

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: P591095

Luminaire Tested: **CTN-CA10-210-722-U-T1-SSS-HM-EX120**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591095
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-CA10-210-722-U-T1-SSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE, 120D FIELD INSTALLED SHIELD ON STREET SIDE
Light Source: (10) 2200K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16549 lumens
Efficiency: N/A
Efficacy: 77.7 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type I - Short
BUG Rating: B4 - U0 - G4

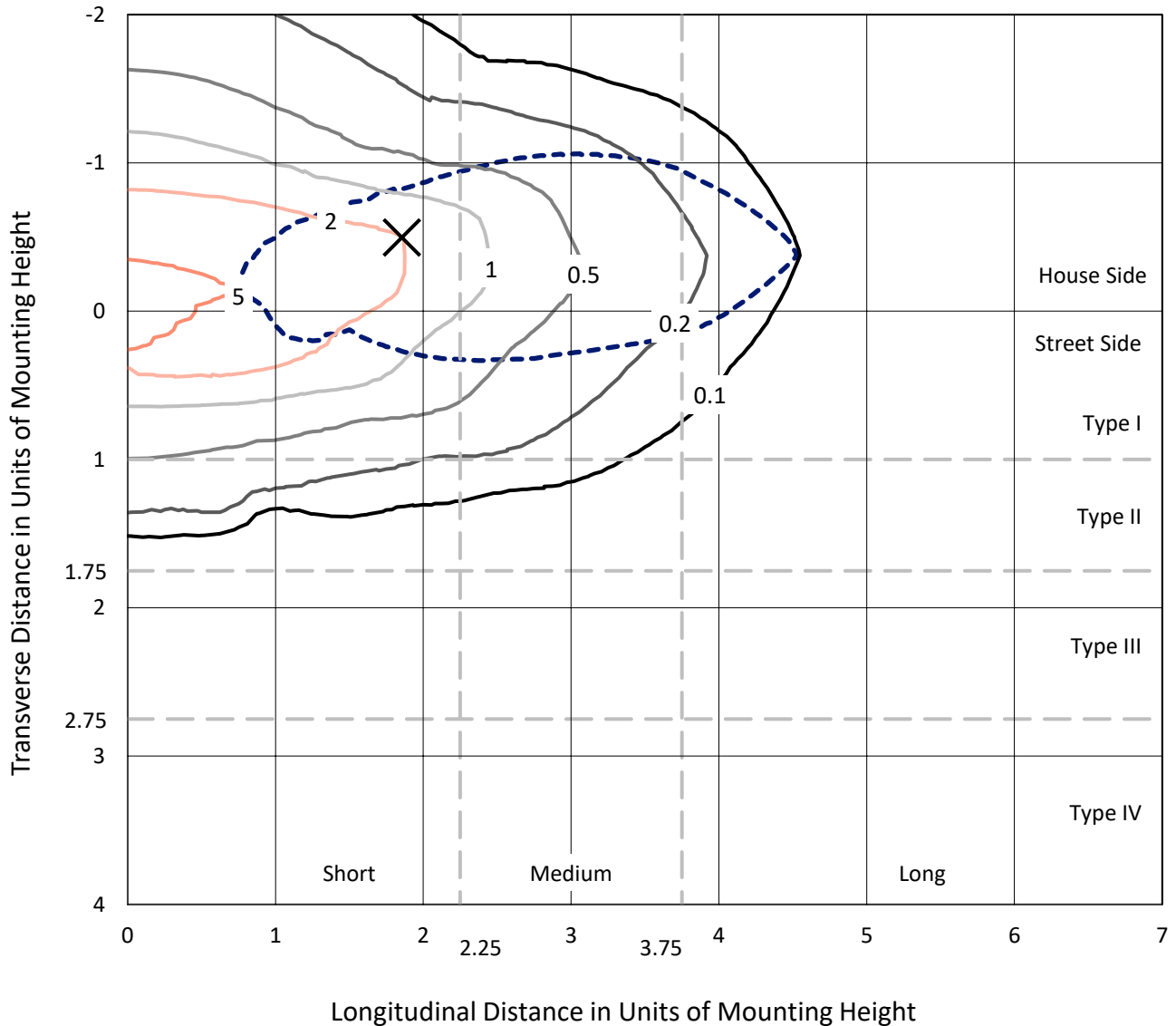
Input Watts (W): 212.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

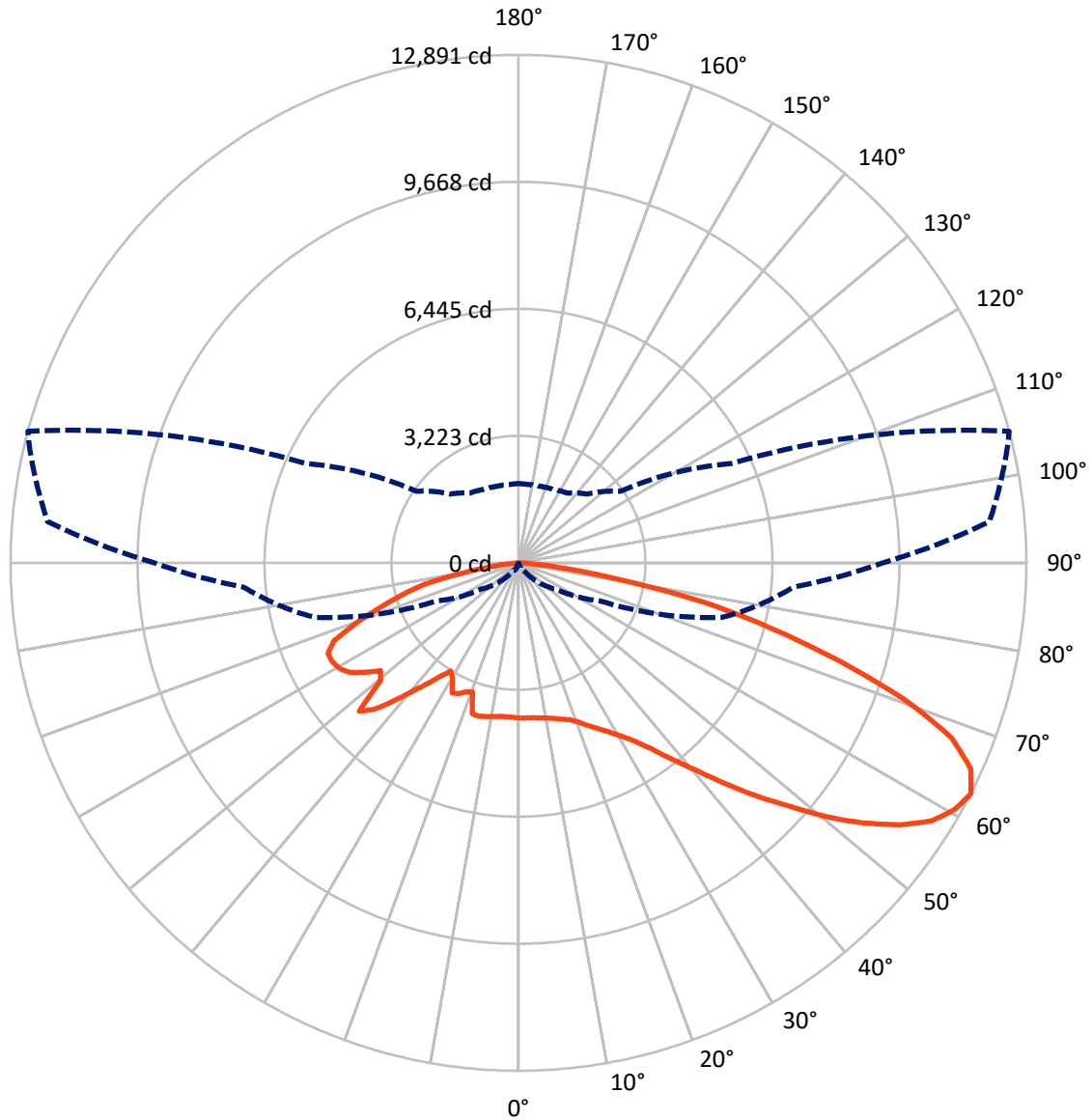
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.3 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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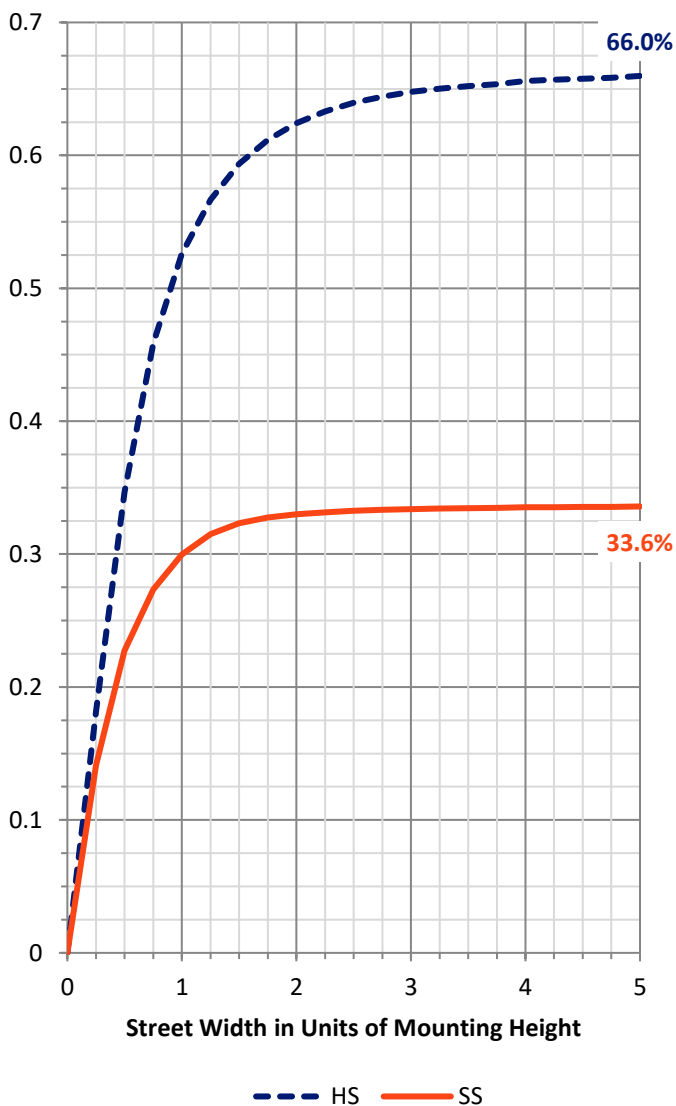
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	11011.5	0.0	11011.5
	% Fixture	66.5	0.0	66.5
Street Side	Lumens	5537.5	0.0	5537.5
	% Fixture	33.5	0.0	33.5
Total	Lumens	16549.0	0.0	16549.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	375.6	2.3
10°-20°	1061.0	6.4
20°-30°	1495.2	9.0
30°-40°	2031.5	12.3
40°-50°	2763.6	16.7
