

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: P510717

Luminaire Tested: **CST-CA8-230-730-U-T2**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510717
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-CA8-230-730-U-T2
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 3000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 34938 lumens
Efficiency: N/A
Efficacy: 153.0 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G4

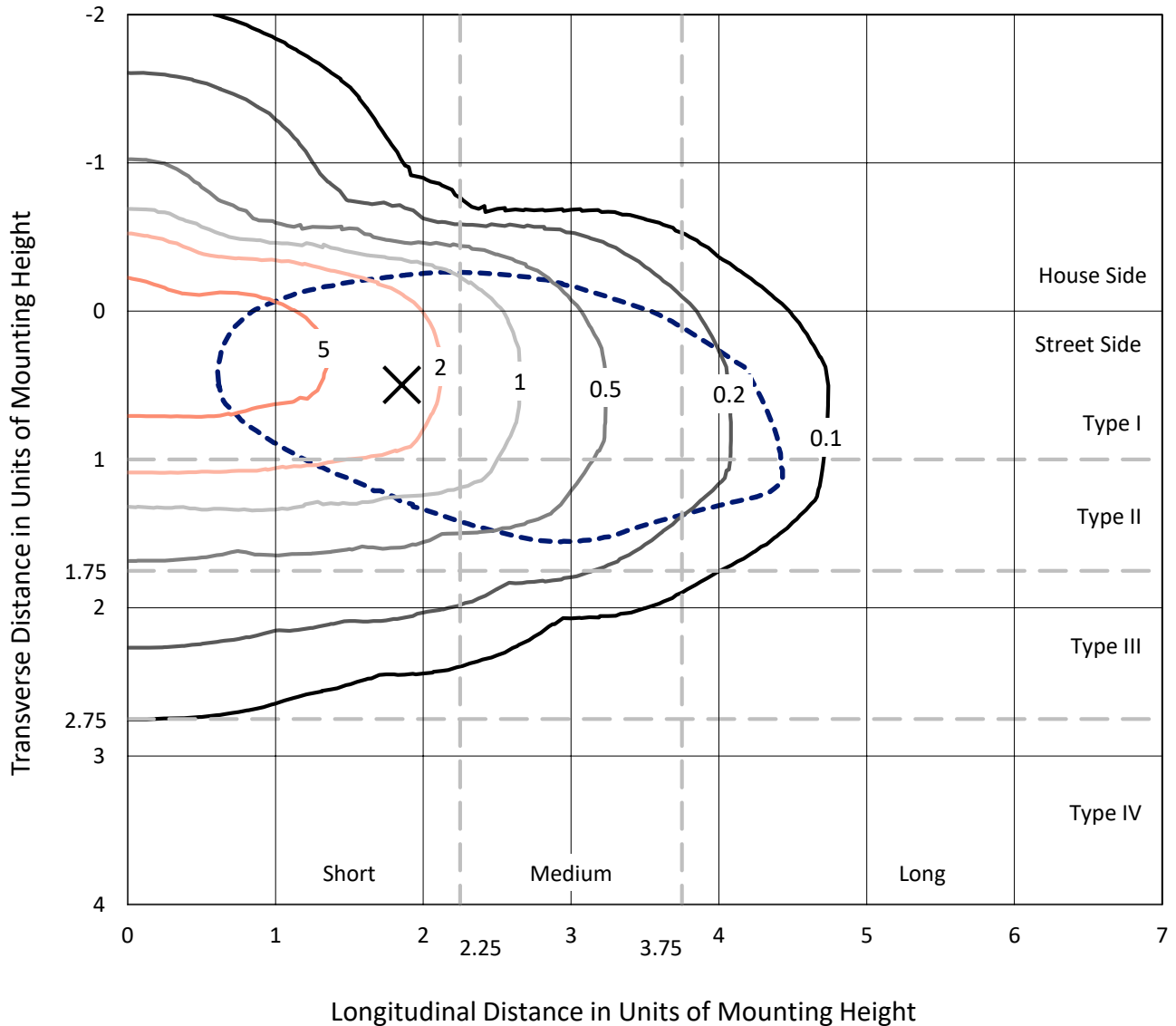
Input Watts (W): 228.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

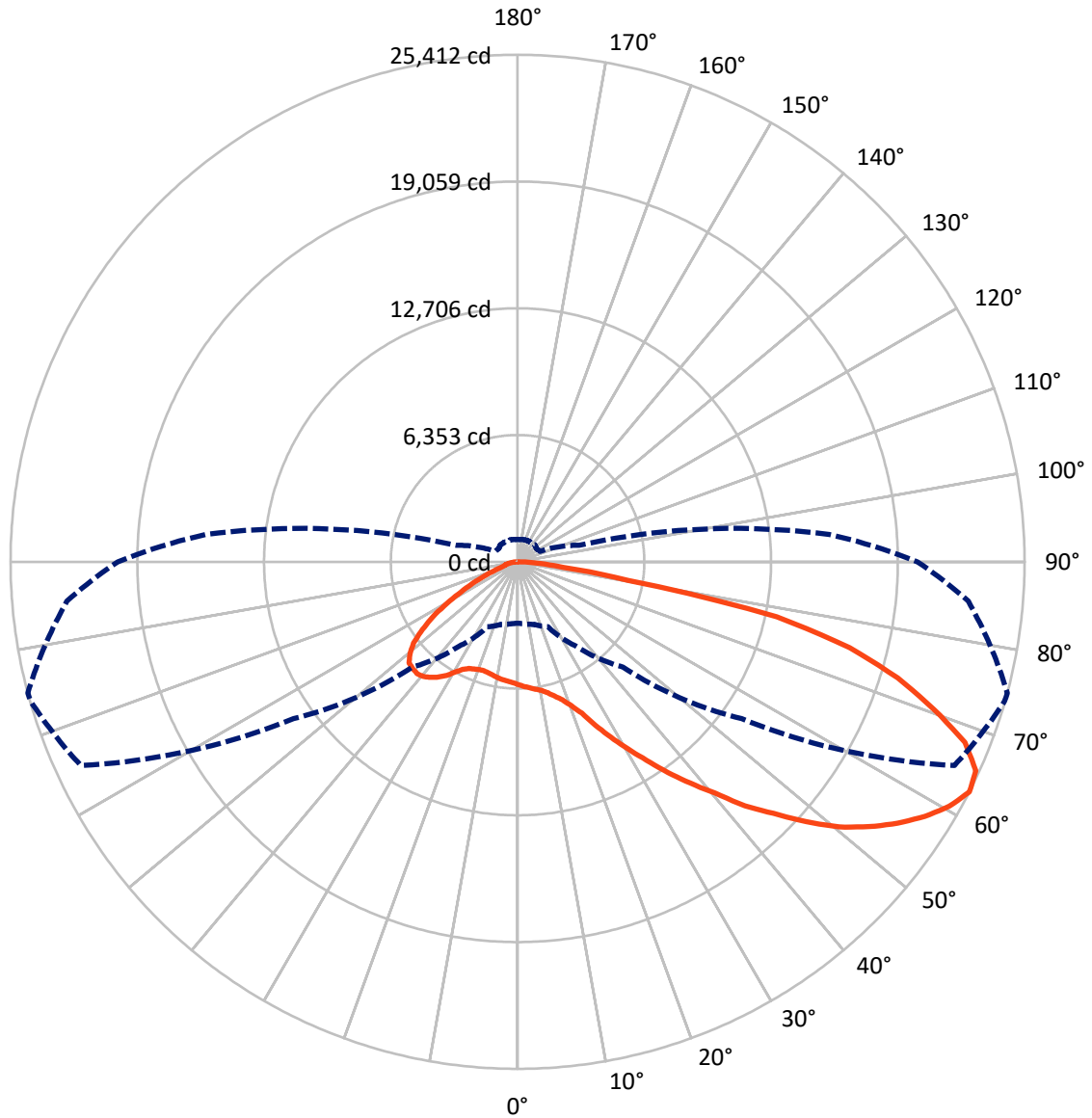
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 8 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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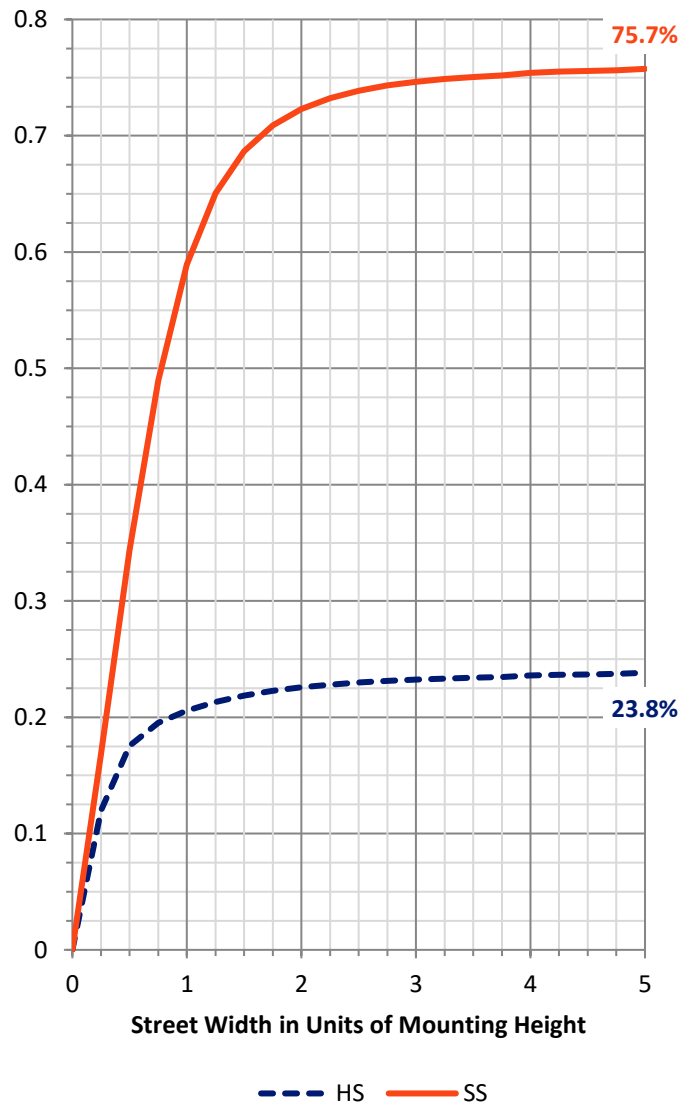
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8464.9	0.0	8464.9
	% Fixture	24.2	0.0	24.2
Street Side	Lumens	26473.1	0.0	26473.1
	% Fixture	75.8	0.0	75.8
Total	Lumens	34938.0	0.0	34938.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	592.5	1.7
10°-20°	1798.2	5.1
20°-30°	3101.4	8.9
30°-40°	4573.1	13.1
40°-50°	6028.3	17.3
50°-60°	7094.8	20.3
60°-70°	7058.6	20.2
70°-80°	4116.4	11.8
80°-90°	574.8	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°	34938.0	100.0
