

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: P721882

Luminaire Tested: **CST-CA8-400-760-U-T4-HSS**

Issue Date: 10/25/2023

Test Information

Test Method: LM-79-08
Report Number: P721882
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-17)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 10/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA8-400-760-U-T4-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 5700K CCT, 70 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 53574 lumens
Efficiency: N/A
Efficacy: 133.7 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

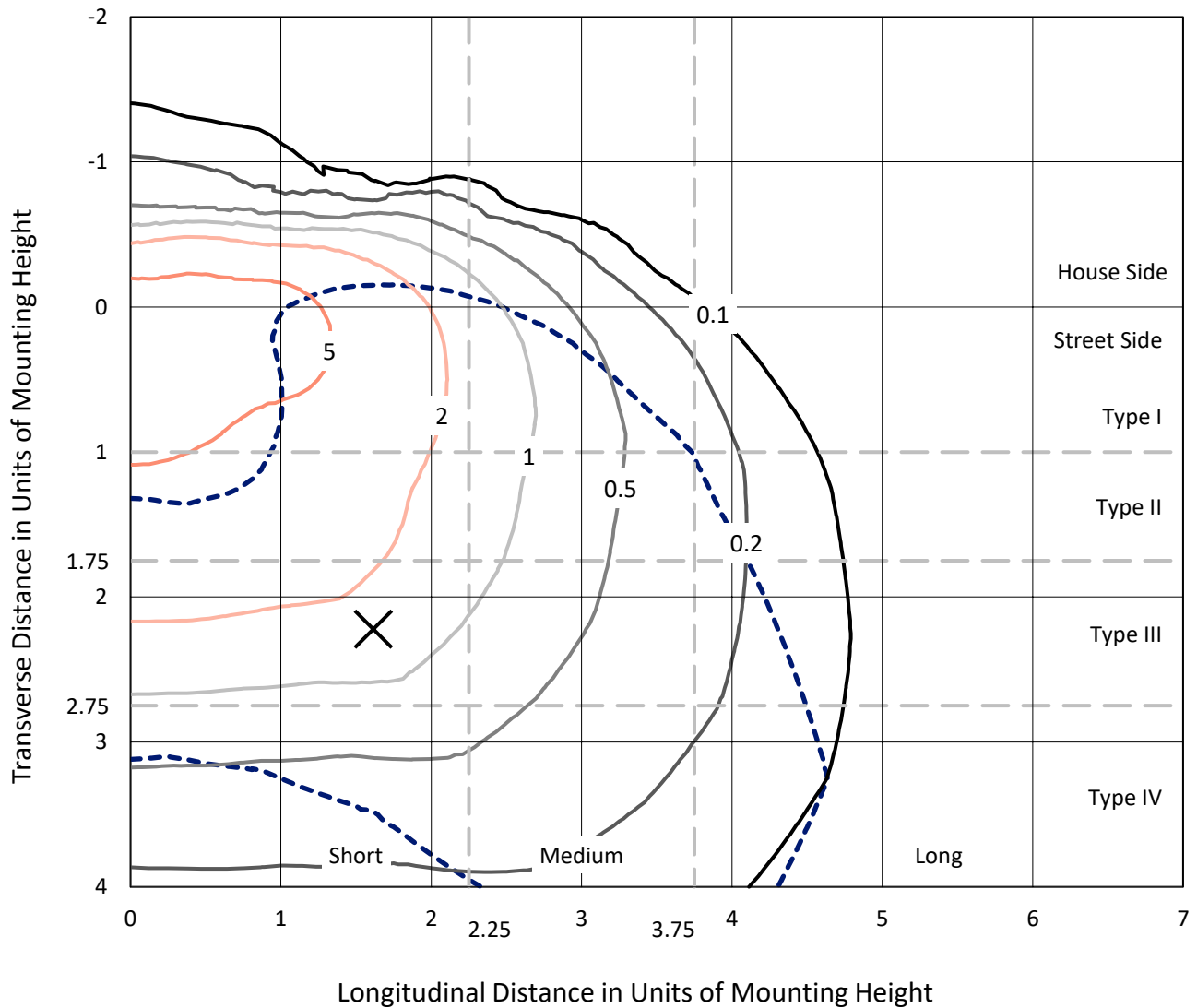
Input Watts (W): 400.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

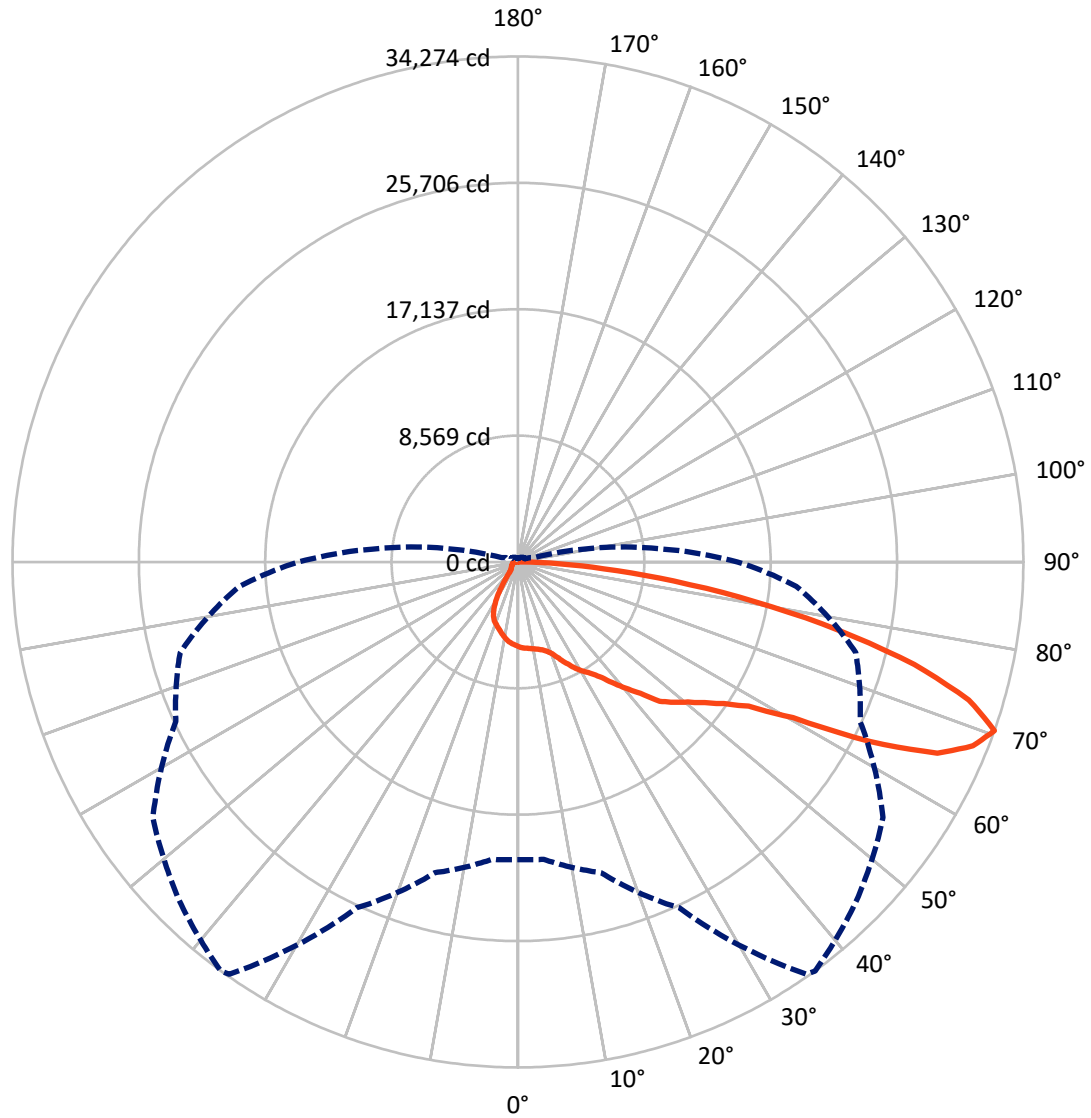
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 7.3 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 36-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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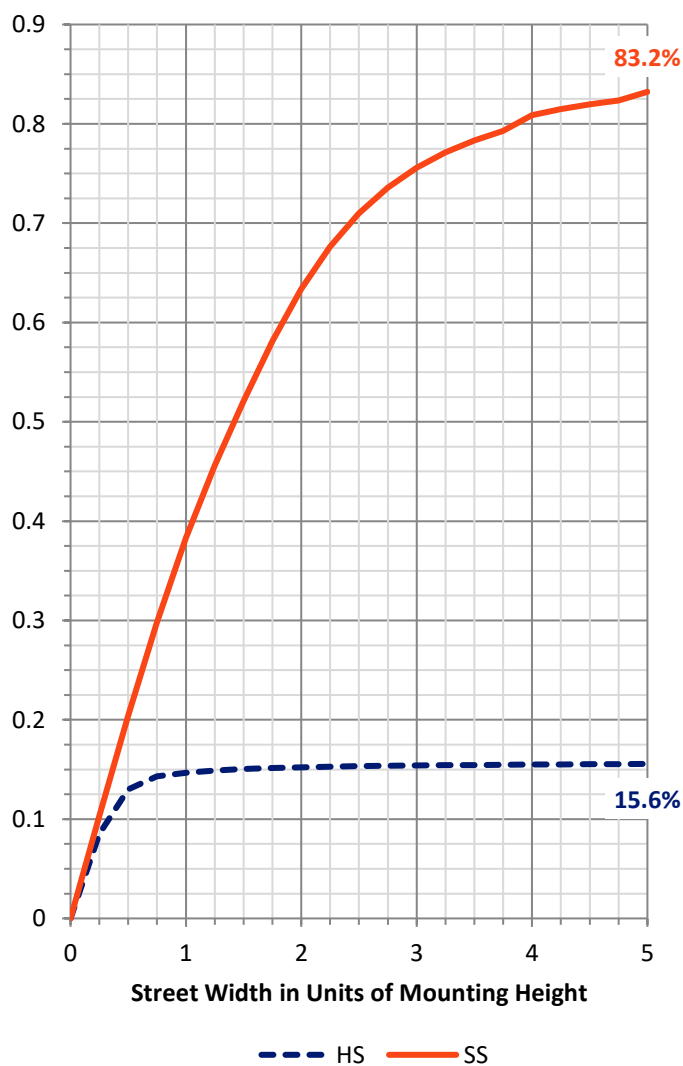
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8454.4	0.0	8454.4
	% Fixture	15.8	0.0	15.8
Street Side	Lumens	45119.6	0.0	45119.6
	% Fixture	84.2	0.0	84.2
Total	Lumens	53574.0	0.0	53574.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	544.4	1.0
10°-20°	1619.0	3.0
20°-30°	2911.4	5.4
30°-40°	4607.2	8.6
