

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: P721918

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

Issue Date: 10/25/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P721918  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-15)  
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-HSS  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (8) 4000K CCT, 70 CRI LEDS  
Ballast/Driver: -

**Summary**

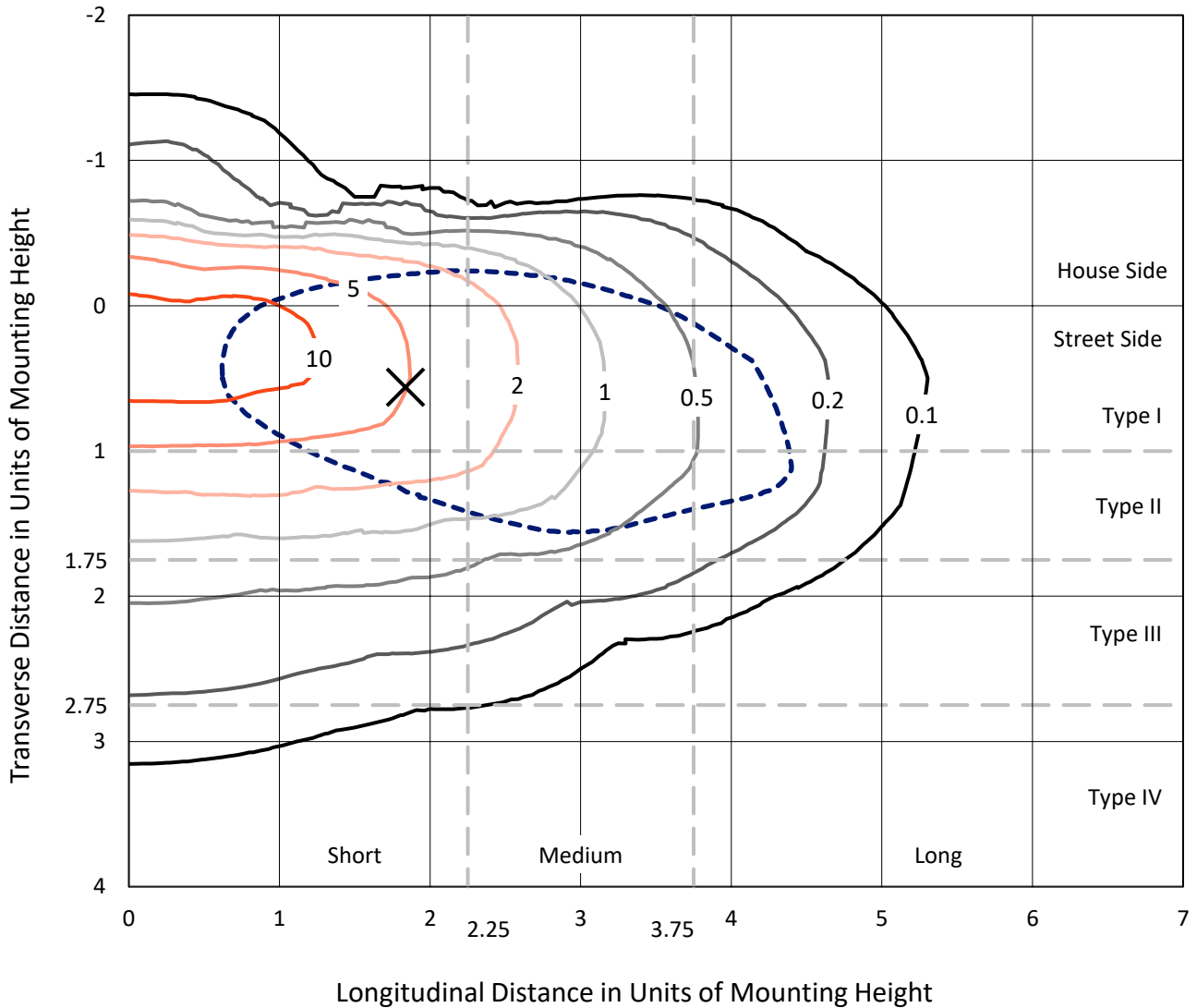
Lumens per Lamp: N/A  
Luminaire Lumens: 59351 lumens  
Efficiency: N/A  
Efficacy: 136.7 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B4 - U0 - G5  
  
