

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: P721839

Luminaire Tested: **CST-CA8-400-727-U-T2**

Issue Date: 10/25/2023

Test Information

Test Method: LM-79-08
Report Number: P721839
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-10)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 10/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA8-400-727-U-T2
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 2700K CCT, 70 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 51055 lumens
Efficiency: N/A
Efficacy: 127.4 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type II - Short
BUG Rating: B4 - U0 - G5

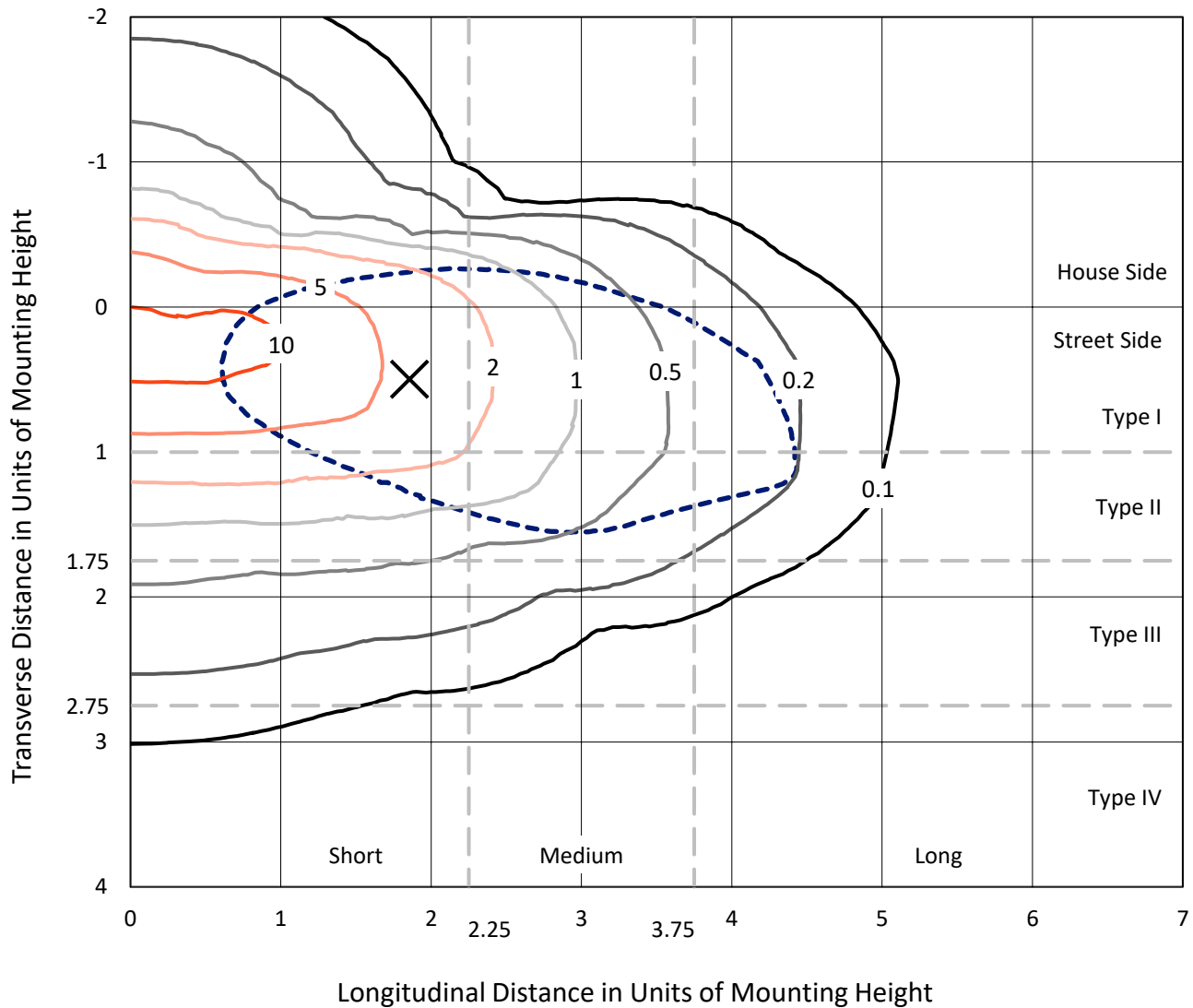
Input Watts (W): 400.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

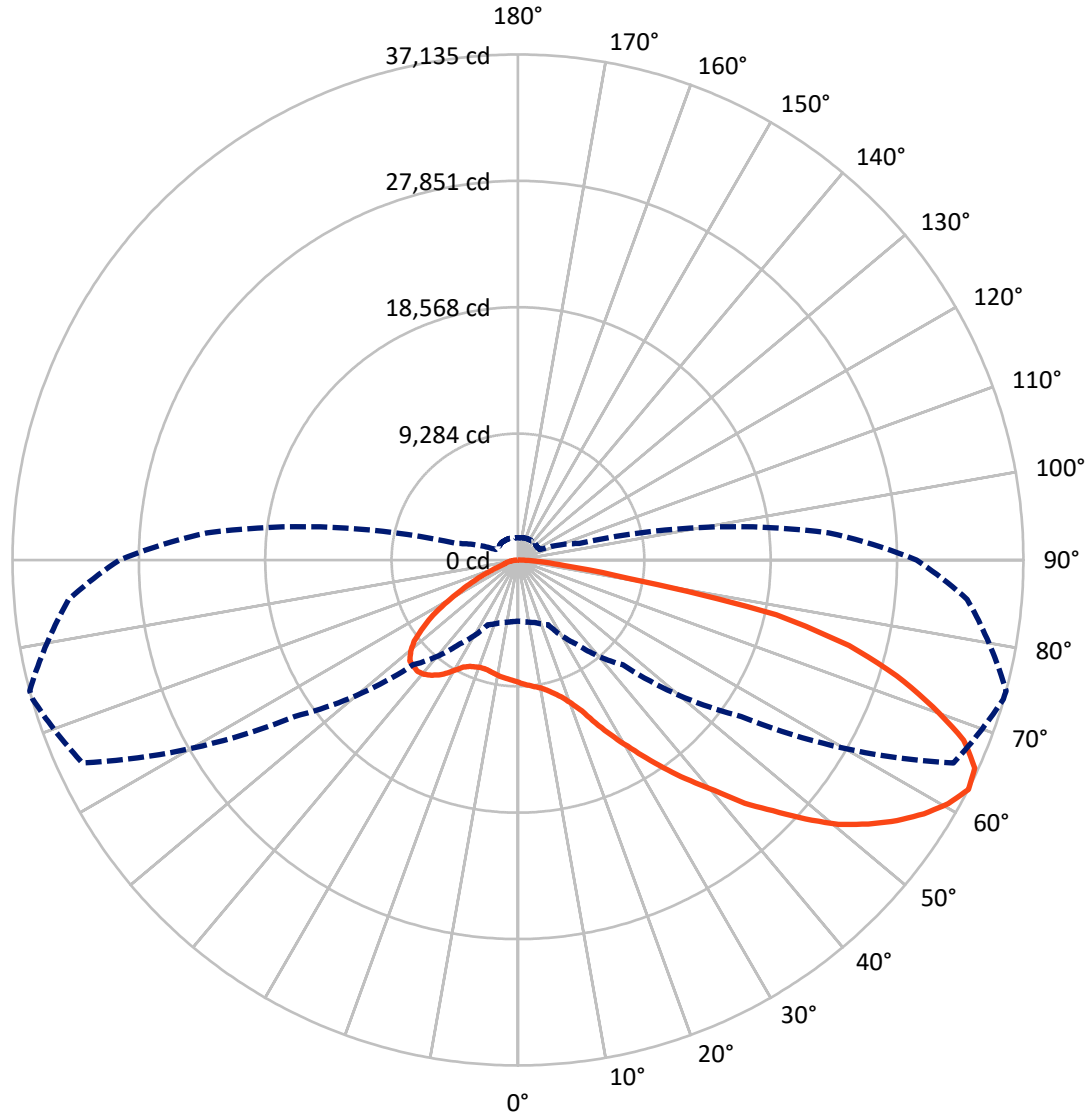
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 11.7 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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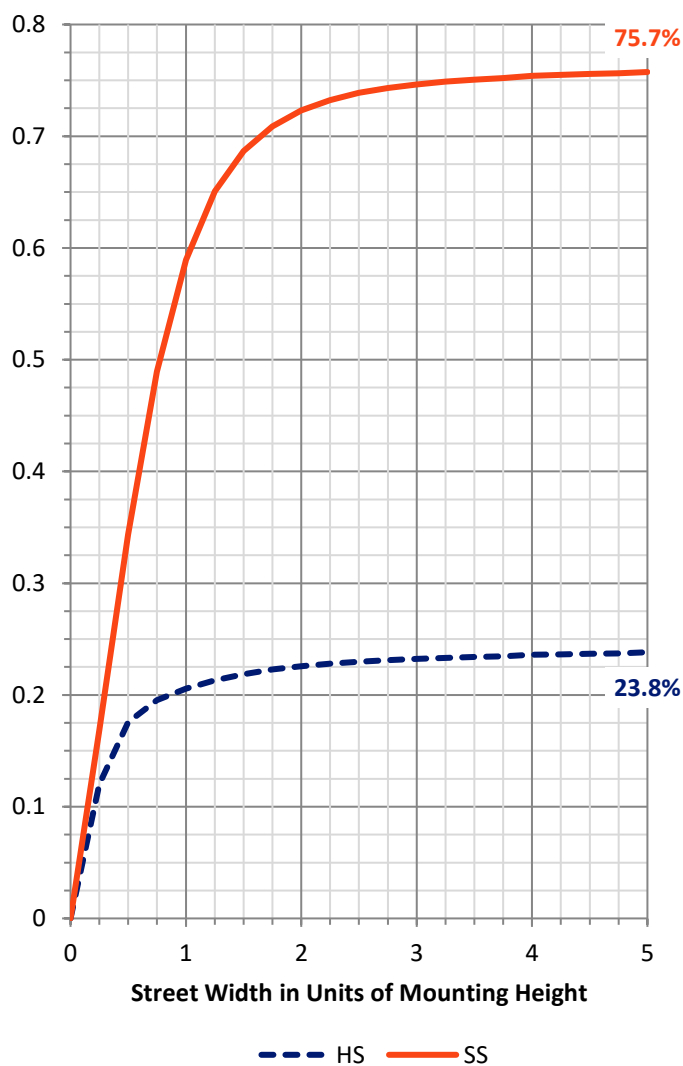
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	12369.7	0.0	12369.7
	% Fixture	24.2	0.0	24.2
Street Side	Lumens	38685.3	0.0	38685.3
	% Fixture	75.8	0.0	75.8
Total	Lumens	51055.0	0.0	51055.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	865.8	1.7
10°-20°	2627.7	5.1
20°-30°	4532.1	8.9
30°-40°	6682.6	13.1
40°-50°	8809.2	17.3
50°-60°	10367.6	20.3
