

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: P721868

Luminaire Tested: **CST-CA8-400-750-U-T2-HSS**

Issue Date: 10/25/2023

Test Information

Test Method: LM-79-08
Report Number: P721868
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-CA8-400-750-U-T2-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 5000K CCT, 70 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 56295 lumens
Efficiency: N/A
Efficacy: 140.5 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type II - Short
BUG Rating: B4 - U0 - G5

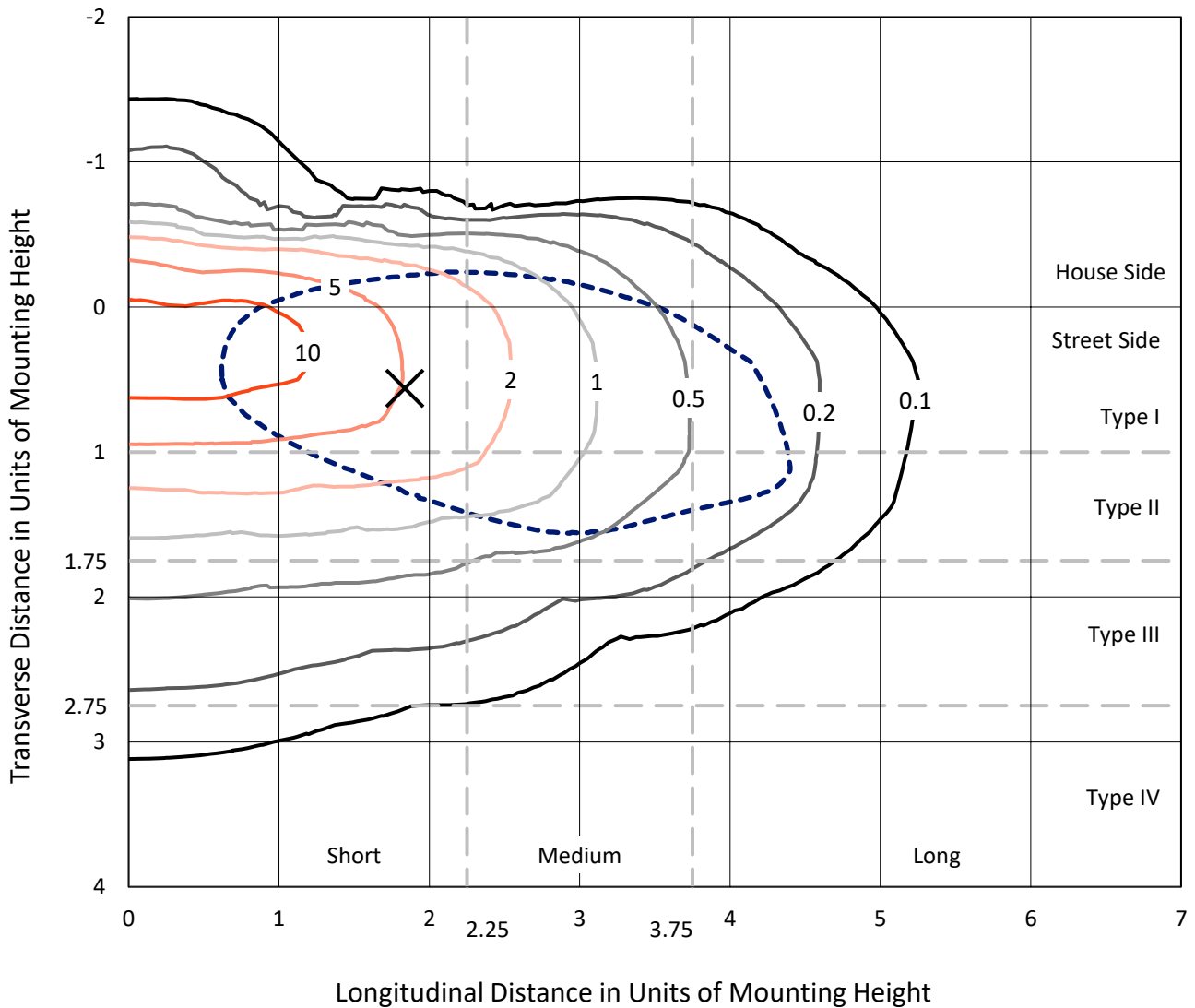
Input Watts (W): 400.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

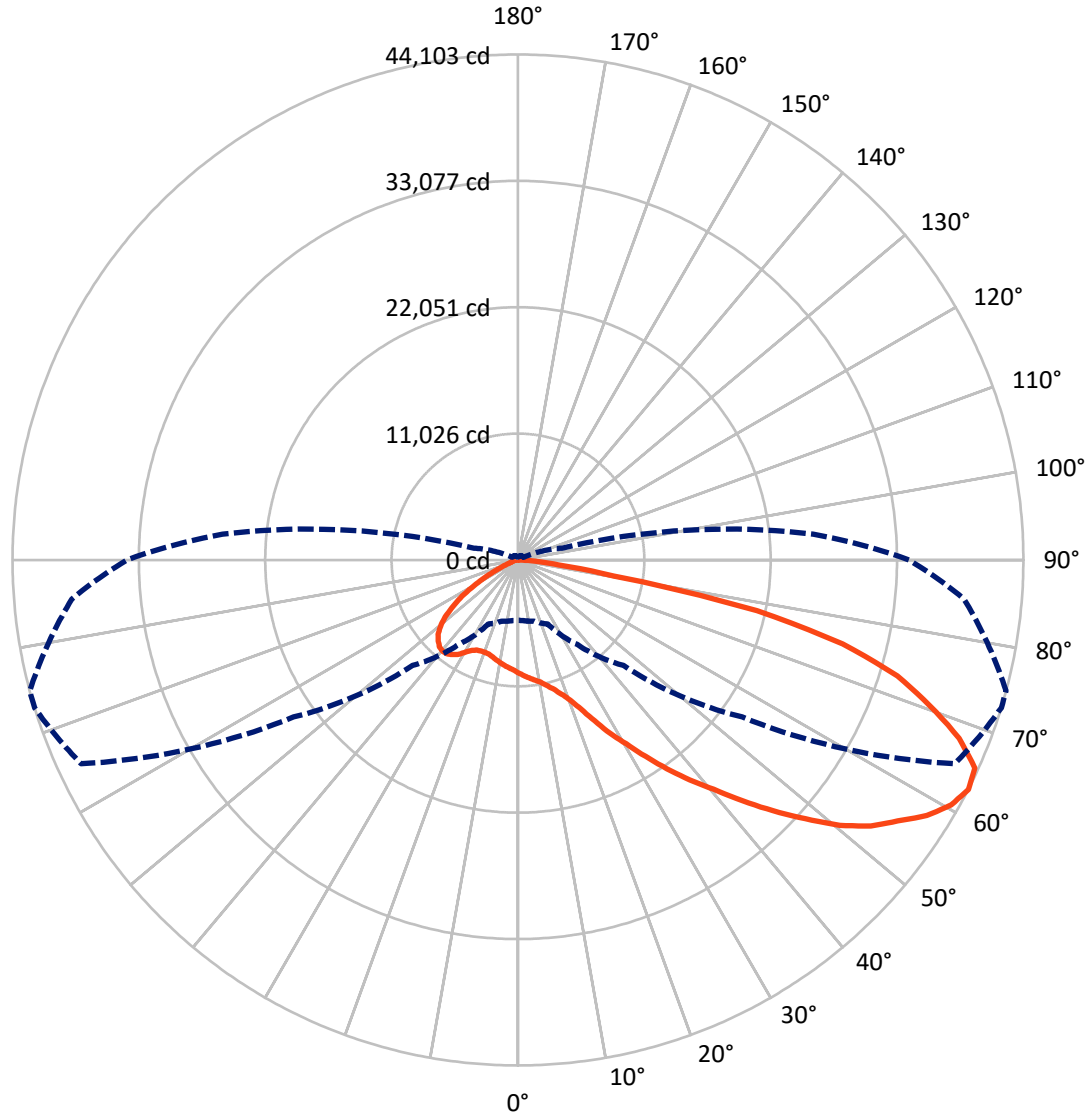
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 13.7 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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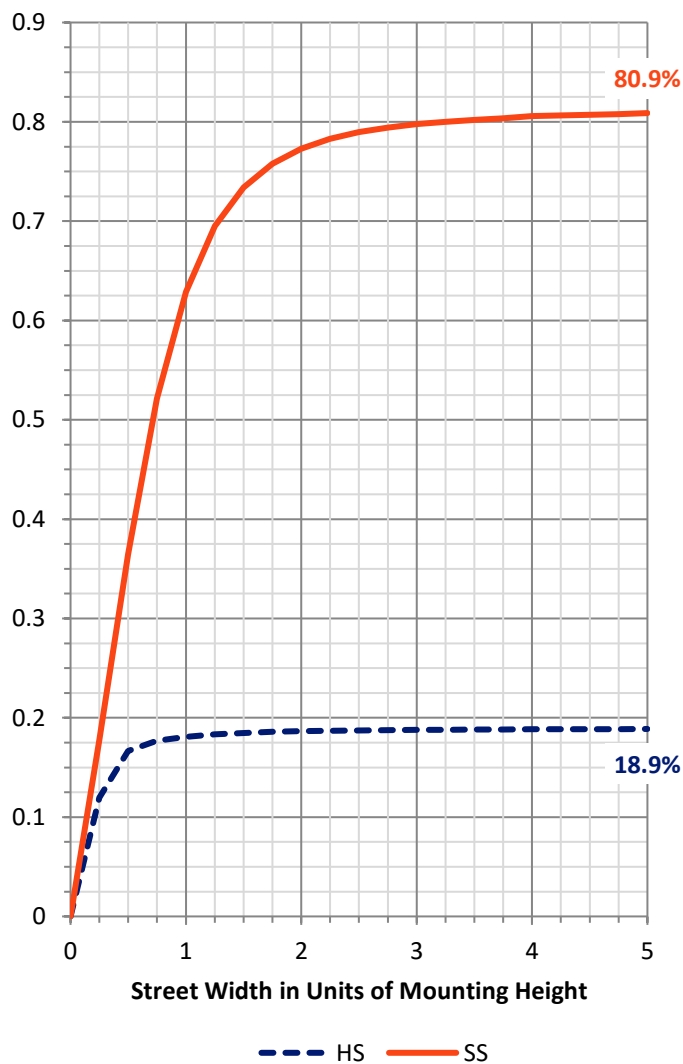
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10769.0	0.0	10769.0
	% Fixture	19.1	0.0	19.1
Street Side	Lumens	45526.0	0.0	45526.0
	% Fixture	80.9	0.0	80.9
Total	Lumens	56295.0	0.0	56295.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	943.0	1.7
10°-20°	2836.3	5.0
20°-30°	4900.5	8.7
30°-40°	7369.2	13.1
40°-50°	9826.1	17.5
50°-60°	11572.2	20.6
60°-70°	11504.8	20.4
70°-80°	6605.2	11.7
