

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: P456159

Luminaire Tested: **GALN-SA7B-827-U-T3R**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P456159
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-8)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA7B-827-U-T3R
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(7) 80 CRI, 2700K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 29815 lumens
Efficiency: N/A
Efficacy: 104.2 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G4

Input Watts (W): 286
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

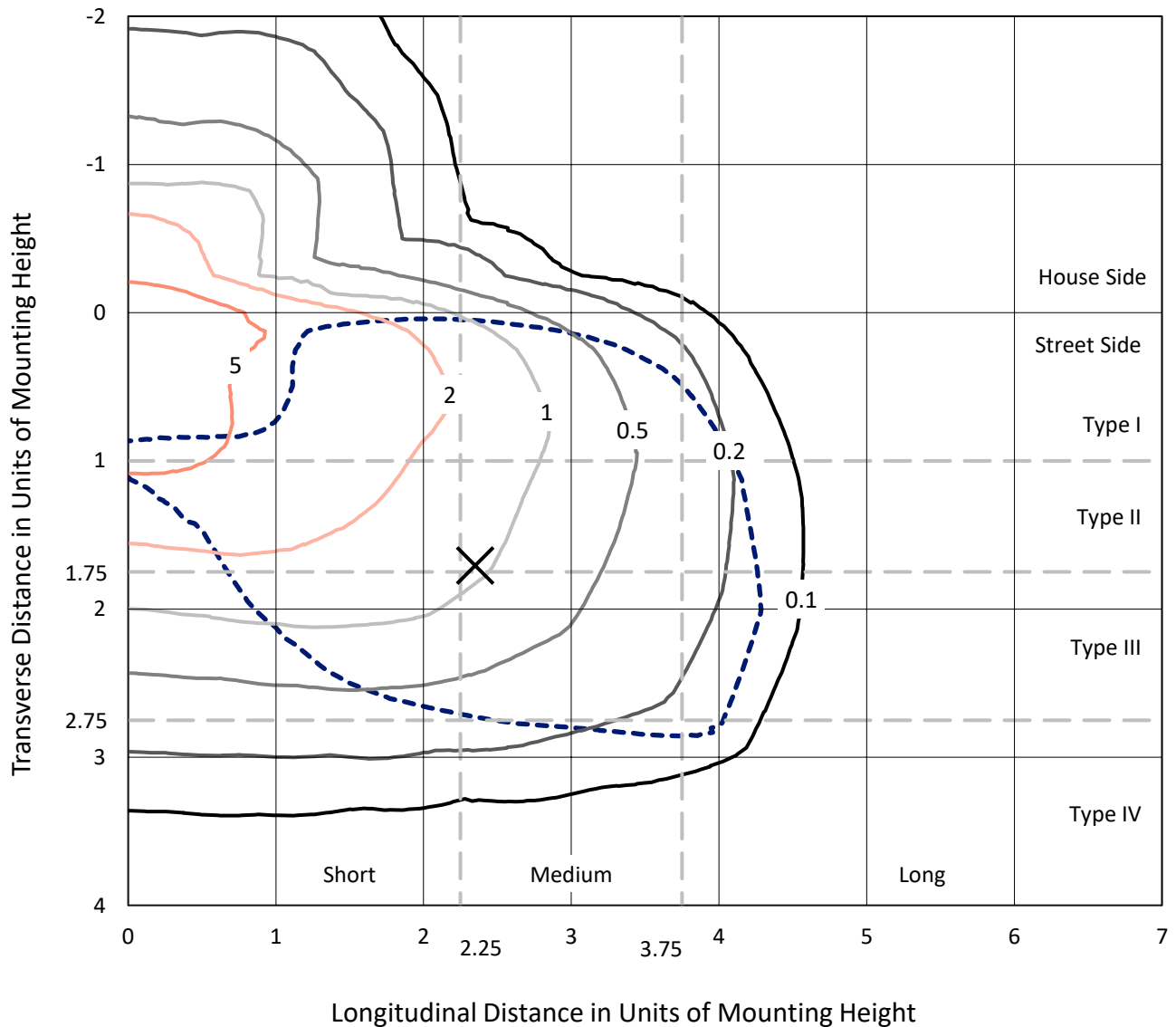




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Iso-Footcandle Lines of Horizontal Illumination

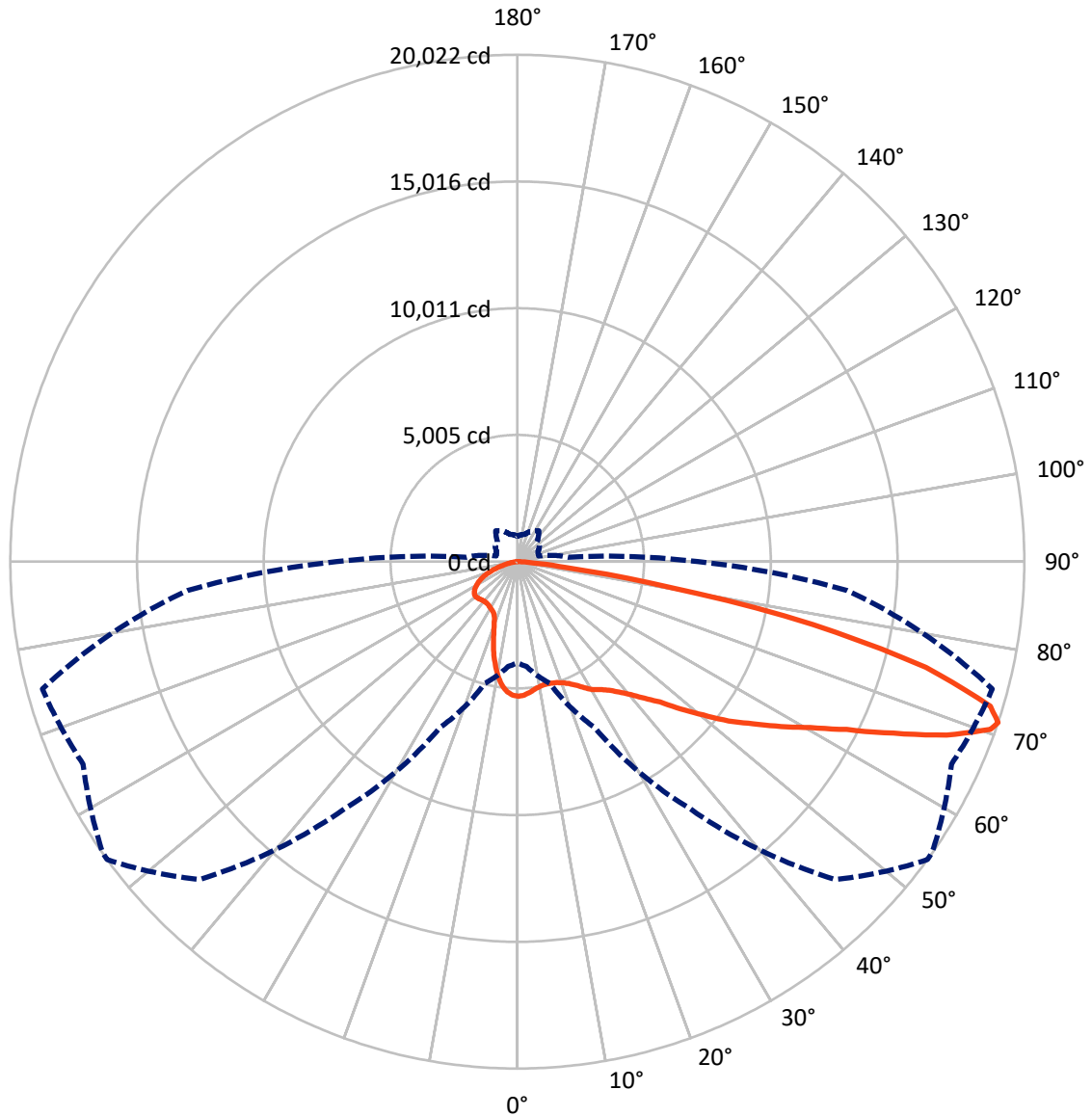
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.6 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5382.9	0.0	5382.9
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	24432.1	0.0	24432.1
	% Fixture	81.9	0.0	81.9
Total	Lumens	29815.0	0.0	29815.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	474.0	1.6
10°-20°	1251.7	4.2
20°-30°	2084.1	7.0
30°-40°	3081.8	10.3
40°-50°	4340.8	14.6
50°-60°	5812.5	19.5
60°-70°	7326.2	24.6
70°-80°	5003.8	16.8
80°-90°	440.1	1.5
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°	29815.0	100.0
