

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: P510540

Luminaire Tested: **CST-CA10-630-730-U-T4-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510540
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-17)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA10-630-730-U-T4-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (10) 3000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 80172 lumens
Efficiency: N/A
Efficacy: 127.0 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B4 - U0 - G5

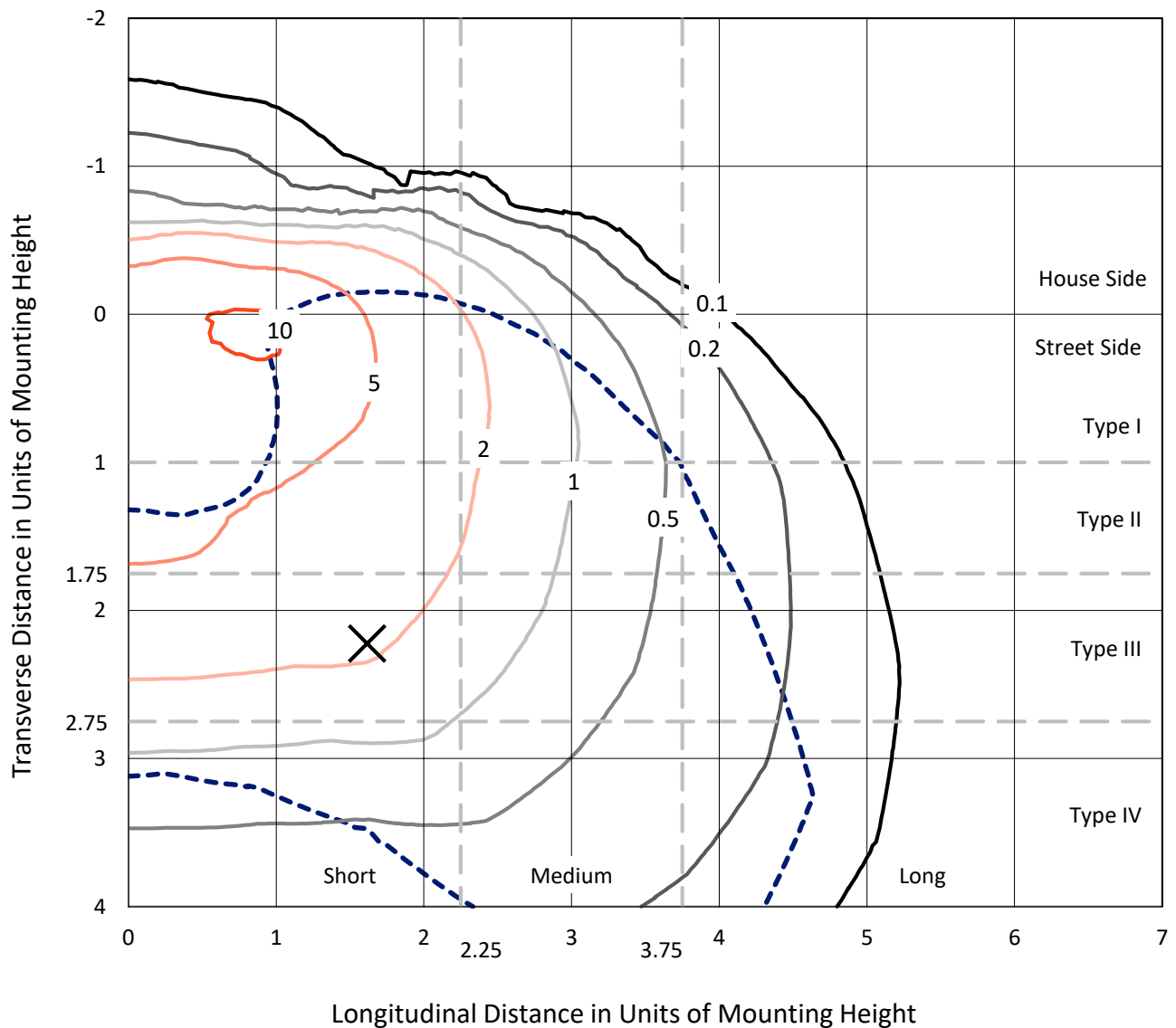
Input Watts (W): 631.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

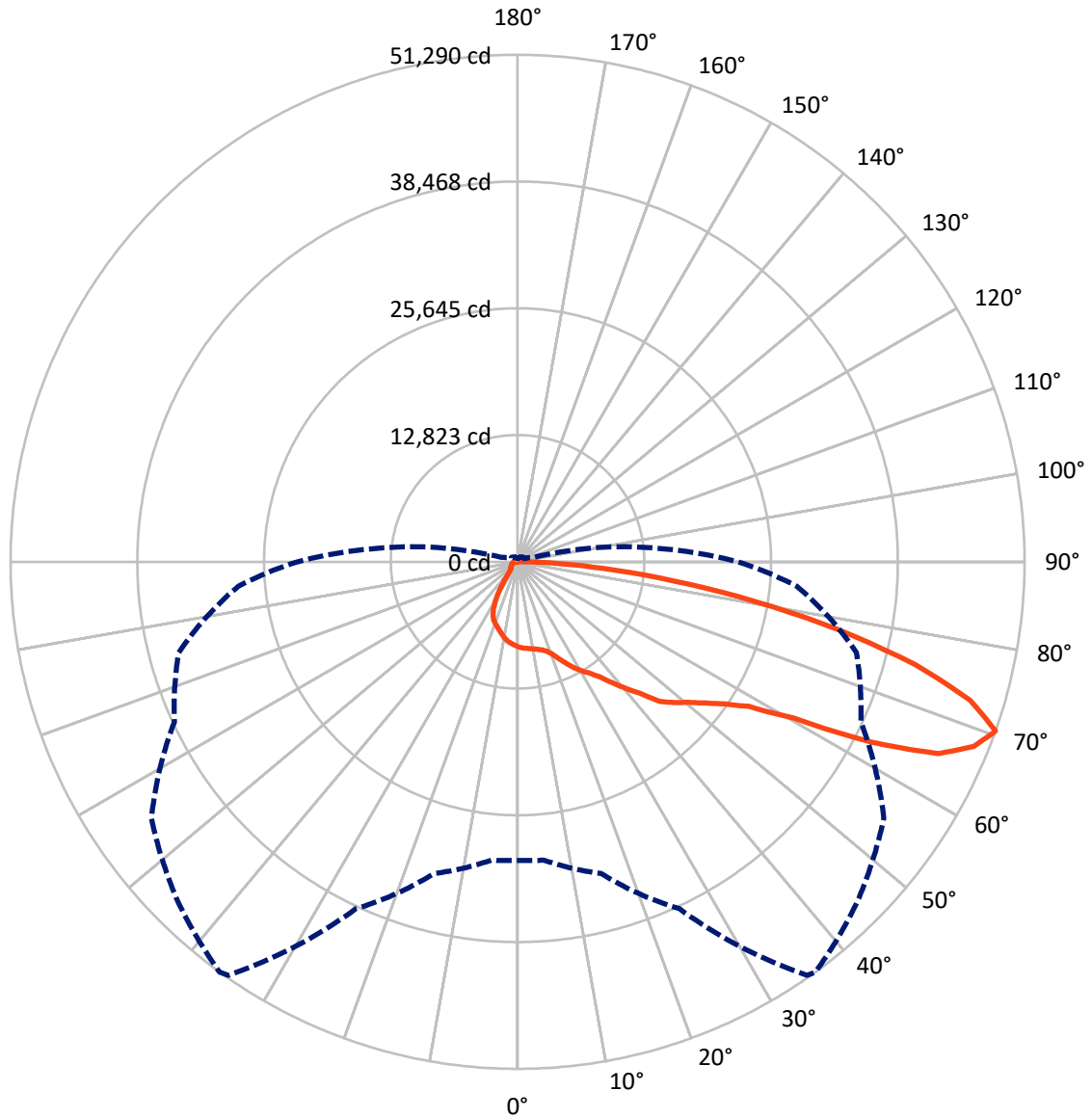
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 10.9 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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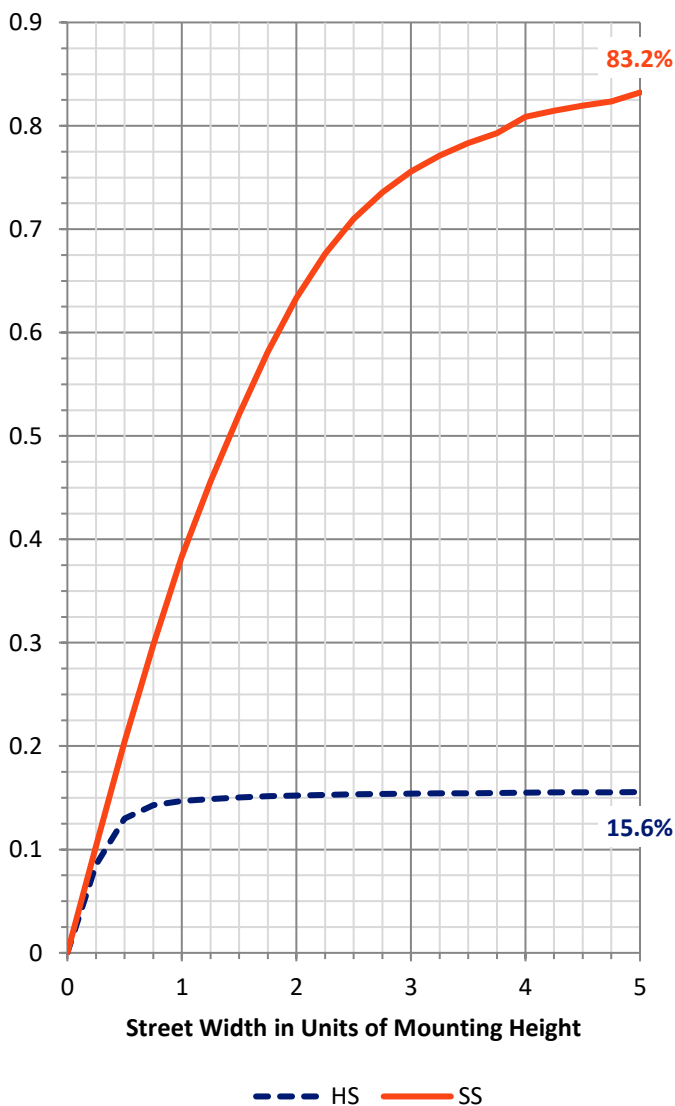
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	12651.7	0.0	12651.7
	% Fixture	15.8	0.0	15.8
Street Side	Lumens	67520.3	0.0	67520.3
	% Fixture	84.2	0.0	84.2
Total	Lumens	80172.0	0.0	80172.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	814.7	1.0
10°-20°	2422.7	3.0
20°-30°	4356.8	5.4
30°-40°	6894.5	8.6
40°-50°	10774.8	13.4
50°-60°	15472.4	19.3
60°-70°	20987.0	26.2
70°-80°	15532.6	19.4
80°-90°	2916.5	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°	80172.0	100.0
