

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: P510548

Luminaire Tested: **CST-CA10-630-740-U-T3-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510548
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-16)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA10-630-740-U-T3-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (10) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 86054 lumens
Efficiency: N/A
Efficacy: 136.3 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U0 - G5

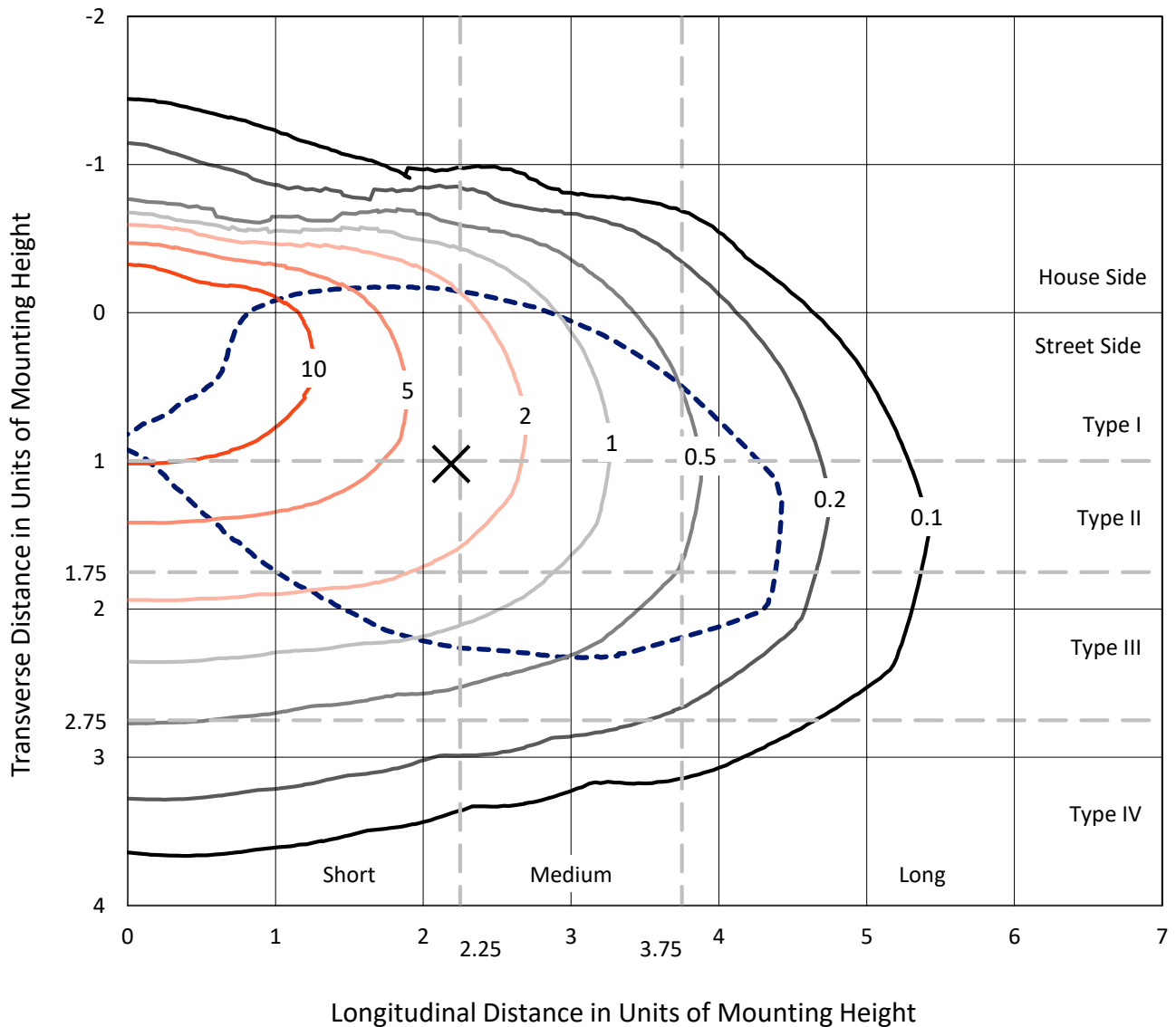
Input Watts (W): 631.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

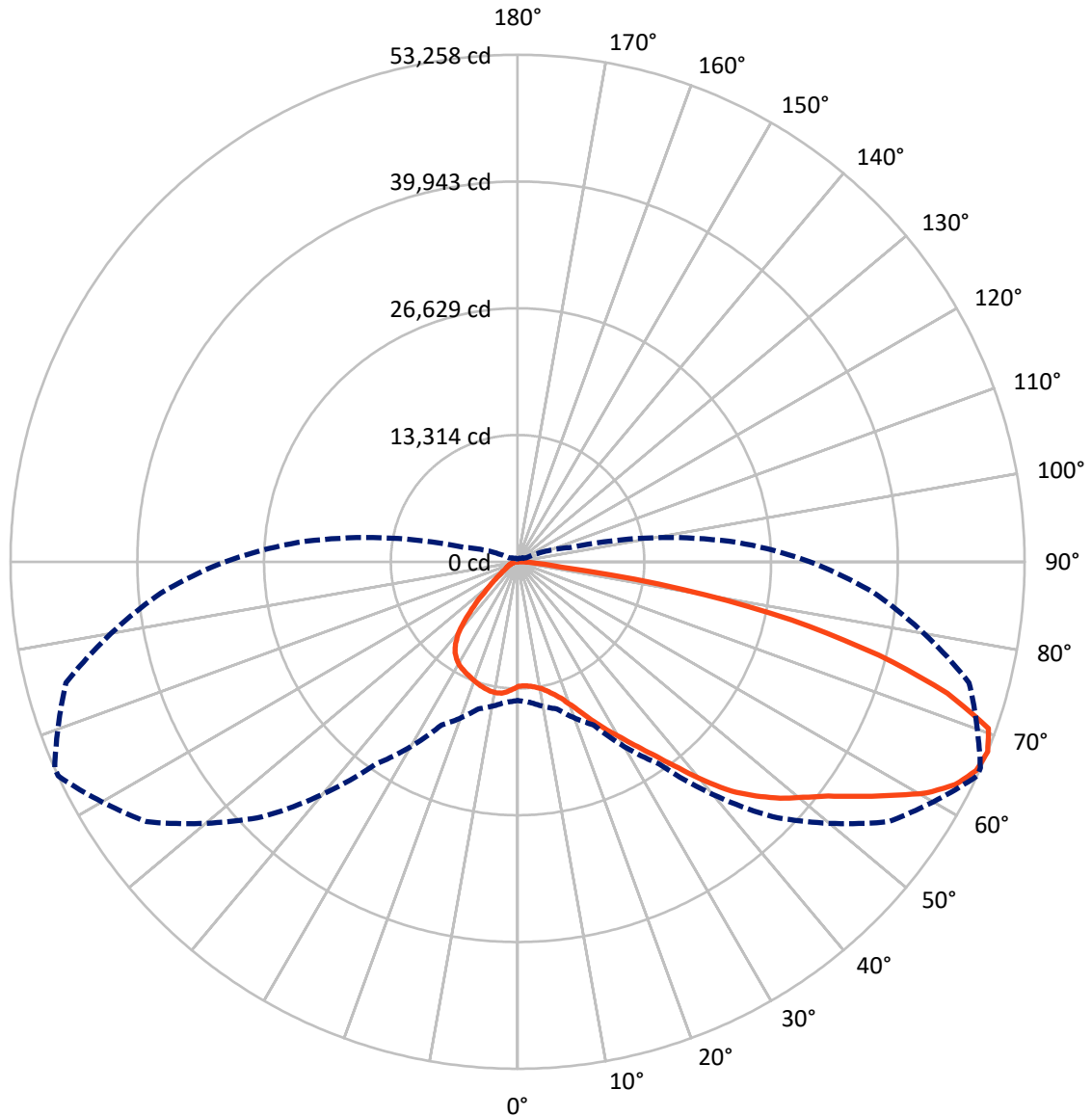
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 17.1 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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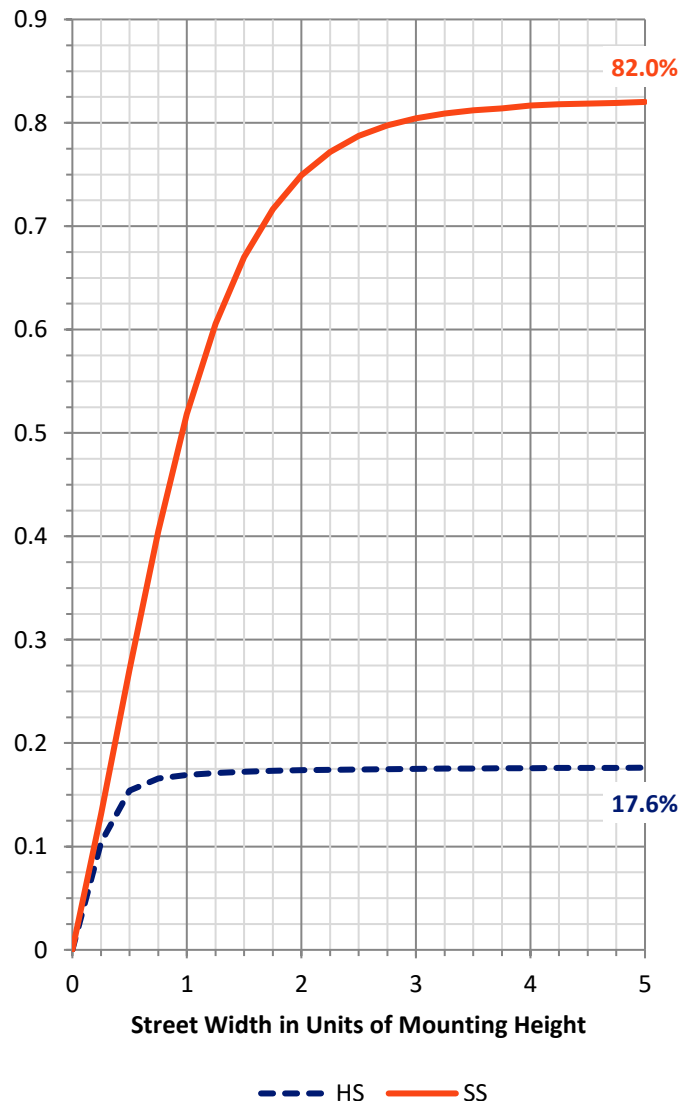
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	15380.0	0.0	15380.0
	% Fixture	17.9	0.0	17.9
Street Side	Lumens	70674.0	0.0	70674.0
	% Fixture	82.1	0.0	82.1
Total	Lumens	86054.0	0.0	86054.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1293.7	1.5
10°-20°	3994.1	4.6
20°-30°	6929.0	8.1
30°-40°	10452.3	12.1
40°-50°	14492.8	16.8
50°-60°	17889.4	20.8
60°-70°	19060.9	22.1
70°-80°	10907.0	12.7
80°-90°	1034.9	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°	86054.0	100.0
