

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: P721861

Luminaire Tested: **CST-CA8-400-740-U-T3**

Issue Date: 10/25/2023

Test Information

Test Method: LM-79-08
Report Number: P721861
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-11)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 10/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA8-400-740-U-T3
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 4000K CCT, 70 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 60863 lumens
Efficiency: N/A
Efficacy: 151.9 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U0 - G5

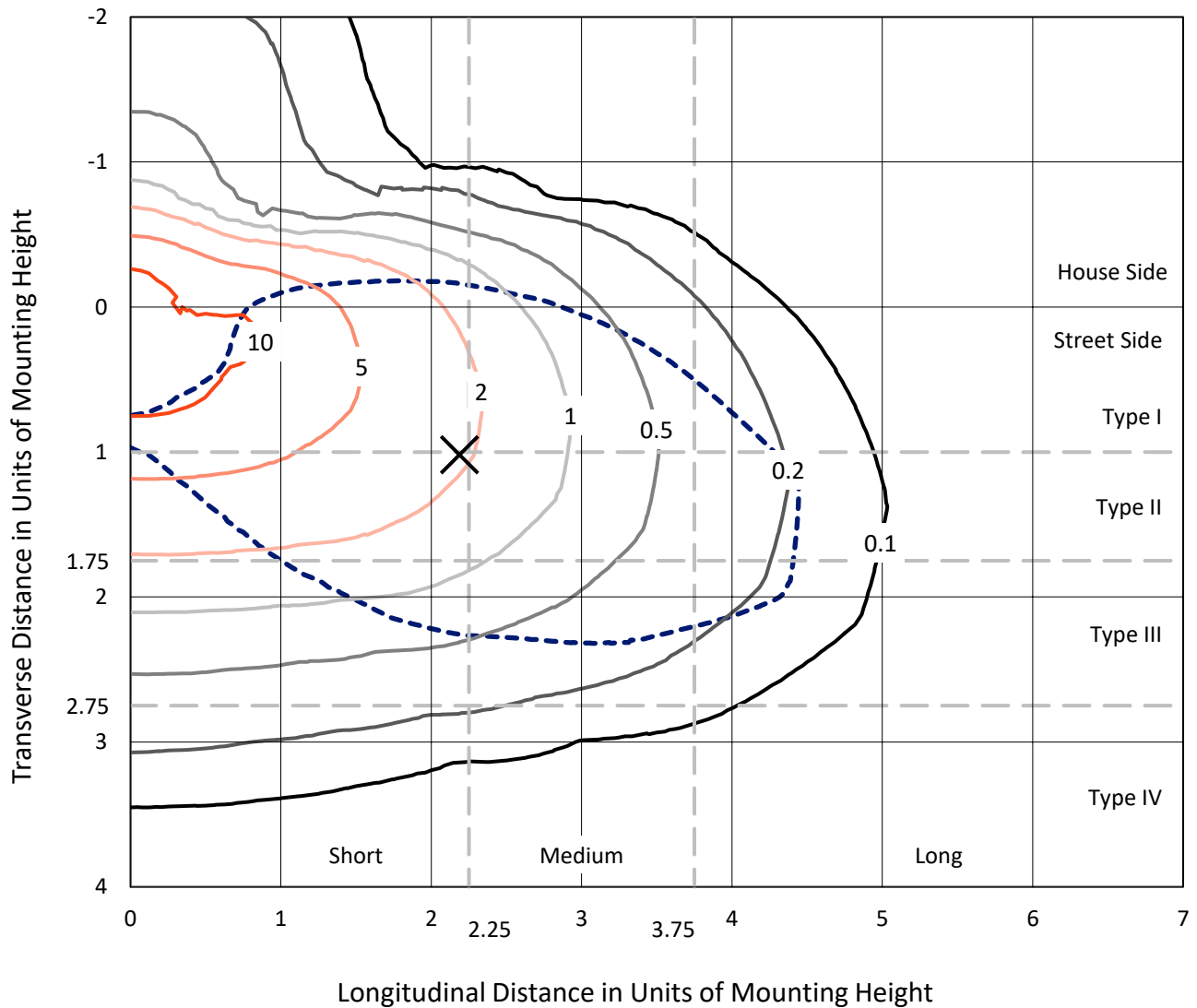
Input Watts (W): 400.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

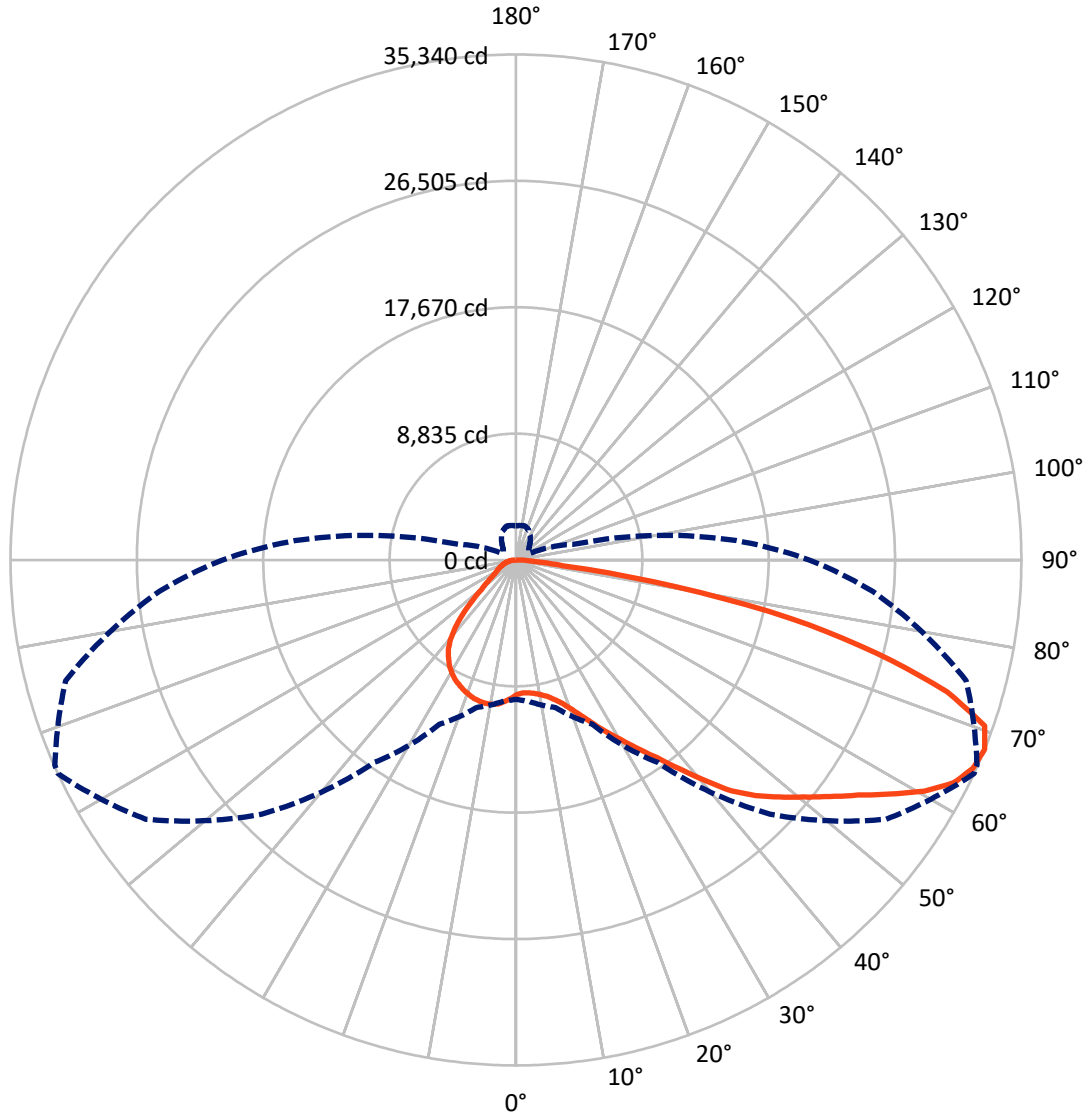
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 11.6 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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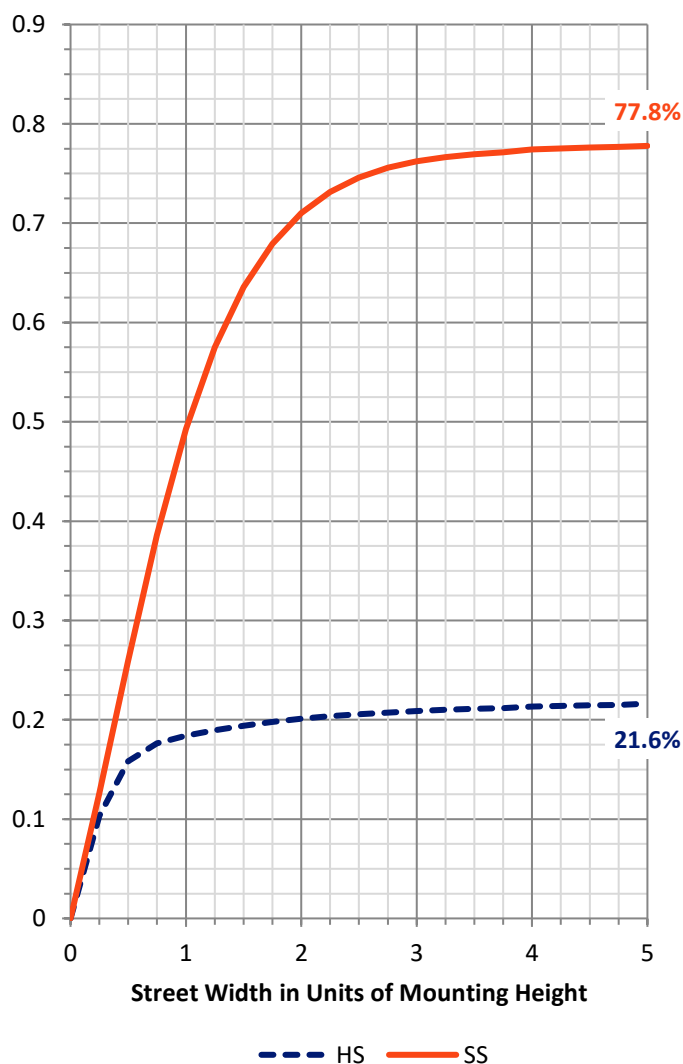
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	13443.9	0.0	13443.9
	% Fixture	22.1	0.0	22.1
Street Side	Lumens	47419.1	0.0	47419.1
	% Fixture	77.9	0.0	77.9
Total	Lumens	60863.0	0.0	60863.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	936.7	1.5
10°-20°	2926.5	4.8
20°-30°	5066.1	8.3
30°-40°	7444.1	12.2
40°-50°	10061.6	16.5
50°-60°	12372.8	20.3
60°-70°	13258.2	21.8
70°-80°	7819.6	12.8
