

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: P453978

Luminaire Tested: **GALN-SA5A-740-U-T2**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P453978
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-SA5A-740-U-T2
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 70 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23032 lumens
Efficiency: N/A
Efficacy: 149.6 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G4

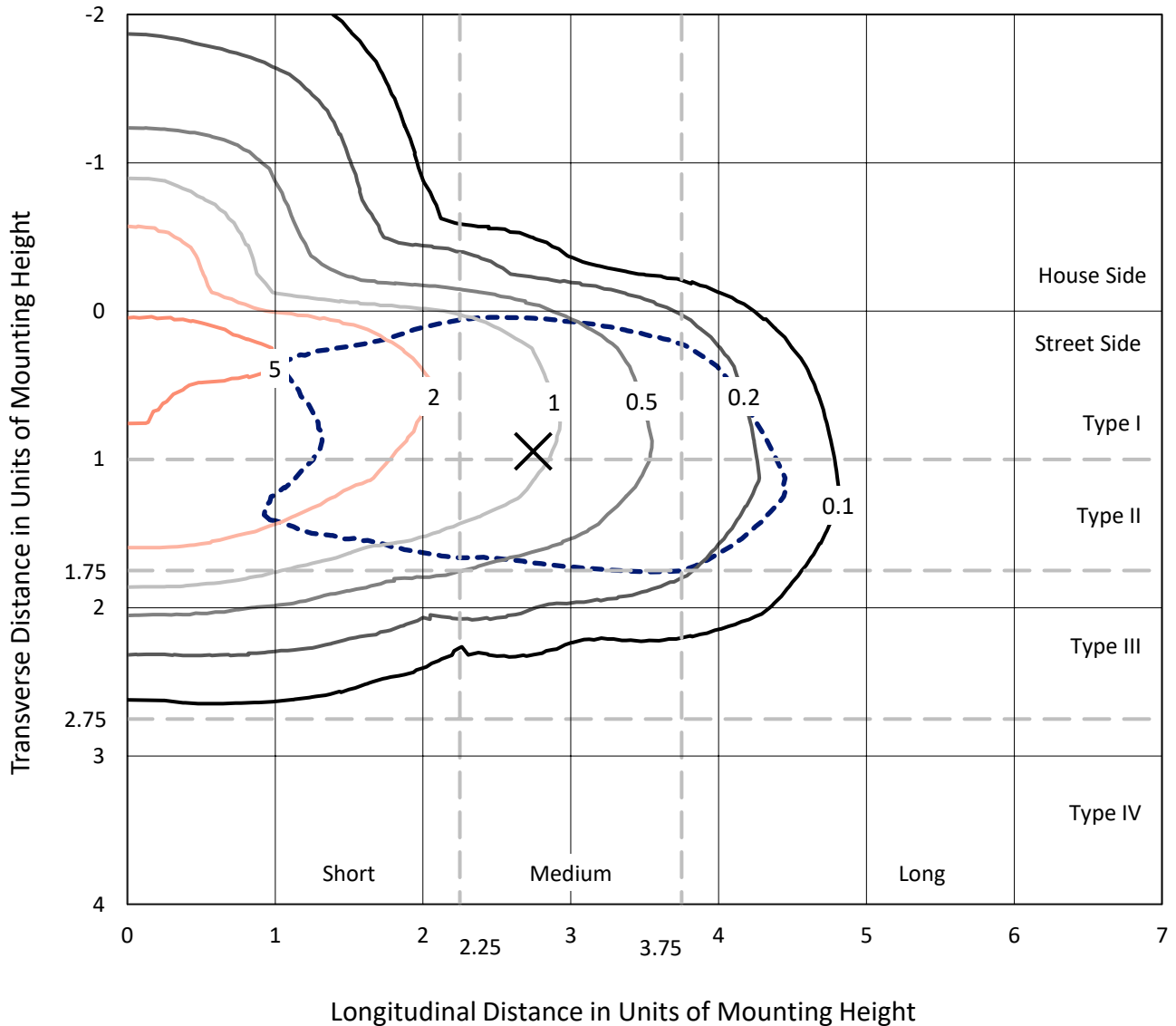
Input Watts (W): 154
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

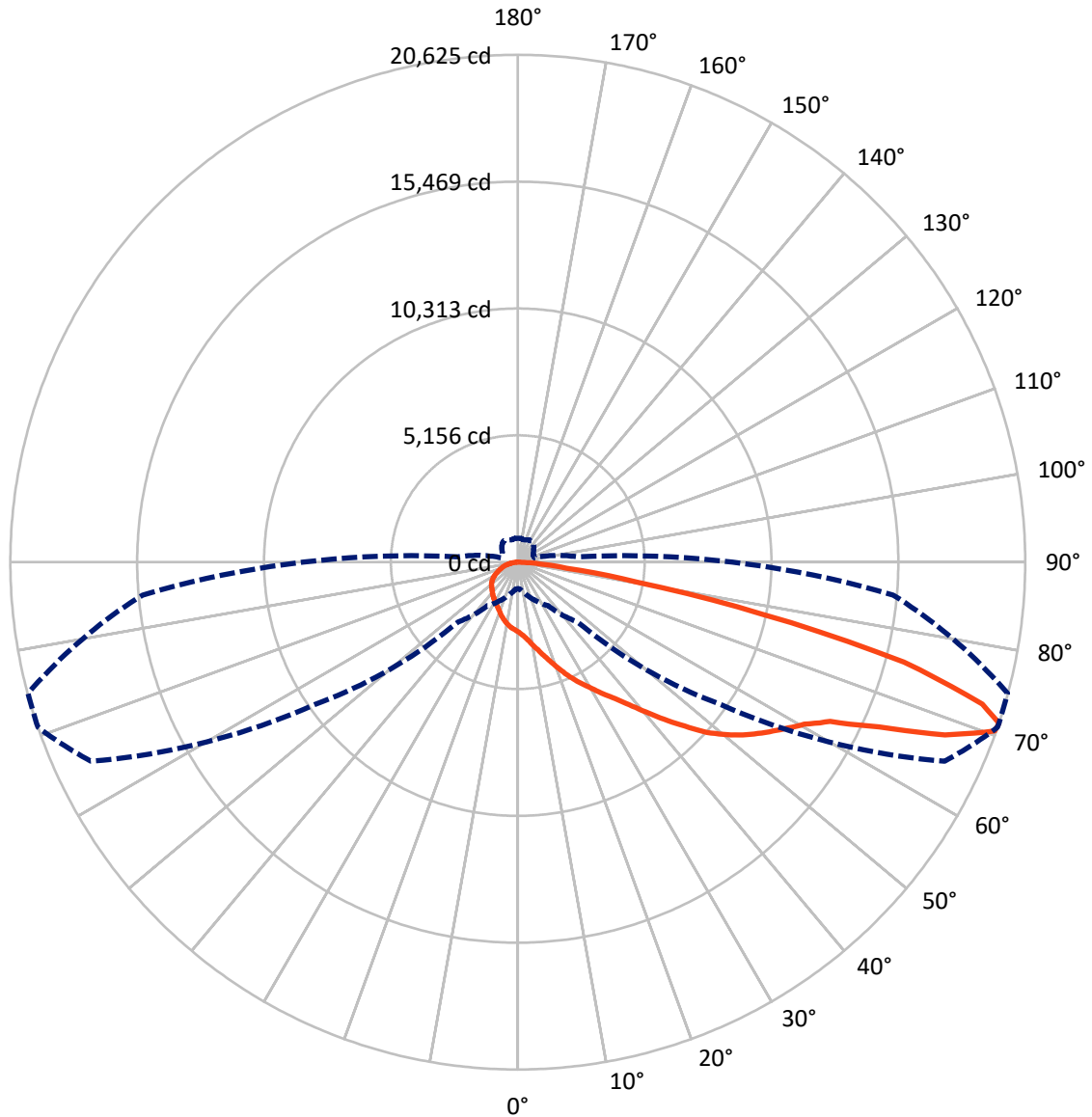
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.4 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
House Side	Lumens	4142.2	0.0	4142.2
	% Fixture	18.0	0.0	18.0
Street Side	Lumens	18889.8	0.0	18889.8
	% Fixture	82.0	0.0	82.0
Total	Lumens	23032.0	0.0	23032.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	283.8	1.2
10°-20°	922.1	4.0
20°-30°	1611.5	7.0
30°-40°	2396.9	10.4
40°-50°	3531.5	15.3
50°-60°	4944.1	21.5
60°-70°	5529.8	24.0
70°-80°	3377.8	14.7
80°-90°	434.5	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°	23032.0	100.0
0°-180°	23032.0	100.0

Coefficient of Utilization



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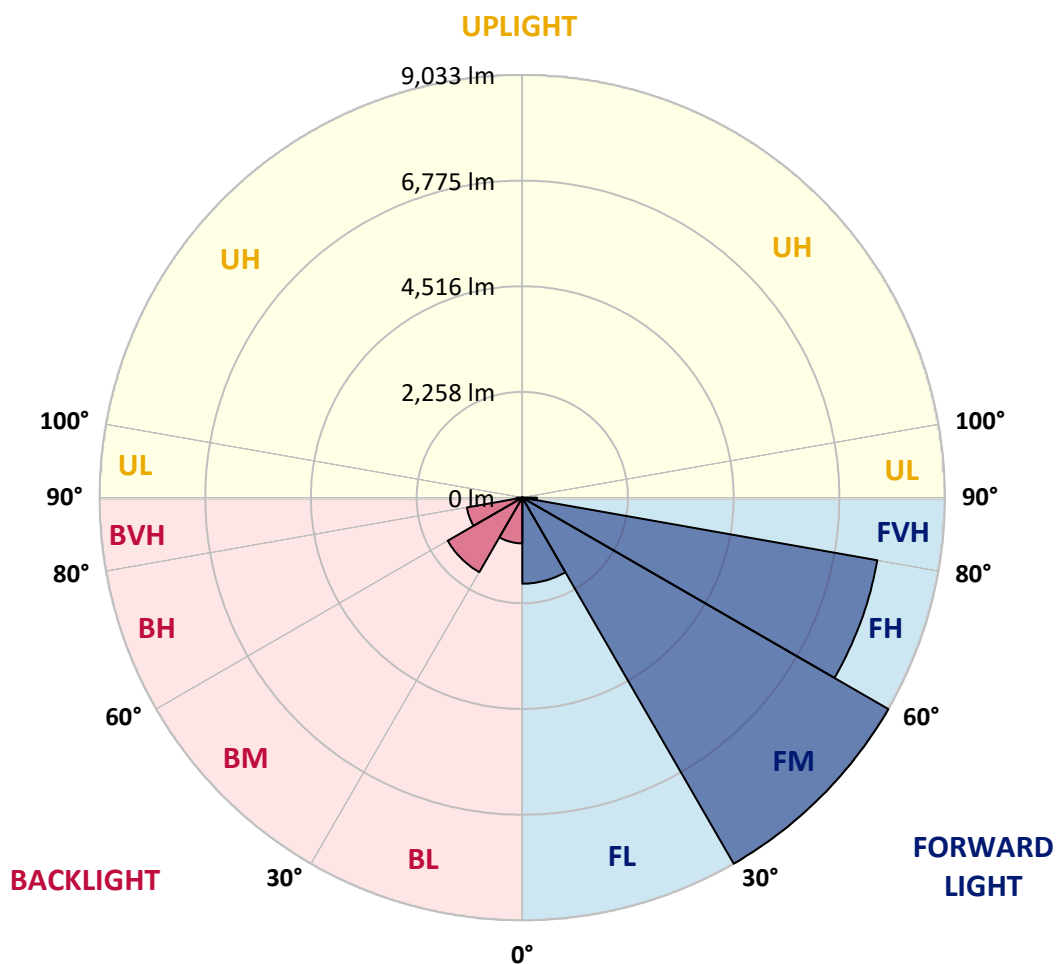
