

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: P510411

Luminaire Tested: **CTN-CA10-210-727-U-T4**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510411  
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: MCGRAW-EDISON  
Catalog Number: CTN-CA10-210-727-U-T4  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (10) 2700K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 29161 lumens  
Efficiency: N/A  
Efficacy: 137.0 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B3 - U0 - G5

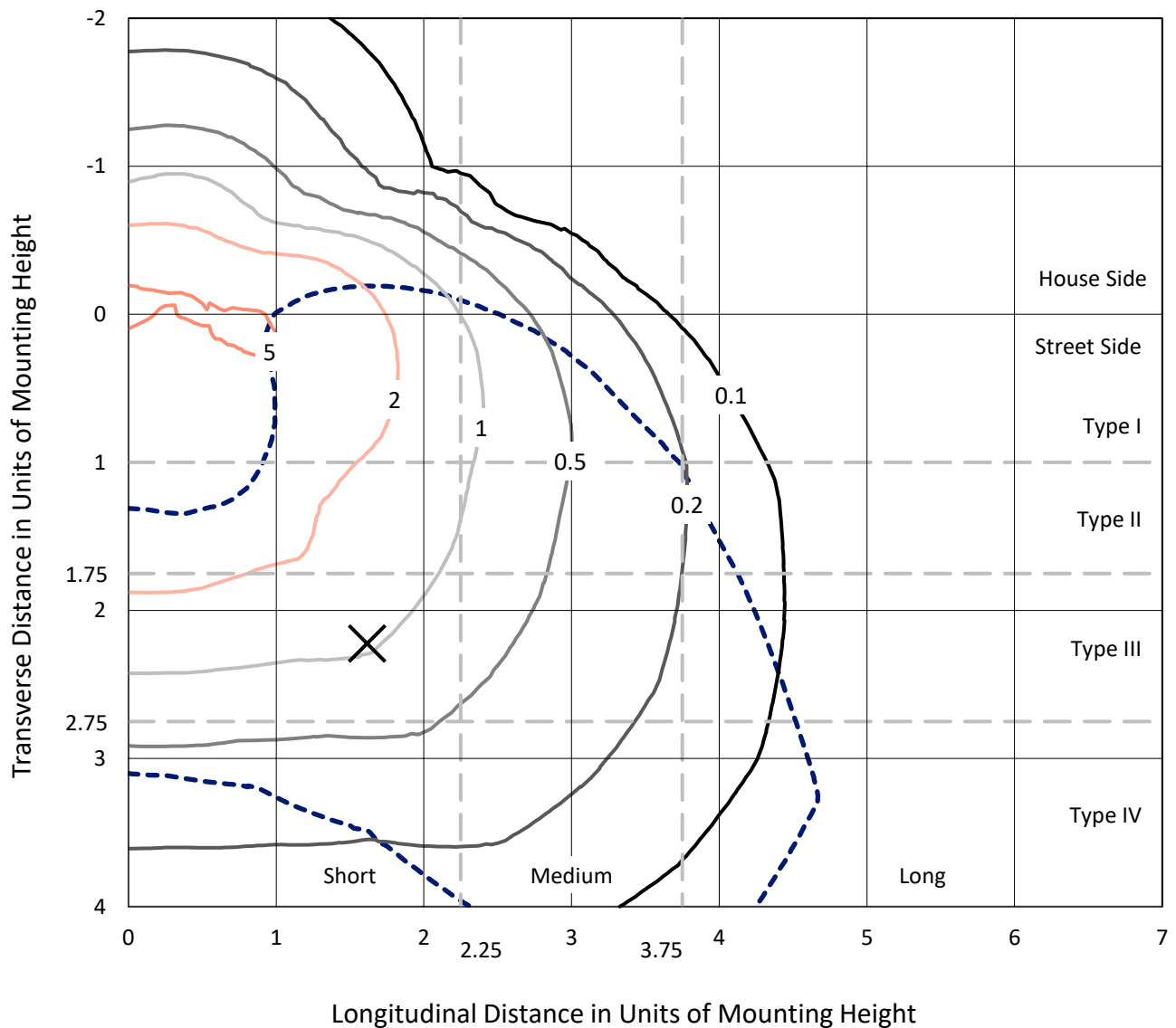
Input Watts (W): 212.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

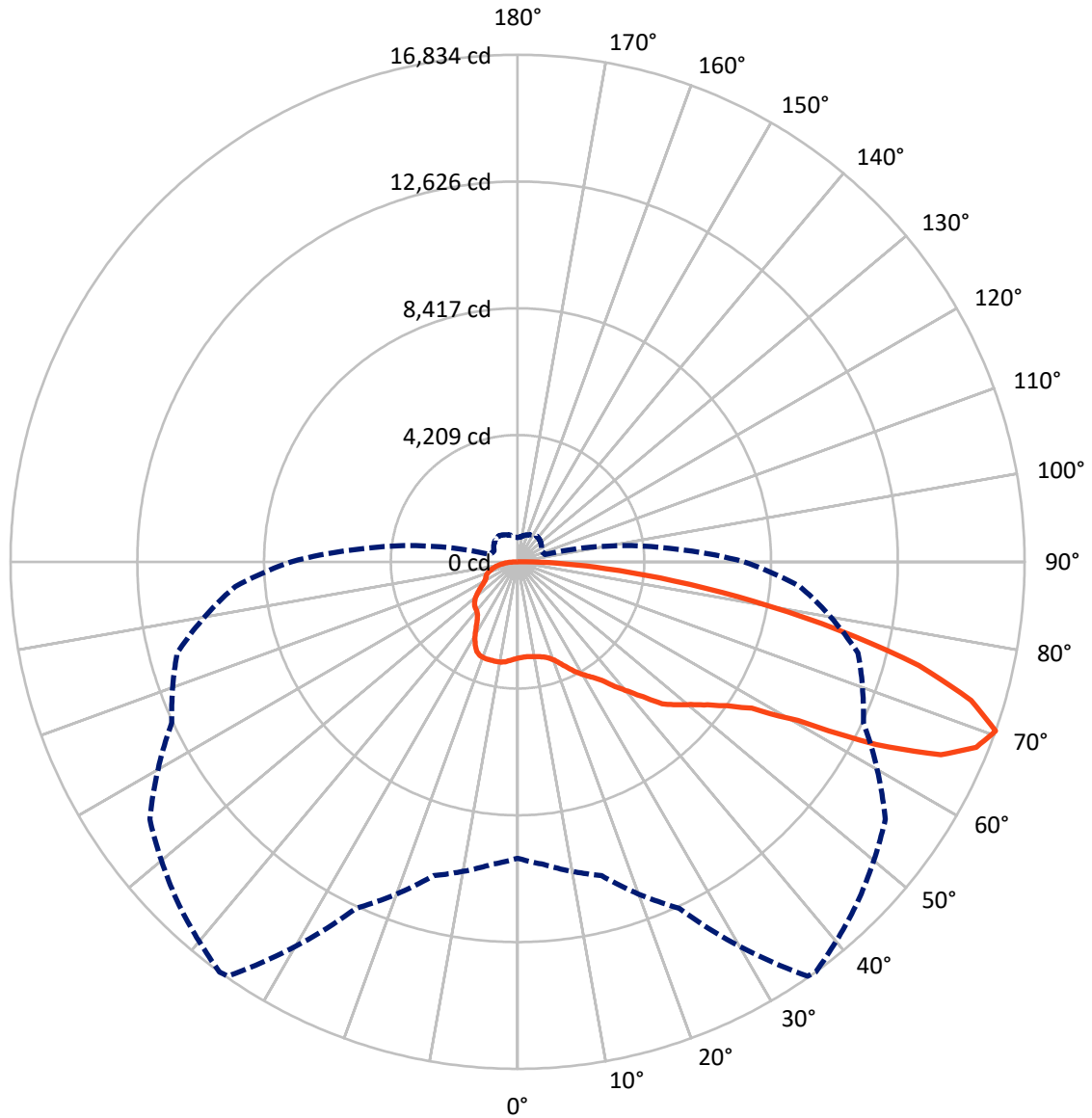
× Max cd  
 - - - 1/2 Max cd



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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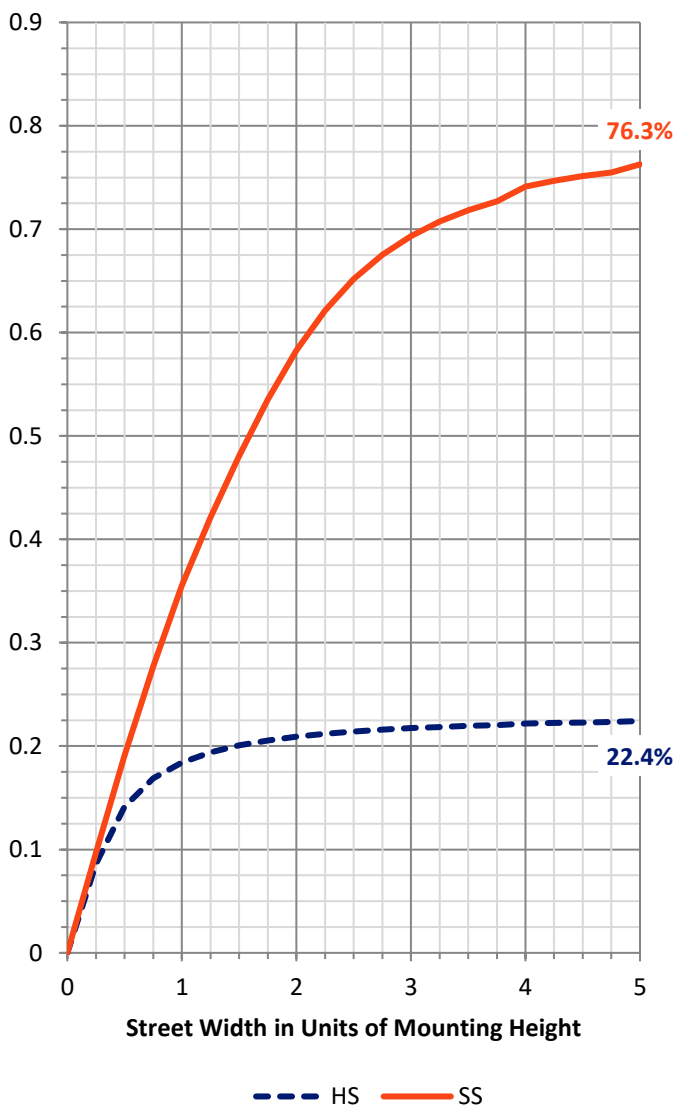
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	6644.2	0.0	6644.2
	% Fixture	22.8	0.0	22.8
<b>Street Side</b>	Lumens	22516.8	0.0	22516.8
	% Fixture	77.2	0.0	77.2
<b>Total</b>	Lumens	29161.0	0.0	29161.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	309.4	1.1
10°-20°	956.6	3.3
20°-30°	1725.6	5.9
30°-40°	2672.6	9.2
40°-50°	4059.7	13.9
50°-60°	5626.9	19.3
60°-70°	7316.9	25.1
70°-80°	5403.5	18.5
80°-90°	1089.8	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°	29161.0	100.0
