

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: P721919

Luminaire Tested: **CST-CA8-430-740-U-T2**

Issue Date: 10/25/2023

Test Information

Test Method: LM-79-08
Report Number: P721919
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-CA8-430-740-U-T2
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 4000K CCT, 70 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 64731 lumens
Efficiency: N/A
Efficacy: 149.1 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type II - Short
BUG Rating: B4 - U0 - G5

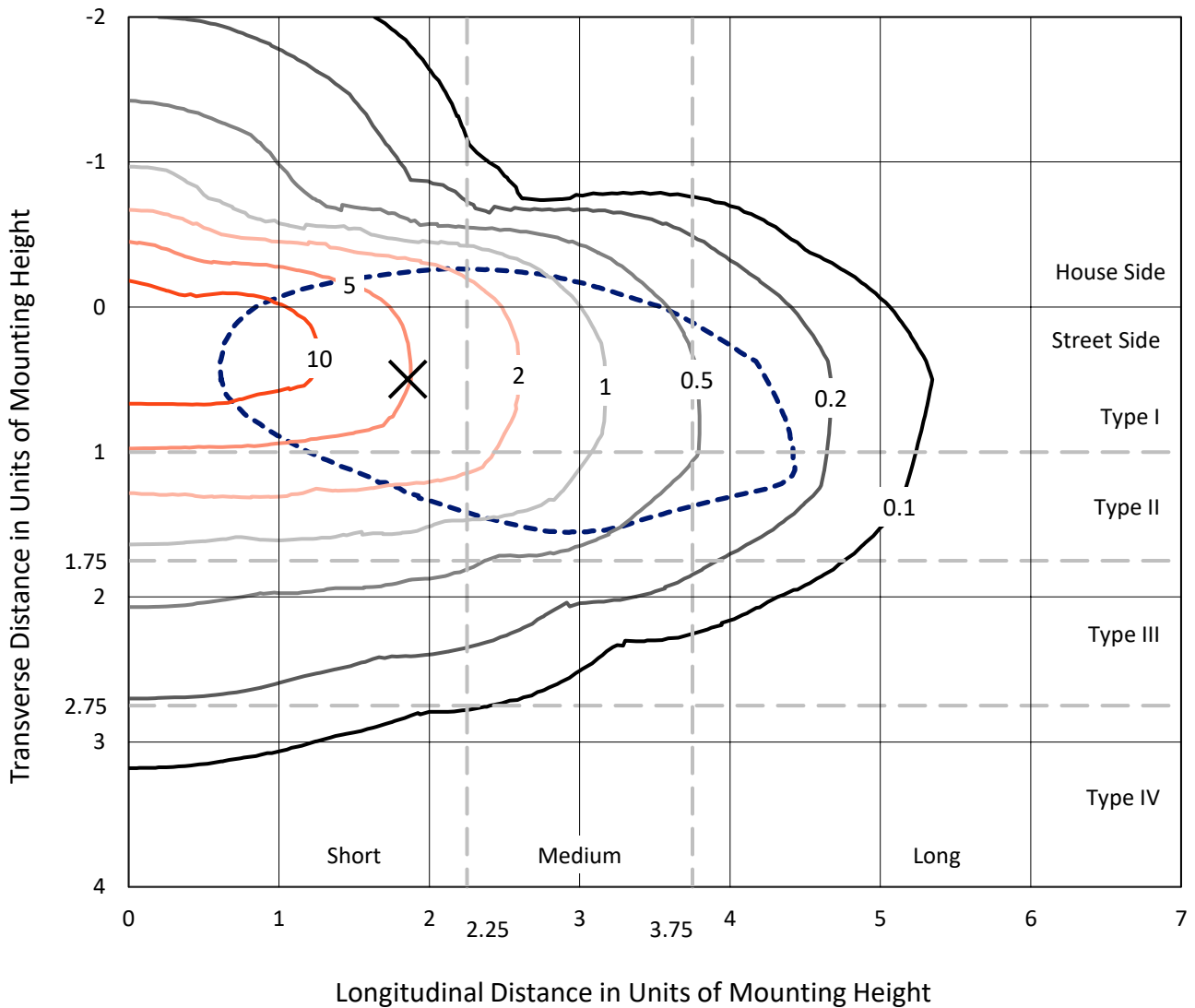
Input Watts (W): 434.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

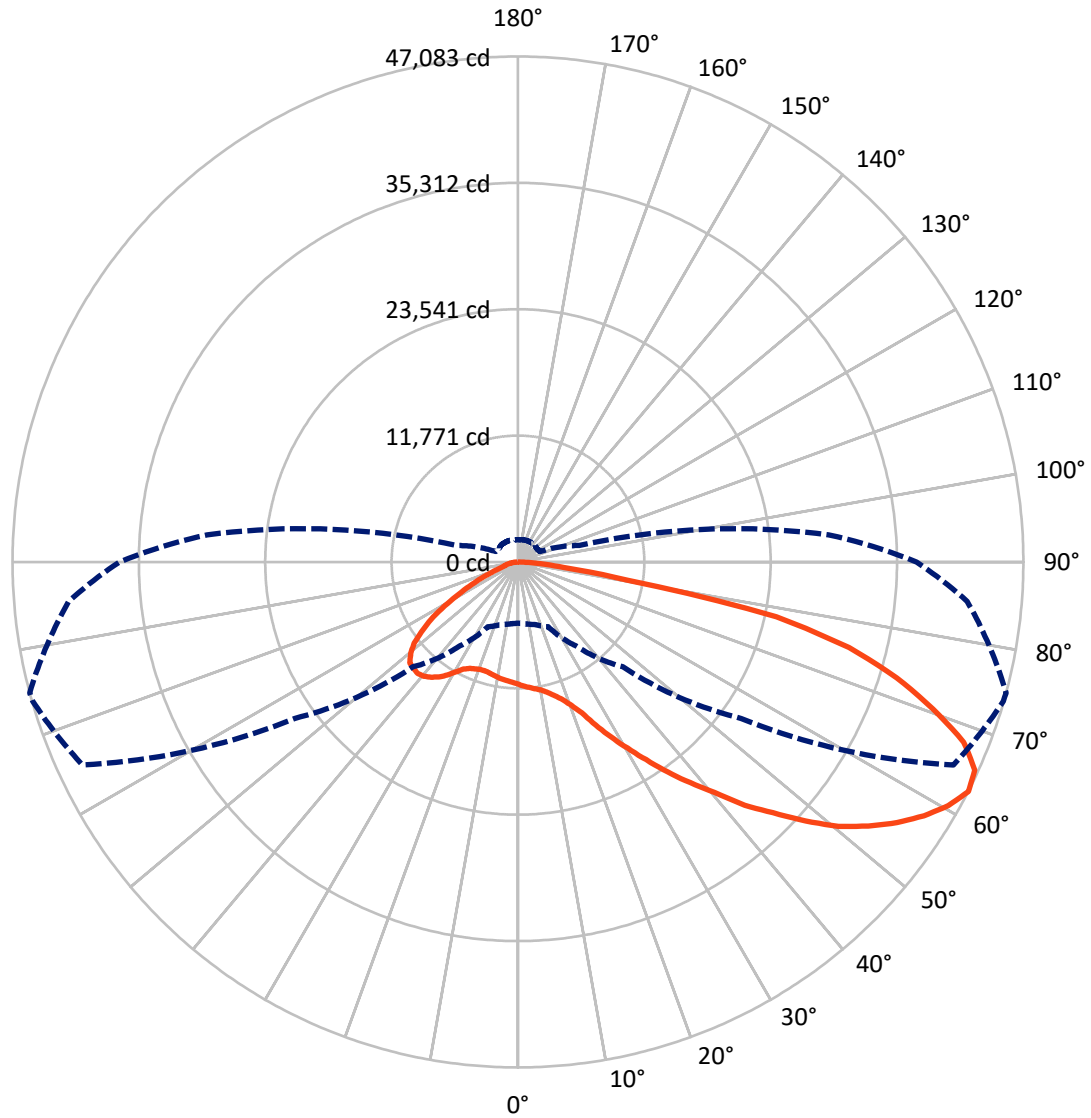
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 14.9 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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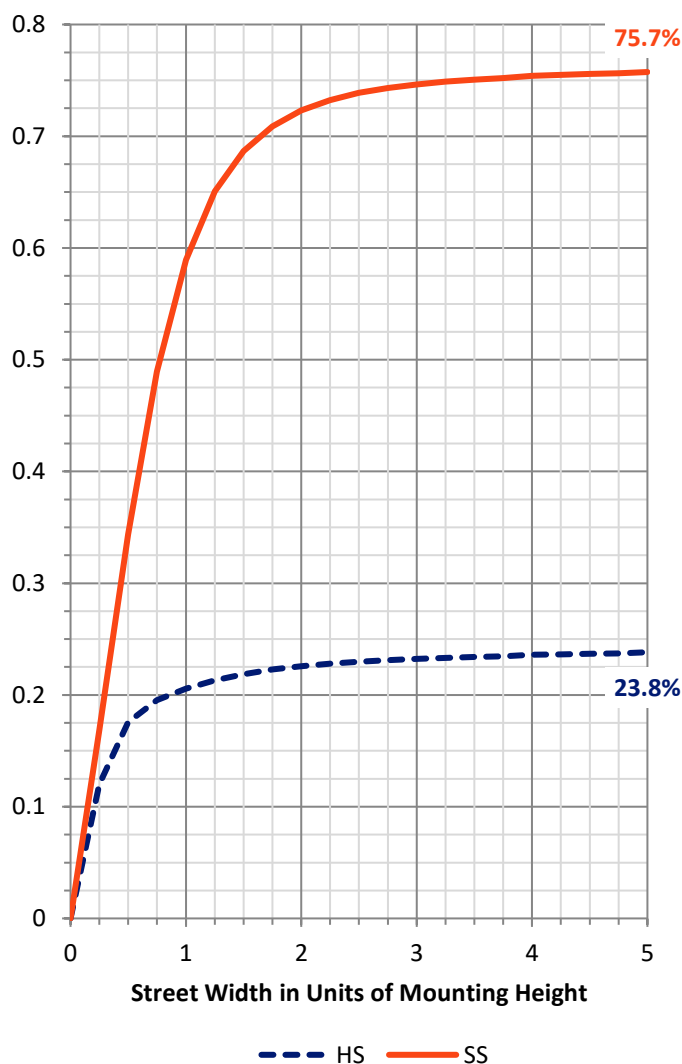
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	15683.2	0.0	15683.2
	% Fixture	24.2	0.0	24.2
Street Side	Lumens	49047.8	0.0	49047.8
	% Fixture	75.8	0.0	75.8
Total	Lumens	64731.0	0.0	64731.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1097.7	1.7
10°-20°	3331.5	5.1
20°-30°	5746.1	8.9
30°-40°	8472.7	13.1
40°-50°	11168.9	17.3
50°-60°	13144.8	20.3
60°-70°	13077.8	20.2
70°-80°	7626.6	11.8
80°-90°	1064.9	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°	64731.0	100.0
