

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: P451738

Luminaire Tested: **GALN-SA2C-827-U-SL4**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P451738  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA2C-827-U-SL4  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(2) 80 CRI, 2700K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV  
SPILL LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10173 lumens  
Efficiency: N/A  
Efficacy: 94.2 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G3

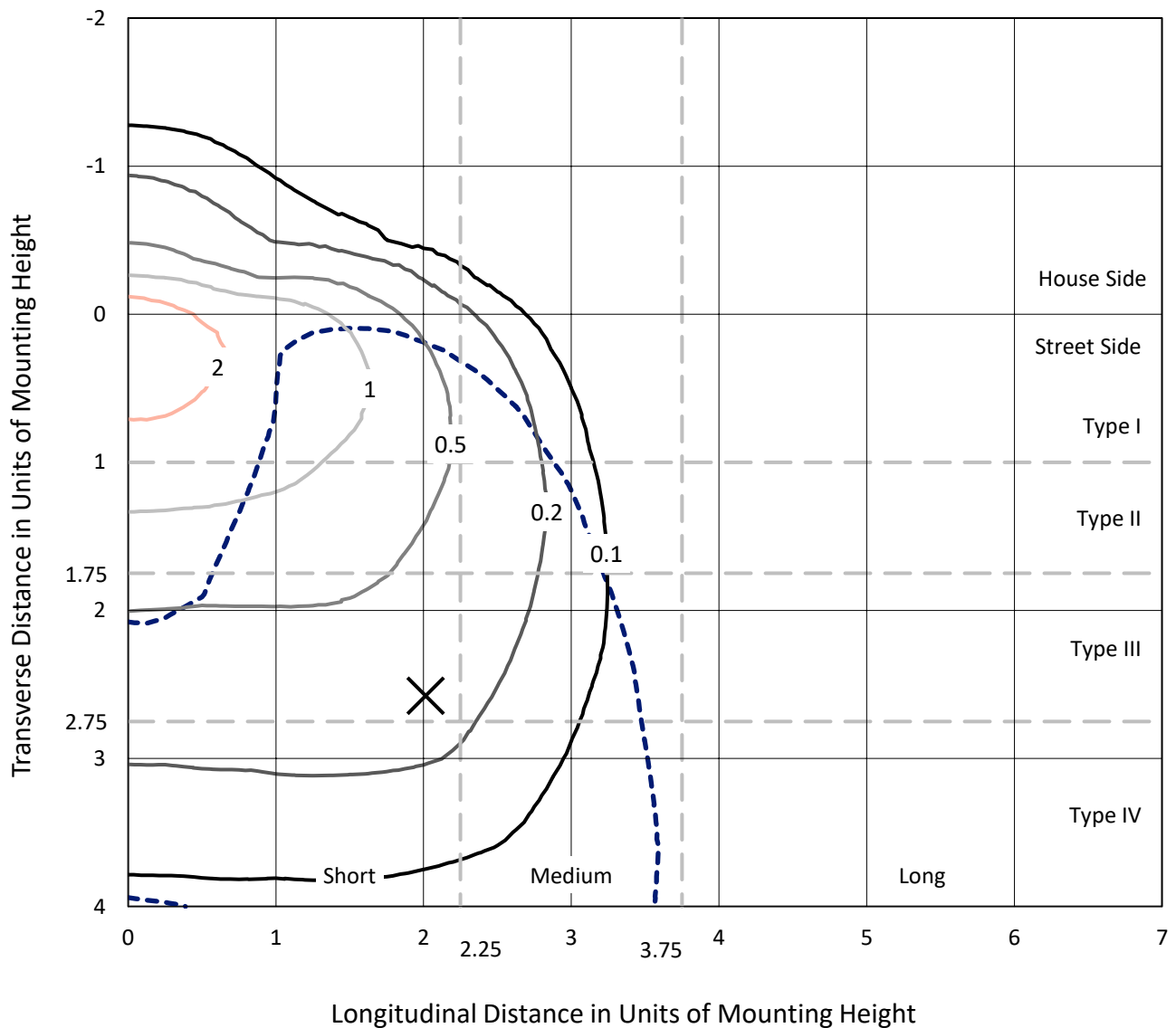
Input Watts (W): 108  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

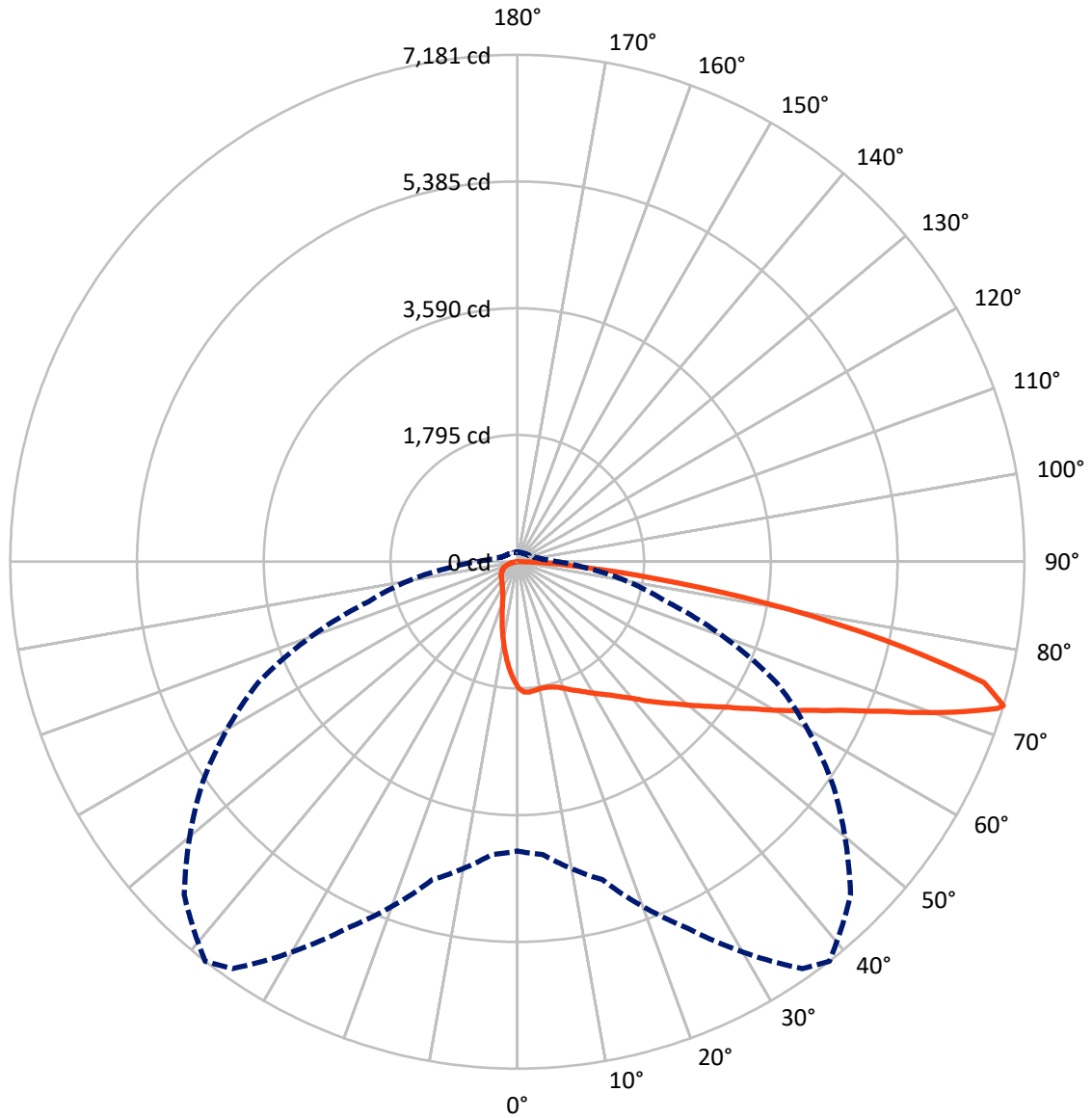
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.9 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 38-Deg Lateral    - - - Horizontal Cone Through 73-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1367.5	0.0	1367.5
	% Fixture	13.4	0.0	13.4
<b>Street Side</b>	Lumens	8805.4	0.0	8805.4
	% Fixture	86.6	0.0	86.6
<b>Total</b>	Lumens	10173.0	0.0	10173.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	156.0	1.5
10°-20°	400.0	3.9
20°-30°	623.0	6.1
30°-40°	913.7	9.0
40°-50°	1355.4	13.3
50°-60°	1920.3	18.9
60°-70°	2436.0	23.9
70°-80°	2027.8	19.9
80°-90°	340.7	3.3
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°	10173.0	100.0
0°-180°	10173.0	100.0

**Coefficient of Utilization**



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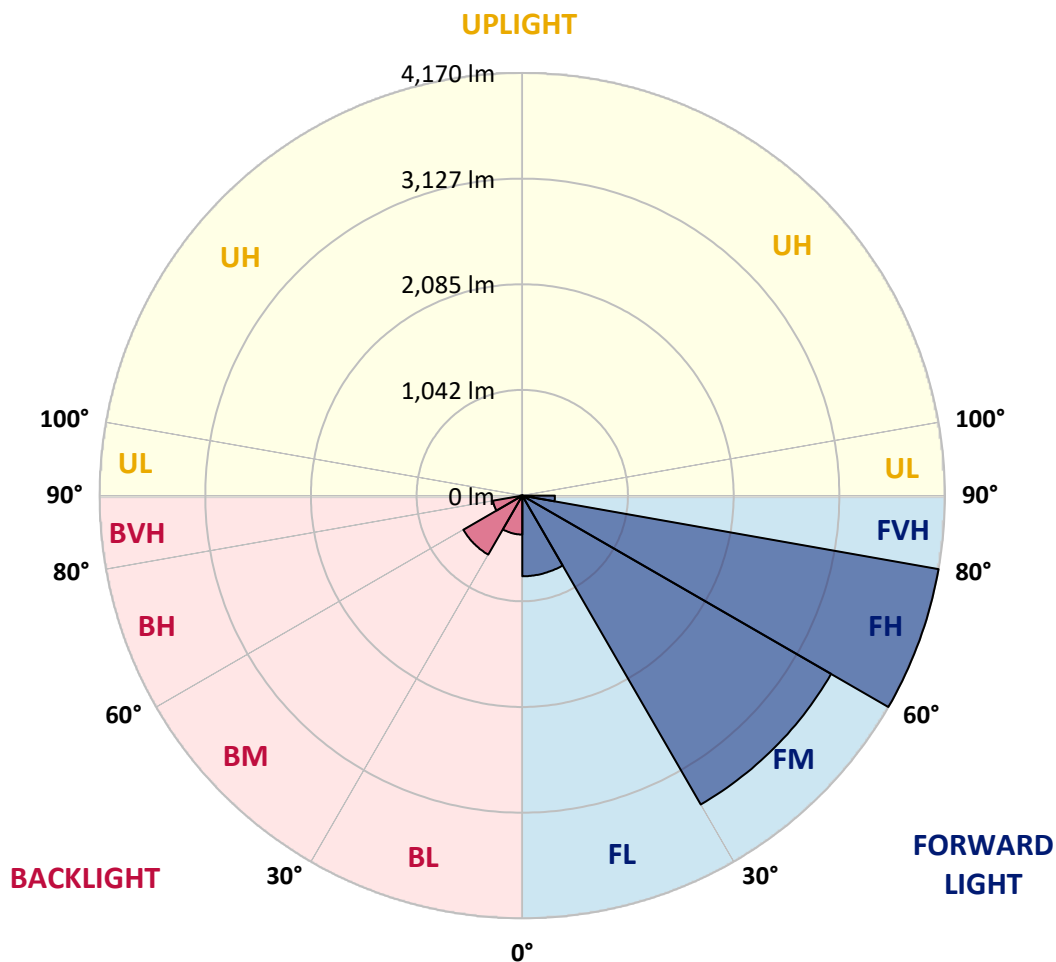
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	795.3	7.8			