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1840.3	8.0			
FM	(30°-60°)	9032.7	39.2			
FH	(60°-80°)	7704.1	33.4			G4/12000
FVH	(80°-90°)	312.7	1.4			G3/500
BL	(0°-30°)	977.1	4.2	B2/1000		
BM	(30°-60°)	1839.7	8.0	B2/2500		
BH	(60°-80°)	1203.5	5.2	B3/2500		G3/2500
BVH	(80°-90°)	121.9	0.5			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	71°	75°	85°
0°	2826.7	2826.7	2826.7	2826.7	2826.7	2826.7	2826.7	2826.7	2826.7	2826.7	2826.7
2.5°	3138.1	3122.9	3124.2	3102.7	3074.8	3044.5	3001.4	2963.4	2933.1	2915.3	2863.4
5°	3477.4	3462.2	3443.2	3396.4	3376.1	3301.4	3206.5	3120.4	3054.6	3017.9	2914.1
7.5°	3752.1	3748.3	3743.2	3716.6	3664.7	3560.9	3479.9	3330.5	3233.1	3163.4	2986.2
10°	3921.7	3928.0	3931.8	3936.9	3915.4	3861.0	3749.6	3560.9	3436.9	3348.3	3079.9
12.5°	4007.8	4014.1	4035.6	4082.5	4111.6	4105.3	4014.1	3829.3	3658.4	3541.9	3179.9
15°	4061.0	4071.1	4109.1	4171.1	4268.6	4330.6	4286.3	4115.4	3928.0	3790.1	3298.9
17.5°	4119.2	4130.6	4172.4	4261.0	4388.8	4523.0	4571.1	4424.3	4220.5	4055.9	3431.8
20°	4152.1	4167.3	4226.8	4343.3	4492.6	4687.6	4847.1	4769.9	4547.1	4364.8	3585.0
22.5°	4205.3	4217.9	4268.6	4392.6	4571.1	4815.4	5123.0	5106.6	4910.4	4674.9	3753.4
25°	4349.6	4369.8	4395.2	4469.8	4642.0	4945.8	5352.2	5466.1	5262.3	4999.0	3907.8
