

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: P591383

Luminaire Tested: **CTN-CA10-210-740-U-T1-SSS-HM-EX120**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591383
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2201-495-2)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/19/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA10-210-740-U-T1-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: 20305 lumens
Efficiency: N/A
Efficacy: 95.4 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type I - Short
BUG Rating: B4 - U0 - G4

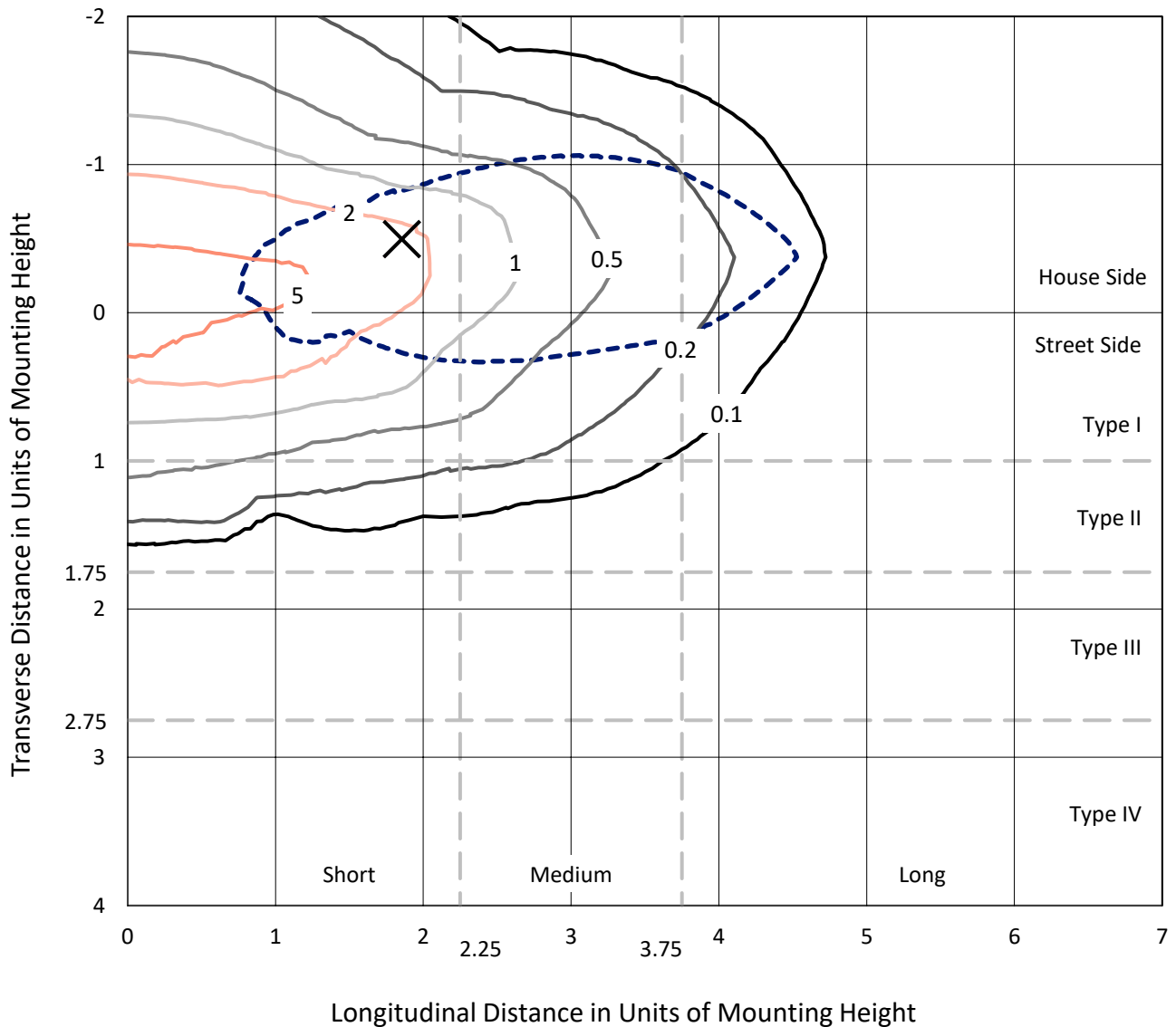
Input Watts (W): 212.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

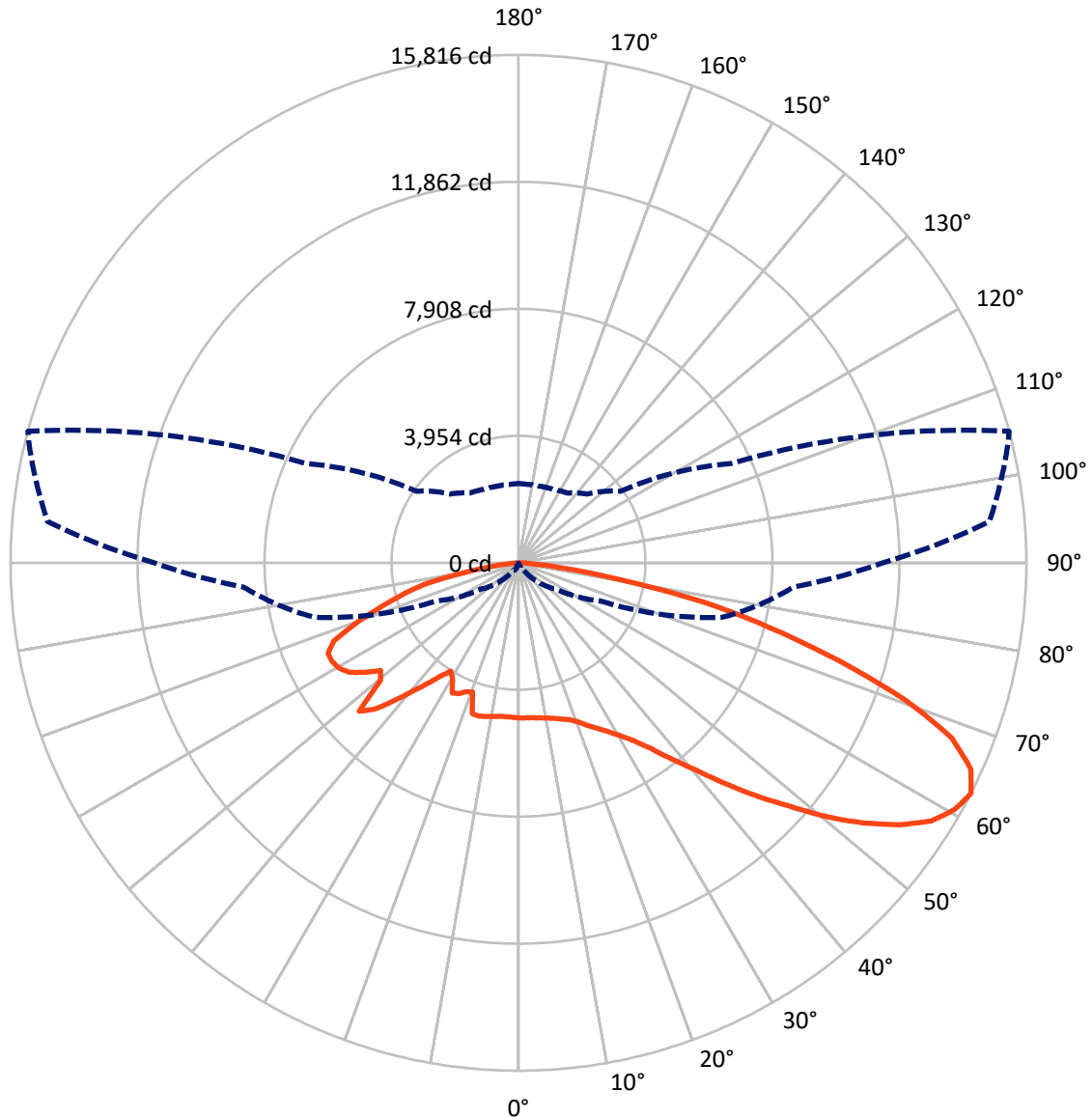
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.7 fc
 Type I - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 105-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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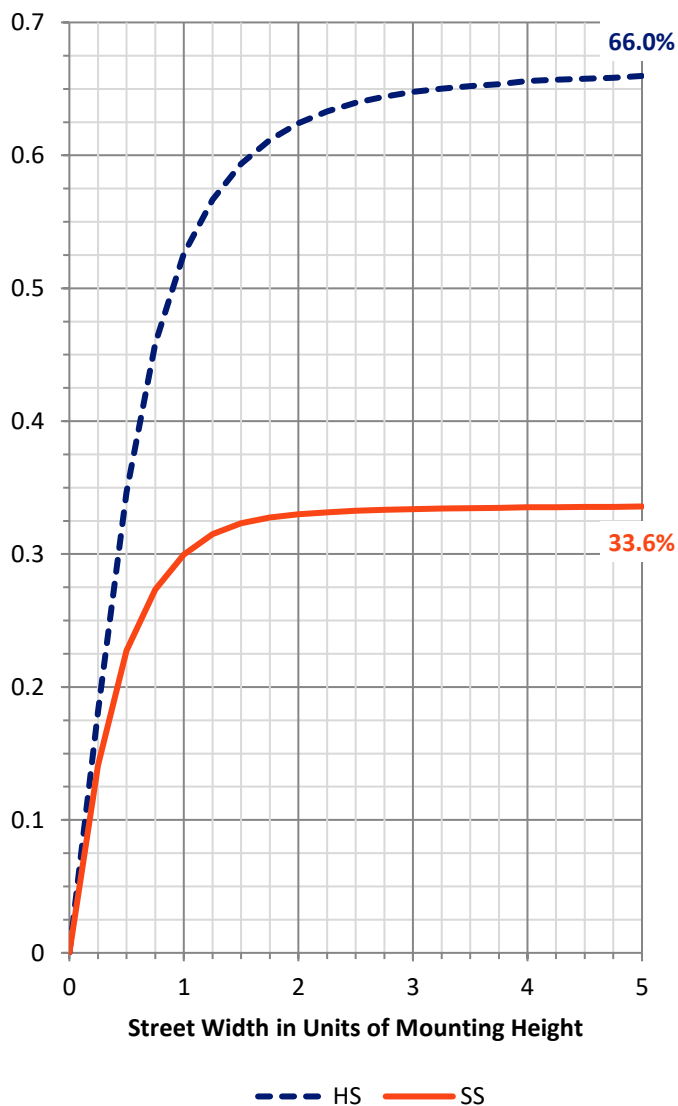
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	13510.7	0.0	13510.7
	% Fixture	66.5	0.0	66.5
Street Side	Lumens	6794.3	0.0	6794.3
	% Fixture	33.5	0.0	33.5
Total	Lumens	20305.0	0.0	20305.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	460.9	2.3
10°-20°	1301.8	6.4
20°-30°	1834.6	9.0
30°-40°	2492.6	12.3
