

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: P721881

Luminaire Tested: **CST-CA8-400-760-U-T3**

Issue Date: 10/25/2023

Test Information

Test Method: LM-79-08
Report Number: P721881
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-CA8-400-760-U-T3
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 5700K CCT, 70 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 60665 lumens
Efficiency: N/A
Efficacy: 151.4 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U0 - G5

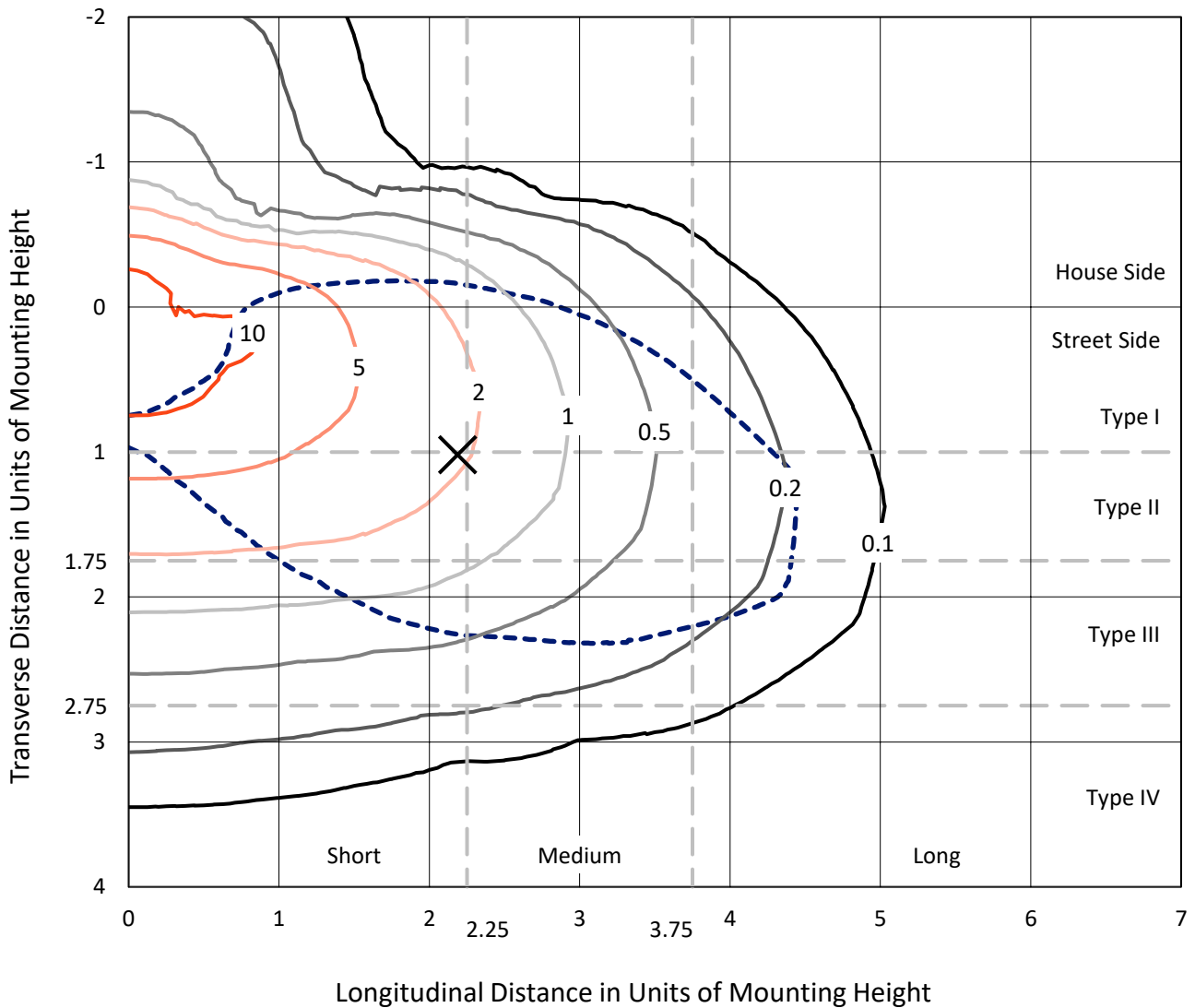
Input Watts (W): 400.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

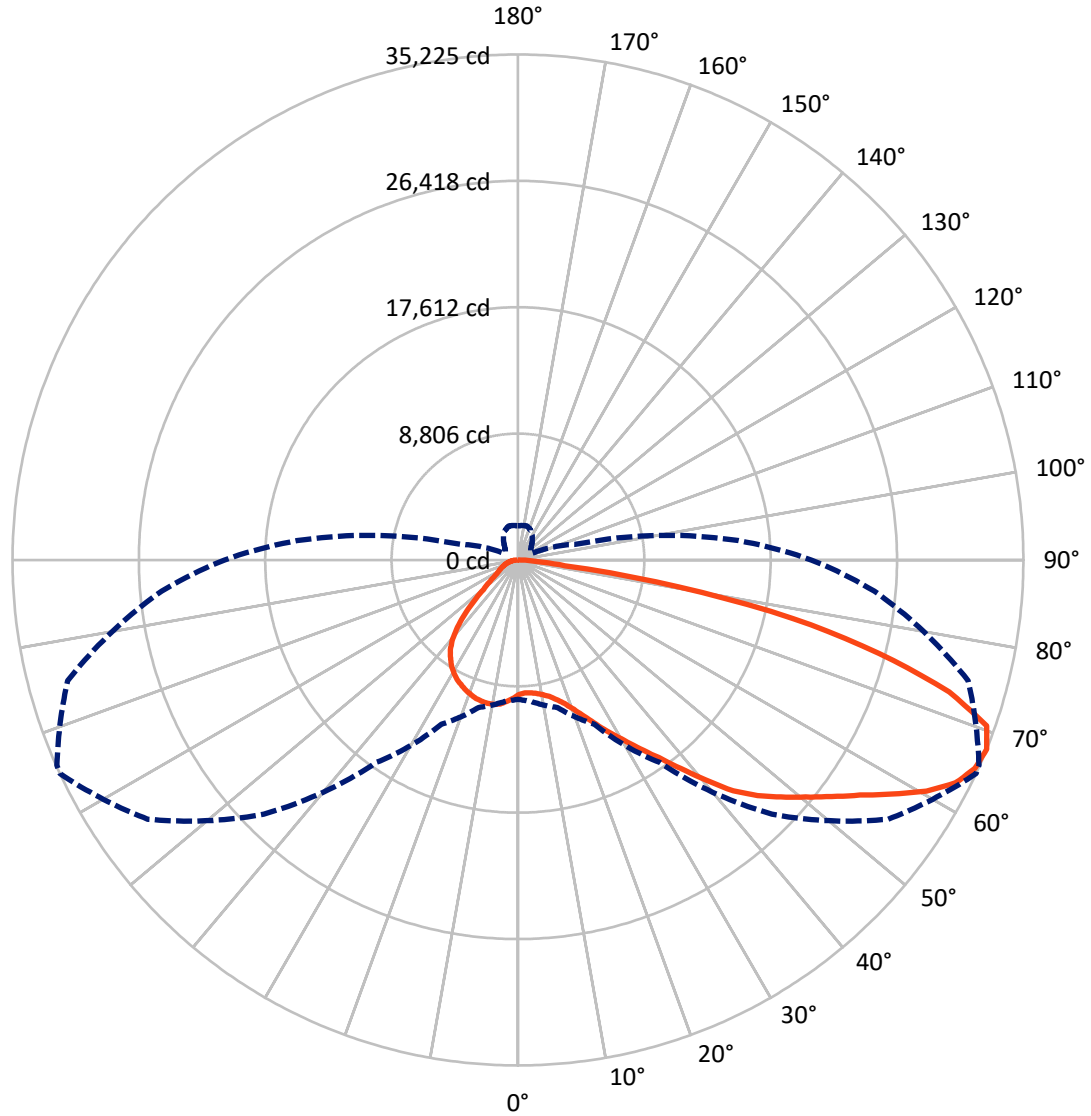
✕ Max cd
 - - - 1/2 Max cd



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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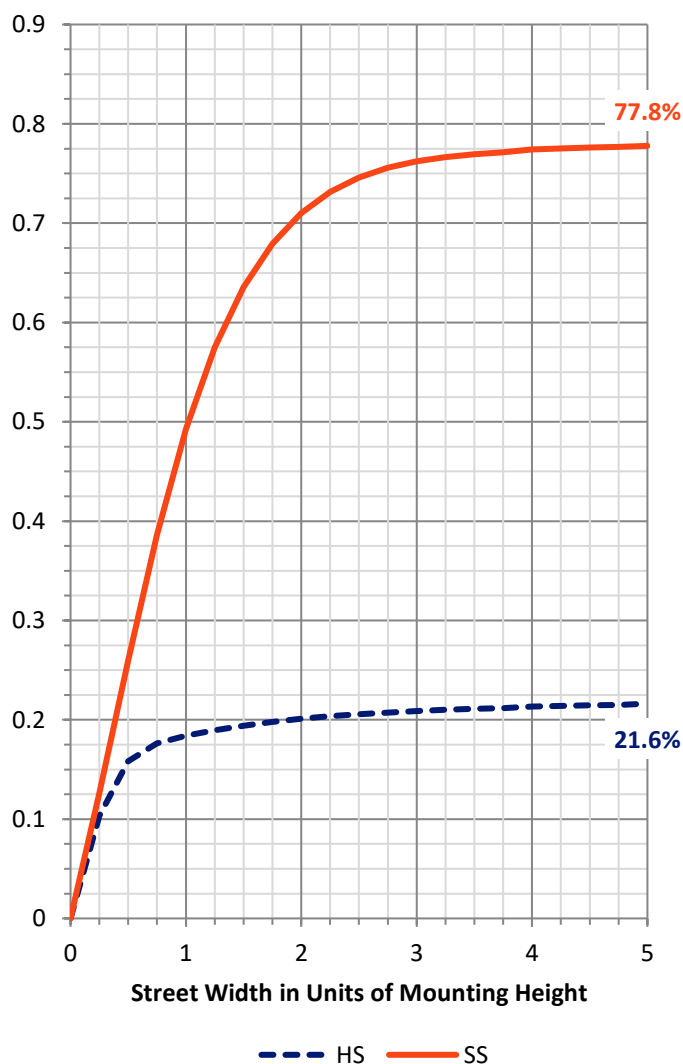
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	13400.1	0.0	13400.1
	% Fixture	22.1	0.0	22.1
Street Side	Lumens	47264.9	0.0	47264.9
	% Fixture	77.9	0.0	77.9
Total	Lumens	60665.0	0.0	60665.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	933.6	1.5
10°-20°	2916.9	4.8
20°-30°	5049.6	8.3
30°-40°	7419.9	12.2
40°-50°	10028.9	16.5
50°-60°	12332.6	20.3
60°-70°	13215.1	21.8
70°-80°	7794.1	12.8
80°-90°	974.2	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°	60665.0	100.0
0°-180°	60665.0	100.0

Coefficient of Utilization



