

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: STREETWORKS

Report Number: P510457

Luminaire Tested: **CST-CA10-310-722-U-T2**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510457
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: STREETWORKS
Catalog Number: CST-CA10-310-722-U-T2
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (10) 2200K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 39197 lumens
Efficiency: N/A
Efficacy: 125.5 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type II - Short
BUG Rating: B4 - U0 - G4

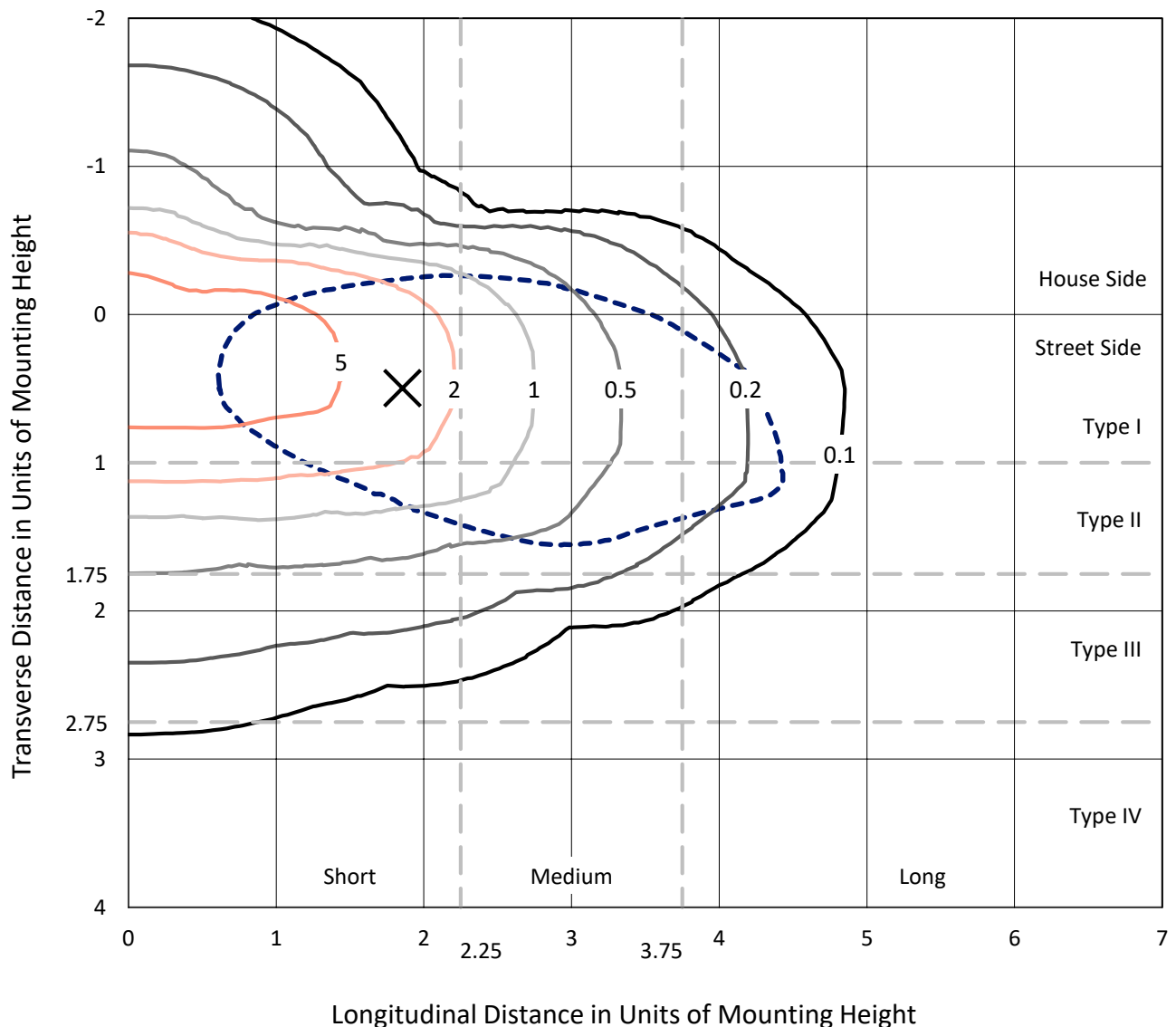
Input Watts (W): 312.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

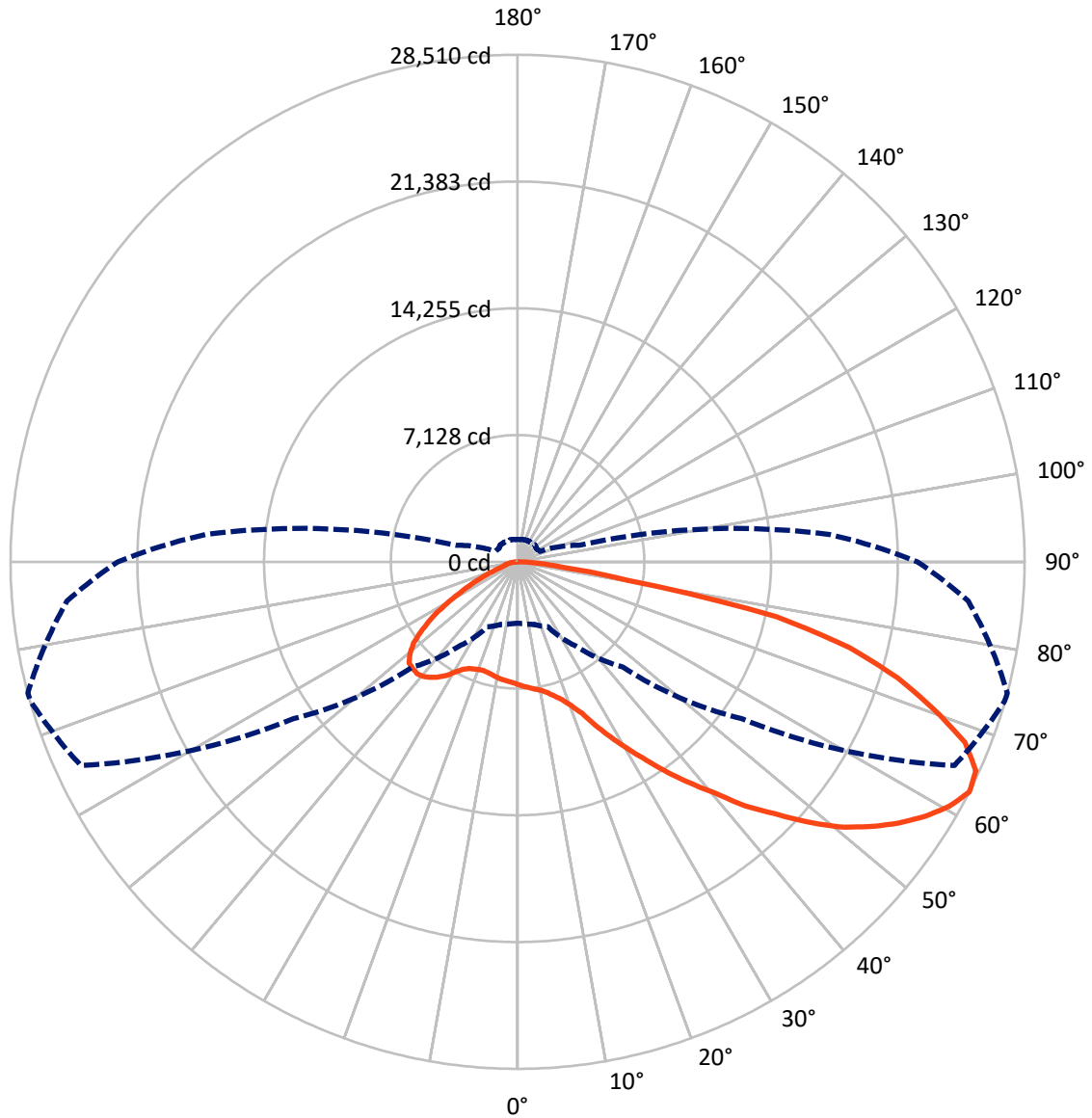
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 9 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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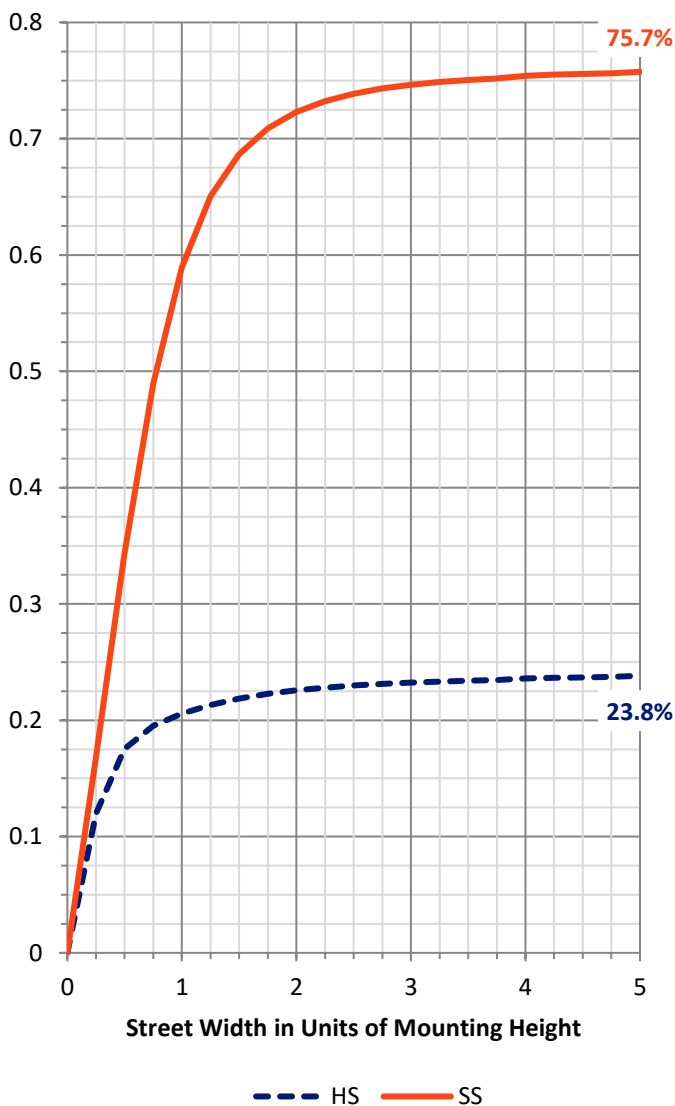
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9496.7	0.0	9496.7
	% Fixture	24.2	0.0	24.2
Street Side	Lumens	29700.3	0.0	29700.3
	% Fixture	75.8	0.0	75.8
Total	Lumens	39197.0	0.0	39197.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	664.7	1.7
10°-20°	2017.4	5.1
20°-30°	3479.5	8.9
30°-40°	5130.5	13.1
40°-50°	6763.2	17.3
50°-60°	7959.6	20.3
60°-70°	7919.1	20.2
70°-80°	4618.2	11.8