40°-50°	3390.9	16.7
50°-60°	4017.2	19.8
60°-70°	3939.3	19.4
70°-80°	2484.5	12.2
80°-90°	383.3	1.9
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°	20305.0	100.0
0°-180°	20305.0	100.0

Coefficient of Utilization

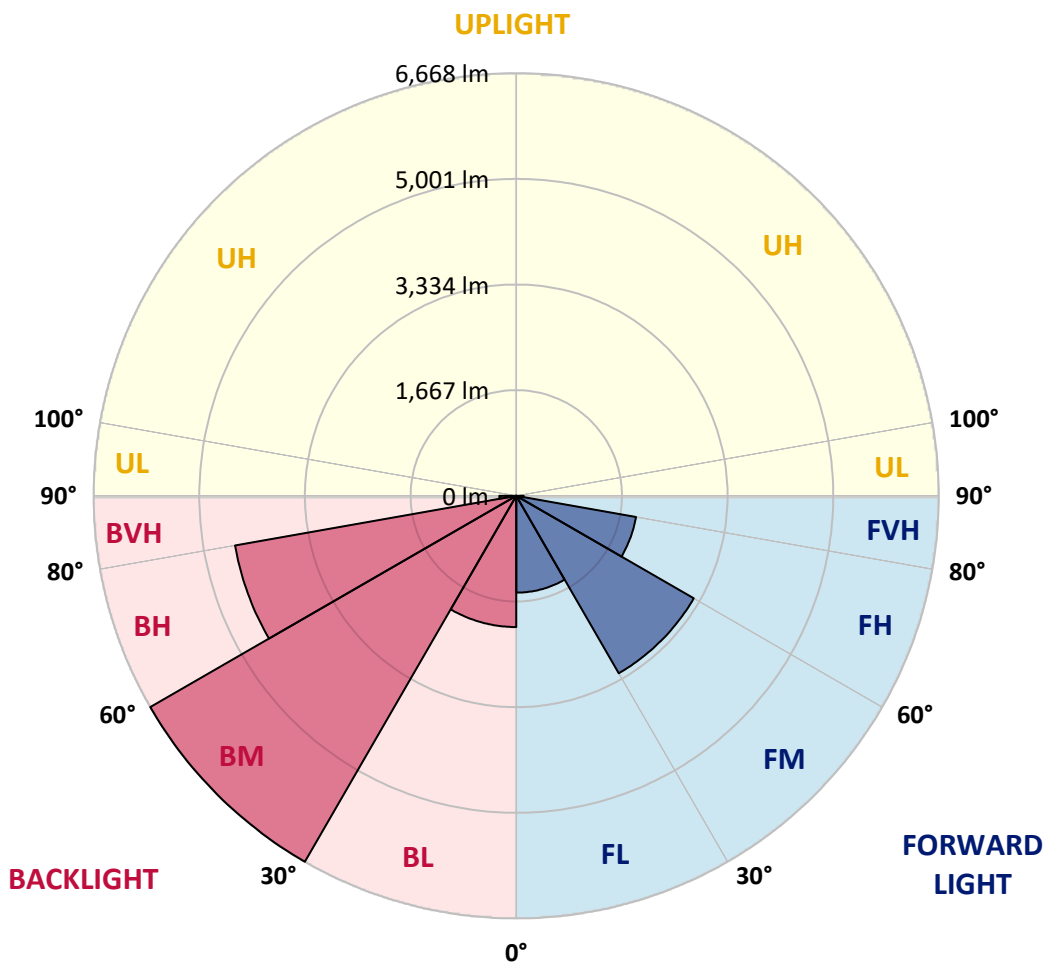


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1527.3	7.5			
FM (30°-60°)	3233.1	15.9			
FH (60°-80°)	1918.4	9.4			G2/5000
FVH (80°-90°)	115.6	0.6			G2/225
BL (0°-30°)	2070.0	10.2	B3/2500		
BM (30°-60°)	6667.6	32.8	B4/8500		
BH (60°-80°)	4505.5	22.2	B4/5000		G4/5000
BVH (80°-90°)	267.6	1.3			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 I Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	4830.2	4830.2	4830.2	4830.2	4830.2	4830.2	4830.2	4830.2	4830.2	4830.2	4830.2
2.5°	4833.5	4795.7	4822.7	4863.7	4802.2	4837.8	4778.5	4827.0	4815.1	4818.4	4841.0
5°	4795.7	4755.8	4788.2	4842.1	4781.7	4821.6	4773.1	4814.1	4809.7	4824.8	4843.2
7.5°	4760.1	4722.4	4755.8	4791.4	4760.1	4799.0	4762.3	4813.0	4816.2	4849.6	4864.8
10°	4722.4	4684.6	4717.0	4758.0	4732.1	4780.6	4765.5	4827.0	4850.7	4895.0	4907.9
12.5°	4639.3	4605.9	4632.8	4680.3	4684.6	4755.8	4765.5	4860.4	4889.6	4947.8	4967.2
15°	4139.9	4176.6	4320.0	4458.1	4517.4	4649.0	4721.3	4890.6	4931.6	5014.7	5044.9
17.5°	3349.2	3280.2	3056.9	3115.2	3443.1	3885.3	4052.5	4473.2	4917.6	5098.8	5137.7