0°-180°	64731.0	100.0

Coefficient of Utilization



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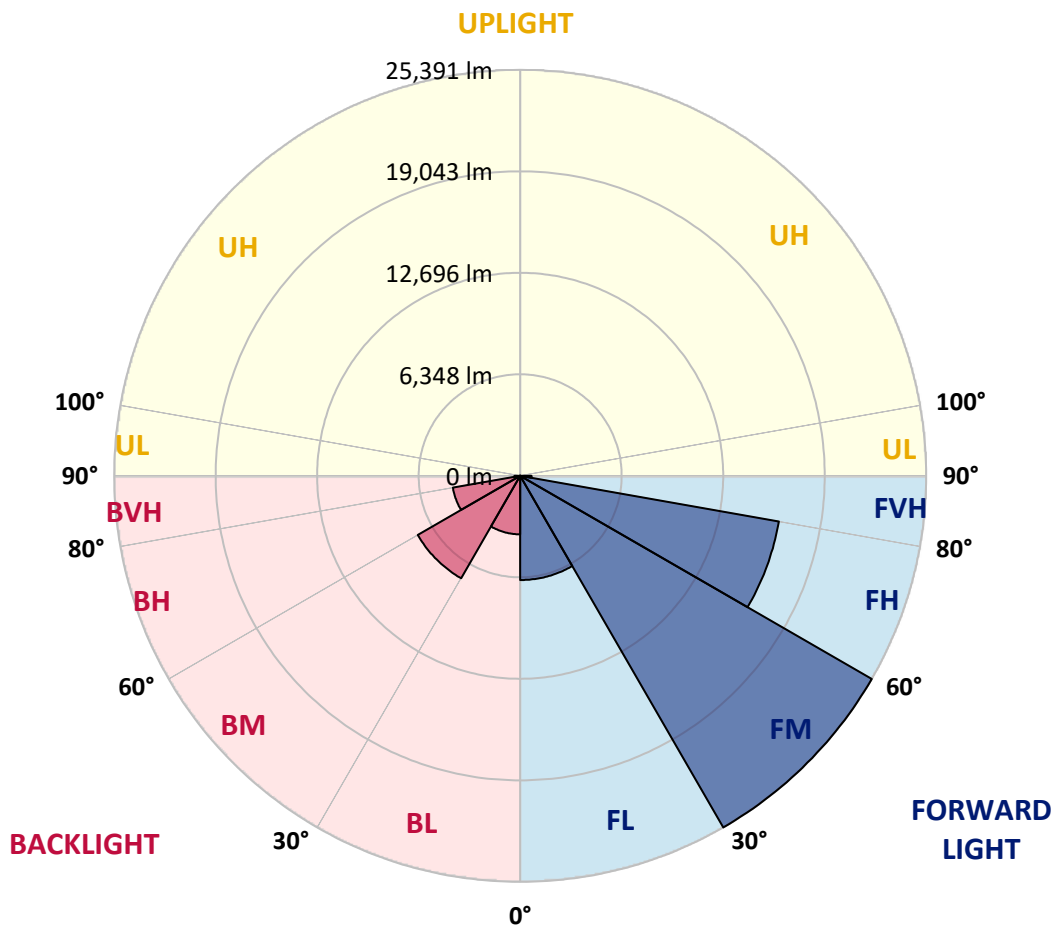
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	6518.1	10.1			
FM (30°-60°)	25391.3	39.2			
FH (60°-80°)	16431.7	25.4			G5
FVH (80°-90°)	706.7	1.1			G4/750
BL (0°-30°)	3657.2	5.6	B4/5000		
BM (30°-60°)	7395.1	11.4	B4/8500		
BH (60°-80°)	4272.6	6.6	B4/5000		G4/5000
BVH (80°-90°)	358.2	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°	11410.6	11410.6	11410.6	11410.6	11410.6	11410.6	11410.6	11410.6	11410.6	11410.6	11410.6
2.5°	12035.4	11986.1	11992.8	11958.1	11906.2	11867.6	11766.3	11657.1	11591.8	11586.5	11493.2
5°	12640.3	12656.2	12660.2	12549.7	12440.4	12316.5	12162.0	11951.5	11779.6	11753.0	11571.8
7.5°	13191.8	13190.5	13182.5	13121.2	13070.6	12886.7	12577.6	12247.2	11967.5	11942.2	11647.7
10°	13756.7	13752.7	13672.7	13570.2	13455.6	13286.4	13021.3	12625.6	12172.6	12139.3	11718.3
12.5°	14372.2	14328.2	14277.6	14153.7	14017.8	13724.7	13446.3	13015.9	12543.0	12483.0	11843.6
15°	14879.7	14834.4	14763.8	14679.9	14537.4	14313.5	14017.8	13507.5	13000.0	12941.3	12124.7
17.5°	15382.0	15360.7	15310.1	15220.8	15111.5	14918.4	14646.6	14213.6	13548.8	13476.9	12592.3
20°	15793.7	15743.0	15705.7	15747.0	15756.3	15613.8	15464.6	15100.9	14368.2	14257.6	13166.5
