

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: P300306

Luminaire Tested: **GLNA-AF-02-LED-E1-T4FT-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300306
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24295)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-02-LED-E1-T4FT-7050
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE
(2) 70 CRI, 5000K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV Forward Throw OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12210.1 lumens
Efficiency: N/A
Efficacy: 108.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B2 - U0 - G2

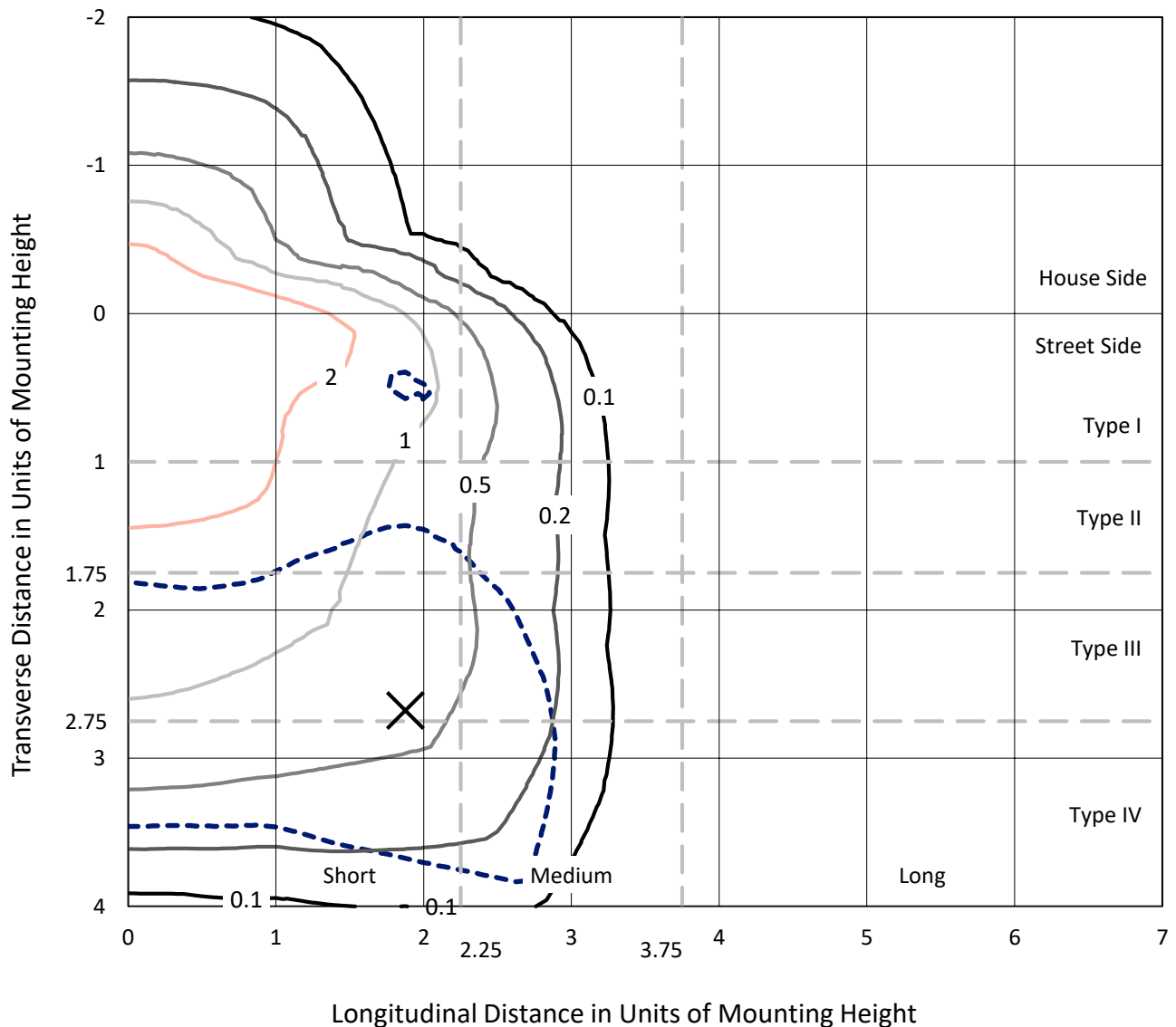
Input Watts (W): 113
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

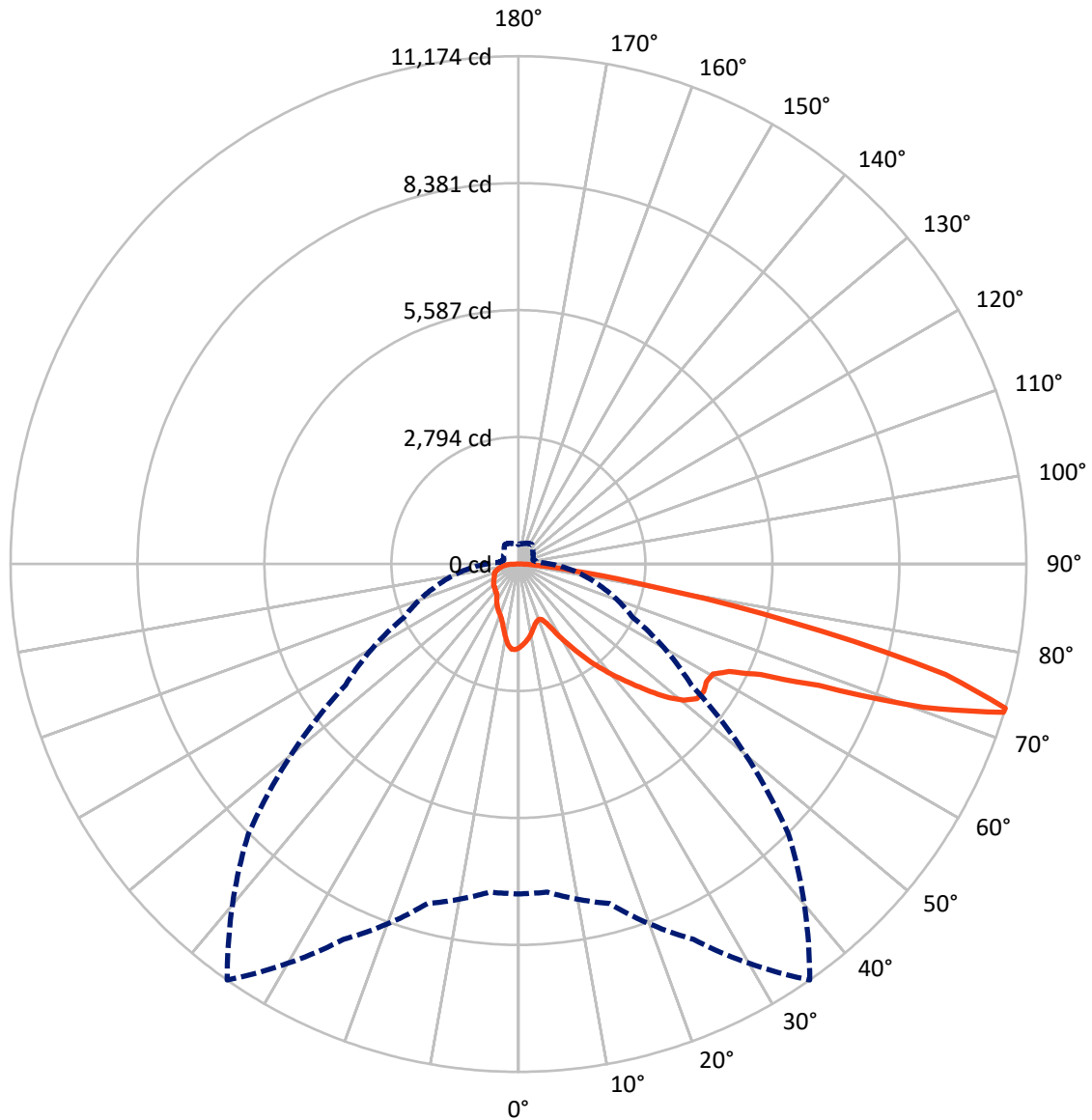
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 4.6 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 73-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2328.8	0.0	2328.8
	% Fixture	19.1	0.0	19.1
Street Side	Lumens	9881.3	0.0	9881.3
	% Fixture	80.9	0.0	80.9
Total	Lumens	12210.1	0.0	12210.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.8	1.4
10°-20°	416.4	3.4
20°-30°	673.2	5.5
30°-40°	1128.8	9.2
40°-50°	1740.0	14.3
50°-60°	2334.4	19.1
60°-70°	3109.9	25.5
70°-80°	2371.9	19.4
80°-90°	268.8	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°	12210.1	100.0
0°-180°	12210.1	100.0



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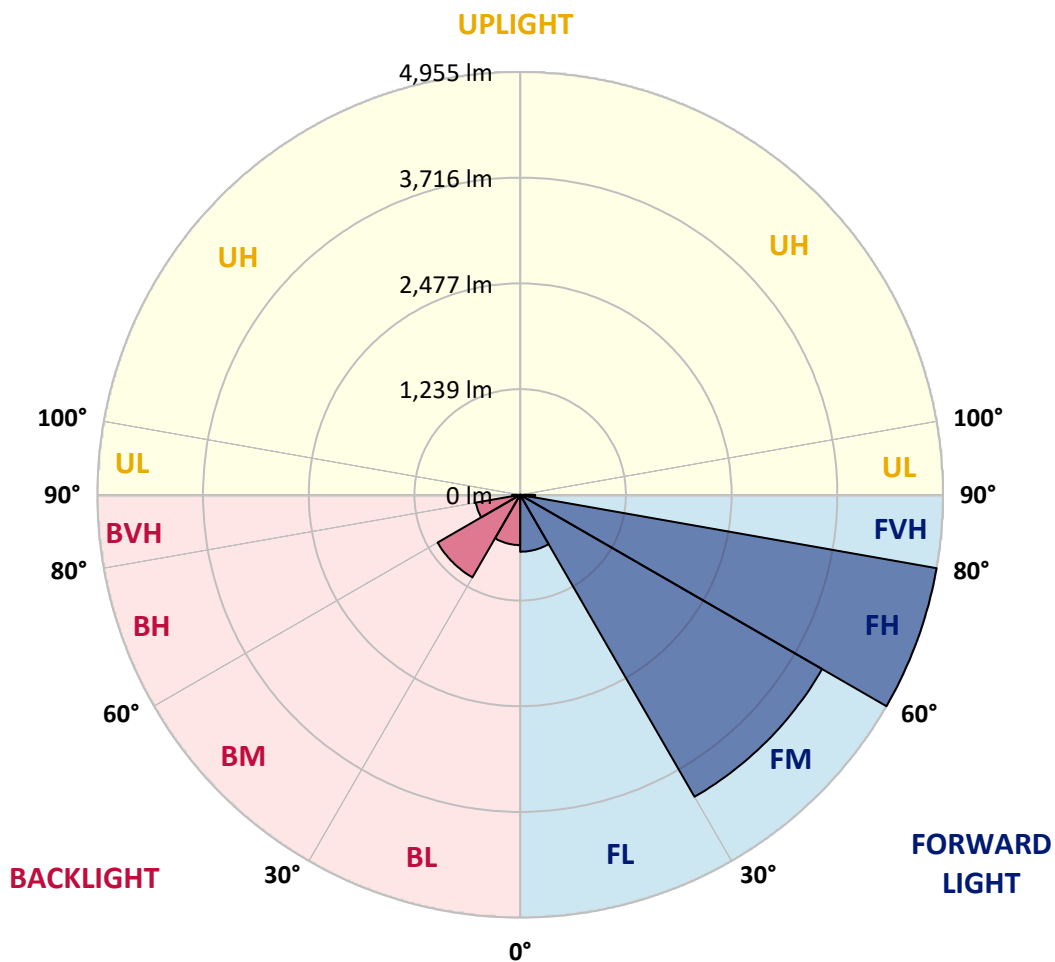
