

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: P451985

Luminaire Tested: **GALN-SA2D-827-U-T4FT**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P451985
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-28)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA2D-827-U-T4FT
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(2) 80 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV FORWARD THROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11411 lumens
Efficiency: N/A
Efficacy: 91.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G3

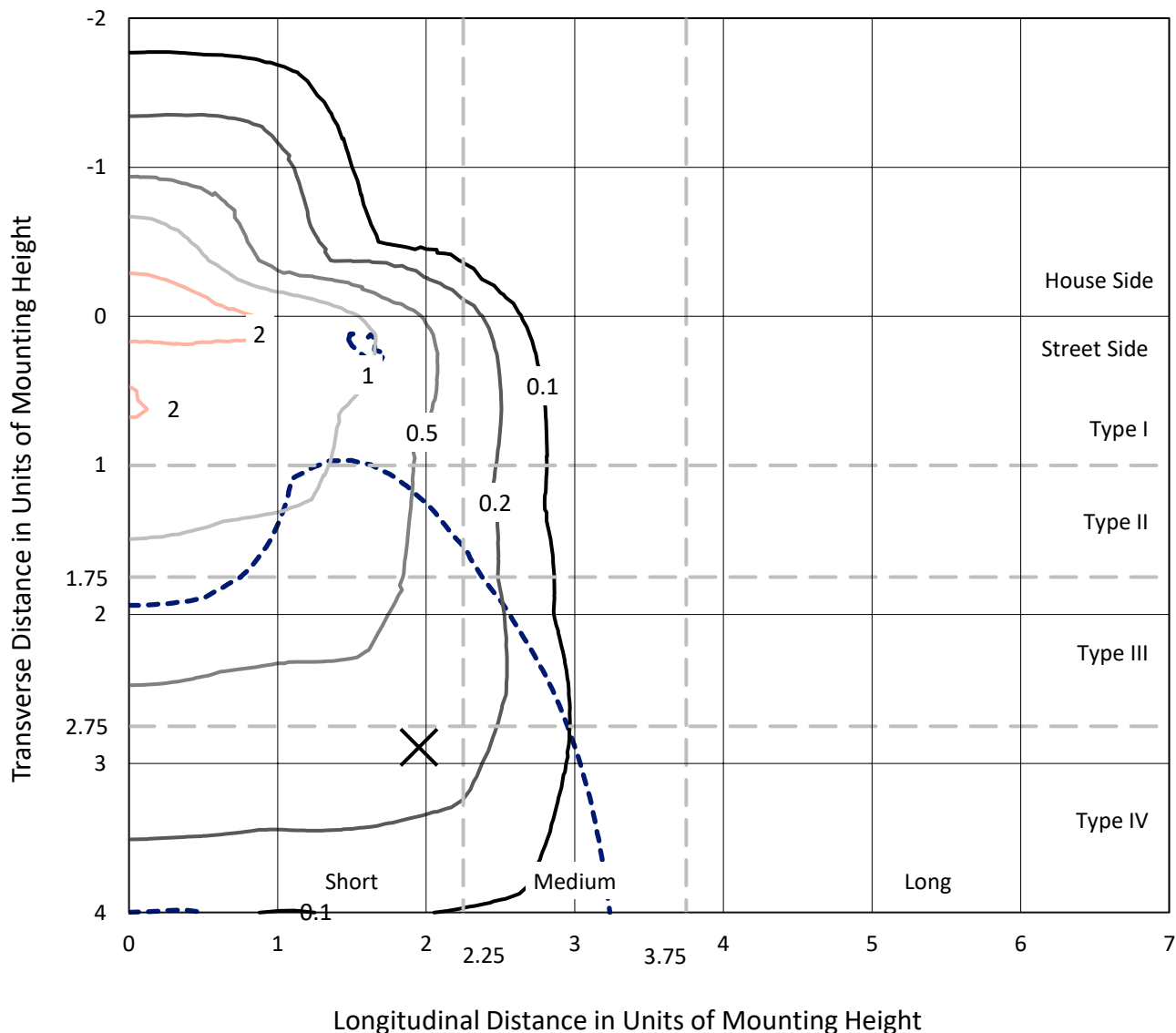
Input Watts (W): 125
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

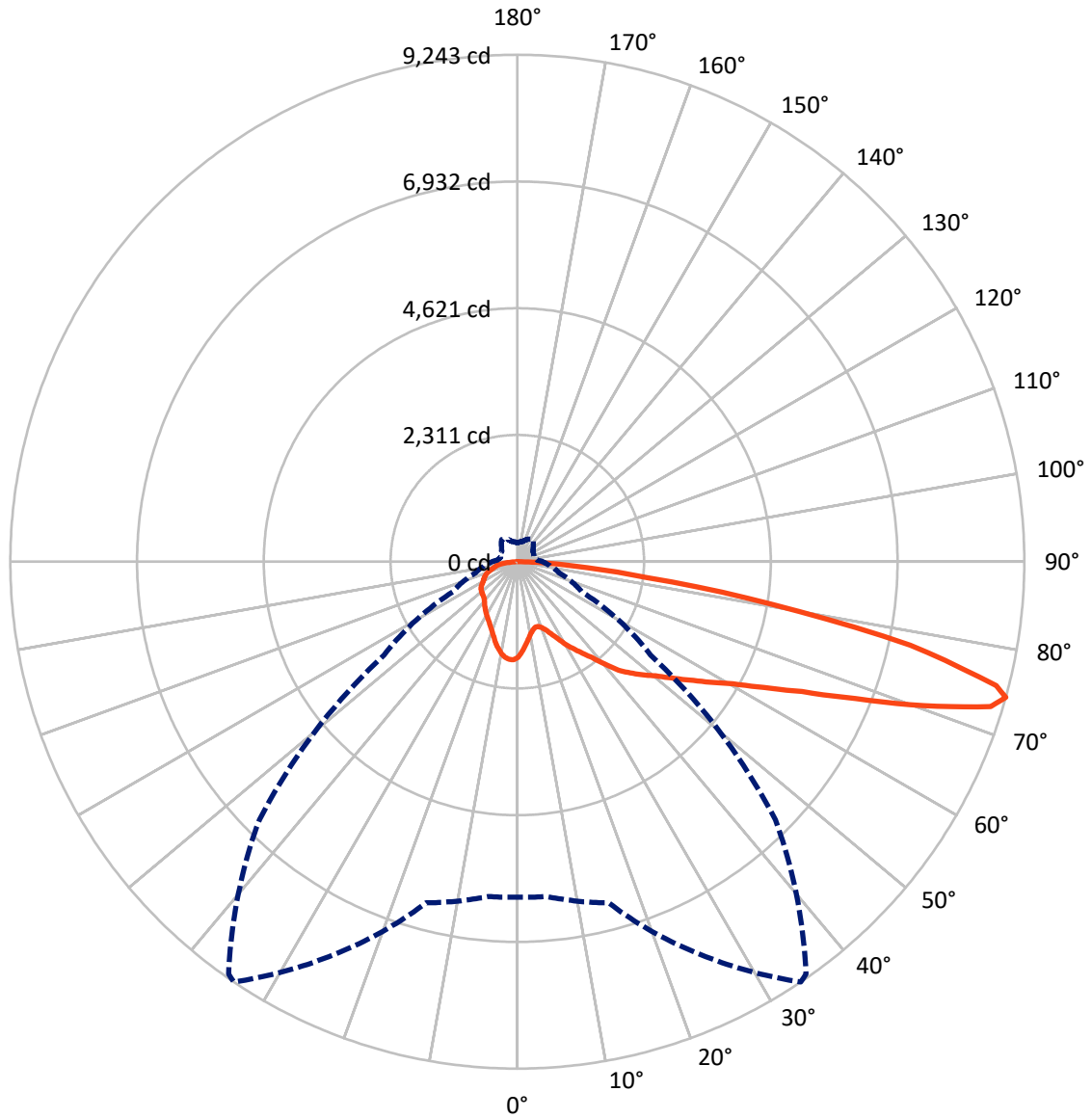
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.8 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 34-Deg Lateral - - - Horizontal Cone Through 74-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2428.3	0.0	2428.3
	% Fixture	21.3	0.0	21.3
Street Side	Lumens	8982.7	0.0	8982.7
	% Fixture	78.7	0.0	78.7
Total	Lumens	11411.0	0.0	11411.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	158.5	1.4
10°-20°	433.7	3.8
20°-30°	715.1	6.3
30°-40°	1071.2	9.4
40°-50°	1557.2	13.6
50°-60°	2175.1	19.1
60°-70°	2723.1	23.9
70°-80°	2251.8	19.7
80°-90°	325.4	2.9
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°	11411.0	100.0
0°-180°	11411.0	100.0

Coefficient of Utilization



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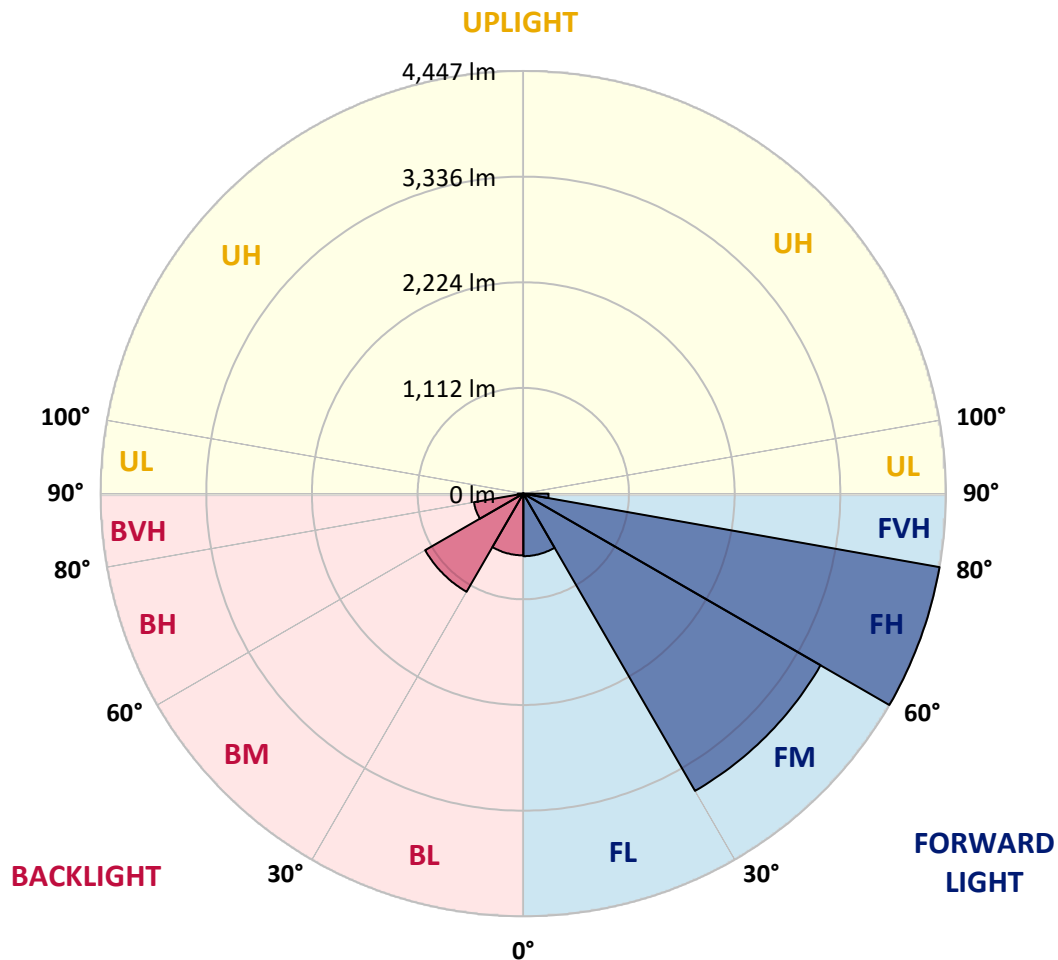
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	657.8	5.8			
