

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: P459552

Luminaire Tested: **GALN-SA9D-735-U-T3R**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P459552  
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-SA9D-735-U-T3R  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(9) 70 CRI, 3500K, 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: 66854 lumens  
Efficiency: N/A  
Efficacy: 121.1 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B4 - U0 - G5

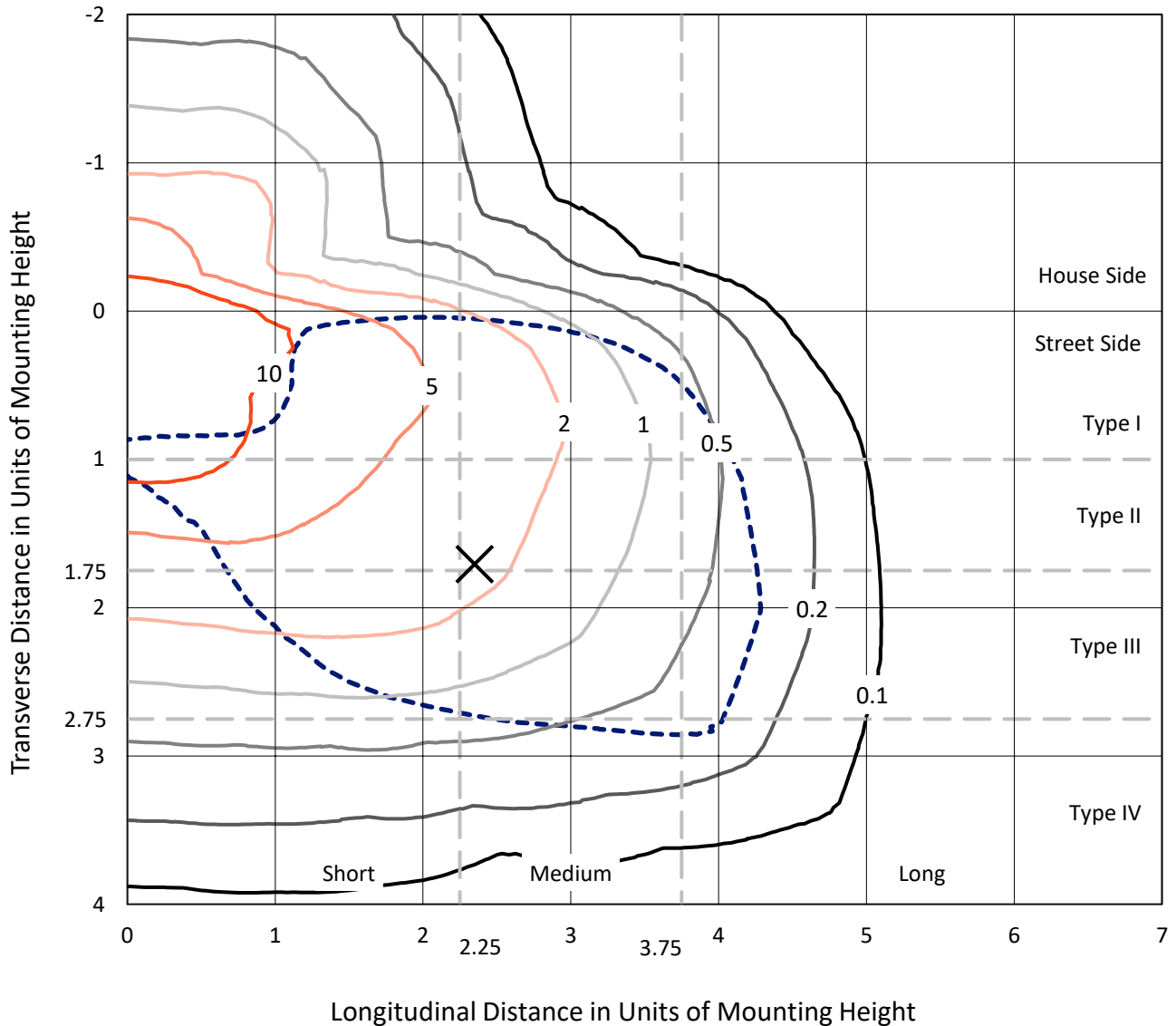
Input Watts (W): 552  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

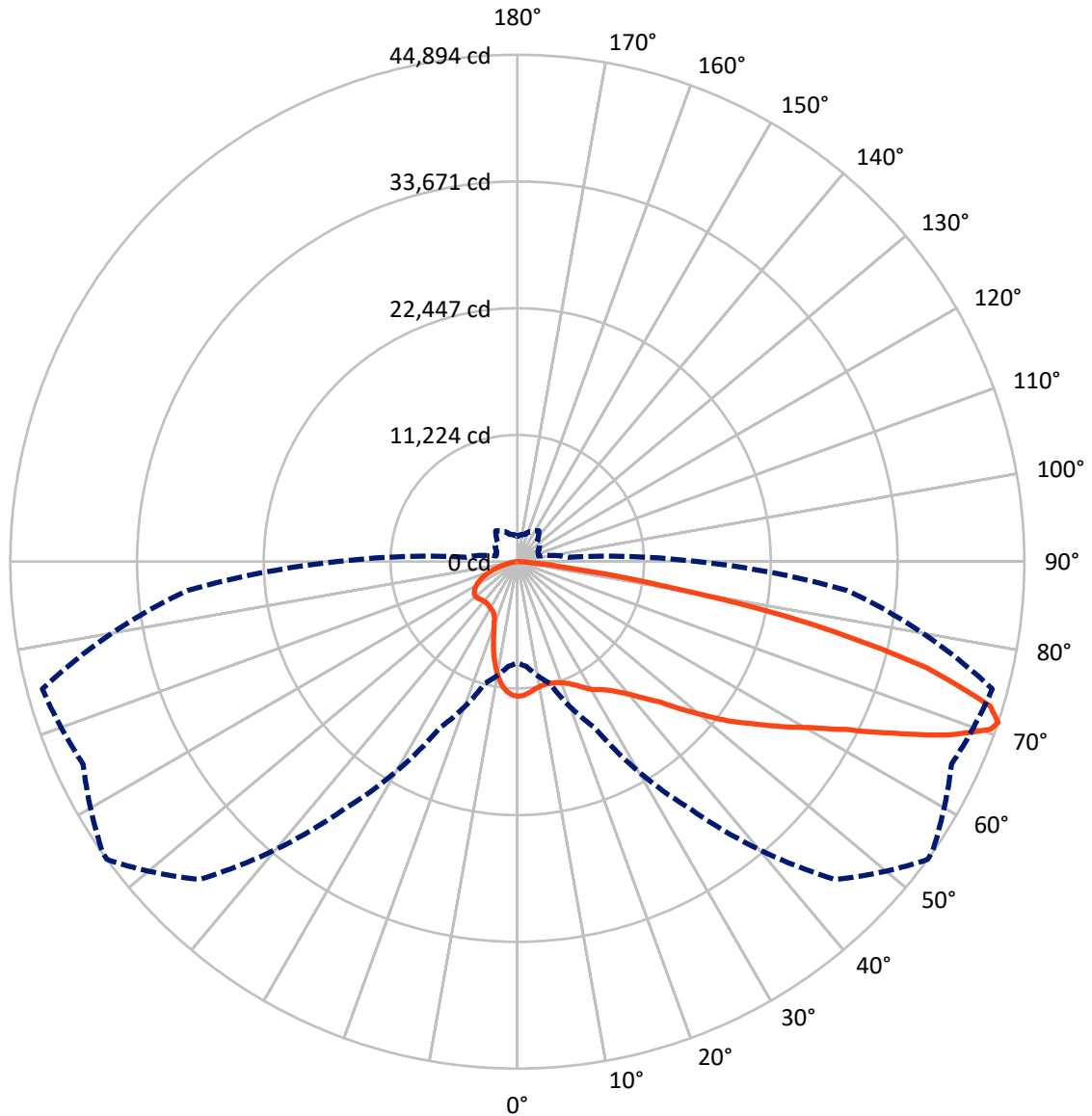
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 19.2 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	12070.1	0.0	12070.1
	% Fixture	18.1	0.0	18.1
<b>Street Side</b>	Lumens	54783.9	0.0	54783.9
	% Fixture	81.9	0.0	81.9
<b>Total</b>	Lumens	66854.0	0.0	66854.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1062.9	1.6
10°-20°	2806.7	4.2
20°-30°	4673.3	7.0
30°-40°	6910.2	10.3
40°-50°	9733.3	14.6
50°-60°	13033.3	19.5
60°-70°	16427.5	24.6
70°-80°	11219.9	16.8
80°-90°	986.7	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°	66854.0	100.0
0°-180°	66854.0	100.0

**Coefficient of Utilization**



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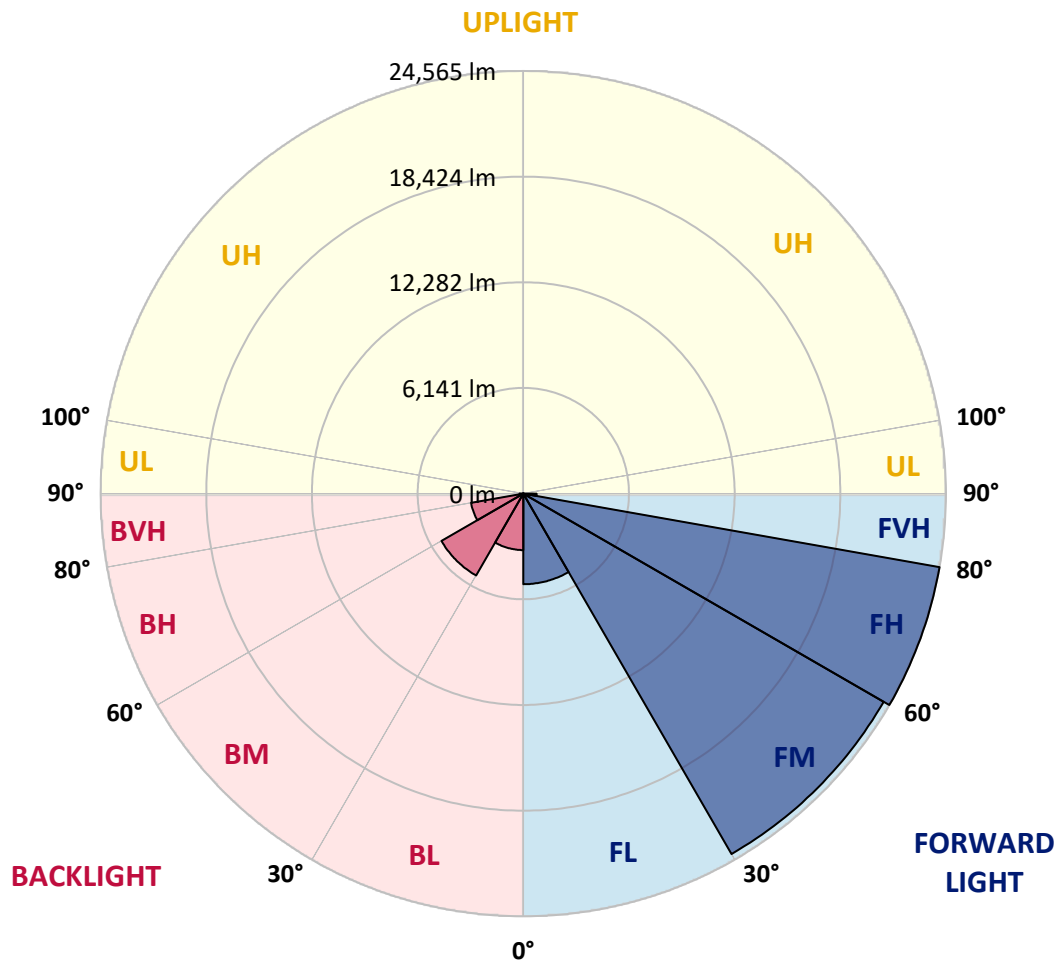