0°-180°	29815.0	100.0



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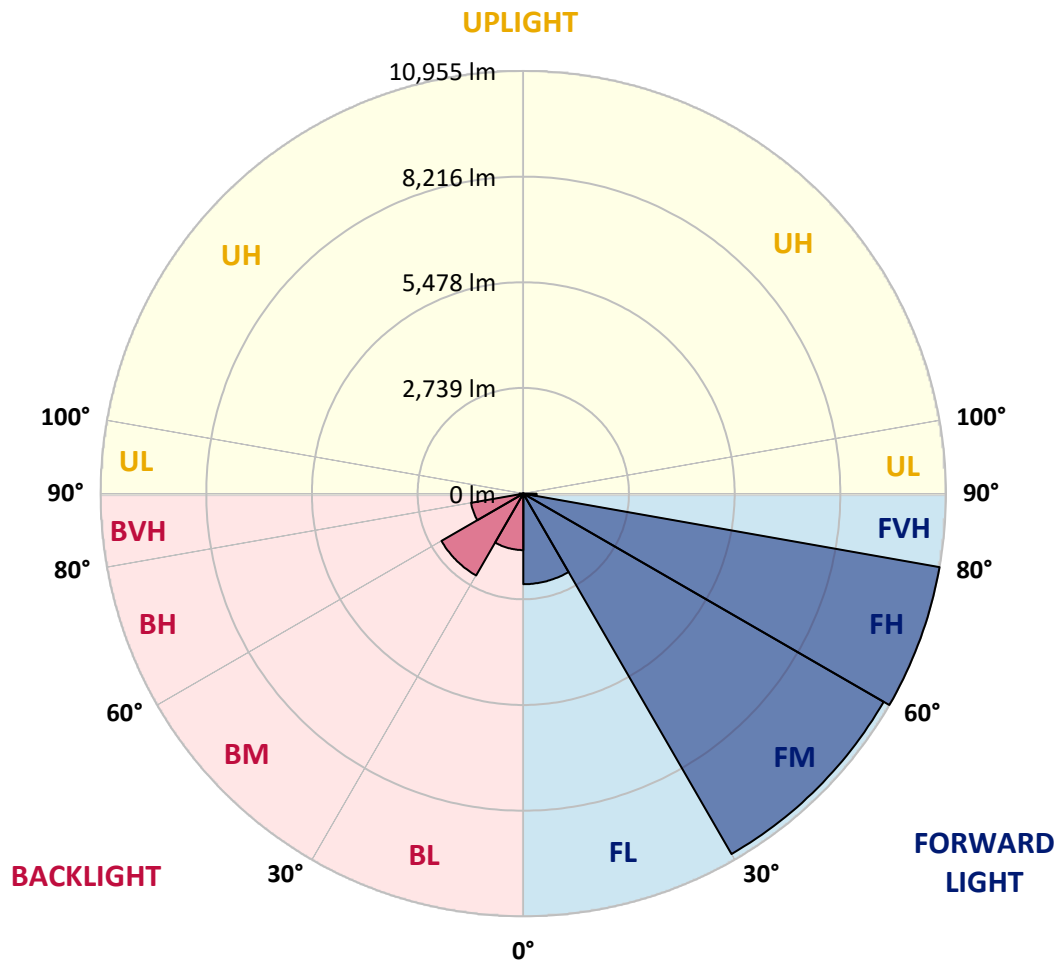
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2346.9	7.9			
FM	(30°-60°)	10786.0	36.2			
FH	(60°-80°)	10955.2	36.7			G4/12000
FVH	(80°-90°)	344.0	1.2			G3/500
BL	(0°-30°)	1463.0	4.9	B3/2500		
BM	(30°-60°)	2449.1	8.2	B2/2500		
BH	(60°-80°)	1374.8	4.6	B3/2500		G3/2500
BVH	(80°-90°)	96.1	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	5319.4	5319.4	5319.4	5319.4	5319.4	5319.4	5319.4	5319.4	5319.4	5319.4	5319.4
2.5°	5139.1	5163.2	5169.7	5185.8	5219.6	5247.0	5274.3	5271.1	5309.8	5325.9	5340.4
5°	4910.4	4916.8	4941.0	4973.2	5032.8	5108.5	5182.5	5184.2	5279.2	5354.9	5391.9
7.5°	4742.9	4763.8	4779.9	4813.7	4876.6	4958.7	5076.3	5085.9	5255.0	5404.8	5483.7
10°	4633.4	4657.5	4675.2	4717.1	4779.9	4871.7	4999.0	5016.7	5237.3	5483.7	5622.2
12.5°	4533.5	4557.7	4573.8	4628.5	4710.7	4823.4	4966.7	4987.7	5243.7	5575.5	5773.6
15°	4594.7	4614.0	4607.6	4623.7	4678.5	4807.3	4979.6	5000.6	5267.9	5664.1	5923.4
17.5°	4866.9	4883.0	4829.8	4768.7	4742.9	4837.9	5019.9	5042.4	5316.2	5755.9	6076.4
20°	5267.9	5311.4	5195.4	5058.5	4934.5	4947.4	5103.6	5127.8	5383.9	5847.7	6232.6
22.5°	5789.7	5821.9	5680.2	5454.7	5226.0	5108.5	5229.3	5243.7	5485.3	5966.9	6403.3
