

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: P721828

Luminaire Tested: **CST-CA8-400-722-U-T2-HSS**

Issue Date: 10/25/2023

Test Information

Test Method: LM-79-08
Report Number: P721828
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-CA8-400-722-U-T2-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 2200K CCT, 70 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 45054 lumens
Efficiency: N/A
Efficacy: 112.4 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G5

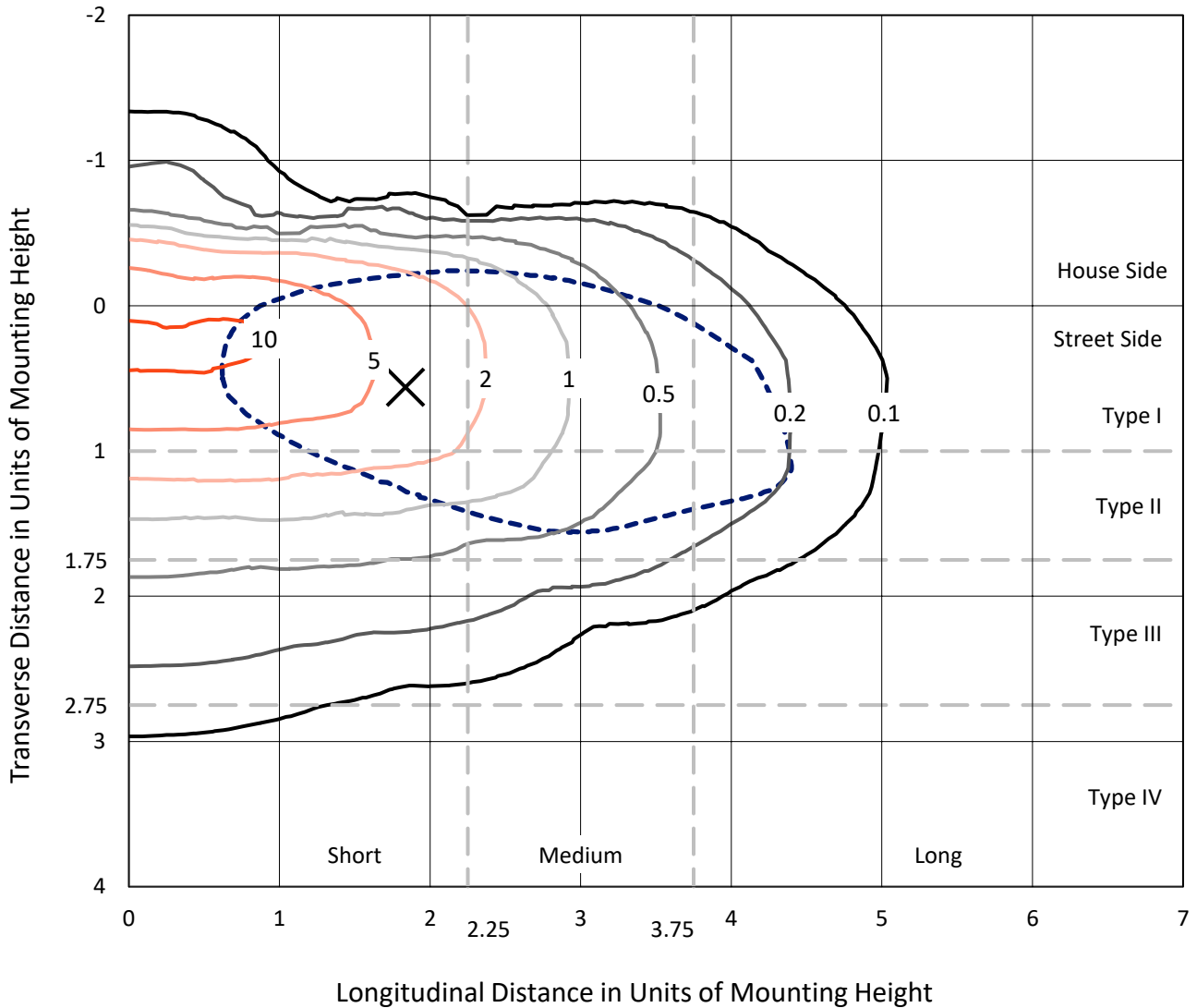
Input Watts (W): 400.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

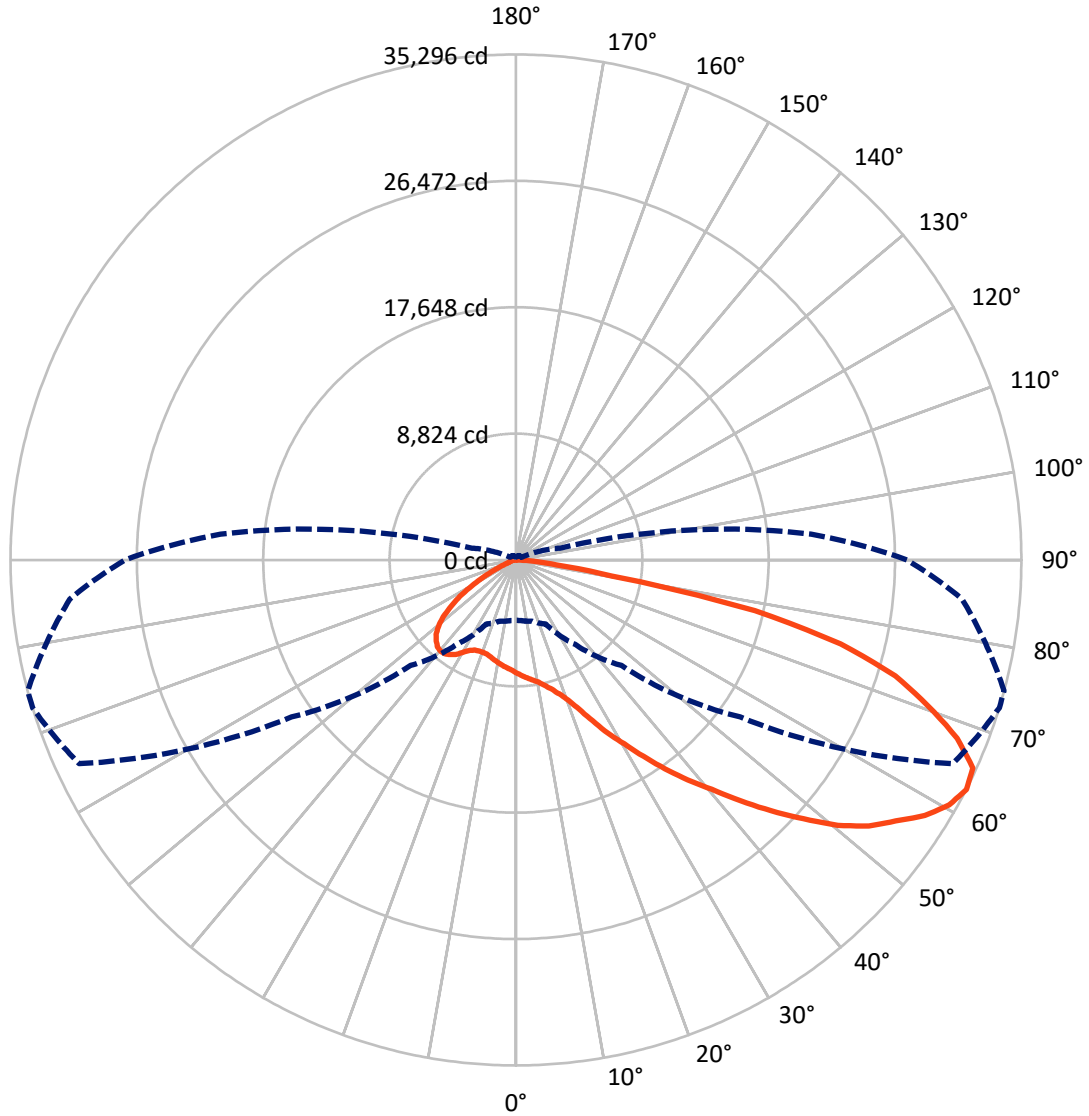
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 11 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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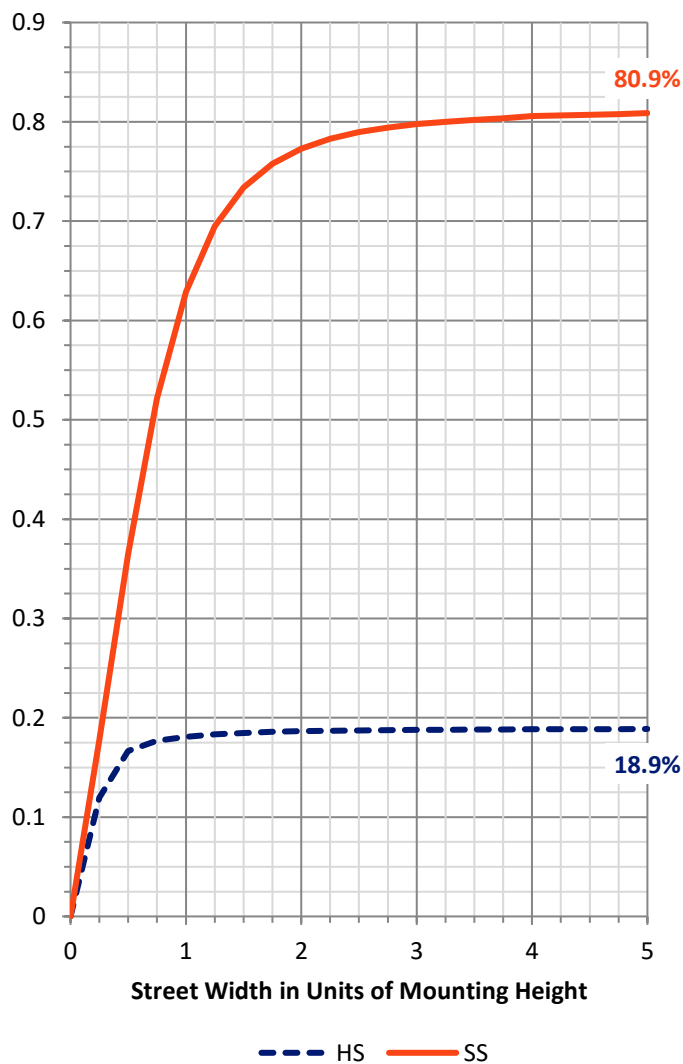
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8618.6	0.0	8618.6
	% Fixture	19.1	0.0	19.1
Street Side	Lumens	36435.4	0.0	36435.4
	% Fixture	80.9	0.0	80.9
Total	Lumens	45054.0	0.0	45054.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	754.7	1.7
10°-20°	2269.9	5.0
20°-30°	3922.0	8.7
30°-40°	5897.7	13.1
40°-50°	7864.0	17.5
50°-60°	9261.4	20.6
60°-70°	9207.5	20.4
70°-80°	5286.2	11.7
80°-90°	590.5	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°	45054.0	100.0