80°-90°	737.9	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°	56295.0	100.0
0°-180°	56295.0	100.0

Coefficient of Utilization



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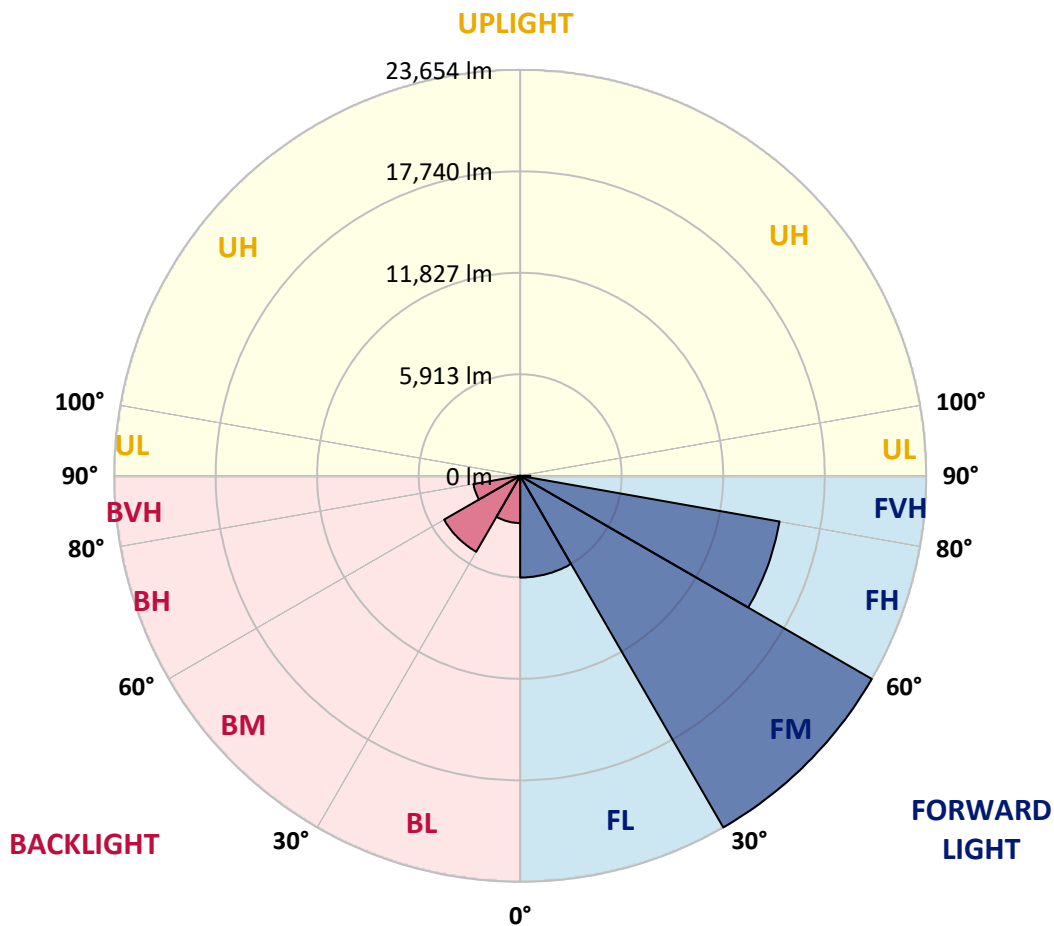
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	5927.8	10.5			
FM (30°-60°)	23653.8	42.0			
FH (60°-80°)	15345.1	27.3			G5
FVH (80°-90°)	599.3	1.1			G4/750
BL (0°-30°)	2752.0	4.9	B4/5000		
BM (30°-60°)	5113.6	9.1	B4/8500		
BH (60°-80°)	2764.8	4.9	B4/5000		G4/5000
BVH (80°-90°)	138.6	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°	9872.9	9872.9	9872.9	9872.9	9872.9	9872.9	9872.9	9872.9	9872.9	9872.9	9872.9
2.5°	10562.8	10589.3	10557.8	10543.9	10528.7	10430.1	10315.1	10197.6	10102.8	10087.7	9963.8
5°	11304.6	11318.5	11266.7	11207.3	11104.9	10941.9	10735.9	10532.5	10342.9	10292.4	10066.2
7.5°	11874.5	11847.9	11835.3	11784.8	11695.0	11515.6	11203.5	10869.9	10576.7	10505.9	10162.2
10°	12409.0	12397.6	12301.6	12238.4	12095.6	11930.1	11673.6	11250.2	10837.0	10723.3	10245.6
12.5°	12987.7	12962.5	12923.3	12786.8	12670.6	12391.3	12081.7	11696.3	11236.3	11084.7	10388.4
15°	13508.4	13440.1	13418.7	13275.9	13158.3	12944.8	12633.9	12186.6	11695.0	11564.9	10660.1
17.5°	14003.7	13972.1	13924.1	13826.8	13695.4	13531.1	13282.2	12803.3	12295.3	12105.7	11121.3
20°	14424.5	14385.3	14343.6	14370.2	14341.1	14236.2	14079.5	13671.4	13050.9	12867.7	11682.4
