

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: P510701

Luminaire Tested: **CST-CA8-230-722-U-T4**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510701  
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-CA8-230-722-U-T4  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (8) 2200K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 28825 lumens  
Efficiency: N/A  
Efficacy: 126.2 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B3 - U0 - G5

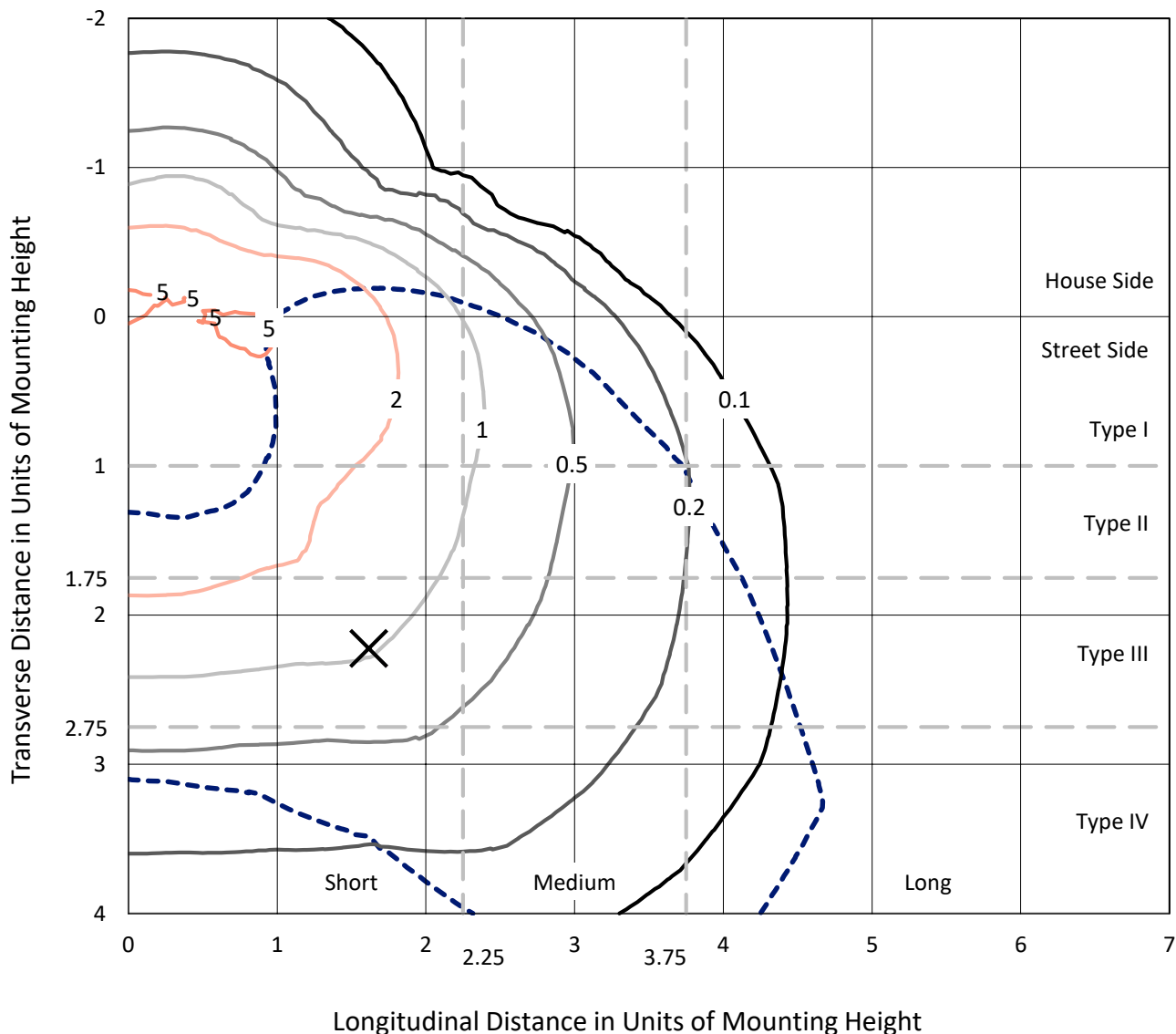
Input Watts (W): 228.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

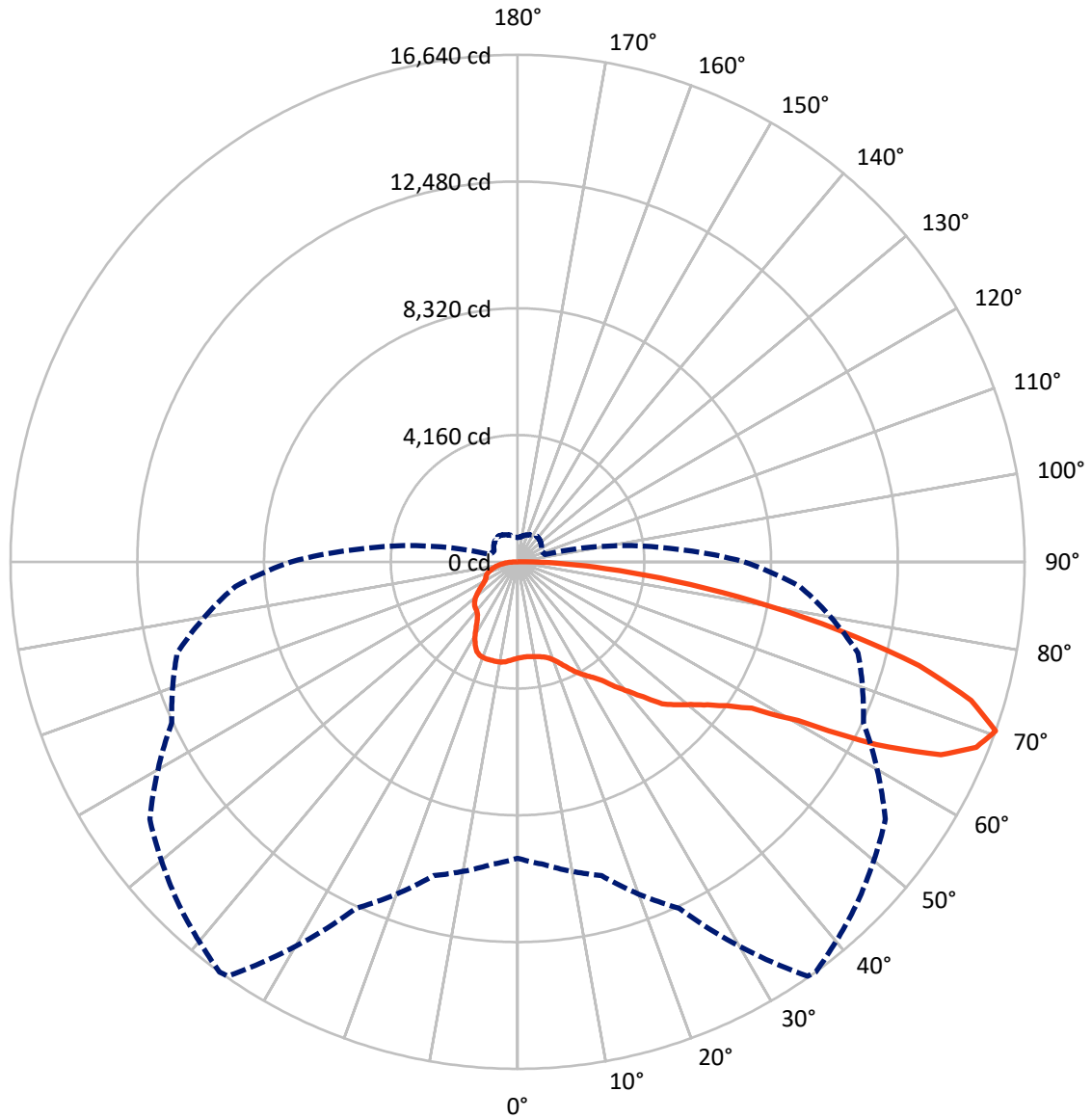
✕ Max cd  
 - - - 1/2 Max cd



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

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### Luminous Intensity Polar Plot



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

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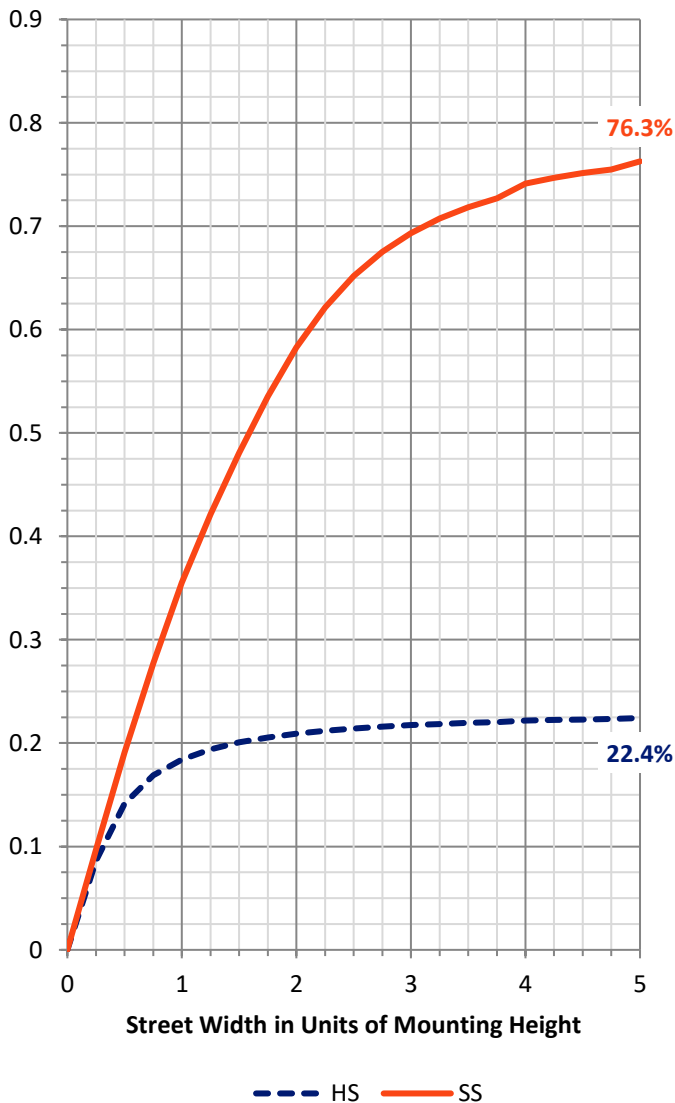
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	6567.6	0.0	6567.6
	% Fixture	22.8	0.0	22.8
<b>Street Side</b>	Lumens	22257.4	0.0	22257.4
	% Fixture	77.2	0.0	77.2
<b>Total</b>	Lumens	28825.0	0.0	28825.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	305.9	1.1
10°-20°	945.6	3.3
20°-30°	1705.7	5.9
30°-40°	2641.8	9.2
40°-50°	4012.9	13.9
50°-60°	5562.1	19.3