0°-180°	34938.0	100.0

Coefficient of Utilization

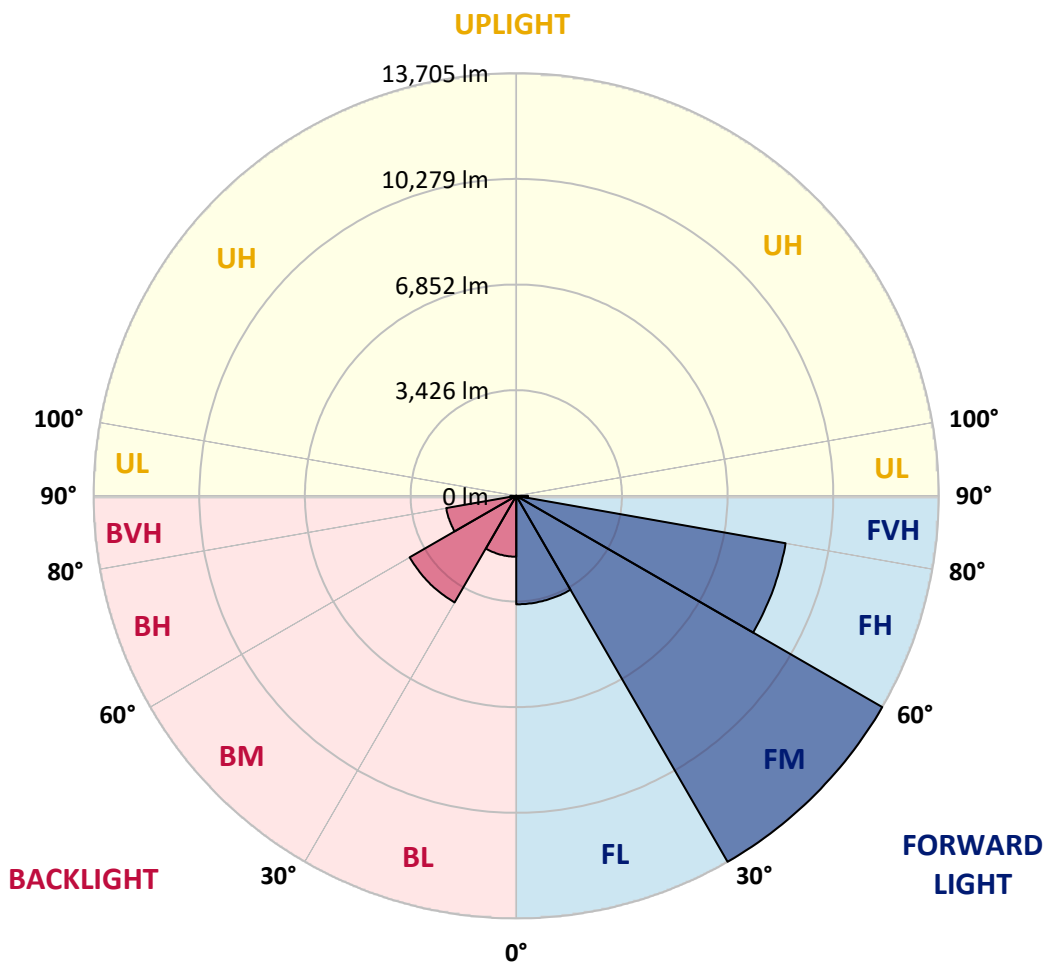


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3518.1	10.1			
FM (30°-60°)	13704.7	39.2			
FH (60°-80°)	8868.9	25.4			G4/12000
FVH (80°-90°)	381.4	1.1			G3/500
BL (0°-30°)	1974.0	5.6	B3/2500		
BM (30°-60°)	3991.4	11.4	B3/5000		
BH (60°-80°)	2306.1	6.6	B3/2500		G3/2500
BVH (80°-90°)	193.4	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°	6158.8	6158.8	6158.8	6158.8	6158.8	6158.8	6158.8	6158.8	6158.8	6158.8	6158.8
2.5°	6496.0	6469.4	6473.0	6454.3	6426.3	6405.4	6350.8	6291.8	6256.6	6253.7	6203.4
5°	6822.5	6831.1	6833.3	6773.6	6714.6	6647.7	6564.3	6450.7	6358.0	6343.6	6245.8
7.5°	7120.2	7119.4	7115.1	7082.0	7054.7	6955.5	6788.7	6610.3	6459.3	6445.7	6286.8
10°	7425.0	7422.9	7379.7	7324.4	7262.5	7171.2	7028.1	6814.6	6570.1	6552.1	6324.9
12.5°	7757.2	7733.5	7706.2	7639.3	7566.0	7407.8	7257.5	7025.2	6770.0	6737.6	6392.5
15°	8031.2	8006.8	7968.7	7923.4	7846.4	7725.6	7566.0	7290.6	7016.6	6985.0	6544.2
17.5°	8302.3	8290.8	8263.5	8215.3	8156.3	8052.1	7905.4	7671.7	7312.9	7274.0	6796.6
20°	8524.5	8497.2	8477.0	8499.3	8504.4	8427.4	8346.9	8150.6	7755.1	7695.4	7106.5
22.5°	8651.0	8645.3	8755.3	8837.3	8870.4	8887.6	8862.4	8704.3	8346.2	8241.9	7537.9