0°-180°	80172.0	100.0

Coefficient of Utilization



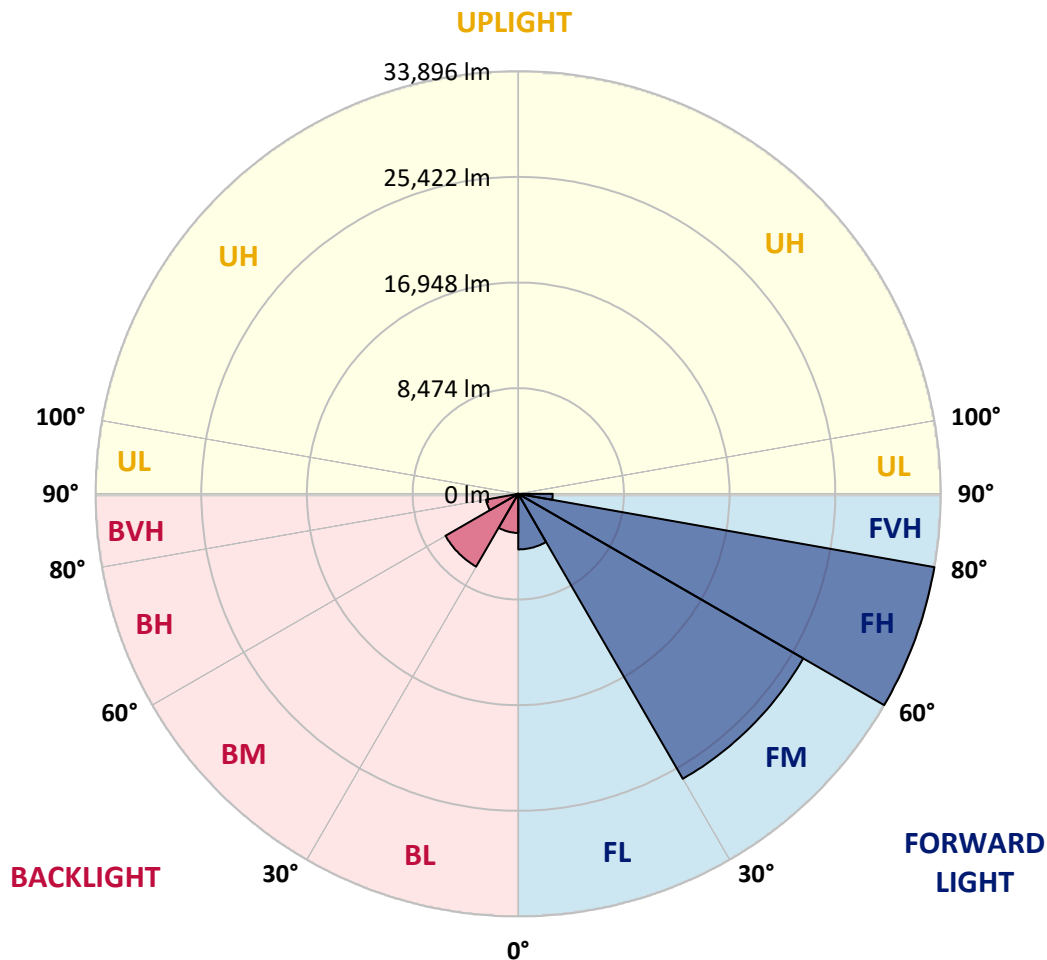
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4459.1	5.6			
FM (30°-60°)	26399.9	32.9			
FH (60°-80°)	33895.9	42.3			G5
FVH (80°-90°)	2765.3	3.4			G5
BL (0°-30°)	3135.0	3.9	B4/5000		
BM (30°-60°)	6741.8	8.4	B4/8500		
BH (60°-80°)	2623.6	3.3	B4/5000		G4/5000
BVH (80°-90°)	151.3	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 IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	8590.0	8590.0	8590.0	8590.0	8590.0	8590.0	8590.0	8590.0	8590.0	8590.0	8590.0
2.5°	8764.0	8745.5	8730.7	8736.3	8725.1	8732.5	8715.9	8695.5	8647.4	8627.0	8617.8
5°	8841.8	8836.2	8821.4	8810.3	8789.9	8782.5	8764.0	8780.7	8754.8	8688.1	8649.3
7.5°	8888.0	8886.2	8869.5	8845.5	8856.6	8865.8	8884.3	8858.4	8825.1	8793.6	8714.0
10°	8908.4	8908.4	8888.0	8901.0	8958.4	8963.9	8973.2	8989.8	8958.4	8912.1	8832.5
12.5°	8960.2	8956.5	8963.9	9006.5	9065.7	9078.7	9124.9	9124.9	9128.6	9100.9	9008.3
15°	9089.8	9089.8	9106.4	9145.3	9247.1	9254.5	9323.0	9384.1	9391.5	9350.8	9280.4
17.5°	9389.6	9382.2	9373.0	9397.0	9506.2	9509.9	9628.4	9706.1	9726.5	9770.9	9759.8
20°	9959.7	9952.3	9950.4	9952.3	9944.9	9933.8	10050.4	10133.7	10237.3	10315.1	10353.9
22.5°	10775.9	10759.3	10759.3	10668.6	10598.3	10609.4	10627.9	10674.1	10811.1	10948.1	11094.3