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	667.1	5.5			
FM	(30°-60°)	4085.6	33.5			
FH	(60°-80°)	4954.9	40.6			G2/5000
FVH	(80°-90°)	173.8	1.4			G2/225
BL	(0°-30°)	589.3	4.8	B2/1000		
BM	(30°-60°)	1117.6	9.2	B2/2500		
BH	(60°-80°)	526.9	4.3	B2/1000		G2/1000
BVH	(80°-90°)	95.1	0.8			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1842.9	1842.9	1842.9	1842.9	1842.9	1842.9	1842.9	1842.9	1842.9	1842.9	1842.9
2.5°	1770.2	1773.7	1769.6	1774.9	1783.7	1793.0	1799.5	1808.9	1819.4	1834.1	1837.6
5°	1686.9	1692.2	1692.2	1701.6	1718.6	1733.8	1747.9	1763.1	1785.4	1810.6	1820.6
7.5°	1595.5	1598.4	1603.7	1617.7	1642.4	1664.1	1684.0	1708.6	1739.1	1772.5	1790.1
10°	1485.2	1489.3	1497.5	1517.5	1550.9	1580.8	1609.5	1643.5	1682.2	1723.9	1746.1
12.5°	1407.2	1406.1	1409.6	1424.2	1453.6	1489.9	1531.5	1574.9	1622.4	1671.1	1698.1
15°	1380.8	1374.4	1360.9	1357.4	1373.2	1409.6	1457.7	1511.0	1567.9	1626.5	1659.9
17.5°	1397.3	1386.1	1349.2	1322.2	1319.9	1347.4	1398.4	1458.2	1523.9	1595.5	1637.1
20°	1500.5	1474.1	1383.2	1320.5	1298.8	1312.2	1356.8	1420.1	1497.5	1592.5	1645.9
22.5°	1747.3	1708.6	1515.7	1399.0	1325.7	1309.3	1342.7	1410.2	1500.5	1628.9	1696.9
25°	2106.7	2051.6	1743.2	1594.9	1443.6	1356.2	1363.8	1433.0	1542.1	1713.3	1795.4
27.5°	2390.5	2354.8	2040.5	1871.0	1658.2	1482.9	1432.4	1490.5	1627.1	1851.7	1935.5
30°	2559.4	2537.7	2358.3	2184.1	1932.0	1684.6	1563.8	1598.4	1760.2	2043.4	2112.6
32.5°	2755.2	2742.3	2654.4	2494.3	2227.5	1949.6	1771.9	1759.6	1938.5	2273.9	2305.5
