

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: P591191

Luminaire Tested: **CTN-CA10-210-727-U-T1-SSS-HM-EX120**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591191
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-CA10-210-727-U-T1-SSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE, 120D FIELD INSTALLED SHIELD ON STREET SIDE
Light Source: (10) 2700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17194 lumens
Efficiency: N/A
Efficacy: 80.8 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type I - Short
BUG Rating: B4 - U0 - G4

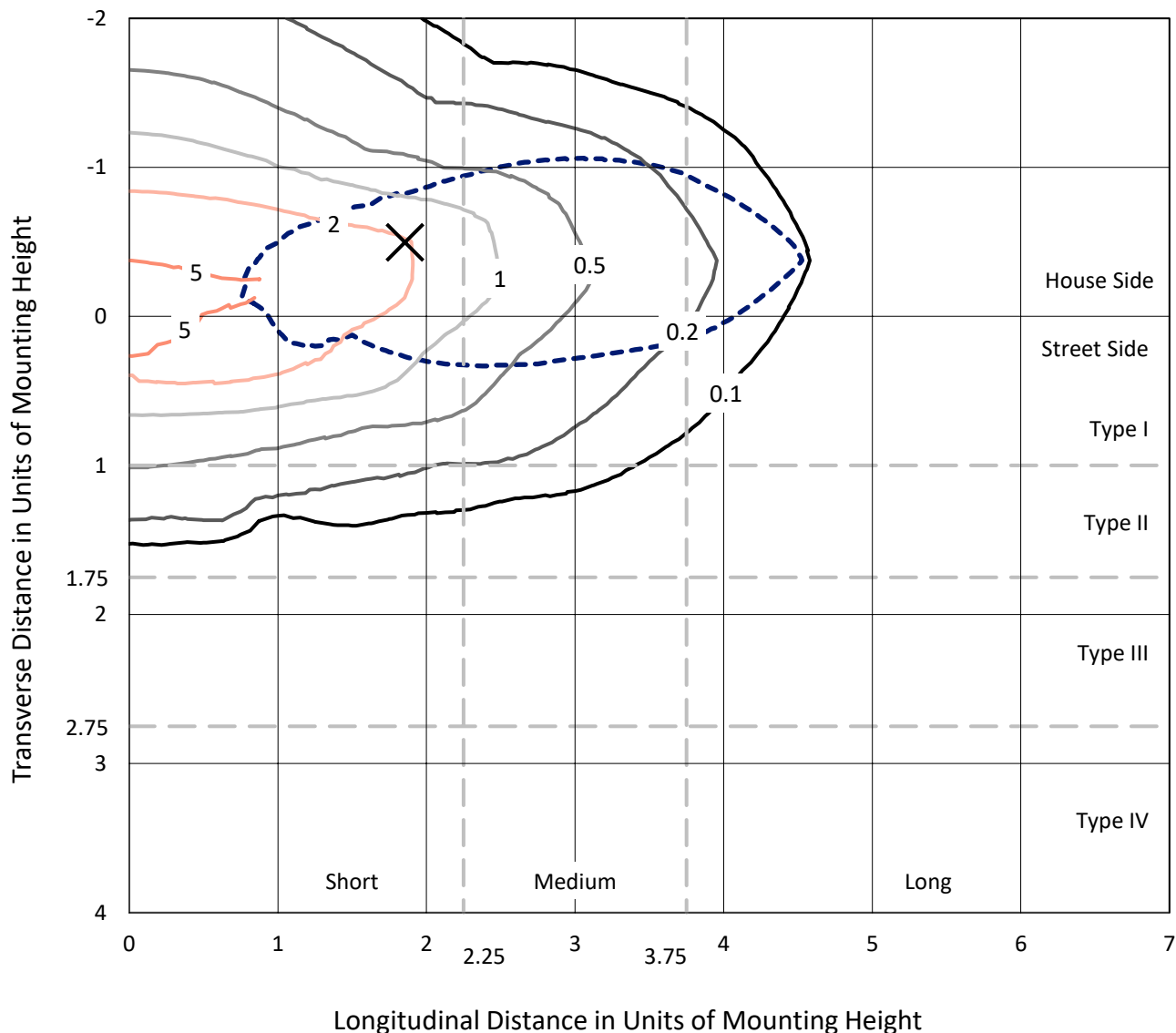
Input Watts (W): 212.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

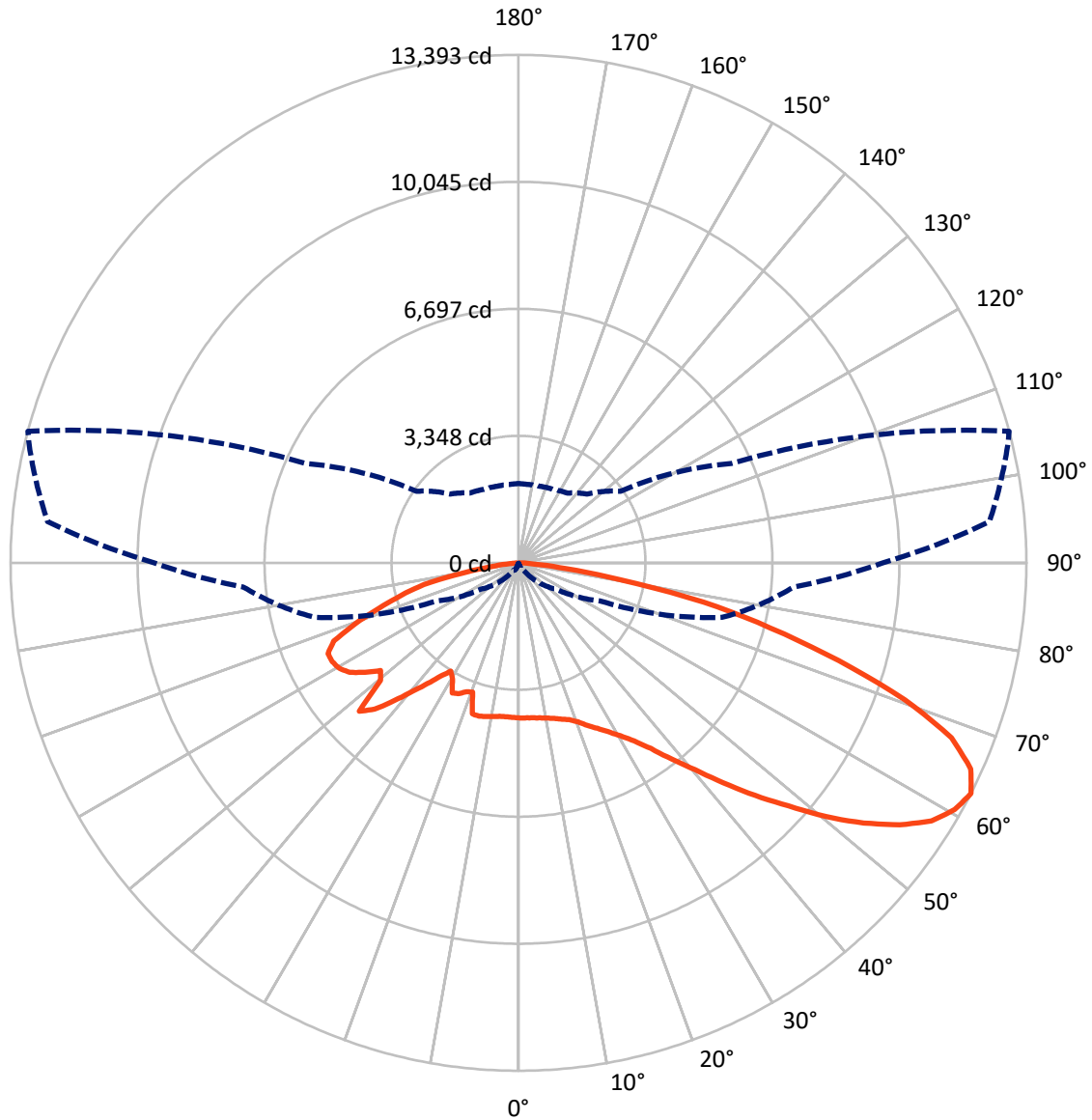
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.5 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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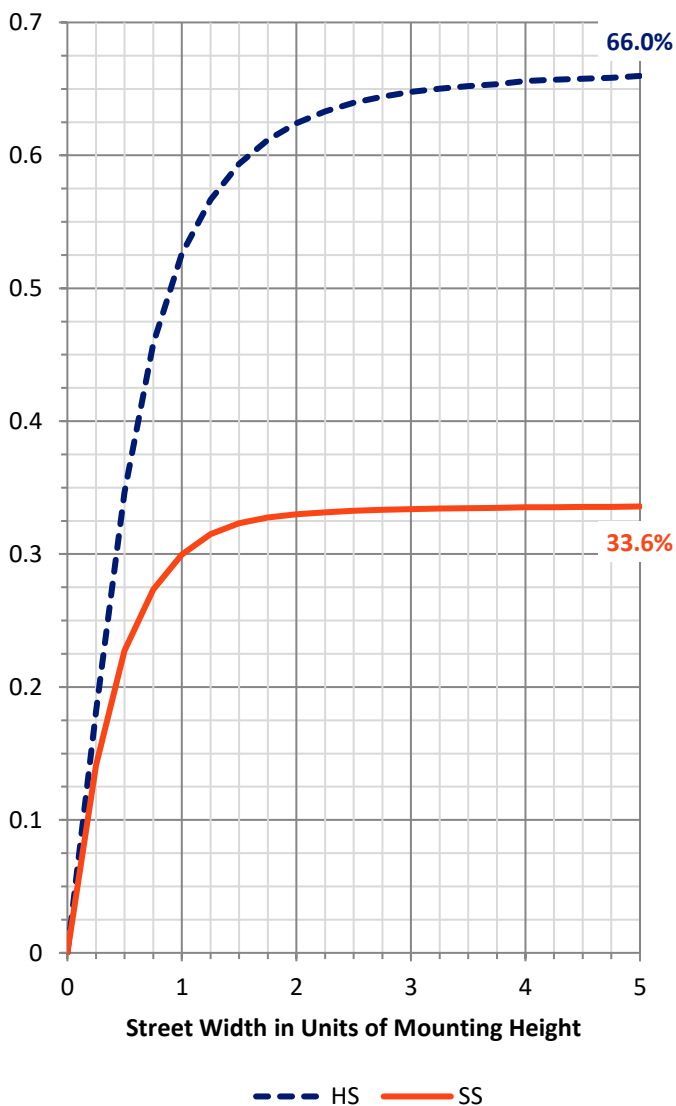
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	11440.7	0.0	11440.7
	% Fixture	66.5	0.0	66.5
Street Side	Lumens	5753.3	0.0	5753.3
	% Fixture	33.5	0.0	33.5
Total	Lumens	17194.0	0.0	17194.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	390.3	2.3
10°-20°	1102.3	6.4
20°-30°	1553.5	9.0
30°-40°	2110.7	12.3
40°-50°	2871.4	16.7