0°-180°	45054.0	100.0

Coefficient of Utilization

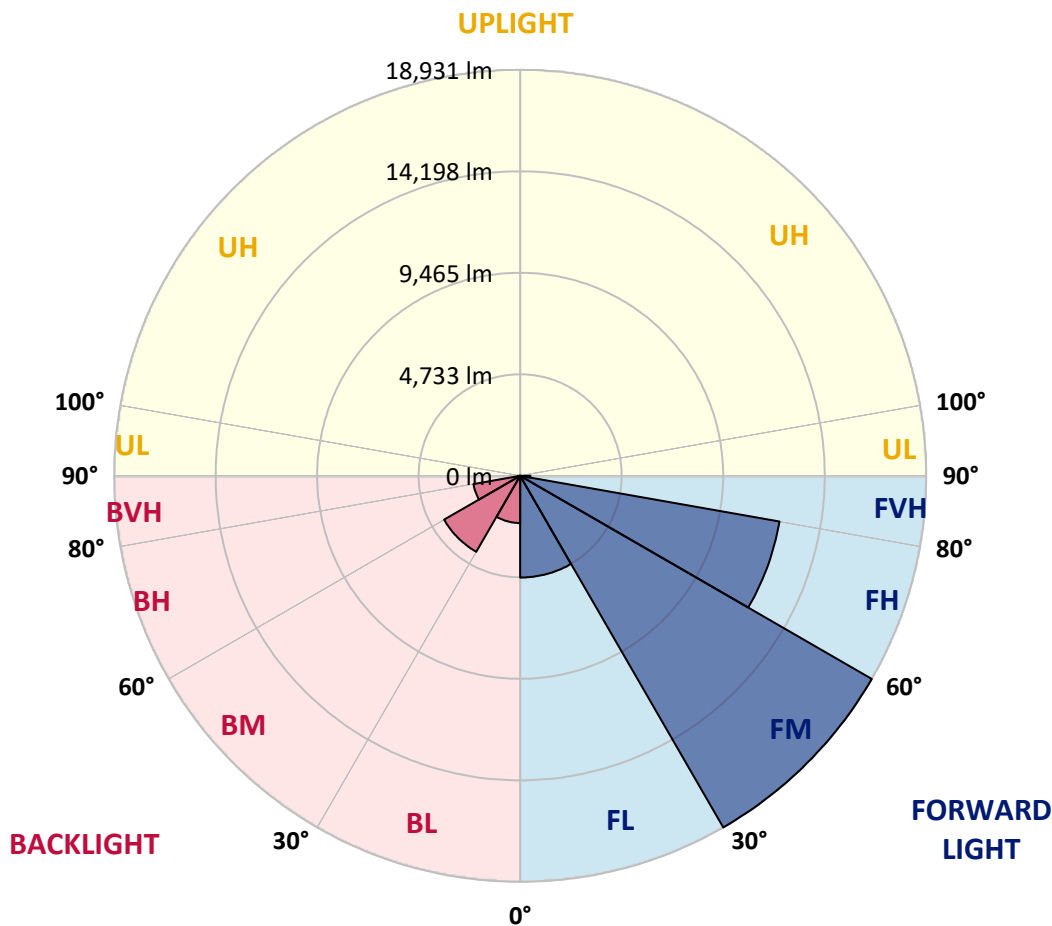


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4744.1	10.5			
FM (30°-60°)	18930.6	42.0			
FH (60°-80°)	12281.0	27.3			G5
FVH (80°-90°)	479.6	1.1			G3/500
BL (0°-30°)	2202.5	4.9	B3/2500		
BM (30°-60°)	4092.5	9.1	B3/5000		
BH (60°-80°)	2212.7	4.9	B3/2500		G3/2500
BVH (80°-90°)	110.9	0.2			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5
 Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	7901.4	7901.4	7901.4	7901.4	7901.4	7901.4	7901.4	7901.4	7901.4	7901.4	7901.4
2.5°	8453.6	8474.9	8449.6	8438.5	8426.3	8347.4	8255.4	8161.4	8085.5	8073.4	7974.3
5°	9047.3	9058.4	9016.9	8969.4	8887.5	8757.0	8592.2	8429.4	8277.7	8237.2	8056.2
7.5°	9503.4	9482.1	9472.0	9431.6	9359.8	9216.2	8966.4	8699.4	8464.8	8408.1	8133.0
10°	9931.2	9922.1	9845.2	9794.6	9680.4	9547.9	9342.6	9003.8	8673.1	8582.1	8199.8
12.5°	10394.4	10374.1	10342.8	10233.6	10140.5	9917.0	9669.2	9360.8	8992.7	8871.3	8314.1
15°	10811.0	10756.4	10739.2	10624.9	10530.9	10360.0	10111.2	9753.2	9359.8	9255.6	8531.5
17.5°	11207.5	11182.2	11143.7	11065.9	10960.7	10829.2	10630.0	10246.7	9840.1	9688.4	8900.6
20°	11544.2	11512.9	11479.5	11500.7	11477.5	11393.5	11268.1	10941.5	10444.9	10298.3	9349.7