22.5°	14717.7	14716.4	14883.2	14980.5	15036.1	15032.3	14994.4	14763.2	14138.9	13953.2	12521.5
25°	14961.6	14980.5	15191.5	15561.8	15892.9	15923.2	16191.1	16081.2	15550.4	15357.1	13783.8
27.5°	15033.6	15071.5	15454.4	16036.9	16539.9	17022.6	17415.6	17616.5	17124.9	16893.7	15141.0
30°	15085.4	15100.6	15475.9	16173.4	17233.6	17998.1	18700.7	19040.6	18617.3	18448.0	16653.6
32.5°	14720.2	14725.3	15300.2	16356.6	17742.8	19068.4	19899.9	20540.6	20429.4	20205.7	18307.7
35°	14217.3	14310.8	14970.4	16179.7	18162.4	20051.5	21183.8	22139.1	22361.5	22201.0	19960.5
37.5°	13595.6	13668.9	14375.2	15916.9	18254.6	20727.6	22182.0	23764.1	24345.4	24318.9	21955.8
40°	12831.1	12920.8	13766.2	15350.8	18209.1	21219.1	23353.4	25563.5	26301.5	26218.1	23934.7
42.5°	11927.5	12059.0	12879.1	14622.9	17876.8	21519.9	24312.5	27395.8	28723.9	28669.6	25686.1
45°	11034.2	11104.9	11853.0	13609.5	17265.2	21617.2	25214.8	29920.6	31208.2	31147.6	27796.4
47.5°	10113.0	10174.9	10955.8	12541.7	16203.7	21421.3	25928.7	32089.0	33739.3	33678.7	29892.8
50°	7969.8	8203.6	9804.6	11602.8	14994.4	20866.6	26602.3	34790.7	36387.9	36130.1	31728.9
52.5°	6818.6	6903.3	7733.5	10656.3	13787.6	19920.1	27052.1	37294.0	38566.5	38194.9	33606.6
55°	6373.8	6430.7	6837.6	8911.2	12654.1	18488.4	27581.6	39803.6	40200.3	40105.6	35138.2
