

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: P591404

Luminaire Tested: **CTN-CA10-310-740-U-T4-SSS-HM-EX120**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591404
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2201-495-11)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/19/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA10-310-740-U-T4-SSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE, 120D FIELD INSTALLED SHIELD ON STREET SIDE
Light Source: (10) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 26293 lumens
Efficiency: N/A
Efficacy: 84.2 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type III - Short
BUG Rating: B4 - U0 - G4

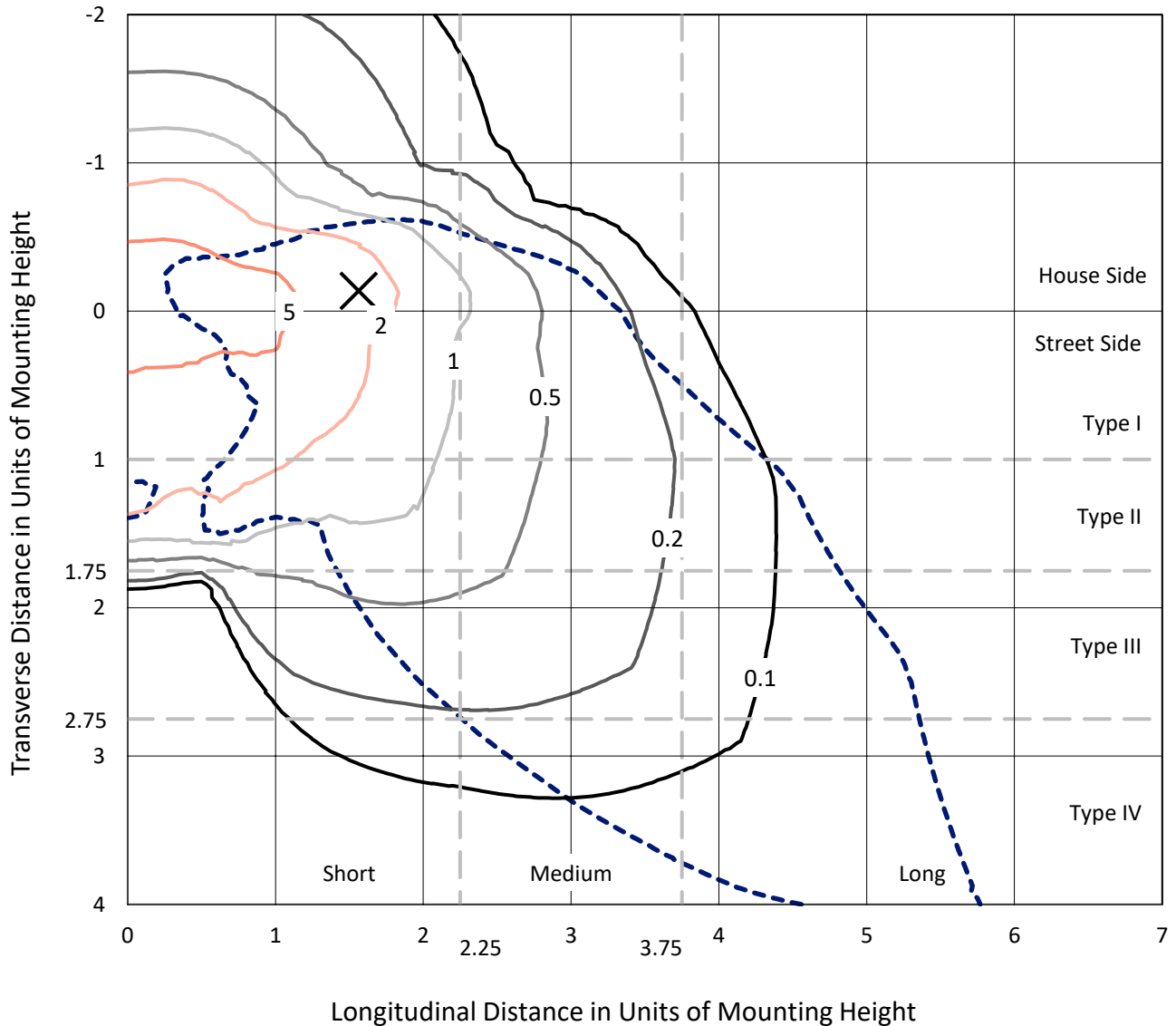
Input Watts (W): 312.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

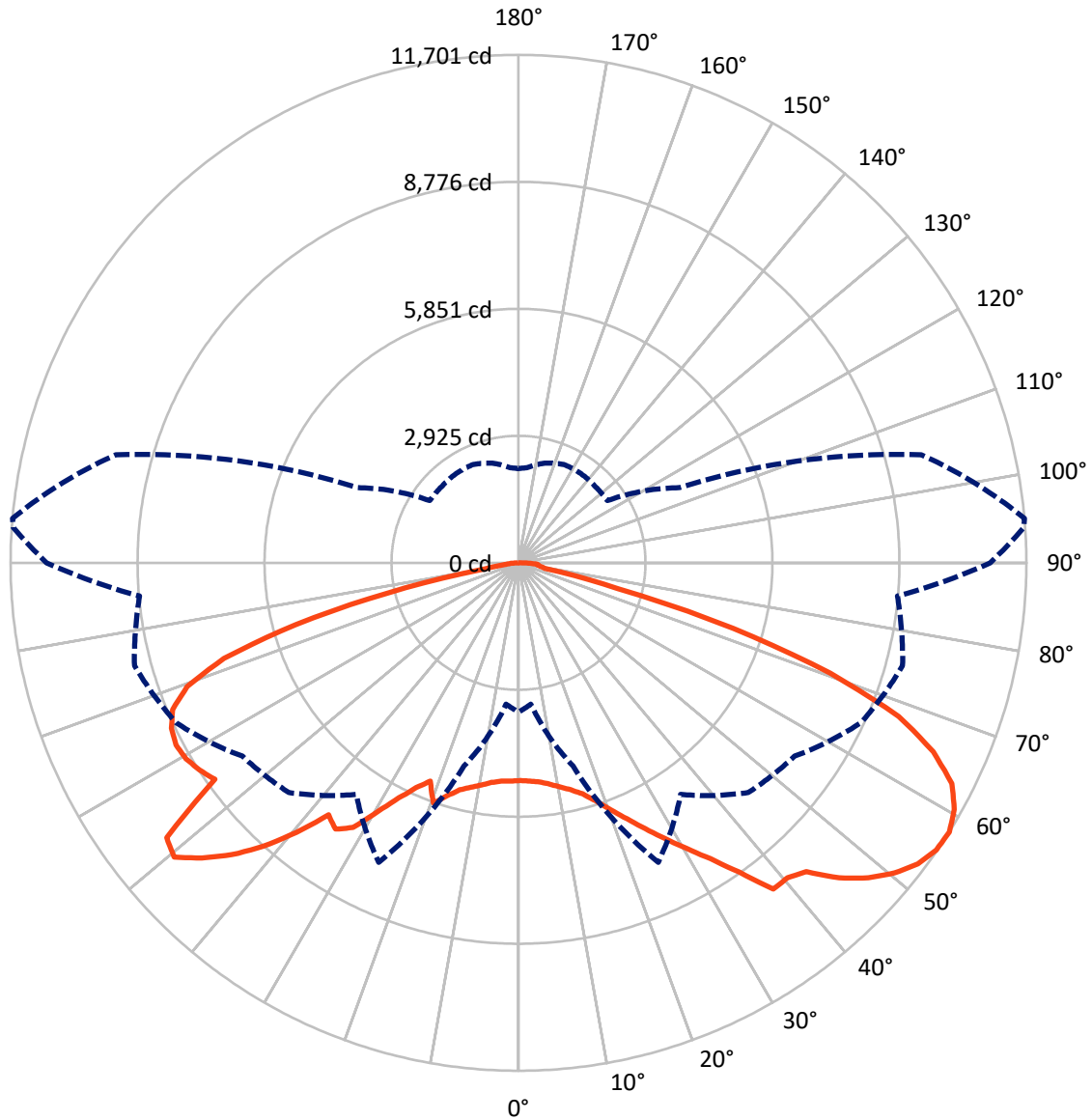
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.5 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 95-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical



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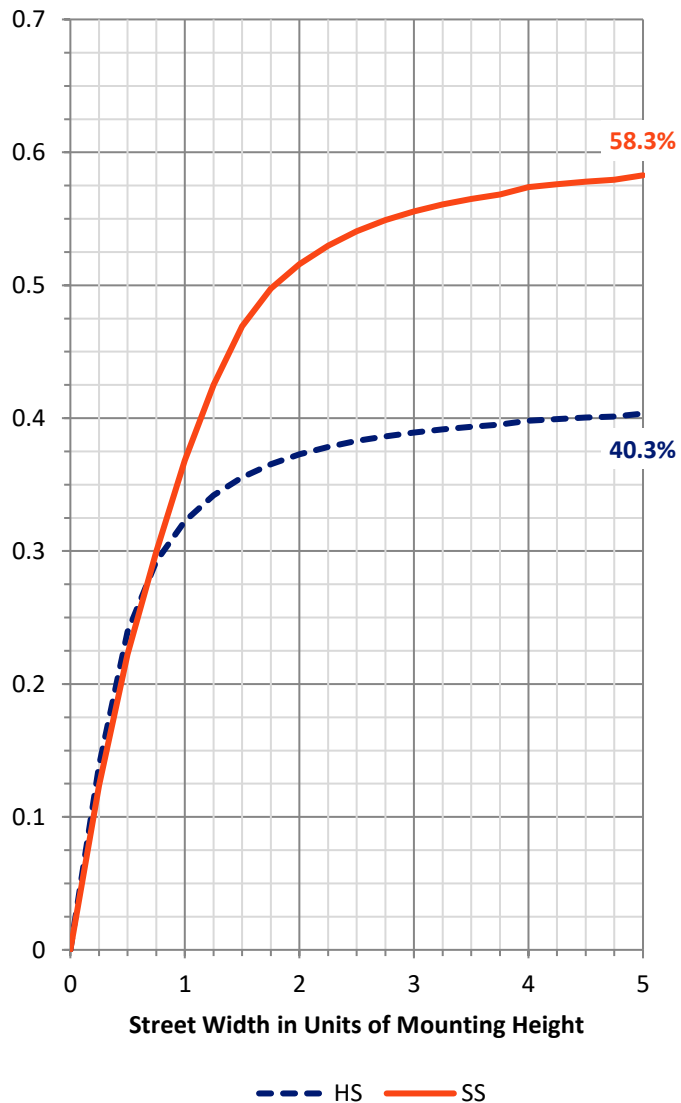
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10829.3	0.0	10829.3
	% Fixture	41.2	0.0	41.2
Street Side	Lumens	15463.7	0.0	15463.7
	% Fixture	58.8	0.0	58.8
Total	Lumens	26293.0	0.0	26293.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	489.9	1.9
