

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: P591368

Luminaire Tested: **CTN-CA8-330-730-U-T4-SSS-HM-EX120**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591368
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-CA8-330-730-U-T4-SSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE, 120D FIELD INSTALLED SHIELD ON STREET SIDE
Light Source: (8) 3000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 26082 lumens
Efficiency: N/A
Efficacy: 78.7 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type III - Short
BUG Rating: B4 - U0 - G4

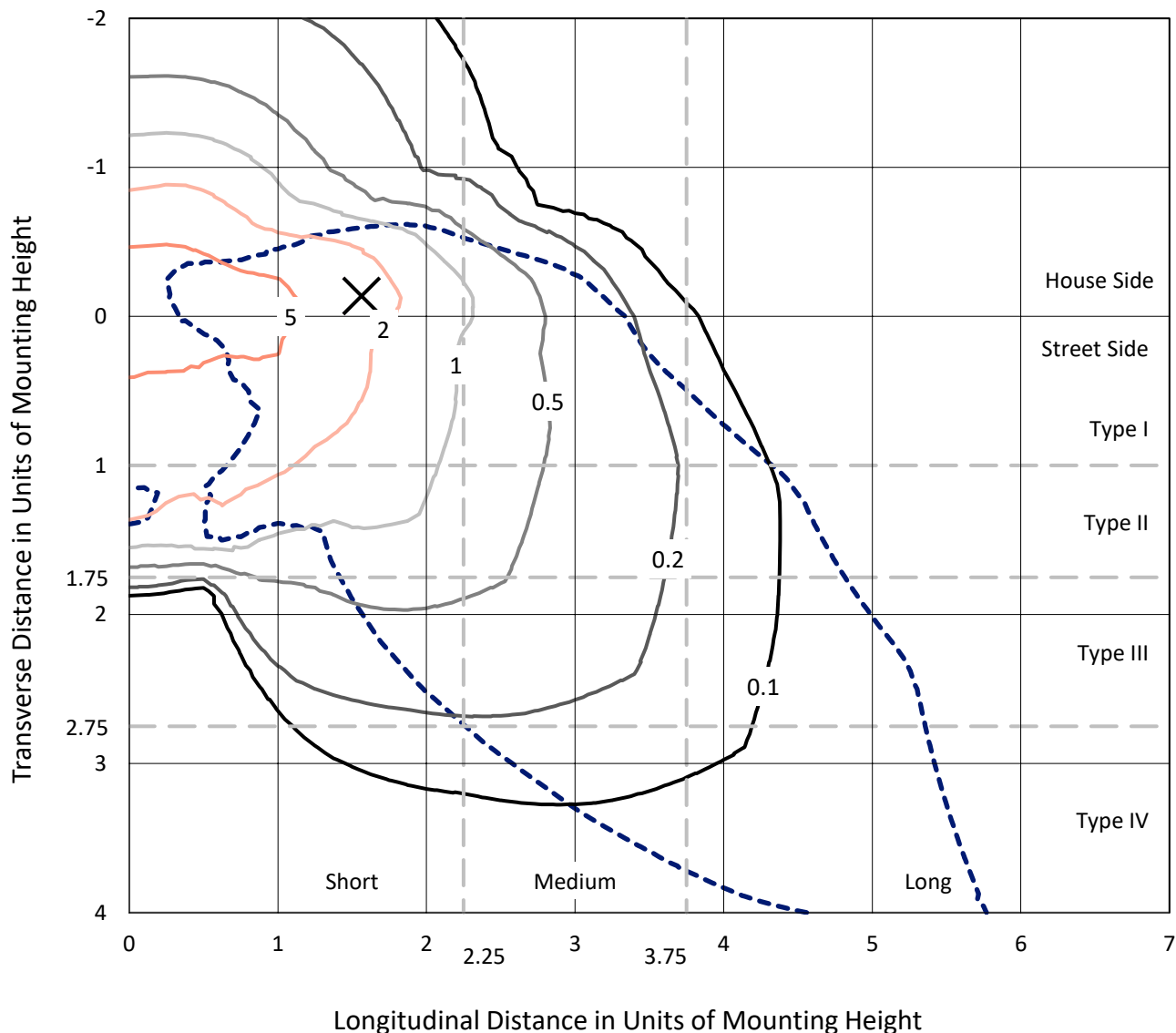
Input Watts (W): 331.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P591368
 CATALOG NUMBER: CTN-CA8-330-730-U-T4-SSS-HM-EX120

