

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: P591268

Luminaire Tested: **CTN-CA8-330-727-U-T2-SSS-HM-EX90**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591268
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2201-495-4)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/19/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA8-330-727-U-T2-SSS-HM-EX90
Description: CELESTEON HIGH MAST LUMINAIRE, 90D FIELD INSTALLED SHIELD ON STREET SIDE
Light Source: (8) 2700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 30118 lumens
Efficiency: N/A
Efficacy: 90.9 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type II - Short
BUG Rating: B4 - U0 - G4

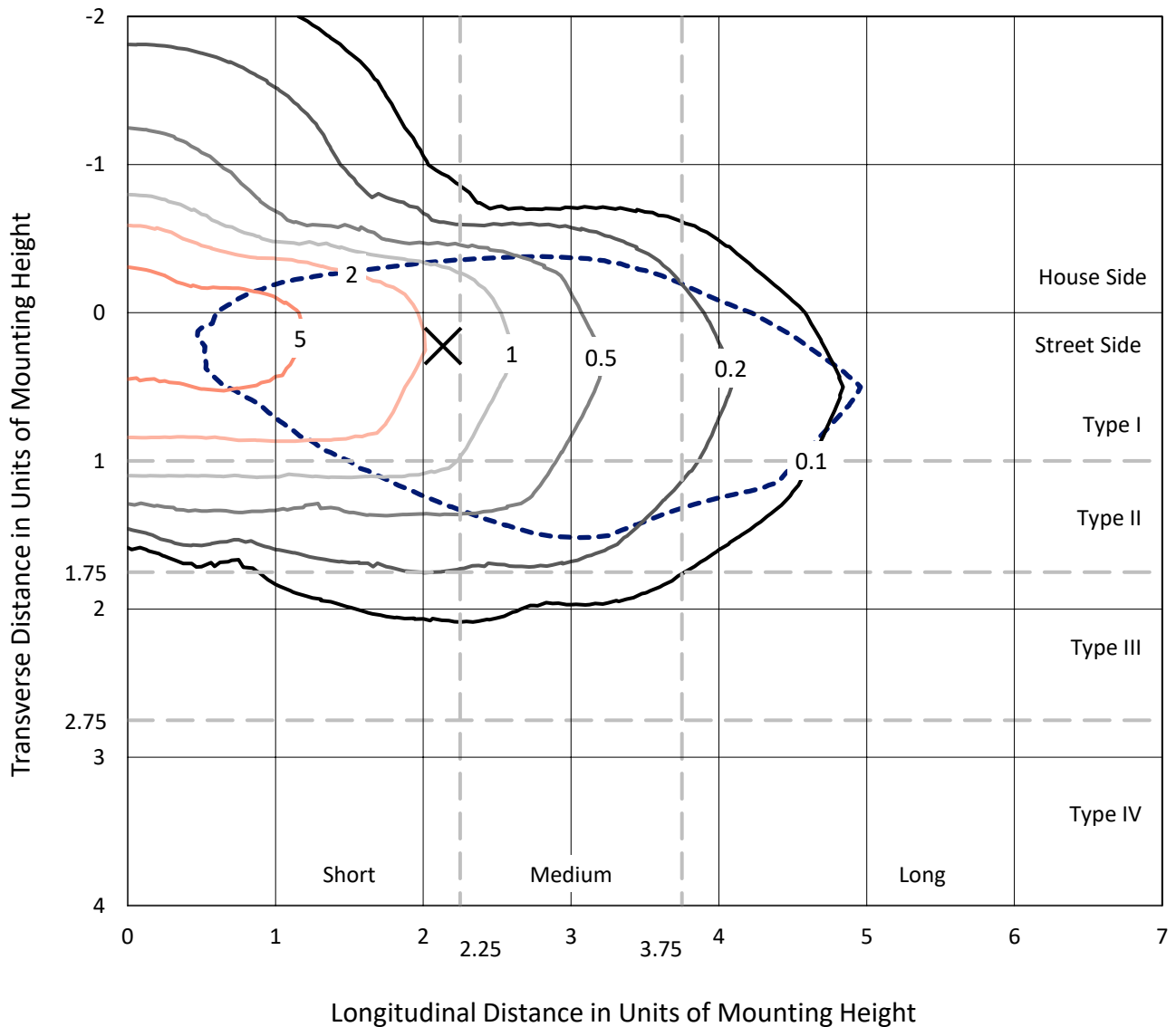
Input Watts (W): 331.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

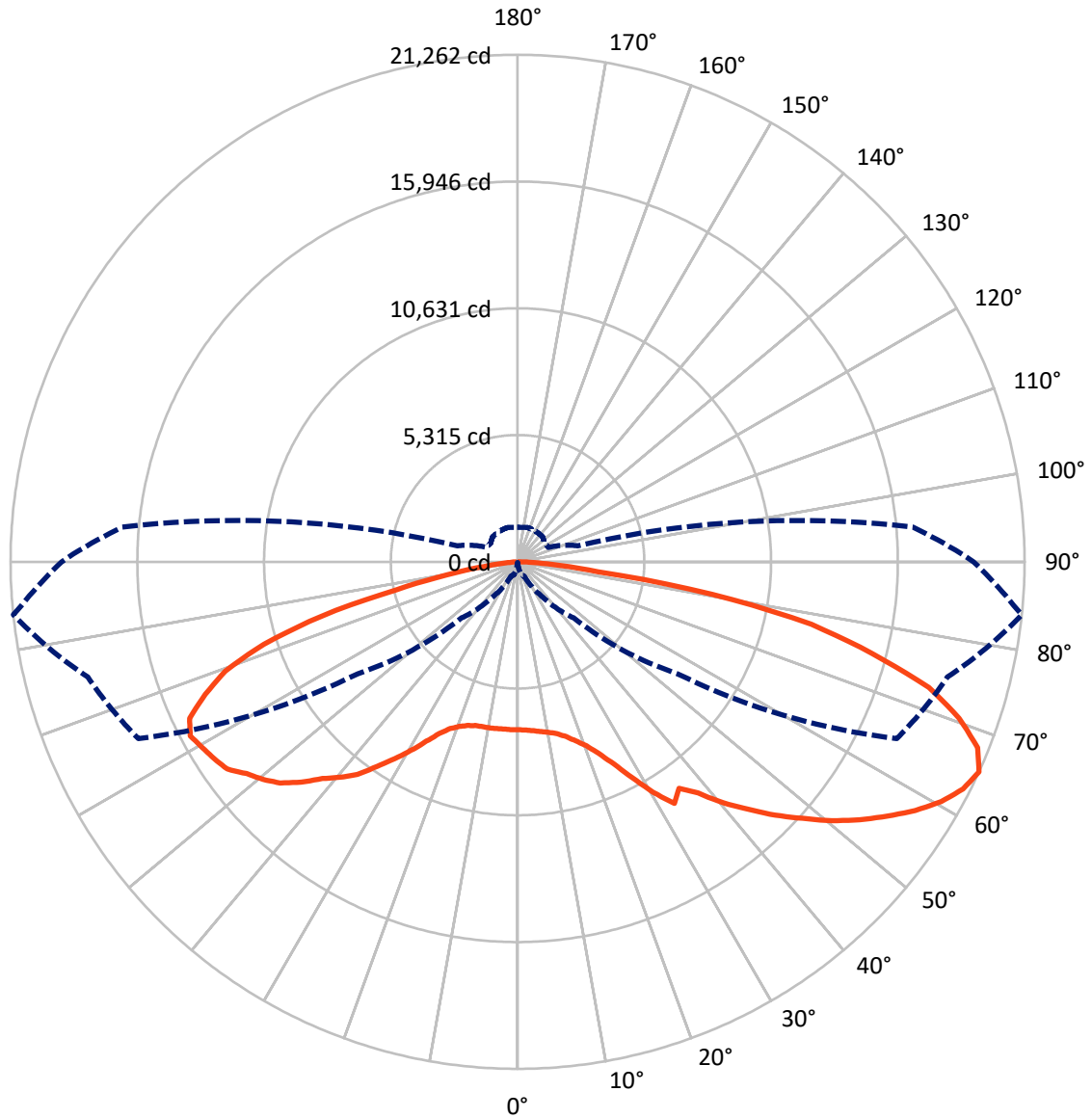
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 9.1 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 84-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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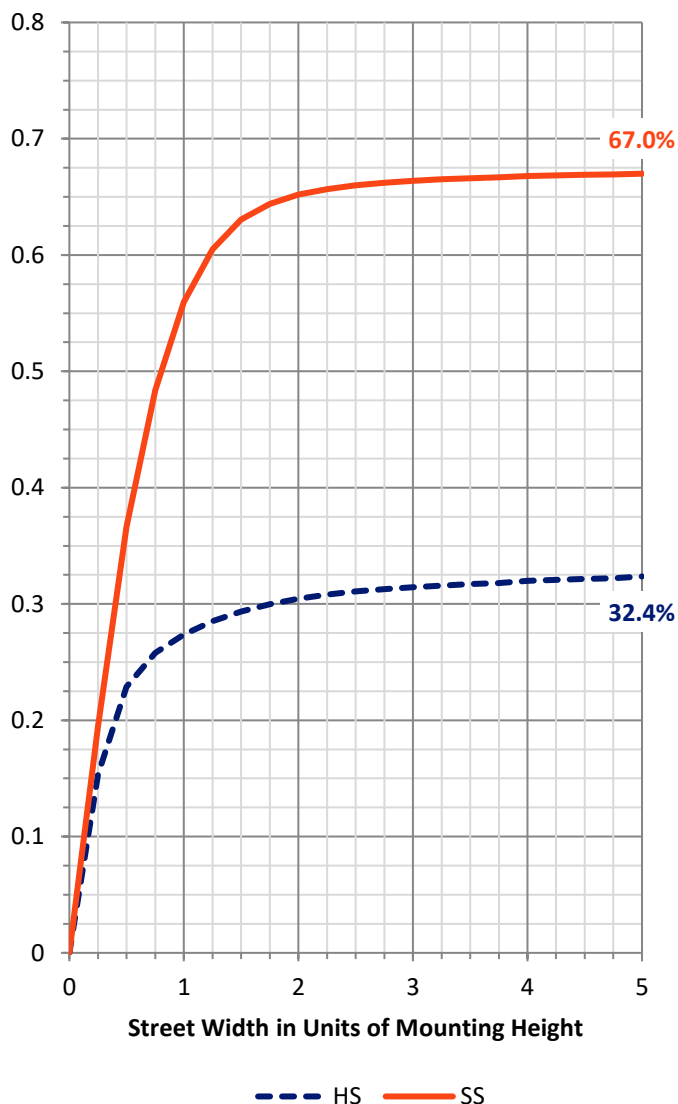
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9970.6	0.0	9970.6
	% Fixture	33.1	0.0	33.1
Street Side	Lumens	20147.4	0.0	20147.4
	% Fixture	66.9	0.0	66.9
Total	Lumens	30118.0	0.0	30118.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	679.7	2.3
