

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: P651815

Luminaire Tested: **GALN-SA3A-840-U-T4FT**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P651815
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-28)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA3A-840-U-T4FT
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(3) 80 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11456.1 lumens
Efficiency: N/A
Efficacy: 123.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G3

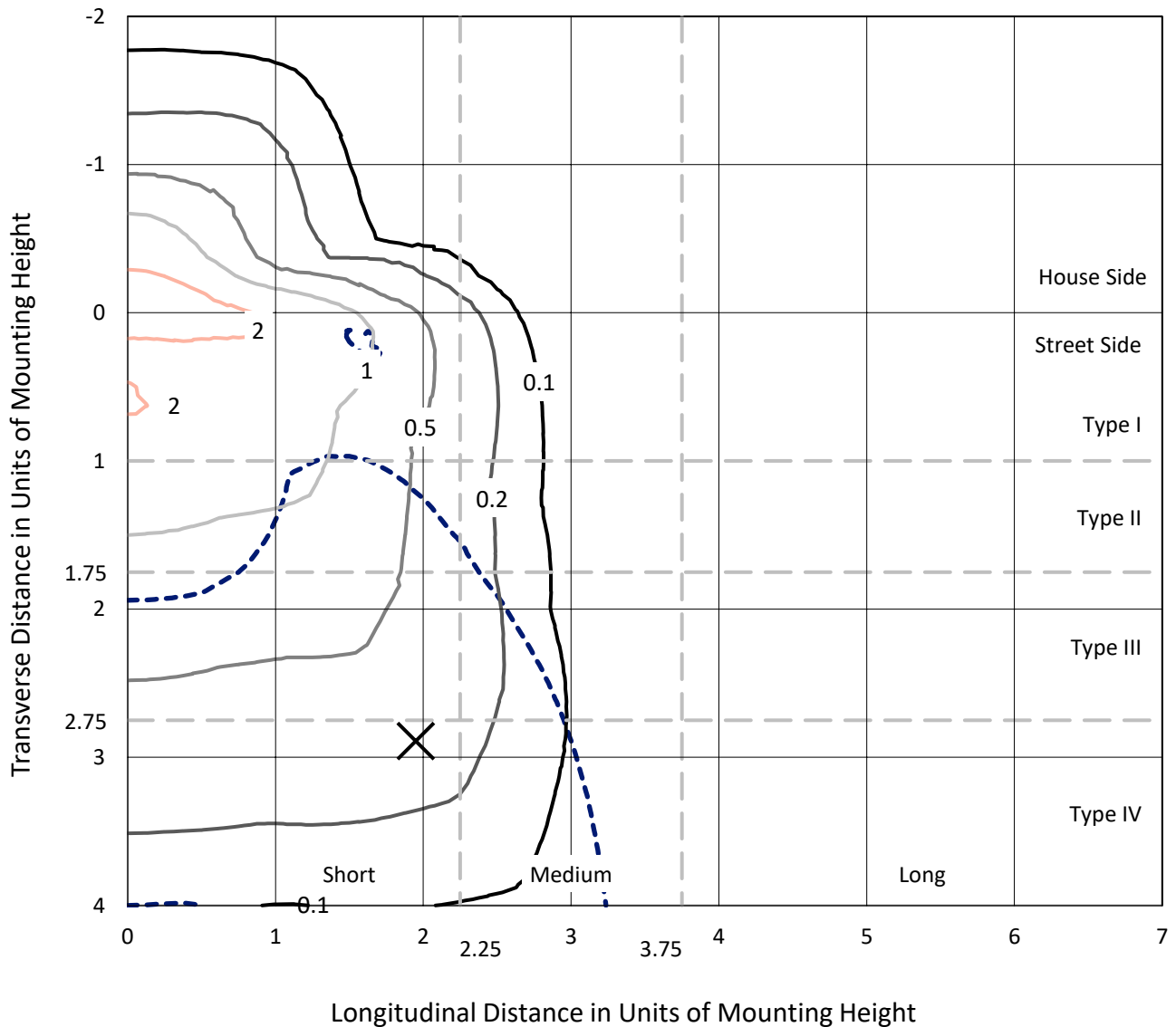
Input Watts (W): 93
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

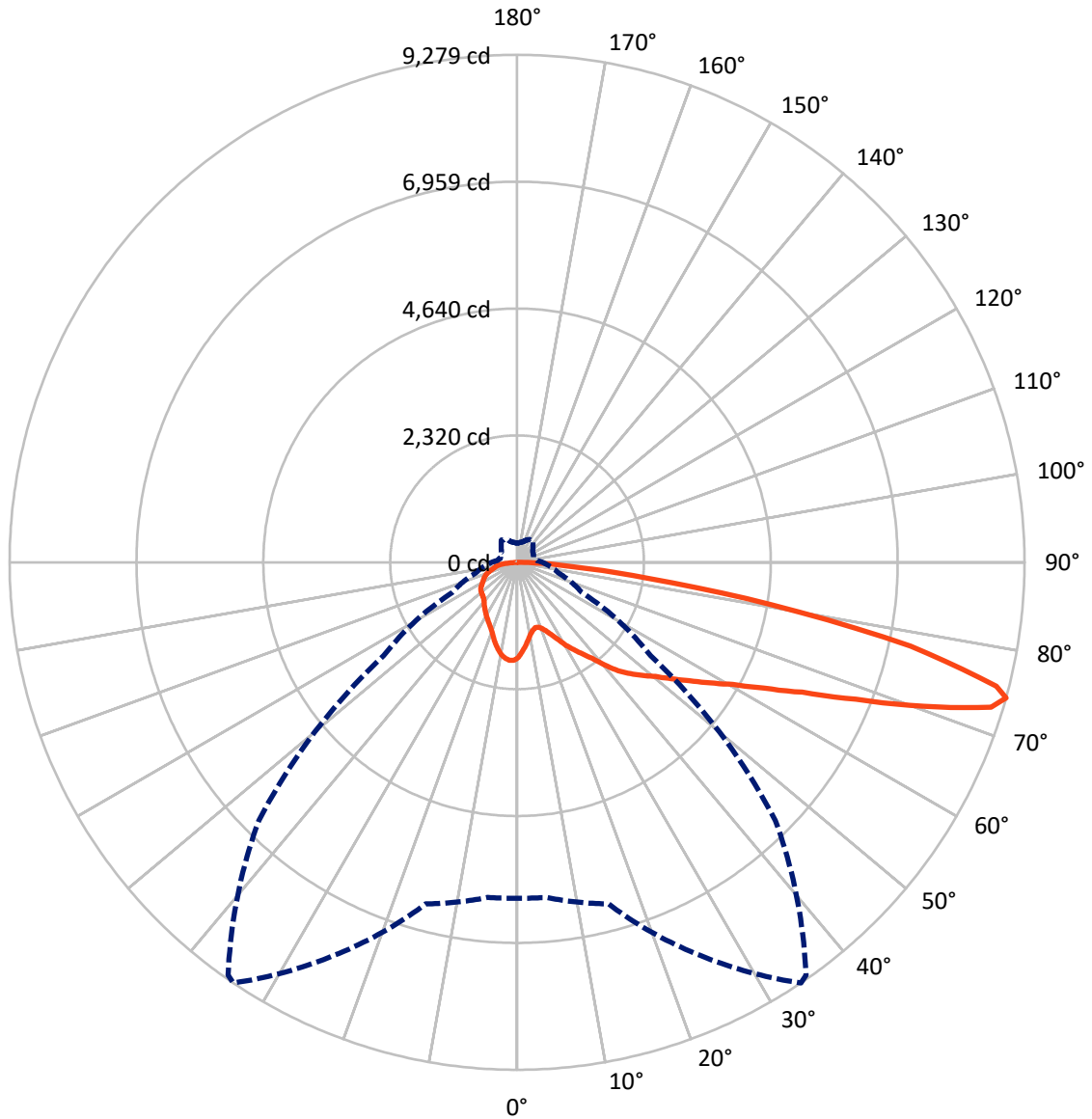
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.8 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 34-Deg Lateral - - - Horizontal Cone Through 74-Deg Vertical

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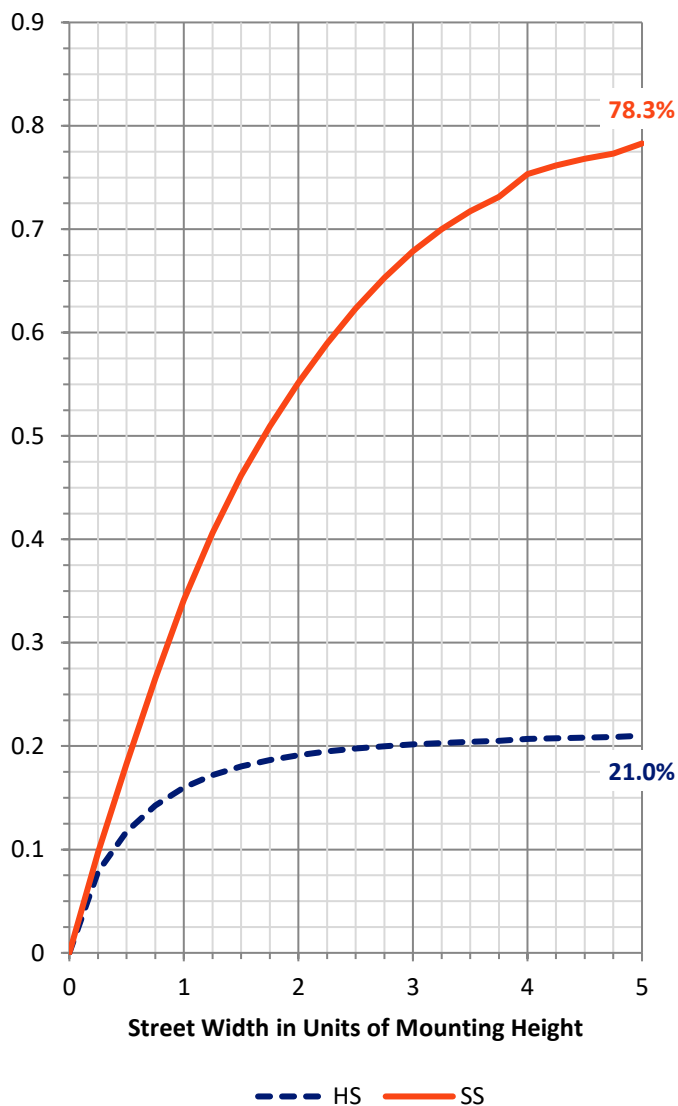
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2437.9	0.0	2437.9
	% Fixture	21.3	0.0	21.3
Street Side	Lumens	9018.2	0.0	9018.2
	% Fixture	78.7	0.0	78.7
Total	Lumens	11456.1	0.0	11456.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	159.1	1.4
10°-20°	435.5	3.8
20°-30°	718.0	6.3
30°-40°	1075.4	9.4
40°-50°	1563.4	13.6
50°-60°	2183.7	19.1
60°-70°	2733.8	23.9
