

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: P510737

Luminaire Tested: **CTN-CA8-230-750-U-T2**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510737  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-10)  
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-T2  
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: 36234 lumens  
Efficiency: N/A  
Efficacy: 158.6 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G4

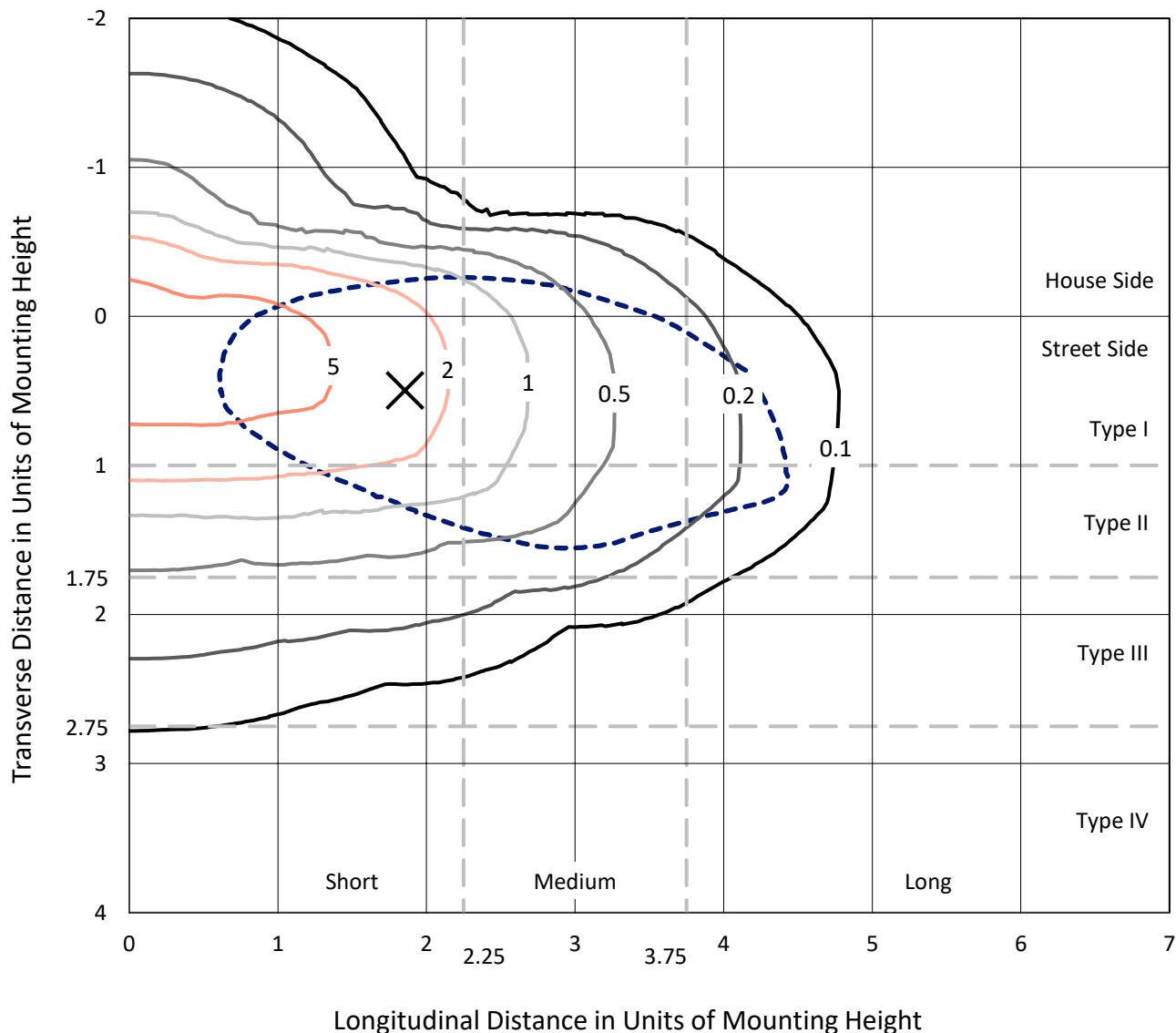
Input Watts (W): 228.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

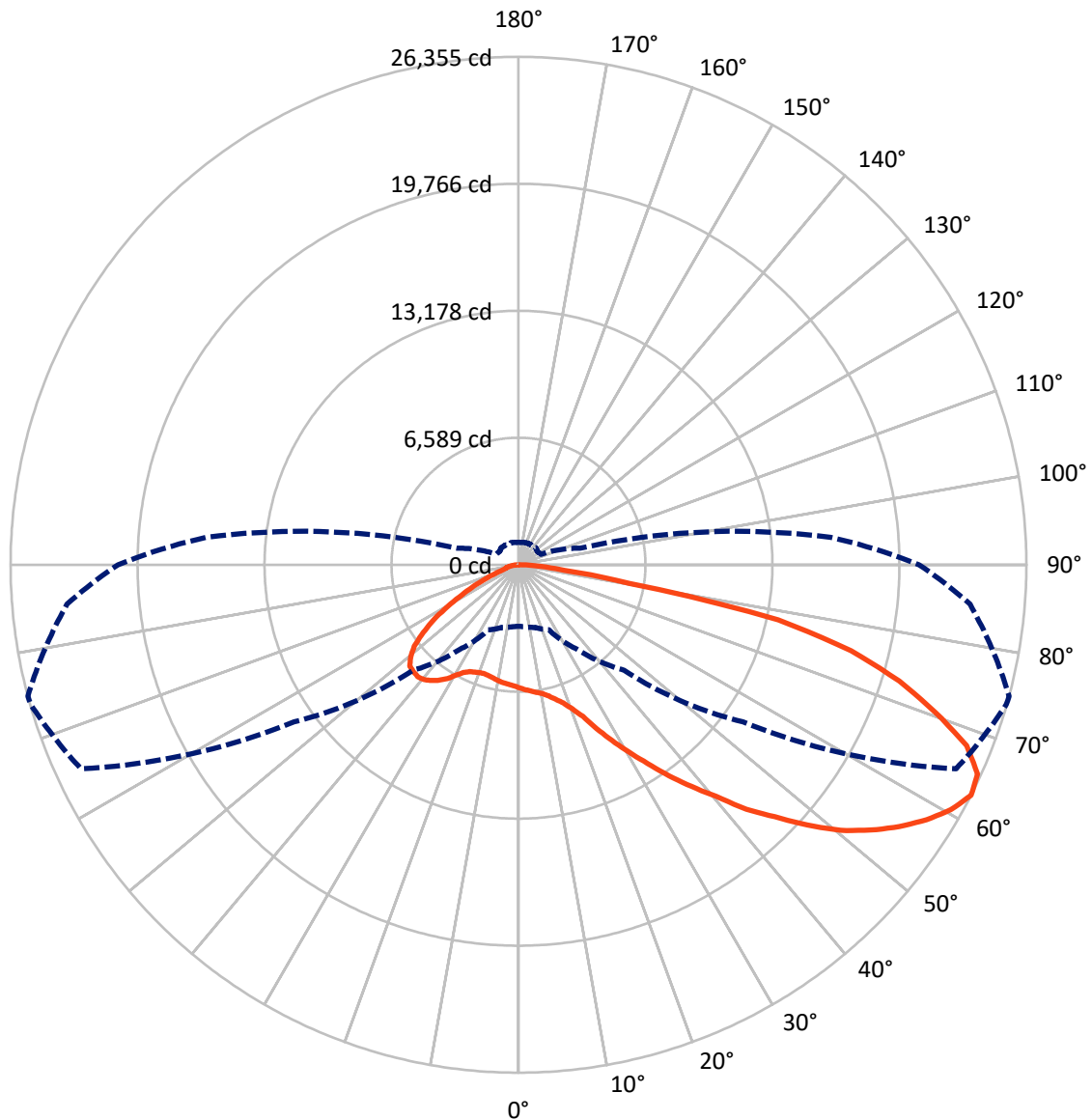
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 8.3 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral    - - - Horizontal Cone Through 62.5-Deg Vertical

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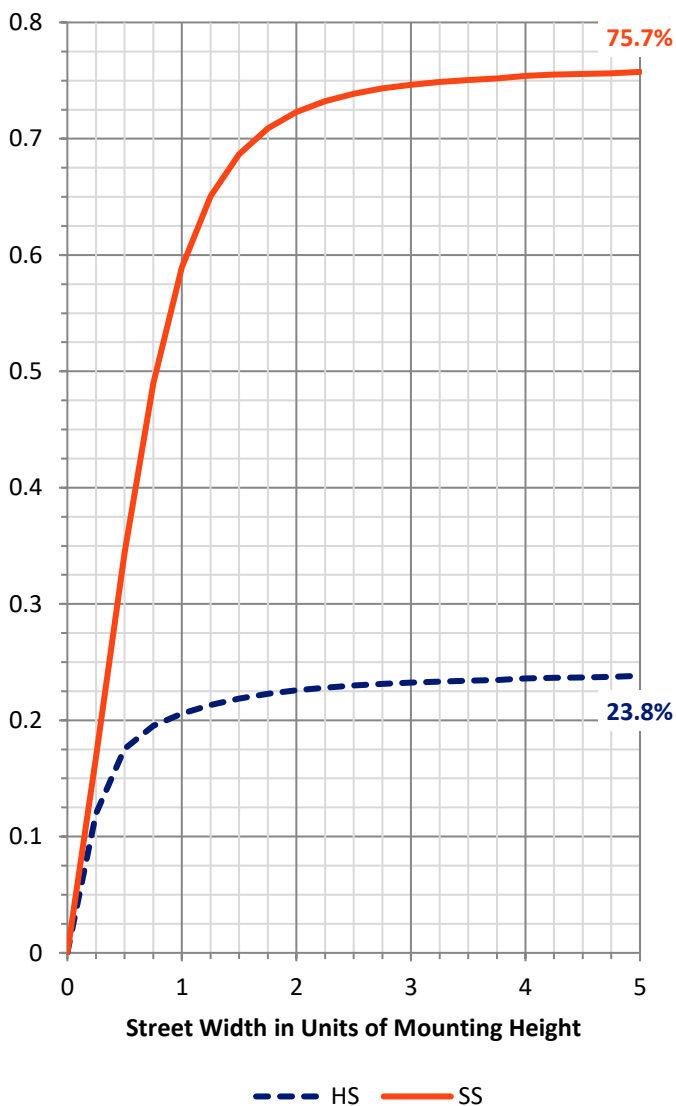
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	8778.9	0.0	8778.9
	% Fixture	24.2	0.0	24.2
<b>Street Side</b>	Lumens	27455.1	0.0	27455.1
	% Fixture	75.8	0.0	75.8
<b>Total</b>	Lumens	36234.0	0.0	36234.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	614.5	1.7
10°-20°	1864.9	5.1
20°-30°	3216.4	8.9
30°-40°	4742.7	13.1
40°-50°	6251.9	17.3
50°-60°	7358.0	20.3
60°-70°	7320.4	20.2
70°-80°	4269.1	11.8
