

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: P522728

Luminaire Tested: **GALN-SA4A-827-U-T4W**

Issue Date: 5/13/2021

Test Information

Test Method: LM-79-08
Report Number: P522728
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2011-042-41)
Test Lab: INNOVATION CENTER
Issue Date: 5/13/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA4A-827-U-T4W
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13309 lumens
Efficiency: N/A
Efficacy: 110.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G3

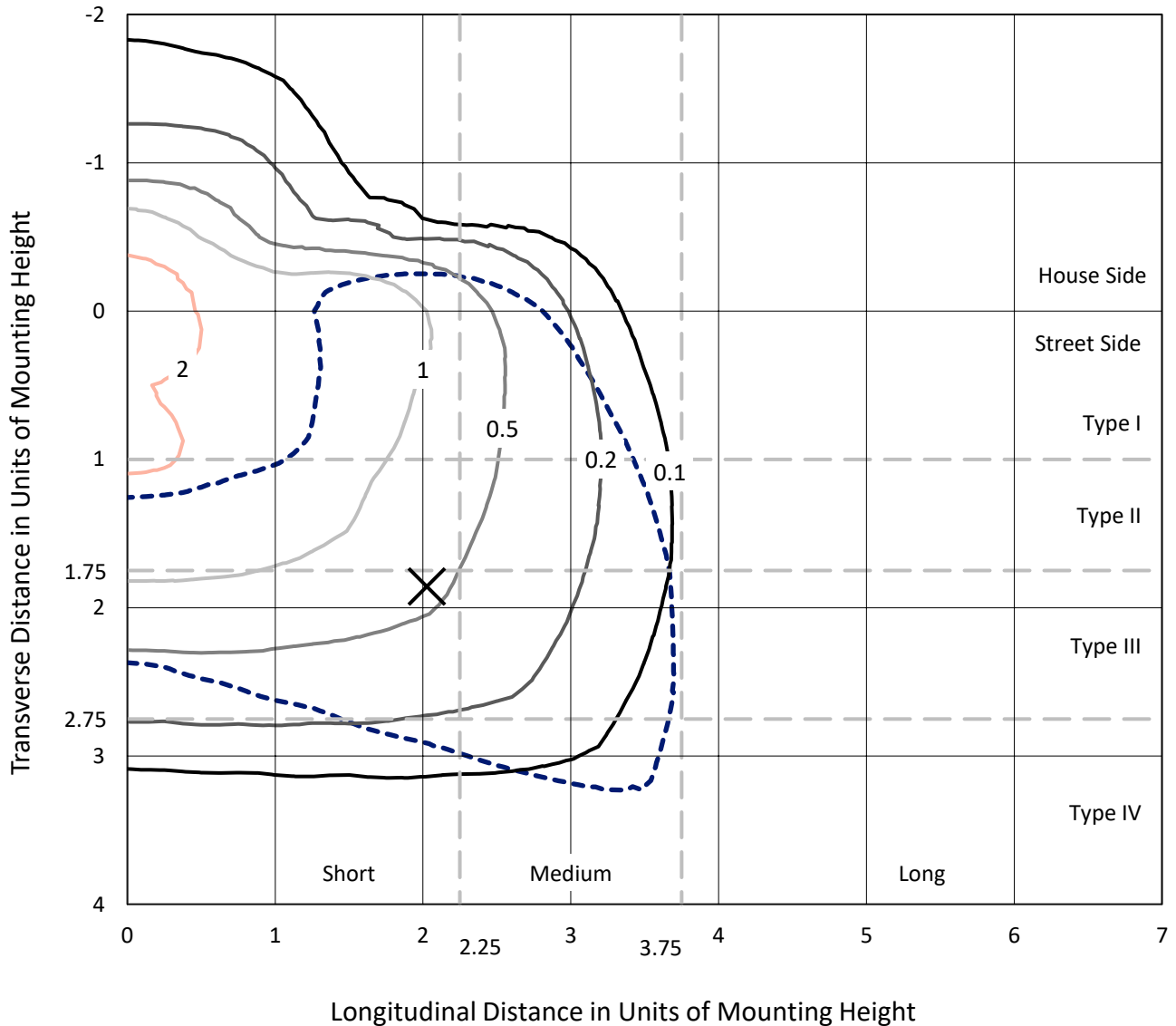
Input Watts (W): 121
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P522728
 CATALOG NUMBER: GALN-SA4A-827-U-T4W