60°-70°	7232.6	25.1
70°-80°	5341.2	18.5
80°-90°	1077.2	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°	28825.0	100.0
0°-180°	28825.0	100.0

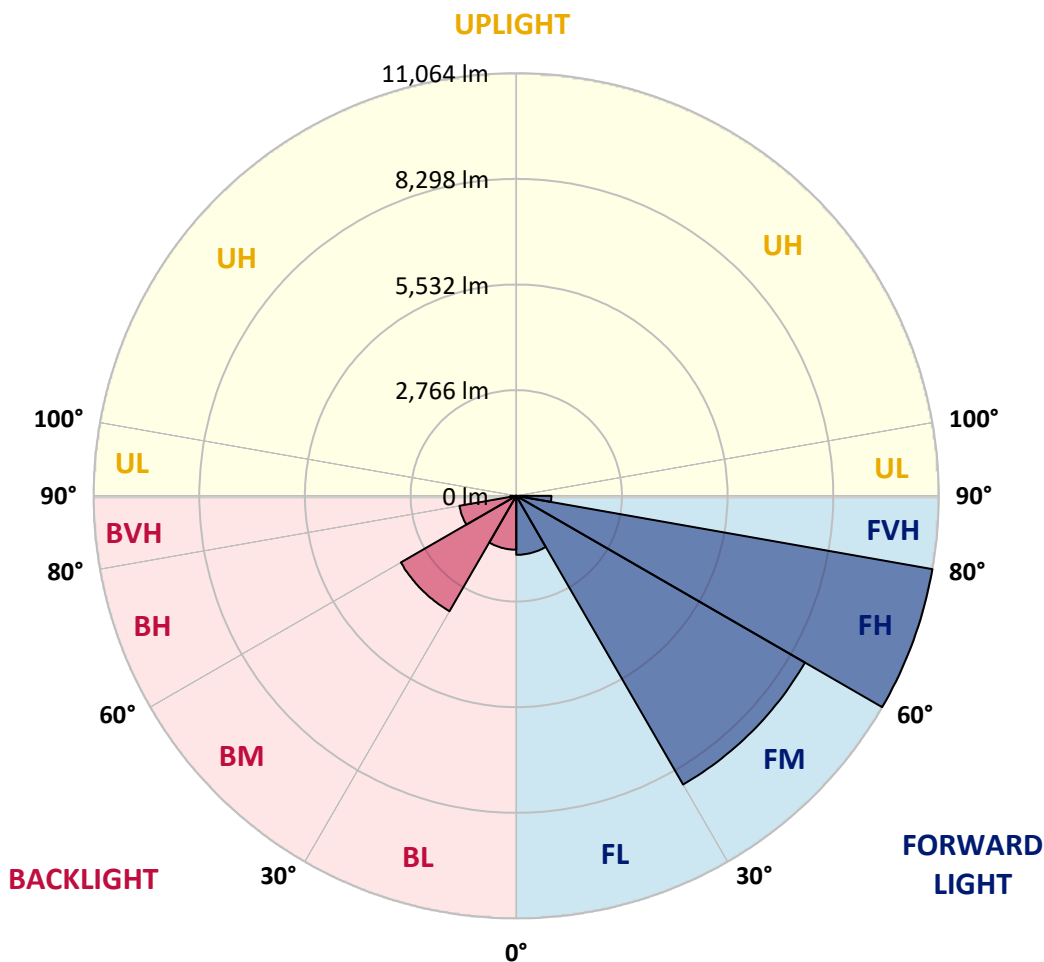


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1545.3	5.4			
FM (30°-60°)	8728.1	30.3			
FH (60°-80°)	11063.7	38.4			G4/12000
FVH (80°-90°)	920.3	3.2			G5
BL (0°-30°)	1411.9	4.9	B3/2500		
BM (30°-60°)	3488.6	12.1	B3/5000		
BH (60°-80°)	1510.2	5.2	B3/2500		G3/2500
BVH (80°-90°)	156.9	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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	3157.2	3157.2	3157.2	3157.2	3157.2	3157.2	3157.2	3157.2	3157.2	3157.2	3157.2
2.5°	3138.1	3133.9	3131.5	3136.3	3138.1	3138.7	3139.9	3138.7	3135.7	3146.5	3159.6
5°	3138.7	3136.3	3131.5	3127.4	3127.4	3127.4	3128.0	3141.7	3147.6	3146.5	3162.6
7.5°	3143.5	3141.7	3132.7	3129.7	3136.9	3139.3	3151.2	3147.1	3153.6	3164.4	3178.1
10°	3144.1	3141.7	3133.9	3140.5	3160.8	3164.4	3169.7	3181.7	3184.1	3197.2	3210.9
12.5°	3150.0	3150.0	3153.0	3167.3	3188.8	3193.0	3213.3	3222.8	3237.2	3243.7	3260.4
15°	3181.7	3181.1	3188.2	3204.3	3239.0	3241.3	3266.4	3295.1	3305.8	3321.9	3348.8
17.5°	3256.9	3260.4	3261.0	3273.0	3314.2	3315.4	3356.5	3383.4	3407.9	3436.5	3498.0
20°	3435.3	3428.8	3421.6	3421.6	3437.7	3446.1	3477.7	3520.7	3570.8	3621.5	3693.7
