

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: P591308

Luminaire Tested: **CTN-CA10-310-730-U-T4-SSS-HM-EX120**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591308
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-CA10-310-730-U-T4-SSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE, 120D FIELD INSTALLED SHIELD ON STREET SIDE
Light Source: (10) 3000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25817 lumens
Efficiency: N/A
Efficacy: 82.6 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type III - Short
BUG Rating: B4 - U0 - G4

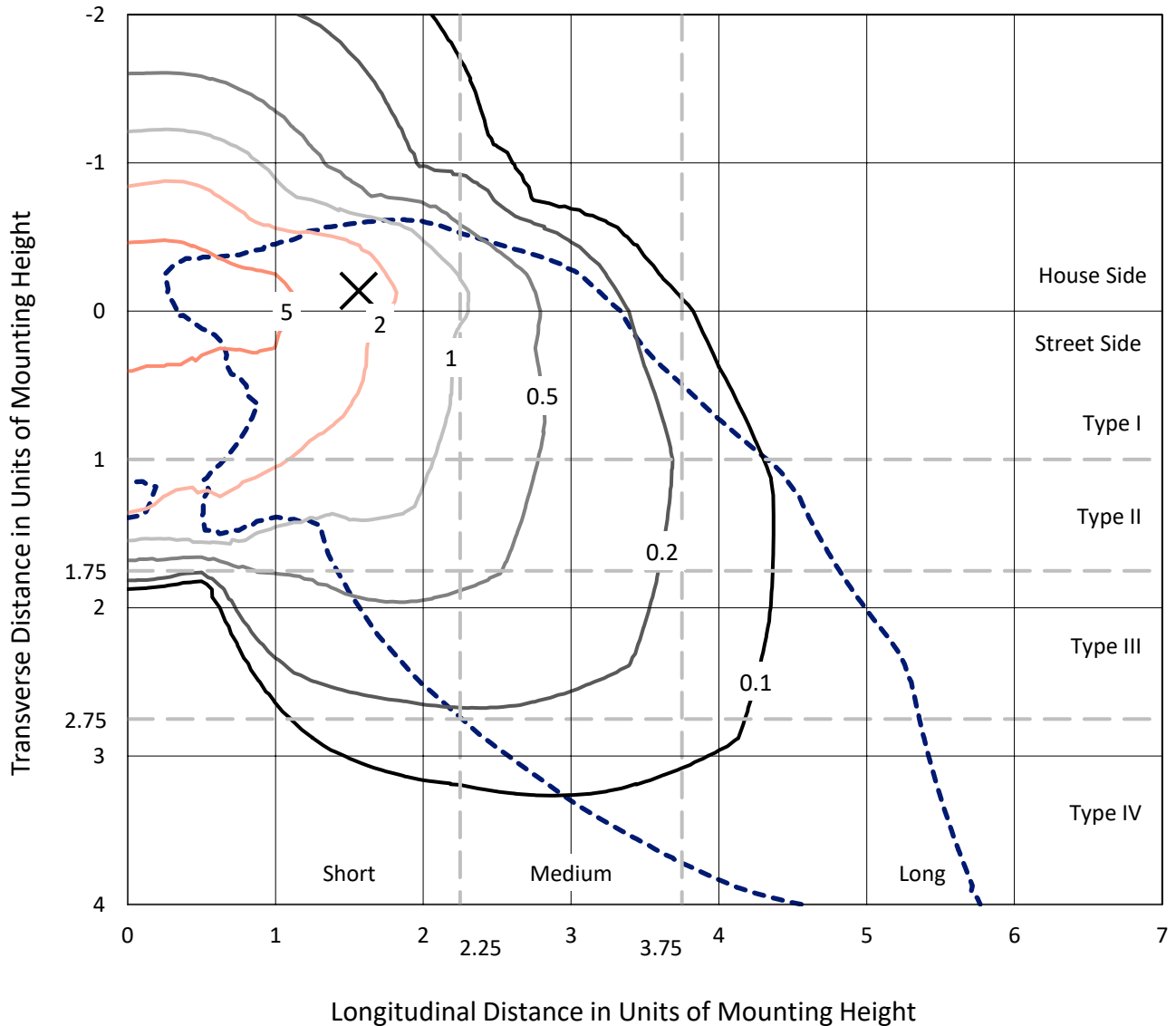
Input Watts (W): 312.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

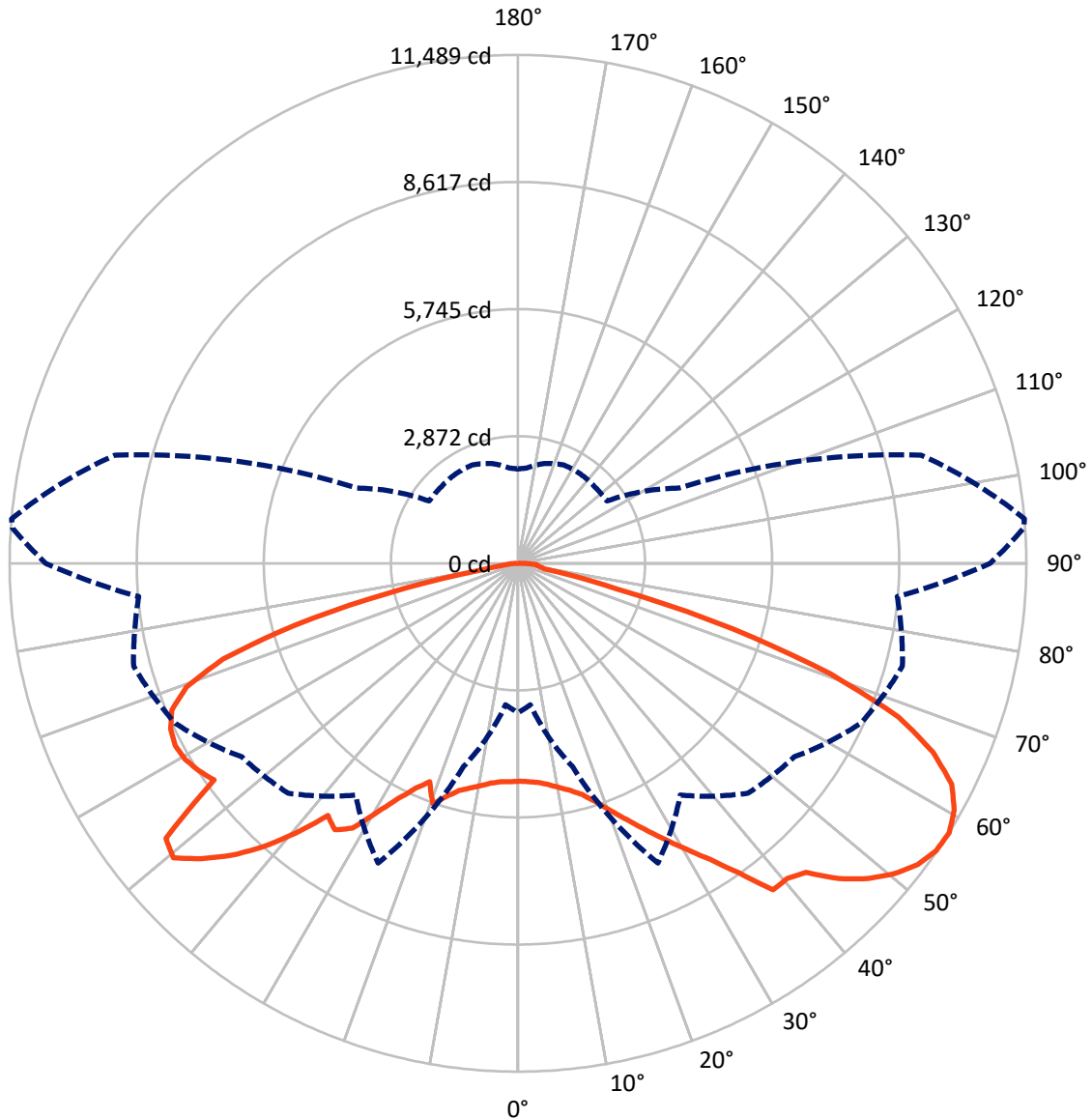
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.4 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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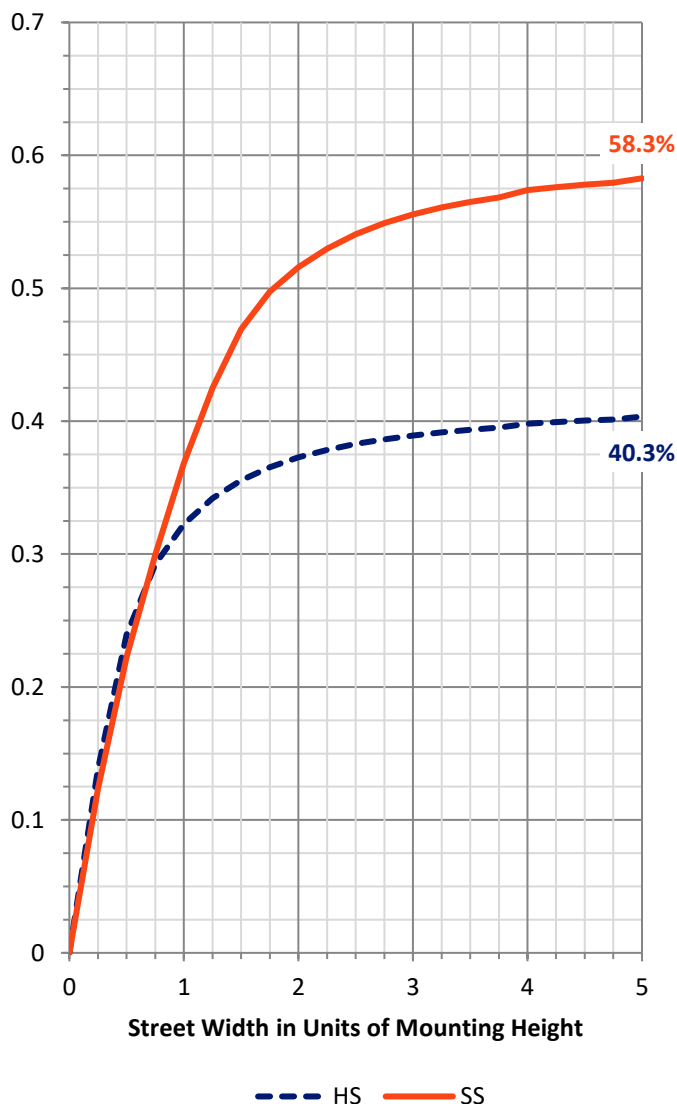
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10633.2	0.0	10633.2
	% Fixture	41.2	0.0	41.2
Street Side	Lumens	15183.8	0.0	15183.8
	% Fixture	58.8	0.0	58.8
Total	Lumens	25817.0	0.0	25817.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	481.0	1.9
10°-20°	1470.9	5.7
20°-30°	2324.3	9.0
30°-40°	3211.8	12.4
40°-50°	4330.6	16.8
50°-60°	5101.4	19.8
