

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: P453964

Luminaire Tested: **GALN-SA5A-740-U-AFL**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P453964  
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-SA5A-740-U-AFL  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(5) 70 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 23126 lumens  
Efficiency: N/A  
Efficacy: 150.2 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G2

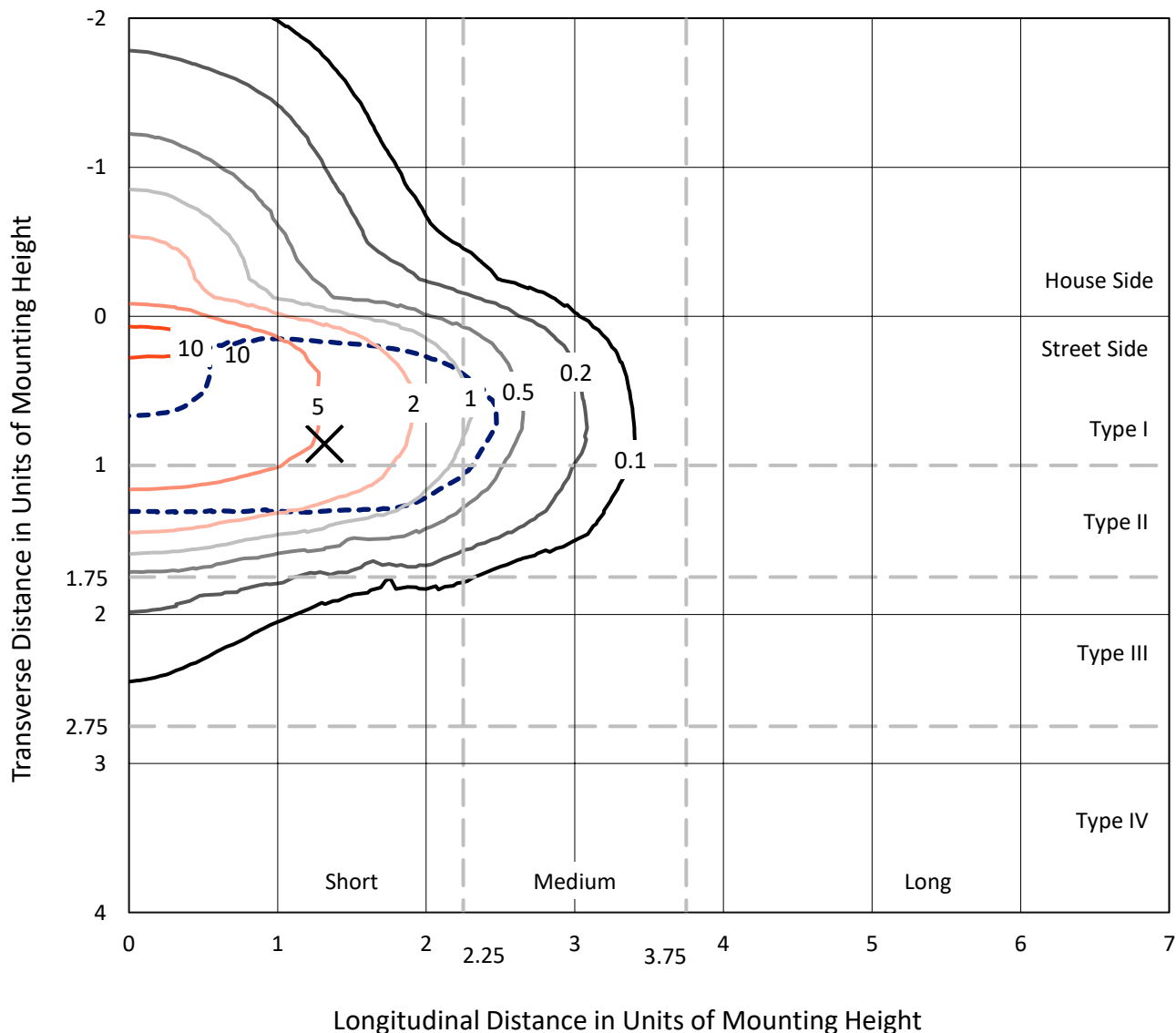
Input Watts (W): 154  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

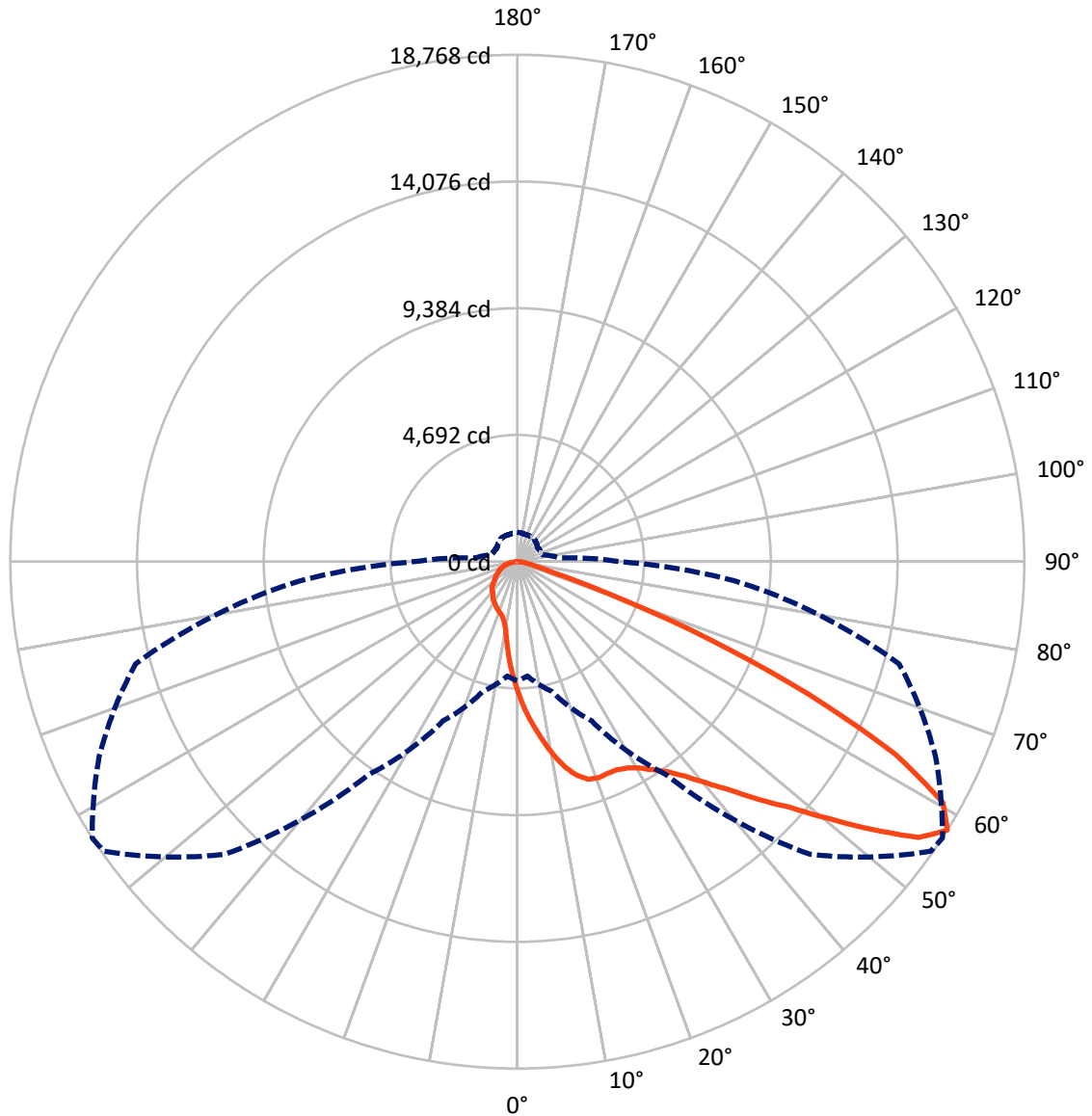
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.8 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	3516.8	0.0	3516.8
	% Fixture	15.2	0.0	15.2
<b>Street Side</b>	Lumens	19609.2	0.0	19609.2
	% Fixture	84.8	0.0	84.8
<b>Total</b>	Lumens	23126.0	0.0	23126.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	466.9	2.0
10°-20°	1376.1	6.0
20°-30°	2285.1	9.9
30°-40°	3442.0	14.9
40°-50°	5167.8	22.3
50°-60°	5792.5	25.0
60°-70°	3390.1	14.7
70°-80°	1002.8	4.3
80°-90°	202.7	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°	23126.0	100.0
0°-180°	23126.0	100.0

**Coefficient of Utilization**



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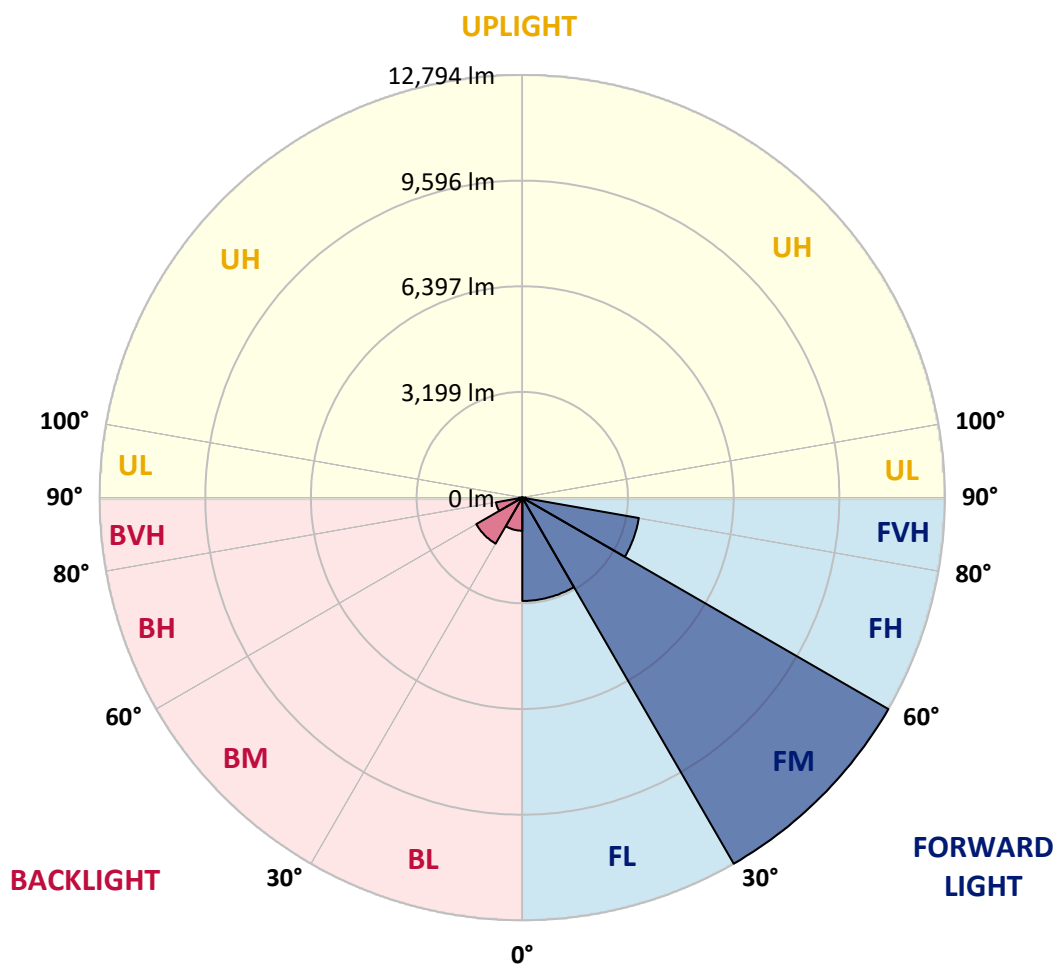
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3126.1	13.5			
FM	(30°-60°)	12794.3	55.3			
FH	(60°-80°)	3583.6	15.5			G2/5000
FVH	(80°-90°)	105.2	0.5			G2/225
BL	(0°-30°)	1002.1	4.3	B3/2500		
