

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: P510778

Luminaire Tested: **CST-CA8-330-730-U-T3-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510778
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-CA8-330-730-U-T3-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 3000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 44824 lumens
Efficiency: N/A
Efficacy: 135.2 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U0 - G5

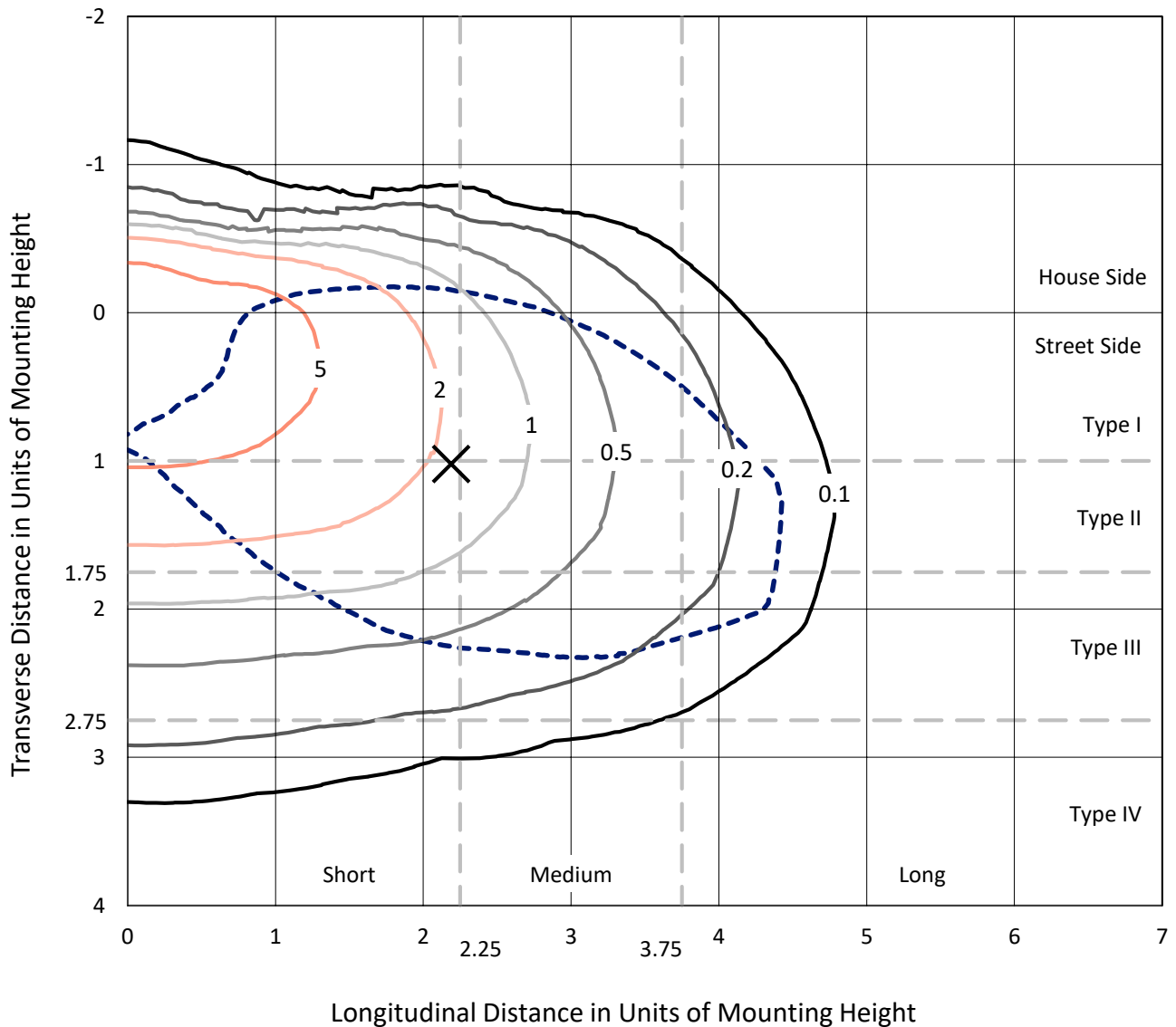
Input Watts (W): 331.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

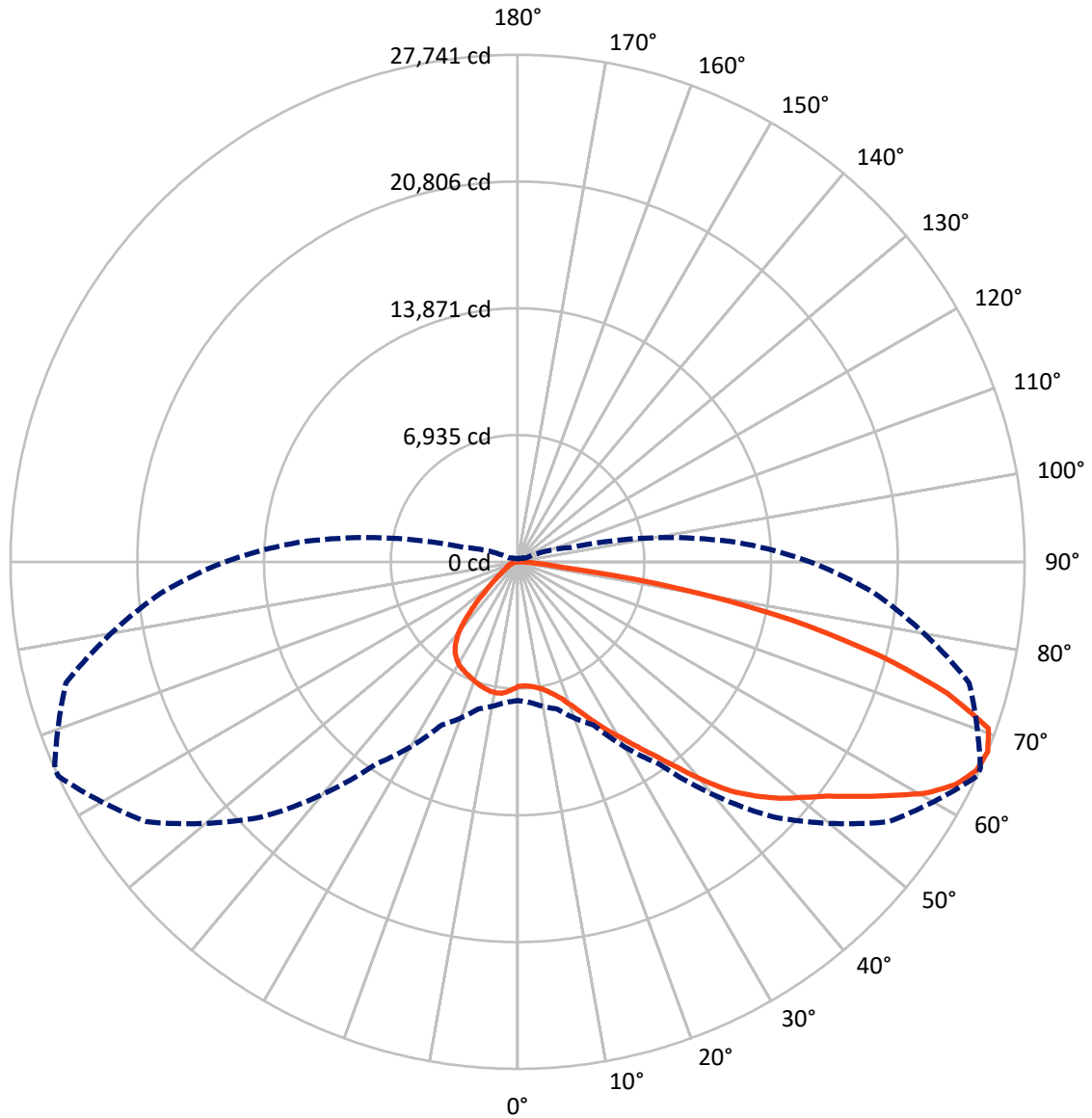
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 8.9 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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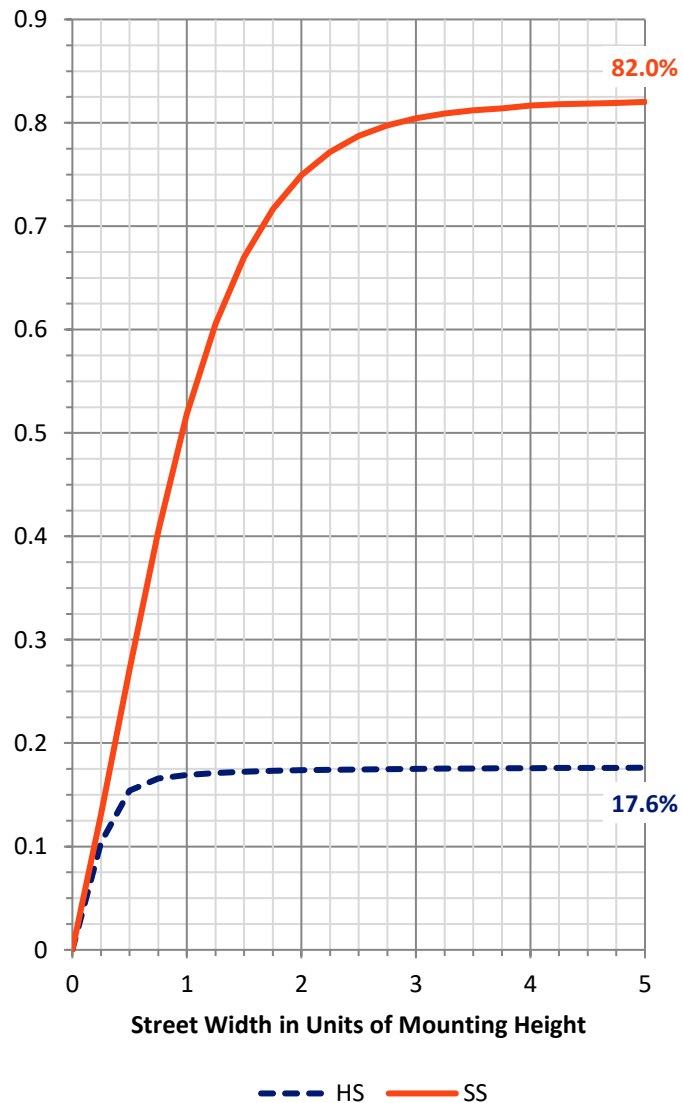
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8011.1	0.0	8011.1
	% Fixture	17.9	0.0	17.9
Street Side	Lumens	36812.9	0.0	36812.9
	% Fixture	82.1	0.0	82.1
Total	Lumens	44824.0	0.0	44824.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	673.9	1.5
10°-20°	2080.5	4.6
20°-30°	3609.2	8.1
30°-40°	5444.4	12.1
40°-50°	7549.0	16.8
50°-60°	9318.3	20.8
60°-70°	9928.5	22.1
70°-80°	5681.2	12.7
80°-90°	539.0	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°	44824.0	100.0
