

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: P591296

Luminaire Tested: **CTN-CA10-210-730-U-T4-SSS-HM-EX120**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591296
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-CA10-210-730-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: 18597 lumens
Efficiency: N/A
Efficacy: 87.4 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G3

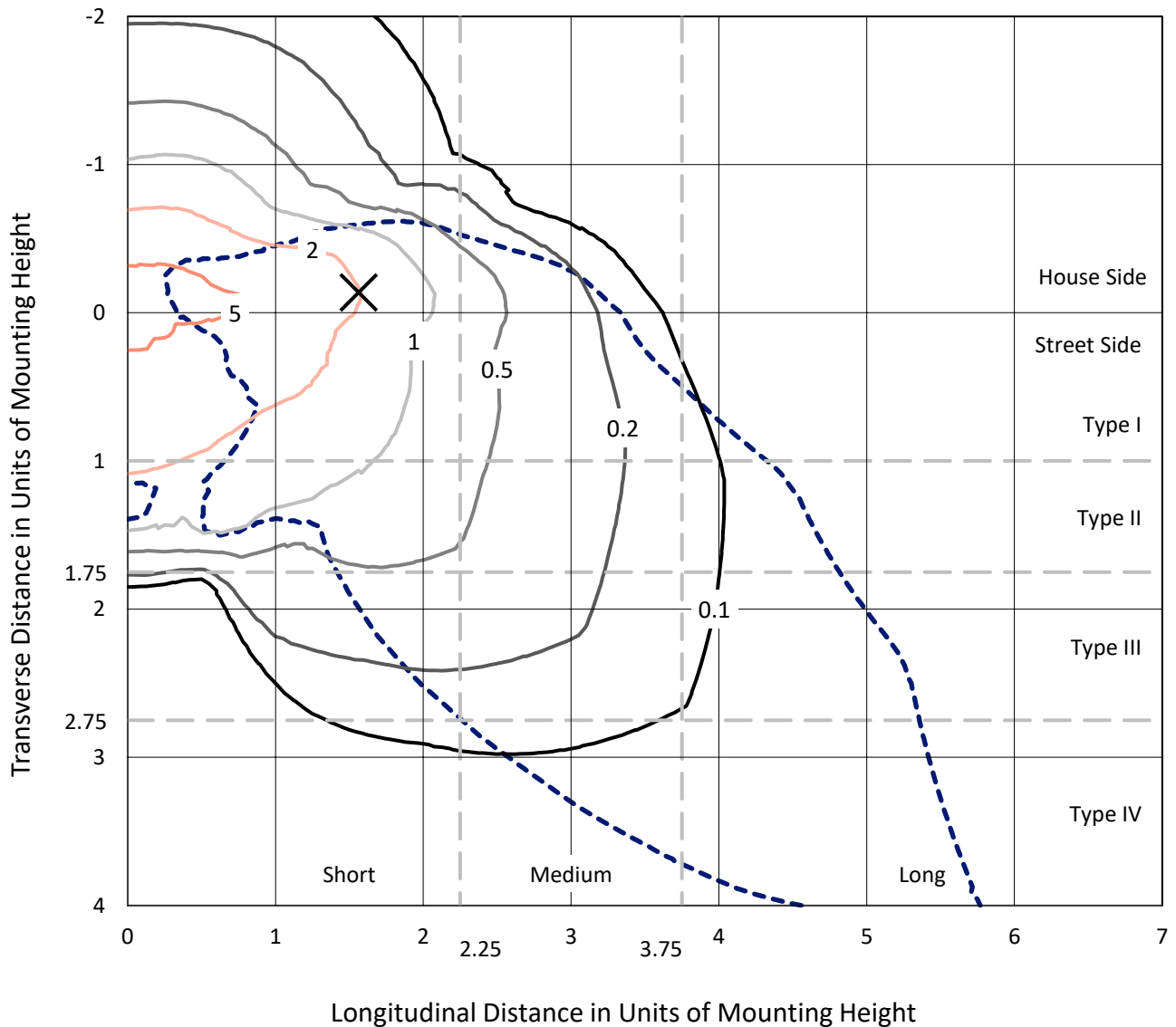
Input Watts (W): 212.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

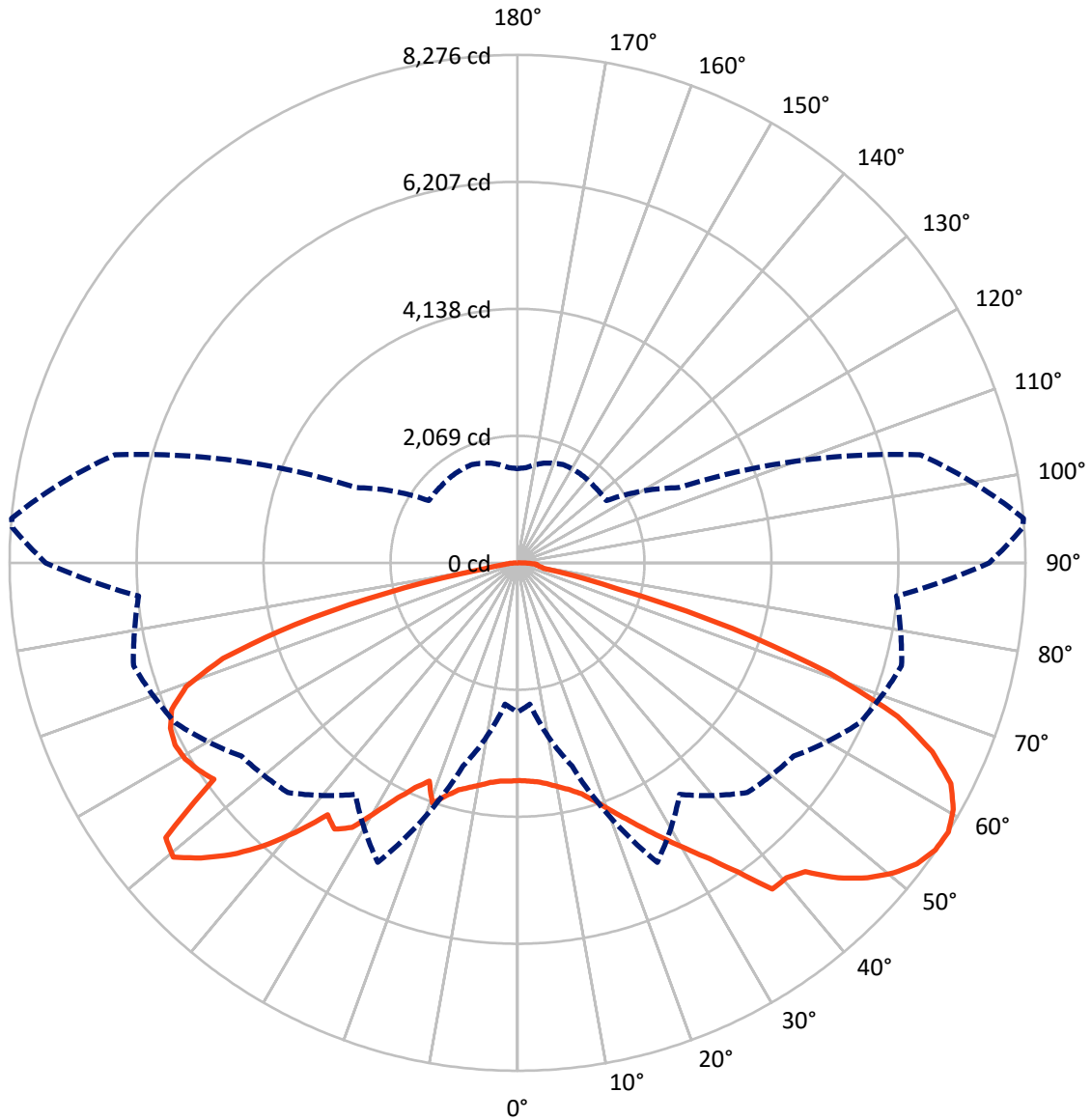
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6 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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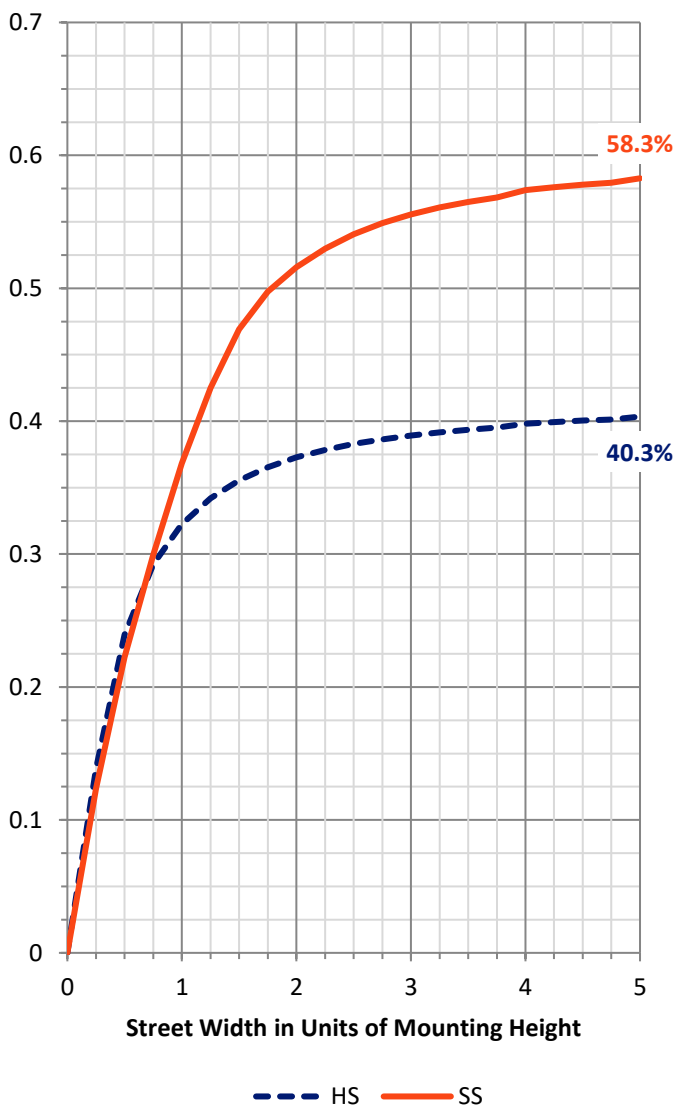
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7659.5	0.0	7659.5
	% Fixture	41.2	0.0	41.2
Street Side	Lumens	10937.5	0.0	10937.5
	% Fixture	58.8	0.0	58.8
Total	Lumens	18597.0	0.0	18597.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	346.5	1.9
10°-20°	1059.6	5.7
20°-30°	1674.3	9.0
30°-40°	2313.6	12.4
40°-50°	3119.5	16.8
50°-60°	3674.7	19.8
60°-70°	3282.9	17.7
70°-80°	2451.2	13.2
80°-90°	674.7	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°	18597.0	100.0
0°-180°	18597.0	100.0