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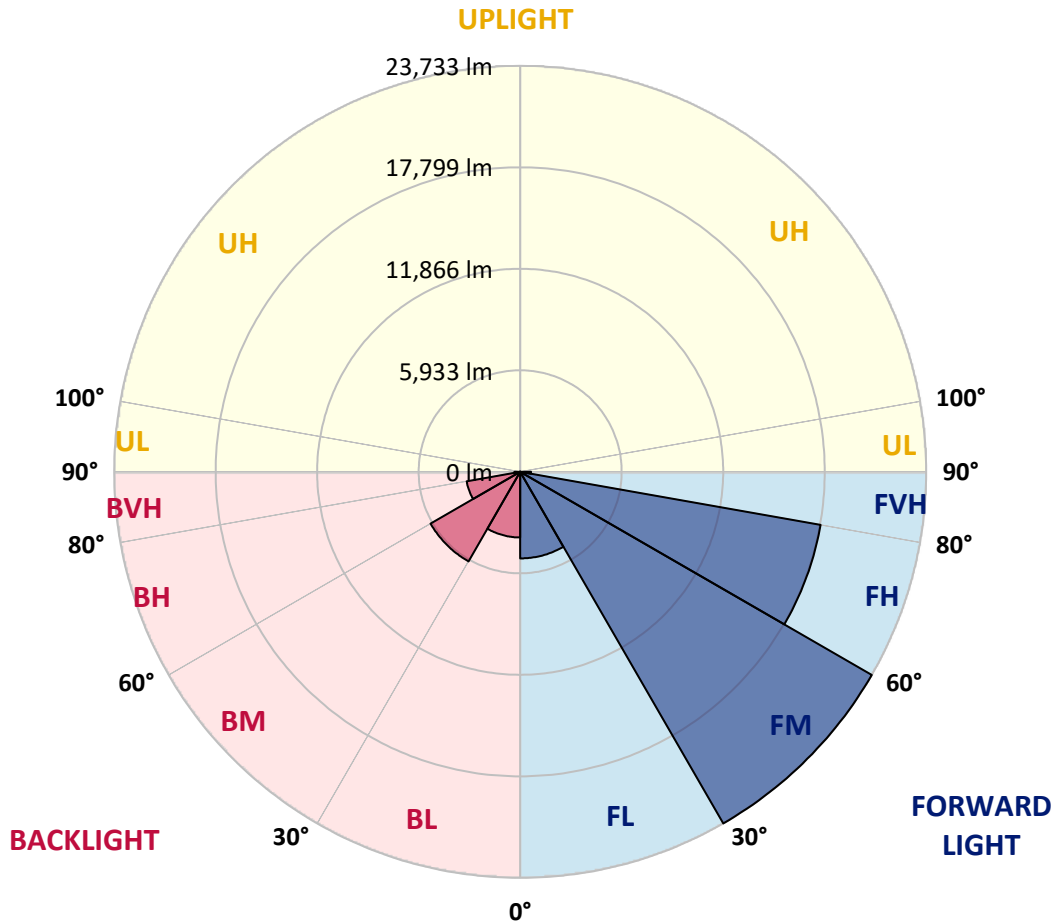
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	5062.0	8.3			
FM (30°-60°)	23732.6	39.1			
FH (60°-80°)	17831.4	29.4			G5
FVH (80°-90°)	638.9	1.1			G4/750
BL (0°-30°)	3838.2	6.3	B4/5000		
BM (30°-60°)	6048.8	10.0	B4/8500		
BH (60°-80°)	3177.8	5.2	B4/5000		G4/5000
BVH (80°-90°)	335.4	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°	9370.4	9370.4	9370.4	9370.4	9370.4	9370.4	9370.4	9370.4	9370.4	9370.4	9370.4
2.5°	9193.6	9176.3	9168.8	9192.3	9209.7	9229.4	9257.9	9285.1	9288.8	9324.7	9371.7
5°	9304.9	9290.0	9274.0	9270.3	9264.1	9262.8	9270.3	9301.2	9308.6	9343.2	9444.7
7.5°	9552.3	9537.4	9507.7	9496.6	9463.2	9403.8	9375.4	9391.5	9395.2	9437.2	9563.4
10°	9955.5	9909.7	9873.8	9836.7	9731.6	9637.6	9568.3	9538.7	9532.5	9573.3	9719.2
12.5°	10436.6	10398.3	10358.7	10261.0	10127.4	9958.0	9835.5	9767.5	9762.5	9797.2	9907.2
15°	10945.0	10945.0	10917.8	10801.5	10670.4	10389.6	10200.4	10086.6	10094.0	10121.2	10171.9
17.5°	11601.7	11547.3	11534.9	11402.6	11256.7	11000.6	10700.1	10518.2	10526.9	10539.3	10500.9
20°	12269.6	12253.6	12235.0	12147.2	12014.8	11685.8	11348.2	11109.5	11110.7	11066.2	10895.5
22.5°	13152.8	13099.6	13113.2	13014.2	12834.9	12497.2	12108.8	11825.6	11844.2	11779.8	11470.6
