

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: McGRAW-EDISON

Report Number: P591049

Luminaire Tested: **CTN-CA6-230-740-U-T3-HSS-HM-EX120**

Issue Date: 12/14/2021

Test Information

Test Method: LM-79-08
Report Number: P591049
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2112-474-2)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 12/14/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA6-230-740-U-T3-HSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD
Light Source: (6) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 31364 lumens
Efficiency: N/A
Efficacy: 137.7 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G4

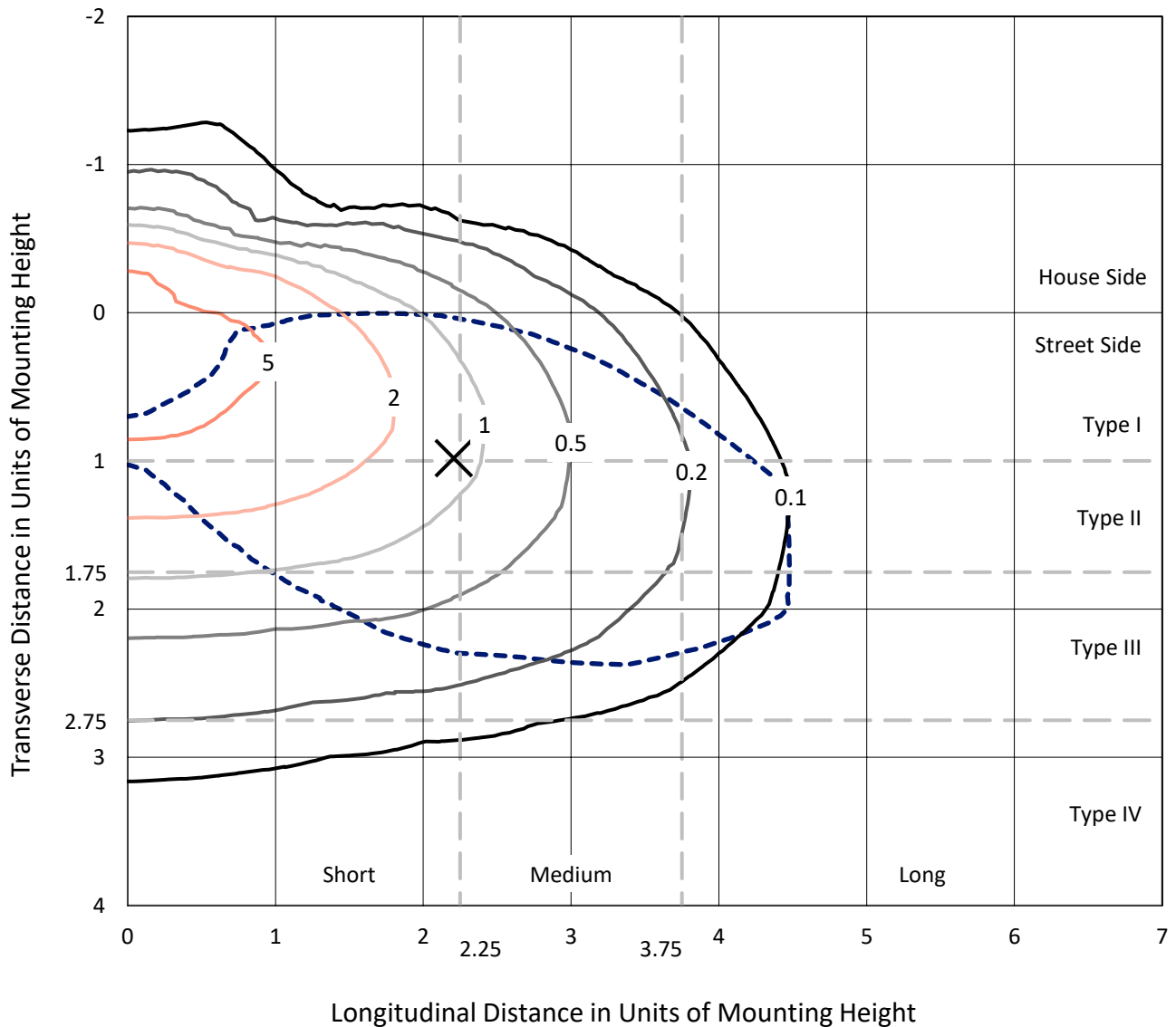
Input Watts (W): 227.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P591049
 CATALOG NUMBER: CTN-CA6-230-740-U-T3-HSS-HM-EX120

