

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: P591431

Luminaire Tested: **CTN-CA6-230-740-U-T1-SSS-HM-EX120**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591431
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-CA6-230-740-U-T1-SSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE, 120D FIELD INSTALLED SHIELD ON STREET SIDE
Light Source: (6) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20045 lumens
Efficiency: N/A
Efficacy: 88.0 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type I - Short
BUG Rating: B4 - U0 - G4

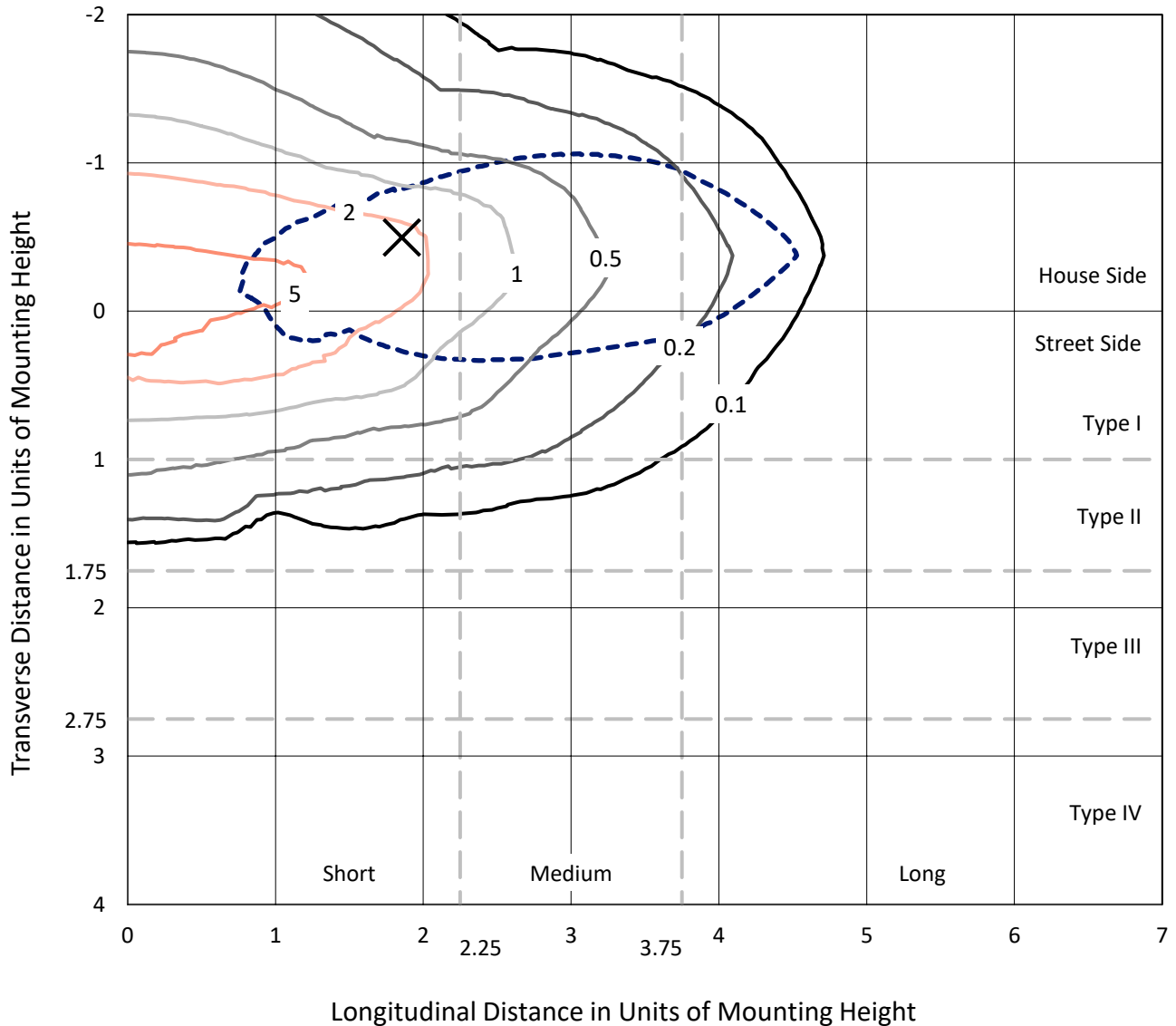
Input Watts (W): 227.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

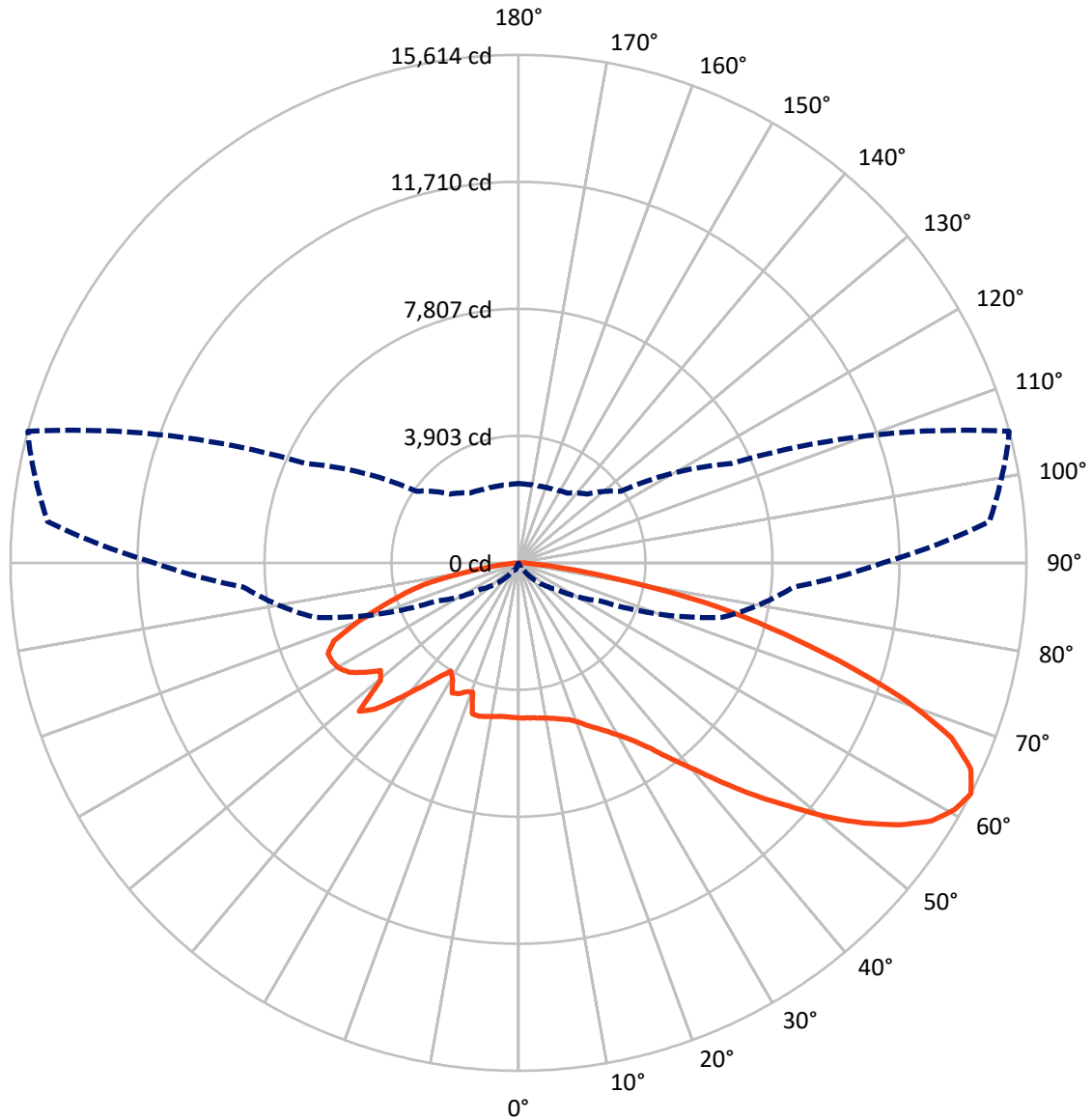
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.6 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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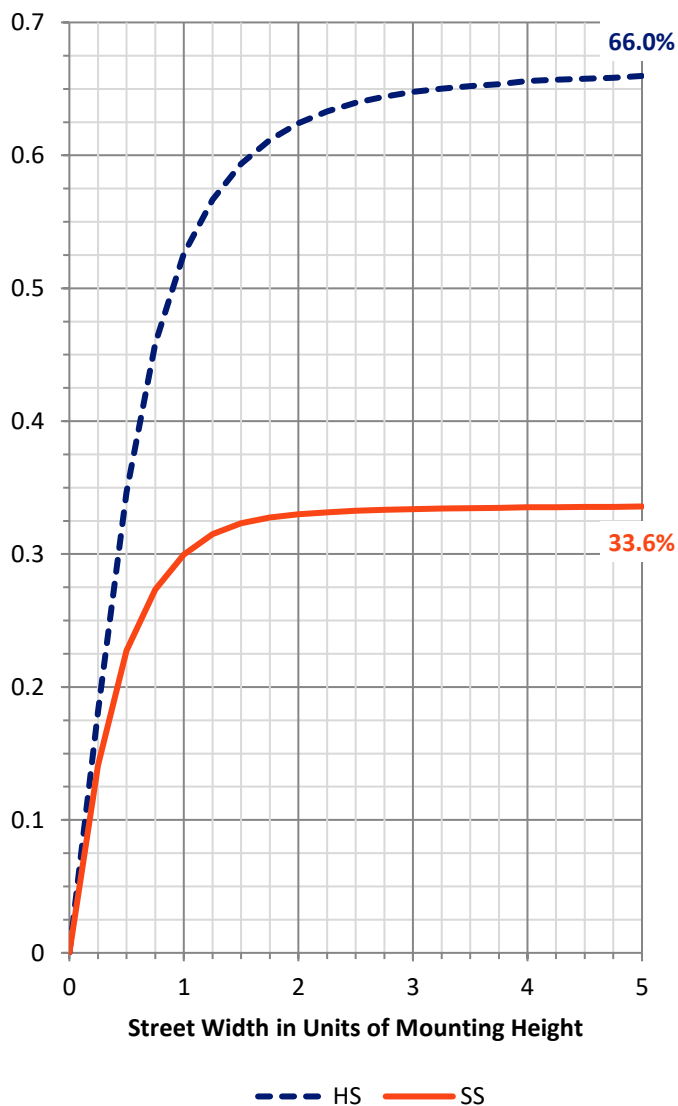
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	13337.7	0.0	13337.7
	% Fixture	66.5	0.0	66.5
Street Side	Lumens	6707.3	0.0	6707.3
	% Fixture	33.5	0.0	33.5
Total	Lumens	20045.0	0.0	20045.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	455.0	2.3
10°-20°	1285.1	6.4
20°-30°	1811.1	9.0
30°-40°	2460.7	12.3
40°-50°	3347.5	16.7
50°-60°	3965.7	19.8