0°-180°	44824.0	100.0

Coefficient of Utilization



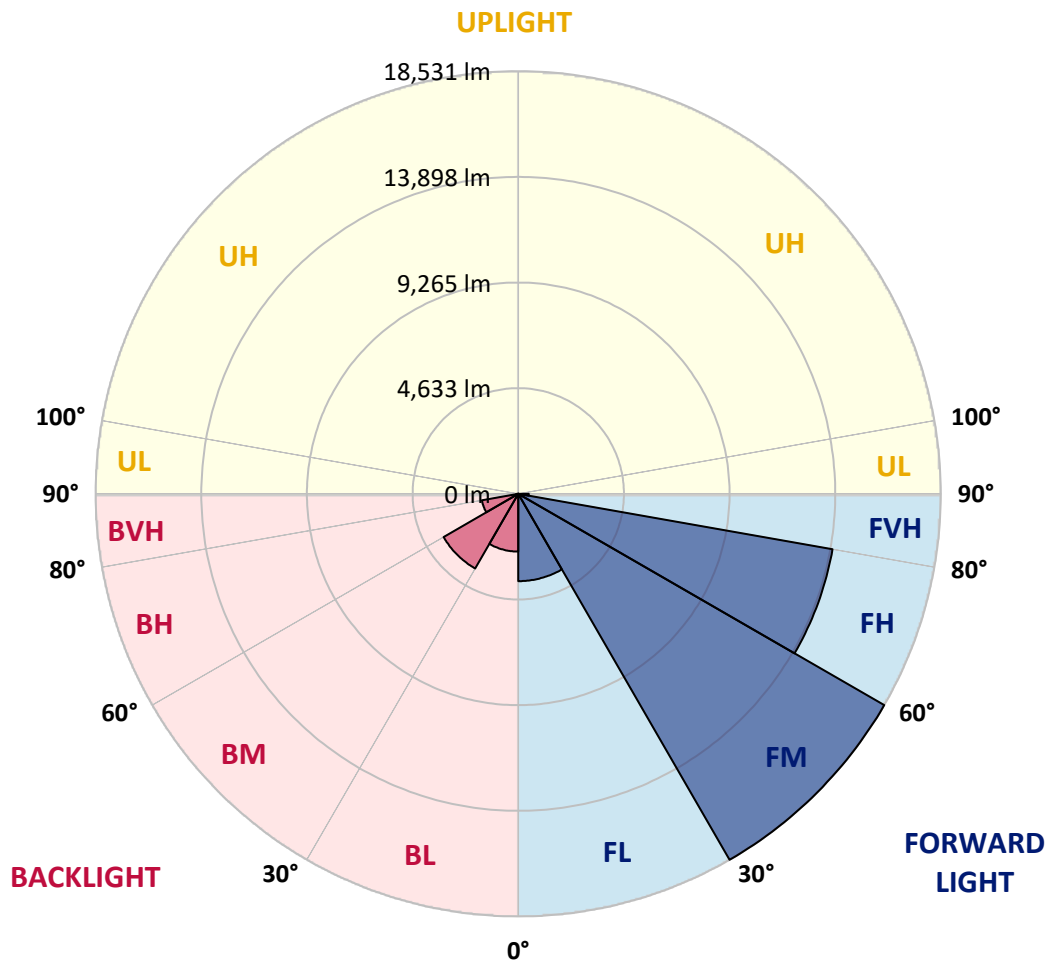
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3828.6	8.5			
FM (30°-60°)	18530.9	41.3			
FH (60°-80°)	13992.8	31.2			G5
FVH (80°-90°)	460.6	1.0			G3/500
BL (0°-30°)	2534.9	5.7	B4/5000		
BM (30°-60°)	3780.8	8.4	B3/5000		
BH (60°-80°)	1616.9	3.6	B3/2500		G3/2500
BVH (80°-90°)	78.5	0.2			G1/100
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°	6811.3	6811.3	6811.3	6811.3	6811.3	6811.3	6811.3	6811.3	6811.3	6811.3	6811.3
2.5°	6745.5	6736.7	6728.8	6742.6	6750.4	6763.2	6781.8	6794.6	6798.5	6810.3	6825.0
5°	6853.5	6852.5	6841.7	6835.8	6819.2	6813.3	6817.2	6832.9	6833.9	6848.6	6894.8
7.5°	7065.6	7063.6	7037.1	7025.3	6990.0	6950.7	6921.3	6924.2	6923.2	6938.0	6999.8
10°	7385.7	7370.0	7332.7	7296.3	7227.6	7154.0	7100.0	7050.9	7050.9	7072.5	7141.2
12.5°	7747.0	7768.6	7717.6	7662.6	7547.7	7415.2	7320.9	7265.9	7260.0	7270.8	7319.9
15°	8195.7	8195.7	8161.4	8082.8	7981.7	7797.1	7602.7	7533.0	7523.2	7545.7	7542.8
17.5°	8701.4	8716.1	8651.3	8612.1	8456.9	8252.7	8009.2	7888.4	7888.4	7873.7	7805.9
20°	9346.5	9266.0	9272.9	9208.1	9094.2	8797.6	8550.2	8374.5	8372.5	8343.0	8152.5
22.5°	10047.6	10003.4	9965.1	9908.1	9751.0	9485.9	9142.3	8968.5	8964.6	8891.9	8609.1
