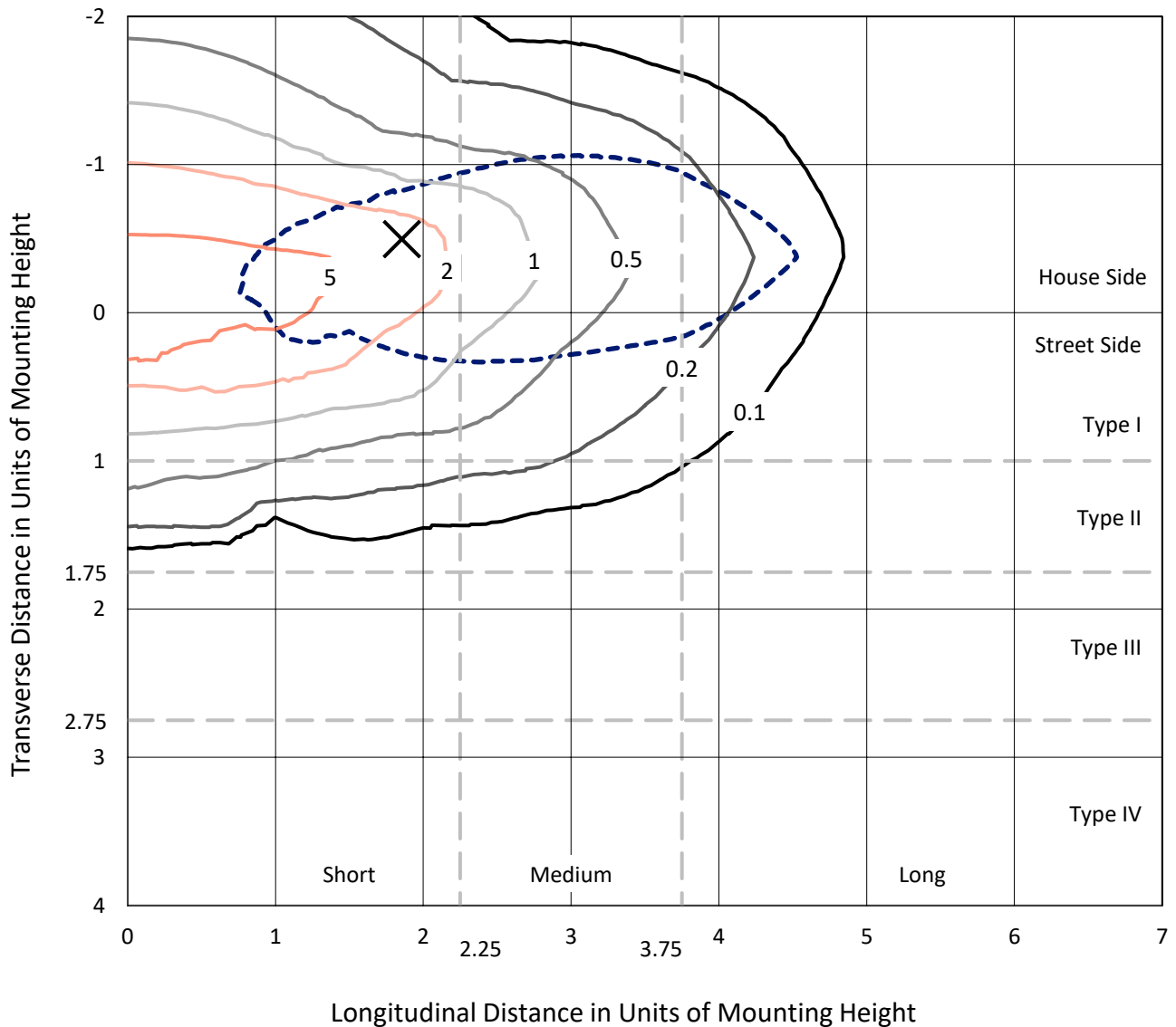
Input Watts (W): 480.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

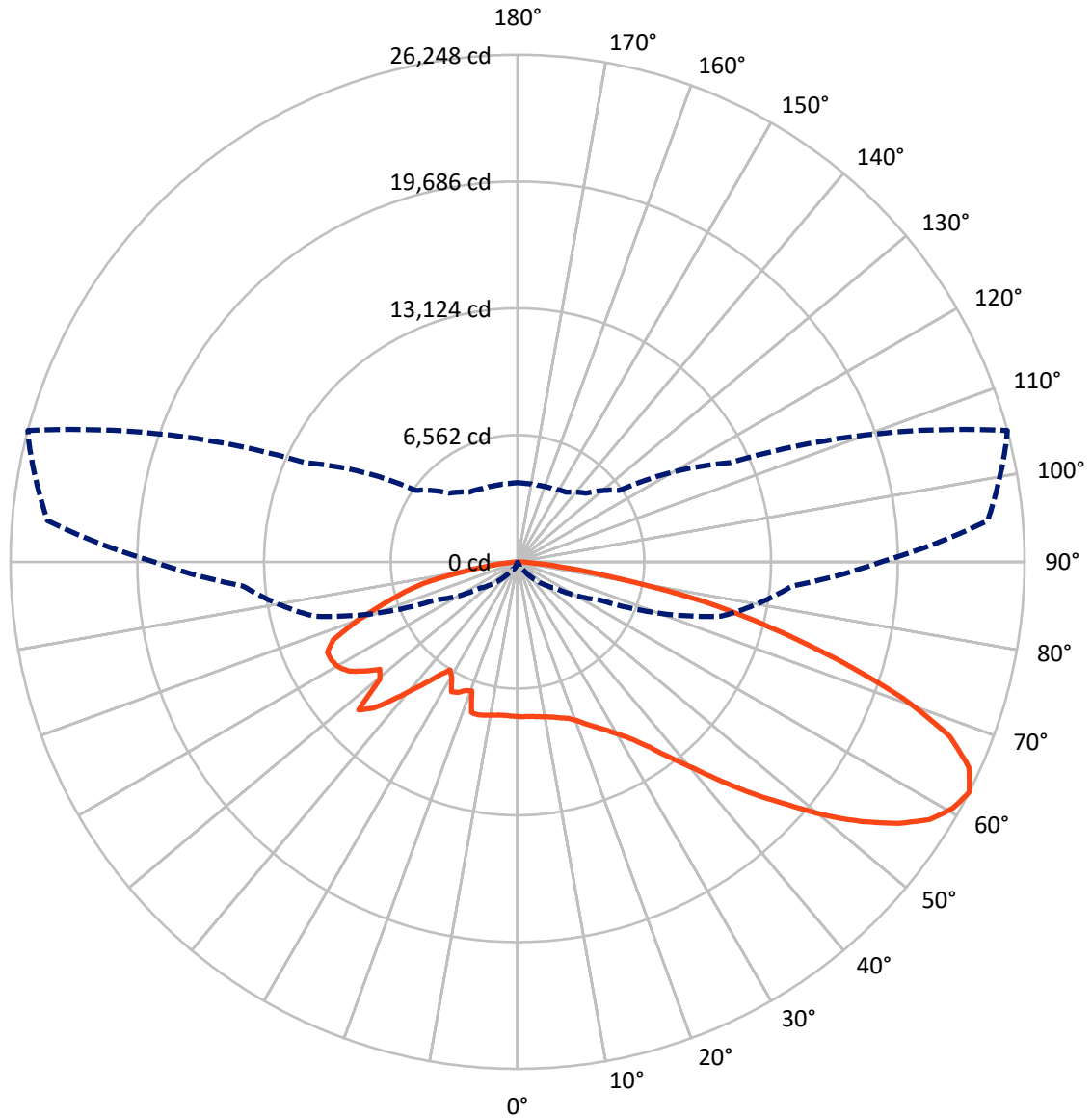
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 8.9 fc
 Type I - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 105-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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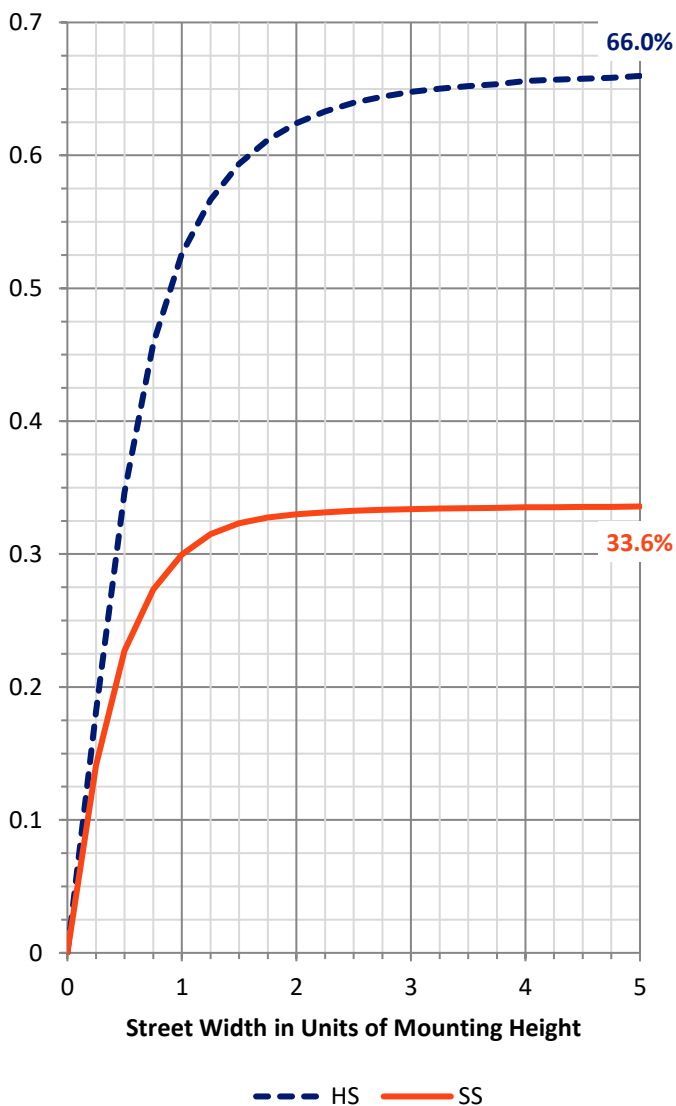
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	22421.6	0.0	22421.6
	% Fixture	66.5	0.0	66.5
Street Side	Lumens	11275.4	0.0	11275.4
	% Fixture	33.5	0.0	33.5
Total	Lumens	33697.0	0.0	33697.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	764.9	2.3
10°-20°	2160.3	6.4
20°-30°	3044.6	9.0
30°-40°	4136.6	12.3
40°-50°	5627.3	16.7
50°-60°	6666.6	19.8
60°-70°	6537.4	19.4
70°-80°	4123.2	12.2
80°-90°	636.0	1.9
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°	33697.0	100.0
0°-180°	33697.0	100.0

Coefficient of Utilization

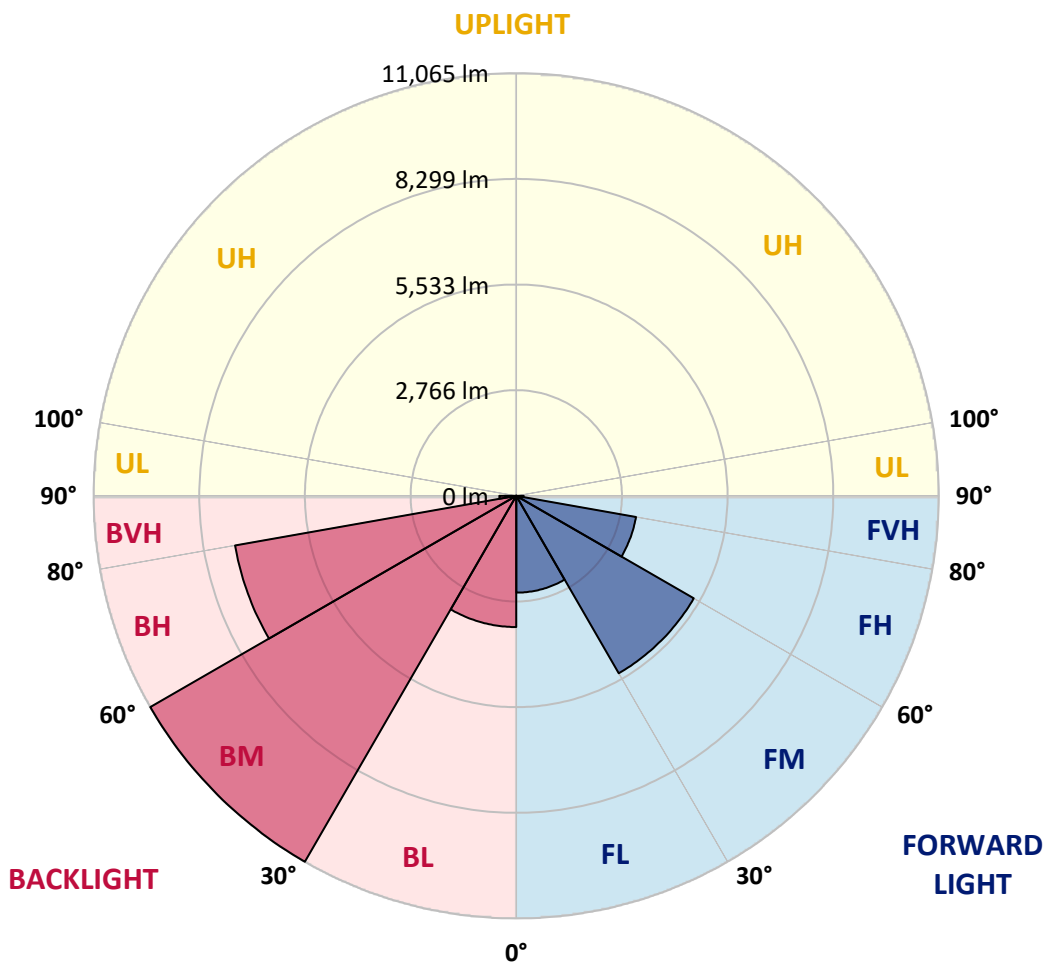


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2534.6	7.5			
FM (30°-60°)	5365.4	15.9			
FH (60°-80°)	3183.6	9.4			G2/5000
FVH (80°-90°)	191.9	0.6			G2/225
BL (0°-30°)	3435.3	10.2	B4/5000		
BM (30°-60°)	11065.2	32.8	B5		