Iso-Footcandle Lines of Horizontal Illumination

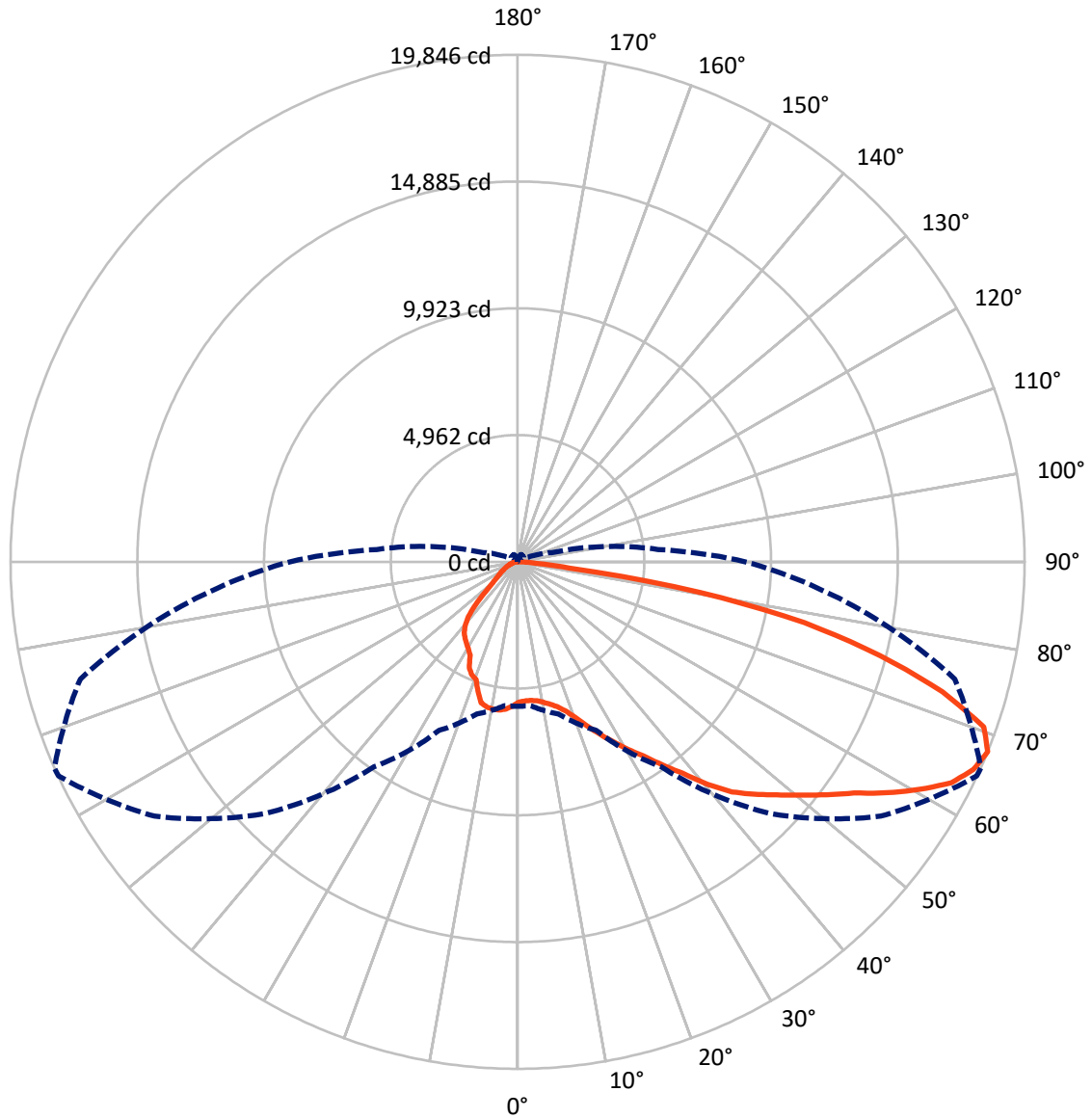
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 6.8 fc
 Type III - Short - N/A

