

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: P721900

Luminaire Tested: **CST-CA8-430-727-U-T3-HSS**

Issue Date: 10/25/2023

Test Information

Test Method: LM-79-08
Report Number: P721900
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-16)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 10/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA8-430-727-U-T3-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 2700K CCT, 70 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 51501 lumens
Efficiency: N/A
Efficacy: 118.6 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U0 - G5

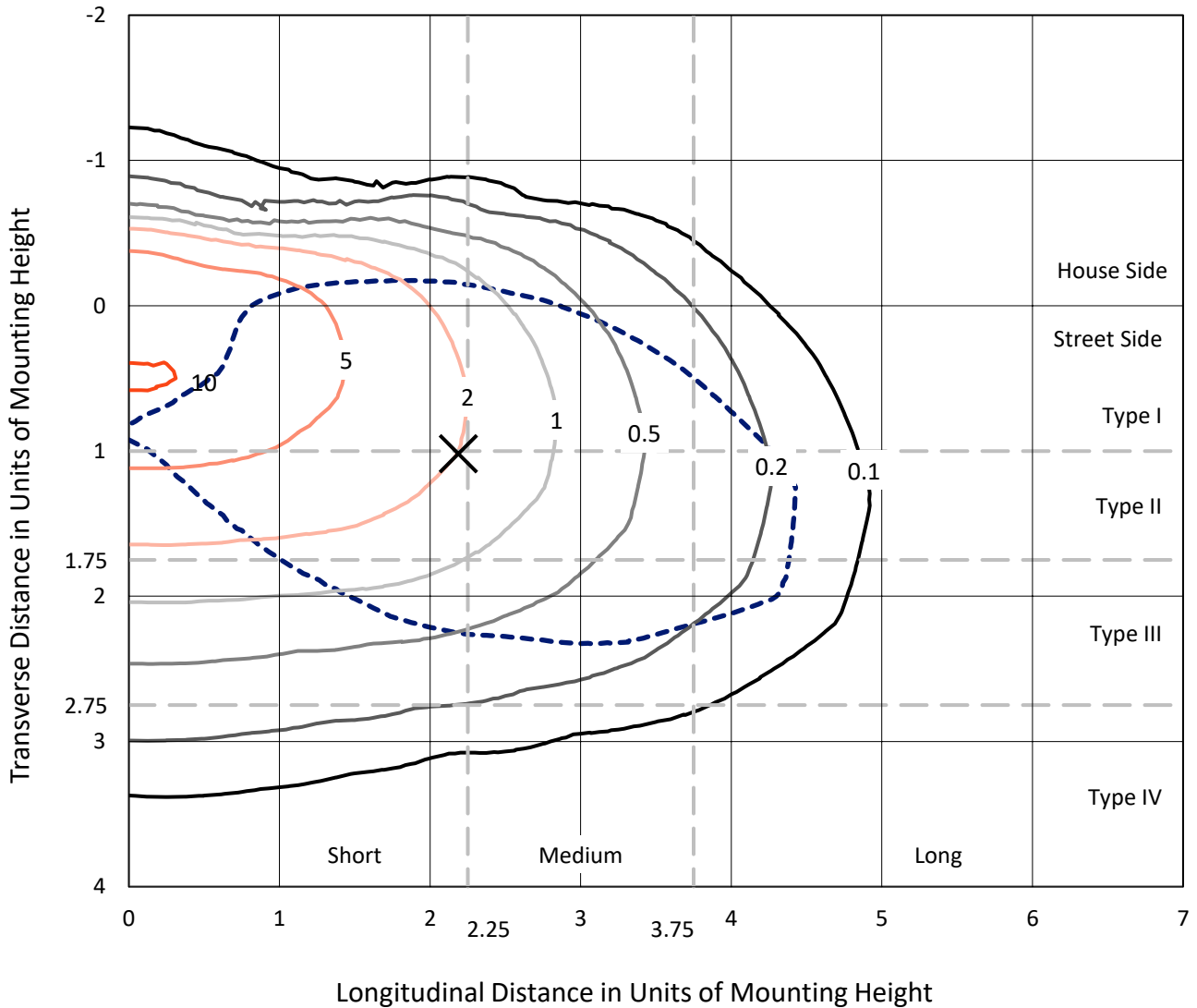
Input Watts (W): 434.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

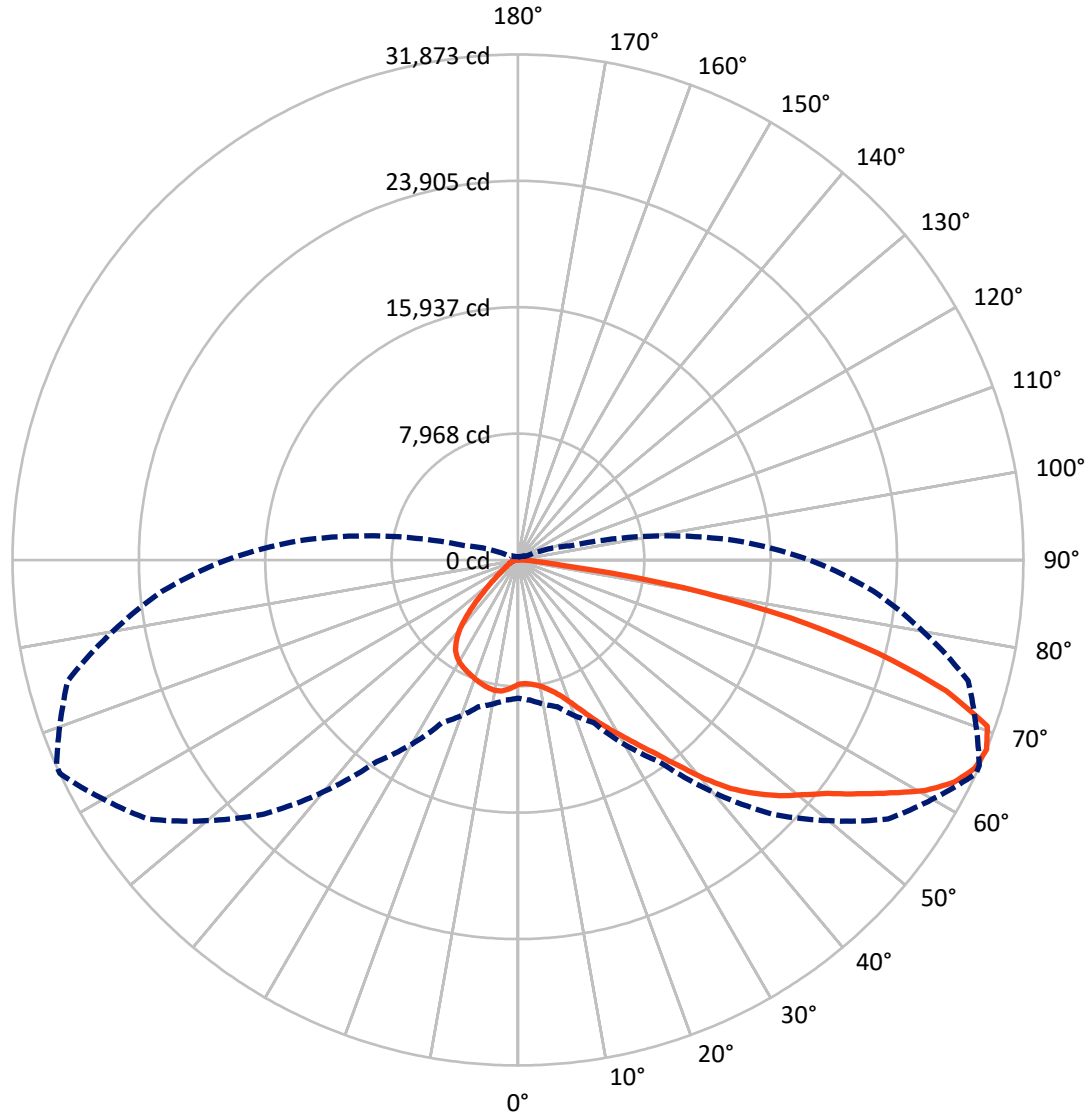
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 10.2 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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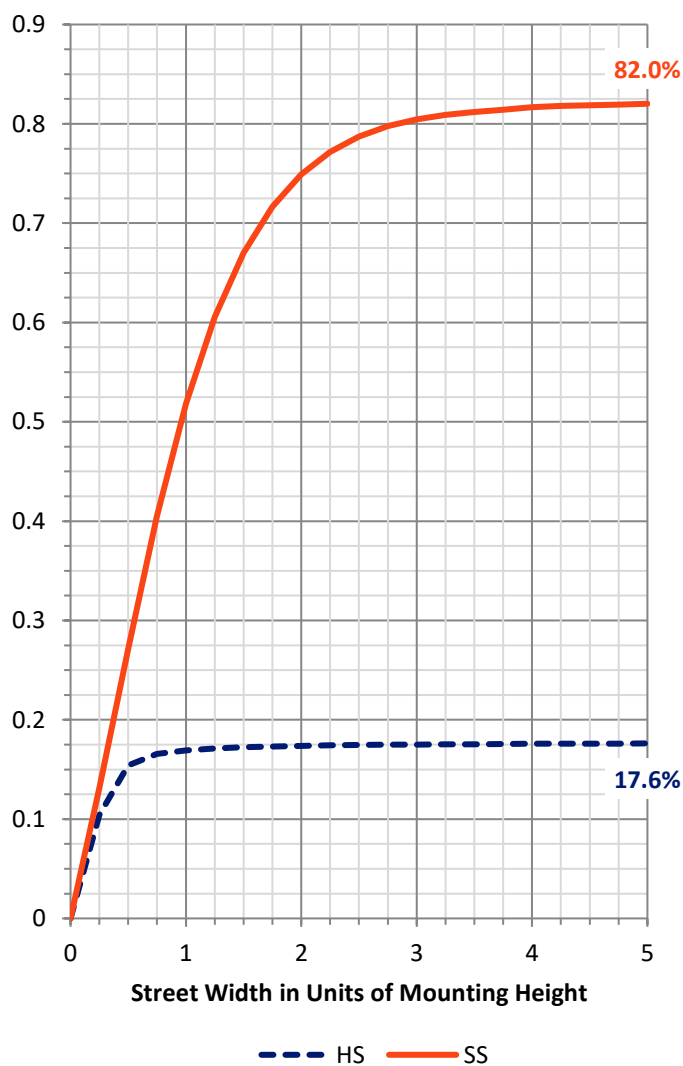
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9204.5	0.0	9204.5
	% Fixture	17.9	0.0	17.9
Street Side	Lumens	42296.5	0.0	42296.5
	% Fixture	82.1	0.0	82.1
Total	Lumens	51501.0	0.0	51501.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	774.2	1.5
10°-20°	2390.4	4.6
20°-30°	4146.8	8.1
30°-40°	6255.4	12.1
40°-50°	8673.5	16.8
50°-60°	10706.4	20.8
