

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: P591287

Luminaire Tested: **CTN-CA10-210-730-U-T1-SSS-HM-EX120**

Issue Date: 1/19/2022

**Test Information**

Test Method: LM-79-08  
Report Number: P591287  
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-CA10-210-730-U-T1-SSS-HM-EX120  
Description: CELESTEON HIGH MAST LUMINAIRE, 120D FIELD INSTALLED SHIELD ON STREET SIDE  
Light Source: (10) 3000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 19938 lumens  
Efficiency: N/A  
Efficacy: 93.6 lumens/watt  
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')  
IES Classification: Type I - Short  
BUG Rating: B4 - U0 - G4

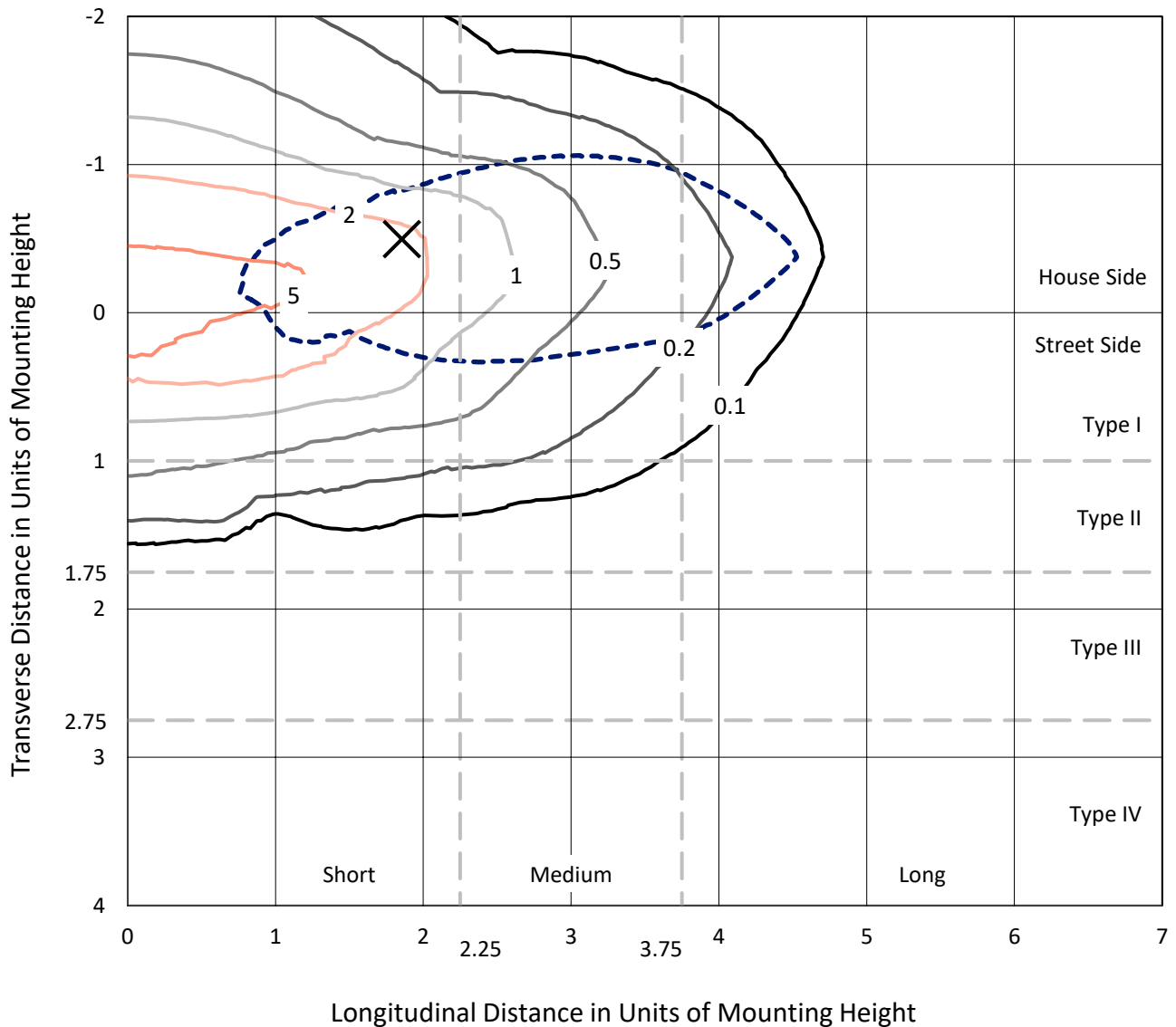
Input Watts (W): 212.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

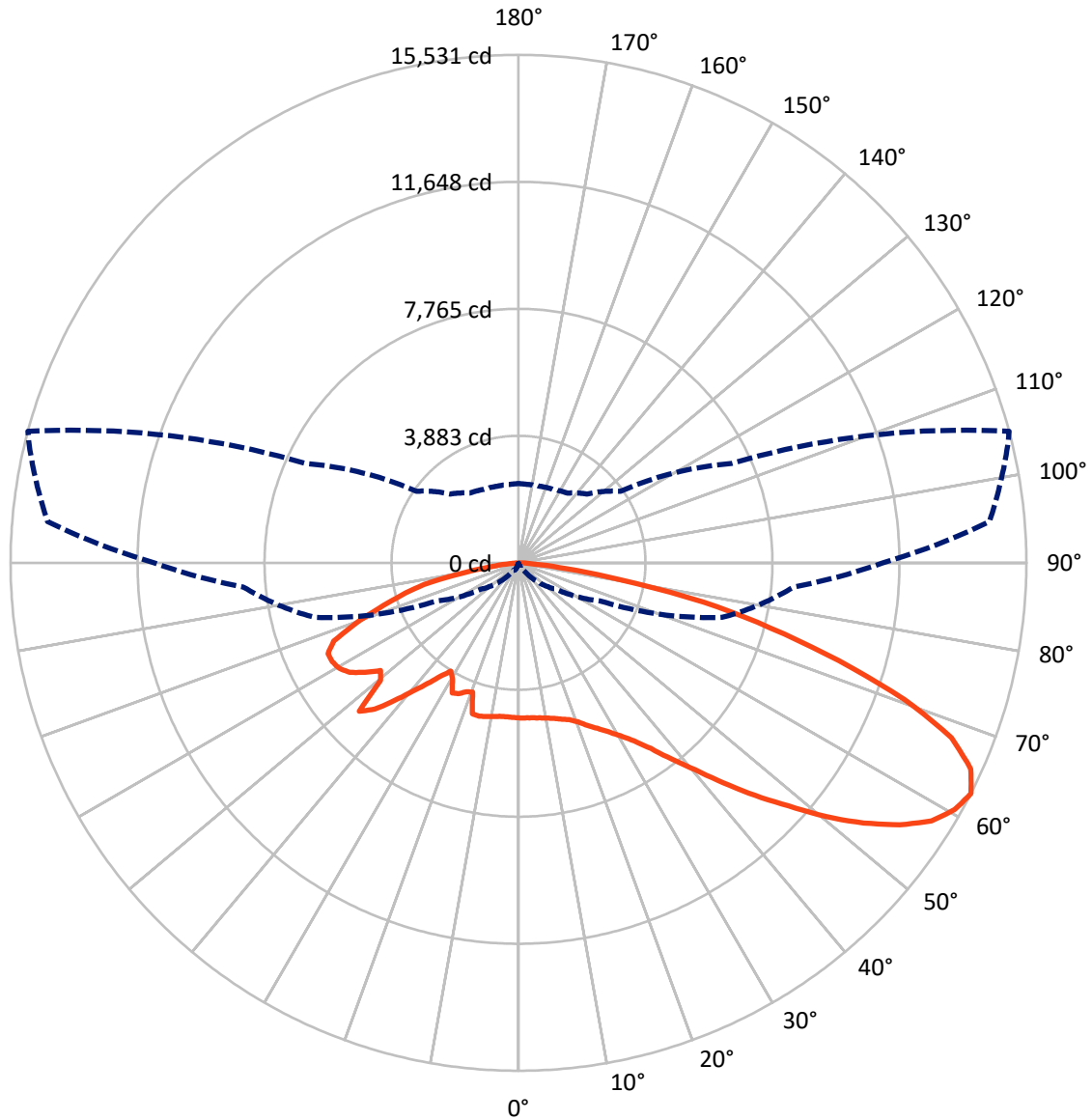
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.6 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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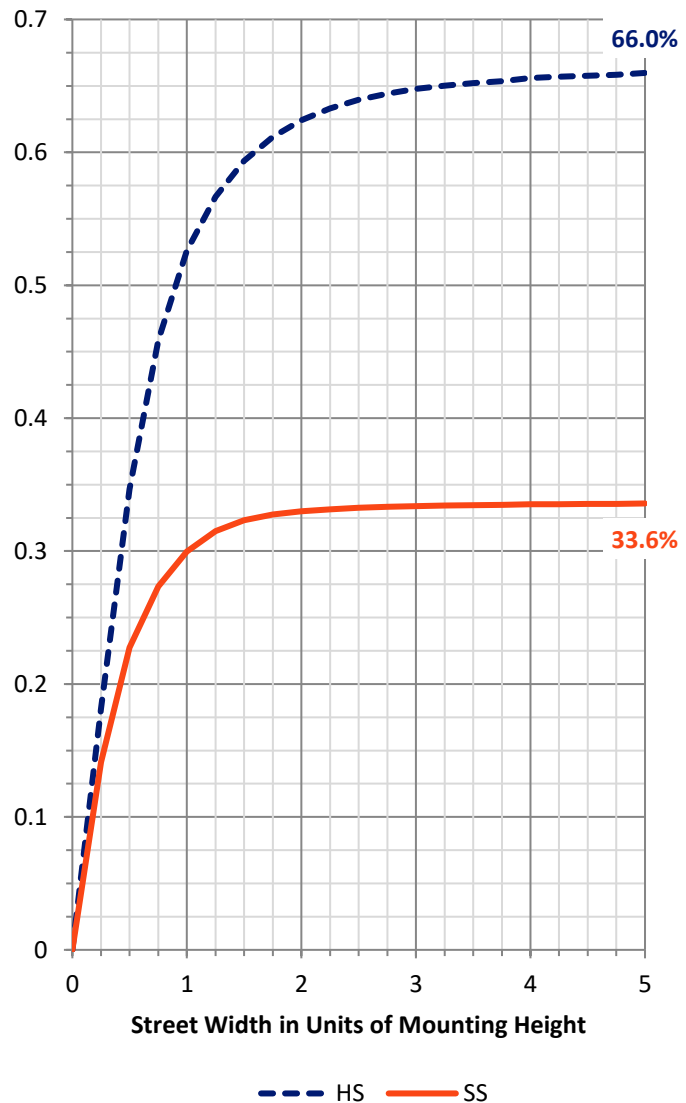
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	13266.5	0.0	13266.5
	% Fixture	66.5	0.0	66.5
<b>Street Side</b>	Lumens	6671.5	0.0	6671.5
	% Fixture	33.5	0.0	33.5
<b>Total</b>	Lumens	19938.0	0.0	19938.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	452.6	2.3
10°-20°	1278.2	6.4