Iso-Footcandle Lines of Horizontal Illumination

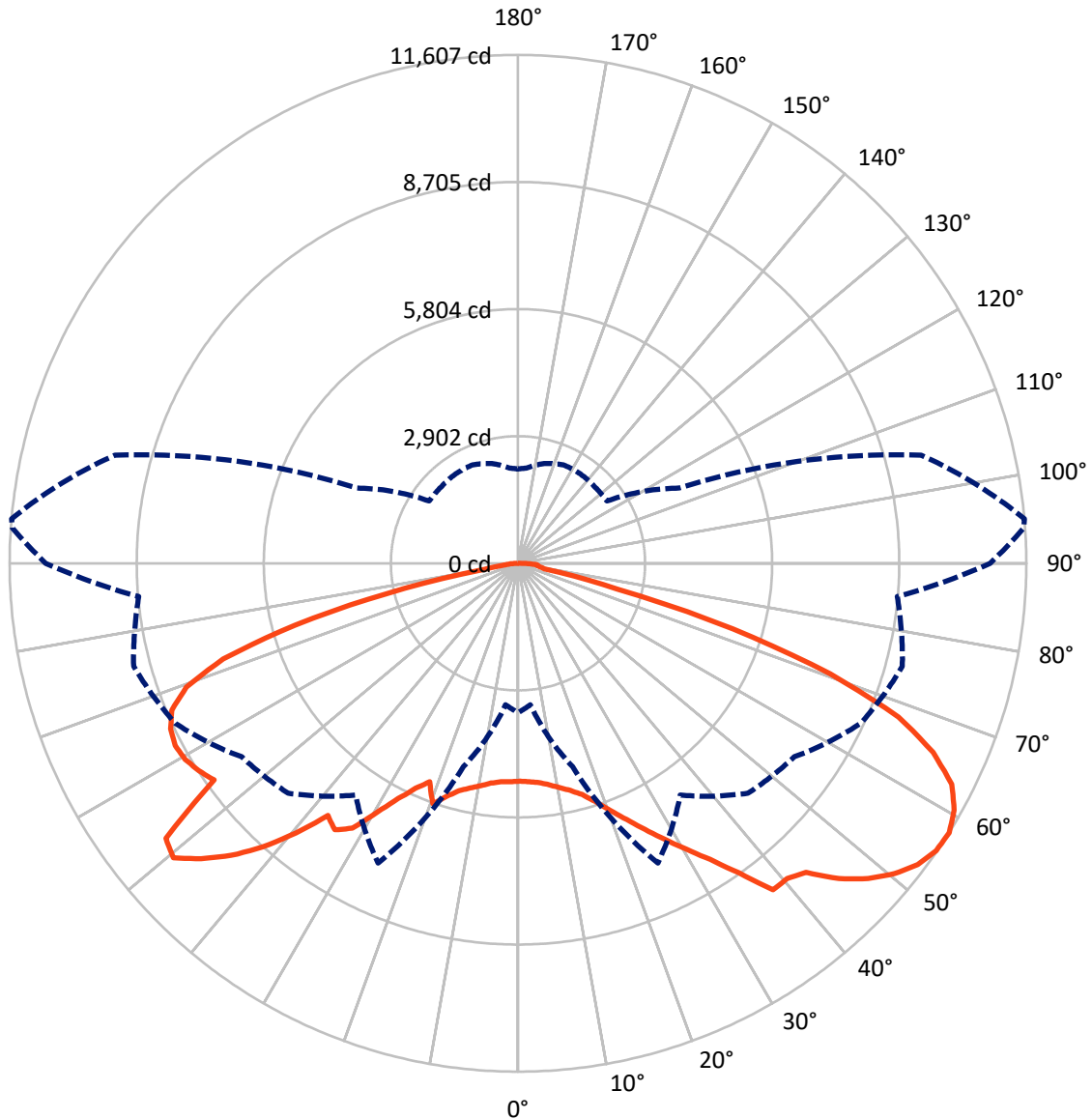
× Max cd
 - - - 1/2 Max cd



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

REPORT NUMBER: P591368
CATALOG NUMBER: CTN-CA8-330-730-U-T4-SSS-HM-EX120

Luminous Intensity Polar Plot



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

REPORT NUMBER: P591368
 CATALOG NUMBER: CTN-CA8-330-730-U-T4-SSS-HM-EX120

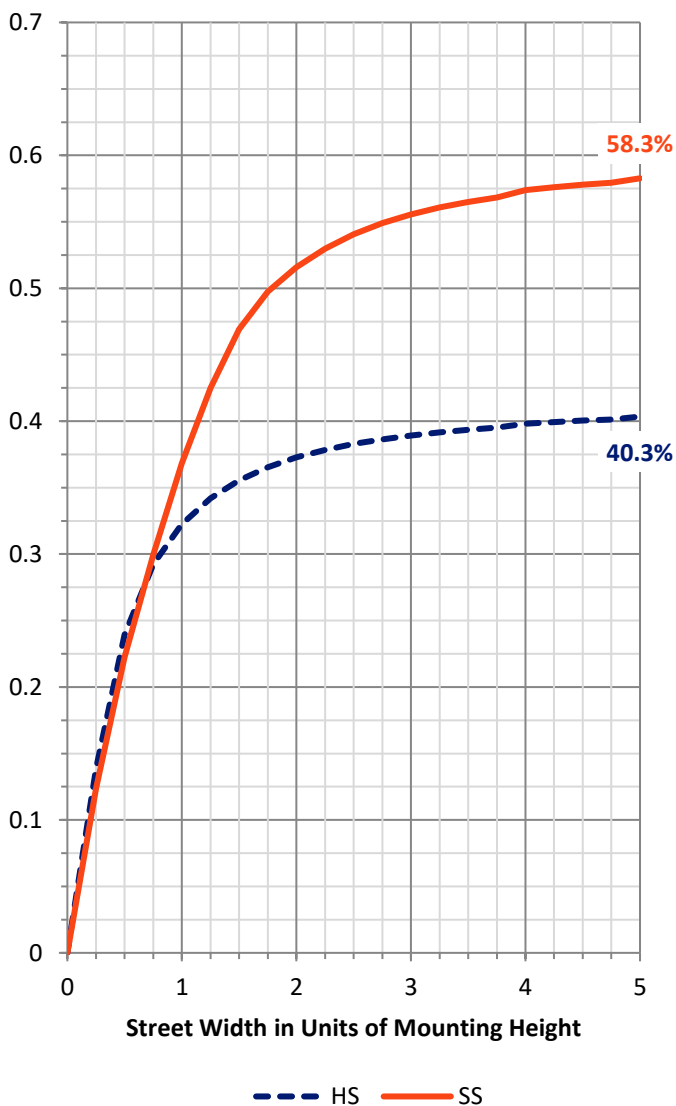
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10742.4	0.0	10742.4
	% Fixture	41.2	0.0	41.2
Street Side	Lumens	15339.6	0.0	15339.6
	% Fixture	58.8	0.0	58.8
Total	Lumens	26082.0	0.0	26082.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	485.9	1.9
10°-20°	1486.0	5.7
20°-30°	2348.2	9.0
30°-40°	3244.8	12.4
40°-50°	4375.1	16.8
50°-60°	5153.7	19.8
60°-70°	4604.2	17.7
70°-80°	3437.8	13.2
80°-90°	946.3	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°	26082.0	100.0
0°-180°	26082.0	100.0