BH (60°-80°)	7477.0	22.2	B5		G5
BVH (80°-90°)	444.2	1.3			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G5
 Type I Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	8016.0	8016.0	8016.0	8016.0	8016.0	8016.0	8016.0	8016.0	8016.0	8016.0	8016.0
2.5°	8021.3	7958.7	8003.4	8071.5	7969.4	8028.5	7930.1	8010.6	7990.9	7996.3	8033.9
5°	7958.7	7892.5	7946.2	8035.7	7935.4	8001.7	7921.1	7989.1	7982.0	8007.0	8037.5
7.5°	7899.6	7837.0	7892.5	7951.5	7899.6	7964.1	7903.2	7987.3	7992.7	8048.2	8073.3
10°	7837.0	7774.3	7828.0	7896.0	7853.1	7933.6	7908.6	8010.6	8050.0	8123.4	8144.9
12.5°	7699.1	7643.6	7688.4	7767.2	7774.3	7892.5	7908.6	8066.1	8114.4	8211.1	8243.3
15°	6870.3	6931.2	7169.3	7398.4	7496.9	7715.2	7835.2	8116.2	8184.2	8322.1	8372.2
17.5°	5558.2	5443.6	5073.1	5169.7	5713.9	6447.9	6725.3	7423.5	8161.0	8461.7	8526.1
20°	3284.8	3519.3	4244.3	4466.2	4666.7	5456.2	6388.8	6804.1	7086.9	8155.6	8737.4
22.5°	2708.4	2724.5	3243.6	4267.5	4493.1	4802.8	5524.2	6891.8	7183.6	7396.6	8044.6
25°	2511.5	2527.6	2617.1	3408.3	4369.6	4727.6	5044.4	6299.3	7432.4	7695.6	8202.1
27.5°	2354.0	2375.4	2457.8	2679.7	4074.2	4706.1	5107.1	5586.8	7543.4	8050.0	8524.4
30°	2235.8	2244.8	2328.9	2543.7	3080.7	4711.5	5198.4	5710.4	6909.7	8499.3	8975.5
