

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: STREETWORKS

Report Number: P510651

Luminaire Tested: **CST-CA6-230-727-U-T4**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510651
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-12)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA6-230-727-U-T4
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (6) 2700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28788 lumens
Efficiency: N/A
Efficacy: 126.4 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

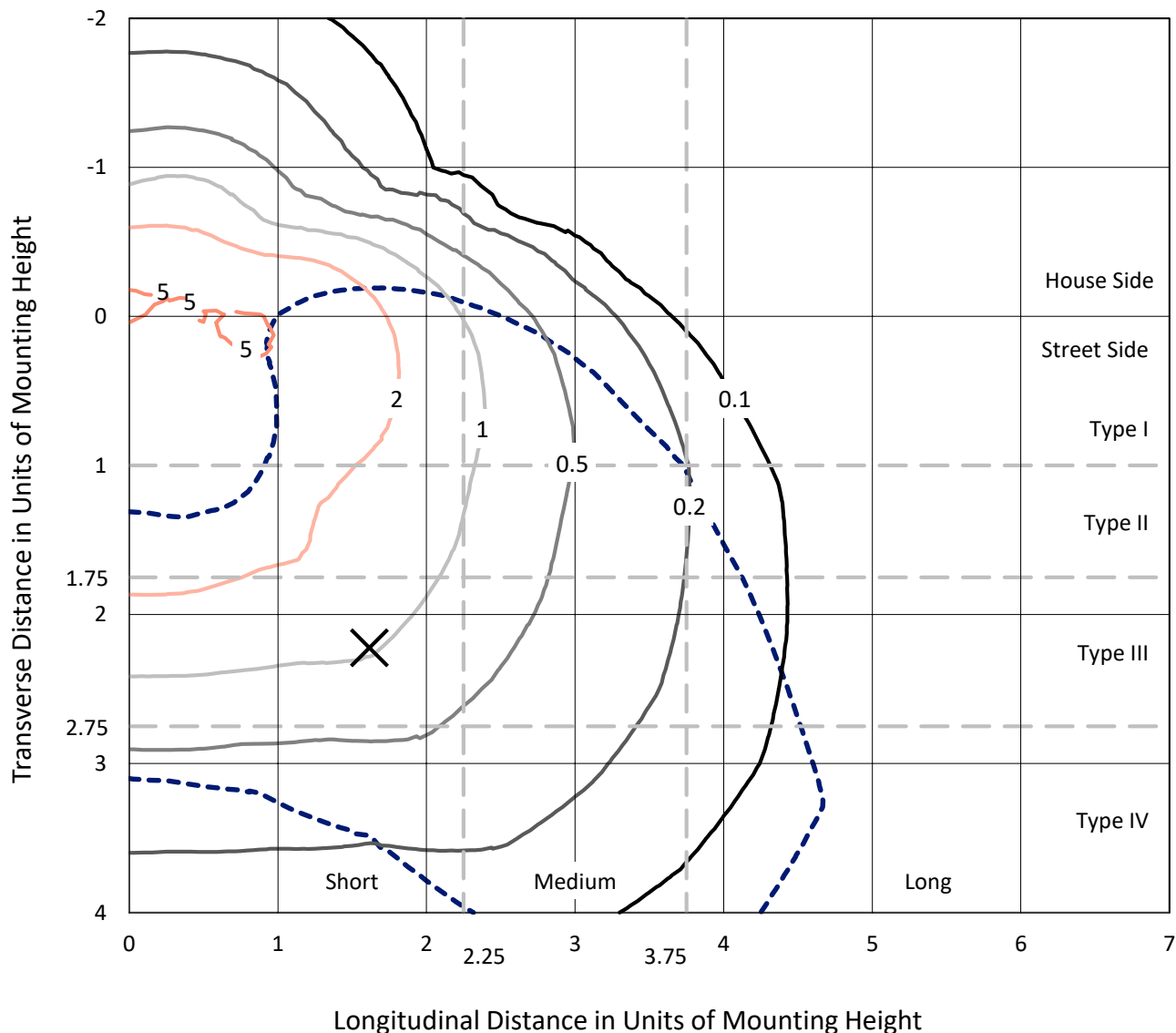
Input Watts (W): 227.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P510651
 CATALOG NUMBER: CST-CA6-230-727-U-T4

