

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: P510478

Luminaire Tested: **CST-CA10-310-730-U-T3-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510478
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-CA10-310-730-U-T3-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: 44370 lumens
Efficiency: N/A
Efficacy: 142.0 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U0 - G5

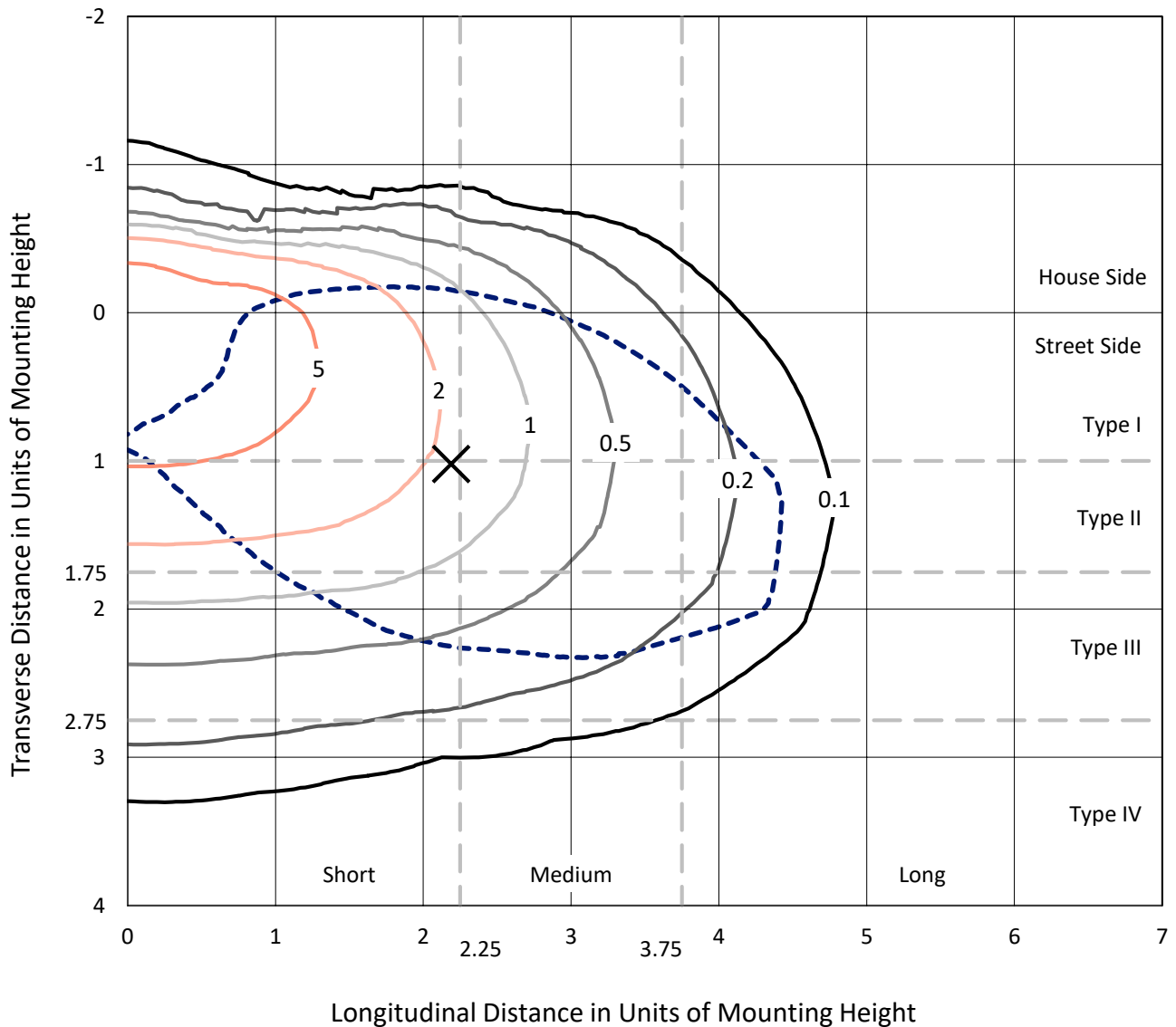
Input Watts (W): 312.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P510478
 CATALOG NUMBER: CST-CA10-310-730-U-T3-HSS

