

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: P591206

Luminaire Tested: **CTN-CA10-310-727-U-T2-SSS-HM-EX120**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591206
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2201-495-5)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/19/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA10-310-727-U-T2-SSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE, 120D FIELD INSTALLED SHIELD ON STREET SIDE
Light Source: (10) 2700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25129 lumens
Efficiency: N/A
Efficacy: 80.4 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

Input Watts (W): 312.4
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

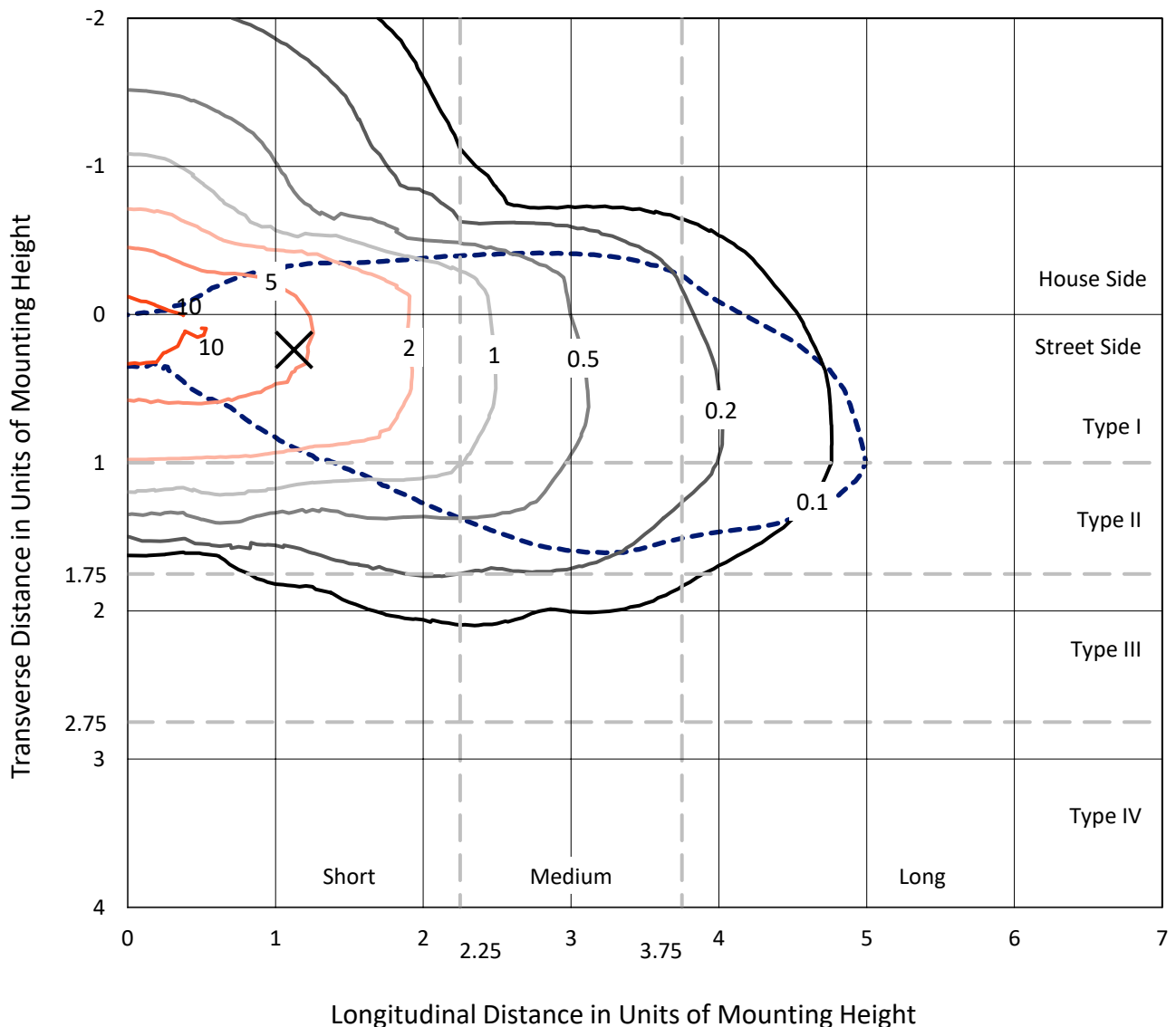




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Iso-Footcandle Lines of Horizontal Illumination

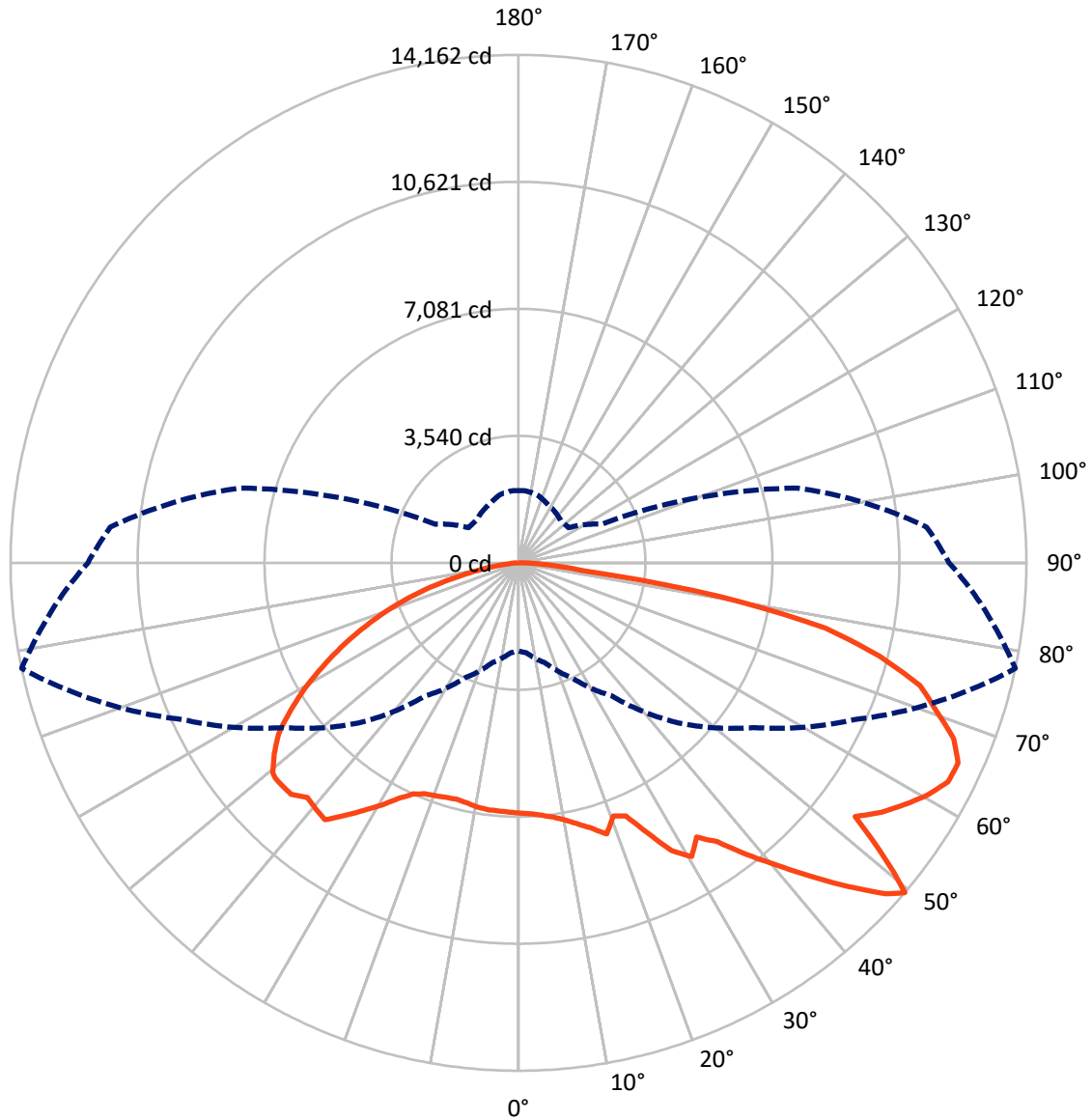
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.8 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 78-Deg Lateral - - - Horizontal Cone Through 49-Deg Vertical

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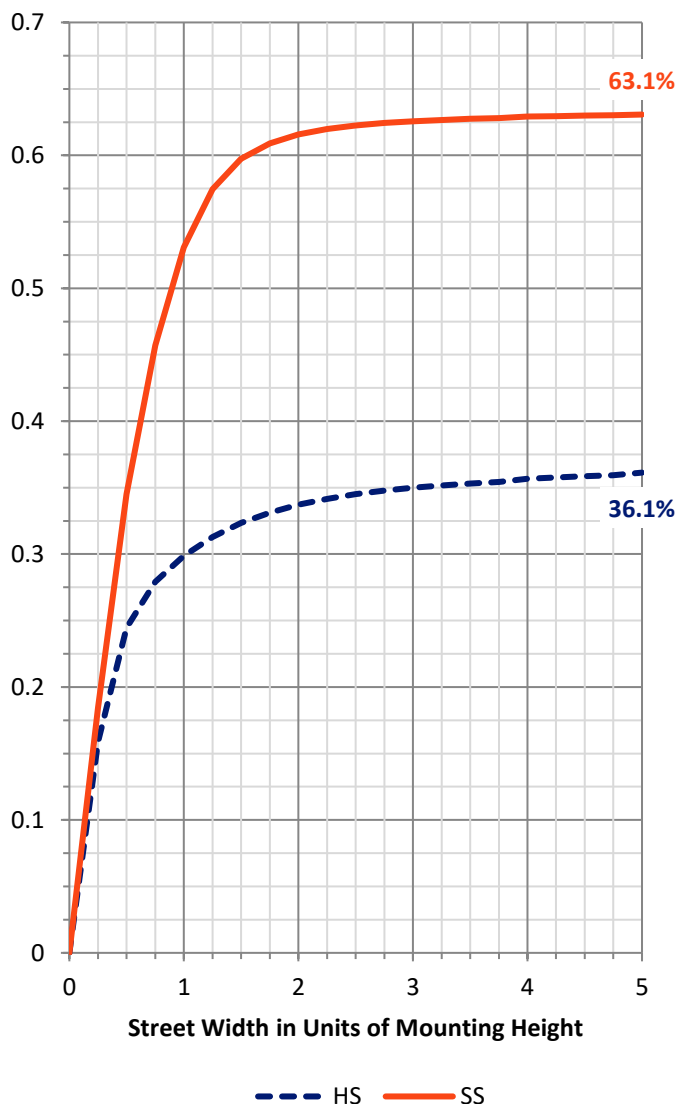
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9304.3	0.0	9304.3
	% Fixture	37.0	0.0	37.0
Street Side	Lumens	15824.6	0.0	15824.6
	% Fixture	63.0	0.0	63.0