Coefficient of Utilization

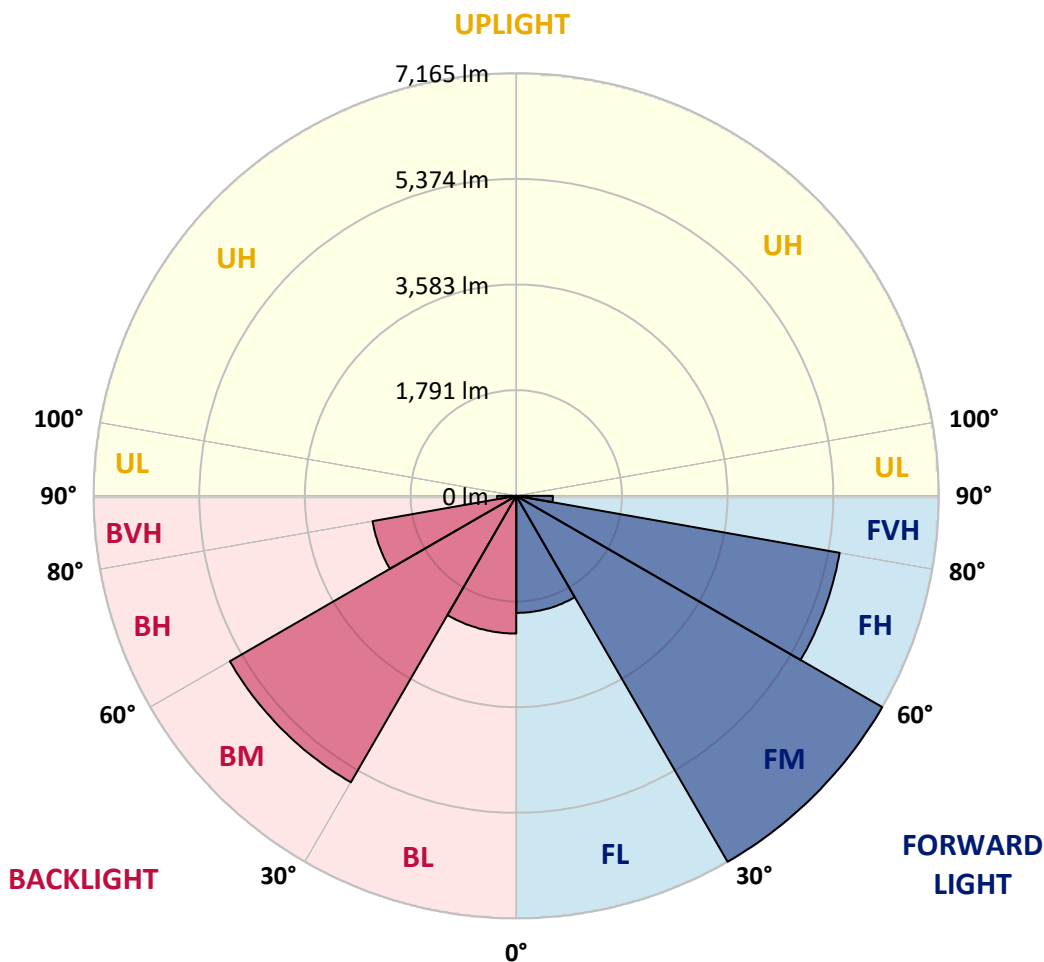


REPORT NUMBER: P591368
 CATALOG NUMBER: CTN-CA8-330-730-U-T4-SSS-HM-EX120

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1985.2	7.6			
FM (30°-60°)	7165.2	27.5			
FH (60°-80°)	5567.7	21.3			G3/7500
FVH (80°-90°)	621.6	2.4			G4/750
BL (0°-30°)	2335.0	9.0	B3/2500		
BM (30°-60°)	5608.4	21.5	B4/8500		
BH (60°-80°)	2474.3	9.5	B3/2500		G3/2500
BVH (80°-90°)	324.7	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