20°-30°	1801.4	9.0
30°-40°	2447.6	12.3
40°-50°	3329.6	16.7
50°-60°	3944.5	19.8
60°-70°	3868.1	19.4
70°-80°	2439.6	12.2
80°-90°	376.3	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°	19938.0	100.0
0°-180°	19938.0	100.0

**Coefficient of Utilization**

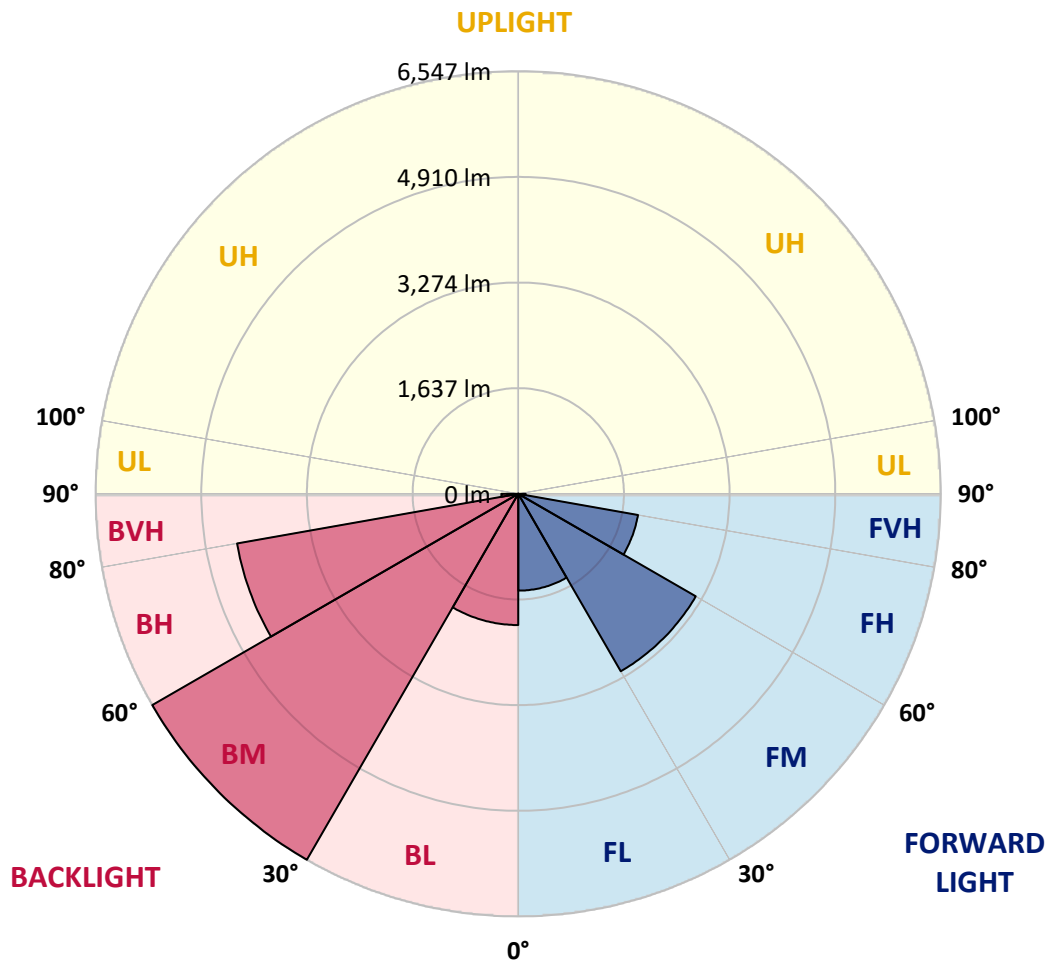


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1499.7	7.5			
FM (30°-60°)	3174.6	15.9			
FH (60°-80°)	1883.7	9.4			G2/5000
FVH (80°-90°)	113.5	0.6			G2/225
BL (0°-30°)	2032.6	10.2	B3/2500		
BM (30°-60°)	6547.1	32.8	B4/8500		
BH (60°-80°)	4424.0	22.2	B4/5000		G4/5000
BVH (80°-90°)	262.8	1.3			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B4-U0-G4**  
 Type I Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	4742.9	4742.9	4742.9	4742.9	4742.9	4742.9	4742.9	4742.9	4742.9	4742.9	4742.9
2.5°	4746.1	4709.0	4735.5	4775.8	4715.4	4750.3	4692.1	4739.8	4728.1	4731.3	4753.5
5°	4709.0	4669.8	4701.6	4754.6	4695.3	4734.5	4686.8	4727.0	4722.8	4737.6	4755.6
7.5°	4674.1	4637.0	4669.8	4704.8	4674.1	4712.2	4676.2	4726.0	4729.2	4762.0	4776.8
10°	4637.0	4599.9	4631.7	4672.0	4646.5	4694.2	4679.4	4739.8	4763.1	4806.5	4819.2
12.5°	4555.5	4522.6	4549.1	4595.7	4599.9	4669.8	4679.4	4772.6	4801.2	4858.4	4877.4
15°	4065.1	4101.1	4241.9	4377.5	4435.8	4565.0	4636.0	4802.2	4842.5	4924.0	4953.7
