

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: P721851

Luminaire Tested: **CST-CA8-400-730-U-T3**

Issue Date: 10/25/2023

Test Information

Test Method: LM-79-08
Report Number: P721851
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-CA8-400-730-U-T3
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 3000K CCT, 70 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 59761 lumens
Efficiency: N/A
Efficacy: 149.1 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U0 - G5

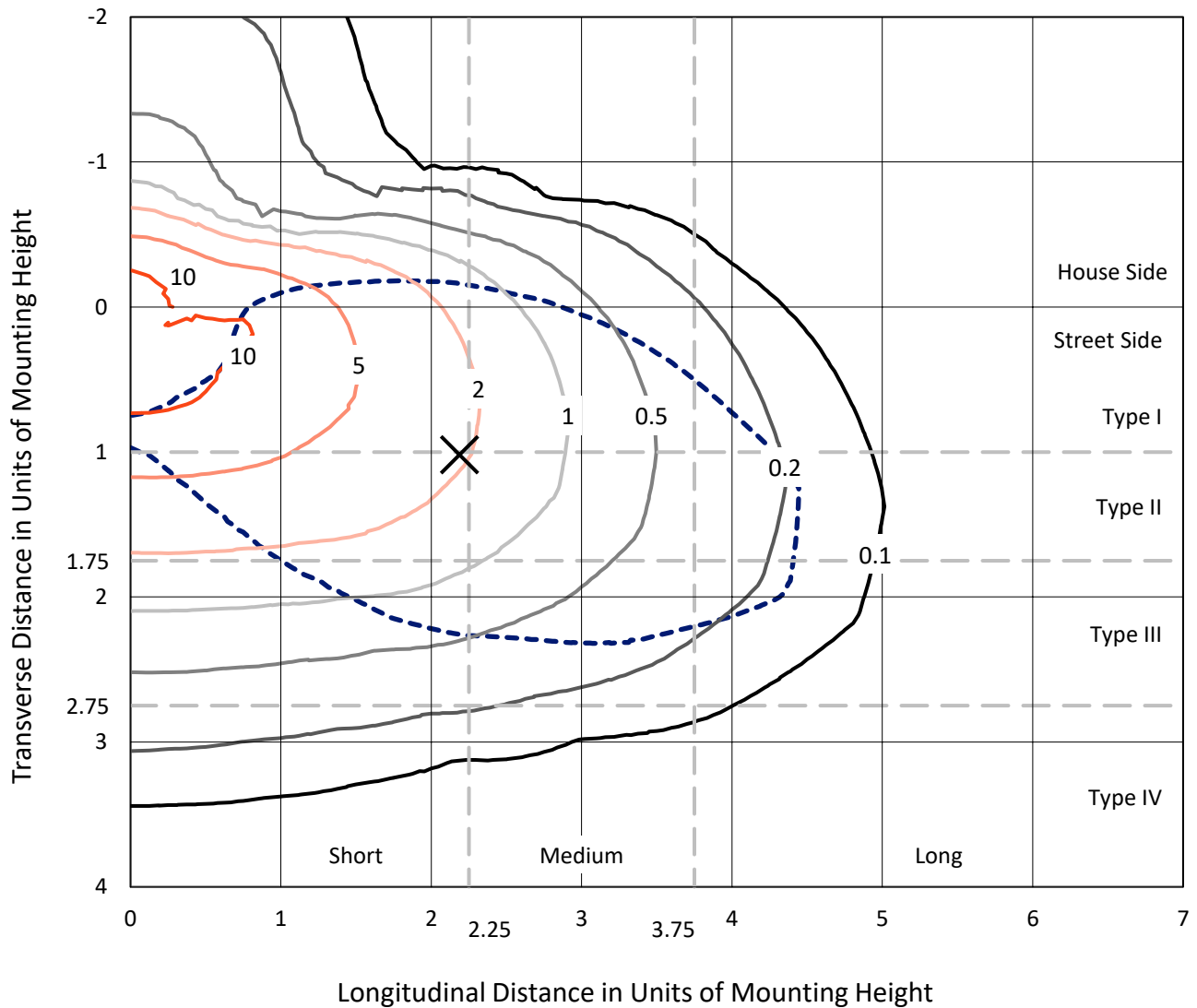
Input Watts (W): 400.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

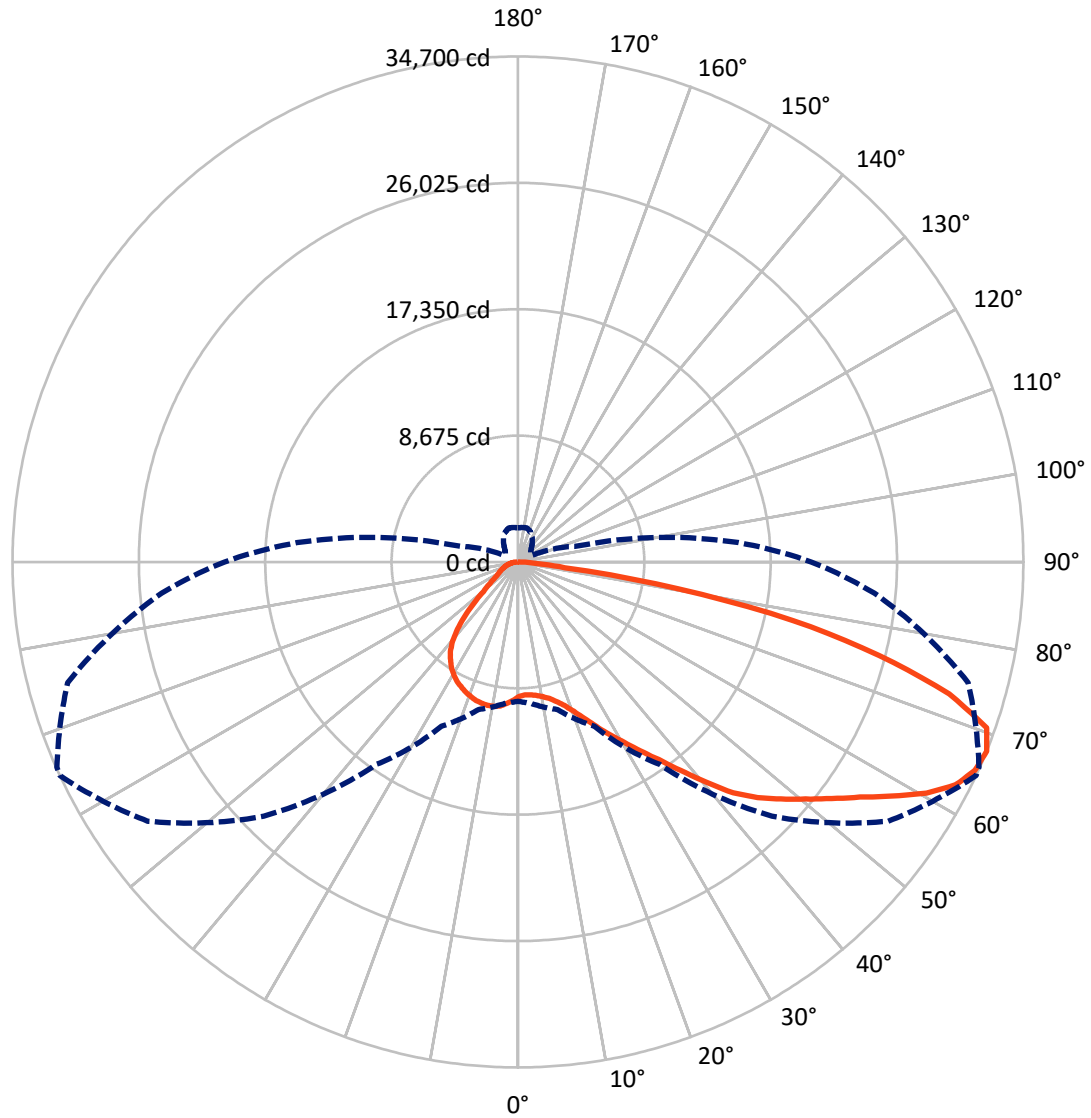
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 11.4 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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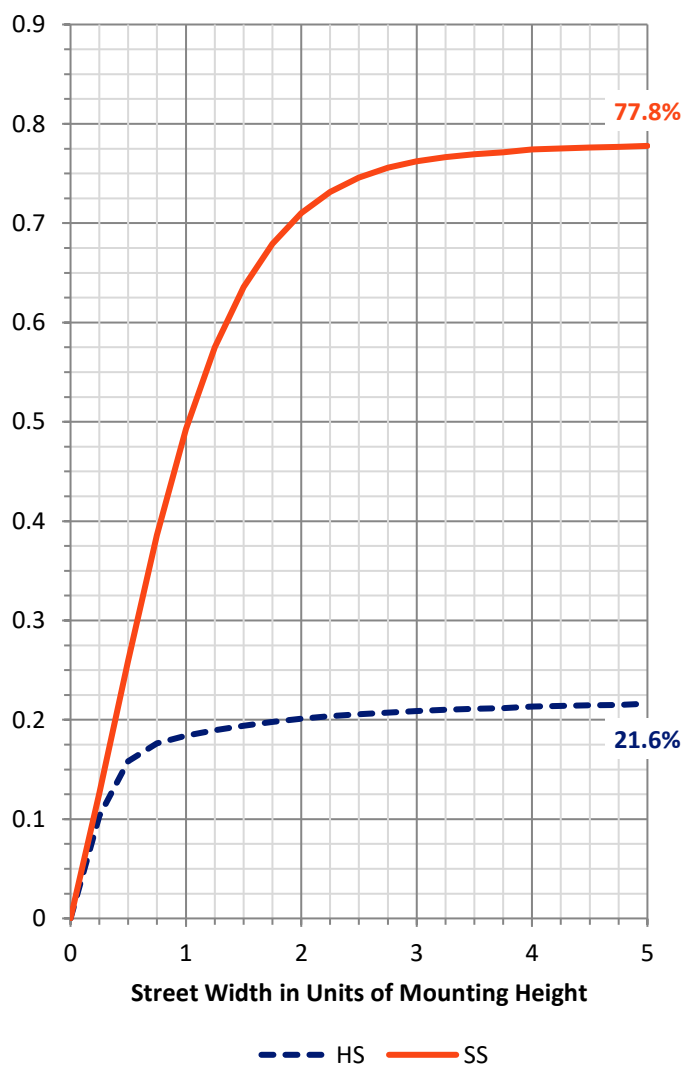
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	13200.5	0.0	13200.5
	% Fixture	22.1	0.0	22.1
Street Side	Lumens	46560.5	0.0	46560.5
	% Fixture	77.9	0.0	77.9
Total	Lumens	59761.0	0.0	59761.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	919.7	1.5
10°-20°	2873.5	4.8
20°-30°	4974.4	8.3
30°-40°	7309.3	12.2
40°-50°	9879.5	16.5
50°-60°	12148.8	20.3
60°-70°	13018.2	21.8
70°-80°	7678.0	12.8
80°-90°	959.7	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°	59761.0	100.0