60°-70°	10314.8	20.2
70°-80°	6015.3	11.8
80°-90°	839.9	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°	51055.0	100.0
0°-180°	51055.0	100.0

Coefficient of Utilization

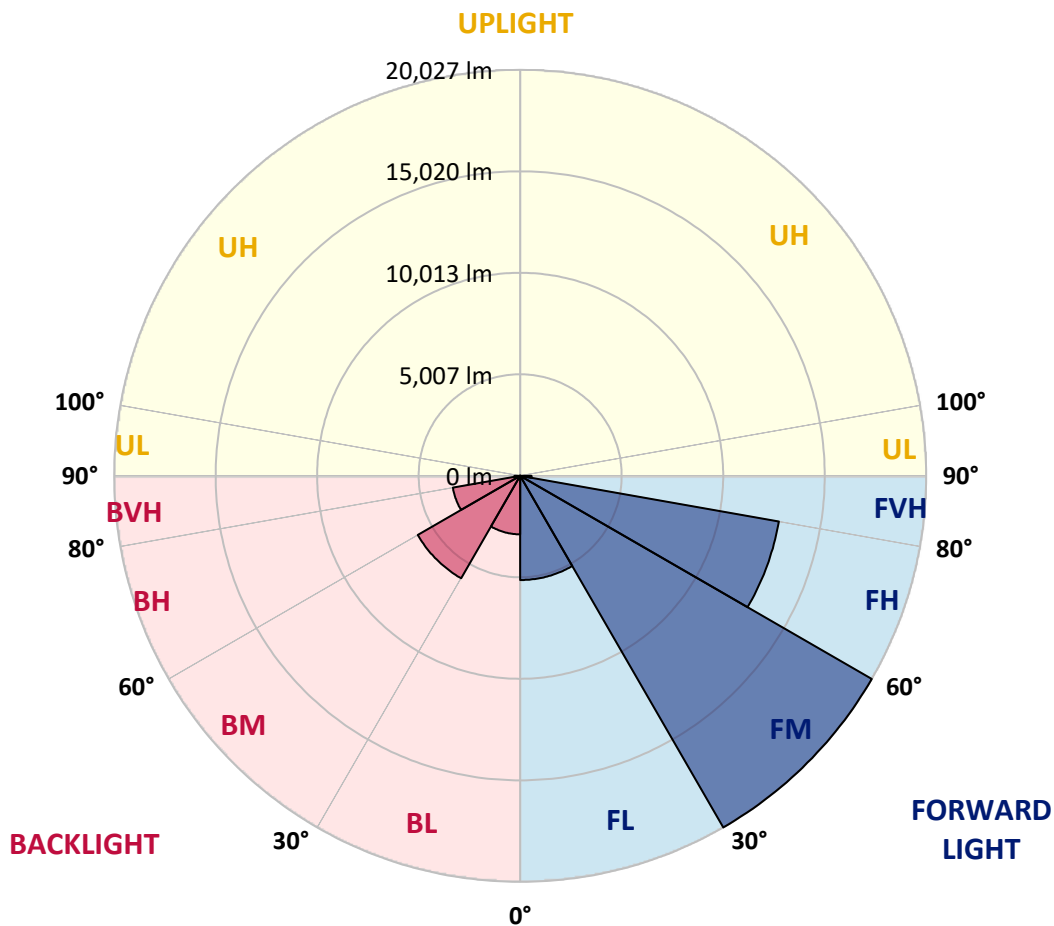


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	5141.0	10.1			
FM (30°-60°)	20026.8	39.2			
FH (60°-80°)	12960.1	25.4			G5
FVH (80°-90°)	557.4	1.1			G4/750
BL (0°-30°)	2884.6	5.6	B4/5000		
BM (30°-60°)	5832.7	11.4	B4/8500		
BH (60°-80°)	3369.9	6.6	B4/5000		G4/5000
BVH (80°-90°)	282.5	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 II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	8999.8	8999.8	8999.8	8999.8	8999.8	8999.8	8999.8	8999.8	8999.8	8999.8	8999.8
2.5°	9492.6	9453.8	9459.0	9431.7	9390.7	9360.2	9280.4	9194.2	9142.7	9138.5	9065.0
5°	9969.7	9982.3	9985.5	9898.2	9812.1	9714.4	9592.5	9426.4	9290.9	9269.9	9127.0
7.5°	10404.7	10403.7	10397.4	10349.0	10309.1	10164.1	9920.3	9659.7	9439.1	9419.1	9186.9
10°	10850.2	10847.1	10784.0	10703.1	10612.8	10479.3	10270.2	9958.1	9600.9	9574.6	9242.6
12.5°	11335.7	11301.0	11261.1	11163.4	11056.2	10825.0	10605.4	10266.0	9893.0	9845.7	9341.3
15°	11736.0	11700.3	11644.6	11578.4	11466.0	11289.5	11056.2	10653.7	10253.4	10207.2	9563.0
17.5°	12132.2	12115.4	12075.4	12005.0	11918.9	11766.5	11552.1	11210.6	10686.3	10629.6	9931.9
20°	12456.9	12416.9	12387.5	12420.1	12427.4	12315.0	12197.3	11910.5	11332.5	11245.3	10384.7