17.5°	3288.7	3220.9	3001.7	3058.9	3380.8	3815.1	3979.3	4392.3	4828.7	5006.7	5044.8
20°	1943.6	2082.3	2511.3	2642.6	2761.2	3228.3	3780.2	4025.9	4193.2	4825.5	5169.8
22.5°	1602.5	1612.0	1919.2	2525.0	2658.5	2841.7	3268.6	4077.8	4250.4	4376.5	4759.9
25°	1486.0	1495.5	1548.5	2016.6	2585.4	2797.2	2984.7	3727.2	4397.6	4553.3	4853.1
27.5°	1392.8	1405.5	1454.2	1585.6	2410.7	2784.5	3021.8	3305.6	4463.3	4763.1	5043.7
30°	1322.9	1328.2	1378.0	1505.1	1822.8	2787.7	3075.8	3378.7	4088.4	5028.9	5310.6
32.5°	1259.3	1262.5	1314.4	1438.3	1630.1	2582.2	3157.4	3531.2	3904.1	5247.1	5677.1
35°	1210.6	1208.5	1255.1	1376.9	1567.6	1977.5	3248.5	3714.5	4198.5	5040.6	6223.6
37.5°	1164.0	1160.8	1201.1	1313.4	1512.5	1851.4	3142.5	3934.8	4621.1	5197.3	6179.2
40°	1128.0	1121.7	1155.5	1256.2	1455.3	1819.6	2475.3	4167.8	5085.0	6005.5	6553.0
42.5°	1096.2	1092.0	1120.6	1201.1	1397.0	1781.5	2306.9	4293.8	5662.3	6939.6	7520.1
45°	1048.6	1054.9	1086.7	1164.0	1334.5	1727.5	2323.8	3448.6	6273.4	7749.9	8483.9
47.5°	1028.4	1027.4	1047.5	1120.6	1280.5	1652.3	2312.2	3162.7	6657.9	8598.3	9427.6
50°	996.7	991.4	864.3	1069.8	1225.5	1559.1	2263.4	3245.3	5540.5	9430.8	10294.0
52.5°	937.4	833.6	756.2	1033.7	1169.3	1457.4	2154.3	3281.3	5349.8	9282.5	11038.6
55°	497.8	555.0	716.0	982.9	1103.6	1366.3	1994.4	3255.9	5761.8	7422.6	10247.4
