

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: P453369

Luminaire Tested: **GALN-SA4B-827-U-T2**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P453369  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-10)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA4B-827-U-T2  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 80 CRI, 2700K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 16642 lumens  
Efficiency: N/A  
Efficacy: 101.5 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B2 - U0 - G3

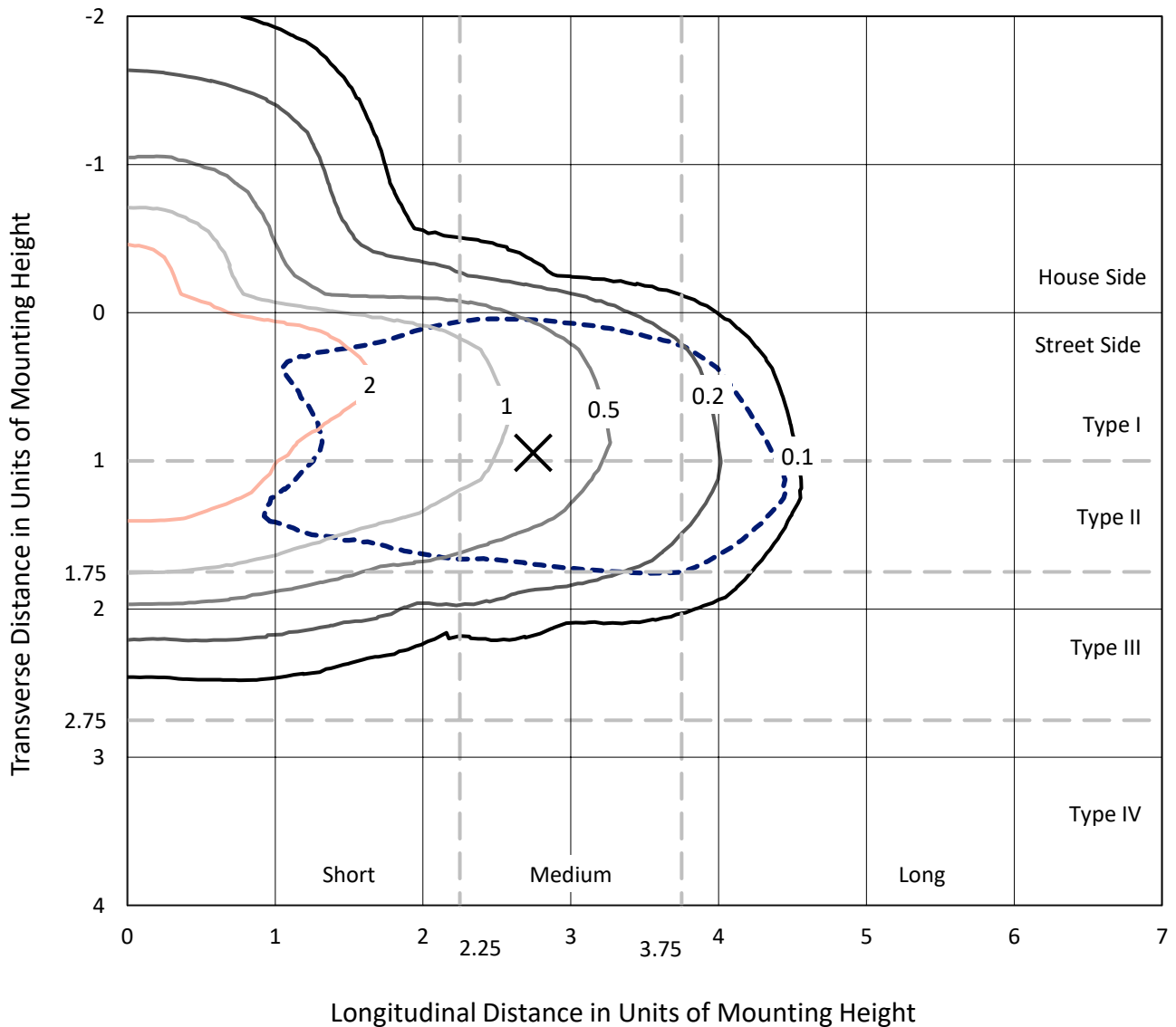
Input Watts (W): 164  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

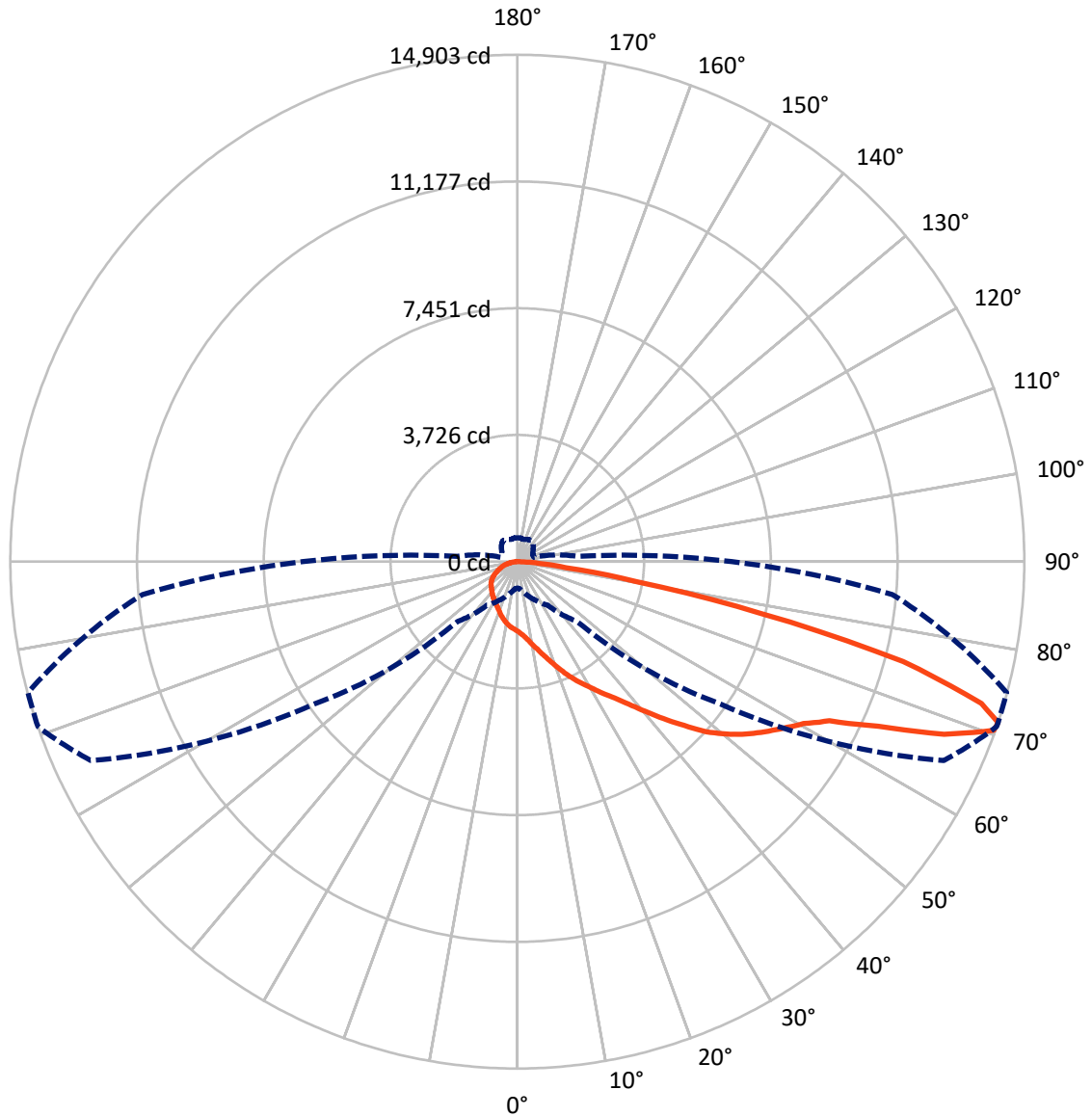
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.6 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 71-Deg Lateral    - - - Horizontal Cone Through 71-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2993.0	0.0	2993.0
	% Fixture	18.0	0.0	18.0
<b>Street Side</b>	Lumens	13649.0	0.0	13649.0
	% Fixture	82.0	0.0	82.0
<b>Total</b>	Lumens	16642.0	0.0	16642.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	205.1	1.2
10°-20°	666.3	4.0
20°-30°	1164.4	7.0
30°-40°	1731.9	10.4
40°-50°	2551.7	15.3
50°-60°	3572.4	21.5
60°-70°	3995.6	24.0
70°-80°	2440.7	14.7
80°-90°	314.0	1.9
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°	16642.0	100.0
