

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: P459010

Luminaire Tested: **GALN-SA5B-735-U-AFL**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P459010  
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-SA5B-735-U-AFL  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(5) 70 CRI, 3500K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 26805 lumens  
Efficiency: N/A  
Efficacy: 131.4 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G2

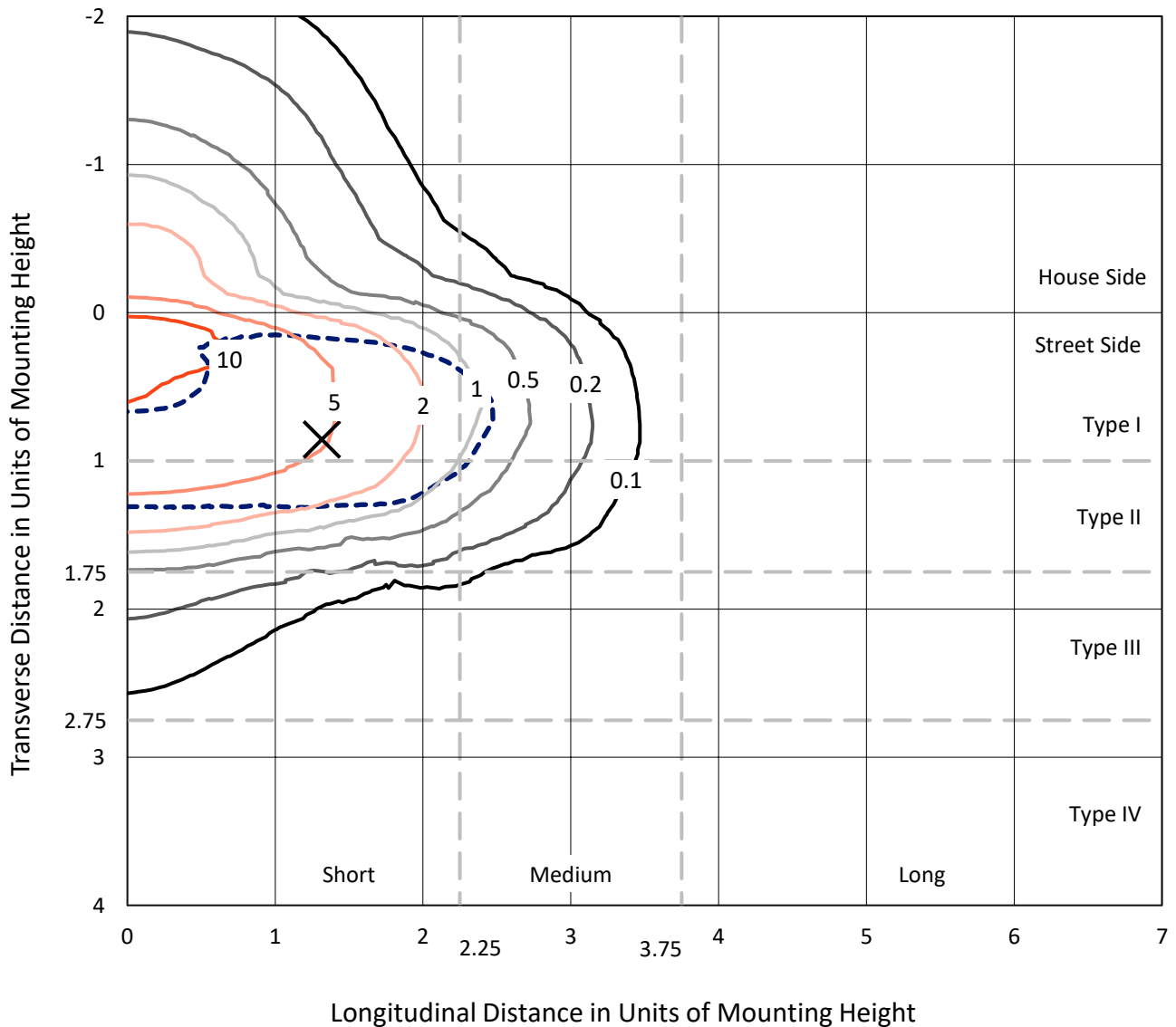
Input Watts (W): 204  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

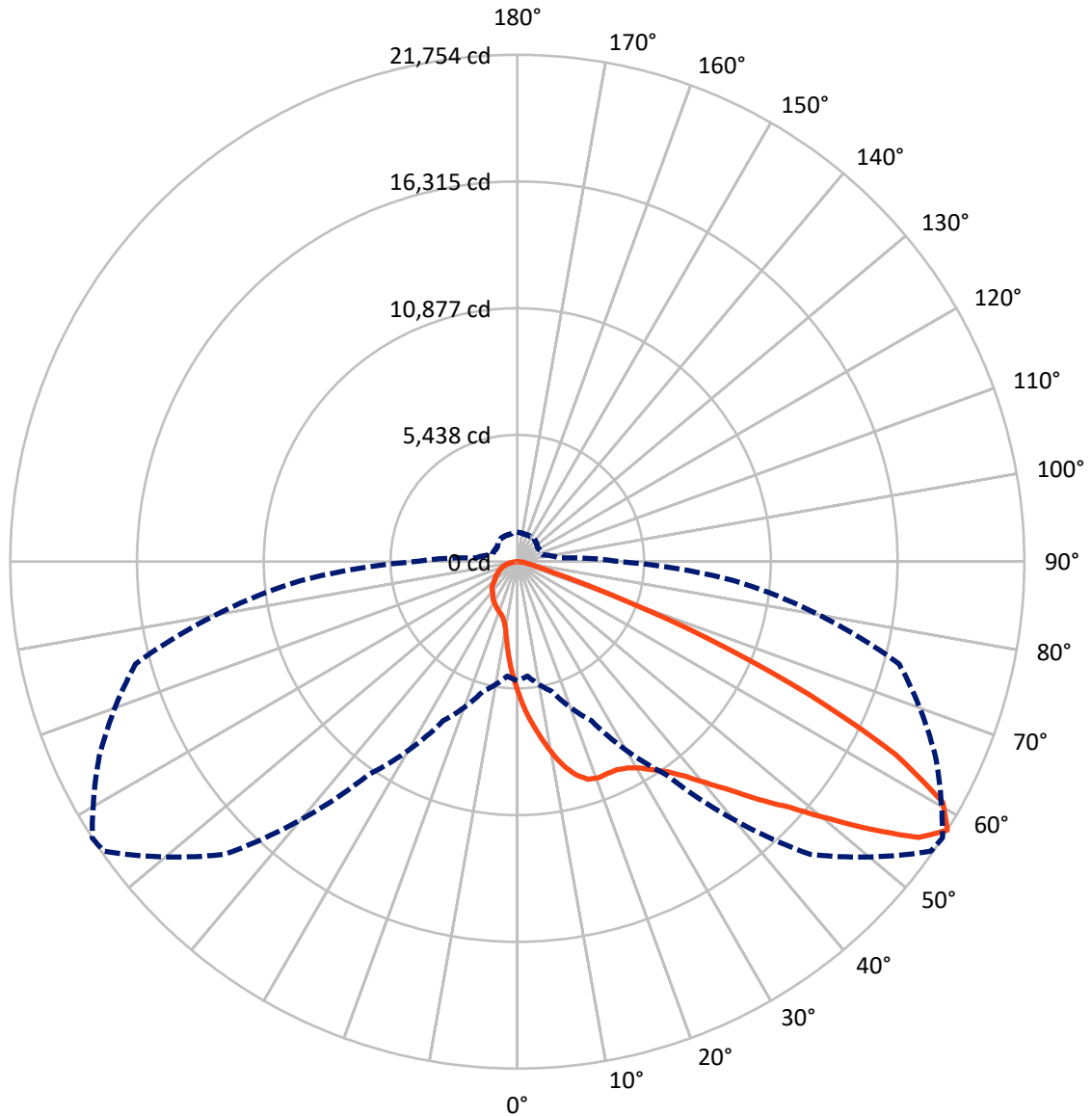
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 13.7 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
<b>House Side</b>	Lumens	4076.3	0.0	4076.3
	% Fixture	15.2	0.0	15.2
<b>Street Side</b>	Lumens	22728.7	0.0	22728.7
	% Fixture	84.8	0.0	84.8
<b>Total</b>	Lumens	26805.0	0.0	26805.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	541.2	2.0
10°-20°	1595.1	6.0
20°-30°	2648.6	9.9
30°-40°	3989.6	14.9
40°-50°	5990.0	22.3
50°-60°	6714.0	25.0
60°-70°	3929.4	14.7
70°-80°	1162.3	4.3
80°-90°	234.9	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°	26805.0	100.0
0°-180°	26805.0	100.0

**Coefficient of Utilization**



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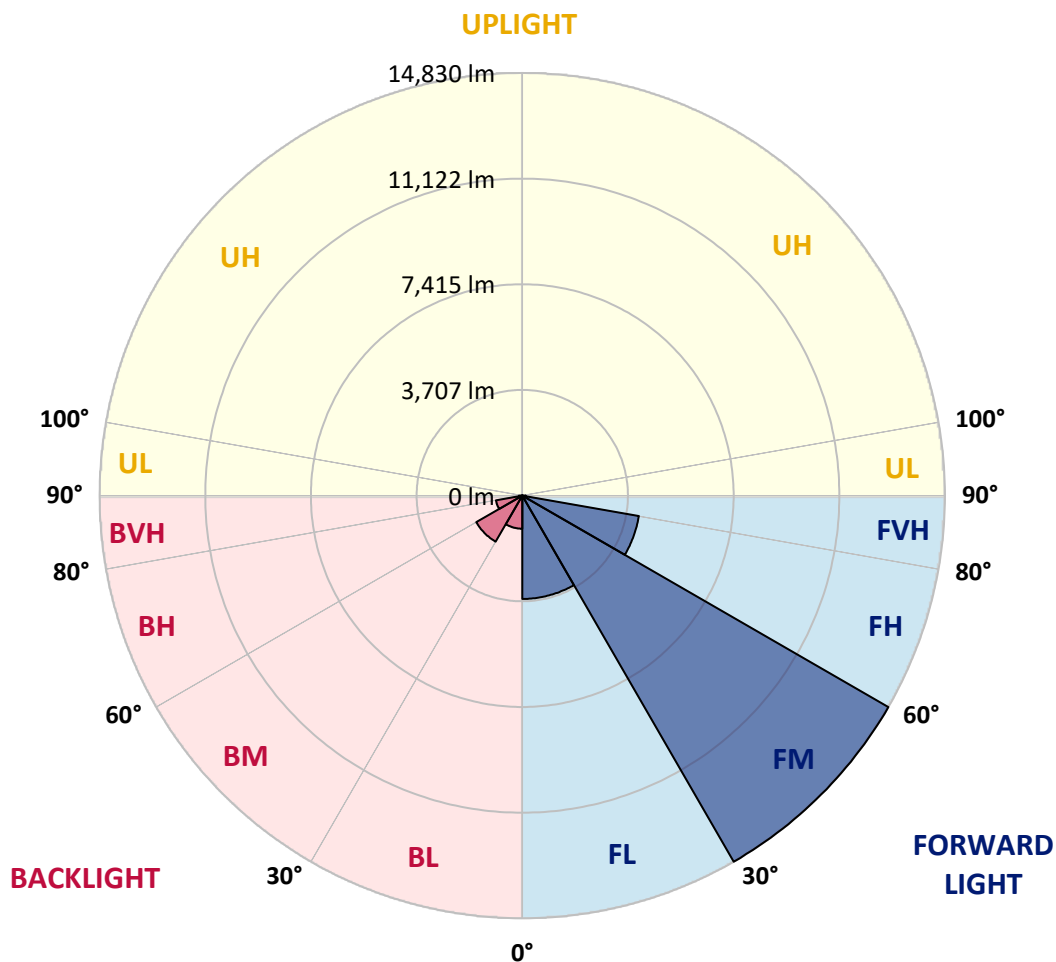
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3623.4	13.5			
FM	(30°-60°)	14829.7	55.3			
FH	(60°-80°)	4153.7	15.5			G2/5000
FVH	(80°-90°)	121.9	0.5			G2/225
BL	(0°-30°)	1161.5	4.3	B3/2500		