Iso-Footcandle Lines of Horizontal Illumination

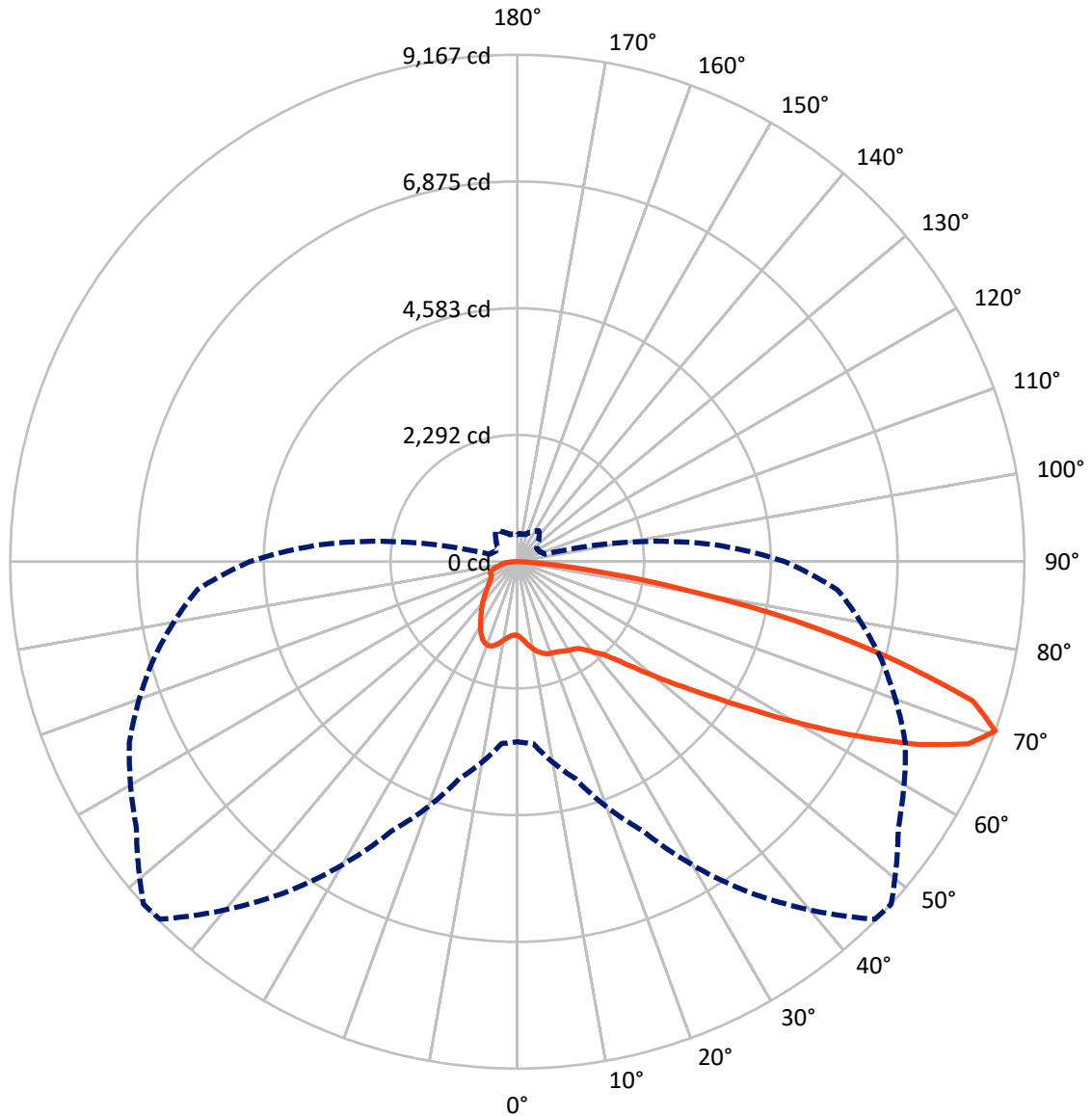
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.7 fc
 Type IV - Short - N/A