0°-180°	16642.0	100.0

**Coefficient of Utilization**



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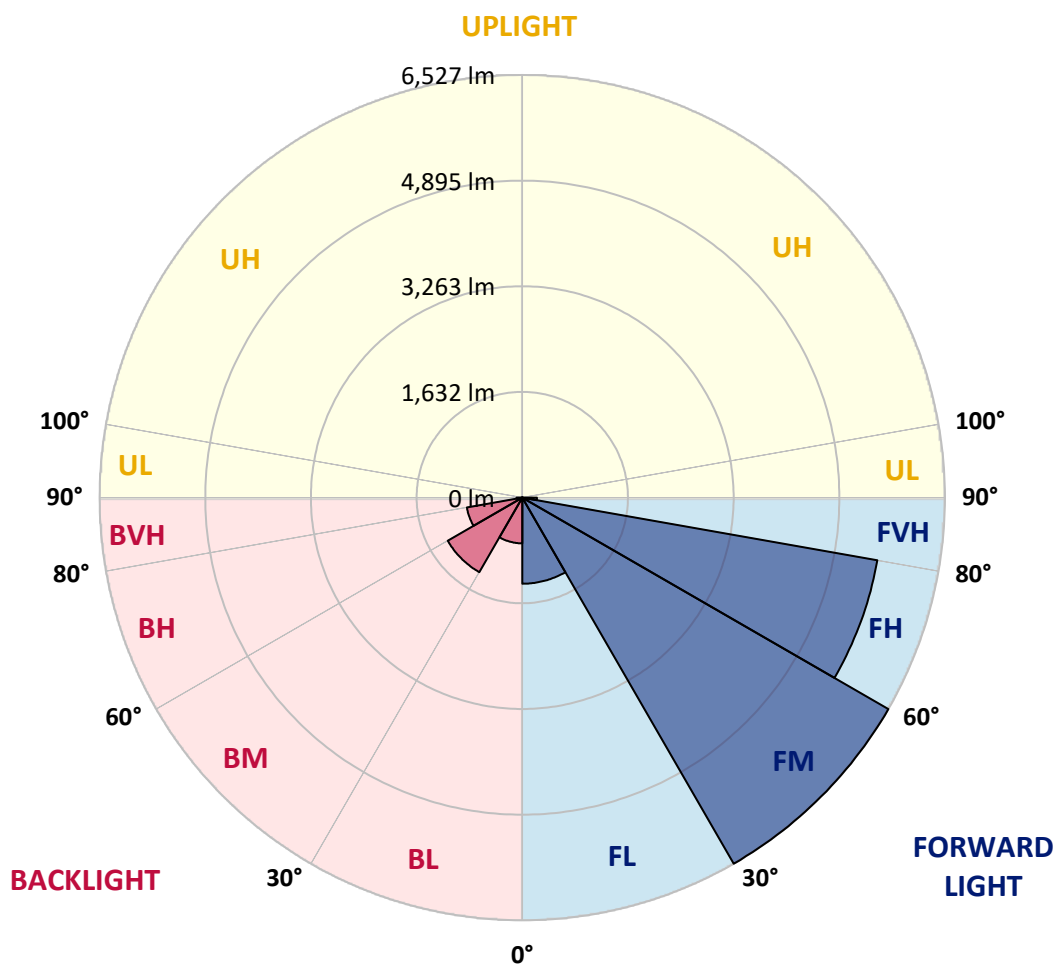
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1329.7	8.0			
FM	(30°-60°)	6526.7	39.2			
FH	(60°-80°)	5566.7	33.4			G3/7500
FVH	(80°-90°)	225.9	1.4			G3/500
BL	(0°-30°)	706.0	4.2	B2/1000		
BM	(30°-60°)	1329.3	8.0	B2/2500		
BH	(60°-80°)	869.6	5.2	B2/1000		G2/1000
BVH	(80°-90°)	88.1	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 II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	71°	75°	85°
0°	2042.5	2042.5	2042.5	2042.5	2042.5	2042.5	2042.5	2042.5	2042.5	2042.5	2042.5
2.5°	2267.5	2256.5	2257.4	2241.9	2221.8	2199.8	2168.7	2141.3	2119.3	2106.5	2069.0
5°	2512.6	2501.6	2487.9	2454.1	2439.4	2385.5	2316.9	2254.7	2207.1	2180.6	2105.6
7.5°	2711.1	2708.4	2704.7	2685.5	2648.0	2573.0	2514.5	2406.5	2336.1	2285.8	2157.7
10°	2833.7	2838.2	2841.0	2844.7	2829.1	2789.8	2709.3	2573.0	2483.4	2419.3	2225.4
12.5°	2895.9	2900.4	2916.0	2949.8	2970.9	2966.3	2900.4	2766.9	2643.4	2559.3	2297.7
15°	2934.3	2941.6	2969.0	3013.9	3084.3	3129.1	3097.1	2973.6	2838.2	2738.5	2383.7
17.5°	2976.4	2984.6	3014.8	3078.8	3171.2	3268.1	3302.9	3196.8	3049.5	2930.6	2479.7
20°	3000.1	3011.1	3054.1	3138.3	3246.2	3387.1	3502.3	3446.5	3285.5	3153.8	2590.4