Input Watts (W): 434.1  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage 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

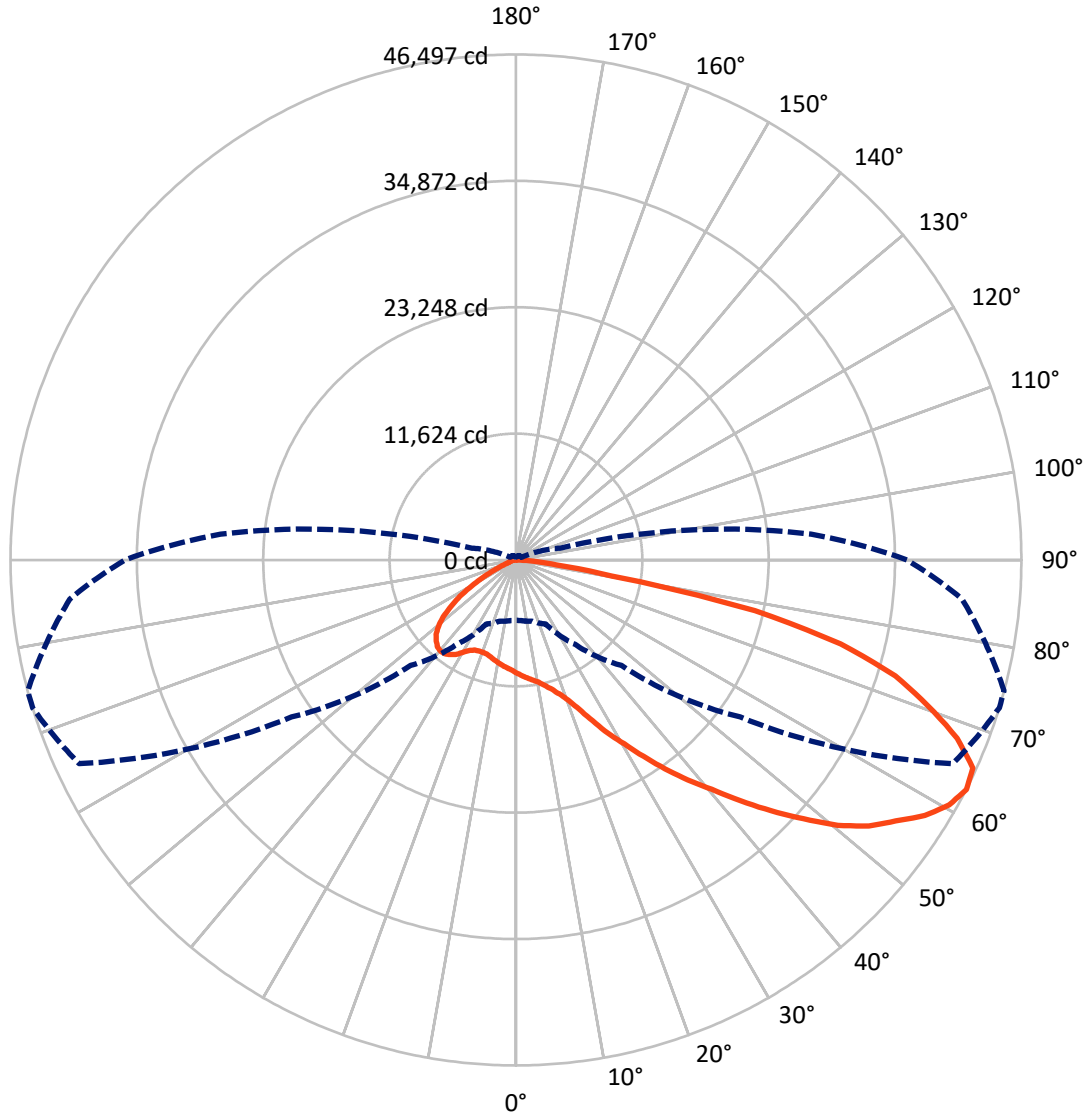
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 14.4 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 73-Deg Lateral      - - - Horizontal Cone Through 62.5-Deg Vertical

