

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: P454680

Luminaire Tested: **GALN-SA5D-740-U-T3R**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P454680
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-SA5D-740-U-T3R
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 70 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 39645 lumens
Efficiency: N/A
Efficacy: 128.3 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G5

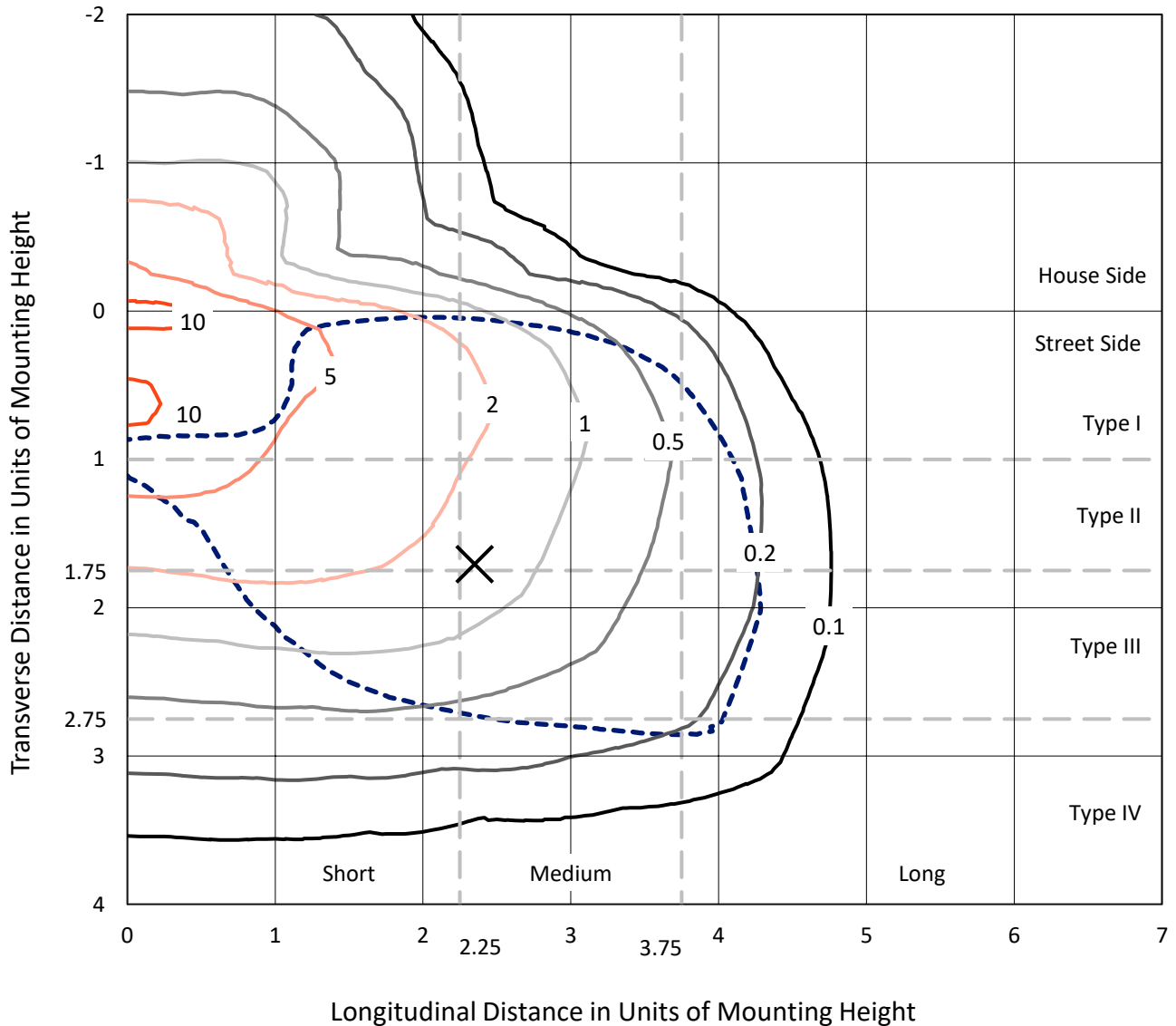
Input Watts (W): 309
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

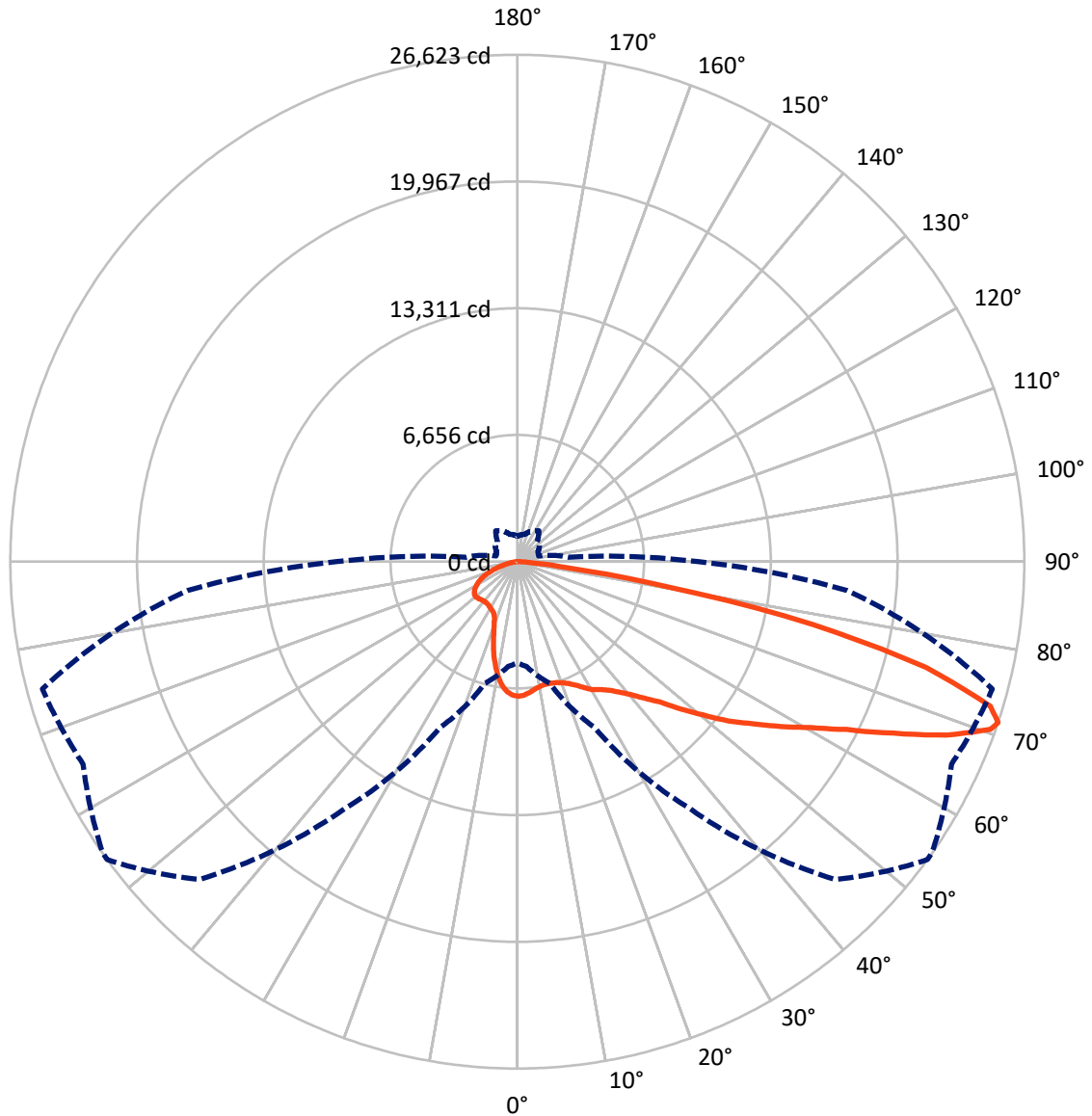
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.4 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	7157.6	0.0	7157.6
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	32487.3	0.0	32487.3
	% Fixture	81.9	0.0	81.9
Total	Lumens	39645.0	0.0	39645.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	630.3	1.6
10°-20°	1664.4	4.2
20°-30°	2771.3	7.0
30°-40°	4097.8	10.3
40°-50°	5771.9	14.6
50°-60°	7728.9	19.5
60°-70°	9741.7	24.6
70°-80°	6653.5	16.8
80°-90°	585.1	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°	39645.0	100.0
0°-180°	39645.0	100.0

Coefficient of Utilization



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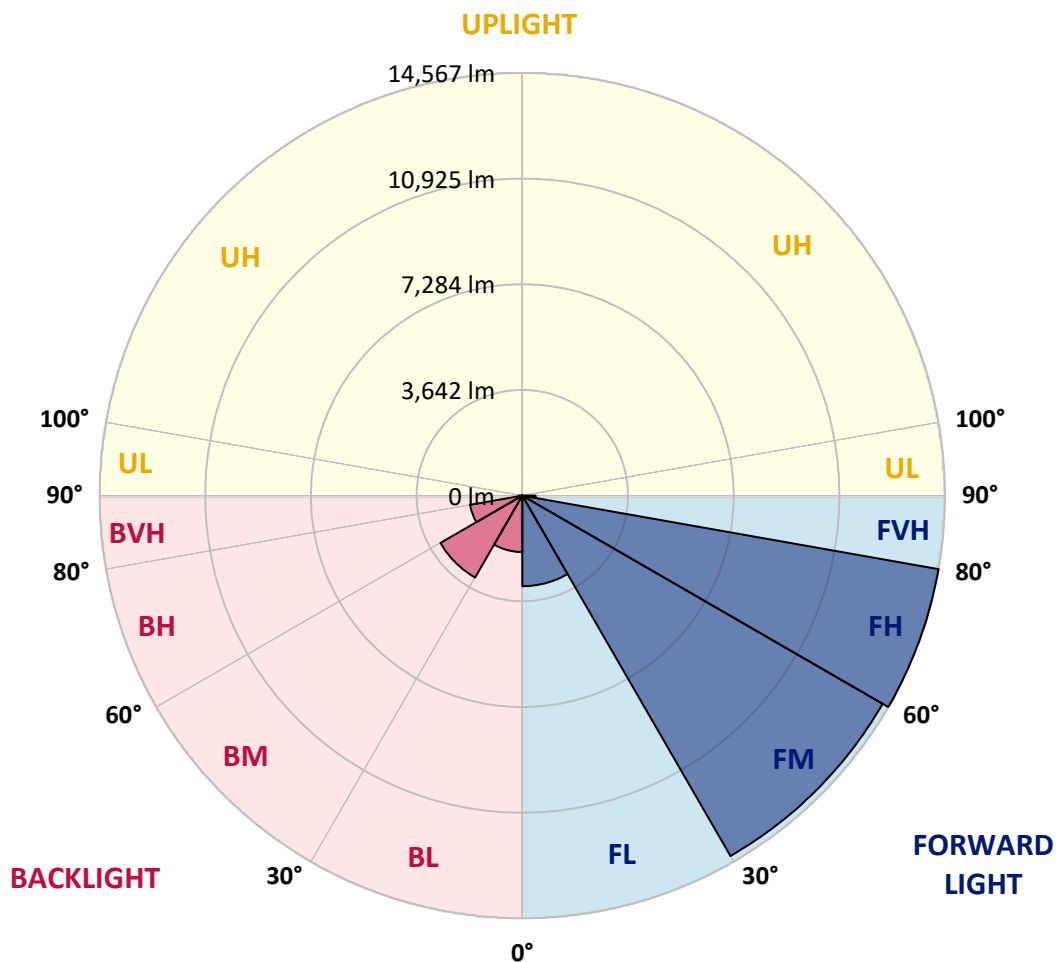