80°-90°	596.1	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°	36234.0	100.0
0°-180°	36234.0	100.0

**Coefficient of Utilization**

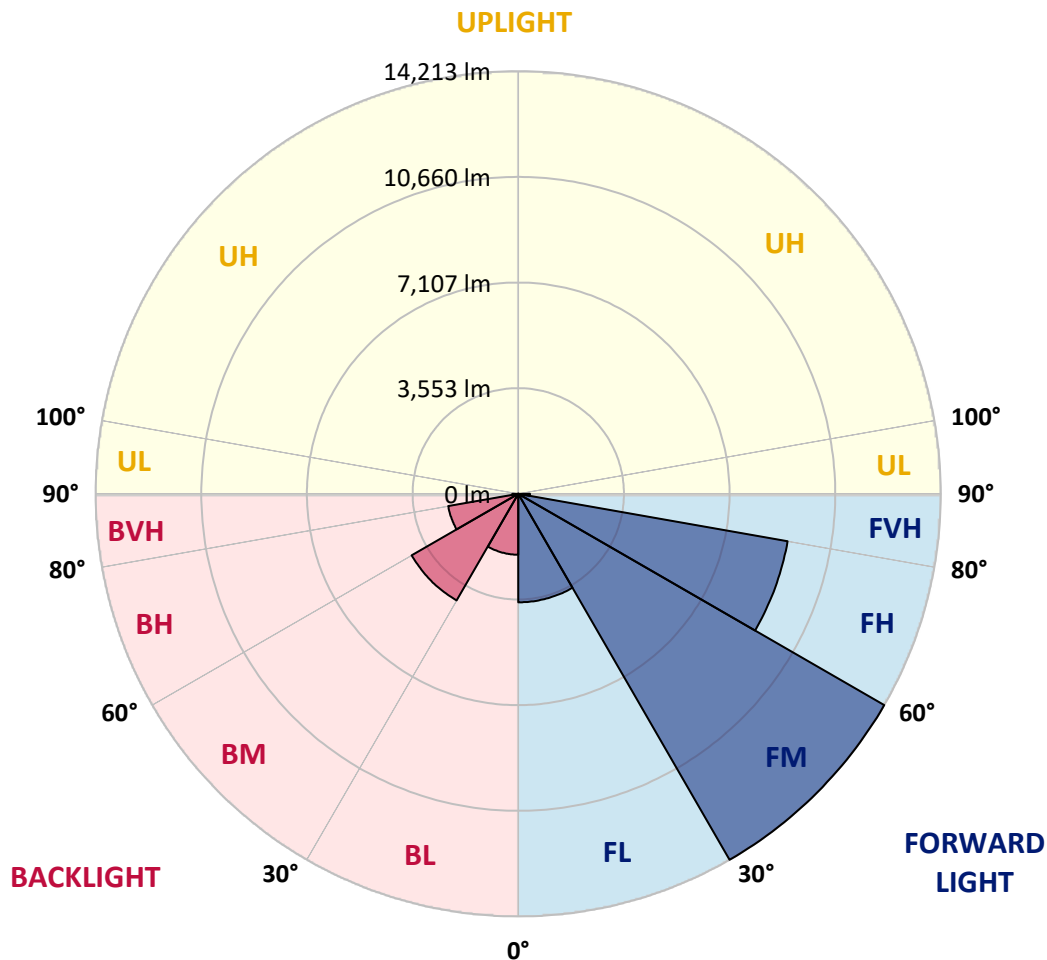


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3648.6	10.1			
FM (30°-60°)	14213.1	39.2			
FH (60°-80°)	9197.9	25.4			G4/12000
FVH (80°-90°)	395.6	1.1			G3/500
BL (0°-30°)	2047.2	5.6	B3/2500		
BM (30°-60°)	4139.5	11.4	B3/5000		
BH (60°-80°)	2391.7	6.6	B3/2500		G3/2500
BVH (80°-90°)	200.5	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 II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	6387.2	6387.2	6387.2	6387.2	6387.2	6387.2	6387.2	6387.2	6387.2	6387.2	6387.2
2.5°	6737.0	6709.4	6713.1	6693.7	6664.6	6643.0	6586.3	6525.2	6488.6	6485.7	6433.5
5°	7075.5	7084.5	7086.7	7024.8	6963.7	6894.3	6807.8	6690.0	6593.8	6578.9	6477.5
7.5°	7384.3	7383.5	7379.1	7344.8	7316.4	7213.5	7040.5	6855.5	6698.9	6684.8	6520.0
10°	7700.5	7698.2	7653.5	7596.1	7531.9	7437.2	7288.8	7067.3	6813.8	6795.1	6559.5
12.5°	8045.0	8020.4	7992.1	7922.7	7846.6	7682.6	7526.7	7285.8	7021.1	6987.5	6629.6
15°	8329.1	8303.8	8264.2	8217.3	8137.5	8012.2	7846.6	7561.0	7276.9	7244.1	6786.9
17.5°	8610.3	8598.3	8570.0	8520.0	8458.9	8350.7	8198.6	7956.3	7584.1	7543.9	7048.7
20°	8840.7	8812.4	8791.5	8814.6	8819.8	8740.0	8656.5	8452.9	8042.8	7980.9	7370.1
22.5°	8971.9	8966.0	9080.1	9165.1	9199.4	9217.3	9191.2	9027.1	8655.8	8547.6	7817.5