22.5°	12641.8	12633.4	12794.2	12913.9	12962.3	12987.5	12950.7	12719.6	12196.3	12043.9	11015.2
25°	12817.3	12803.6	13022.2	13321.6	13606.4	13751.4	13849.1	13879.6	13399.4	13261.7	12029.2
27.5°	12822.5	12860.4	13177.7	13680.0	14113.9	14556.3	15024.9	15078.5	14657.2	14547.9	13182.9
30°	12850.9	12867.7	13181.9	13758.8	14662.4	15371.7	15982.2	16283.8	15920.2	15869.8	14453.3
32.5°	12490.5	12512.5	13001.2	13896.4	15076.4	16215.5	17025.6	17473.2	17382.9	17318.8	15808.8
35°	12115.4	12134.3	12701.7	13701.0	15384.3	16981.5	17968.1	18847.6	19012.6	18964.3	17320.9
37.5°	11526.9	11590.0	12184.7	13467.7	15437.9	17544.7	18867.6	20216.8	20714.8	20569.8	18920.1
40°	10888.1	10934.3	11626.8	12979.1	15378.0	17914.5	19751.3	21732.0	22335.1	22257.4	20507.8
42.5°	10081.1	10205.1	10898.6	12354.9	15070.1	18144.7	20568.8	23450.0	24326.3	24430.4	21966.3
45°	9401.2	9398.1	10042.2	11451.3	14512.2	18199.3	21321.1	25186.9	26468.9	26273.4	23894.5
47.5°	8601.6	8634.2	9306.7	10551.8	13689.4	18025.9	21907.5	27240.1	28537.8	28431.7	25475.9
50°	6751.2	6985.5	8259.0	9778.4	12576.6	17542.6	22396.1	29239.7	30478.6	30526.9	26913.3
52.5°	5820.2	5910.6	6613.5	8999.8	11588.9	16731.4	22932.0	31489.4	32354.2	32231.3	28545.2
55°	5447.2	5495.5	5832.8	7601.3	10633.8	15475.7	23189.4	33543.7	33816.9	33796.9	29888.1
57.5°	5177.1	5213.9	5453.5	6343.5	9585.1	13863.8	22971.9	34880.3	35304.8	35174.5	31155.3