22.5°	11778.8	11777.8	11911.3	11989.2	12033.7	12030.7	12000.3	11815.3	11315.7	11167.0	10021.2
25°	11974.0	11989.2	12158.1	12454.4	12719.4	12743.6	12958.0	12870.1	12445.3	12290.6	11031.5
27.5°	12031.7	12062.0	12368.4	12834.7	13237.2	13623.5	13938.0	14098.8	13705.4	13520.3	12117.6
30°	12073.1	12085.3	12385.6	12943.9	13792.4	14404.2	14966.5	15238.6	14899.8	14764.3	13328.2
32.5°	11780.9	11784.9	12245.1	13090.5	14199.9	15260.8	15926.3	16439.0	16350.0	16171.0	14652.0
35°	11378.4	11453.2	11981.1	12948.9	14535.7	16047.6	16953.8	17718.3	17896.3	17767.9	15974.8
37.5°	10880.8	10939.5	11504.8	12738.6	14609.5	16588.7	17752.7	19018.9	19484.1	19462.9	17571.7
40°	10268.9	10340.8	11017.3	12285.5	14573.1	16982.1	18690.2	20459.0	21049.6	20982.9	19155.4
42.5°	9545.9	9651.0	10307.4	11703.0	14307.1	17222.8	19457.8	21925.4	22988.3	22944.8	20557.1
45°	8830.8	8887.5	9486.2	10891.9	13817.7	17300.7	20179.9	23946.0	24976.6	24928.0	22246.0
47.5°	8093.6	8143.2	8768.1	10037.4	12968.2	17143.9	20751.3	25681.5	27002.3	26953.7	23923.8
50°	6378.4	6565.5	7846.8	9285.9	12000.3	16699.9	21290.3	27843.7	29122.0	28915.7	25393.2
52.5°	5457.1	5524.8	6189.3	8528.5	11034.5	15942.5	21650.3	29847.1	30865.5	30568.2	26896.1
55°	5101.1	5146.6	5472.3	7131.8	10127.4	14796.6	22074.1	31855.6	32173.1	32097.3	28121.8
57.5°	4831.1	4881.6	5114.2	5956.7	9171.7	13190.7	21941.6	33268.4	33665.8	33423.1	29423.4