Iso-Footcandle Lines of Horizontal Illumination

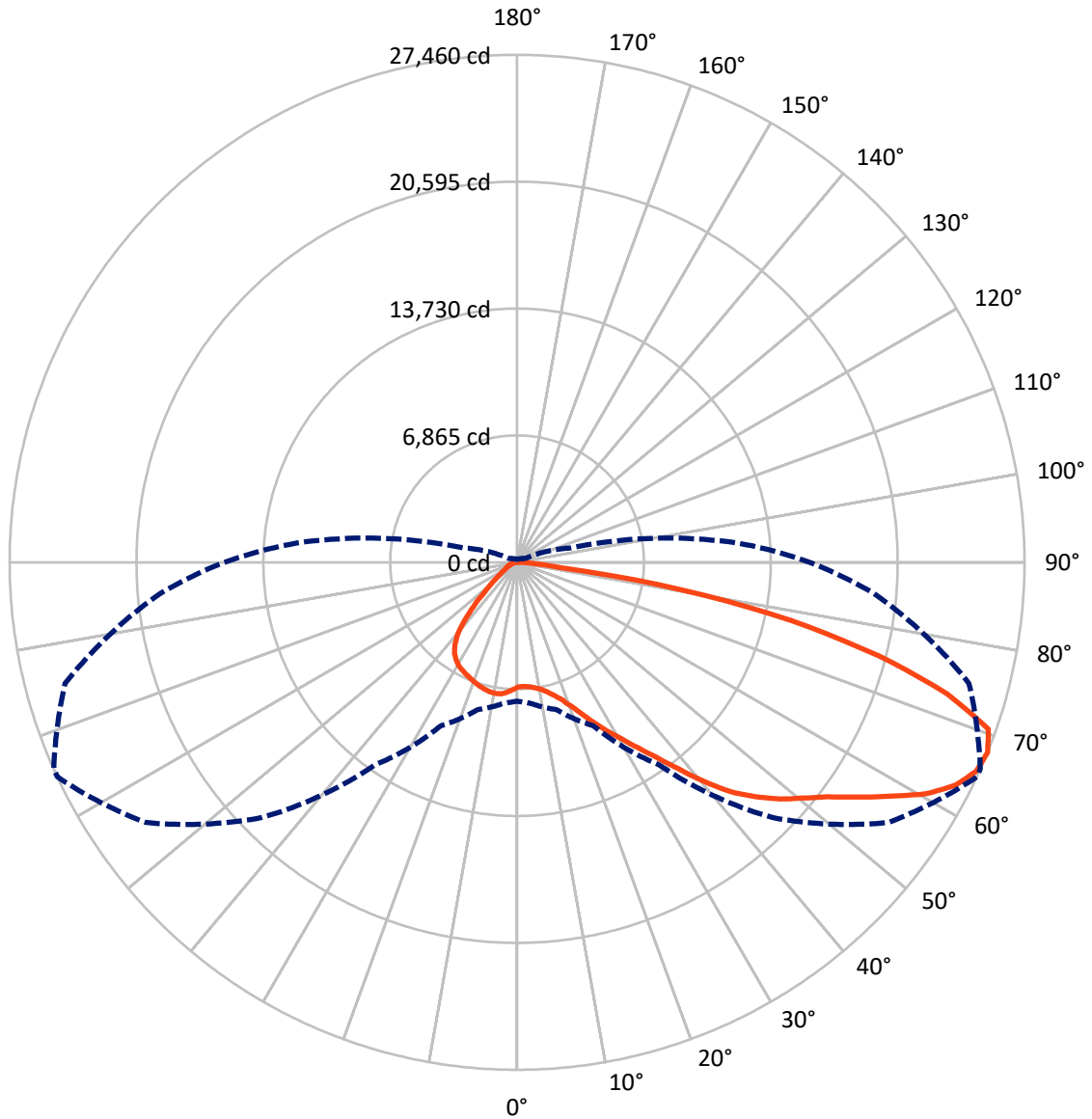
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 8.8 fc
 Type III - Short - N/A

REPORT NUMBER: P510478
CATALOG NUMBER: CST-CA10-310-730-U-T3-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P510478
 CATALOG NUMBER: CST-CA10-310-730-U-T3-HSS

