

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: P510551

Luminaire Tested: **CTN-CA10-630-740-U-T4**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510551  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-12)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 4/6/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: CTN-CA10-630-740-U-T4  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (10) 4000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 91042 lumens  
Efficiency: N/A  
Efficacy: 144.2 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B5 - U0 - G5

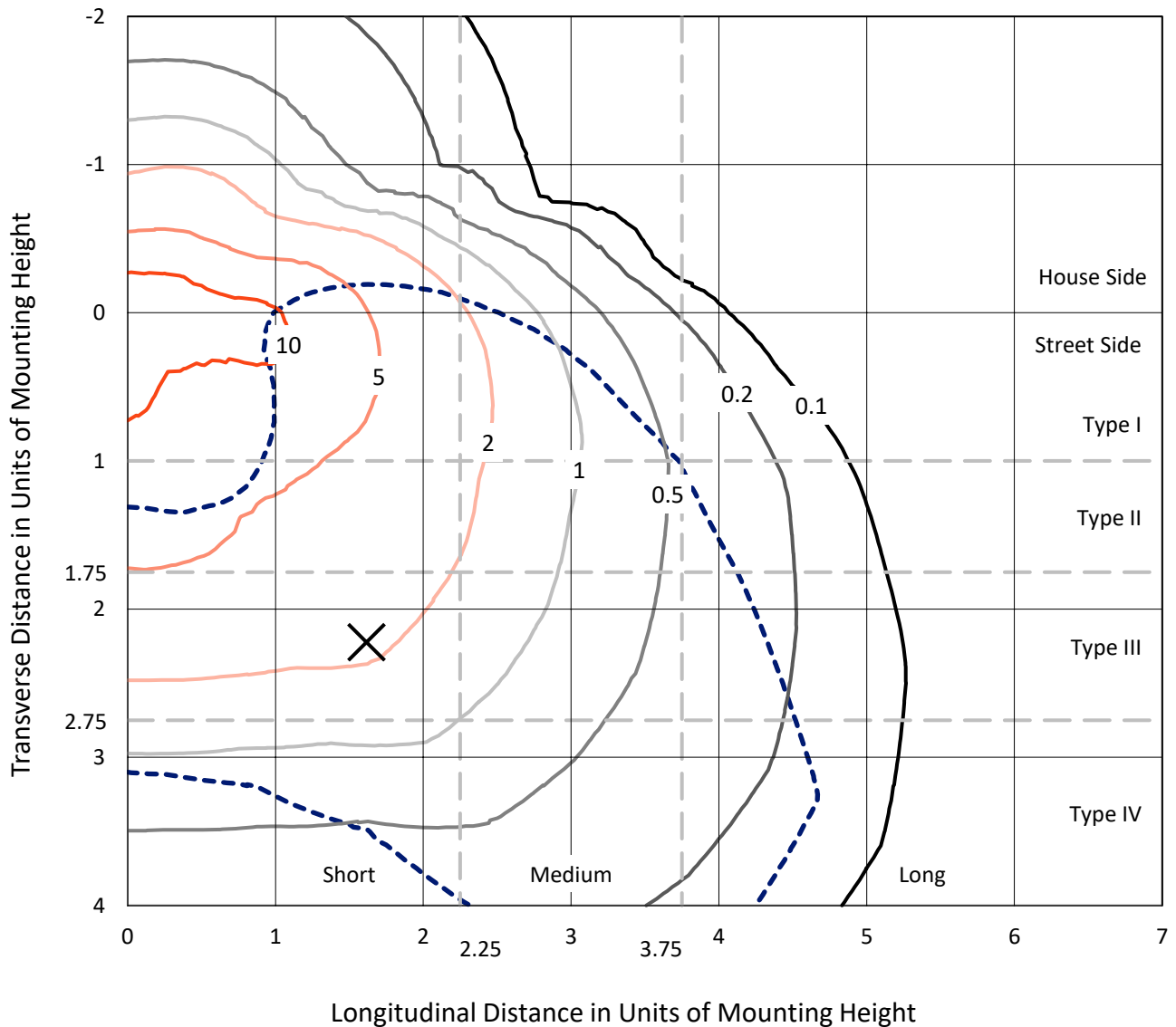
Input Watts (W): 631.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

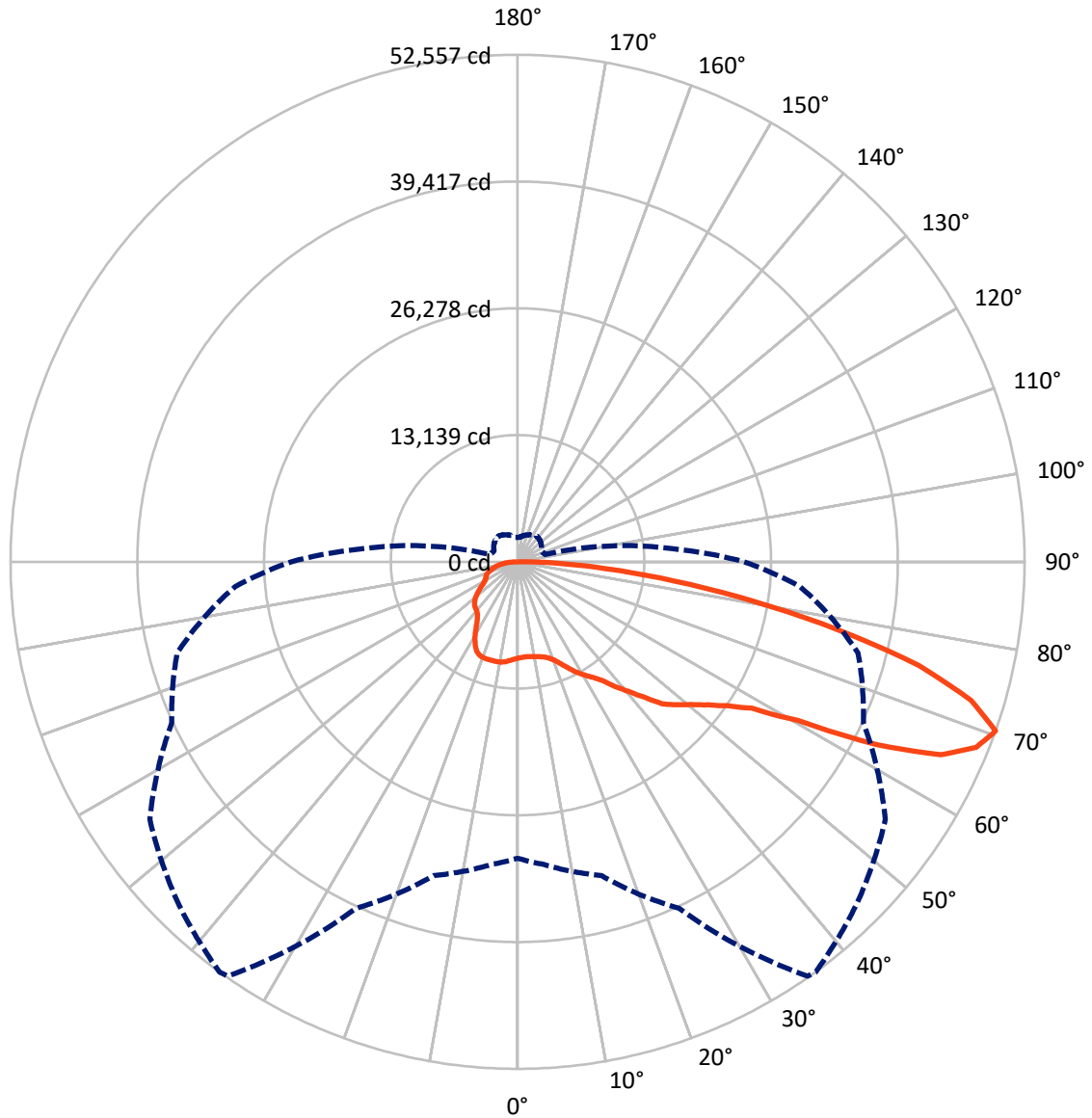
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 11.5 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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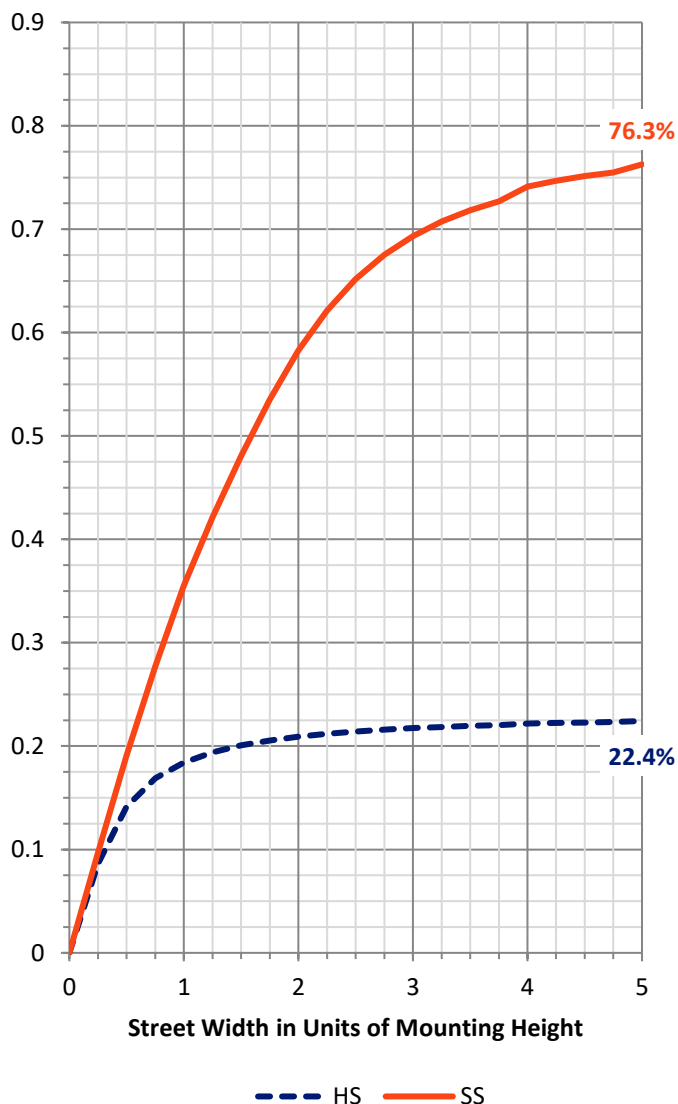
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	20743.4	0.0	20743.4
	% Fixture	22.8	0.0	22.8
<b>Street Side</b>	Lumens	70298.6	0.0	70298.6
	% Fixture	77.2	0.0	77.2
<b>Total</b>	Lumens	91042.0	0.0	91042.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	966.1	1.1
10°-20°	2986.6	3.3
20°-30°	5387.3	5.9
30°-40°	8343.9	9.2
40°-50°	12674.4	13.9
50°-60°	17567.5	19.3
60°-70°	22843.9	25.1
70°-80°	16869.9	18.5
