

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: P319149

Luminaire Tested: **GLEON-SA5A-827-U-T4W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P319149  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GLEON-SA5A-827-U-T4W  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(5) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 17003 lumens  
Efficiency: N/A  
Efficacy: 105.0 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B3 - U0 - G3

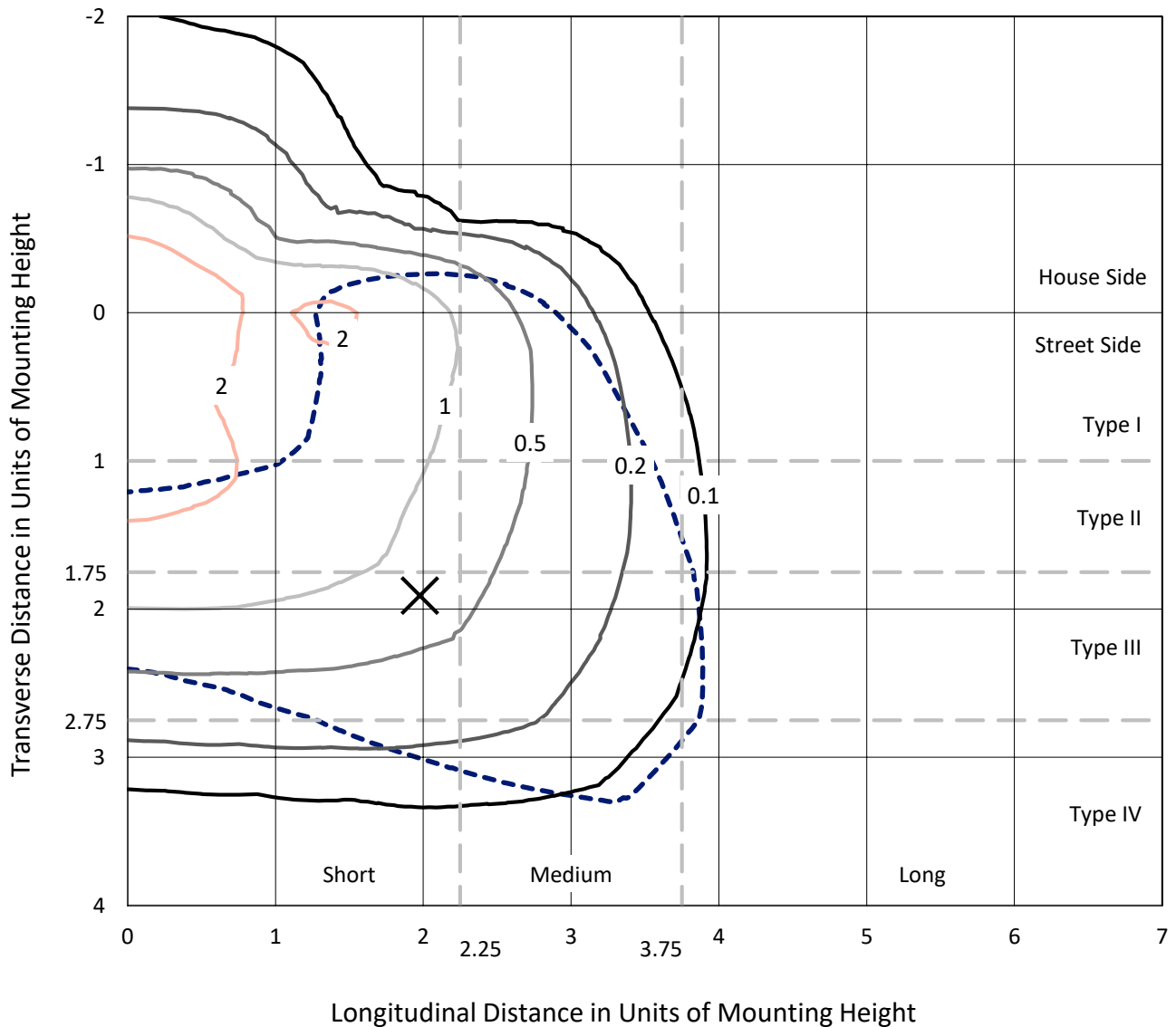
Input Watts (W): 162  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

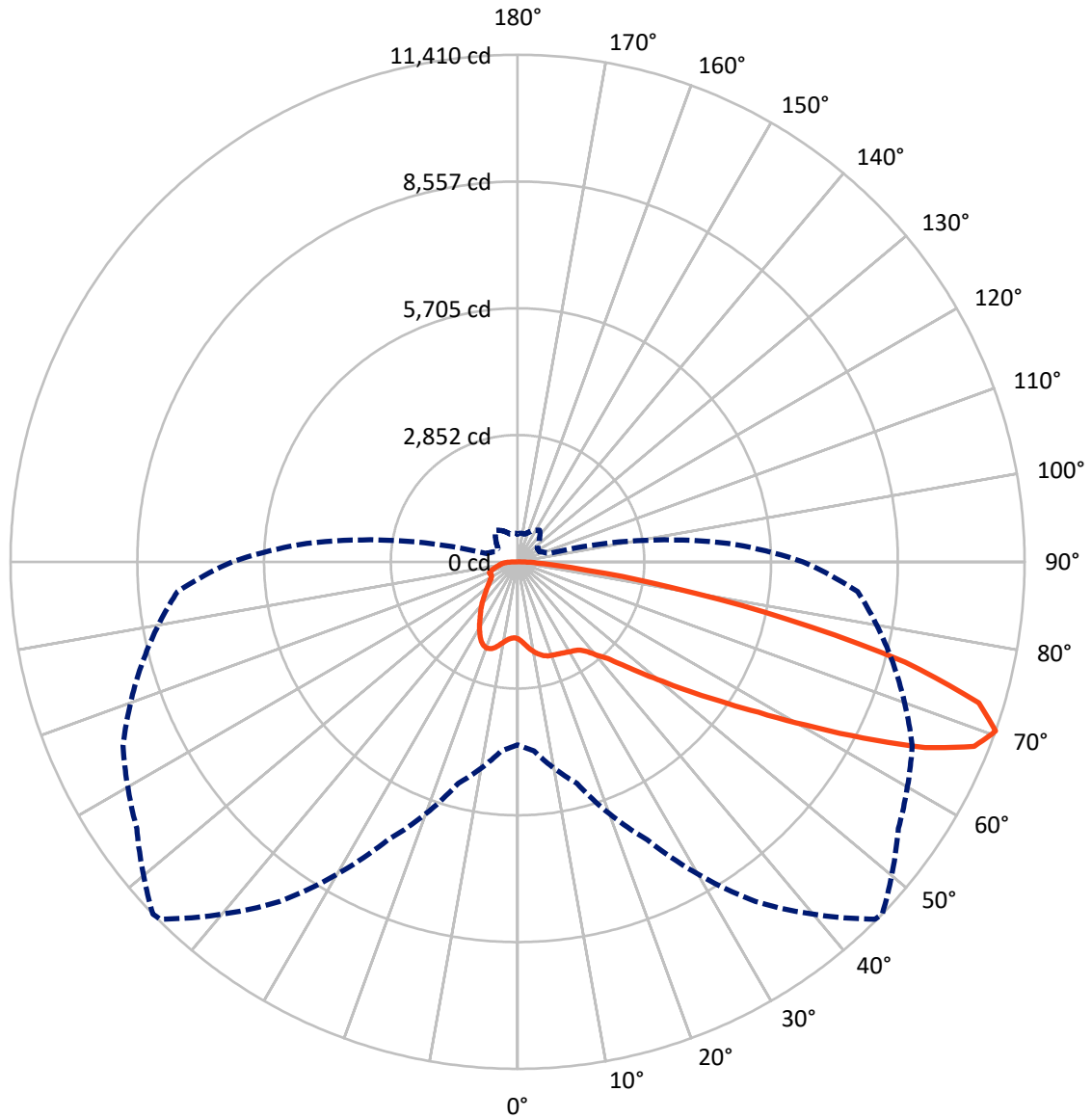
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.5 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 46-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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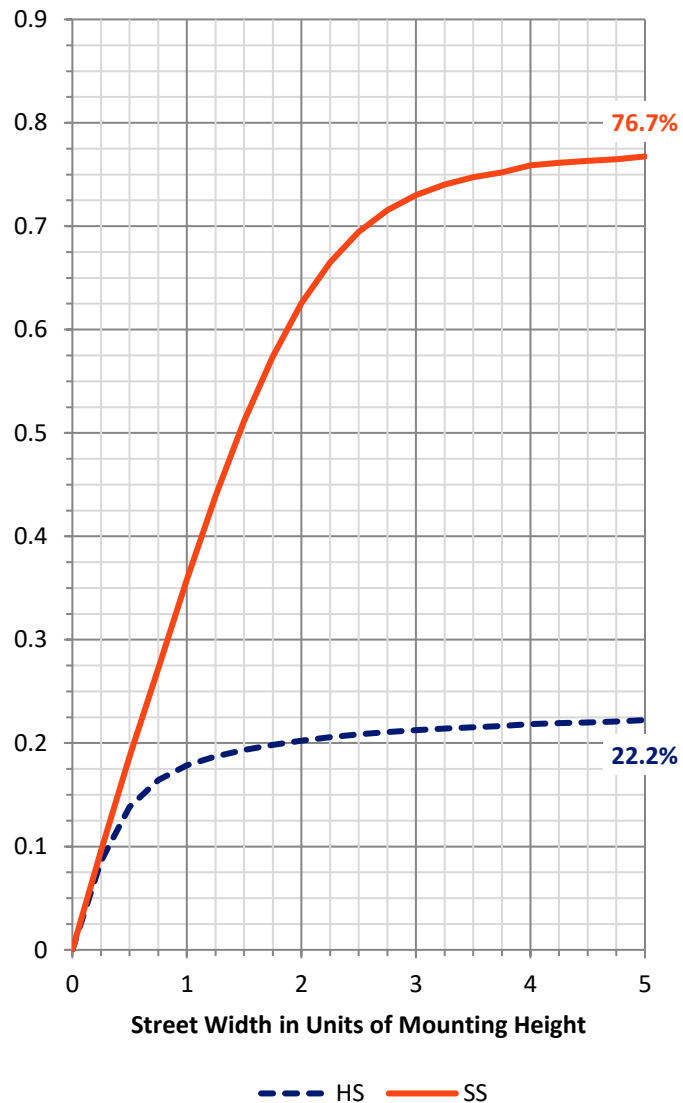
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3897.0	0.0	3897.0
	% Fixture	22.9	0.0	22.9
<b>Street Side</b>	Lumens	13106.0	0.0	13106.0
	% Fixture	77.1	0.0	77.1
<b>Total</b>	Lumens	17003.0	0.0	17003.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	176.6	1.0
10°-20°	588.4	3.5
20°-30°	981.0	5.8
30°-40°	1392.1	8.2
40°-50°	2047.7	12.0
50°-60°	3467.8	20.4
60°-70°	4922.5	29.0
70°-80°	2990.5	17.6