40°-50°	7200.1	13.4
50°-60°	10339.3	19.3
60°-70°	14024.3	26.2
70°-80°	10379.5	19.4
80°-90°	1948.9	3.6
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°	53574.0	100.0
0°-180°	53574.0	100.0

Coefficient of Utilization



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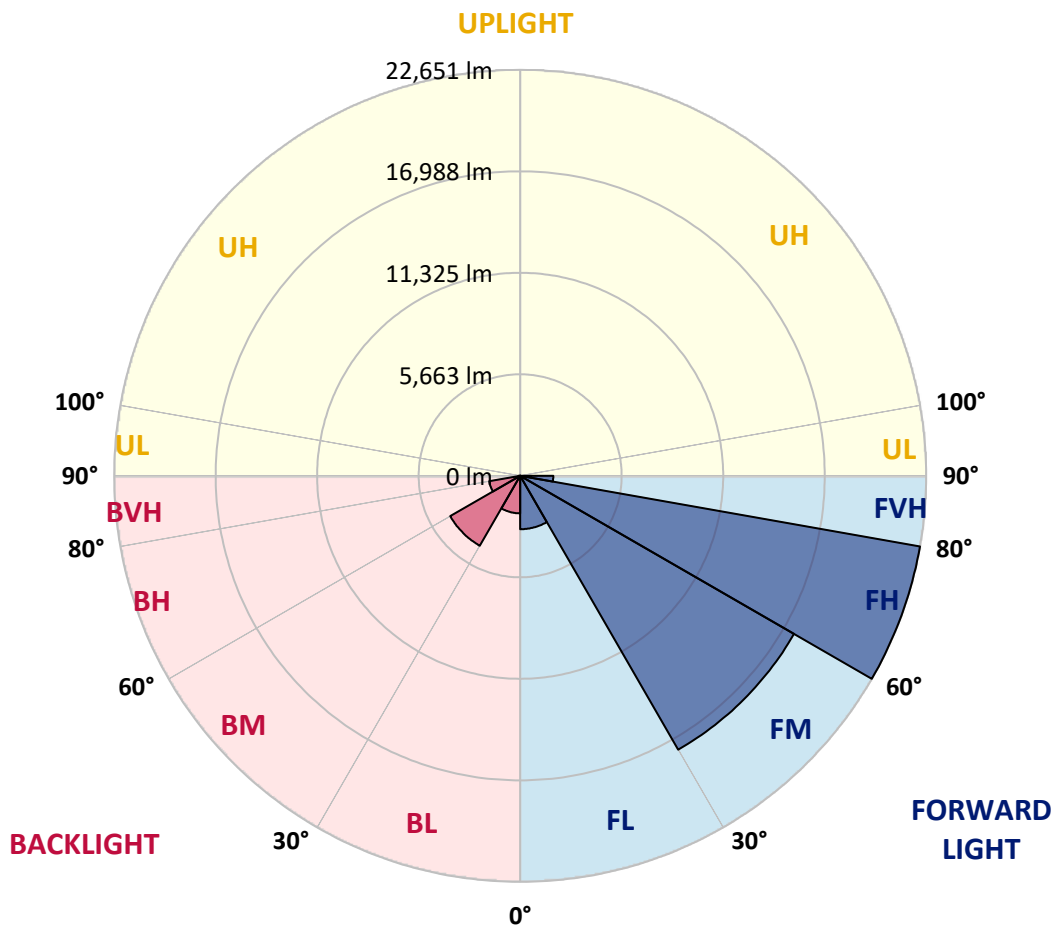
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2979.8	5.6			
FM (30°-60°)	17641.4	32.9			
FH (60°-80°)	22650.6	42.3			G5
FVH (80°-90°)	1847.9	3.4			G5
BL (0°-30°)	2095.0	3.9	B3/2500		
BM (30°-60°)	4505.1	8.4	B3/5000		
BH (60°-80°)	1753.2	3.3	B3/2500		G3/2500
BVH (80°-90°)	101.1	0.2			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	5740.2	5740.2	5740.2	5740.2	5740.2	5740.2	5740.2	5740.2	5740.2	5740.2	5740.2
2.5°	5856.5	5844.1	5834.2	5837.9	5830.5	5835.4	5824.3	5810.7	5778.5	5764.9	5758.7
5°	5908.4	5904.7	5894.8	5887.4	5873.8	5868.8	5856.5	5867.6	5850.3	5805.7	5779.8
7.5°	5939.3	5938.1	5927.0	5910.9	5918.3	5924.5	5936.8	5919.5	5897.3	5876.2	5823.1
10°	5952.9	5952.9	5939.3	5948.0	5986.3	5990.0	5996.2	6007.3	5986.3	5955.4	5902.2
12.5°	5987.6	5985.1	5990.0	6018.5	6058.1	6066.7	6097.6	6097.6	6100.1	6081.6	6019.7
15°	6074.1	6074.1	6085.3	6111.2	6179.3	6184.2	6230.0	6270.8	6275.7	6248.5	6201.5
17.5°	6274.5	6269.6	6263.4	6279.5	6352.4	6354.9	6434.1	6486.0	6499.6	6529.3	6521.9