80°-90°	3402.3	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°	91042.0	100.0
0°-180°	91042.0	100.0

**Coefficient of Utilization**

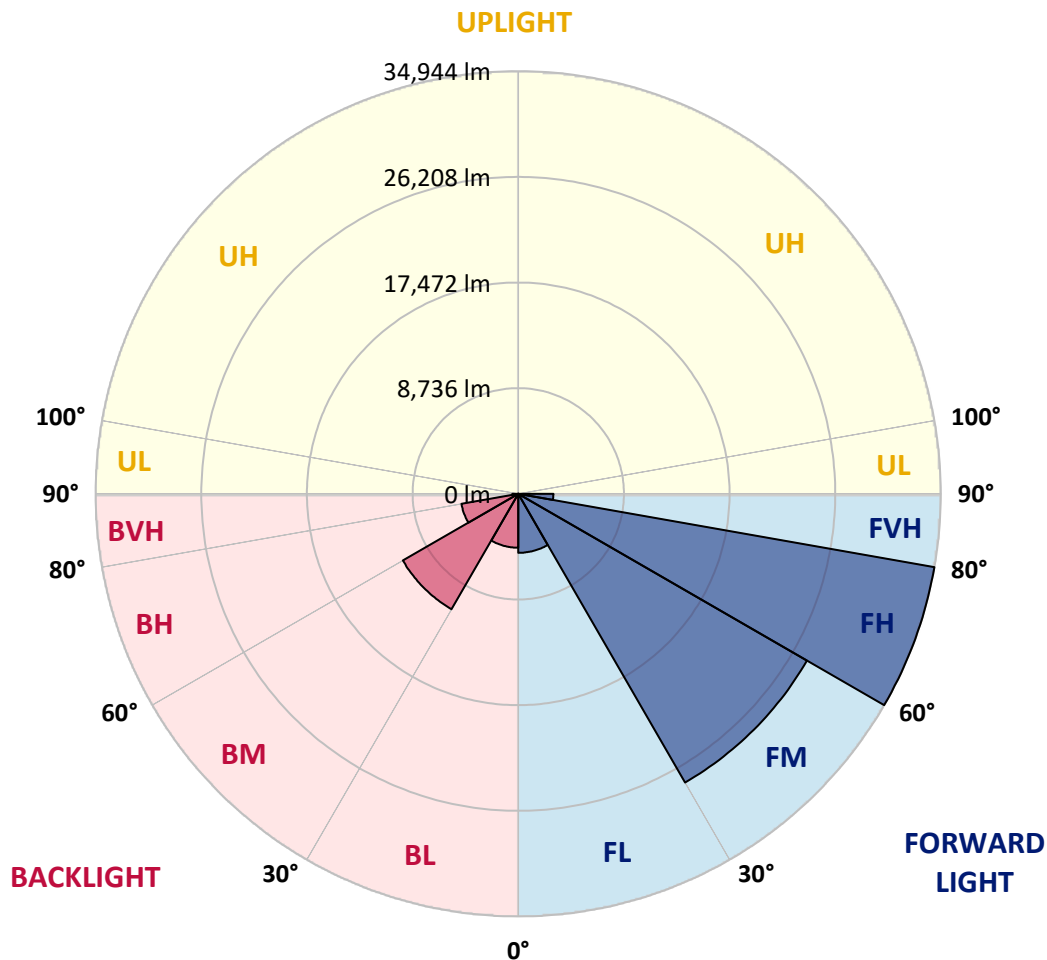


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4880.8	5.4			
FM (30°-60°)	27567.3	30.3			
FH (60°-80°)	34943.9	38.4			G5
FVH (80°-90°)	2906.6	3.2			G5
BL (0°-30°)	4459.3	4.9	B4/5000		
BM (30°-60°)	11018.6	12.1	B5		
BH (60°-80°)	4769.9	5.2	B4/5000		G4/5000
BVH (80°-90°)	495.6	0.5			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 IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	9971.8	9971.8	9971.8	9971.8	9971.8	9971.8	9971.8	9971.8	9971.8	9971.8	9971.8
2.5°	9911.5	9898.3	9890.8	9905.8	9911.5	9913.4	9917.1	9913.4	9904.0	9937.9	9979.4
5°	9913.4	9905.8	9890.8	9877.6	9877.6	9877.6	9879.4	9922.8	9941.7	9937.9	9988.8
7.5°	9928.5	9922.8	9894.5	9885.1	9907.7	9915.3	9953.0	9939.8	9960.5	9994.4	10037.8
10°	9930.3	9922.8	9898.3	9919.0	9983.1	9994.4	10011.4	10049.1	10056.6	10098.1	10141.5
12.5°	9949.2	9949.2	9958.6	10003.9	10071.7	10084.9	10149.0	10179.2	10224.4	10245.1	10297.9
15°	10049.1	10047.2	10069.8	10120.7	10230.1	10237.6	10316.8	10407.3	10441.2	10492.1	10576.9
17.5°	10286.6	10297.9	10299.8	10337.5	10467.6	10471.3	10601.4	10686.2	10763.5	10854.0	11048.2
20°	10850.2	10829.5	10806.9	10806.9	10857.8	10884.2	10984.1	11119.8	11278.1	11438.4	11666.5
22.5°	11559.0	11600.5	11517.5	11474.2	11498.7	11468.5	11543.9	11653.3	11838.0	12077.4	12365.8