80°-90°	436.4	2.6
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°	17003.0	100.0
0°-180°	17003.0	100.0

**Coefficient of Utilization**

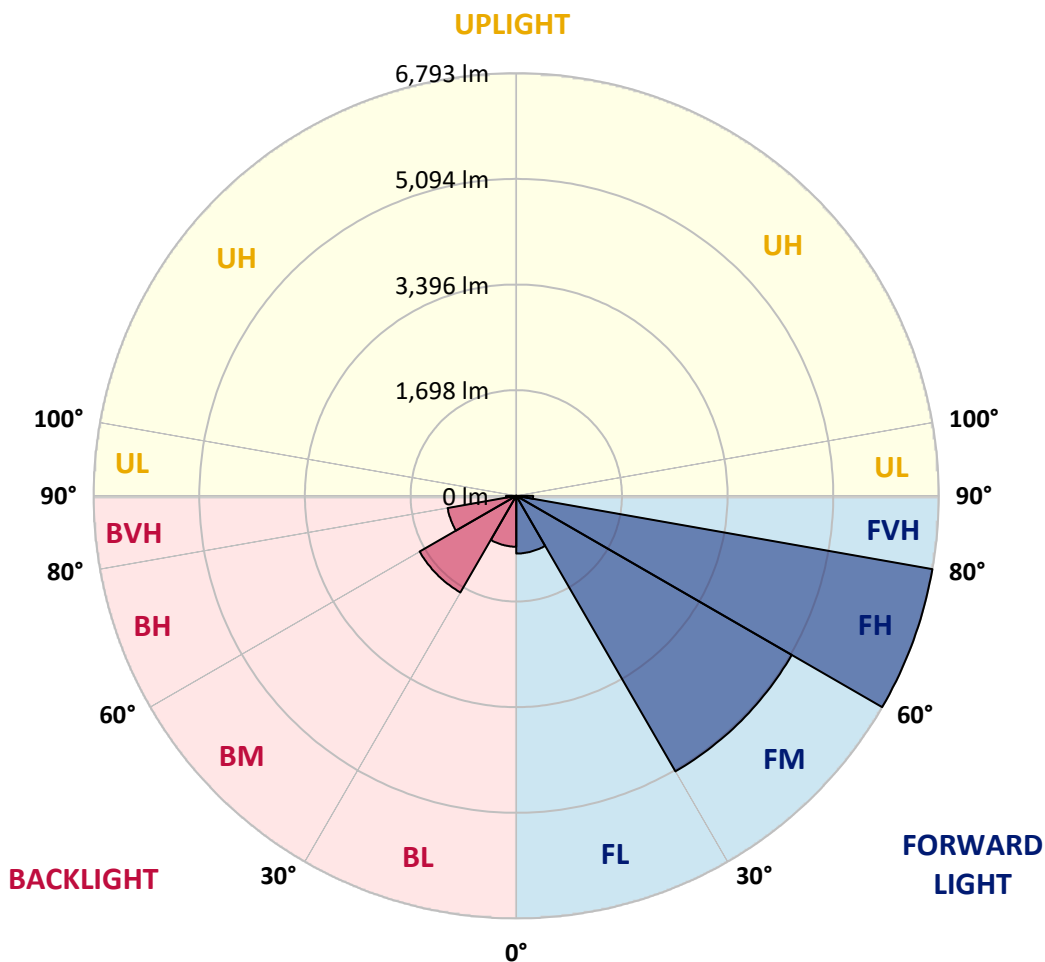


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	927.8	5.5			
FM (30°-60°)	5113.7	30.1			
FH (60°-80°)	6792.6	39.9			G3/7500
FVH (80°-90°)	271.9	1.6			G3/500
BL (0°-30°)	818.2	4.8	B2/1000		
BM (30°-60°)	1793.9	10.6	B2/2500		
BH (60°-80°)	1120.4	6.6	B3/2500		G3/2500
BVH (80°-90°)	164.6	1.0			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G3**  
 Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	1732.3	1732.3	1732.3	1732.3	1732.3	1732.3	1732.3	1732.3	1732.3	1732.3	1732.3
2.5°	1819.0	1820.1	1822.5	1816.6	1800.4	1795.7	1794.0	1777.1	1766.0	1749.7	1735.8
5°	1964.4	1965.6	1962.1	1945.8	1909.7	1883.0	1880.7	1842.2	1807.3	1770.1	1742.2
7.5°	2116.3	2118.1	2107.0	2076.2	2025.5	1979.0	1976.1	1923.7	1870.8	1814.3	1772.4
10°	2250.7	2243.8	2225.7	2182.7	2122.7	2065.7	2063.4	2008.7	1947.6	1879.5	1823.6
12.5°	2340.3	2334.5	2311.2	2258.9	2193.1	2140.8	2136.1	2085.5	2026.1	1951.6	1884.7
15°	2389.8	2393.9	2362.5	2303.1	2239.1	2194.9	2190.8	2154.7	2101.8	2026.7	1949.9
17.5°	2396.2	2399.7	2369.4	2310.7	2258.3	2228.0	2226.3	2202.4	2164.0	2091.9	2011.6