22.5°	3659.7	3672.9	3646.6	3632.9	3640.6	3631.1	3654.9	3689.6	3748.1	3823.8	3915.2
25°	3927.7	3928.9	3927.1	3871.6	3854.3	3860.3	3880.0	3912.2	3989.8	4050.0	4182.5
27.5°	4189.1	4183.7	4164.6	4106.1	4089.4	4097.8	4097.2	4186.1	4265.5	4342.5	4498.3
30°	4426.6	4441.0	4406.9	4308.5	4310.3	4309.1	4336.5	4451.1	4596.1	4739.4	4899.3
32.5°	4845.6	4802.0	4756.1	4561.5	4525.7	4521.5	4537.6	4708.3	4923.2	5164.9	5357.1
35°	5240.1	5229.4	5184.0	4986.5	4779.4	4775.8	4753.7	4961.4	5263.4	5711.0	5950.9
37.5°	5643.6	5628.0	5583.3	5415.0	5209.1	5189.4	5003.8	5231.2	5639.4	6349.6	6691.6
40°	6124.6	6115.1	6045.8	5830.4	5619.1	5589.3	5396.5	5514.7	6113.9	7200.1	7441.2
42.5°	6546.6	6544.8	6465.4	6265.5	6085.8	6056.0	5891.8	6014.8	6773.4	8033.2	8175.3
45°	6856.3	6903.5	6907.0	6793.0	6668.9	6642.6	6599.1	6768.6	7536.1	8789.4	8768.5
47.5°	7117.7	7158.3	7115.9	7057.4	7015.1	7016.9	7084.3	7420.9	8289.3	9448.3	9286.0
50°	7554.6	7529.5	7309.3	7274.7	7328.4	7360.0	7555.8	8125.2	9151.7	10066.6	9750.3
52.5°	8184.8	8088.8	7656.7	7586.2	7789.7	7801.7	8113.2	8754.8	10013.5	10597.2	10175.2
55°	9047.2	8967.9	8479.7	8154.4	8257.1	8337.6	8776.3	9400.0	10717.2	11096.1	10502.3
57.5°	10322.1	10328.0	9930.0	9323.6	8974.4	9060.4	9403.0	10027.2	11298.5	11513.9	10706.4
60°	11343.8	11533.0	11414.3	11137.3	10636.0	10577.5	10316.7	10680.8	11795.0	11869.0	10901.6