BM	(30°-60°)	1608.0	7.0	B2/2500		
BH	(60°-80°)	809.2	3.5	B2/1000		G2/1000
BVH	(80°-90°)	97.5	0.4			G1/100
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°	4858.5	4858.5	4858.5	4858.5	4858.5	4858.5	4858.5	4858.5	4858.5	4858.5	4858.5
2.5°	6037.1	5971.2	5919.3	5873.8	5814.3	5653.5	5492.7	5490.2	5362.3	5164.9	4962.3
5°	7020.7	6932.0	6943.4	6801.7	6659.9	6427.0	6086.4	6068.7	5796.5	5426.9	5050.9
7.5°	7661.2	7662.5	7627.0	7546.0	7392.8	7128.3	6742.2	6654.8	6276.3	5715.5	5152.2
10°	7628.3	7662.5	7722.0	7791.6	7838.4	7708.0	7356.1	7249.8	6757.4	6064.9	5264.9
12.5°	7190.3	7243.5	7328.3	7503.0	7785.3	8000.5	7880.2	7794.1	7314.3	6413.0	5388.9
15°	6916.9	6948.5	6995.3	7113.1	7416.9	7932.1	8243.5	8197.9	7839.7	6806.7	5528.2
17.5°	6833.3	6865.0	6880.1	6952.3	7168.8	7696.6	8386.6	8467.6	8305.5	7168.8	5668.7
20°	6916.9	6932.0	6932.0	6975.1	7144.7	7558.7	8380.2	8543.5	8687.8	7603.0	5800.3
22.5°	7135.9	7142.2	7133.3	7148.5	7275.1	7596.6	8320.7	8523.3	8996.7	7971.3	5902.9
25°	7491.6	7501.7	7443.5	7408.0	7500.4	7763.7	8353.6	8539.7	9238.5	8323.3	5971.2
27.5°	7895.4	7908.1	7837.2	7754.9	7797.9	7970.1	8482.8	8649.9	9419.5	8670.1	6014.3
30°	8390.4	8395.4	8276.4	8177.7	8149.8	8277.7	8703.0	8858.7	9644.9	9079.0	6078.8
32.5°	8896.7	8934.7	8781.5	8642.3	8595.4	8634.7	9028.4	9179.0	9913.2	9518.3	6182.6
35°	9585.4	9591.7	9408.1	9238.5	9084.1	9134.7	9444.8	9553.7	10284.1	10025.9	6329.5
37.5°	10444.9	10503.1	10250.0	9933.5	9743.6	9670.2	9948.7	10067.7	10804.4	10648.7	6551.0