60°-70°	4557.4	17.7
70°-80°	3402.9	13.2
80°-90°	936.7	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°	25817.0	100.0
0°-180°	25817.0	100.0

Coefficient of Utilization

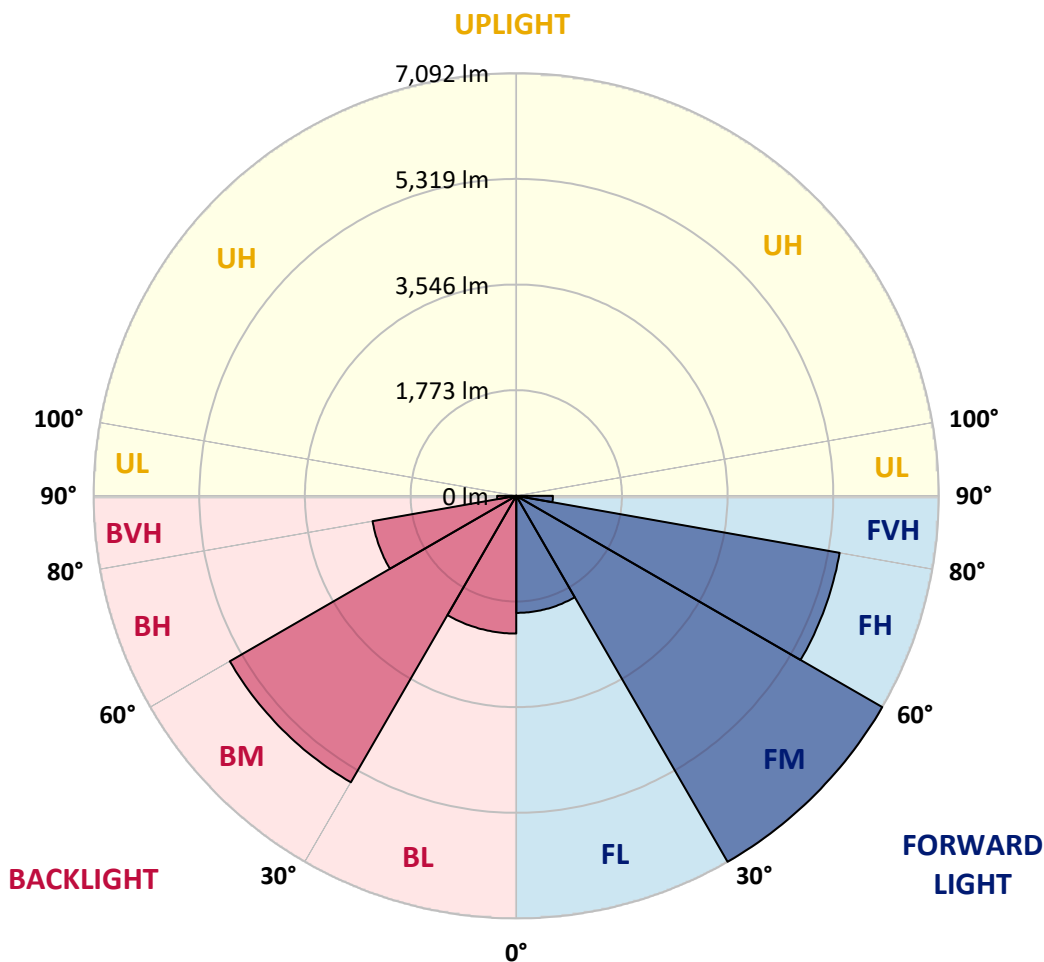


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1965.0	7.6			
FM (30°-60°)	7092.4	27.5			
FH (60°-80°)	5511.1	21.3			G3/7500
FVH (80°-90°)	615.2	2.4			G4/750
BL (0°-30°)	2311.2	9.0	B3/2500		
BM (30°-60°)	5551.4	21.5	B4/8500		
BH (60°-80°)	2449.2	9.5	B3/2500		G3/2500
BVH (80°-90°)	321.4	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°	4925.7	4925.7	4925.7	4925.7	4925.7	4925.7	4925.7	4925.7	4925.7	4925.7	4925.7
2.5°	4861.0	4830.1	4831.6	4874.2	4811.0	4856.6	4850.7	4921.3	4911.0	4938.9	4947.7
5°	4821.3	4794.8	4796.3	4850.7	4808.1	4849.2	4821.3	4886.0	4909.5	4952.2	4961.0
7.5°	4831.6	4808.1	4816.9	4868.3	4815.4	4856.6	4859.5	4919.8	4931.6	5005.1	5016.8
10°	4858.0	4833.1	4838.9	4880.1	4846.3	4919.8	4911.0	4990.4	4993.3	5096.2	5110.9
12.5°	4822.8	4805.1	4805.1	4856.6	4874.2	4947.7	4969.8	5052.1	5069.8	5188.9	5208.0
15°	4759.5	4730.1	4772.8	4849.2	4884.5	4996.3	5037.4	5160.9	5181.5	5305.0	5346.2
17.5°	4650.7	4634.6	4791.9	4815.4	4681.6	4766.9	4941.9	5287.4	5358.0	5503.5	5580.0
20°	4325.8	4143.5	3722.9	3799.4	4211.1	4518.4	4572.8	4738.9	5041.8	5766.7	5885.8