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3120.7	7.9			
FM	(30°-60°)	14342.1	36.2			
FH	(60°-80°)	14567.1	36.7			G5
FVH	(80°-90°)	457.4	1.2			G3/500
BL	(0°-30°)	1945.3	4.9	B3/2500		
BM	(30°-60°)	3256.5	8.2	B3/5000		
BH	(60°-80°)	1828.0	4.6	B3/2500		G3/2500
BVH	(80°-90°)	127.8	0.3			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	7073.3	7073.3	7073.3	7073.3	7073.3	7073.3	7073.3	7073.3	7073.3	7073.3	7073.3
2.5°	6833.4	6865.5	6874.1	6895.5	6940.5	6976.9	7013.3	7009.0	7060.4	7081.8	7101.1
5°	6529.3	6537.9	6570.0	6612.8	6692.1	6792.7	6891.2	6893.4	7019.7	7120.4	7169.6
7.5°	6306.6	6334.4	6355.9	6400.8	6484.4	6593.6	6749.9	6762.7	6987.6	7186.8	7291.7
10°	6161.0	6193.1	6216.7	6272.3	6355.9	6477.9	6647.1	6670.7	6964.0	7291.7	7475.9
12.5°	6028.2	6060.3	6081.8	6154.6	6263.8	6413.7	6604.3	6632.1	6972.6	7413.7	7677.1
15°	6109.6	6135.3	6126.7	6148.1	6221.0	6392.3	6621.4	6649.2	7004.7	7531.5	7876.3
17.5°	6471.5	6492.9	6422.3	6340.9	6306.6	6433.0	6674.9	6704.9	7069.0	7653.6	8079.7
20°	7004.7	7062.5	6908.4	6726.3	6561.4	6578.6	6786.3	6818.4	7158.9	7775.7	8287.5
22.5°	7698.6	7741.4	7552.9	7253.1	6949.1	6792.7	6953.3	6972.6	7293.8	7934.1	8514.5
25°	8514.5	8540.2	8278.9	7893.4	7454.4	7158.9	7182.5	7216.7	7516.5	8114.0	8715.8
27.5°	9306.8	9388.2	9086.2	8615.1	8036.9	7544.4	7497.3	7518.7	7758.5	8214.7	8855.0