27.5°	4621.8	4638.2	4636.9	4647.1	4744.5	5058.5	5550.9	5821.8	5611.7	5326.8	4057.2
30°	4931.9	4938.2	4943.3	4920.5	4942.0	5173.7	5733.2	6173.7	5963.6	5663.6	4187.6
32.5°	5309.1	5321.8	5278.7	5220.5	5202.8	5344.6	5883.8	6525.6	6380.1	6005.4	4316.7
35°	5754.7	5787.6	5700.3	5597.7	5525.6	5590.2	6086.4	6885.2	6806.7	6442.1	4487.6
37.5°	6263.6	6304.1	6223.1	6021.8	5919.3	5937.0	6351.0	7329.5	7345.9	6939.6	4742.0
40°	6680.1	6733.2	6735.8	6451.0	6295.3	6315.5	6686.4	7808.0	7996.6	7554.8	5042.0
42.5°	6954.8	7006.7	7061.1	6894.0	6730.7	6845.9	7077.6	8327.0	8728.3	8301.7	5461.0
45°	7256.1	7302.9	7333.3	7257.3	7166.2	7464.9	7549.7	8878.9	9508.1	9135.9	5919.3
47.5°	7605.4	7657.3	7686.5	7614.3	7580.1	8008.0	8058.6	9394.1	10341.0	9946.1	6425.6
50°	8071.3	8110.5	8095.3	8049.8	8042.2	8424.5	8547.3	9876.4	11028.4	10818.3	6951.0
52.5°	8651.1	8697.9	8714.4	8649.8	8620.7	8722.0	8941.0	10315.7	11653.7	11567.7	7511.8
55°	9001.7	9076.4	9327.0	9428.3	9497.9	9106.8	9365.0	10800.5	12214.5	12357.6	8114.3
57.5°	8552.3	8648.5	9209.3	9715.7	10370.1	10068.9	9966.3	11306.9	12775.3	13123.4	8835.9
60°	7456.1	7477.6	8200.4	9133.4	10449.9	11305.6	11220.8	12112.0	13382.9	13895.6	9786.6
62.5°	5172.4	5218.0	6072.5	7561.1	9465.0	11751.2	13355.1	13501.9	14253.9	15051.4	11180.3
65°	2667.2	2607.7	3386.2	4752.1	7135.8	10692.9	15084.3	16057.8	16142.6	16859.1	13142.4
