

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: P591359

Luminaire Tested: **CTN-CA8-330-730-U-T1-SSS-HM-EX120**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591359
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2201-495-2)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/19/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA8-330-730-U-T1-SSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE, 120D FIELD INSTALLED SHIELD ON STREET SIDE
Light Source: (8) 3000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27962 lumens
Efficiency: N/A
Efficacy: 84.3 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type I - Short
BUG Rating: B5 - U0 - G5

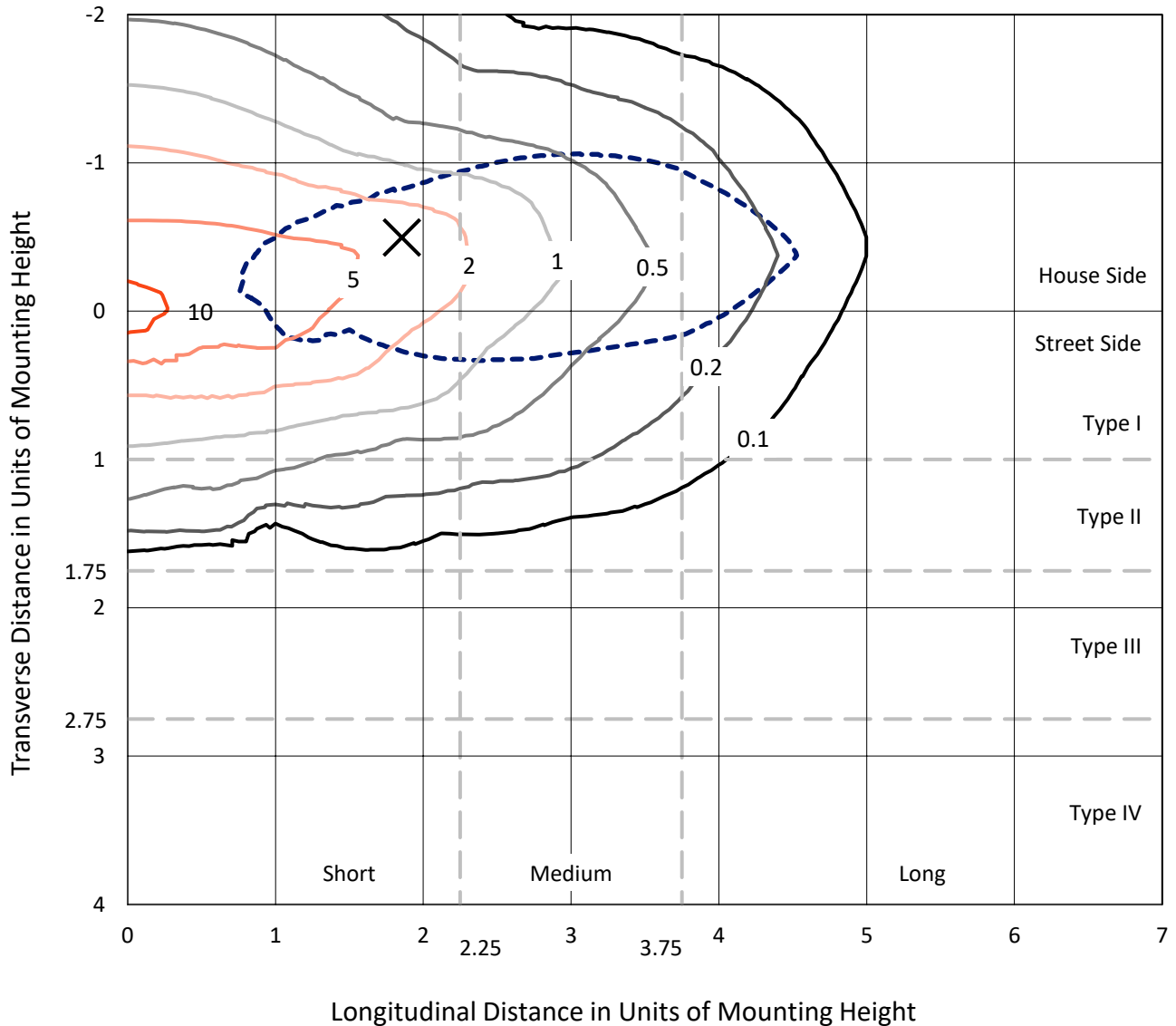
Input Watts (W): 331.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

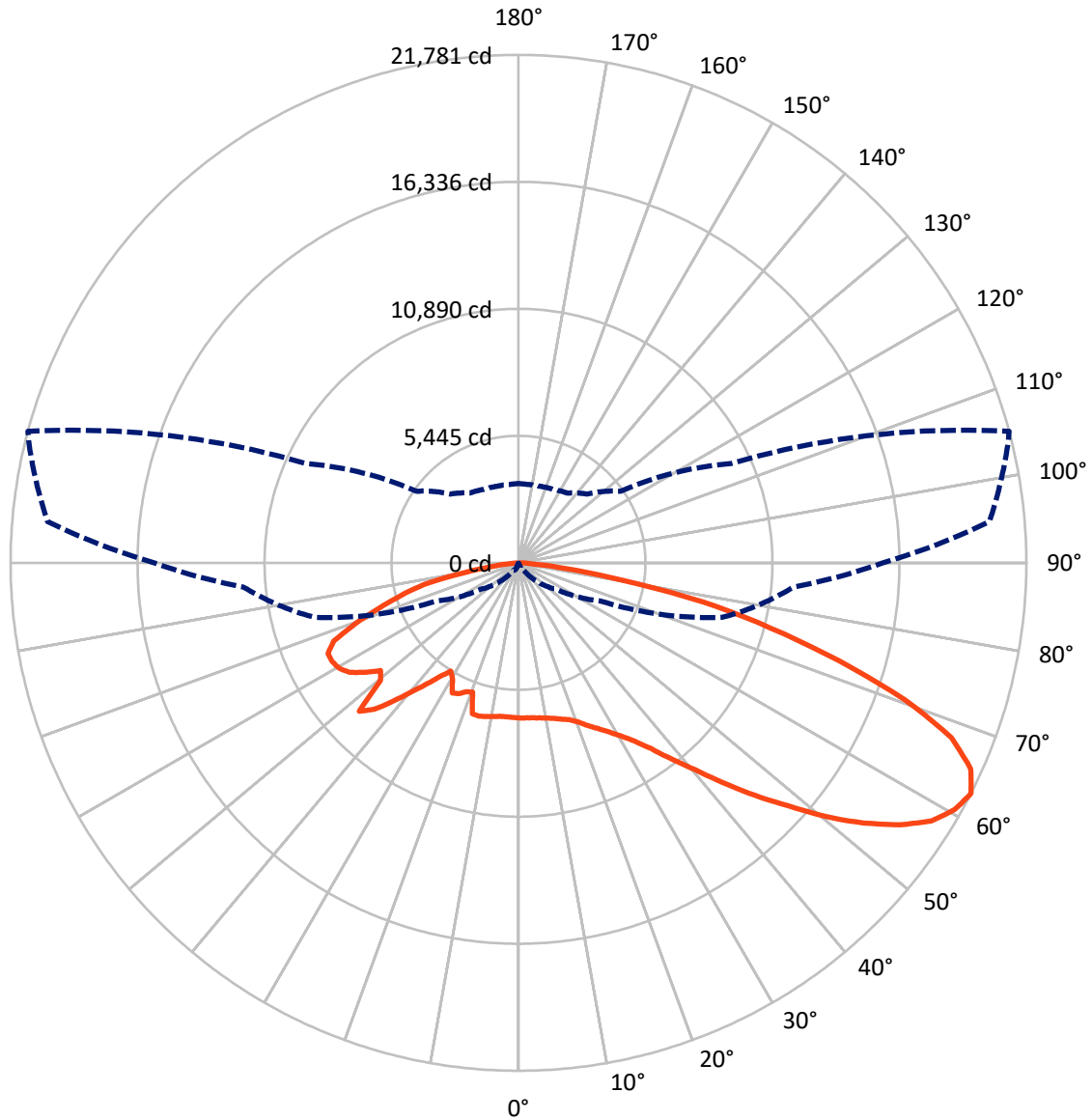
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.6 fc
 Type I - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 105-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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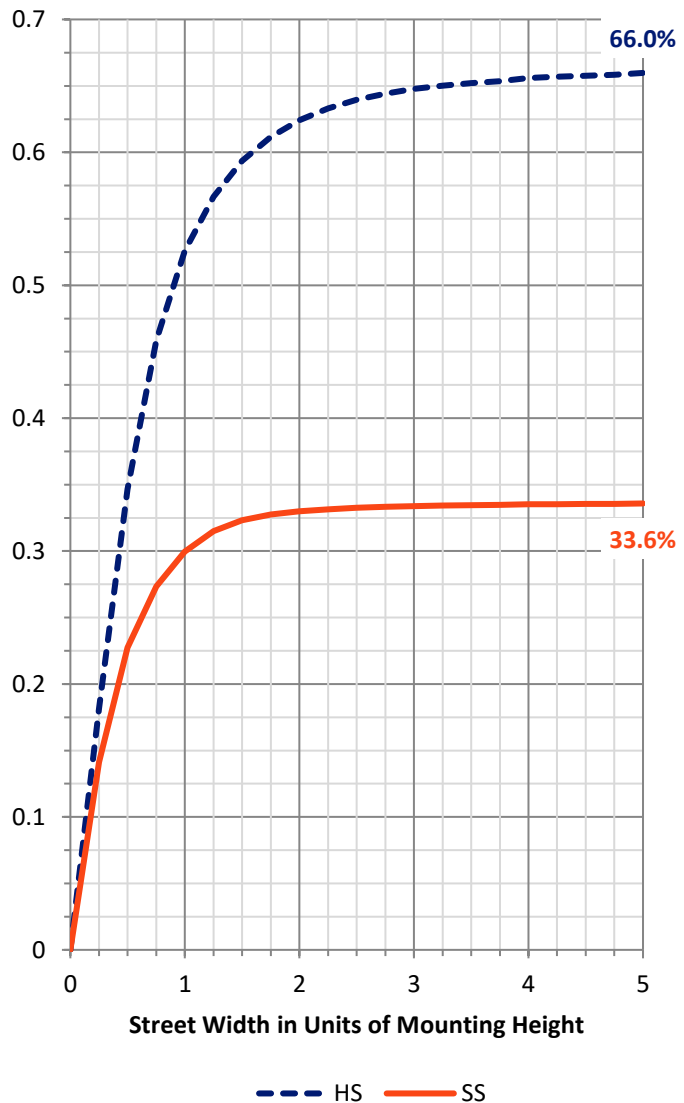
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	18605.6	0.0	18605.6
	% Fixture	66.5	0.0	66.5
Street Side	Lumens	9356.4	0.0	9356.4
	% Fixture	33.5	0.0	33.5
Total	Lumens	27962.0	0.0	27962.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	634.7	2.3