25°	8771.1	8761.8	8911.3	9116.3	9311.1	9410.4	9477.2	9498.1	9169.5	9075.3	8231.8
27.5°	8774.7	8800.6	9017.8	9361.5	9658.4	9961.2	10281.9	10318.5	10030.2	9955.4	9021.4
30°	8794.1	8805.6	9020.6	9415.4	10033.8	10519.2	10936.9	11143.3	10894.5	10860.0	9890.7
32.5°	8547.5	8562.6	8897.0	9509.6	10317.1	11096.6	11651.0	11957.3	11895.5	11851.6	10818.3
35°	8290.8	8303.7	8692.0	9375.9	10527.8	11620.8	12296.0	12897.8	13010.7	12977.6	11853.0
37.5°	7888.1	7931.3	8338.3	9216.2	10564.5	12006.2	12911.5	13834.8	14175.6	14076.4	12947.4
40°	7450.9	7482.6	7956.4	8881.9	10523.5	12259.3	13516.2	14871.7	15284.4	15231.2	14033.9
42.5°	6898.7	6983.5	7458.1	8454.7	10312.8	12416.8	14075.7	16047.3	16647.0	16718.2	15032.0
45°	6433.5	6431.3	6872.1	7836.3	9931.0	12454.2	14590.5	17235.9	18113.2	17979.4	16351.5
47.5°	5886.2	5908.5	6368.7	7220.8	9367.9	12335.5	14991.7	18641.0	19529.0	19456.4	17433.7
50°	4620.0	4780.3	5651.8	6691.6	8606.5	12004.8	15326.1	20009.4	20857.1	20890.2	18417.4
52.5°	3982.9	4044.7	4525.8	6158.8	7930.5	11449.6	15692.8	21548.9	22140.7	22056.5	19534.1
55°	3727.6	3760.7	3991.5	5201.7	7276.9	10590.4	15869.0	22954.6	23141.6	23127.9	20453.0
57.5°	3542.8	3568.0	3731.9	4341.0	6559.3	9487.3	15720.1	23869.3	24159.8	24070.6	21320.2
60°	3276.0	3296.2	3540.7	3911.7	5820.8	8373.5	14804.8	24284.2	24898.3	24865.2	22086.7
