

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: P302834

Luminaire Tested: **GLNA-AF-03-LED-E1-T4W-7027-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P302834
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-7027-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(3) 70 CRI, 2700K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV
Wide OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12623.3 lumens
Efficiency: N/A
Efficacy: 101.8 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

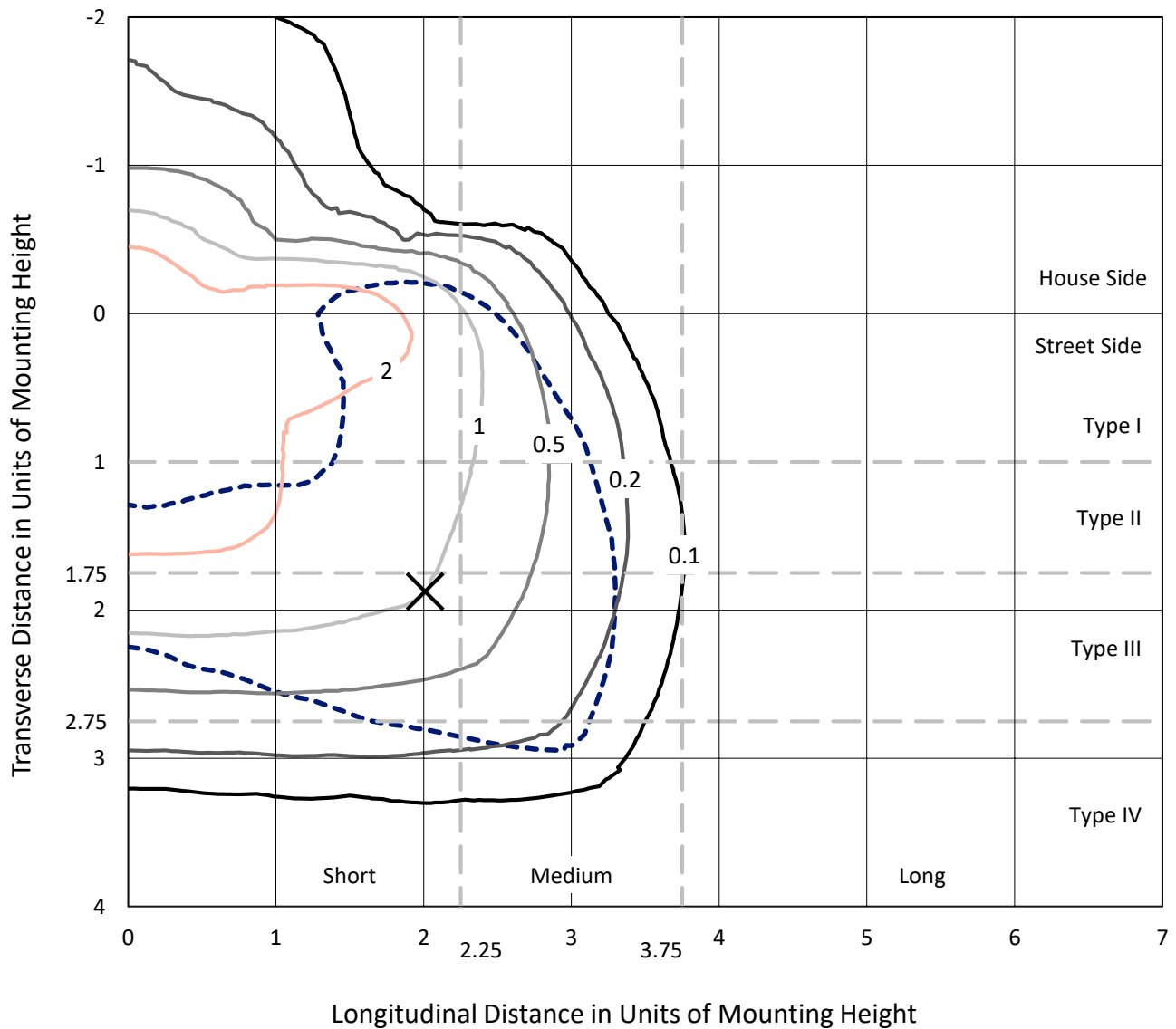


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Iso-Footcandle Lines of Horizontal Illumination

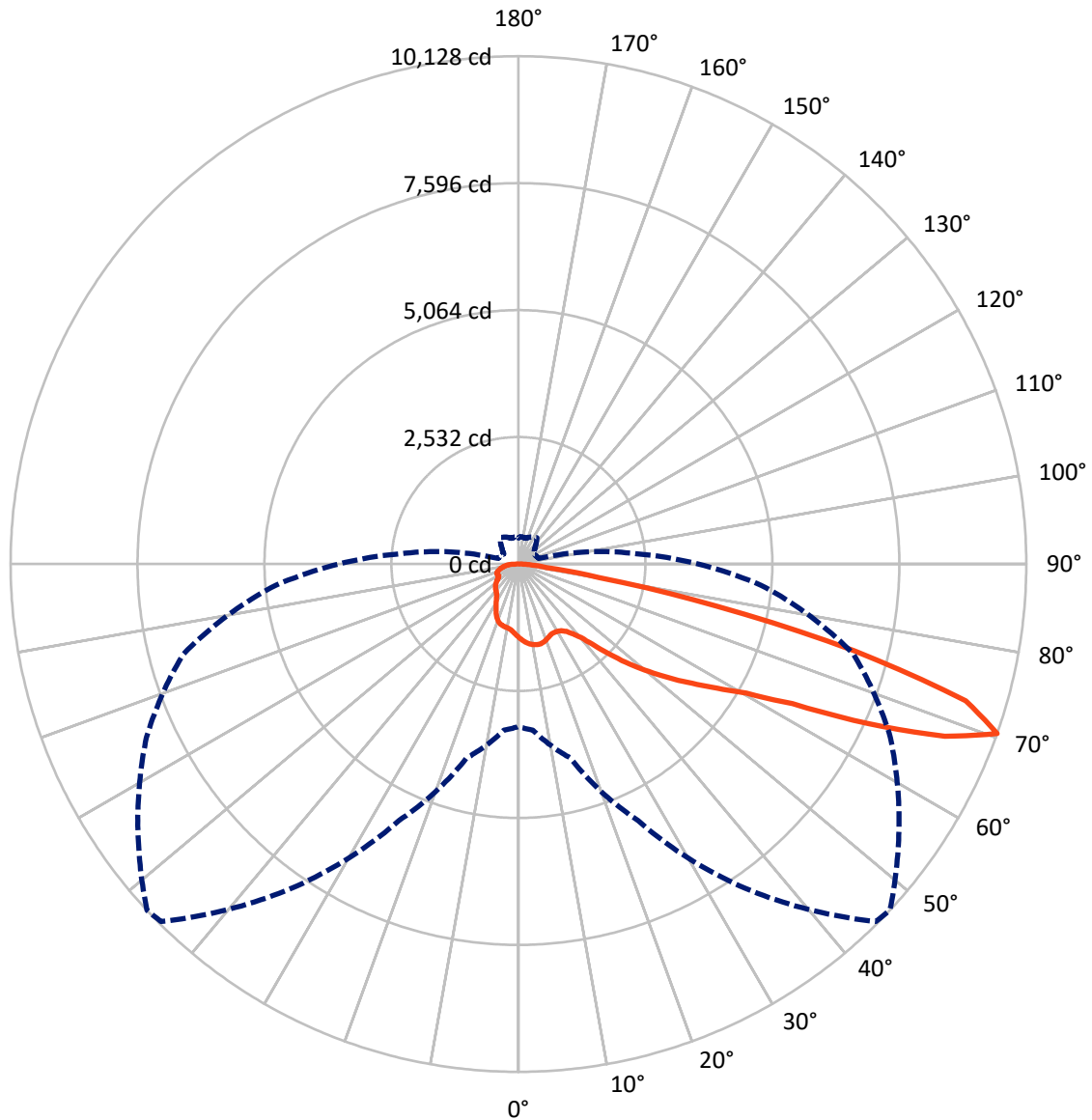
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 4.2 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	2633.5	0.0	2633.5
	% Fixture	20.9	0.0	20.9
Street Side	Lumens	9989.8	0.0	9989.8
	% Fixture	79.1	0.0	79.1
Total	Lumens	12623.3	0.0	12623.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.3	1.1
10°-20°	411.7	3.3
20°-30°	608.0	4.8
30°-40°	883.7	7.0
40°-50°	1590.4	12.6
50°-60°	2755.2	21.8
60°-70°	3932.5	31.2
70°-80°	2018.7	16.0
80°-90°	282.6	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°	12623.3	100.0
0°-180°	12623.3	100.0

Coefficient of Utilization



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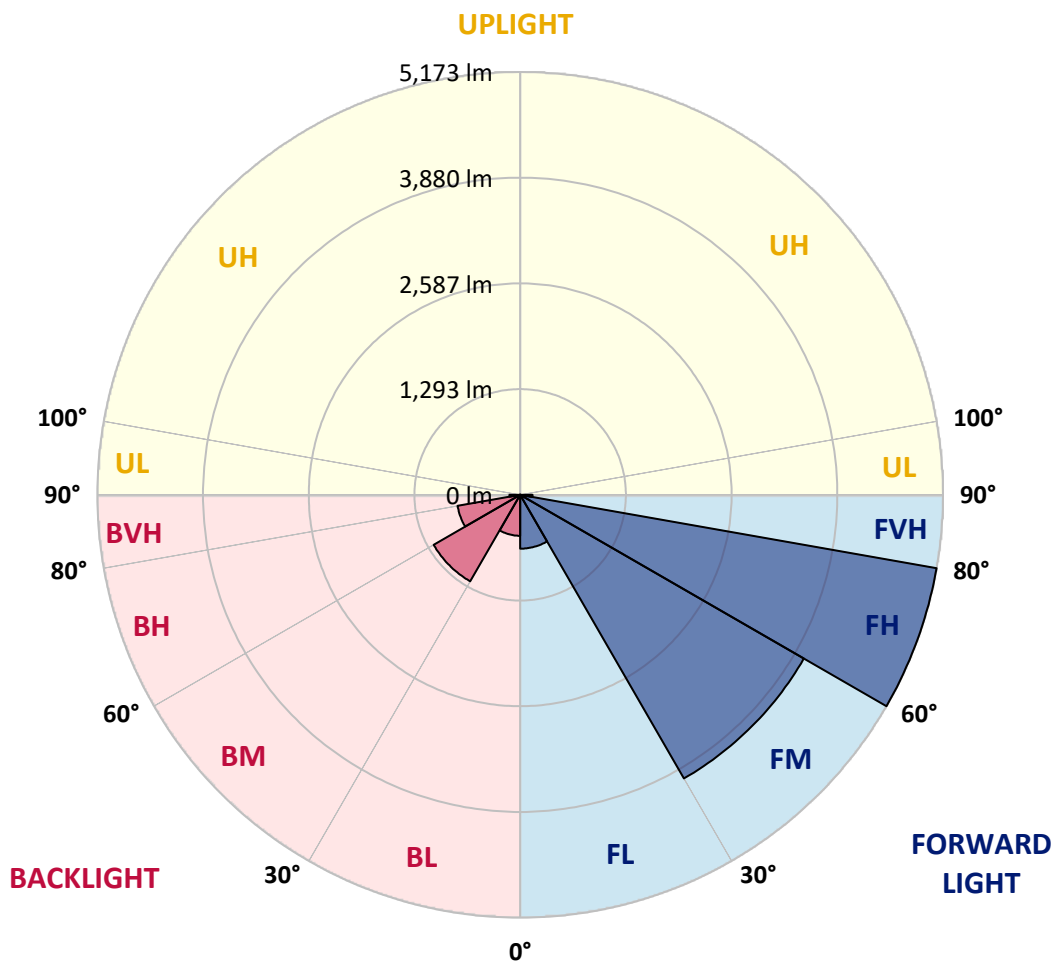
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	658.7	5.2			
FM (30°-60°)	4007.0	31.7			
