

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: P458865

Luminaire Tested: **GALN-SA4A-735-U-AFL**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P458865  
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-SA4A-735-U-AFL  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 70 CRI, 3500K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 17018 lumens  
Efficiency: N/A  
Efficacy: 140.6 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G2

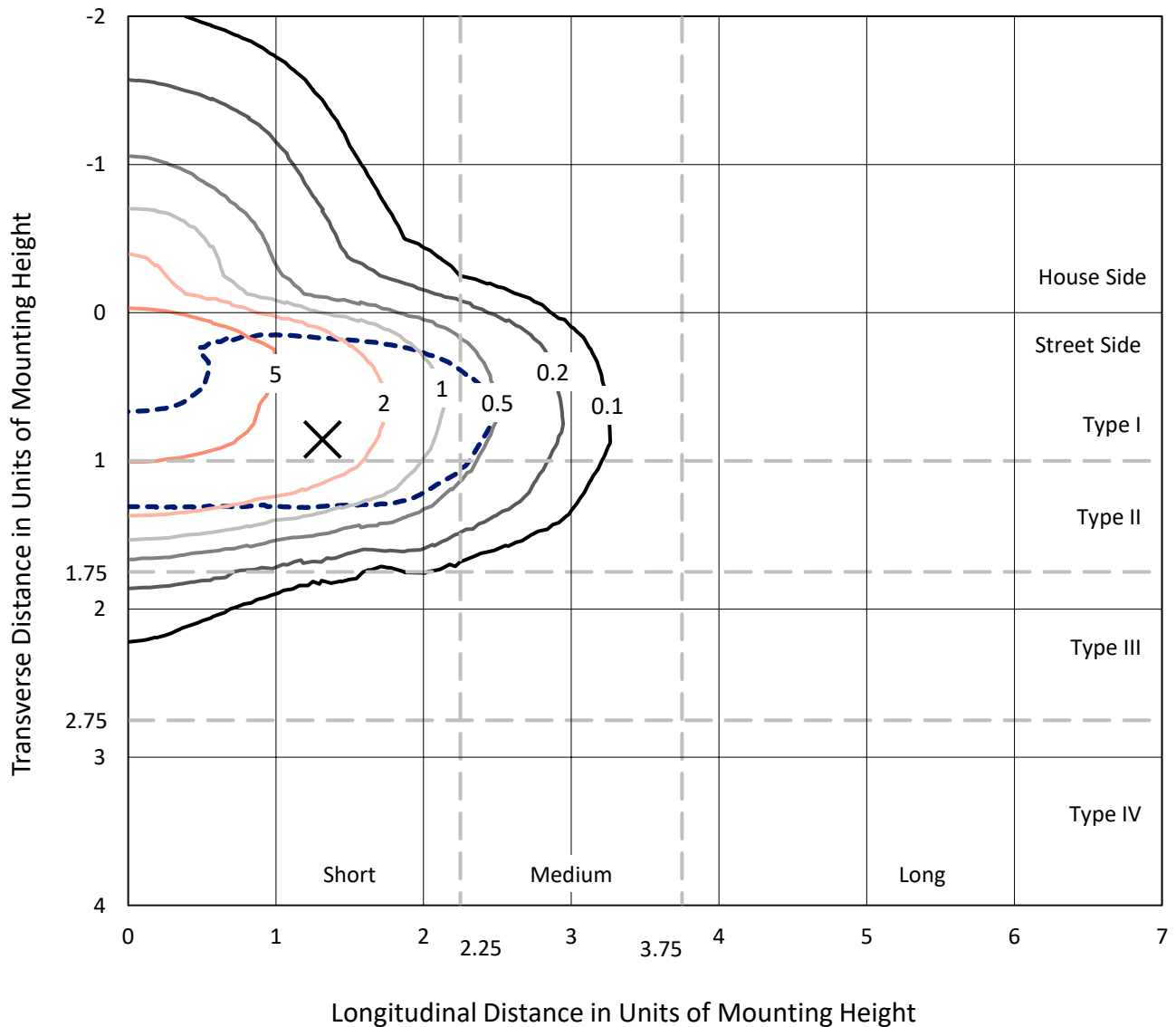
Input Watts (W): 121  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

