

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: P721859

Luminaire Tested: **CST-CA8-400-740-U-T2**

Issue Date: 10/25/2023

Test Information

Test Method: LM-79-08
Report Number: P721859
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-CA8-400-740-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: 60292 lumens
Efficiency: N/A
Efficacy: 150.4 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type II - Short
BUG Rating: B4 - U0 - G5

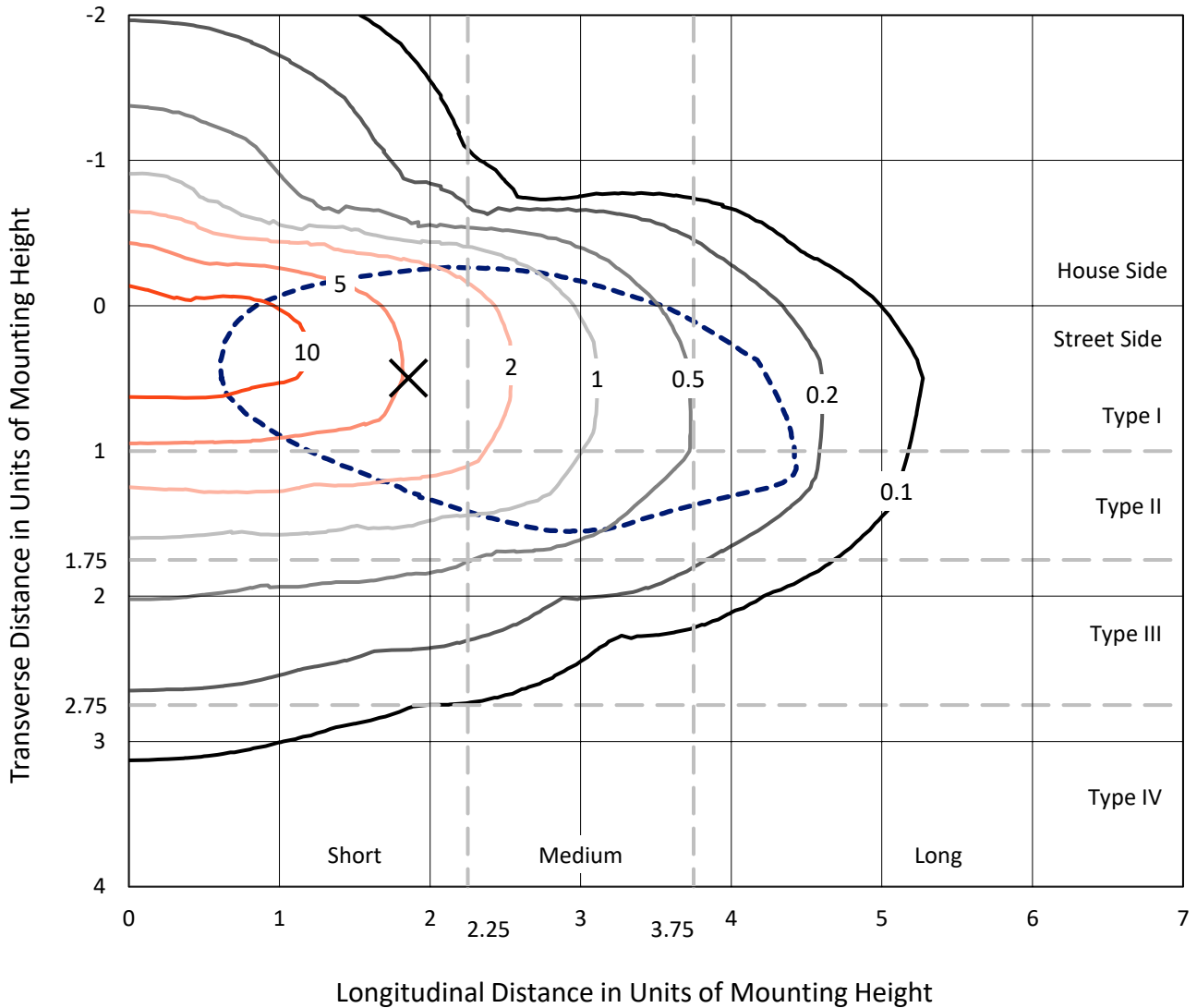
Input Watts (W): 400.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

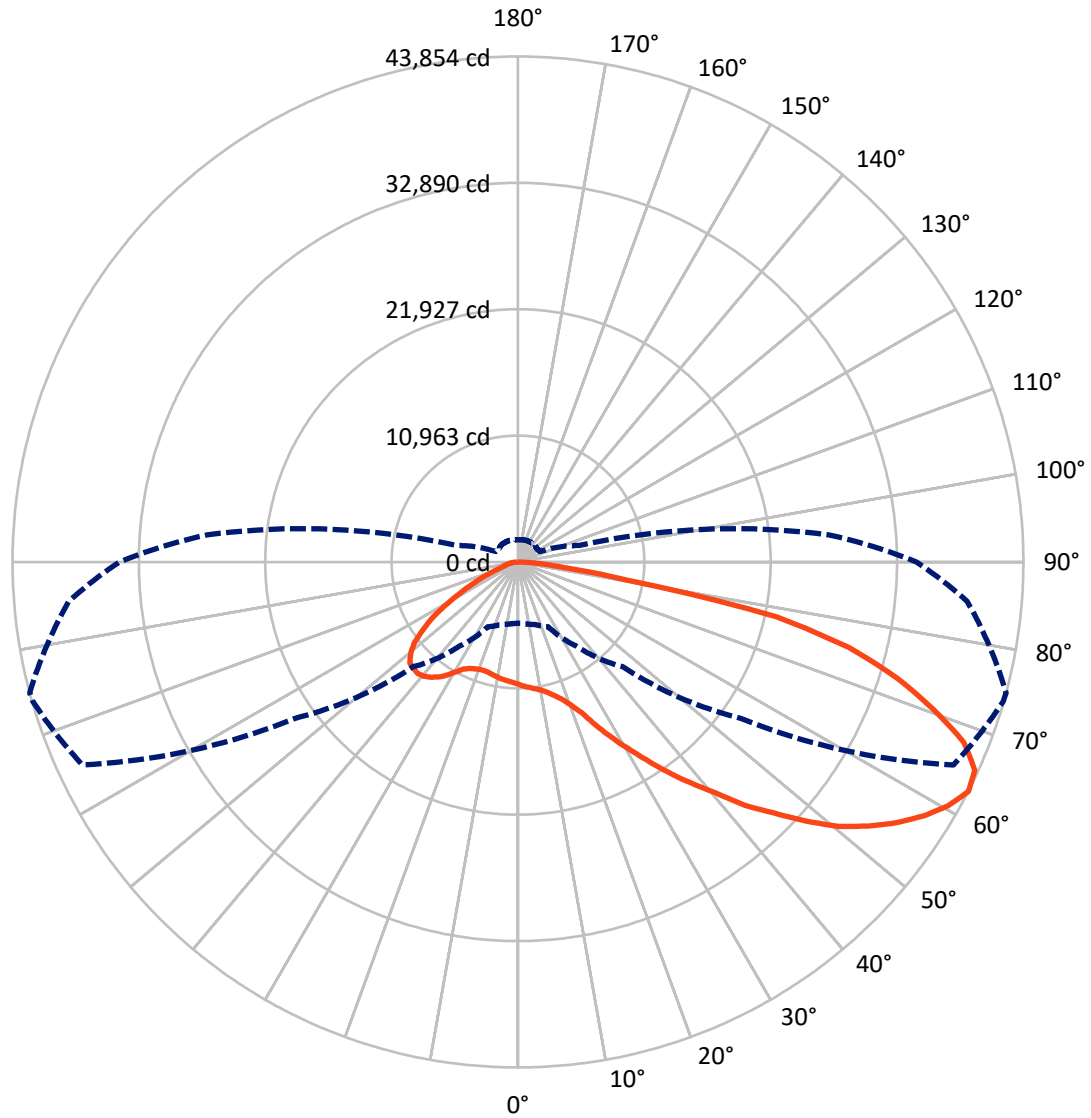
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 13.9 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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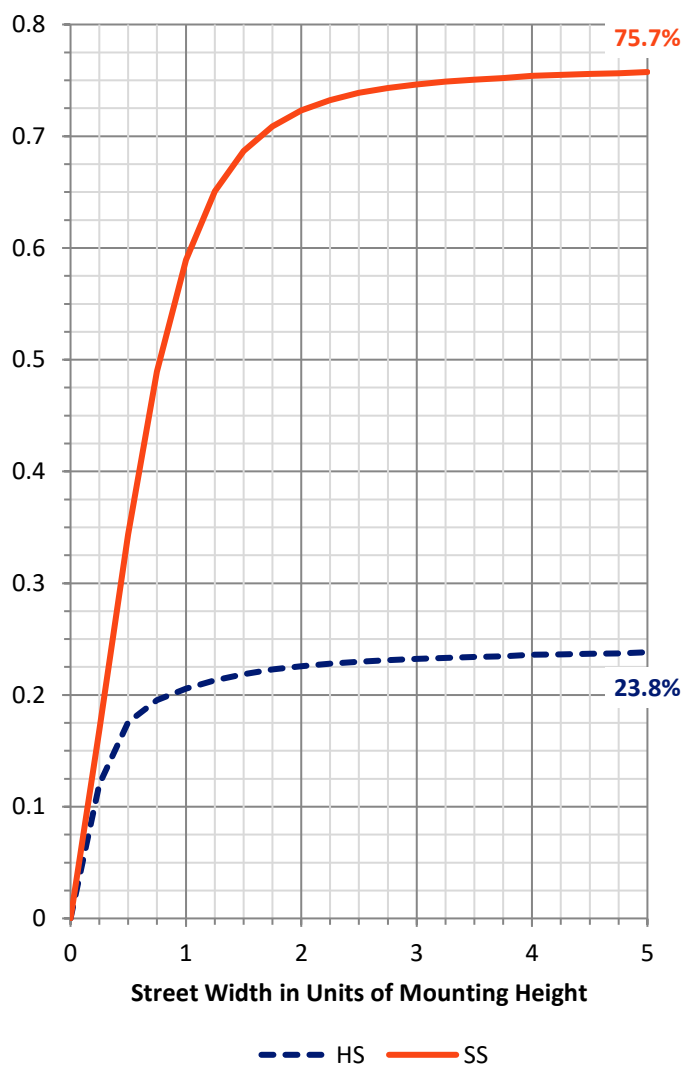
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	14607.7	0.0	14607.7
	% Fixture	24.2	0.0	24.2
Street Side	Lumens	45684.3	0.0	45684.3
	% Fixture	75.8	0.0	75.8
Total	Lumens	60292.0	0.0	60292.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1022.5	1.7
10°-20°	3103.1	5.1
20°-30°	5352.1	8.9
30°-40°	7891.7	13.1
40°-50°	10403.0	17.3
50°-60°	12243.4	20.3
60°-70°	12180.9	20.2
70°-80°	7103.6	11.8
80°-90°	991.9	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°	60292.0	100.0
0°-180°	60292.0	100.0

Coefficient of Utilization