20°	1979.3	2120.6	2557.5	2691.3	2812.1	3287.8	3849.7	4100.0	4270.4	4914.4	5264.9
22.5°	1632.0	1641.7	1954.5	2571.5	2707.4	2894.0	3328.7	4152.8	4328.7	4457.0	4847.5
25°	1513.4	1523.1	1577.0	2053.8	2633.0	2848.7	3039.7	3795.8	4478.6	4637.2	4942.4
27.5°	1418.4	1431.4	1481.0	1614.8	2455.0	2835.8	3077.4	3366.5	4545.5	4850.7	5136.6
30°	1347.2	1352.6	1403.3	1532.8	1856.4	2839.0	3132.4	3440.9	4163.6	5121.5	5408.4
32.5°	1282.5	1285.8	1338.6	1464.8	1660.1	2629.8	3215.5	3596.2	3975.9	5343.7	5781.6
35°	1232.9	1230.7	1278.2	1402.3	1596.4	2013.9	3308.2	3782.9	4275.8	5133.3	6338.2
37.5°	1185.4	1182.2	1223.2	1337.5	1540.3	1885.5	3200.4	4007.2	4706.2	5293.0	6292.9
40°	1148.8	1142.3	1176.8	1279.3	1482.1	1853.1	2520.8	4244.5	5178.6	6116.0	6673.7
42.5°	1116.4	1112.1	1141.2	1223.2	1422.8	1814.3	2349.3	4372.9	5766.5	7067.4	7658.5
45°	1067.9	1074.3	1106.7	1185.4	1359.1	1759.3	2366.6	3512.1	6388.9	7892.5	8640.1
47.5°	1047.4	1046.3	1066.8	1141.2	1304.1	1682.7	2354.7	3220.9	6780.4	8756.6	9601.1
50°	1015.0	1009.6	880.2	1089.4	1248.0	1587.8	2305.1	3305.0	5642.5	9604.4	10483.5
52.5°	954.6	848.9	770.2	1052.8	1190.8	1484.2	2194.0	3341.7	5448.3	9453.4	11241.8
55°	507.0	565.2	729.2	1001.0	1124.0	1391.5	2031.1	3315.8	5867.9	7559.2	10436.0
57.5°	449.8	447.6	463.8	790.7	585.7	1290.1	1834.8	3197.1	6264.9	7904.4	10631.3
