

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: P318508

Luminaire Tested: **GLEON-SA4A-827-U-T3**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P318508  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GLEON-SA4A-827-U-T3  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13822 lumens  
Efficiency: N/A  
Efficacy: 107.1 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G2

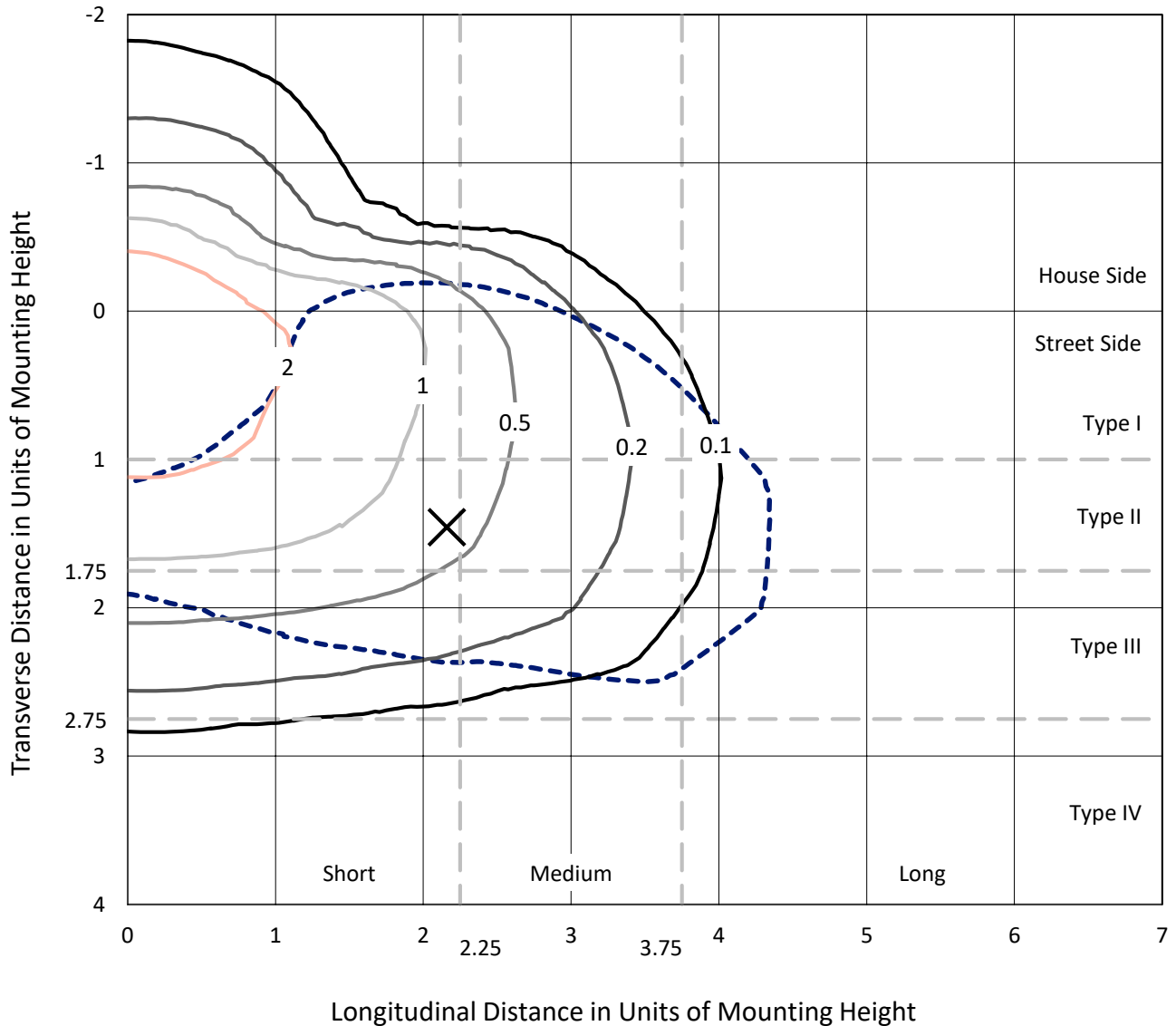
Input Watts (W): 129  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

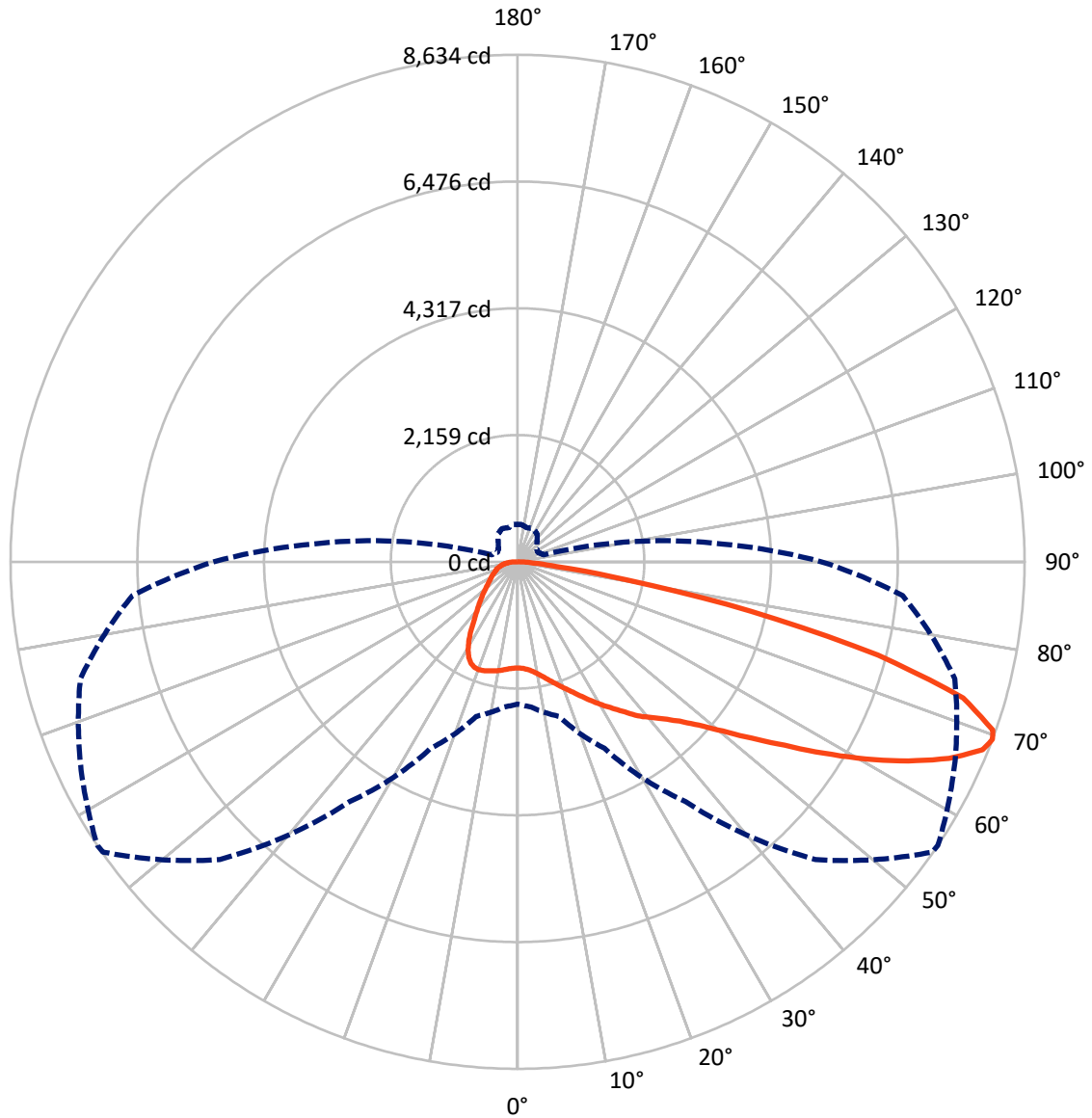
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.1 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 56-Deg Lateral      - - - Horizontal Cone Through 69-Deg Vertical

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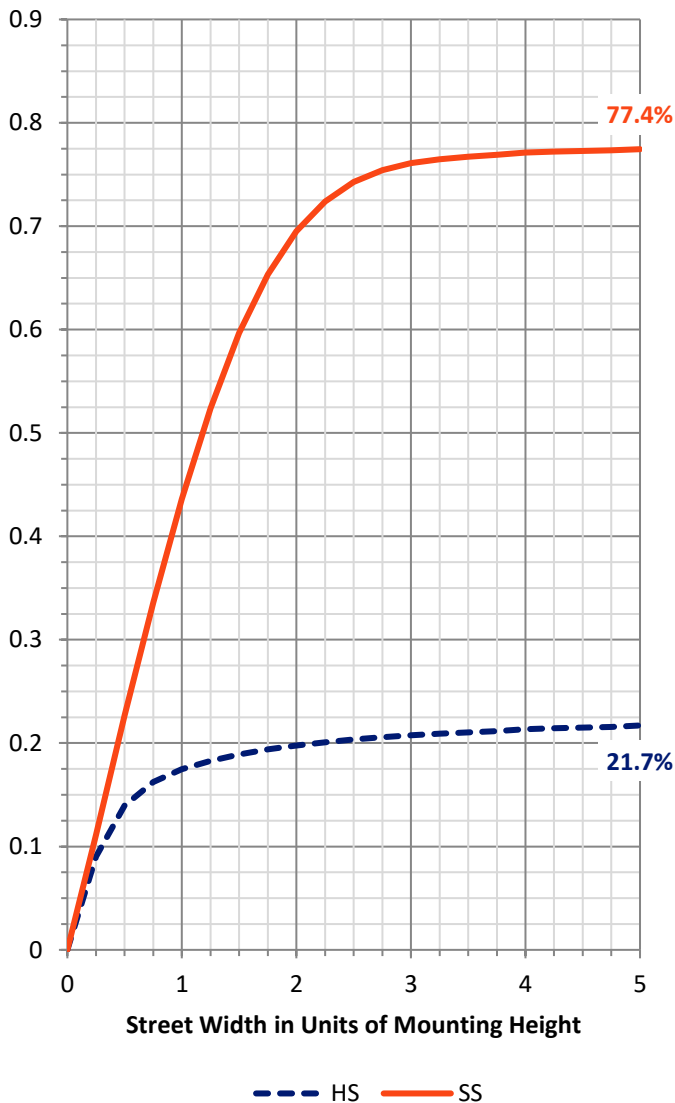
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3078.1	0.0	3078.1
	% Fixture	22.3	0.0	22.3
<b>Street Side</b>	Lumens	10743.9	0.0	10743.9
	% Fixture	77.7	0.0	77.7
<b>Total</b>	Lumens	13822.0	0.0	13822.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	177.5	1.3
10°-20°	570.7	4.1
20°-30°	996.2	7.2
30°-40°	1431.0	10.4
40°-50°	1980.5	14.3
50°-60°	2901.7	21.0
60°-70°	3537.7	25.6
70°-80°	1955.9	14.2
80°-90°	270.9	2.0