Iso-Footcandle Lines of Horizontal Illumination

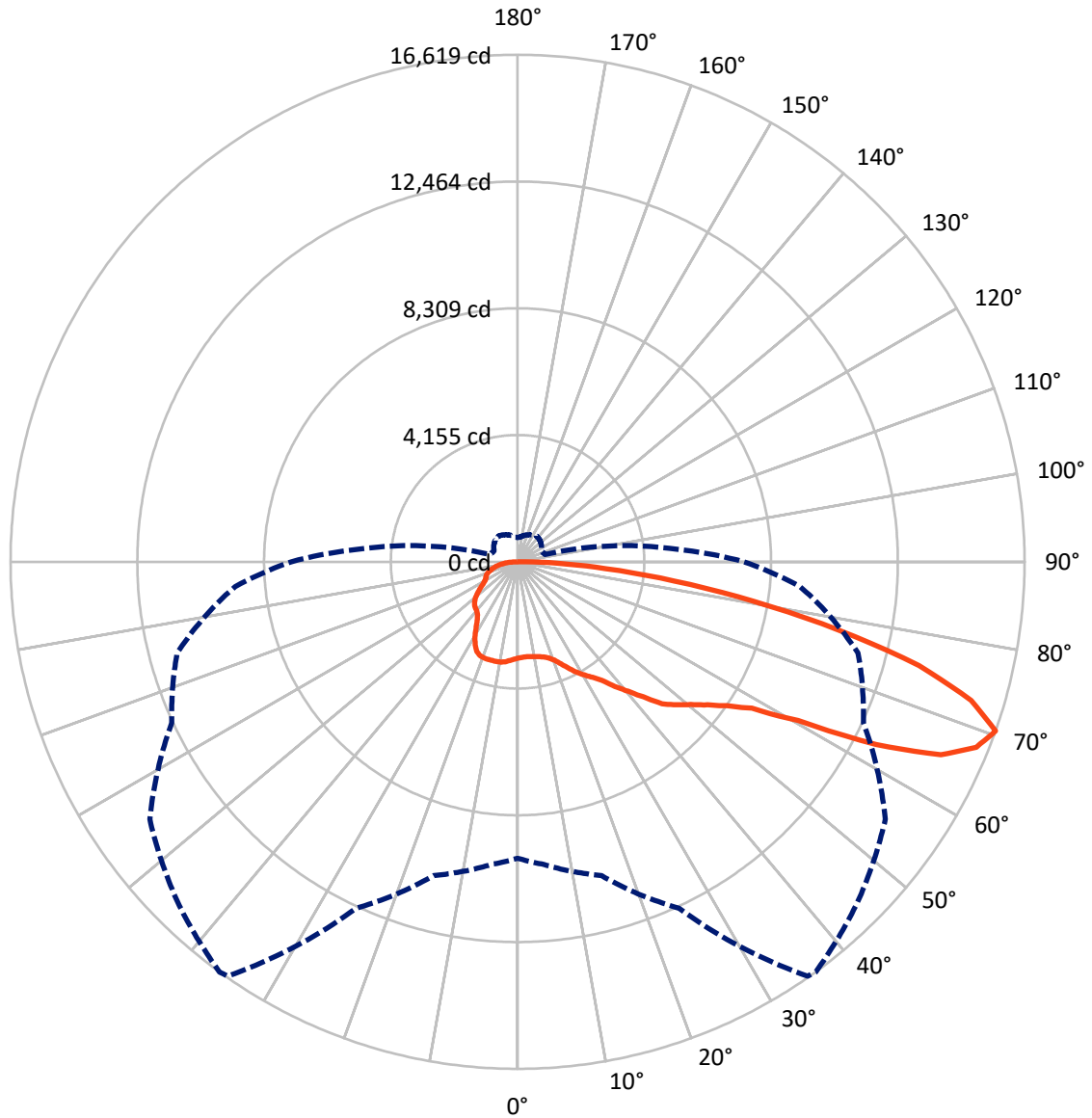
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.3 fc
 Type IV - Short - N/A

REPORT NUMBER: P510651
CATALOG NUMBER: CST-CA6-230-727-U-T4

Luminous Intensity Polar Plot



— Vertical Plane Through 36-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P510651
 CATALOG NUMBER: CST-CA6-230-727-U-T4