50°-60°	3274.1	19.8
60°-70°	3210.6	19.4
70°-80°	2024.9	12.2
80°-90°	312.4	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°	16549.0	100.0
0°-180°	16549.0	100.0

Coefficient of Utilization

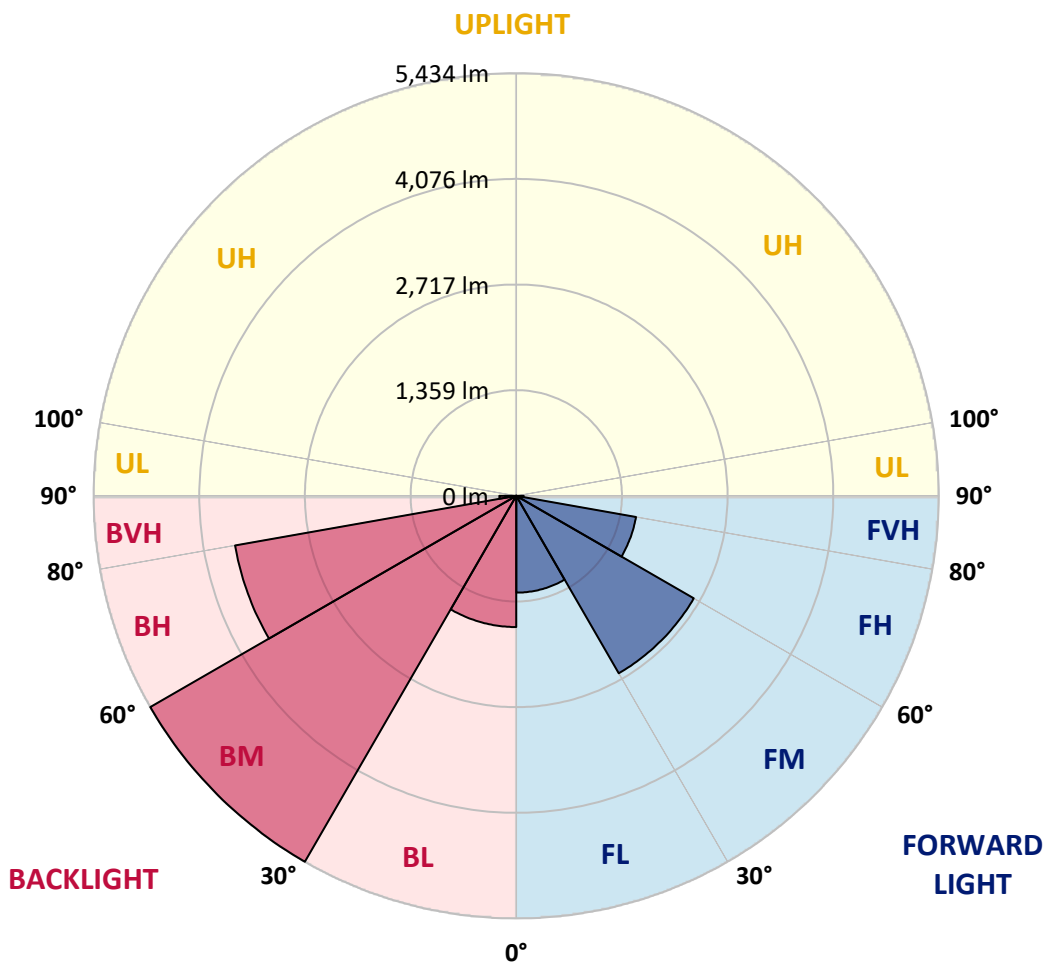


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1244.8	7.5			
FM (30°-60°)	2635.0	15.9			
FH (60°-80°)	1563.5	9.4			G1/1800
FVH (80°-90°)	94.2	0.6			G1/100
BL (0°-30°)	1687.1	10.2	B3/2500		
BM (30°-60°)	5434.2	32.8	B4/8500		
BH (60°-80°)	3672.0	22.2	B4/5000		G4/5000
BVH (80°-90°)	218.1	1.3			G2/225
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°	3936.7	3936.7	3936.7	3936.7	3936.7	3936.7	3936.7	3936.7	3936.7	3936.7	3936.7
2.5°	3939.4	3908.6	3930.6	3964.0	3913.9	3942.9	3894.5	3934.1	3924.4	3927.1	3945.5
5°	3908.6	3876.1	3902.5	3946.4	3897.2	3929.7	3890.1	3923.6	3920.0	3932.3	3947.3
7.5°	3879.6	3848.8	3876.1	3905.1	3879.6	3911.2	3881.4	3922.7	3925.3	3952.6	3964.9
10°	3848.8	3818.1	3844.4	3877.8	3856.7	3896.3	3884.0	3934.1	3953.4	3989.5	4000.0
12.5°	3781.1	3753.9	3775.9	3814.5	3818.1	3876.1	3884.0	3961.4	3985.1	4032.6	4048.4
15°	3374.1	3404.0	3520.9	3633.4	3681.8	3789.0	3847.9	3986.0	4019.4	4087.1	4111.7
17.5°	2729.7	2673.4	2491.5	2538.9	2806.2	3166.6	3302.9	3645.7	4008.0	4155.6	4187.3