20°	2359.0	2361.3	2336.3	2288.0	2253.6	2244.3	2243.8	2233.3	2204.8	2140.8	2062.8
22.5°	2304.8	2306.6	2288.6	2253.6	2242.0	2256.6	2260.6	2256.6	2236.2	2176.3	2102.9
25°	2291.5	2290.3	2271.7	2236.2	2246.1	2276.9	2282.2	2283.9	2269.9	2217.6	2154.1
27.5°	2356.1	2352.0	2316.5	2259.5	2265.9	2303.1	2310.1	2327.0	2318.2	2272.3	2212.3
30°	2542.8	2535.9	2463.1	2347.9	2316.5	2335.7	2344.4	2371.2	2372.9	2334.5	2289.7
32.5°	2858.2	2849.5	2719.2	2513.2	2402.0	2368.9	2377.0	2417.2	2438.7	2409.0	2360.7
35°	3256.8	3246.9	3075.8	2794.2	2545.2	2432.3	2438.1	2470.1	2513.2	2471.3	2407.3
37.5°	3672.3	3648.4	3483.7	3124.7	2772.7	2567.9	2567.9	2571.9	2592.3	2505.0	2462.0
40°	4085.4	4061.6	3912.6	3513.4	3067.1	2781.4	2768.0	2677.8	2661.5	2586.5	2571.9
42.5°	4469.5	4462.5	4374.6	3952.7	3412.8	2991.5	2972.9	2819.8	2823.3	2776.8	2777.3
45°	4877.9	4877.9	4806.4	4396.1	3815.4	3329.0	3310.3	3085.2	3120.1	3098.5	3150.3
47.5°	5211.4	5221.8	5211.9	4858.2	4283.8	3757.8	3724.1	3452.9	3550.7	3624.6	3775.3
50°	5551.8	5568.1	5569.8	5365.0	4850.0	4267.5	4229.1	3941.1	4159.3	4371.1	4667.3
52.5°	6045.8	6082.4	5936.4	5870.6	5543.6	4872.7	4834.9	4569.0	4933.2	5230.6	5740.9
55°	6503.7	6471.7	6367.6	6408.3	6286.1	5561.7	5533.1	5299.8	5795.6	6182.0	6844.7
57.5°	6751.6	6749.3	6854.0	7028.6	7086.8	6411.2	6387.4	6160.4	6767.9	7058.3	7881.1