80°-90°	644.8	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°	39197.0	100.0
0°-180°	39197.0	100.0

Coefficient of Utilization

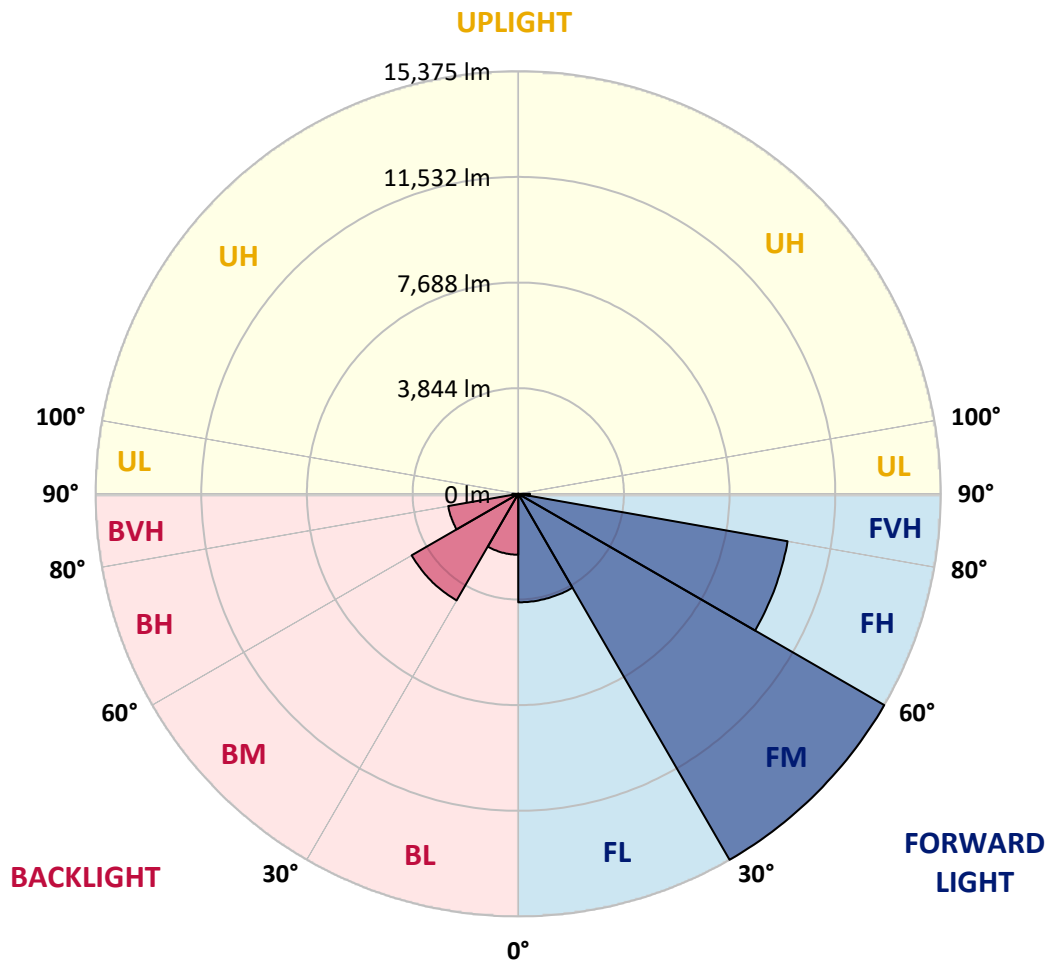


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3947.0	10.1			
FM (30°-60°)	15375.4	39.2			
FH (60°-80°)	9950.0	25.4			G4/12000
FVH (80°-90°)	427.9	1.1			G3/500
BL (0°-30°)	2214.6	5.6	B3/2500		
BM (30°-60°)	4478.0	11.4	B3/5000		
BH (60°-80°)	2587.2	6.6	B4/5000		G4/5000
BVH (80°-90°)	216.9	0.6			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4
 Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	6909.5	6909.5	6909.5	6909.5	6909.5	6909.5	6909.5	6909.5	6909.5	6909.5	6909.5
2.5°	7287.9	7258.0	7262.1	7241.1	7209.6	7186.2	7124.9	7058.8	7019.2	7016.0	6959.6
5°	7654.1	7663.8	7666.2	7599.3	7533.1	7458.1	7364.5	7237.1	7133.0	7116.9	7007.1
7.5°	7988.1	7987.3	7982.5	7945.4	7914.7	7803.4	7616.2	7416.2	7246.7	7231.4	7053.1
10°	8330.2	8327.7	8279.3	8217.2	8147.8	8045.4	7884.9	7645.3	7371.0	7350.8	7095.9
12.5°	8702.9	8676.2	8645.6	8570.6	8488.3	8310.8	8142.2	7881.6	7595.2	7558.9	7171.7
15°	9010.2	8982.8	8940.0	8889.2	8802.9	8667.4	8488.3	8179.3	7872.0	7836.5	7341.9
17.5°	9314.4	9301.5	9270.8	9216.7	9150.6	9033.6	8869.1	8606.9	8204.3	8160.8	7625.1
20°	9563.6	9533.0	9510.4	9535.4	9541.0	9454.7	9364.4	9144.1	8700.4	8633.5	7972.8
