

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: P591388

Luminaire Tested: **CTN-CA10-210-740-U-T2-SSS-HM-EX90**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591388
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2201-495-4)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/19/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA10-210-740-U-T2-SSS-HM-EX90
Description: CELESTEON HIGH MAST LUMINAIRE, 90D FIELD INSTALLED SHIELD ON STREET SIDE
Light Source: (10) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25360 lumens
Efficiency: N/A
Efficacy: 119.1 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

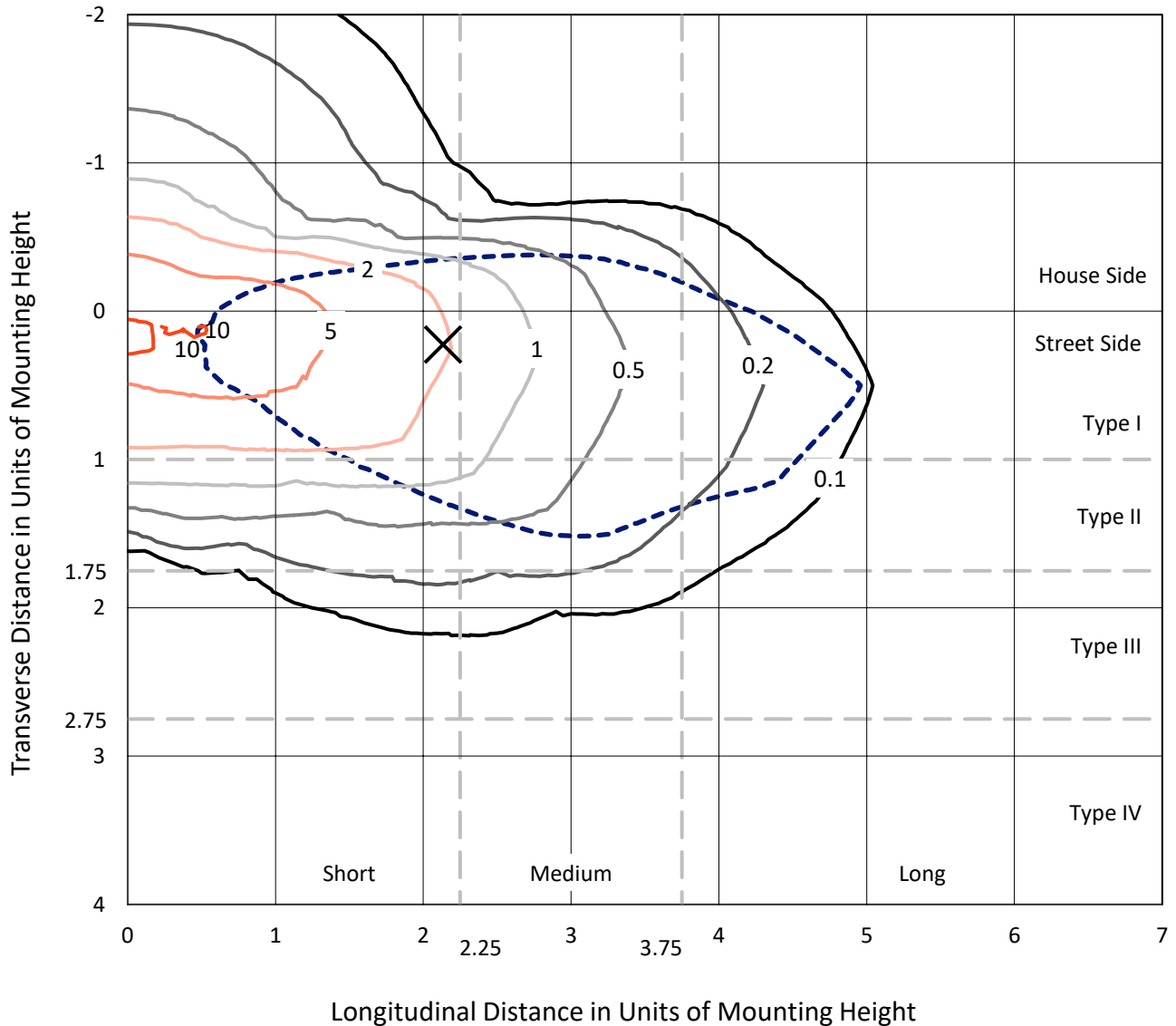
Input Watts (W): 212.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

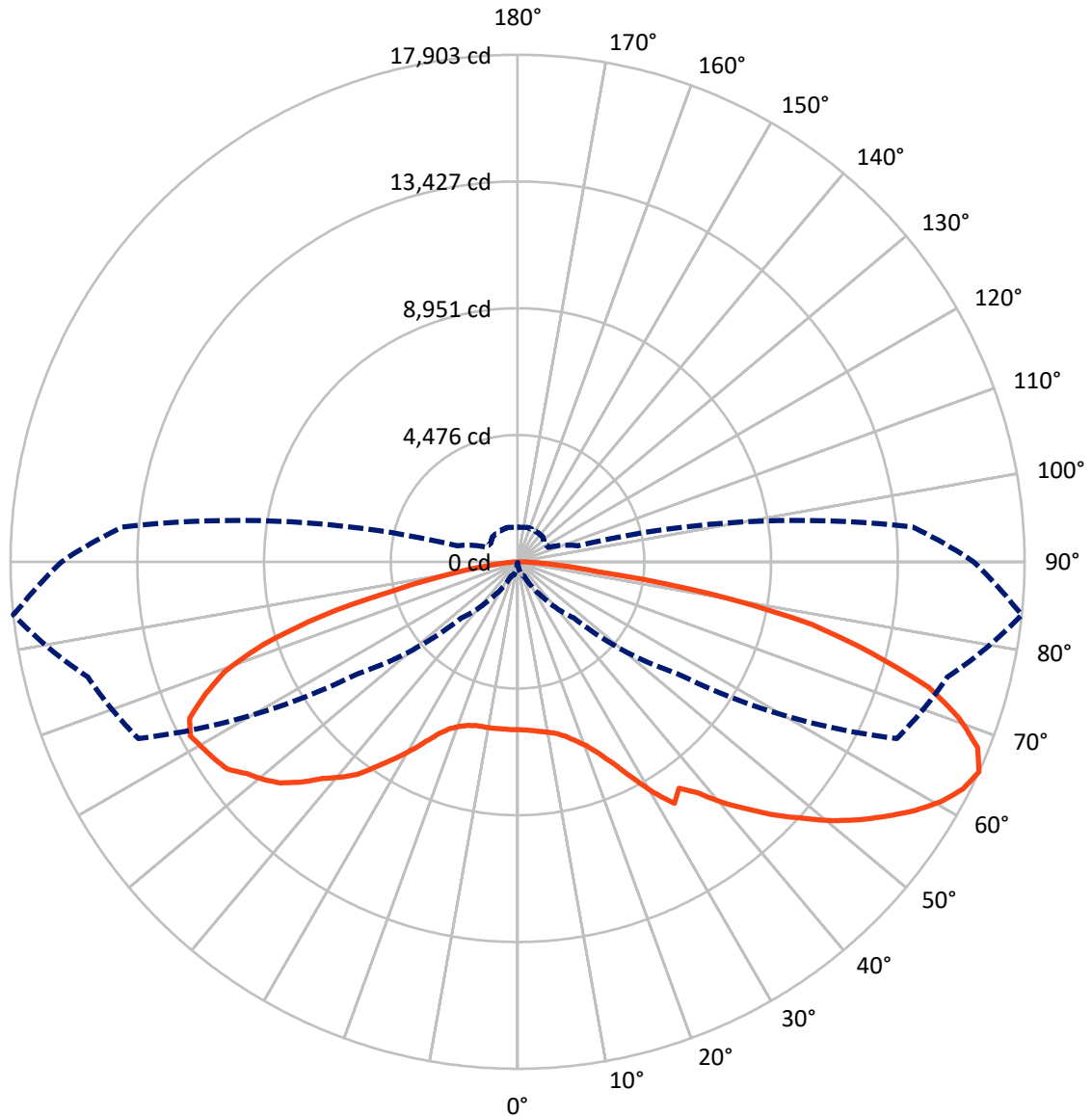
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 84-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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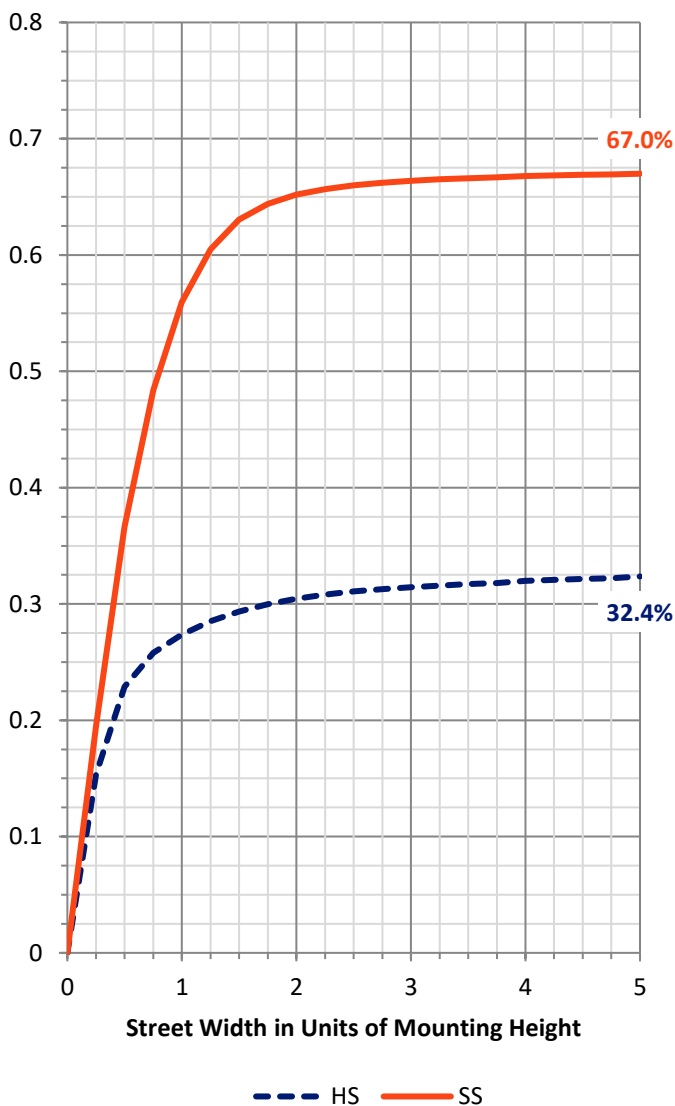
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8395.4	0.0	8395.4
	% Fixture	33.1	0.0	33.1
Street Side	Lumens	16964.6	0.0	16964.6
	% Fixture	66.9	0.0	66.9
Total	Lumens	25360.0	0.0	25360.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	572.3	2.3
10°-20°	1703.6	6.7
20°-30°	2559.5	10.1
30°-40°	3403.7	13.4