FH (60°-80°)	5173.4	41.0			G3/7500
FVH (80°-90°)	150.8	1.2			G2/225
BL (0°-30°)	501.4	4.0	B2/1000		
BM (30°-60°)	1222.4	9.7	B2/2500		
BH (60°-80°)	777.9	6.2	B2/1000		G2/1000
BVH (80°-90°)	131.8	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°	1464.7	1464.7	1464.7	1464.7	1464.7	1464.7	1464.7	1464.7	1464.7	1464.7	1464.7
2.5°	1550.7	1547.7	1546.5	1544.0	1540.9	1525.4	1522.4	1511.4	1496.1	1480.0	1463.4
5°	1652.7	1652.1	1645.2	1632.9	1613.4	1579.5	1571.5	1544.6	1508.3	1473.2	1438.4
7.5°	1742.3	1736.8	1723.9	1699.2	1665.0	1618.9	1607.8	1570.3	1520.6	1472.6	1425.3
10°	1807.9	1804.9	1776.7	1742.9	1698.0	1647.0	1634.2	1592.3	1537.7	1476.9	1418.0
12.5°	1845.5	1839.3	1806.7	1766.3	1712.9	1663.1	1650.1	1607.8	1546.5	1476.9	1407.6
15°	1843.0	1838.7	1806.1	1761.8	1708.0	1664.3	1652.7	1610.3	1544.6	1470.8	1394.1
17.5°	1793.9	1795.7	1768.2	1724.5	1680.3	1647.0	1636.6	1597.4	1532.2	1458.5	1378.2
20°	1708.0	1716.6	1698.0	1659.5	1634.8	1612.1	1605.4	1572.2	1513.2	1440.8	1360.8
22.5°	1621.9	1629.9	1622.5	1589.9	1586.2	1572.8	1569.1	1545.2	1496.7	1429.8	1350.4
25°	1558.7	1566.0	1564.8	1536.5	1547.7	1547.1	1544.0	1532.2	1493.0	1429.8	1352.3
27.5°	1541.6	1544.0	1541.6	1515.7	1531.0	1543.4	1540.9	1538.9	1504.0	1447.5	1375.7
30°	1600.5	1596.8	1577.7	1525.4	1539.7	1556.9	1554.4	1555.6	1537.1	1494.2	1428.0
32.5°	1835.7	1819.0	1758.8	1612.1	1574.6	1583.8	1585.0	1605.4	1608.5	1566.0	1508.9
35°	2187.5	2169.2	2091.0	1844.2	1683.3	1651.5	1651.5	1682.1	1700.4	1669.2	1634.8