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	5262.5	7.9			
FM	(30°-60°)	24185.4	36.2			
FH	(60°-80°)	24564.8	36.7			G5
FVH	(80°-90°)	771.3	1.2			G5
BL	(0°-30°)	3280.4	4.9	B4/5000		
BM	(30°-60°)	5491.5	8.2	B4/8500		
BH	(60°-80°)	3082.7	4.6	B4/5000		G4/5000
BVH	(80°-90°)	215.4	0.3			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B4-U0-G5**

Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	11927.7	11927.7	11927.7	11927.7	11927.7	11927.7	11927.7	11927.7	11927.7	11927.7	11927.7
2.5°	11523.3	11577.5	11591.9	11628.0	11703.9	11765.2	11826.6	11819.4	11906.1	11942.2	11974.7
5°	11010.5	11024.9	11079.1	11151.3	11285.0	11454.7	11620.8	11624.4	11837.5	12007.2	12090.2
7.5°	10634.9	10681.9	10718.0	10793.8	10934.7	11118.8	11382.5	11404.1	11783.3	12119.1	12296.1
10°	10389.4	10443.5	10483.3	10577.2	10718.0	10923.8	11209.1	11248.8	11743.6	12296.1	12606.6
12.5°	10165.5	10219.7	10255.8	10378.5	10562.7	10815.5	11136.9	11183.8	11758.0	12501.9	12946.1
15°	10302.7	10346.0	10331.6	10367.7	10490.5	10779.4	11165.8	11212.7	11812.2	12700.5	13281.9
17.5°	10913.0	10949.1	10829.9	10692.7	10634.9	10848.0	11256.1	11306.6	11920.5	12906.4	13625.0
20°	11812.2	11909.7	11649.7	11342.7	11064.7	11093.6	11443.8	11498.0	12072.2	13112.2	13975.3
22.5°	12982.2	13054.4	12736.6	12231.1	11718.3	11454.7	11725.5	11758.0	12299.7	13379.4	14358.1
25°	14358.1	14401.4	13960.8	13310.8	12570.5	12072.2	12111.9	12169.7	12675.3	13682.8	14697.5