25°	9096.5	9086.8	9241.9	9454.4	9656.5	9759.4	9828.8	9850.4	9509.6	9411.9	8537.2
27.5°	9100.2	9127.1	9352.3	9708.7	10016.7	10330.7	10663.3	10701.3	10402.3	10324.7	9356.0
30°	9120.3	9132.3	9355.3	9764.7	10406.0	10909.4	11342.6	11556.7	11298.6	11262.8	10257.6
32.5°	8864.6	8880.2	9227.0	9862.4	10699.8	11508.2	12083.2	12400.8	12336.7	12291.2	11219.6
35°	8598.3	8611.8	9014.5	9723.6	10918.3	12051.8	12752.1	13376.3	13493.3	13459.0	12292.7
37.5°	8180.7	8225.5	8647.6	9558.1	10956.3	12451.5	13390.4	14348.0	14701.4	14598.5	13427.7
40°	7727.3	7760.1	8251.6	9211.3	10913.8	12714.0	14017.6	15423.3	15851.4	15796.2	14554.5
42.5°	7154.6	7242.6	7734.8	8768.4	10695.3	12877.4	14597.8	16642.6	17264.5	17338.4	15589.6
45°	6672.1	6669.9	7127.0	8127.0	10299.4	12916.1	15131.7	17875.3	18785.1	18646.4	16958.0
47.5°	6104.6	6127.7	6605.0	7488.7	9715.4	12793.1	15547.8	19332.5	20253.4	20178.1	18080.4
50°	4791.4	4957.7	5861.5	6939.8	8925.7	12450.1	15894.6	20751.6	21630.8	21665.1	19100.5
52.5°	4130.6	4194.8	4693.7	6387.2	8224.7	11874.4	16274.9	22348.2	22961.9	22874.7	20258.7
55°	3865.9	3900.2	4139.6	5394.7	7546.8	10983.2	16457.6	23806.1	24000.0	23985.8	21211.7
57.5°	3674.2	3700.3	3870.4	4502.0	6802.6	9839.2	16303.3	24754.7	25056.0	24963.5	22111.1
60°	3397.6	3418.5	3672.0	4056.8	6036.7	8684.1	15354.0	25185.0	25821.8	25787.5	22906.0