REPORT NUMBER: P591049
CATALOG NUMBER: CTN-CA6-230-740-U-T3-HSS-HM-EX120

Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical



REPORT NUMBER: P591049
 CATALOG NUMBER: CTN-CA6-230-740-U-T3-HSS-HM-EX120

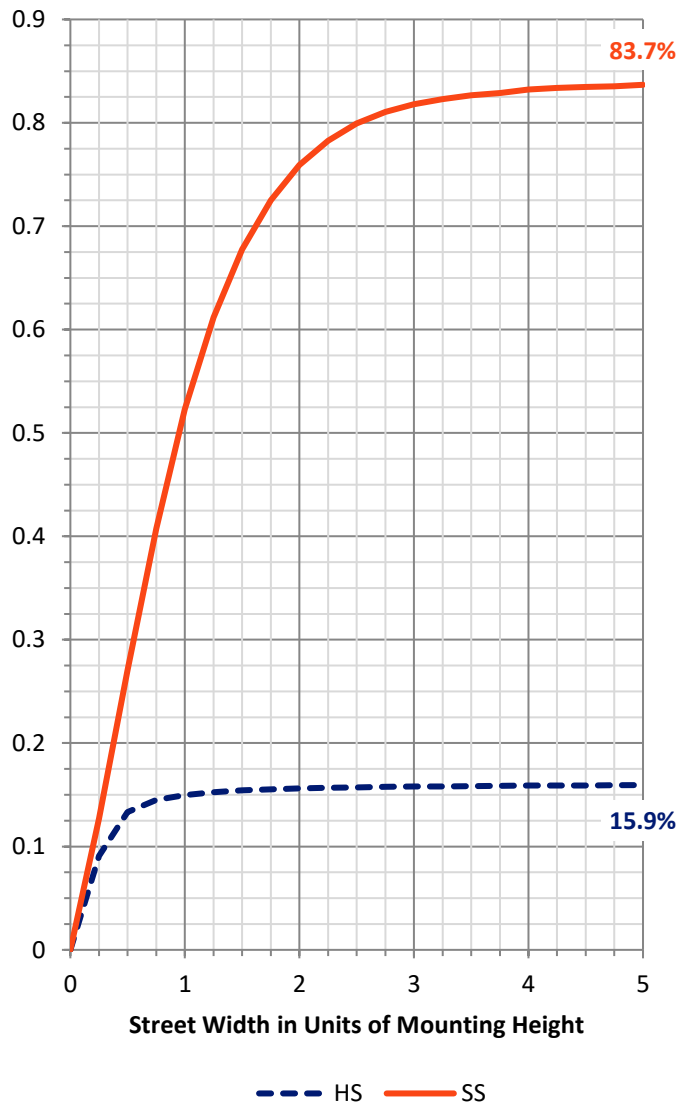
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5062.8	0.0	5062.8
	% Fixture	16.1	0.0	16.1
Street Side	Lumens	26301.2	0.0	26301.2
	% Fixture	83.9	0.0	83.9
Total	Lumens	31364.0	0.0	31364.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	544.2	1.7
10°-20°	1640.8	5.2
20°-30°	2667.2	8.5
30°-40°	3896.1	12.4
40°-50°	5189.2	16.5
50°-60°	6277.3	20.0
60°-70°	6720.5	21.4
70°-80°	3988.4	12.7
80°-90°	440.4	1.4
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°	31364.0	100.0
0°-180°	31364.0	100.0