40°-50°	4202.5	16.6
50°-60°	4722.4	18.6
60°-70°	4631.7	18.3
70°-80°	3011.7	11.9
80°-90°	552.7	2.2
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°	25360.0	100.0
0°-180°	25360.0	100.0

Coefficient of Utilization

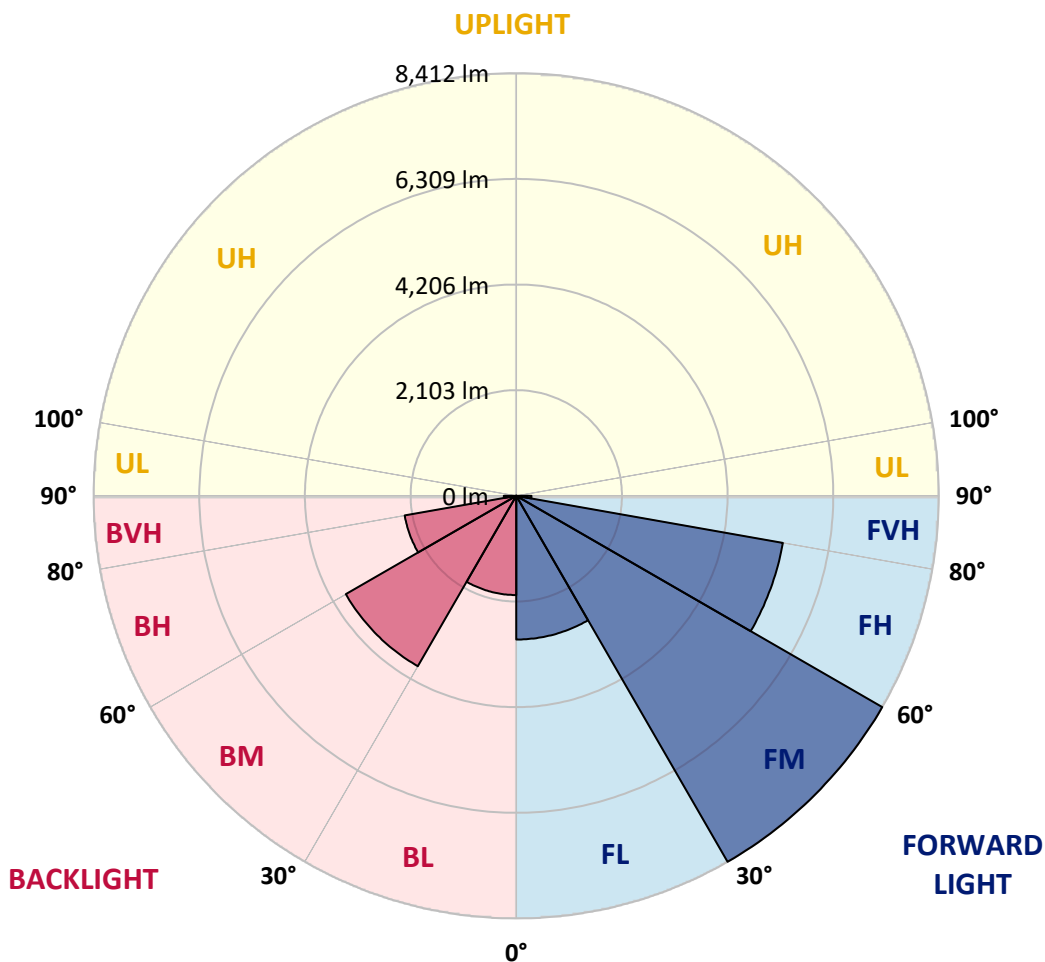


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2860.5	11.3			
FM (30°-60°)	8411.8	33.2			
FH (60°-80°)	5388.7	21.2			G3/7500
FVH (80°-90°)	303.6	1.2			G3/500
BL (0°-30°)	1974.9	7.8	B3/2500		
BM (30°-60°)	3916.8	15.4	B3/5000		
BH (60°-80°)	2254.7	8.9	B3/2500		G3/2500
BVH (80°-90°)	249.1	1.0			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3
 Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	84°	85°
0°	5928.4	5928.4	5928.4	5928.4	5928.4	5928.4	5928.4	5928.4	5928.4	5928.4	5928.4
2.5°	6183.0	6124.7	6131.2	6159.2	6051.4	6087.0	6026.6	6037.4	5965.1	5952.1	5959.7
5°	6617.7	6555.1	6555.1	6572.4	6391.2	6342.6	6174.4	6146.3	6039.5	5992.1	5994.2
7.5°	6842.1	6780.6	6768.7	6784.9	6654.4	6665.1	6492.6	6327.5	6137.7	6053.5	6049.2
10°	7172.1	7103.1	7062.1	7063.2	6887.4	6820.5	6693.2	6577.8	6287.6	6123.7	6103.2
12.5°	7438.6	7385.7	7364.1	7348.0	7153.8	7109.6	6870.1	6776.3	6466.7	6230.4	6203.5
15°	7592.8	7543.2	7511.9	7475.2	7367.4	7295.1	7191.5	6978.0	6679.2	6402.0	6368.5
17.5°	7190.5	7105.3	6957.5	6892.8	6867.9	6972.6	7418.1	7309.1	6953.2	6645.7	6610.1