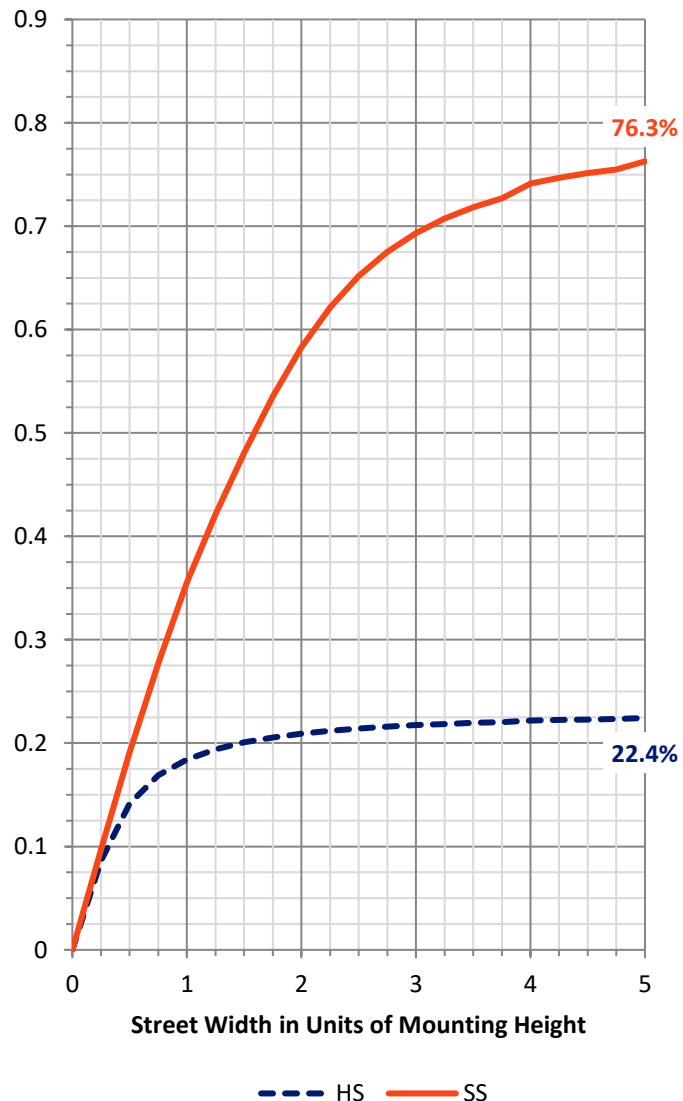
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6559.2	0.0	6559.2
	% Fixture	22.8	0.0	22.8
Street Side	Lumens	22228.8	0.0	22228.8
	% Fixture	77.2	0.0	77.2
Total	Lumens	28788.0	0.0	28788.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	305.5	1.1
10°-20°	944.4	3.3
20°-30°	1703.5	5.9
30°-40°	2638.4	9.2
40°-50°	4007.7	13.9
50°-60°	5554.9	19.3
60°-70°	7223.4	25.1
70°-80°	5334.4	18.5
80°-90°	1075.8	3.7
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°	28788.0	100.0
0°-180°	28788.0	100.0