25°	14029.7	13976.5	13948.1	13881.3	13726.7	13406.3	12945.0	12685.2	12663.0	12546.7	12097.7
27.5°	14905.4	14874.5	14898.0	14817.6	14691.4	14334.0	13911.0	13622.8	13637.6	13557.2	12888.1
30°	15812.0	15777.4	15880.0	15750.2	15672.2	15324.7	14919.0	14580.1	14592.5	14622.1	13871.4
32.5°	16496.0	16536.8	16716.1	16701.3	16686.5	16299.3	15872.6	15684.6	15703.2	15807.1	15039.0
35°	17156.5	17160.2	17412.5	17603.0	17683.4	17359.3	16916.5	16910.3	17031.5	17348.2	16666.7
37.5°	17704.4	17692.0	18028.5	18324.1	18544.2	18293.1	18049.5	18429.2	18539.3	19196.0	18305.5
40°	18003.7	18029.7	18462.6	18831.2	19264.1	19145.3	19171.3	20142.2	20413.1	20988.3	19531.2
42.5°	17793.5	17872.6	18546.7	19298.7	19951.8	20110.1	20632.0	21992.6	22107.6	22211.5	20737.2
45°	17440.9	17523.8	18270.9	19485.5	20519.5	21188.6	22085.4	23416.2	23542.4	23426.1	21740.3
47.5°	17073.6	17158.9	17991.3	19410.0	20989.5	22272.1	23377.9	24675.3	24836.1	24476.2	22705.0
50°	16607.3	16739.6	17650.0	19250.5	21370.4	23440.9	24601.1	25971.6	26045.8	25526.3	23436.0
52.5°	16033.4	16179.4	17163.9	18977.1	21668.5	24257.3	25839.2	27377.9	27370.4	26753.3	24272.1
55°	15429.8	15562.2	16576.4	18546.7	21835.5	24885.6	26828.7	28927.7	29016.7	28499.7	25029.1
57.5°	14656.8	14776.8	15882.5	17967.8	21662.3	25418.7	28431.7	30769.3	30813.9	29715.5	25631.4
60°	13632.7	13809.5	14920.2	17231.9	21165.1	26035.9	30197.9	32706.3	32760.7	30911.6	26018.6