BM	(30°-60°)	1863.8	7.0	B2/2500		
BH	(60°-80°)	937.9	3.5	B2/1000		G2/1000
BVH	(80°-90°)	113.0	0.4			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G2**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	5631.4	5631.4	5631.4	5631.4	5631.4	5631.4	5631.4	5631.4	5631.4	5631.4	5631.4
2.5°	6997.5	6921.2	6861.0	6808.2	6739.2	6552.9	6366.5	6363.6	6215.4	5986.5	5751.7
5°	8137.5	8034.8	8048.0	7883.7	7719.4	7449.4	7054.7	7034.1	6718.7	6290.2	5854.5
7.5°	8880.0	8881.5	8840.4	8746.5	8568.9	8262.3	7814.7	7713.5	7274.8	6624.8	5971.8
10°	8841.8	8881.5	8950.4	9031.1	9085.4	8934.3	8526.4	8403.1	7832.3	7029.7	6102.4
12.5°	8334.2	8395.8	8494.1	8696.6	9023.8	9273.2	9133.8	9034.0	8477.9	7433.2	6246.2
15°	8017.2	8053.9	8108.2	8244.7	8596.8	9194.0	9554.9	9502.1	9086.9	7889.6	6407.6
17.5°	7920.4	7957.1	7974.7	8058.3	8309.2	8921.1	9720.7	9814.6	9626.8	8309.2	6570.5
20°	8017.2	8034.8	8034.8	8084.7	8281.3	8761.1	9713.4	9902.7	10069.9	8812.5	6723.1
22.5°	8271.1	8278.4	8268.1	8285.7	8432.5	8805.2	9644.4	9879.2	10428.0	9239.5	6841.9
25°	8683.4	8695.1	8627.6	8586.5	8693.6	8998.8	9682.6	9898.3	10708.2	9647.4	6921.2
27.5°	9151.4	9166.1	9083.9	8988.6	9038.4	9238.0	9832.2	10025.9	10918.0	10049.4	6971.1
30°	9725.1	9731.0	9593.1	9478.6	9446.4	9594.5	10087.6	10268.0	11179.2	10523.3	7045.9
32.5°	10312.0	10356.1	10178.5	10017.1	9962.8	10008.3	10464.6	10639.3	11490.3	11032.5	7166.2
35°	11110.3	11117.6	10904.8	10708.2	10529.2	10587.9	10947.4	11073.6	11920.2	11620.9	7336.4
37.5°	12106.5	12174.0	11880.6	11513.8	11293.7	11208.6	11531.4	11669.3	12523.2	12342.8	7593.2