60°	35.6	36.7	43.1	263.2	310.7	908.2	1623.4	3050.4	6475.2	8312.1	11104.8
62.5°	17.3	19.4	25.9	235.1	283.7	826.3	1432.5	2800.2	6563.6	8606.6	11338.9
65°	4.3	5.4	11.9	207.1	247.0	735.6	1240.5	2506.8	6571.2	8618.5	11527.6
67.5°	3.2	5.4	11.9	187.7	225.4	655.8	1072.2	2301.9	6249.7	8574.3	11432.7
70°	3.2	5.4	11.9	168.3	203.9	568.5	923.3	2101.2	5428.9	8409.2	11110.2
72.5°	3.2	6.5	11.9	147.8	179.1	482.2	784.2	1880.1	4556.3	7720.0	10391.8
75°	3.2	6.5	12.9	119.7	153.2	384.0	644.0	1610.4	3789.3	6694.2	9201.0
77.5°	3.2	6.5	12.9	92.8	124.0	286.9	487.6	1276.1	3023.5	4937.0	6464.4
80°	3.2	6.5	12.9	65.8	101.4	201.7	354.9	870.5	1803.5	2595.3	3292.1
82.5°	3.2	6.5	12.9	47.5	73.3	145.6	219.0	429.3	860.8	1245.9	1563.0
85°	2.2	5.4	11.9	31.3	38.8	88.5	130.5	190.9	257.8	340.9	460.6
87.5°	2.2	3.2	7.6	11.9	16.2	31.3	48.5	43.1	48.5	101.4	145.6
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):

	95°	104°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4830.2	4830.2	4830.2	4830.2	4830.2	4830.2	4830.2	4830.2	4830.2	4830.2	4830.2
2.5°	4837.8	4833.5	4834.5	4858.3	4837.8	4842.1	4806.5	4877.7	4871.2	4861.5	4889.6
5°	4843.2	4841.0	4849.6	4870.1	4838.9	4844.3	4810.8	4893.9	4873.4	4870.1	4903.6
7.5°	4870.1	4866.9	4875.5	4885.2	4850.7	4850.7	4821.6	4887.4	4875.5	4854.0	4891.7
10°	4918.7	4906.8	4915.4	4920.8	4868.0	4865.8	4811.9	4889.6	4859.4	4848.6	4897.1