10°-20°	1498.0	5.7
20°-30°	2367.2	9.0
30°-40°	3271.0	12.4
40°-50°	4410.4	16.8
50°-60°	5195.4	19.8
60°-70°	4641.4	17.7
70°-80°	3465.6	13.2
80°-90°	953.9	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°	26293.0	100.0
0°-180°	26293.0	100.0

Coefficient of Utilization

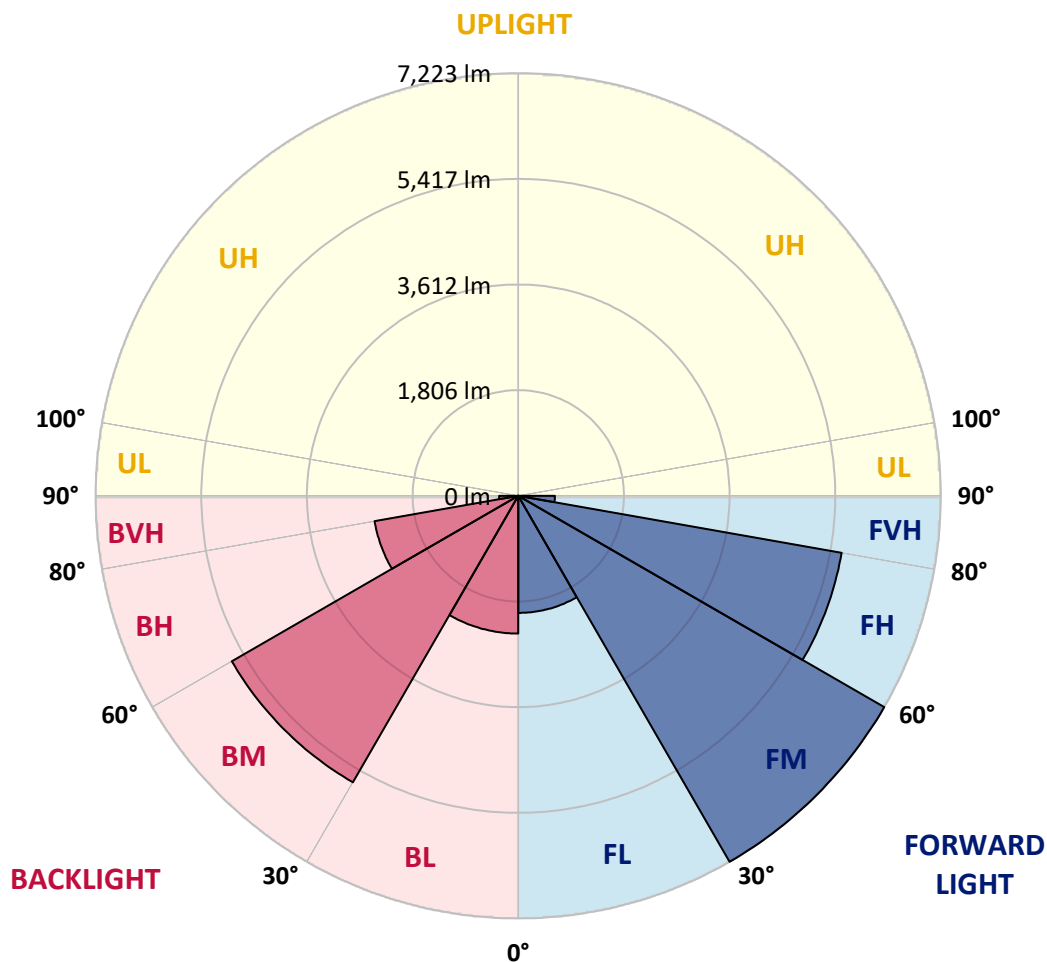


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2001.3	7.6			
FM (30°-60°)	7223.2	27.5			
FH (60°-80°)	5612.7	21.3			G3/7500
FVH (80°-90°)	626.6	2.4			G4/750
BL (0°-30°)	2353.9	9.0	B3/2500		
BM (30°-60°)	5653.7	21.5	B4/8500		
BH (60°-80°)	2494.3	9.5	B3/2500		G3/2500
BVH (80°-90°)	327.4	1.2			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4
 Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	5016.5	5016.5	5016.5	5016.5	5016.5	5016.5	5016.5	5016.5	5016.5	5016.5	5016.5
2.5°	4950.6	4919.2	4920.7	4964.1	4899.7	4946.1	4940.1	5012.0	5001.5	5030.0	5039.0
5°	4910.2	4883.2	4884.7	4940.1	4896.7	4938.6	4910.2	4976.1	5000.0	5043.5	5052.4
7.5°	4920.7	4896.7	4905.7	4958.1	4904.2	4946.1	4949.1	5010.5	5022.5	5097.4	5109.3
10°	4947.6	4922.2	4928.2	4970.1	4935.6	5010.5	5001.5	5082.4	5085.4	5190.2	5205.2
12.5°	4911.7	4893.7	4893.7	4946.1	4964.1	5039.0	5061.4	5145.3	5163.3	5284.5	5304.0
15°	4847.3	4817.3	4860.8	4938.6	4974.6	5088.4	5130.3	5256.1	5277.1	5402.8	5444.8