57.5°	6036.4	6099.6	6390.3	7442.9	11460.0	16481.7	27416.0	41568.9	42065.5	41762.2	36764.5
60°	5558.8	5635.9	6021.3	6682.2	10102.8	14444.7	25959.1	42291.7	43421.4	43080.2	38001.6
62.5°	5258.0	5308.6	5529.7	6170.4	8978.2	13011.8	23885.4	42059.2	44102.5	44089.9	39074.4
65°	4849.9	4924.4	5160.7	5680.1	7977.4	11901.0	21929.3	40910.5	43809.3	43820.7	39295.6
67.5°	4422.8	4453.1	4700.8	5117.8	6798.4	10883.8	19398.2	38945.5	41525.9	41786.2	37765.3
70°	3889.5	3874.3	4142.2	4446.8	5556.2	9241.0	15613.6	35450.3	38152.0	38259.4	34670.6
72.5°	3060.5	3074.4	3149.0	3360.0	4218.0	7272.3	11329.8	29950.9	34625.1	34816.0	30715.4
75°	2057.2	2080.0	2427.5	2633.4	3034.0	5226.4	7124.4	20217.1	29271.1	29809.4	25139.0
77.5°	1569.4	1583.3	1684.4	1909.4	2195.0	3725.2	3861.7	11016.5	21310.1	22587.7	19666.1
80°	1112.0	1117.1	1017.2	904.8	1168.9	2527.3	2280.9	4691.9	8491.7	10034.6	11551.0
82.5°	497.9	490.3	577.5	480.2	673.5	978.1	1076.6	2277.1	3526.8	3790.9	4127.1
85°	231.2	259.0	297.0	248.9	400.6	377.8	419.5	970.5	1652.8	1824.7	1814.6
87.5°	56.9	61.9	78.3	99.8	145.3	128.9	126.4	285.6	369.0	367.7	564.8
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°	9872.9	9872.9	9872.9	9872.9	9872.9	9872.9	9872.9	9872.9	9872.9	9872.9	9872.9
2.5°	9879.2	9813.5	9658.0	9507.7	9364.9	9270.1	9164.0	9052.8	8985.8	8954.2	9022.4
5°	9928.5	9803.4	9506.4	9208.2	8955.5	8739.4	8587.7	8458.8	8389.3	8395.7	8399.5
