

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: P510850

Luminaire Tested: **CST-CA8-480-740-U-T4-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510850
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-CA8-480-740-U-T4-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 62888 lumens
Efficiency: N/A
Efficacy: 130.8 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B4 - U0 - G5

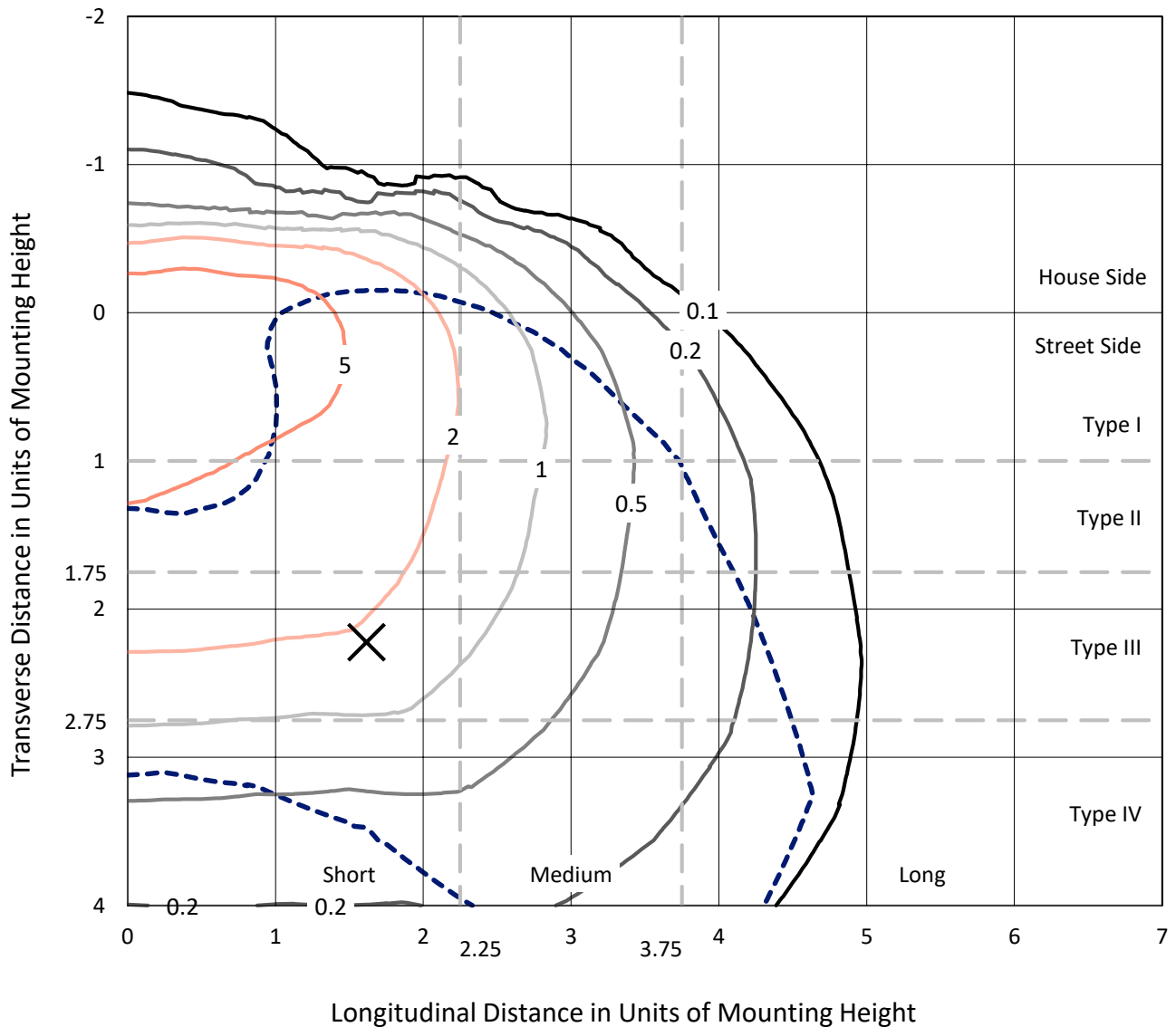
Input Watts (W): 480.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

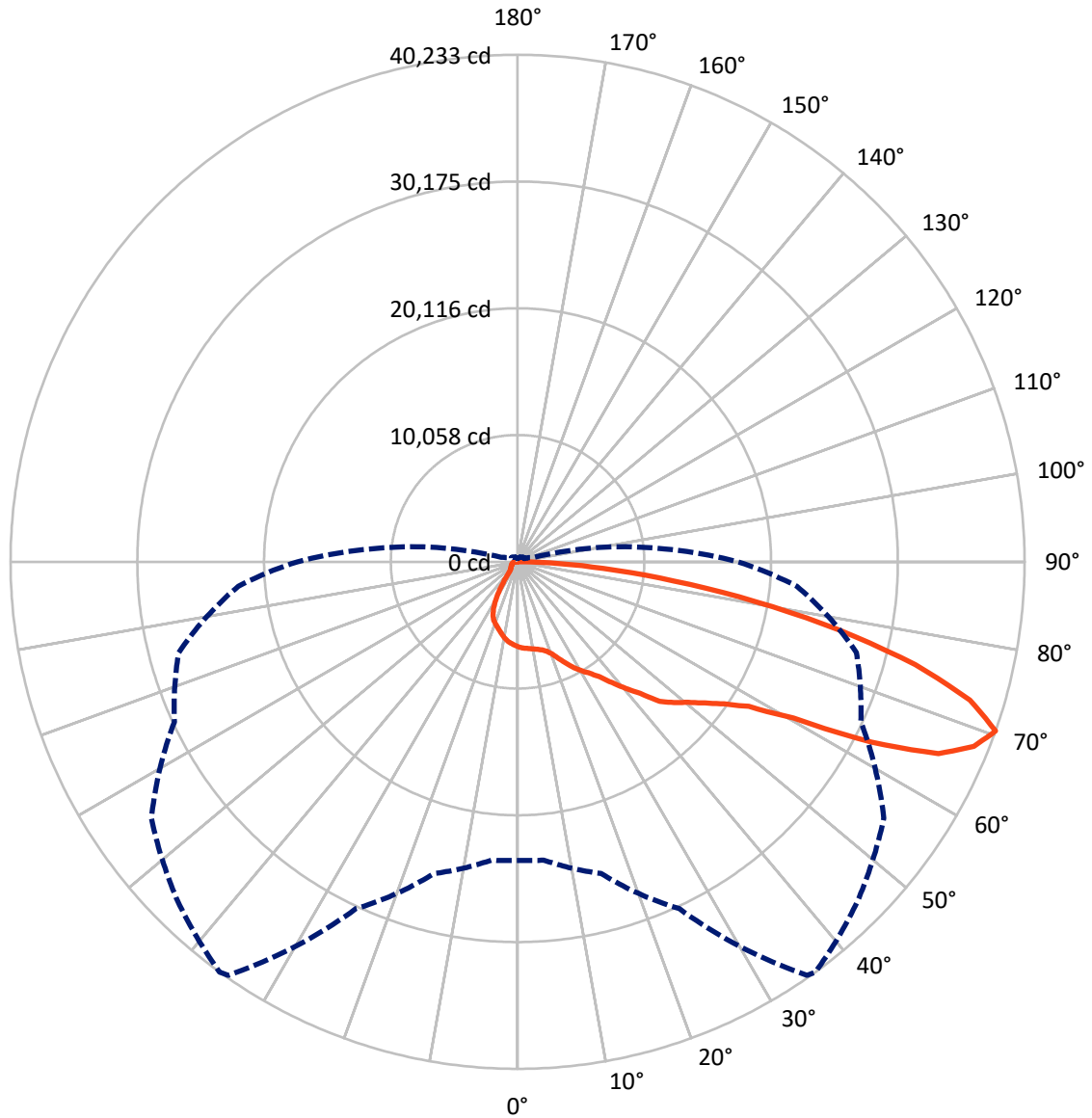
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 8.5 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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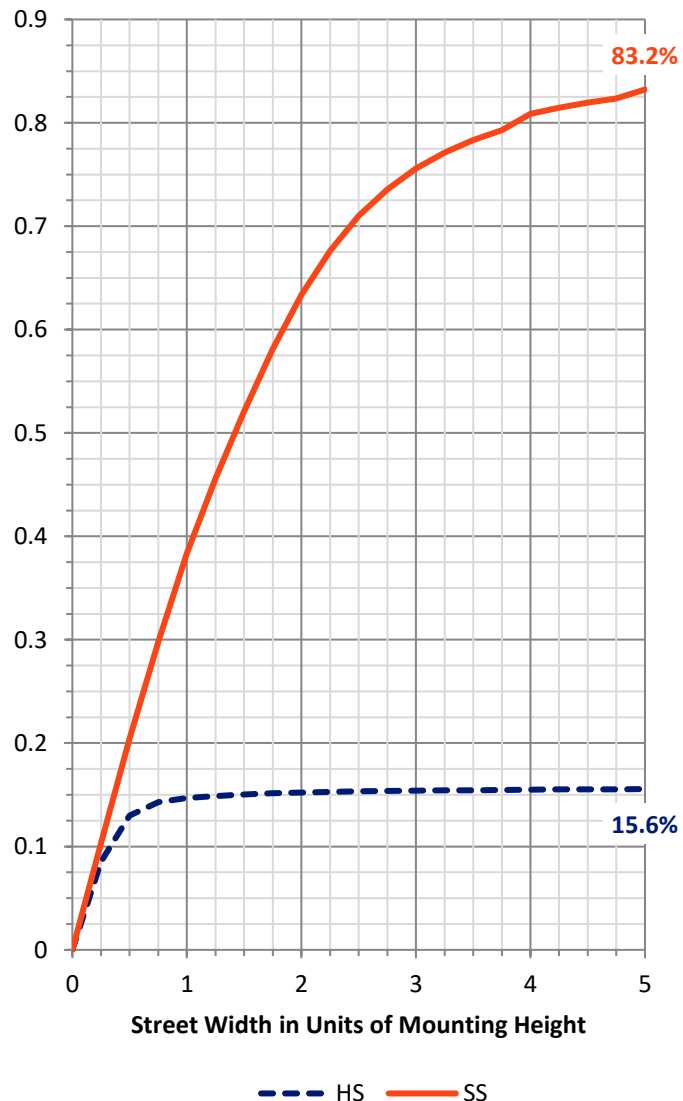
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9924.2	0.0	9924.2
	% Fixture	15.8	0.0	15.8
Street Side	Lumens	52963.8	0.0	52963.8
	% Fixture	84.2	0.0	84.2
Total	Lumens	62888.0	0.0	62888.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	639.0	1.0
10°-20°	1900.4	3.0
20°-30°	3417.5	5.4
30°-40°	5408.1	8.6
40°-50°	8451.9	13.4
50°-60°	12136.8	19.3
60°-70°	16462.5	26.2
70°-80°	12184.0	19.4
80°-90°	2287.8	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°	62888.0	100.0
0°-180°	62888.0	100.0

Coefficient of Utilization

