

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: P510739

Luminaire Tested: **CTN-CA8-230-750-U-T3**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510739  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-11)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 4/6/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: CTN-CA8-230-750-U-T3  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (8) 5000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 36577 lumens  
Efficiency: N/A  
Efficacy: 160.1 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B3 - U0 - G4

Input Watts (W): 228.4  
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

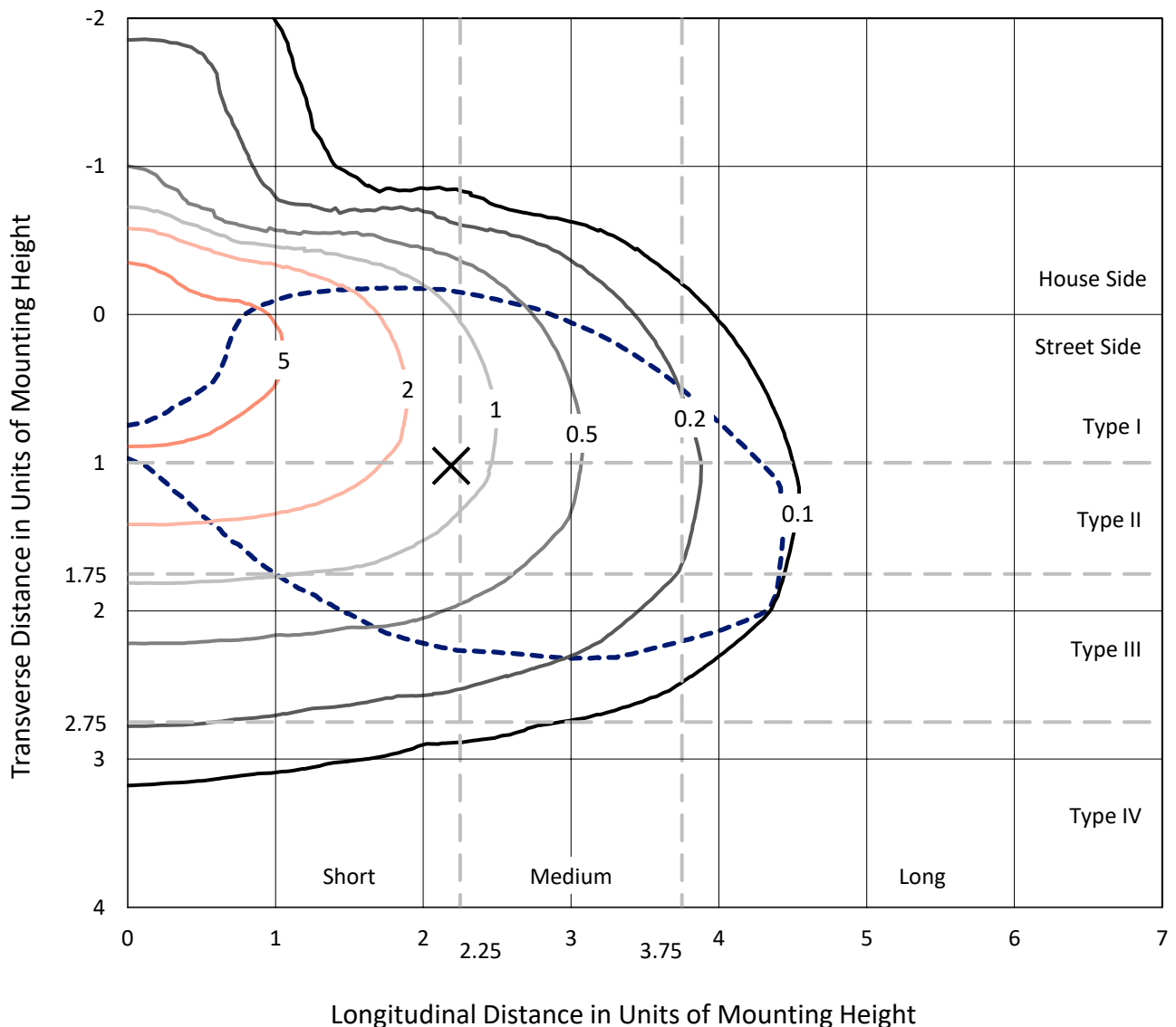




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### Iso-Footcandle Lines of Horizontal Illumination

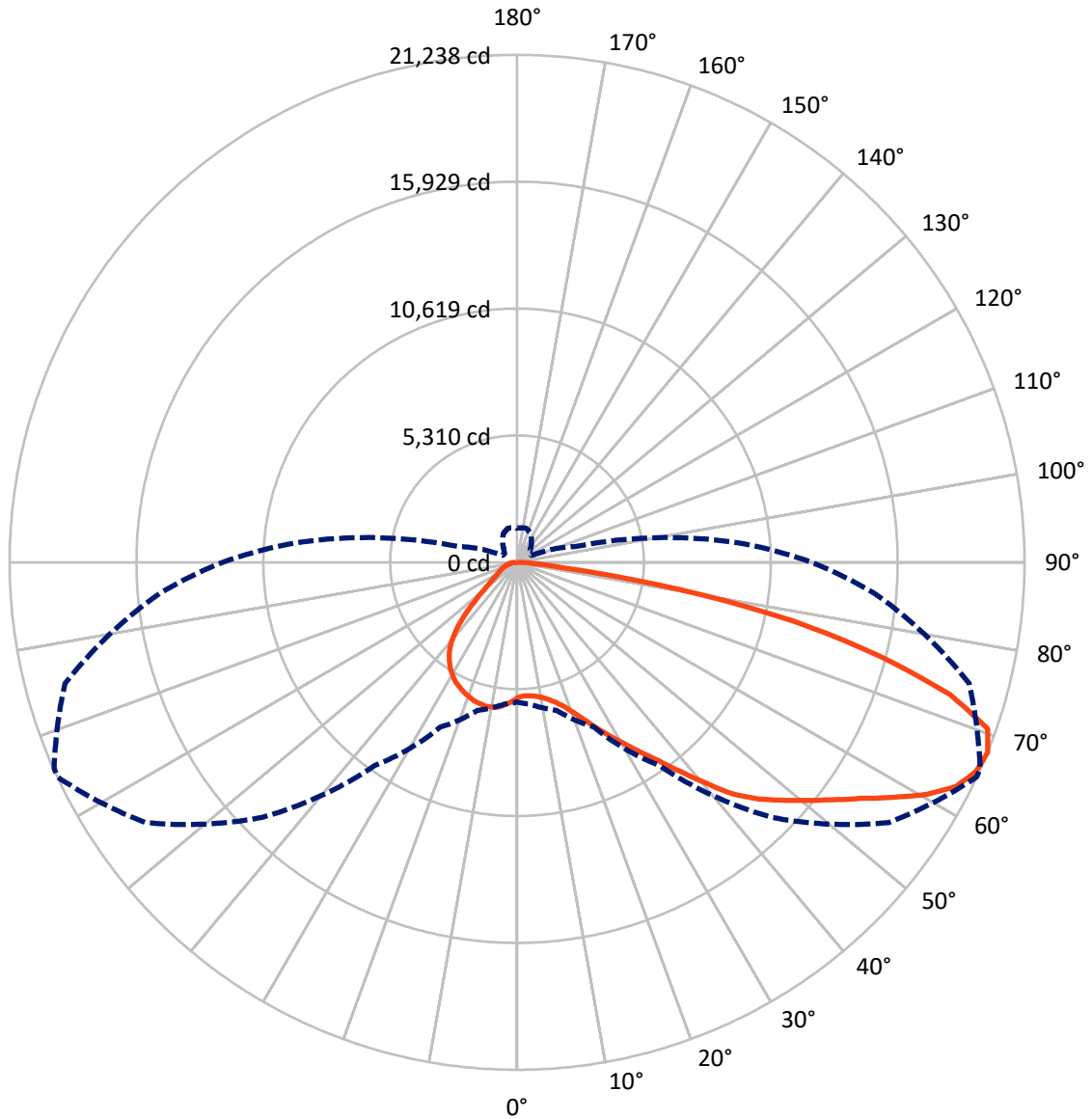
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 7 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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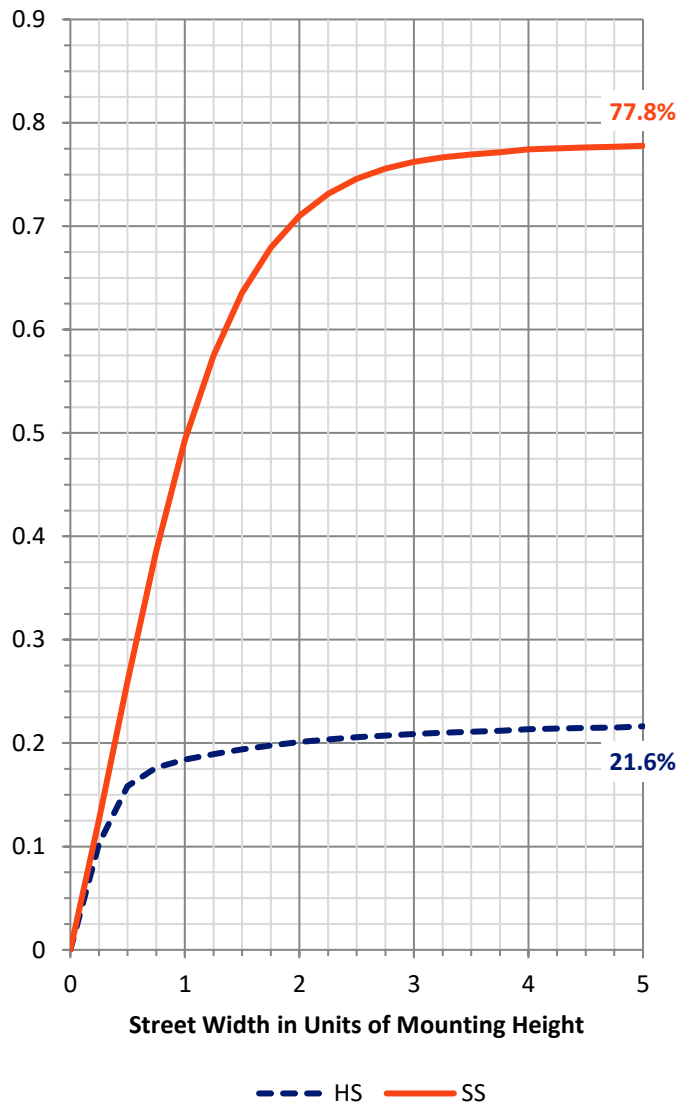
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	8079.4	0.0	8079.4
	% Fixture	22.1	0.0	22.1
<b>Street Side</b>	Lumens	28497.6	0.0	28497.6
	% Fixture	77.9	0.0	77.9
<b>Total</b>	Lumens	36577.0	0.0	36577.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	562.9	1.5
10°-20°	1758.7	4.8