25°	11655.1	11644.0	11653.3	11421.9	11327.5	11364.5	11340.5	11412.7	11592.2	11710.6	11866.1
27.5°	12373.3	12389.9	12338.1	12158.6	12097.5	12125.3	12069.7	12277.0	12475.1	12682.4	12917.4
30°	13267.3	13178.4	13050.7	12832.3	12810.1	12813.8	12810.1	13143.2	13554.1	13850.3	14176.0
32.5°	14435.2	14450.0	14163.1	13648.5	13459.8	13433.8	13507.9	13996.5	14551.8	15208.9	15638.3
35°	15616.0	15640.1	15431.0	14894.2	14355.6	14274.1	14164.9	14799.8	15601.2	16919.1	17566.9
37.5°	16869.1	16954.3	16706.2	16226.8	15588.3	15512.4	14996.0	15619.8	16804.3	18944.0	19793.5
40°	18546.0	18455.3	18155.5	17546.5	16952.4	16830.2	16230.5	16558.2	18351.7	21479.7	22096.1
42.5°	19782.4	19756.5	19502.9	18901.4	18303.6	18205.5	17722.4	18077.7	20300.7	24050.6	24326.4
45°	20763.4	20922.6	20917.0	20539.4	20202.6	20147.1	19862.0	20385.8	22656.9	26477.1	26342.0
47.5°	21635.2	21733.3	21575.9	21411.2	21253.9	21272.4	21483.4	22560.6	25064.9	28596.4	27998.6
50°	23062.2	22936.4	22231.2	22105.3	22327.4	22336.7	22978.9	24637.3	27717.2	30428.8	29401.6
52.5°	24964.9	24828.0	23378.7	23164.0	23689.7	23728.5	24796.5	26706.6	30452.9	32179.8	30797.1
55°	27796.8	27478.5	25925.6	24963.1	25203.7	25361.0	26654.8	28696.4	32594.4	33723.4	31854.0
57.5°	31274.7	31506.0	30710.1	28535.3	27534.0	27593.2	28781.5	30600.9	34484.1	35074.6	32472.2
