

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: P510431

Luminaire Tested: **CTN-CA10-210-740-U-T4**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510431
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-CA10-210-740-U-T4
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (10) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 34437 lumens
Efficiency: N/A
Efficacy: 161.8 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

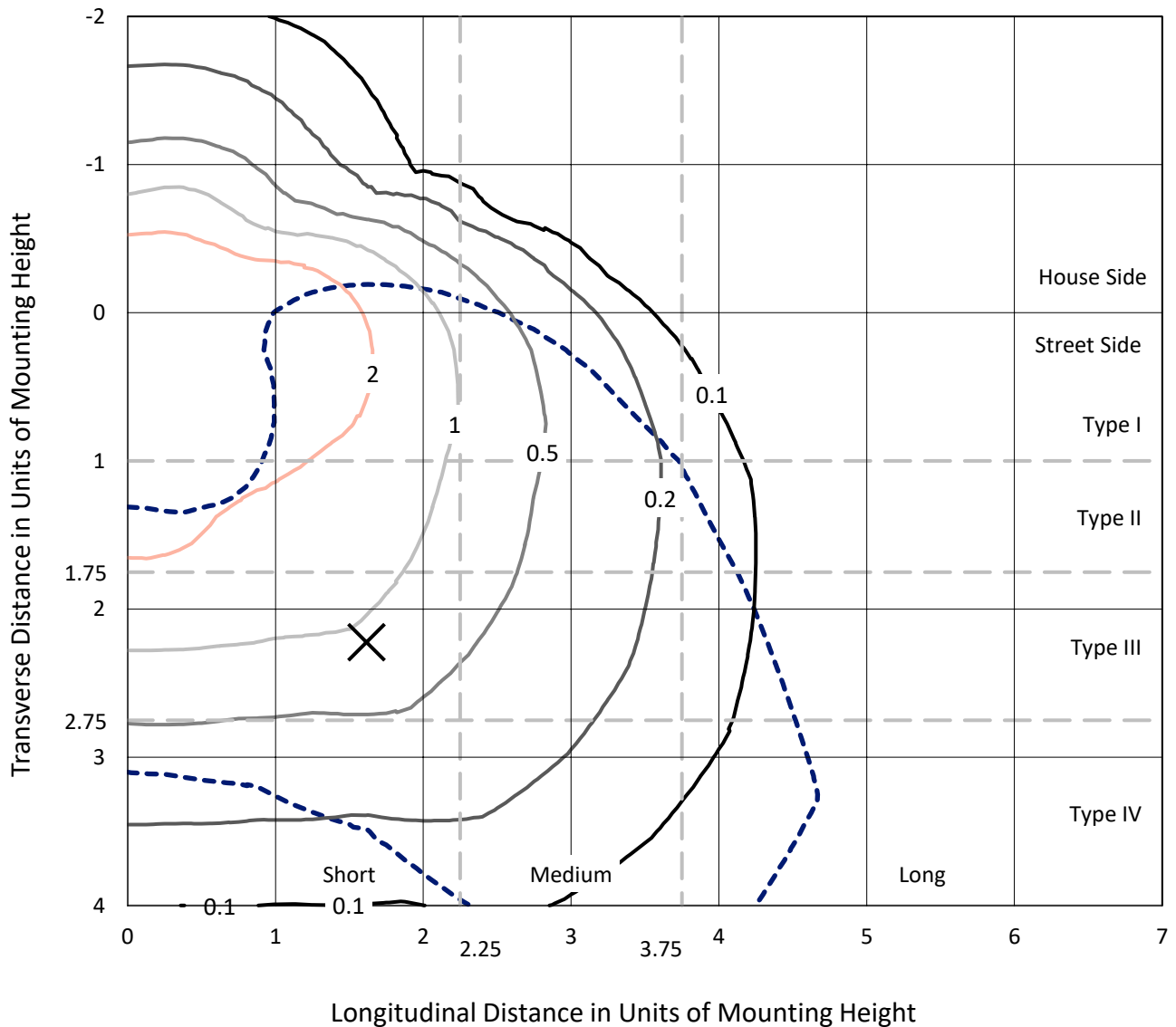
Input Watts (W): 212.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P510431
 CATALOG NUMBER: CTN-CA10-210-740-U-T4