Coefficient of Utilization



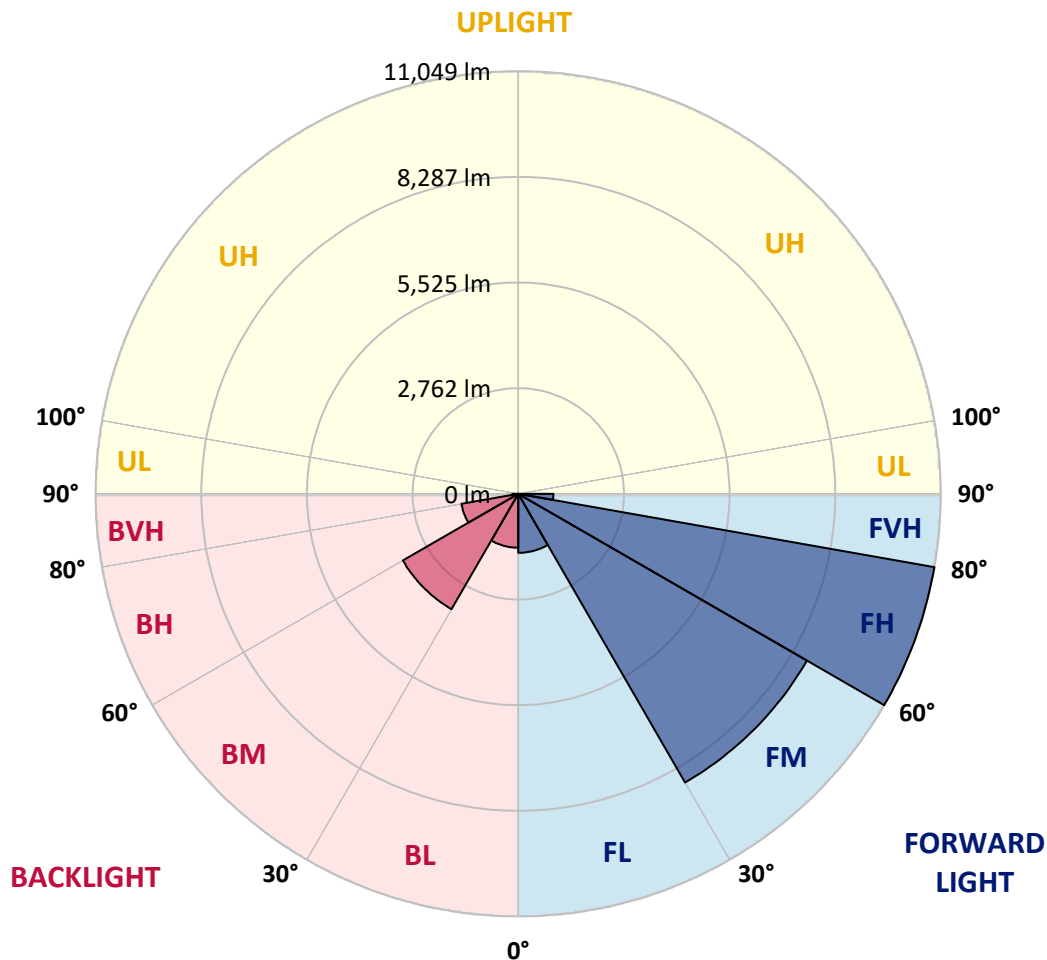
REPORT NUMBER: P510651
 CATALOG NUMBER: CST-CA6-230-727-U-T4

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1543.3	5.4			
FM (30°-60°)	8716.9	30.3			
FH (60°-80°)	11049.5	38.4			G4/12000
FVH (80°-90°)	919.1	3.2			G5
BL (0°-30°)	1410.0	4.9	B3/2500		
BM (30°-60°)	3484.1	12.1	B3/5000		
BH (60°-80°)	1508.3	5.2	B3/2500		G3/2500
BVH (80°-90°)	156.7	0.5			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type IV Short





