

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: P459001

Luminaire Tested: **GALN-SA5A-735-U-T3R**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P459001
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-SA5A-735-U-T3R
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 70 CRI, 3500K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21832 lumens
Efficiency: N/A
Efficacy: 141.8 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G4

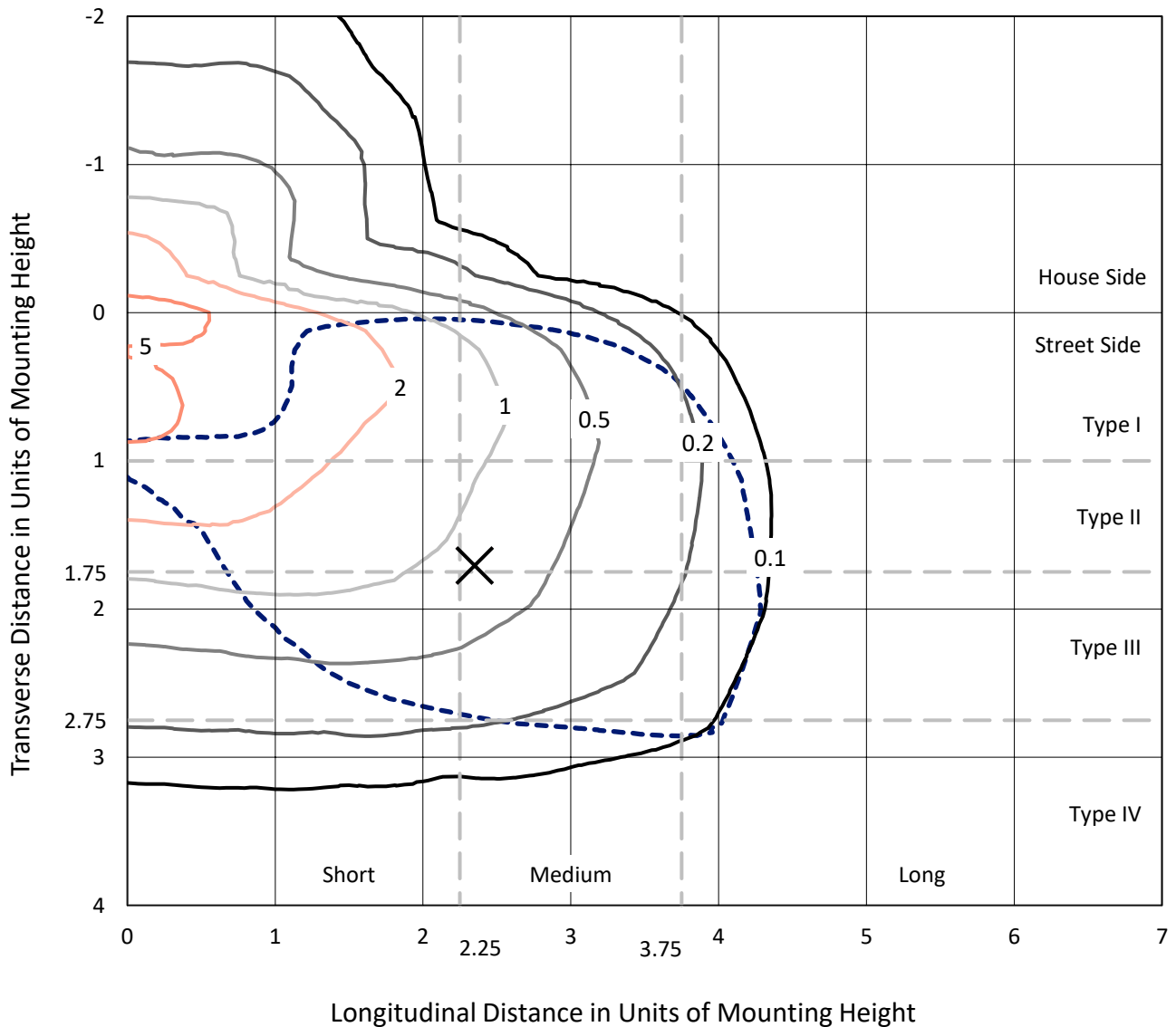
Input Watts (W): 154
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

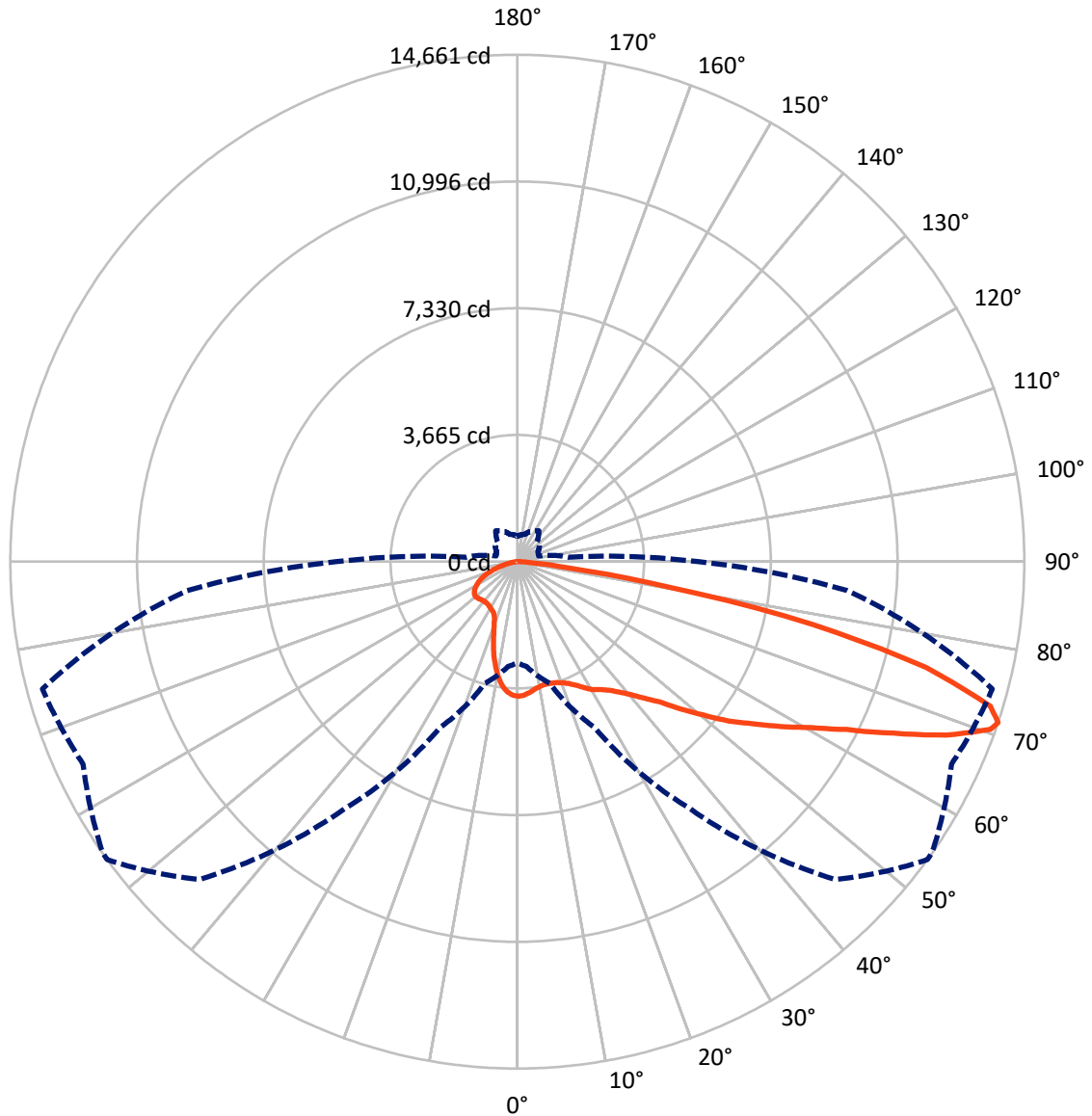
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.3 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	3941.6	0.0	3941.6
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	17890.4	0.0	17890.4
	% Fixture	81.9	0.0	81.9
Total	Lumens	21832.0	0.0	21832.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	347.1	1.6
10°-20°	916.6	4.2
20°-30°	1526.1	7.0
30°-40°	2256.6	10.3
40°-50°	3178.5	14.6
50°-60°	4256.2	19.5
60°-70°	5364.6	24.6
70°-80°	3664.0	16.8
80°-90°	322.2	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°	21832.0	100.0
0°-180°	21832.0	100.0

Coefficient of Utilization

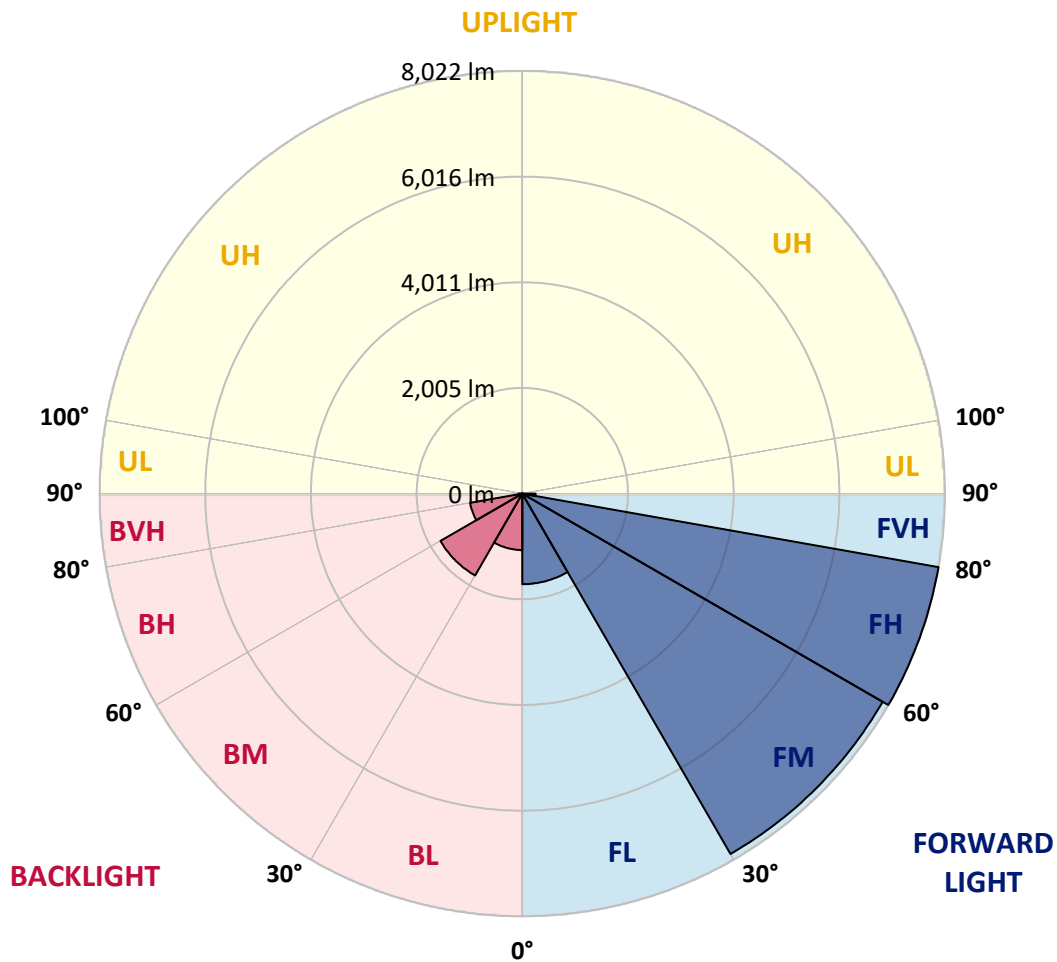


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1718.5	7.9			
FM	(30°-60°)	7898.0	36.2			
FH	(60°-80°)	8021.9	36.7			G4/12000
FVH	(80°-90°)	251.9	1.2			G3/500
BL	(0°-30°)	1071.3	4.9	B3/2500		
BM	(30°-60°)	1793.3	8.2	B2/2500		
BH	(60°-80°)	1006.7	4.6	B3/2500		G3/2500