22.5°	3038.6	3047.7	3084.3	3173.9	3302.9	3479.4	3701.7	3689.8	3548.0	3377.9	2712.0
25°	3142.8	3157.5	3175.8	3229.7	3354.1	3573.6	3867.3	3949.6	3802.3	3612.1	2823.6
27.5°	3339.5	3351.4	3350.5	3357.8	3428.2	3655.1	4010.9	4206.6	4054.8	3849.0	2931.5
30°	3563.6	3568.2	3571.8	3555.4	3570.9	3738.3	4142.6	4460.9	4309.1	4092.3	3025.8
32.5°	3836.2	3845.3	3814.2	3772.1	3759.3	3861.8	4251.4	4715.2	4610.0	4339.2	3119.1
35°	4158.1	4181.9	4118.8	4044.7	3992.6	4039.2	4397.8	4974.9	4918.2	4654.8	3242.5
37.5°	4525.8	4555.1	4496.6	4351.1	4277.0	4289.8	4588.9	5296.0	5307.9	5014.3	3426.4
40°	4826.8	4865.2	4867.0	4661.2	4548.7	4563.3	4831.3	5641.7	5778.0	5458.8	3643.2
42.5°	5025.2	5062.7	5102.1	4981.3	4863.3	4946.6	5114.0	6016.8	6306.7	5998.5	3945.9
45°	5242.9	5276.8	5298.7	5243.9	5178.0	5393.9	5455.1	6415.6	6870.2	6601.2	4277.0
47.5°	5495.4	5532.9	5553.9	5501.8	5477.1	5786.3	5822.8	6787.8	7472.0	7186.6	4642.9
50°	5832.0	5860.3	5849.4	5816.4	5811.0	6087.2	6175.9	7136.3	7968.7	7816.8	5022.5
52.5°	6250.9	6284.8	6296.6	6250.0	6229.0	6302.1	6460.4	7453.7	8420.5	8358.3	5427.7
55°	6504.3	6558.2	6739.4	6812.5	6862.8	6580.2	6766.8	7804.0	8825.7	8929.1	5863.1
57.5°	6179.6	6249.1	6654.3	7020.2	7493.0	7275.4	7201.3	8169.9	9230.9	9482.5	6384.5
60°	5387.5	5403.0	5925.3	6599.4	7550.7	8169.0	8107.7	8751.6	9670.0	10040.4	7071.4