17.5°	4736.5	4720.0	4880.2	4904.2	4767.9	4854.8	5033.0	5384.9	5456.8	5605.0	5682.9
20°	4405.5	4219.9	3791.6	3869.4	4288.7	4601.7	4657.1	4826.3	5134.8	5873.1	5994.3
22.5°	3239.0	3399.2	3965.3	4011.7	3998.2	4257.3	4839.8	5003.0	5149.8	5420.8	6226.5
25°	3354.3	3345.3	3622.4	4210.9	4189.9	4239.3	4483.4	5277.1	5423.8	5693.4	6531.9
27.5°	3457.6	3465.1	3444.2	3998.2	4390.6	4441.5	4516.3	5058.4	5768.2	6076.7	6865.9
30°	3662.8	3631.3	3574.4	3572.9	4565.8	4640.6	4767.9	4949.1	6085.7	6575.4	7283.7
32.5°	4008.7	3972.8	3897.9	3779.6	3945.8	4847.3	5022.5	5253.1	5615.5	7187.8	7773.3
35°	4264.8	4239.3	4188.4	4106.0	3972.8	4950.6	5271.1	5576.6	6055.7	7442.4	8415.7
37.5°	4580.7	4544.8	4486.4	4384.6	4284.2	4243.8	5510.7	5943.4	6669.7	7270.2	8555.0
40°	4938.6	4917.7	4811.3	4679.6	4568.8	4456.5	5675.4	6422.6	7458.9	8042.9	8427.7
42.5°	5208.2	5191.7	5128.8	5022.5	4914.7	4842.8	5030.0	7011.1	8318.4	8790.1	9073.1
45°	5443.3	5425.3	5425.3	5396.9	5366.9	5372.9	5453.8	7433.4	9134.5	9428.0	9684.1
47.5°	5624.5	5593.0	5467.2	5492.7	5536.1	5666.4	5912.0	6463.1	9791.9	9970.1	10197.7
50°	6066.2	6018.3	5611.0	5705.3	5846.1	6055.7	6371.7	7065.0	9143.5	10432.8	10611.0
52.5°	6473.5	6251.9	4634.6	6018.3	6177.0	6487.0	6861.4	7716.4	8415.7	10283.1	10927.0
55°	5775.7	5549.6	4658.6	6593.3	6566.4	6957.2	7322.6	8251.0	8811.1	8589.4	10847.6
57.5°	3438.2	3267.5	4847.3	7614.6	6509.5	7482.8	7764.3	8707.7	9158.5	8761.7	10868.6
