

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: P299818

Luminaire Tested: **GLNA-AF-01-LED-E1-5WQ**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299818  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24143)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLNA-AF-01-LED-E1-5WQ  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(1) 70 CRI, 4000K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV  
w/Spill Control OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6541.7 lumens  
Efficiency: N/A  
Efficacy: 110.9 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type V - Short - Semi-Cutoff  
BUG Rating: B3 - U0 - G2  
  
Input Watts (W): 59  
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: 25 FT

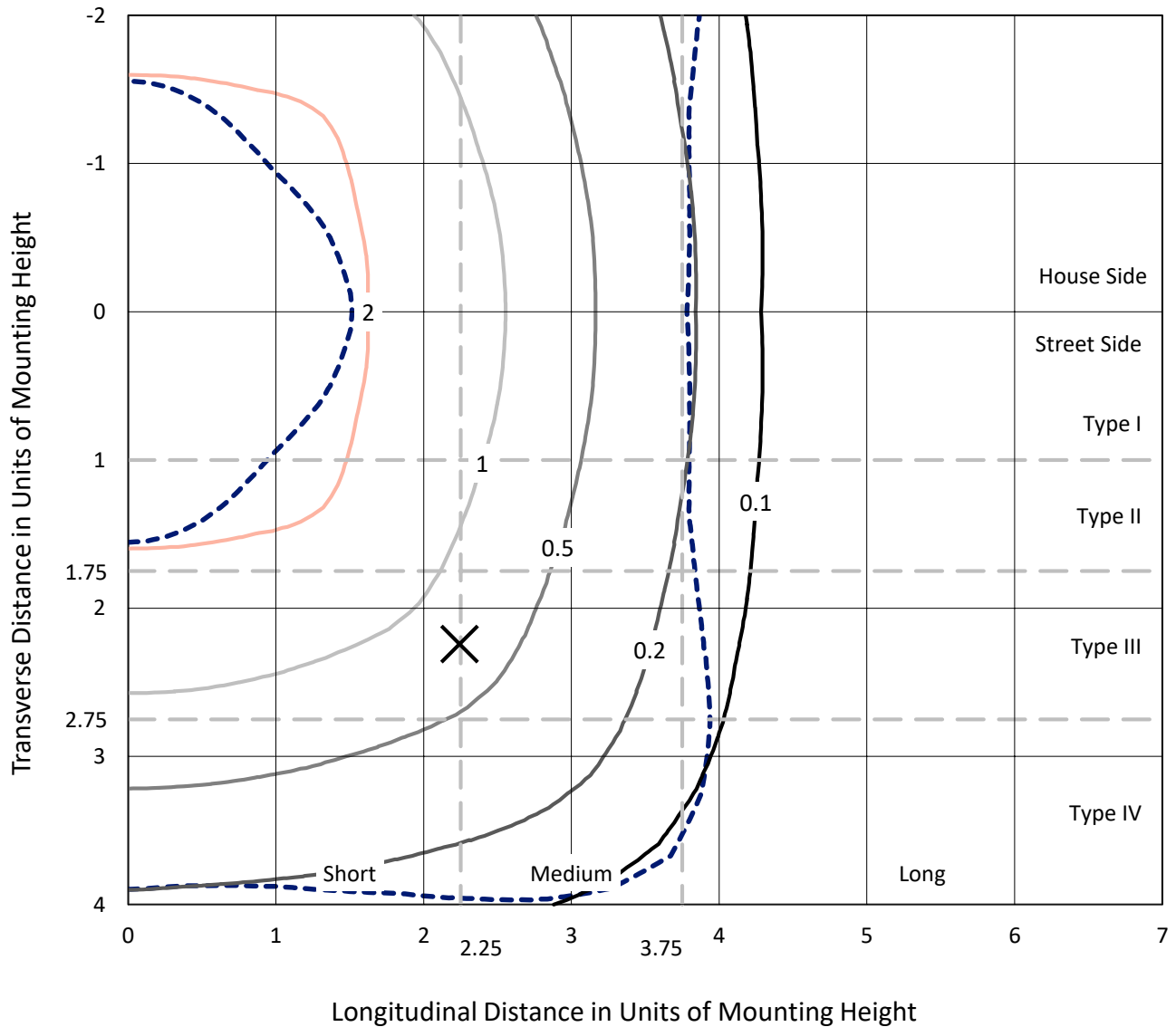


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

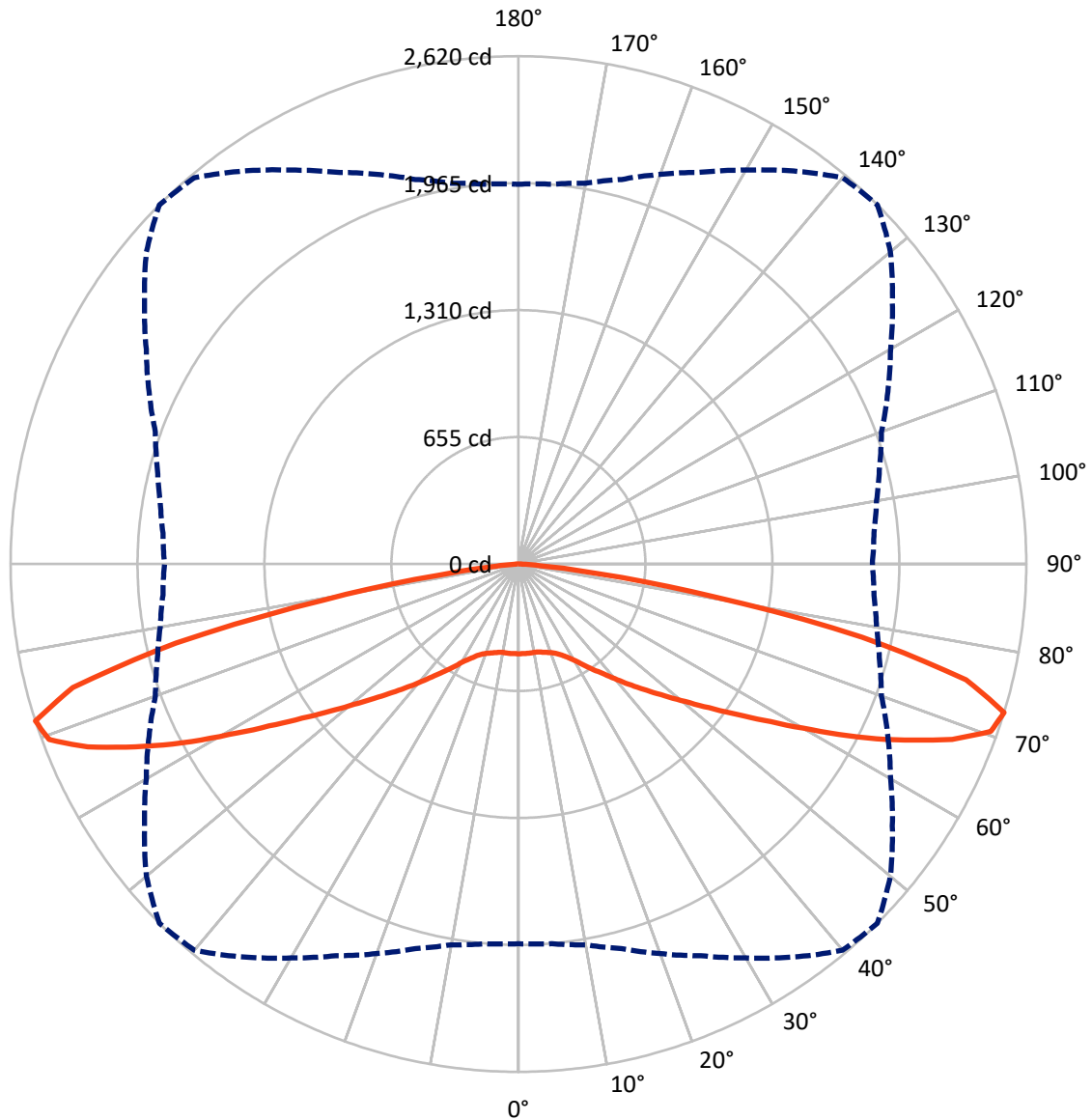


Based on 10 foot mounting height. Maximum calculated value = 4.6 fc  
 Type V - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

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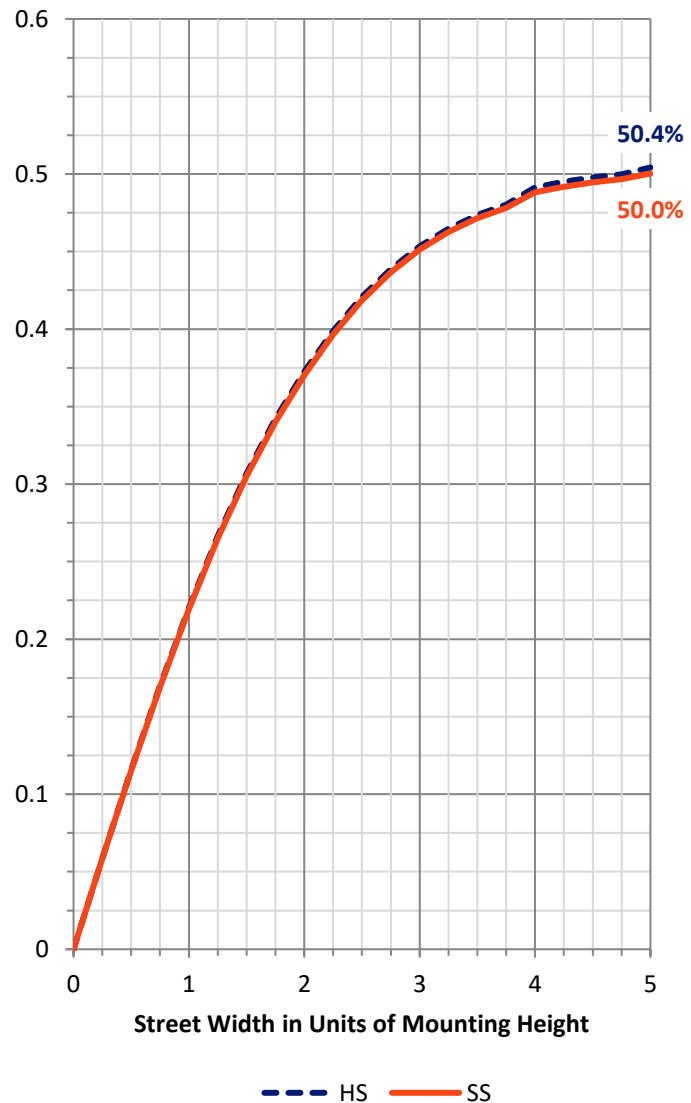
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3270.9	0.0	3270.9