Coefficient of Utilization



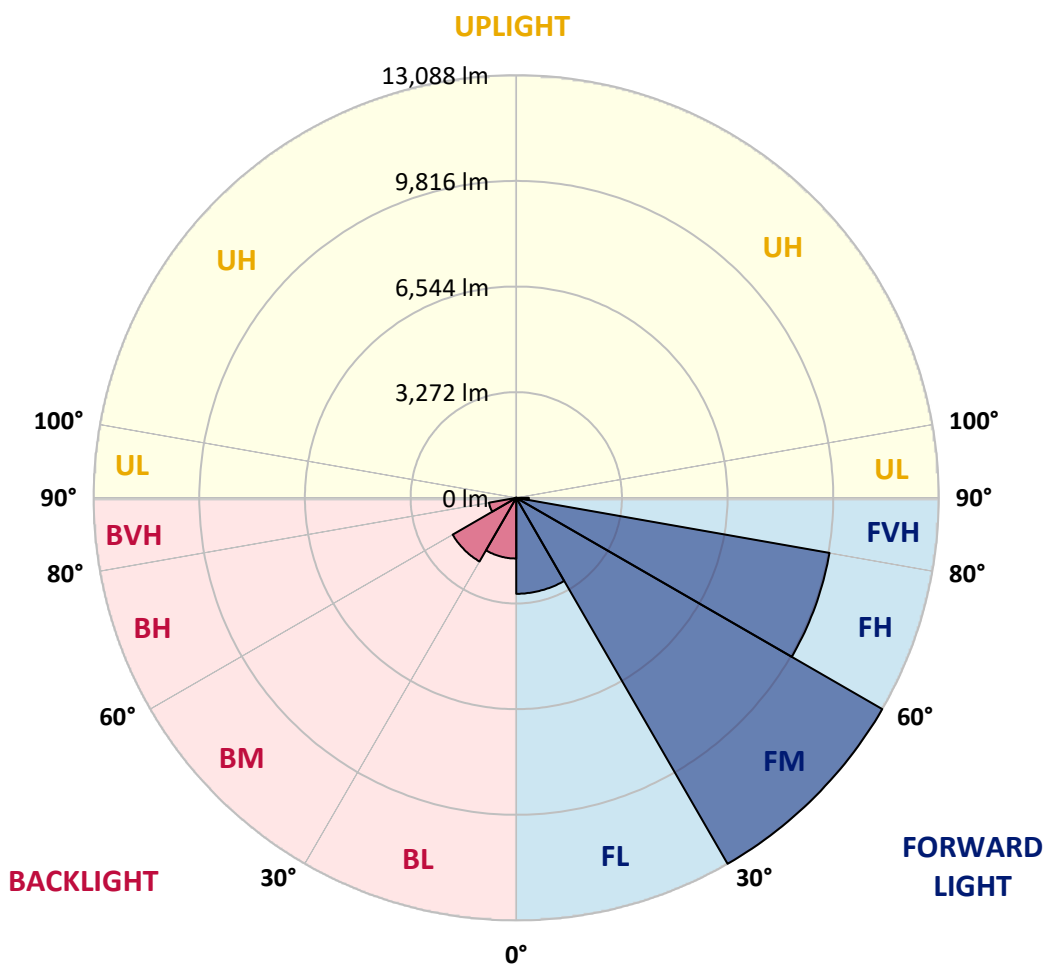
REPORT NUMBER: P591049
 CATALOG NUMBER: CTN-CA6-230-740-U-T3-HSS-HM-EX120

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2971.9	9.5			
FM (30°-60°)	13087.6	41.7			
FH (60°-80°)	9851.3	31.4			G4/12000
FVH (80°-90°)	390.4	1.2			G3/500
BL (0°-30°)	1880.3	6.0	B3/2500		
BM (30°-60°)	2275.0	7.3	B2/2500		
BH (60°-80°)	857.6	2.7	B2/1000		G2/1000
BVH (80°-90°)	50.0	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type III Short