Coefficient of Utilization



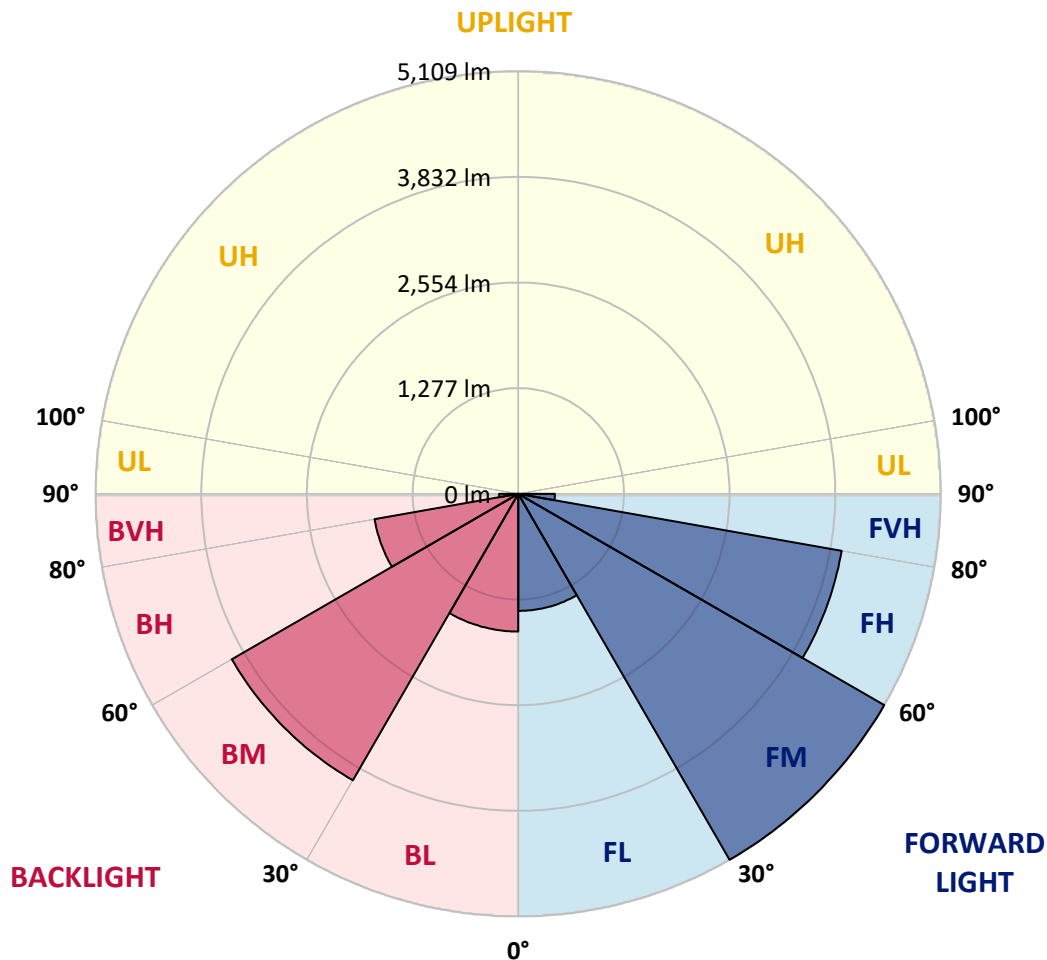
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1415.5	7.6			
FM (30°-60°)	5108.9	27.5			
FH (60°-80°)	3969.9	21.3			G2/5000
FVH (80°-90°)	443.2	2.4			G3/500
BL (0°-30°)	1664.9	9.0	B3/2500		
BM (30°-60°)	3998.9	21.5	B3/5000		
BH (60°-80°)	1764.2	9.5	B3/2500		G3/2500
BVH (80°-90°)	231.5	1.2			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3548.2	3548.2	3548.2	3548.2	3548.2	3548.2	3548.2	3548.2	3548.2	3548.2	3548.2
2.5°	3501.6	3479.3	3480.4	3511.1	3465.5	3498.4	3494.1	3545.0	3537.6	3557.7	3564.1
5°	3473.0	3453.9	3455.0	3494.1	3463.4	3493.1	3473.0	3519.6	3536.5	3567.2	3573.6
7.5°	3480.4	3463.4	3469.8	3506.9	3468.7	3498.4	3500.5	3543.9	3552.4	3605.4	3613.8
10°	3499.4	3481.4	3485.7	3515.3	3491.0	3543.9	3537.6	3594.8	3596.9	3671.0	3681.6
12.5°	3474.0	3461.3	3461.3	3498.4	3511.1	3564.1	3579.9	3639.3	3652.0	3737.8	3751.5
15°	3428.5	3407.3	3438.0	3493.1	3518.5	3599.0	3628.7	3717.6	3732.5	3821.4	3851.1
17.5°	3350.1	3338.5	3451.8	3468.7	3372.3	3433.8	3559.8	3808.7	3859.6	3964.4	4019.5
20°	3116.0	2984.7	2681.8	2736.9	3033.4	3254.8	3294.0	3413.7	3631.8	4154.0	4239.8
22.5°	2290.9	2404.3	2804.6	2837.5	2827.9	3011.2	3423.2	3538.6	3642.4	3834.1	4404.0