20°	6655.5	6650.5	6649.3	6650.5	6645.6	6638.1	6716.1	6771.7	6841.0	6892.9	6918.9
22.5°	7200.9	7189.8	7189.8	7129.2	7082.2	7089.6	7102.0	7132.9	7224.4	7315.9	7413.6
25°	7788.4	7781.0	7787.2	7632.6	7569.5	7594.2	7578.1	7626.4	7746.3	7825.5	7929.4
27.5°	8268.3	8279.4	8244.8	8124.8	8084.0	8102.6	8065.5	8204.0	8336.3	8474.8	8631.9
30°	8865.7	8806.3	8721.0	8575.0	8560.2	8562.7	8560.2	8782.8	9057.4	9255.3	9473.0
32.5°	9646.1	9656.0	9464.3	9120.5	8994.3	8977.0	9026.5	9353.0	9724.1	10163.1	10450.1
35°	10435.2	10451.3	10311.6	9952.9	9593.0	9538.5	9465.6	9889.8	10425.3	11306.0	11738.9
37.5°	11272.6	11329.5	11163.7	10843.4	10416.7	10366.0	10020.9	10437.7	11229.3	12659.1	13226.8
40°	12393.2	12332.6	12132.2	11725.3	11328.2	11246.6	10845.9	11064.8	12263.3	14353.6	14765.4
42.5°	13219.4	13202.1	13032.6	12630.6	12231.1	12165.6	11842.8	12080.2	13565.7	16071.5	16255.8
45°	13874.9	13981.3	13977.6	13725.2	13500.1	13463.0	13272.6	13622.6	15140.2	17693.0	17602.7
47.5°	14457.5	14523.0	14417.9	14307.8	14202.7	14215.0	14356.0	15075.9	16749.3	19109.2	18709.7
50°	15411.1	15327.0	14855.7	14771.6	14920.0	14926.2	15355.4	16463.6	18521.7	20333.7	19647.2
52.5°	16682.5	16591.0	15622.6	15479.1	15830.4	15856.3	16570.0	17846.4	20349.8	21503.7	20579.8
55°	18574.9	18362.2	17324.5	16681.3	16842.1	16947.2	17811.8	19176.0	21780.8	22535.3	21286.1
57.5°	20898.9	21053.5	20521.7	19068.4	18399.3	18438.9	19232.9	20448.7	23043.6	23438.2	21699.2
