

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: P453587

Luminaire Tested: **GALN-SA4C-827-U-AFL**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P453587
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-24)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA4C-827-U-AFL
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 2700K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20645 lumens
Efficiency: N/A
Efficacy: 96.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

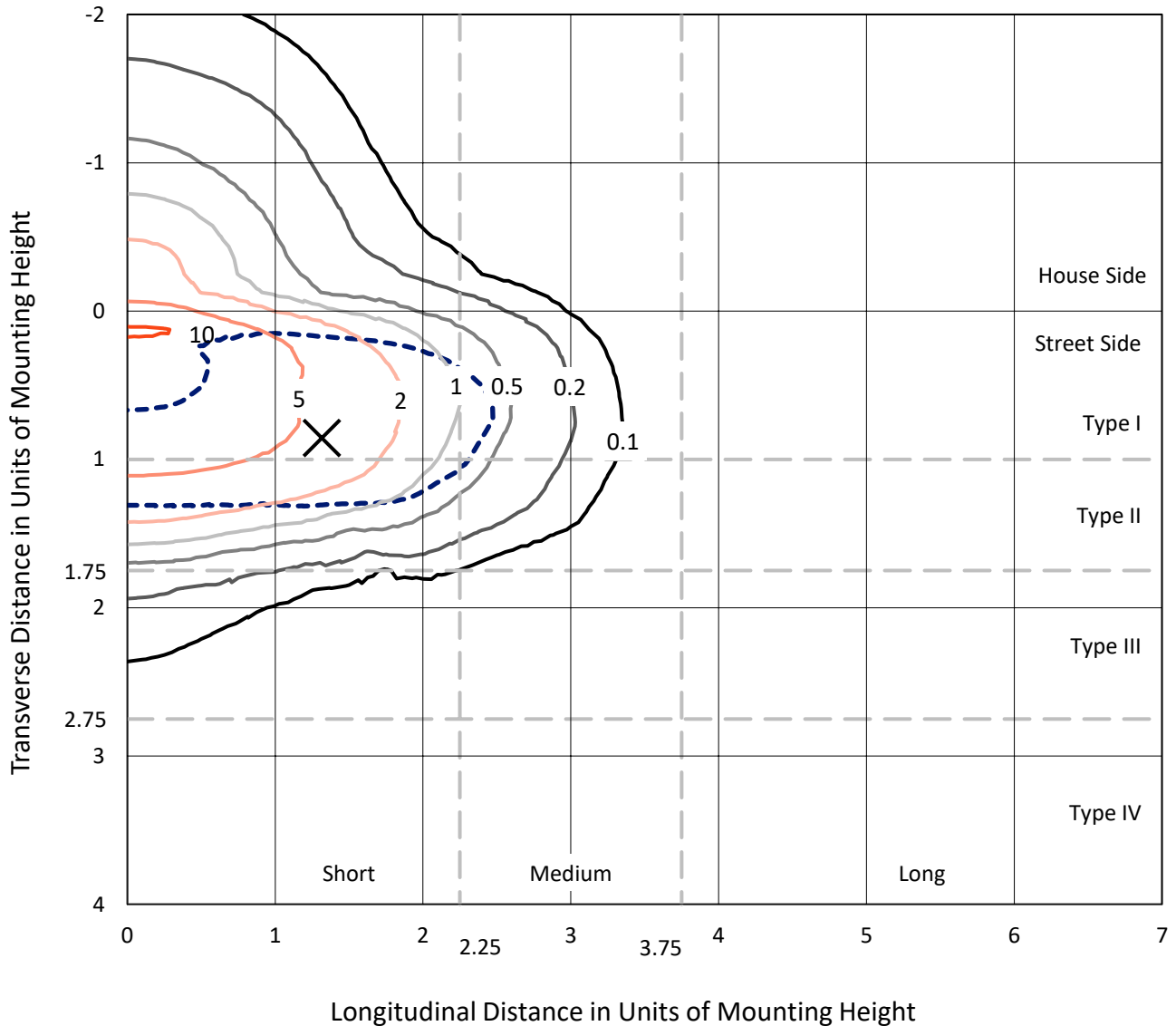
Input Watts (W): 213
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

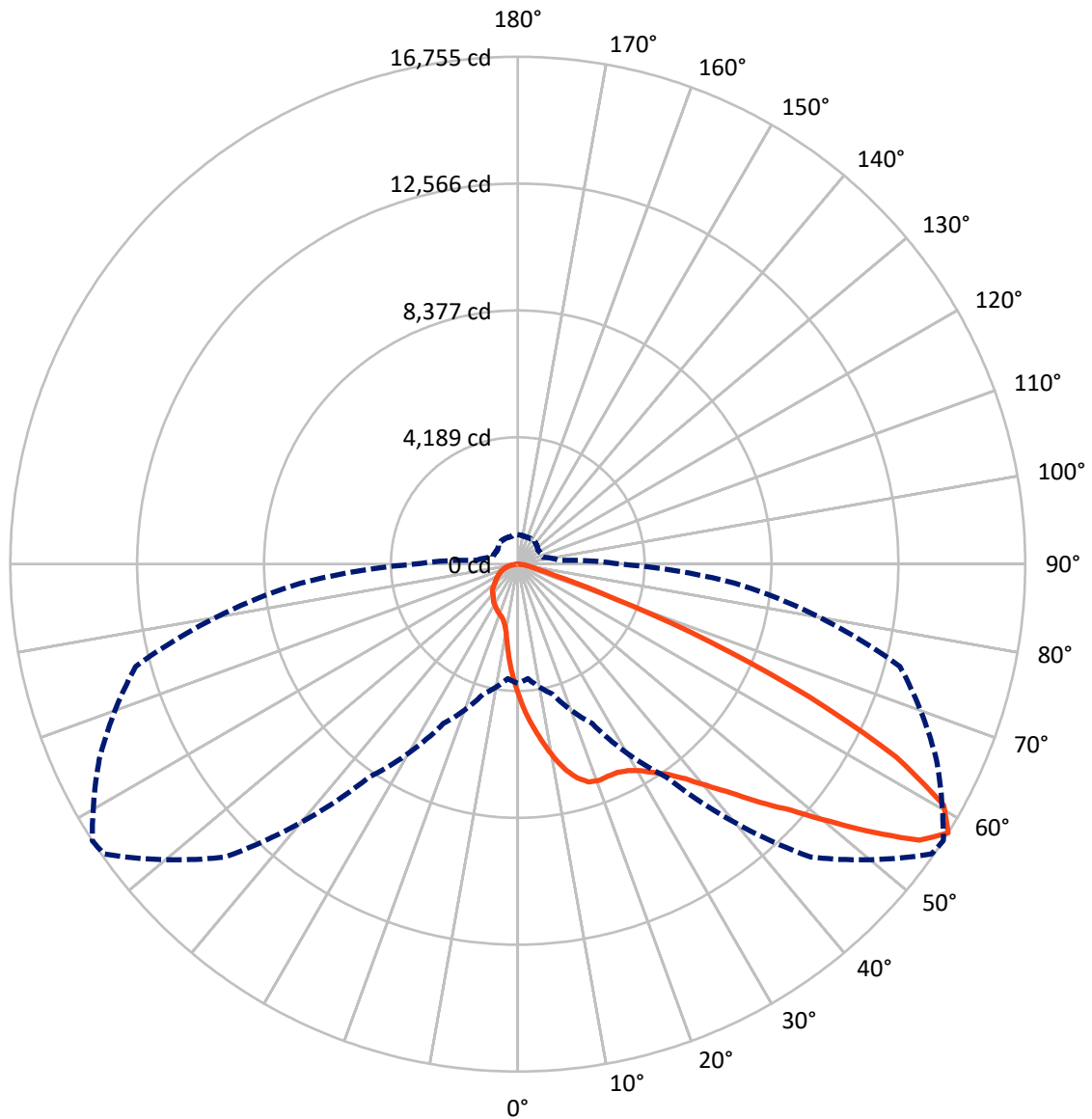
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.6 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3139.5	0.0	3139.5
	% Fixture	15.2	0.0	15.2
Street Side	Lumens	17505.5	0.0	17505.5
	% Fixture	84.8	0.0	84.8
Total	Lumens	20645.0	0.0	20645.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	416.9	2.0
10°-20°	1228.5	6.0
20°-30°	2039.9	9.9
30°-40°	3072.7	14.9
40°-50°	4613.4	22.3
50°-60°	5171.1	25.0
60°-70°	3026.4	14.7
70°-80°	895.2	4.3
80°-90°	180.9	0.9
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°	20645.0	100.0
0°-180°	20645.0	100.0

Coefficient of Utilization



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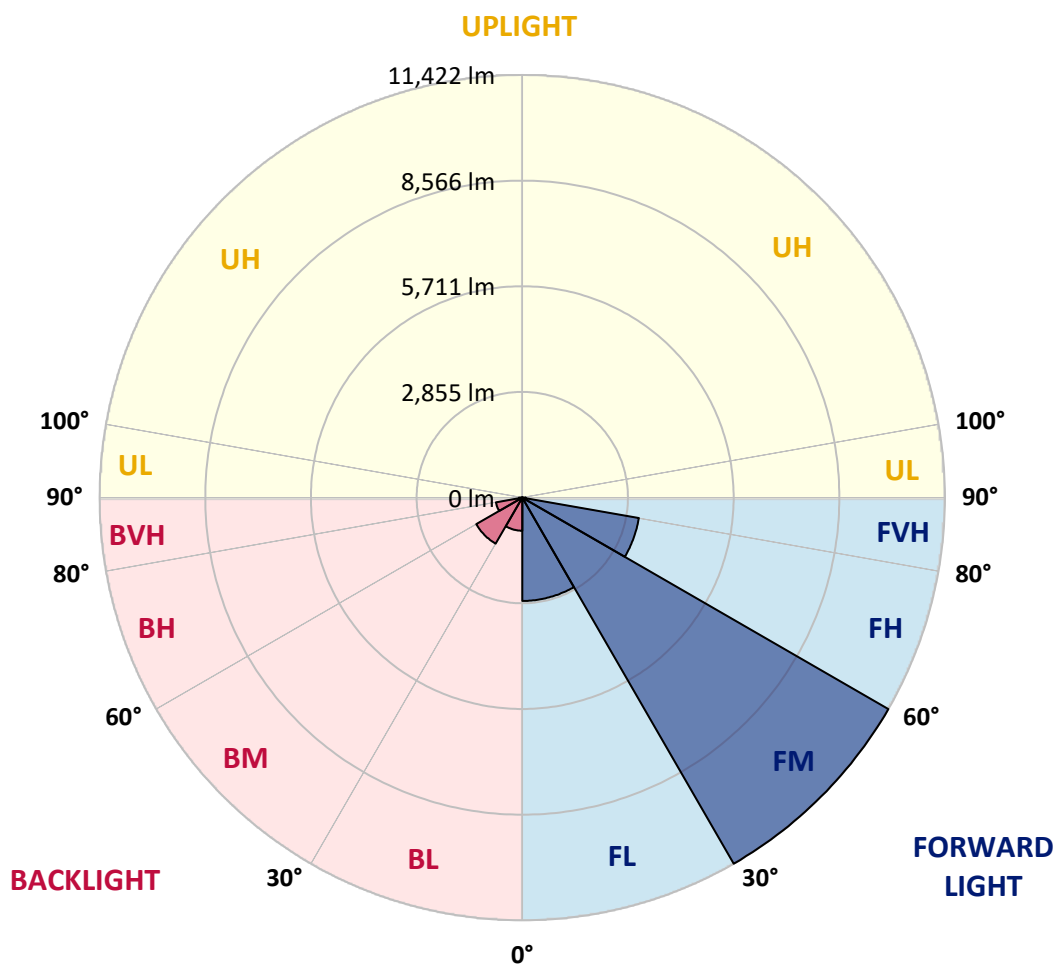
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2790.7	13.5			
FM	(30°-60°)	11421.7	55.3			
FH	(60°-80°)	3199.2	15.5			G2/5000
FVH	(80°-90°)	93.9	0.5			G1/100