60°	4448.8	4510.5	4818.9	5347.9	8085.5	11560.4	20775.6	33846.9	34751.0	34477.9	30413.4
62.5°	4208.1	4248.6	4425.5	4938.3	7185.4	10413.6	19116.0	33660.8	35296.1	35286.0	31272.0
65°	3881.4	3941.1	4130.2	4545.9	6384.5	9524.6	17550.5	32741.5	35061.5	35070.6	31449.0
67.5°	3539.6	3563.9	3762.1	4095.8	5440.9	8710.5	15524.8	31168.9	33234.0	33442.3	30224.3
70°	3112.8	3100.7	3315.1	3558.8	4446.8	7395.8	12495.9	28371.6	30533.8	30619.7	27747.6
72.5°	2449.4	2460.5	2520.2	2689.1	3375.8	5820.1	9067.5	23970.3	27711.2	27863.9	24582.2
75°	1646.4	1664.6	1942.7	2107.6	2428.2	4182.8	5701.8	16180.1	23426.2	23857.0	20119.2
77.5°	1256.1	1267.2	1348.1	1528.1	1756.7	2981.4	3090.6	8816.7	17054.9	18077.4	15739.2
80°	890.0	894.0	814.1	724.1	935.5	2022.6	1825.4	3755.0	6796.1	8030.9	9244.5
82.5°	398.5	392.4	462.2	384.3	539.0	782.8	861.6	1822.4	2822.6	3034.0	3303.0
85°	185.1	207.3	237.7	199.2	320.6	302.4	335.8	776.7	1322.8	1460.3	1452.3
87.5°	45.5	49.6	62.7	79.9	116.3	103.2	101.1	228.6	295.3	294.3	452.1
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°	7901.4	7901.4	7901.4	7901.4	7901.4	7901.4	7901.4	7901.4	7901.4	7901.4	7901.4
2.5°	7906.5	7853.9	7729.5	7609.2	7494.9	7419.0	7334.1	7245.1	7191.5	7166.2	7220.8
5°	7945.9	7845.8	7608.2	7369.5	7167.2	6994.3	6872.9	6769.8	6714.2	6719.2	6722.2