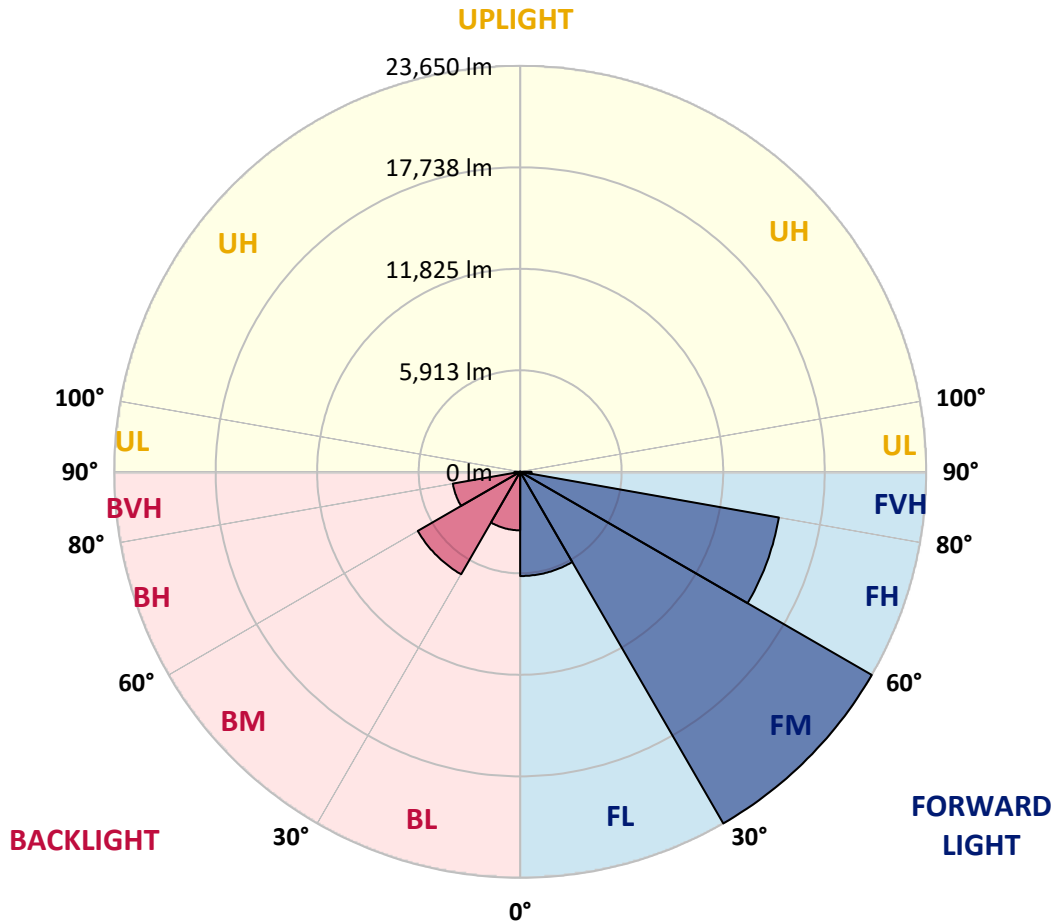


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	6071.1	10.1			
FM (30°-60°)	23650.1	39.2			
FH (60°-80°)	15304.9	25.4			G5
FVH (80°-90°)	658.2	1.1			G4/750
BL (0°-30°)	3406.4	5.6	B4/5000		
BM (30°-60°)	6888.0	11.4	B4/8500		
BH (60°-80°)	3979.6	6.6	B4/5000		G4/5000
BVH (80°-90°)	333.7	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°	10628.1	10628.1	10628.1	10628.1	10628.1	10628.1	10628.1	10628.1	10628.1	10628.1	10628.1
2.5°	11210.1	11164.2	11170.4	11138.1	11089.7	11053.7	10959.4	10857.7	10796.9	10791.9	10705.0
5°	11773.4	11788.3	11792.0	11689.1	11587.3	11471.9	11328.0	11131.9	10971.8	10947.0	10778.2
7.5°	12287.2	12285.9	12278.5	12221.4	12174.2	12003.0	11715.1	11407.4	11146.8	11123.2	10849.0
10°	12813.3	12809.6	12735.1	12639.6	12532.8	12375.3	12128.3	11759.8	11337.9	11306.9	10914.7
12.5°	13386.6	13345.6	13298.5	13183.1	13056.5	12783.5	12524.2	12123.4	11682.8	11627.0	11031.4
15°	13859.3	13817.2	13751.4	13673.2	13540.4	13332.0	13056.5	12581.2	12108.5	12053.9	11293.2
17.5°	14327.2	14307.3	14260.1	14177.0	14075.3	13895.3	13642.2	13238.9	12619.7	12552.7	11728.8
20°	14710.6	14663.4	14628.7	14667.2	14675.8	14543.1	14404.1	14065.3	13382.8	13279.9	12263.6
22.5°	14929.0	14919.1	15108.9	15250.4	15307.4	15337.2	15293.8	15020.8	14402.8	14222.9	13008.1