30°	10246.9	10240.5	9921.4	9375.3	8634.4	7964.1	7794.9	7790.6	7889.2	8263.9	8955.6
32.5°	10996.4	11084.2	10771.6	10176.2	9317.5	8398.8	8000.5	7991.9	7989.8	8349.6	9105.5
35°	11848.7	11861.6	11574.6	10975.0	10056.3	8944.9	8287.5	8244.6	8195.4	8533.7	9308.9
37.5°	12611.1	12671.0	12407.6	11735.2	10782.3	9512.4	8681.5	8653.7	8503.8	8852.8	9634.4
40°	13206.4	13251.4	13092.9	12452.6	11497.5	10124.8	9182.6	9131.2	8949.2	9375.3	10069.2
42.5°	13401.3	13493.4	13555.5	13240.7	12319.8	10850.8	9799.3	9735.1	9595.9	10167.7	10570.3
45°	13416.3	13561.9	13889.5	13904.5	13146.4	11720.2	10518.9	10473.9	10463.2	11182.7	11274.8
47.5°	13302.8	13450.5	14000.9	14298.6	13883.1	12598.2	11557.5	11486.8	11493.2	12437.6	12065.0
50°	13028.7	13204.3	13872.4	14551.2	14459.2	13510.5	12653.9	12630.4	12763.1	13870.3	12885.2
52.5°	12512.6	12724.6	13739.6	14709.7	14887.5	14296.4	13900.2	13833.9	14170.1	15425.0	13782.5
55°	11084.2	11403.3	13253.5	14797.5	15294.3	15048.1	15022.4	15142.3	15587.7	17121.0	14769.7
57.5°	10339.0	10578.8	12197.8	14812.5	15808.3	15921.8	16332.9	16362.9	17142.4	18922.0	15885.4
60°	9932.1	10144.1	11619.6	14714.0	16525.7	17003.2	17673.5	17780.6	18660.7	20872.8	17041.8
62.5°	9576.6	9758.7	11272.7	14373.5	17335.1	18607.2	19410.2	19461.6	20384.6	23027.2	18183.2