	% Fixture	50.0	0.0	50.0
<b>Street Side</b>	Lumens	3270.9	0.0	3270.9
	% Fixture	50.0	0.0	50.0
<b>Total</b>	Lumens	6541.7	0.0	6541.7
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	44.2	0.7
10°-20°	134.4	2.1
20°-30°	245.5	3.8
30°-40°	423.3	6.5
40°-50°	723.6	11.1
50°-60°	1172.9	17.9
60°-70°	1945.8	29.7
70°-80°	1713.8	26.2
80°-90°	138.2	2.1
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°	6541.7	100.0
0°-180°	6541.7	100.0



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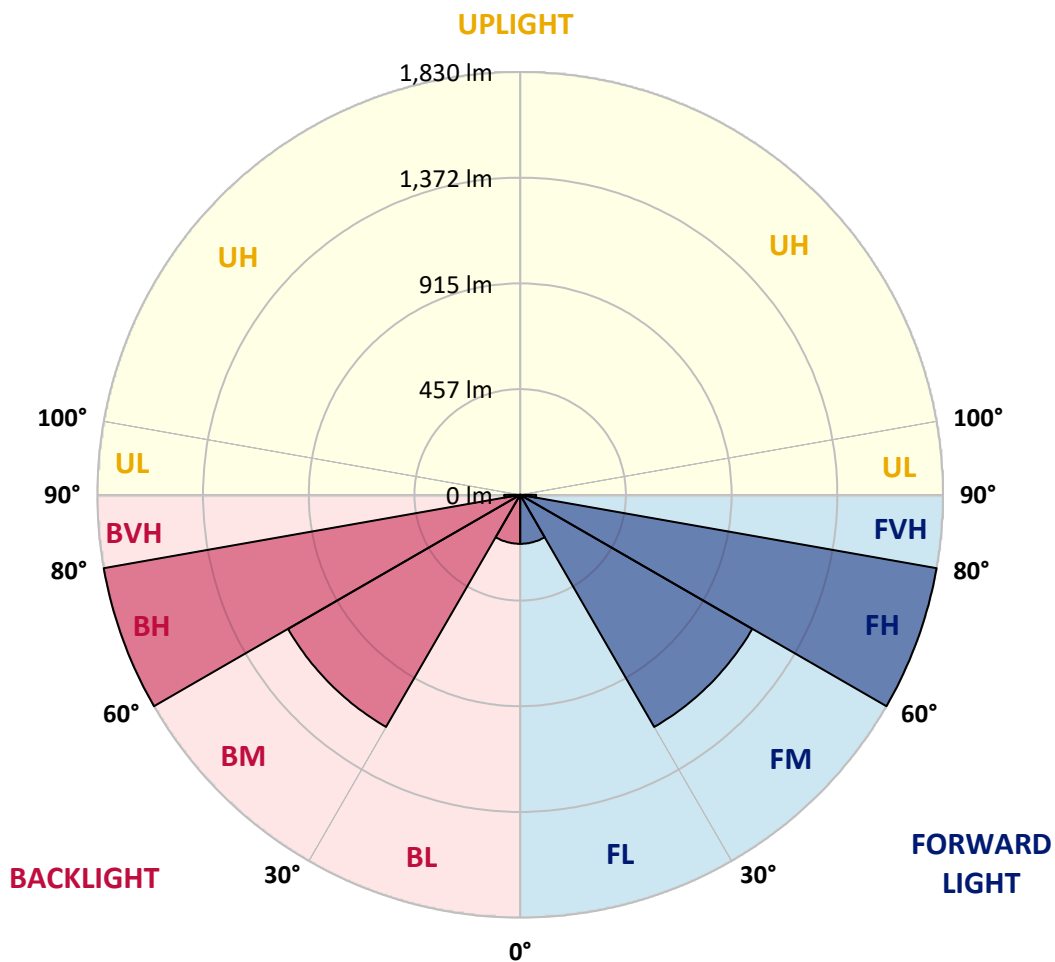
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	212.1	3.2			
FM (30°-60°)	1159.9	17.7			
FH (60°-80°)	1829.8	28.0			G2/5000
FVH (80°-90°)	69.1	1.1			G1/100
BL (0°-30°)	212.1	3.2	B1/500		
BM (30°-60°)	1159.9	17.7	B2/2500		
BH (60°-80°)	1829.8	28.0	B3/2500		G2/5000
BVH (80°-90°)	69.1	1.1			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G2**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	463.3	463.3	463.3	463.3	463.3	463.3	463.3	463.3	463.3	463.3	463.3
2.5°	463.3	463.6	463.9	463.6	463.6	463.3	463.0	463.3	463.0	462.4	462.7
5°	464.8	465.4	465.4	464.8	465.1	464.8	464.2	464.5	463.9	463.0	463.0