REPORT NUMBER: P510651

CATALOG NUMBER: CST-CA6-230-727-U-T4

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	3153.1	3153.1	3153.1	3153.1	3153.1	3153.1	3153.1	3153.1	3153.1	3153.1	3153.1
2.5°	3134.1	3129.9	3127.5	3132.3	3134.1	3134.7	3135.9	3134.7	3131.7	3142.4	3155.5
5°	3134.7	3132.3	3127.5	3123.3	3123.3	3123.3	3123.9	3137.6	3143.6	3142.4	3158.5
7.5°	3139.4	3137.6	3128.7	3125.7	3132.9	3135.3	3147.2	3143.0	3149.6	3160.3	3174.0
10°	3140.0	3137.6	3129.9	3136.5	3156.7	3160.3	3165.7	3177.6	3180.0	3193.1	3206.8
12.5°	3146.0	3146.0	3149.0	3163.3	3184.7	3188.9	3209.2	3218.7	3233.0	3239.6	3256.3
15°	3177.6	3177.0	3184.1	3200.2	3234.8	3237.2	3262.2	3290.8	3301.6	3317.7	3344.5
17.5°	3252.7	3256.3	3256.9	3268.8	3309.9	3311.1	3352.2	3379.1	3403.5	3432.1	3493.5
20°	3430.9	3424.4	3417.2	3417.2	3433.3	3441.6	3473.2	3516.1	3566.2	3616.9	3689.0
22.5°	3655.0	3668.1	3641.9	3628.2	3636.0	3626.4	3650.3	3684.8	3743.2	3818.9	3910.1
25°	3922.7	3923.8	3922.1	3866.6	3849.3	3855.3	3875.0	3907.2	3984.6	4044.8	4177.2
27.5°	4183.7	4178.4	4159.3	4100.9	4084.2	4092.5	4091.9	4180.7	4260.0	4336.9	4492.5
30°	4421.0	4435.3	4401.3	4302.9	4304.7	4303.5	4331.0	4445.4	4590.2	4733.3	4893.0
32.5°	4839.4	4795.9	4750.0	4555.7	4519.9	4515.7	4531.8	4702.3	4916.9	5158.3	5350.2
35°	5233.4	5222.7	5177.4	4980.1	4773.2	4769.7	4747.6	4955.0	5256.6	5703.7	5943.3
37.5°	5636.3	5620.8	5576.1	5408.0	5202.4	5182.7	4997.3	5224.4	5632.1	6341.5	6683.0
40°	6116.7	6107.2	6038.1	5822.9	5611.9	5582.1	5389.6	5507.6	6106.0	7190.8	7431.6
42.5°	6538.2	6536.4	6457.1	6257.4	6078.0	6048.2	5884.3	6007.1	6764.7	8022.9	8164.8
45°	6847.5	6894.6	6898.2	6784.3	6660.3	6634.1	6590.6	6759.9	7526.4	8778.1	8757.3
47.5°	7108.6	7149.1	7106.8	7048.4	7006.1	7007.8	7075.2	7411.4	8278.6	9436.2	9274.1
50°	7544.9	7519.9	7299.9	7265.3	7319.0	7350.6	7546.1	8114.7	9139.9	10053.7	9737.8
52.5°	8174.3	8078.4	7646.8	7576.5	7779.7	7791.7	8102.8	8743.6	10000.7	10583.6	10162.2
55°	9035.6	8956.4	8468.8	8143.9	8246.5	8326.9	8765.0	9387.9	10703.4	11081.9	10488.8
57.5°	10308.8	10314.8	9917.2	9311.6	8962.9	9048.7	9390.9	10014.4	11284.0	11499.1	10692.7
60°	11329.3	11518.2	11399.6	11123.0	10622.3	10563.9	10303.5	10667.0	11779.9	11853.8	10887.6
62.5°	12036.8	12122.6	12530.3	12588.7	13161.0	13185.4	11937.8	11431.8	12324.7	12086.3	10928.7
65°	12001.0	12054.1	12698.4	13482.8	15173.2	15248.9	14518.8	12588.7	12697.8	12190.0	10808.9
67.5°	11165.3	11245.2	12064.2	13530.5	16245.5	16216.9	15753.8	14199.3	12820.6	12023.7	10237.9
70°	9713.9	9960.1	10648.0	12525.0	16580.5	16618.7	15765.1	14713.7	12504.1	11553.4	9286.0
72.5°	8006.2	8083.7	8733.4	10833.9	15601.2	15545.2	15119.0	14034.8	11931.9	10702.8	7620.0
75°	6088.7	6088.7	6875.5	8633.9	13397.6	13594.3	13760.0	12711.5	10570.5	8723.3	5188.7
77.5°	4041.9	4186.7	4820.3	6488.1	10605.1	10750.5	11322.7	10835.1	8654.8	6396.9	2369.9
80°	2144.0	2161.9	2841.4	4311.3	7585.4	7859.6	8646.4	8356.7	6225.2	2997.0	599.0
82.5°	749.8	818.4	1249.3	2498.7	4997.9	5169.0	5735.9	4965.8	2198.9	663.4	331.4
85°	372.5	385.6	550.2	1189.7	2814.0	2896.8	3351.0	1934.2	354.1	289.7	225.3
87.5°	179.4	183.6	211.0	425.6	1223.1	1279.7	1354.8	629.4	131.1	110.3	97.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P510651
 CATALOG NUMBER: CST-CA6-230-727-U-T4