FM (30°-60°)	3518.1	34.6			
FH (60°-80°)	4169.9	41.0			G2/5000
FVH (80°-90°)	322.2	3.2			G3/500
BL (0°-30°)	383.7	3.8	B1/500		
BM (30°-60°)	671.4	6.6	B1/1000		
BH (60°-80°)	293.9	2.9	B1/500		G1/500
BVH (80°-90°)	18.5	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G3**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	38°	45°	55°	65°	75°	85°
0°	1787.2	1787.2	1787.2	1787.2	1787.2	1787.2	1787.2	1787.2	1787.2	1787.2	1787.2
2.5°	1859.0	1868.2	1863.6	1857.3	1853.3	1849.3	1843.5	1826.9	1813.7	1799.3	1776.9
5°	1872.8	1878.6	1874.5	1866.5	1857.3	1853.3	1842.4	1820.5	1799.3	1775.2	1741.8
7.5°	1864.8	1867.1	1862.5	1852.7	1844.7	1837.2	1824.6	1800.4	1774.6	1745.3	1701.6
10°	1836.1	1844.7	1844.7	1836.6	1828.6	1824.6	1811.9	1788.9	1765.4	1732.1	1680.4
12.5°	1812.5	1821.7	1829.2	1826.9	1826.3	1826.3	1816.5	1799.3	1771.7	1740.1	1678.6
15°	1796.4	1807.3	1823.4	1832.6	1838.4	1840.1	1836.1	1821.1	1793.0	1756.2	1685.5
17.5°	1793.0	1806.2	1835.5	1855.6	1870.5	1869.9	1868.8	1848.1	1817.1	1779.2	1694.2
20°	1808.5	1825.7	1866.5	1898.1	1919.9	1915.9	1909.6	1882.6	1846.4	1803.9	1702.2
22.5°	1855.0	1872.8	1917.6	1952.1	1973.4	1973.4	1954.4	1918.8	1880.3	1832.6	1713.1
25°	1921.7	1941.2	1988.9	2023.9	2033.7	2026.2	2007.3	1964.2	1919.9	1874.0	1736.1
27.5°	2003.2	2026.8	2071.0	2100.3	2097.4	2091.7	2072.2	2017.0	1972.8	1930.8	1775.2
30°	2104.9	2122.1	2168.1	2175.0	2164.7	2163.5	2135.9	2080.8	2039.4	2007.3	1830.9
32.5°	2200.9	2216.4	2253.1	2256.0	2237.6	2239.9	2214.1	2163.5	2140.0	2128.5	1924.5