25°	12405.4	12409.2	12403.5	12228.2	12173.5	12192.4	12254.6	12356.4	12601.4	12791.8	13210.3
27.5°	13231.0	13214.1	13153.7	12969.0	12916.2	12942.6	12940.7	13221.6	13472.3	13715.5	14207.5
30°	13981.3	14026.5	13919.1	13608.0	13613.7	13609.9	13696.6	14058.6	14516.6	14969.0	15474.2
32.5°	15304.6	15167.0	15021.8	14407.3	14294.2	14281.0	14331.9	14871.0	15549.6	16313.1	16920.0
35°	16550.6	16516.6	16373.4	15749.4	15095.3	15084.0	15014.3	15670.3	16624.1	18037.9	18795.6
37.5°	17824.9	17775.8	17634.5	17102.9	16452.5	16390.3	15804.1	16522.3	17811.7	20054.8	21135.0
40°	19344.2	19314.0	19095.4	18414.9	17747.6	17653.3	17044.4	17417.7	19310.3	22741.0	23502.6
42.5°	20676.9	20671.2	20420.5	19789.1	19221.7	19127.4	18609.0	18997.3	21393.2	25372.5	25821.2
45°	21655.2	21804.2	21815.5	21455.4	21063.3	20980.4	20842.8	21378.1	23802.3	27760.8	27694.9
47.5°	22480.9	22609.1	22475.2	22290.5	22156.7	22162.3	22375.3	23438.5	26181.2	29841.9	29329.2
50°	23860.7	23781.5	23086.0	22976.6	23146.3	23246.2	23864.5	25662.8	28905.1	31794.8	30795.7
52.5°	25851.3	25547.8	24183.1	23960.6	24603.4	24641.1	25625.1	27651.5	31627.0	33470.6	32137.9
55°	28575.2	28324.5	26782.5	25755.2	26079.4	26333.9	27719.4	29689.2	33849.5	35046.5	33170.9
57.5°	32601.6	32620.5	31363.1	29448.0	28345.2	28616.7	29698.7	31670.4	35685.5	36366.0	33815.6
60°	35828.8	36426.3	36051.2	35176.6	33593.1	33408.4	32584.6	33734.5	37253.9	37487.6	34432.0