20°	6129.0	6206.7	6318.9	6064.3	6143.1	6920.8	7756.8	7747.1	7336.1	6938.1	6891.7
22.5°	5214.3	5009.4	5363.2	5751.5	5999.6	6733.1	7888.4	8253.0	7854.9	7349.0	7295.1
25°	4274.8	4391.3	4868.1	5650.1	5997.4	6590.7	7816.1	8641.3	8518.3	7908.9	7845.2
27.5°	4147.5	4149.7	4608.1	5206.8	6116.1	6920.8	7894.8	8656.4	9268.0	8632.7	8509.7
30°	4120.5	4107.6	4231.7	4958.7	5906.8	7229.3	8401.8	8791.2	9450.3	9441.7	9277.7
32.5°	3994.3	3986.8	4116.2	4446.3	5459.2	7556.1	8881.8	9420.1	9384.5	10170.9	10126.6
35°	3814.2	3841.2	4001.9	4344.9	5248.8	7284.3	9374.8	10140.6	10201.1	9817.0	9992.9
37.5°	3626.5	3641.6	3796.9	4211.2	4897.2	6808.6	9750.2	10847.2	11054.3	10360.7	10220.5
40°	3370.9	3402.1	3584.4	4050.4	4826.0	6367.4	9484.8	11651.9	11974.4	11190.2	10974.5
42.5°	3100.1	3115.2	3337.4	3789.4	4707.3	6373.9	8940.1	12346.5	12822.2	11947.4	11728.5
45°	2862.8	2867.1	3075.3	3479.8	4473.3	6334.0	8596.0	12374.6	13837.3	12758.6	12483.5
47.5°	2572.6	2613.6	2819.7	3223.1	4174.5	6200.2	8756.7	11504.1	14855.5	13532.0	13280.7
50°	1972.9	2005.3	2404.4	2971.8	3847.6	5977.0	8866.7	12205.2	13720.8	14371.2	14191.1
52.5°	1696.8	1641.7	1928.7	2689.1	3548.8	5604.8	8913.1	13189.0	13718.6	15130.6	14950.5
55°	726.0	1113.2	1737.7	2208.1	3275.9	5108.6	8879.7	14151.2	14387.4	15846.9	15784.3
57.5°	573.9	600.8	1277.2	1786.3	2952.3	4521.8	8728.7	14787.6	14974.2	16564.2	16386.2
