

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: P591227

Luminaire Tested: **CTN-CA10-760-727-U-T1-SSS-HM-EX120**

Issue Date: 1/19/2022

**Test Information**

Test Method: LM-79-08  
Report Number: P591227  
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-CA10-760-727-U-T1-SSS-HM-EX120  
Description: CELESTEON HIGH MAST LUMINAIRE, 120D FIELD INSTALLED SHIELD ON STREET SIDE  
Light Source: (10) 2700K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 52483 lumens  
Efficiency: N/A  
Efficacy: 68.9 lumens/watt  
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')  
IES Classification: Type I - Short  
BUG Rating: B5 - U0 - G5

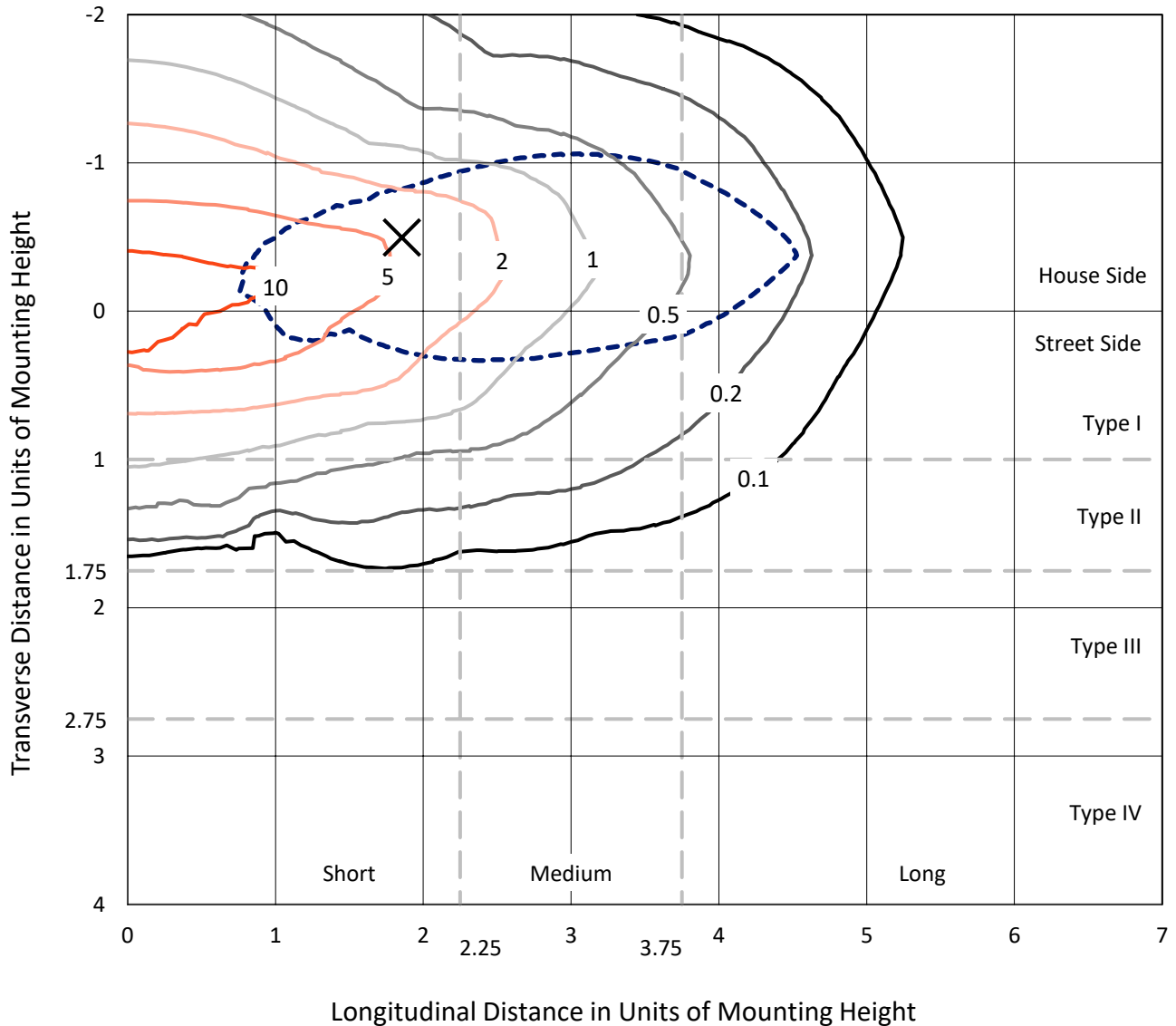
Input Watts (W): 761.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

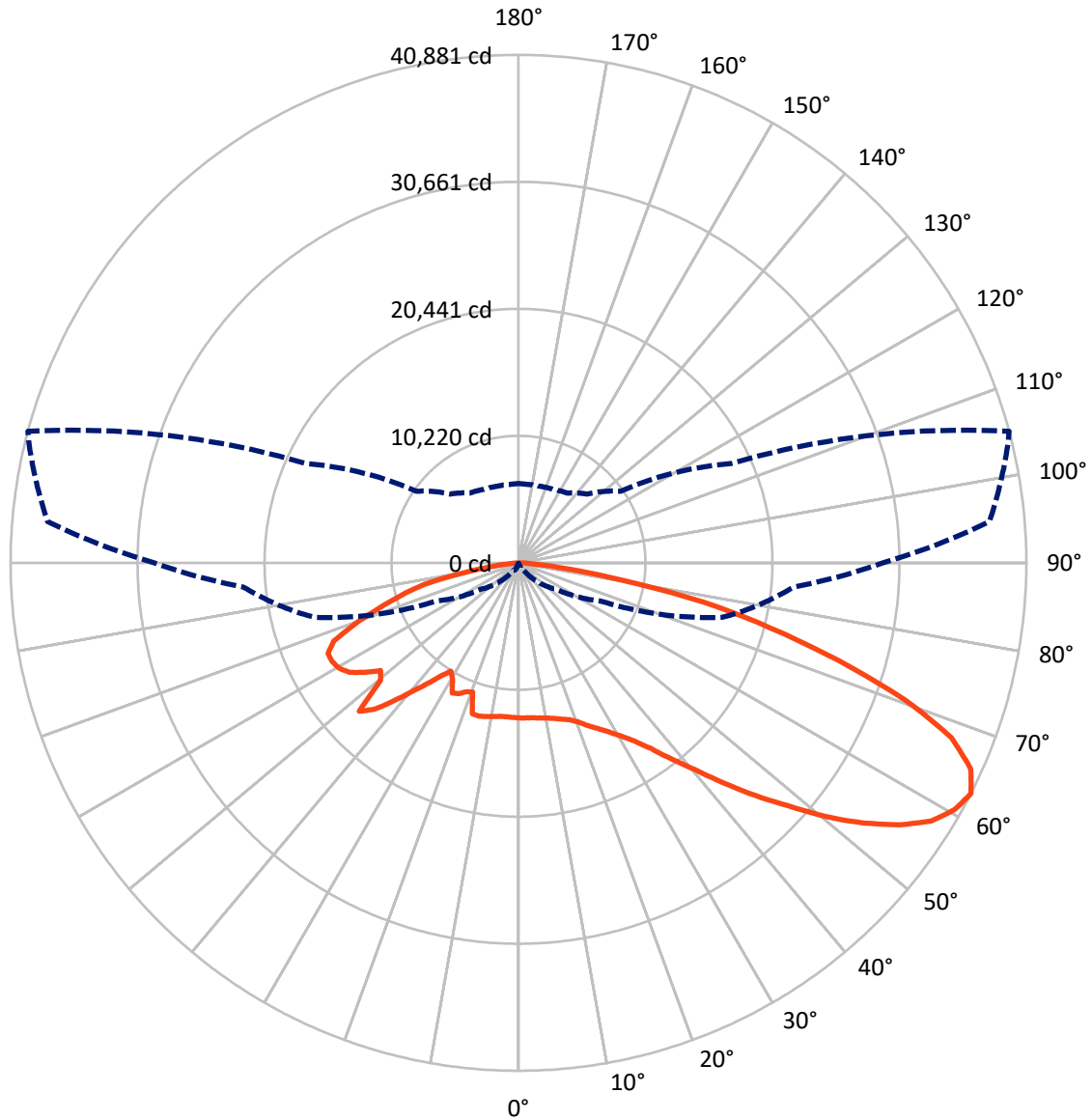
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 13.9 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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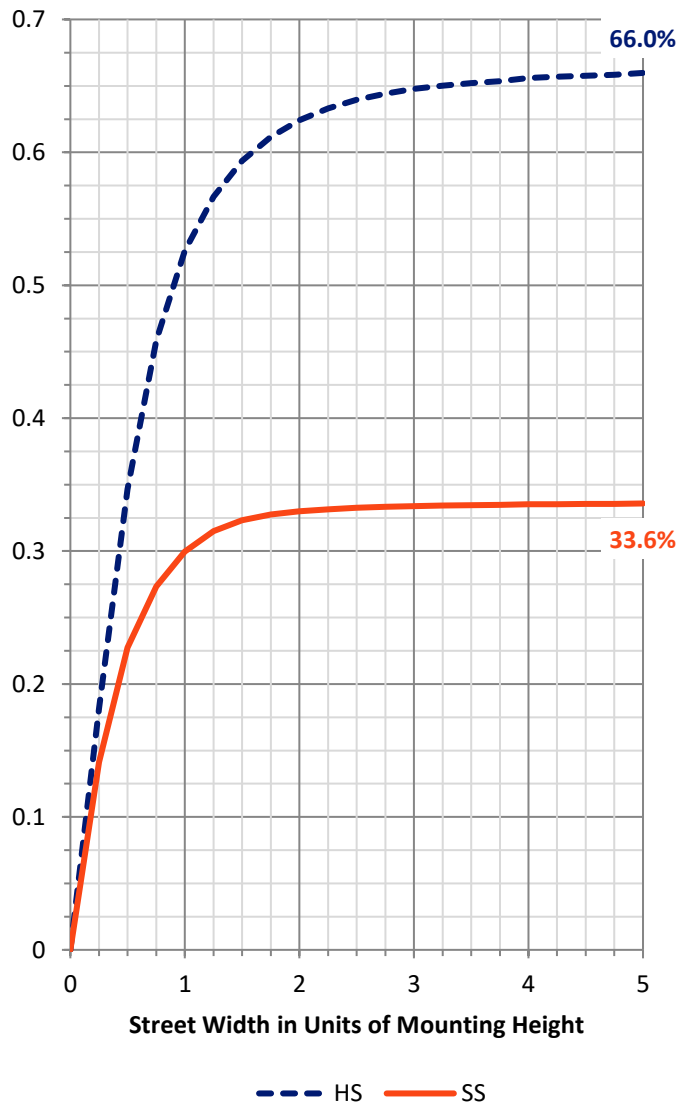
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	34921.6	0.0	34921.6
	% Fixture	66.5	0.0	66.5
<b>Street Side</b>	Lumens	17561.4	0.0	17561.4
	% Fixture	33.5	0.0	33.5
<b>Total</b>	Lumens	52483.0	0.0	52483.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1191.3	2.3
10°-20°	3364.7	6.4
20°-30°	4742.0	9.0
30°-40°	6442.8	12.3
40°-50°	8764.5	16.7
