

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: P591401

Luminaire Tested: **CTN-CA10-310-740-U-T3-SSS-HM-EX120**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591401
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2201-495-8)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/19/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA10-310-740-U-T3-SSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE, 120D FIELD INSTALLED SHIELD ON STREET SIDE
Light Source: (10) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28974 lumens
Efficiency: N/A
Efficacy: 92.7 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type III - Medium
BUG Rating: B4 - U0 - G3

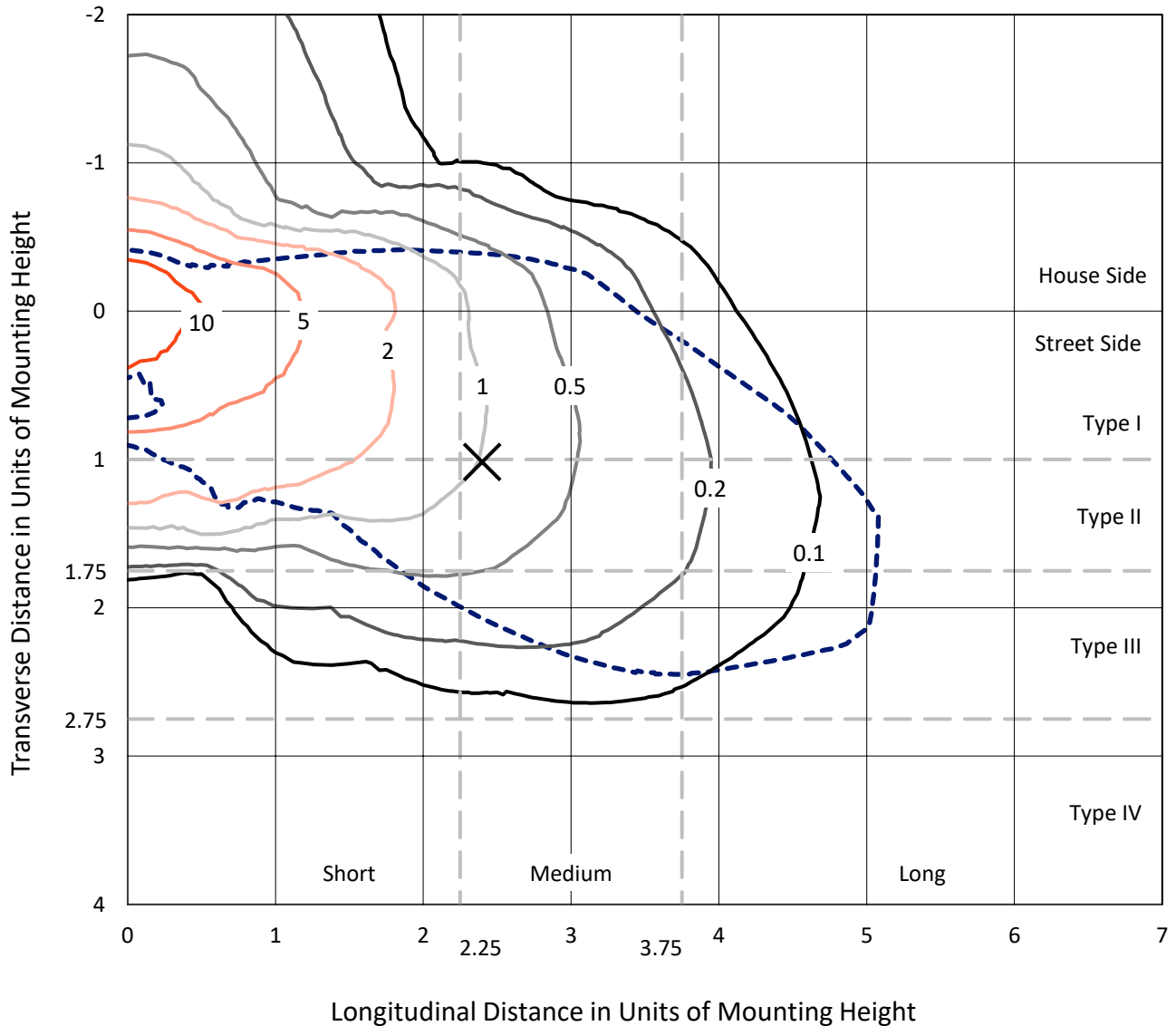
Input Watts (W): 312.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

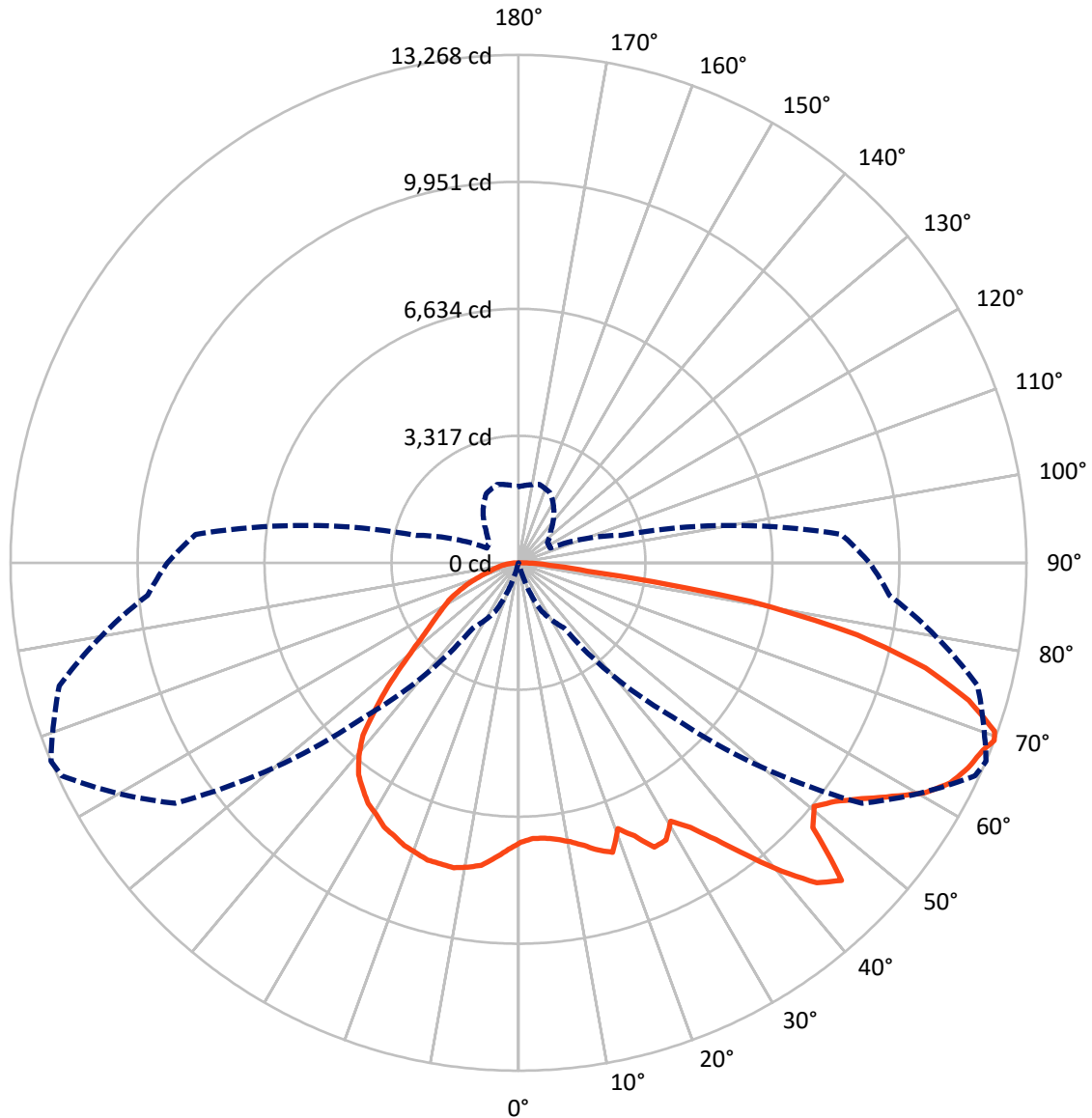
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 13.1 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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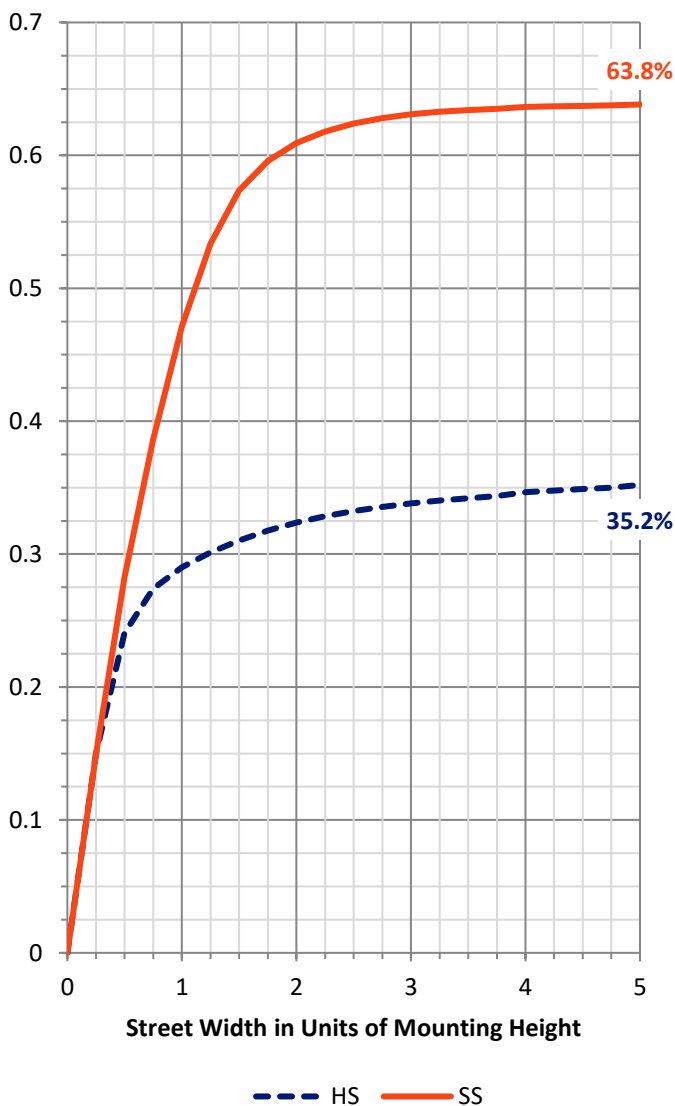
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10482.0	0.0	10482.0
	% Fixture	36.2	0.0	36.2
Street Side	Lumens	18492.1	0.0	18492.1
	% Fixture	63.8	0.0	63.8
Total	Lumens	28974.0	0.0	28974.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	729.9	2.5
10°-20°	2253.5	7.8
20°-30°	3326.0	11.5