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°	13822.0	100.0
0°-180°	13822.0	100.0



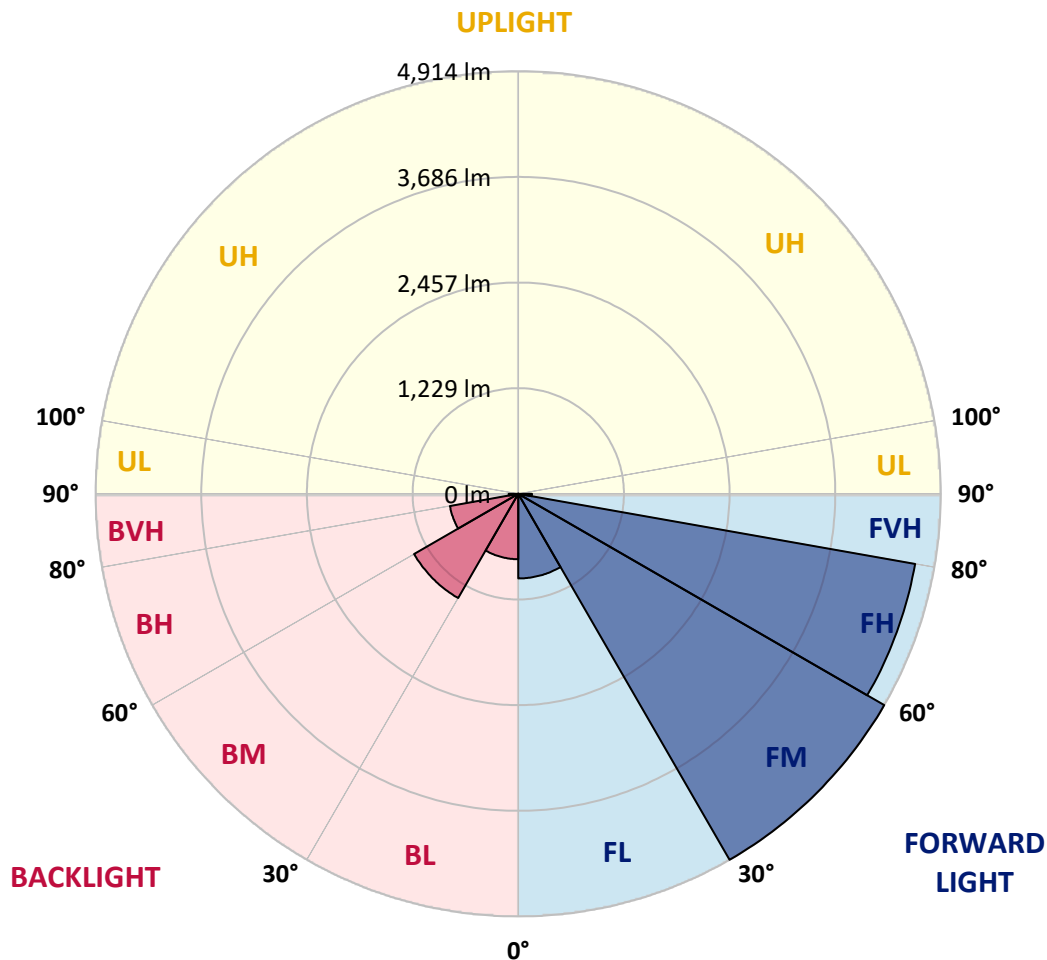
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	983.7	7.1			
FM (30°-60°)	4914.2	35.6			
FH (60°-80°)	4686.4	33.9			G2/5000
FVH (80°-90°)	159.6	1.2			G2/225
BL (0°-30°)	760.7	5.5	B2/1000		
BM (30°-60°)	1398.9	10.1	B2/2500		
BH (60°-80°)	807.2	5.8	B2/1000		G2/1000
BVH (80°-90°)	111.3	0.8			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	1807.0	1807.0	1807.0	1807.0	1807.0	1807.0	1807.0	1807.0	1807.0	1807.0	1807.0
2.5°	1818.4	1820.4	1818.9	1822.7	1818.4	1821.3	1818.9	1818.9	1817.5	1813.2	1808.4
5°	1847.0	1850.8	1848.4	1852.3	1847.0	1848.0	1843.7	1843.7	1839.4	1830.4	1820.8
7.5°	1891.8	1896.1	1894.2	1898.0	1890.8	1890.8	1885.1	1884.6	1876.1	1861.3	1850.3
10°	1945.1	1950.8	1948.9	1954.6	1948.9	1950.8	1945.1	1945.1	1933.7	1912.7	1898.9
12.5°	2022.7	2029.9	2024.6	2024.1	2021.8	2025.6	2020.8	2019.9	2009.4	1980.8	1961.8
15°	2126.5	2134.1	2123.2	2122.2	2108.9	2107.5	2107.5	2106.0	2099.4	2065.1	2033.7
17.5°	2246.0	2248.4	2238.9	2223.7	2206.5	2195.6	2194.1	2197.9	2197.9	2157.9	2108.0
20°	2363.2	2367.5	2359.8	2342.7	2320.8	2304.6	2293.2	2300.8	2300.3	2252.7	2181.8
22.5°	2490.8	2500.8	2489.4	2467.4	2441.7	2423.6	2403.6	2410.3	2410.8	2352.2	2254.1