7.5°	7979.3	7838.7	7506.0	7169.2	6853.7	6639.3	6480.5	6369.3	6305.6	6257.0	6293.4
10°	8008.6	7809.4	7386.7	6937.7	6594.8	6277.3	6061.9	5927.3	5810.0	5744.3	5795.9
12.5°	8040.0	7798.3	7253.2	6730.3	6286.4	5931.4	5636.1	5502.6	5387.3	5337.7	5369.1
15°	8176.5	7840.8	7128.8	6486.6	5982.0	5522.8	5204.3	5040.4	4949.4	4889.7	4902.9
17.5°	8411.2	7953.0	7048.9	6231.8	5642.2	5156.7	4744.1	4553.0	4402.3	4359.8	4348.7
20°	8744.9	8166.4	7048.9	6016.3	5256.8	4750.2	4274.9	3952.2	3717.6	3629.6	3697.4
22.5°	9305.2	8529.5	7118.7	5821.2	4925.1	4328.5	3762.1	3269.6	2953.1	2824.6	2899.5
25°	10088.9	9090.8	7232.0	5650.2	4622.7	3843.0	3111.8	2545.5	2196.6	2043.9	2041.9
27.5°	11112.4	9949.4	7460.5	5510.7	4260.7	3215.0	2433.2	1888.1	1560.5	1468.4	1481.6
30°	12247.1	10879.8	7892.3	5308.4	3820.8	2512.1	1771.8	1387.5	1157.0	1035.6	1037.6
32.5°	13341.3	11843.6	8405.1	5176.9	3249.4	1894.2	1263.1	990.1	846.5	774.7	785.8
35°	14514.5	12674.9	8786.4	4956.5	2578.9	1369.3	893.0	742.3	682.6	645.2	647.2
37.5°	15781.7	13589.1	9099.9	4661.2	1949.8	940.5	659.4	636.1	610.8	563.3	559.3
40°	17105.5	14648.0	9287.0	4183.8	1355.2	651.3	560.3	586.6	572.4	510.7	505.7
42.5°	18228.0	15465.1	9333.5	3551.8	876.8	527.9	507.7	548.1	551.2	488.5	480.4
45°	19306.1	16193.3	9242.5	2719.4	607.8	496.6	475.3	530.9	535.0	478.4	465.2