0°-180°	59761.0	100.0

Coefficient of Utilization

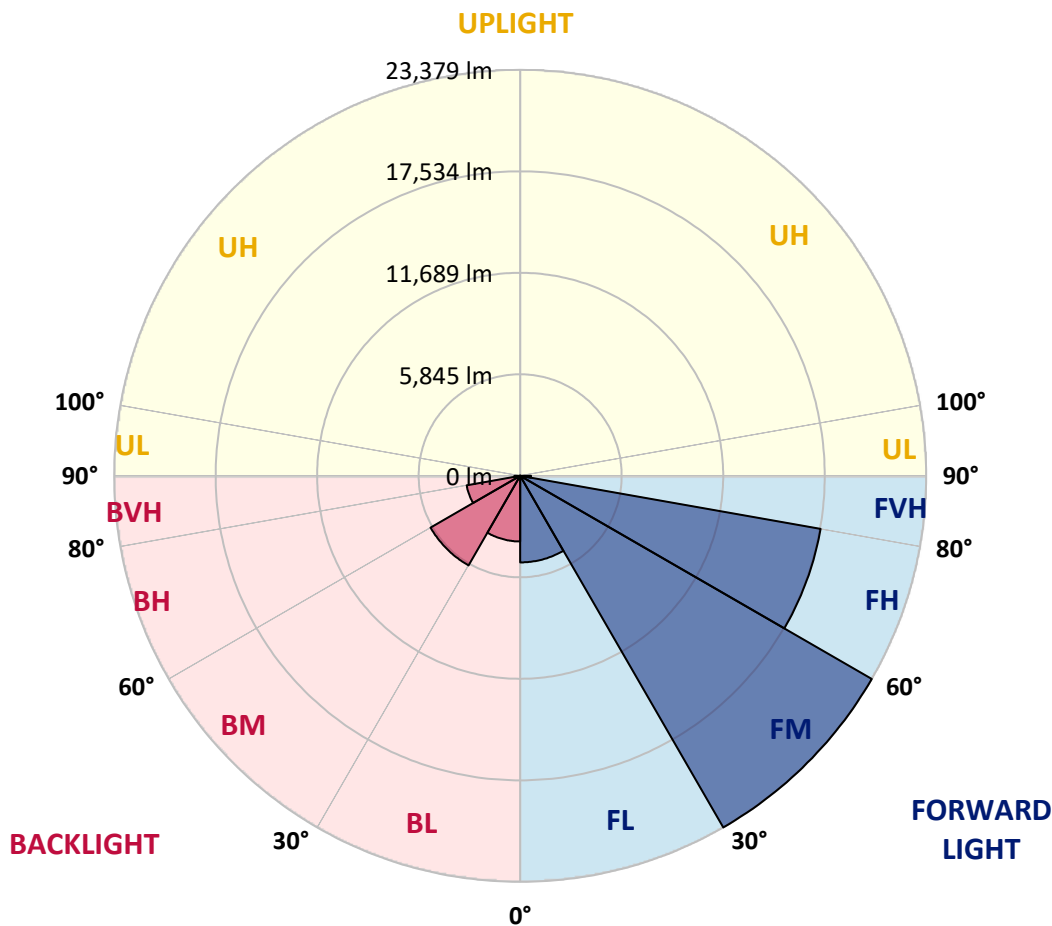


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4986.6	8.3			
FM (30°-60°)	23378.9	39.1			
FH (60°-80°)	17565.7	29.4			G5
FVH (80°-90°)	629.3	1.1			G4/750
BL (0°-30°)	3781.0	6.3	B4/5000		
BM (30°-60°)	5958.6	10.0	B4/8500		
BH (60°-80°)	3130.5	5.2	B4/5000		G4/5000
BVH (80°-90°)	330.4	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°	9230.8	9230.8	9230.8	9230.8	9230.8	9230.8	9230.8	9230.8	9230.8	9230.8	9230.8
2.5°	9056.6	9039.5	9032.2	9055.4	9072.4	9091.9	9119.9	9146.7	9150.4	9185.7	9232.0
5°	9166.2	9151.6	9135.8	9132.1	9126.0	9124.8	9132.1	9162.6	9169.9	9204.0	9303.9
7.5°	9409.9	9395.3	9366.1	9355.1	9322.2	9263.7	9235.7	9251.5	9255.2	9296.6	9420.9
10°	9807.1	9762.0	9726.7	9690.2	9586.6	9494.0	9425.8	9396.5	9390.4	9430.6	9574.4
12.5°	10281.1	10243.3	10204.3	10108.1	9976.5	9809.6	9688.9	9621.9	9617.1	9651.2	9759.6
15°	10781.9	10781.9	10755.1	10640.5	10511.4	10234.8	10048.4	9936.3	9943.6	9970.4	10020.4
17.5°	11428.9	11375.2	11363.1	11232.7	11088.9	10836.7	10540.6	10361.5	10370.0	10382.2	10344.5
20°	12086.8	12071.0	12052.7	11966.2	11835.8	11511.7	11179.1	10943.9	10945.1	10901.3	10733.1
22.5°	12956.8	12904.4	12917.8	12820.3	12643.6	12311.0	11928.4	11649.4	11667.7	11604.3	11299.7
25°	13820.6	13768.2	13740.2	13674.4	13522.1	13206.5	12752.1	12496.2	12474.3	12359.7	11917.4