BL	(0°-30°)	894.6	4.3	B2/1000		
BM	(30°-60°)	1435.5	7.0	B2/2500		
BH	(60°-80°)	722.4	3.5	B2/1000		G2/1000
BVH	(80°-90°)	87.1	0.4			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 II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	4337.3	4337.3	4337.3	4337.3	4337.3	4337.3	4337.3	4337.3	4337.3	4337.3	4337.3
2.5°	5389.4	5330.6	5284.3	5243.6	5190.5	5047.0	4903.5	4901.2	4787.1	4610.8	4429.9
5°	6267.5	6188.4	6198.5	6072.0	5945.4	5737.5	5433.5	5417.6	5174.7	4844.7	4509.1
7.5°	6839.3	6840.4	6808.8	6736.5	6599.7	6363.5	6018.8	5940.9	5603.0	5102.3	4599.5
10°	6809.9	6840.4	6893.5	6955.7	6997.5	6881.1	6566.9	6472.0	6032.4	5414.3	4700.0
12.5°	6418.9	6466.4	6542.1	6698.0	6950.0	7142.2	7034.8	6958.0	6529.6	5725.0	4810.8
15°	6174.8	6203.1	6244.9	6350.0	6621.2	7081.1	7359.1	7318.5	6998.6	6076.5	4935.1
17.5°	6100.2	6128.5	6142.0	6206.4	6399.7	6870.9	7486.8	7559.2	7414.5	6399.7	5060.5
20°	6174.8	6188.4	6188.4	6226.8	6378.2	6747.8	7481.2	7627.0	7755.8	6787.3	5178.1
22.5°	6370.3	6376.0	6368.0	6381.6	6494.6	6781.7	7428.1	7608.9	8031.5	7116.2	5269.6
25°	6687.9	6696.9	6644.9	6613.3	6695.8	6930.8	7457.5	7623.6	8247.4	7430.3	5330.6
27.5°	7048.4	7059.7	6996.4	6922.9	6961.3	7115.0	7572.7	7721.9	8409.0	7740.0	5369.0
30°	7490.2	7494.7	7388.5	7300.4	7275.5	7389.6	7769.4	7908.4	8610.1	8105.0	5426.7
32.5°	7942.3	7976.2	7839.4	7715.1	7673.3	7708.3	8059.8	8194.3	8849.7	8497.1	5519.4
35°	8557.0	8562.7	8398.8	8247.4	8109.5	8154.7	8431.6	8528.8	9180.8	8950.3	5650.4
37.5°	9324.4	9376.3	9150.3	8867.8	8698.3	8632.7	8881.4	8987.6	9645.3	9506.3	5848.2