20°	1613.2	1728.4	2084.4	2193.4	2291.9	2679.6	3137.6	3341.6	3480.5	4005.3	4291.0
22.5°	1330.1	1338.0	1593.0	2095.8	2206.6	2358.7	2713.0	3384.6	3527.9	3632.6	3950.8
25°	1233.4	1241.3	1285.3	1673.9	2146.0	2321.8	2477.4	3093.7	3650.1	3779.4	4028.2
27.5°	1156.1	1166.6	1207.0	1316.1	2000.9	2311.2	2508.2	2743.8	3704.7	3953.4	4186.4
30°	1098.0	1102.4	1143.7	1249.2	1513.0	2313.9	2553.0	2804.4	3393.4	4174.1	4408.0
32.5°	1045.3	1047.9	1091.0	1193.9	1353.0	2143.3	2620.7	2931.0	3240.5	4355.2	4712.1
35°	1004.8	1003.1	1041.8	1142.9	1301.1	1641.3	2696.3	3083.1	3484.9	4183.8	5165.8
37.5°	966.2	963.5	996.9	1090.1	1255.4	1536.7	2608.4	3266.0	3835.6	4313.9	5128.8
40°	936.3	931.0	959.1	1042.6	1207.9	1510.3	2054.5	3459.4	4220.7	4984.7	5439.2
42.5°	909.9	906.4	930.1	996.9	1159.6	1478.7	1914.7	3564.0	4699.8	5760.1	6241.8
45°	870.3	875.6	902.0	966.2	1107.7	1433.9	1928.8	2862.4	5207.1	6432.6	7041.8
47.5°	853.6	852.8	869.5	930.1	1062.9	1371.4	1919.1	2625.1	5526.2	7136.8	7825.1
50°	827.3	822.9	717.4	887.9	1017.2	1294.1	1878.7	2693.7	4598.7	7827.8	8544.3
52.5°	778.0	691.9	627.7	858.0	970.6	1209.7	1788.1	2723.5	4440.5	7704.7	9162.3
55°	413.2	460.7	594.3	815.8	916.1	1134.1	1655.4	2702.4	4782.5	6160.9	8505.6
57.5°	366.6	364.8	378.0	644.4	477.4	1051.4	1495.4	2605.7	5106.0	6442.3	8664.7