REPORT NUMBER: P522728
CATALOG NUMBER: GALN-SA4A-827-U-T4W

Luminous Intensity Polar Plot



— Vertical Plane Through 47.5-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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CATALOG NUMBER: GALN-SA4A-827-U-T4W

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3013.4	0.0	3013.4
	% Fixture	22.6	0.0	22.6
Street Side	Lumens	10295.6	0.0	10295.6
	% Fixture	77.4	0.0	77.4
Total	Lumens	13309.0	0.0	13309.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.7	1.0
10°-20°	460.4	3.5
20°-30°	765.7	5.8
30°-40°	1085.2	8.2
40°-50°	1602.0	12.0
50°-60°	2774.7	20.8
60°-70°	3919.4	29.4
70°-80°	2253.1	16.9
80°-90°	310.9	2.3
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°	13309.0	100.0
0°-180°	13309.0	100.0

Coefficient of Utilization



REPORT NUMBER: P522728

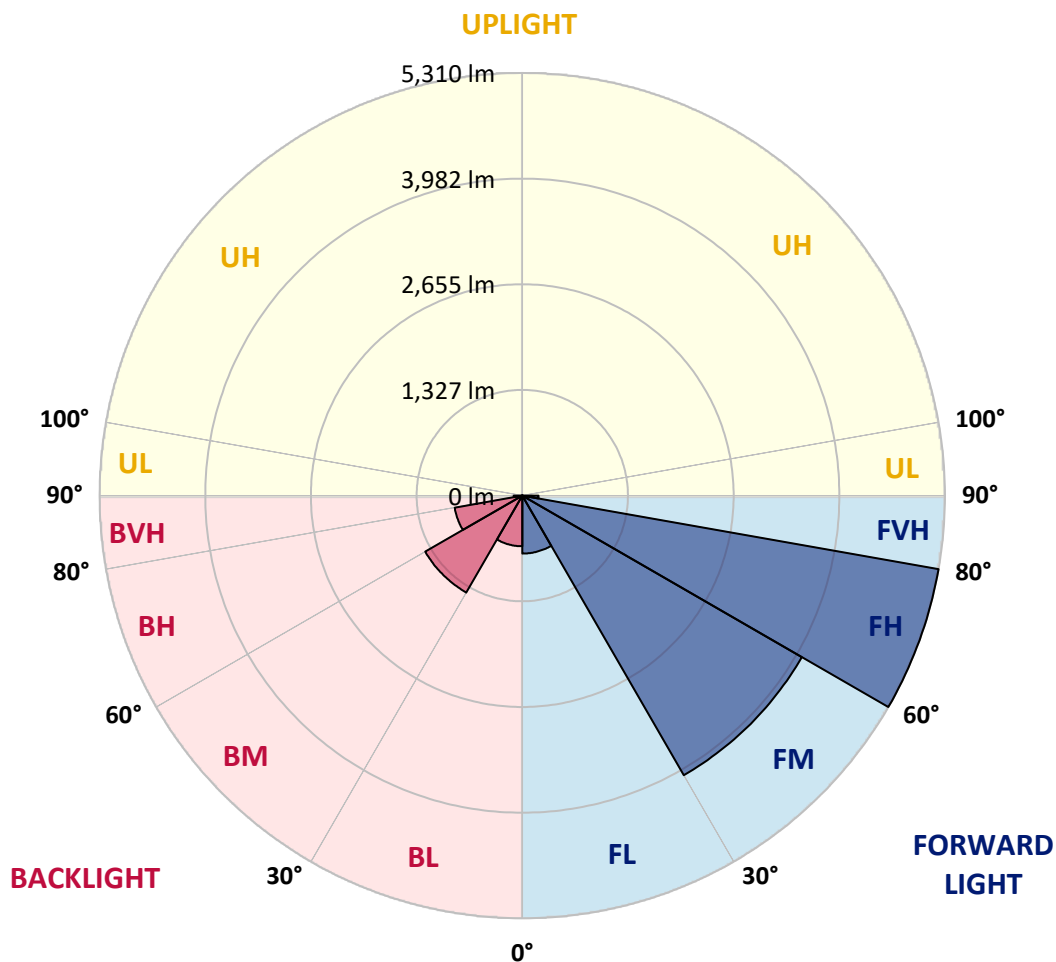
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	727.8	5.5			
FM	(30°-60°)	4055.0	30.5			
FH	(60°-80°)	5309.7	39.9			G3/7500
FVH	(80°-90°)	203.1	1.5			G2/225
BL	(0°-30°)	636.0	4.8	B2/1000		
BM	(30°-60°)	1406.9	10.6	B2/2500		
BH	(60°-80°)	862.7	6.5	B2/1000		G2/1000
BVH	(80°-90°)	107.8	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-G3