80°-90°	977.4	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°	60863.0	100.0
0°-180°	60863.0	100.0

Coefficient of Utilization



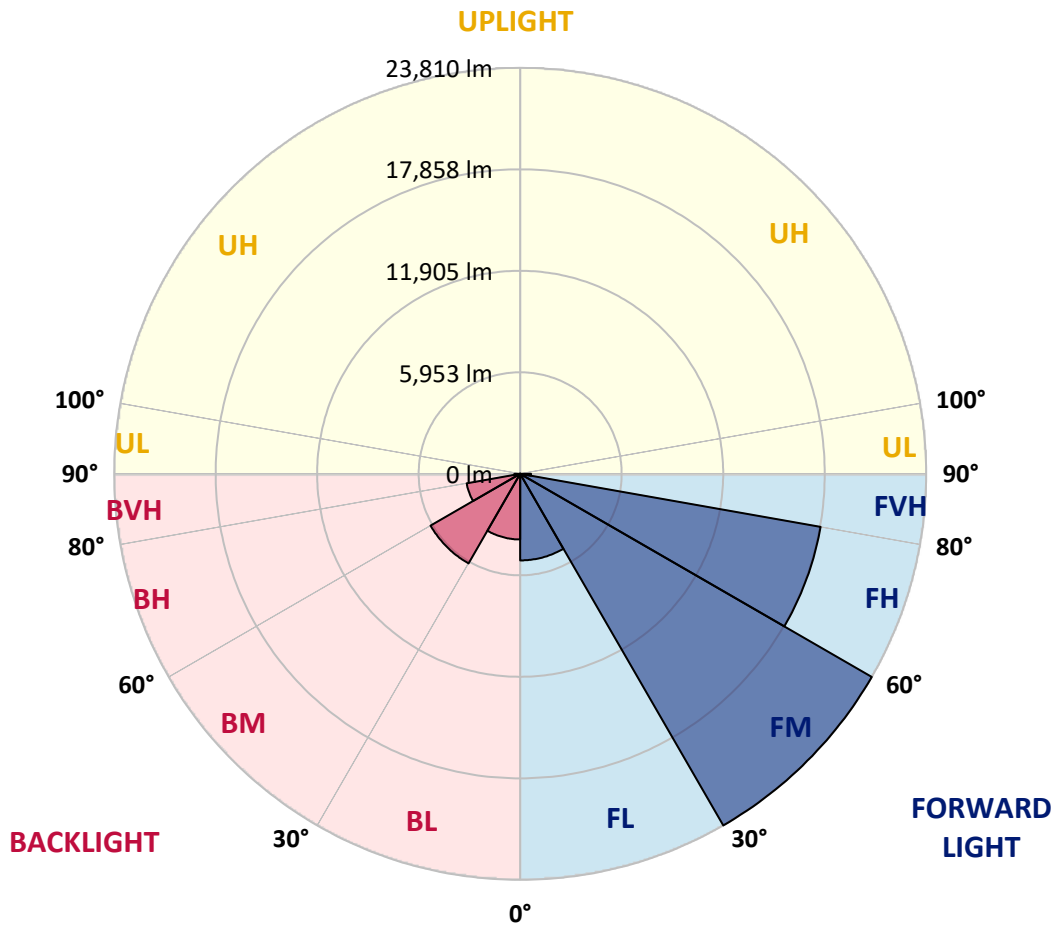
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	5078.5	8.3			
FM (30°-60°)	23810.0	39.1			
FH (60°-80°)	17889.6	29.4			G5
FVH (80°-90°)	640.9	1.1			G4/750
BL (0°-30°)	3850.7	6.3	B4/5000		
BM (30°-60°)	6068.5	10.0	B4/8500		
BH (60°-80°)	3188.2	5.2	B4/5000		G4/5000
BVH (80°-90°)	336.5	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 III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	9401.0	9401.0	9401.0	9401.0	9401.0	9401.0	9401.0	9401.0	9401.0	9401.0	9401.0
2.5°	9223.6	9206.2	9198.8	9222.3	9239.7	9259.6	9288.1	9315.4	9319.1	9355.1	9402.3
5°	9335.3	9320.4	9304.2	9300.5	9294.3	9293.1	9300.5	9331.5	9339.0	9373.7	9475.5
7.5°	9583.4	9568.5	9538.8	9527.6	9494.1	9434.5	9406.0	9422.1	9425.8	9468.0	9594.6
10°	9988.0	9942.1	9906.1	9868.8	9763.4	9669.1	9599.6	9569.8	9563.6	9604.5	9751.0
12.5°	10470.7	10432.2	10392.5	10294.5	10160.5	9990.5	9867.6	9799.4	9794.4	9829.1	9939.6
15°	10980.7	10980.7	10953.4	10836.7	10705.2	10423.5	10233.7	10119.5	10127.0	10154.2	10205.1
17.5°	11639.6	11585.0	11572.6	11439.8	11293.4	11036.5	10735.0	10552.6	10561.3	10573.7	10535.2
20°	12309.7	12293.6	12274.9	12186.8	12054.1	11724.0	11385.2	11145.7	11147.0	11102.3	10931.1
