

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: P510497

Luminaire Tested: **CTN-CA10-310-750-U-T2**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510497
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-CA10-310-750-U-T2
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (10) 5000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 48977 lumens
Efficiency: N/A
Efficacy: 156.8 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type II - Short
BUG Rating: B4 - U0 - G5

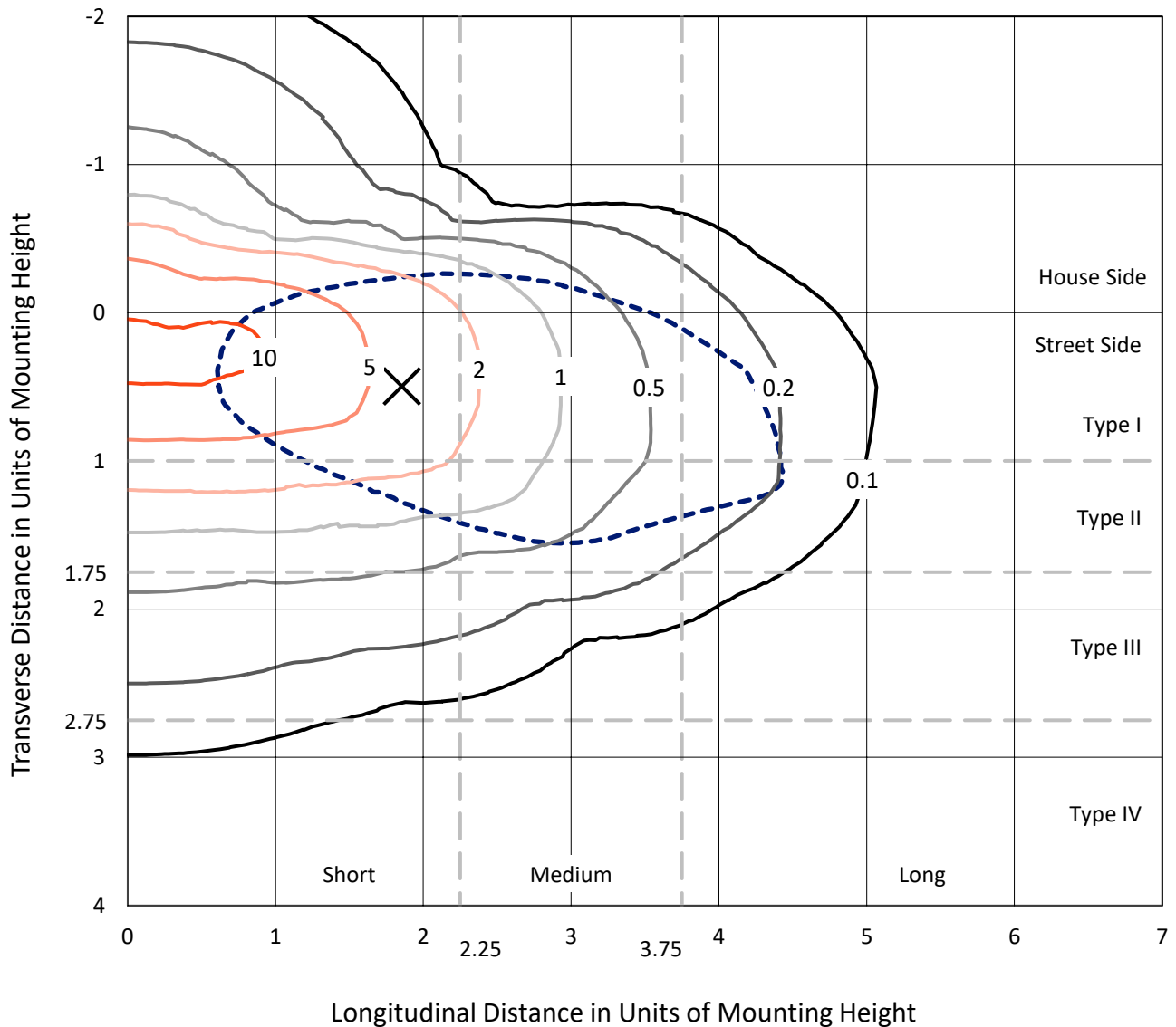
Input Watts (W): 312.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

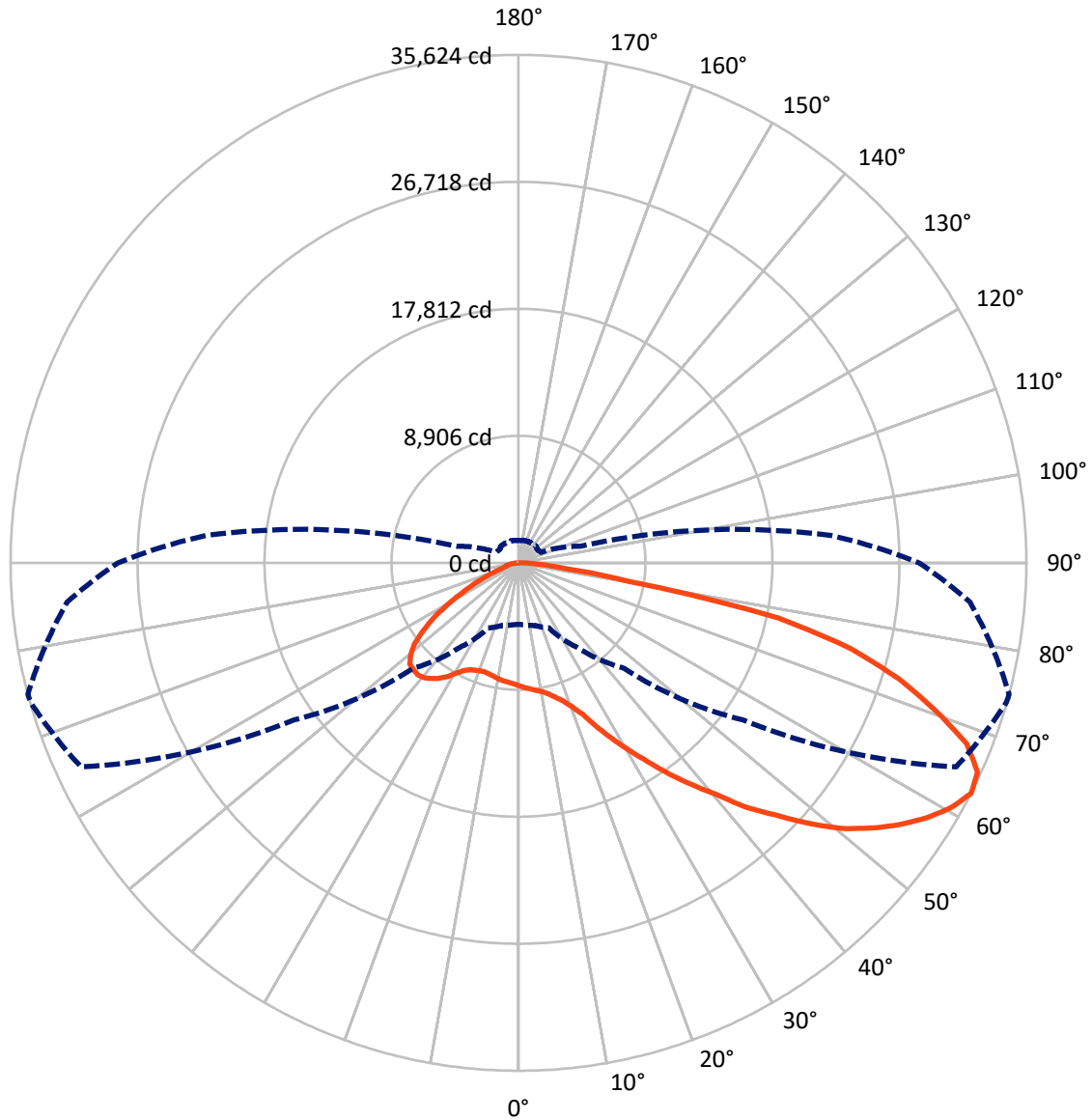
× Max cd
 - - - 1/2 Max cd



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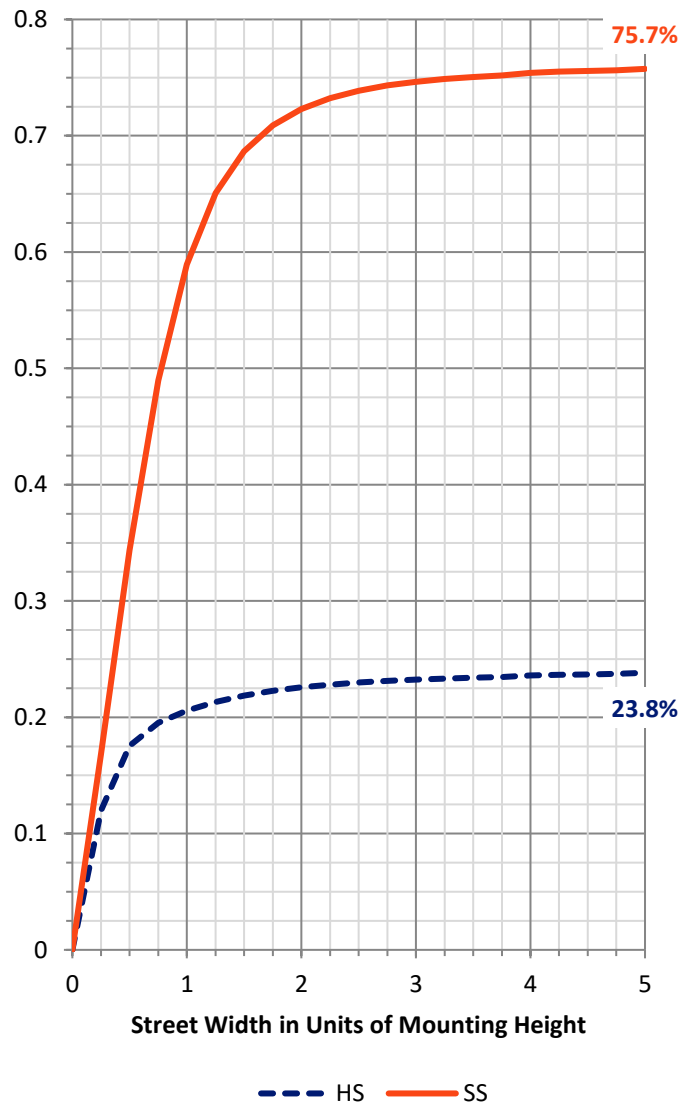
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	11866.2	0.0	11866.2
	% Fixture	24.2	0.0	24.2
Street Side	Lumens	37110.7	0.0	37110.7
	% Fixture	75.8	0.0	75.8
Total	Lumens	48977.0	0.0	48977.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	830.6	1.7
10°-20°	2520.7	5.1
20°-30°	4347.6	8.9
30°-40°	6410.7	13.1
40°-50°	8450.7	17.3
50°-60°	9945.7	20.3
60°-70°	9894.9	20.2
70°-80°	5770.4	11.8
80°-90°	805.7	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°	48977.0	100.0
0°-180°	48977.0	100.0

Coefficient of Utilization