40°	11399.4	11420.9	11204.4	11007.0	10660.1	10447.4	10639.9	10769.0	11446.2	11391.8	6808.0
42.5°	11999.4	12046.3	12062.7	12042.5	11781.7	11424.7	11498.1	11558.9	12205.8	12089.3	7071.3
45°	12202.0	12271.6	12507.1	13005.8	13033.7	12681.7	12510.8	12569.1	13033.7	12793.1	7323.2
47.5°	11866.5	11985.5	12419.7	13442.5	14208.4	14235.0	13719.8	13591.9	13788.1	13376.7	7505.5
50°	10999.4	11024.7	11689.3	13170.4	14759.1	15719.9	15187.0	14949.0	14504.6	13808.4	7630.8
52.5°	9657.5	9686.6	10243.6	11905.7	14419.8	16757.9	16903.5	16478.2	15232.5	14143.9	7713.1
55°	7168.8	7337.1	7949.8	9556.2	12812.1	16660.5	18268.1	18026.4	16112.3	14409.7	7842.2
57.5°	4407.8	4253.4	4980.0	6501.6	9636.0	15321.1	18689.7	18768.2	17080.7	14632.5	8058.7
60°	2028.0	2058.3	2358.4	3353.4	5873.8	11985.5	17603.5	18099.8	17616.2	14624.9	8113.1
62.5°	1397.5	1369.7	1293.7	1472.2	2678.6	7580.2	14869.2	15709.8	16542.7	14170.4	7896.7
65°	1249.4	1221.6	1074.7	1025.4	1230.5	3304.0	10809.5	11870.3	13928.7	13023.5	7357.4
67.5°	1167.2	1129.2	977.3	881.1	878.5	1315.3	6373.8	7651.1	10331.0	11010.8	6375.1
70°	1081.1	1050.7	900.1	793.7	748.1	826.6	2801.4	3667.3	6708.0	7934.6	4966.1
72.5°	995.0	959.5	824.1	710.2	650.7	619.0	1073.5	1396.3	3790.1	4757.2	3044.5
75°	869.7	851.9	736.8	643.1	578.5	500.0	681.1	777.3	1812.8	2184.9	1527.9
77.5°	760.8	741.8	654.5	562.1	515.2	406.4	483.6	527.9	764.6	886.1	689.9
80°	557.0	576.0	551.9	496.2	459.5	319.0	325.3	362.0	454.5	502.6	421.5
82.5°	353.2	388.6	425.3	382.3	348.1	251.9	225.3	239.3	310.1	329.1	187.4