7.5°	466.6	466.9	466.9	466.3	466.6	466.0	465.4	465.1	464.5	463.3	462.4
10°	469.3	469.6	469.3	468.7	468.7	467.8	466.3	465.7	464.5	462.7	461.8
12.5°	472.3	472.6	472.3	471.7	471.4	469.9	468.7	467.8	466.9	465.4	463.9
15°	476.5	477.1	476.5	475.3	474.4	473.2	472.6	472.9	473.2	472.0	470.5
17.5°	484.3	484.6	483.7	481.0	479.8	478.6	478.6	479.2	480.1	479.5	478.0
20°	498.7	497.8	495.7	492.4	490.9	488.8	488.5	488.8	488.8	488.5	487.3
22.5°	516.7	516.1	513.4	509.2	507.1	505.9	504.1	502.6	502.3	501.4	500.2
25°	538.3	538.0	534.7	531.1	529.6	528.1	526.6	524.5	522.7	520.6	519.4
27.5°	565.9	564.7	559.9	558.1	556.0	555.1	553.0	550.6	549.1	546.4	544.9
30°	596.2	596.2	592.3	591.7	591.7	589.6	587.2	583.0	580.3	577.6	576.7
32.5°	626.5	626.8	622.9	624.1	625.0	626.5	627.1	625.6	623.8	623.5	621.7
35°	670.3	669.1	665.2	666.1	665.8	665.5	665.5	668.8	669.4	670.0	666.4
37.5°	724.6	724.6	720.7	720.7	718.9	717.1	714.7	716.8	720.1	721.0	718.6
40°	786.7	788.8	784.0	783.7	784.3	778.6	775.9	779.2	781.3	784.9	782.2
42.5°	859.9	858.4	853.6	853.0	849.7	847.9	845.5	848.2	851.5	853.9	854.8
45°	930.1	928.9	923.5	923.5	920.2	918.7	919.9	924.4	925.9	929.2	932.5