10°-20°	1792.6	6.4
20°-30°	2526.4	9.0
30°-40°	3432.6	12.3
40°-50°	4669.6	16.7
50°-60°	5532.0	19.8
60°-70°	5424.8	19.4
70°-80°	3421.5	12.2
80°-90°	527.8	1.9
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°	27962.0	100.0
0°-180°	27962.0	100.0

Coefficient of Utilization

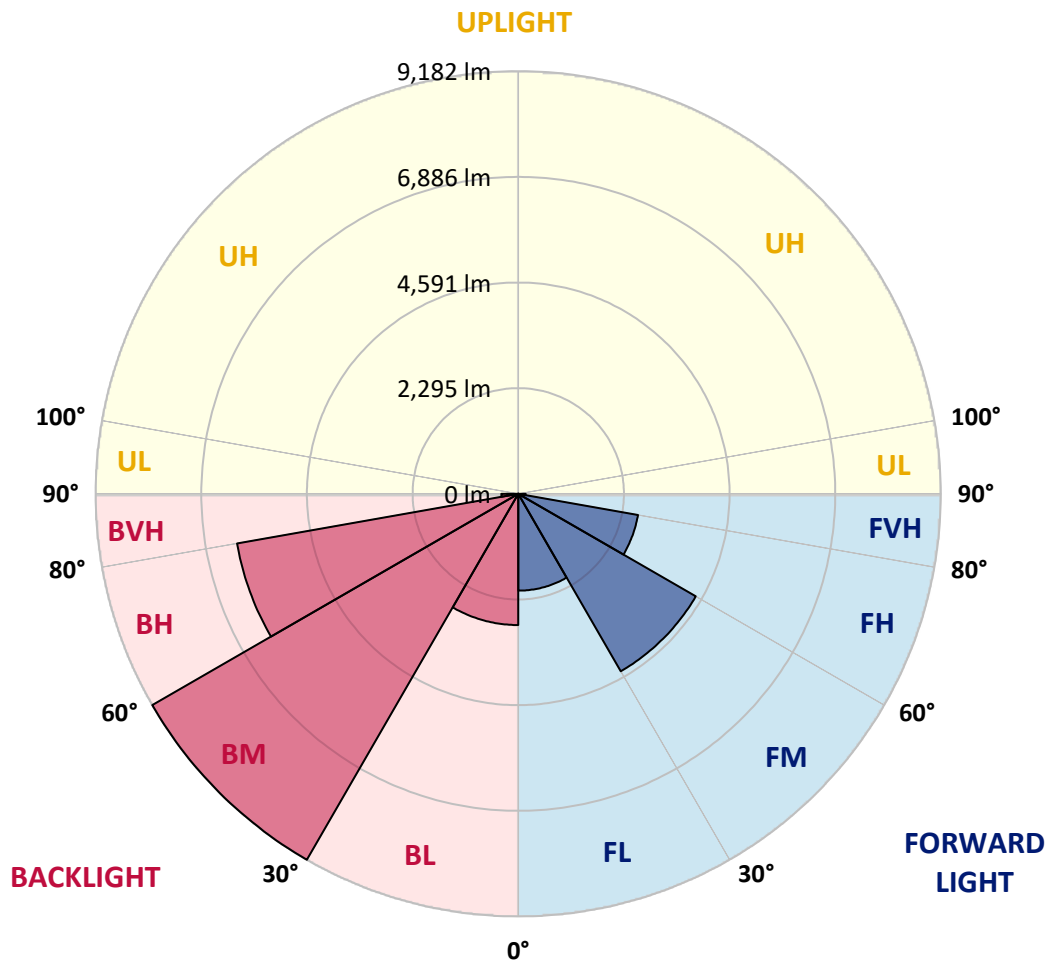


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2103.2	7.5			
FM (30°-60°)	4452.2	15.9			
FH (60°-80°)	2641.7	9.4			G2/5000
FVH (80°-90°)	159.2	0.6			G2/225
BL (0°-30°)	2850.6	10.2	B4/5000		
BM (30°-60°)	9182.0	32.8	B5		
BH (60°-80°)	6204.5	22.2	B5		G5
BVH (80°-90°)	368.6	1.3			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G5
 Type I Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	6651.7	6651.7	6651.7	6651.7	6651.7	6651.7	6651.7	6651.7	6651.7	6651.7	6651.7
2.5°	6656.2	6604.2	6641.3	6697.8	6613.1	6662.1	6580.4	6647.3	6630.9	6635.4	6666.6
5°	6604.2	6549.2	6593.8	6668.1	6584.9	6639.8	6573.0	6629.4	6623.5	6644.3	6669.5
7.5°	6555.2	6503.2	6549.2	6598.2	6555.2	6608.6	6558.1	6627.9	6632.4	6678.4	6699.2
10°	6503.2	6451.2	6495.7	6552.2	6516.5	6583.4	6562.6	6647.3	6679.9	6740.8	6758.7
12.5°	6388.8	6342.7	6379.9	6445.2	6451.2	6549.2	6562.6	6693.3	6733.4	6813.6	6840.4
15°	5701.0	5751.5	5949.1	6139.2	6220.9	6402.2	6501.7	6734.9	6791.3	6905.7	6947.3