25°	15136.2	15120.1	15378.2	15731.8	16068.1	16239.3	16354.7	16390.7	15823.7	15661.1	14205.5
27.5°	15142.4	15187.1	15561.8	16155.0	16667.4	17189.9	17743.3	17806.6	17309.0	17179.9	15568.0
30°	15175.9	15195.8	15566.8	16248.0	17315.2	18152.8	18873.7	19229.9	18800.5	18740.9	17068.2
32.5°	14750.3	14776.4	15353.4	16410.6	17804.1	19149.2	20105.9	20634.5	20527.8	20452.1	18669.0
35°	14307.3	14329.6	14999.7	16179.8	18167.7	20053.8	21219.0	22257.6	22452.4	22395.3	20454.6
37.5°	13612.4	13686.9	14389.2	15904.3	18230.9	20718.9	22281.2	23874.5	24462.6	24291.4	22343.2
40°	12858.0	12912.6	13730.3	15327.3	18160.2	21155.7	23324.7	25663.8	26376.1	26284.2	24218.2
42.5°	11905.0	12051.4	12870.4	14590.2	17796.6	21427.4	24290.1	27692.6	28727.5	28850.4	25940.5
45°	11102.1	11098.4	11859.1	13523.1	17137.7	21492.0	25178.6	29743.8	31257.7	31026.9	28217.5
47.5°	10157.8	10196.3	10990.4	12460.9	16166.1	21287.2	25871.0	32168.5	33701.0	33575.6	30085.0
50°	7972.6	8249.3	9753.3	11547.6	14852.0	20716.4	26448.0	34529.9	35992.8	36049.9	31782.6
52.5°	6873.2	6979.9	7810.1	10628.1	13685.6	19758.5	27080.9	37186.6	38207.8	38062.6	33709.6
55°	6432.7	6489.8	6888.1	8976.5	12557.7	18275.6	27384.9	39612.5	39935.1	39911.5	35295.5
57.5°	6113.8	6157.2	6440.1	7491.2	11319.3	16372.1	27128.0	41190.9	41692.2	41538.3	36792.0
60°	5653.4	5688.2	6110.1	6750.4	10044.9	14450.0	25548.4	41906.9	42966.6	42909.5	38114.7