20°-30°	3044.6	8.3
30°-40°	4473.7	12.2
40°-50°	6046.8	16.5
50°-60°	7435.7	20.3
60°-70°	7967.8	21.8
70°-80°	4699.3	12.8
80°-90°	587.4	1.6
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°	36577.0	100.0
0°-180°	36577.0	100.0

**Coefficient of Utilization**



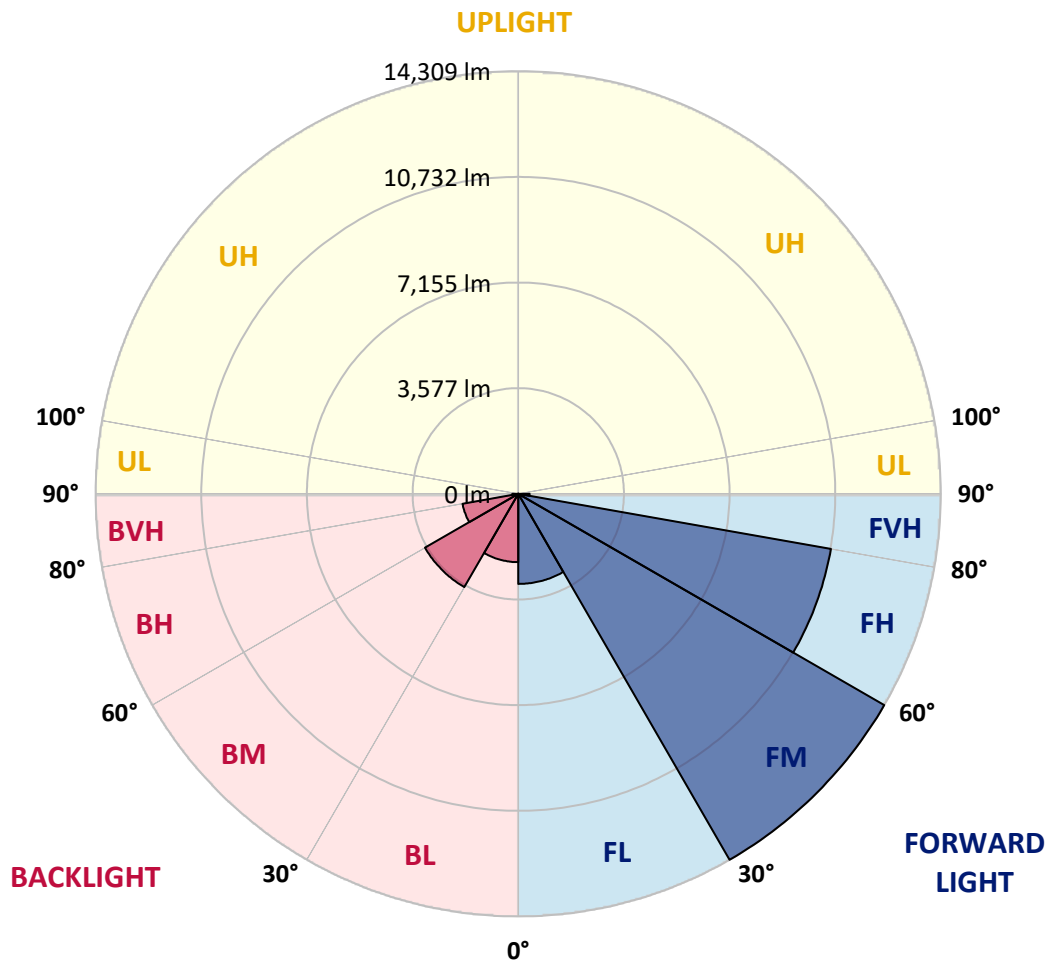
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3052.1	8.3			
FM (30°-60°)	14309.2	39.1			
FH (60°-80°)	10751.2	29.4			G4/12000
FVH (80°-90°)	385.2	1.1			G3/500
BL (0°-30°)	2314.2	6.3	B3/2500		
BM (30°-60°)	3647.0	10.0	B3/5000		
BH (60°-80°)	1916.0	5.2	B3/2500		G3/2500
BVH (80°-90°)	202.2	0.6			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G4**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	5649.8	5649.8	5649.8	5649.8	5649.8	5649.8	5649.8	5649.8	5649.8	5649.8	5649.8
2.5°	5543.1	5532.7	5528.2	5542.4	5552.8	5564.7	5581.9	5598.3	5600.5	5622.2	5650.5
5°	5610.2	5601.3	5591.6	5589.4	5585.6	5584.9	5589.4	5608.0	5612.5	5633.4	5694.5
7.5°	5759.4	5750.4	5732.5	5725.8	5705.7	5669.9	5652.7	5662.4	5664.7	5690.0	5766.1
10°	6002.5	5974.9	5953.3	5930.9	5867.5	5810.8	5769.1	5751.2	5747.5	5772.1	5860.1
12.5°	6292.6	6269.5	6245.6	6186.7	6106.2	6004.0	5930.2	5889.1	5886.2	5907.0	5973.4
15°	6599.1	6599.1	6582.7	6512.6	6433.5	6264.3	6150.2	6081.5	6086.0	6102.4	6133.0
17.5°	6995.1	6962.3	6954.8	6875.0	6787.0	6632.7	6451.4	6341.8	6347.0	6354.5	6331.4