60°	23355.3	23318.2	23540.8	22928.6	21647.2	21434.5	21030.0	21747.4	24022.0	24198.8	22124.6
62.5°	24701.0	24917.4	25659.5	25782.0	26938.4	26825.9	24069.0	23357.8	25152.4	24676.2	22240.9
65°	24693.6	24787.6	26169.1	27688.0	31300.8	31268.6	29987.3	25686.7	25994.7	24931.0	22008.4
67.5°	23098.0	23244.0	24859.3	27826.5	33316.8	33278.5	32392.9	28960.7	26259.4	24624.3	20923.7
70°	20189.0	20238.5	21814.2	25876.0	34127.0	34274.1	32475.8	30217.3	25601.4	23712.7	18946.0
72.5°	16655.3	16552.7	18093.8	22097.4	32063.9	31976.1	31102.9	28717.0	24493.2	21942.8	15451.9
75°	12263.3	12549.0	13931.8	17742.5	27453.0	27774.5	28161.7	26421.4	21753.6	18083.9	10685.1
77.5°	8097.6	8461.2	9858.9	13303.5	21733.8	22233.5	23236.6	22472.2	17696.7	12972.0	5088.4
80°	4184.2	4458.8	5716.7	8827.3	15580.5	16301.6	18140.8	17020.2	12546.5	5865.1	1139.1
82.5°	1583.2	1547.3	2561.5	5052.5	9990.0	10645.5	11982.5	10206.4	4465.0	1030.3	529.4
85°	695.1	735.9	1061.2	2304.2	5711.7	5797.1	6787.8	3978.9	654.3	492.3	359.9
87.5°	300.6	345.1	445.3	662.9	1927.0	2225.1	2753.2	1264.1	197.9	170.7	180.6
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°	5740.2	5740.2	5740.2	5740.2	5740.2	5740.2	5740.2	5740.2	5740.2	5740.2	5740.2
2.5°	5747.6	5740.2	5727.8	5696.9	5646.2	5640.0	5635.1	5630.1	5620.2	5625.2	5653.6
