

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: P299168

Luminaire Tested: **GLNA-AF-03-LED-E1-T3-7030-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299168  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24140)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLNA-AF-03-LED-E1-T3-7030-800  
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE  
(3) 70 CRI, 3000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 14154.7 lumens  
Efficiency: N/A  
Efficacy: 114.2 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type III - Short - Full Cutoff  
BUG Rating: B2 - U0 - G2

Input Watts (W): 124  
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

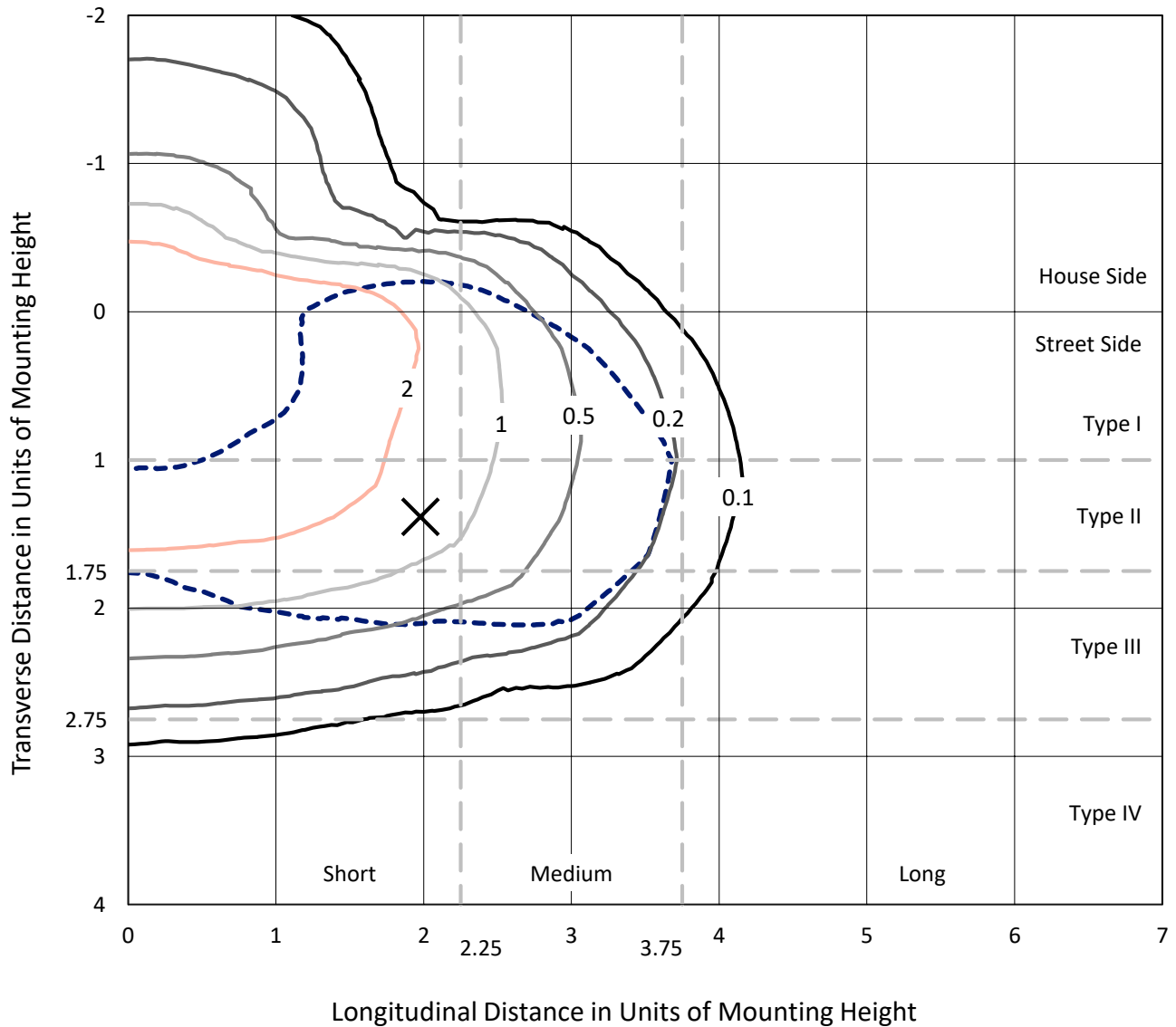


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### Iso-Footcandle Lines of Horizontal Illumination

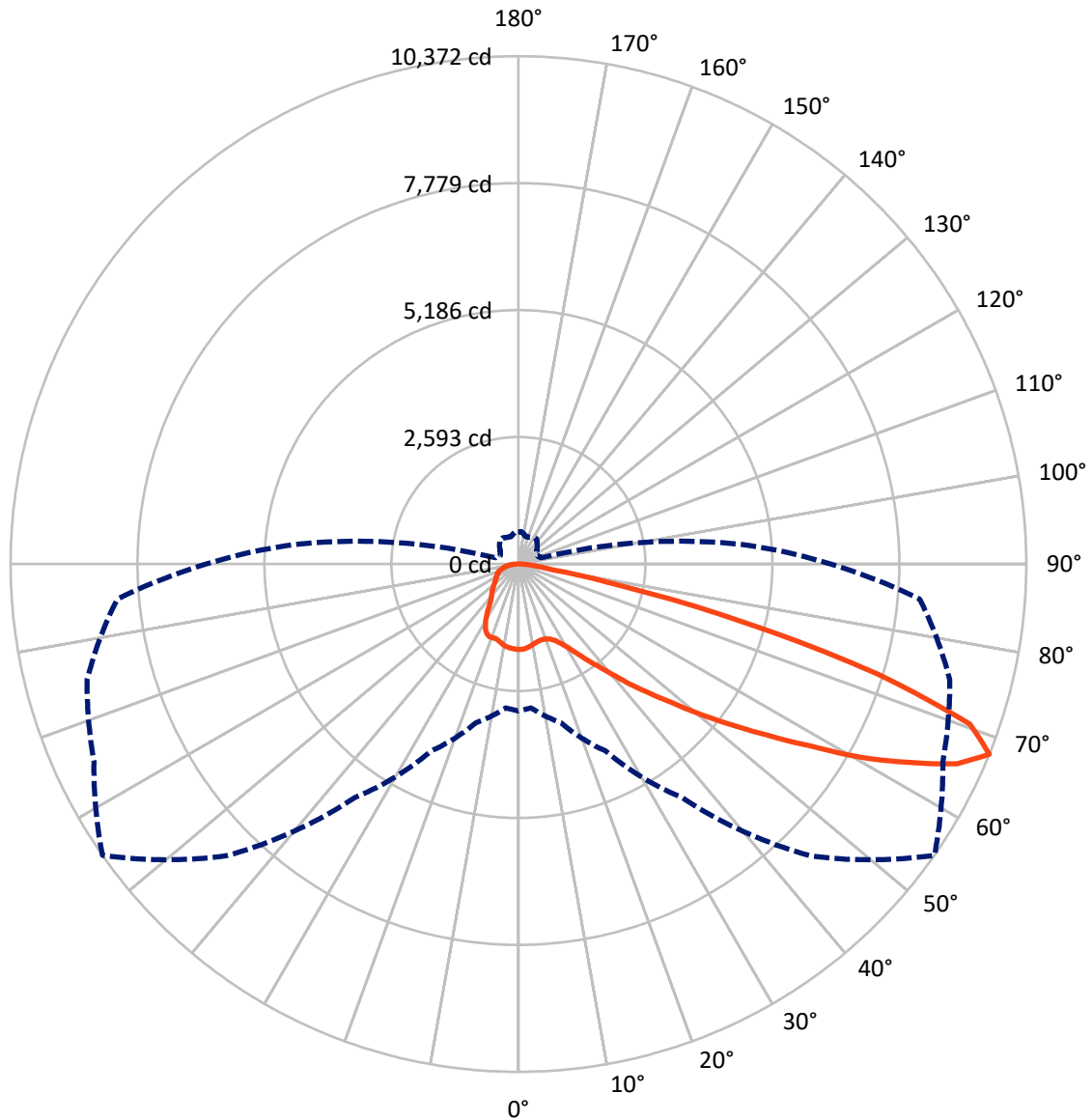
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 4.5 fc  
 Type III - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3057.7	0.0	3057.7
	% Fixture	21.6	0.0	21.6
<b>Street Side</b>	Lumens	11097.0	0.0	11097.0
	% Fixture	78.4	0.0	78.4
<b>Total</b>	Lumens	14154.7	0.0	14154.7
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	162.9	1.2
10°-20°	461.4	3.3
20°-30°	772.9	5.5
30°-40°	1271.0	9.0
40°-50°	2139.5	15.1
50°-60°	3367.4	23.8
60°-70°	4018.6	28.4
70°-80°	1725.7	12.2
80°-90°	235.3	1.7
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°	14154.7	100.0
0°-180°	14154.7	100.0