0°-180°	29161.0	100.0

**Coefficient of Utilization**

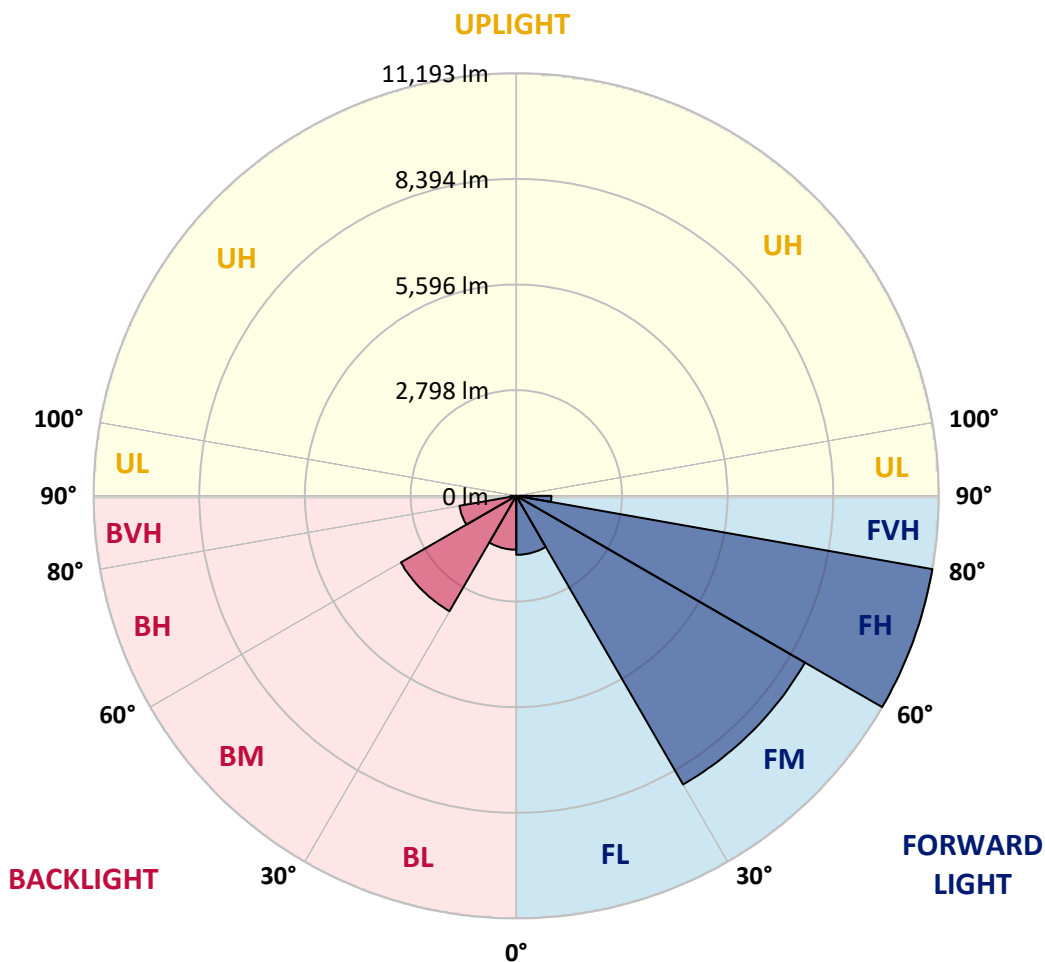


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1563.3	5.4			
FM (30°-60°)	8829.9	30.3			
FH (60°-80°)	11192.6	38.4			G4/12000
FVH (80°-90°)	931.0	3.2			G5
BL (0°-30°)	1428.3	4.9	B3/2500		
BM (30°-60°)	3529.3	12.1	B3/5000		
BH (60°-80°)	1527.8	5.2	B3/2500		G3/2500
BVH (80°-90°)	158.7	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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	3194.0	3194.0	3194.0	3194.0	3194.0	3194.0	3194.0	3194.0	3194.0	3194.0	3194.0
2.5°	3174.7	3170.5	3168.0	3172.9	3174.7	3175.3	3176.5	3175.3	3172.3	3183.1	3196.4
5°	3175.3	3172.9	3168.0	3163.8	3163.8	3163.8	3164.4	3178.3	3184.3	3183.1	3199.4
7.5°	3180.1	3178.3	3169.2	3166.2	3173.5	3175.9	3188.0	3183.7	3190.4	3201.2	3215.1
10°	3180.7	3178.3	3170.5	3177.1	3197.6	3201.2	3206.7	3218.8	3221.2	3234.5	3248.3
12.5°	3186.8	3186.8	3189.8	3204.3	3226.0	3230.2	3250.8	3260.4	3274.9	3281.5	3298.5
15°	3218.8	3218.2	3225.4	3241.7	3276.7	3279.1	3304.5	3333.5	3344.3	3360.6	3387.8
17.5°	3294.8	3298.5	3299.1	3311.1	3352.8	3354.0	3395.7	3422.8	3447.6	3476.6	3538.8
20°	3475.4	3468.7	3461.5	3461.5	3477.8	3486.2	3518.2	3561.7	3612.4	3663.7	3736.8