35°	2958.1	2954.0	2902.4	2787.5	2544.7	2299.1	2048.1	1964.8	2132.5	2513.1	2493.1
37.5°	3146.9	3139.9	3110.0	3043.1	2876.6	2674.3	2329.6	2175.3	2341.9	2741.8	2653.2
40°	3494.6	3439.5	3336.9	3286.5	3212.0	2990.4	2553.0	2371.8	2558.8	2959.9	2791.6
42.5°	3918.6	3828.8	3637.7	3568.5	3558.0	3239.6	2705.4	2562.3	2777.5	3176.2	2927.6
45°	4252.2	4167.8	4003.0	3915.6	3954.3	3465.3	2858.4	2765.8	3002.7	3403.2	3067.8
47.5°	4608.1	4475.6	4257.5	4283.9	4368.3	3678.7	3014.4	2984.5	3249.5	3657.0	3241.9
50°	4621.0	4519.6	4424.0	4581.7	4713.1	3875.2	3209.7	3213.8	3551.5	3976.6	3473.5
52.5°	4353.0	4331.3	4483.2	4731.2	4920.6	4030.5	3431.9	3450.7	3937.9	4343.7	3728.0
55°	4259.2	4234.6	4409.9	4679.0	4948.8	4159.0	3672.9	3706.9	4405.2	4730.6	3976.0
57.5°	4487.9	4433.4	4445.1	4654.4	4880.2	4299.7	3935.6	4004.2	4913.0	5069.0	4135.5
60°	5127.0	5010.3	4788.7	4783.4	4917.1	4510.8	4239.3	4323.1	5440.7	5230.8	4073.4
62.5°	6023.5	5906.9	5491.7	5221.4	5201.5	4859.1	4612.2	4634.5	5745.6	5011.5	3694.0
65°	6993.9	6889.6	6425.8	6044.1	5860.0	5436.0	5045.5	4773.5	5645.9	4408.2	3030.2
67.5°	8171.9	8059.9	7661.2	7308.8	7131.7	6367.1	5349.8	4640.3	5013.3	3414.9	2178.3
70°	8995.7	8881.4	8724.3	9009.8	9443.1	7710.5	5389.1	4099.2	3744.4	2269.7	1311.1
72.5°	7921.0	7867.6	8154.3	9356.9	11161.7	8525.5	4871.4	2984.5	2174.8	1204.9	758.7
73°	7257.2	7245.5	7734.5	9113.6	11174.0	8400.0	4644.5	2774.0	1865.2	1066.0	693.6
75°	3277.1	3371.5	4443.3	6961.1	9708.1	6921.8	3268.9	1591.3	1053.7	736.5	523.6