22.5°	13195.7	13142.3	13156.0	13056.7	12876.8	12538.0	12148.4	11864.2	11882.8	11818.3	11508.1
25°	14075.5	14022.1	13993.6	13926.6	13771.5	13450.1	12987.2	12726.6	12704.3	12587.6	12137.2
27.5°	14954.0	14923.0	14946.6	14865.9	14739.4	14380.7	13956.4	13667.2	13682.1	13601.5	12930.1
30°	15863.6	15828.9	15931.9	15801.6	15723.4	15374.7	14967.7	14627.7	14640.1	14669.9	13916.6
32.5°	16549.8	16590.8	16770.7	16755.8	16740.9	16352.5	15924.4	15735.8	15754.4	15858.6	15088.1
35°	17212.5	17216.2	17469.3	17660.4	17741.1	17416.0	16971.7	16965.5	17087.1	17404.8	16721.1
37.5°	17762.2	17749.8	18087.3	18383.9	18604.8	18352.8	18108.4	18489.3	18599.8	19258.7	18365.3
40°	18062.5	18088.5	18522.9	18892.6	19327.0	19207.8	19233.9	20208.0	20479.7	21056.8	19595.0
42.5°	17851.5	17930.9	18607.2	19361.7	20016.9	20175.7	20699.4	22064.4	22179.8	22284.0	20804.9
45°	17497.9	17581.0	18330.5	19549.1	20586.5	21257.8	22157.4	23492.6	23619.2	23502.6	21811.2
47.5°	17129.3	17214.9	18050.1	19473.4	21058.0	22344.8	23454.2	24755.9	24917.2	24556.1	22779.1
50°	16661.5	16794.3	17707.6	19313.3	21440.2	23517.5	24681.4	26056.3	26130.8	25609.6	23512.5
52.5°	16085.7	16232.2	17219.9	19039.1	21739.3	24336.4	25923.6	27467.2	27459.8	26840.6	24351.3
55°	15480.2	15613.0	16630.5	18607.2	21906.8	24966.8	26916.3	29022.1	29111.4	28592.7	25110.8
57.5°	14704.6	14825.0	15934.3	18026.5	21733.0	25501.6	28524.5	30869.8	30914.4	29812.5	25715.1