22.5°	3702.4	3715.7	3689.1	3675.2	3683.1	3673.4	3697.6	3732.6	3791.7	3868.4	3960.8
25°	3973.5	3974.7	3972.9	3916.7	3899.2	3905.3	3925.2	3957.8	4036.3	4097.3	4231.3
27.5°	4237.9	4232.5	4213.2	4154.0	4137.1	4145.6	4145.0	4234.9	4315.2	4393.1	4550.7
30°	4478.2	4492.7	4458.3	4358.7	4360.5	4359.3	4387.1	4503.0	4649.7	4794.6	4956.4
32.5°	4902.1	4858.0	4811.5	4614.7	4578.5	4574.2	4590.5	4763.2	4980.6	5225.1	5419.5
35°	5301.2	5290.3	5244.4	5044.6	4835.1	4831.5	4809.1	5019.2	5324.7	5777.6	6020.3
37.5°	5709.3	5693.7	5648.4	5478.1	5269.8	5249.9	5062.1	5292.1	5705.1	6423.6	6769.6
40°	6196.0	6186.3	6116.3	5898.3	5684.6	5654.4	5459.4	5578.9	6185.1	7284.0	7527.9
42.5°	6622.9	6621.1	6540.8	6338.5	6156.7	6126.6	5960.5	6084.9	6852.3	8126.9	8270.6
45°	6936.2	6983.9	6987.6	6872.2	6746.6	6720.1	6676.0	6847.5	7623.9	8891.9	8870.7
47.5°	7200.7	7241.7	7198.9	7139.7	7096.8	7098.6	7166.9	7507.4	8385.9	9558.4	9394.2
50°	7642.7	7617.3	7394.5	7359.5	7413.8	7445.8	7643.9	8219.9	9258.4	10184.0	9864.0
52.5°	8280.2	8183.0	7745.9	7674.7	7880.5	7892.6	8207.8	8856.9	10130.2	10720.7	10293.9
55°	9152.7	9072.4	8578.5	8249.5	8353.3	8434.8	8878.6	9509.5	10842.1	11225.5	10624.7
57.5°	10442.4	10448.4	10045.7	9432.3	9079.0	9166.0	9512.6	10144.1	11430.2	11648.1	10831.2
60°	11476.1	11667.5	11547.3	11267.1	10760.0	10700.8	10436.9	10805.3	11932.5	12007.4	11028.7