17.5°	4612.2	4517.2	4209.7	4289.9	4741.5	5350.5	5580.7	6160.0	6772.0	7021.6	7075.1
20°	2725.7	2920.3	3521.9	3706.1	3872.5	4527.6	5301.5	5646.1	5880.8	6767.6	7250.3
22.5°	2247.4	2260.8	2691.6	3541.2	3728.4	3985.4	4584.0	5718.9	5961.0	6137.8	6675.5
25°	2084.0	2097.4	2171.7	2828.2	3625.9	3923.0	4185.9	5227.2	6167.5	6385.8	6806.2
27.5°	1953.3	1971.2	2039.5	2223.7	3380.8	3905.2	4237.9	4636.0	6259.6	6679.9	7073.6
30°	1855.3	1862.7	1932.5	2110.8	2556.4	3909.6	4313.7	4738.5	5733.7	7052.8	7447.9
32.5°	1766.2	1770.6	1843.4	2017.2	2286.1	3621.5	4428.0	4952.4	5475.3	7358.8	7961.9
35°	1697.8	1694.9	1760.2	1931.0	2198.4	2773.3	4555.8	5209.4	5888.2	7069.1	8728.3
37.5°	1632.5	1628.0	1684.5	1841.9	2121.2	2596.5	4407.2	5518.3	6480.9	7289.0	8665.9
40°	1582.0	1573.1	1620.6	1761.7	2041.0	2552.0	3471.4	5845.1	7131.5	8422.3	9190.3
42.5°	1537.4	1531.5	1571.6	1684.5	1959.3	2498.5	3235.2	6021.9	7941.1	9732.5	10546.5
45°	1470.6	1479.5	1524.0	1632.5	1871.6	2422.7	3259.0	4836.5	8798.1	10868.8	11898.2
47.5°	1442.3	1440.9	1469.1	1571.6	1795.9	2317.3	3242.7	4435.5	9337.4	12058.6	13221.7
50°	1397.8	1390.4	1212.1	1500.3	1718.6	2186.5	3174.3	4551.3	7770.2	13226.2	14436.8
52.5°	1314.6	1169.0	1060.6	1449.8	1639.9	2043.9	3021.3	4601.8	7502.9	13018.2	15481.0
55°	698.1	778.4	1004.1	1378.5	1547.8	1916.2	2797.0	4566.2	8080.7	10409.8	14371.4
57.5°	619.4	616.4	638.7	1088.8	806.6	1776.6	2526.7	4402.8	8627.3	10885.2	14640.3