10°-20°	2023.2	6.7
20°-30°	3039.7	10.1
30°-40°	4042.3	13.4
40°-50°	4991.0	16.6
50°-60°	5608.5	18.6
60°-70°	5500.6	18.3
70°-80°	3576.7	11.9
80°-90°	656.4	2.2
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°	30118.0	100.0
0°-180°	30118.0	100.0

Coefficient of Utilization

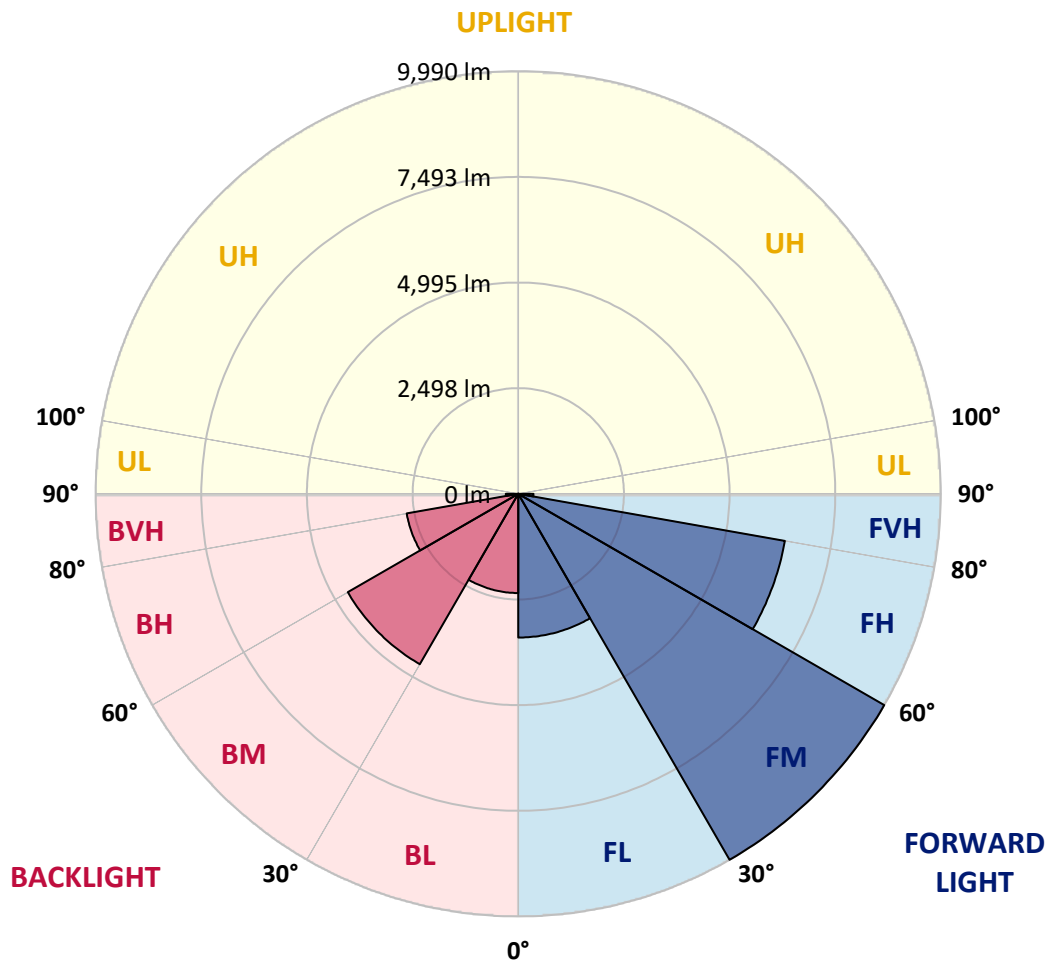


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3397.2	11.3			
FM	(30°-60°)	9990.0	33.2			
FH	(60°-80°)	6399.7	21.2			G3/7500
FVH	(80°-90°)	360.6	1.2			G3/500
BL	(0°-30°)	2345.4	7.8	B3/2500		
BM	(30°-60°)	4651.7	15.4	B3/5000		
BH	(60°-80°)	2677.7	8.9	B4/5000		G4/5000
BVH	(80°-90°)	295.8	1.0			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4
 Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	84°	85°
0°	7040.7	7040.7	7040.7	7040.7	7040.7	7040.7	7040.7	7040.7	7040.7	7040.7	7040.7
2.5°	7343.0	7273.8	7281.5	7314.8	7186.7	7229.0	7157.3	7170.1	7084.2	7068.9	7077.8
5°	7859.3	7785.0	7785.0	7805.5	7590.3	7532.6	7332.8	7299.5	7172.6	7116.3	7118.8
7.5°	8125.7	8052.7	8038.6	8057.9	7902.8	7915.7	7710.7	7514.7	7289.2	7189.3	7184.2
10°	8517.8	8435.8	8387.1	8388.4	8179.6	8100.1	7949.0	7811.9	7467.3	7272.6	7248.2
12.5°	8834.2	8771.4	8745.8	8726.6	8496.0	8443.4	8159.1	8047.6	7679.9	7399.4	7367.4
15°	9017.4	8958.4	8921.3	8877.7	8749.6	8663.8	8540.8	8287.2	7932.3	7603.1	7563.4