65°	8739.3	8947.0	10574.5	14033.0	18033.3	20611.6	21714.4	21654.5	22219.8	24886.0	18898.4
67.5°	7610.8	7874.2	9270.4	12857.3	18378.0	22802.3	24309.9	24234.9	24031.5	26104.4	19104.0
70°	6169.6	6310.9	7602.2	10825.1	17001.1	23952.3	26359.3	26280.0	25153.6	26265.1	18131.8
71°	5308.7	5529.3	6619.3	9615.2	15855.4	23601.1	26622.7	26601.3	25155.8	25821.8	17399.4
72.5°	4143.7	4278.6	5242.3	7450.2	13476.2	21605.2	25971.7	26053.0	24609.7	24590.4	15889.7
75°	2621.2	2681.1	3289.3	4385.7	7394.5	15300.8	22170.6	22391.1	21851.5	20127.6	11816.6
77.5°	1522.6	1599.7	1970.1	2584.7	3195.1	8304.6	15864.0	16103.8	15183.0	11082.1	4837.6
80°	886.6	972.2	1297.7	1501.2	1466.9	3081.6	8077.6	8486.6	6574.3	2798.9	1357.7
82.5°	492.5	550.4	912.3	914.4	781.6	1006.5	2541.9	2659.7	1875.9	1128.6	554.6
85°	357.6	404.7	588.9	533.2	374.8	432.6	884.4	927.3	758.1	475.4	179.9
87.5°	126.3	179.9	323.4	257.0	102.8	89.9	254.8	207.7	192.7	132.8	40.7
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°	7073.3	7073.3	7073.3	7073.3	7073.3	7073.3	7073.3	7073.3	7073.3	7073.3	7073.3
2.5°	7111.8	7116.1	7094.7	7056.1	7017.6	6968.3	6912.6	6869.8	6850.5	6848.4	6846.3
5°	7188.9	7199.6	7118.2	6998.3	6865.5	6702.8	6563.6	6405.1	6364.4	6300.2	6319.5
7.5°	7313.1	7306.7	7146.1	6891.2	6580.7	6235.9	5944.7	5775.5	5599.9	5550.7	5552.8
10°	7490.8	7450.2	7146.1	6672.8	6154.6	5642.8	5235.9	4978.9	4839.7	4724.1	4681.2