Iso-Footcandle Lines of Horizontal Illumination

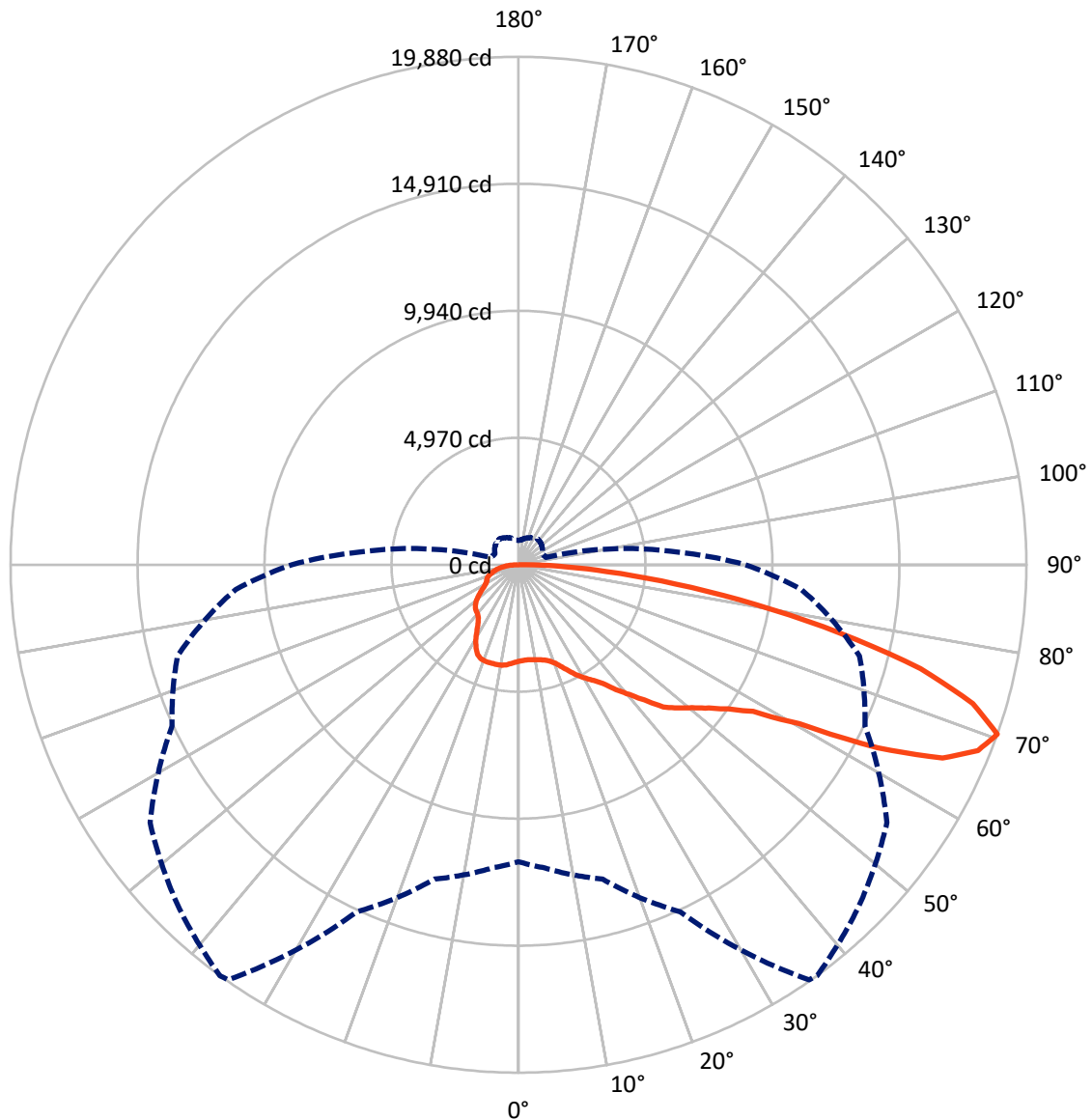
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 4.4 fc
 Type IV - Short - N/A

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CATALOG NUMBER: CTN-CA10-210-740-U-T4