62.5°	5307.2	5366.8	5602.6	6203.1	8956.6	12866.6	23666.0	41683.5	43802.9	43853.8	39124.8
65°	4941.2	4994.5	5194.3	5719.2	7970.1	11825.5	21635.9	40564.2	43418.3	43553.5	39288.6
67.5°	4489.5	4530.4	4767.4	5221.6	6817.4	10784.5	19346.5	38585.0	41283.9	41719.5	37658.1
70°	3921.2	3936.1	4226.4	4535.4	5660.9	9214.7	15383.1	35345.1	38195.4	38204.1	34579.5
72.5°	3120.8	3133.2	3210.1	3444.7	4252.5	7292.6	11306.9	29532.8	34440.5	34377.2	30732.8
75°	2121.9	2231.1	2497.9	2721.2	3067.4	5121.1	7032.0	19897.4	29179.2	29675.5	25244.4
77.5°	1676.4	1686.4	1796.8	2001.5	2300.6	3825.6	3941.0	11009.1	21753.8	22933.9	19842.8
80°	1168.9	1186.3	1126.7	1176.4	1604.5	2618.2	2303.1	4791.0	9072.0	9686.3	11913.7
82.5°	557.2	577.0	662.6	615.5	797.9	1113.1	1216.1	2475.5	3918.7	4021.7	4638.4
85°	367.3	367.3	368.5	348.7	465.3	485.2	552.2	1056.0	1913.4	1978.0	1966.8
87.5°	117.9	130.3	126.6	147.7	178.7	161.3	168.8	331.3	656.4	650.2	543.5
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°	10628.1	10628.1	10628.1	10628.1	10628.1	10628.1	10628.1	10628.1	10628.1	10628.1	10628.1
2.5°	10643.0	10592.1	10473.0	10368.8	10265.8	10187.6	10120.6	10031.2	9989.1	9950.6	10031.2
5°	10674.0	10583.4	10370.0	10156.6	9960.5	9816.6	9728.5	9663.9	9605.6	9605.6	9632.9
7.5°	10710.0	10587.2	10281.9	9979.1	9685.0	9521.2	9395.9	9314.0	9266.9	9269.3	9327.7