25°	2656.0	2647.0	2639.8	2608.9	2572.2	2553.6	2535.1	2541.7	2539.8	2459.4	2328.9
27.5°	2802.2	2804.1	2794.6	2761.7	2719.3	2678.4	2677.4	2681.7	2674.6	2570.8	2399.4
30°	2972.2	2973.1	2959.8	2930.3	2884.1	2831.2	2818.9	2826.0	2810.8	2676.5	2473.6
32.5°	3141.2	3146.0	3131.2	3095.5	3058.4	2994.1	2969.3	2974.1	2936.0	2784.6	2550.3
35°	3289.3	3296.0	3291.2	3267.4	3226.9	3171.7	3142.2	3139.3	3092.2	2916.9	2651.7
37.5°	3440.2	3446.4	3441.2	3421.2	3405.0	3346.4	3330.7	3330.7	3248.8	3052.2	2780.8
40°	3595.5	3605.0	3598.8	3571.2	3557.4	3530.7	3493.1	3484.0	3395.5	3214.5	2991.2
42.5°	3739.7	3752.1	3776.9	3760.7	3732.6	3736.4	3660.7	3655.9	3591.2	3454.5	3255.5
45°	3944.5	3962.6	4004.5	3992.1	3986.4	3965.4	3875.4	3871.2	3846.4	3777.4	3583.6
47.5°	4167.8	4192.6	4268.3	4270.7	4332.1	4292.6	4170.2	4155.4	4161.1	4164.0	3984.0
50°	4373.5	4400.6	4524.9	4583.5	4728.2	4736.8	4541.1	4527.8	4550.2	4615.9	4450.6
52.5°	4537.8	4572.1	4727.3	4908.2	5156.3	5226.8	4997.8	4987.8	5004.4	5117.7	4978.2
55°	4658.3	4695.4	4864.4	5193.9	5590.1	5714.4	5523.4	5513.9	5524.4	5668.7	5552.0
57.5°	4686.3	4695.4	4940.6	5386.3	5956.3	6254.8	6166.7	6147.7	6096.2	6222.0	6185.3
60°	4554.4	4590.6	4877.8	5453.9	6239.6	6787.6	6839.1	6815.2	6671.0	6773.8	6744.3