60°-70°	3888.8	19.4
70°-80°	2452.7	12.2
80°-90°	378.4	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°	20045.0	100.0
0°-180°	20045.0	100.0

Coefficient of Utilization

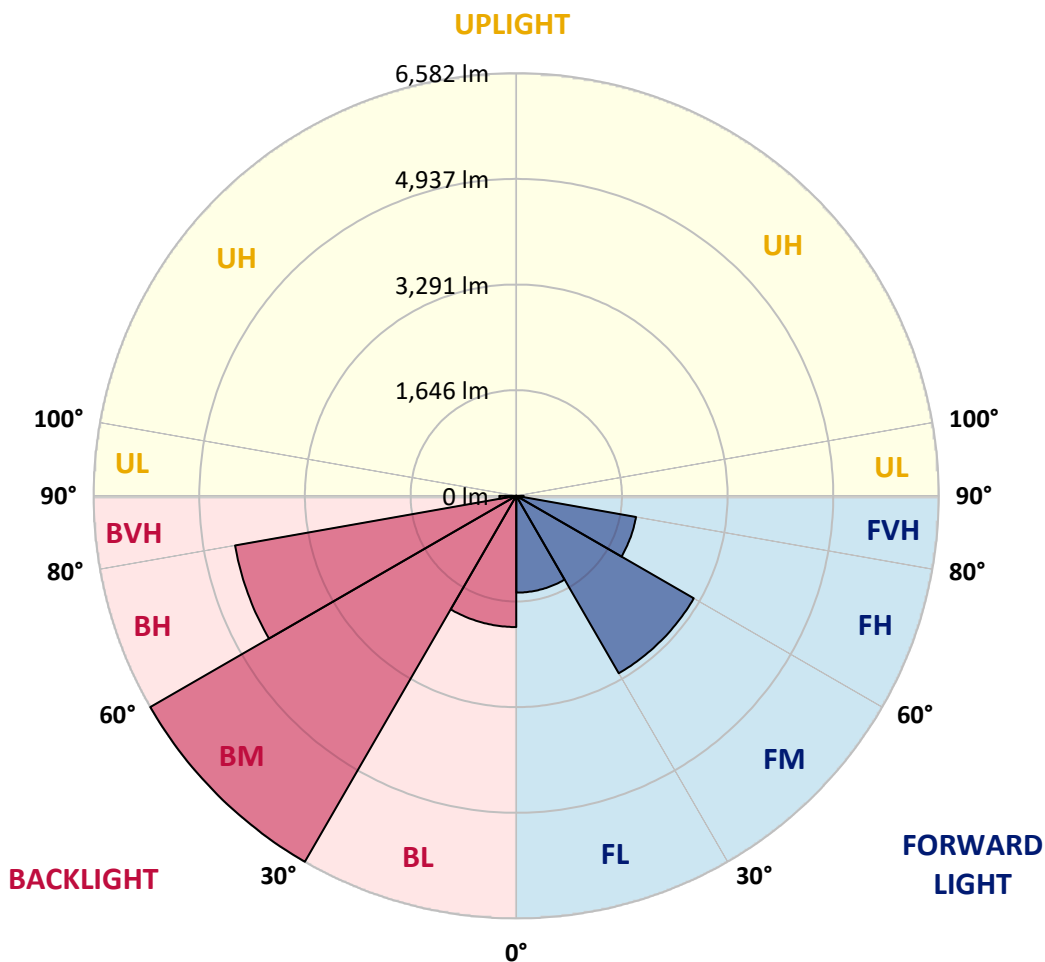


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1507.7	7.5			
FM (30°-60°)	3191.7	15.9			
FH (60°-80°)	1893.8	9.4			G2/5000
FVH (80°-90°)	114.1	0.6			G2/225
BL (0°-30°)	2043.5	10.2	B3/2500		
BM (30°-60°)	6582.2	32.8	B4/8500		
BH (60°-80°)	4447.8	22.2	B4/5000		G4/5000
BVH (80°-90°)	264.2	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°	4768.4	4768.4	4768.4	4768.4	4768.4	4768.4	4768.4	4768.4	4768.4	4768.4	4768.4
2.5°	4771.6	4734.3	4760.9	4801.4	4740.7	4775.8	4717.3	4765.2	4753.5	4756.7	4779.0
5°	4734.3	4694.9	4726.9	4780.1	4720.5	4759.9	4711.9	4752.4	4748.2	4763.1	4781.2
7.5°	4699.2	4661.9	4694.9	4730.0	4699.2	4737.5	4701.3	4751.3	4754.5	4787.6	4802.5
10°	4661.9	4624.6	4656.6	4697.0	4671.5	4719.4	4704.5	4765.2	4788.6	4832.3	4845.1
12.5°	4579.9	4546.9	4573.5	4620.4	4624.6	4694.9	4704.5	4798.2	4827.0	4884.5	4903.6
15°	4086.9	4123.1	4264.7	4401.0	4459.6	4589.5	4660.8	4828.0	4868.5	4950.5	4980.3
17.5°	3306.3	3238.2	3017.8	3075.3	3399.0	3835.6	4000.6	4415.9	4854.6	5033.5	5071.9
20°	1954.0	2093.5	2524.8	2656.8	2776.1	3245.7	3800.4	4047.5	4215.7	4851.4	5197.5