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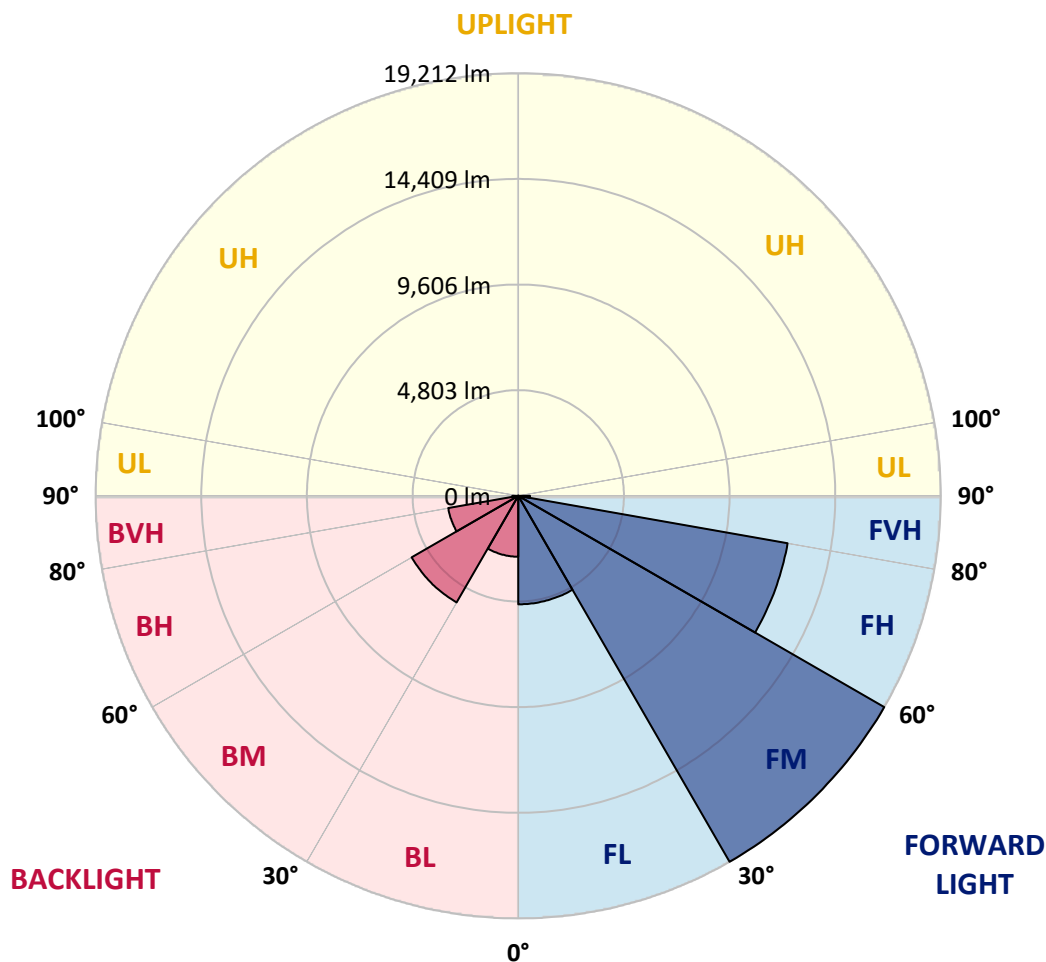
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4931.8	10.1			
FM (30°-60°)	19211.7	39.2			
FH (60°-80°)	12432.6	25.4			G5
FVH (80°-90°)	534.7	1.1			G4/750
BL (0°-30°)	2767.2	5.6	B4/5000		
BM (30°-60°)	5595.3	11.4	B4/8500		
BH (60°-80°)	3232.8	6.6	B4/5000		G4/5000
BVH (80°-90°)	271.0	0.6			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	8633.5	8633.5	8633.5	8633.5	8633.5	8633.5	8633.5	8633.5	8633.5	8633.5	8633.5
2.5°	9106.3	9069.0	9074.0	9047.8	9008.5	8979.3	8902.7	8820.0	8770.6	8766.6	8696.0
5°	9563.9	9576.0	9579.0	9495.4	9412.7	9319.0	9202.0	9042.8	8912.7	8892.6	8755.5
7.5°	9981.2	9980.2	9974.2	9927.8	9889.5	9750.4	9516.5	9266.6	9054.9	9035.7	8813.0
10°	10408.6	10405.6	10345.1	10267.5	10180.8	10052.8	9852.2	9552.8	9210.1	9184.9	8866.4
12.5°	10874.3	10841.0	10802.7	10709.0	10606.2	10384.4	10173.8	9848.2	9490.3	9445.0	8961.1
15°	11258.4	11224.1	11170.7	11107.2	10999.3	10830.0	10606.2	10220.1	9836.1	9791.7	9173.8
17.5°	11638.4	11622.2	11583.9	11516.4	11433.8	11287.6	11082.0	10754.4	10251.4	10196.9	9527.6
20°	11949.8	11911.5	11883.3	11914.6	11921.6	11813.8	11700.9	11425.7	10871.3	10787.6	9962.1
22.5°	12127.3	12119.2	12273.4	12388.3	12434.7	12458.9	12423.6	12201.8	11699.9	11553.7	10566.9