47.5°	20512.6	17189.4	9077.6	1814.3	502.6	469.3	464.2	502.6	516.8	470.3	454.1
50°	21978.0	17999.5	8589.1	1114.5	474.3	452.1	452.1	475.3	494.5	454.1	446.0
52.5°	23480.8	18705.4	7866.0	764.6	457.1	433.9	447.0	457.1	464.2	427.8	434.9
55°	24557.9	19331.4	6788.0	614.9	447.0	421.7	453.1	432.8	422.7	391.4	384.3
57.5°	25753.3	20075.7	5685.6	545.1	433.9	428.8	432.8	394.4	366.1	333.7	326.7
60°	26587.6	20476.2	4336.5	512.7	418.7	421.7	399.5	347.9	296.3	273.1	268.0
62.5°	27315.8	20704.8	3178.6	471.3	404.5	403.5	362.1	297.3	243.7	218.4	214.4
65°	27205.5	20347.8	2060.1	437.9	393.4	380.3	324.6	254.9	203.3	184.1	182.0
67.5°	25993.0	18768.1	1297.5	403.5	374.2	350.9	291.3	227.5	187.1	164.8	162.8
70°	23447.5	16586.7	793.9	359.0	332.7	310.5	257.9	213.4	177.0	150.7	145.6
72.5°	19929.1	14206.0	561.3	316.5	290.2	264.0	218.4	203.3	168.9	135.5	131.5
75°	16373.3	10464.1	470.3	276.1	247.8	212.4	186.1	189.1	158.8	123.4	120.3
77.5°	11530.1	6524.0	437.9	225.5	195.2	168.9	160.8	172.9	145.6	113.3	110.2
80°	6729.3	3664.0	362.1	178.0	146.6	130.5	134.5	146.6	127.4	102.1	98.1
82.5°	2716.4	1450.2	254.9	138.6	107.2	104.2	110.2	119.3	105.2	86.0	83.9
85°	969.9	453.1	144.6	91.0	68.8	71.8	70.8	85.0	75.8	62.7	61.7
87.5°	254.9	90.0	64.7	36.4	29.3	29.3	27.3	39.4	36.4	28.3	31.4
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)