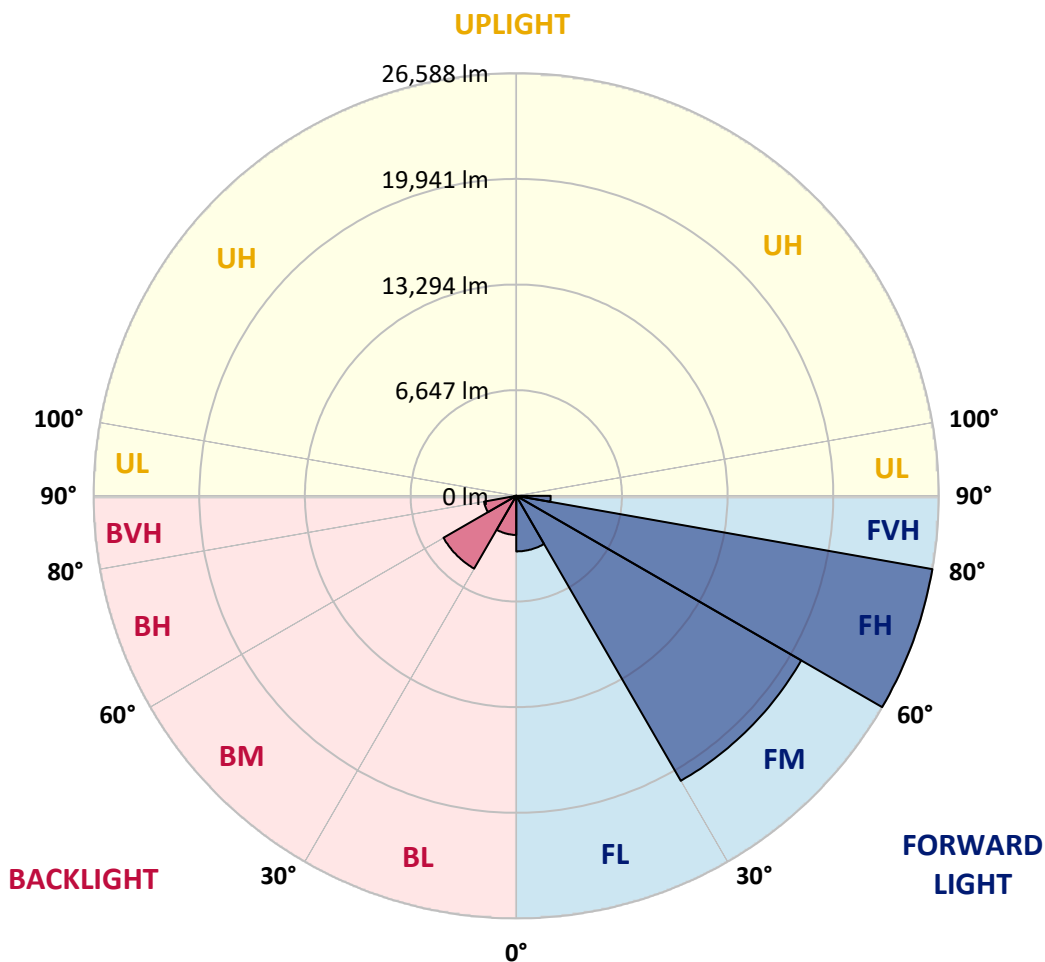


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3497.8	5.6			
FM (30°-60°)	20708.5	32.9			
FH (60°-80°)	26588.4	42.3			G5
FVH (80°-90°)	2169.1	3.4			G5
BL (0°-30°)	2459.2	3.9	B3/2500		
BM (30°-60°)	5288.4	8.4	B4/8500		
BH (60°-80°)	2058.0	3.3	B3/2500		G3/2500
BVH (80°-90°)	118.6	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 IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	6738.1	6738.1	6738.1	6738.1	6738.1	6738.1	6738.1	6738.1	6738.1	6738.1	6738.1
2.5°	6874.6	6860.1	6848.5	6852.8	6844.1	6849.9	6836.9	6820.9	6783.1	6767.2	6759.9
5°	6935.6	6931.2	6919.6	6910.9	6894.9	6889.1	6874.6	6887.7	6867.4	6815.1	6784.6
7.5°	6971.9	6970.4	6957.4	6938.5	6947.2	6954.5	6969.0	6948.7	6922.5	6897.8	6835.4
10°	6987.9	6987.9	6971.9	6982.1	7027.1	7031.4	7038.7	7051.7	7027.1	6990.8	6928.3
12.5°	7028.5	7025.6	7031.4	7064.8	7111.3	7121.4	7157.7	7157.7	7160.6	7138.9	7066.3
15°	7130.1	7130.1	7143.2	7173.7	7253.6	7259.4	7313.1	7361.0	7366.8	7334.9	7279.7
17.5°	7365.3	7359.5	7352.3	7371.2	7456.8	7459.7	7552.6	7613.6	7629.6	7664.4	7655.7
20°	7812.5	7806.7	7805.3	7806.7	7800.9	7792.2	7883.7	7949.0	8030.3	8091.3	8121.8
22.5°	8452.8	8439.7	8439.7	8368.6	8313.4	8322.1	8336.6	8372.9	8480.4	8587.8	8702.5
25°	9142.4	9133.7	9141.0	8959.5	8885.5	8914.5	8895.6	8952.2	9093.1	9186.0	9307.9