7.5°	9970.2	9794.5	9378.8	8958.0	8563.7	8295.8	8097.4	7958.4	7878.8	7818.2	7863.7
10°	10006.8	9757.9	9229.7	8668.6	8240.2	7843.4	7574.3	7406.2	7259.6	7177.5	7242.0
12.5°	10046.0	9744.0	9062.9	8409.6	7854.8	7411.3	7042.3	6875.5	6731.4	6669.5	6708.7
15°	10216.6	9797.0	8907.4	8105.0	7474.5	6900.8	6502.7	6298.0	6184.3	6109.7	6126.2
17.5°	10509.7	9937.3	8807.6	7786.6	7049.9	6443.3	5927.8	5688.9	5500.6	5447.6	5433.7
20°	10926.7	10203.9	8807.6	7517.4	6568.4	5935.3	5341.4	4938.3	4645.2	4535.2	4619.9
22.5°	11626.8	10657.6	8894.8	7273.5	6154.0	5408.4	4700.8	4085.4	3689.8	3529.4	3622.9
25°	12606.1	11358.9	9036.3	7060.0	5776.1	4801.9	3888.2	3180.6	2744.6	2553.8	2551.3
27.5°	13884.9	12431.7	9321.9	6885.6	5323.7	4017.1	3040.3	2359.2	1949.8	1834.8	1851.2
30°	15302.7	13594.3	9861.5	6632.9	4774.1	3138.9	2213.9	1733.7	1445.6	1294.0	1296.5
32.5°	16670.0	14798.6	10502.2	6468.6	4060.1	2366.8	1578.3	1237.1	1057.7	968.0	981.9
35°	18135.8	15837.3	10978.6	6193.1	3222.3	1711.0	1115.8	927.5	853.0	806.2	808.7
37.5°	19719.2	16979.6	11370.3	5824.1	2436.3	1175.2	823.9	794.8	763.2	703.9	698.8
40°	21373.3	18302.6	11604.1	5227.7	1693.3	813.8	700.1	732.9	715.2	638.1	631.8
42.5°	22775.9	19323.7	11662.2	4437.9	1095.6	659.6	634.3	684.9	688.7	610.3	600.2
45°	24123.0	20233.5	11548.5	3397.9	759.5	620.4	593.9	663.4	668.5	597.7	581.3