37.5°	2560.4	2540.0	2498.4	2166.1	1911.8	1768.8	1765.7	1787.1	1813.4	1821.0	1829.6
40°	2984.0	2962.6	2974.2	2527.1	2230.5	1971.9	1928.3	1913.0	1984.2	2031.5	2100.4
42.5°	3447.8	3437.8	3442.1	2929.3	2593.4	2276.0	2214.0	2134.7	2220.8	2304.8	2449.2
45°	3876.9	3885.5	3881.2	3359.9	2997.7	2646.8	2581.2	2427.6	2511.8	2656.0	2891.4
47.5°	4252.9	4217.2	4272.4	3830.2	3450.3	3062.1	2980.9	2775.3	2860.6	3038.7	3436.6
50°	4709.1	4704.2	4623.3	4458.0	3997.3	3479.0	3372.7	3134.5	3267.1	3514.7	4123.9
52.5°	5188.8	5099.7	5025.5	4946.1	4577.8	3906.5	3776.2	3492.5	3745.0	4056.2	4961.6
55°	5286.9	5247.2	5339.2	5472.6	5137.2	4350.6	4198.8	3941.4	4283.0	4675.5	5927.6
57.5°	5497.0	5496.4	5686.9	5924.5	5713.2	4821.5	4668.5	4483.7	4887.8	5384.6	6953.1
60°	5639.0	5678.8	6032.6	6493.8	6278.8	5365.7	5224.9	5109.5	5575.8	6177.5	7908.7
62.5°	5713.2	5767.3	6250.1	6724.7	7078.4	6271.5	6131.0	5964.5	6485.8	7047.2	8467.6
65°	5404.4	5510.5	6216.2	6924.4	7778.6	7739.8	7676.6	7384.3	7623.8	7734.3	8265.6
67.5°	4549.4	4658.1	5479.9	6738.2	8278.5	9156.1	9169.6	8670.3	8324.0	7793.3	6949.5
70°	3241.4	3326.7	4006.7	5649.4	7897.7	10081.5	10127.6	9262.8	8184.5	6911.3	4855.4
72.5°	1538.9	1591.1	2234.8	3676.9	6267.2	9237.1	9326.3	8506.3	6959.2	5116.8	2648.7
75°	565.6	581.5	755.3	1564.2	3635.0	6812.0	6917.0	6097.7	4613.3	2547.5	1009.0
77.5°	339.0	349.4	423.8	660.2	1429.8	3893.7	4048.9	3316.2	2016.2	948.2	496.2
80°	237.0	244.3	303.9	410.8	675.5	1483.8	1621.9	1353.5	803.2	600.1	361.0
82.5°	160.3	164.0	213.8	277.6	448.9	529.9	571.7	601.9	541.7	446.5	229.1
