

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: P458227

Luminaire Tested: **GALN-SA9C-827-U-AFL**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P458227  
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-SA9C-827-U-AFL  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(9) 80 CRI, 2700K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 47311 lumens  
Efficiency: N/A  
Efficacy: 98.4 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G3

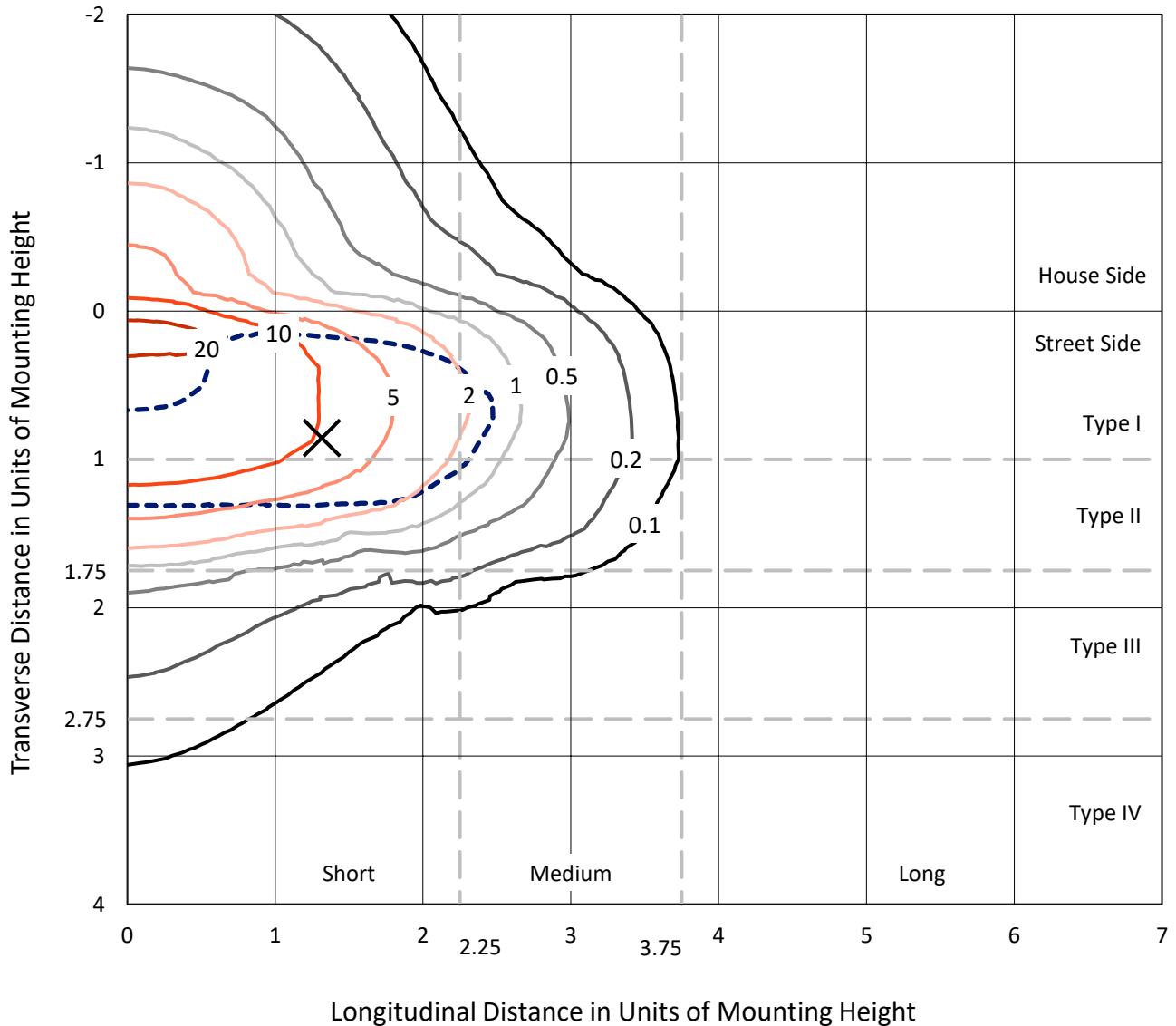
Input Watts (W): 481  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

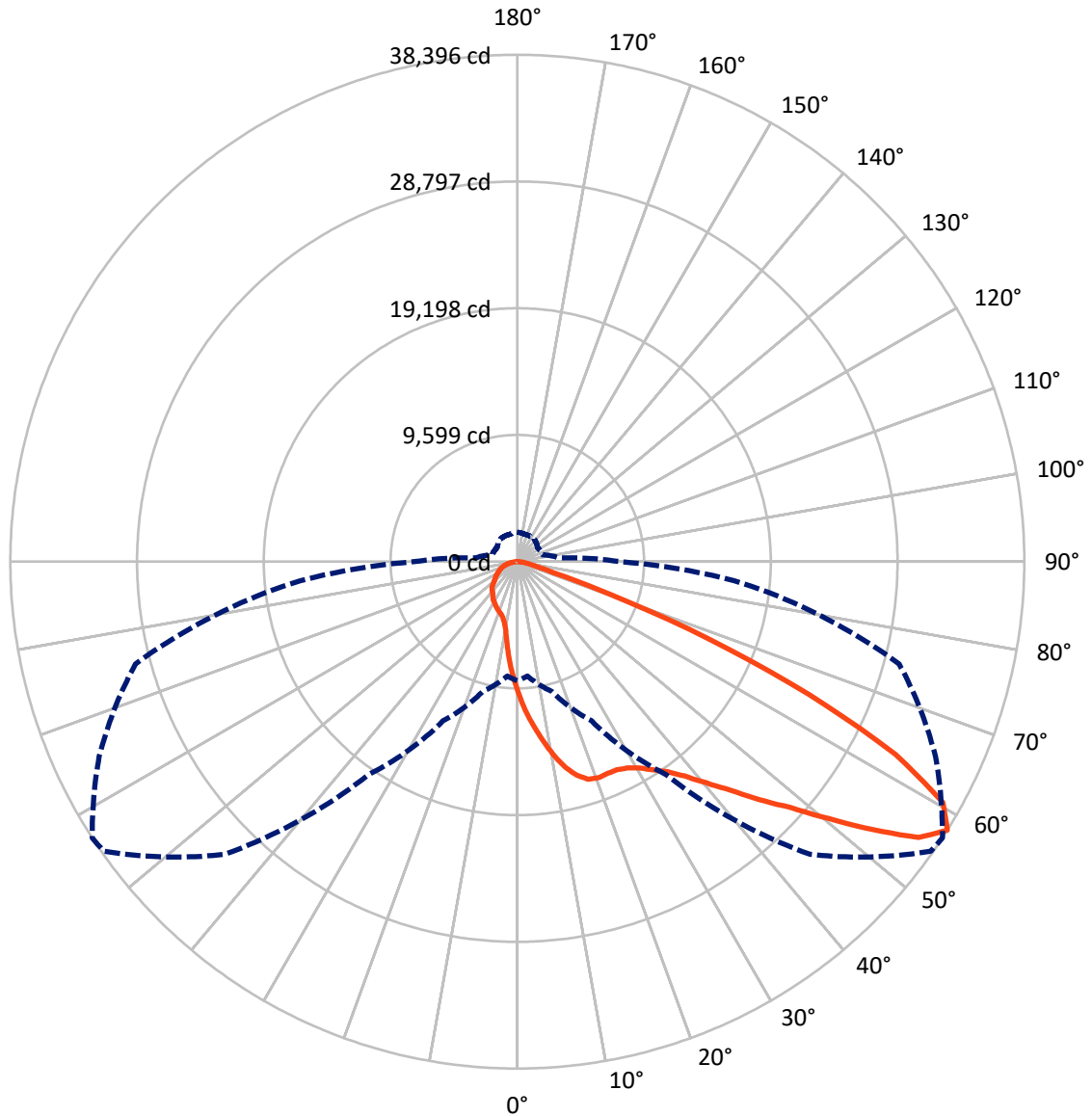
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 24.2 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	7194.7	0.0	7194.7
	% Fixture	15.2	0.0	15.2
<b>Street Side</b>	Lumens	40116.3	0.0	40116.3
	% Fixture	84.8	0.0	84.8
<b>Total</b>	Lumens	47311.0	0.0	47311.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	955.3	2.0
10°-20°	2815.3	6.0
20°-30°	4674.8	9.9
30°-40°	7041.6	14.9
40°-50°	10572.3	22.3
50°-60°	11850.3	25.0
60°-70°	6935.3	14.7
70°-80°	2051.4	4.3
80°-90°	414.6	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°	47311.0	100.0
0°-180°	47311.0	100.0

**Coefficient of Utilization**



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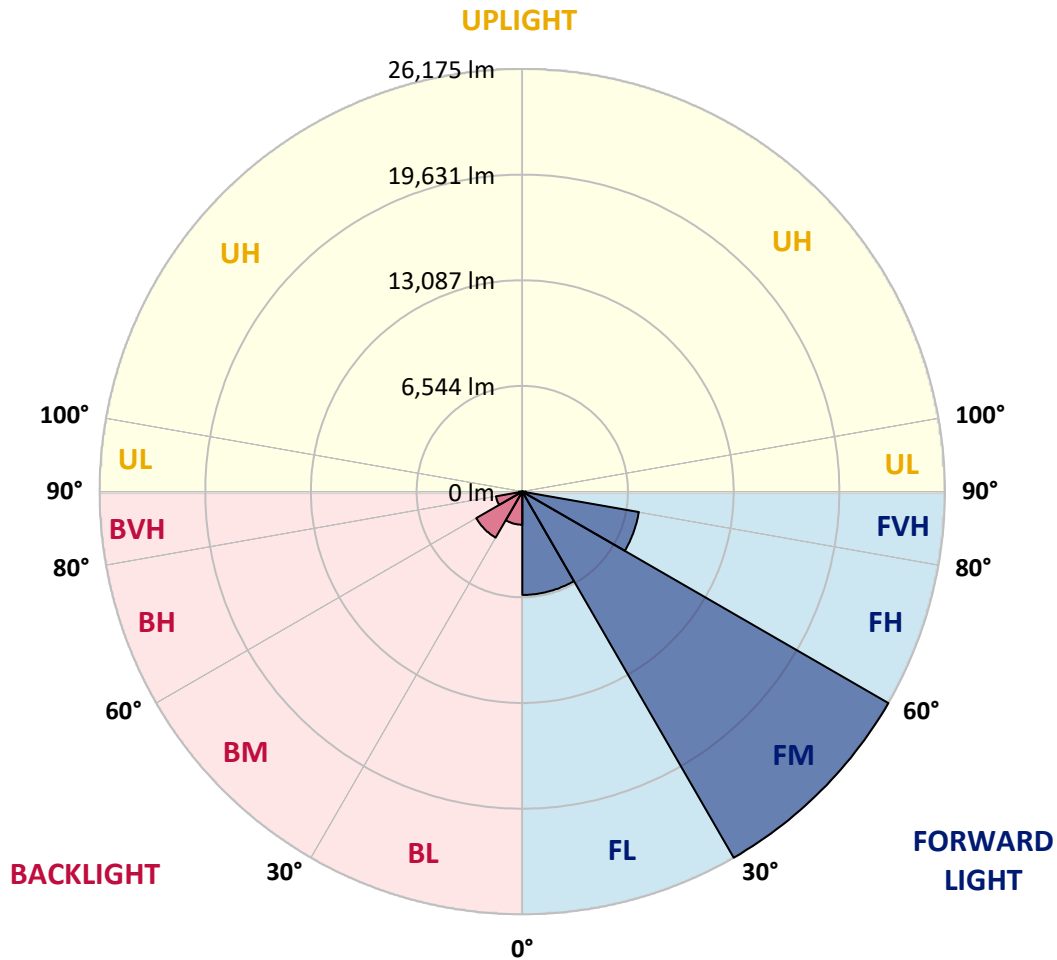
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	6395.4	13.5			
FM	(30°-60°)	26174.5	55.3			
FH	(60°-80°)	7331.3	15.5			G3/7500
FVH	(80°-90°)	215.1	0.5			G2/225
BL	(0°-30°)	2050.0	4.3	B3/2500		
BM	(30°-60°)	3289.7	7.0	B3/5000		