Type IV Short





REPORT NUMBER: P522728

CATALOG NUMBER: GALN-SA4A-827-U-T4W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	47.5°	55°	65°	75°	85°
0°	1336.1	1336.1	1336.1	1336.1	1336.1	1336.1	1336.1	1336.1	1336.1	1336.1	1336.1
2.5°	1422.2	1417.3	1416.5	1405.9	1400.2	1389.5	1385.2	1375.2	1363.1	1351.0	1339.6
5°	1534.1	1534.1	1529.1	1514.1	1490.6	1466.4	1455.7	1436.5	1402.3	1374.5	1351.0
7.5°	1648.7	1650.1	1640.2	1618.1	1584.6	1545.4	1535.5	1507.0	1458.6	1418.0	1383.1
10°	1747.7	1747.7	1734.2	1704.3	1662.2	1619.5	1609.5	1577.5	1523.4	1472.8	1427.2
12.5°	1823.2	1823.2	1805.4	1766.2	1720.6	1682.2	1670.8	1640.2	1589.6	1533.3	1475.7
15°	1872.3	1868.8	1848.8	1804.7	1760.5	1727.1	1719.2	1693.6	1647.3	1590.3	1525.5
17.5°	1874.5	1873.1	1853.8	1816.8	1778.3	1755.5	1750.6	1733.5	1697.1	1643.0	1574.6
20°	1833.2	1836.0	1823.2	1796.8	1778.3	1768.4	1766.2	1760.5	1734.9	1684.3	1616.0
22.5°	1789.0	1794.0	1781.9	1767.6	1766.2	1776.2	1777.6	1779.0	1762.7	1713.5	1650.9
25°	1778.3	1781.9	1769.8	1757.0	1764.8	1791.2	1796.8	1802.5	1789.7	1748.4	1692.2
27.5°	1832.5	1829.6	1806.1	1778.3	1783.3	1818.9	1826.8	1833.2	1826.8	1791.2	1743.4
30°	1985.6	1976.3	1929.3	1848.1	1822.5	1847.4	1855.2	1873.1	1873.1	1846.7	1799.0
32.5°	2242.0	2224.2	2138.0	1978.5	1889.4	1874.5	1882.3	1911.5	1926.5	1905.8	1853.8
35°	2553.2	2534.7	2411.5	2197.1	2011.9	1928.6	1926.5	1959.2	1999.1	1952.8	1885.2
37.5°	2865.8	2846.6	2698.5	2457.8	2190.7	2042.6	2029.7	2041.1	2058.2	1973.5	1928.6
40°	3178.5	3155.7	3026.1	2749.0	2409.3	2193.5	2160.1	2108.8	2101.7	2041.1	2012.6
42.5°	3488.3	3467.6	3402.1	3075.9	2671.4	2341.0	2289.7	2201.4	2228.4	2192.1	2167.2
45°	3800.9	3802.4	3732.6	3442.7	2987.6	2613.0	2543.9	2405.8	2469.9	2456.3	2470.6
47.5°	4078.0	4074.4	4049.5	3798.8	3380.0	2963.4	2874.4	2714.1	2823.8	2873.7	2982.6
50°	4346.5	4344.3	4345.8	4202.6	3835.8	3380.0	3281.8	3113.7	3360.8	3533.9	3729.0
52.5°	4731.1	4743.2	4657.0	4619.2	4389.9	3872.2	3763.9	3590.1	3995.4	4268.1	4649.2