60°	13677.2	13854.6	14968.9	17288.2	21234.2	26120.9	30296.5	32813.0	32867.6	31012.5	26103.5
62.5°	12549.2	12619.9	13755.3	16151.5	20508.3	26598.6	31525.0	34333.1	34253.7	31950.6	26220.1
65°	11174.3	11230.1	12212.9	14689.7	19159.4	26336.8	31965.5	35114.9	35016.8	32540.0	25861.5
67.5°	9734.8	9907.3	10679.1	12662.1	17277.0	25128.1	31593.2	35339.5	35289.8	32584.7	25005.3
70°	7866.0	7926.8	8624.2	10315.6	14415.5	22708.4	30352.3	34763.7	34725.2	31587.0	23256.9
72.5°	5546.8	5487.2	5826.0	7152.5	10412.4	18063.7	25914.9	31528.7	31593.2	28256.4	20252.7
75°	2944.6	3058.8	3586.2	4379.1	5902.9	11612.3	20660.9	26093.6	26071.2	23627.9	16008.8
77.5°	1568.5	1566.0	1928.4	2267.1	2890.0	5335.9	13627.5	19678.1	19787.3	18306.9	10991.9
80°	753.2	781.8	804.1	922.0	1440.7	2465.7	5700.7	11411.3	12155.8	10918.6	5221.7
82.5°	603.1	605.6	608.0	582.0	595.6	1003.9	2196.4	3302.0	3421.1	2749.8	1683.9
85°	446.7	419.4	415.7	352.4	398.3	603.1	1108.1	1409.7	1340.2	1304.2	950.5
87.5°	179.9	168.8	163.8	153.9	153.9	227.1	390.9	510.0	508.8	464.1	318.9
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°	9401.0	9401.0	9401.0	9401.0	9401.0	9401.0	9401.0	9401.0	9401.0	9401.0	9401.0
2.5°	9439.5	9484.2	9588.4	9677.7	9711.3	9793.1	9870.1	9914.8	9945.8	9964.4	10048.8
5°	9537.5	9626.9	9793.1	9918.5	10040.1	10191.5	10289.5	10351.6	10386.3	10406.2	10467.0
7.5°	9687.7	9778.3	9954.5	10146.8	10258.5	10382.6	10445.9	10490.5	10512.9	10506.7	10555.1