62.5°	3075.4	3109.9	3246.6	3594.6	5190.2	7456.0	13714.0	24154.8	25382.9	25412.4	22672.0
65°	2863.3	2894.2	3010.0	3314.2	4618.5	6852.7	12537.6	23506.2	25160.0	25238.4	22767.0
67.5°	2601.6	2625.3	2762.6	3025.8	3950.5	6249.4	11210.9	22359.3	23923.2	24175.6	21822.1
70°	2272.2	2280.9	2449.1	2628.2	3280.4	5339.8	8914.2	20481.8	22133.5	22138.5	20038.1
72.5°	1808.4	1815.6	1860.2	1996.1	2464.2	4225.9	6552.1	17113.7	19957.6	19920.9	17809.0
75°	1229.6	1292.9	1447.5	1576.9	1777.5	2967.6	4074.9	11530.2	16908.8	17196.4	14628.6
77.5°	971.5	977.2	1041.2	1159.8	1333.1	2216.9	2283.7	6379.5	12605.9	13289.7	11498.5
80°	677.4	687.4	652.9	681.7	929.7	1517.2	1334.6	2776.3	5257.1	5613.0	6903.7
82.5°	322.9	334.4	384.0	356.7	462.4	645.0	704.7	1434.5	2270.8	2330.5	2687.9
85°	212.8	212.8	213.6	202.1	269.6	281.2	320.0	611.9	1108.8	1146.2	1139.7
87.5°	68.3	75.5	73.3	85.6	103.5	93.5	97.8	192.0	380.4	376.8	314.9
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°	6158.8	6158.8	6158.8	6158.8	6158.8	6158.8	6158.8	6158.8	6158.8	6158.8	6158.8
2.5°	6167.4	6137.9	6068.9	6008.5	5948.8	5903.5	5864.7	5812.9	5788.5	5766.2	5812.9
5°	6185.4	6132.9	6009.2	5885.5	5771.9	5688.5	5637.5	5600.1	5566.3	5566.3	5582.1
7.5°	6206.2	6135.0	5958.2	5782.7	5612.3	5517.4	5444.7	5397.3	5370.0	5371.4	5405.2
10°	6219.9	6110.6	5899.9	5663.3	5477.8	5325.4	5254.2	5185.9	5134.1	5103.2	5137.7