50°-60°	3401.7	19.8
60°-70°	3335.7	19.4
70°-80°	2103.9	12.2
80°-90°	324.5	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°	17194.0	100.0
0°-180°	17194.0	100.0

Coefficient of Utilization

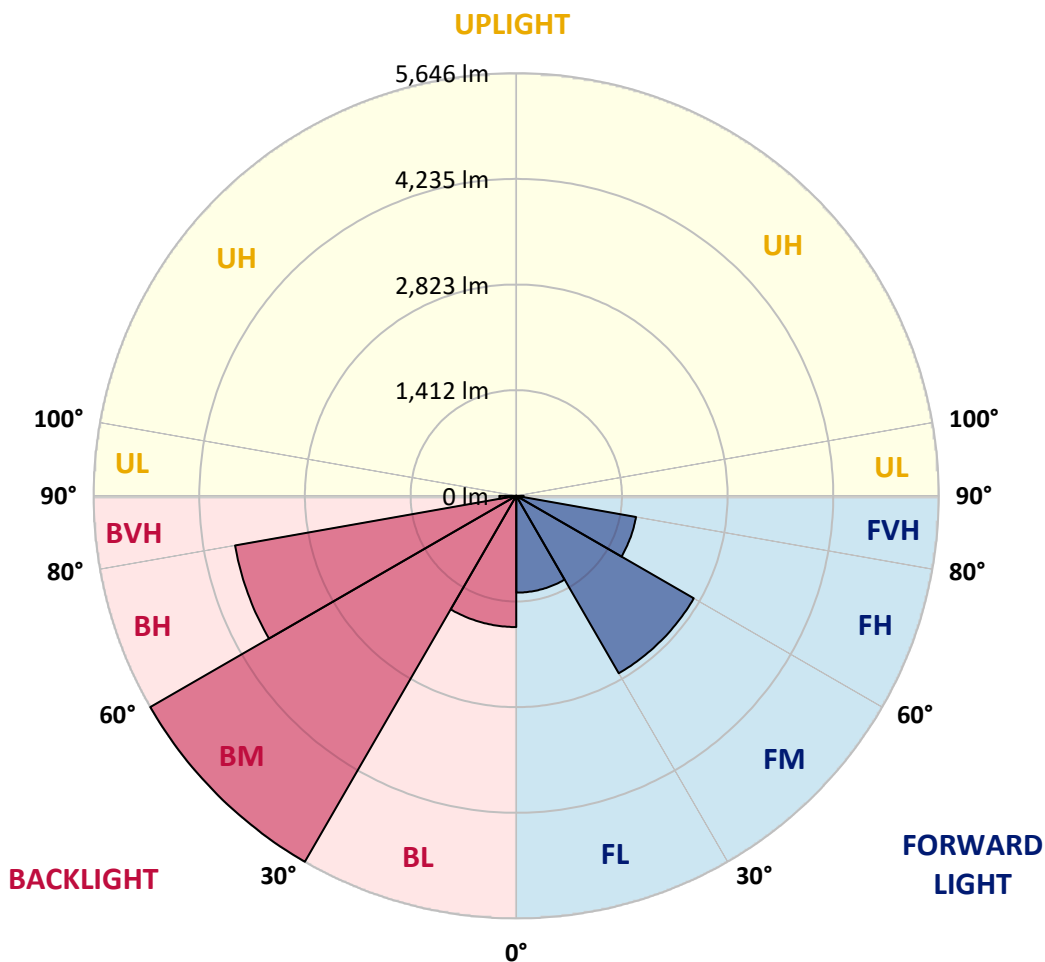


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1293.3	7.5			
FM	(30°-60°)	2737.7	15.9			
FH	(60°-80°)	1624.4	9.4			G1/1800
FVH	(80°-90°)	97.9	0.6			G1/100
BL	(0°-30°)	1752.8	10.2	B3/2500		
BM	(30°-60°)	5646.0	32.8	B4/8500		
BH	(60°-80°)	3815.2	22.2	B4/5000		G4/5000
BVH	(80°-90°)	226.6	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°	4090.2	4090.2	4090.2	4090.2	4090.2	4090.2	4090.2	4090.2	4090.2	4090.2	4090.2
2.5°	4092.9	4060.9	4083.8	4118.5	4066.4	4096.6	4046.3	4087.4	4077.4	4080.1	4099.3
5°	4060.9	4027.2	4054.6	4100.2	4049.1	4082.9	4041.8	4076.5	4072.8	4085.6	4101.1
7.5°	4030.8	3998.8	4027.2	4057.3	4030.8	4063.7	4032.6	4075.6	4078.3	4106.6	4119.4
10°	3998.8	3966.9	3994.3	4029.0	4007.1	4048.2	4035.4	4087.4	4107.5	4145.0	4155.9
12.5°	3928.5	3900.2	3923.0	3963.2	3966.9	4027.2	4035.4	4115.8	4140.4	4189.7	4206.2
15°	3505.6	3536.7	3658.1	3775.1	3825.3	3936.7	3997.9	4141.3	4176.0	4246.4	4271.9
17.5°	2836.1	2777.6	2588.6	2637.9	2915.6	3290.0	3431.6	3787.8	4164.2	4317.6	4350.5
20°	1676.1	1795.7	2165.7	2278.9	2381.2	2784.0	3259.9	3471.8	3616.1	4161.4	4458.3