40°	13212.9	13237.8	12986.9	12758.0	12356.0	12109.5	12332.5	12482.2	13267.2	13204.1	7891.0
42.5°	13908.4	13962.6	13981.7	13958.2	13656.0	13242.2	13327.3	13397.7	14147.5	14012.5	8196.2
45°	14143.1	14223.8	14496.7	15074.8	15107.1	14699.2	14501.1	14568.6	15107.1	14828.3	8488.2
47.5°	13754.3	13892.2	14395.5	15581.1	16468.8	16499.6	15902.4	15754.2	15981.6	15504.8	8699.5
50°	12749.2	12778.5	13548.9	15265.6	17107.0	18220.7	17603.0	17327.1	16812.1	16005.1	8844.8
52.5°	11193.9	11227.6	11873.2	13799.8	16713.8	19423.9	19592.6	19099.6	17655.8	16393.9	8940.1
55°	8309.2	8504.4	9214.5	11076.5	14850.3	19310.9	21174.3	20894.1	18675.6	16702.1	9089.8
57.5°	5109.1	4930.1	5772.3	7536.0	11168.9	17758.5	21662.9	21753.9	19798.0	16960.3	9340.7
60°	2350.6	2385.8	2733.5	3886.8	6808.2	13892.2	20404.0	20979.2	20418.7	16951.5	9403.8
62.5°	1619.9	1587.6	1499.6	1706.4	3104.8	8786.1	17234.7	18209.0	19174.4	16424.7	9152.9
65°	1448.2	1415.9	1245.7	1188.5	1426.2	3829.6	12529.1	13758.7	16144.5	15095.4	8527.8
67.5°	1352.8	1308.8	1132.7	1021.2	1018.3	1524.5	7387.8	8868.2	11974.5	12762.4	7389.2
70°	1253.1	1217.8	1043.2	920.0	867.2	958.1	3247.1	4250.7	7775.1	9196.9	5756.1
72.5°	1153.3	1112.2	955.2	823.1	754.2	717.5	1244.3	1618.4	4393.0	5514.0	3528.8
75°	1008.0	987.5	854.0	745.4	670.5	579.6	789.4	900.9	2101.1	2532.5	1771.0
77.5°	881.8	859.8	758.6	651.5	597.2	471.0	560.5	611.9	886.2	1027.1	799.7
80°	645.6	667.6	639.7	575.2	532.6	369.8	377.1	419.6	526.8	582.5	488.6
82.5°	409.4	450.5	493.0	443.1	403.5	292.0	261.2	277.3	359.5	381.5	217.2