60°-70°	11407.4	22.1
70°-80°	6527.5	12.7
80°-90°	619.3	1.2
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°	51501.0	100.0
0°-180°	51501.0	100.0

Coefficient of Utilization



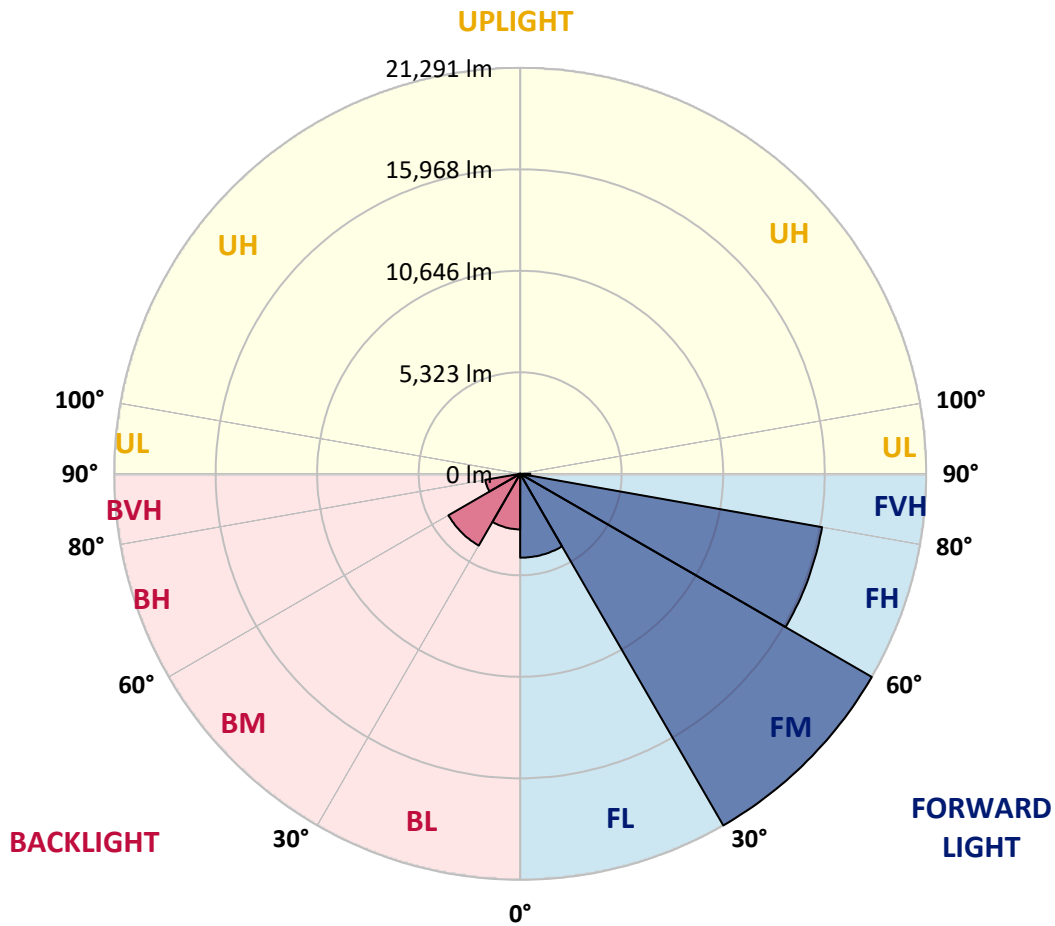
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4398.9	8.5			
FM (30°-60°)	21291.3	41.3			
FH (60°-80°)	16077.2	31.2			G5
FVH (80°-90°)	529.2	1.0			G4/750
BL (0°-30°)	2912.5	5.7	B4/5000		
BM (30°-60°)	4344.0	8.4	B3/5000		
BH (60°-80°)	1857.8	3.6	B3/2500		G3/2500
BVH (80°-90°)	90.1	0.2			G1/100
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°	7825.9	7825.9	7825.9	7825.9	7825.9	7825.9	7825.9	7825.9	7825.9	7825.9	7825.9
2.5°	7750.3	7740.2	7731.1	7746.9	7756.0	7770.6	7792.1	7806.7	7811.2	7824.8	7841.7
5°	7874.4	7873.3	7860.9	7854.1	7834.9	7828.2	7832.7	7850.7	7851.9	7868.8	7921.8
7.5°	8118.1	8115.8	8085.4	8071.8	8031.2	7986.1	7952.3	7955.6	7954.5	7971.4	8042.5
10°	8485.9	8467.8	8425.0	8383.2	8304.2	8219.6	8157.6	8101.2	8101.2	8126.0	8205.0
12.5°	8901.0	8925.9	8867.2	8804.0	8672.0	8519.7	8411.4	8348.2	8341.5	8353.9	8410.3
15°	9416.6	9416.6	9377.1	9286.9	9170.7	8958.6	8735.2	8655.1	8643.8	8669.8	8666.4
17.5°	9997.6	10014.5	9940.0	9894.9	9716.7	9482.0	9202.2	9063.5	9063.5	9046.6	8968.7
20°	10738.8	10646.3	10654.2	10579.7	10448.8	10108.1	9823.9	9621.9	9619.7	9585.8	9367.0