62.5°	12508.4	12578.9	13710.6	16099.0	20441.6	26512.1	31422.4	34221.4	34142.3	31846.6	26134.8
65°	11137.9	11193.6	12173.2	14641.9	19097.1	26251.1	31861.5	35000.6	34902.9	32434.2	25777.4
67.5°	9703.2	9875.1	10644.4	12620.9	17220.8	25046.4	31490.4	35224.5	35175.0	32478.7	24923.9
70°	7840.4	7901.1	8596.2	10282.0	14368.6	22634.5	30253.6	34650.6	34612.3	31484.2	23181.2
72.5°	5528.8	5469.4	5807.1	7129.3	10378.5	18005.0	25830.6	31426.1	31490.4	28164.5	20186.8
75°	2935.1	3048.9	3574.5	4364.9	5883.7	11574.5	20593.7	26008.7	25986.4	23551.0	15956.7
77.5°	1563.4	1560.9	1922.1	2259.7	2880.6	5318.5	13583.2	19614.1	19723.0	18247.4	10956.1
80°	750.8	779.2	801.5	919.0	1436.0	2457.6	5682.1	11374.2	12116.3	10883.1	5204.7
82.5°	601.1	603.6	606.1	580.1	593.7	1000.6	2189.2	3291.3	3410.0	2740.9	1678.4
85°	445.3	418.1	414.3	351.3	397.0	601.1	1104.5	1405.1	1335.8	1299.9	947.4
87.5°	179.3	168.2	163.3	153.4	153.4	226.3	389.6	508.3	507.1	462.6	317.9
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°	9370.4	9370.4	9370.4	9370.4	9370.4	9370.4	9370.4	9370.4	9370.4	9370.4	9370.4
2.5°	9408.8	9453.3	9557.2	9646.3	9679.7	9761.3	9838.0	9882.5	9913.4	9932.0	10016.1
5°	9506.5	9595.6	9761.3	9886.2	10007.4	10158.3	10256.0	10317.9	10352.5	10372.3	10432.9
7.5°	9656.2	9746.4	9922.1	10113.8	10225.1	10348.8	10411.9	10456.4	10478.7	10472.5	10520.7