0°-180°	86054.0	100.0

Coefficient of Utilization

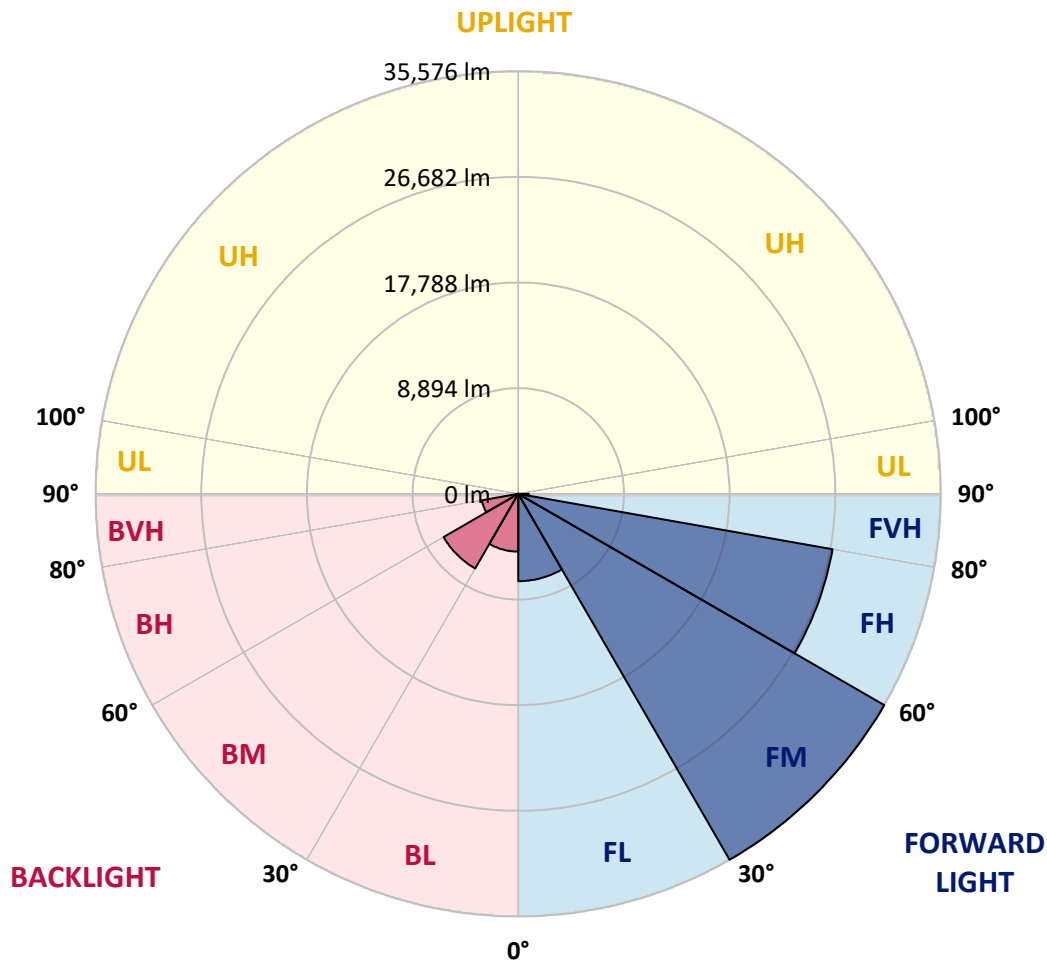


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	7350.2	8.5			
FM (30°-60°)	35576.0	41.3			
FH (60°-80°)	26863.7	31.2			G5
FVH (80°-90°)	884.2	1.0			G5
BL (0°-30°)	4866.6	5.7	B4/5000		
BM (30°-60°)	7258.5	8.4	B4/8500		
BH (60°-80°)	3104.2	3.6	B4/5000		G4/5000
BVH (80°-90°)	150.6	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 III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	13076.5	13076.5	13076.5	13076.5	13076.5	13076.5	13076.5	13076.5	13076.5	13076.5	13076.5
2.5°	12950.2	12933.2	12918.1	12944.5	12959.6	12984.1	13019.9	13044.4	13052.0	13074.6	13102.9
5°	13157.5	13155.6	13134.9	13123.6	13091.5	13080.2	13087.8	13117.9	13119.8	13148.1	13236.7
7.5°	13564.7	13560.9	13510.0	13487.4	13419.5	13344.1	13287.6	13293.2	13291.4	13319.6	13438.4
10°	14179.2	14149.1	14077.4	14007.7	13875.7	13734.3	13630.7	13536.4	13536.4	13577.9	13709.8
12.5°	14872.9	14914.4	14816.4	14710.8	14490.2	14235.8	14054.8	13949.2	13937.9	13958.7	14052.9
15°	15734.4	15734.4	15668.4	15517.6	15323.4	14969.0	14595.8	14462.0	14443.1	14486.5	14480.8
17.5°	16705.2	16733.4	16609.0	16533.6	16235.8	15843.7	15376.2	15144.3	15144.3	15116.1	14986.0
20°	17943.6	17789.0	17802.2	17677.8	17459.2	16889.9	16414.9	16077.4	16073.7	16017.1	15651.4