35°	2302.5	2310.6	2342.2	2338.7	2326.7	2324.9	2314.6	2266.3	2273.8	2294.5	2057.2
37.5°	2387.6	2403.6	2421.5	2424.3	2423.8	2429.5	2436.4	2413.4	2456.5	2521.4	2231.3
40°	2465.7	2479.5	2505.9	2515.1	2537.5	2549.0	2572.5	2573.1	2672.5	2779.4	2445.6
42.5°	2518.5	2542.1	2591.5	2608.2	2662.7	2697.2	2732.3	2769.6	2913.8	3051.1	2698.4
45°	2564.5	2595.5	2677.7	2729.4	2803.5	2845.4	2919.5	2997.7	3205.1	3384.9	2955.2
47.5°	2634.0	2661.6	2755.8	2847.1	2959.2	3007.4	3118.3	3234.9	3506.1	3703.1	3201.0
50°	2730.5	2747.2	2843.1	2991.9	3135.0	3197.0	3343.5	3511.8	3827.8	4017.4	3417.0
52.5°	2854.0	2860.9	2937.3	3135.5	3324.0	3401.0	3595.1	3791.6	4109.3	4290.3	3588.2
55°	3000.0	2988.5	3048.2	3287.8	3540.0	3640.5	3849.1	4074.8	4425.8	4510.9	3712.9
57.5°	3144.2	3126.3	3174.0	3472.8	3806.5	3927.8	4170.8	4366.7	4708.5	4717.1	3800.2
60°	3297.0	3283.8	3340.6	3689.9	4133.4	4277.0	4501.7	4669.4	4981.9	4860.7	3814.0
62.5°	3453.8	3432.5	3513.6	3934.1	4501.7	4632.1	4849.8	4991.1	5250.2	4914.1	3681.3
65°	3606.0	3596.3	3721.5	4224.2	4921.0	5069.3	5280.7	5376.6	5465.1	4833.7	3352.1
67.5°	3768.0	3787.6	3987.5	4611.4	5468.0	5654.1	5882.2	5792.0	5526.5	4452.8	2823.0
70°	4015.1	4027.7	4336.8	5118.7	6172.8	6397.5	6507.8	5939.6	5230.1	3729.6	2122.1
72.5°	4121.4	4177.1	4648.7	5651.2	6973.7	7111.0	6718.0	5610.4	4356.9	2533.5	1115.1
73°	4097.8	4164.4	4663.1	5732.2	7036.3	7180.5	6673.2	5441.0	4050.1	2181.9	955.9
75°	3804.2	3886.4	4476.4	5664.4	6914.5	6828.3	5952.8	4637.2	2736.8	992.1	435.5
77.5°	3001.7	3025.2	3546.9	4574.1	5445.0	5285.3	4455.1	2898.3	1117.9	368.8	247.0