REPORT NUMBER: P591368

CATALOG NUMBER: CTN-CA8-330-730-U-T4-SSS-HM-EX120

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	4976.2	4976.2	4976.2	4976.2	4976.2	4976.2	4976.2	4976.2	4976.2	4976.2	4976.2
2.5°	4910.9	4879.7	4881.2	4924.3	4860.4	4906.4	4900.5	4971.8	4961.4	4989.6	4998.5
5°	4870.8	4844.0	4845.5	4900.5	4857.4	4899.0	4870.8	4936.1	4959.9	5003.0	5011.9
7.5°	4881.2	4857.4	4866.3	4918.3	4864.8	4906.4	4909.4	4970.3	4982.2	5056.5	5068.3
10°	4907.9	4882.7	4888.6	4930.2	4896.0	4970.3	4961.4	5041.6	5044.6	5148.6	5163.4
12.5°	4872.3	4854.4	4854.4	4906.4	4924.3	4998.5	5020.8	5104.0	5121.8	5242.1	5261.4
15°	4808.4	4778.7	4821.8	4899.0	4934.7	5047.5	5089.1	5213.9	5234.7	5359.5	5401.1
17.5°	4698.5	4682.1	4841.1	4864.8	4729.7	4815.8	4992.6	5341.7	5413.0	5560.0	5637.3
20°	4370.2	4186.0	3761.1	3838.4	4254.3	4564.8	4619.7	4787.6	5093.6	5825.9	5946.2
22.5°	3213.0	3372.0	3933.5	3979.5	3966.1	4223.1	4801.0	4962.9	5108.4	5377.3	6176.5
25°	3327.4	3318.5	3593.3	4177.1	4156.3	4205.3	4447.4	5234.7	5380.3	5647.7	6479.5
27.5°	3429.9	3437.3	3416.5	3966.1	4355.3	4405.8	4480.1	5017.8	5721.9	6027.9	6810.8
30°	3633.4	3602.2	3545.8	3544.3	4529.1	4603.4	4729.7	4909.4	6036.9	6522.6	7225.2
32.5°	3976.5	3940.9	3866.6	3749.3	3914.2	4808.4	4982.2	5210.9	5570.4	7130.1	7711.0
35°	4230.6	4205.3	4154.8	4073.1	3940.9	4910.9	5228.8	5531.8	6007.1	7382.7	8348.2
37.5°	4544.0	4508.3	4450.4	4349.4	4249.9	4209.8	5466.4	5895.7	6616.2	7211.8	8486.4
40°	4899.0	4878.2	4772.7	4642.0	4532.1	4420.7	5629.8	6371.1	7399.0	7978.3	8360.1
42.5°	5166.4	5150.0	5087.7	4982.2	4875.2	4803.9	4989.6	6954.9	8251.7	8719.6	9000.3
45°	5399.6	5381.8	5381.8	5353.5	5323.8	5329.8	5410.0	7373.8	9061.2	9352.4	9606.4
47.5°	5579.3	5548.1	5423.4	5448.6	5491.7	5620.9	5864.5	6411.2	9713.3	9890.1	10115.9
50°	6017.5	5970.0	5566.0	5659.5	5799.2	6007.1	6320.6	7008.3	9070.1	10349.1	10525.9
52.5°	6421.6	6201.7	4597.5	5970.0	6127.5	6435.0	6806.3	7654.5	8348.2	10200.6	10839.3
55°	5729.4	5505.1	4621.2	6540.4	6513.7	6901.4	7263.8	8184.8	8740.4	8520.5	10760.6
57.5°	3410.6	3241.2	4808.4	7553.5	6457.2	7422.8	7702.0	8637.9	9085.0	8691.3	10781.4
60°	1766.2	1856.8	1785.5	4469.7	5560.0	7651.5	8155.1	9074.6	9318.2	8819.1	10794.7
62.5°	237.7	170.8	71.3	3269.5	3951.3	6375.5	8724.0	9490.5	9489.0	8862.2	10701.2
65°	14.9	16.3	32.7	3253.1	4358.3	7563.9	9665.8	9826.2	9573.7	8786.4	10389.2
67.5°	5.9	7.4	29.7	3230.8	4702.9	7951.6	10773.9	9933.2	9582.6	8582.9	9704.4
70°	5.9	7.4	29.7	3009.5	4937.6	8019.9	10961.1	9893.1	9472.7	8082.3	8431.4
72.5°	7.4	8.9	26.7	2614.4	4795.0	7834.2	10655.1	9811.4	9079.0	7075.2	6546.4
75°	7.4	8.9	26.7	2112.3	4242.4	7428.7	10413.0	9128.1	7959.0	5286.7	4245.4
77.5°	5.9	7.4	26.7	1648.8	3536.8	6583.5	9446.0	7936.7	6293.8	3076.4	1677.1
80°	5.9	7.4	26.7	1148.2	2694.6	5396.6	7694.6	6180.9	3539.8	879.4	472.4
82.5°	5.9	7.4	25.3	716.0	1905.8	3969.1	5258.5	2849.1	759.1	343.1	368.4
85°	5.9	5.9	19.3	350.6	1218.1	2636.7	2620.3	476.8	301.5	222.8	279.3
87.5°	3.0	4.5	10.4	160.4	680.3	1390.4	1044.3	182.7	129.2	90.6	156.0
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: P591368

CATALOG NUMBER: CTN-CA8-330-730-U-T4-SSS-HM-EX120

CANDELA DISTRIBUTION (continued):