5°	5760.0	5746.4	5701.8	5657.3	5612.8	5573.2	5525.0	5506.4	5481.7	5465.6	5495.3
7.5°	5802.0	5773.6	5708.0	5647.4	5526.2	5468.1	5406.2	5333.3	5281.3	5247.9	5277.6
10°	5872.5	5836.7	5755.0	5630.1	5487.9	5328.3	5219.5	5098.3	4999.3	4972.1	4999.3
12.5°	5987.6	5934.4	5839.1	5669.7	5417.4	5208.3	5001.8	4842.2	4682.7	4636.9	4650.5
15°	6174.3	6132.3	5986.3	5752.6	5418.6	5099.5	4792.8	4535.5	4326.5	4253.5	4248.6
17.5°	6473.6	6429.1	6260.9	5917.1	5463.1	5014.2	4587.4	4195.4	3878.7	3717.9	3692.0
20°	6902.8	6841.0	6586.2	6159.5	5559.6	4977.1	4397.0	3870.1	3377.8	3076.0	3030.3
22.5°	7380.2	7314.7	6938.7	6346.2	5628.9	4904.1	4215.2	3510.2	2862.1	2493.5	2441.5
25°	7973.9	7830.5	7276.3	6523.1	5612.8	4750.7	3919.6	3021.6	2319.1	2000.0	1965.3
27.5°	8560.2	8378.4	7620.2	6615.9	5542.3	4507.1	3486.7	2450.2	1815.7	1589.3	1560.9
30°	9287.5	8936.2	7925.7	6659.2	5364.2	4142.2	2906.6	1862.7	1359.3	1203.4	1176.2
32.5°	10152.0	9620.2	8212.6	6610.9	5067.3	3585.6	2259.7	1364.2	1010.5	912.8	911.6
35°	11292.4	10458.7	8528.0	6452.6	4612.2	2985.7	1584.4	932.6	787.9	754.5	760.7
37.5°	12625.7	11594.2	8848.4	6192.9	4097.7	2284.4	1056.3	718.6	692.6	693.9	695.1
40°	14032.0	12848.3	9280.0	5828.0	3473.1	1653.7	760.7	645.6	644.4	656.8	660.5
42.5°	15375.2	14066.6	9811.9	5341.9	2818.8	1093.4	659.2	615.9	599.9	604.8	608.5
45°	16623.2	15111.7	10264.6	4868.2	2117.5	780.4	646.9	581.3	556.6	554.1	556.6