REPORT NUMBER: P591049

CATALOG NUMBER: CTN-CA6-230-740-U-T3-HSS-HM-EX120

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	5492.1	5492.1	5492.1	5492.1	5492.1	5492.1	5492.1	5492.1	5492.1	5492.1	5492.1
2.5°	5421.5	5390.8	5404.7	5440.7	5371.6	5415.5	5384.4	5438.7	5453.6	5459.5	5481.2
5°	5527.6	5487.1	5488.1	5510.9	5432.3	5451.6	5398.7	5436.8	5448.6	5464.4	5517.3
7.5°	5713.8	5668.9	5664.9	5670.9	5573.1	5551.4	5476.8	5484.7	5493.6	5502.9	5571.6
10°	5969.7	5923.7	5915.8	5900.5	5771.6	5714.8	5604.2	5586.9	5595.3	5580.0	5661.5
12.5°	6276.9	6221.6	6192.4	6148.5	5999.3	5910.4	5764.2	5716.8	5724.2	5692.1	5748.9
15°	6599.9	6541.1	6525.3	6457.6	6273.9	6152.4	5963.3	5891.1	5893.1	5856.1	5853.6
17.5°	6944.6	6892.3	6879.4	6836.5	6633.0	6488.3	6254.7	6156.9	6149.5	6112.9	6004.3
20°	7335.8	7302.7	7295.8	7271.1	7086.9	6917.5	6651.7	6520.4	6513.0	6455.2	6223.0
22.5°	7816.8	7777.8	7757.1	7735.8	7598.0	7421.7	7136.3	6951.0	6980.2	6882.9	6507.0
25°	8295.4	8264.3	8246.5	8232.7	8119.1	7952.2	7663.2	7445.9	7475.1	7370.9	6852.3
27.5°	8770.5	8701.9	8730.5	8763.1	8649.5	8516.7	8202.6	7966.0	7974.9	7862.3	7265.7
30°	9212.1	9176.0	9225.4	9256.0	9173.1	9069.3	8739.4	8510.8	8524.1	8390.2	7739.8
32.5°	9604.2	9552.4	9662.5	9722.3	9672.9	9587.4	9268.9	9052.1	9056.0	8975.0	8305.8
35°	9892.2	9895.6	10047.7	10208.3	10207.8	10087.3	9816.6	9715.9	9761.8	9725.7	9000.2
37.5°	10185.5	10159.4	10335.2	10573.7	10651.8	10544.6	10384.1	10443.9	10505.6	10616.2	9656.1
40°	10324.3	10325.3	10538.2	10813.8	10994.0	10973.8	10917.5	11317.1	11445.0	11478.1	9393.3
42.5°	10156.9	10168.8	10548.6	11036.0	11316.1	11423.2	11546.7	12227.3	12313.7	12126.5	9703.0
45°	9937.6	9953.9	10399.9	11112.6	11601.5	11903.3	12243.6	12907.4	12974.6	12725.6	10153.4
47.5°	9731.7	9761.8	10226.0	11066.6	11827.7	12444.1	12866.9	13548.0	13630.0	13301.5	10573.3
50°	9461.0	9528.2	10001.8	10944.7	11998.1	12914.8	13442.8	14318.9	14350.5	13863.6	10951.6
52.5°	9199.2	9219.0	9748.0	10788.6	12126.5	13341.5	14129.8	15111.1	15147.7	14479.0	11300.8
55°	8840.7	8870.3	9461.5	10593.0	12205.6	13699.1	14825.2	15936.9	15969.5	15218.3	11676.1
57.5°	8446.1	8467.8	9090.1	10292.7	12146.3	14016.7	15566.5	16977.1	17057.1	15978.9	12013.4
60°	7950.7	7979.3	8611.0	9876.4	11941.8	14387.1	16482.2	18088.8	18088.8	16677.3	12280.6
62.5°	7252.8	7292.8	7932.4	9276.8	11517.1	14601.4	17213.1	19056.8	19050.4	17227.5	12371.0
65°	6441.8	6448.3	7028.1	8433.2	10811.8	14487.3	17491.7	19622.3	19608.0	17625.5	12246.6
67.5°	5655.1	5648.2	6162.8	7279.5	9794.9	13925.8	17358.8	19828.8	19846.1	17721.4	11782.8
70°	4538.9	4530.0	5003.1	5915.8	8256.9	12716.2	16603.7	19304.8	19357.1	17174.1	11012.8
72.5°	3247.8	3234.5	3461.2	4064.7	6063.5	10460.6	14721.0	17290.7	17386.5	15421.3	9606.7
75°	1902.0	1916.3	2152.9	2500.1	3601.0	6881.4	11939.9	14520.9	14657.7	13118.8	7556.1
77.5°	1057.9	1055.0	1228.8	1490.1	1771.1	3446.4	8335.4	11435.6	11482.0	10279.9	5081.2
80°	510.7	508.2	555.1	700.3	1010.0	1548.4	4093.9	7105.1	7245.9	6247.7	2484.3
82.5°	367.5	369.4	395.6	384.2	376.8	683.1	1366.1	2237.8	2043.2	1577.0	768.0
85°	276.1	276.1	299.8	276.6	270.2	347.7	664.3	799.6	767.5	701.8	456.4
87.5°	129.9	123.5	131.4	124.5	115.6	154.1	291.4	337.8	312.6	272.6	199.5
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: P591049

