

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: P302838

Luminaire Tested: **GLNA-AF-03-LED-E1-T4W-7050-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P302838
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P191569)
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-T4W-7050-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(3) 70 CRI, 5000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV
Wide OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14529 lumens
Efficiency: N/A
Efficacy: 117.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B2 - U0 - G3

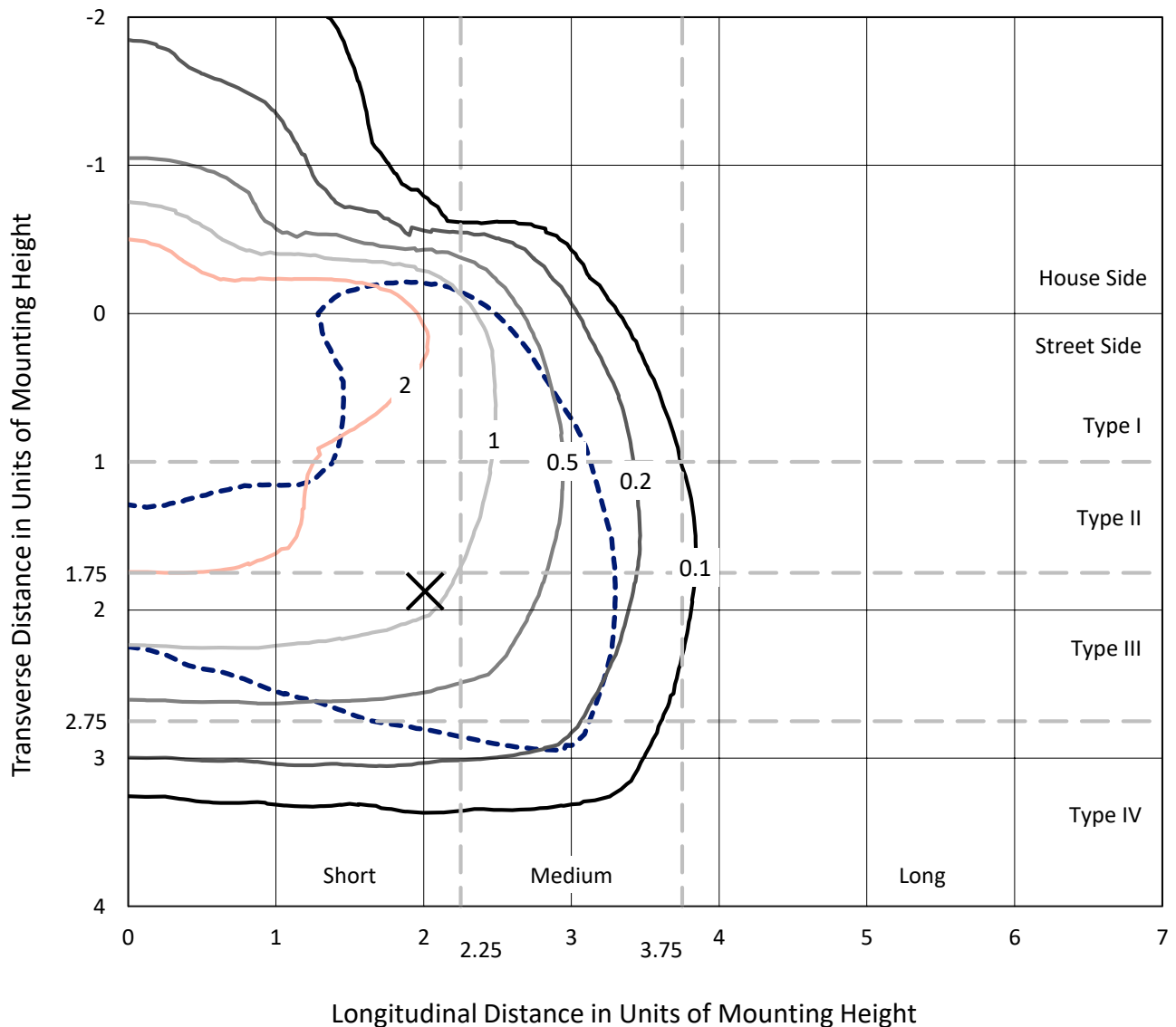
Input Watts (W): 124
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

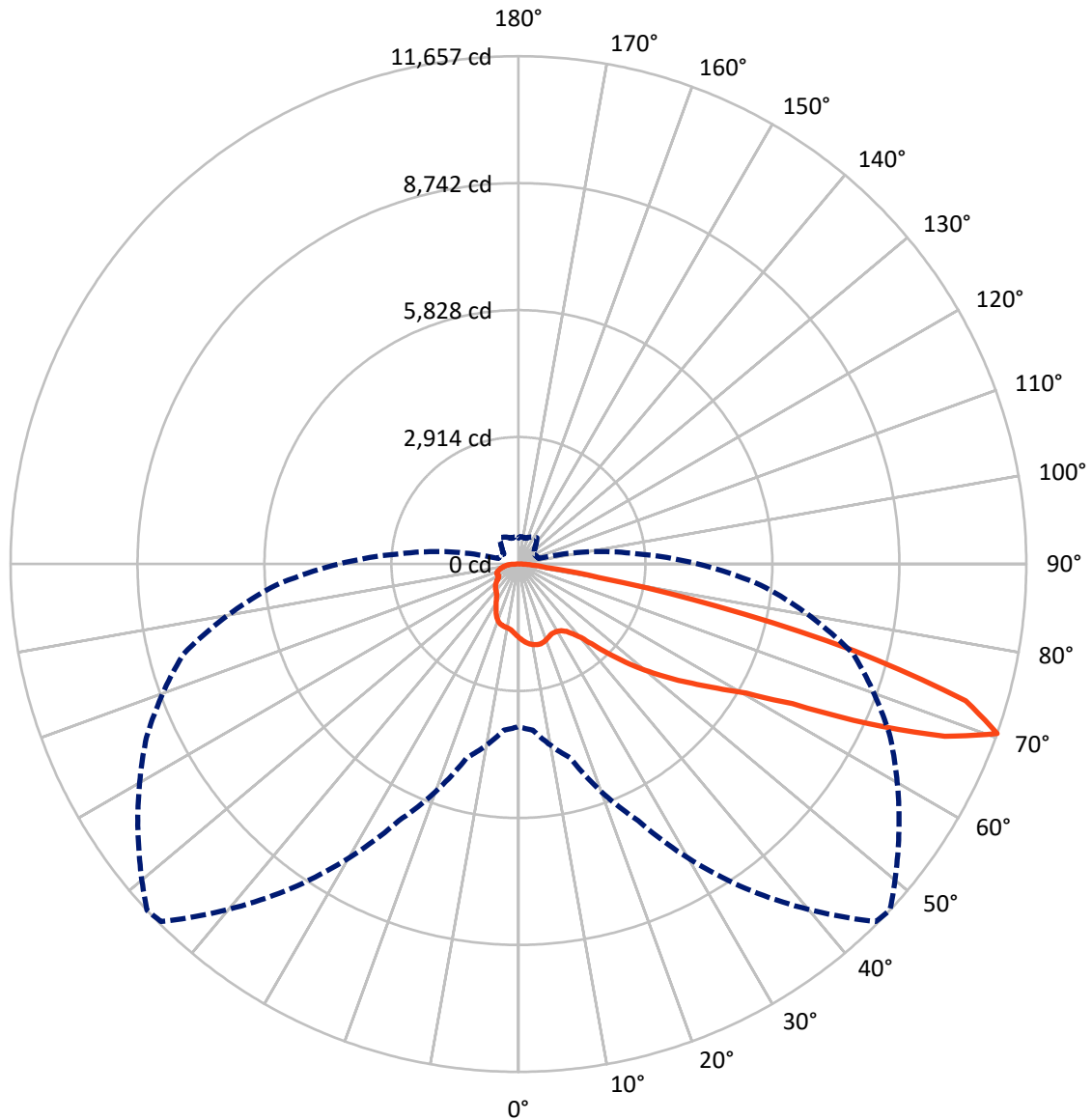
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 4.9 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 47-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3031.0	0.0	3031.0
	% Fixture	20.9	0.0	20.9
Street Side	Lumens	11497.9	0.0	11497.9
	% Fixture	79.1	0.0	79.1
Total	Lumens	14529.0	0.0	14529.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	161.5	1.1
10°-20°	473.9	3.3
20°-30°	699.8	4.8
30°-40°	1017.2	7.0
40°-50°	1830.5	12.6
50°-60°	3171.2	21.8
60°-70°	4526.2	31.2
70°-80°	2323.5	16.0
80°-90°	325.3	2.2
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°	14529.0	100.0
0°-180°	14529.0	100.0



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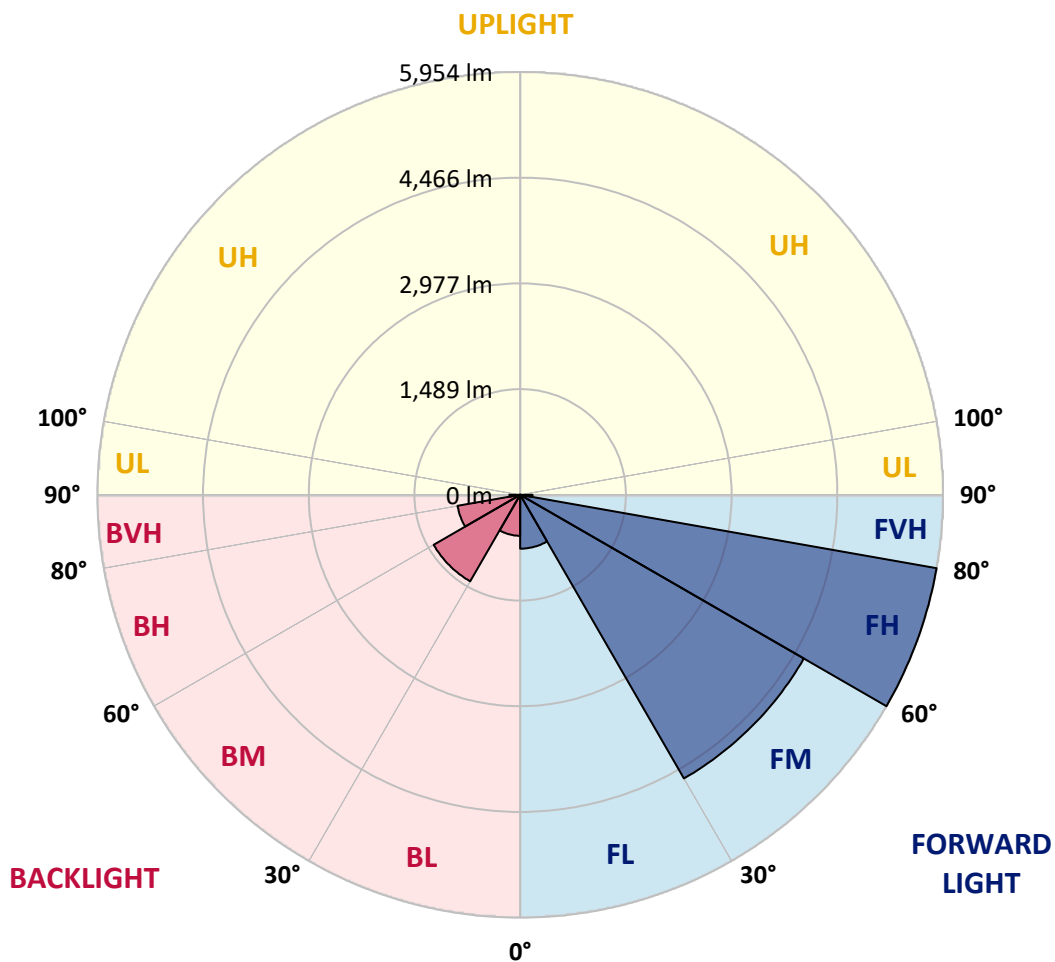
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	758.1	5.2			
