

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: P453984

Luminaire Tested: **GALN-SA5A-740-U-T3R**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P453984  
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-740-U-T3R  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(5) 70 CRI, 4000K, 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: 23436 lumens  
Efficiency: N/A  
Efficacy: 152.2 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B3 - U0 - G4

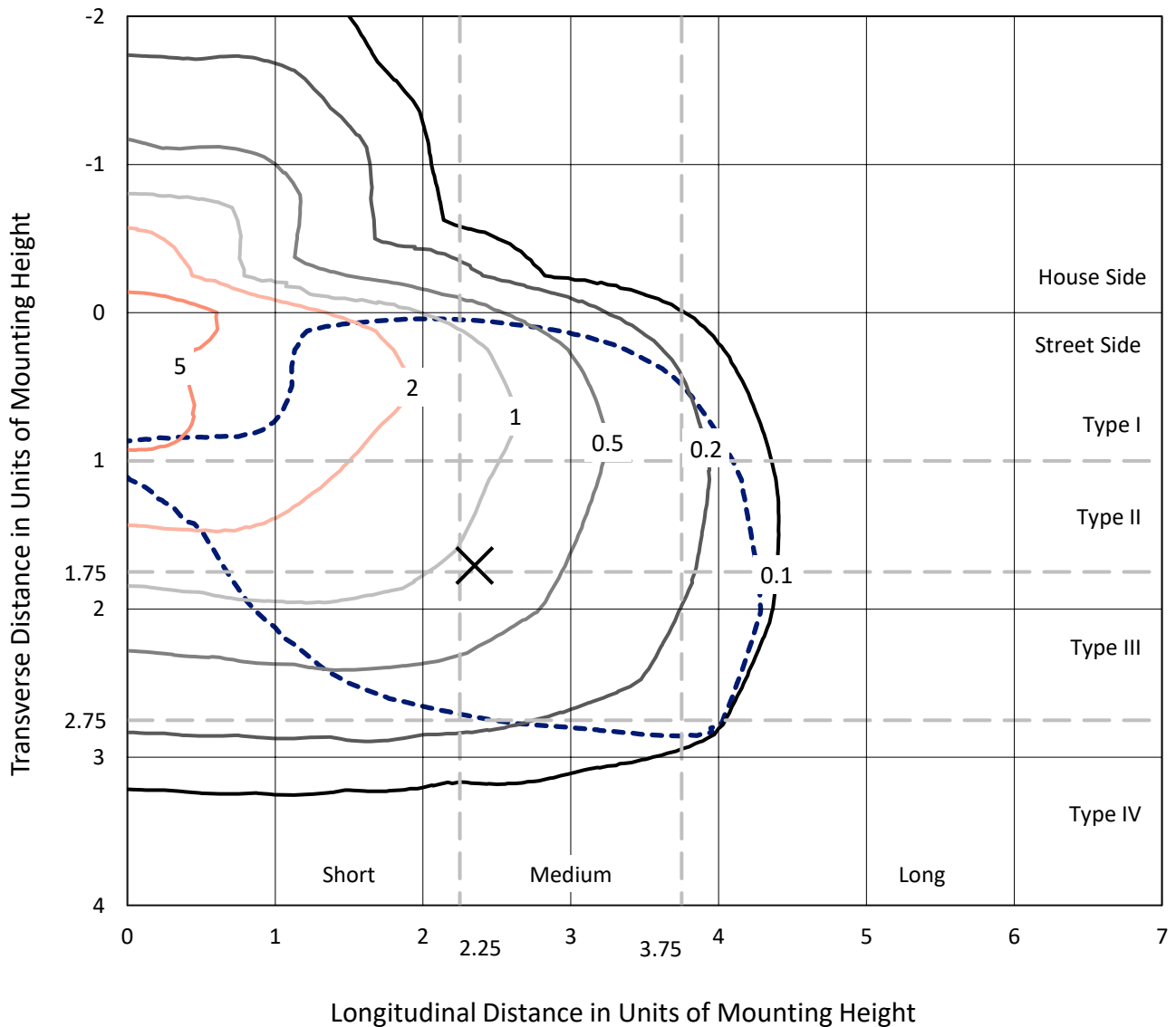
Input Watts (W): 154  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

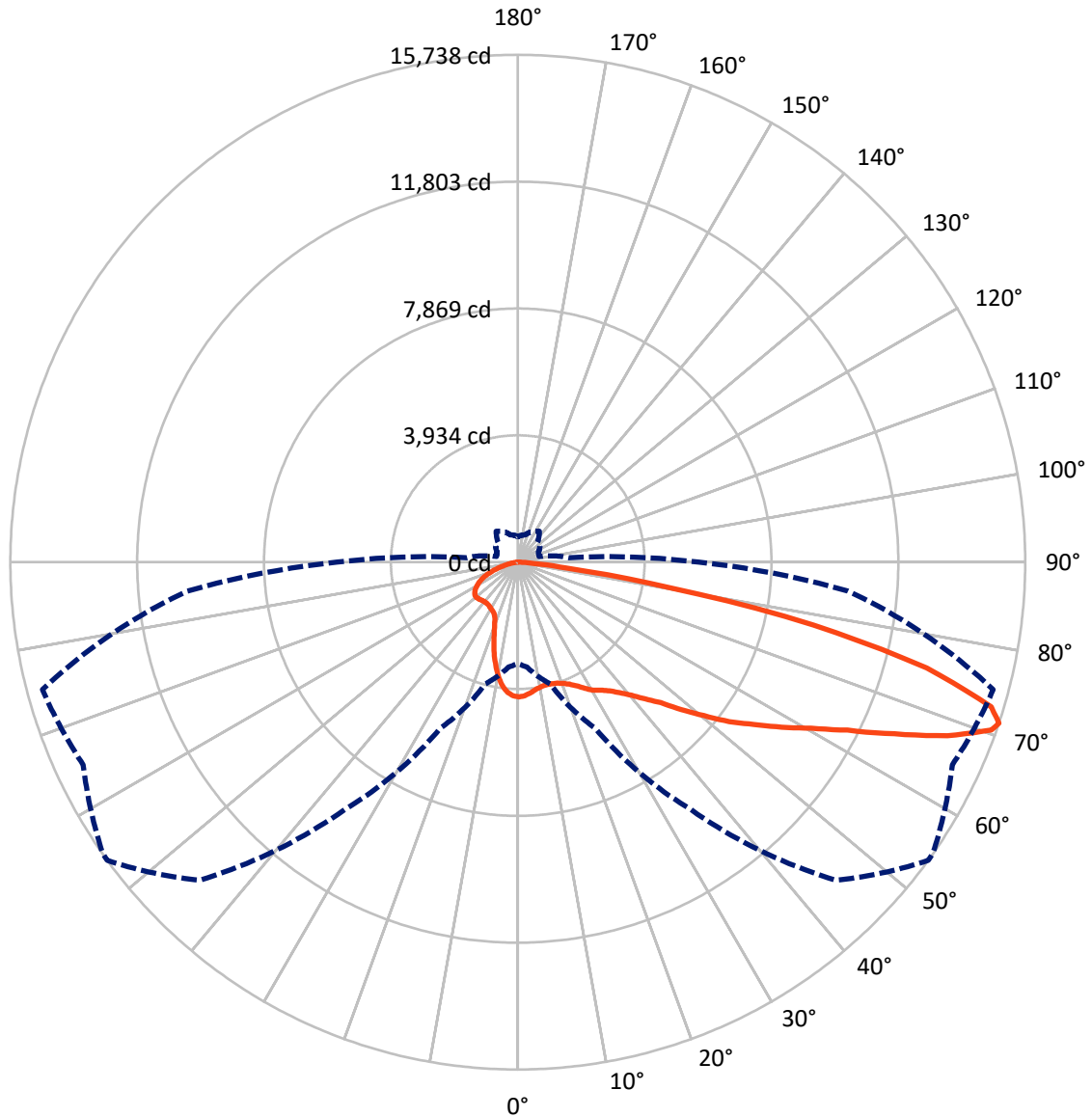
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.7 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
<b>House Side</b>	Lumens	4231.2	0.0	4231.2
	% Fixture	18.1	0.0	18.1
<b>Street Side</b>	Lumens	19204.8	0.0	19204.8
	% Fixture	81.9	0.0	81.9
<b>Total</b>	Lumens	23436.0	0.0	23436.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	372.6	1.6
10°-20°	983.9	4.2
20°-30°	1638.2	7.0
30°-40°	2422.4	10.3
40°-50°	3412.1	14.6
50°-60°	4568.9	19.5
60°-70°	5758.7	24.6
70°-80°	3933.2	16.8
80°-90°	345.9	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°	23436.0	100.0
0°-180°	23436.0	100.0



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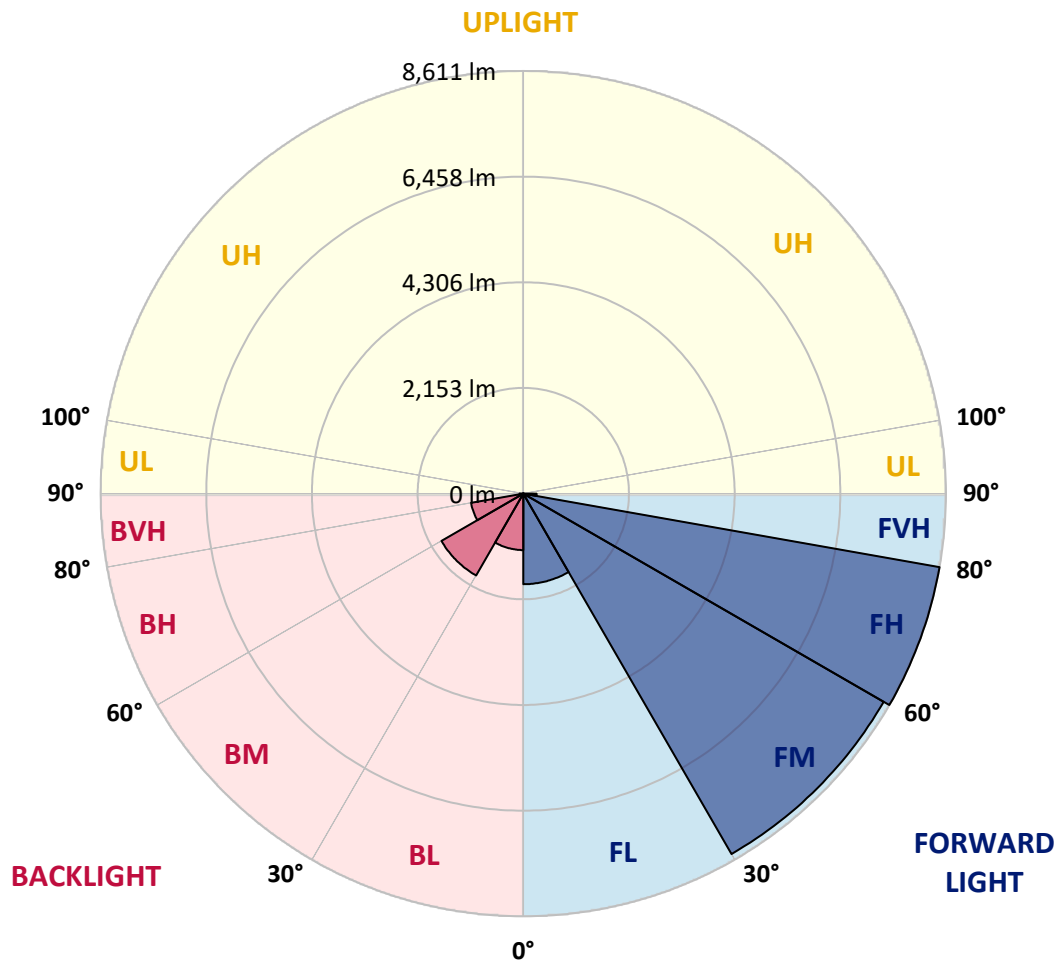