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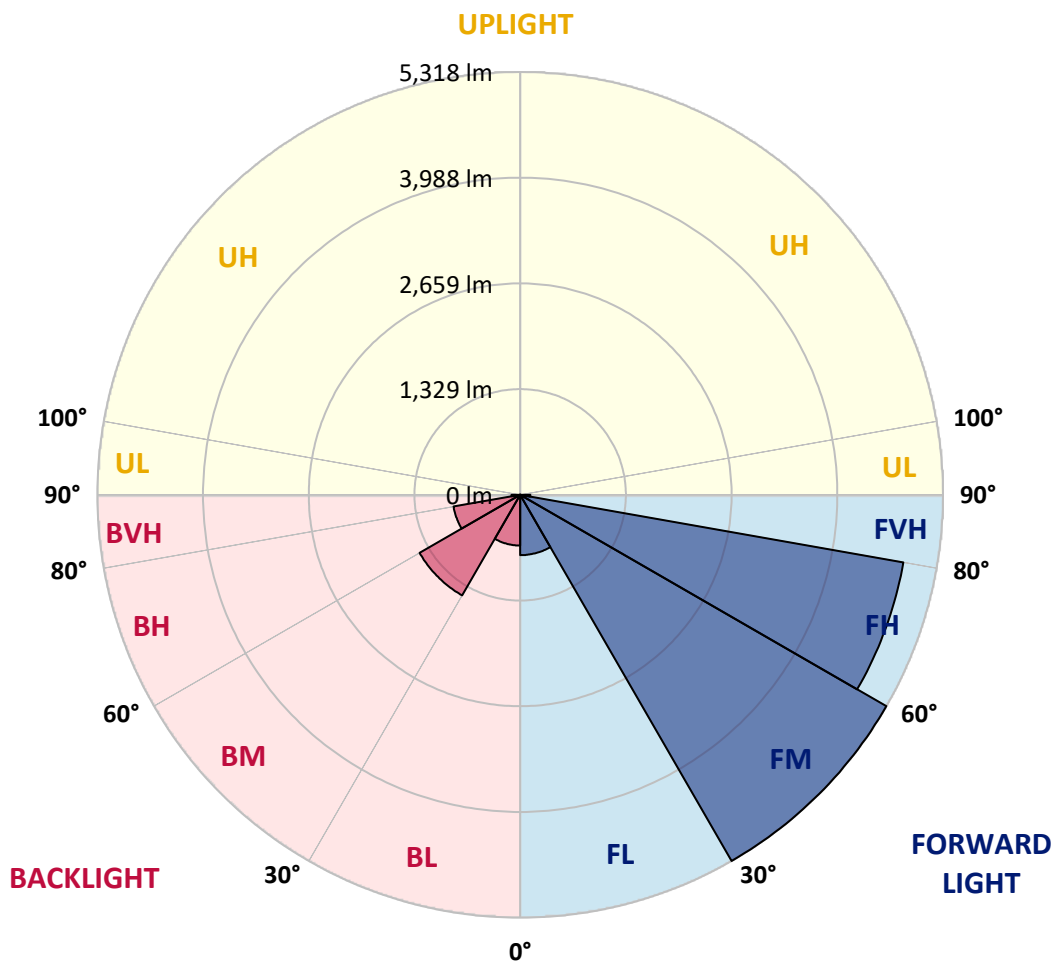
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	758.7	5.4			
FM (30°-60°)	5317.6	37.6			
FH (60°-80°)	4893.4	34.6			G2/5000
FVH (80°-90°)	127.4	0.9			G2/225
BL (0°-30°)	638.5	4.5	B2/1000		
BM (30°-60°)	1460.3	10.3	B2/2500		
BH (60°-80°)	851.0	6.0	B2/1000		G2/1000
BVH (80°-90°)	107.9	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°	65°	75°	85°	90°
0°	1745.4	1745.4	1745.4	1745.4	1745.4	1745.4	1745.4	1745.4	1745.4	1745.4	1745.4
2.5°	1730.4	1731.1	1732.4	1737.9	1742.7	1741.3	1742.0	1739.3	1738.6	1734.5	1738.6
5°	1708.5	1710.6	1711.2	1720.1	1725.6	1727.0	1724.9	1721.5	1717.4	1713.3	1715.4
7.5°	1658.6	1664.1	1664.8	1677.1	1686.0	1697.6	1698.3	1698.9	1696.9	1694.2	1698.3
10°	1627.2	1628.5	1627.8	1636.7	1643.6	1656.6	1664.1	1677.1	1682.5	1683.9	1686.6
12.5°	1625.1	1623.7	1621.7	1621.7	1619.6	1625.1	1638.8	1657.2	1670.2	1674.3	1677.7
15°	1647.0	1646.3	1639.5	1629.2	1616.2	1612.1	1623.7	1644.2	1661.3	1670.2	1673.6
17.5°	1696.2	1692.1	1681.2	1657.9	1629.9	1619.0	1620.3	1637.4	1657.2	1668.9	1672.3
20°	1786.5	1786.5	1763.2	1719.5	1669.5	1643.6	1631.3	1641.5	1660.7	1676.4	1681.2
22.5°	1942.3	1943.7	1904.7	1832.9	1748.9	1693.5	1662.7	1660.7	1683.2	1701.0	1706.5
25°	2163.2	2157.7	2103.0	2000.4	1872.6	1781.0	1727.7	1715.4	1734.5	1754.3	1761.2
27.5°	2420.2	2400.4	2335.4	2211.7	2046.3	1912.3	1830.2	1810.4	1828.8	1851.4	1858.2
30°	2674.6	2654.0	2576.8	2441.4	2257.5	2088.0	1970.4	1938.2	1964.2	1996.3	2000.4