27.5°	14683.3	14652.8	14676.0	14596.8	14472.5	14120.4	13703.7	13419.8	13434.4	13355.2	12696.0
30°	15576.4	15542.3	15643.4	15515.5	15438.7	15096.3	14696.7	14362.8	14375.0	14404.3	13664.7
32.5°	16250.2	16290.4	16467.1	16452.4	16437.8	16056.4	15636.1	15450.9	15469.2	15571.5	14814.9
35°	16900.8	16904.5	17153.0	17340.7	17419.9	17100.6	16664.4	16658.3	16777.8	17089.7	16418.3
37.5°	17440.6	17428.4	17759.8	18051.0	18267.9	18020.5	17780.5	18154.6	18263.0	18910.0	18032.7
40°	17735.4	17761.0	18187.5	18550.6	18977.0	18860.0	18885.6	19842.1	20108.9	20675.5	19240.2
42.5°	17528.3	17606.3	18270.3	19011.1	19654.5	19810.4	20324.6	21664.9	21778.2	21880.5	20428.2
45°	17181.1	17262.7	17998.6	19195.1	20213.7	20872.9	21756.2	23067.3	23191.6	23077.0	21416.3
47.5°	16819.2	16903.2	17723.3	19120.8	20676.7	21940.2	23029.5	24307.6	24466.0	24111.5	22366.7
50°	16359.8	16490.2	17387.0	18963.6	21052.0	23091.6	24234.5	25584.5	25657.7	25145.9	23086.8
52.5°	15794.5	15938.3	16908.1	18694.3	21345.6	23895.8	25454.2	26969.9	26962.6	26354.6	23910.4
55°	15199.9	15330.3	16329.4	18270.3	21510.1	24514.8	26428.9	28496.6	28584.3	28075.0	24656.1
57.5°	14438.4	14556.6	15645.8	17700.1	21339.5	25039.9	28008.0	30310.8	30354.7	29272.7	25249.5
60°	13429.5	13603.7	14697.9	16975.1	20849.7	25647.9	29747.9	32218.9	32272.5	30450.9	25630.8