12.5°	7679.3	7576.5	7077.5	6366.6	5606.4	4978.9	4542.0	4195.1	4105.2	4011.0	4013.1
15°	7859.2	7687.9	6942.6	5936.1	5015.3	4270.1	3846.1	3638.3	3610.5	3621.2	3619.1
17.5°	8021.9	7767.1	6737.0	5456.4	4325.8	3661.9	3437.0	3452.0	3527.0	3580.5	3587.0
20°	8186.8	7814.2	6430.8	4814.0	3674.8	3293.6	3302.1	3419.9	3533.4	3606.2	3616.9
22.5°	8343.1	7835.6	6071.0	4193.0	3203.6	3137.2	3263.6	3389.9	3501.3	3572.0	3582.7
25°	8445.9	7786.4	5561.4	3544.1	2972.4	3081.6	3214.3	3321.4	3415.6	3488.4	3505.6
27.5°	8473.8	7627.9	4929.6	3019.5	2865.3	3028.0	3150.1	3229.3	3302.1	3370.7	3383.5
30°	8458.8	7394.5	4235.8	2711.1	2803.2	2965.9	3060.2	3118.0	3205.8	3259.3	3270.0
32.5°	8435.2	7122.5	3512.0	2546.2	2751.8	2908.1	2963.8	3015.2	3013.0	2991.6	3006.6
35°	8443.8	6797.0	2925.2	2447.7	2706.8	2865.3	2912.4	2848.1	2664.0	2655.4	2646.8
37.5°	8488.8	6475.8	2499.1	2379.2	2683.3	2858.9	2884.6	2589.0	2426.3	2351.3	2332.1
40°	8604.4	6101.0	2218.6	2327.8	2681.1	2908.1	2758.2	2458.4	2145.7	2000.1	1989.4
42.5°	8758.6	5732.7	2047.2	2295.6	2706.8	2983.1	2706.8	2274.2	1933.7	1848.1	1835.2
45°	8987.7	5310.8	1953.0	2280.7	2745.4	3010.9	2689.7	2139.3	1848.1	1779.6	1779.6
47.5°	9246.8	4908.2	1901.6	2270.0	2794.6	2991.6	2537.6	2096.5	1807.4	1816.0	1856.6
50°	9503.8	4559.2	1863.1	2246.4	2837.4	2980.9	2475.5	2094.4	1818.1	1927.3	2000.1