25°	2372.5	2366.1	2562.1	2978.3	2963.5	2998.5	3171.1	3732.5	3836.3	4026.9	4620.0
27.5°	2445.6	2450.9	2436.1	2827.9	3105.4	3141.4	3194.4	3577.8	4079.9	4298.0	4856.2
30°	2590.7	2568.4	2528.2	2527.1	3229.4	3282.3	3372.3	3500.5	4304.4	4650.7	5151.7
32.5°	2835.4	2809.9	2757.0	2673.3	2790.9	3428.5	3552.4	3715.5	3971.8	5083.9	5498.1
35°	3016.5	2998.5	2962.5	2904.2	2809.9	3501.6	3728.2	3944.3	4283.2	5264.0	5952.4
37.5°	3240.0	3214.5	3173.2	3101.2	3030.2	3001.6	3897.7	4203.8	4717.5	5142.2	6050.9
40°	3493.1	3478.3	3403.1	3309.9	3231.5	3152.0	4014.2	4542.7	5275.6	5688.7	5960.9
42.5°	3683.7	3672.1	3627.6	3552.4	3476.1	3425.3	3557.7	4959.0	5883.6	6217.2	6417.4
45°	3850.0	3837.3	3837.3	3817.2	3796.0	3800.2	3857.4	5257.6	6460.8	6668.4	6849.5
47.5°	3978.2	3955.9	3867.0	3885.0	3915.7	4007.8	4181.5	4571.3	6925.8	7051.8	7212.8
50°	4290.6	4256.7	3968.6	4035.4	4134.9	4283.2	4506.7	4997.1	6467.2	7379.1	7505.2
52.5°	4578.7	4422.0	3278.1	4256.7	4369.0	4588.3	4853.0	5457.8	5952.4	7273.2	7728.6
55°	4085.2	3925.2	3295.0	4663.5	4644.4	4920.8	5179.3	5835.9	6232.1	6075.3	7672.5
57.5°	2431.8	2311.1	3428.5	5385.8	4604.1	5292.6	5491.7	6159.0	6477.8	6197.1	7687.3
60°	1259.3	1323.9	1273.1	3187.0	3964.4	5455.7	5814.8	6470.4	6644.1	6288.2	7696.9