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1844.8	7.9			
FM	(30°-60°)	8478.3	36.2			
FH	(60°-80°)	8611.3	36.7			G4/12000
FVH	(80°-90°)	270.4	1.2			G3/500
BL	(0°-30°)	1150.0	4.9	B3/2500		
BM	(30°-60°)	1925.1	8.2	B2/2500		
BH	(60°-80°)	1080.6	4.6	B3/2500		G3/2500
BVH	(80°-90°)	75.5	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°	4181.3	4181.3	4181.3	4181.3	4181.3	4181.3	4181.3	4181.3	4181.3	4181.3	4181.3
2.5°	4039.5	4058.5	4063.6	4076.3	4102.8	4124.4	4145.9	4143.4	4173.7	4186.4	4197.8
5°	3859.8	3864.8	3883.8	3909.2	3956.0	4015.5	4073.7	4075.0	4149.7	4209.2	4238.3
7.5°	3728.1	3744.6	3757.2	3783.8	3833.2	3897.8	3990.2	3997.8	4130.7	4248.4	4310.5
10°	3642.0	3661.0	3675.0	3707.9	3757.2	3829.4	3929.4	3943.3	4116.8	4310.5	4419.3
12.5°	3563.6	3582.5	3595.2	3638.3	3702.8	3791.4	3904.1	3920.6	4121.8	4382.6	4538.3
15°	3611.7	3626.9	3621.8	3634.5	3677.5	3778.8	3914.2	3930.7	4140.8	4452.2	4656.0
17.5°	3825.6	3838.3	3796.5	3748.4	3728.1	3802.8	3945.9	3963.6	4178.8	4524.4	4776.3
20°	4140.8	4175.0	4083.9	3976.3	3878.8	3888.9	4011.7	4030.7	4232.0	4596.6	4899.1
22.5°	4551.0	4576.3	4464.9	4287.7	4107.9	4015.5	4110.4	4121.8	4311.7	4690.2	5033.3
25°	5033.3	5048.5	4894.0	4666.2	4406.7	4232.0	4245.9	4266.1	4443.4	4796.6	5152.3