25°	12295.6	12282.5	12492.2	12779.4	13052.6	13191.7	13285.5	13314.7	12854.0	12722.0	11539.6
27.5°	12300.6	12336.9	12641.3	13123.2	13539.5	13963.8	14413.4	14464.8	14060.6	13955.8	12646.4
30°	12327.8	12344.0	12645.4	13198.8	14065.6	14746.0	15331.7	15621.0	15272.2	15223.8	13865.1
32.5°	11982.1	12003.3	12472.0	13330.8	14462.8	15555.5	16332.6	16762.0	16675.4	16613.9	15165.4
35°	11622.2	11640.4	12184.7	13143.3	14758.1	16290.3	17236.8	18080.5	18238.8	18192.4	16615.9
37.5°	11057.8	11118.2	11688.8	12919.5	14809.5	16830.6	18099.7	19393.9	19871.7	19732.6	18150.1
40°	10444.9	10489.3	11153.5	12450.8	14752.1	17185.4	18947.4	20847.5	21426.1	21351.5	19673.2
42.5°	9670.8	9789.7	10455.0	11852.1	14456.7	17406.2	19731.6	22495.6	23336.2	23436.0	21072.3
45°	9018.6	9015.6	9633.5	10985.2	13921.5	17458.6	20453.3	24161.8	25391.5	25204.1	22921.9
47.5°	8251.5	8282.7	8927.9	10122.3	13132.2	17292.3	21015.8	26131.4	27376.3	27274.5	24439.0
50°	6476.4	6701.2	7922.9	9380.5	12064.8	16828.6	21484.5	28049.6	29238.1	29284.4	25817.9
52.5°	5583.3	5670.0	6344.4	8633.5	11117.2	16050.4	21998.6	30207.8	31037.4	30919.4	27383.3
55°	5225.5	5271.8	5595.4	7291.9	10201.0	14845.8	22245.6	32178.4	32440.5	32421.3	28671.6
57.5°	4966.4	5001.7	5231.5	6085.3	9195.0	13299.6	22036.9	33460.6	33867.8	33742.8	29887.2
60°	4592.5	4620.7	4963.4	5483.5	8159.8	11738.2	20753.7	34042.2	34903.0	34856.7	30961.8