67.5°	1641.9	1668.4	2033.0	2774.8	4219.2	7771.3	14903.3	19180.7	18733.8	19078.2	14964.0
70°	1233.0	1265.9	1516.5	1898.8	2572.3	4443.3	11985.4	19937.7	20561.8	20473.2	15518.5
71°	1072.2	1106.4	1367.2	1727.9	2160.9	3429.3	10098.0	19145.3	20625.1	20609.9	15309.6
72.5°	914.0	935.5	1139.3	1463.4	1821.6	2403.9	7586.5	17170.5	19745.3	20250.4	14564.0
75°	717.8	734.2	825.4	1116.5	1434.2	1476.0	4071.1	12872.8	16217.3	17179.3	12124.7
77.5°	584.8	596.2	643.1	829.2	1106.4	1045.6	2135.5	8378.9	10160.0	11128.4	7142.1
80°	464.6	477.2	505.1	562.1	829.2	745.6	1019.0	4245.8	4907.8	4897.7	2850.8
82.5°	360.8	364.6	397.5	412.7	567.1	529.1	551.9	1797.6	1991.2	2057.1	1029.2
85°	227.9	239.3	351.9	316.5	339.3	310.1	272.2	714.0	879.8	867.1	411.4
87.5°	69.6	73.4	119.0	134.2	150.6	135.4	100.0	210.1	257.0	278.5	102.5
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°	2826.7	2826.7	2826.7	2826.7	2826.7	2826.7	2826.7	2826.7	2826.7	2826.7	2826.7
2.5°	2843.2	2829.3	2779.9	2739.4	2701.4	2659.6	2624.2	2614.1	2605.2	2601.4	2600.1
5°	2869.8	2828.0	2730.5	2650.8	2587.5	2529.2	2492.5	2476.1	2459.6	2459.6	2464.7
7.5°	2907.7	2831.8	2681.1	2562.2	2482.4	2428.0	2401.4	2398.9	2402.7	2406.4	2407.7
10°	2949.5	2829.3	2609.0	2460.9	2390.0	2364.7	2365.9	2387.5	2407.7	2422.9	2425.4