40°	10176.4	10195.7	10002.4	9826.1	9516.5	9326.6	9498.4	9613.7	10218.3	10169.7	6077.6
42.5°	10712.1	10753.9	10768.6	10750.5	10517.7	10199.0	10264.6	10318.8	10896.3	10792.3	6312.7
45°	10892.9	10955.1	11165.3	11610.5	11635.4	11321.2	11168.7	11220.6	11635.4	11420.7	6537.6
47.5°	10593.4	10699.7	11087.3	12000.4	12684.1	12707.8	12247.9	12133.8	12308.9	11941.6	6700.3
50°	9819.3	9841.9	10435.2	11757.4	13175.7	14033.4	13557.7	13345.2	12948.5	12327.0	6812.2
52.5°	8621.4	8647.4	9144.7	10628.5	12872.8	14960.1	15090.1	14710.4	13598.4	12626.5	6885.6
55°	6399.7	6550.0	7097.0	8531.0	11437.6	14873.1	16308.3	16092.5	14383.8	12863.8	7000.9
57.5°	3935.0	3797.1	4445.8	5804.1	8602.2	13677.5	16684.6	16754.7	15248.3	13062.7	7194.1
60°	1810.4	1837.5	2105.4	2993.6	5243.6	10699.7	15715.0	16158.0	15726.3	13055.9	7242.7
62.5°	1247.6	1222.8	1155.0	1314.3	2391.3	6767.0	13274.0	14024.4	14768.0	12650.2	7049.5
65°	1115.4	1090.5	959.4	915.4	1098.4	2949.5	9649.8	10596.8	12434.4	11626.3	6568.1
67.5°	1041.9	1008.0	872.4	786.5	784.3	1174.2	5690.0	6830.3	9222.6	9829.5	5691.1
70°	965.1	938.0	803.5	708.6	667.9	737.9	2500.9	3273.9	5988.3	7083.4	4433.3
72.5°	888.2	856.6	735.7	634.0	580.9	552.6	958.3	1246.5	3383.5	4246.9	2717.9
75°	776.4	760.5	657.7	574.1	516.5	446.4	608.0	693.9	1618.3	1950.5	1364.0
77.5°	679.2	662.2	584.3	501.8	459.9	362.8	431.7	471.2	682.6	791.1	615.9
80°	497.2	514.2	492.7	443.0	410.2	284.8	290.4	323.2	405.7	448.6	376.3
82.5°	315.3	346.9	379.7	341.3	310.8	224.9	201.2	213.6	276.9	293.8	167.3