25°	6403.3	6422.6	6226.1	5936.3	5606.1	5383.9	5401.6	5427.3	5652.8	6102.1	6554.7
27.5°	6999.2	7060.4	6833.3	6479.0	6044.2	5673.7	5638.3	5654.4	5834.8	6177.8	6659.4
30°	7706.2	7701.3	7461.4	7050.7	6493.5	5989.4	5862.2	5859.0	5933.0	6214.9	6735.1
32.5°	8269.8	8335.9	8100.7	7653.0	7007.2	6316.3	6016.8	6010.3	6008.7	6279.3	6847.8
35°	8910.8	8920.5	8704.7	8253.7	7562.8	6727.0	6232.6	6200.4	6163.3	6417.8	7000.8
37.5°	9484.2	9529.2	9331.2	8825.5	8108.8	7153.8	6528.9	6508.0	6395.2	6657.8	7245.6
40°	9931.9	9965.7	9846.5	9365.0	8646.7	7614.4	6905.8	6867.1	6730.2	7050.7	7572.5
42.5°	10078.4	10147.7	10194.4	9957.6	9265.1	8160.3	7369.6	7321.3	7216.6	7646.6	7949.4
45°	10089.7	10199.2	10445.6	10456.9	9886.8	8814.2	7910.7	7876.9	7868.8	8410.0	8479.2
47.5°	10004.3	10115.5	10529.4	10753.2	10440.8	9474.5	8691.8	8638.7	8643.5	9353.7	9073.5
50°	9798.2	9930.3	10432.7	10943.3	10874.0	10160.6	9516.4	9498.7	9598.5	10431.1	9690.3
52.5°	9410.1	9569.5	10332.9	11062.4	11196.1	10751.6	10453.7	10403.7	10656.6	11600.3	10365.1
55°	8335.9	8575.8	9967.3	11128.5	11502.1	11316.9	11297.6	11387.8	11722.7	12875.8	11107.5
57.5°	7775.4	7955.8	9173.3	11139.7	11888.6	11974.0	12283.2	12305.7	12891.9	14230.3	11946.6
60°	7469.4	7628.9	8738.5	11065.7	12428.1	12787.3	13291.3	13371.9	14033.8	15697.4	12816.3
62.5°	7202.1	7339.0	8477.6	10809.6	13036.9	13993.5	14597.5	14636.1	15330.2	17317.6	13674.6