FM	(30°-60°)	4611.9	31.7			
FH	(60°-80°)	5954.4	41.0			G3/7500
FVH	(80°-90°)	173.6	1.2			G2/225
BL	(0°-30°)	577.1	4.0	B2/1000		
BM	(30°-60°)	1406.9	9.7	B2/2500		
BH	(60°-80°)	895.3	6.2	B2/1000		G2/1000
BVH	(80°-90°)	151.7	1.0			G2/225
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°	35°	45°	47°	55°	65°	75°	85°
0°	1685.8	1685.8	1685.8	1685.8	1685.8	1685.8	1685.8	1685.8	1685.8	1685.8	1685.8
2.5°	1784.8	1781.3	1779.9	1777.1	1773.6	1755.7	1752.2	1739.5	1721.9	1703.4	1684.4
5°	1902.2	1901.5	1893.5	1879.4	1856.9	1817.9	1808.8	1777.8	1736.0	1695.6	1655.5
7.5°	2005.3	1998.9	1984.1	1955.7	1916.3	1863.2	1850.6	1807.4	1750.1	1694.9	1640.5
10°	2080.9	2077.3	2044.9	2006.0	1954.3	1895.6	1880.9	1832.7	1769.8	1699.9	1632.0
12.5°	2124.1	2117.0	2079.5	2033.0	1971.5	1914.2	1899.2	1850.6	1779.9	1699.9	1620.0
15°	2121.2	2116.3	2078.8	2027.8	1965.8	1915.6	1902.2	1853.4	1777.8	1692.8	1604.5
17.5°	2064.7	2066.8	2035.1	1984.9	1933.9	1895.6	1883.7	1838.6	1763.5	1678.7	1586.2
20°	1965.8	1975.7	1954.3	1910.0	1881.6	1855.5	1847.8	1809.5	1741.6	1658.3	1566.3
22.5°	1866.8	1875.9	1867.5	1829.9	1825.7	1810.2	1806.0	1778.5	1722.6	1645.6	1554.3
25°	1794.0	1802.4	1801.0	1768.4	1781.3	1780.6	1777.1	1763.5	1718.4	1645.6	1556.4
27.5°	1774.3	1777.1	1774.3	1744.5	1762.1	1776.4	1773.6	1771.2	1731.1	1666.1	1583.4
30°	1842.1	1837.9	1815.8	1755.7	1772.2	1791.9	1789.1	1790.5	1769.1	1719.8	1643.5
32.5°	2112.8	2093.5	2024.3	1855.5	1812.3	1822.9	1824.3	1847.8	1851.3	1802.4	1736.7
35°	2517.7	2496.6	2406.7	2122.7	1937.4	1900.8	1900.8	1936.0	1957.1	1921.2	1881.6