60°	4787.3	4816.7	5174.0	5716.2	8506.0	12236.2	21634.3	35486.5	36383.9	36335.6	32275.4
62.5°	4494.1	4544.6	4744.2	5252.8	7584.4	10895.4	20040.3	35297.4	37092.1	37135.2	33130.7
65°	4184.2	4229.3	4398.5	4843.0	6749.1	10013.8	18321.2	34349.6	36766.4	36880.9	33269.4
67.5°	3801.7	3836.4	4037.1	4421.6	5772.9	9132.2	16382.5	32673.6	34959.1	35327.9	31888.7
70°	3320.4	3333.0	3578.9	3840.6	4793.6	7803.0	13026.4	29930.1	32343.7	32351.1	29281.8
72.5°	2642.7	2653.2	2718.3	2916.9	3601.0	6175.4	9574.6	25008.3	29164.1	29110.5	26024.4
75°	1796.8	1889.3	2115.2	2304.3	2597.5	4336.5	5954.7	16849.1	24708.8	25129.1	21376.8
77.5°	1419.6	1428.0	1521.5	1694.9	1948.1	3239.5	3337.2	9322.4	18421.0	19420.3	16802.8
80°	989.8	1004.5	954.1	996.1	1358.6	2217.1	1950.2	4057.0	7682.2	8202.3	10088.4
82.5°	471.8	488.6	561.1	521.2	675.6	942.5	1029.8	2096.3	3318.3	3405.5	3927.8
85°	311.0	311.0	312.1	295.3	394.0	410.9	467.6	894.2	1620.3	1674.9	1665.5
87.5°	99.8	110.3	107.2	125.0	151.3	136.6	142.9	280.6	555.9	550.6	460.2
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°	8999.8	8999.8	8999.8	8999.8	8999.8	8999.8	8999.8	8999.8	8999.8	8999.8	8999.8
2.5°	9012.4	8969.4	8868.5	8780.2	8693.0	8626.8	8570.1	8494.4	8458.7	8426.1	8494.4
5°	9038.7	8962.0	8781.3	8600.5	8434.5	8312.6	8238.0	8183.4	8134.0	8134.0	8157.1