50°-60°	10383.3	19.8
60°-70°	10182.0	19.4
70°-80°	6421.9	12.2
80°-90°	990.6	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°	52483.0	100.0
0°-180°	52483.0	100.0

**Coefficient of Utilization**

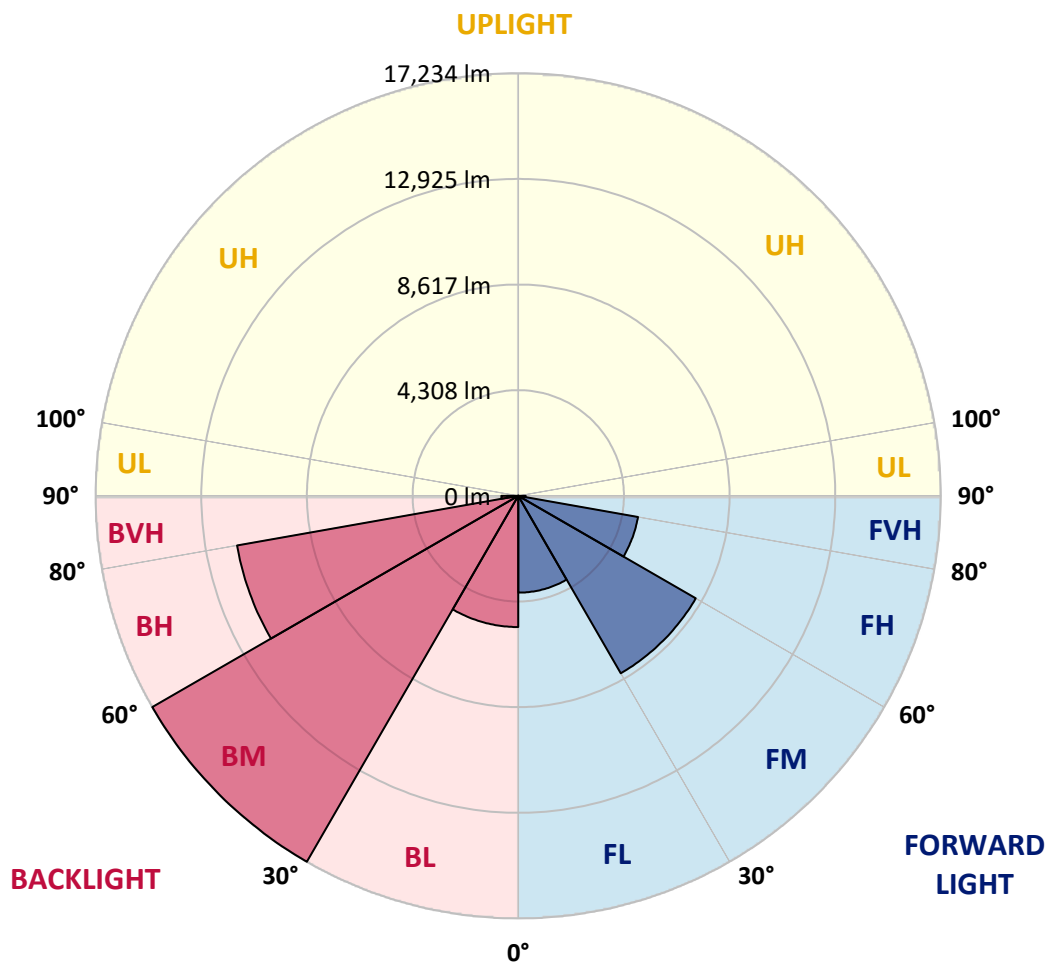


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3947.6	7.5			
FM (30°-60°)	8356.6	15.9			
FH (60°-80°)	4958.4	9.4			G2/5000
FVH (80°-90°)	298.8	0.6			G3/500
BL (0°-30°)	5350.4	10.2	B5		
BM (30°-60°)	17234.0	32.8	B5		
BH (60°-80°)	11645.4	22.2	B5		G5
BVH (80°-90°)	691.8	1.3			G4/750
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°	12484.9	12484.9	12484.9	12484.9	12484.9	12484.9	12484.9	12484.9	12484.9	12484.9	12484.9
2.5°	12493.2	12395.6	12465.3	12571.3	12412.4	12504.4	12351.0	12476.5	12445.8	12454.2	12512.7
5°	12395.6	12292.5	12376.1	12515.5	12359.4	12462.6	12337.1	12443.0	12431.9	12470.9	12518.3
7.5°	12303.6	12206.1	12292.5	12384.5	12303.6	12404.0	12309.2	12440.3	12448.6	12535.0	12574.1
10°	12206.1	12108.5	12192.1	12298.1	12231.2	12356.6	12317.6	12476.5	12537.8	12652.1	12685.6
12.5°	11991.4	11905.0	11974.7	12097.3	12108.5	12292.5	12317.6	12562.9	12638.2	12788.8	12838.9
15°	10700.5	10795.3	11166.1	11523.0	11676.3	12016.5	12203.3	12641.0	12746.9	12961.6	13039.7
17.5°	8656.9	8478.4	7901.3	8051.9	8899.4	10042.5	10474.7	11562.0	12710.7	13179.1	13279.5
20°	5116.1	5481.3	6610.5	6956.2	7268.4	8498.0	9950.5	10597.4	11037.9	12702.3	13608.4