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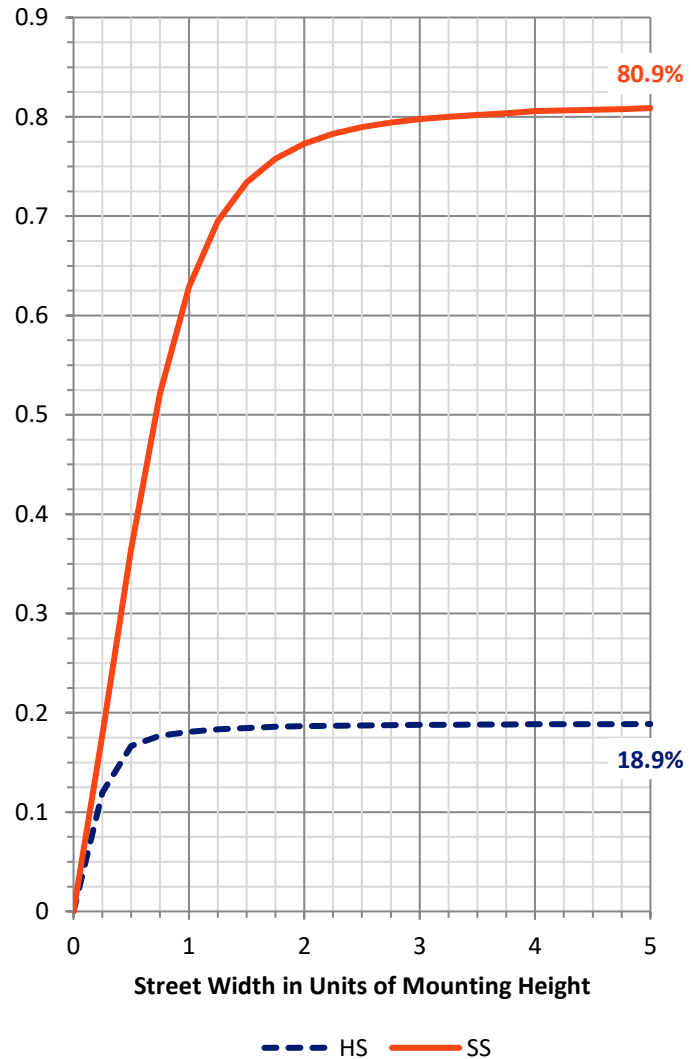
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	11353.6	0.0	11353.6
	% Fixture	19.1	0.0	19.1
<b>Street Side</b>	Lumens	47997.4	0.0	47997.4
	% Fixture	80.9	0.0	80.9
<b>Total</b>	Lumens	59351.0	0.0	59351.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	994.2	1.7
10°-20°	2990.3	5.0
20°-30°	5166.5	8.7
30°-40°	7769.2	13.1
40°-50°	10359.5	17.5
50°-60°	12200.4	20.6
60°-70°	12129.3	20.4
70°-80°	6963.7	11.7
80°-90°	777.9	1.3
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°	59351.0	100.0
0°-180°	59351.0	100.0