60°	29.0	29.9	35.2	214.5	253.2	740.2	1323.1	2486.2	5277.4	6774.6	9050.6
62.5°	14.1	15.8	21.1	191.7	231.2	673.4	1167.5	2282.2	5349.5	7014.6	9241.4
65°	3.5	4.4	9.7	168.8	201.3	599.6	1011.0	2043.1	5355.7	7024.2	9395.3
67.5°	2.6	4.4	9.7	153.0	183.7	534.5	873.9	1876.1	5093.7	6988.2	9317.9
70°	2.6	4.4	9.7	137.1	166.2	463.3	752.5	1712.5	4424.7	6853.7	9055.0
72.5°	2.6	5.3	9.7	120.4	145.9	393.0	639.1	1532.3	3713.4	6291.9	8469.5
75°	2.6	5.3	10.5	97.6	124.8	313.0	524.8	1312.5	3088.4	5455.9	7499.0
77.5°	2.6	5.3	10.5	75.6	101.1	233.8	397.4	1040.0	2464.2	4023.8	5268.6
80°	2.6	5.3	10.5	53.6	82.6	164.4	289.2	709.5	1469.9	2115.2	2683.1
82.5°	2.6	5.3	10.5	38.7	59.8	118.7	178.5	349.9	701.5	1015.4	1273.9
85°	1.8	4.4	9.7	25.5	31.6	72.1	106.4	155.6	210.1	277.8	375.4
87.5°	1.8	2.6	6.2	9.7	13.2	25.5	39.6	35.2	39.6	82.6	118.7
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°	3936.7	3936.7	3936.7	3936.7	3936.7	3936.7	3936.7	3936.7	3936.7	3936.7	3936.7
2.5°	3942.9	3939.4	3940.3	3959.6	3942.9	3946.4	3917.4	3975.4	3970.1	3962.2	3985.1
5°	3947.3	3945.5	3952.6	3969.3	3943.8	3948.2	3920.9	3988.6	3971.9	3969.3	3996.5
7.5°	3969.3	3966.6	3973.7	3981.6	3953.4	3953.4	3929.7	3983.3	3973.7	3956.1	3986.9
10°	4008.8	3999.2	4006.2	4010.6	3967.5	3965.8	3921.8	3985.1	3960.5	3951.7	3991.2