10°	9821.7	9911.0	10087.2	10234.9	10298.2	10368.9	10402.4	10412.4	10413.6	10418.6	10467.0
12.5°	10004.1	10058.7	10153.0	10249.8	10236.1	10238.6	10267.2	10254.8	10226.2	10221.3	10253.5
15°	10200.2	10201.4	10208.8	10187.8	10102.1	10064.9	10025.2	9991.7	9913.5	9908.6	9959.4
17.5°	10445.9	10387.5	10252.3	10108.3	9904.8	9764.6	9623.1	9564.8	9469.3	9450.7	9475.5
20°	10762.3	10640.7	10311.8	9954.5	9573.5	9322.8	9151.6	8979.1	8846.3	8814.1	8837.7
22.5°	11216.5	10977.0	10387.5	9790.7	9201.2	8773.1	8440.6	8233.3	8010.0	7895.8	7907.0
25°	11764.9	11390.2	10519.1	9583.4	8763.2	8145.2	7605.5	7189.8	6937.8	6770.3	6815.0
27.5°	12483.4	11968.4	10676.7	9378.7	8218.5	7342.4	6559.4	5996.0	5739.1	5659.7	5607.6
30°	13316.1	12667.1	10842.9	9075.9	7630.3	6348.4	5345.8	4876.7	4582.6	4535.5	4495.8
32.5°	14430.4	13546.9	11154.4	8747.1	6927.9	5354.5	4266.2	3726.4	3659.4	3620.9	3612.2
35°	15867.3	14699.7	11480.8	8320.2	6012.1	4189.3	3227.6	2936.0	2903.7	2945.9	2949.6
37.5°	17392.4	15950.5	11871.6	7838.7	4958.6	3125.8	2469.4	2267.1	2303.1	2434.6	2464.4
40°	18424.8	16774.4	12226.5	7184.8	3656.9	2270.8	1796.8	1753.4	1951.9	2120.7	2155.4
42.5°	19415.1	17398.6	12370.5	6319.9	2608.4	1616.9	1450.6	1599.5	1877.5	2062.4	2087.2
45°	20260.1	18124.5	12008.1	5282.5	1768.3	1351.3	1389.8	1595.8	1904.8	2109.5	2128.1
47.5°	21064.2	18717.7	11513.0	4162.0	1394.8	1300.5	1388.6	1629.3	1965.6	2159.2	2170.3