22.5°	1611.1	1620.7	1929.5	2538.6	2672.8	2857.0	3286.1	4099.7	4273.2	4399.9	4785.4
25°	1494.0	1503.6	1556.8	2027.5	2599.3	2812.3	3000.7	3747.2	4421.2	4577.8	4879.1
27.5°	1400.3	1413.1	1462.0	1594.1	2423.6	2799.5	3038.0	3323.4	4487.3	4788.6	5070.8
30°	1330.0	1335.3	1385.4	1513.1	1832.6	2802.7	3092.3	3396.9	4110.3	5055.9	5339.1
32.5°	1266.1	1269.3	1321.5	1446.1	1638.8	2596.1	3174.3	3550.2	3925.0	5275.3	5707.6
35°	1217.1	1215.0	1261.8	1384.3	1576.0	1988.1	3265.9	3734.4	4221.1	5067.6	6257.0
37.5°	1170.3	1167.1	1207.5	1320.4	1520.6	1861.4	3159.4	3955.9	4645.9	5225.2	6212.3
40°	1134.1	1127.7	1161.7	1262.9	1463.1	1829.4	2488.5	4190.2	5112.3	6037.7	6588.2
42.5°	1102.1	1097.9	1126.6	1207.5	1404.5	1791.1	2319.2	4316.9	5692.7	6976.9	7560.4
45°	1054.2	1060.6	1092.5	1170.3	1341.7	1736.8	2336.3	3467.1	6307.1	7791.5	8529.4
47.5°	1034.0	1032.9	1053.1	1126.6	1287.4	1661.2	2324.6	3179.6	6693.6	8644.4	9478.2
50°	1002.0	996.7	868.9	1075.5	1232.0	1567.5	2275.6	3262.7	5570.2	9481.4	10349.2
52.5°	942.4	838.0	760.3	1039.3	1175.6	1465.2	2165.9	3298.9	5378.5	9332.3	11097.8
55°	500.5	558.0	719.8	988.2	1109.6	1373.7	2005.1	3273.3	5792.8	7462.4	10302.4
57.5°	444.0	441.9	457.9	780.5	578.2	1273.6	1811.3	3156.2	6184.6	7803.2	10495.1
60°	35.1	36.2	42.6	259.8	306.7	896.6	1602.6	3011.4	6392.3	8205.7	10962.6