12.5°	4064.2	4042.2	4052.8	4045.8	3988.6	3978.1	3919.2	3960.5	3929.7	3924.4	3960.5
15°	4138.9	4109.9	4117.8	4104.7	4032.6	4001.8	3906.9	3924.4	3875.2	3870.8	3897.2
17.5°	4208.4	4190.8	4186.4	4186.4	4102.0	4025.5	3895.4	3870.8	3805.8	3801.4	3814.5
20°	4334.1	4310.4	4307.7	4286.6	4161.8	4044.9	3877.0	3801.4	3704.7	3682.7	3707.3
22.5°	4374.5	4489.7	4481.8	4388.6	4211.9	4060.7	3839.2	3714.3	3581.6	3539.4	3551.7
25°	4495.0	4668.2	4654.1	4518.7	4262.9	4069.5	3793.4	3618.5	3435.6	3361.8	3364.4
27.5°	4685.8	4862.5	4852.8	4657.6	4326.2	4072.1	3742.5	3517.4	3290.6	3193.9	3201.8
30°	4928.4	5106.9	5092.8	4812.4	4422.0	4077.4	3703.8	3396.1	3157.8	3053.2	3051.5
32.5°	5266.0	5427.7	5386.4	5019.0	4537.2	4099.4	3652.8	3280.9	3036.5	2926.6	2917.8
35°	5775.9	5835.7	5784.7	5265.1	4659.4	4113.4	3571.0	3168.4	2924.0	2815.9	2807.9
37.5°	6465.1	6391.3	6322.7	5542.0	4786.0	4109.9	3467.3	3059.4	2827.3	2724.4	2724.4
40°	6532.8	7029.5	6902.9	5833.9	4900.3	4090.6	3368.8	2953.0	2749.0	2665.5	2678.7
42.5°	6850.2	7811.1	7633.5	6116.1	4982.9	4034.3	3263.3	2856.3	2676.1	2608.4	2613.7
45°	7630.0	8522.3	8418.5	6388.6	5027.7	3935.0	3141.1	2761.3	2594.3	2540.7	2551.2
47.5°	8468.7	9368.0	9215.9	6640.1	5003.1	3788.2	3011.0	2674.3	2509.0	2474.7	2494.1
50°	9261.6	10257.7	10131.1	6816.8	4894.1	3582.5	2872.1	2582.0	2442.2	2415.0	2424.6