20°	7397.8	7388.1	7376.9	7324.0	7244.2	7045.8	6842.2	6698.3	6699.0	6672.2	6569.3
22.5°	7930.2	7898.2	7906.4	7846.7	7738.6	7535.0	7300.8	7130.1	7141.2	7102.5	6916.0
25°	8459.0	8426.9	8409.8	8369.5	8276.3	8083.1	7805.0	7648.4	7634.9	7564.8	7294.1
27.5°	8987.0	8968.3	8982.5	8934.0	8858.0	8642.4	8387.4	8213.6	8222.6	8174.1	7770.7
30°	9533.6	9512.7	9574.6	9496.3	9449.3	9239.8	8995.2	8790.8	8798.3	8816.2	8363.5
32.5°	9946.0	9970.6	10078.7	10069.8	10060.8	9827.4	9570.1	9456.8	9468.0	9530.6	9067.5
35°	10344.2	10346.5	10498.6	10613.4	10661.9	10466.5	10199.5	10195.8	10268.9	10459.8	10048.9
37.5°	10674.6	10667.1	10870.0	11048.2	11180.9	11029.6	10882.6	11111.6	11178.0	11574.0	11037.0
40°	10855.1	10870.7	11131.7	11354.0	11615.0	11543.4	11559.0	12144.4	12307.8	12654.5	11776.1
42.5°	10728.3	10776.0	11182.4	11635.9	12029.6	12125.1	12439.8	13260.1	13329.4	13392.1	12503.2
45°	10515.7	10565.7	11016.1	11748.5	12371.9	12775.3	13316.0	14118.4	14194.5	14124.4	13108.0
47.5°	10294.3	10345.7	10847.6	11703.0	12655.3	13428.6	14095.3	14877.6	14974.5	14757.5	13689.6
50°	10013.1	10092.9	10641.8	11606.8	12885.0	14133.3	14832.9	15659.1	15703.9	15390.7	14130.4
52.5°	9667.1	9755.1	10348.7	11442.0	13064.7	14625.5	15579.3	16507.1	16502.6	16130.5	14634.5
55°	9303.2	9383.0	9994.5	11182.4	13165.4	15004.4	16175.9	17441.5	17495.2	17183.4	15090.9