22.5°	3180.4	3337.7	3893.5	3939.1	3925.8	4180.2	4752.2	4912.5	5056.5	5322.7	6113.7
25°	3293.6	3284.8	3556.8	4134.6	4114.0	4162.6	4402.2	5181.5	5325.6	5590.3	6413.7
27.5°	3395.0	3402.4	3381.8	3925.8	4311.1	4361.1	4434.6	4966.9	5663.8	5966.7	6741.6
30°	3596.5	3565.6	3509.7	3508.3	4483.1	4556.6	4681.6	4859.5	5975.5	6456.3	7151.8
32.5°	3936.1	3900.8	3827.3	3711.2	3874.4	4759.5	4931.6	5158.0	5513.8	7057.7	7632.6
35°	4187.6	4162.6	4112.6	4031.7	3900.8	4861.0	5175.6	5475.6	5946.1	7307.7	8263.4
37.5°	4497.8	4462.5	4405.2	4305.2	4206.7	4167.0	5410.9	5835.8	6549.0	7138.6	8400.1
40°	4849.2	4828.6	4724.2	4594.9	4486.0	4375.8	5572.6	6306.3	7323.8	7897.3	8275.1
42.5°	5113.9	5097.7	5036.0	4931.6	4825.7	4755.1	4938.9	6884.2	8167.8	8631.0	8908.9
45°	5344.7	5327.1	5327.1	5299.2	5269.7	5275.6	5355.0	7298.8	8969.2	9257.3	9508.8
47.5°	5522.6	5491.8	5368.3	5393.3	5435.9	5563.8	5805.0	6346.0	9614.6	9789.6	10013.1
50°	5956.4	5909.4	5509.4	5602.0	5740.3	5946.1	6256.4	6937.1	8978.0	10244.0	10418.9
52.5°	6356.3	6138.7	4550.7	5909.4	6065.2	6369.6	6737.2	7576.7	8263.4	10096.9	10729.2
55°	5671.2	5449.1	4574.3	6474.0	6447.5	6831.3	7190.0	8101.6	8651.6	8433.9	10651.2
57.5°	3375.9	3208.3	4759.5	7476.7	6391.6	7347.4	7623.8	8550.1	8992.7	8603.0	10671.8
60°	1748.3	1837.9	1767.4	4424.3	5503.5	7573.8	8072.2	8982.4	9223.5	8729.5	10685.1