32.5°	2128.4	2133.8	2221.5	2430.9	2754.9	4364.2	5336.2	5968.1	6598.2	8868.1	9594.8
35°	2046.1	2042.5	2121.2	2327.1	2649.3	3342.1	5490.2	6277.8	7095.9	8519.0	10518.5
37.5°	1967.3	1961.9	2030.0	2219.7	2556.2	3129.1	5311.2	6650.1	7810.1	8783.9	10443.3
40°	1906.4	1895.7	1953.0	2123.0	2459.6	3075.4	4183.4	7044.0	8594.2	10149.8	11075.2
42.5°	1852.7	1845.6	1893.9	2030.0	2361.1	3010.9	3898.8	7257.0	9569.8	11728.6	12709.6
45°	1772.2	1782.9	1836.6	1967.3	2255.5	2919.6	3927.4	5828.5	10602.6	13098.0	14338.5
47.5°	1738.2	1736.4	1770.4	1893.9	2164.2	2792.5	3907.7	5345.2	11252.4	14531.9	15933.5
50°	1684.5	1675.5	1460.7	1808.0	2071.1	2635.0	3825.4	5484.8	9363.9	15938.9	17397.8
52.5°	1584.2	1408.8	1278.1	1747.1	1976.2	2463.1	3641.0	5545.7	9041.7	15688.3	18656.2
55°	841.3	938.0	1210.1	1661.2	1865.3	2309.2	3370.7	5502.7	9738.0	12544.9	17319.0
57.5°	746.5	742.9	769.7	1312.1	972.0	2140.9	3044.9	5305.8	10396.8	13117.7	17643.0
60°	59.1	60.9	71.6	436.8	515.5	1507.2	2694.1	5062.3	10745.8	13794.4	18428.9
62.5°	28.6	32.2	43.0	390.2	470.8	1371.2	2377.2	4647.0	10892.6	14283.0	18817.3
65°	7.2	9.0	19.7	343.7	409.9	1220.8	2058.6	4160.1	10905.2	14302.7	19130.6
67.5°	5.4	9.0	19.7	311.5	374.1	1088.4	1779.3	3820.0	10371.7	14229.3	18973.1