57.5°	8837.1	8909.4	9576.1	10833.4	13061.0	15325.8	17142.4	18551.9	18578.7	17916.5	15454.1
60°	8219.6	8326.2	8995.9	10389.7	12761.2	15697.9	18207.4	19719.7	19752.5	18637.6	15687.5
62.5°	7541.7	7584.2	8266.6	9706.6	12324.9	15985.0	18945.6	20633.3	20585.5	19201.4	15757.6
65°	6715.4	6749.0	7339.6	8828.1	11514.3	15827.7	19210.4	21103.1	21044.2	19555.7	15542.1
67.5°	5850.4	5954.0	6417.9	7609.6	10383.0	15101.3	18986.7	21238.1	21208.2	19582.5	15027.5
70°	4727.3	4763.8	5182.9	6199.4	8663.3	13647.1	18240.9	20892.0	20868.9	18982.9	13976.7
72.5°	3333.5	3297.7	3501.3	4298.5	6257.5	10855.8	15574.1	18947.9	18986.7	16981.3	12171.3
75°	1769.7	1838.3	2155.2	2631.7	3547.5	6978.7	12416.6	15681.5	15668.1	14199.7	9620.8
77.5°	942.6	941.1	1158.9	1362.5	1736.8	3206.7	8189.8	11826.0	11891.6	11002.0	6605.8
80°	452.7	469.8	483.2	554.1	865.8	1481.8	3425.9	6857.9	7305.3	6561.8	3138.1
82.5°	362.4	363.9	365.4	349.8	358.0	603.3	1320.0	1984.4	2056.0	1652.6	1012.0
85°	268.5	252.1	249.8	211.8	239.4	362.4	665.9	847.2	805.4	783.8	571.2
87.5°	108.1	101.4	98.4	92.5	92.5	136.5	234.9	306.5	305.8	278.9	191.7
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):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5649.8	5649.8	5649.8	5649.8	5649.8	5649.8	5649.8	5649.8	5649.8	5649.8	5649.8
2.5°	5672.9	5699.7	5762.4	5816.1	5836.2	5885.4	5931.7	5958.5	5977.1	5988.3	6039.0
5°	5731.8	5785.5	5885.4	5960.7	6033.8	6124.8	6183.7	6221.0	6241.9	6253.8	6290.4