30°-40°	4178.8	14.4
40°-50°	4901.6	16.9
50°-60°	5129.1	17.7
60°-70°	4582.3	15.8
70°-80°	3225.1	11.1
80°-90°	647.8	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°	28974.0	100.0
0°-180°	28974.0	100.0

Coefficient of Utilization

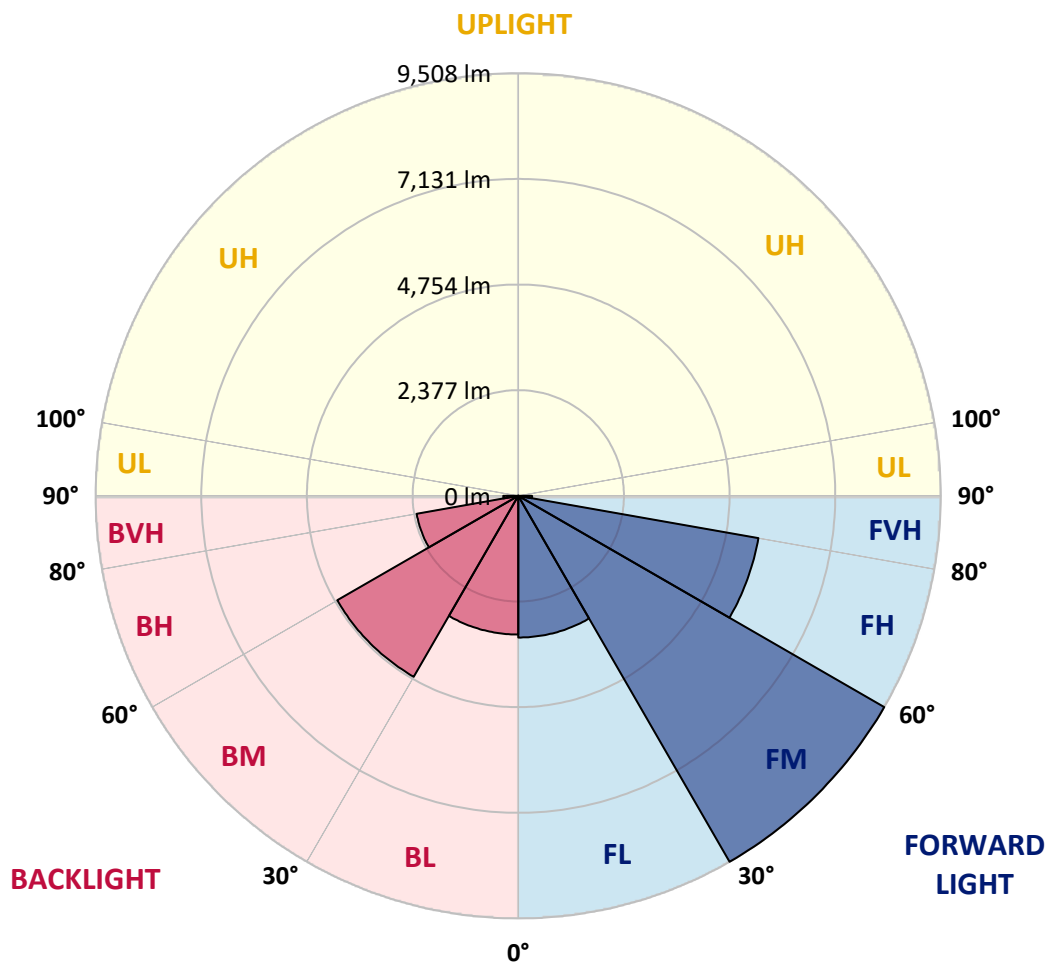


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3188.5	11.0			
FM (30°-60°)	9508.0	32.8			
FH (60°-80°)	5486.0	18.9			G3/7500
FVH (80°-90°)	309.6	1.1			G3/500
BL (0°-30°)	3120.8	10.8	B4/5000		
BM (30°-60°)	4701.6	16.2	B3/5000		
BH (60°-80°)	2321.3	8.0	B3/2500		G3/2500
BVH (80°-90°)	338.2	1.2			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G3
 Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	7298.8	7298.8	7298.8	7298.8	7298.8	7298.8	7298.8	7298.8	7298.8	7298.8	7298.8
2.5°	7125.1	7083.2	7102.6	7158.0	7042.7	7125.1	7095.1	7179.0	7210.4	7205.9	7325.7
5°	7182.0	7135.6	7143.1	7185.0	7059.2	7123.6	7095.1	7188.0	7223.9	7213.4	7376.7
7.5°	7384.1	7333.2	7316.8	7330.2	7194.0	7243.4	7182.0	7256.9	7295.8	7295.8	7481.5
10°	7703.1	7641.7	7605.8	7604.3	7444.0	7421.6	7346.7	7381.2	7409.6	7433.6	7640.2
12.5°	8037.1	7986.1	7939.7	7914.3	7703.1	7650.7	7541.4	7566.8	7575.8	7608.8	7813.9
15°	8341.0	8290.1	8276.7	8236.2	8026.6	7939.7	7787.0	7775.0	7787.0	7806.4	8010.1
17.5°	8224.2	8227.2	8302.1	8309.6	8037.1	7836.4	7730.1	7932.2	7951.7	8105.9	8237.7