85°	132.2	134.5	220.4	207.9	177.4	133.4	120.9	127.7	148.0	154.8	78.0
87.5°	50.9	49.7	78.0	72.3	55.4	38.4	38.4	42.9	58.8	54.2	24.9
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°	4337.3	4337.3	4337.3	4337.3	4337.3	4337.3	4337.3	4337.3	4337.3	4337.3	4337.3
2.5°	4352.0	4271.7	4112.4	3914.6	3770.0	3607.2	3463.7	3360.9	3322.5	3304.4	3270.5
5°	4348.6	4190.4	3860.4	3514.6	3236.6	2951.8	2711.1	2555.1	2541.6	2437.6	2427.4
7.5°	4349.7	4107.9	3582.4	3073.8	2650.1	2358.5	2159.6	2107.6	2045.5	2029.6	2037.5
10°	4353.1	4002.8	3284.0	2637.6	2227.4	2036.4	1961.8	1941.5	1943.8	1950.5	1951.7
12.5°	4357.6	3901.1	2974.4	2306.5	1990.1	1911.0	1903.1	1921.1	1940.4	1955.1	1958.4
15°	4363.3	3784.7	2672.7	2039.8	1871.4	1864.6	1890.6	1921.1	1948.3	1969.7	1973.1
17.5°	4356.5	3649.1	2419.5	1875.9	1805.9	1838.7	1881.6	1920.0	1944.9	1965.2	1967.5
20°	4340.7	3497.6	2175.4	1760.7	1765.2	1818.3	1864.6	1900.8	1927.9	1938.1	1946.0
22.5°	4279.6	3316.8	1963.0	1671.4	1716.6	1790.1	1845.4	1866.9	1836.4	1814.9	1820.6
25°	4175.7	3081.8	1765.2	1599.1	1672.5	1750.5	1807.0	1755.0	1730.2	1721.1	1725.6
27.5°	4045.7	2824.1	1616.0	1523.4	1616.0	1706.4	1690.6	1681.6	1670.3	1655.6	1659.0
30°	3905.6	2572.1	1489.5	1464.6	1555.0	1607.0	1613.8	1628.5	1616.0	1593.4	1602.5
32.5°	3775.6	2334.8	1393.4	1414.9	1512.1	1504.1	1555.0	1572.0	1514.3	1438.6	1442.0
35°	3664.9	2114.4	1321.1	1366.3	1438.6	1442.0	1492.8	1434.1	1371.9	1335.8	1338.0
37.5°	3581.2	1942.6	1273.6	1324.5	1344.8	1387.7	1360.6	1330.1	1322.2	1297.3	1298.5
