

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: P510541

Luminaire Tested: **CTN-CA10-630-730-U-T4**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510541  
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-CA10-630-730-U-T4  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (10) 3000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 89393 lumens  
Efficiency: N/A  
Efficacy: 141.6 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B5 - U0 - G5

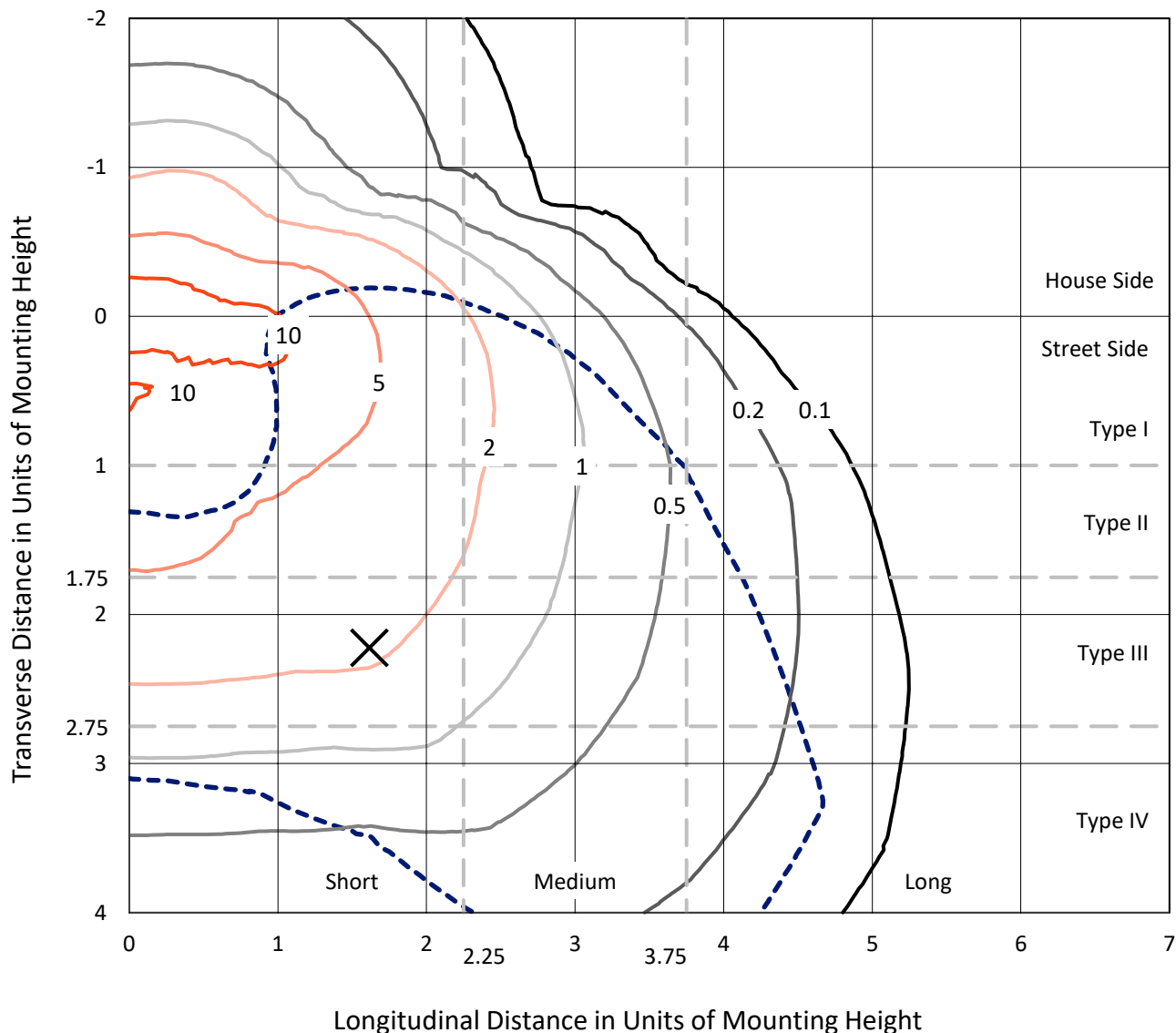
Input Watts (W): 631.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

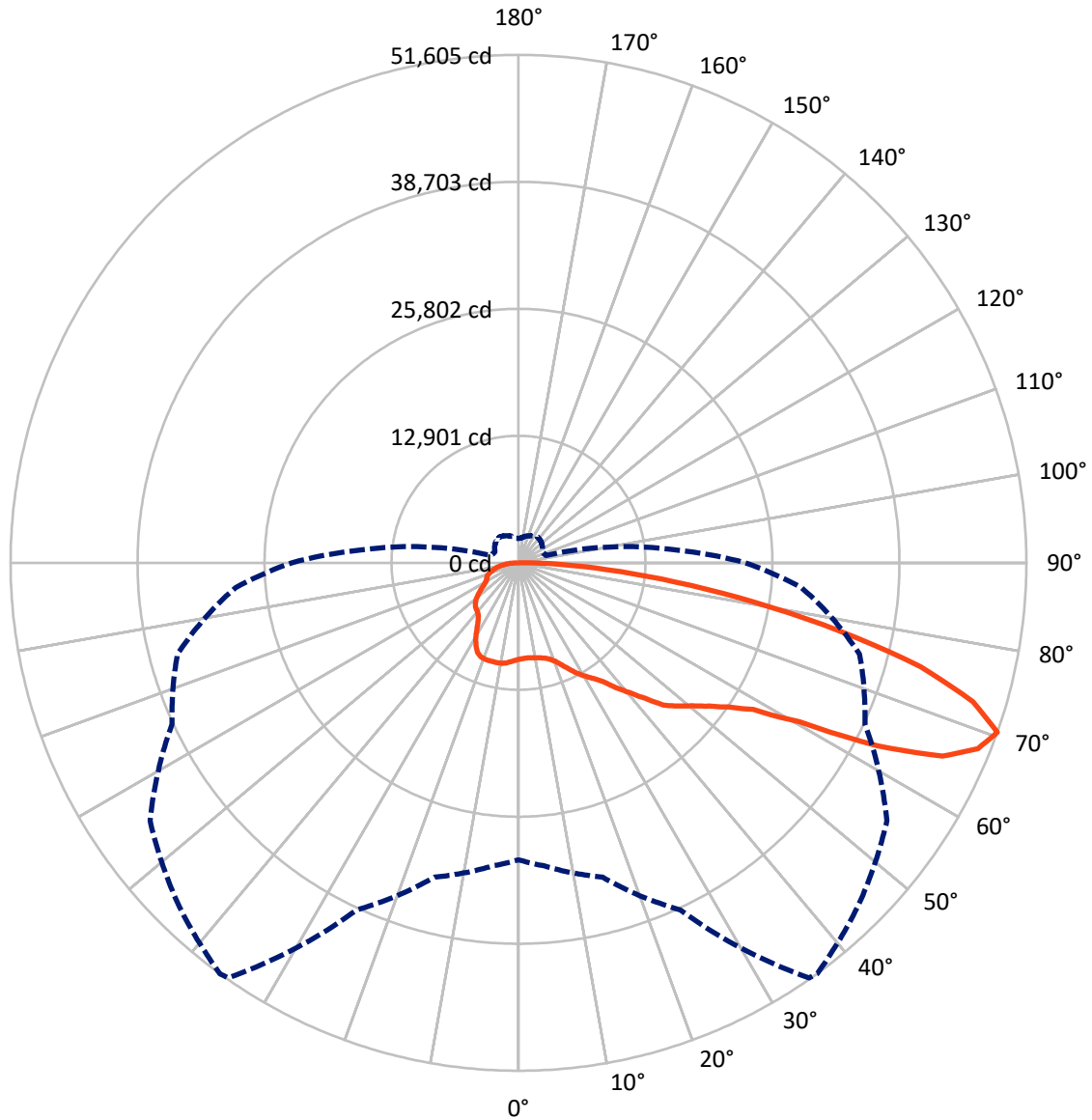
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 11.3 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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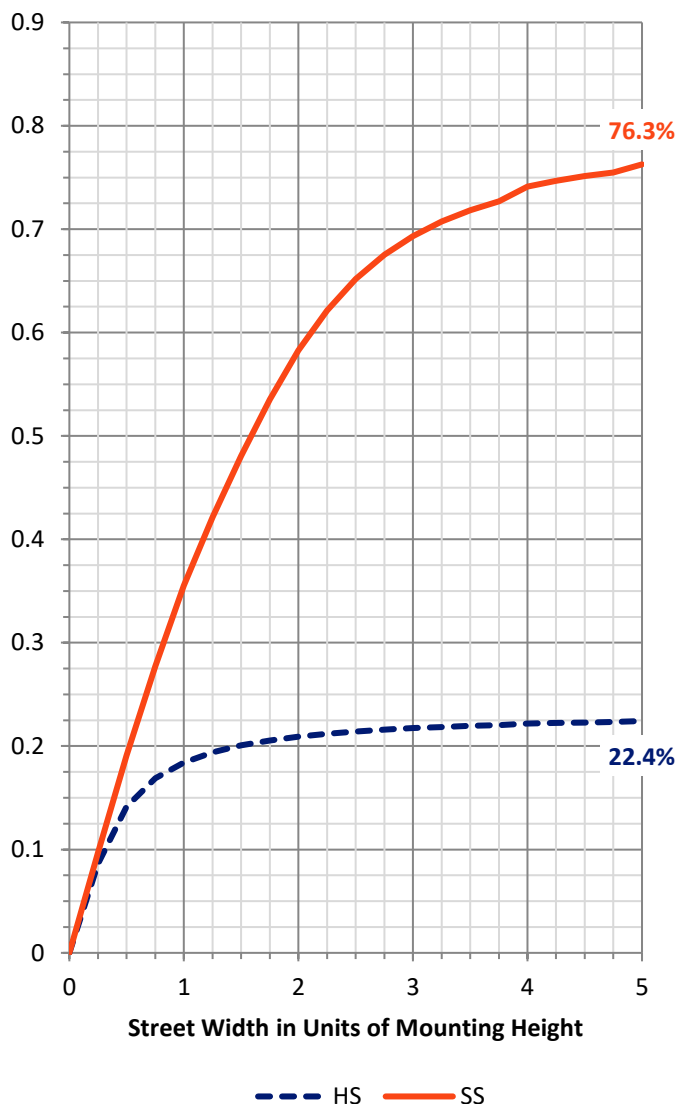
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	20367.7	0.0	20367.7
	% Fixture	22.8	0.0	22.8
<b>Street Side</b>	Lumens	69025.3	0.0	69025.3
	% Fixture	77.2	0.0	77.2
<b>Total</b>	Lumens	89393.0	0.0	89393.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	948.6	1.1
10°-20°	2932.5	3.3
20°-30°	5289.7	5.9
30°-40°	8192.8	9.2
40°-50°	12444.9	13.9
50°-60°	17249.3	19.3
60°-70°	22430.1	25.1
70°-80°	16564.4	18.5
80°-90°	3340.6	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°	89393.0	100.0
0°-180°	89393.0	100.0