62.5°	4311.2	4359.6	4551.1	5039.0	7275.7	10452.0	19224.6	33860.8	35582.4	35623.8	31782.3
65°	4013.9	4057.2	4219.5	4645.9	6474.4	9606.2	17575.5	32951.5	35269.9	35379.8	31915.3
67.5°	3646.9	3680.2	3872.7	4241.7	5538.0	8760.5	15715.7	31343.8	33536.2	33890.0	30590.8
70°	3185.3	3197.4	3433.3	3684.2	4598.5	7485.4	12496.2	28711.9	31027.3	31034.3	28090.0
72.5°	2535.1	2545.2	2607.7	2798.2	3454.4	5924.0	9184.9	23990.4	27977.1	27925.7	24965.2
75°	1723.7	1812.4	2029.1	2210.5	2491.8	4160.0	5712.3	16163.3	23703.1	24106.3	20506.8
77.5°	1361.8	1369.9	1459.6	1625.9	1868.8	3107.7	3201.4	8943.0	17671.3	18629.9	16118.9
80°	949.5	963.6	915.3	955.6	1303.3	2126.9	1870.8	3891.9	7369.5	7868.5	9677.8
82.5°	452.6	468.7	538.3	500.0	648.1	904.2	987.8	2011.0	3183.3	3266.9	3767.9
85°	298.4	298.4	299.4	283.2	378.0	394.1	448.6	857.8	1554.3	1606.8	1597.7
87.5°	95.8	105.8	102.8	120.0	145.2	131.0	137.1	269.1	533.2	528.2	441.5
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°	8633.5	8633.5	8633.5	8633.5	8633.5	8633.5	8633.5	8633.5	8633.5	8633.5	8633.5
2.5°	8645.6	8604.3	8507.5	8422.9	8339.2	8275.7	8221.3	8148.7	8114.4	8083.2	8148.7
5°	8670.8	8597.2	8423.9	8250.5	8091.2	7974.3	7902.7	7850.3	7802.9	7802.9	7825.1
7.5°	8700.1	8600.3	8352.3	8106.3	7867.4	7734.4	7632.6	7566.1	7527.7	7529.8	7577.1