Luminous Intensity Polar Plot



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

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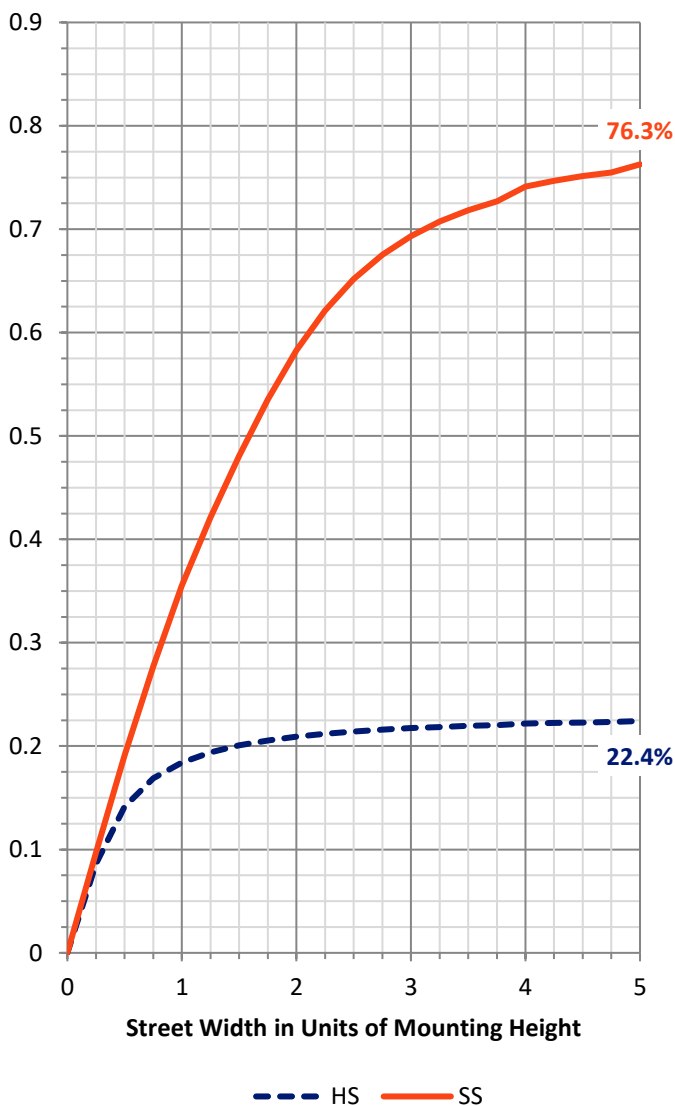
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7846.3	0.0	7846.3
	% Fixture	22.8	0.0	22.8
Street Side	Lumens	26590.7	0.0	26590.7
	% Fixture	77.2	0.0	77.2
Total	Lumens	34437.0	0.0	34437.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	365.4	1.1
10°-20°	1129.7	3.3
20°-30°	2037.8	5.9
30°-40°	3156.1	9.2
40°-50°	4794.2	13.9
50°-60°	6645.0	19.3
60°-70°	8640.8	25.1
70°-80°	6381.1	18.5
80°-90°	1286.9	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°	34437.0	100.0
0°-180°	34437.0	100.0