62.5°	235.3	169.1	70.6	3236.2	3911.1	6310.8	8635.4	9394.1	9392.6	8772.1	10592.4
65°	14.7	16.2	32.3	3220.1	4314.0	7487.0	9567.6	9726.4	9476.4	8697.1	10283.7
67.5°	5.9	7.4	29.4	3198.0	4655.1	7870.8	10664.5	9832.3	9485.3	8495.7	9605.8
70°	5.9	7.4	29.4	2978.9	4887.5	7938.4	10849.7	9792.6	9376.4	8000.2	8345.7
72.5°	7.4	8.8	26.5	2587.8	4746.3	7754.6	10546.8	9711.7	8986.8	7003.3	6479.8
75°	7.4	8.8	26.5	2090.8	4199.3	7353.2	10307.2	9035.3	7878.2	5233.0	4202.3
77.5°	5.9	7.4	26.5	1632.1	3500.9	6516.6	9350.0	7856.1	6229.9	3045.1	1660.0
80°	5.9	7.4	26.5	1136.6	2667.2	5341.8	7616.4	6118.1	3503.9	870.4	467.6
82.5°	5.9	7.4	25.0	708.7	1886.5	3928.8	5205.1	2820.1	751.4	339.7	364.6
85°	5.9	5.9	19.1	347.0	1205.7	2609.9	2593.7	472.0	298.5	220.6	276.4
87.5°	2.9	4.4	10.3	158.8	673.4	1376.3	1033.7	180.9	127.9	89.7	154.4
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°	4925.7	4925.7	4925.7	4925.7	4925.7	4925.7	4925.7	4925.7	4925.7	4925.7	4925.7
2.5°	4950.7	4943.3	4963.9	5016.8	5013.9	5053.6	5022.7	5083.0	5093.3	5080.1	5100.7
5°	4977.1	4980.1	5036.0	5091.8	5071.2	5135.9	5149.2	5238.9	5241.8	5230.0	5256.5
7.5°	5043.3	5053.6	5109.5	5175.6	5205.1	5259.5	5252.1	5368.3	5358.0	5352.1	5383.0
10°	5135.9	5155.1	5215.3	5319.7	5306.5	5390.3	5352.1	5430.0	5427.1	5415.3	5449.1