22.5°	4218.3	4243.4	5051.9	6646.7	6998.0	7480.3	8603.9	10734.0	11188.4	11520.2	12529.5
25°	3911.6	3936.7	4076.1	5308.4	6805.6	7363.2	7856.7	9811.1	11576.0	11985.8	12774.8
27.5°	3666.3	3699.7	3828.0	4173.7	6345.6	7329.8	7954.3	8701.5	11748.8	12537.8	13276.7
30°	3482.3	3496.2	3627.2	3961.8	4798.2	7338.1	8096.5	8893.9	10761.9	13237.6	13979.3
32.5°	3315.0	3323.3	3460.0	3786.2	4290.8	6797.3	8311.2	9295.3	10276.7	13812.0	14943.9
35°	3186.7	3181.2	3303.8	3624.5	4126.3	5205.3	8550.9	9777.7	11051.8	13268.3	16382.6
37.5°	3064.1	3055.7	3161.6	3457.2	3981.3	4873.5	8272.1	10357.6	12164.2	13680.9	16265.5
40°	2969.3	2952.5	3041.8	3306.6	3830.8	4789.9	6515.7	10971.0	13385.4	15808.2	17249.6
42.5°	2885.6	2874.5	2949.8	3161.6	3677.4	4689.5	6072.4	11302.7	14904.9	18267.3	19795.1
45°	2760.2	2776.9	2860.5	3064.1	3512.9	4547.3	6117.0	9077.9	16513.6	20400.1	22332.2
47.5°	2707.2	2704.4	2757.4	2949.8	3370.7	4349.3	6086.3	8325.1	17525.6	22633.3	24816.4
50°	2623.6	2609.6	2275.0	2815.9	3225.8	4104.0	5958.1	8542.6	14584.3	24824.8	27097.0
52.5°	2467.4	2194.2	1990.7	2721.1	3078.0	3836.3	5670.9	8637.4	14082.4	24434.4	29057.0
55°	1310.4	1460.9	1884.7	2587.3	2905.1	3596.6	5249.9	8570.4	15167.0	19538.6	26974.3
57.5°	1162.6	1157.0	1198.9	2043.6	1513.9	3334.5	4742.5	8263.8	16193.0	20430.8	27479.0
60°	92.0	94.8	111.5	680.3	803.0	2347.5	4196.0	7884.6	16736.6	21484.7	28702.9