7.5°	9069.2	8965.2	8706.7	8450.3	8201.2	8062.5	7956.4	7887.1	7847.1	7849.2	7898.6
10°	9089.1	8929.4	8621.6	8275.9	8004.8	7782.0	7678.0	7578.1	7502.5	7457.3	7507.7
12.5°	9112.3	8917.9	8507.0	8117.2	7787.2	7535.1	7318.6	7244.0	7170.4	7113.7	7141.0
15°	9255.2	8962.0	8411.4	7915.4	7533.0	7218.8	6935.1	6798.5	6777.5	6738.6	6748.0
17.5°	9488.4	9080.7	8349.4	7668.5	7227.2	6856.3	6496.9	6320.4	6278.3	6258.4	6268.9
20°	9836.2	9306.7	8368.3	7495.1	6882.5	6467.5	6003.0	5796.0	5656.3	5664.7	5705.7
22.5°	10367.9	9671.3	8471.3	7304.9	6509.5	5965.2	5496.6	5215.0	5074.2	5043.7	5089.9
25°	11214.9	10258.7	8584.8	7123.2	6149.1	5423.0	4903.9	4599.2	4418.5	4406.9	4458.4
27.5°	12300.3	11159.2	8831.7	6965.5	5701.5	4771.5	4255.6	3995.0	3802.7	3779.6	3762.8
30°	13411.0	12159.5	9278.3	6726.0	5179.2	4099.0	3650.4	3446.5	3231.1	3143.9	3162.8
32.5°	14587.8	13091.5	9801.6	6557.8	4595.0	3507.5	3117.6	2923.2	2725.7	2599.6	2570.2
35°	15773.1	14018.3	10241.8	6306.7	4041.3	3037.8	2664.7	2464.1	2291.7	2188.8	2181.4
37.5°	17160.1	14982.9	10594.9	6039.8	3466.5	2670.0	2221.3	2105.7	2022.7	1932.4	1941.8
40°	18549.2	16107.2	10877.6	5598.5	2989.4	2274.9	1890.3	1913.4	1931.3	1855.7	1849.4
42.5°	19703.0	17051.9	11006.8	5026.9	2567.0	1931.3	1744.3	1849.4	1927.1	1877.7	1871.4
45°	20874.6	17847.3	10956.4	4317.6	2216.1	1767.4	1732.7	1839.9	1939.7	1928.2	1922.9
47.5°	22148.1	18889.7	10869.1	3509.6	1964.9	1751.6	1757.9	1808.4	1934.5	1955.5	1947.1