10°	9789.7	9878.8	10054.4	10201.6	10264.7	10335.2	10368.6	10378.5	10379.7	10384.7	10432.9
12.5°	9971.6	10026.0	10120.0	10216.5	10202.8	10205.3	10233.8	10221.4	10193.0	10188.0	10220.2
15°	10167.0	10168.2	10175.6	10154.6	10069.3	10032.2	9992.6	9959.2	9881.3	9876.3	9927.0
17.5°	10411.9	10353.7	10218.9	10075.5	9872.6	9732.8	9591.8	9533.7	9438.5	9419.9	9444.7
20°	10727.3	10606.1	10278.3	9922.1	9542.4	9292.5	9121.8	8949.9	8817.6	8785.4	8808.9
22.5°	11180.0	10941.3	10353.7	9758.8	9171.3	8744.6	8413.1	8206.6	7983.9	7870.1	7881.3
25°	11726.7	11353.1	10484.9	9552.3	8734.7	8118.7	7580.7	7166.4	6915.3	6748.3	6792.8
27.5°	12442.8	11929.5	10641.9	9348.2	8191.7	7318.5	6538.0	5976.5	5720.5	5641.3	5589.4
30°	13272.7	12625.9	10807.7	9046.4	7605.4	6327.8	5328.4	4860.9	4567.7	4520.7	4481.1
32.5°	14383.4	13502.8	11118.1	8718.6	6905.4	5337.0	4252.3	3714.3	3647.5	3609.2	3600.5
35°	15815.7	14651.8	11443.4	8293.1	5992.6	4175.6	3217.1	2926.4	2894.2	2936.3	2940.0
37.5°	17335.8	15898.6	11833.0	7813.2	4942.5	3115.6	2461.3	2259.7	2295.6	2426.7	2456.4
40°	18364.9	16719.9	12186.8	7161.4	3645.0	2263.5	1791.0	1747.7	1945.6	2113.8	2148.4
42.5°	19351.9	17342.0	12330.2	6299.3	2599.9	1611.6	1445.9	1594.3	1871.4	2055.7	2080.4
45°	20194.2	18065.6	11969.1	5265.3	1762.5	1346.9	1385.3	1590.6	1898.6	2102.7	2121.2
47.5°	20995.7	18656.8	11475.6	4148.4	1390.2	1296.2	1384.0	1624.0	1959.2	2152.1	2163.3