77.5°	787.5	820.3	1390.2	3305.8	6130.8	4125.0	1481.1	786.9	673.7	520.1	382.3
80°	335.4	346.5	535.3	1221.4	2886.6	1661.1	682.5	527.1	466.1	362.9	268.0
82.5°	186.5	198.2	303.7	554.1	1165.1	566.4	416.3	367.1	306.7	218.7	174.1
85°	105.5	112.0	177.7	309.6	493.7	227.5	249.2	243.9	173.0	112.6	85.6
87.5°	49.8	53.9	85.6	143.7	193.5	89.1	126.7	139.6	108.5	68.6	44.6
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°	1842.9	1842.9	1842.9	1842.9	1842.9	1842.9	1842.9	1842.9	1842.9	1842.9
2.5°	1841.7	1852.3	1864.6	1871.0	1876.9	1883.9	1891.0	1891.0	1892.1	1892.7
5°	1828.8	1850.5	1869.9	1878.1	1879.8	1879.8	1878.1	1868.7	1860.5	1864.0
7.5°	1801.8	1833.5	1849.9	1847.0	1824.7	1798.9	1777.2	1750.8	1737.3	1735.0
10°	1763.1	1799.5	1802.4	1773.1	1718.0	1662.9	1617.1	1572.6	1551.5	1546.2
12.5°	1720.3	1753.8	1735.0	1674.6	1586.1	1505.7	1447.7	1402.5	1382.6	1377.3
15°	1685.7	1708.6	1661.1	1566.1	1454.7	1369.7	1321.6	1288.2	1274.1	1270.0
17.5°	1667.6	1672.3	1585.5	1457.1	1338.6	1267.7	1237.8	1221.9	1216.7	1213.7
20°	1676.4	1643.5	1513.4	1355.6	1243.6	1193.8	1186.8	1182.7	1181.5	1179.7
22.5°	1720.3	1634.7	1447.1	1259.5	1160.4	1138.7	1144.5	1144.0	1142.8	1141.6
25°	1798.9	1642.4	1382.6	1168.0	1090.6	1085.9	1096.5	1096.5	1091.8	1091.8
27.5°	1902.7	1658.2	1310.5	1081.2	1027.3	1027.9	1036.1	1033.7	1028.5	1024.9
30°	2029.3	1668.2	1226.1	1003.2	968.1	965.7	968.1	958.1	942.3	941.1
32.5°	2158.9	1655.8	1128.1	934.1	905.3	900.0	898.3	884.2	866.0	860.8
35°	2276.2	1610.7	1028.5	878.9	845.5	833.8	842.0	837.3	820.9	816.8