80°	1505.7	1592.5	1999.2	2620.2	3641.1	3588.8	2812.1	1370.7	465.9	216.6	163.7
82.5°	724.4	785.9	973.8	1277.7	2011.8	1964.2	1392.6	749.1	295.9	126.4	96.5
85°	466.5	512.4	619.9	609.5	827.3	789.9	625.6	567.0	175.2	66.1	67.2
87.5°	307.9	337.2	404.4	323.4	301.0	272.3	276.3	319.4	34.5	25.3	9.2
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°	1787.2	1787.2	1787.2	1787.2	1787.2	1787.2	1787.2	1787.2	1787.2	1787.2	1787.2
2.5°	1767.7	1760.2	1735.5	1711.4	1688.4	1666.6	1652.2	1633.3	1620.6	1624.1	1629.2
5°	1723.5	1706.8	1663.1	1620.6	1580.4	1532.7	1494.2	1463.2	1439.7	1431.0	1429.3
7.5°	1676.9	1648.8	1586.2	1513.2	1444.8	1385.7	1317.3	1283.4	1243.8	1230.0	1225.4
10°	1648.8	1610.9	1523.0	1421.3	1318.4	1220.2	1146.1	1085.8	1031.2	1020.9	1015.7
12.5°	1640.7	1590.7	1472.4	1341.4	1204.7	1084.1	974.3	895.0	842.2	830.1	812.3
15°	1636.1	1574.1	1425.3	1261.0	1087.5	940.4	825.0	732.5	684.2	652.0	652.6
17.5°	1632.1	1555.1	1372.4	1173.1	986.4	816.9	689.4	606.1	561.8	544.6	542.9
20°	1626.4	1532.7	1311.5	1080.6	870.9	704.3	588.8	526.8	496.9	482.6	482.0
22.5°	1624.1	1510.9	1251.8	986.4	768.7	617.6	522.2	478.5	459.6	449.8	449.8
25°	1629.8	1495.4	1189.2	896.8	677.9	543.5	476.2	446.4	435.5	430.3	428.6
27.5°	1647.6	1488.5	1127.1	807.2	594.6	492.9	445.2	424.5	416.5	412.5	413.1
30°	1681.5	1487.9	1066.2	718.7	532.5	454.4	420.5	406.2	399.8	397.5	397.0
32.5°	1736.1	1500.6	1006.5	645.7	480.3	422.2	397.5	387.2	384.3	382.6	382.0
35°	1828.6	1536.2	947.3	579.1	440.1	393.5	375.7	370.5	366.5	368.2	368.8
37.5°	1953.2	1597.6	891.0	526.8	409.6	372.3	357.3	352.7	350.4	352.2	353.9