55°	5117.1	5107.1	5039.4	5078.6	4969.6	4454.7	4341.5	4203.3	4701.9	5000.3	5572.9
57.5°	5344.3	5347.8	5416.9	5608.5	5685.4	5181.2	5078.6	4971.8	5495.9	5707.5	6394.7
60°	5548.7	5565.0	5763.7	6125.5	6334.2	6073.5	5982.4	5878.4	6224.5	6308.6	7108.3
62.5°	5612.7	5663.3	6010.1	6551.4	6966.6	7080.6	6967.3	6738.0	6918.2	6885.4	7591.9
65°	5293.0	5362.1	5983.8	6710.9	7531.4	8036.3	7964.4	7538.5	7509.3	7312.0	7671.0
67.5°	4451.2	4520.3	5318.6	6376.2	7765.0	8863.9	8792.0	8122.5	7868.2	7351.9	7072.7
70°	3256.8	3300.3	4063.7	5368.5	7295.6	9141.6	9166.6	8407.4	7740.1	6809.9	5807.2
72.5°	1876.6	1972.8	2507.6	3776.7	5960.3	8439.4	8612.5	7814.8	6929.6	5681.1	4060.2
75°	806.9	809.0	1159.4	2083.1	4036.7	6783.6	6950.9	6478.1	5441.8	3928.4	2167.9
77.5°	383.9	391.0	509.9	930.1	2222.0	4686.9	5138.4	4576.5	3480.5	1887.3	819.0
80°	249.3	254.3	311.9	461.5	1089.6	2717.7	3032.5	2640.1	1535.5	674.4	353.2
82.5°	151.0	152.4	208.7	282.0	599.7	1230.7	1450.7	1145.9	655.2	403.8	208.0
85°	91.9	92.6	126.8	174.5	363.9	425.2	436.6	433.0	384.6	264.2	111.1
87.5°	44.2	45.6	65.5	82.6	143.1	131.8	124.6	144.6	181.6	142.4	47.7
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1336.1	1336.1	1336.1	1336.1	1336.1	1336.1	1336.1	1336.1	1336.1	1336.1	1336.1
2.5°	1334.6	1332.5	1327.5	1325.4	1324.0	1324.7	1324.0	1324.0	1324.7	1324.7	1324.7
5°	1341.0	1337.5	1329.7	1329.7	1333.9	1343.9	1353.2	1360.3	1368.1	1367.4	1367.4
7.5°	1368.8	1362.4	1353.2	1356.0	1366.7	1382.4	1398.7	1414.4	1430.1	1431.5	1430.8
10°	1409.4	1403.0	1393.0	1396.6	1413.7	1437.2	1457.8	1480.6	1497.7	1502.7	1501.3
12.5°	1455.7	1442.9	1434.3	1444.3	1471.4	1502.7	1522.7	1539.7	1551.9	1559.0	1556.1
15°	1502.7	1490.6	1480.6	1501.3	1534.1	1563.3	1573.2	1576.1	1578.2	1585.3	1583.9
17.5°	1548.3	1531.9	1528.4	1555.4	1586.8	1599.6	1593.9	1581.8	1572.5	1578.2	1577.5
20°	1588.9	1576.1	1574.6	1601.7	1613.8	1601.7	1577.5	1556.1	1539.7	1541.2	1540.5
22.5°	1627.3	1617.4	1618.8	1630.2	1611.0	1569.7	1529.8	1500.6	1482.8	1486.3	1488.5