27.5°	9705.8	9718.8	9678.2	9537.3	9489.4	9511.2	9467.7	9630.3	9785.6	9948.2	10132.6
30°	10407.0	10337.3	10237.1	10065.8	10048.4	10051.3	10048.4	10309.7	10632.1	10864.4	11119.9
32.5°	11323.1	11334.8	11109.7	10706.1	10558.0	10537.7	10595.8	10979.1	11414.6	11930.0	12266.9
35°	12249.4	12268.3	12104.3	11683.2	11260.7	11196.8	11111.2	11609.2	12237.8	13271.6	13779.7
37.5°	13232.4	13299.1	13104.6	12728.6	12227.7	12168.1	11763.1	12252.3	13181.5	14859.9	15526.3
40°	14547.8	14476.6	14241.4	13763.7	13297.7	13201.9	12731.5	12988.4	14395.3	16849.0	17332.4
42.5°	15517.6	15497.3	15298.4	14826.5	14357.6	14280.6	13901.7	14180.4	15924.1	18865.6	19081.9
45°	16287.1	16412.0	16407.6	16111.4	15847.2	15803.6	15580.0	15990.9	17772.4	20769.0	20663.0
47.5°	16970.9	17047.9	16924.5	16795.2	16671.8	16686.4	16851.9	17696.9	19661.2	22431.4	21962.5
50°	18090.3	17991.6	17438.4	17339.7	17513.9	17521.2	18025.0	19325.9	21741.8	23868.8	23063.0
52.5°	19582.8	19475.4	18338.6	18170.2	18582.5	18613.0	19450.7	20949.1	23887.6	25242.2	24157.7
55°	21804.2	21554.5	20336.4	19581.4	19770.1	19893.5	20908.4	22509.8	25567.5	26453.1	24986.7
57.5°	24532.3	24713.8	24089.5	22383.5	21598.0	21644.5	22576.6	24003.8	27049.8	27513.0	25471.6
60°	27415.7	27372.1	27633.5	26914.8	25410.7	25160.9	24686.2	25528.3	28198.2	28405.9	25971.1