37.5°	2361.8	1526.8	938.7	830.3	802.7	799.8	805.1	806.8	787.5	783.4
40°	2419.3	1413.1	861.9	789.2	794.5	783.4	765.8	753.5	747.6	745.8
42.5°	2465.6	1294.7	797.4	769.9	796.3	764.0	725.9	706.0	716.5	721.2
45°	2518.9	1179.1	743.5	745.8	787.5	741.7	698.3	679.0	683.1	684.3
47.5°	2592.2	1038.4	685.4	707.1	758.1	726.5	681.3	653.8	634.4	625.6
50°	2693.7	871.9	625.0	663.7	729.4	715.3	654.9	625.6	589.9	581.7
52.5°	2764.0	716.5	575.2	627.4	703.6	693.1	633.8	595.7	558.2	551.2
55°	2725.9	595.1	531.8	586.9	669.6	665.5	616.3	565.2	535.9	530.1
57.5°	2535.4	518.3	498.4	548.8	628.0	642.0	592.8	539.4	518.3	514.2
60°	2171.8	470.3	477.3	523.0	594.0	618.6	569.3	525.4	511.3	508.4
62.5°	1685.2	438.0	461.5	504.3	567.6	602.2	556.4	523.6	518.3	514.8
65°	1207.3	412.2	444.5	485.5	543.5	586.9	551.8	521.3	522.4	519.5
67.5°	820.3	389.3	423.9	464.4	520.1	573.4	545.3	513.1	527.7	524.2
70°	574.0	367.1	399.9	437.4	490.8	554.7	533.6	500.7	499.6	485.5
72.5°	448.0	337.7	367.1	399.9	453.2	528.3	510.1	473.2	453.8	439.2
73°	427.4	330.7	358.8	391.7	445.0	521.8	503.7	465.6	443.9	430.4
75°	353.6	300.2	326.0	355.3	409.9	491.4	472.0	431.0	403.4	395.2
77.5°	277.9	256.8	281.4	307.8	361.2	446.8	425.1	385.8	370.6	363.5
80°	205.8	212.8	234.5	258.0	313.1	399.3	380.0	340.7	408.7	391.7
82.5°	144.8	161.2	181.2	202.3	262.7	353.0	329.5	289.1	299.0	248.6
85°	85.6	105.5	124.3	142.5	189.4	292.6	272.1	230.4	188.8	180.0
87.5°	49.8	58.6	63.9	82.7	130.2	220.5	191.7	170.6	97.9	66.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)