BH	(60°-80°)	1655.5	3.5	B3/2500		G3/2500
BVH	(80°-90°)	199.5	0.4			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G3**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	9939.5	9939.5	9939.5	9939.5	9939.5	9939.5	9939.5	9939.5	9939.5	9939.5	9939.5
2.5°	12350.6	12215.9	12109.7	12016.5	11894.8	11565.9	11237.0	11231.8	10970.2	10566.2	10151.9
5°	14362.8	14181.5	14204.8	13914.8	13624.7	13148.2	12451.6	12415.3	11858.5	11102.3	10333.1
7.5°	15673.2	15675.8	15603.3	15437.6	15124.2	14582.9	13793.1	13614.4	12840.0	11692.8	10540.3
10°	15605.9	15675.8	15797.5	15940.0	16035.8	15769.0	15049.1	14831.6	13824.1	12407.5	10770.8
12.5°	14709.8	14818.6	14992.1	15349.5	15927.0	16367.3	16121.3	15945.2	14963.6	13119.7	11024.6
15°	14150.4	14215.2	14311.0	14551.9	15173.4	16227.4	16864.5	16771.3	16038.4	13925.1	11309.5
17.5°	13979.5	14044.3	14075.3	14223.0	14665.8	15745.7	17157.2	17322.9	16991.4	14665.8	11596.9
20°	14150.4	14181.5	14181.5	14269.6	14616.6	15463.5	17144.2	17478.3	17773.5	15554.1	11866.3
22.5°	14598.5	14611.4	14593.3	14624.4	14883.4	15541.2	17022.5	17436.9	18405.4	16307.7	12076.1
25°	15326.2	15346.9	15227.8	15155.3	15344.3	15883.0	17089.8	17470.5	18900.1	17027.7	12215.9
27.5°	16152.3	16178.2	16033.2	15864.9	15952.9	16305.1	17354.0	17695.8	19270.4	17737.3	12304.0
30°	17164.9	17175.3	16931.9	16729.9	16672.9	16934.4	17804.6	18123.1	19731.4	18573.8	12436.0
32.5°	18200.8	18278.5	17965.2	17680.3	17584.5	17664.8	18470.2	18778.4	20280.4	19472.4	12648.4
35°	19609.7	19622.6	19247.1	18900.1	18584.1	18687.7	19322.2	19544.9	21039.2	20510.9	12948.8
37.5°	21368.1	21487.2	20969.3	20321.8	19933.4	19783.2	20352.9	20596.4	22103.6	21785.1	13402.0