22.5°	9705.6	9699.2	9822.6	9914.6	9951.7	9971.0	9942.8	9765.3	9363.6	9246.6	8456.8
25°	9840.3	9829.9	9997.7	10227.6	10446.2	10557.5	10632.5	10655.9	10287.3	10181.6	9235.3
27.5°	9844.4	9873.4	10117.0	10502.7	10835.8	11175.5	11535.3	11576.4	11252.9	11169.0	10121.1
30°	9866.2	9879.1	10120.3	10563.2	11256.9	11801.5	12270.2	12501.7	12222.6	12183.9	11096.4
32.5°	9589.5	9606.4	9981.5	10668.8	11574.8	12449.3	13071.2	13414.9	13345.5	13296.3	12137.1
35°	9301.5	9316.0	9751.6	10518.8	11811.2	13037.4	13794.9	14470.1	14596.7	14559.6	13297.9
37.5°	8849.7	8898.1	9354.7	10339.7	11852.3	13469.8	14485.4	15521.2	15903.6	15792.3	14525.8
40°	8359.2	8394.7	8926.3	9964.6	11806.3	13753.7	15163.9	16684.5	17147.6	17087.9	15744.7
42.5°	7739.6	7834.8	8367.3	9485.4	11569.9	13930.4	15791.5	18003.5	18676.3	18756.2	16864.4
45°	7217.7	7215.3	7709.8	8791.6	11141.6	13972.3	16369.1	19337.0	20321.2	20171.2	18344.8
47.5°	6603.8	6628.8	7145.1	8101.1	10509.9	13839.2	16819.3	20913.3	21909.6	21828.2	19558.9
50°	5183.2	5363.1	6340.8	7507.3	9655.6	13468.1	17194.4	22448.5	23399.6	23436.8	20662.5
52.5°	4468.4	4537.8	5077.5	6909.5	8897.3	12845.4	17605.8	24175.7	24839.6	24745.3	21915.3
55°	4182.0	4219.1	4478.1	5835.8	8164.0	11881.3	17803.5	25752.8	25962.6	25947.3	22946.3
57.5°	3974.7	4002.9	4186.9	4870.2	7358.9	10643.8	17636.5	26779.0	27104.9	27004.9	23919.2