22.5°	11544.3	11493.5	11449.5	11384.1	11203.6	10899.0	10504.1	10304.4	10299.9	10216.4	9891.5
25°	12338.5	12376.8	12328.3	12208.7	12076.7	11745.1	11309.6	11113.3	11112.2	10973.4	10513.1
27.5°	13155.3	13197.0	13181.2	13072.9	12896.9	12637.4	12225.7	11969.6	11953.8	11863.5	11284.8
30°	14057.8	14020.5	14069.0	14022.8	13934.8	13511.7	13139.5	12841.6	12880.0	12852.9	12161.4
32.5°	14714.3	14738.0	14897.1	14901.6	14809.1	14495.5	14040.8	13858.1	13919.0	13882.9	13238.7
35°	15307.7	15346.1	15551.4	15753.4	15821.0	15478.1	15015.6	15004.3	15083.2	15303.2	14723.4
37.5°	15817.7	15844.7	16132.4	16395.3	16614.1	16379.5	16043.3	16443.8	16560.0	17010.1	16255.4
40°	16123.4	16158.4	16530.6	16900.7	17291.0	17207.5	17175.9	18123.6	18233.0	18629.0	17373.4
42.5°	15950.8	16019.6	16640.1	17317.0	17891.2	18058.2	18490.2	19708.6	19833.8	19867.7	18472.2
45°	15642.8	15728.5	16422.3	17517.8	18454.1	18990.0	19812.4	21000.3	21069.2	20973.3	19382.6
47.5°	15311.1	15402.5	16177.5	17458.0	18906.5	20074.1	20993.6	22216.5	22265.0	21970.5	20299.8
50°	14934.3	15018.9	15852.6	17318.1	19247.2	21097.4	22207.5	23267.9	23449.5	22867.4	21012.8
52.5°	14476.3	14566.6	15451.0	17099.2	19546.2	21856.6	23278.1	24455.8	24468.2	23988.8	21816.0
55°	13882.9	14039.7	14946.7	16720.2	19703.0	22508.7	24211.0	26027.3	26107.4	25643.8	22488.4