47.5°	999.4	997.9	994.3	995.8	996.1	998.8	1002.7	1006.9	1011.1	1015.6	1017.1
50°	1070.2	1070.5	1066.6	1070.2	1074.7	1082.2	1092.7	1099.6	1108.3	1114.0	1115.8
52.5°	1134.7	1135.9	1140.1	1148.5	1157.5	1172.2	1190.2	1207.0	1221.4	1231.0	1230.4
55°	1212.1	1213.9	1224.1	1238.5	1253.2	1275.4	1302.1	1331.9	1355.9	1369.7	1361.0
57.5°	1311.1	1315.0	1326.5	1346.0	1367.9	1396.7	1433.3	1478.0	1515.2	1533.8	1519.7
60°	1447.1	1449.5	1463.3	1484.9	1511.3	1547.0	1595.9	1655.9	1708.4	1733.0	1716.8
62.5°	1626.2	1630.7	1641.8	1663.7	1690.7	1731.2	1790.9	1865.9	1931.3	1965.5	1928.9
65°	1840.1	1854.5	1863.8	1886.0	1911.2	1954.1	2016.5	2096.9	2167.1	2189.6	2147.3
67.5°	2051.9	2064.5	2080.7	2106.2	2131.7	2180.0	2238.0	2316.0	2393.1	2413.5	2347.8
70°	2144.6	2151.8	2177.0	2211.9	2260.8	2317.8	2384.7	2472.3	2567.7	2584.5	2501.1
72.5°	1958.9	1966.1	1994.3	2053.4	2138.6	2229.3	2346.0	2474.7	2600.7	2619.6	2504.7
75°	1481.6	1469.9	1511.6	1589.9	1704.8	1831.1	1994.3	2178.8	2361.0	2384.7	2247.6
77.5°	765.7	764.2	795.7	892.9	1030.0	1173.7	1353.5	1562.0	1740.2	1812.2	1700.6
80°	215.7	218.1	233.1	281.4	361.5	465.4	605.8	801.1	946.9	1021.3	958.9