60°	3675.4	3698.0	3972.3	4388.5	6530.4	9394.2	16609.5	27244.5	27933.4	27896.3	24779.1
62.5°	3450.3	3489.1	3642.3	4032.8	5822.9	8364.9	15385.7	27099.3	28477.1	28510.2	25435.8
65°	3212.3	3247.0	3376.9	3718.2	5181.5	7688.0	14065.9	26371.6	28227.0	28315.0	25542.3
67.5°	2918.7	2945.3	3099.4	3394.7	4432.1	7011.2	12577.5	25084.9	26839.5	27122.7	24482.3
70°	2549.2	2558.9	2747.7	2948.6	3680.2	5990.7	10000.9	22978.5	24831.6	24837.2	22480.8
72.5°	2028.9	2037.0	2087.0	2239.4	2764.6	4741.1	7350.8	19199.9	22390.4	22349.3	19980.0
75°	1379.5	1450.5	1623.9	1769.1	1994.2	3329.3	4571.7	12935.7	18970.0	19292.7	16411.9
77.5°	1089.9	1096.3	1168.1	1301.2	1495.7	2487.1	2562.1	7157.2	14142.6	14909.8	12900.2
80°	759.9	771.2	732.5	764.8	1043.1	1702.2	1497.3	3114.7	5897.9	6297.2	7745.3
82.5°	362.2	375.1	430.8	400.1	518.7	723.6	790.6	1609.4	2547.6	2614.6	3015.5
85°	238.8	238.8	239.6	226.7	302.5	315.4	359.0	686.5	1244.0	1285.9	1278.6
87.5°	76.6	84.7	82.3	96.0	116.2	104.9	109.7	215.4	426.8	422.7	353.3
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°	6909.5	6909.5	6909.5	6909.5	6909.5	6909.5	6909.5	6909.5	6909.5	6909.5	6909.5
2.5°	6919.2	6886.1	6808.7	6740.9	6674.0	6623.2	6579.6	6521.5	6494.1	6469.1	6521.5
5°	6939.4	6880.5	6741.7	6603.0	6475.5	6381.9	6324.7	6282.7	6244.8	6244.8	6262.5
7.5°	6962.8	6882.9	6684.5	6487.6	6296.4	6189.9	6108.5	6055.2	6024.6	6026.2	6064.1