65°	6572.4	6728.6	7952.6	10553.5	13561.9	15500.9	16330.3	16285.2	16710.4	18715.5	14212.5
67.5°	5723.7	5921.8	6971.8	9669.4	13821.2	17148.5	18282.2	18225.9	18072.9	19631.8	14367.2
70°	4639.8	4746.1	5717.2	8141.0	12785.7	18013.3	19823.5	19763.9	18916.8	19752.6	13636.0
71°	3992.4	4158.3	4978.0	7231.1	11924.0	17749.2	20021.6	20005.5	18918.4	19419.2	13085.2
72.5°	3116.3	3217.8	3942.5	5602.9	10134.8	16248.2	19532.0	19593.2	18507.7	18493.2	11949.8
75°	1971.2	2016.3	2473.7	3298.3	5561.0	11506.9	16673.4	16839.2	16433.4	15137.0	8886.7
77.5°	1145.1	1203.0	1481.6	1943.9	2402.8	6245.5	11930.5	12110.9	11418.4	8334.3	3638.1
80°	666.7	731.2	976.0	1129.0	1103.2	2317.5	6074.8	6382.4	4944.2	2104.9	1021.0
82.5°	370.4	413.9	686.1	687.7	587.8	756.9	1911.6	2000.2	1410.8	848.7	417.1
85°	269.0	304.4	442.9	401.0	281.8	325.3	665.1	697.3	570.1	357.5	135.3
87.5°	95.0	135.3	243.2	193.3	77.3	67.6	191.6	156.2	144.9	99.9	30.6
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°	5319.4	5319.4	5319.4	5319.4	5319.4	5319.4	5319.4	5319.4	5319.4	5319.4	5319.4
2.5°	5348.4	5351.6	5335.5	5306.6	5277.6	5240.5	5198.7	5166.4	5151.9	5150.3	5148.7
5°	5406.4	5414.5	5353.3	5263.1	5163.2	5040.8	4936.1	4817.0	4786.4	4738.1	4752.5
7.5°	5499.8	5495.0	5374.2	5182.5	4949.0	4689.7	4470.7	4343.5	4211.4	4174.4	4176.0