12.5°	2990.0	2814.1	2524.2	2365.9	2320.4	2325.4	2360.9	2409.0	2448.2	2469.7	2471.0
15°	3035.6	2790.0	2421.6	2276.1	2260.9	2300.1	2365.9	2439.4	2498.9	2534.3	2538.1
17.5°	3073.6	2749.5	2314.0	2188.7	2207.7	2279.9	2371.0	2465.9	2538.1	2582.4	2590.0
20°	3116.6	2697.6	2202.6	2105.2	2159.6	2257.1	2360.9	2463.4	2538.1	2581.1	2591.3
22.5°	3150.8	2624.2	2096.3	2036.8	2116.6	2229.2	2326.7	2409.0	2469.7	2492.5	2507.7
25°	3164.7	2531.8	1996.3	1981.1	2082.4	2183.7	2249.5	2296.3	2315.3	2312.8	2319.1
27.5°	3157.1	2425.4	1910.2	1936.8	2039.3	2112.8	2145.7	2141.9	2107.7	2076.1	2091.2
30°	3125.5	2298.8	1838.1	1891.2	1983.6	2024.2	2019.1	1969.7	1905.2	1845.7	1849.5
32.5°	3068.5	2162.1	1771.0	1839.3	1905.2	1922.9	1888.7	1824.1	1731.7	1654.5	1643.1
35°	3020.4	2031.7	1711.5	1779.8	1826.7	1817.8	1784.9	1701.4	1617.8	1549.4	1538.1
37.5°	3012.8	1920.3	1654.5	1712.7	1739.3	1726.7	1686.2	1615.3	1584.9	1533.0	1526.7
40°	3053.3	1841.9	1596.3	1641.9	1654.5	1644.4	1600.1	1559.6	1587.4	1574.8	1574.8
42.5°	3163.4	1800.1	1544.4	1571.0	1581.1	1588.7	1557.0	1522.9	1557.0	1498.8	1479.8
45°	3338.1	1801.4	1497.5	1501.3	1531.7	1558.3	1536.8	1486.2	1468.4	1352.0	1329.2
47.5°	3595.1	1844.4	1459.6	1435.5	1489.9	1534.3	1503.9	1430.5	1352.0	1274.7	1260.8
50°	3895.1	1921.6	1425.4	1367.2	1434.2	1503.9	1481.1	1395.0	1314.0	1267.2	1258.3