20°	8002.6	7893.3	7501.0	7286.8	7318.3	7578.8	7385.6	7376.7	7417.1	7691.1	8359.0
22.5°	6665.4	6605.5	6821.1	6890.0	7138.6	7237.4	7697.1	7709.1	7749.5	7749.5	7944.2
25°	5754.9	6064.9	6484.2	7232.9	7155.0	7174.5	7361.7	8156.9	8233.2	8231.7	8203.3
27.5°	5949.5	5910.6	6538.1	7008.3	7563.8	7529.4	7325.7	7866.3	8204.8	8785.8	8651.0
30°	6183.2	6154.7	6201.1	6996.3	7917.3	7963.7	7775.0	7719.6	7834.9	9055.4	9163.2
32.5°	6400.3	6365.9	6418.3	6539.6	7421.6	8411.4	8266.2	8198.8	8240.7	8486.3	9822.1
35°	6592.0	6589.0	6648.9	6792.6	7544.4	8567.2	8769.3	8764.8	8877.2	9088.3	9917.9
37.5°	6728.2	6726.7	6774.7	6942.4	7111.6	7912.8	9241.0	9509.1	9688.8	10001.8	9688.8
40°	6726.7	6750.7	6876.5	7092.1	7316.8	7557.9	9449.2	10383.6	10599.3	10822.4	10301.3
42.5°	6586.0	6599.5	6821.1	7220.9	7499.5	7707.6	8622.6	11187.8	11428.9	11412.4	10783.5
45°	6455.7	6461.7	6708.8	7200.0	7652.2	8028.1	8453.4	11184.8	11836.2	11938.0	11237.2
47.5°	6286.5	6286.5	6530.6	7078.7	7790.0	8389.0	8905.6	9661.8	10341.7	12393.3	11613.1
50°	6069.3	6096.3	5796.8	6952.9	7855.9	8731.9	9289.0	9911.9	10006.3	11083.0	11962.0
52.5°	5723.4	5708.5	4529.9	6813.6	7882.8	8980.5	9687.3	10302.8	10353.7	10245.9	11620.6
55°	3607.5	4022.3	4005.8	6650.4	7866.3	9140.7	9992.8	10732.5	10876.3	10744.5	9775.6
57.5°	2178.9	2080.0	3423.3	6183.2	6317.9	9265.0	10407.6	11385.5	11511.2	11205.8	9940.4