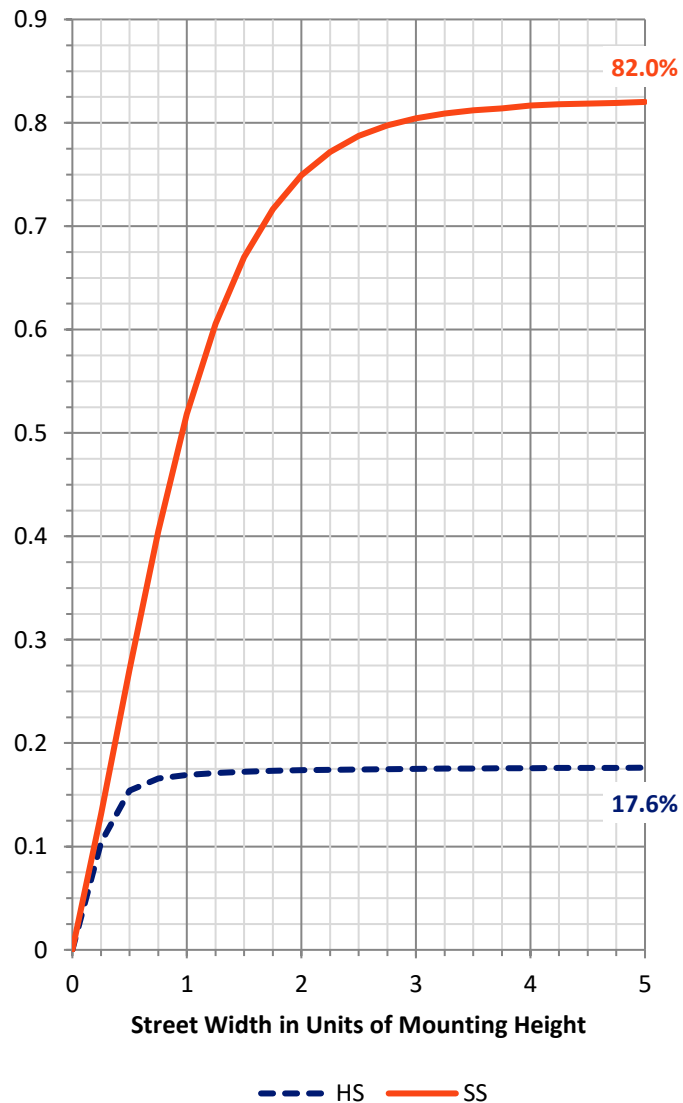
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7930.0	0.0	7930.0
	% Fixture	17.9	0.0	17.9
Street Side	Lumens	36440.0	0.0	36440.0
	% Fixture	82.1	0.0	82.1
Total	Lumens	44370.0	0.0	44370.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	667.0	1.5
10°-20°	2059.4	4.6
20°-30°	3572.6	8.1
30°-40°	5389.3	12.1
40°-50°	7472.6	16.8
50°-60°	9223.9	20.8
60°-70°	9827.9	22.1
70°-80°	5623.7	12.7
80°-90°	533.6	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°	44370.0	100.0
0°-180°	44370.0	100.0