40°	23320.8	23364.8	22922.0	22518.0	21808.4	21373.3	21766.9	22031.1	23416.6	23305.3	13927.7
42.5°	24548.3	24644.2	24677.8	24636.4	24102.9	23372.6	23522.8	23647.1	24970.5	24732.2	14466.4
45°	24962.7	25105.1	25586.8	26607.2	26664.2	25944.2	25594.6	25713.7	26664.2	26172.1	14981.8
47.5°	24276.4	24519.8	25408.1	27500.7	29067.5	29121.9	28067.8	27806.3	28207.7	27366.0	15354.7
50°	22502.4	22554.2	23913.8	26943.9	30194.0	32159.6	31069.4	30582.5	29673.5	28249.1	15611.1
52.5°	19757.3	19816.8	20956.3	24356.7	29500.0	34283.2	34581.1	33710.9	31162.6	28935.4	15779.4
55°	14665.8	15010.3	16263.7	19550.1	26211.0	34083.8	37372.8	36878.2	32962.5	29479.2	16043.6
57.5°	9017.5	8701.6	10188.1	13301.0	19713.3	31343.9	38235.2	38395.8	34943.6	29935.0	16486.4
60°	4148.8	4211.0	4824.7	6860.3	12016.5	24519.8	36013.2	37028.4	36039.1	29919.5	16597.8
62.5°	2859.1	2802.1	2646.7	3011.9	5479.9	15507.5	30419.3	32138.9	33843.0	28989.8	16154.9
65°	2556.1	2499.1	2198.7	2097.7	2517.2	6759.3	22114.0	24284.2	28495.1	26643.5	15051.7
67.5°	2387.8	2310.1	1999.3	1802.5	1797.3	2690.8	13039.4	15652.5	21135.0	22525.7	13042.0
70°	2211.7	2149.5	1841.3	1623.8	1530.5	1691.1	5731.1	7502.5	13723.1	16232.6	10159.6
72.5°	2035.6	1963.0	1685.9	1452.9	1331.1	1266.4	2196.1	2856.5	7753.7	9732.3	6228.4
75°	1779.2	1742.9	1507.2	1315.6	1183.5	1023.0	1393.3	1590.1	3708.5	4469.9	3125.8
77.5°	1556.4	1517.6	1338.9	1149.9	1054.0	831.3	989.3	1079.9	1564.2	1812.8	1411.4
80°	1139.5	1178.3	1129.1	1015.2	940.1	652.6	665.6	740.7	929.7	1028.1	862.4
82.5°	722.5	795.1	870.2	782.1	712.2	515.4	461.0	489.5	634.5	673.3	383.3