60°	850.6	802.7	867.0	2813.8	4532.9	8619.6	10972.1	12078.8	12198.6	11644.5	10079.6
62.5°	106.3	91.3	77.9	1948.2	2881.2	6403.3	11271.6	12637.4	12659.8	11962.0	10106.6
65°	15.0	16.5	29.9	1737.1	2617.6	6294.0	11376.5	12865.0	12911.4	12191.1	10015.2
67.5°	6.0	7.5	24.0	1511.0	2297.2	6003.5	11117.4	13022.2	13076.1	12412.7	9926.9
69°	6.0	7.5	24.0	1358.2	2078.5	5683.0	10951.2	13161.5	13267.8	12417.2	9724.7
70°	6.0	7.5	22.5	1248.9	1907.8	5411.9	10791.0	13107.6	13192.9	12297.4	9500.1
72.5°	6.0	7.5	22.5	961.4	1451.1	4345.7	9777.1	12343.9	12300.4	11542.7	8625.6
75°	7.5	7.5	22.5	675.4	1006.3	3090.8	8251.2	10961.7	10981.1	10275.8	7255.4
77.5°	7.5	7.5	22.5	429.8	634.9	1788.0	5975.0	8989.5	9044.9	8561.2	5432.9
80°	7.5	7.5	22.5	196.2	393.8	934.4	2938.1	5858.2	6156.2	5747.4	2981.5
82.5°	7.5	7.5	21.0	122.8	215.6	420.8	1159.1	1837.4	1819.5	1791.0	947.9
85°	6.0	6.0	16.5	86.9	143.8	244.1	643.9	823.6	813.1	720.3	489.7
87.5°	3.0	3.0	9.0	35.9	59.9	110.8	322.0	374.4	356.4	305.5	209.6
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°	7298.8	7298.8	7298.8	7298.8	7298.8	7298.8	7298.8	7298.8	7298.8	7298.8	7298.8
2.5°	7381.2	7391.6	7441.1	7505.4	7524.9	7608.8	7622.3	7760.0	7781.0	7815.4	7830.4
5°	7456.0	7496.5	7604.3	7755.5	7884.3	8016.1	8020.6	8188.3	8231.7	8222.7	8266.2
7.5°	7562.4	7629.7	7794.5	8004.1	8050.5	8221.2	8209.3	8375.5	8378.5	8354.5	8420.4