22.5°	19289.5	19204.7	19131.2	19021.9	18720.3	18211.3	17551.5	17217.9	17210.3	17070.8	16528.0
25°	20616.6	20680.7	20599.6	20399.8	20179.3	19625.1	18897.4	18569.5	18567.6	18335.7	17566.6
27.5°	21981.4	22051.1	22024.7	21843.8	21549.7	21116.1	20428.1	20000.2	19973.8	19823.0	18856.0
30°	23489.4	23427.2	23508.2	23430.9	23283.9	22577.0	21955.0	21457.3	21521.4	21476.2	20320.6
32.5°	24586.5	24626.1	24891.8	24899.4	24744.8	24220.8	23461.1	23155.7	23257.5	23197.2	22120.9
35°	25578.0	25642.1	25985.2	26322.6	26435.7	25862.6	25089.8	25070.9	25202.9	25570.5	24601.6
37.5°	26430.0	26475.3	26956.0	27395.2	27760.9	27368.8	26807.0	27476.2	27670.4	28422.5	27161.4
40°	26940.9	26999.3	27621.4	28239.7	28891.9	28752.4	28699.6	30283.0	30465.9	31127.5	29029.5
42.5°	26652.5	26767.5	27804.2	28935.2	29894.7	30173.7	30895.7	32931.5	33140.7	33197.3	30865.5
45°	26137.9	26281.1	27440.4	29270.8	30835.4	31730.7	33104.9	35089.9	35204.9	35044.6	32386.7
47.5°	25583.7	25736.3	27031.4	29170.9	31591.3	33542.3	35078.6	37121.9	37203.0	36711.0	33919.3
50°	24954.1	25095.4	26488.5	28937.1	32160.5	35252.0	37106.9	38878.8	39182.3	38209.6	35110.6
52.5°	24188.7	24339.5	25817.4	28571.4	32660.1	36520.6	38895.7	40863.7	40884.5	40083.3	36452.7
55°	23197.2	23459.2	24974.8	27938.1	32922.1	37610.2	40454.7	43489.6	43623.4	42848.7	37576.2
57.5°	22094.5	22322.5	23960.6	27093.6	32686.5	38437.7	42961.8	46305.8	46288.8	44733.7	38558.3