57.5°	441.7	439.6	455.4	776.4	575.1	1266.8	1801.6	3139.4	6151.6	7761.5	10439.1
60°	35.0	36.0	42.4	258.4	305.0	891.8	1594.0	2995.3	6358.2	8161.9	10904.1
62.5°	16.9	19.1	25.4	230.9	278.6	811.3	1406.6	2749.6	6445.0	8451.1	11133.9
65°	4.2	5.3	11.7	203.4	242.5	722.3	1218.0	2461.5	6452.4	8462.7	11319.3
67.5°	3.2	5.3	11.7	184.3	221.4	644.0	1052.8	2260.3	6136.8	8419.3	11226.1
70°	3.2	5.3	11.7	165.2	200.2	558.2	906.6	2063.2	5330.8	8257.2	10909.4
72.5°	3.2	6.4	11.7	145.1	175.8	473.4	770.0	1846.1	4473.9	7580.4	10204.0
75°	3.2	6.4	12.7	117.6	150.4	377.1	632.3	1581.3	3720.8	6573.2	9034.7
77.5°	3.2	6.4	12.7	91.1	121.8	281.7	478.7	1253.0	2968.8	4847.8	6347.6
80°	3.2	6.4	12.7	64.6	99.6	198.1	348.5	854.7	1770.9	2548.3	3232.6
82.5°	3.2	6.4	12.7	46.6	72.0	143.0	215.0	421.5	845.2	1223.3	1534.7
85°	2.1	5.3	11.7	30.7	38.1	86.9	128.2	187.5	253.1	334.7	452.3
87.5°	2.1	3.2	7.4	11.7	15.9	30.7	47.7	42.4	47.7	99.6	143.0
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°	4742.9	4742.9	4742.9	4742.9	4742.9	4742.9	4742.9	4742.9	4742.9	4742.9	4742.9
2.5°	4750.3	4746.1	4747.2	4770.5	4750.3	4754.6	4719.6	4789.5	4783.2	4773.6	4801.2
5°	4755.6	4753.5	4762.0	4782.1	4751.4	4756.7	4723.9	4805.4	4785.3	4782.1	4815.0
7.5°	4782.1	4778.9	4787.4	4796.9	4763.1	4763.1	4734.5	4799.1	4787.4	4766.2	4803.3
10°	4829.8	4818.1	4826.6	4831.9	4780.0	4777.9	4724.9	4801.2	4771.5	4760.9	4808.6