37.5°	2946.9	2923.4	2875.5	2493.1	2200.4	2035.8	2032.3	2056.9	2087.2	2095.9	2105.7
40°	3434.5	3409.8	3423.2	2908.6	2567.3	2269.6	2219.4	2201.8	2283.7	2338.2	2417.5
42.5°	3968.3	3956.8	3961.7	3371.5	2984.9	2619.6	2548.3	2456.9	2556.0	2652.7	2818.9
45°	4462.2	4472.1	4467.1	3867.1	3450.2	3046.4	2970.8	2794.0	2891.0	3057.0	3327.9
47.5°	4894.9	4853.8	4917.4	4408.5	3971.1	3524.4	3430.9	3194.3	3292.4	3497.4	3955.4
50°	5420.0	5414.4	5321.2	5131.0	4600.7	4004.2	3881.9	3607.7	3760.3	4045.3	4746.5
52.5°	5972.2	5869.6	5784.1	5692.8	5268.8	4496.3	4346.2	4019.7	4310.3	4668.6	5710.6
55°	6085.1	6039.3	6145.2	6298.7	5912.8	5007.3	4832.7	4536.4	4929.6	5381.3	6822.4
57.5°	6326.9	6326.2	6545.4	6818.9	6575.7	5549.4	5373.3	5160.6	5625.7	6197.5	8002.8
60°	6490.3	6536.0	6943.3	7474.1	7226.7	6175.7	6013.7	5880.8	6417.5	7110.0	9102.6
62.5°	6575.7	6637.9	7193.6	7739.9	8146.9	7218.2	7056.5	6864.9	7465.0	8111.0	9745.8
65°	6220.3	6342.4	7154.6	7969.7	8952.8	8908.2	8835.5	8499.1	8774.7	8901.9	9513.4
67.5°	5236.2	5361.3	6307.2	7755.4	9528.2	10538.4	10553.9	9979.2	9580.6	8969.7	7998.6
70°	3730.7	3828.8	4611.5	6502.2	9089.9	11603.5	11656.5	10661.1	9420.0	7954.7	5588.3
72.5°	1771.2	1831.3	2572.2	4231.9	7213.3	10631.6	10734.2	9790.4	8009.8	5889.3	3048.5
75°	651.0	669.3	869.3	1800.3	4183.8	7840.3	7961.2	7018.2	5309.7	2932.1	1161.3
77.5°	390.2	402.1	487.8	759.9	1645.6	4481.5	4660.1	3816.9	2320.5	1091.4	571.2
80°	272.8	281.2	349.8	472.8	777.5	1707.8	1866.8	1557.8	924.5	690.6	415.5