60°	20637.3	20799.4	22639.2	25988.9	31926.8	39438.6	45572.5	49323.7	49293.6	46581.0	39189.8
62.5°	18767.4	18929.5	20660.0	24256.6	30810.8	40109.7	47344.5	51583.9	51497.2	47925.1	39384.0
65°	16599.6	16889.9	18392.3	22007.7	28837.2	39668.6	48200.3	52914.7	52775.2	48950.5	38920.3
67.5°	14567.5	14814.5	16003.9	18912.5	25924.8	37879.7	47597.1	53257.8	53216.3	49099.4	37610.2
70°	11691.0	11781.4	12871.0	15361.1	21570.4	34049.3	45512.2	52466.1	52484.9	47727.1	34978.7
72.5°	8002.0	8222.5	8707.0	10673.1	15696.7	27078.5	39227.5	47218.2	47221.9	42795.9	30475.3
75°	4303.5	4644.7	5210.2	6184.8	8774.8	17376.2	31502.7	39180.4	39253.9	35681.8	24222.7
77.5°	2133.9	2256.4	2584.4	3308.2	4022.7	8198.0	20260.3	29410.3	29585.6	27389.5	16520.4
80°	976.4	997.2	1021.7	1016.0	1540.1	3596.6	8697.5	17662.7	17715.5	16290.4	7542.0
82.5°	763.4	759.7	771.0	701.2	705.0	1387.4	3010.4	4625.9	4933.1	3883.2	2392.1
85°	461.8	459.9	495.8	384.5	473.1	750.2	1519.3	1845.4	1868.1	1519.3	1238.5
87.5°	175.3	169.7	156.5	137.6	158.3	211.1	525.9	678.6	663.5	471.3	427.9
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°	13076.5	13076.5	13076.5	13076.5	13076.5	13076.5	13076.5	13076.5	13076.5	13076.5	13076.5
2.5°	13127.4	13187.7	13298.9	13383.7	13412.0	13502.5	13589.2	13604.3	13666.5	13691.0	13772.0
5°	13291.4	13393.2	13566.6	13681.6	13732.5	13883.3	13981.3	14030.3	14013.3	14022.8	14113.2