CATALOG NUMBER: CTN-CA6-230-740-U-T3-HSS-HM-EX120

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5492.1	5492.1	5492.1	5492.1	5492.1	5492.1	5492.1	5492.1	5492.1	5492.1	5492.1
2.5°	5518.3	5529.1	5585.9	5660.0	5666.9	5730.6	5750.4	5829.4	5826.4	5804.7	5827.4
5°	5555.3	5588.4	5685.7	5789.9	5816.6	5896.6	5913.9	5991.4	5996.3	5969.7	5991.9
7.5°	5614.6	5663.0	5754.8	5858.1	5869.9	5941.0	5938.1	6011.7	5998.8	5975.6	6005.2
10°	5687.2	5724.7	5786.0	5854.1	5848.7	5905.5	5887.7	5940.5	5913.9	5895.1	5929.2
12.5°	5760.3	5761.7	5766.7	5809.7	5776.1	5788.9	5753.8	5792.9	5751.9	5720.3	5741.0
15°	5833.4	5791.9	5722.2	5695.6	5602.2	5554.3	5503.9	5550.9	5455.0	5404.7	5417.5
17.5°	5936.6	5836.8	5602.7	5263.9	4976.5	4817.9	4698.9	4607.0	4609.0	4654.4	4681.6
20°	6019.1	5639.8	5067.8	4858.4	4643.6	4353.7	3903.7	3780.3	3698.8	3697.3	3710.6
22.5°	5989.9	5431.3	5068.3	4740.9	4273.7	3694.3	3499.7	3386.6	3196.5	2790.0	2756.9
25°	6258.1	5616.1	5097.5	4497.9	3684.4	3390.6	3123.4	2903.6	2423.5	2348.0	2345.0
27.5°	6579.6	5865.5	5137.0	3973.4	3448.9	3052.3	2712.5	2181.5	1951.4	1918.8	1907.4
30°	6951.5	6159.3	4896.0	3805.4	3198.0	2658.6	2208.2	1675.3	1488.1	1476.7	1479.7
32.5°	7417.8	6494.7	4644.6	3667.2	2894.2	2202.8	1505.9	1277.7	1170.5	1053.5	1091.0
35°	7914.6	6301.6	4794.7	3496.3	2513.9	1656.5	1143.9	1014.9	928.0	776.4	714.7
37.5°	7719.0	6434.4	4969.1	3308.6	2038.8	1123.1	885.1	773.4	691.9	565.5	563.0
40°	7960.1	6814.7	5093.5	3006.3	1474.3	796.6	645.0	598.6	561.1	490.9	481.1
42.5°	8385.8	7146.6	5178.0	2618.6	881.1	592.7	550.7	557.6	525.0	471.2	464.8
45°	8805.1	7437.0	5098.5	2027.4	626.7	534.4	536.9	533.9	494.4	474.6	467.7
47.5°	9186.9	7682.5	4874.7	1337.5	543.8	521.1	526.5	513.2	468.7	457.3	456.4
50°	9514.8	7941.8	3859.8	1024.8	523.0	503.3	515.1	493.4	416.8	404.5	391.7
52.5°	9716.8	7510.6	3429.1	787.3	501.3	475.6	479.1	496.9	392.6	312.6	292.9
55°	9686.2	6765.8	3188.1	655.4	466.7	437.1	444.0	472.7	355.1	244.5	221.3
57.5°	9831.9	6704.6	2938.2	557.6	402.5	396.1	382.3	430.7	323.0	162.0	153.6
60°	9808.2	6697.2	2622.1	438.6	355.6	332.9	315.6	350.7	231.6	60.3	54.8
62.5°	9769.7	6507.0	2263.0	393.1	327.5	318.6	303.7	343.3	197.1	42.0	31.1
65°	9576.6	6198.4	1856.0	344.2	305.7	287.4	286.5	325.0	162.5	23.2	10.4
67.5°	8917.2	5526.2	1380.9	317.1	292.9	283.5	300.8	313.1	156.1	23.7	9.4
70°	8097.4	4639.6	891.0	286.0	274.6	279.5	293.9	316.6	151.6	21.7	8.4
72.5°	6770.8	3589.1	540.3	255.3	248.4	263.2	289.9	316.6	140.3	18.3	6.9
75°	5150.8	2393.9	402.0	225.7	217.8	236.6	264.2	304.2	137.8	15.8	4.4
77.5°	3198.0	1130.5	317.1	189.7	181.3	200.5	221.8	250.9	139.8	15.3	2.5
80°	1293.5	472.2	248.9	152.6	142.2	152.6	179.8	213.9	111.1	21.7	0.0
82.5°	544.3	332.4	203.5	121.5	113.6	100.3	122.5	158.5	87.4	17.3	0.0
85°	360.0	230.6	145.7	82.5	72.6	48.9	59.8	71.6	49.9	0.0	0.0
87.5°	163.0	102.2	63.7	28.2	23.7	13.3	7.9	6.9	0.0	0.0	0.0
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)