62.5°	44.6	50.2	66.9	607.8	733.3	2135.6	3702.5	7237.8	16965.3	22245.8	29307.9
65°	11.2	13.9	30.7	535.3	638.5	1901.4	3206.3	6479.4	16984.8	22276.5	29795.8
67.5°	8.4	13.9	30.7	485.1	582.7	1695.1	2771.3	5949.7	16153.9	22162.2	29550.5
70°	8.4	13.9	30.7	434.9	526.9	1469.3	2386.6	5431.1	14032.2	21735.6	28716.9
72.5°	8.4	16.7	30.7	382.0	462.8	1246.3	2026.9	4859.6	11776.7	19954.0	26860.0
75°	8.4	16.7	33.5	309.5	395.9	992.5	1664.5	4162.6	9794.4	17302.6	23782.0
77.5°	8.4	16.7	33.5	239.8	320.6	741.6	1260.2	3298.3	7814.9	12760.9	16708.8
80°	8.4	16.7	33.5	170.1	262.1	521.4	917.3	2250.0	4661.6	6708.0	8509.1
82.5°	8.4	16.7	33.5	122.7	189.6	376.4	566.0	1109.6	2224.9	3220.2	4039.9
85°	5.6	13.9	30.7	80.9	100.4	228.6	337.4	493.5	666.3	881.0	1190.5
87.5°	5.6	8.4	19.5	30.7	41.8	80.9	125.5	111.5	125.5	262.1	376.4
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°	12484.9	12484.9	12484.9	12484.9	12484.9	12484.9	12484.9	12484.9	12484.9	12484.9	12484.9
2.5°	12504.4	12493.2	12496.0	12557.4	12504.4	12515.5	12423.5	12607.5	12590.8	12565.7	12638.2
5°	12518.3	12512.7	12535.0	12588.0	12507.2	12521.1	12434.7	12649.4	12596.4	12588.0	12674.5
7.5°	12588.0	12579.7	12602.0	12627.1	12537.8	12537.8	12462.6	12632.6	12602.0	12546.2	12643.8
10°	12713.5	12682.8	12705.1	12719.1	12582.4	12576.9	12437.5	12638.2	12560.1	12532.3	12657.7