17.5°	8539.5	8438.3	8262.8	8186.0	8156.5	8280.8	8809.8	8680.4	8257.7	7892.6	7850.3
20°	7279.0	7371.2	7504.4	7202.1	7295.6	8219.3	9212.1	9200.6	8712.5	8239.8	8184.7
22.5°	6192.6	5949.2	6369.4	6830.6	7125.2	7996.4	9368.4	9801.4	9328.7	8727.8	8663.8
25°	5076.8	5215.2	5781.4	6710.2	7122.7	7827.3	9282.5	10262.6	10116.5	9392.7	9317.1
27.5°	4925.7	4928.2	5472.7	6183.7	7263.6	8219.3	9376.1	10280.5	11006.8	10252.3	10106.3
30°	4893.6	4878.3	5025.6	5889.0	7015.1	8585.6	9978.2	10440.6	11223.3	11213.1	11018.4
32.5°	4743.8	4734.8	4888.5	5280.5	6483.4	8973.8	10548.2	11187.5	11145.2	12079.1	12026.6
35°	4529.8	4561.8	4752.7	5160.1	6233.6	8651.0	11133.7	12043.2	12115.0	11658.9	11867.7
37.5°	4306.9	4324.8	4509.3	5001.2	5816.0	8086.0	11579.5	12882.3	13128.3	12304.6	12138.0
40°	4003.3	4040.5	4257.0	4810.4	5731.5	7562.1	11264.3	13838.0	14221.0	13289.7	13033.5
42.5°	3681.8	3699.7	3963.6	4500.4	5590.5	7569.8	10617.4	14663.0	15227.9	14189.0	13928.9
45°	3399.9	3405.1	3652.3	4132.7	5312.5	7522.4	10208.7	14696.3	16433.4	15152.3	14825.7
47.5°	3055.3	3104.0	3348.7	3827.8	4957.7	7363.5	10399.6	13662.5	17642.7	16070.9	15772.4
50°	2343.1	2381.5	2855.5	3529.3	4569.5	7098.3	10530.3	14495.2	16295.1	17067.5	16853.6
52.5°	2015.1	1949.8	2290.5	3193.7	4214.7	6656.4	10585.4	15663.5	16292.5	17969.4	17755.5
55°	862.2	1322.1	2063.8	2622.3	3890.6	6067.1	10545.7	16806.2	17086.7	18820.0	18745.7