27.5°	15694.2	15831.4	15322.3	14527.8	13552.8	12722.2	12642.8	12678.9	13083.3	13852.5	14932.2
30°	17279.5	17268.7	16730.6	15809.8	14560.3	13430.0	13144.7	13137.5	13303.6	13935.6	15102.0
32.5°	18543.4	18691.5	18164.3	17160.4	15712.3	14163.1	13491.4	13476.9	13473.3	14080.0	15354.8
35°	19980.7	20002.4	19518.5	18507.3	16958.1	15083.9	13975.3	13903.1	13820.0	14390.6	15697.8
37.5°	21266.3	21367.4	20923.2	19789.3	18182.3	16040.9	14639.7	14592.8	14340.0	14928.6	16246.7
40°	22270.2	22346.0	22078.8	20999.0	19388.5	17073.7	15484.8	15398.1	15091.1	15809.8	16979.8
42.5°	22598.8	22754.1	22858.8	22328.0	20775.1	18297.9	16524.8	16416.4	16181.7	17145.9	17824.8
45°	22624.1	22869.6	23422.1	23447.4	22169.1	19764.0	17738.1	17662.3	17644.2	18857.6	19012.9
47.5°	22432.7	22681.9	23609.9	24111.9	23411.3	21244.6	19489.6	19370.4	19381.2	20973.8	20345.4
50°	21970.4	22266.6	23393.3	24538.0	24382.7	22783.0	21338.5	21298.8	21522.7	23389.6	21728.5
52.5°	21100.2	21457.7	23169.4	24805.2	25105.0	24108.3	23440.2	23328.3	23895.2	26011.4	23241.6
55°	18691.5	19229.6	22349.6	24953.3	25791.1	25375.8	25332.5	25534.7	26285.8	28871.4	24906.3
57.5°	17434.8	17839.3	20569.3	24978.6	26657.8	26849.2	27542.5	27593.1	28907.5	31908.4	26787.8
60°	16748.7	17106.2	19594.3	24812.5	27867.5	28672.8	29803.1	29983.7	31467.9	35198.2	28737.8
62.5°	16149.2	16456.2	19009.3	24238.3	29232.5	31377.6	32731.8	32818.4	34374.9	38831.1	30662.6