27.5°	5501.7	5549.8	5371.3	5092.8	4751.0	4459.8	4432.0	4444.6	4586.4	4856.1	5234.6
30°	6057.4	6053.6	5865.0	5542.2	5104.2	4708.0	4607.9	4605.4	4663.6	4885.2	5294.1
32.5°	6500.5	6552.4	6367.6	6015.6	5508.0	4964.9	4729.5	4724.4	4723.1	4935.8	5382.7
35°	7004.3	7011.9	6842.3	6487.8	5944.8	5287.7	4899.1	4873.8	4844.7	5044.7	5502.9
37.5°	7455.0	7490.4	7334.7	6937.2	6373.9	5623.2	5132.0	5115.6	5027.0	5233.3	5695.4
40°	7806.9	7833.5	7739.8	7361.3	6796.7	5985.3	5428.3	5397.9	5290.3	5542.2	5952.3
42.5°	7922.1	7976.6	8013.3	7827.2	7282.8	6414.4	5792.8	5754.9	5672.6	6010.6	6248.6
45°	7931.0	8017.1	8210.7	8219.6	7771.5	6928.4	6218.2	6191.6	6185.3	6610.6	6665.1
47.5°	7863.9	7951.2	8276.6	8452.5	8207.0	7447.4	6832.2	6790.4	6794.2	7352.5	7132.2
50°	7701.8	7805.7	8200.6	8601.9	8547.5	7986.7	7480.3	7466.4	7544.9	8199.4	7617.0
52.5°	7396.8	7522.1	8122.1	8695.6	8800.7	8451.3	8217.1	8177.8	8376.6	9118.4	8147.5
55°	6552.4	6741.0	7834.8	8747.5	9041.2	8895.6	8880.4	8951.3	9214.6	10121.0	8731.0
57.5°	6111.9	6253.6	7210.7	8756.4	9345.0	9412.1	9655.2	9672.9	10133.7	11185.7	9390.6
60°	5871.3	5996.7	6868.9	8698.1	9769.1	10051.4	10447.6	10510.9	11031.2	12338.9	10074.2
62.5°	5661.2	5768.8	6663.8	8496.8	10247.6	10999.6	11474.3	11504.7	12050.3	13612.4	10748.9