Total	Lumens	25129.0	0.0	25129.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	676.4	2.7
10°-20°	1990.6	7.9
20°-30°	2841.5	11.3
30°-40°	3658.0	14.6
40°-50°	4290.8	17.1
50°-60°	4426.6	17.6
60°-70°	4019.3	16.0
70°-80°	2669.3	10.6
80°-90°	556.6	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°	25129.0	100.0
0°-180°	25129.0	100.0

Coefficient of Utilization



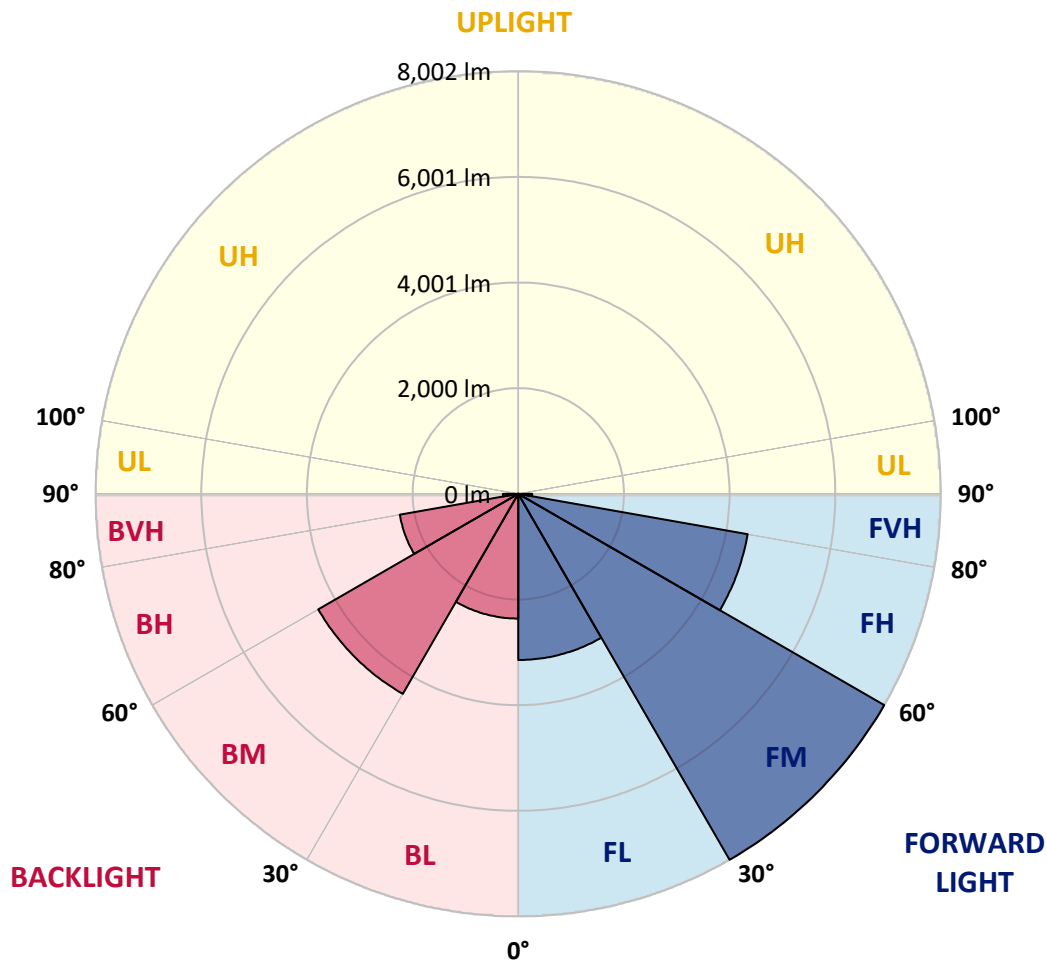
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3146.5	12.5			
FM (30°-60°)	8001.8	31.8			
FH (60°-80°)	4411.1	17.6			G2/5000
FVH (80°-90°)	265.3	1.1			G3/500
BL (0°-30°)	2362.0	9.4	B3/2500		
BM (30°-60°)	4373.6	17.4	B3/5000		
BH (60°-80°)	2277.5	9.1	B3/2500		G3/2500
BVH (80°-90°)	291.3	1.2			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	78°	85°
0°	6978.1	6978.1	6978.1	6978.1	6978.1	6978.1	6978.1	6978.1	6978.1	6978.1	6978.1
2.5°	7263.4	7207.6	7225.3	7255.8	7117.6	7148.0	7088.4	7112.5	7038.9	7011.0	7023.7
5°	7776.9	7717.3	7738.9	7749.0	7548.7	7467.5	7281.1	7241.8	7126.4	7075.7	7070.6
7.5°	8030.5	7965.9	7970.9	7977.3	7817.5	7828.9	7660.3	7458.7	7244.4	7167.0	7132.8
10°	8447.7	8357.7	8327.3	8314.6	8099.0	8009.0	7861.9	7751.6	7416.8	7300.2	7212.7
12.5°	8705.1	8639.2	8639.2	8626.5	8398.3	8328.5	8066.1	7949.4	7619.7	7481.5	7330.6
15°	8752.1	8707.7	8764.7	8753.3	8603.7	8522.5	8405.9	8162.4	7825.1	7681.8	7504.3
17.5°	8222.0	8104.1	7878.4	7912.6	7913.9	8078.7	7998.8	8166.2	8067.3	7950.7	7759.2