60°	7042.6	7046.6	7306.2	7702.4	7942.2	7469.1	7458.6	7286.4	7712.3	7876.4	8694.0
62.5°	7083.3	7156.6	7603.5	8285.5	8742.8	8705.0	8728.3	8300.6	8557.2	8529.3	9300.9
65°	6614.9	6711.5	7520.3	8461.8	9538.8	10056.7	10078.3	9320.6	9223.5	9087.3	9517.9
67.5°	5654.8	5797.9	6676.6	8078.3	9801.3	11055.8	11086.1	10111.4	9776.3	9276.4	8995.4
70°	4115.1	4273.9	5158.4	6899.4	9333.4	11375.3	11409.6	10461.1	9797.2	8738.2	7679.1
72.5°	2485.8	2610.3	3339.4	5079.3	7877.6	10793.4	10854.5	10017.7	8944.7	7401.6	5670.5
75°	1091.6	1173.1	1614.7	2926.9	5639.6	8930.2	9006.4	8574.7	7267.7	5378.9	3351.7
77.5°	464.9	488.2	662.2	1271.4	3188.2	6102.2	6207.0	6265.2	4930.9	2926.9	1416.3
80°	289.8	299.1	374.7	575.5	1492.0	3427.3	3540.2	3686.2	2448.6	1075.9	494.6
82.5°	176.3	186.8	249.0	348.0	776.8	1553.6	1607.7	1710.7	950.2	464.9	256.0
85°	105.9	113.5	152.5	220.0	442.2	611.0	610.4	675.0	447.5	299.1	135.0
87.5°	50.6	56.4	81.5	114.0	222.9	229.3	214.7	243.2	271.7	196.1	68.1
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°	1732.3	1732.3	1732.3	1732.3	1732.3	1732.3	1732.3	1732.3	1732.3	1732.3	1732.3
2.5°	1731.1	1728.8	1721.2	1715.4	1714.2	1710.7	1707.8	1709.6	1711.9	1712.5	1712.5
5°	1730.5	1724.1	1714.2	1710.2	1715.4	1722.4	1731.1	1742.7	1749.7	1755.0	1758.5