65°	5166.2	5289.0	6251.1	8295.6	10660.3	12184.5	12836.4	12801.0	13135.2	14711.2	11171.7
67.5°	4499.1	4654.8	5480.2	7600.6	10864.1	13479.5	14370.7	14326.4	14206.1	15431.5	11293.3
70°	3647.1	3730.7	4494.0	6399.2	10050.1	14159.3	15582.2	15535.4	14869.5	15526.5	10718.5
71°	3138.2	3268.6	3913.0	5684.0	9372.9	13951.7	15737.9	15725.2	14870.7	15264.4	10285.6
72.5°	2449.6	2529.3	3099.0	4404.1	7966.4	12771.9	15353.1	15401.2	14547.9	14536.5	9393.1
75°	1549.5	1584.9	1944.5	2592.6	4371.2	9045.0	13106.1	13236.4	12917.4	11898.4	6985.3
77.5°	900.1	945.6	1164.6	1528.0	1888.8	4909.2	9377.9	9519.7	8975.4	6551.1	2859.7
80°	524.1	574.7	767.1	887.4	867.2	1821.7	4775.0	5016.8	3886.4	1654.6	802.6
82.5°	291.2	325.3	539.3	540.5	462.1	595.0	1502.6	1572.3	1108.9	667.1	327.9
85°	211.4	239.3	348.1	315.2	221.5	255.7	522.8	548.1	448.1	281.0	106.3
87.5°	74.7	106.3	191.2	151.9	60.8	53.2	150.6	122.8	113.9	78.5	24.1
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°	4181.3	4181.3	4181.3	4181.3	4181.3	4181.3	4181.3	4181.3	4181.3	4181.3	4181.3
2.5°	4204.1	4206.6	4194.0	4171.2	4148.4	4119.3	4086.4	4061.1	4049.7	4048.4	4047.1
5°	4249.7	4256.0	4207.9	4137.0	4058.5	3962.3	3880.0	3786.4	3762.3	3724.3	3735.7
7.5°	4323.1	4319.3	4224.4	4073.7	3890.2	3686.4	3514.2	3414.2	3310.4	3281.3	3282.5
10°	4428.2	4404.1	4224.4	3944.6	3638.3	3335.7	3095.2	2943.3	2861.0	2792.6	2767.3