10°	7725.6	7809.4	7959.2	8088.0	8176.3	8287.1	8272.2	8429.4	8406.9	8381.5	8454.9
12.5°	7893.3	7936.7	8028.1	8171.8	8191.3	8230.2	8210.8	8356.0	8332.1	8300.6	8372.5
15°	8040.1	8061.0	8061.0	8138.9	8089.5	8120.9	8055.0	8171.8	8116.4	8101.4	8170.3
17.5°	8230.2	8195.8	8125.4	8119.4	7990.6	7942.7	7843.9	7875.3	7770.5	7781.0	7816.9
20°	8444.4	8368.0	8182.3	7996.6	7758.5	7644.7	7448.5	7433.6	7336.2	7318.3	7352.7
22.5°	8523.7	8591.1	8251.2	7891.8	7481.5	7226.9	6994.8	6884.0	6741.7	6650.4	6662.4
25°	8764.8	8886.1	8356.0	7704.6	7155.0	6735.7	6386.8	6133.7	5919.6	5810.3	5832.7
27.5°	9091.3	9289.0	8415.9	7574.3	6726.7	6178.7	5594.6	5262.2	5040.6	4926.8	4923.8
30°	9558.5	9807.1	8531.2	7301.8	6250.5	5446.4	4726.1	4333.8	4152.6	4077.7	4083.7
32.5°	10142.5	10442.0	8770.8	7074.2	5732.4	4663.2	3842.6	3499.6	3417.3	3403.8	3396.3
35°	10916.7	11213.2	8961.0	6723.8	5060.0	3775.2	3084.8	2842.2	2855.7	2852.7	2861.7
37.5°	10791.0	11915.6	9178.1	6380.8	4255.9	2959.1	2493.3	2357.1	2361.5	2414.0	2424.4
40°	10317.7	11301.6	9501.6	5813.3	3315.5	2273.2	1966.2	1934.8	2063.5	2178.9	2199.8
42.5°	10689.1	10931.7	9545.0	5200.8	2425.9	1743.1	1644.2	1774.5	1982.7	2116.0	2139.9
45°	11060.5	11256.7	9293.5	4284.3	1740.1	1491.5	1564.9	1752.1	1982.7	2124.9	2141.4
47.5°	11437.9	11436.4	8999.9	3435.3	1422.6	1425.6	1545.4	1753.6	1994.7	2138.4	2147.4
50°	11677.5	11581.6	8233.2	2691.0	1323.8	1386.7	1534.9	1762.6	1991.7	2096.5	2101.0