**Coefficient of Utilization**

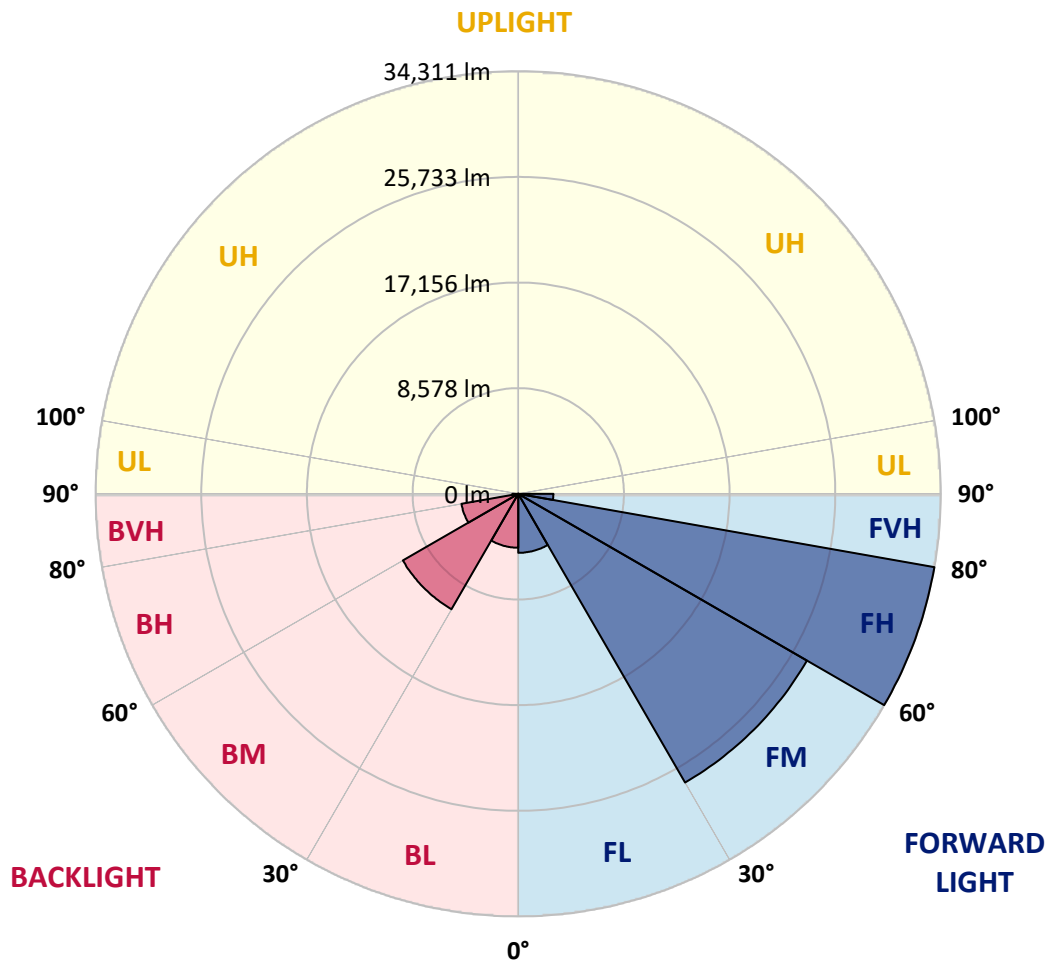


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4792.4	5.4			
FM (30°-60°)	27068.0	30.3			
FH (60°-80°)	34311.0	38.4			G5
FVH (80°-90°)	2854.0	3.2			G5
BL (0°-30°)	4378.5	4.9	B4/5000		
BM (30°-60°)	10819.0	12.1	B5		
BH (60°-80°)	4683.5	5.2	B4/5000		G4/5000
BVH (80°-90°)	486.7	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°	9791.2	9791.2	9791.2	9791.2	9791.2	9791.2	9791.2	9791.2	9791.2	9791.2	9791.2
2.5°	9732.0	9719.0	9711.6	9726.4	9732.0	9733.8	9737.5	9733.8	9724.6	9757.9	9798.6
5°	9733.8	9726.4	9711.6	9698.7	9698.7	9698.7	9700.5	9743.1	9761.6	9757.9	9807.9
7.5°	9748.6	9743.1	9715.3	9706.1	9728.3	9735.7	9772.7	9759.7	9780.1	9813.4	9856.0
10°	9750.5	9743.1	9719.0	9739.4	9802.3	9813.4	9830.1	9867.1	9874.5	9915.2	9957.8
12.5°	9769.0	9769.0	9778.2	9822.7	9889.3	9902.3	9965.2	9994.8	10039.2	10059.6	10111.4
15°	9867.1	9865.2	9887.4	9937.4	10044.8	10052.2	10129.9	10218.8	10252.1	10302.0	10385.3
17.5°	10100.3	10111.4	10113.3	10150.3	10278.0	10281.7	10409.4	10492.7	10568.6	10657.4	10848.1
20°	10653.7	10633.4	10611.1	10611.1	10661.1	10687.0	10785.1	10918.4	11073.9	11231.2	11455.1
22.5°	11349.6	11390.4	11308.9	11266.4	11290.4	11260.8	11334.8	11442.2	11623.6	11858.6	12141.8
25°	12180.7	12184.4	12178.8	12006.7	11953.0	11971.5	12032.6	12132.6	12373.2	12560.1	12971.0