85°	171.7	174.6	286.1	270.0	230.4	173.1	157.0	165.8	192.2	201.0	101.2
87.5°	66.0	64.6	101.2	93.9	71.9	49.9	49.9	55.8	76.3	70.4	32.3
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°	5631.4	5631.4	5631.4	5631.4	5631.4	5631.4	5631.4	5631.4	5631.4	5631.4	5631.4
2.5°	5650.5	5546.3	5339.4	5082.7	4894.8	4683.6	4497.2	4363.7	4313.8	4290.3	4246.3
5°	5646.1	5440.7	5012.2	4563.2	4202.3	3832.5	3520.0	3317.5	3299.9	3164.9	3151.7
7.5°	5647.6	5333.6	4651.3	3991.0	3440.8	3062.2	2804.0	2736.5	2655.8	2635.2	2645.5
10°	5652.0	5197.1	4263.9	3424.6	2892.0	2644.0	2547.2	2520.8	2523.7	2532.5	2534.0
12.5°	5657.8	5065.1	3861.9	2994.7	2583.9	2481.2	2470.9	2494.4	2519.3	2538.4	2542.8
15°	5665.2	4913.9	3470.1	2648.4	2429.8	2421.0	2454.8	2494.4	2529.6	2557.5	2561.9
17.5°	5656.4	4737.8	3141.4	2435.7	2344.7	2387.3	2443.0	2492.9	2525.2	2551.6	2554.5
20°	5635.8	4541.2	2824.5	2286.0	2291.9	2360.9	2421.0	2468.0	2503.2	2516.4	2526.7
22.5°	5556.6	4306.5	2548.7	2170.1	2228.8	2324.2	2396.1	2423.9	2384.3	2356.5	2363.8
25°	5421.6	4001.3	2291.9	2076.2	2171.6	2272.8	2346.2	2278.7	2246.4	2234.7	2240.5
27.5°	5252.9	3666.7	2098.2	1977.9	2098.2	2215.6	2195.1	2183.3	2168.6	2149.6	2154.0
30°	5070.9	3339.5	1933.9	1901.6	2019.0	2086.5	2095.3	2114.4	2098.2	2068.9	2080.6
32.5°	4902.2	3031.4	1809.2	1837.0	1963.2	1953.0	2019.0	2041.0	1966.2	1867.8	1872.3
35°	4758.4	2745.3	1715.3	1773.9	1867.8	1872.3	1938.3	1862.0	1781.3	1734.3	1737.3
37.5°	4649.8	2522.3	1653.6	1719.7	1746.1	1801.8	1766.6	1727.0	1716.7	1684.4	1685.9
40°	4585.3	2327.1	1614.0	1677.1	1672.7	1710.8	1597.9	1637.5	1652.2	1641.9	1643.4