BVH	(80°-90°)	70.4	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°	3895.2	3895.2	3895.2	3895.2	3895.2	3895.2	3895.2	3895.2	3895.2	3895.2	3895.2
2.5°	3763.1	3780.8	3785.5	3797.3	3822.0	3842.1	3862.1	3859.8	3888.1	3899.9	3910.5
5°	3595.6	3600.3	3618.0	3641.6	3685.2	3740.7	3794.9	3796.1	3865.7	3921.1	3948.2
7.5°	3473.0	3488.3	3500.1	3524.9	3570.9	3631.0	3717.1	3724.2	3848.0	3957.7	4015.4
10°	3392.8	3410.5	3423.4	3454.1	3500.1	3567.3	3660.5	3673.4	3835.0	4015.4	4116.9
12.5°	3319.7	3337.4	3349.1	3389.2	3449.4	3531.9	3636.9	3652.2	3839.7	4082.7	4227.7
15°	3364.5	3378.6	3373.9	3385.7	3425.8	3520.1	3646.3	3661.7	3857.4	4147.5	4337.4
17.5°	3563.8	3575.6	3536.7	3491.8	3473.0	3542.5	3675.8	3692.3	3892.8	4214.7	4449.4
20°	3857.4	3889.3	3804.3	3704.1	3613.3	3622.7	3737.1	3754.8	3942.3	4282.0	4563.8
22.5°	4239.5	4263.1	4159.3	3994.2	3826.8	3740.7	3829.1	3839.7	4016.6	4369.2	4688.8
25°	4688.8	4703.0	4559.1	4346.8	4105.1	3942.3	3955.3	3974.2	4139.3	4468.3	4799.7
27.5°	5125.1	5170.0	5003.7	4744.2	4425.8	4154.6	4128.6	4140.4	4272.5	4523.7	4876.3
30°	5642.8	5639.3	5463.6	5162.9	4754.8	4385.7	4292.6	4290.2	4344.5	4550.8	4931.7
32.5°	6055.6	6103.9	5931.8	5603.9	5131.0	4625.1	4405.8	4401.1	4399.9	4598.0	5014.3
35°	6524.9	6532.0	6374.0	6043.8	5537.9	4925.8	4563.8	4540.2	4513.1	4699.4	5126.3
37.5°	6944.8	6977.8	6832.7	6462.4	5937.7	5238.3	4780.8	4765.5	4682.9	4875.1	5305.6
40°	7272.6	7297.4	7210.1	6857.5	6331.5	5575.6	5056.7	5028.4	4928.2	5162.9	5545.0
42.5°	7379.9	7430.6	7464.8	7291.5	6784.4	5975.4	5396.4	5361.0	5284.3	5599.2	5820.9