62.5°	3189.5	3225.3	3367.0	3727.9	5382.7	7732.5	14222.7	25050.8	26324.5	26355.0	23513.0
65°	2969.5	3001.6	3121.6	3437.1	4789.9	7106.9	13002.6	24378.1	26093.3	26174.6	23611.5
67.5°	2698.1	2722.7	2865.1	3138.1	4097.1	6481.2	11626.8	23188.7	24810.6	25072.4	22631.6
70°	2356.5	2365.5	2540.0	2725.7	3402.0	5537.8	9244.9	21241.5	22954.5	22959.7	20781.4
72.5°	1875.5	1883.0	1929.2	2070.2	2555.6	4382.7	6795.1	17748.5	20697.9	20659.9	18469.6
75°	1275.2	1340.8	1501.2	1635.4	1843.5	3077.7	4226.1	11957.9	17536.0	17834.3	15171.2
77.5°	1007.5	1013.5	1079.8	1202.9	1382.6	2299.1	2368.5	6616.2	13073.5	13782.7	11925.1
80°	702.5	712.9	677.1	707.0	964.2	1573.5	1384.1	2879.3	5452.1	5821.2	7159.8
82.5°	334.8	346.8	398.2	369.9	479.5	668.9	730.8	1487.7	2355.0	2416.9	2787.6
85°	220.7	220.7	221.5	209.6	279.7	291.6	331.9	634.6	1149.9	1188.7	1182.0
87.5°	70.8	78.3	76.1	88.7	107.4	96.9	101.4	199.1	394.5	390.8	326.6
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°	6387.2	6387.2	6387.2	6387.2	6387.2	6387.2	6387.2	6387.2	6387.2	6387.2	6387.2
2.5°	6396.2	6365.6	6294.0	6231.4	6169.5	6122.5	6082.2	6028.5	6003.2	5980.1	6028.5
5°	6414.8	6360.4	6232.1	6103.8	5986.0	5899.5	5846.6	5807.8	5772.7	5772.7	5789.1
7.5°	6436.4	6362.6	6179.2	5997.2	5820.5	5722.0	5646.7	5597.5	5569.2	5570.6	5605.7