7.5°	13530.8	13626.9	13766.4	13905.9	13930.4	13956.8	13947.4	13939.8	13873.8	13817.3	13902.1
10°	13749.4	13839.9	13926.6	13947.4	13822.9	13753.2	13628.8	13532.6	13404.5	13346.0	13413.9
12.5°	14056.7	14075.5	13990.7	13877.6	13609.9	13361.1	13159.4	12984.1	12825.8	12716.4	12806.9
15°	14380.9	14307.4	14060.5	13730.6	13315.9	12959.6	12629.7	12337.5	12075.5	12011.4	12035.9
17.5°	14810.7	14610.9	14113.2	13559.0	12914.4	12360.2	11936.0	11566.6	11223.5	11080.2	11067.0
20°	15334.7	15012.4	14220.7	13342.3	12439.3	11702.3	11046.3	10494.0	10020.8	9632.5	9641.9
22.5°	16017.1	15549.6	14382.8	13116.1	11913.4	10931.3	9977.5	9038.7	8260.2	7924.7	7841.7
25°	16918.2	16220.7	14612.8	12910.6	11325.3	9951.1	8603.3	7278.1	6454.3	6128.2	6092.4
27.5°	18039.8	17121.7	14963.4	12682.5	10695.7	8788.0	6850.2	5551.4	4795.5	4452.4	4337.5
30°	19314.0	18232.0	15323.4	12445.0	9934.1	7293.2	5223.4	3951.0	3176.3	2869.0	2829.4
32.5°	20963.4	19638.3	15858.8	12071.7	8821.9	5732.4	3643.8	2465.6	1939.7	1807.7	1770.0
35°	23306.5	21540.3	16520.4	11600.5	7393.1	4003.8	2258.3	1443.9	1163.1	1097.1	1083.9
37.5°	25491.3	23406.4	17187.7	10818.2	5613.6	2499.6	1291.2	925.6	863.3	865.2	869.0
40°	27223.6	24682.6	17726.8	9789.0	3692.8	1419.4	897.3	769.1	771.0	765.3	761.6
42.5°	28765.6	25700.5	17970.0	8267.8	2139.5	950.1	778.5	708.8	691.8	697.5	693.7
45°	30041.8	26739.2	17498.8	6558.0	1261.1	852.0	735.2	657.9	639.0	669.2	673.0