10°	8719.2	8566.0	8270.6	7939.0	7678.9	7465.3	7365.5	7269.7	7197.1	7153.8	7202.2
12.5°	8741.4	8554.9	8160.8	7786.8	7470.3	7228.4	7020.7	6949.2	6878.6	6824.2	6850.4
15°	8878.5	8597.2	8069.0	7593.3	7226.4	6925.0	6652.8	6521.8	6501.6	6464.3	6473.4
17.5°	9102.2	8711.1	8009.6	7356.4	6933.0	6577.2	6232.5	6063.1	6022.8	6003.7	6013.7
20°	9435.9	8927.9	8027.7	7190.1	6602.4	6204.2	5758.7	5560.1	5426.1	5434.1	5473.4
22.5°	9945.9	9277.6	8126.5	7007.6	6244.6	5722.4	5272.9	5002.7	4867.6	4838.4	4882.8
25°	10758.4	9841.1	8235.4	6833.2	5898.8	5202.3	4704.3	4412.0	4238.6	4227.6	4276.9
27.5°	11799.7	10705.0	8472.2	6682.0	5469.4	4577.3	4082.4	3832.4	3648.0	3625.8	3609.7
30°	12865.1	11664.6	8900.6	6452.2	4968.4	3932.2	3501.8	3306.2	3099.6	3015.9	3034.1
32.5°	13994.1	12558.7	9402.6	6290.9	4408.0	3364.7	2990.7	2804.3	2614.8	2493.8	2465.6
35°	15131.1	13447.7	9825.0	6050.0	3876.8	2914.1	2556.3	2363.8	2198.4	2099.7	2092.6
37.5°	16461.7	14373.1	10163.7	5794.0	3325.4	2561.3	2130.9	2020.0	1940.4	1853.7	1862.8
40°	17794.2	15451.6	10434.8	5370.6	2867.8	2182.3	1813.4	1835.6	1852.7	1780.1	1774.1
42.5°	18901.0	16357.8	10558.8	4822.3	2462.5	1852.7	1673.3	1774.1	1848.7	1801.3	1795.2
45°	20024.9	17120.9	10510.4	4141.9	2125.9	1695.5	1662.2	1765.0	1860.8	1849.7	1844.6
47.5°	21246.6	18120.8	10426.8	3366.7	1885.0	1680.3	1686.4	1734.8	1855.7	1875.9	1867.8