45°	7388.2	7468.4	7648.8	7657.0	7239.6	6454.2	5792.6	5767.8	5761.9	6158.2	6208.9
47.5°	7325.7	7407.0	7710.1	7874.0	7645.3	6937.7	6364.6	6325.6	6329.2	6849.2	6644.0
50°	7174.7	7271.4	7639.4	8013.2	7962.5	7440.1	6968.3	6955.4	7028.5	7638.2	7095.7
52.5°	6890.5	7007.3	7566.2	8100.5	8198.3	7872.9	7654.7	7618.1	7803.3	8494.3	7589.8
55°	6103.9	6279.7	7298.5	8148.8	8422.4	8286.8	8272.6	8338.7	8584.0	9428.3	8133.5
57.5°	5693.5	5825.6	6717.2	8157.1	8705.4	8767.9	8994.3	9010.9	9440.1	10420.1	8747.9
60°	5469.5	5586.2	6398.8	8102.8	9100.5	9363.5	9732.6	9791.5	10276.2	11494.4	9384.7
62.5°	5273.7	5374.0	6207.7	7915.3	9546.2	10246.7	10689.0	10717.3	11225.5	12680.8	10013.2
65°	4812.6	4927.0	5823.3	7727.8	9930.7	11350.5	11957.9	11924.8	12236.2	13704.4	10407.1
67.5°	4191.2	4336.2	5105.1	7080.4	10120.6	12556.9	13387.2	13345.9	13233.8	14375.4	10520.3
70°	3397.5	3475.3	4186.4	5961.2	9362.3	13190.2	14515.7	14472.1	13851.8	14463.8	9984.9
71°	2923.4	3044.9	3645.1	5295.0	8731.4	12996.8	14660.8	14649.0	13853.0	14219.7	9581.6
72.5°	2281.9	2356.2	2886.9	4102.7	7421.2	11897.7	14302.3	14347.1	13552.3	13541.6	8750.2
75°	1443.4	1476.5	1811.4	2415.2	4072.0	8425.9	12209.1	12330.5	12033.3	11084.0	6507.3
77.5°	838.5	880.9	1084.9	1423.4	1759.5	4573.2	8736.1	8868.2	8361.1	6102.8	2664.0
80°	488.2	535.4	714.6	826.7	807.8	1697.0	4448.2	4673.5	3620.4	1541.3	747.7
82.5°	271.2	303.1	502.4	503.6	430.4	554.3	1399.8	1464.7	1033.0	621.5	305.4
85°	196.9	222.9	324.3	293.6	206.4	238.2	487.0	510.6	417.5	261.8	99.1