62.5°	4286.8	4351.6	4643.0	5351.1	6350.5	7222.8	7498.5	7470.0	7221.4	7288.1	7146.2
65°	3849.7	3877.4	4183.5	4996.3	6209.6	7501.4	8086.6	8072.3	7759.5	7655.2	7220.5
67.5°	3067.9	3119.8	3379.8	4254.9	5632.9	7468.5	8541.3	8539.9	8110.9	7791.4	6957.1
69°	2423.6	2477.4	2725.1	3505.0	4984.4	7168.1	8617.5	8634.2	8209.9	7708.5	6581.0
70°	1932.2	1994.6	2164.6	2952.2	4408.7	6771.9	8554.2	8584.2	8190.9	7571.9	6233.9
72.5°	822.3	872.8	993.7	1521.8	2687.0	5056.8	7821.4	7934.7	7749.5	6930.0	5152.0
75°	359.0	374.7	429.5	620.4	1192.8	2752.2	6127.2	6336.7	6626.2	5857.7	3837.8
77.5°	262.8	269.5	299.5	364.3	535.2	1039.5	3940.2	4062.1	4778.7	4262.6	2354.1
80°	203.3	208.1	231.4	267.6	349.5	420.4	1797.0	1901.8	2687.0	2189.4	980.4
82.5°	161.9	165.2	181.4	197.1	241.4	254.7	596.6	661.9	991.8	604.7	259.5
85°	150.5	154.3	160.0	143.8	154.8	149.5	258.1	270.0	299.5	237.6	108.6
87.5°	68.1	80.5	158.6	111.9	82.4	65.7	105.7	110.5	124.3	124.8	48.1
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°	1807.0	1807.0	1807.0	1807.0	1807.0	1807.0	1807.0	1807.0	1807.0	1807.0	1807.0
2.5°	1811.3	1809.9	1812.3	1806.5	1813.7	1813.2	1810.8	1811.8	1816.5	1816.1	1816.5
5°	1822.3	1821.3	1824.2	1819.9	1828.4	1831.3	1831.8	1836.1	1841.3	1842.7	1842.7
7.5°	1849.9	1849.9	1851.3	1845.6	1851.3	1850.8	1848.4	1852.7	1858.0	1858.4	1858.0