60°	105.7	119.7	627.8	755.1	2137.9	3645.9	8178.5	14878.2	15402.4	17188.7	16961.1
62.5°	48.5	57.2	504.8	628.9	1709.7	2998.7	7707.2	14849.1	15798.3	17652.6	17451.9
65°	22.7	29.1	452.0	570.6	1479.9	2798.1	6890.6	14770.3	15710.9	17902.8	17577.1
67.5°	17.3	24.8	415.3	512.4	1230.8	2598.5	6115.0	13944.1	15290.3	17515.6	17063.6
70°	17.3	24.8	379.7	466.0	1044.2	2345.0	4964.1	12909.6	14330.2	16537.2	16160.7
72.5°	18.3	24.8	337.6	421.8	905.0	2024.7	3877.8	11258.2	13179.3	15186.7	14790.8
75°	18.3	24.8	291.2	373.2	762.6	1695.7	2596.4	8046.9	11352.0	12925.8	12485.7
77.5°	18.3	24.8	241.6	311.7	621.3	1354.8	1679.5	4338.4	8931.5	10600.2	10036.0
80°	18.3	24.8	180.1	236.2	467.1	955.7	1003.2	2187.6	4805.5	6963.9	7062.1
82.5°	18.3	23.7	125.1	172.6	305.3	524.2	554.4	1056.0	1773.3	2856.3	2896.2
85°	17.3	20.5	89.5	114.3	167.2	197.4	269.7	525.3	850.0	1218.9	1209.2
87.5°	10.8	10.8	29.1	45.3	68.0	77.7	120.8	194.2	293.4	402.3	379.7
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°	5928.4	5928.4	5928.4	5928.4	5928.4	5928.4	5928.4	5928.4	5928.4	5928.4	5928.4
2.5°	5958.6	5933.8	5902.5	5893.9	5820.5	5786.0	5715.9	5747.2	5711.6	5682.5	5715.9
5°	5967.2	5930.6	5864.8	5787.1	5630.7	5559.5	5460.3	5471.1	5419.3	5379.4	5402.0
7.5°	5988.8	5943.5	5840.0	5665.2	5478.6	5366.4	5262.9	5343.8	5308.2	5278.0	5300.6