22.5°	1382.0	1390.2	1655.1	2177.5	2292.6	2450.6	2818.7	3516.6	3665.4	3774.1	4104.8
25°	1281.5	1289.7	1335.4	1739.1	2229.6	2412.3	2573.9	3214.2	3792.4	3926.7	4185.2
27.5°	1201.1	1212.1	1254.1	1367.4	2078.9	2401.3	2605.9	2850.7	3849.0	4107.5	4349.6
30°	1140.8	1145.4	1188.3	1297.9	1572.0	2404.1	2652.5	2913.7	3525.7	4336.8	4579.8
32.5°	1086.0	1088.8	1133.5	1240.4	1405.7	2226.9	2722.8	3045.3	3366.8	4525.0	4895.8
35°	1044.0	1042.2	1082.4	1187.4	1351.8	1705.3	2801.4	3203.3	3620.7	4346.8	5367.1
37.5°	1003.8	1001.1	1035.8	1132.6	1304.3	1596.6	2710.0	3393.3	3985.1	4482.0	5328.7
40°	972.8	967.3	996.5	1083.3	1255.0	1569.2	2134.6	3594.2	4385.2	5178.9	5651.2
42.5°	945.4	941.7	966.4	1035.8	1204.8	1536.3	1989.4	3702.9	4883.0	5984.6	6485.1
45°	904.3	909.7	937.1	1003.8	1150.9	1489.7	2004.0	2974.0	5410.0	6683.3	7316.3
47.5°	886.9	886.0	903.3	966.4	1104.3	1424.9	1993.9	2727.4	5741.6	7414.9	8130.1
50°	859.5	854.9	745.3	922.5	1056.8	1344.5	1951.9	2798.6	4778.0	8132.9	8877.3
52.5°	808.4	718.8	652.2	891.5	1008.4	1256.8	1857.8	2829.7	4613.6	8005.0	9519.4
55°	429.3	478.6	617.5	847.6	951.8	1178.3	1719.9	2807.8	4968.9	6401.1	8837.1
57.5°	380.9	379.1	392.8	669.5	496.0	1092.4	1553.7	2707.3	5305.0	6693.3	9002.4