10°	5633.5	5602.9	5374.2	5018.3	4628.5	4243.6	3937.6	3744.4	3639.7	3552.7	3520.5
12.5°	5775.2	5697.9	5322.7	4788.0	4216.3	3744.4	3415.8	3154.9	3087.3	3016.4	3018.1
15°	5910.5	5781.6	5221.2	4464.3	3771.8	3211.3	2892.4	2736.2	2715.3	2723.3	2721.7
17.5°	6032.9	5841.2	5066.6	4103.5	3253.2	2753.9	2584.8	2596.1	2652.5	2692.7	2697.6
20°	6156.9	5876.7	4836.3	3620.4	2763.6	2476.9	2483.4	2571.9	2657.3	2712.1	2720.1
22.5°	6274.5	5892.8	4565.7	3153.3	2409.3	2359.4	2454.4	2549.4	2633.1	2686.3	2694.3
25°	6351.8	5855.7	4182.4	2665.4	2235.4	2317.5	2417.3	2497.9	2568.7	2623.5	2636.4
27.5°	6372.7	5736.6	3707.3	2270.8	2154.8	2277.2	2369.0	2428.6	2483.4	2534.9	2544.6
30°	6361.4	5561.0	3185.5	2038.9	2108.1	2230.5	2301.4	2344.9	2410.9	2451.2	2459.2
32.5°	6343.7	5356.5	2641.2	1914.9	2069.5	2187.0	2228.9	2267.6	2266.0	2249.8	2261.1
35°	6350.1	5111.7	2199.9	1840.8	2035.7	2154.8	2190.3	2141.9	2003.4	1997.0	1990.6
37.5°	6384.0	4870.1	1879.4	1789.3	2017.9	2150.0	2169.3	1947.1	1824.7	1768.3	1753.8
40°	6470.9	4588.3	1668.5	1750.6	2016.3	2187.0	2074.3	1848.8	1613.7	1504.2	1496.1
42.5°	6586.9	4311.3	1539.6	1726.4	2035.7	2243.4	2035.7	1710.3	1454.3	1389.8	1380.2
45°	6759.2	3994.0	1468.8	1715.2	2064.6	2264.3	2022.8	1608.9	1389.8	1338.3	1338.3
47.5°	6954.1	3691.2	1430.1	1707.1	2101.7	2249.8	1908.4	1576.7	1359.3	1365.7	1396.3