57.5°	681.5	713.5	1516.8	2121.4	3506.3	5370.2	10366.3	17562.0	17783.6	19671.9	19460.5
60°	125.5	142.2	745.6	896.7	2539.1	4330.0	9713.0	17669.6	18292.2	20413.6	20143.3
62.5°	57.6	67.9	599.5	746.9	2030.5	3561.3	9153.2	17635.0	18762.4	20964.5	20726.2
65°	26.9	34.6	536.8	677.7	1757.6	3323.1	8183.4	17541.5	18658.6	21261.7	20874.8
67.5°	20.5	29.5	493.2	608.5	1461.7	3086.1	7262.3	16560.2	18159.0	20801.8	20265.0
70°	20.5	29.5	450.9	553.4	1240.1	2785.0	5895.4	15331.7	17018.8	19639.9	19192.8
72.5°	21.8	29.5	401.0	500.9	1074.8	2404.5	4605.4	13370.4	15652.0	18036.0	17565.9
75°	21.8	29.5	345.9	443.2	905.7	2013.8	3083.5	9556.7	13481.8	15350.9	14828.2
77.5°	21.8	29.5	287.0	370.2	737.9	1609.0	1994.6	5152.4	10607.2	12589.0	11919.0
80°	21.8	29.5	213.9	280.6	554.7	1135.0	1191.4	2598.0	5707.1	8270.5	8387.1
82.5°	21.8	28.2	148.6	205.0	362.5	622.6	658.5	1254.2	2106.1	3392.2	3439.6
85°	20.5	24.3	106.3	135.8	198.6	234.4	320.3	623.9	1009.5	1447.6	1436.1
87.5°	12.8	12.8	34.6	53.8	80.7	92.2	143.5	230.6	348.4	477.8	450.9
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°	7040.7	7040.7	7040.7	7040.7	7040.7	7040.7	7040.7	7040.7	7040.7	7040.7	7040.7
2.5°	7076.6	7047.1	7009.9	6999.7	6912.6	6871.6	6788.3	6825.5	6783.2	6748.6	6788.3
5°	7086.8	7043.3	6965.1	6872.9	6687.1	6602.6	6484.7	6497.5	6436.0	6388.6	6415.5
7.5°	7112.4	7058.6	6935.6	6728.1	6506.5	6373.3	6250.3	6346.4	6304.1	6268.2	6295.1