**Coefficient of Utilization**

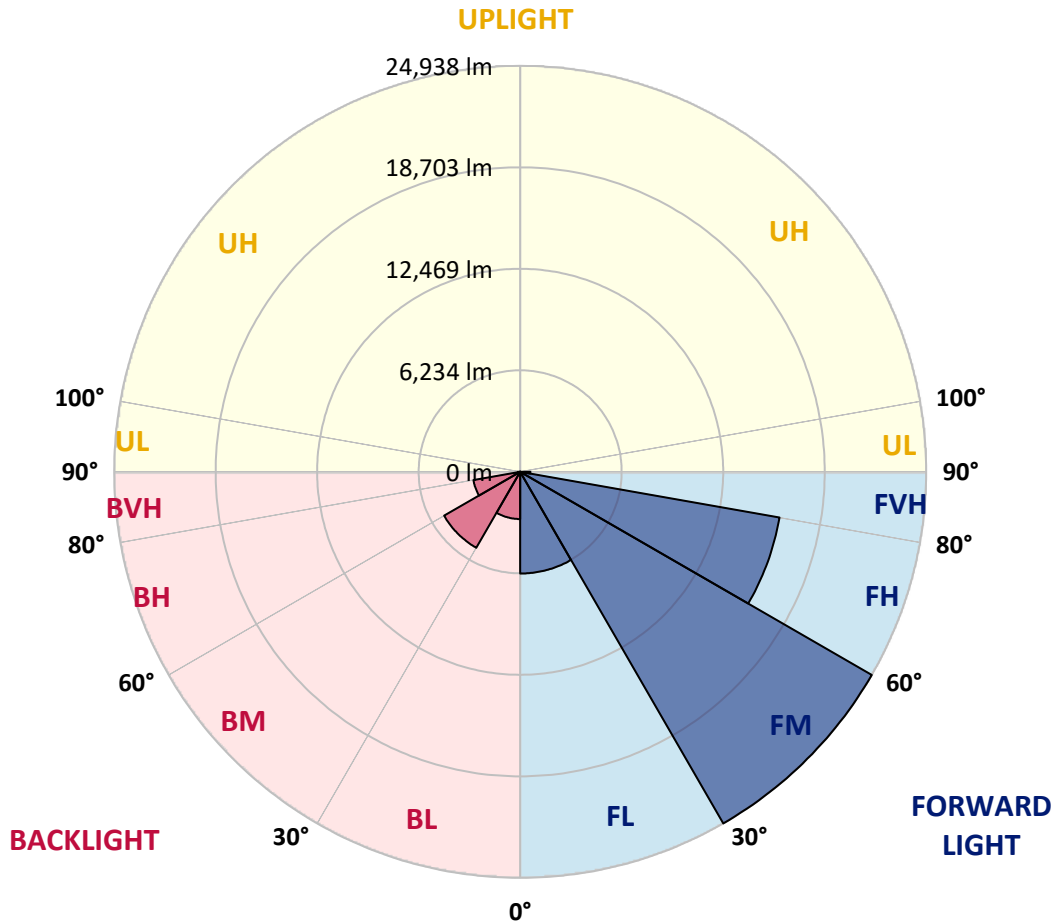


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	6249.6	10.5			
FM (30°-60°)	24937.9	42.0			
FH (60°-80°)	16178.2	27.3			G5
FVH (80°-90°)	631.8	1.1			G4/750
BL (0°-30°)	2901.4	4.9	B4/5000		
BM (30°-60°)	5391.2	9.1	B4/8500		
BH (60°-80°)	2914.9	4.9	B4/5000		G4/5000
BVH (80°-90°)	146.1	0.2			G2/225
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°	73°	75°	85°
0°	10408.8	10408.8	10408.8	10408.8	10408.8	10408.8	10408.8	10408.8	10408.8	10408.8	10408.8
2.5°	11136.2	11164.2	11130.9	11116.2	11100.2	10996.3	10875.1	10751.2	10651.3	10635.3	10504.7
5°	11918.2	11932.9	11878.3	11815.7	11707.8	11535.9	11318.7	11104.2	10904.4	10851.1	10612.6
7.5°	12519.1	12491.1	12477.8	12424.5	12329.9	12140.7	11811.7	11460.0	11150.9	11076.3	10713.9
10°	13082.6	13070.6	12969.4	12902.8	12752.2	12577.7	12307.3	11861.0	11425.3	11305.4	10801.8
12.5°	13692.8	13666.1	13624.8	13481.0	13358.4	13064.0	12737.6	12331.2	11846.3	11686.4	10952.4
15°	14241.7	14169.7	14147.1	13996.5	13872.6	13647.5	13319.8	12848.2	12329.9	12192.7	11238.8
17.5°	14763.9	14730.6	14680.0	14577.4	14438.8	14265.7	14003.2	13498.3	12962.7	12762.9	11725.1
20°	15207.6	15166.3	15122.3	15150.3	15119.6	15009.0	14843.9	14413.5	13759.4	13566.2	12316.6
22.5°	15516.6	15515.3	15691.2	15793.7	15852.4	15848.4	15808.4	15564.6	14906.5	14710.6	13201.2
25°	15773.8	15793.7	16016.2	16406.6	16755.6	16787.6	17070.0	16954.1	16394.6	16190.7	14532.1
27.5°	15849.7	15889.7	16293.3	16907.5	17437.7	17946.6	18361.0	18572.8	18054.6	17810.8	15962.9
30°	15904.3	15920.3	16316.0	17051.4	18169.1	18975.1	19715.9	20074.2	19627.9	19449.4	17557.6
32.5°	15519.3	15524.6	16130.8	17244.6	18706.0	20103.5	20980.2	21655.6	21538.4	21302.6	19301.5
35°	14989.1	15087.7	15783.1	17058.0	19148.3	21140.0	22333.7	23340.9	23575.4	23406.2	21044.1
37.5°	14333.6	14410.9	15155.6	16780.9	19245.6	21852.8	23386.2	25054.2	25667.0	25639.0	23147.7
40°	13527.6	13622.2	14513.5	16184.1	19197.6	22371.0	24621.2	26951.3	27729.3	27641.4	25234.0
42.5°	12575.0	12713.6	13578.2	15416.7	18847.2	22688.1	25632.4	28883.0	30283.2	30225.9	27080.5
45°	11633.1	11707.8	12496.4	14348.3	18202.4	22790.7	26583.6	31544.8	32902.4	32838.5	29305.3