10°	5999.6	5964.0	5780.6	5596.2	5327.6	5266.1	5136.7	5127.0	5130.2	5127.0	5162.6
12.5°	6028.7	5978.0	5711.6	5476.4	5247.8	5084.9	5005.1	5004.0	4901.5	4857.3	4876.7
15°	6115.0	6005.0	5665.2	5334.1	5081.7	4973.8	4721.4	4722.5	4679.3	4628.6	4627.5
17.5°	6287.6	6085.9	5665.2	5238.1	4928.5	4710.6	4490.5	4370.8	4341.7	4348.1	4343.8
20°	6515.2	6221.8	5663.1	5096.8	4712.7	4487.3	4170.2	4068.8	3977.1	3983.6	3983.6
22.5°	6842.1	6422.4	5667.4	4967.3	4506.7	4200.4	3843.3	3715.0	3616.8	3620.0	3620.0
25°	7311.3	6766.5	5718.1	4888.6	4230.6	3862.7	3502.5	3302.9	3202.6	3203.7	3205.8
27.5°	7908.9	7246.6	5893.9	4721.4	4000.8	3463.6	3068.8	2922.1	2821.8	2795.9	2795.9
30°	8585.2	7822.6	6121.5	4612.4	3644.9	3013.8	2685.9	2577.0	2456.1	2420.6	2420.6
32.5°	9334.9	8400.7	6356.6	4478.7	3309.4	2627.7	2354.8	2254.4	2103.4	2059.2	2044.1
35°	10114.8	8998.3	6642.5	4291.0	2887.6	2309.4	2067.8	1945.9	1837.0	1778.7	1764.7
37.5°	10535.4	9679.0	6900.3	4101.1	2561.9	2058.1	1788.4	1693.5	1621.3	1580.3	1572.7
40°	11113.6	10174.1	7034.1	3787.2	2211.3	1802.5	1530.6	1526.3	1536.0	1499.4	1497.2
42.5°	11702.6	10662.7	6997.4	3366.6	1938.4	1541.4	1401.2	1475.6	1529.6	1497.2	1499.4
45°	12439.3	11320.7	7131.1	2924.3	1668.7	1396.9	1374.2	1461.6	1536.0	1528.5	1528.5
47.5°	13184.7	11957.1	6884.1	2382.8	1487.5	1354.8	1377.5	1439.0	1531.7	1556.5	1551.1