57.5°	13222.9	13359.4	14339.8	16214.8	19562.0	23003.9	25711.5	27712.8	27702.6	26771.9	23076.1
60°	12350.9	12447.9	13549.0	15553.7	19107.3	23603.0	27273.9	29518.9	29500.9	27877.5	23454.0
62.5°	11231.8	11328.8	12364.4	14516.9	18439.5	24004.6	28334.4	30871.6	30819.7	28681.9	23570.2
65°	9934.4	10108.1	11007.3	13171.0	17258.3	23740.6	28846.6	31668.0	31584.6	29295.6	23292.7
67.5°	8718.3	8866.1	9577.9	11318.6	15515.3	22670.0	28485.6	31873.4	31848.5	29384.7	22508.7
70°	6996.7	7050.9	7702.9	9193.2	12909.3	20377.6	27237.8	31399.5	31410.8	28563.4	20933.8
72.5°	4789.0	4921.0	5210.9	6387.5	9394.0	16205.7	23476.6	28258.8	28261.1	25612.2	18238.7
75°	2575.5	2779.7	3118.2	3701.4	5251.5	10399.2	18853.5	23448.4	23492.4	21354.6	14496.6
77.5°	1277.1	1350.4	1546.7	1979.9	2407.5	4906.3	12125.3	17601.3	17706.2	16391.9	9887.0
80°	584.4	596.8	611.5	608.1	921.7	2152.5	5205.2	10570.7	10602.3	9749.4	4513.7
82.5°	456.9	454.6	461.4	419.7	421.9	830.3	1801.6	2768.5	2952.3	2324.0	1431.6
85°	276.4	275.3	296.7	230.1	283.2	449.0	909.3	1104.4	1118.0	909.3	741.2
87.5°	104.9	101.5	93.6	82.4	94.8	126.4	314.8	406.1	397.1	282.0	256.1
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°	7825.9	7825.9	7825.9	7825.9	7825.9	7825.9	7825.9	7825.9	7825.9	7825.9	7825.9
2.5°	7856.4	7892.5	7959.0	8009.8	8026.7	8080.9	8132.8	8141.8	8179.0	8193.7	8242.2
5°	7954.5	8015.4	8119.2	8188.0	8218.5	8308.8	8367.4	8396.8	8386.6	8392.2	8446.4