FM (30°-60°)	3610.9	31.6			
FH (60°-80°)	4447.4	39.0			G2/5000
FVH (80°-90°)	266.5	2.3			G3/500
BL (0°-30°)	649.5	5.7	B2/1000		
BM (30°-60°)	1192.6	10.5	B2/2500		
BH (60°-80°)	527.4	4.6	B2/1000		G2/1000
BVH (80°-90°)	58.8	0.5			G1/100
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°	34°	35°	45°	55°	65°	75°	85°
0°	1742.2	1742.2	1742.2	1742.2	1742.2	1742.2	1742.2	1742.2	1742.2	1742.2	1742.2
2.5°	1610.1	1618.3	1622.8	1638.6	1642.4	1647.4	1660.7	1678.4	1701.1	1721.4	1739.1
5°	1476.1	1488.7	1496.3	1510.2	1537.4	1539.9	1575.3	1615.8	1661.9	1704.9	1740.3
7.5°	1349.0	1362.9	1369.3	1394.5	1430.6	1436.3	1488.1	1552.0	1629.1	1694.2	1748.6
10°	1253.6	1260.5	1274.4	1293.4	1336.4	1340.2	1407.8	1493.2	1593.0	1689.1	1762.5
12.5°	1201.7	1205.5	1208.7	1228.9	1271.3	1277.0	1347.8	1444.5	1564.6	1692.9	1785.2
15°	1209.3	1210.6	1196.7	1200.5	1234.6	1242.8	1313.0	1412.2	1546.9	1702.4	1819.4
17.5°	1273.2	1268.7	1234.6	1216.9	1240.9	1244.7	1306.0	1399.6	1538.7	1720.1	1854.8
20°	1373.7	1367.4	1308.6	1269.4	1283.3	1286.4	1328.8	1409.1	1546.9	1749.2	1909.8
22.5°	1498.9	1496.3	1407.2	1359.8	1359.1	1359.1	1381.3	1443.2	1571.6	1789.0	1967.3
25°	1674.0	1660.7	1544.4	1483.0	1466.0	1464.7	1462.2	1499.5	1603.2	1831.4	2035.6
27.5°	1853.5	1830.7	1727.1	1632.9	1596.2	1591.8	1575.3	1579.1	1643.6	1879.4	2113.3
30°	2014.7	2000.2	1902.8	1798.5	1754.9	1744.8	1699.2	1678.4	1711.3	1966.0	2237.2
32.5°	2138.0	2129.1	2053.3	1958.4	1894.0	1892.1	1825.7	1808.6	1816.8	2071.0	2378.8
35°	2237.8	2241.0	2202.4	2120.3	2046.3	2035.6	1991.3	1969.8	1945.8	2222.7	2557.1