10°	6450.6	6337.3	6118.8	5873.4	5681.0	5522.9	5449.1	5378.2	5324.6	5292.5	5328.3
12.5°	6467.0	6329.1	6037.5	5760.8	5526.6	5347.7	5194.0	5141.1	5088.9	5048.6	5068.0
15°	6568.4	6360.4	5969.6	5617.6	5346.2	5123.2	4921.9	4824.9	4810.0	4782.4	4789.1
17.5°	6734.0	6444.6	5925.6	5442.4	5129.2	4865.9	4610.9	4485.6	4455.8	4441.6	4449.1
20°	6980.8	6605.0	5939.0	5319.3	4884.6	4590.0	4260.4	4113.5	4014.3	4020.3	4049.3
22.5°	7358.2	6863.8	6012.1	5184.4	4619.8	4233.5	3900.9	3701.1	3601.2	3579.5	3612.3
25°	7959.2	7280.6	6092.7	5055.3	4364.0	3848.7	3480.3	3264.1	3135.8	3127.6	3164.2
27.5°	8729.6	7919.7	6267.9	4943.5	4046.4	3386.4	3020.2	2835.3	2698.8	2682.4	2670.5
30°	9517.8	8629.7	6584.8	4773.5	3675.7	2909.1	2590.7	2446.0	2293.1	2231.2	2244.7
32.5°	10353.0	9291.1	6956.2	4654.1	3261.1	2489.3	2212.6	2074.6	1934.4	1845.0	1824.1
35°	11194.2	9948.9	7268.7	4475.9	2868.1	2155.9	1891.2	1748.8	1626.4	1553.4	1548.1
37.5°	12178.6	10633.4	7519.3	4286.5	2460.2	1894.9	1576.5	1494.5	1435.5	1371.4	1378.1
40°	13164.5	11431.4	7719.9	3973.3	2121.6	1614.5	1341.6	1358.0	1370.7	1317.0	1312.5
42.5°	13983.3	12101.8	7811.6	3567.6	1821.8	1370.7	1237.9	1312.5	1367.7	1332.6	1328.2
45°	14814.8	12666.3	7775.8	3064.2	1572.8	1254.3	1229.7	1305.8	1376.6	1368.4	1364.7
47.5°	15718.6	13406.1	7713.9	2490.8	1394.5	1243.1	1247.6	1283.4	1372.9	1387.8	1381.8