20°	6752.4	6792.9	7154.3	7066.8	7033.9	7383.8	7741.4	7751.6	7555.0	7536.0	7794.7
22.5°	5882.5	5737.9	6139.9	6724.5	6761.2	7229.1	7646.3	8148.5	7834.0	7665.3	7467.5
25°	5010.1	5063.3	5669.4	6426.5	6961.6	7065.6	7544.9	8346.3	8480.7	8324.7	7911.4
27.5°	4859.2	4856.6	5120.4	5959.8	7058.0	7448.5	7607.0	8234.7	9171.8	9084.3	8561.9
30°	4826.2	4805.9	4944.1	5641.5	6610.3	7793.4	8095.2	8319.7	9117.3	9506.6	9289.7
32.5°	4681.6	4663.9	4811.0	5176.2	6251.5	8045.8	8560.6	8895.4	8932.1	9116.0	10058.2
35°	4454.7	4468.6	4672.8	5069.7	5732.8	7439.6	9037.4	9543.3	9676.5	9549.7	9680.3
37.5°	4222.6	4237.8	4438.2	4888.3	5642.8	7186.0	9345.5	10169.7	10446.2	10310.5	9706.9
40°	3934.8	3958.8	4190.9	4696.8	5538.8	6614.1	8712.8	10881.1	11256.5	11078.9	10406.9
42.5°	3607.6	3617.7	3881.5	4405.2	5407.0	6648.4	8059.7	11538.0	12042.7	11945.0	11096.7
45°	3323.6	3323.6	3563.2	4029.9	5106.4	6583.7	7783.3	11048.5	13007.6	12869.4	11787.8
47.5°	2936.8	2971.0	3252.5	3715.4	4752.6	6434.1	7941.8	9949.1	13906.7	13791.3	12481.4
49°	2460.0	2518.3	2889.9	3542.9	4525.7	6309.8	8005.2	10337.1	13286.6	14161.6	12931.6
50°	2264.7	2295.2	2299.0	3419.9	4357.0	6196.9	8034.4	10635.1	12240.5	13564.3	13247.3
52.5°	1960.4	1768.9	1572.4	3078.8	4018.4	5779.8	8052.1	11444.1	11989.4	11752.3	13001.3
55°	828.0	1084.2	1378.4	2518.3	3653.2	5263.7	7993.8	12333.0	12541.0	12279.8	11147.4