60°	34950.6	34895.0	35228.2	34312.0	32394.5	32076.1	31470.9	32544.4	35948.2	36212.9	33108.9
62.5°	36964.3	37288.2	38398.8	38582.0	40312.6	40144.2	36018.5	34954.3	37639.9	36927.3	33282.9
65°	36953.2	37093.9	39161.4	41434.3	46840.7	46792.6	44875.1	38439.5	38900.4	37308.6	32934.9
67.5°	34565.6	34784.0	37201.3	41641.6	49857.7	49800.3	48475.1	43338.8	39296.5	36849.6	31311.7
70°	30212.3	30286.3	32644.3	38722.7	51070.1	51290.3	48599.1	45219.4	38311.8	35485.5	28352.1
72.5°	24924.2	24770.6	27076.8	33068.2	47982.8	47851.3	46544.6	42974.2	36653.4	32836.8	23123.3
75°	18351.7	18779.2	20848.5	26551.2	41082.6	41563.8	42143.2	39538.9	32553.6	27062.0	15989.9
77.5°	12117.8	12662.0	14753.5	19908.3	32524.0	33271.8	34772.9	33629.0	26482.7	19412.2	7614.6
80°	6261.6	6672.5	8554.9	13209.9	23315.8	24394.9	27147.2	25470.2	18775.5	8777.0	1704.7
82.5°	2369.2	2315.5	3833.2	7560.9	14949.7	15930.7	17931.5	15273.6	6681.8	1541.8	792.2
85°	1040.2	1101.3	1588.1	3448.2	8547.5	8675.2	10157.7	5954.3	979.1	736.7	538.6
87.5°	449.8	516.4	666.3	992.1	2883.7	3329.8	4120.1	1891.6	296.1	255.4	270.2
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°	8590.0	8590.0	8590.0	8590.0	8590.0	8590.0	8590.0	8590.0	8590.0	8590.0	8590.0
2.5°	8601.1	8590.0	8571.5	8525.2	8449.4	8440.1	8432.7	8425.3	8410.5	8417.9	8460.5
5°	8619.6	8599.3	8532.7	8466.0	8399.4	8340.2	8268.0	8240.2	8203.2	8179.1	8223.6