10°	6978.1	6855.5	6619.1	6353.7	6145.6	5974.6	5894.7	5818.0	5760.0	5725.3	5764.0
12.5°	6995.9	6846.6	6531.2	6231.9	5978.6	5785.0	5618.8	5561.5	5505.0	5461.5	5482.5
15°	7105.6	6880.5	6457.8	6077.0	5783.4	5542.1	5324.3	5219.5	5203.3	5173.5	5180.7
17.5°	7284.7	6971.7	6410.2	5887.4	5548.6	5263.8	4987.9	4852.4	4820.1	4804.8	4812.9
20°	7551.7	7145.1	6424.7	5754.3	5284.0	4965.3	4608.8	4449.9	4342.6	4349.0	4380.5
22.5°	7959.9	7425.0	6503.8	5608.3	4997.6	4579.7	4219.9	4003.7	3895.6	3872.2	3907.7
25°	8610.1	7876.0	6590.9	5468.7	4720.9	4163.5	3765.0	3531.0	3392.2	3383.4	3422.9
27.5°	9443.4	8567.3	6780.5	5347.7	4377.2	3663.3	3267.2	3067.1	2919.5	2901.8	2888.9
30°	10296.1	9335.3	7123.3	5163.8	3976.3	3147.0	2802.5	2646.0	2480.7	2413.7	2428.2
32.5°	11199.7	10050.9	7525.1	5034.7	3527.8	2692.8	2393.5	2244.3	2092.6	1995.8	1973.2
35°	12109.6	10762.4	7863.1	4841.9	3102.6	2332.2	2045.8	1891.8	1759.5	1680.4	1674.7
37.5°	13174.5	11503.0	8134.1	4637.0	2661.4	2049.9	1705.4	1616.7	1552.9	1483.6	1490.8
40°	14241.0	12366.2	8351.1	4298.2	2295.1	1746.5	1451.3	1469.0	1482.7	1424.7	1419.8
42.5°	15126.8	13091.4	8450.4	3859.3	1970.8	1482.7	1339.2	1419.8	1479.5	1441.6	1436.8
45°	16026.3	13702.1	8411.6	3314.8	1701.4	1356.9	1330.3	1412.6	1489.2	1480.3	1476.3
47.5°	17004.0	14502.4	8344.7	2694.4	1508.6	1344.8	1349.6	1388.4	1485.2	1501.3	1494.8