25°	1670.1	1660.1	1663.7	1645.2	1581.8	1509.8	1452.1	1427.2	1420.1	1427.2	1432.2
27.5°	1725.6	1719.2	1717.1	1645.9	1529.8	1421.5	1356.0	1346.7	1353.2	1368.8	1376.7
30°	1785.5	1785.5	1774.1	1633.8	1458.6	1315.4	1258.4	1259.9	1281.9	1304.0	1311.8
32.5°	1843.1	1855.2	1819.6	1601.0	1366.7	1212.1	1168.7	1170.1	1189.4	1216.4	1223.5
35°	1890.9	1925.8	1858.8	1541.2	1258.4	1125.3	1092.5	1073.3	1074.0	1094.6	1100.3
37.5°	1956.4	2021.2	1881.6	1452.1	1143.1	1051.2	1014.2	980.7	958.6	950.1	950.1
40°	2070.3	2165.8	1887.3	1320.4	1034.1	980.7	928.0	888.1	845.4	806.9	799.8
42.5°	2263.3	2383.7	1875.9	1168.7	935.8	903.1	851.8	802.6	743.5	689.4	685.1
45°	2605.2	2667.1	1845.3	1011.3	848.2	828.3	778.4	725.0	662.3	613.9	610.3
47.5°	3152.9	3065.3	1804.7	871.7	768.5	762.8	724.3	662.3	599.7	566.2	562.6
50°	3952.6	3692.0	1799.0	770.6	704.4	707.2	675.9	618.9	564.1	536.3	532.0
52.5°	4915.5	4449.0	1836.7	699.4	648.1	658.8	643.1	590.4	542.0	518.5	514.2
55°	5849.9	5129.9	1859.5	643.8	595.4	615.3	617.5	573.3	529.2	505.7	502.8
57.5°	6608.4	5642.7	1758.4	593.3	549.8	580.4	596.1	563.3	522.7	504.9	502.1
60°	7136.1	5884.8	1470.7	548.4	516.3	552.7	588.3	564.1	538.4	540.6	542.0
62.5°	7304.2	5777.3	1103.2	514.9	493.5	543.4	601.1	593.3	566.9	583.3	586.1
65°	7025.7	5332.9	799.8	488.6	473.6	549.8	639.5	614.6	556.9	569.0	569.0
67.5°	6093.5	4594.3	622.5	464.3	450.8	561.9	678.0	612.5	533.4	547.7	534.9
70°	4833.6	3553.8	518.5	437.3	426.6	544.1	681.6	590.4	505.7	508.5	484.3
72.5°	3207.7	2336.7	445.8	411.6	389.6	489.3	652.4	561.9	478.6	462.2	438.0
75°	1571.8	1165.1	388.9	379.6	341.1	425.9	612.5	534.9	449.4	423.8	410.2
77.5°	608.9	495.7	331.9	339.0	297.0	375.3	559.8	496.4	410.9	376.0	365.4
80°	295.6	281.3	272.1	282.7	244.3	319.8	511.4	462.9	375.3	336.9	321.2
82.5°	183.7	173.8	208.7	220.1	188.0	292.0	485.0	434.4	330.5	279.2	266.4
85°	93.3	99.7	139.6	150.3	134.6	232.2	399.5	326.2	238.6	198.0	199.4
87.5°	35.6	47.7	73.4	79.1	71.9	122.5	220.1	190.2	153.1	104.0	96.1
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)