40°	3531.5	1792.3	1243.1	1291.7	1288.3	1317.7	1230.7	1261.2	1272.5	1264.6	1265.7
42.5°	3481.8	1686.1	1211.5	1246.5	1245.4	1187.7	1168.5	1194.5	1223.9	1227.3	1225.0
45°	3442.2	1603.6	1178.7	1177.6	1200.2	1109.7	1104.1	1119.9	1161.7	1182.1	1180.9
47.5°	3398.2	1534.7	1129.0	1097.3	1104.1	1061.2	1052.1	1058.9	1109.7	1142.5	1151.6
50°	3342.8	1465.7	1066.8	1023.9	995.6	1015.9	1018.2	1019.3	1070.2	1107.5	1115.4
52.5°	3298.7	1413.7	995.6	964.0	930.1	975.3	992.2	994.5	1025.0	1055.5	1061.2
55°	3324.7	1384.4	925.5	902.9	872.4	933.5	966.2	970.7	977.5	1000.1	1003.5
57.5°	3402.7	1391.1	869.0	839.7	817.1	883.7	939.1	942.5	938.0	965.1	969.6
60°	3426.4	1387.7	827.2	769.6	756.0	830.6	899.6	906.3	905.2	944.8	952.7
62.5°	3327.0	1344.8	785.4	710.8	701.8	776.4	844.2	871.3	876.9	933.5	943.6
65°	3093.1	1256.7	730.0	648.7	648.7	718.7	791.1	828.4	844.2	919.9	931.2
67.5°	2784.5	1152.7	673.5	595.6	593.3	663.4	734.6	773.0	797.8	900.7	907.5
70°	2311.0	1012.6	603.5	537.9	537.9	601.2	665.6	712.0	748.1	864.5	864.5
72.5°	1583.3	841.9	518.7	472.4	473.5	532.3	597.8	649.8	692.7	792.2	794.5
75°	1001.3	657.7	426.0	402.3	406.8	462.2	530.0	584.3	670.1	783.2	786.5
77.5°	532.3	462.2	339.0	333.4	339.0	389.9	465.6	540.2	672.4	679.2	667.9
80°	344.7	327.7	267.8	256.5	258.8	314.2	414.7	513.1	540.2	547.0	522.1
82.5°	187.6	207.9	189.9	178.6	178.6	245.2	353.7	408.0	387.6	322.1	307.4
85°	80.2	97.2	98.3	85.9	82.5	151.4	237.3	222.6	206.8	197.8	195.5
87.5°	22.6	31.6	31.6	23.7	18.1	41.8	47.5	13.6	0.0	1.1	2.3
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)