32.5°	2928.9	2928.9	2842.7	2684.8	2484.5	2297.8	2157.0	2118.7	2161.8	2200.8	2209.7
35°	3233.1	3234.5	3151.1	2961.0	2745.7	2548.1	2392.9	2364.8	2429.8	2457.1	2478.3
37.5°	3607.1	3614.6	3507.3	3277.6	3041.7	2833.9	2649.3	2611.0	2675.9	2750.4	2818.8
40°	4011.1	4020.7	3902.4	3619.4	3383.5	3166.1	2966.5	2897.4	3005.5	3147.7	3235.9
42.5°	4396.7	4446.0	4331.8	4040.5	3786.9	3562.0	3359.6	3259.1	3394.5	3609.1	3685.7
45°	4953.9	4989.5	4790.5	4526.6	4288.0	4036.4	3768.4	3662.5	3851.8	4122.6	4138.3
47.5°	5325.2	5298.5	5197.3	5033.2	4882.2	4647.0	4243.6	4127.4	4379.0	4697.6	4609.4
50°	5522.8	5531.0	5517.3	5526.9	5532.3	5384.7	4826.1	4666.8	4966.9	5351.8	5148.8
52.5°	5707.4	5652.7	5697.8	5922.0	6192.8	6138.1	5459.9	5293.7	5597.3	6077.9	5719.0
55°	5703.3	5619.8	5766.8	6162.7	6750.0	6812.9	6171.6	5980.1	6263.9	6856.6	6323.4
57.5°	5501.6	5505.7	5732.0	6250.2	7138.3	7447.3	6997.5	6710.3	6970.8	7645.6	6875.1
60°	5224.0	5261.6	5587.7	6235.8	7449.4	7967.6	8010.7	7497.2	7663.4	8362.8	7331.8
62.5°	4776.2	4815.8	5265.7	6086.8	7402.2	8468.7	8926.8	8390.1	8387.4	8797.6	7465.8
65°	4069.9	4058.3	4530.7	5529.6	7006.3	8839.3	9836.8	9162.0	8933.0	8804.4	7196.4
67.5°	3001.4	2949.4	3354.8	4211.5	5823.6	8424.3	10372.1	9564.0	9118.9	8225.3	6373.3
70°	1557.4	1505.5	1833.6	2459.2	3830.0	6574.9	9779.3	9356.2	8708.0	6894.9	4992.9
72.5°	665.9	657.0	790.3	1078.8	1852.8	3792.4	7668.1	8098.2	7471.9	5137.2	3432.8
75°	447.8	445.1	495.0	588.0	833.4	1539.0	4798.7	5748.4	5466.7	3185.3	1930.7