47.5°	17628.7	15949.1	10540.4	4311.6	1508.9	648.1	620.9	549.2	514.5	507.1	503.4
50°	18394.3	16571.2	10640.6	3680.8	1020.4	618.4	586.3	512.1	470.0	471.2	471.2
52.5°	19141.4	17136.5	10524.3	3045.1	750.8	592.4	562.8	482.4	437.8	461.3	467.5
55°	19679.4	17373.9	10185.4	2357.4	625.8	560.3	536.8	447.7	416.8	455.2	467.5
57.5°	19993.6	17560.7	9563.3	1701.9	573.9	529.4	503.4	415.6	387.1	397.0	403.2
60°	20189.0	17299.7	8740.8	1163.9	546.7	504.6	470.0	394.6	356.2	332.7	329.0
62.5°	20081.4	16646.7	7657.3	800.2	518.2	477.4	441.6	374.8	324.1	293.1	290.7
65°	19204.5	15438.3	5878.7	648.1	500.9	465.1	424.2	356.2	301.8	272.1	268.4
67.5°	17578.0	13266.4	3433.5	576.4	493.5	452.7	410.6	338.9	289.4	257.3	252.3
70°	14905.2	9978.8	1150.3	514.5	492.3	451.4	399.5	326.5	275.8	242.4	237.5
72.5°	10753.1	6021.0	560.3	452.7	460.1	432.9	390.8	316.6	267.2	225.1	216.4
75°	6111.2	1960.4	505.9	390.8	427.9	413.1	385.9	317.9	270.9	204.1	194.2
77.5°	1739.0	572.7	488.6	332.7	404.4	426.7	361.2	286.9	277.1	189.2	176.9
80°	587.5	509.6	471.2	258.5	326.5	352.5	312.9	252.3	279.5	171.9	159.6
82.5°	471.2	512.1	395.8	206.6	248.6	267.2	248.6	226.3	226.3	153.4	143.5
85°	377.2	474.9	251.1	164.5	185.5	205.3	175.6	169.4	158.3	128.6	124.9
87.5°	218.9	148.4	103.9	84.1	77.9	79.2	68.0	81.6	100.2	87.8	86.6
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)