12.5°	4539.6	4478.8	4183.9	3763.6	3314.2	2943.3	2685.0	2479.9	2426.8	2371.1	2372.3
15°	4645.9	4544.6	4104.1	3509.1	2964.8	2524.2	2273.6	2150.8	2134.3	2140.7	2139.4
17.5°	4742.1	4591.5	3982.6	3225.6	2557.2	2164.7	2031.8	2040.7	2085.0	2116.6	2120.4
20°	4839.6	4619.3	3801.6	2845.8	2172.3	1947.0	1952.0	2021.7	2088.8	2131.8	2138.1
22.5°	4932.0	4632.0	3588.9	2478.7	1893.8	1854.6	1929.3	2003.9	2069.8	2111.6	2117.9
25°	4992.8	4602.9	3287.6	2095.1	1757.1	1821.7	1900.1	1963.4	2019.1	2062.2	2072.3
27.5°	5009.2	4509.2	2914.1	1784.9	1693.8	1790.0	1862.2	1909.0	1952.0	1992.6	2000.2
30°	5000.4	4371.2	2504.0	1602.7	1657.1	1753.3	1809.0	1843.2	1895.1	1926.7	1933.1
32.5°	4986.5	4210.4	2076.1	1505.2	1626.7	1719.1	1752.0	1782.4	1781.1	1768.5	1777.3
35°	4991.5	4018.0	1729.2	1446.9	1600.1	1693.8	1721.6	1683.7	1574.8	1569.7	1564.7
37.5°	5018.1	3828.1	1477.3	1406.4	1586.2	1690.0	1705.2	1530.5	1434.3	1390.0	1378.6
40°	5086.5	3606.6	1311.5	1376.1	1584.9	1719.1	1630.5	1453.3	1268.5	1182.4	1176.0
42.5°	5177.6	3388.9	1210.2	1357.1	1600.1	1763.4	1600.1	1344.4	1143.1	1092.5	1084.9
45°	5313.1	3139.5	1154.5	1348.2	1622.9	1779.9	1590.0	1264.7	1092.5	1052.0	1052.0
47.5°	5466.2	2901.5	1124.1	1341.9	1652.0	1768.5	1500.1	1239.3	1068.4	1073.5	1097.6