10°	7125.2	7083.0	6865.2	6646.1	6327.1	6254.1	6100.4	6088.9	6092.7	6088.9	6131.1
12.5°	7159.8	7099.6	6783.2	6503.9	6232.3	6038.9	5944.1	5942.8	5821.1	5768.6	5791.7
15°	7262.3	7131.6	6728.1	6334.8	6035.1	5907.0	5607.2	5608.5	5557.2	5497.0	5495.7
17.5°	7467.3	7227.7	6728.1	6220.8	5853.2	5594.4	5333.0	5190.8	5156.3	5163.9	5158.8
20°	7737.6	7389.1	6725.6	6053.0	5596.9	5329.2	4952.6	4832.1	4723.3	4730.9	4730.9
22.5°	8125.7	7627.4	6730.7	5899.3	5352.3	4988.4	4564.4	4412.0	4295.4	4299.2	4299.2
25°	8683.0	8036.1	6790.9	5805.8	5024.3	4587.5	4159.6	3922.6	3803.5	3804.7	3807.3
27.5°	9392.7	8606.1	6999.7	5607.2	4751.4	4113.5	3644.6	3470.4	3351.2	3320.5	3320.5
30°	10195.9	9290.2	7270.0	5477.8	4328.7	3579.3	3189.8	3060.4	2917.0	2874.7	2874.7
32.5°	11086.3	9976.9	7549.3	5319.0	3930.3	3120.7	2796.5	2677.4	2498.1	2445.5	2427.6
35°	12012.5	10686.6	7888.8	5096.0	3429.4	2742.7	2455.8	2311.0	2181.6	2112.5	2095.8
37.5°	12512.1	11494.9	8194.9	4870.6	3042.5	2444.3	2124.0	2011.3	1925.4	1876.7	1867.8
40°	13198.7	12082.9	8353.8	4497.8	2626.2	2140.6	1817.8	1812.7	1824.2	1780.7	1778.1
42.5°	13898.2	12663.3	8310.2	3998.2	2302.1	1830.6	1664.1	1752.5	1816.5	1778.1	1780.7
45°	14773.2	13444.7	8469.1	3472.9	1981.8	1659.0	1632.1	1735.8	1824.2	1815.3	1815.3
47.5°	15658.4	14200.5	8175.7	2829.9	1766.6	1609.0	1635.9	1708.9	1819.1	1848.6	1842.2