	94°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4976.2	4976.2	4976.2	4976.2	4976.2	4976.2	4976.2	4976.2	4976.2	4976.2	4976.2
2.5°	5001.5	4994.1	5014.9	5068.3	5065.4	5105.5	5074.3	5135.2	5145.6	5132.2	5153.0
5°	5028.2	5031.2	5087.7	5144.1	5123.3	5188.7	5202.0	5292.6	5295.6	5283.7	5310.5
7.5°	5095.1	5105.5	5161.9	5228.8	5258.5	5313.4	5306.0	5423.4	5413.0	5407.0	5438.2
10°	5188.7	5208.0	5268.9	5374.3	5361.0	5445.6	5407.0	5485.8	5482.8	5470.9	5505.1
12.5°	5303.0	5322.4	5399.6	5500.6	5502.1	5508.0	5476.8	5516.9	5503.6	5475.4	5502.1
15°	5457.5	5479.8	5585.3	5659.5	5595.7	5579.3	5519.9	5497.6	5447.1	5372.9	5395.1
17.5°	5701.1	5719.0	5837.8	5879.4	5769.5	5704.1	5534.8	5408.5	5265.9	5161.9	5181.2
20°	6008.6	6025.0	6121.5	6111.1	5964.1	5803.6	5540.7	5326.8	5060.9	4857.4	4851.5
22.5°	6347.3	6357.7	6449.8	6357.7	6096.3	5863.1	5528.8	5200.5	4753.4	4490.5	4462.3
25°	6720.2	6729.1	6727.6	6522.6	6172.0	5828.9	5418.9	4989.6	4416.2	4135.5	4105.8
27.5°	7137.6	7139.1	6975.7	6650.3	6139.3	5702.6	5206.5	4610.8	4107.3	3863.6	3841.4
30°	7581.7	7578.7	7202.9	6662.2	6013.1	5463.5	4878.2	4252.8	3829.5	3612.6	3581.4
32.5°	8088.3	8063.0	7404.9	6620.6	5782.8	5120.3	4454.9	3952.8	3611.1	3363.0	3317.0
35°	8737.4	8675.0	7577.3	6476.5	5441.2	4656.9	4062.7	3691.3	3400.2	3147.7	3101.6
37.5°	9541.0	9460.8	7847.6	6273.0	5047.5	4273.6	3774.5	3514.6	3248.7	2960.5	2901.1
40°	9309.3	9463.8	8170.0	6053.2	4667.3	3967.6	3605.2	3429.9	3156.6	2837.2	2780.8
42.5°	9667.3	9648.0	8611.1	5793.2	4301.9	3728.5	3536.8	3404.6	3107.6	2783.7	2718.4
45°	10276.3	10271.9	9086.5	5540.7	3945.3	3536.8	3484.9	3336.3	3037.7	2716.9	2645.6
47.5°	10771.0	10756.1	9541.0	5262.9	3615.6	3386.8	3379.4	3198.2	2913.0	2614.4	2549.0
50°	11115.6	11137.9	9793.5	4995.6	3303.6	3232.3	3204.1	3003.6	2737.7	2491.1	2440.6
52.5°	11387.4	11429.0	9903.5	4970.3	3030.3	3033.3	2984.3	2801.6	2593.6	2394.5	2341.1
55°	11521.1	11585.0	9790.6	4806.9	2762.9	2780.8	2733.2	2617.4	2494.1	2311.4	2272.7
57.5°	11576.1	11607.3	9529.1	4065.7	2476.2	2473.3	2488.1	2476.2	2360.4	2180.6	2152.4
60°	11482.5	11440.9	8960.2	3089.7	2185.1	2198.5	2293.5	2281.6	2179.1	2042.5	2003.9
62.5°	11194.3	11112.6	7918.9	2284.6	1951.9	2060.3	2161.3	2127.2	2002.4	1877.6	1847.9
65°	10644.7	10414.5	6310.2	1784.0	1840.5	1989.0	2082.6	2032.1	1889.5	1742.4	1724.6
67.5°	9658.4	9370.2	4141.4	1599.8	1792.9	1928.1	2026.1	1941.5	1803.3	1644.4	1619.1
70°	7881.8	7565.4	1960.8	1491.4	1686.0	1819.7	1891.0	1804.8	1663.7	1504.8	1486.9
72.5°	5496.2	5136.7	1056.2	1374.0	1562.7	1678.6	1726.1	1620.6	1497.3	1427.5	1423.1
75°	2739.2	2341.1	958.1	1253.7	1403.7	1504.8	1585.0	1512.2	1403.7	1276.0	1243.3
77.5°	729.4	626.9	901.7	1120.0	1277.5	1391.9	1437.9	1362.2	1237.4	1128.9	1109.6
80°	506.5	516.9	842.2	928.4	1114.1	1216.6	1259.7	1163.1	1100.7	993.8	964.1
82.5°	429.3	451.6	680.3	699.6	885.3	995.2	1071.0	1054.7	965.5	879.4	867.5
85°	402.6	427.8	435.2	484.3	634.3	763.5	894.2	901.7	842.2	732.3	696.7
87.5°	231.7	228.8	209.4	246.6	347.6	423.4	512.5	488.7	398.1	344.6	337.2
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)