85°	303.0	308.2	505.0	476.5	406.6	305.6	277.1	292.6	339.3	354.8	178.7
87.5°	116.5	113.9	178.7	165.7	126.9	88.1	88.1	98.4	134.7	124.3	57.0
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°	9939.5	9939.5	9939.5	9939.5	9939.5	9939.5	9939.5	9939.5	9939.5	9939.5	9939.5
2.5°	9973.2	9789.3	9424.1	8970.9	8639.4	8266.5	7937.6	7701.9	7613.9	7572.5	7494.8
5°	9965.4	9602.8	8846.6	8054.2	7417.1	6764.5	6212.8	5855.4	5824.4	5586.1	5562.8
7.5°	9968.0	9413.8	8209.5	7044.1	6073.0	5404.8	4949.0	4829.9	4687.5	4651.2	4669.3
10°	9975.8	9172.9	7525.8	6044.5	5104.4	4666.7	4495.8	4449.2	4454.4	4469.9	4472.5
12.5°	9986.1	8939.9	6816.2	5285.7	4560.6	4379.3	4361.2	4402.6	4446.6	4480.3	4488.1
15°	9999.1	8673.1	6124.8	4674.5	4288.6	4273.1	4332.7	4402.6	4464.7	4514.0	4521.7
17.5°	9983.5	8362.3	5544.7	4299.0	4138.4	4213.5	4312.0	4400.0	4457.0	4503.6	4508.8
20°	9947.3	8015.3	4985.3	4034.8	4045.2	4166.9	4273.1	4356.0	4418.1	4441.4	4459.6
22.5°	9807.4	7600.9	4498.4	3830.3	3933.8	4102.2	4229.1	4278.3	4208.4	4159.2	4172.1
25°	9569.2	7062.3	4045.2	3664.5	3832.8	4011.5	4141.0	4021.9	3964.9	3944.2	3954.6
27.5°	9271.3	6471.8	3703.4	3491.0	3703.4	3910.5	3874.3	3853.6	3827.7	3794.0	3801.8
30°	8950.2	5894.3	3413.3	3356.3	3563.5	3682.6	3698.2	3731.8	3703.4	3651.6	3672.3
32.5°	8652.4	5350.4	3193.2	3242.4	3465.1	3447.0	3563.5	3602.4	3470.3	3296.8	3304.5
35°	8398.6	4845.4	3027.4	3131.0	3296.8	3304.5	3421.1	3286.4	3144.0	3061.1	3066.3
37.5°	8207.0	4451.8	2918.7	3035.2	3081.8	3180.2	3118.1	3048.1	3030.0	2973.0	2975.6
40°	8093.0	4107.4	2848.7	2960.1	2952.3	3019.7	2820.2	2890.2	2916.1	2897.9	2900.5