57.5°	626.4	667.0	740.5	1954.1	2617.3	4675.3	7797.2	12896.0	13006.4	12709.6	11600.1
60°	91.3	93.8	131.9	792.5	1498.8	3337.5	7089.7	12879.6	13352.5	13124.3	11990.7
62.5°	38.0	39.3	50.7	649.2	1155.2	2569.1	6472.1	12664.0	13688.6	13443.8	12357.1
65°	6.3	7.6	21.6	574.4	954.8	2400.4	5795.0	12707.1	13569.4	13467.9	12499.1
67.5°	5.1	6.3	20.3	516.1	787.5	2197.5	5126.7	12021.1	13134.4	13090.1	12120.0
70°	5.1	6.3	21.6	466.6	680.9	1936.3	4301.2	11071.3	12336.8	12354.6	11483.4
72.5°	6.3	6.3	21.6	417.2	592.2	1654.8	3403.4	9803.3	11612.8	11710.4	10578.1
75°	6.3	6.3	20.3	362.7	508.5	1379.6	2451.1	7208.9	10414.5	10385.3	9277.0
77.5°	6.3	6.3	20.3	287.8	422.3	1134.9	1596.5	4060.3	8624.0	8747.0	7756.6
80°	6.3	6.3	20.3	210.5	331.0	850.9	967.5	2078.3	4604.3	5699.9	5335.9
82.5°	6.3	6.3	20.3	142.0	227.0	490.7	557.9	1052.5	1653.5	1812.0	2120.2
85°	5.1	5.1	15.2	85.0	116.7	173.7	268.8	560.5	904.1	944.7	921.9
87.5°	2.5	2.5	7.6	30.4	50.7	63.4	120.5	225.7	332.2	339.8	295.5
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6978.1	6978.1	6978.1	6978.1	6978.1	6978.1	6978.1	6978.1	6978.1	6978.1	6978.1
2.5°	7023.7	6983.1	6946.4	6952.7	6874.1	6851.3	6763.8	6809.4	6765.0	6725.7	6762.5
5°	7035.1	6985.7	6918.5	6853.8	6673.7	6590.0	6484.8	6511.4	6451.8	6404.9	6445.5
7.5°	7068.1	7007.2	6903.3	6719.4	6505.1	6371.9	6252.7	6369.4	6355.5	6320.0	6361.8