10°	1897.5	1898.0	1895.6	1880.8	1876.1	1863.2	1851.3	1851.8	1858.4	1863.7	1865.1
12.5°	1957.5	1955.6	1945.1	1918.0	1898.0	1871.8	1859.4	1858.9	1865.6	1869.9	1871.3
15°	2026.1	2020.8	1993.7	1949.4	1914.2	1888.4	1868.4	1863.7	1859.9	1855.1	1855.6
17.5°	2090.8	2078.9	2033.7	1972.2	1935.1	1900.8	1862.3	1831.3	1809.9	1797.5	1793.7
20°	2156.5	2133.2	2068.0	1993.7	1946.5	1884.2	1809.9	1747.0	1708.0	1689.9	1686.6
22.5°	2216.5	2178.9	2099.9	2016.1	1937.5	1828.0	1711.3	1619.9	1565.6	1541.3	1543.2
25°	2275.1	2222.7	2133.2	2031.8	1891.8	1728.9	1574.2	1461.8	1399.0	1371.8	1370.9
27.5°	2326.5	2267.0	2169.4	2018.9	1806.5	1588.0	1411.8	1302.3	1249.9	1226.6	1222.8
30°	2385.6	2322.7	2217.5	1969.9	1681.8	1425.1	1253.2	1176.1	1139.0	1115.6	1111.4
32.5°	2457.4	2398.4	2257.0	1880.8	1522.3	1255.2	1129.4	1075.6	1041.8	1015.6	1010.9
35°	2562.2	2498.4	2267.0	1753.2	1347.1	1120.9	1038.5	983.3	937.6	903.7	900.4
37.5°	2693.6	2623.6	2244.1	1588.0	1177.1	1033.7	962.8	894.7	835.2	787.6	779.9
40°	2883.1	2777.4	2180.8	1397.5	1051.8	966.6	889.0	811.4	737.6	681.9	670.9
42.5°	3110.7	2957.9	2083.7	1208.0	959.9	898.5	815.7	719.5	649.0	609.5	603.8
45°	3400.2	3145.5	1948.9	1042.3	869.5	830.4	736.6	648.1	604.2	575.2	570.4
47.5°	3730.7	3356.0	1807.5	907.6	792.8	766.6	673.3	616.1	581.4	558.5	554.2