42.5°	4520.7	2189.2	1572.9	1618.4	1616.9	1542.1	1517.2	1550.9	1589.1	1593.5	1590.5
45°	4469.3	2082.1	1530.4	1528.9	1558.3	1440.9	1433.5	1454.1	1508.4	1534.8	1533.3
47.5°	4412.1	1992.6	1465.8	1424.7	1433.5	1377.8	1366.0	1374.8	1440.9	1483.4	1495.2
50°	4340.2	1903.1	1385.1	1329.4	1292.7	1319.1	1322.0	1323.5	1389.5	1437.9	1448.2
52.5°	4283.0	1835.6	1292.7	1251.6	1207.6	1266.3	1288.3	1291.2	1330.8	1370.4	1377.8
55°	4316.7	1797.4	1201.7	1172.4	1132.7	1212.0	1254.5	1260.4	1269.2	1298.5	1302.9
57.5°	4418.0	1806.2	1128.3	1090.2	1060.8	1147.4	1219.3	1223.7	1217.8	1253.1	1258.9
60°	4448.8	1801.8	1074.0	999.2	981.6	1078.5	1168.0	1176.8	1175.3	1226.6	1236.9
62.5°	4319.7	1746.1	1019.8	922.9	911.2	1008.0	1096.1	1131.3	1138.6	1212.0	1225.2
65°	4015.9	1631.6	947.9	842.2	842.2	933.2	1027.1	1075.5	1096.1	1194.4	1209.0
67.5°	3615.4	1496.6	874.5	773.3	770.3	861.3	953.7	1003.6	1035.9	1169.4	1178.2
70°	3000.6	1314.7	783.5	698.4	698.4	780.6	864.2	924.4	971.3	1122.5	1122.5
72.5°	2055.7	1093.1	673.5	613.3	614.8	691.1	776.2	843.7	899.4	1028.6	1031.5
75°	1300.0	854.0	553.2	522.4	528.2	600.1	688.2	758.6	870.1	1016.8	1021.2
77.5°	691.1	600.1	440.2	432.8	440.2	506.2	604.5	701.4	873.0	881.8	867.2
80°	447.5	425.5	347.7	333.1	336.0	407.9	538.5	666.1	701.4	710.2	677.9
82.5°	243.6	270.0	246.5	231.8	231.8	318.4	459.3	529.7	503.3	418.2	399.1
85°	104.2	126.2	127.7	111.5	107.1	196.6	308.1	289.1	268.5	256.8	253.8
87.5°	29.3	41.1	41.1	30.8	23.5	54.3	61.6	17.6	0.0	1.5	2.9
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)