62.5°	12322.0	12391.4	13506.3	15859.1	20137.0	26117.0	30954.2	33711.5	33633.5	31372.1	25745.4
65°	10971.9	11026.8	11991.8	14423.7	18812.5	25859.9	31386.7	34479.1	34382.8	31950.8	25393.3
67.5°	9558.6	9727.9	10485.8	12432.8	16964.2	24673.2	31021.2	34699.6	34650.9	31994.7	24552.5
70°	7723.6	7783.3	8468.1	10128.8	14154.5	22297.2	29802.7	34134.3	34096.5	31015.1	22835.8
72.5°	5446.4	5387.9	5720.5	7023.0	10223.8	17736.7	25445.6	30957.8	31021.2	27744.8	19886.0
75°	2891.3	3003.4	3521.3	4299.8	5796.1	11402.0	20286.8	25621.1	25599.2	23200.1	15718.9
77.5°	1540.1	1537.7	1893.4	2226.1	2837.7	5239.2	13380.8	19321.8	19429.0	17975.5	10792.8
80°	739.6	767.6	789.5	905.3	1414.6	2421.0	5597.5	11204.7	11935.7	10720.9	5127.1
82.5°	592.2	594.6	597.0	571.4	584.8	985.7	2156.6	3242.2	3359.2	2700.0	1653.4
85°	438.6	411.8	408.2	346.0	391.1	592.2	1088.1	1384.1	1315.9	1280.6	933.3
87.5°	176.7	165.7	160.8	151.1	151.1	223.0	383.8	500.8	499.6	455.7	313.1
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°	9230.8	9230.8	9230.8	9230.8	9230.8	9230.8	9230.8	9230.8	9230.8	9230.8	9230.8
2.5°	9268.6	9312.4	9414.8	9502.5	9535.4	9615.8	9691.4	9735.2	9765.7	9784.0	9866.8
5°	9364.8	9452.6	9615.8	9738.9	9858.3	10006.9	10103.2	10164.1	10198.2	10217.7	10277.4
7.5°	9512.3	9601.2	9774.2	9963.1	10072.7	10194.6	10256.7	10300.6	10322.5	10316.4	10363.9