60°	30.1	31.1	36.5	222.9	263.1	769.1	1374.7	2583.1	5483.1	7038.6	9403.4
62.5°	14.6	16.4	21.9	199.1	240.2	699.7	1213.0	2371.2	5558.0	7288.0	9601.6
65°	3.7	4.6	10.0	175.4	209.2	622.9	1050.4	2122.7	5564.4	7298.0	9761.4
67.5°	2.7	4.6	10.0	158.9	190.9	555.3	907.9	1949.2	5292.2	7260.6	9681.1
70°	2.7	4.6	10.0	142.5	172.6	481.4	781.9	1779.3	4597.1	7120.8	9408.0
72.5°	2.7	5.5	10.0	125.1	151.6	408.3	664.0	1592.0	3858.2	6537.2	8799.6
75°	2.7	5.5	11.0	101.4	129.7	325.2	545.3	1363.7	3208.8	5668.5	7791.2
77.5°	2.7	5.5	11.0	78.6	105.0	243.0	412.9	1080.5	2560.2	4180.6	5474.0
80°	2.7	5.5	11.0	55.7	85.9	170.8	300.5	737.1	1527.2	2197.6	2787.7
82.5°	2.7	5.5	11.0	40.2	62.1	123.3	185.4	363.5	728.9	1055.0	1323.5
85°	1.8	4.6	10.0	26.5	32.9	74.9	110.5	161.7	218.3	288.6	390.0
87.5°	1.8	2.7	6.4	10.0	13.7	26.5	41.1	36.5	41.1	85.9	123.3
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°	4090.2	4090.2	4090.2	4090.2	4090.2	4090.2	4090.2	4090.2	4090.2	4090.2	4090.2
2.5°	4096.6	4092.9	4093.8	4113.9	4096.6	4100.2	4070.1	4130.4	4124.9	4116.7	4140.4
5°	4101.1	4099.3	4106.6	4124.0	4097.5	4102.1	4073.7	4144.1	4126.7	4124.0	4152.3
7.5°	4124.0	4121.2	4128.5	4136.8	4107.5	4107.5	4082.9	4138.6	4128.5	4110.3	4142.2
10°	4165.1	4155.0	4162.3	4166.9	4122.1	4120.3	4074.6	4140.4	4114.8	4105.7	4146.8