7.5°	8097.8	8155.3	8238.8	8322.3	8337.0	8352.8	8347.1	8342.6	8303.1	8269.3	8320.0
10°	8228.7	8282.8	8334.7	8347.1	8272.7	8230.9	8156.5	8098.9	8022.2	7987.2	8027.9
12.5°	8412.5	8423.8	8373.1	8305.4	8145.2	7996.3	7875.6	7770.6	7675.9	7610.4	7664.6
15°	8606.6	8562.6	8414.8	8217.4	7969.2	7756.0	7558.5	7383.7	7226.9	7188.5	7203.2
17.5°	8863.8	8744.2	8446.4	8114.7	7728.9	7397.2	7143.4	6922.3	6717.0	6631.2	6623.3
20°	9177.4	8984.5	8510.7	7985.0	7444.6	7003.5	6610.9	6280.4	5997.2	5764.8	5770.4
22.5°	9585.8	9306.0	8607.7	7849.6	7129.9	6542.1	5971.2	5409.4	4943.5	4742.7	4693.1
25°	10125.1	9707.7	8745.3	7726.6	6777.9	5955.5	5148.8	4355.8	3862.8	3667.6	3646.2
27.5°	10796.3	10246.9	8955.2	7590.1	6401.1	5259.4	4099.7	3322.4	2870.0	2664.7	2595.9
30°	11558.9	10911.4	9170.7	7448.0	5945.3	4364.8	3126.1	2364.6	1900.9	1717.0	1693.3
32.5°	12546.1	11753.0	9491.0	7224.6	5279.7	3430.7	2180.7	1475.6	1160.9	1081.9	1059.3
35°	13948.3	12891.3	9887.0	6942.6	4424.6	2396.2	1351.5	864.2	696.1	656.6	648.7
37.5°	15255.8	14008.1	10286.4	6474.4	3359.6	1495.9	772.8	553.9	516.7	517.8	520.1
40°	16292.6	14771.9	10609.0	5858.4	2210.0	849.5	537.0	460.3	461.4	458.0	455.8
42.5°	17215.4	15381.1	10754.6	4948.0	1280.4	568.6	465.9	424.2	414.0	417.4	415.2
45°	17979.2	16002.7	10472.5	3924.8	754.7	509.9	440.0	393.7	382.4	400.5	402.7