52.5°	10039.7	11065.6	10970.7	6912.6	4676.1	3367.1	2743.8	2494.1	2379.8	2345.5	2358.7
55°	10681.4	11831.3	11739.0	6902.9	4348.2	3142.0	2616.3	2399.1	2316.5	2285.7	2296.3
57.5°	11182.5	12427.4	12361.4	6756.1	3966.6	2935.4	2472.1	2306.0	2233.0	2205.7	2214.5
60°	11630.9	12805.4	12720.1	6431.7	3562.2	2707.7	2323.5	2195.2	2134.5	2112.5	2126.6
62.5°	11998.4	12813.3	12890.7	5962.3	3165.7	2466.8	2158.3	2058.9	2015.0	2001.8	2010.6
65°	12092.4	12577.7	12615.5	5382.0	2764.0	2227.7	1959.6	1894.5	1876.1	1868.2	1885.7
67.5°	11962.3	12081.0	11855.9	4891.5	2397.4	1956.9	1745.1	1704.6	1716.1	1717.8	1740.7
70°	11626.5	10751.8	10404.5	4480.9	2055.4	1657.2	1509.5	1496.3	1527.0	1552.5	1569.2
72.5°	10770.2	8827.3	8496.8	3900.7	1620.2	1268.6	1188.6	1230.8	1220.2	1231.7	1261.6
75°	9272.2	6813.3	6608.4	3174.5	1234.3	922.2	815.0	819.3	832.5	890.6	922.2
77.5°	6604.9	4900.3	4808.8	2435.2	817.6	542.4	560.9	623.3	641.8	643.5	665.5
80°	3499.8	2731.5	2607.5	1434.7	540.7	387.7	422.0	449.2	473.9	499.3	505.5
82.5°	1577.2	1235.2	1200.9	713.0	342.9	298.9	306.8	353.4	373.6	378.0	382.4
85°	612.8	426.4	406.2	296.3	225.1	202.2	224.2	271.7	291.0	282.2	279.6
87.5°	163.5	100.2	91.4	99.3	105.5	111.6	127.5	145.1	166.2	160.0	154.7
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)