52.5°	11797.3	11655.0	7556.4	2150.4	1277.4	1355.2	1536.4	1783.5	1975.2	2033.6	2030.6
55°	11595.1	11614.6	6996.3	1788.0	1233.9	1329.8	1543.9	1798.5	1982.7	2042.6	2042.6
57.5°	11343.5	11348.0	6550.0	1514.0	1190.5	1308.8	1552.9	1821.0	2120.5	2232.8	2216.3
60°	11166.8	10964.7	5918.1	1341.8	1141.1	1289.3	1564.9	1918.3	2443.9	2557.7	2518.8
62.5°	10876.3	10602.3	5268.2	1222.0	1085.7	1274.4	1572.4	2054.6	2487.3	2493.3	2397.5
65°	10367.2	9974.8	4252.9	1103.7	1028.8	1253.4	1567.9	2105.5	2291.2	2201.3	2174.4
67.5°	9630.4	9118.2	3333.4	985.4	965.9	1222.0	1597.8	2012.6	2163.9	2090.5	2054.6
69°	9170.7	8468.3	2767.4	915.0	925.5	1198.0	1612.8	1994.7	2119.0	2029.1	1987.2
70°	8821.7	7905.3	2343.6	868.5	891.0	1177.0	1582.9	1984.2	2098.0	1987.2	1937.8
72.5°	7490.5	6355.4	1500.5	760.7	801.2	1124.6	1502.0	1918.3	2051.6	1976.7	1915.3
75°	5790.8	4667.7	956.9	661.9	709.8	1046.7	1418.1	1871.9	2072.5	1937.8	1803.0
77.5°	3898.0	2607.1	730.8	555.6	602.0	944.9	1284.9	1741.6	2000.7	1882.4	1716.1
80°	1776.0	994.3	564.6	450.7	486.7	760.7	1108.1	1540.9	1891.3	1889.8	1770.0
82.5°	711.3	664.9	419.3	344.4	383.4	567.6	877.5	1319.3	1668.2	1740.1	1858.4
85°	414.8	419.3	278.5	239.6	286.0	417.8	626.0	1019.8	1356.7	1500.5	1600.8
87.5°	169.2	188.7	130.3	125.8	157.2	223.1	287.5	494.2	730.8	897.0	958.4
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)