Coefficient of Utilization

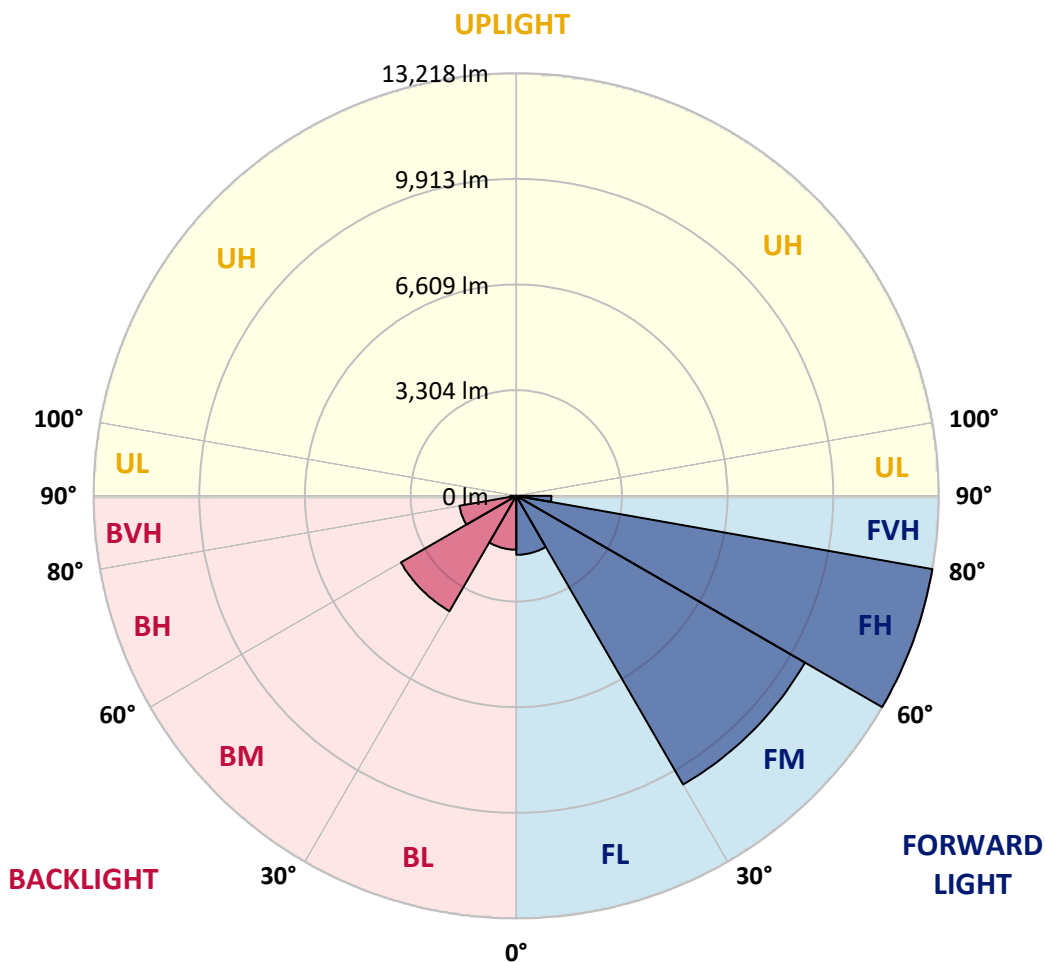


REPORT NUMBER: P510431
 CATALOG NUMBER: CTN-CA10-210-740-U-T4

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1846.2	5.4			
FM (30°-60°)	10427.4	30.3			
FH (60°-80°)	13217.7	38.4			G5
FVH (80°-90°)	1099.5	3.2			G5
BL (0°-30°)	1686.7	4.9	B3/2500		
BM (30°-60°)	4167.8	12.1	B3/5000		
BH (60°-80°)	1804.2	5.2	B3/2500		G3/2500
BVH (80°-90°)	187.5	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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 CATALOG NUMBER: CTN-CA10-210-740-U-T4