77.5°	351.4	348.0	377.4	422.5	540.1	607.1	2129.7	3086.1	2856.4	1386.5	845.0
80°	274.8	272.1	290.6	315.2	388.3	382.9	700.8	1227.9	950.3	531.2	410.9
82.5°	216.7	216.7	231.8	232.5	275.5	261.2	365.8	540.8	474.5	309.7	251.6
85°	198.3	198.3	214.0	173.7	179.8	164.8	227.0	320.6	300.8	127.2	109.4
87.5°	99.8	97.1	179.8	153.8	97.8	87.5	110.8	155.2	166.8	70.4	54.7
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):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1745.4	1745.4	1745.4	1745.4	1745.4	1745.4	1745.4	1745.4	1745.4	1745.4
2.5°	1737.2	1736.5	1737.9	1738.6	1744.1	1751.6	1755.0	1759.8	1762.5	1761.2
5°	1716.7	1718.1	1723.6	1727.7	1737.2	1749.5	1756.4	1761.8	1766.6	1764.6
7.5°	1699.6	1703.0	1711.2	1714.7	1720.1	1723.6	1722.9	1724.9	1729.0	1724.2
10°	1690.1	1694.2	1700.3	1695.5	1682.5	1664.1	1647.0	1638.1	1640.8	1637.4
12.5°	1680.5	1686.0	1681.2	1658.6	1622.4	1598.4	1585.5	1586.8	1593.0	1594.3
15°	1675.0	1677.1	1656.6	1614.2	1577.2	1573.8	1580.7	1579.3	1580.0	1580.0
17.5°	1675.0	1669.5	1631.3	1588.9	1573.1	1567.0	1545.8	1519.1	1507.5	1503.4
20°	1683.9	1669.5	1623.1	1595.0	1560.8	1508.2	1452.1	1402.9	1381.0	1374.9
22.5°	1710.6	1686.0	1646.3	1597.8	1500.7	1412.5	1323.6	1264.8	1225.2	1218.3
25°	1764.6	1737.2	1692.1	1561.5	1405.0	1279.2	1178.0	1112.3	1072.7	1067.2
27.5°	1858.9	1841.1	1716.7	1481.5	1277.8	1143.1	1049.4	998.9	969.5	967.4
30°	2001.1	1992.2	1704.4	1363.3	1121.2	1011.2	966.0	936.6	914.8	914.1
32.5°	2228.1	2156.3	1664.1	1219.0	978.3	917.5	899.0	881.3	864.2	864.2