85°	105.0	108.7	145.0	183.0	285.5	273.9	280.0	354.3	395.5	303.3	127.1
87.5°	60.2	62.6	87.3	97.7	140.1	116.1	117.3	186.6	253.1	204.6	77.3
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°	1464.7	1464.7	1464.7	1464.7	1464.7	1464.7	1464.7	1464.7	1464.7	1464.7	1464.7
2.5°	1459.2	1451.2	1433.5	1422.2	1411.8	1409.4	1405.1	1404.5	1403.9	1403.9	1402.0
5°	1426.5	1413.1	1385.5	1370.0	1357.2	1356.0	1355.3	1358.4	1359.6	1360.8	1359.0
7.5°	1405.7	1387.4	1352.9	1330.9	1315.6	1311.7	1318.0	1332.1	1341.3	1344.9	1343.1
10°	1392.9	1370.0	1330.3	1306.2	1293.3	1291.5	1299.5	1316.2	1335.1	1342.5	1341.9
12.5°	1378.2	1352.3	1309.9	1284.8	1277.4	1281.1	1291.5	1306.8	1326.6	1338.2	1338.8
15°	1363.3	1333.3	1289.7	1267.6	1264.6	1269.5	1279.3	1290.9	1306.2	1318.0	1319.2
17.5°	1345.6	1314.1	1270.7	1247.9	1245.4	1247.9	1248.5	1254.6	1264.6	1275.6	1278.6
20°	1326.6	1294.6	1249.1	1226.4	1215.4	1205.6	1194.4	1195.6	1198.7	1209.9	1212.4
22.5°	1312.9	1281.1	1232.6	1201.1	1171.8	1142.2	1120.2	1117.1	1118.3	1127.5	1130.6
25°	1314.1	1280.5	1228.3	1174.2	1109.8	1062.4	1032.9	1028.0	1027.4	1034.1	1038.6
27.5°	1338.2	1304.3	1244.2	1146.5	1042.3	972.1	940.9	937.2	932.3	934.2	939.0
30°	1391.6	1360.2	1282.9	1118.3	969.0	883.8	851.1	847.5	840.7	837.7	841.4
32.5°	1478.7	1453.0	1339.4	1091.2	896.0	808.1	775.1	767.1	762.8	759.2	762.2
35°	1623.8	1612.7	1414.9	1061.8	831.6	749.8	719.8	707.6	701.4	708.2	713.1
37.5°	1851.0	1857.1	1513.8	1015.7	781.8	711.2	685.9	671.9	662.7	668.2	673.7