50°	21832.3	19169.4	10668.0	3166.8	1306.7	1276.9	1399.7	1681.4	1999.1	2120.7	2115.7
52.5°	22401.9	19402.6	9768.3	2556.2	1271.9	1258.3	1429.5	1747.2	2005.3	2078.5	2073.5
55°	22820.1	19358.0	9177.7	2093.4	1243.4	1250.8	1477.9	1796.8	2064.9	2175.3	2171.6
57.5°	22858.5	19155.7	8506.3	1768.3	1208.6	1249.6	1530.0	1866.3	2362.7	2566.2	2504.1
60°	22812.6	18820.7	7836.3	1552.4	1170.2	1257.0	1584.6	2074.8	2792.0	2952.1	2908.7
62.5°	22586.8	18196.5	6832.4	1409.7	1136.7	1284.3	1625.6	2239.8	2770.9	2789.5	2727.5
65°	21889.4	17361.4	5514.5	1265.7	1103.2	1302.9	1659.1	2283.2	2545.1	2485.5	2454.5
67.5°	20509.5	15496.3	4253.8	1134.2	1059.7	1299.2	1758.3	2221.2	2459.5	2416.0	2376.3
70°	18548.9	13376.9	2953.3	998.9	986.5	1275.6	1733.5	2242.3	2418.5	2351.5	2298.1
72.5°	15496.3	10494.3	1878.7	888.5	877.3	1219.8	1671.5	2228.6	2391.2	2361.4	2288.2
75°	11668.1	7325.0	1193.7	768.1	780.5	1118.0	1572.2	2155.4	2377.6	2284.5	2144.3
77.5°	7346.1	3616.0	928.2	652.7	671.3	964.2	1358.8	1882.4	2282.0	2226.2	2046.2
80°	2778.4	1468.0	725.9	529.9	546.0	749.5	1114.3	1548.6	2100.8	2192.7	2115.7
82.5°	1279.4	918.3	544.8	425.6	431.8	546.0	831.4	1146.6	1778.2	2012.7	2205.1
85°	747.0	601.8	363.6	284.2	295.3	322.6	467.8	699.9	1152.8	1535.0	1717.4
87.5°	254.4	209.7	141.5	120.4	116.6	132.8	112.9	229.6	342.5	603.1	688.7
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)