12.5°	5249.2	5268.3	5344.7	5444.7	5446.2	5452.1	5421.2	5460.9	5447.7	5419.7	5446.2
15°	5402.1	5424.1	5528.5	5602.0	5538.8	5522.6	5463.8	5441.8	5391.8	5318.3	5340.3
17.5°	5643.2	5660.9	5778.5	5819.7	5710.9	5646.2	5478.5	5353.6	5212.4	5109.5	5128.6
20°	5947.6	5963.8	6059.3	6049.0	5903.5	5744.7	5484.4	5272.7	5009.5	4808.1	4802.2
22.5°	6282.8	6293.1	6384.3	6293.1	6034.3	5803.5	5472.7	5147.7	4705.1	4444.9	4416.9
25°	6651.9	6660.7	6659.2	6456.3	6109.3	5769.7	5363.8	4938.9	4371.4	4093.5	4064.1
27.5°	7065.0	7066.5	6904.8	6582.8	6077.0	5644.7	5153.6	4564.0	4065.5	3824.4	3802.3
30°	7504.7	7501.7	7129.7	6594.5	5952.0	5408.0	4828.6	4209.6	3790.6	3575.9	3545.0
32.5°	8006.1	7981.1	7329.7	6553.4	5724.1	5068.3	4409.6	3912.6	3574.4	3328.9	3283.3
35°	8648.6	8586.9	7500.3	6410.7	5385.9	4609.6	4021.4	3653.8	3365.6	3115.7	3070.1
37.5°	9444.1	9364.7	7767.9	6209.3	4996.3	4230.2	3736.2	3478.9	3215.7	2930.4	2871.6
40°	9214.7	9367.6	8086.9	5991.7	4619.9	3927.3	3568.5	3395.0	3124.5	2808.4	2752.5
42.5°	9569.1	9549.9	8523.6	5734.4	4258.1	3690.6	3500.9	3370.1	3076.0	2755.4	2690.7
45°	10171.9	10167.5	8994.2	5484.4	3905.3	3500.9	3449.4	3302.4	3006.9	2689.3	2618.7
47.5°	10661.5	10646.8	9444.1	5209.5	3578.8	3352.4	3345.1	3165.7	2883.4	2587.8	2523.1
50°	11002.7	11024.7	9694.0	4944.8	3270.1	3199.5	3171.6	2973.1	2709.9	2465.8	2415.8