7.5°	5822.0	5876.5	5982.4	6098.0	6165.1	6239.6	6277.7	6304.5	6317.9	6314.2	6343.3
10°	5902.6	5956.3	6062.2	6150.9	6188.9	6231.4	6251.6	6257.5	6258.3	6261.3	6290.4
12.5°	6012.2	6045.0	6101.7	6159.8	6151.6	6153.1	6170.3	6162.8	6145.7	6142.7	6162.1
15°	6130.0	6130.8	6135.2	6122.6	6071.1	6048.7	6024.9	6004.7	5957.8	5954.8	5985.3
17.5°	6277.7	6242.6	6161.3	6074.8	5952.5	5868.3	5783.2	5748.2	5690.8	5679.6	5694.5
20°	6467.8	6394.8	6197.1	5982.4	5753.4	5602.8	5499.9	5396.2	5316.4	5297.0	5311.2
22.5°	6740.8	6596.9	6242.6	5883.9	5529.7	5272.4	5072.6	4948.0	4813.8	4745.2	4751.9
25°	7070.4	6845.2	6321.7	5759.4	5266.4	4895.1	4570.7	4320.8	4169.5	4068.8	4095.6
27.5°	7502.2	7192.7	6416.4	5636.3	4939.1	4412.6	3942.0	3603.4	3449.1	3401.3	3370.0
30°	8002.6	7612.6	6516.3	5454.4	4585.6	3815.2	3212.7	2930.8	2754.0	2725.7	2701.8
32.5°	8672.3	8141.3	6703.5	5256.8	4163.5	3217.9	2563.9	2239.5	2199.2	2176.1	2170.9
35°	9535.8	8834.1	6899.6	5000.2	3613.1	2517.6	1939.7	1764.4	1745.0	1770.4	1772.6
37.5°	10452.4	9585.8	7134.5	4710.9	2980.0	1878.5	1484.0	1362.5	1384.1	1463.2	1481.0
40°	11072.8	10081.0	7347.8	4317.9	2197.7	1364.7	1079.8	1053.7	1173.1	1274.5	1295.4
42.5°	11667.9	10456.1	7434.3	3798.1	1567.6	971.7	871.8	961.3	1128.3	1239.4	1254.3
45°	12175.8	10892.3	7216.6	3174.6	1062.7	812.1	835.2	959.0	1144.7	1267.8	1279.0