62.5°	28995.3	29249.4	30120.5	30264.3	31621.8	31489.6	28253.4	27418.6	29525.3	28966.3	26107.6
65°	28986.6	29097.0	30718.7	32501.6	36742.5	36704.8	35200.6	30152.5	30514.0	29265.4	25834.6
67.5°	27113.7	27285.0	29181.2	32664.2	39109.1	39064.1	38024.5	33995.6	30824.7	28905.3	24561.3
70°	23698.9	23757.0	25606.7	30374.6	40060.0	40232.8	38121.8	35470.7	30052.3	27835.3	22239.8
72.5°	19550.9	19430.4	21239.4	25939.1	37638.3	37535.2	36510.2	33709.6	28751.4	25757.7	18138.2
75°	14395.3	14730.7	16353.9	20827.1	32225.7	32603.2	33057.7	31014.9	25535.5	21227.8	12542.7
77.5°	9505.4	9932.3	11572.9	15616.3	25512.3	26098.8	27276.3	26379.1	20773.4	15227.2	5973.0
80°	4911.7	5234.0	6710.6	10362.0	18289.2	19135.7	21294.6	19979.2	14727.8	6884.8	1337.2
82.5°	1858.4	1816.3	3006.8	5930.9	11726.8	12496.3	14065.7	11980.8	5241.3	1209.4	621.4
85°	816.0	863.9	1245.7	2704.8	6704.7	6804.9	7967.9	4670.7	768.0	577.8	422.5
87.5°	352.8	405.1	522.7	778.2	2262.0	2611.9	3231.9	1483.8	232.3	200.4	212.0
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°	6738.1	6738.1	6738.1	6738.1	6738.1	6738.1	6738.1	6738.1	6738.1	6738.1	6738.1
2.5°	6746.8	6738.1	6723.6	6687.3	6627.8	6620.5	6614.7	6608.9	6597.3	6603.1	6636.5
5°	6761.4	6745.4	6693.1	6640.9	6588.6	6542.1	6485.5	6463.7	6434.7	6415.8	6450.7