62.5°	3737.4	3770.3	4387.7	5463.4	6839.1	8491.0	9649.9	9756.0	10299.3	10875.5	8078.4
65°	1927.2	1884.2	2446.8	3433.7	5156.0	7726.3	10899.3	11602.7	11664.0	12181.7	9496.2
67.5°	1186.3	1205.5	1469.0	2005.0	3048.6	5615.2	10768.5	13859.2	13536.3	13785.1	10812.4
70°	890.9	914.7	1095.8	1372.0	1858.6	3210.5	8660.2	14406.2	14857.1	14793.1	11213.0
71°	774.7	799.4	987.9	1248.5	1561.4	2477.9	7296.4	13833.6	14902.9	14891.9	11062.1
72.5°	660.4	675.9	823.2	1057.4	1316.2	1737.0	5481.7	12406.7	14267.2	14632.1	10523.4
75°	518.6	530.5	596.4	806.7	1036.3	1066.5	2941.6	9301.4	11717.9	12413.1	8760.8
77.5°	422.6	430.8	464.7	599.1	799.4	755.5	1543.1	6054.3	7341.2	8040.9	5160.6
80°	335.7	344.8	365.0	406.1	599.1	538.7	736.3	3067.8	3546.2	3538.9	2059.9
82.5°	260.7	263.4	287.2	298.2	409.8	382.3	398.8	1298.8	1438.8	1486.4	743.6
85°	164.6	172.9	254.3	228.7	245.1	224.1	196.7	515.9	635.7	626.6	297.3
87.5°	50.3	53.1	86.0	97.0	108.8	97.9	72.3	151.8	185.7	201.2	74.1
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°	2042.5	2042.5	2042.5	2042.5	2042.5	2042.5	2042.5	2042.5	2042.5	2042.5	2042.5
2.5°	2054.4	2044.3	2008.6	1979.4	1951.9	1921.7	1896.1	1888.8	1882.4	1879.7	1878.7
5°	2073.6	2043.4	1973.0	1915.3	1869.6	1827.5	1801.0	1789.1	1777.2	1777.2	1780.9
7.5°	2101.0	2046.1	1937.3	1851.3	1793.7	1754.4	1735.1	1733.3	1736.1	1738.8	1739.7