62.5°	169.5	121.8	50.8	2331.2	2817.3	4545.9	6220.4	6766.9	6765.9	6318.9	7630.1
65°	10.6	11.7	23.3	2319.5	3107.6	5393.2	6891.9	7006.3	6826.2	6264.9	7407.7
67.5°	4.2	5.3	21.2	2303.7	3353.3	5669.6	7682.0	7082.6	6832.6	6119.8	6919.4
70°	4.2	5.3	21.2	2145.8	3520.6	5718.4	7815.5	7054.0	6754.2	5762.9	6011.8
72.5°	5.3	6.4	19.1	1864.1	3418.9	5586.0	7597.3	6995.7	6473.5	5044.7	4667.7
75°	5.3	6.4	19.1	1506.1	3024.9	5296.8	7424.7	6508.5	5674.9	3769.5	3027.1
77.5°	4.2	5.3	19.1	1175.7	2521.8	4694.2	6735.2	5659.1	4487.6	2193.5	1195.8
80°	4.2	5.3	19.1	818.7	1921.3	3847.9	5486.4	4407.1	2524.0	627.0	336.8
82.5°	4.2	5.3	18.0	510.5	1358.9	2830.1	3749.4	2031.5	541.2	244.7	262.7
85°	4.2	4.2	13.8	250.0	868.5	1880.0	1868.3	340.0	215.0	158.9	199.1
87.5°	2.1	3.2	7.4	114.4	485.1	991.4	744.6	130.3	92.1	64.6	111.2
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°	3548.2	3548.2	3548.2	3548.2	3548.2	3548.2	3548.2	3548.2	3548.2	3548.2	3548.2
2.5°	3566.2	3560.9	3575.7	3613.8	3611.7	3640.3	3618.1	3661.5	3668.9	3659.4	3674.2
5°	3585.2	3587.4	3627.6	3667.8	3653.0	3699.6	3709.2	3773.8	3775.9	3767.4	3786.5
7.5°	3632.9	3640.3	3680.6	3728.2	3749.4	3788.6	3783.3	3867.0	3859.6	3855.3	3877.6
10°	3699.6	3713.4	3756.8	3832.0	3822.5	3882.9	3855.3	3911.5	3909.3	3900.9	3925.2