70°-80°	2260.7	19.7
80°-90°	326.6	2.9
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°	11456.1	100.0
0°-180°	11456.1	100.0

Coefficient of Utilization



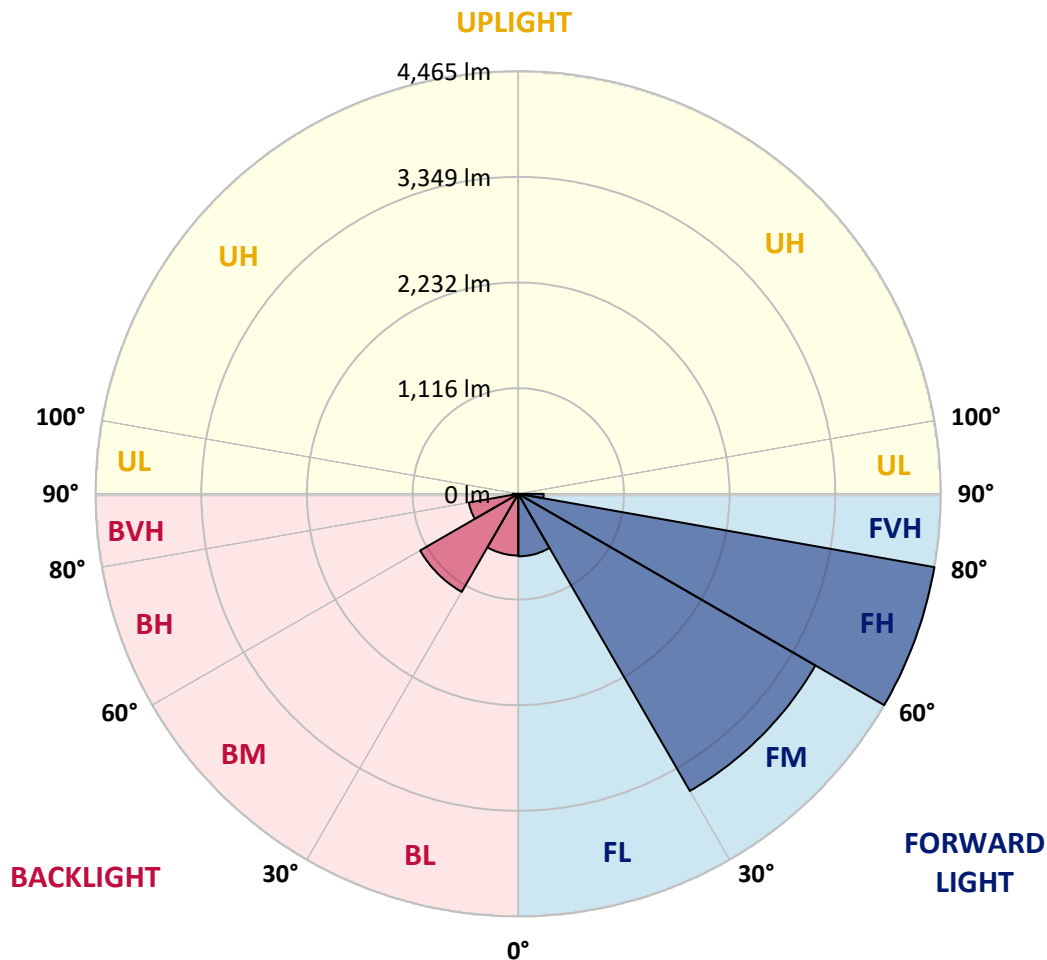
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	660.4	5.8			
FM (30°-60°)	3625.2	31.6			
FH (60°-80°)	4465.0	39.0			G2/5000
FVH (80°-90°)	267.6	2.3			G3/500
BL (0°-30°)	652.1	5.7	B2/1000		
BM (30°-60°)	1197.3	10.5	B2/2500		
BH (60°-80°)	529.5	4.6	B2/1000		G2/1000
BVH (80°-90°)	59.0	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	34°	35°	45°	55°	65°	75°	85°
0°	1749.1	1749.1	1749.1	1749.1	1749.1	1749.1	1749.1	1749.1	1749.1	1749.1	1749.1
2.5°	1616.5	1624.7	1629.2	1645.0	1648.9	1653.9	1667.3	1685.0	1707.9	1728.2	1745.9
5°	1481.9	1494.6	1502.3	1516.2	1543.5	1546.0	1581.6	1622.2	1668.5	1711.7	1747.2
7.5°	1354.3	1368.3	1374.7	1400.1	1436.3	1442.0	1494.0	1558.1	1635.5	1700.9	1755.5
10°	1258.6	1265.5	1279.5	1298.5	1341.6	1345.5	1413.4	1499.1	1599.3	1695.8	1769.5
12.5°	1206.5	1210.3	1213.5	1233.7	1276.3	1282.0	1353.1	1450.2	1570.8	1699.6	1792.3
15°	1214.1	1215.4	1201.4	1205.2	1239.5	1247.7	1318.2	1417.8	1553.0	1709.2	1826.6
17.5°	1278.2	1273.8	1239.5	1221.7	1245.9	1249.6	1311.2	1405.1	1544.7	1726.9	1862.1
20°	1379.2	1372.8	1313.7	1274.4	1288.3	1291.5	1334.1	1414.6	1553.0	1756.1	1917.3