50°	4136.9	3593.6	1657.5	797.1	715.7	690.0	643.3	598.5	570.9	553.3	549.0
52.5°	4594.9	3861.6	1549.4	710.0	651.9	633.3	627.6	589.0	566.6	553.3	549.0
55°	5088.2	4134.5	1432.8	636.6	596.6	601.9	617.1	590.0	574.7	558.5	552.3
57.5°	5582.0	4416.4	1302.8	574.7	552.8	578.5	610.0	591.9	579.0	563.3	557.6
60°	5972.4	4594.9	1101.4	522.8	518.1	552.8	592.8	577.6	560.9	561.4	560.4
62.5°	6154.8	4585.4	879.0	476.6	483.3	518.1	565.2	555.2	541.4	560.0	561.4
65°	6052.4	4356.8	684.2	434.7	446.2	481.9	536.6	544.2	549.0	584.7	589.5
67.5°	5622.9	3912.1	530.0	398.1	412.4	457.1	539.5	592.8	599.0	636.6	636.1
69°	5178.7	3495.0	460.4	379.0	395.7	463.3	576.6	623.8	600.4	640.4	634.7
70°	4806.3	3165.0	423.3	366.2	388.1	474.3	601.4	623.3	593.3	627.6	618.1
72.5°	3701.6	2277.0	359.0	342.4	362.4	453.8	608.5	609.5	576.6	583.3	567.1
75°	2538.9	1438.9	313.3	310.0	323.3	409.0	585.7	582.3	533.3	523.8	510.4
77.5°	1399.9	730.9	266.2	279.0	288.1	362.4	532.3	527.6	487.1	467.1	462.3
80°	540.0	320.0	224.7	248.1	253.8	313.8	466.6	462.3	428.5	402.8	395.7
82.5°	203.8	167.6	185.7	214.7	212.8	259.0	395.2	392.8	360.0	322.4	310.9
85°	94.3	100.5	147.1	177.1	163.3	191.9	316.2	320.5	280.5	235.7	235.7
87.5°	40.0	56.2	104.3	133.8	110.0	129.5	231.9	221.4	203.3	140.9	132.4
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)