12.5°	4222.6	4199.8	4210.7	4203.4	4144.1	4133.1	4071.9	4114.8	4082.9	4077.4	4114.8
15°	4300.3	4270.1	4278.3	4264.6	4189.7	4157.8	4059.1	4077.4	4026.2	4021.7	4049.1
17.5°	4372.4	4354.1	4349.6	4349.6	4261.9	4182.4	4047.2	4021.7	3954.1	3949.5	3963.2
20°	4503.0	4478.4	4475.6	4453.7	4324.0	4202.5	4028.1	3949.5	3849.0	3826.2	3851.8
22.5°	4545.0	4664.7	4656.5	4559.7	4376.1	4219.0	3988.8	3859.1	3721.2	3677.3	3690.1
25°	4670.2	4850.1	4835.5	4694.8	4429.0	4228.1	3941.3	3759.5	3569.5	3492.8	3495.6
27.5°	4868.4	5052.0	5041.9	4839.2	4494.8	4230.8	3888.3	3654.5	3418.8	3318.4	3326.6
30°	5120.5	5305.9	5291.3	4999.9	4594.4	4236.3	3848.1	3528.4	3280.9	3172.2	3170.4
32.5°	5471.2	5639.3	5596.4	5214.6	4714.0	4259.2	3795.2	3408.8	3154.9	3040.7	3031.6
35°	6001.0	6063.1	6010.1	5470.3	4841.0	4273.8	3710.2	3291.9	3037.9	2925.6	2917.4
37.5°	6717.1	6640.4	6569.1	5758.0	4972.5	4270.1	3602.4	3178.6	2937.5	2830.6	2830.6
40°	6787.4	7303.5	7172.0	6061.3	5091.3	4250.0	3500.1	3068.1	2856.2	2769.4	2783.1
42.5°	7117.2	8115.5	7931.0	6354.5	5177.1	4191.6	3390.5	2967.6	2780.4	2710.0	2715.5
45°	7927.3	8854.4	8746.7	6637.6	5223.7	4088.4	3263.6	2869.0	2695.4	2639.7	2650.7
47.5°	8798.7	9733.1	9575.1	6898.9	5198.1	3935.8	3128.4	2778.5	2606.8	2571.2	2591.3
50°	9622.6	10657.5	10525.9	7082.5	5084.9	3722.1	2984.1	2682.6	2537.4	2509.1	2519.1