70°	5.4	9.0	19.7	279.3	338.3	943.4	1532.3	3487.1	9009.5	13955.5	18437.8
72.5°	5.4	10.7	19.7	245.2	297.2	800.2	1301.4	3120.1	7561.3	12811.6	17245.6
75°	5.4	10.7	21.5	198.7	254.2	637.3	1068.7	2672.6	6288.5	11109.2	15269.4
77.5°	5.4	10.7	21.5	153.9	205.9	476.2	809.1	2117.7	5017.6	8193.2	10727.9
80°	5.4	10.7	21.5	109.2	168.3	334.7	588.9	1444.6	2993.0	4306.9	5463.3
82.5°	5.4	10.7	21.5	78.8	121.7	241.7	363.4	712.5	1428.5	2067.5	2593.8
85°	3.6	9.0	19.7	51.9	64.4	146.8	216.6	316.8	427.8	565.7	764.4
87.5°	3.6	5.4	12.5	19.7	26.9	51.9	80.6	71.6	80.6	168.3	241.7
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):

	95°	104°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	8016.0	8016.0	8016.0	8016.0	8016.0	8016.0	8016.0	8016.0	8016.0	8016.0	8016.0
2.5°	8028.5	8021.3	8023.1	8062.5	8028.5	8035.7	7976.6	8094.7	8084.0	8067.9	8114.4
5°	8037.5	8033.9	8048.2	8082.2	8030.3	8039.2	7983.8	8121.6	8087.6	8082.2	8137.7
7.5°	8082.2	8076.8	8091.2	8107.3	8050.0	8050.0	8001.7	8110.9	8091.2	8055.4	8118.0
10°	8162.8	8143.1	8157.4	8166.3	8078.6	8075.0	7985.5	8114.4	8064.3	8046.4	8127.0
12.5°	8275.5	8230.8	8252.3	8237.9	8121.6	8100.1	7980.2	8064.3	8001.7	7990.9	8064.3
15°	8427.7	8368.6	8384.7	8357.9	8211.1	8148.4	7955.1	7990.9	7890.7	7881.7	7935.4