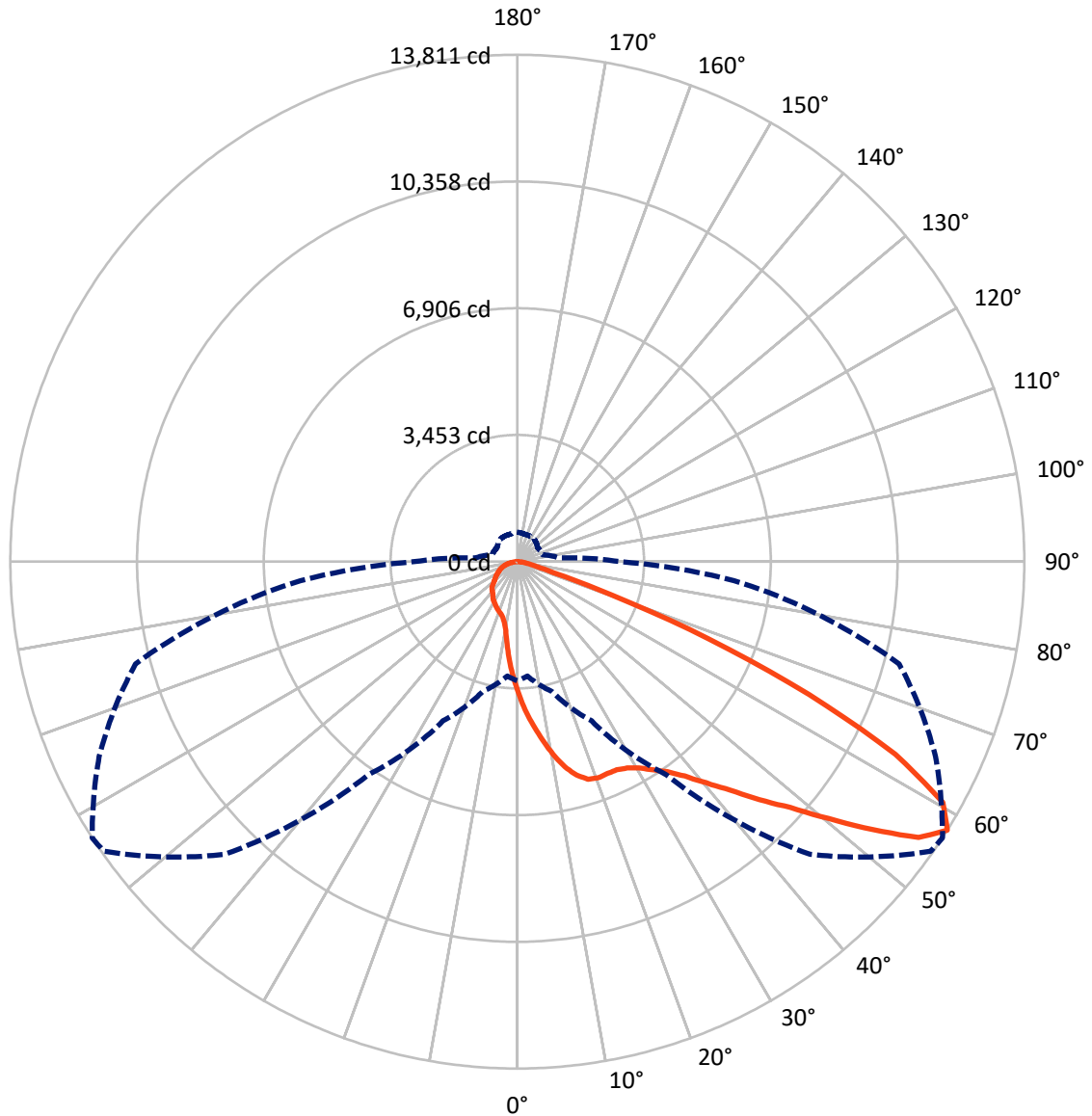
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.7 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	2588.0	0.0	2588.0
	% Fixture	15.2	0.0	15.2
<b>Street Side</b>	Lumens	14430.0	0.0	14430.0
	% Fixture	84.8	0.0	84.8
<b>Total</b>	Lumens	17018.0	0.0	17018.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	343.6	2.0
10°-20°	1012.7	6.0
20°-30°	1681.6	9.9
30°-40°	2532.9	14.9
40°-50°	3802.9	22.3
50°-60°	4262.6	25.0
60°-70°	2494.7	14.7
70°-80°	737.9	4.3
80°-90°	149.2	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°	17018.0	100.0
0°-180°	17018.0	100.0