37.5°	2374.4	2381.3	2378.8	2308.0	2217.6	2220.1	2210.0	2174.6	2110.8	2392.1	2755.0
40°	2524.8	2529.9	2529.3	2502.1	2454.7	2457.2	2453.4	2413.0	2317.5	2607.7	2974.9
42.5°	2732.8	2708.8	2646.2	2673.4	2701.2	2713.2	2739.2	2700.6	2569.7	2837.8	3181.7
45°	2965.5	2919.9	2778.3	2791.0	2894.0	2916.8	3059.7	3006.6	2843.5	3102.0	3425.0
47.5°	3112.1	3067.2	2947.8	2945.2	3081.8	3103.9	3356.8	3337.2	3092.5	3387.1	3722.2
50°	3243.0	3236.7	3102.0	3134.3	3267.6	3300.5	3680.4	3662.1	3341.0	3723.4	4045.8
52.5°	3437.1	3385.9	3278.4	3344.8	3521.1	3564.1	4001.6	3947.8	3569.2	4020.5	4360.0
55°	3524.3	3512.3	3506.0	3563.5	3805.6	3836.6	4313.9	4190.6	3763.9	4272.1	4599.0
57.5°	3757.6	3735.4	3798.0	3837.2	4140.7	4188.1	4640.1	4444.1	3934.6	4471.9	4715.3
60°	4059.7	4047.7	4105.2	4176.1	4514.9	4587.0	5011.8	4660.3	4071.7	4572.4	4651.4
62.5°	4511.1	4509.8	4499.1	4650.8	5045.3	5111.6	5438.5	4870.8	4093.2	4497.2	4321.4
65°	5158.4	5135.7	5042.1	5207.7	5705.2	5783.0	5882.9	4988.4	3963.6	4110.9	3638.7
67.5°	5835.5	5834.2	5758.3	5973.3	6652.9	6733.1	6438.6	4962.5	3603.9	3330.2	2584.3
70°	6396.8	6369.6	6466.4	7039.1	7863.4	7956.4	6924.7	4657.1	2870.6	2199.3	1535.5
72.5°	6531.5	6532.7	6733.8	7860.9	9026.0	9040.5	7099.8	3774.6	1921.1	1213.1	768.1
74°	6116.8	6127.5	6439.2	7902.0	9242.8	9177.1	6652.2	2966.7	1299.1	792.1	553.8
75°	5583.2	5515.6	5966.3	7628.3	9017.8	8947.0	6128.2	2380.7	991.2	632.8	484.9
77.5°	2985.1	3054.0	3749.3	5692.6	7326.1	7244.6	4155.2	1141.7	535.4	440.6	349.0
80°	1062.7	1172.0	1647.4	2978.7	4697.0	4722.2	1983.1	523.4	376.8	324.9	246.5