7.5°	6810.7	6777.3	6700.4	6629.2	6487.0	6418.7	6346.1	6260.5	6199.5	6160.3	6195.1
10°	6893.5	6851.4	6755.6	6608.9	6442.0	6254.7	6126.9	5984.6	5868.5	5836.5	5868.5
12.5°	7028.5	6966.1	6854.3	6655.4	6359.2	6113.8	5871.4	5684.1	5496.8	5443.1	5459.0
15°	7247.7	7198.4	7027.1	6752.7	6360.6	5986.1	5626.0	5324.0	5078.6	4993.0	4987.2
17.5°	7599.1	7546.8	7349.4	6945.8	6412.9	5885.9	5385.0	4924.7	4553.1	4364.3	4333.8
20°	8102.9	8030.3	7731.2	7230.3	6526.2	5842.3	5161.4	4542.9	3965.1	3610.8	3557.1
22.5°	8663.3	8586.4	8145.0	7449.6	6607.5	5756.7	4948.0	4120.4	3359.6	2927.0	2866.0
25°	9360.2	9191.8	8541.4	7657.2	6588.6	5576.6	4601.0	3546.9	2722.3	2347.7	2307.0
27.5°	10048.4	9835.0	8945.0	7766.1	6505.8	5290.6	4092.8	2876.2	2131.3	1865.7	1832.3
30°	10902.1	10489.8	9303.6	7816.9	6296.8	4862.3	3411.9	2186.5	1595.6	1412.7	1380.7
32.5°	11917.0	11292.7	9640.4	7760.3	5948.3	4209.0	2652.6	1601.4	1186.2	1071.5	1070.0
35°	13255.6	12277.0	10010.7	7574.4	5414.0	3504.8	1859.8	1094.7	924.8	885.6	892.9
37.5°	14820.7	13609.8	10386.7	7269.5	4810.1	2681.6	1239.9	843.5	813.0	814.5	816.0
40°	16471.5	15082.0	10893.4	6841.2	4076.9	1941.2	892.9	757.9	756.4	770.9	775.3
42.5°	18048.2	16512.1	11517.7	6270.6	3308.8	1283.5	773.8	723.0	704.2	710.0	714.3
45°	19513.2	17739.0	12049.1	5714.6	2485.6	916.1	759.3	682.4	653.3	650.4	653.3