50°	23705.3	19849.0	10353.2	2733.0	1843.0	1776.8	1814.7	1788.4	1895.6	1938.7	1946.0
52.5°	25255.2	20587.7	9662.9	2368.4	1794.7	1801.0	1893.5	1804.2	1851.5	1889.3	1924.0
55°	26451.0	21340.1	8545.9	2148.8	1779.0	1812.6	1915.6	1837.8	1836.7	1836.7	1848.3
57.5°	27675.1	22347.7	7428.9	2007.0	1751.6	1825.2	1889.3	1844.1	1829.4	1808.4	1794.7
60°	28527.3	22720.8	5993.6	1913.4	1723.3	1807.3	1815.7	1809.4	1764.2	1744.3	1728.5
62.5°	29283.9	22923.6	4666.5	1806.3	1684.4	1765.3	1721.2	1707.5	1681.2	1632.9	1641.3
65°	29081.1	22488.5	3555.8	1685.4	1657.1	1714.9	1638.1	1605.6	1607.7	1557.2	1574.1
67.5°	27776.0	20537.3	2553.4	1500.5	1582.5	1615.0	1543.6	1519.4	1483.7	1458.5	1481.6
70°	25139.6	18205.6	1722.2	1245.2	1412.2	1482.6	1435.3	1393.3	1337.6	1320.8	1346.0
72.5°	21159.3	15197.3	1188.4	1001.4	1218.9	1310.3	1292.4	1249.4	1209.4	1250.4	1299.8
75°	17382.9	11243.2	969.9	820.7	937.3	1091.7	1144.3	1156.9	1276.7	1676.0	1717.0
77.5°	12512.5	6969.7	872.1	667.2	748.1	873.2	978.3	1021.3	1559.3	1493.1	1490.0
80°	7295.5	4062.3	665.1	526.4	605.2	639.9	765.0	1198.9	1345.0	1153.7	1125.4
82.5°	3328.8	1792.6	463.4	421.4	420.3	423.5	521.2	1153.7	1031.9	908.9	875.3
85°	1224.1	630.5	281.6	243.8	279.5	242.7	341.5	845.9	597.9	588.4	490.7
87.5°	301.6	129.2	95.6	79.9	65.1	62.0	104.0	278.5	146.1	133.4	128.2
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)