50°	18199.5	15238.9	7948.6	2098.3	1415.0	1364.2	1393.2	1373.0	1455.3	1488.4	1494.0
52.5°	19389.5	15806.0	7418.6	1818.3	1377.9	1382.7	1453.7	1385.1	1421.4	1450.5	1477.1
55°	20307.5	16383.6	6561.0	1649.7	1365.8	1391.6	1470.6	1410.9	1410.1	1410.1	1419.0
57.5°	21247.3	17157.3	5703.5	1540.8	1344.8	1401.3	1450.5	1415.8	1404.5	1388.4	1377.9
60°	21901.6	17443.7	4601.5	1469.0	1323.0	1387.6	1394.0	1389.2	1354.5	1339.2	1327.1
62.5°	22482.4	17599.4	3582.6	1386.7	1293.2	1355.3	1321.4	1310.9	1290.7	1253.6	1260.1
65°	22326.7	17265.4	2729.9	1294.0	1272.2	1316.6	1257.7	1232.7	1234.3	1195.6	1208.5
67.5°	21324.8	15767.3	1960.3	1152.0	1214.9	1239.9	1185.1	1166.5	1139.1	1119.7	1137.5
70°	19300.7	13977.2	1322.2	956.0	1084.2	1138.3	1102.0	1069.7	1027.0	1014.0	1033.4
72.5°	16244.9	11667.6	912.4	768.8	935.8	1006.0	992.3	959.2	928.5	960.0	997.9
75°	13345.5	8631.9	744.6	630.0	719.6	838.2	878.5	888.2	980.2	1286.7	1318.2
77.5°	9606.4	5351.0	669.6	512.3	574.4	670.4	751.1	784.1	1197.2	1146.3	1143.9
80°	5601.0	3118.8	510.7	404.2	464.7	491.3	587.3	920.5	1032.6	885.8	864.0
82.5°	2555.7	1376.3	355.8	323.5	322.7	325.1	400.1	885.8	792.2	697.8	672.0
85°	939.8	484.0	216.2	187.2	214.6	186.4	262.2	649.4	459.0	451.8	376.7
87.5°	231.5	99.2	73.4	61.3	50.0	47.6	79.9	213.8	112.1	102.5	98.4
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)