50°	16823.8	14086.9	7347.7	1939.7	1308.0	1261.0	1287.9	1269.2	1345.3	1375.9	1381.1
52.5°	17923.8	14611.2	6857.8	1680.9	1273.7	1278.2	1343.8	1280.4	1314.0	1340.8	1365.4
55°	18772.4	15145.1	6065.1	1525.0	1262.5	1286.4	1359.5	1304.3	1303.5	1303.5	1311.7
57.5°	19641.2	15860.3	5272.4	1424.4	1243.1	1295.3	1340.8	1308.8	1298.3	1283.4	1273.7
60°	20246.0	16125.0	4253.7	1358.0	1223.0	1282.7	1288.6	1284.2	1252.1	1237.9	1226.7
62.5°	20782.9	16269.0	3311.8	1281.9	1195.4	1252.8	1221.5	1211.8	1193.2	1158.9	1164.8
65°	20639.0	15960.2	2523.6	1196.2	1176.0	1217.0	1162.6	1139.5	1141.0	1105.2	1117.1
67.5°	19712.8	14575.4	1812.1	1064.9	1123.1	1146.2	1095.5	1078.3	1053.0	1035.1	1051.5
70°	17841.7	12920.6	1222.3	883.7	1002.3	1052.2	1018.7	988.8	949.3	937.4	955.3
72.5°	15016.9	10785.6	843.4	710.7	865.1	929.9	917.3	886.7	858.3	887.4	922.5
75°	12336.7	7979.4	688.3	582.4	665.2	774.8	812.1	821.1	906.1	1189.4	1218.5
77.5°	8880.2	4946.5	619.0	473.5	531.0	619.7	694.3	724.9	1106.7	1059.7	1057.5
80°	5177.6	2883.0	472.1	373.6	429.5	454.2	542.9	850.9	954.5	818.8	798.7
82.5°	2362.5	1272.2	328.9	299.0	298.3	300.5	369.9	818.8	732.3	645.1	621.2
85°	868.8	447.4	199.9	173.0	198.4	172.3	242.4	600.3	424.3	417.6	348.3
87.5°	214.0	91.7	67.9	56.7	46.2	44.0	73.8	197.6	103.7	94.7	91.0
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)