60°	49.0	50.5	59.4	362.4	427.8	1250.7	2235.6	4200.8	8917.0	11446.6	15292.4
62.5°	23.8	26.7	35.7	323.8	390.7	1137.8	1972.6	3856.2	9038.8	11852.2	15614.7
65°	5.9	7.4	16.3	285.2	340.2	1013.1	1708.2	3452.1	9049.2	11868.5	15874.7
67.5°	4.5	7.4	16.3	258.5	310.5	903.1	1476.5	3169.9	8606.5	11807.6	15744.0
70°	4.5	7.4	16.3	231.7	280.7	782.8	1271.5	2893.6	7476.1	11580.3	15299.8
72.5°	4.5	8.9	16.3	203.5	246.6	664.0	1079.9	2589.1	6274.4	10631.2	14310.5
75°	4.5	8.9	17.8	164.9	210.9	528.8	886.8	2217.7	5218.3	9218.5	12670.6
77.5°	4.5	8.9	17.8	127.7	170.8	395.1	671.4	1757.3	4163.6	6798.8	8902.1
80°	4.5	8.9	17.8	90.6	139.6	277.8	488.7	1198.7	2483.6	3573.9	4533.5
82.5°	4.5	8.9	17.8	65.4	101.0	200.5	301.5	591.2	1185.4	1715.7	2152.4
85°	3.0	7.4	16.3	43.1	53.5	121.8	179.7	262.9	355.0	469.4	634.3
87.5°	3.0	4.5	10.4	16.3	22.3	43.1	66.8	59.4	66.8	139.6	200.5
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):

	95°	104°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6651.7	6651.7	6651.7	6651.7	6651.7	6651.7	6651.7	6651.7	6651.7	6651.7	6651.7
2.5°	6662.1	6656.2	6657.7	6690.3	6662.1	6668.1	6619.0	6717.1	6708.2	6694.8	6733.4
5°	6669.5	6666.6	6678.4	6706.7	6663.6	6671.0	6625.0	6739.4	6711.1	6706.7	6752.7
7.5°	6706.7	6702.2	6714.1	6727.5	6679.9	6679.9	6639.8	6730.4	6714.1	6684.4	6736.4