Coefficient of Utilization



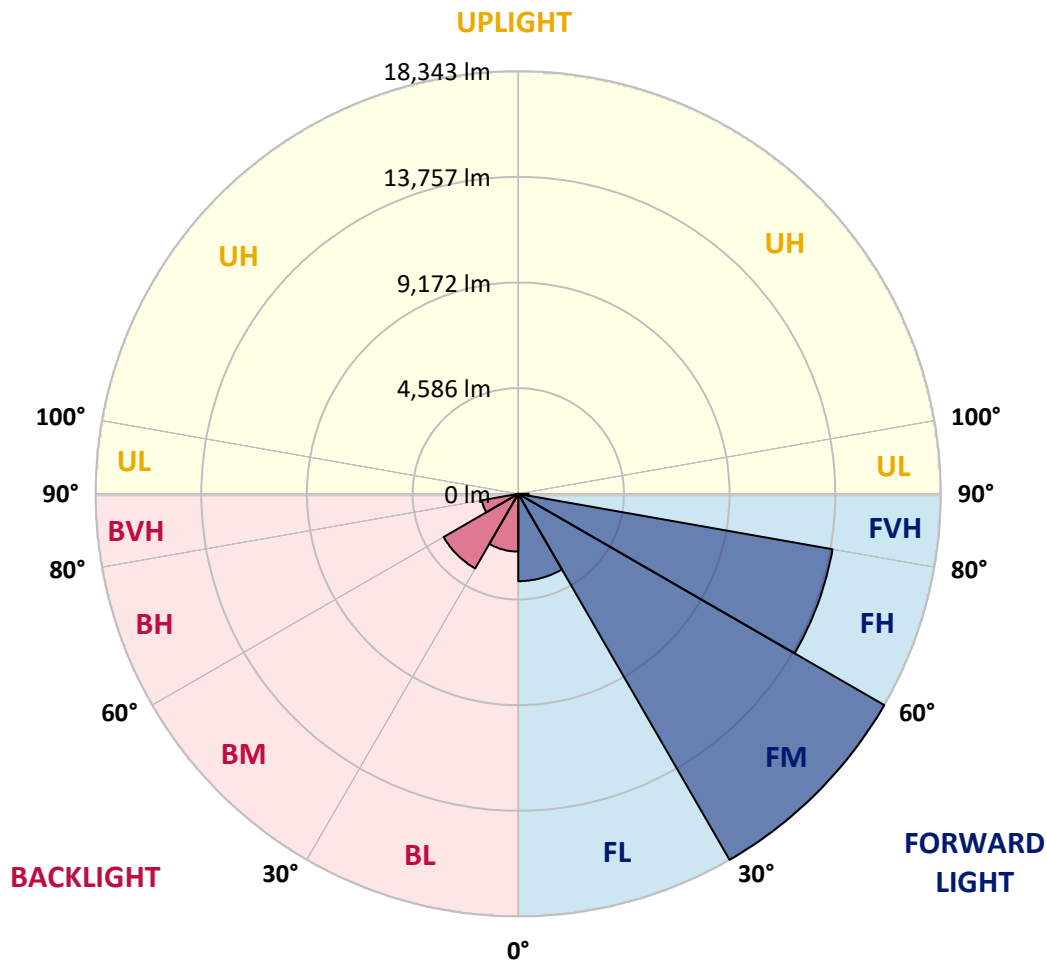
REPORT NUMBER: P510478
 CATALOG NUMBER: CST-CA10-310-730-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3789.8	8.5			
FM (30°-60°)	18343.2	41.3			
FH (60°-80°)	13851.1	31.2			G5
FVH (80°-90°)	455.9	1.0			G3/500
BL (0°-30°)	2509.3	5.7	B4/5000		
BM (30°-60°)	3742.5	8.4	B3/5000		
BH (60°-80°)	1600.5	3.6	B3/2500		G3/2500
BVH (80°-90°)	77.7	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