22.5°	16028.1	16017.5	16221.3	16373.2	16434.5	16466.4	16419.8	16126.7	15463.3	15270.1	13965.8
25°	16250.6	16233.3	16510.4	16890.1	17251.1	17435.0	17558.9	17597.5	16988.7	16814.1	15251.4
27.5°	16257.3	16305.2	16707.6	17344.4	17894.6	18455.5	19049.6	19117.6	18583.4	18444.8	16714.2
30°	16293.2	16314.6	16712.9	17444.3	18590.0	19489.3	20263.3	20645.7	20184.7	20120.8	18324.9
32.5°	15836.3	15864.3	16483.7	17618.8	19114.9	20559.1	21586.2	22153.7	22039.2	21957.9	20043.5
35°	15360.7	15384.7	16104.1	17371.0	19505.3	21530.3	22781.2	23896.3	24105.5	24044.2	21960.6
37.5°	14614.6	14694.6	15448.6	17075.3	19573.2	22244.3	23921.6	25632.2	26263.7	26079.8	23988.2
40°	13804.6	13863.2	14741.2	16455.8	19497.3	22713.3	25042.0	27553.3	28318.0	28219.4	26001.2
42.5°	12781.5	12938.7	13817.9	15664.4	19106.9	23005.0	26078.5	29731.5	30842.6	30974.5	27850.4
45°	11919.5	11915.5	12732.2	14518.7	18399.5	23074.3	27032.4	31933.7	33559.0	33311.2	30295.0
47.5°	10905.7	10947.0	11799.6	13378.3	17356.4	22854.5	27775.8	34536.9	36182.2	36047.6	32300.0
50°	8559.6	8856.7	10471.4	12397.8	15945.5	22241.7	28395.3	37072.1	38642.8	38704.1	34122.5
52.5°	7379.3	7493.8	8385.1	11410.6	14693.2	21213.2	29074.7	39924.4	41020.9	40865.0	36191.5
55°	6906.3	6967.6	7395.2	9637.4	13482.2	19621.2	29401.1	42529.0	42875.3	42850.0	37894.1
57.5°	6563.9	6610.6	6914.3	8042.7	12152.7	17577.5	29125.3	44223.6	44761.8	44596.6	39500.8