10°	9643.9	9731.6	9904.6	10049.6	10111.7	10181.2	10214.1	10223.8	10225.0	10229.9	10277.4
12.5°	9823.0	9876.6	9969.2	10064.2	10050.8	10053.2	10081.3	10069.1	10041.1	10036.2	10067.9
15°	10015.5	10016.7	10024.0	10003.3	9919.2	9882.7	9843.7	9810.8	9734.0	9729.1	9779.1
17.5°	10256.7	10199.5	10066.7	9925.3	9725.5	9587.8	9448.9	9391.6	9297.8	9279.5	9303.9
20°	10567.4	10448.0	10125.1	9774.2	9400.2	9154.0	8985.9	8816.5	8686.2	8654.5	8677.6
22.5°	11013.4	10778.2	10199.5	9613.4	9034.6	8614.3	8287.7	8084.3	7865.0	7752.9	7763.8
25°	11551.9	11183.9	10328.6	9409.9	8604.5	7997.8	7467.7	7059.6	6812.2	6647.7	6691.6
27.5°	12257.4	11751.7	10483.4	9208.9	8069.6	7209.4	6440.6	5887.4	5635.2	5557.2	5506.1
30°	13074.9	12437.7	10646.6	8911.6	7492.1	6233.5	5249.0	4788.4	4499.7	4453.4	4414.4
32.5°	14169.1	13301.6	10952.4	8588.7	6802.5	5257.5	4189.0	3658.9	3593.1	3555.4	3546.8
35°	15580.0	14433.5	11272.9	8169.6	5903.3	4113.4	3169.1	2882.8	2851.1	2892.5	2896.2
37.5°	17077.5	15661.7	11656.7	7696.8	4868.8	3069.2	2424.7	2226.1	2261.4	2390.6	2419.8
40°	18091.2	16470.7	12005.2	7054.7	3590.7	2229.7	1764.3	1721.6	1916.6	2082.3	2116.4
42.5°	19063.5	17083.6	12146.5	6205.5	2561.1	1587.6	1424.3	1570.6	1843.5	2025.0	2049.4
45°	19893.3	17796.4	11790.7	5186.8	1736.3	1326.9	1364.6	1566.9	1870.3	2071.3	2089.6
47.5°	20682.8	18378.8	11304.6	4086.6	1369.5	1276.9	1363.4	1599.8	1930.0	2120.1	2131.0