REPORT NUMBER: P510478

CATALOG NUMBER: CST-CA10-310-730-U-T3-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	6742.3	6742.3	6742.3	6742.3	6742.3	6742.3	6742.3	6742.3	6742.3	6742.3	6742.3
2.5°	6677.2	6668.4	6660.7	6674.3	6682.1	6694.7	6713.2	6725.8	6729.7	6741.3	6755.9
5°	6784.1	6783.1	6772.4	6766.6	6750.1	6744.3	6748.1	6763.7	6764.7	6779.2	6824.9
7.5°	6994.0	6992.1	6965.9	6954.2	6919.2	6880.3	6851.2	6854.1	6853.1	6867.7	6928.9
10°	7310.9	7295.3	7258.4	7222.4	7154.4	7081.5	7028.1	6979.5	6979.5	7000.8	7068.9
12.5°	7668.6	7689.9	7639.4	7585.0	7471.3	7340.1	7246.7	7192.3	7186.5	7197.2	7245.8
15°	8112.7	8112.7	8078.7	8001.0	7900.9	7718.1	7525.7	7456.7	7447.0	7469.3	7466.4
17.5°	8613.3	8627.9	8563.7	8524.8	8371.3	8169.1	7928.1	7808.5	7808.5	7793.9	7726.9
20°	9251.8	9172.1	9179.0	9114.8	9002.1	8708.5	8463.6	8289.6	8287.7	8258.5	8070.0
22.5°	9945.8	9902.1	9864.2	9807.8	9652.3	9389.9	9049.7	8877.7	8873.8	8801.8	8521.9
25°	10630.0	10663.1	10621.3	10518.3	10404.6	10118.8	9743.6	9574.5	9573.6	9454.0	9057.5
27.5°	11333.7	11369.7	11356.1	11262.8	11111.2	10887.6	10532.9	10312.2	10298.6	10220.9	9722.3
30°	12111.3	12079.2	12121.0	12081.1	12005.3	11640.9	11320.1	11063.5	11096.6	11073.3	10477.5
32.5°	12676.9	12697.4	12834.4	12838.3	12758.6	12488.4	12096.7	11939.2	11991.7	11960.6	11405.7
35°	13188.2	13221.2	13398.1	13572.1	13630.4	13334.9	12936.5	12926.7	12994.8	13184.3	12684.7
37.5°	13627.5	13650.8	13898.7	14125.1	14313.7	14111.5	13821.9	14166.9	14267.0	14654.8	14004.6
40°	13890.9	13921.0	14241.8	14560.6	14896.8	14824.9	14797.7	15614.1	15708.4	16049.6	14967.8
42.5°	13742.2	13801.5	14336.0	14919.2	15413.9	15557.8	15930.0	16979.7	17087.6	17116.7	15914.5
45°	13476.8	13550.7	14148.5	15092.2	15898.9	16360.6	17069.1	18092.6	18151.9	18069.2	16698.8
47.5°	13191.1	13269.8	13937.5	15040.7	16288.7	17294.6	18086.7	19140.3	19182.1	18928.4	17489.0
50°	12866.5	12939.4	13657.6	14920.2	16582.2	18176.2	19132.5	20046.2	20202.6	19701.1	18103.3
52.5°	12471.9	12549.6	13311.6	14731.6	16839.7	18830.3	20054.9	21069.6	21080.3	20667.2	18795.3
55°	11960.6	12095.7	12877.2	14405.0	16974.8	19392.0	20858.7	22423.5	22492.5	22093.0	19374.5
57.5°	11392.0	11509.7	12354.3	13969.6	16853.3	19818.7	22151.4	23875.6	23866.8	23065.0	19880.9
60°	10640.7	10724.3	11672.9	13400.1	16461.7	20334.8	23497.5	25431.6	25416.1	24017.5	20206.5
62.5°	9676.6	9760.2	10652.4	12506.9	15886.3	20680.8	24411.1	26597.0	26552.3	24710.5	20306.6
65°	8558.9	8708.5	9483.2	11347.3	14868.7	20453.4	24852.4	27283.2	27211.3	25239.2	20067.5
67.5°	7511.1	7638.4	8251.7	9751.4	13367.0	19531.0	24541.4	27460.1	27438.7	25316.0	19392.0
70°	6027.9	6074.6	6636.4	7920.3	11121.8	17556.1	23466.4	27051.9	27061.6	24608.4	18035.2
72.5°	4125.9	4239.6	4489.4	5503.1	8093.3	13961.8	20226.0	24346.0	24347.9	22065.8	15713.3
75°	2218.9	2394.8	2686.4	3188.9	4524.4	8959.3	16243.0	20201.7	20239.6	18397.8	12489.4
77.5°	1100.2	1163.4	1332.5	1705.7	2074.1	4226.9	10446.4	15164.1	15254.5	14122.2	8518.0
80°	503.5	514.2	526.8	523.9	794.1	1854.5	4484.5	9107.0	9134.2	8399.5	3888.7
82.5°	393.6	391.7	397.5	361.6	363.5	715.3	1552.2	2385.1	2543.6	2002.2	1233.4