60°	6069.7	6107.0	6559.9	7247.4	10784.4	15513.9	27429.4	44992.3	46130.0	46068.7	40920.9
62.5°	5698.0	5761.9	6015.0	6659.8	9616.1	13813.9	25408.4	44752.5	47027.9	47082.5	42005.4
65°	5305.0	5362.2	5576.7	6140.3	8556.9	12696.2	23228.9	43550.8	46614.9	46760.1	42181.2
67.5°	4820.0	4864.0	5118.4	5606.0	7319.3	11578.5	20770.9	41425.9	44323.5	44791.1	40430.7
70°	4209.9	4225.9	4537.6	4869.3	6077.7	9893.2	16515.7	37947.4	41007.5	41016.9	37125.4
72.5°	3350.6	3363.9	3446.5	3698.3	4565.6	7829.5	12139.3	31707.2	36976.2	36908.3	32995.5
75°	2278.1	2395.4	2681.8	2921.6	3293.3	5498.1	7549.8	21362.4	31327.5	31860.4	27103.0
77.5°	1799.9	1810.5	1929.1	2148.9	2470.0	4107.3	4231.2	11819.6	23355.4	24622.4	21303.8
80°	1255.0	1273.6	1209.7	1263.0	1722.6	2811.0	2472.6	5143.8	9740.0	10399.4	12790.8
82.5°	598.2	619.5	711.4	660.8	856.6	1195.0	1305.6	2657.8	4207.2	4317.8	4979.9
85°	394.3	394.3	395.7	374.4	499.6	520.9	592.8	1133.7	2054.3	2123.6	2111.6
87.5°	126.6	139.9	135.9	158.5	191.8	173.2	181.2	355.7	704.8	698.1	583.5
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°	11410.6	11410.6	11410.6	11410.6	11410.6	11410.6	11410.6	11410.6	11410.6	11410.6	11410.6
2.5°	11426.6	11372.0	11244.1	11132.2	11021.6	10937.7	10865.7	10769.8	10724.5	10683.2	10769.8
5°	11459.9	11362.6	11133.5	10904.3	10693.9	10539.3	10444.7	10375.5	10312.8	10312.8	10342.1
7.5°	11498.5	11366.6	11038.9	10713.8	10398.1	10222.2	10087.7	9999.8	9949.1	9951.8	10014.4