35°	2520.0	2289.0	1587.5	1064.5	891.5	865.5	842.3	814.3	791.7	790.3
37.5°	2863.2	2371.0	1450.1	940.1	850.5	830.7	796.5	754.8	715.1	708.3
40°	3209.9	2395.6	1256.6	863.5	824.5	795.8	754.1	704.9	666.6	664.5
42.5°	3527.8	2348.4	1051.5	810.8	798.5	760.3	716.5	672.7	642.7	642.0
45°	3794.4	2226.1	879.2	760.9	771.2	728.1	689.1	653.6	630.4	625.6
47.5°	4045.3	2053.1	758.2	708.3	743.8	710.3	677.5	644.0	621.5	618.0
50°	4336.6	1866.4	673.4	657.0	719.9	704.2	687.1	652.2	614.6	610.5
52.5°	4689.4	1705.1	607.1	611.9	701.5	712.4	711.7	675.5	609.8	604.4
55°	5083.2	1526.0	557.2	575.0	693.9	727.4	717.9	697.4	613.9	605.7
57.5°	5470.8	1316.8	522.3	546.9	683.0	726.1	688.5	659.1	623.5	611.9
60°	5761.4	1035.8	495.7	522.3	659.1	703.5	656.3	617.4	621.5	612.6
62.5°	5780.5	800.6	463.5	501.1	622.8	680.9	635.1	598.9	630.4	622.1
65°	5440.7	605.1	432.8	475.8	583.9	666.6	614.6	588.6	648.8	639.9
67.5°	4580.7	486.8	406.8	449.9	544.9	636.5	596.2	579.1	665.2	649.5
70°	3307.0	415.0	381.5	418.4	510.0	602.3	579.8	562.0	620.8	596.2
72.5°	2036.0	359.6	352.8	376.7	483.4	566.8	555.1	529.9	559.2	539.4
75°	1016.6	311.8	320.6	335.7	445.8	526.4	514.1	488.8	492.9	488.8
77.5°	486.8	266.6	283.0	294.7	397.2	480.6	467.6	441.7	436.9	437.6
80°	308.3	222.9	238.6	246.8	354.8	427.3	414.3	388.3	443.0	410.9
82.5°	192.8	181.2	185.3	200.3	309.0	371.9	354.8	331.6	399.3	315.9
85°	106.7	126.5	132.0	144.9	237.9	311.1	294.0	264.6	237.2	233.1
87.5°	63.6	75.2	77.3	86.8	160.0	224.9	199.0	188.7	156.6	155.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)