25°	10738.8	10772.2	10730.0	10625.9	10511.0	10222.3	9843.3	9672.5	9671.5	9550.7	9150.1
27.5°	11449.7	11486.0	11472.3	11378.0	11224.8	10999.0	10640.6	10417.7	10404.0	10325.4	9821.7
30°	12235.2	12202.8	12245.0	12204.8	12128.2	11760.0	11436.0	11176.7	11210.1	11186.6	10584.7
32.5°	12806.7	12827.3	12965.7	12969.6	12889.1	12616.2	12220.5	12061.4	12114.4	12083.0	11522.4
35°	13323.1	13356.5	13535.2	13711.0	13769.9	13471.4	13068.8	13059.0	13127.7	13319.2	12814.5
37.5°	13766.9	13790.5	14040.9	14269.7	14460.1	14255.9	13963.3	14311.9	14413.0	14804.8	14147.9
40°	14033.0	14063.5	14387.5	14709.5	15049.3	14976.6	14949.1	15773.9	15869.1	16213.8	15120.9
42.5°	13882.8	13942.7	14482.7	15071.9	15571.6	15716.9	16093.0	17153.4	17262.4	17291.9	16077.3
45°	13614.7	13689.4	14293.2	15246.6	16061.6	16528.0	17243.8	18277.7	18337.6	18254.1	16869.7
47.5°	13326.1	13405.6	14080.2	15194.6	16455.3	17471.6	18271.8	19336.2	19378.4	19122.1	17667.9
50°	12998.1	13071.8	13797.4	15072.8	16751.8	18362.1	19328.3	20251.3	20409.4	19902.7	18288.5
52.5°	12599.5	12678.0	13447.8	14882.4	17012.0	19022.9	20260.1	21285.2	21296.0	20878.7	18987.6
55°	12083.0	12219.5	13008.9	14552.4	17148.5	19590.5	21072.1	22652.9	22722.7	22319.1	19572.8
57.5°	11508.6	11627.4	12480.7	14112.6	17025.8	20021.5	22378.0	24119.9	24111.0	23301.0	20084.3