47.5°	20693.5	18721.9	12372.8	5061.2	1771.3	760.8	728.8	644.6	604.0	595.3	590.9
50°	21592.2	19452.2	12490.5	4320.8	1197.8	725.9	688.2	601.1	551.7	553.2	553.2
52.5°	22469.2	20115.7	12354.0	3574.5	881.3	695.4	660.6	566.2	514.0	541.5	548.8
55°	23100.7	20394.4	11956.2	2767.3	734.6	657.7	630.1	525.6	489.3	534.3	548.8
57.5°	23469.5	20613.7	11225.9	1997.8	673.7	621.4	590.9	487.8	454.4	466.1	473.3
60°	23698.9	20307.3	10260.4	1366.2	641.7	592.4	551.7	463.1	418.1	390.6	386.2
62.5°	23572.6	19540.7	8988.5	939.4	608.3	560.4	518.3	439.9	380.4	344.1	341.2
65°	22543.2	18122.3	6900.7	760.8	588.0	545.9	498.0	418.1	354.3	319.4	315.1
67.5°	20634.0	15572.8	4030.4	676.6	579.3	531.4	482.0	397.8	339.7	302.0	296.2
70°	17496.5	11713.7	1350.2	604.0	577.8	529.9	469.0	383.3	323.8	284.6	278.8
72.5°	12622.6	7067.7	657.7	531.4	540.1	508.2	458.8	371.7	313.6	264.2	254.1
75°	7173.7	2301.2	593.8	458.8	502.3	484.9	453.0	373.1	318.0	239.6	227.9
77.5°	2041.3	672.2	573.5	390.6	474.8	500.9	423.9	336.8	325.2	222.1	207.6
80°	689.6	598.2	553.2	303.4	383.3	413.8	367.3	296.2	328.1	201.8	187.3
82.5°	553.2	601.1	464.6	242.5	291.8	313.6	291.8	265.7	265.7	180.0	168.4
85°	442.8	557.5	294.7	193.1	217.8	241.0	206.2	198.9	185.8	151.0	146.6
87.5°	257.0	174.2	122.0	98.7	91.5	92.9	79.9	95.8	117.6	103.1	101.6
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)