82.5°	184.5	188.7	246.0	319.5	516.7	609.9	658.0	692.8	623.5	513.9	263.6
85°	120.9	125.1	166.9	210.6	328.7	315.3	322.3	407.8	455.2	349.1	146.3
87.5°	69.3	72.1	100.5	112.4	161.3	133.6	135.0	214.8	291.3	235.5	89.0
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°	1685.8	1685.8	1685.8	1685.8	1685.8	1685.8	1685.8	1685.8	1685.8	1685.8	1685.8
2.5°	1679.4	1670.3	1649.9	1636.9	1625.0	1622.2	1617.2	1616.5	1615.8	1615.8	1613.7
5°	1641.9	1626.4	1594.7	1576.8	1562.1	1560.6	1559.9	1563.5	1564.9	1566.3	1564.2
7.5°	1617.9	1596.8	1557.1	1531.8	1514.2	1509.7	1517.0	1533.2	1543.7	1548.0	1545.9
10°	1603.1	1576.8	1531.1	1503.4	1488.6	1486.5	1495.6	1514.9	1536.7	1545.2	1544.5
12.5°	1586.2	1556.4	1507.6	1478.7	1470.3	1474.5	1486.5	1504.1	1526.8	1540.2	1540.9
15°	1569.1	1534.6	1484.4	1459.0	1455.5	1461.1	1472.4	1485.8	1503.4	1517.0	1518.4
17.5°	1548.7	1512.5	1462.5	1436.2	1433.4	1436.2	1436.9	1444.0	1455.5	1468.2	1471.7
20°	1526.8	1490.0	1437.6	1411.6	1398.9	1387.6	1374.7	1376.1	1379.7	1392.6	1395.4
22.5°	1511.1	1474.5	1418.6	1382.5	1348.7	1314.6	1289.3	1285.8	1287.2	1297.7	1301.2
25°	1512.5	1473.8	1413.7	1351.5	1277.3	1222.8	1188.8	1183.2	1182.5	1190.2	1195.4
27.5°	1540.2	1501.3	1432.0	1319.6	1199.6	1118.8	1082.9	1078.7	1073.1	1075.2	1080.8
30°	1601.7	1565.6	1476.6	1287.2	1115.3	1017.2	979.6	975.4	967.7	964.1	968.4
32.5°	1702.0	1672.4	1541.6	1255.9	1031.3	930.1	892.1	882.9	878.0	873.8	877.3
35°	1868.9	1856.2	1628.5	1222.1	957.1	863.0	828.4	814.4	807.3	815.1	820.7
37.5°	2130.4	2137.4	1742.3	1169.1	899.8	818.6	789.5	773.3	762.7	769.1	775.4