12.5°	4896.5	4870.0	4882.7	4874.3	4805.4	4792.7	4721.7	4771.5	4734.5	4728.1	4771.5
15°	4986.5	4951.6	4961.1	4945.2	4858.4	4821.3	4706.9	4728.1	4668.8	4663.5	4695.3
17.5°	5070.2	5049.0	5043.7	5043.7	4942.1	4849.9	4693.1	4663.5	4585.1	4579.8	4595.7
20°	5221.7	5193.1	5189.9	5164.5	5014.1	4873.2	4670.9	4579.8	4463.3	4436.8	4466.5
22.5°	5270.4	5409.1	5399.6	5287.3	5074.4	4892.3	4625.4	4475.0	4315.0	4264.2	4279.0
25°	5415.5	5624.2	5607.2	5444.1	5135.9	4902.9	4570.3	4359.5	4139.2	4050.2	4053.4
27.5°	5645.3	5858.2	5846.6	5611.4	5212.1	4906.0	4508.9	4237.7	3964.4	3847.9	3857.5
30°	5937.7	6152.7	6135.7	5797.9	5327.6	4912.4	4462.3	4091.5	3804.5	3678.5	3676.4
32.5°	6344.4	6539.3	6489.5	6046.8	5466.3	4938.9	4400.8	3952.8	3658.3	3526.0	3515.4
35°	6958.7	7030.7	6969.3	6343.3	5613.6	4955.8	4302.3	3817.2	3522.8	3392.5	3383.0
37.5°	7789.1	7700.1	7617.5	6677.0	5766.1	4951.6	4177.3	3685.9	3406.3	3282.3	3282.3
40°	7870.6	8469.1	8316.5	7028.6	5903.8	4928.3	4058.7	3557.7	3312.0	3211.4	3227.3
42.5°	8253.0	9410.7	9196.7	7368.6	6003.3	4860.5	3931.6	3441.2	3224.1	3142.5	3148.9
45°	9192.5	10267.5	10142.5	7696.9	6057.4	4740.8	3784.4	3326.8	3125.6	3061.0	3073.7
47.5°	10202.9	11286.4	11103.2	7999.9	6027.7	4563.9	3627.6	3222.0	3022.9	2981.5	3004.8
50°	11158.3	12358.3	12205.8	8212.7	5896.4	4316.1	3460.3	3110.8	2942.4	2909.5	2921.2