27.5°	12991.4	12974.7	12915.5	12734.1	12682.3	12708.2	12706.3	12982.1	13228.3	13467.1	13950.1
30°	13728.0	13772.5	13667.0	13361.6	13367.1	13363.4	13448.6	13803.9	14253.7	14697.9	15193.9
32.5°	15027.4	14892.2	14749.7	14146.3	14035.3	14022.3	14072.3	14601.7	15268.0	16017.6	16613.6
35°	16250.8	16217.5	16076.8	15464.2	14821.9	14810.8	14742.3	15386.4	16323.0	17711.1	18455.2
37.5°	17502.0	17453.9	17315.1	16793.1	16154.6	16093.5	15517.8	16223.0	17489.0	19691.6	20752.2
40°	18993.8	18964.2	18749.5	18081.3	17426.1	17333.6	16735.7	17102.2	18960.5	22329.1	23076.9
42.5°	20302.4	20296.8	20050.7	19430.6	18873.5	18781.0	18272.0	18653.3	21005.7	24913.0	25353.5
45°	21263.0	21409.2	21420.3	21066.8	20681.8	20600.4	20465.3	20990.9	23371.2	27258.0	27193.2
47.5°	22073.7	22199.6	22068.1	21886.8	21755.3	21760.9	21970.0	23013.9	25707.0	29301.4	28798.0
50°	23428.5	23350.8	22667.8	22560.5	22727.1	22825.2	23432.2	25198.0	28381.5	31218.9	30238.0
52.5°	25383.1	25085.1	23745.0	23526.6	24157.8	24194.8	25161.0	27150.7	31054.2	32864.4	31555.8
55°	28057.6	27811.4	26297.4	25288.7	25607.0	25856.9	27217.3	29151.5	33236.4	34411.7	32570.1
57.5°	32011.1	32029.6	30795.1	28914.6	27831.8	28098.3	29160.7	31096.8	35039.2	35707.3	33203.1
60°	35179.8	35766.6	35398.2	34539.4	32984.7	32803.3	31994.5	33123.5	36579.1	36808.6	33808.3
62.5°	37376.8	37643.4	38909.4	39090.8	40867.6	40943.5	37069.6	35498.2	38270.8	37530.5	33936.0