12.5°	6235.7	6102.7	5821.5	5554.8	5329.0	5156.4	5008.3	4957.2	4906.9	4868.1	4886.7
15°	6333.5	6132.9	5756.1	5416.7	5155.0	4940.0	4745.8	4652.3	4638.0	4611.3	4617.8
17.5°	6493.1	6214.1	5713.7	5247.7	4945.7	4691.9	4446.0	4325.2	4296.4	4282.7	4289.9
20°	6731.1	6368.7	5726.6	5129.1	4709.9	4425.8	4108.0	3966.3	3870.7	3876.5	3904.5
22.5°	7095.0	6618.3	5797.1	4998.9	4454.6	4082.1	3761.4	3568.7	3472.4	3451.5	3483.1
25°	7674.6	7020.2	5874.7	4874.5	4208.0	3711.1	3355.9	3147.3	3023.7	3015.7	3051.0
27.5°	8417.3	7636.4	6043.7	4766.7	3901.6	3265.3	2912.2	2733.9	2602.3	2586.5	2575.0
30°	9177.4	8321.0	6349.3	4602.7	3544.3	2805.1	2498.0	2358.5	2211.1	2151.4	2164.4
32.5°	9982.7	8958.8	6707.4	4487.7	3144.5	2400.2	2133.5	2000.4	1865.2	1779.0	1758.8
35°	10793.8	9593.0	7008.7	4315.8	2765.5	2078.8	1823.5	1686.2	1568.3	1497.8	1492.8
37.5°	11743.0	10253.1	7250.3	4133.2	2372.2	1827.1	1520.1	1441.0	1384.2	1322.4	1328.8
40°	12693.6	11022.5	7443.7	3831.2	2045.7	1556.8	1293.6	1309.4	1321.6	1269.9	1265.6
42.5°	13483.1	11668.9	7532.2	3440.0	1756.7	1321.6	1193.6	1265.6	1318.8	1285.0	1280.7
45°	14284.9	12213.3	7497.7	2954.6	1516.5	1209.5	1185.7	1259.1	1327.4	1319.5	1315.9
47.5°	15156.4	12926.6	7438.0	2401.7	1344.6	1198.7	1203.0	1237.5	1323.8	1338.2	1332.4