65°	14737.2	15087.5	17832.0	23664.1	30409.8	34757.7	36617.4	36516.3	37469.7	41965.6	31868.7
67.5°	12834.2	13278.3	15632.8	21681.6	30991.2	38451.9	40994.2	40867.8	40524.7	44020.3	32215.4
70°	10403.8	10642.2	12819.7	18254.5	28669.2	40391.1	44450.1	44316.5	42417.0	44291.2	30575.9
71°	8952.1	9324.1	11162.2	16214.2	26737.2	39798.9	44894.2	44858.1	42420.6	43543.7	29340.9
72.5°	6987.6	7215.1	8840.2	12563.3	22725.2	36433.2	43796.4	43933.7	41499.7	41467.2	26795.0
75°	4420.1	4521.2	5546.8	7395.7	12469.4	25801.9	37386.6	37758.5	36848.5	33941.5	19926.5
77.5°	2567.6	2697.6	3322.3	4358.7	5387.9	14004.2	26751.7	27156.1	25603.3	18687.9	8157.7
80°	1495.0	1639.5	2188.4	2531.4	2473.7	5196.5	13621.4	14311.1	11086.3	4719.8	2289.5
82.5°	830.6	928.1	1538.4	1542.0	1318.1	1697.3	4286.5	4485.1	3163.4	1903.1	935.3
85°	603.1	682.5	993.1	899.2	632.0	729.5	1491.4	1563.6	1278.4	801.7	303.3
87.5°	213.1	303.3	545.3	433.3	173.3	151.7	429.7	350.3	325.0	223.9	68.6
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°	11927.7	11927.7	11927.7	11927.7	11927.7	11927.7	11927.7	11927.7	11927.7	11927.7	11927.7
2.5°	11992.7	12000.0	11963.9	11898.9	11833.9	11750.8	11656.9	11584.7	11552.2	11548.6	11545.0
5°	12122.7	12140.8	12003.6	11801.4	11577.5	11303.0	11068.3	10801.1	10732.4	10624.1	10656.6
7.5°	12332.2	12321.4	12050.5	11620.8	11097.2	10515.8	10024.6	9739.4	9443.2	9360.2	9363.8