47.5°	12659.0	11248.8	6919.0	2501.2	838.2	781.5	834.5	979.2	1181.3	1297.6	1304.3
50°	13120.6	11520.3	6411.2	1903.1	785.3	767.4	841.2	1010.5	1201.4	1274.5	1271.5
52.5°	13462.9	11660.5	5870.5	1536.2	764.4	756.2	859.1	1050.0	1205.1	1249.1	1246.1
55°	13714.2	11633.6	5515.5	1258.1	747.2	751.7	888.2	1079.8	1240.9	1307.3	1305.1
57.5°	13737.4	11512.1	5112.1	1062.7	726.4	751.0	919.5	1121.6	1419.9	1542.2	1504.9
60°	13709.8	11310.7	4709.4	932.9	703.2	755.4	952.3	1246.9	1677.9	1774.1	1748.0
62.5°	13574.0	10935.6	4106.1	847.2	683.1	771.8	976.9	1346.1	1665.2	1676.4	1639.1
65°	13154.9	10433.7	3314.1	760.7	663.0	783.0	997.1	1372.2	1529.5	1493.7	1475.1
67.5°	12325.7	9312.9	2556.4	681.6	636.9	780.8	1056.7	1334.9	1478.1	1452.0	1428.1
70°	11147.4	8039.1	1774.9	600.3	592.9	766.6	1041.8	1347.6	1453.5	1413.2	1381.1
72.5°	9312.9	6306.8	1129.1	534.0	527.2	733.1	1004.5	1339.4	1437.0	1419.2	1375.2
75°	7012.2	4402.1	717.4	461.6	469.1	671.9	944.9	1295.4	1428.8	1372.9	1288.6
77.5°	4414.8	2173.1	557.8	392.3	403.4	579.4	816.6	1131.3	1371.4	1337.9	1229.7
80°	1669.7	882.2	436.3	318.4	328.1	450.4	669.7	930.7	1262.5	1317.7	1271.5
82.5°	768.9	551.9	327.4	255.8	259.5	328.1	499.6	689.1	1068.7	1209.6	1325.2
85°	448.9	361.7	218.5	170.8	177.5	193.9	281.1	420.6	692.8	922.5	1032.1
87.5°	152.9	126.0	85.0	72.3	70.1	79.8	67.9	138.0	205.8	362.4	413.9
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)