10°	7083.3	7031.3	6852.5	6637.0	6337.7	6254.0	6146.2	6145.0	6148.8	6155.1	6196.9
12.5°	7123.9	7045.3	6762.5	6511.4	6233.7	6063.8	5985.2	6048.6	5934.5	5867.3	5896.4
15°	7220.3	7077.0	6701.6	6335.2	6072.7	5931.9	5680.9	5702.4	5678.3	5612.4	5641.5
17.5°	7410.5	7165.7	6699.1	6223.6	5867.3	5637.7	5418.4	5314.4	5281.4	5286.5	5311.9
20°	7643.8	7323.0	6704.2	6080.3	5653.0	5386.7	5048.1	4975.8	4866.8	4869.3	4875.6
22.5°	7495.4	7504.3	6706.7	5916.7	5385.4	5051.9	4693.0	4551.0	4467.3	4445.8	4477.5
25°	7897.4	7856.8	6746.0	5829.2	5103.9	4656.3	4280.9	4099.6	3974.1	3963.9	3999.4
27.5°	8432.5	8359.0	6948.9	5640.3	4805.9	4182.0	3775.0	3638.0	3530.2	3492.2	3517.6
30°	9083.0	8996.8	7229.1	5493.2	4403.9	3672.3	3323.6	3229.7	3123.2	3053.5	3059.8
32.5°	9762.7	9578.8	7517.0	5368.9	3991.8	3225.9	2927.9	2844.2	2718.7	2628.7	2650.2
35°	10447.4	10186.2	7837.8	5149.5	3488.4	2832.8	2591.9	2479.0	2376.3	2295.2	2281.2
37.5°	9906.0	10896.3	8148.5	4945.4	3094.0	2533.6	2260.9	2181.0	2120.2	2056.8	2055.5
40°	9950.4	10177.4	8332.3	4584.0	2654.0	2226.7	1952.8	1980.7	2006.1	1957.9	1957.9
42.5°	10390.4	10067.0	8258.8	4104.7	2326.9	1919.8	1794.3	1907.1	1987.0	1952.8	1951.5
45°	11010.5	10590.7	8384.3	3564.5	2008.6	1730.9	1749.9	1888.1	1992.1	1985.8	1983.2
47.5°	11668.6	11186.7	8143.4	2922.9	1789.2	1672.6	1749.9	1860.2	1984.5	2013.7	2007.3
49°	12007.1	11422.6	8047.0	2548.8	1701.7	1664.9	1752.4	1837.4	1970.5	2014.9	2008.6