12.5°	12889.1	12819.4	12852.9	12830.6	12649.4	12615.9	12429.1	12560.1	12462.6	12445.8	12560.1
15°	13126.1	13034.1	13059.2	13017.4	12788.8	12691.2	12390.1	12445.8	12289.7	12275.8	12359.4
17.5°	13346.4	13290.6	13276.7	13276.7	13009.0	12766.5	12353.8	12275.8	12069.4	12055.5	12097.3
20°	13745.1	13669.8	13661.4	13594.5	13198.6	12827.8	12295.3	12055.5	11748.8	11679.1	11757.2
22.5°	13873.3	14238.5	14213.5	13917.9	13357.5	12878.0	12175.4	11779.5	11358.5	11224.7	11263.7
25°	14255.3	14804.5	14759.9	14330.6	13519.2	12905.9	12030.4	11475.6	10895.7	10661.5	10669.8
27.5°	14860.3	15420.7	15390.0	14771.1	13720.0	12914.2	11868.7	11155.0	10435.7	10129.0	10154.1
30°	15629.8	16195.8	16151.1	15261.8	14023.9	12931.0	11746.0	10770.2	10014.7	9682.9	9677.3
32.5°	16700.4	17213.4	17082.4	15916.9	14389.1	13000.7	11584.3	10405.0	9629.9	9281.4	9253.5
35°	18317.5	18507.0	18345.3	16697.6	14776.6	13045.3	11325.0	10048.1	9273.0	8930.1	8905.0
37.5°	20503.3	20269.1	20051.6	17575.8	15178.1	13034.1	10996.0	9702.4	8966.4	8640.2	8640.2
40°	20718.0	22293.2	21891.7	18501.5	15540.6	12972.8	10683.8	9365.0	8718.2	8453.4	8495.2
42.5°	21724.4	24771.8	24208.6	19396.4	15802.6	12794.3	10349.2	9058.4	8486.8	8272.1	8288.9
45°	24197.4	27027.3	26698.3	20260.7	15944.8	12479.3	9961.7	8757.2	8227.5	8057.4	8090.9
47.5°	26857.2	29709.4	29227.1	21058.1	15866.8	12013.7	9549.1	8481.2	7957.1	7848.3	7909.7