7.5°	1758.5	1746.2	1735.2	1732.9	1743.3	1761.9	1781.7	1806.2	1823.0	1834.7	1837.0
10°	1805.0	1789.9	1778.8	1781.2	1799.8	1826.5	1854.5	1885.9	1911.5	1927.2	1928.4
12.5°	1858.5	1844.0	1833.5	1843.4	1874.3	1906.8	1935.9	1963.3	1986.6	2002.3	2002.3
15°	1920.2	1909.7	1897.5	1920.2	1962.1	1991.2	2003.4	2016.8	2029.6	2041.3	2038.9
17.5°	1979.6	1969.7	1963.3	1990.0	2033.7	2047.1	2038.9	2029.0	2029.0	2035.4	2036.6
20°	2030.8	2022.1	2026.1	2052.3	2075.0	2061.0	2030.8	1999.4	1986.6	1990.0	1993.5
22.5°	2075.6	2071.5	2083.7	2096.0	2079.7	2030.8	1974.9	1932.4	1916.7	1915.6	1916.7
25°	2128.0	2127.4	2142.5	2120.4	2048.2	1958.0	1883.0	1841.7	1832.9	1839.9	1851.6
27.5°	2193.1	2199.5	2207.1	2126.2	1984.2	1848.1	1771.8	1743.3	1752.1	1768.9	1780.0
30°	2276.3	2293.8	2277.5	2111.7	1892.3	1722.4	1649.6	1641.5	1665.4	1689.2	1700.9
32.5°	2357.2	2384.6	2345.0	2073.8	1773.6	1589.1	1532.7	1530.4	1559.5	1582.7	1599.0
35°	2422.4	2476.5	2395.6	1998.8	1636.3	1466.4	1425.0	1409.3	1419.8	1447.1	1465.8
37.5°	2507.3	2597.5	2430.5	1884.1	1487.3	1365.1	1316.8	1280.7	1271.4	1282.5	1291.8
40°	2662.7	2782.0	2446.8	1724.1	1341.8	1263.9	1215.0	1162.0	1125.4	1098.6	1099.2
42.5°	2916.4	3022.3	2436.4	1529.8	1207.4	1164.9	1109.7	1048.6	989.2	928.7	924.0
45°	3328.4	3379.6	2404.9	1323.8	1089.3	1061.4	1009.6	948.5	869.3	800.7	794.3