50°	16222.1	13583.1	7084.9	1870.3	1261.2	1215.9	1241.8	1223.8	1297.2	1326.7	1331.7
52.5°	17282.7	14088.6	6612.5	1620.8	1228.2	1232.5	1295.8	1234.6	1267.0	1292.9	1316.6
55°	18101.0	14603.4	5848.1	1470.5	1217.4	1240.4	1310.9	1257.6	1256.9	1256.9	1264.8
57.5°	18938.7	15293.0	5083.8	1373.4	1198.7	1249.0	1292.9	1262.0	1251.9	1237.5	1228.2
60°	19521.8	15548.3	4101.5	1309.4	1179.3	1236.8	1242.5	1238.2	1207.3	1193.6	1182.9
62.5°	20039.6	15687.1	3193.4	1236.1	1152.7	1208.0	1177.8	1168.5	1150.5	1117.4	1123.2
65°	19900.8	15389.4	2433.3	1153.4	1134.0	1173.5	1121.0	1098.7	1100.2	1065.7	1077.2
67.5°	19007.7	14054.1	1747.3	1026.8	1082.9	1105.2	1056.3	1039.8	1015.3	998.1	1013.9
70°	17203.6	12458.5	1178.5	852.1	966.4	1014.6	982.2	953.5	915.4	903.9	921.1
72.5°	14479.8	10399.8	813.3	685.3	834.1	896.7	884.4	855.0	827.6	855.7	889.5
75°	11895.5	7694.0	663.7	561.6	641.4	747.1	783.1	791.7	873.7	1146.9	1174.9
77.5°	8562.6	4769.5	596.8	456.6	512.0	597.5	669.4	698.9	1067.1	1021.8	1019.6
80°	4992.5	2779.9	455.2	360.3	414.2	437.9	523.5	820.5	920.4	789.5	770.1
82.5°	2278.0	1226.7	317.1	288.3	287.6	289.8	356.7	789.5	706.1	622.0	599.0
85°	837.7	431.4	192.7	166.8	191.3	166.1	233.7	578.8	409.1	402.7	335.8
87.5°	206.4	88.4	65.4	54.6	44.6	42.4	71.2	190.6	99.9	91.3	87.7
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)