65°	37265.8	37430.5	39431.3	41867.1	47116.2	47351.3	45083.9	39090.8	39429.5	37852.5	33564.0
67.5°	34670.8	34918.9	37462.0	42015.2	50446.0	50357.1	48919.0	44091.9	39810.8	37336.1	31790.9
70°	30163.9	30928.3	33064.3	38892.7	51486.2	51604.6	48954.1	45689.2	38827.9	35875.8	28835.0
72.5°	24861.1	25101.7	27119.2	33641.7	48445.1	48271.2	46947.8	43581.0	37051.1	33234.5	23661.8
75°	18906.8	18906.8	21350.0	26810.1	41602.4	42213.2	42727.8	39472.0	32823.7	27087.7	16112.0
77.5°	12550.9	13000.6	14968.1	20146.9	32931.0	33382.6	35159.5	33645.4	26874.9	19863.7	7359.1
80°	6657.6	6713.2	8823.2	13387.5	23554.4	24405.8	26849.0	25949.5	19330.7	9306.3	1860.1
82.5°	2328.4	2541.3	3879.5	7758.9	15519.7	16050.9	17811.1	15419.7	6827.9	2060.0	1029.1
85°	1156.8	1197.5	1708.4	3694.4	8738.0	8995.3	10405.7	6006.1	1099.4	899.5	699.6
87.5°	557.1	570.1	655.2	1321.5	3798.0	3973.9	4207.1	1954.5	407.2	342.4	303.5
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°	9791.2	9791.2	9791.2	9791.2	9791.2	9791.2	9791.2	9791.2	9791.2	9791.2	9791.2
2.5°	9807.9	9824.5	9856.0	9865.2	9843.0	9883.7	9922.6	9957.8	9955.9	9968.9	10015.2
5°	9830.1	9865.2	9898.6	9957.8	10015.2	10048.5	10079.9	10109.6	10118.8	10146.6	10174.3
7.5°	9898.6	9933.7	10009.6	10113.3	10117.0	10200.2	10253.9	10263.2	10270.6	10270.6	10335.4
10°	10004.1	10068.8	10191.0	10263.2	10328.0	10300.2	10355.7	10320.6	10294.6	10305.7	10350.2