62.5°	38066.3	38337.8	39627.1	39811.9	41621.5	41698.8	37753.4	36153.0	38976.8	38222.8	34562.0
65°	37953.2	38121.0	40158.7	42639.4	47985.3	48224.7	45915.6	39811.9	40156.8	38550.8	34183.1
67.5°	35310.4	35563.0	38153.0	42790.2	51376.5	51286.0	49821.4	44905.2	40545.1	38024.8	32377.3
70°	30720.3	31498.9	33674.2	39610.2	52435.9	52556.5	49857.2	46532.0	39544.2	36537.6	29366.9
72.5°	25319.7	25564.8	27619.5	34262.3	49338.8	49161.6	47813.8	44384.9	37734.5	33847.6	24098.2
75°	19255.6	19255.6	21743.8	27304.7	42369.8	42991.9	43515.9	40200.2	33429.1	27587.4	16409.2
77.5°	12782.4	13240.5	15244.2	20518.6	33538.5	33998.4	35808.0	34266.1	27370.6	20230.2	7494.9
80°	6780.5	6837.0	8985.9	13634.4	23988.9	24856.0	27344.3	26428.1	19687.3	9477.9	1894.5
82.5°	2371.4	2588.1	3951.0	7902.0	15806.0	16347.0	18139.7	15704.2	6953.9	2098.0	1048.1
85°	1178.1	1219.6	1739.9	3762.5	8899.2	9161.3	10597.6	6116.9	1119.7	916.1	712.5
87.5°	567.4	580.6	667.3	1345.9	3868.1	4047.2	4284.7	1990.6	414.7	348.7	309.1
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°	9971.8	9971.8	9971.8	9971.8	9971.8	9971.8	9971.8	9971.8	9971.8	9971.8	9971.8
2.5°	9988.8	10005.7	10037.8	10047.2	10024.6	10066.1	10105.7	10141.5	10139.6	10152.8	10199.9
5°	10011.4	10047.2	10081.1	10141.5	10199.9	10233.8	10265.9	10296.0	10305.5	10333.7	10362.0
7.5°	10081.1	10117.0	10194.2	10299.8	10303.6	10388.4	10443.1	10452.5	10460.0	10460.0	10526.0