7.5°	8682.6	8640.0	8541.9	8451.2	8269.8	8182.8	8090.3	7981.1	7903.3	7853.4	7897.8
10°	8788.1	8734.4	8612.2	8425.3	8212.4	7973.7	7810.8	7629.4	7481.3	7440.6	7481.3
12.5°	8960.2	8880.6	8738.1	8484.5	8106.9	7794.1	7485.0	7246.3	7007.5	6939.0	6959.4
15°	9239.7	9176.8	8958.4	8608.5	8108.8	7631.3	7172.2	6787.3	6474.5	6365.2	6357.8
17.5°	9687.6	9621.0	9369.3	8854.7	8175.4	7503.6	6865.0	6278.3	5804.4	5563.8	5524.9
20°	10329.9	10237.3	9856.0	9217.5	8319.8	7448.0	6580.0	5791.5	5054.8	4603.2	4534.7
22.5°	11044.3	10946.2	10383.6	9497.0	8423.4	7338.8	6307.9	5252.9	4283.0	3731.4	3653.7
25°	11932.8	11718.1	10888.8	9761.7	8399.4	7109.3	5865.5	4521.8	3470.4	2992.9	2941.1
27.5°	12810.1	12538.0	11403.4	9900.5	8293.9	6744.7	5217.7	3666.6	2717.1	2378.4	2335.8
30°	13898.4	13372.8	11860.6	9965.2	8027.4	6198.7	4349.6	2787.5	2034.1	1800.9	1760.2
32.5°	15192.2	14396.3	12290.0	9893.1	7583.1	5365.8	3381.6	2041.5	1512.2	1366.0	1364.1
35°	16898.7	15651.2	12762.0	9656.1	6902.0	4468.1	2371.0	1395.6	1179.0	1129.0	1138.3
37.5°	18894.0	17350.3	13241.3	9267.5	6132.0	3418.6	1580.7	1075.4	1036.5	1038.4	1040.2
40°	20998.5	19227.2	13887.3	8721.4	5197.3	2474.7	1138.3	966.2	964.3	982.8	988.4
42.5°	23008.5	21050.3	14683.2	7994.0	4218.2	1636.2	986.5	921.7	897.7	905.1	910.6
45°	24876.1	22614.3	15360.6	7285.1	3168.7	1167.9	968.0	869.9	832.9	829.2	832.9