60°	1780.5	1871.8	1800.0	4505.9	5605.0	7713.4	8221.1	9148.0	9393.6	8890.4	10882.1
62.5°	239.6	172.2	71.9	3295.9	3983.3	6427.1	8794.6	9567.3	9565.8	8933.9	10787.7
65°	15.0	16.5	32.9	3279.4	4393.6	7625.1	9744.0	9905.7	9651.1	8857.5	10473.3
67.5°	6.0	7.5	29.9	3257.0	4741.0	8015.9	10861.1	10013.5	9660.1	8652.3	9782.9
70°	6.0	7.5	29.9	3033.9	4977.6	8084.8	11049.8	9973.1	9549.3	8147.7	8499.6
72.5°	7.5	9.0	27.0	2635.5	4833.8	7897.6	10741.3	9890.7	9152.5	7132.4	6599.3
75°	7.5	9.0	27.0	2129.4	4276.8	7488.8	10497.2	9201.9	8023.4	5329.5	4279.7
77.5°	6.0	7.5	27.0	1662.2	3565.5	6636.8	9522.4	8000.9	6344.8	3101.2	1690.6
80°	6.0	7.5	27.0	1157.5	2716.4	5440.3	7756.9	6230.9	3568.5	886.5	476.2
82.5°	6.0	7.5	25.5	721.8	1921.2	4001.2	5301.0	2872.1	765.2	345.9	371.4
85°	6.0	6.0	19.5	353.4	1227.9	2658.0	2641.5	480.7	304.0	224.6	281.5
87.5°	3.0	4.5	10.5	161.7	685.8	1401.6	1052.7	184.2	130.3	91.3	157.2
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):

	94°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5016.5	5016.5	5016.5	5016.5	5016.5	5016.5	5016.5	5016.5	5016.5	5016.5	5016.5
2.5°	5042.0	5034.5	5055.4	5109.3	5106.3	5146.8	5115.3	5176.7	5187.2	5173.7	5194.7
5°	5068.9	5071.9	5128.8	5185.7	5164.8	5230.6	5244.1	5335.5	5338.5	5326.5	5353.4
7.5°	5136.3	5146.8	5203.7	5271.1	5301.0	5356.4	5348.9	5467.2	5456.8	5450.8	5482.2