40°	2120.4	1686.1	843.9	484.9	387.8	354.5	341.2	337.2	334.9	337.8	338.4
42.5°	2304.8	1788.4	804.9	452.1	370.0	339.5	326.9	322.3	320.6	322.3	322.9
45°	2494.4	1907.3	784.7	428.6	355.0	328.6	315.4	310.2	306.2	305.1	306.8
47.5°	2681.1	2010.7	784.2	414.2	343.0	318.8	304.5	298.7	293.6	290.7	290.1
50°	2833.4	2092.8	798.0	407.9	332.6	307.9	293.6	287.8	280.9	275.2	276.3
52.5°	2948.3	2146.3	804.3	405.0	326.9	296.4	282.1	276.9	268.9	261.4	261.4
55°	3022.4	2158.9	788.8	402.1	322.3	284.4	268.9	264.3	256.2	248.8	248.8
57.5°	3047.6	2119.9	733.0	395.2	317.7	274.0	255.6	251.6	245.3	237.8	236.7
60°	2989.0	1987.7	635.4	374.6	308.5	263.1	241.3	239.6	237.3	230.9	230.4
62.5°	2763.3	1707.4	529.1	347.6	293.0	251.6	228.1	230.9	232.7	229.2	228.6
65°	2387.6	1386.2	452.1	310.2	272.3	235.5	213.7	221.2	225.8	225.8	224.6
67.5°	1936.6	1064.5	380.9	278.1	246.5	213.7	197.6	203.4	206.8	205.7	208.5
70°	1376.5	721.0	310.2	241.3	213.7	189.0	176.9	176.9	174.6	173.5	173.5
72.5°	667.6	411.9	251.6	201.6	182.1	161.4	151.7	147.6	143.0	142.5	139.6
73°	557.8	369.4	240.1	194.2	174.6	157.4	146.5	140.2	137.3	135.0	134.4
75°	339.5	280.3	200.5	163.7	148.8	135.6	125.8	120.1	117.2	115.5	114.9
77.5°	223.5	209.1	155.7	125.2	113.7	105.7	101.7	95.9	94.2	91.9	91.9
80°	166.6	159.7	111.5	88.5	81.6	74.7	73.5	72.4	67.8	64.9	63.8
82.5°	107.4	113.7	75.8	59.2	51.7	46.0	46.5	48.3	43.7	39.6	38.5
85°	76.4	82.2	46.0	27.0	21.8	19.0	21.3	19.0	19.5	15.5	12.6
87.5°	12.6	21.8	8.0	3.4	1.7	1.1	0.0	0.0	0.0	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)