62.5°	12192.7	12279.7	12692.7	12751.8	13331.5	13356.2	12092.5	11579.9	12484.4	12242.9	11070.3
65°	12156.5	12210.3	12862.9	13657.5	15369.8	15446.5	14706.9	12751.8	12862.3	12347.9	10949.0
67.5°	11310.0	11390.9	12220.5	13705.8	16456.0	16427.1	15957.9	14383.3	12986.7	12179.5	10370.5
70°	9839.8	10089.2	10785.9	12687.2	16795.4	16834.0	15969.4	14904.3	12666.1	11703.1	9406.3
72.5°	8110.0	8188.5	8846.6	10974.3	15803.4	15746.6	15314.9	14216.6	12086.5	10841.5	7718.7
75°	6167.6	6167.6	6964.6	8745.8	13571.2	13770.4	13938.3	12876.2	10707.4	8836.3	5255.9
77.5°	4094.2	4241.0	4882.8	6572.2	10742.5	10889.8	11469.4	10975.5	8766.9	6479.8	2400.6
80°	2171.8	2189.9	2878.2	4367.1	7683.7	7961.4	8758.4	8465.0	6305.9	3035.8	606.8
82.5°	759.6	829.0	1265.5	2531.0	5062.7	5236.0	5810.2	5030.1	2227.3	672.0	335.7
85°	377.4	390.6	557.3	1205.1	2850.4	2934.4	3394.5	1959.3	358.6	293.4	228.2
87.5°	181.7	186.0	213.7	431.1	1239.0	1296.3	1372.4	637.6	132.8	111.7	99.0
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°	3194.0	3194.0	3194.0	3194.0	3194.0	3194.0	3194.0	3194.0	3194.0	3194.0	3194.0
2.5°	3199.4	3204.9	3215.1	3218.2	3210.9	3224.2	3236.9	3248.3	3247.7	3252.0	3267.1
5°	3206.7	3218.2	3229.0	3248.3	3267.1	3277.9	3288.2	3297.8	3300.9	3309.9	3319.0
7.5°	3229.0	3240.5	3265.2	3299.1	3300.3	3327.4	3344.9	3348.0	3350.4	3350.4	3371.5