10°	10733.6	10545.0	10181.4	9773.1	9453.0	9189.9	9067.1	8949.2	8859.9	8806.5	8866.1
12.5°	10760.9	10531.3	10046.1	9585.8	9196.1	8898.3	8642.7	8554.6	8467.7	8400.7	8433.0
15°	10929.6	10583.4	9933.2	9347.5	8895.8	8524.8	8189.8	8028.5	8003.7	7957.7	7968.9
17.5°	11205.1	10723.7	9860.0	9055.9	8534.7	8096.7	7672.3	7463.9	7414.2	7390.7	7403.1
20°	11615.8	10990.4	9882.3	8851.2	8127.7	7637.6	7089.1	6844.7	6679.6	6689.6	6738.0
22.5°	12243.7	11421.0	10003.9	8626.6	7687.2	7044.5	6491.0	6158.5	5992.2	5956.2	6010.8
25°	13243.9	12114.7	10138.0	8411.9	7261.6	6404.2	5791.2	5431.3	5217.9	5204.2	5265.0
27.5°	14525.7	13178.1	10429.6	8225.8	6733.0	5634.8	5025.5	4717.8	4490.7	4463.4	4443.6
30°	15837.3	14359.4	10956.9	7942.8	6116.3	4840.7	4310.8	4070.1	3815.7	3712.7	3735.0
32.5°	17227.1	15460.1	11574.9	7744.3	5426.4	4142.0	3681.7	3452.1	3218.8	3069.9	3035.2
35°	18626.8	16554.5	12094.8	7447.7	4772.4	3587.4	3146.9	2909.9	2706.4	2584.7	2576.1
37.5°	20264.7	17693.7	12511.8	7132.6	4093.6	3153.1	2623.2	2486.7	2388.7	2282.0	2293.1
40°	21905.2	19021.4	12845.5	6611.4	3530.3	2686.5	2232.3	2259.6	2280.7	2191.4	2183.9
42.5°	23267.7	20136.9	12998.2	5936.4	3031.5	2280.7	2059.9	2183.9	2275.8	2217.4	2210.0
45°	24651.2	21076.3	12938.6	5098.8	2617.0	2087.2	2046.2	2172.8	2290.7	2277.0	2270.8
47.5°	26155.2	22307.2	12835.6	4144.5	2320.4	2068.5	2076.0	2135.5	2284.5	2309.3	2299.3