10°	12631.9	12563.3	12050.5	11252.5	10378.5	9515.5	8829.3	8396.0	8161.3	7966.3	7894.1
12.5°	12949.7	12776.4	11935.0	10736.1	9454.1	8396.0	7659.3	7074.3	6922.6	6763.7	6767.4
15°	13253.0	12964.2	11707.5	10010.2	8457.4	7200.7	6485.7	6135.4	6088.5	6106.5	6102.9
17.5°	13527.5	13097.8	11360.8	9201.3	7294.6	6175.1	5796.0	5821.2	5947.6	6037.9	6048.7
20°	13805.6	13177.2	10844.4	8117.9	6196.8	5554.0	5568.4	5767.1	5958.5	6081.2	6099.3
22.5°	14069.2	13213.3	10237.7	7070.7	5402.3	5290.4	5503.4	5716.5	5904.3	6023.5	6041.5
25°	14242.5	13130.3	9378.2	5976.5	5012.3	5196.5	5420.4	5600.9	5759.8	5882.6	5911.5
27.5°	14289.5	12863.0	8312.9	5091.8	4831.8	5106.2	5312.1	5445.7	5568.4	5684.0	5705.7
30°	14264.2	12469.4	7142.9	4571.8	4727.0	5001.5	5160.4	5257.9	5405.9	5496.2	5514.3
32.5°	14224.5	12010.8	5922.3	4293.7	4640.4	4904.0	4997.9	5084.5	5080.9	5044.8	5070.1
35°	14238.9	11461.9	4932.9	4127.6	4564.5	4831.8	4911.2	4802.9	4492.3	4477.9	4463.4
37.5°	14314.7	10920.2	4214.3	4012.0	4524.8	4820.9	4864.3	4365.9	4091.5	3965.1	3932.6
40°	14509.7	10288.3	3741.2	3925.4	4521.2	4904.0	4651.2	4145.6	3618.4	3372.8	3354.8
42.5°	14769.7	9667.1	3452.3	3871.2	4564.5	5030.4	4564.5	3835.1	3260.9	3116.5	3094.8
45°	15156.1	8955.7	3293.4	3845.9	4629.5	5077.3	4535.6	3607.6	3116.5	3000.9	3000.9
47.5°	15593.1	8276.8	3206.7	3827.9	4712.6	5044.8	4279.3	3535.3	3047.8	3062.3	3130.9