22.5°	1504.8	1502.3	1412.7	1365.1	1364.5	1366.7	1449.0	1577.8	1796.1	1975.1	
25°	1680.6	1667.3	1550.5	1488.9	1471.8	1470.5	1468.0	1505.4	1609.5	1838.6	2043.6
27.5°	1860.8	1838.0	1733.9	1639.4	1602.5	1598.1	1581.6	1585.4	1650.1	1886.9	2121.7
30°	2022.7	2008.1	1910.3	1805.6	1761.8	1751.6	1706.0	1685.0	1718.0	1973.8	2246.1
32.5°	2146.4	2137.6	2061.4	1966.2	1901.4	1899.6	1832.9	1815.7	1824.0	2079.1	2388.2
35°	2246.7	2249.8	2211.2	2128.7	2054.4	2043.6	1999.1	1977.6	1953.5	2231.4	2567.2
37.5°	2383.8	2390.8	2388.2	2317.1	2226.4	2228.9	2218.7	2183.2	2119.2	2401.6	2765.9
40°	2534.9	2539.9	2539.2	2512.0	2464.4	2466.9	2463.1	2422.5	2326.6	2617.9	2986.7
42.5°	2743.6	2719.5	2656.7	2684.0	2711.9	2723.9	2750.0	2711.3	2579.9	2849.0	3194.2
45°	2977.2	2931.5	2789.3	2802.0	2905.5	2928.3	3071.8	3018.4	2854.7	3114.3	3438.6
47.5°	3124.4	3079.4	2959.4	2956.9	3094.0	3116.2	3370.1	3350.4	3104.7	3400.5	3736.9
50°	3255.8	3249.5	3114.3	3146.6	3280.6	3313.5	3695.0	3676.6	3354.2	3738.2	4061.8
52.5°	3450.6	3399.2	3291.3	3357.9	3535.1	3578.2	4017.4	3963.5	3583.2	4036.5	4377.2
55°	3538.3	3526.1	3519.8	3577.6	3820.7	3851.8	4330.9	4207.2	3778.8	4289.0	4617.2
57.5°	3772.4	3750.2	3813.0	3852.4	4157.0	4204.6	4658.4	4461.7	3950.1	4489.6	4733.9
60°	4075.7	4063.7	4121.5	4192.6	4532.7	4605.1	5031.5	4678.7	4087.8	4590.5	4669.8