85°	238.1	237.2	255.6	198.3	244.0	386.8	783.4	951.5	963.2	783.4	638.6
87.5°	90.4	87.5	80.7	71.0	81.6	108.9	271.2	349.9	342.1	243.0	220.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P510478
 CATALOG NUMBER: CST-CA10-310-730-U-T3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6742.3	6742.3	6742.3	6742.3	6742.3	6742.3	6742.3	6742.3	6742.3	6742.3	6742.3
2.5°	6768.6	6799.7	6857.0	6900.7	6915.3	6962.0	7006.7	7014.5	7046.5	7059.2	7101.0
5°	6853.1	6905.6	6995.0	7054.3	7080.5	7158.3	7208.8	7234.1	7225.4	7230.2	7276.9
7.5°	6976.5	7026.1	7098.0	7170.0	7182.6	7196.2	7191.3	7187.5	7153.4	7124.3	7168.0
10°	7089.3	7135.9	7180.7	7191.3	7127.2	7091.2	7027.1	6977.5	6911.4	6881.3	6916.3
12.5°	7247.7	7257.4	7213.7	7155.4	7017.4	6889.1	6785.1	6694.7	6613.0	6556.7	6603.3
15°	7414.9	7377.0	7249.7	7079.6	6865.7	6682.1	6512.0	6361.3	6226.2	6193.2	6205.8
17.5°	7636.5	7533.5	7276.9	6991.1	6658.7	6373.0	6154.3	5963.8	5786.9	5713.0	5706.2
20°	7906.7	7740.5	7332.3	6879.4	6413.8	6033.8	5695.5	5410.8	5166.8	4966.6	4971.4
22.5°	8258.5	8017.5	7415.9	6762.7	6142.6	5636.2	5144.5	4660.4	4259.0	4086.0	4043.2
25°	8723.1	8363.5	7534.4	6656.8	5839.4	5130.8	4435.9	3752.6	3327.9	3159.8	3141.3
27.5°	9301.4	8828.1	7715.2	6539.2	5514.8	4531.2	3532.0	2862.3	2472.6	2295.7	2236.4
30°	9958.4	9400.6	7900.9	6416.7	5122.1	3760.4	2693.2	2037.2	1637.7	1479.3	1458.9
32.5°	10808.9	10125.6	8176.9	6224.3	4548.7	2955.7	1878.7	1271.3	1000.1	932.1	912.6
35°	12017.0	11106.3	8518.0	5981.3	3811.9	2064.4	1164.4	744.5	599.7	565.7	558.9
37.5°	13143.5	12068.5	8862.1	5577.9	2894.4	1288.8	665.8	477.2	445.1	446.1	448.1
40°	14036.7	12726.5	9140.1	5047.3	1904.0	731.9	462.6	396.5	397.5	394.6	392.7
42.5°	14831.7	13251.4	9265.5	4262.9	1103.1	489.9	401.4	365.4	356.7	359.6	357.7
45°	15489.7	13786.9	9022.5	3381.4	650.2	439.3	379.1	339.2	329.5	345.0	347.0
47.5°	16181.7	14295.2	8650.2	2547.4	527.8	417.9	358.6	319.8	314.9	334.3	336.3
50°	16763.9	14663.6	8015.5	1919.6	503.5	394.6	340.2	300.3	299.4	316.9	316.9
52.5°	17250.9	14886.2	7262.3	1482.2	486.9	374.2	321.7	281.9	281.9	287.7	288.7
55°	17594.0	14841.4	6813.3	1166.3	469.4	354.8	302.3	264.4	252.7	248.8	250.8
57.5°	17656.2	14722.9	6292.3	909.7	449.0	336.3	284.8	244.0	222.6	219.7	218.7
60°	17616.3	14462.4	5697.5	760.1	425.7	318.8	267.3	222.6	201.2	194.4	196.3
62.5°	17450.1	14000.7	5010.3	666.7	402.4	305.2	247.8	208.0	188.6	179.8	179.8
65°	16948.6	13339.8	3989.8	584.1	373.2	290.6	232.3	202.2	180.8	171.1	169.1
67.5°	15846.4	11968.4	2998.4	512.2	345.0	275.1	230.3	201.2	176.9	163.3	161.3
70°	14368.1	10281.1	2046.9	450.0	313.9	260.5	229.4	202.2	173.0	155.5	153.6
72.5°	11994.6	8105.0	1179.0	391.7	282.8	246.9	225.5	203.1	166.2	144.8	141.9
75°	9012.8	5684.8	692.0	336.3	252.7	226.5	214.8	197.3	155.5	132.2	129.3
77.5°	5420.5	2654.4	521.0	278.9	216.7	199.2	191.5	180.8	141.9	122.5	119.5
80°	1988.6	1007.9	409.2	223.5	172.0	173.0	165.2	158.4	129.3	112.7	110.8
82.5°	867.0	616.2	302.3	170.1	135.1	154.5	136.1	130.2	110.8	101.1	97.2
85°	525.8	367.4	194.4	115.7	93.3	105.0	95.2	100.1	85.5	79.7	76.8
87.5°	174.0	109.8	86.5	56.4	46.7	43.7	42.8	51.5	48.6	44.7	44.7
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)