10°	2131.2	2044.3	1885.2	1778.1	1726.9	1708.6	1709.5	1725.1	1739.7	1750.7	1752.5
12.5°	2160.5	2033.3	1823.9	1709.5	1676.6	1680.3	1705.9	1740.6	1769.0	1784.5	1785.5
15°	2193.4	2016.0	1749.8	1644.6	1633.6	1662.0	1709.5	1762.6	1805.6	1831.2	1833.9
17.5°	2220.8	1986.7	1672.0	1581.5	1595.2	1647.3	1713.2	1781.8	1833.9	1865.9	1871.4
20°	2251.9	1949.2	1591.5	1521.1	1560.4	1630.9	1705.9	1780.0	1833.9	1865.0	1872.3
22.5°	2276.6	1896.1	1514.7	1471.7	1529.3	1610.7	1681.2	1740.6	1784.5	1801.0	1812.0
25°	2286.7	1829.4	1442.4	1431.5	1504.6	1577.8	1625.4	1659.2	1672.9	1671.1	1675.7
27.5°	2281.2	1752.5	1380.2	1399.5	1473.5	1526.6	1550.4	1547.6	1522.9	1500.1	1511.0
30°	2258.3	1661.1	1328.1	1366.5	1433.3	1462.6	1458.9	1423.2	1376.6	1333.6	1336.3
32.5°	2217.2	1562.3	1279.6	1329.0	1376.6	1389.4	1364.7	1318.1	1251.3	1195.5	1187.3
35°	2182.4	1468.1	1236.6	1286.0	1319.9	1313.5	1289.7	1229.3	1169.0	1119.6	1111.3
37.5°	2176.9	1387.6	1195.5	1237.6	1256.8	1247.6	1218.4	1167.1	1145.2	1107.7	1103.1
40°	2206.2	1330.9	1153.4	1186.3	1195.5	1188.2	1156.2	1126.9	1147.0	1137.9	1137.9
42.5°	2285.8	1300.7	1115.9	1135.1	1142.4	1147.9	1125.1	1100.4	1125.1	1083.0	1069.3
45°	2412.0	1301.6	1082.1	1084.8	1106.8	1126.0	1110.4	1073.8	1061.0	976.9	960.4
47.5°	2597.7	1332.7	1054.6	1037.2	1076.6	1108.6	1086.6	1033.6	976.9	921.1	911.0