10°	3263.4	3284.6	3324.4	3348.0	3369.1	3360.0	3378.2	3366.7	3358.2	3361.8	3376.3
12.5°	3322.6	3341.3	3398.7	3424.6	3405.3	3401.7	3383.6	3357.6	3328.0	3325.0	3338.3
15°	3415.6	3450.6	3501.9	3526.7	3478.4	3435.5	3374.5	3321.4	3264.0	3242.9	3251.4
17.5°	3565.3	3607.6	3663.7	3646.8	3558.7	3474.2	3373.3	3261.0	3149.9	3072.6	3092.6
20°	3784.5	3815.9	3861.8	3793.6	3664.9	3525.5	3360.0	3182.5	2994.8	2854.1	2837.8
22.5°	4014.5	4062.2	4034.5	3908.3	3739.8	3545.4	3332.3	3068.4	2778.0	2601.7	2575.1
25°	4291.7	4307.4	4211.4	4021.2	3760.9	3514.0	3242.3	2901.8	2556.4	2390.4	2382.5
27.5°	4585.7	4550.1	4371.4	4073.1	3737.4	3421.0	3061.8	2638.5	2356.0	2209.2	2186.3
30°	4917.8	4835.1	4503.6	4078.5	3648.6	3239.9	2833.5	2432.6	2192.9	2045.6	2022.1
32.5°	5345.3	5150.2	4626.2	4022.4	3461.5	2974.2	2559.4	2256.9	2046.2	1898.3	1877.2
35°	5891.7	5562.6	4756.0	3921.0	3230.8	2708.6	2332.4	2107.8	1927.3	1749.2	1720.8
37.5°	6521.4	6138.0	4911.2	3792.9	2977.8	2474.9	2179.0	2013.0	1839.1	1637.5	1603.6
40°	7253.2	6714.0	5150.2	3640.2	2750.8	2306.4	2104.8	1980.4	1790.2	1580.1	1541.5
42.5°	7887.2	7323.3	5434.6	3476.0	2536.5	2166.4	2071.6	1958.7	1759.4	1537.2	1493.1
45°	8473.5	7826.2	5712.4	3276.7	2310.7	2070.4	2031.7	1904.3	1705.1	1484.1	1438.2
47.5°	8949.8	8232.5	5953.9	3093.8	2130.1	1982.2	1944.8	1801.1	1613.9	1420.1	1386.3