50°	21437.0	18822.3	10474.8	3109.4	1283.0	1253.8	1374.4	1651.0	1962.9	2082.3	2077.4
52.5°	21996.3	19051.3	9591.5	2510.0	1248.9	1235.5	1403.6	1715.5	1969.0	2040.9	2036.0
55°	22406.9	19007.5	9011.5	2055.5	1220.9	1228.2	1451.1	1764.3	2027.5	2135.9	2132.2
57.5°	22444.7	18808.9	8352.3	1736.3	1186.7	1227.0	1502.3	1832.5	2319.9	2519.7	2458.8
60°	22399.6	18479.9	7694.4	1524.3	1149.0	1234.3	1555.9	2037.2	2741.5	2898.6	2856.0
62.5°	22177.8	17867.0	6708.7	1384.1	1116.1	1261.1	1596.1	2199.3	2720.7	2739.0	2678.1
65°	21493.1	17047.0	5414.7	1242.8	1083.2	1279.3	1629.0	2241.9	2499.0	2440.5	2410.1
67.5°	20138.2	15215.7	4176.8	1113.6	1040.5	1275.7	1726.5	2181.0	2414.9	2372.3	2333.3
70°	18213.1	13134.7	2899.9	980.8	968.7	1252.5	1702.1	2201.7	2374.7	2308.9	2256.5
72.5°	15215.7	10304.2	1844.7	872.4	861.4	1197.7	1641.2	2188.3	2347.9	2318.7	2246.8
75°	11456.9	7192.4	1172.1	754.2	766.4	1097.8	1543.7	2116.4	2334.5	2243.1	2105.4
77.5°	7213.1	3550.5	911.4	640.9	659.2	946.7	1334.2	1848.4	2240.7	2185.9	2009.2
80°	2728.1	1441.4	712.8	520.3	536.1	735.9	1094.1	1520.6	2062.8	2153.0	2077.4
82.5°	1256.2	901.6	534.9	417.9	424.0	536.1	816.3	1125.8	1746.0	1976.3	2165.1
85°	733.5	590.9	357.0	279.0	290.0	316.8	459.3	687.2	1131.9	1507.2	1686.3
87.5°	249.8	205.9	138.9	118.2	114.5	130.4	110.9	225.4	336.3	592.2	676.2
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)