52.5°	9801.5	4312.9	1816.0	2207.8	2837.4	2912.4	2456.3	2137.2	1848.1	1880.2	1912.3
55°	10161.2	4235.8	1756.0	2124.3	2786.0	2741.1	2445.6	2199.3	1869.5	1794.5	1807.4
57.5°	10636.7	4360.0	1698.2	2019.4	2668.3	2563.3	2441.3	2216.4	1820.2	1758.1	1745.3
60°	11189.1	4606.3	1681.0	1912.3	2507.7	2411.3	2415.6	2167.2	1751.7	1687.5	1698.2
62.5°	11576.8	4754.0	1670.3	1831.0	2332.1	2244.3	2353.5	2107.2	1721.7	1666.1	1676.8
65°	11576.8	4574.2	1571.8	1706.7	2105.1	2043.0	2278.5	2032.2	1683.2	1618.9	1608.2
67.5°	11137.8	4049.5	1421.9	1520.4	1854.5	1813.8	2173.6	1942.3	1625.4	1576.1	1550.4
70°	9994.2	3070.9	1233.5	1302.0	1537.6	1574.0	2038.7	1820.2	1529.0	1469.0	1430.5
71°	9491.0	2674.7	1154.2	1190.7	1415.5	1469.0	1974.4	1768.8	1486.2	1400.5	1332.0
72.5°	8520.9	2252.8	1034.3	1049.3	1209.9	1306.3	1839.5	1670.3	1404.8	1282.7	1205.6
75°	6473.6	1644.6	833.0	824.5	895.1	1036.5	1556.8	1488.3	1231.3	1066.4	1021.5
77.5°	2796.8	895.1	623.2	629.6	608.2	785.9	1224.9	1278.5	1055.7	867.3	826.6
80°	848.0	516.1	426.2	434.7	406.9	526.8	863.0	1002.2	848.0	674.6	618.9
82.5°	434.7	308.4	291.2	287.0	259.1	297.7	522.5	685.3	606.0	421.9	372.6
85°	188.4	164.9	143.5	139.2	122.1	107.1	186.3	342.6	321.2	235.6	224.9
87.5°	47.1	42.8	27.8	25.7	15.0	2.1	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)