50°	9315.7	8538.1	6086.1	2948.3	1939.3	1882.0	1832.5	1684.5	1504.6	1337.4	1308.4
52.5°	9690.1	8844.2	6151.3	2955.5	1761.8	1732.9	1682.1	1555.3	1417.7	1289.1	1257.7
55°	9908.0	8969.8	6082.5	2779.8	1598.8	1565.0	1520.9	1455.1	1373.0	1258.9	1229.3
57.5°	10035.4	9047.7	5873.0	2267.2	1402.6	1370.6	1377.8	1372.4	1304.8	1184.6	1157.4
60°	10127.2	8878.6	5443.7	1666.4	1235.3	1211.2	1271.0	1251.6	1193.1	1099.5	1076.5
62.5°	10052.9	8556.8	4670.8	1252.8	1098.9	1150.2	1202.7	1167.1	1087.4	1002.3	975.7
65°	9600.1	7925.2	3550.2	1006.5	1054.8	1125.4	1167.7	1110.4	1029.4	928.6	916.5
67.5°	8775.9	6780.5	2093.9	922.6	1021.6	1096.5	1131.5	1055.4	984.2	887.6	873.1
70°	7518.3	5076.0	935.3	859.2	963.6	1037.9	1060.8	989.0	911.7	821.1	806.7
72.5°	5595.8	3060.6	630.3	793.4	877.9	943.7	969.1	893.0	838.0	797.0	792.8
75°	3107.7	1062.7	581.4	718.5	784.3	843.5	874.9	821.1	777.7	721.5	698.6
77.5°	989.6	451.6	552.5	642.4	725.7	774.7	769.8	688.9	675.0	606.8	600.8
80°	394.9	393.7	510.8	525.9	619.5	660.5	649.7	547.6	565.7	525.9	510.2
82.5°	309.7	360.5	409.4	401.5	481.8	530.1	515.0	402.1	454.6	417.8	382.2
85°	235.5	315.8	262.6	261.4	336.3	393.7	403.3	309.1	309.7	282.0	251.2
87.5°	121.4	116.5	100.8	100.2	112.3	160.0	196.2	175.7	138.9	104.5	100.2
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)