47.5°	18782.4	16592.7	10040.5	2956.9	612.6	485.1	416.3	371.2	365.5	388.1	390.3
50°	19458.2	17020.3	9303.8	2228.1	584.4	458.0	394.8	348.6	347.5	367.8	367.8
52.5°	20023.4	17278.6	8429.5	1720.4	565.2	434.3	373.4	327.2	327.2	333.9	335.1
55°	20421.6	17226.7	7908.3	1353.8	544.9	411.8	350.9	306.9	293.3	288.8	291.1
57.5°	20493.8	17089.1	7303.6	1055.9	521.2	390.3	330.5	283.2	258.3	255.0	253.8
60°	20447.6	16786.7	6613.2	882.2	494.1	370.0	310.2	258.3	233.5	225.6	227.9
62.5°	20254.6	16250.9	5815.6	773.9	467.1	354.2	287.7	241.4	218.9	208.7	208.7
65°	19672.5	15483.7	4631.0	678.0	433.2	337.3	269.6	234.7	209.8	198.6	196.3
67.5°	18393.2	13891.9	3480.3	594.5	400.5	319.3	267.4	233.5	205.3	189.5	187.3
70°	16677.3	11933.5	2375.9	522.3	364.4	302.3	266.2	234.7	200.8	180.5	178.2
72.5°	13922.4	9407.6	1368.4	454.6	328.3	286.5	261.7	235.8	192.9	168.1	164.7
75°	10461.3	6598.5	803.2	390.3	293.3	262.9	249.3	229.0	180.5	153.4	150.0
77.5°	6291.6	3081.0	604.7	323.8	251.6	231.3	222.2	209.8	164.7	142.1	138.8
80°	2308.2	1169.9	474.9	259.5	199.7	200.8	191.8	183.9	150.0	130.9	128.6
82.5°	1006.3	715.2	350.9	197.4	156.8	179.4	157.9	151.2	128.6	117.3	112.8
85°	610.3	426.4	225.6	134.2	108.3	121.8	110.6	116.2	99.3	92.5	89.1
87.5°	201.9	127.5	100.4	65.4	54.2	50.8	49.6	59.8	56.4	51.9	51.9
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)