12.5°	3781.2	3794.9	3850.0	3922.0	3923.1	3927.3	3905.1	3933.7	3924.2	3904.0	3923.1
15°	3891.3	3907.2	3982.4	4035.4	3989.8	3978.2	3935.8	3919.9	3883.9	3831.0	3846.8
17.5°	4065.0	4077.7	4162.5	4192.1	4113.8	4067.1	3946.4	3856.4	3754.7	3680.6	3694.3
20°	4284.3	4295.9	4364.8	4357.4	4252.5	4138.1	3950.6	3798.1	3608.5	3463.4	3459.2
22.5°	4525.8	4533.2	4598.8	4533.2	4346.8	4180.5	3942.2	3708.1	3389.3	3201.8	3181.7
25°	4791.6	4798.0	4796.9	4650.7	4400.8	4156.1	3863.8	3557.7	3148.9	2948.7	2927.5
27.5°	5089.2	5090.3	4973.8	4741.8	4377.5	4066.1	3712.3	3287.6	2928.6	2754.9	2739.0
30°	5405.9	5403.8	5135.8	4750.3	4287.5	3895.6	3478.3	3032.4	2730.5	2575.9	2553.6
32.5°	5767.1	5749.1	5279.9	4720.6	4123.3	3650.9	3176.4	2818.4	2574.8	2397.9	2365.1
35°	6229.9	6185.5	5402.7	4617.9	3879.7	3320.4	2896.8	2632.0	2424.4	2244.3	2211.5
37.5°	6802.9	6745.7	5595.5	4472.8	3599.0	3047.2	2691.3	2506.0	2316.4	2110.9	2068.5
40°	6637.7	6747.9	5825.3	4316.1	3327.9	2829.0	2570.6	2445.6	2250.7	2023.0	1982.7
42.5°	6893.0	6879.2	6139.9	4130.7	3067.3	2658.5	2521.8	2427.6	2215.7	1984.9	1938.3
45°	7327.2	7324.0	6478.8	3950.6	2813.1	2521.8	2484.8	2378.9	2166.0	1937.2	1886.4
47.5°	7679.9	7669.3	6802.9	3752.6	2578.0	2414.9	2409.6	2280.4	2077.0	1864.1	1817.5
50°	7925.6	7941.5	6983.0	3561.9	2355.6	2304.7	2284.6	2141.6	1952.0	1776.2	1740.2