12.5°	4986.6	4959.7	4972.6	4964.0	4893.9	4880.9	4808.7	4859.4	4821.6	4815.1	4859.4
15°	5078.3	5042.7	5052.4	5036.3	4947.8	4910.1	4793.6	4815.1	4754.7	4749.3	4781.7
17.5°	5163.5	5142.0	5136.6	5136.6	5033.0	4939.2	4779.5	4749.3	4669.5	4664.1	4680.3
20°	5317.8	5288.7	5285.4	5259.5	5106.4	4962.9	4756.9	4664.1	4545.5	4518.5	4548.7
22.5°	5367.4	5508.7	5499.0	5384.7	5167.9	4982.3	4710.5	4557.3	4394.5	4342.7	4357.8
25°	5515.2	5727.7	5710.4	5544.3	5230.4	4993.1	4654.4	4439.8	4215.4	4124.8	4128.0
27.5°	5749.3	5966.1	5954.2	5714.7	5308.1	4996.3	4591.9	4315.7	4037.4	3918.8	3928.5
30°	6047.0	6265.9	6248.7	5904.6	5425.7	5002.8	4544.4	4166.9	3874.5	3746.2	3744.0
32.5°	6461.2	6659.6	6608.9	6158.1	5567.0	5029.8	4481.8	4025.6	3725.7	3590.9	3580.1
35°	7086.8	7160.1	7097.6	6460.1	5716.9	5047.0	4381.5	3887.5	3587.6	3454.9	3445.2
37.5°	7932.5	7841.8	7757.7	6799.9	5872.2	5042.7	4254.2	3753.7	3469.0	3342.8	3342.8
40°	8015.5	8625.0	8469.6	7158.0	6012.4	5019.0	4133.4	3623.2	3373.0	3270.5	3286.7
42.5°	8404.9	9583.9	9366.0	7504.2	6113.8	4950.0	4004.0	3504.6	3283.4	3200.4	3206.9
45°	9361.7	10456.5	10329.2	7838.6	6168.8	4828.1	3854.0	3388.1	3183.1	3117.3	3130.3
47.5°	10390.7	11494.2	11307.6	8147.1	6138.6	4647.9	3694.4	3281.3	3078.5	3036.4	3060.2