62.5°	12052.3	12138.2	12546.4	12604.9	13177.9	13202.3	11953.2	11446.5	12340.5	12101.8	10942.8
65°	12016.4	12069.6	12714.7	13500.2	15192.7	15268.5	14537.4	12604.9	12714.1	12205.6	10822.8
67.5°	11179.7	11259.7	12079.7	13547.9	16266.4	16237.8	15774.0	14217.5	12837.1	12039.1	10251.0
70°	9726.4	9972.9	10661.7	12541.1	16601.8	16640.0	15785.4	14732.6	12520.2	11568.2	9297.9
72.5°	8016.5	8094.1	8744.7	10847.9	15621.3	15565.2	15138.4	14052.8	11947.2	10716.6	7629.8
75°	6096.6	6096.6	6884.4	8645.0	13414.8	13611.8	13777.7	12727.9	10584.1	8734.5	5195.3
77.5°	4047.1	4192.1	4826.5	6496.4	10618.7	10764.3	11337.3	10849.1	8665.9	6405.1	2373.0
80°	2146.8	2164.7	2845.1	4316.8	7595.2	7869.7	8657.5	8367.5	6233.2	3000.8	599.8
82.5°	750.8	819.4	1250.9	2501.9	5004.4	5175.7	5743.2	4972.1	2201.7	664.3	331.8
85°	373.0	386.1	550.9	1191.3	2817.6	2900.6	3355.3	1936.7	354.5	290.1	225.6
87.5°	179.6	183.8	211.3	426.1	1224.7	1281.4	1356.6	630.2	131.3	110.4	97.9
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):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3157.2	3157.2	3157.2	3157.2	3157.2	3157.2	3157.2	3157.2	3157.2	3157.2	3157.2
2.5°	3162.6	3167.9	3178.1	3181.1	3173.9	3187.0	3199.6	3210.9	3210.3	3214.5	3229.4
5°	3169.7	3181.1	3191.8	3210.9	3229.4	3240.2	3250.3	3259.9	3262.8	3271.8	3280.7