82.5°	433.7	445.7	707.4	1321.8	2385.1	2407.9	809.8	311.0	269.3	223.8	147.3
85°	169.4	174.5	312.9	594.2	1017.8	1084.2	280.0	164.4	165.6	128.3	75.2
87.5°	56.9	64.5	128.3	197.9	345.8	338.8	81.5	48.7	59.4	55.6	23.4
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°	1742.2	1742.2	1742.2	1742.2	1742.2	1742.2	1742.2	1742.2	1742.2	1742.2	1742.2
2.5°	1747.9	1759.9	1768.2	1777.0	1785.2	1787.7	1785.9	1791.5	1792.2	1792.8	1793.4
5°	1758.0	1774.5	1790.3	1799.1	1802.9	1799.8	1789.0	1783.3	1778.3	1774.5	1775.7
7.5°	1771.9	1795.3	1809.9	1813.7	1803.6	1789.0	1762.5	1741.6	1728.3	1719.5	1718.8
10°	1793.4	1816.2	1828.2	1817.5	1789.6	1754.2	1712.5	1673.3	1643.6	1634.8	1634.1
12.5°	1820.6	1846.5	1845.9	1814.3	1765.6	1702.4	1634.8	1589.3	1548.8	1528.6	1536.8
15°	1856.0	1875.6	1857.3	1800.4	1723.3	1636.7	1553.2	1491.3	1445.8	1424.3	1425.5
17.5°	1897.1	1914.2	1865.5	1775.7	1663.8	1552.6	1455.9	1397.1	1361.0	1345.2	1344.0
20°	1948.3	1953.4	1865.5	1732.8	1587.4	1454.6	1362.3	1321.2	1301.0	1292.8	1295.3
22.5°	2003.3	1993.2	1855.4	1672.1	1486.8	1352.2	1290.2	1271.9	1261.8	1260.5	1261.8
25°	2065.3	2036.8	1834.5	1589.9	1381.9	1263.7	1227.7	1230.8	1232.7	1232.7	1237.1
27.5°	2141.1	2084.2	1799.8	1486.2	1259.3	1181.5	1171.4	1193.5	1203.6	1205.5	1208.7
30°	2241.0	2136.1	1742.2	1356.6	1155.0	1107.5	1125.2	1155.0	1166.3	1173.3	1172.0
32.5°	2359.9	2193.0	1664.5	1227.0	1070.9	1055.7	1077.2	1107.5	1120.2	1124.0	1118.9
35°	2499.6	2257.4	1562.1	1105.6	997.5	1006.4	1031.7	1041.2	1052.5	1052.5	1055.1
37.5°	2650.0	2309.3	1436.9	994.4	940.7	972.9	991.2	982.4	977.3	971.0	974.2