47.5°	10661.9	10727.2	11550.5	13222.5	17083.4	22584.2	27336.3	33831.0	35570.9	35506.9	31515.5
50°	8402.5	8648.9	10336.9	12232.7	15808.4	21999.3	28046.4	36679.3	38363.3	38091.5	33451.3
52.5°	7188.8	7278.0	8153.3	11234.8	14536.1	21001.5	28520.7	39318.5	40660.1	40268.4	35431.0
55°	6719.8	6779.8	7208.8	9395.0	13341.1	19492.0	29078.9	41964.3	42382.6	42282.7	37045.7
57.5°	6364.1	6430.7	6737.2	7846.9	12082.1	17376.4	28904.3	43825.5	44349.0	44029.3	38760.3
60°	5860.5	5941.8	6348.1	7044.9	10651.3	15228.9	27368.3	44587.5	45778.5	45418.8	40064.5
62.5°	5543.5	5596.8	5829.9	6505.3	9465.6	13718.1	25182.1	44342.4	46496.6	46483.3	41195.6
65°	5113.1	5191.8	5440.9	5988.4	8410.4	12547.1	23119.7	43131.4	46187.5	46199.5	41428.8
67.5°	4662.9	4694.8	4955.9	5395.6	7167.5	11474.6	20451.3	41059.7	43780.2	44054.6	39815.4
70°	4100.6	4084.7	4367.1	4688.2	5857.9	9742.7	16461.2	37374.7	40223.1	40336.3	36552.7
72.5°	3226.7	3241.3	3319.9	3542.4	4447.0	7667.1	11944.9	31576.8	36504.8	36706.0	32382.8
75°	2168.9	2192.9	2559.2	2776.4	3198.7	5510.2	7511.2	21314.6	30860.1	31427.6	26503.6
77.5°	1654.6	1669.3	1775.9	2013.0	2314.1	3927.5	4071.3	11614.5	22466.9	23813.8	20733.7
80°	1172.4	1177.7	1072.5	953.9	1232.3	2664.5	2404.7	4946.6	8952.7	10579.3	12178.0
82.5°	524.9	516.9	608.8	506.3	710.1	1031.2	1135.1	2400.7	3718.3	3996.7	4351.1
85°	243.8	273.1	313.1	262.5	422.3	398.3	442.3	1023.2	1742.6	1923.8	1913.1
87.5°	60.0	65.3	82.6	105.2	153.2	135.9	133.2	301.1	389.0	387.7	595.5
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°	10408.8	10408.8	10408.8	10408.8	10408.8	10408.8	10408.8	10408.8	10408.8	10408.8	10408.8
2.5°	10415.5	10346.2	10182.3	10023.8	9873.3	9773.3	9661.4	9544.2	9473.6	9440.3	9512.2
5°	10467.4	10335.5	10022.5	9708.1	9441.6	9213.8	9053.9	8918.0	8844.8	8851.4	8855.4
7.5°	10511.4	10326.2	9887.9	9444.3	9028.6	8746.2	8537.0	8390.5	8306.5	8242.6	8290.5
10°	10550.0	10287.6	9730.7	9139.2	8687.6	8269.2	7985.5	7808.3	7653.7	7567.1	7635.1
12.5°	10591.3	10272.9	9554.8	8866.1	8281.2	7813.6	7424.6	7248.7	7096.9	7031.6	7072.9
15°	10771.2	10328.9	9391.0	8545.0	7880.2	7275.4	6855.7	6639.9	6520.0	6441.4	6458.7
17.5°	11080.3	10476.8	9285.7	8209.3	7432.6	6793.1	6249.6	5997.8	5799.3	5743.3	5728.6