60°	10749.6	10834.1	11792.4	13537.2	16630.1	20542.9	23737.9	25691.9	25676.2	24263.2	20413.3
62.5°	9775.6	9860.0	10761.4	12634.8	16048.8	20892.4	24660.9	26869.1	26824.0	24963.3	20514.4
65°	8646.4	8797.6	9580.2	11463.4	15020.8	20662.7	25106.7	27562.3	27489.7	25497.5	20272.9
67.5°	7588.0	7716.6	8336.2	9851.2	13503.8	19730.9	24792.5	27741.0	27719.4	25575.0	19590.5
70°	6089.6	6136.7	6704.3	8001.3	11235.6	17735.7	23706.5	27328.7	27338.5	24860.2	18219.8
72.5°	4168.1	4283.0	4535.3	5559.4	8176.1	14104.7	20432.9	24595.1	24597.1	22291.6	15874.0
75°	2241.6	2419.4	2713.9	3221.5	4570.6	9051.0	16409.2	20408.4	20446.7	18586.0	12617.2
77.5°	1111.5	1175.3	1346.2	1723.2	2095.3	4270.2	10553.2	15319.3	15410.6	14266.7	8605.2
80°	508.6	519.4	532.2	529.2	802.2	1873.4	4530.4	9200.2	9227.7	8485.4	3928.5
82.5°	397.7	395.7	401.6	365.3	367.2	722.7	1568.1	2409.5	2569.6	2022.7	1246.0
85°	240.6	239.6	258.2	200.3	246.5	390.8	791.4	961.3	973.0	791.4	645.1
87.5°	91.3	88.4	81.5	71.7	82.5	110.0	273.9	353.5	345.6	245.5	222.9
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°	6811.3	6811.3	6811.3	6811.3	6811.3	6811.3	6811.3	6811.3	6811.3	6811.3	6811.3
2.5°	6837.8	6869.2	6927.2	6971.3	6986.1	7033.2	7078.4	7086.2	7118.6	7131.4	7173.6
5°	6923.2	6976.3	7066.6	7126.5	7153.0	7231.5	7282.6	7308.1	7299.3	7304.2	7351.3