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3153.1	3153.1	3153.1	3153.1	3153.1	3153.1	3153.1	3153.1	3153.1	3153.1	3153.1
2.5°	3158.5	3163.9	3174.0	3177.0	3169.8	3182.9	3195.5	3206.8	3206.2	3210.4	3225.3
5°	3165.7	3177.0	3187.7	3206.8	3225.3	3236.0	3246.1	3255.7	3258.6	3267.6	3276.5
7.5°	3187.7	3199.0	3223.5	3256.9	3258.1	3284.9	3302.2	3305.1	3307.5	3307.5	3328.4
10°	3221.7	3242.6	3281.9	3305.1	3326.0	3317.1	3334.9	3323.6	3315.3	3318.8	3333.2
12.5°	3280.1	3298.6	3355.2	3380.8	3361.8	3358.2	3340.3	3314.7	3285.5	3282.5	3295.6
15°	3371.9	3406.5	3457.1	3481.6	3433.9	3391.6	3331.4	3278.9	3222.3	3201.4	3209.8
17.5°	3519.7	3561.4	3616.9	3600.2	3513.2	3429.7	3330.2	3219.3	3109.6	3033.3	3053.0
20°	3736.1	3767.1	3812.4	3745.0	3618.1	3480.4	3317.1	3141.8	2956.4	2817.6	2801.5
22.5°	3963.2	4010.3	3982.9	3858.3	3692.0	3500.0	3289.6	3029.2	2742.5	2568.4	2542.2
25°	4236.8	4252.3	4157.5	3969.7	3712.8	3469.1	3200.8	2864.7	2523.7	2359.8	2352.0
27.5°	4527.1	4491.9	4315.5	4021.0	3689.6	3377.3	3022.6	2604.8	2325.8	2181.0	2158.3
30°	4854.9	4773.2	4446.0	4026.4	3602.0	3198.4	2797.3	2401.5	2164.9	2019.4	1996.2
32.5°	5276.9	5084.4	4567.0	3970.9	3417.2	2936.2	2526.7	2228.1	2020.0	1874.0	1853.1
35°	5816.3	5491.5	4695.1	3870.8	3189.5	2673.9	2302.6	2080.8	1902.6	1726.8	1698.8
37.5°	6438.0	6059.5	4848.3	3744.4	2939.8	2443.2	2151.2	1987.3	1815.6	1616.5	1583.1
40°	7160.4	6628.2	5084.4	3593.6	2715.6	2276.9	2077.9	1955.1	1767.3	1559.9	1521.7
42.5°	7786.3	7229.6	5365.1	3431.5	2504.0	2138.7	2045.1	1933.6	1736.9	1517.6	1474.1
45°	8365.1	7726.1	5639.3	3234.8	2281.1	2043.9	2005.7	1880.0	1683.3	1465.1	1419.8
47.5°	8835.4	8127.2	5877.7	3054.2	2102.9	1956.9	1919.9	1778.0	1593.3	1401.9	1368.5
50°	9196.6	8428.8	6008.3	2910.5	1914.5	1857.9	1809.0	1663.0	1485.4	1320.3	1291.7
52.5°	9566.1	8731.1	6072.6	2917.7	1739.3	1710.7	1660.6	1535.4	1399.5	1272.6	1241.6
55°	9781.3	8855.0	6004.7	2744.2	1578.4	1545.0	1501.5	1436.5	1355.4	1242.8	1213.6
57.5°	9907.1	8931.9	5797.9	2238.2	1384.6	1353.1	1360.2	1354.8	1288.1	1169.5	1142.6
60°	9997.7	8765.0	5374.1	1645.1	1219.5	1195.7	1254.7	1235.6	1177.8	1085.4	1062.8
62.5°	9924.4	8447.3	4611.1	1236.8	1084.8	1135.5	1187.3	1152.2	1073.5	989.5	963.2
65°	9477.3	7823.9	3504.8	993.6	1041.3	1111.1	1152.8	1096.1	1016.3	916.7	904.8
67.5°	8663.7	6693.7	2067.1	910.8	1008.5	1082.4	1117.0	1041.9	971.6	876.2	861.9
70°	7422.1	5011.1	923.3	848.2	951.3	1024.6	1047.3	976.3	900.0	810.6	796.3
72.5°	5524.3	3021.4	622.3	783.2	866.7	931.6	956.7	881.6	827.3	786.8	782.6
75°	3067.9	1049.1	574.0	709.3	774.3	832.7	863.7	810.6	767.7	712.3	689.6
77.5°	976.9	445.9	545.4	634.2	716.5	764.7	760.0	680.1	666.4	599.0	593.1
80°	389.8	388.6	504.3	519.2	611.6	652.1	641.4	540.6	558.5	519.2	503.7
82.5°	305.8	355.8	404.1	396.4	475.7	523.3	508.4	397.0	448.8	412.5	377.3
85°	232.5	311.7	259.3	258.1	332.0	388.6	398.2	305.2	305.8	278.4	248.0
87.5°	119.8	115.0	99.5	98.9	110.9	158.0	193.7	173.5	137.1	103.1	98.9
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)