62.5°	4529.0	4527.7	4516.8	4669.1	5065.2	5131.9	5459.9	4890.1	4109.4	4515.0	4338.6
65°	5178.8	5156.0	5062.1	5228.3	5727.8	5805.8	5906.2	5008.1	3979.3	4127.2	3653.1
67.5°	5858.6	5857.2	5781.1	5996.9	6679.1	6759.8	6464.0	4982.1	3618.2	3343.4	2594.5
70°	6422.1	6394.8	6491.9	7066.9	7894.6	7987.8	6952.0	4675.5	2882.0	2208.0	1541.6
72.5°	6557.3	6558.5	6760.4	7891.9	9061.7	9076.2	7127.9	3789.5	1928.7	1217.9	771.1
74°	6141.0	6151.7	6464.6	7933.2	9279.3	9213.3	6678.5	2978.5	1304.2	795.2	556.0
75°	5605.3	5537.4	5989.9	7658.4	9053.4	8982.3	6152.4	2390.1	995.2	635.3	486.8
77.5°	2996.8	3066.0	3764.1	5715.1	7355.0	7273.2	4171.6	1146.2	537.6	442.4	350.4
80°	1066.9	1176.6	1653.9	2990.5	4715.5	4740.9	1990.9	525.5	378.3	326.2	247.5
82.5°	435.4	447.4	710.2	1327.1	2394.6	2417.5	813.0	312.3	270.4	224.6	147.8
85°	170.1	175.2	314.2	596.6	1021.8	1088.4	281.1	165.0	166.3	128.8	75.5
87.5°	57.1	64.8	128.8	198.6	347.2	340.2	81.8	48.9	59.6	55.8	23.5
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°	1749.1	1749.1	1749.1	1749.1	1749.1	1749.1	1749.1	1749.1	1749.1	1749.1	1749.1
2.5°	1754.8	1766.9	1775.2	1784.0	1792.3	1794.8	1792.9	1798.6	1799.2	1799.9	1800.5
5°	1765.0	1781.5	1797.4	1806.2	1810.1	1806.9	1796.1	1790.4	1785.3	1781.5	1782.8