50°	2814.5	1388.5	1029.9	987.9	1036.3	1086.6	1070.2	1008.0	949.4	915.6	909.2
52.5°	3055.0	1458.9	999.7	933.0	986.9	1076.6	1073.8	1004.3	923.8	901.0	895.5
55°	3352.3	1528.4	962.2	868.9	943.0	1068.3	1063.8	974.1	918.3	901.9	900.0
57.5°	3698.0	1629.0	908.3	804.0	892.7	1034.5	1024.4	955.8	900.0	888.2	887.2
60°	4255.1	1785.5	831.4	744.5	841.5	975.0	987.9	924.7	870.8	868.0	867.1
62.5°	4987.7	2005.0	751.9	683.3	782.1	898.2	934.8	882.7	839.7	853.4	855.2
65°	5999.4	2189.7	669.5	631.1	716.2	824.1	884.5	843.3	804.9	831.4	831.4
67.5°	6658.9	2193.4	594.5	577.2	649.4	761.9	831.4	796.7	760.1	804.9	806.7
70°	6521.7	1921.7	532.3	520.5	584.5	695.2	772.9	745.5	703.4	743.6	729.0
71°	6300.3	1770.8	507.6	498.5	558.9	663.1	745.5	722.6	680.5	707.0	698.8
72.5°	5947.2	1537.6	467.4	469.2	520.5	622.9	707.0	683.3	641.2	655.8	653.1
75°	5027.1	1342.7	399.7	407.9	447.3	554.3	630.2	611.9	568.9	568.9	566.2
77.5°	3142.8	938.5	332.0	336.6	379.6	474.7	541.5	525.9	484.8	471.1	467.4
80°	1172.6	484.8	259.8	265.3	291.8	374.1	448.2	433.6	391.5	375.9	361.3
82.5°	443.6	243.3	191.2	186.6	214.9	285.4	351.2	333.9	300.9	263.4	252.5
85°	167.4	120.7	117.1	113.4	126.2	169.2	217.7	214.0	179.3	152.8	150.0
87.5°	43.9	39.3	45.7	33.8	35.7	32.0	32.9	13.7	6.4	2.7	1.8
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)