40°	2500.8	2505.8	1868.2	1094.2	850.3	792.3	761.3	746.5	731.5	720.2	719.5
42.5°	2987.0	2937.0	1991.9	1013.0	793.0	776.1	741.6	723.0	700.5	669.3	662.9
45°	3563.8	3388.0	2085.8	919.5	728.7	756.4	719.5	694.2	658.7	624.9	621.4
47.5°	4228.4	3872.0	2131.8	822.8	668.6	727.3	692.8	652.4	607.8	590.9	588.8
50°	5039.7	4446.7	2153.6	728.7	616.5	689.2	653.8	606.4	569.0	565.5	563.4
52.5°	5963.7	5138.1	2160.9	651.7	573.3	639.7	622.1	576.1	546.3	549.3	549.3
55°	6930.7	5852.0	2064.7	595.8	533.6	588.8	600.7	564.1	539.2	550.7	555.0
57.5°	7818.3	6484.6	1762.1	552.8	496.3	550.0	593.0	575.4	558.5	604.3	607.1
60°	8499.8	6858.4	1316.0	513.9	468.6	536.4	613.6	618.6	622.8	732.2	747.2
62.5°	8642.5	6734.2	904.7	483.6	455.9	547.9	651.0	651.7	646.7	723.0	732.2
65°	7987.3	5947.3	658.0	466.5	445.3	568.3	682.9	667.9	635.5	693.5	676.3
67.5°	6343.1	4480.8	547.9	453.8	429.8	566.9	716.7	682.9	629.1	679.4	651.7
70°	4117.4	2709.3	487.8	443.2	411.3	539.9	736.4	681.5	610.6	632.0	599.3
72.5°	2008.8	1211.6	447.4	427.7	392.3	502.6	735.7	668.6	591.6	590.2	572.6
75°	786.0	555.0	410.6	404.2	359.9	460.1	716.0	650.3	569.0	546.3	539.9
77.5°	460.1	395.8	364.1	369.7	320.9	417.6	687.1	618.6	537.8	511.1	504.0
80°	335.0	296.3	310.3	319.5	274.2	375.4	648.2	579.6	503.3	516.7	506.8
82.5°	214.8	190.9	251.7	260.8	228.4	332.2	605.7	538.5	454.5	412.7	402.8
85°	109.6	120.9	187.3	198.6	176.1	272.8	554.3	484.3	399.3	343.4	349.1
87.5°	61.5	82.6	119.5	133.6	124.4	209.9	449.6	399.3	325.8	265.0	233.3
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)