10°	5230.6	5250.1	5311.5	5417.8	5404.3	5489.7	5450.8	5530.1	5527.1	5515.2	5549.6
12.5°	5345.9	5365.4	5443.3	5545.1	5546.6	5552.6	5521.1	5561.6	5548.1	5519.6	5546.6
15°	5501.7	5524.1	5630.5	5705.3	5640.9	5624.5	5564.6	5542.1	5491.2	5416.3	5438.8
17.5°	5747.3	5765.2	5885.0	5927.0	5816.1	5750.3	5579.5	5452.3	5308.5	5203.7	5223.2
20°	6057.2	6073.7	6171.0	6160.6	6012.3	5850.6	5585.5	5369.9	5101.9	4896.7	4890.7
22.5°	6398.7	6409.1	6502.0	6409.1	6145.6	5910.5	5573.6	5242.6	4791.9	4526.8	4498.4
25°	6774.5	6783.5	6782.0	6575.4	6222.0	5876.0	5462.7	5030.0	4452.0	4168.9	4139.0
27.5°	7195.3	7196.8	7032.1	6704.1	6189.0	5748.8	5248.6	4648.1	4140.5	3894.9	3872.4
30°	7643.1	7640.1	7261.2	6716.1	6061.7	5507.7	4917.7	4287.2	3860.5	3641.8	3610.4
32.5°	8153.7	8128.2	7464.9	6674.2	5829.6	5161.8	4490.9	3984.7	3640.3	3390.3	3343.8
35°	8808.1	8745.2	7638.6	6528.9	5485.2	4694.5	4095.6	3721.2	3427.7	3173.1	3126.7
37.5°	9618.2	9537.3	7911.1	6323.8	5088.4	4308.2	3805.1	3543.0	3275.0	2984.4	2924.5
40°	9384.6	9540.3	8236.0	6102.2	4705.0	3999.7	3634.3	3457.6	3182.1	2860.2	2803.3
42.5°	9745.5	9726.0	8680.8	5840.1	4336.7	3758.6	3565.5	3432.2	3132.7	2806.2	2740.4
45°	10359.4	10355.0	9160.0	5585.5	3977.3	3565.5	3513.0	3363.3	3062.3	2738.9	2667.0
47.5°	10858.1	10843.1	9618.2	5305.5	3644.8	3414.2	3406.7	3224.0	2936.5	2635.5	2569.6