7.5°	7047.9	7098.0	7170.7	7243.3	7256.1	7269.8	7264.9	7261.0	7226.6	7197.2	7241.4
10°	7161.8	7209.0	7254.1	7264.9	7200.1	7163.8	7099.0	7048.9	6982.1	6951.7	6987.1
12.5°	7321.9	7331.7	7287.5	7228.6	7089.2	6959.6	6854.5	6763.2	6680.7	6623.8	6670.9
15°	7490.8	7452.5	7323.8	7152.0	6936.0	6750.4	6578.6	6426.4	6289.9	6256.5	6269.3
17.5°	7714.6	7610.5	7351.3	7062.7	6726.9	6438.2	6217.3	6024.8	5846.1	5771.5	5764.6
20°	7987.6	7819.7	7407.3	6949.7	6479.4	6095.5	5753.8	5466.1	5219.7	5017.4	5022.3
22.5°	8343.0	8099.5	7491.7	6831.9	6205.5	5693.9	5197.1	4708.1	4302.6	4127.8	4084.6
25°	8812.4	8449.1	7611.5	6724.9	5899.1	5183.3	4481.3	3791.0	3362.0	3192.1	3173.4
27.5°	9396.6	8918.4	7794.2	6606.1	5571.2	4577.5	3568.2	2891.6	2497.9	2319.2	2259.3
30°	10060.3	9496.7	7981.7	6482.4	5174.5	3798.9	2720.8	2058.0	1654.5	1494.4	1473.8
32.5°	10919.5	10229.2	8260.6	6288.0	4595.2	2985.9	1898.0	1284.3	1010.4	941.6	922.0
35°	12140.0	11219.9	8605.2	6042.5	3850.9	2085.5	1176.3	752.1	605.8	571.5	564.6
37.5°	13278.0	12192.0	8952.8	5635.0	2924.0	1302.0	672.6	482.1	449.7	450.7	452.6
40°	14180.3	12856.7	9233.6	5098.9	1923.5	739.4	467.4	400.6	401.6	398.6	396.7
42.5°	14983.5	13386.9	9360.3	4306.5	1114.4	494.9	405.5	369.2	360.3	363.3	361.3
45°	15648.2	13928.0	9114.8	3416.0	656.9	443.8	382.9	342.7	332.9	348.6	350.5