50°	21761.3	19107.0	10633.3	3156.5	1302.4	1272.7	1395.2	1675.9	1992.6	2113.8	2108.8
52.5°	22329.0	19339.5	9736.6	2547.9	1267.8	1254.2	1424.9	1741.5	1998.8	2071.7	2066.8
55°	22745.8	19295.0	9147.8	2086.6	1239.3	1246.8	1473.1	1791.0	2058.1	2168.2	2164.5
57.5°	22784.2	19093.4	8478.7	1762.5	1204.7	1245.5	1525.0	1860.2	2355.0	2557.8	2496.0
60°	22738.4	18759.4	7810.8	1547.3	1166.4	1252.9	1579.5	2068.0	2782.9	2942.5	2899.2
62.5°	22513.3	18137.3	6810.1	1405.1	1133.0	1280.1	1620.3	2232.5	2761.9	2780.5	2718.6
65°	21818.2	17304.9	5496.6	1261.6	1099.6	1298.7	1653.7	2275.8	2536.8	2477.4	2446.5
67.5°	20442.8	15445.9	4240.0	1130.5	1056.3	1295.0	1752.6	2214.0	2451.5	2408.2	2368.6
70°	18488.6	13333.3	2943.7	995.7	983.3	1271.5	1727.9	2235.0	2410.6	2343.8	2290.7
72.5°	15445.9	10460.1	1872.6	885.6	874.5	1215.8	1666.0	2221.4	2383.4	2353.7	2280.8
75°	11630.2	7301.2	1189.9	765.6	778.0	1114.4	1567.1	2148.4	2369.8	2277.1	2137.3
77.5°	7322.2	3604.2	925.2	650.6	669.1	961.0	1354.4	1876.3	2274.6	2218.9	2039.6
80°	2769.3	1463.2	723.6	528.1	544.2	747.1	1110.7	1543.6	2094.0	2185.5	2108.8
82.5°	1275.2	915.3	543.0	424.2	430.4	544.2	828.7	1142.9	1772.4	2006.2	2197.9
85°	744.6	599.9	362.4	283.2	294.4	321.6	466.3	697.6	1149.0	1530.0	1711.8
87.5°	253.6	209.0	141.0	120.0	116.3	132.3	112.6	228.8	341.4	601.1	686.5
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)