42.5°	7979.1	3863.9	2776.2	2856.5	2853.9	2721.8	2677.8	2737.4	2804.7	2812.5	2807.3
45°	7888.4	3674.9	2701.1	2698.5	2750.3	2543.1	2530.2	2566.5	2662.3	2708.9	2706.3
47.5°	7787.4	3516.9	2587.2	2514.7	2530.2	2431.8	2411.1	2426.6	2543.1	2618.2	2639.0
50°	7660.5	3358.9	2444.7	2346.3	2281.6	2328.2	2333.4	2336.0	2452.5	2538.0	2556.1
52.5°	7559.5	3239.8	2281.6	2209.1	2131.4	2235.0	2273.8	2279.0	2348.9	2418.8	2431.8
55°	7619.1	3172.5	2121.0	2069.2	1999.3	2139.1	2214.2	2224.6	2240.1	2291.9	2299.7
57.5°	7797.8	3188.0	1991.5	1924.2	1872.4	2025.2	2152.1	2159.9	2149.5	2211.7	2222.0
60°	7852.2	3180.2	1895.7	1763.6	1732.5	1903.5	2061.4	2077.0	2074.4	2165.0	2183.2
62.5°	7624.3	3081.8	1799.9	1629.0	1608.2	1779.2	1934.6	1996.7	2009.7	2139.1	2162.4
65°	7088.2	2879.8	1673.0	1486.5	1486.5	1647.1	1812.8	1898.3	1934.6	2108.1	2134.0
67.5°	6381.2	2641.6	1543.5	1364.8	1359.6	1520.2	1683.3	1771.4	1828.4	2064.0	2079.6
70°	5296.1	2320.4	1382.9	1232.7	1232.7	1377.8	1525.4	1631.5	1714.4	1981.2	1981.2
72.5°	3628.3	1929.4	1188.7	1082.5	1085.1	1219.8	1370.0	1489.1	1587.5	1815.4	1820.6
75°	2294.5	1507.2	976.3	922.0	932.3	1059.2	1214.6	1338.9	1535.7	1794.7	1802.5
77.5°	1219.8	1059.2	776.9	764.0	776.9	893.5	1067.0	1237.9	1540.9	1556.4	1530.5
80°	789.9	751.0	613.8	587.9	593.1	720.0	950.4	1175.8	1237.9	1253.4	1196.5
82.5°	429.9	476.5	435.1	409.2	409.2	562.0	810.6	934.9	888.3	738.1	704.4
85°	183.9	222.7	225.3	196.8	189.1	347.0	543.8	510.2	473.9	453.2	448.0
87.5°	51.8	72.5	72.5	54.4	41.4	95.8	108.8	31.1	0.0	2.6	5.2
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)