7.5°	1779.0	1802.4	1817.1	1820.8	1810.7	1796.1	1769.5	1748.5	1735.2	1726.2	1725.6
10°	1800.5	1823.4	1835.4	1824.6	1796.7	1761.1	1719.3	1680.0	1650.1	1641.2	1640.6
12.5°	1827.8	1853.8	1853.2	1821.4	1772.6	1709.2	1641.2	1595.5	1554.9	1534.6	1542.8
15°	1863.3	1883.0	1864.7	1807.5	1730.1	1643.1	1559.4	1497.1	1451.5	1429.9	1431.1
17.5°	1904.6	1921.8	1872.9	1782.8	1670.4	1558.7	1461.7	1402.6	1366.5	1350.6	1349.3
20°	1956.0	1961.1	1872.9	1739.6	1593.6	1460.3	1367.7	1326.4	1306.2	1297.9	1300.4
22.5°	2011.3	2001.1	1862.7	1678.6	1492.7	1357.5	1295.3	1277.0	1266.8	1265.5	1266.8
25°	2073.4	2044.9	1841.8	1596.1	1387.4	1268.6	1232.5	1235.7	1237.6	1237.6	1242.0
27.5°	2149.6	2092.5	1806.9	1492.1	1264.3	1186.1	1176.1	1198.3	1208.3	1210.3	1213.5
30°	2249.8	2144.5	1749.1	1362.0	1159.5	1111.9	1129.7	1159.5	1170.9	1177.9	1176.6
32.5°	2369.2	2201.7	1671.1	1231.9	1075.1	1059.9	1081.4	1111.9	1124.6	1128.5	1123.3
35°	2509.5	2266.3	1568.2	1110.0	1001.5	1010.4	1035.8	1045.3	1056.7	1056.7	1059.2
37.5°	2660.5	2318.4	1442.6	998.4	944.4	976.7	995.2	986.2	981.2	974.8	978.0
40°	2814.1	2357.2	1279.5	887.9	887.3	941.8	946.9	921.5	901.2	894.9	891.7
42.5°	2948.0	2381.2	1132.2	802.2	833.3	907.5	911.4	870.8	838.4	819.4	813.0
45°	3106.0	2409.1	988.2	731.2	783.1	880.3	889.8	835.2	787.6	747.6	737.5
47.5°	3322.5	2472.6	874.6	675.9	747.0	863.1	876.5	806.0	743.2	691.1	682.9