47.5°	16347.3	14441.5	8738.7	2573.5	533.2	422.2	362.3	323.0	318.1	337.8	339.7
50°	16935.5	14813.6	8097.6	1939.2	508.6	398.6	343.7	303.4	302.4	320.1	320.1
52.5°	17427.4	15038.5	7336.6	1497.4	491.9	378.0	325.0	284.7	284.7	290.6	291.6
55°	17774.0	14993.3	6883.0	1178.3	474.2	358.4	305.4	267.1	255.3	251.4	253.3
57.5°	17836.8	14873.5	6356.7	919.0	453.6	339.7	287.7	246.5	224.9	221.9	220.9
60°	17796.6	14610.4	5755.8	767.8	430.1	322.1	270.0	224.9	203.2	196.4	198.3
62.5°	17628.7	14144.0	5061.6	673.6	406.5	308.3	250.4	210.1	190.5	181.6	181.6
65°	17122.0	13476.3	4030.6	590.1	377.0	293.6	234.7	204.2	182.6	172.8	170.8
67.5°	16008.6	12090.9	3029.1	517.5	348.6	277.9	232.7	203.2	178.7	165.0	163.0
70°	14515.1	10386.3	2067.8	454.6	317.1	263.1	231.7	204.2	174.8	157.1	155.1
72.5°	12117.4	8187.9	1191.0	395.7	285.7	249.4	227.8	205.2	167.9	146.3	143.4
75°	9105.0	5743.0	699.1	339.7	255.3	228.8	217.0	199.3	157.1	133.5	130.6
77.5°	5475.9	2681.5	526.3	281.8	219.0	201.3	193.4	182.6	143.4	123.7	120.8
80°	2008.9	1018.2	413.4	225.8	173.8	174.8	166.9	160.0	130.6	113.9	111.9
82.5°	875.8	622.5	305.4	171.8	136.5	156.1	137.5	131.6	111.9	102.1	98.2
85°	531.2	371.2	196.4	116.8	94.3	106.0	96.2	101.1	86.4	80.5	77.6
87.5°	175.8	111.0	87.4	56.9	47.1	44.2	43.2	52.0	49.1	45.2	45.2
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)