52.5°	12095.6	13331.7	13217.3	8328.2	5633.7	4056.6	3305.6	3004.8	2867.2	2825.8	2841.7
55°	12868.8	14254.2	14143.0	8316.5	5238.6	3785.4	3152.1	2890.5	2790.9	2753.8	2766.5
57.5°	13472.5	14972.3	14892.9	8139.7	4778.9	3536.5	2978.4	2778.2	2690.3	2657.4	2668.0
60°	14012.7	15427.8	15325.0	7748.8	4291.7	3262.2	2799.4	2644.7	2571.6	2545.2	2562.1
62.5°	14455.5	15437.3	15530.5	7183.2	3814.0	2972.0	2600.2	2480.6	2427.6	2411.7	2422.3
65°	14568.8	15153.4	15199.0	6484.2	3330.0	2683.9	2360.9	2282.5	2260.3	2250.7	2271.9
67.5°	14412.0	14555.0	14283.9	5893.2	2888.3	2357.7	2102.4	2053.7	2067.5	2069.6	2097.1
70°	14007.4	12953.6	12535.2	5398.6	2476.3	1996.5	1818.6	1802.7	1839.8	1870.5	1890.6
72.5°	12975.8	10635.1	10236.8	4699.5	1952.0	1528.4	1432.0	1482.8	1470.1	1483.9	1519.9
75°	11171.0	8208.5	7961.7	3824.6	1487.1	1111.1	981.8	987.1	1003.0	1072.9	1111.1
77.5°	7957.5	5903.8	5793.6	2933.9	985.0	653.5	675.7	750.9	773.2	775.3	801.8
80°	4216.5	3290.8	3141.5	1728.6	651.4	467.1	508.4	541.2	570.9	601.6	609.0
82.5°	1900.1	1488.1	1446.8	859.0	413.1	360.1	369.6	425.8	450.1	455.4	460.7
85°	738.2	513.7	489.3	356.9	271.1	243.6	270.1	327.3	350.6	340.0	336.8
87.5°	197.0	120.7	110.2	119.7	127.1	134.5	153.6	174.8	200.2	192.8	186.4
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)