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	3771.9	3771.9	3771.9	3771.9	3771.9	3771.9	3771.9	3771.9	3771.9	3771.9	3771.9
2.5°	3749.1	3744.1	3741.2	3746.9	3749.1	3749.8	3751.2	3749.8	3746.2	3759.0	3774.7
5°	3749.8	3746.9	3741.2	3736.2	3736.2	3736.2	3736.9	3753.3	3760.5	3759.0	3778.3
7.5°	3755.5	3753.3	3742.6	3739.1	3747.6	3750.5	3764.7	3759.8	3767.6	3780.4	3796.8
10°	3756.2	3753.3	3744.1	3751.9	3776.2	3780.4	3786.9	3801.1	3804.0	3819.7	3836.1
12.5°	3763.3	3763.3	3766.9	3784.0	3809.7	3814.7	3838.9	3850.3	3867.4	3875.3	3895.2
15°	3801.1	3800.4	3809.0	3828.2	3869.6	3872.4	3902.4	3936.6	3949.4	3968.7	4000.8
17.5°	3891.0	3895.2	3895.9	3910.2	3959.4	3960.8	4010.0	4042.1	4071.3	4105.6	4179.0
20°	4104.1	4096.3	4087.7	4087.7	4107.0	4117.0	4154.8	4206.1	4266.0	4326.6	4412.9
22.5°	4372.2	4387.9	4356.6	4340.2	4349.4	4338.0	4366.5	4407.9	4477.8	4568.3	4677.4
25°	4692.4	4693.8	4691.7	4625.4	4604.7	4611.8	4635.3	4673.8	4766.5	4838.6	4996.8
27.5°	5004.7	4998.3	4975.5	4905.6	4885.6	4895.6	4894.9	5001.1	5096.0	5187.9	5374.0
30°	5288.5	5305.6	5264.9	5147.3	5149.4	5148.0	5180.8	5317.7	5491.0	5662.1	5853.2
32.5°	5789.0	5737.0	5682.1	5449.6	5406.8	5401.8	5421.1	5625.0	5881.7	6170.5	6400.1
35°	6260.3	6247.5	6193.3	5957.3	5709.9	5705.6	5679.2	5927.3	6288.1	6822.9	7109.5
37.5°	6742.3	6723.8	6670.3	6469.2	6223.2	6199.7	5978.0	6249.6	6737.3	7585.8	7994.4
40°	7317.0	7305.6	7222.9	6965.5	6713.1	6677.4	6447.1	6588.3	7304.2	8601.9	8889.9
42.5°	7821.1	7819.0	7724.2	7485.3	7270.7	7235.0	7038.9	7185.8	8092.1	9597.3	9767.0
45°	8191.2	8247.5	8251.8	8115.6	7967.3	7935.9	7883.9	8086.4	9003.3	10500.7	10475.7
47.5°	8503.5	8552.0	8501.3	8431.5	8380.8	8383.0	8463.6	8865.7	9903.1	11287.8	11093.9
50°	9025.4	8995.5	8732.4	8691.0	8755.2	8793.0	9026.8	9707.1	10933.5	12026.5	11648.6
52.5°	9778.4	9663.6	9147.3	9063.2	9306.3	9320.6	9692.8	10459.3	11963.1	12660.4	12156.3
55°	10808.7	10713.8	10130.6	9742.0	9864.6	9960.9	10485.0	11230.1	12803.7	13256.5	12547.0
57.5°	12331.7	12338.8	11863.2	11138.8	10721.7	10824.4	11233.6	11979.5	13498.2	13755.6	12790.9
60°	13552.4	13778.4	13636.5	13305.7	12706.7	12636.9	12325.3	12760.2	14091.4	14179.8	13024.0
62.5°	14398.7	14501.4	14989.1	15059.0	15743.5	15772.7	14280.4	13675.0	14743.1	14457.9	13073.2
65°	14356.0	14419.4	15190.2	16128.5	18150.6	18241.2	17367.8	15059.0	15189.5	14582.0	12929.9
67.5°	13356.3	13451.8	14431.5	16185.6	19433.4	19399.1	18845.1	16985.6	15336.4	14383.0	12246.8
70°	11620.1	11914.6	12737.4	14982.7	19834.1	19879.7	18858.7	17600.9	14957.7	13820.5	11108.1
72.5°	9577.3	9670.0	10447.2	12959.9	18662.6	18595.6	18085.8	16788.8	14273.2	12803.0	9115.3
75°	7283.5	7283.5	8224.7	10328.1	16026.6	16261.9	16460.1	15205.9	12644.7	10435.1	6206.8
77.5°	4835.0	5008.3	5766.2	7761.2	12686.1	12860.0	13544.5	12961.3	10353.1	7652.1	2835.0
80°	2564.7	2586.1	3399.0	5157.3	9073.9	9401.9	10343.1	9996.5	7446.8	3585.1	716.6
82.5°	897.0	979.0	1494.5	2989.0	5978.7	6183.3	6861.4	5940.2	2630.3	793.6	396.4
85°	445.6	461.3	658.1	1423.2	3366.2	3465.3	4008.6	2313.8	423.5	346.5	269.5
87.5°	214.6	219.6	252.4	509.1	1463.1	1530.9	1620.7	752.9	156.9	131.9	116.9
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: P510431
 CATALOG NUMBER: CTN-CA10-210-740-U-T4