50°	29372.1	32530.9	32129.4	21618.5	15521.0	11361.3	9108.5	8188.5	7745.2	7658.8	7689.4
52.5°	31839.5	35093.1	34792.0	21922.4	14829.6	10678.2	8701.5	7909.7	7547.2	7438.5	7480.3
55°	33874.7	37521.5	37228.8	21891.7	13789.7	9964.5	8297.2	7608.6	7346.5	7248.9	7282.4
57.5°	35463.9	39411.8	39202.7	21426.1	12579.7	9309.3	7840.0	7313.0	7081.6	6995.2	7023.1
60°	36885.8	40610.7	40340.2	20397.3	11297.2	8587.2	7368.8	6961.7	6769.4	6699.7	6744.3
62.5°	38051.2	40635.8	40881.1	18908.5	10039.7	7823.3	6844.6	6529.6	6390.2	6348.4	6376.3
65°	38349.6	39888.6	40008.4	17068.4	8765.6	7064.9	6214.6	6008.2	5949.7	5924.6	5980.4
67.5°	37936.9	38313.3	37599.6	15512.7	7603.0	6206.2	5534.3	5406.0	5442.3	5447.8	5520.3
70°	36871.9	34097.8	32996.5	14210.7	6518.4	5255.5	4787.1	4745.3	4842.8	4923.7	4976.7
72.5°	34156.3	27994.8	26946.5	12370.6	5138.4	4023.1	3769.4	3903.3	3869.8	3906.1	4000.8
75°	29405.5	21607.3	20957.7	10067.6	3914.4	2924.7	2584.5	2598.5	2640.3	2824.3	2924.7
77.5°	20946.6	15540.6	15250.6	7722.9	2592.9	1720.2	1778.8	1976.7	2035.3	2040.8	2110.5
80°	11099.2	8662.5	8269.3	4550.1	1714.6	1229.5	1338.3	1424.7	1502.8	1583.6	1603.1
82.5°	5001.8	3917.2	3808.5	2261.1	1087.3	947.9	973.0	1120.8	1184.9	1198.9	1212.8
85°	1943.3	1352.2	1288.1	939.6	713.7	641.3	711.0	861.5	922.8	895.0	886.6
87.5°	518.6	317.8	290.0	315.0	334.6	354.1	404.3	460.0	526.9	507.4	490.7
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)