52.5°	8119.5	8149.1	7061.4	3543.9	2160.7	2162.8	2127.8	1997.6	1849.3	1707.4	1669.2
55°	8214.8	8260.3	6980.9	3427.4	1970.0	1982.7	1948.8	1866.2	1778.3	1648.0	1620.5
57.5°	8254.0	8276.2	6794.5	2898.9	1765.6	1763.5	1774.1	1765.6	1683.0	1554.8	1534.7
60°	8187.3	8157.6	6388.8	2203.0	1558.0	1567.5	1635.3	1626.9	1553.8	1456.3	1428.8
62.5°	7981.8	7923.5	5646.3	1629.0	1391.7	1469.0	1541.1	1516.7	1427.7	1338.8	1317.6
65°	7589.9	7425.7	4499.3	1272.0	1312.3	1418.2	1484.9	1448.9	1347.2	1242.4	1229.7
67.5°	6886.6	6681.1	2952.9	1140.7	1278.4	1374.8	1444.7	1384.3	1285.8	1172.5	1154.5
70°	5619.9	5394.3	1398.1	1063.4	1202.1	1297.5	1348.3	1286.9	1186.3	1072.9	1060.2
72.5°	3918.9	3662.6	753.1	979.7	1114.2	1196.8	1230.7	1155.5	1067.6	1017.8	1014.7
75°	1953.1	1669.2	683.2	893.9	1000.9	1072.9	1130.1	1078.2	1000.9	909.8	886.5
77.5°	520.0	447.0	642.9	798.6	910.9	992.4	1025.3	971.2	882.3	805.0	791.2
80°	361.2	368.6	600.5	662.0	794.4	867.4	898.2	829.3	784.8	708.6	687.4
82.5°	306.1	322.0	485.1	498.9	631.3	709.6	763.6	752.0	688.4	627.0	618.5
85°	287.0	305.0	310.3	345.3	452.3	544.4	637.6	642.9	600.5	522.2	496.7
87.5°	165.2	163.1	149.3	175.8	247.8	301.9	365.4	348.5	283.9	245.7	240.4
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)