7.5°	3191.8	3203.2	3227.6	3261.0	3262.2	3289.1	3306.4	3309.4	3311.8	3311.8	3332.7
10°	3225.8	3246.7	3286.1	3309.4	3330.3	3321.3	3339.2	3327.9	3319.5	3323.1	3337.4
12.5°	3284.3	3302.8	3359.5	3385.2	3366.1	3362.5	3344.6	3318.9	3289.7	3286.7	3299.8
15°	3376.2	3410.8	3461.6	3486.0	3438.3	3395.9	3335.6	3283.1	3226.4	3205.5	3213.9
17.5°	3524.2	3566.0	3621.5	3604.8	3517.7	3434.1	3334.5	3223.4	3113.6	3037.2	3056.9
20°	3740.9	3771.9	3817.3	3749.8	3622.7	3484.9	3321.3	3145.9	2960.2	2821.2	2805.1
22.5°	3968.3	4015.4	3988.0	3863.2	3696.7	3504.5	3293.9	3033.1	2746.0	2571.7	2545.5
25°	4242.2	4257.7	4162.8	3974.8	3717.6	3473.5	3204.9	2868.3	2527.0	2362.8	2355.1
27.5°	4532.9	4497.7	4321.0	4026.2	3694.3	3381.6	3026.5	2608.1	2328.8	2183.8	2161.1
30°	4861.1	4779.4	4451.7	4031.5	3606.6	3202.6	2800.9	2404.6	2167.7	2022.0	1998.8
32.5°	5283.7	5090.9	4572.9	3976.0	3421.6	2940.0	2529.9	2230.9	2022.6	1876.4	1855.5
35°	5823.8	5498.5	4701.2	3875.8	3193.6	2677.4	2305.5	2083.5	1905.1	1729.0	1700.9
37.5°	6446.3	6067.3	4854.6	3749.2	2943.5	2446.4	2153.9	1989.8	1817.9	1618.6	1585.2
40°	7169.6	6636.7	5090.9	3598.2	2719.1	2279.9	2080.5	1957.6	1769.6	1561.9	1523.7
42.5°	7796.3	7238.9	5372.0	3435.9	2507.3	2141.4	2047.7	1936.1	1739.1	1519.5	1475.9
45°	8375.8	7736.0	5646.5	3239.0	2284.0	2046.5	2008.3	1882.4	1685.4	1467.0	1421.6