12.5°	10185.4	10242.8	10418.6	10498.2	10439.0	10427.9	10372.4	10292.8	10202.1	10192.8	10233.6
15°	10470.5	10577.8	10735.2	10811.0	10663.0	10531.6	10344.6	10181.7	10005.9	9941.1	9967.0
17.5°	10929.5	11059.1	11231.2	11179.4	10909.1	10650.0	10340.9	9996.6	9656.1	9419.2	9480.2
20°	11601.4	11697.6	11838.3	11629.1	11234.9	10807.3	10300.2	9756.0	9180.4	8749.1	8699.2
22.5°	12306.6	12452.8	12367.6	11980.8	11464.4	10868.4	10215.1	9406.2	8515.9	7975.5	7894.0
25°	13156.1	13204.2	12909.9	12326.9	11529.2	10772.2	9939.3	8895.4	7836.7	7327.7	7303.6
27.5°	14057.5	13948.3	13400.4	12486.1	11457.0	10487.1	9385.9	8088.4	7222.2	6772.4	6702.1
30°	15075.5	14821.9	13805.8	12502.7	11184.9	9931.9	8686.2	7457.2	6722.4	6270.8	6198.6
32.5°	16385.9	15788.1	14181.5	12330.6	10611.1	9117.5	7845.9	6918.6	6272.7	5819.2	5754.4
35°	18061.0	17052.2	14579.4	12019.7	9904.1	8303.1	7150.0	6461.5	5908.0	5362.0	5275.0
37.5°	19991.4	18816.1	15055.1	11627.3	9128.6	7586.8	6679.9	6170.9	5637.8	5019.6	4916.0
40°	22234.7	20581.9	15788.1	11159.0	8432.6	7070.4	6452.2	6070.9	5487.9	4843.8	4725.3
42.5°	24178.2	22449.4	16659.8	10655.6	7775.6	6641.0	6350.4	6004.3	5393.5	4712.4	4577.2
45°	25975.4	23991.2	17511.3	10044.8	7083.3	6346.7	6228.2	5837.7	5226.9	4549.5	4408.8
47.5°	27435.7	25236.9	18251.6	9484.0	6529.9	6076.5	5961.7	5521.2	4947.4	4353.3	4249.6