47.5°	3987.7	3874.2	2356.1	1144.0	985.1	973.5	925.8	855.4	771.6	716.3	711.6
50°	4886.7	4588.2	2332.2	1000.8	893.2	896.7	857.7	783.2	704.1	663.3	658.7
52.5°	5962.0	5419.7	2378.2	890.3	819.3	831.5	802.4	732.6	666.3	634.3	629.6
55°	7077.5	6280.9	2427.6	810.0	749.5	773.3	763.4	705.8	645.9	616.2	612.1
57.5°	8032.3	6923.9	2328.7	744.8	687.2	724.4	733.2	689.0	635.4	608.7	604.0
60°	8633.4	7182.8	2069.2	683.7	637.7	685.5	715.7	684.3	639.5	637.2	633.7
62.5°	8918.6	7160.1	1679.9	635.4	606.9	668.6	728.5	710.5	686.0	707.0	708.7
65°	8790.5	6818.0	1251.1	603.4	584.8	675.0	766.9	759.9	699.4	720.4	723.3
67.5°	7948.0	6001.6	926.4	575.5	560.4	693.0	836.8	776.2	673.2	688.4	679.1
70°	6424.0	4758.1	714.6	544.1	535.3	690.7	868.2	766.3	644.7	648.2	623.2
72.5°	4429.9	3244.6	581.3	515.0	499.3	629.6	846.1	741.9	620.9	594.1	560.9
75°	2409.0	1741.6	494.0	484.7	435.8	552.8	805.3	724.4	599.3	563.8	545.2
77.5°	947.9	722.7	428.8	443.4	381.1	488.2	759.9	691.3	569.7	523.1	513.8
80°	387.0	368.9	355.5	383.5	327.6	427.1	705.2	652.3	534.2	485.3	466.7
82.5°	219.4	229.3	276.4	302.6	265.9	393.4	679.1	620.9	491.7	434.7	412.6
85°	112.3	134.4	192.6	217.0	195.5	334.6	625.5	543.5	394.5	332.8	334.6
87.5°	54.1	75.1	121.6	136.2	126.9	242.1	467.3	393.9	307.2	243.2	235.7
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)