50°	12213.8	11549.4	7922.8	2335.7	1654.8	1666.2	1757.5	1823.5	1957.9	2007.3	2003.5
52.5°	12679.2	11742.1	7306.5	1965.5	1578.7	1670.0	1790.5	1809.5	1910.9	1964.2	1992.1
55°	12205.0	12182.1	6520.3	1795.6	1538.1	1661.1	1804.4	1822.2	1871.6	1900.8	1922.4
57.5°	12131.4	12373.6	5530.0	1704.3	1502.6	1648.5	1787.9	1820.9	1850.1	1845.0	1836.1
60°	12364.7	12541.0	4509.2	1614.2	1462.1	1628.2	1733.4	1781.6	1790.5	1777.8	1757.5
62.5°	12401.5	12586.6	3465.6	1522.9	1417.7	1578.7	1653.5	1701.7	1701.7	1670.0	1662.4
65°	12230.3	12301.3	2553.8	1417.7	1364.4	1521.7	1559.7	1595.2	1611.7	1569.8	1572.4
67.5°	11739.6	11328.7	1938.8	1292.1	1299.7	1443.0	1469.7	1493.8	1497.6	1473.5	1470.9
70°	10753.0	10240.8	1386.0	1101.9	1181.8	1318.8	1359.3	1396.1	1383.4	1341.6	1335.3
72.5°	9265.6	8810.4	942.2	882.6	1039.8	1199.6	1224.9	1226.2	1200.8	1231.3	1252.8
75°	7970.9	6881.7	702.5	703.8	833.1	1034.7	1113.3	1119.7	1131.1	1298.5	1332.7
77.5°	6333.9	4483.8	598.5	555.4	639.1	861.0	985.3	1030.9	1368.2	1483.6	1468.4
80°	3890.4	2692.1	464.1	440.0	519.9	661.9	847.1	1053.7	1396.1	1312.4	1268.0
82.5°	1822.2	1228.7	334.8	337.3	386.8	483.1	669.5	1226.2	1205.9	995.4	982.7
85°	705.0	424.8	202.9	229.5	259.9	327.2	513.6	1209.7	937.1	843.3	781.1
87.5°	181.3	82.4	88.8	93.8	115.4	172.5	280.2	634.0	493.3	432.4	424.8
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)