10°	11523.8	11321.3	10931.0	10492.7	10149.0	9866.5	9734.6	9608.1	9512.2	9454.9	9518.8
12.5°	11553.1	11306.7	10785.8	10291.5	9873.2	9553.5	9279.0	9184.4	9091.2	9019.2	9053.9
15°	11734.3	11362.6	10664.5	10035.7	9550.8	9152.5	8792.8	8619.6	8592.9	8543.6	8555.6
17.5°	12030.1	11513.2	10585.9	9722.7	9163.1	8692.8	8237.2	8013.4	7960.1	7934.8	7948.1
20°	12471.1	11799.6	10609.9	9502.8	8726.1	8199.9	7611.1	7348.6	7171.4	7182.1	7234.0
22.5°	13145.2	12261.9	10740.5	9261.7	8253.2	7563.1	6968.9	6611.9	6433.4	6394.7	6453.3
25°	14218.9	13006.6	10884.4	9031.2	7796.2	6875.7	6217.5	5831.2	5602.1	5587.4	5652.7
27.5°	15595.1	14148.3	11197.4	8831.4	7228.7	6049.7	5395.6	5065.2	4821.4	4792.1	4770.7
30°	17003.3	15416.6	11763.6	8527.6	6566.6	5197.1	4628.2	4369.7	4096.6	3986.0	4010.0
32.5°	18495.4	16598.3	12427.1	8314.5	5825.9	4447.0	3952.7	3706.3	3455.8	3296.0	3258.6
35°	19998.2	17773.4	12985.3	7996.1	5123.8	3851.5	3378.5	3124.1	2905.6	2775.0	2765.7
37.5°	21756.7	18996.3	13432.9	7657.7	4395.0	3385.2	2816.3	2669.8	2564.6	2450.0	2462.0
40°	23518.0	20421.8	13791.3	7098.2	3790.2	2884.3	2396.7	2426.0	2448.6	2352.7	2344.7
42.5°	24980.7	21619.5	13955.2	6373.4	3254.7	2448.6	2211.5	2344.7	2443.3	2380.7	2372.7
45°	26466.2	22628.0	13891.2	5474.2	2809.7	2240.8	2196.9	2332.7	2459.3	2444.7	2438.0
47.5°	28080.9	23949.6	13780.6	4449.7	2491.3	2220.8	2228.8	2292.8	2452.6	2479.3	2468.6