10°	6773.5	6757.2	6769.1	6776.5	6703.7	6700.7	6626.5	6733.4	6691.8	6677.0	6743.8
12.5°	6867.1	6830.0	6847.8	6835.9	6739.4	6721.5	6622.0	6691.8	6639.8	6630.9	6691.8
15°	6993.4	6944.3	6957.7	6935.4	6813.6	6761.6	6601.2	6630.9	6547.7	6540.3	6584.9
17.5°	7110.7	7081.0	7073.6	7073.6	6931.0	6801.7	6581.9	6540.3	6430.4	6423.0	6445.2
20°	7323.1	7283.0	7278.6	7242.9	7032.0	6834.4	6550.7	6423.0	6259.6	6222.4	6264.0
22.5°	7391.5	7586.0	7572.7	7415.2	7116.6	6861.2	6486.8	6275.9	6051.6	5980.3	6001.1
25°	7595.0	7887.6	7863.8	7635.1	7202.8	6876.0	6409.6	6114.0	5805.0	5680.2	5684.7
27.5°	7917.3	8215.9	8199.5	7869.8	7309.8	6880.5	6323.4	5943.2	5559.9	5396.5	5409.9
30°	8327.3	8628.8	8605.0	8131.2	7471.7	6889.4	6258.1	5738.2	5335.6	5158.9	5155.9
32.5°	8897.7	9171.0	9101.2	8480.3	7666.3	6926.5	6171.9	5543.6	5130.6	4945.0	4930.1
35°	9759.2	9860.2	9774.1	8896.2	7872.7	6950.3	6033.8	5353.5	4940.5	4757.8	4744.4
37.5°	10923.8	10799.0	10683.1	9364.1	8086.6	6944.3	5858.5	5169.3	4777.1	4603.3	4603.3
40°	11038.2	11877.4	11663.5	9857.2	8279.7	6911.7	5692.1	4989.5	4644.9	4503.8	4526.1
42.5°	11574.4	13198.0	12897.9	10334.1	8419.4	6816.6	5513.9	4826.1	4521.6	4407.2	4416.2
45°	12892.0	14399.7	14224.4	10794.5	8495.1	6648.7	5307.4	4665.7	4383.5	4292.9	4310.7
47.5°	14309.1	15828.6	15571.7	11219.4	8453.5	6400.7	5087.6	4518.6	4239.4	4181.5	4214.1