47.5°	26380.9	23867.4	15773.4	6452.2	2258.1	969.9	929.2	821.8	770.0	758.9	753.3
50°	27526.6	24798.4	15923.3	5508.3	1527.0	925.5	877.3	766.3	703.3	705.2	705.2
52.5°	28644.5	25644.2	15749.3	4556.9	1123.5	886.6	842.2	721.9	655.2	690.4	699.6
55°	29449.7	25999.6	15242.2	3527.8	936.6	838.5	803.3	670.0	623.8	681.1	699.6
57.5°	29919.8	26279.1	14311.2	2546.8	858.8	792.2	753.3	621.9	579.3	594.1	603.4
60°	30212.3	25888.5	13080.3	1741.7	818.1	755.2	703.3	590.4	533.1	497.9	492.3
62.5°	30051.2	24911.3	11458.9	1197.5	775.5	714.4	660.8	560.8	484.9	438.7	435.0
65°	28738.9	23102.9	8797.3	969.9	749.6	695.9	634.9	533.1	451.6	407.2	401.6
67.5°	26305.0	19852.8	5138.1	862.5	738.5	677.4	614.5	507.1	433.1	385.0	377.6
70°	22305.2	14933.1	1721.3	770.0	736.7	675.6	597.8	488.6	412.8	362.8	355.4
72.5°	16091.7	9010.2	838.5	677.4	688.5	647.8	584.9	473.8	399.8	336.9	323.9
75°	9145.3	2933.7	757.0	584.9	640.4	618.2	577.5	475.7	405.3	305.4	290.6
77.5°	2602.4	857.0	731.1	497.9	605.2	638.6	540.5	429.4	414.6	283.2	264.7
80°	879.2	762.6	705.2	386.8	488.6	527.5	468.3	377.6	418.3	257.3	238.8
82.5°	705.2	766.3	592.3	309.1	372.0	399.8	372.0	338.7	338.7	229.5	214.7
85°	564.5	710.7	375.7	246.2	277.6	307.2	262.8	253.6	236.9	192.5	186.9
87.5°	327.6	222.1	155.5	125.9	116.6	118.5	101.8	122.2	149.9	131.4	129.6
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)