40°	2172.8	2177.1	1623.1	950.7	738.8	688.4	661.5	648.6	635.6	625.8	625.1
42.5°	2595.2	2551.8	1730.6	880.1	689.0	674.3	644.3	628.2	608.6	581.5	576.0
45°	3096.4	2943.6	1812.2	798.9	633.1	657.2	625.1	603.1	572.3	543.0	539.9
47.5°	3673.8	3364.2	1852.2	714.9	580.9	631.9	601.9	566.8	528.1	513.4	511.5
50°	4378.7	3863.5	1871.2	633.1	535.6	598.8	568.0	526.8	494.4	491.3	489.5
52.5°	5181.5	4464.2	1877.5	566.2	498.1	555.8	540.5	500.5	474.6	477.3	477.3
55°	6021.6	5084.4	1793.9	517.7	463.6	511.5	521.9	490.1	468.5	478.5	482.2
57.5°	6792.8	5634.1	1531.0	480.3	431.2	477.9	515.2	499.9	485.2	525.0	527.5
60°	7384.9	5958.8	1143.4	446.5	407.1	466.1	533.2	537.4	541.1	636.2	649.2
62.5°	7508.9	5850.9	786.1	420.2	396.1	476.1	565.6	566.2	561.9	628.2	636.2
65°	6939.7	5167.2	571.7	405.3	386.9	493.8	593.3	580.3	552.1	602.5	587.6
67.5°	5511.1	3893.1	476.1	394.3	373.5	492.6	622.7	593.3	546.6	590.3	566.2
70°	3577.3	2353.9	423.8	385.1	357.3	469.1	639.8	592.1	530.5	549.1	520.7
72.5°	1745.3	1052.7	388.8	371.6	340.8	436.7	639.2	580.9	514.0	512.8	497.5
75°	682.9	482.2	356.7	351.2	312.7	399.8	622.1	565.0	494.4	474.6	469.1
77.5°	399.8	343.9	316.3	321.2	278.8	362.9	597.0	537.4	467.3	444.0	437.9
80°	291.1	257.4	269.6	277.6	238.2	326.1	563.1	503.6	437.3	448.9	440.4
82.5°	186.6	165.8	218.6	226.6	198.5	288.6	526.2	467.9	394.9	358.6	350.0
85°	95.3	105.0	162.8	172.6	153.0	237.0	481.6	420.8	346.9	298.4	303.3
87.5°	53.4	71.8	103.8	116.1	108.1	182.3	390.6	346.9	283.1	230.3	202.7
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)