87.5°	69.6	99.1	178.1	141.5	56.6	49.5	140.3	114.4	106.1	73.1	22.4
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°	3895.2	3895.2	3895.2	3895.2	3895.2	3895.2	3895.2	3895.2	3895.2	3895.2	3895.2
2.5°	3916.4	3918.7	3906.9	3885.7	3864.5	3837.4	3806.7	3783.1	3772.5	3771.3	3770.1
5°	3958.8	3964.7	3919.9	3853.9	3780.8	3691.1	3614.5	3527.2	3504.8	3469.4	3480.0
7.5°	4027.2	4023.7	3935.2	3794.9	3623.9	3434.1	3273.7	3180.5	3083.8	3056.7	3057.9
10°	4125.1	4102.7	3935.2	3674.6	3389.2	3107.4	2883.3	2741.8	2665.2	2601.5	2577.9
12.5°	4228.9	4172.3	3897.5	3506.0	3087.3	2741.8	2501.2	2310.2	2260.7	2208.8	2210.0
15°	4327.9	4233.6	3823.2	3269.0	2761.9	2351.5	2118.0	2003.6	1988.3	1994.2	1993.0
17.5°	4417.6	4277.2	3710.0	3004.8	2382.1	2016.6	1892.7	1901.0	1942.3	1971.8	1975.3
20°	4508.4	4303.2	3541.4	2651.0	2023.6	1813.7	1818.4	1883.3	1945.8	1985.9	1991.8
22.5°	4594.5	4315.0	3343.3	2309.0	1764.2	1727.6	1797.2	1866.8	1928.1	1967.0	1972.9
25°	4651.1	4287.9	3062.6	1951.7	1636.8	1697.0	1770.1	1829.1	1880.9	1921.0	1930.5
27.5°	4666.4	4200.6	2714.7	1662.8	1577.9	1667.5	1734.7	1778.3	1818.4	1856.2	1863.3
30°	4658.1	4072.0	2332.6	1493.0	1543.7	1633.3	1685.2	1717.0	1765.4	1794.9	1800.8
32.5°	4645.2	3922.3	1934.0	1402.2	1515.4	1601.5	1632.1	1660.4	1659.2	1647.5	1655.7
35°	4649.9	3743.0	1610.9	1347.9	1490.6	1577.9	1603.8	1568.4	1467.0	1462.3	1457.6
37.5°	4674.7	3566.1	1376.2	1310.2	1477.6	1574.3	1588.5	1425.7	1336.1	1294.8	1284.2
40°	4738.3	3359.8	1221.7	1281.9	1476.5	1601.5	1518.9	1353.8	1181.6	1101.4	1095.5