10°	10188.6	10254.6	10379.0	10452.5	10518.5	10490.2	10546.7	10510.9	10484.5	10495.9	10541.1
12.5°	10373.3	10431.8	10610.8	10691.9	10631.6	10620.3	10563.7	10482.7	10390.3	10380.9	10422.3
15°	10663.6	10773.0	10933.2	11010.5	10859.7	10725.8	10535.4	10369.6	10190.5	10124.5	10150.9
17.5°	11131.1	11263.1	11438.4	11385.6	11110.4	10846.5	10531.7	10181.1	9834.2	9592.9	9655.1
20°	11815.4	11913.4	12056.7	11843.6	11442.1	11006.7	10490.2	9936.0	9349.8	8910.5	8859.6
22.5°	12533.6	12682.5	12595.8	12201.8	11675.9	11068.9	10403.5	9579.7	8673.0	8122.6	8039.7
25°	13398.8	13447.8	13148.1	12554.3	11741.9	10970.9	10122.6	9059.5	7981.2	7462.8	7438.3
27.5°	14316.8	14205.6	13647.6	12716.4	11668.3	10680.6	9559.0	8237.6	7355.4	6897.3	6825.7
30°	15353.6	15095.3	14060.4	12733.4	11391.2	10115.1	8846.4	7594.8	6846.4	6386.5	6313.0
32.5°	16688.2	16079.3	14443.1	12558.1	10806.9	9285.7	7990.6	7046.2	6388.4	5926.5	5860.6
35°	18394.1	17366.8	14848.4	12241.4	10086.8	8456.2	7281.9	6580.6	6017.0	5460.9	5372.3
37.5°	20360.2	19163.2	15332.8	11841.8	9297.0	7726.7	6803.1	6284.7	5741.8	5112.2	5006.6
40°	22644.9	20961.5	16079.3	11364.9	8588.2	7200.8	6571.2	6182.9	5589.1	4933.1	4812.5
42.5°	24624.2	22863.5	16967.2	10852.1	7919.0	6763.5	6467.5	6115.0	5493.0	4799.3	4661.7
45°	26454.5	24433.8	17834.3	10230.1	7214.0	6463.8	6343.1	5945.4	5323.3	4633.4	4490.1
47.5°	27941.8	25702.4	18588.3	9658.9	6650.4	6188.6	6071.7	5623.0	5038.7	4433.6	4328.0