50°	11363.7	12585.8	12430.5	8363.9	6004.9	4395.5	3524.0	3168.0	2996.5	2963.1	2974.9
52.5°	12318.3	13577.1	13460.6	8481.5	5737.4	4131.3	3366.5	3060.2	2919.9	2877.9	2894.0
55°	13105.7	14516.6	14403.3	8469.6	5335.0	3855.1	3210.1	2943.7	2842.3	2804.5	2817.5
57.5°	13720.5	15247.9	15167.0	8289.5	4866.9	3601.6	3033.2	2829.3	2739.8	2706.4	2717.1
60°	14270.7	15711.7	15607.1	7891.5	4370.7	3322.3	2850.9	2693.4	2619.0	2592.0	2609.3
62.5°	14721.5	15721.5	15816.4	7315.5	3884.3	3026.7	2648.1	2526.2	2472.3	2456.1	2466.9
65°	14837.0	15432.4	15478.8	6603.5	3391.3	2733.3	2404.3	2324.5	2301.9	2292.1	2313.7
67.5°	14677.3	14822.9	14546.8	6001.7	2941.5	2401.1	2141.1	2091.5	2105.5	2107.7	2135.7
70°	14265.3	13192.0	12765.9	5497.9	2521.9	2033.3	1852.1	1835.9	1873.6	1904.9	1925.4
72.5°	13214.6	10830.8	10425.2	4786.0	1988.0	1556.5	1458.3	1510.1	1497.2	1511.2	1547.9
75°	11376.6	8359.6	8108.3	3895.0	1514.4	1131.5	999.9	1005.3	1021.5	1092.7	1131.5
77.5°	8104.0	6012.4	5900.3	2987.9	1003.2	665.5	688.2	764.8	787.4	789.6	816.5
80°	4294.1	3351.4	3199.3	1760.4	663.4	475.7	517.8	551.2	581.4	612.7	620.2
82.5°	1935.1	1515.5	1473.4	874.8	420.7	366.7	376.5	433.6	458.4	463.8	469.2
85°	751.8	523.1	498.3	363.5	276.1	248.1	275.1	333.3	357.0	346.2	343.0
87.5°	200.6	123.0	112.2	121.9	129.4	137.0	156.4	178.0	203.9	196.3	189.8
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)