47.5°	31383.9	27725.1	16776.8	4940.7	1023.6	810.6	695.6	620.2	610.8	648.5	652.2
50°	32513.0	28439.5	15545.9	3722.9	976.4	765.3	659.8	582.5	580.6	614.5	614.5
52.5°	33457.4	28871.1	14085.0	2874.7	944.4	725.7	623.9	546.7	546.7	558.0	559.9
55°	34122.8	28784.4	13214.1	2262.0	910.5	688.0	586.2	512.7	490.1	482.6	486.3
57.5°	34243.5	28554.5	12203.7	1764.4	870.9	652.2	552.3	473.1	431.7	426.0	424.1
60°	34166.2	28049.3	11050.1	1474.1	825.6	618.3	518.4	431.7	390.2	377.0	380.8
62.5°	33843.9	27153.9	9717.3	1293.1	780.4	591.9	480.7	403.4	365.7	348.7	348.7
65°	32871.2	25872.1	7738.1	1132.9	723.9	563.6	450.5	392.1	350.6	331.8	328.0
67.5°	30733.6	23212.3	5815.3	993.4	669.2	533.5	446.8	390.2	343.1	316.7	312.9
70°	27866.4	19939.9	3969.9	872.8	608.9	505.2	444.9	392.1	335.5	301.6	297.8
72.5°	23263.2	15719.3	2286.5	759.7	548.5	478.8	437.3	394.0	322.3	280.9	275.2
75°	17479.9	11025.6	1342.1	652.2	490.1	439.2	416.6	382.7	301.6	256.4	250.7
77.5°	10512.8	5148.0	1010.4	541.0	420.4	386.4	371.4	350.6	275.2	237.5	231.9
80°	3856.8	1954.8	793.6	433.6	333.7	335.5	320.5	307.3	250.7	218.7	214.9
82.5°	1681.4	1195.1	586.2	329.9	262.0	299.7	263.9	252.6	214.9	196.0	188.5
85°	1019.8	712.5	377.0	224.3	181.0	203.6	184.7	194.2	165.9	154.6	148.9
87.5°	337.4	213.0	167.8	109.3	90.5	84.8	82.9	99.9	94.3	86.7	86.7
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)