62.5°	17.0	19.2	25.6	232.1	280.1	815.7	1414.1	2764.3	6479.6	8496.4	11193.7
65°	4.3	5.3	11.7	204.5	243.8	726.2	1224.6	2474.7	6487.0	8508.1	11380.0
67.5°	3.2	5.3	11.7	185.3	222.6	647.4	1058.5	2272.4	6169.7	8464.5	11286.3
70°	3.2	5.3	11.7	166.1	201.3	561.2	911.5	2074.3	5359.4	8301.5	10967.9
72.5°	3.2	6.4	11.7	145.9	176.8	476.0	774.1	1856.0	4497.9	7621.1	10258.7
75°	3.2	6.4	12.8	118.2	151.2	379.1	635.7	1589.8	3740.8	6608.4	9083.1
77.5°	3.2	6.4	12.8	91.6	122.5	283.2	481.3	1259.7	2984.8	4873.8	6381.6
80°	3.2	6.4	12.8	65.0	100.1	199.1	350.3	859.3	1780.4	2562.0	3249.9
82.5°	3.2	6.4	12.8	46.9	72.4	143.8	216.2	423.8	849.7	1229.9	1543.0
85°	2.1	5.3	11.7	30.9	38.3	87.3	128.8	188.5	254.5	336.5	454.7
87.5°	2.1	3.2	7.5	11.7	16.0	30.9	47.9	42.6	47.9	100.1	143.8
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°	4768.4	4768.4	4768.4	4768.4	4768.4	4768.4	4768.4	4768.4	4768.4	4768.4	4768.4
2.5°	4775.8	4771.6	4772.6	4796.1	4775.8	4780.1	4745.0	4815.2	4808.8	4799.3	4827.0
5°	4781.2	4779.0	4787.6	4807.8	4776.9	4782.2	4749.2	4831.2	4811.0	4807.8	4840.8
7.5°	4807.8	4804.6	4813.1	4822.7	4788.6	4788.6	4759.9	4824.8	4813.1	4791.8	4829.1
10°	4855.7	4844.0	4852.5	4857.8	4805.7	4803.5	4750.3	4827.0	4797.1	4786.5	4834.4