20°	11519.9	10757.9	9285.7	7925.5	6925.0	6257.5	5631.4	5206.4	4897.3	4781.4	4870.7
22.5°	12258.0	11236.1	9377.7	7668.4	6488.0	5702.0	4955.9	4307.1	3890.1	3721.0	3819.5
25°	13290.5	11975.5	9526.9	7443.2	6089.7	5062.5	4099.3	3353.3	2893.6	2692.5	2689.8
27.5°	14638.7	13106.6	9828.0	7259.4	5612.7	4235.2	3205.4	2487.3	2055.7	1934.4	1951.7
30°	16133.5	14332.3	10396.8	6992.9	5033.2	3309.3	2334.1	1827.8	1524.1	1364.2	1366.9
32.5°	17574.9	15601.9	11072.3	6819.8	4280.5	2495.3	1664.0	1304.3	1115.1	1020.5	1035.2
35°	19120.4	16697.0	11574.5	6529.3	3397.2	1803.9	1176.4	977.9	899.3	850.0	852.6
37.5°	20789.7	17901.3	11987.5	6140.3	2568.6	1239.0	868.6	838.0	804.7	742.1	736.7
40°	22533.6	19296.2	12234.0	5511.5	1785.2	858.0	738.1	772.7	754.0	672.8	666.1
42.5°	24012.3	20372.7	12295.3	4678.8	1155.1	695.4	668.8	722.1	726.1	643.5	632.8
45°	25432.5	21331.9	12175.4	3582.4	800.7	654.1	626.2	699.4	704.8	630.2	612.8
47.5°	27021.9	22644.1	11958.2	2390.0	662.1	618.2	611.5	662.1	680.8	619.5	598.2
50°	28952.3	23711.3	11314.7	1468.1	624.8	595.5	595.5	626.2	651.5	598.2	587.5
52.5°	30932.0	24641.2	10362.2	1007.2	602.2	571.5	588.9	602.2	611.5	563.5	572.9
55°	32350.9	25465.8	8942.0	810.0	588.9	555.5	596.8	570.2	556.9	515.6	506.3
57.5°	33925.6	26446.4	7489.9	718.1	571.5	564.9	570.2	519.6	482.3	439.6	430.3
60°	35024.7	26973.9	5712.7	675.4	551.5	555.5	526.2	458.3	390.3	359.7	353.0
62.5°	35983.9	27275.0	4187.2	620.8	532.9	531.6	476.9	391.7	321.1	287.8	282.4
65°	35838.7	26804.7	2713.8	576.9	518.2	500.9	427.6	335.7	267.8	242.5	239.8
67.5°	34241.3	24723.8	1709.3	531.6	492.9	462.3	383.7	299.8	246.5	217.2	214.5
70°	30888.1	21850.1	1045.8	472.9	438.3	409.0	339.7	281.1	233.1	198.5	191.8
72.5°	26253.2	18714.0	739.4	417.0	382.4	347.7	287.8	267.8	222.5	178.5	173.2
75°	21569.0	13784.7	619.5	363.7	326.4	279.8	245.1	249.1	209.2	162.5	158.5
77.5°	15188.9	8594.3	576.9	297.1	257.1	222.5	211.8	227.8	191.8	149.2	145.2
80°	8864.7	4826.7	476.9	234.5	193.2	171.9	177.2	193.2	167.9	134.6	129.2
82.5°	3578.4	1910.4	335.7	182.5	141.2	137.2	145.2	157.2	138.6	113.2	110.6
85°	1277.6	596.8	190.5	119.9	90.6	94.6	93.3	111.9	99.9	82.6	81.3
87.5°	335.7	118.6	85.3	48.0	38.6	38.6	36.0	52.0	48.0	37.3	41.3
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)