50°	27994.2	23440.1	12226.4	3227.5	2176.5	2098.3	2143.0	2112.0	2238.5	2289.4	2298.1
52.5°	29824.5	24312.5	11411.1	2796.9	2119.4	2126.9	2236.1	2130.6	2186.4	2231.1	2272.0
55°	31236.6	25201.0	10092.0	2537.6	2100.8	2140.5	2262.1	2170.3	2169.1	2169.1	2182.7
57.5°	32682.2	26391.0	8773.0	2370.1	2068.5	2155.4	2231.1	2177.7	2160.4	2135.5	2119.4
60°	33688.5	26831.5	7078.0	2259.6	2035.0	2134.3	2144.2	2136.8	2083.4	2059.9	2041.2
62.5°	34582.0	27071.0	5510.7	2133.1	1989.1	2084.7	2032.6	2016.4	1985.4	1928.3	1938.2
65°	34342.5	26557.2	4199.1	1990.4	1956.9	2025.1	1934.5	1896.1	1898.5	1839.0	1858.8
67.5°	32801.3	24252.9	3015.3	1772.0	1868.8	1907.2	1822.8	1794.3	1752.1	1722.3	1749.6
70°	29688.0	21499.4	2033.8	1470.4	1667.7	1750.9	1695.0	1645.4	1579.6	1559.8	1589.6
72.5°	24987.5	17946.8	1403.4	1182.6	1439.4	1547.4	1526.3	1475.4	1428.2	1476.6	1535.0
75°	20527.8	13277.4	1145.3	969.1	1106.9	1289.3	1351.3	1366.2	1507.7	1979.2	2027.6
77.5°	14776.4	8230.7	1029.9	788.0	883.5	1031.2	1155.3	1206.1	1841.5	1763.3	1759.6
80°	8615.4	4797.2	785.5	621.7	714.7	755.7	903.4	1415.8	1588.3	1362.5	1329.0
82.5°	3931.1	2116.9	547.2	497.6	496.4	500.1	615.5	1362.5	1218.5	1073.4	1033.6
85°	1445.6	744.5	332.6	287.9	330.1	286.6	403.3	998.9	706.1	694.9	579.5
87.5°	356.1	152.6	112.9	94.3	76.9	73.2	122.8	328.8	172.5	157.6	151.4
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)