17.5°	8569.1	8533.3	8524.4	8524.4	8352.5	8196.8	7931.8	7881.7	7749.3	7740.3	7767.2
20°	8825.1	8776.8	8771.4	8728.4	8474.2	8236.2	7894.3	7740.3	7543.4	7498.6	7548.8
22.5°	8907.4	9141.9	9125.8	8936.1	8576.3	8268.4	7817.3	7563.1	7292.8	7206.9	7231.9
25°	9152.7	9505.3	9476.7	9201.0	8680.1	8286.3	7724.2	7368.0	6995.6	6845.3	6850.6
27.5°	9541.1	9900.9	9881.2	9483.8	8809.0	8291.6	7620.4	7162.1	6700.3	6503.4	6519.5
30°	10035.2	10398.6	10369.9	9798.9	9004.1	8302.4	7541.6	6915.1	6430.0	6216.9	6213.4
32.5°	10722.6	11052.0	10967.8	10219.6	9238.6	8347.1	7437.8	6680.6	6182.9	5959.2	5941.3
35°	11760.8	11882.5	11778.7	10720.8	9487.4	8375.8	7271.3	6451.4	5953.8	5733.6	5717.5
37.5°	13164.2	13013.9	12874.3	11284.7	9745.2	8368.6	7060.1	6229.5	5756.9	5547.5	5547.5
40°	13302.1	14313.5	14055.7	11879.0	9977.9	8329.2	6859.6	6012.9	5597.6	5427.5	5454.4
42.5°	13948.3	15904.9	15543.3	12453.6	10146.2	8214.7	6644.8	5816.0	5449.0	5311.2	5321.9
45°	15536.1	17353.0	17141.8	13008.5	10237.5	8012.4	6396.0	5622.6	5282.5	5173.3	5194.8
47.5°	17243.8	19075.1	18765.4	13520.5	10187.3	7713.5	6131.0	5445.4	5108.9	5039.1	5078.5
50°	18858.5	20886.6	20628.9	13880.3	9965.4	7294.6	5848.2	5257.5	4972.8	4917.3	4937.0
52.5°	20442.7	22531.7	22338.4	14075.4	9521.4	6856.0	5586.8	5078.5	4845.7	4775.9	4802.8