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3771.9	3771.9	3771.9	3771.9	3771.9	3771.9	3771.9	3771.9	3771.9	3771.9	3771.9
2.5°	3778.3	3784.7	3796.8	3800.4	3791.8	3807.5	3822.5	3836.1	3835.3	3840.3	3858.2
5°	3786.9	3800.4	3813.2	3836.1	3858.2	3871.0	3883.1	3894.5	3898.1	3908.8	3919.5
7.5°	3813.2	3826.8	3856.0	3895.9	3897.4	3929.5	3950.1	3953.7	3956.6	3956.6	3981.5
10°	3853.9	3878.8	3925.9	3953.7	3978.7	3968.0	3989.3	3975.8	3965.8	3970.1	3987.2
12.5°	3923.8	3945.9	4013.6	4044.3	4021.4	4017.2	3995.8	3965.1	3930.2	3926.6	3942.3
15°	4033.6	4074.9	4135.5	4164.8	4107.7	4057.1	3985.1	3922.3	3854.6	3829.6	3839.6
17.5°	4210.4	4260.3	4326.6	4306.6	4202.5	4102.7	3983.6	3851.0	3719.8	3628.6	3652.1
20°	4469.2	4506.3	4560.5	4479.9	4328.0	4163.3	3968.0	3758.3	3536.6	3370.4	3351.2
22.5°	4740.9	4797.2	4764.4	4615.4	4416.4	4186.9	3935.2	3623.6	3280.6	3072.4	3041.0
25°	5068.1	5086.7	4973.3	4748.7	4441.4	4149.8	3828.9	3426.8	3018.9	2822.8	2813.6
27.5°	5415.4	5373.3	5162.3	4810.0	4413.6	4040.0	3615.7	3115.9	2782.2	2608.9	2581.8
30°	5807.6	5709.9	5318.4	4816.5	4308.8	3826.1	3346.2	2872.8	2589.7	2415.7	2387.9
32.5°	6312.4	6082.1	5463.2	4750.1	4087.7	3512.3	3022.5	2665.3	2416.4	2241.7	2216.8
35°	6957.7	6569.1	5616.5	4630.4	3815.4	3198.6	2754.4	2489.2	2276.0	2065.6	2032.1
37.5°	7701.3	7248.6	5799.7	4479.2	3516.6	2922.7	2573.3	2377.2	2171.9	1933.7	1893.8
40°	8565.5	7928.8	6082.1	4298.8	3248.5	2723.7	2485.6	2338.7	2114.1	1866.0	1820.3
42.5°	9314.2	8648.2	6417.9	4104.9	2995.4	2558.3	2446.4	2313.0	2077.7	1815.4	1763.3
45°	10006.5	9242.2	6745.9	3869.6	2728.7	2444.9	2399.3	2248.9	2013.6	1752.6	1698.4
47.5°	10569.1	9722.0	7031.1	3653.5	2515.5	2340.8	2296.6	2126.9	1905.9	1677.0	1637.1
50°	11001.2	10082.8	7187.2	3481.7	2290.2	2222.5	2164.0	1989.3	1776.8	1579.3	1545.1
52.5°	11443.3	10444.3	7264.3	3490.2	2080.6	2046.4	1986.5	1836.7	1674.2	1522.3	1485.2
55°	11700.7	10592.6	7183.0	3282.7	1888.1	1848.1	1796.1	1718.4	1621.4	1486.6	1451.7
57.5°	11851.1	10684.6	6935.5	2677.4	1656.3	1618.6	1627.1	1620.7	1540.8	1398.9	1366.9
60°	11959.5	10485.0	6428.6	1967.9	1458.8	1430.3	1500.9	1478.1	1408.9	1298.4	1271.3
62.5°	11871.8	10104.9	5515.9	1479.5	1297.7	1358.3	1420.3	1378.3	1284.1	1183.6	1152.2
65°	11337.0	9359.1	4192.6	1188.6	1245.6	1329.1	1379.0	1311.2	1215.7	1096.6	1082.4
67.5°	10363.8	8007.2	2472.8	1089.5	1206.4	1294.8	1336.2	1246.4	1162.2	1048.1	1031.0
70°	8878.5	5994.4	1104.5	1014.6	1138.0	1225.7	1252.8	1167.9	1076.7	969.7	952.6
72.5°	6608.3	3614.3	744.4	936.9	1036.7	1114.5	1144.4	1054.6	989.7	941.2	936.2
75°	3669.9	1254.9	686.6	848.5	926.2	996.1	1033.2	969.7	918.4	852.1	825.0
77.5°	1168.6	533.3	652.4	758.7	857.1	914.8	909.1	813.6	797.2	716.6	709.5
80°	466.3	464.9	603.2	621.0	731.6	780.0	767.2	646.7	668.1	621.0	602.5
82.5°	365.8	425.7	483.4	474.2	569.0	626.0	608.2	474.9	536.9	493.4	451.3
85°	278.1	372.9	310.2	308.7	397.2	464.9	476.3	365.1	365.8	333.0	296.6
87.5°	143.3	137.6	119.1	118.4	132.6	189.0	231.7	207.5	164.0	123.4	118.4
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)