12.5°	4922.8	4896.2	4908.9	4900.4	4831.2	4818.4	4747.1	4797.1	4759.9	4753.5	4797.1
15°	5013.3	4978.2	4987.7	4971.8	4884.5	4847.2	4732.2	4753.5	4693.8	4688.5	4720.5
17.5°	5097.4	5076.1	5070.8	5070.8	4968.6	4875.9	4718.3	4688.5	4609.7	4604.4	4620.4
20°	5249.7	5220.9	5217.7	5192.2	5041.0	4899.4	4696.0	4604.4	4487.3	4460.6	4490.5
22.5°	5298.7	5438.2	5428.6	5315.7	5101.7	4918.5	4650.2	4499.0	4338.2	4287.1	4302.0
25°	5444.6	5654.3	5637.3	5473.3	5163.4	4929.2	4594.8	4382.9	4161.4	4072.0	4075.2
27.5°	5675.6	5889.7	5878.0	5641.6	5240.1	4932.4	4533.1	4260.5	3985.7	3868.6	3878.2
30°	5969.5	6185.7	6168.7	5829.0	5356.2	4938.8	4486.2	4113.5	3824.9	3698.2	3696.1
32.5°	6378.4	6574.4	6524.3	6079.2	5495.7	4965.4	4424.4	3974.0	3678.0	3544.9	3534.2
35°	6996.0	7068.5	7006.7	6377.4	5643.7	4982.4	4325.4	3837.7	3541.7	3410.7	3401.1
37.5°	7830.9	7741.4	7658.4	6712.8	5797.0	4978.2	4199.8	3705.7	3424.5	3300.0	3300.0
40°	7912.9	8514.5	8361.2	7066.3	5935.5	4954.7	4080.5	3576.8	3329.8	3228.6	3244.6
42.5°	8297.3	9461.2	9246.1	7408.1	6035.6	4886.6	3952.7	3459.7	3241.4	3159.4	3165.8
45°	9241.8	10322.6	10197.0	7738.2	6089.9	4766.3	3804.7	3344.7	3142.4	3077.4	3090.2
47.5°	10257.7	11347.0	11162.8	8042.8	6060.0	4588.4	3647.1	3239.3	3039.1	2997.5	3021.0
50°	11218.2	12424.6	12271.3	8256.8	5928.0	4339.3	3478.9	3127.5	2958.1	2925.1	2936.8