50°	29084.1	26656.2	19001.1	9204.6	6054.7	5875.6	5721.1	5259.2	4697.5	4175.3	4084.9
52.5°	30252.9	27611.9	19204.7	9227.2	5500.5	5410.0	5251.7	4855.8	4426.1	4024.5	3926.5
55°	30933.4	28004.0	18989.8	8678.7	4991.6	4886.0	4748.4	4542.9	4286.6	3930.3	3837.9
57.5°	31331.1	28247.2	18335.7	7078.3	4378.9	4279.0	4301.6	4284.7	4073.6	3698.4	3613.6
60°	31617.6	27719.4	16995.4	5202.7	3856.8	3781.4	3968.0	3907.7	3724.8	3432.6	3361.0
62.5°	31385.8	26714.7	14582.6	3911.4	3430.8	3591.0	3755.0	3643.8	3394.9	3129.2	3046.2
65°	29972.0	24742.9	11084.0	3142.3	3293.1	3513.7	3645.6	3466.6	3214.0	2899.2	2861.5
67.5°	27398.9	21168.9	6537.3	2880.3	3189.5	3423.2	3532.5	3295.0	3072.6	2771.0	2725.8
70°	23472.4	15847.5	2919.9	2682.4	3008.5	3240.4	3312.0	3087.7	2846.4	2563.6	2518.4
72.5°	17470.5	9555.2	1968.0	2476.9	2740.8	2946.3	3025.5	2788.0	2616.4	2488.2	2475.0
75°	9702.3	3317.7	1815.3	2243.2	2448.7	2633.4	2731.4	2563.6	2427.9	2252.6	2181.0
77.5°	3089.6	1410.0	1724.8	2005.7	2265.8	2418.5	2403.4	2150.8	2107.5	1894.5	1875.6
80°	1232.8	1229.0	1594.7	1641.9	1934.0	2062.2	2028.3	1709.7	1766.3	1641.9	1592.9
82.5°	967.0	1125.4	1278.1	1253.5	1504.3	1655.1	1607.9	1255.4	1419.4	1304.4	1193.2
85°	735.2	985.9	820.0	816.2	1050.0	1229.0	1259.2	965.1	967.0	880.3	784.2
87.5°	378.9	363.8	314.8	312.9	350.6	499.5	612.6	548.5	433.6	326.1	312.9
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)