50°	16026.4	7688.2	3141.7	3788.1	4784.8	5026.8	4174.5	3531.7	3065.9	3250.1	3372.8
52.5°	16528.4	7272.9	3062.3	3723.1	4784.8	4911.2	4142.0	3604.0	3116.5	3170.6	3224.8
55°	17135.1	7142.9	2961.2	3582.3	4698.2	4622.3	4124.0	3708.7	3152.6	3026.2	3047.8
57.5°	17936.8	7352.4	2863.7	3405.3	4499.5	4322.6	4116.8	3737.6	3069.5	2964.8	2943.1
60°	18868.4	7767.7	2834.8	3224.8	4228.7	4066.2	4073.4	3654.5	2953.9	2845.6	2863.7
62.5°	19522.1	8016.8	2816.7	3087.6	3932.6	3784.5	3968.7	3553.4	2903.4	2809.5	2827.6
65°	19522.1	7713.5	2650.6	2878.1	3549.8	3445.1	3842.3	3427.0	2838.4	2730.1	2712.0
67.5°	18781.8	6828.8	2397.8	2563.9	3127.3	3058.7	3665.4	3275.3	2740.9	2657.8	2614.5
70°	16853.4	5178.4	2080.0	2195.6	2592.8	2654.2	3437.8	3069.5	2578.4	2477.3	2412.3
71°	16004.8	4510.4	1946.4	2007.8	2387.0	2477.3	3329.5	2982.8	2506.2	2361.7	2246.2
72.5°	14368.9	3799.0	1744.2	1769.5	2040.3	2202.8	3102.0	2816.7	2368.9	2163.1	2033.1
75°	10916.6	2773.4	1404.8	1390.3	1509.5	1747.8	2625.3	2509.8	2076.4	1798.4	1722.5
77.5°	4716.2	1509.5	1050.9	1061.7	1025.6	1325.3	2065.6	2155.9	1780.3	1462.5	1393.9
80°	1430.0	870.3	718.6	733.1	686.1	888.4	1455.3	1690.0	1430.0	1137.5	1043.6
82.5°	733.1	520.0	491.1	483.9	437.0	502.0	881.1	1155.6	1022.0	711.4	628.3
85°	317.8	278.1	241.9	234.7	205.8	180.6	314.2	577.8	541.7	397.2	379.2
87.5°	79.4	72.2	46.9	43.3	25.3	3.6	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)