52.5°	10431.0	11496.9	11398.2	7182.0	4858.3	3498.3	2850.7	2591.3	2472.6	2436.9	2450.6
55°	11097.7	12292.5	12196.5	7172.0	4517.6	3264.5	2718.3	2492.7	2406.8	2374.8	2385.8
57.5°	11618.4	12911.7	12843.2	7019.4	4121.2	3049.8	2568.5	2395.8	2320.0	2291.7	2300.8
60°	12084.2	13304.5	13215.9	6682.4	3701.1	2813.3	2414.1	2280.7	2217.7	2194.9	2209.5
62.5°	12466.0	13312.7	13393.1	6194.6	3289.1	2563.0	2242.4	2139.2	2093.5	2079.8	2088.9
65°	12563.7	13067.9	13107.2	5591.8	2871.7	2314.5	2036.0	1968.4	1949.2	1941.0	1959.2
67.5°	12428.5	12551.9	12318.0	5082.1	2490.8	2033.2	1813.1	1771.1	1782.9	1784.8	1808.5
70°	12079.6	11170.8	10810.0	4655.6	2135.5	1721.7	1568.3	1554.6	1586.6	1613.1	1630.4
72.5°	11190.0	9171.4	8828.0	4052.7	1683.4	1318.0	1234.9	1278.8	1267.8	1279.7	1310.7
75°	9633.6	7078.8	6866.0	3298.3	1282.4	958.1	846.7	851.3	865.0	925.3	958.1
77.5°	6862.3	5091.3	4996.3	2530.1	849.5	563.6	582.7	647.6	666.8	668.6	691.4
80°	3636.2	2837.9	2709.1	1490.7	561.7	402.8	438.4	466.7	492.3	518.8	525.2
82.5°	1638.6	1283.3	1247.7	740.8	356.2	310.6	318.8	367.2	388.2	392.8	397.3
85°	636.6	443.0	422.0	307.8	233.8	210.1	232.9	282.2	302.3	293.2	290.5
87.5°	169.9	104.1	95.0	103.2	109.6	116.0	132.4	150.7	172.6	166.2	160.8
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)