82.5°	84.6	91.2	96.9	105.9	116.4	131.7	175.8	261.6	351.0	419.4	343.5
85°	30.3	32.4	45.9	54.3	55.2	58.2	66.3	77.4	93.3	111.3	91.5
87.5°	11.4	12.6	14.7	24.3	24.0	21.9	26.7	27.9	21.0	19.2	23.7
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):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	463.3	463.3	463.3	463.3	463.3	463.3	463.3	463.3
2.5°	462.1	462.4	462.4	462.7	463.0	463.0	463.6	463.6
5°	462.4	462.4	461.8	462.1	461.8	461.8	462.1	462.1
7.5°	461.8	461.5	460.9	460.6	460.0	460.0	460.0	460.0
10°	460.9	460.6	460.0	459.7	459.4	459.4	459.4	459.4
12.5°	463.3	462.4	461.8	461.5	461.5	461.5	461.5	461.5
15°	469.6	467.5	466.0	466.0	466.3	466.9	466.9	467.5
17.5°	477.4	475.0	473.5	472.3	472.9	473.8	474.4	475.0
20°	486.7	485.5	483.4	482.2	482.2	483.4	484.0	484.3
22.5°	499.6	498.7	497.8	496.3	496.3	496.9	498.1	498.1
25°	518.8	518.2	517.6	516.4	516.1	516.1	516.7	517.3
27.5°	542.8	543.1	542.5	542.2	541.3	541.0	541.9	541.6
30°	574.9	576.4	577.9	576.7	575.2	574.3	573.4	572.2
32.5°	618.4	616.6	615.4	613.3	610.6	608.2	606.4	604.3
35°	659.5	656.5	655.3	657.1	656.8	655.3	653.2	651.4
37.5°	709.9	709.3	709.9	713.2	712.6	714.1	709.9	709.6
40°	773.5	774.1	778.3	782.2	784.3	786.4	784.0	781.6