50°	13792.0	12392.9	6732.0	1923.3	1385.0	1355.9	1388.3	1410.9	1512.3	1552.2	1551.1
52.5°	14282.8	12808.2	6164.6	1623.4	1326.8	1360.2	1422.8	1406.6	1477.8	1519.9	1544.7
55°	14977.4	13383.2	5518.5	1508.0	1296.6	1355.9	1434.6	1421.7	1450.8	1470.2	1488.6
57.5°	15514.6	13669.0	4653.4	1433.6	1269.6	1349.4	1424.9	1426.0	1440.0	1432.5	1424.9
60°	15965.5	13930.0	3806.7	1361.3	1235.1	1335.4	1383.9	1399.0	1394.7	1385.0	1365.6
62.5°	16185.6	14212.7	2956.7	1284.7	1198.4	1294.4	1317.1	1334.3	1324.6	1292.3	1290.1
65°	16102.5	14009.9	2191.9	1201.6	1154.2	1249.1	1248.0	1255.6	1259.9	1218.9	1223.2
67.5°	15636.5	13118.9	1669.8	1095.9	1103.5	1184.4	1179.0	1183.3	1171.4	1143.4	1147.7
70°	14281.7	12107.1	1184.4	918.0	999.9	1083.0	1090.5	1108.9	1081.9	1032.3	1035.5
72.5°	12278.6	10368.3	830.6	731.3	878.0	983.8	979.4	978.4	941.7	961.1	984.8
75°	10472.9	7940.1	631.0	589.0	693.6	846.8	895.3	898.5	903.9	1098.1	1112.1
77.5°	8062.0	4803.4	537.2	464.9	538.3	702.2	792.8	829.5	1139.1	1180.1	1158.5
80°	4804.4	2774.4	415.3	362.4	434.7	536.1	677.4	875.9	1144.5	1022.6	978.4
82.5°	2338.6	1286.9	302.0	276.1	320.4	389.4	531.8	1020.4	968.7	790.7	779.9
85°	872.7	434.7	181.2	188.8	213.6	255.6	404.5	974.0	743.2	644.0	608.4
87.5°	217.9	79.8	73.4	75.5	96.0	128.4	207.1	469.2	360.3	298.8	292.3
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)