42.5°	4823.2	3156.9	1127.4	1264.2	1490.6	1642.7	1490.6	1252.4	1064.9	1017.7	1010.6
45°	4949.4	2924.6	1075.5	1255.9	1511.8	1658.1	1481.2	1178.1	1017.7	980.0	980.0
47.5°	5092.1	2702.9	1047.2	1250.0	1539.0	1647.5	1397.4	1154.5	995.3	1000.0	1022.4
50°	5233.6	2510.7	1026.0	1237.1	1562.5	1641.6	1363.2	1153.3	1001.2	1061.3	1101.4
52.5°	5397.6	2375.1	1000.0	1215.8	1562.5	1603.8	1352.6	1176.9	1017.7	1035.4	1053.1
55°	5595.7	2332.6	967.0	1169.8	1534.2	1509.5	1346.7	1211.1	1029.5	988.2	995.3
57.5°	5857.5	2401.0	935.2	1112.1	1469.4	1411.6	1344.4	1220.6	1002.4	968.2	961.1
60°	6161.7	2536.6	925.7	1053.1	1380.9	1327.9	1330.2	1193.4	964.6	929.3	935.2
62.5°	6375.2	2618.0	919.8	1008.3	1284.2	1235.9	1296.0	1160.4	948.1	917.5	923.4
65°	6375.2	2518.9	865.6	939.9	1159.2	1125.0	1254.8	1119.1	926.9	891.5	885.6
67.5°	6133.4	2230.0	783.0	837.3	1021.3	998.8	1197.0	1069.6	895.1	867.9	853.8
70°	5503.7	1691.1	679.3	717.0	846.7	866.8	1122.7	1002.4	842.0	809.0	787.8
71°	5226.6	1472.9	635.6	655.7	779.5	809.0	1087.3	974.1	818.4	771.2	733.5
72.5°	4692.3	1240.6	569.6	577.8	666.3	719.4	1013.0	919.8	773.6	706.4	663.9
75°	3565.0	905.7	458.7	454.0	492.9	570.8	857.3	819.6	678.1	587.3	562.5
77.5°	1540.1	492.9	343.2	346.7	334.9	432.8	674.5	704.0	581.4	477.6	455.2
80°	467.0	284.2	234.7	239.4	224.1	290.1	475.2	551.9	467.0	371.5	340.8
82.5°	239.4	169.8	160.4	158.0	142.7	163.9	287.7	377.4	333.7	232.3	205.2
85°	103.8	90.8	79.0	76.7	67.2	59.0	102.6	188.7	176.9	129.7	123.8
87.5°	25.9	23.6	15.3	14.2	8.3	1.2	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)