40°	2803.0	2347.8	1274.4	884.4	883.8	938.1	943.2	917.9	897.7	891.3	888.2
42.5°	2936.4	2371.9	1127.8	799.1	830.0	904.0	907.8	867.3	835.1	816.1	809.8
45°	3093.8	2399.7	984.3	728.2	780.1	876.8	886.3	831.9	784.5	744.7	734.6
47.5°	3309.4	2462.9	871.1	673.3	744.1	859.7	873.0	802.8	740.3	688.4	680.2
50°	3552.7	2549.5	783.2	636.0	716.2	844.6	861.0	773.1	699.2	641.6	635.3
52.5°	3775.9	2596.3	707.4	602.4	689.1	816.8	845.2	751.6	658.7	594.9	589.2
55°	3897.9	2520.4	632.8	569.6	651.8	780.7	823.1	721.9	619.5	570.2	562.0
57.5°	3914.3	2363.6	565.2	534.2	612.6	736.5	782.0	685.9	594.2	553.1	546.2
60°	3787.3	2129.7	512.7	505.1	572.7	686.5	735.8	654.3	568.3	534.2	527.2
62.5°	3471.2	1875.6	476.0	478.5	532.3	634.1	701.7	623.9	543.7	513.3	507.0
65°	2927.5	1548.2	440.6	451.4	496.2	593.0	670.7	598.7	519.0	497.5	491.8
67.5°	2033.7	1117.7	411.5	422.9	462.1	551.2	634.7	571.5	491.2	479.8	471.0
70°	1125.9	687.8	377.4	390.7	426.7	504.5	594.2	530.4	450.7	445.7	433.0
72.5°	591.7	438.1	338.8	353.4	378.7	444.4	532.3	485.5	410.9	389.4	373.0
74°	462.1	359.1	312.9	328.1	345.2	409.0	495.6	453.3	382.5	357.2	344.5
75°	402.7	319.9	290.8	310.4	325.6	385.0	467.2	430.5	366.7	342.6	331.3
77.5°	284.5	239.6	237.7	261.1	269.3	337.6	421.0	391.9	326.8	301.5	290.8
80°	199.8	179.5	188.4	202.9	214.3	298.4	390.7	338.8	268.0	238.3	234.5
82.5°	130.2	117.6	134.7	147.9	151.7	220.0	315.4	257.3	195.3	158.7	147.3
85°	60.1	58.8	77.1	75.2	74.6	107.5	187.1	150.5	112.5	84.1	79.0
87.5°	15.2	14.5	19.0	15.8	19.0	16.4	17.1	4.4	0.6	0.0	0.0
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)