50°	3566.8	2559.6	786.3	638.5	719.1	847.9	864.4	776.2	701.9	644.2	637.8
52.5°	3790.8	2606.5	710.2	604.8	691.8	820.0	848.6	754.6	661.3	597.2	591.5
55°	3913.3	2530.4	635.3	571.8	654.3	783.8	826.4	724.8	622.0	572.5	564.2
57.5°	3929.8	2373.0	567.4	536.3	615.0	739.4	785.1	688.6	596.6	555.3	548.3
60°	3802.2	2138.2	514.7	507.1	575.0	689.2	738.7	656.9	570.5	536.3	529.3
62.5°	3484.9	1883.0	477.9	480.5	534.4	636.6	704.5	626.4	545.8	515.4	509.0
65°	2939.1	1554.3	442.4	453.1	498.2	595.3	673.4	601.1	521.1	499.5	493.8
67.5°	2041.7	1122.1	413.2	424.6	463.9	553.5	637.2	573.7	493.2	481.7	472.8
70°	1130.3	690.5	378.9	392.2	428.4	506.5	596.6	532.4	452.5	447.4	434.7
72.5°	594.1	439.8	340.2	354.7	380.1	446.2	534.4	487.4	412.5	391.0	374.4
74°	463.9	360.5	314.2	329.4	346.5	410.7	497.5	455.1	384.0	358.6	345.9
75°	404.3	321.2	291.9	311.6	326.8	386.5	469.0	432.2	368.1	344.0	332.5
77.5°	285.6	240.5	238.6	262.1	270.4	338.9	422.7	393.5	328.2	302.8	291.9
80°	200.6	180.2	189.1	203.7	215.1	299.6	392.2	340.2	269.1	239.3	235.5
82.5°	130.8	118.1	135.1	148.5	152.3	220.8	316.7	258.3	196.1	159.3	147.8
85°	60.3	59.0	77.5	75.5	74.8	107.9	187.9	151.0	112.9	84.4	79.3
87.5°	15.2	14.6	19.0	15.9	19.0	16.5	17.2	4.5	0.7	0.0	0.0
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)