42.5°	847.3	847.0	848.5	853.9	857.5	859.9	854.8	854.2
45°	925.3	923.2	924.4	928.9	932.5	935.2	929.5	929.5
47.5°	1011.1	1007.5	1003.6	1008.7	1010.8	1012.6	1008.1	1006.6
50°	1106.8	1099.3	1090.9	1093.0	1093.0	1092.4	1086.7	1086.4
52.5°	1216.6	1202.8	1187.5	1181.8	1178.5	1174.9	1165.0	1160.2
55°	1343.0	1322.3	1298.2	1283.5	1275.7	1265.8	1249.3	1244.8
57.5°	1490.6	1458.2	1416.8	1398.8	1381.4	1365.2	1346.9	1341.8
60°	1665.5	1617.8	1562.9	1529.6	1510.7	1495.1	1476.2	1475.3
62.5°	1860.5	1785.2	1723.1	1693.1	1679.3	1665.5	1647.5	1649.9
65°	2058.8	1980.2	1922.0	1897.7	1884.8	1873.4	1855.4	1858.1
67.5°	2254.5	2182.1	2118.2	2093.3	2078.9	2064.5	2048.3	2051.0
70°	2394.9	2305.2	2233.2	2177.9	2143.4	2104.4	2079.2	2072.9
72.5°	2354.7	2216.4	2102.0	1992.5	1928.3	1876.1	1840.7	1825.4
75°	2037.8	1848.8	1701.8	1567.4	1491.8	1430.3	1385.6	1357.7
77.5°	1513.4	1300.9	1127.2	972.4	850.0	767.8	709.9	672.4
80°	828.4	630.1	460.6	323.7	237.9	197.7	174.6	163.5
82.5°	258.0	166.5	122.7	105.9	98.4	94.2	87.3	76.2
85°	82.2	72.0	66.9	63.9	60.9	53.1	36.6	33.3
87.5°	31.8	32.7	32.4	30.6	31.2	22.5	18.0	15.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)