52.5°	4228.1	2019.1	1383.6	1291.2	1365.9	1489.9	1486.2	1389.9	1278.5	1246.9	1239.3
55°	4639.5	2115.3	1331.7	1202.6	1305.1	1478.6	1472.2	1348.2	1270.9	1248.2	1245.6
57.5°	5118.0	2254.5	1257.0	1112.7	1235.5	1431.7	1417.8	1322.9	1245.6	1229.2	1227.9
60°	5888.9	2471.0	1150.7	1030.4	1164.6	1349.4	1367.2	1279.8	1205.1	1201.3	1200.1
62.5°	6902.9	2774.8	1040.6	945.6	1082.3	1243.1	1293.7	1221.6	1162.1	1181.1	1183.6
65°	8302.9	3030.5	926.6	873.5	991.2	1140.6	1224.1	1167.1	1114.0	1150.7	1150.7
67.5°	9215.7	3035.6	822.8	798.8	898.8	1054.5	1150.7	1102.6	1052.0	1114.0	1116.5
70°	9025.8	2659.6	736.7	720.3	808.9	962.1	1069.7	1031.7	973.5	1029.2	1008.9
71°	8719.4	2450.8	702.6	689.9	773.5	917.8	1031.7	1000.1	941.8	978.5	967.1
72.5°	8230.8	2128.0	646.9	649.4	720.3	862.1	978.5	945.6	887.4	907.6	903.8
75°	6957.3	1858.3	553.2	564.6	619.0	767.1	872.2	846.9	787.4	787.4	783.6
77.5°	4349.6	1298.8	459.5	465.8	525.3	657.0	749.4	727.9	670.9	651.9	646.9
80°	1622.9	670.9	359.5	367.1	403.8	517.7	620.3	600.0	541.8	520.3	500.0
82.5°	614.0	336.7	264.6	258.2	297.5	395.0	486.1	462.0	416.5	364.6	349.4
85°	231.7	167.1	162.0	157.0	174.7	234.2	301.3	296.2	248.1	211.4	207.6
87.5°	60.8	54.4	63.3	46.8	49.4	44.3	45.6	19.0	8.9	3.8	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)