50°	28557.4	26173.4	18657.0	9037.9	5945.1	5769.2	5617.4	5164.0	4612.4	4099.7	4010.9
52.5°	29704.9	27111.8	18856.8	9060.1	5400.9	5312.0	5156.6	4767.9	4345.9	3951.6	3855.4
55°	30373.1	27496.8	18645.8	8521.5	4901.2	4797.5	4662.4	4460.6	4208.9	3859.1	3768.4
57.5°	30763.6	27735.6	18003.6	6950.1	4299.6	4201.5	4223.7	4207.1	3999.8	3631.4	3548.2
60°	31044.9	27217.3	16687.6	5108.5	3786.9	3712.9	3896.1	3836.9	3657.4	3370.5	3300.1
62.5°	30817.3	26230.8	14318.5	3840.6	3368.6	3525.9	3687.0	3577.8	3333.4	3072.5	2991.0
65°	29429.1	24294.8	10883.2	3085.4	3233.5	3450.1	3579.6	3403.8	3155.8	2846.7	2809.6
67.5°	26902.7	20785.5	6418.9	2828.2	3131.7	3361.2	3468.6	3235.4	3016.9	2720.8	2676.4
70°	23047.3	15560.4	2867.0	2633.8	2954.0	3181.7	3252.0	3031.8	2794.8	2517.2	2472.8
72.5°	17154.0	9382.2	1932.3	2432.1	2691.2	2892.9	2970.7	2737.5	2569.0	2443.2	2430.2
75°	9526.5	3257.6	1782.4	2202.6	2404.3	2585.7	2681.9	2517.2	2383.9	2211.8	2141.5
77.5°	3033.6	1384.5	1693.6	1969.3	2224.8	2374.7	2359.9	2111.9	2069.3	1860.1	1841.6
80°	1210.5	1206.8	1565.9	1612.1	1899.0	2024.9	1991.6	1678.8	1734.3	1612.1	1564.0
82.5°	949.5	1105.0	1254.9	1230.8	1477.0	1625.1	1578.8	1232.7	1393.7	1280.8	1171.6
85°	721.8	968.0	805.1	801.4	1030.9	1206.8	1236.4	947.7	949.5	864.4	770.0
87.5°	372.0	357.2	309.1	307.2	344.3	490.5	601.5	538.6	425.7	320.2	307.2
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)