50°	30055.2	25165.9	13126.5	3465.1	2336.7	2252.8	2300.8	2267.5	2403.4	2458.0	2467.3
52.5°	32020.3	26102.5	12251.2	3002.9	2275.5	2283.5	2400.7	2287.4	2347.4	2395.4	2439.3
55°	33536.4	27056.4	10835.1	2724.4	2255.5	2298.1	2428.7	2330.1	2328.7	2328.7	2343.4
57.5°	35088.4	28334.0	9418.9	2544.6	2220.8	2314.1	2395.4	2338.1	2319.4	2292.8	2275.5
60°	36168.9	28806.9	7599.1	2426.0	2184.9	2291.4	2302.1	2294.1	2236.8	2211.5	2191.5
62.5°	37128.1	29064.0	5916.5	2290.1	2135.6	2238.2	2182.2	2164.9	2131.6	2070.3	2081.0
65°	36870.9	28512.5	4508.3	2136.9	2100.9	2174.2	2077.0	2035.7	2038.3	1974.4	1995.7
67.5°	35216.3	26038.5	3237.3	1902.4	2006.3	2047.6	1957.1	1926.4	1881.1	1849.1	1878.5
70°	31873.7	23082.3	2183.5	1578.7	1790.5	1879.8	1819.8	1766.5	1695.9	1674.6	1706.6
72.5°	26827.2	19268.1	1506.8	1269.6	1545.4	1661.3	1638.6	1584.0	1533.4	1585.4	1648.0
75°	22039.2	14254.9	1229.7	1040.5	1188.4	1384.2	1450.8	1466.8	1618.7	2124.9	2176.9
77.5°	15864.3	8836.7	1105.8	846.0	948.6	1107.1	1240.3	1294.9	1977.0	1893.1	1889.1
80°	9249.7	5150.4	843.3	667.4	767.4	811.3	969.9	1520.1	1705.3	1462.8	1426.8
82.5°	4220.5	2272.8	587.5	534.2	532.9	536.9	660.8	1462.8	1308.3	1152.4	1109.8
85°	1552.1	799.3	357.0	309.1	354.4	307.7	433.0	1072.4	758.0	746.1	622.2
87.5°	382.4	163.9	121.2	101.2	82.6	78.6	131.9	353.0	185.2	169.2	162.5
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)