50°	5618.1	2695.1	1101.3	1327.9	1677.3	1762.2	1463.4	1238.1	1074.8	1139.3	1182.4
52.5°	5794.1	2549.6	1073.5	1305.2	1677.3	1721.6	1452.0	1263.4	1092.5	1111.5	1130.5
55°	6006.8	2504.0	1038.1	1255.8	1647.0	1620.4	1445.7	1300.1	1105.1	1060.8	1068.4
57.5°	6287.8	2577.4	1003.9	1193.8	1577.3	1515.3	1443.1	1310.2	1076.0	1039.3	1031.7
60°	6614.4	2723.0	993.7	1130.5	1482.4	1425.4	1428.0	1281.1	1035.5	997.5	1003.9
62.5°	6843.6	2810.3	987.4	1082.4	1378.6	1326.7	1391.2	1245.7	1017.8	984.9	991.2
65°	6843.6	2704.0	929.2	1008.9	1244.4	1207.7	1346.9	1201.4	995.0	957.0	950.7
67.5°	6584.0	2393.9	840.6	898.8	1096.3	1072.2	1284.9	1148.2	960.8	931.7	916.5
70°	5908.0	1815.3	729.2	769.7	908.9	930.5	1205.2	1076.0	903.9	868.4	845.6
71°	5610.6	1581.1	682.3	703.9	836.8	868.4	1167.2	1045.6	878.5	827.9	787.4
72.5°	5037.1	1331.7	611.4	620.3	715.2	772.2	1087.4	987.4	830.4	758.3	712.7
75°	3826.9	972.2	492.4	487.4	529.2	612.7	920.3	879.8	727.9	630.4	603.8
77.5°	1653.3	529.2	368.4	372.2	359.5	464.6	724.1	755.8	624.1	512.7	488.6
80°	501.3	305.1	251.9	257.0	240.5	311.4	510.2	592.4	501.3	398.8	365.9
82.5°	257.0	182.3	172.2	169.6	153.2	176.0	308.9	405.1	358.3	249.4	220.3
85°	111.4	97.5	84.8	82.3	72.2	63.3	110.1	202.5	189.9	139.3	132.9
87.5°	27.9	25.3	16.5	15.2	8.9	1.3	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)