55°	21749.5	24090.9	23902.9	14055.7	8853.7	6397.7	5327.3	4885.1	4716.9	4654.2	4675.7
57.5°	22769.8	25304.6	25170.3	13756.8	8076.8	5977.1	5033.7	4695.4	4546.8	4491.3	4509.2
60°	23682.8	26074.3	25900.7	13096.2	7253.4	5513.4	4731.2	4469.8	4346.3	4301.6	4330.2
62.5°	24431.0	26090.4	26247.9	12140.3	6446.1	5023.0	4394.6	4192.4	4102.9	4076.0	4093.9
65°	24622.5	25610.7	25687.6	10958.9	5628.0	4536.1	3990.1	3857.6	3820.0	3803.9	3839.7
67.5°	24357.6	24599.3	24141.0	9960.0	4881.5	3984.7	3553.3	3471.0	3494.2	3497.8	3544.4
70°	23673.8	21892.7	21185.6	9124.0	4185.2	3374.3	3073.6	3046.7	3109.4	3161.3	3195.3
72.5°	21930.3	17974.2	17301.1	7942.6	3299.1	2583.1	2420.2	2506.1	2484.6	2507.9	2568.8
75°	18880.0	13873.1	13456.0	6464.0	2513.3	1877.8	1659.4	1668.4	1695.2	1813.4	1877.8
77.5°	13448.9	9977.9	9791.7	4958.5	1664.8	1104.5	1142.1	1269.2	1306.8	1310.3	1355.1
80°	7126.3	5561.8	5309.4	2921.4	1100.9	789.4	859.2	914.7	964.9	1016.8	1029.3
82.5°	3211.4	2515.1	2445.2	1451.8	698.1	608.6	624.7	719.6	760.8	769.7	778.7
85°	1247.7	868.2	827.0	603.3	458.3	411.7	456.5	553.1	592.5	574.6	569.2
87.5°	333.0	204.1	186.2	202.3	214.8	227.3	259.6	295.4	338.3	325.8	315.1
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)