50°	22740.5	19041.1	9931.8	2621.8	1768.0	1704.5	1740.8	1715.6	1818.4	1859.8	1866.8
52.5°	24227.3	19749.8	9269.6	2272.0	1721.7	1727.7	1816.4	1730.7	1776.1	1812.4	1845.6
55°	25374.4	20471.5	8198.1	2061.4	1706.5	1738.8	1837.6	1763.0	1762.0	1762.0	1773.1
57.5°	26548.7	21438.2	7126.6	1925.3	1680.3	1750.9	1812.4	1769.0	1754.9	1734.8	1721.7
60°	27366.2	21796.0	5749.6	1835.6	1653.1	1733.8	1741.8	1735.8	1692.4	1673.3	1658.2
62.5°	28092.0	21990.5	4476.5	1732.8	1615.8	1693.4	1651.1	1638.0	1612.8	1566.4	1574.5
65°	27897.4	21573.2	3411.1	1616.8	1589.6	1645.1	1571.5	1540.2	1542.2	1493.9	1510.0
67.5°	26645.5	19701.4	2449.4	1439.4	1518.0	1549.3	1480.8	1457.6	1423.3	1399.1	1421.3
70°	24116.4	17464.6	1652.1	1194.5	1354.8	1422.3	1376.9	1336.6	1283.2	1267.1	1291.2
72.5°	20298.1	14578.7	1140.0	960.6	1169.3	1257.0	1239.8	1198.5	1160.2	1199.5	1246.9
75°	16675.4	10785.6	930.4	787.2	899.1	1047.3	1097.7	1109.8	1224.7	1607.8	1647.1
77.5°	12003.3	6686.1	836.6	640.1	717.7	837.6	938.4	979.8	1495.9	1432.4	1429.3
80°	6998.5	3896.9	638.1	505.0	580.6	613.9	733.8	1150.1	1290.2	1106.8	1079.6
82.5°	3193.3	1719.6	444.5	404.2	403.2	406.2	500.0	1106.8	989.9	871.9	839.7
85°	1174.3	604.8	270.1	233.9	268.1	232.8	327.6	811.4	573.6	564.5	470.7
87.5°	289.3	124.0	91.7	76.6	62.5	59.5	99.8	267.1	140.1	128.0	123.0
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)