50°	7147.3	3428.7	1401.1	1689.4	2133.9	2241.8	1861.7	1575.1	1367.3	1449.4	1504.2
52.5°	7371.2	3243.5	1365.7	1660.4	2133.9	2190.3	1847.2	1607.3	1389.8	1414.0	1438.2
55°	7641.8	3185.5	1320.6	1597.6	2095.2	2061.4	1839.2	1654.0	1406.0	1349.6	1359.3
57.5°	7999.3	3279.0	1277.1	1518.7	2006.7	1927.8	1836.0	1666.9	1368.9	1322.2	1312.5
60°	8414.8	3464.2	1264.2	1438.2	1885.9	1813.4	1816.6	1629.8	1317.4	1269.1	1277.1
62.5°	8706.3	3575.3	1256.2	1377.0	1753.8	1687.8	1769.9	1584.7	1294.8	1253.0	1261.0
65°	8706.3	3440.0	1182.1	1283.6	1583.1	1536.4	1713.6	1528.4	1265.8	1217.5	1209.5
67.5°	8376.1	3045.4	1069.4	1143.4	1394.7	1364.1	1634.6	1460.7	1222.4	1185.3	1166.0
70°	7516.1	2309.4	927.6	979.2	1156.3	1183.7	1533.2	1368.9	1149.9	1104.8	1075.8
71°	7137.7	2011.5	868.1	895.4	1064.5	1104.8	1484.9	1330.3	1117.7	1053.3	1001.7
72.5°	6408.1	1694.2	777.9	789.1	909.9	982.4	1383.4	1256.2	1056.5	964.7	906.7
75°	4868.5	1236.9	626.5	620.0	673.2	779.5	1170.8	1119.3	926.0	802.0	768.2
77.5°	2103.3	673.2	468.7	473.5	457.4	591.0	921.2	961.5	794.0	652.2	621.6
80°	637.8	388.1	320.5	326.9	306.0	396.2	649.0	753.7	637.8	507.3	465.4
82.5°	326.9	231.9	219.0	215.8	194.9	223.9	393.0	515.4	455.8	317.3	280.2
85°	141.7	124.0	107.9	104.7	91.8	80.5	140.1	257.7	241.6	177.2	169.1
87.5°	35.4	32.2	20.9	19.3	11.3	1.6	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)