50°	11205.5	11228.0	9872.8	5036.0	3330.4	3258.5	3230.0	3027.9	2759.8	2511.2	2460.3
52.5°	11479.6	11521.5	9983.6	5010.5	3054.8	3057.8	3008.4	2824.2	2614.6	2413.9	2360.0
55°	11614.3	11678.7	9869.8	4845.8	2785.3	2803.3	2755.3	2638.5	2514.2	2330.1	2291.1
57.5°	11669.7	11701.2	9606.2	4098.6	2496.3	2493.3	2508.3	2496.3	2379.5	2198.3	2169.8
60°	11575.4	11533.5	9032.7	3114.7	2202.8	2216.2	2312.1	2300.1	2196.8	2059.0	2020.1
62.5°	11284.9	11202.5	7983.0	2303.1	1967.7	2077.0	2178.8	2144.4	2018.6	1892.8	1862.8
65°	10730.8	10498.7	6361.2	1798.5	1855.4	2005.1	2099.4	2048.5	1904.8	1756.5	1738.6
67.5°	9736.5	9446.0	4174.9	1612.8	1807.4	1943.7	2042.5	1957.2	1817.9	1657.7	1632.2
70°	7945.5	7626.6	1976.7	1503.5	1699.6	1834.4	1906.3	1819.4	1677.2	1516.9	1499.0
72.5°	5540.6	5178.2	1064.7	1385.2	1575.3	1692.1	1740.1	1633.7	1509.4	1439.1	1434.6
75°	2761.3	2360.0	965.9	1263.9	1415.1	1516.9	1597.8	1524.4	1415.1	1286.3	1253.4
77.5°	735.3	631.9	909.0	1129.1	1287.8	1403.1	1449.5	1373.2	1247.4	1138.1	1118.6
80°	510.6	521.1	849.1	935.9	1123.1	1226.4	1269.8	1172.5	1109.6	1001.8	971.9
82.5°	432.8	455.2	685.8	705.3	892.5	1003.3	1079.7	1063.2	973.4	886.5	874.5
85°	405.8	431.3	438.8	488.2	639.4	769.7	901.5	909.0	849.1	738.2	702.3
87.5°	233.6	230.6	211.1	248.6	350.4	426.8	516.6	492.7	401.3	347.4	339.9
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)