52.5°	11271.7	11312.9	9802.8	4919.8	2999.5	3002.5	2953.9	2773.1	2567.2	2370.2	2317.3
55°	11404.1	11467.3	9691.1	4758.1	2734.9	2752.5	2705.5	2590.8	2468.7	2287.9	2249.6
57.5°	11458.5	11489.3	9432.3	4024.4	2451.1	2448.1	2462.8	2451.1	2336.4	2158.5	2130.5
60°	11365.8	11324.7	8869.2	3058.3	2162.9	2176.1	2270.2	2258.5	2157.0	2021.7	1983.5
62.5°	11080.6	10999.7	7838.5	2261.4	1932.0	2039.4	2139.4	2105.5	1982.0	1858.5	1829.1
65°	10536.6	10308.6	6246.1	1765.9	1821.8	1968.8	2061.4	2011.4	1870.3	1724.7	1707.1
67.5°	9560.2	9275.0	4099.3	1583.6	1774.7	1908.5	2005.6	1921.8	1785.0	1627.7	1602.7
70°	7801.7	7488.5	1940.9	1476.2	1668.9	1801.2	1871.8	1786.5	1646.8	1489.5	1471.8
72.5°	5440.3	5084.5	1045.4	1360.1	1546.8	1661.5	1708.6	1604.2	1482.1	1413.0	1408.6
75°	2711.3	2317.3	948.4	1241.0	1389.5	1489.5	1568.9	1496.8	1389.5	1263.0	1230.7
77.5°	721.9	620.5	892.5	1108.6	1264.5	1377.7	1423.3	1348.3	1224.8	1117.5	1098.4
80°	501.4	511.7	833.7	919.0	1102.8	1204.2	1246.9	1151.3	1089.5	983.7	954.3
82.5°	424.9	447.0	673.4	692.5	876.3	985.1	1060.1	1044.0	955.7	870.4	858.7
85°	398.5	423.5	430.8	479.3	627.8	755.8	885.2	892.5	833.7	724.9	689.6
87.5°	229.4	226.4	207.3	244.1	344.1	419.1	507.3	483.7	394.1	341.1	333.8
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)