47.5°	25630.5	21478.2	11342.5	2267.0	628.0	586.3	580.0	628.0	645.7	587.6	567.4
50°	27461.5	22490.4	10732.1	1392.5	592.6	564.8	564.8	593.9	617.9	567.4	557.3
52.5°	29339.3	23372.4	9828.6	955.3	571.2	542.1	558.5	571.2	580.0	534.5	543.4
55°	30685.1	24154.6	8481.6	768.3	558.5	526.9	566.1	540.8	528.2	489.0	480.2
57.5°	32178.7	25084.6	7104.2	681.1	542.1	535.8	540.8	492.8	457.4	417.0	408.2
60°	33221.2	25585.0	5418.5	640.7	523.1	526.9	499.1	434.7	370.2	341.2	334.9
62.5°	34131.1	25870.6	3971.6	588.9	505.5	504.2	452.4	371.5	304.5	272.9	267.9
65°	33993.3	25424.5	2574.0	547.2	491.6	475.1	405.6	318.4	254.0	230.0	227.5
67.5°	32478.2	23450.7	1621.3	504.2	467.5	438.5	363.9	284.3	233.8	206.0	203.4
70°	29297.6	20725.0	992.0	448.6	415.7	387.9	322.2	266.6	221.1	188.3	182.0
72.5°	24901.4	17750.4	701.3	395.5	362.7	329.8	272.9	254.0	211.0	169.3	164.3
75°	20458.4	13074.9	587.6	345.0	309.6	265.4	232.5	236.3	198.4	154.2	150.4
77.5°	14406.8	8151.8	547.2	281.8	243.9	211.0	200.9	216.1	182.0	141.5	137.7
80°	8408.3	4578.2	452.4	222.4	183.2	163.0	168.1	183.2	159.2	127.6	122.6
82.5°	3394.2	1812.1	318.4	173.1	133.9	130.2	137.7	149.1	131.4	107.4	104.9
85°	1211.8	566.1	180.7	113.7	85.9	89.7	88.5	106.1	94.8	78.3	77.1
87.5°	318.4	112.5	80.9	45.5	36.6	36.6	34.1	49.3	45.5	35.4	39.2
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)