50°	16379.6	14718.1	7995.1	2284.1	1644.9	1610.3	1648.7	1675.6	1796.0	1843.4	1842.2
52.5°	16962.5	15211.3	7321.2	1928.0	1575.7	1615.4	1689.7	1670.5	1755.0	1805.0	1834.5
55°	17787.5	15894.1	6553.9	1790.9	1539.8	1610.3	1703.8	1688.4	1723.0	1746.1	1767.9
57.5°	18425.4	16233.6	5526.5	1702.5	1507.8	1602.6	1692.3	1693.6	1710.2	1701.2	1692.3
60°	18960.9	16543.6	4520.9	1616.7	1466.8	1585.9	1643.6	1661.5	1656.4	1644.9	1621.8
62.5°	19222.3	16879.2	3511.4	1525.7	1423.3	1537.3	1564.2	1584.7	1573.1	1534.7	1532.1
65°	19123.6	16638.4	2603.1	1427.1	1370.7	1483.5	1482.2	1491.2	1496.3	1447.6	1452.7
67.5°	18570.2	15580.2	1983.1	1301.6	1310.5	1406.6	1400.2	1405.3	1391.2	1357.9	1363.0
70°	16961.2	14378.6	1406.6	1090.2	1187.5	1286.2	1295.1	1316.9	1284.9	1226.0	1229.8
72.5°	14582.3	12313.5	986.4	868.6	1042.8	1168.3	1163.2	1161.9	1118.4	1141.4	1169.6
75°	12437.8	9429.9	749.4	699.5	823.7	1005.6	1063.3	1067.1	1073.5	1304.1	1320.8
77.5°	9574.6	5704.5	638.0	552.1	639.2	834.0	941.6	985.1	1352.8	1401.5	1375.9
80°	5705.8	3294.9	493.2	430.4	516.3	636.7	804.5	1040.2	1359.2	1214.4	1161.9
82.5°	2777.3	1528.3	358.7	328.0	380.5	462.5	631.6	1211.9	1150.4	939.0	926.2
85°	1036.4	516.3	215.2	224.2	253.6	303.6	480.4	1156.8	882.6	764.8	722.5
87.5°	258.8	94.8	87.1	89.7	114.0	152.4	246.0	557.3	427.9	354.9	347.2
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)