52.5°	12160.6	13403.2	13288.2	8372.9	5663.9	4078.4	3323.4	3021.0	2882.5	2841.0	2857.0
55°	12937.9	14330.7	14218.9	8361.2	5266.7	3805.8	3169.0	2906.0	2805.9	2768.6	2781.4
57.5°	13544.9	15052.7	14972.8	8183.3	4804.6	3555.5	2994.3	2793.1	2704.7	2671.7	2682.3
60°	14087.9	15510.6	15407.3	7790.4	4314.8	3279.7	2814.4	2658.9	2585.4	2558.8	2575.9
62.5°	14533.0	15520.1	15613.8	7221.8	3834.5	2988.0	2614.2	2493.9	2440.6	2424.7	2435.3
65°	14647.0	15234.8	15280.6	6519.0	3347.9	2698.3	2373.5	2294.7	2272.4	2262.8	2284.1
67.5°	14489.4	14633.1	14360.5	5924.8	2903.8	2370.3	2113.7	2064.7	2078.6	2080.7	2108.4
70°	14082.6	13023.1	12602.5	5427.5	2489.6	2007.2	1828.3	1812.4	1849.6	1880.5	1900.8
72.5°	13045.4	10692.1	10291.7	4724.7	1962.5	1536.6	1439.7	1490.8	1478.0	1491.9	1528.1
75°	11230.9	8252.6	8004.5	3845.2	1495.0	1117.0	987.1	992.4	1008.4	1078.7	1117.0
77.5°	8000.2	5935.5	5824.7	2949.6	990.3	657.0	679.4	755.0	777.3	779.5	806.1
80°	4239.2	3308.5	3158.3	1737.8	654.9	469.6	511.1	544.1	574.0	604.8	612.3
82.5°	1910.3	1496.1	1454.6	863.6	415.3	362.0	371.6	428.1	452.6	457.9	463.2
85°	742.2	516.5	492.0	358.9	272.6	244.9	271.5	329.0	352.5	341.8	338.6
87.5°	198.1	121.4	110.7	120.3	127.8	135.2	154.4	175.7	201.3	193.8	187.4
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)