50°	15648.9	17331.9	17118.0	11517.9	8269.3	6053.1	4852.9	4362.7	4126.5	4080.4	4096.8
52.5°	16963.5	18697.0	18536.6	11679.9	7901.0	5689.2	4636.0	4214.1	4021.0	3963.1	3985.4
55°	18047.9	19990.8	19834.8	11663.5	7346.9	5308.9	4420.6	4053.7	3914.1	3862.1	3879.9
57.5°	18894.5	20997.9	20886.5	11415.5	6702.2	4959.8	4177.0	3896.3	3773.0	3726.9	3741.8
60°	19652.1	21636.6	21492.5	10867.3	6018.9	4575.1	3926.0	3709.1	3606.6	3569.5	3593.2
62.5°	20273.0	21650.0	21780.7	10074.1	5349.0	4168.1	3646.7	3478.9	3404.6	3382.3	3397.2
65°	20432.0	21251.9	21315.8	9093.7	4670.2	3764.1	3311.0	3201.1	3169.9	3156.5	3186.2
67.5°	20212.1	20412.6	20032.4	8264.9	4050.7	3306.5	2948.6	2880.2	2899.5	2902.5	2941.1
70°	19644.7	18166.7	17579.9	7571.2	3472.9	2800.0	2550.5	2528.2	2580.2	2623.3	2651.5
72.5°	18197.9	14915.1	14356.6	6590.8	2737.6	2143.5	2008.3	2079.6	2061.8	2081.1	2131.6
75°	15666.7	11512.0	11165.9	5363.9	2085.5	1558.2	1377.0	1384.4	1406.7	1504.7	1558.2
77.5°	11160.0	8279.7	8125.2	4114.6	1381.4	916.5	947.7	1053.2	1084.4	1087.3	1124.5
80°	5913.5	4615.2	4405.8	2424.2	913.5	655.1	713.0	759.0	800.6	843.7	854.1
82.5°	2664.8	2087.0	2029.1	1204.7	579.3	505.0	518.4	597.1	631.3	638.7	646.2
85°	1035.3	720.4	686.3	500.6	380.3	341.6	378.8	459.0	491.7	476.8	472.4
87.5°	276.3	169.3	154.5	167.9	178.3	188.6	215.4	245.1	280.7	270.3	261.4
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)