47.5°	8846.7	8137.7	5885.3	3058.1	2105.6	1959.4	1922.4	1780.3	1595.3	1403.7	1370.3
50°	9208.4	8439.7	6016.0	2914.3	1917.0	1860.3	1811.4	1665.1	1487.3	1322.0	1293.3
52.5°	9578.4	8742.3	6080.4	2921.5	1741.5	1712.9	1662.8	1537.4	1401.3	1274.2	1243.2
55°	9793.9	8866.4	6012.4	2747.8	1580.4	1547.0	1503.4	1438.3	1357.2	1244.4	1215.1
57.5°	9919.8	8943.4	5805.3	2241.1	1386.4	1354.8	1362.0	1356.6	1289.7	1171.0	1144.1
60°	10010.5	8776.3	5381.0	1647.2	1221.1	1197.2	1256.3	1237.2	1179.3	1086.8	1064.1
62.5°	9937.1	8458.2	4617.0	1238.4	1086.2	1136.9	1188.9	1153.7	1074.9	990.7	964.5
65°	9489.5	7833.9	3509.3	994.9	1042.7	1112.5	1154.3	1097.6	1017.6	917.9	906.0
67.5°	8674.8	6702.3	2069.8	911.9	1009.8	1083.8	1118.4	1043.2	972.8	877.3	863.0
70°	7431.6	5017.5	924.5	849.3	952.5	1025.9	1048.6	977.6	901.2	811.7	797.4
72.5°	5531.4	3025.3	623.1	784.2	867.8	932.8	957.9	882.7	828.4	787.8	783.6
75°	3071.9	1050.4	574.7	710.2	775.3	833.8	864.8	811.7	768.7	713.2	690.5
77.5°	978.2	446.4	546.1	635.0	717.4	765.7	761.0	681.0	667.2	599.8	593.8
80°	390.3	389.1	504.9	519.8	612.3	652.9	642.2	541.3	559.2	519.8	504.3
82.5°	306.2	356.3	404.6	396.9	476.3	524.0	509.1	397.5	449.4	413.0	377.8
85°	232.8	312.1	259.6	258.4	332.4	389.1	398.7	305.6	306.2	278.7	248.3
87.5°	120.0	115.2	99.7	99.1	111.0	158.2	194.0	173.7	137.3	103.3	99.1
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)