85°	148.1	150.6	246.8	232.9	198.7	149.4	135.5	143.0	165.8	173.4	87.3
87.5°	57.0	55.7	87.3	81.0	62.0	43.0	43.0	48.1	65.8	60.8	27.8
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°	4858.5	4858.5	4858.5	4858.5	4858.5	4858.5	4858.5	4858.5	4858.5	4858.5	4858.5
2.5°	4875.0	4785.1	4606.6	4385.1	4223.0	4040.7	3880.0	3764.8	3721.7	3701.5	3663.5
5°	4871.2	4693.9	4324.3	3936.9	3625.5	3306.5	3036.9	2862.2	2847.0	2730.5	2719.1
7.5°	4872.4	4601.5	4012.9	3443.2	2968.5	2641.9	2419.1	2360.9	2291.3	2273.5	2282.4
10°	4876.2	4483.8	3678.7	2954.6	2495.1	2281.1	2197.6	2174.8	2177.3	2184.9	2186.2
12.5°	4881.3	4369.9	3331.8	2583.7	2229.2	2140.6	2131.8	2152.0	2173.5	2190.0	2193.8
15°	4887.6	4239.5	2993.8	2284.9	2096.3	2088.7	2117.8	2152.0	2182.4	2206.5	2210.3
17.5°	4880.0	4087.6	2710.3	2101.4	2022.9	2059.6	2107.7	2150.8	2178.6	2201.4	2203.9
20°	4862.3	3917.9	2436.8	1972.3	1977.3	2036.8	2088.7	2129.2	2159.6	2171.0	2179.9
22.5°	4793.9	3715.4	2198.9	1872.3	1922.9	2005.2	2067.2	2091.3	2057.1	2033.0	2039.4
25°	4677.5	3452.1	1977.3	1791.2	1873.5	1960.9	2024.2	1965.9	1938.1	1928.0	1933.0
27.5°	4531.9	3163.5	1810.2	1706.4	1810.2	1911.5	1893.8	1883.7	1871.0	1854.5	1858.3
30°	4374.9	2881.2	1668.5	1640.6	1741.9	1800.1	1807.7	1824.2	1810.2	1784.9	1795.0
32.5°	4229.4	2615.3	1560.8	1584.9	1693.8	1684.9	1741.9	1760.9	1696.3	1611.5	1615.3
35°	4105.3	2368.5	1479.8	1530.5	1611.5	1615.3	1672.2	1606.4	1536.8	1496.3	1498.8
37.5°	4011.6	2176.1	1426.7	1483.6	1506.4	1554.5	1524.1	1490.0	1481.1	1453.2	1454.5
40°	3955.9	2007.7	1392.5	1446.9	1443.1	1476.0	1378.6	1412.7	1425.4	1416.5	1417.8
42.5°	3900.2	1888.7	1357.0	1396.3	1395.0	1330.5	1308.9	1338.1	1371.0	1374.8	1372.2
45°	3855.9	1796.3	1320.3	1319.1	1344.4	1243.1	1236.8	1254.5	1301.3	1324.1	1322.9
47.5°	3806.5	1719.1	1264.6	1229.2	1236.8	1188.7	1178.5	1186.1	1243.1	1279.8	1289.9
50°	3744.5	1641.9	1195.0	1146.9	1115.3	1138.0	1140.6	1141.8	1198.8	1240.6	1249.4
52.5°	3695.1	1583.6	1115.3	1079.8	1041.8	1092.5	1111.5	1114.0	1148.2	1182.3	1188.7
55°	3724.3	1550.7	1036.8	1011.5	977.3	1045.6	1082.3	1087.4	1095.0	1120.3	1124.1
57.5°	3811.6	1558.3	973.5	940.6	915.2	989.9	1052.0	1055.8	1050.7	1081.1	1086.1
60°	3838.2	1554.5	926.6	862.1	846.9	930.4	1007.7	1015.2	1014.0	1058.3	1067.2
62.5°	3726.8	1506.4	879.8	796.2	786.1	869.7	945.6	976.0	982.3	1045.6	1057.0
65°	3464.8	1407.7	817.8	726.6	726.6	805.1	886.1	927.9	945.6	1030.4	1043.1
67.5°	3119.2	1291.2	754.5	667.1	664.6	743.1	822.8	865.9	893.7	1008.9	1016.5
70°	2588.8	1134.2	676.0	602.6	602.6	673.5	745.6	797.5	838.0	968.4	968.4
72.5°	1773.5	943.1	581.0	529.1	530.4	596.2	669.7	727.9	776.0	887.4	889.9
75°	1121.6	736.8	477.2	450.7	455.7	517.8	593.7	654.5	750.7	877.3	881.1
77.5°	596.2	517.8	379.8	373.4	379.8	436.7	521.5	605.1	753.2	760.8	748.1
80°	386.1	367.1	300.0	287.4	289.9	351.9	464.6	574.7	605.1	612.7	584.8
82.5°	210.1	232.9	212.7	200.0	200.0	274.7	396.2	457.0	434.2	360.8	344.3
85°	89.9	108.9	110.1	96.2	92.4	169.6	265.8	249.4	231.7	221.5	219.0
87.5°	25.3	35.4	35.4	26.6	20.3	46.8	53.2	15.2	0.0	1.3	2.5
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)