**Coefficient of Utilization**



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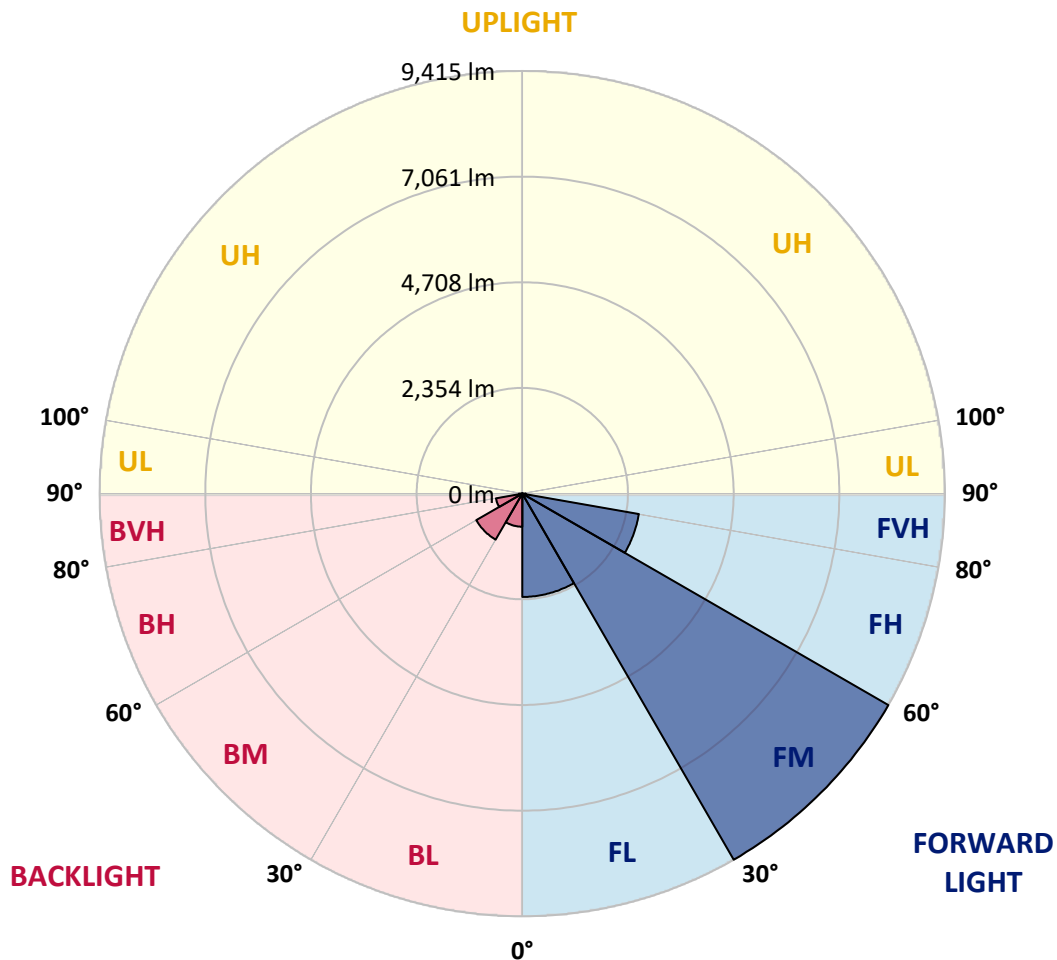
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2300.4	13.5			
FM	(30°-60°)	9415.1	55.3			
FH	(60°-80°)	2637.1	15.5			G2/5000
FVH	(80°-90°)	77.4	0.5			G1/100
BL	(0°-30°)	737.4	4.3	B2/1000		
BM	(30°-60°)	1183.3	7.0	B2/2500		
BH	(60°-80°)	595.5	3.5	B2/1000		G2/1000
BVH	(80°-90°)	71.8	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	3575.3	3575.3	3575.3	3575.3	3575.3	3575.3	3575.3	3575.3	3575.3	3575.3	3575.3
2.5°	4442.6	4394.1	4355.9	4322.4	4278.6	4160.3	4042.0	4040.1	3946.0	3800.7	3651.7
5°	5166.4	5101.2	5109.5	5005.2	4900.9	4729.5	4478.9	4465.8	4265.6	3993.6	3716.9
7.5°	5637.7	5638.7	5612.6	5553.0	5440.2	5245.6	4961.4	4897.2	4618.6	4205.9	3791.4
10°	5613.5	5638.7	5682.5	5733.7	5768.2	5672.2	5413.2	5335.0	4972.6	4463.1	3874.3
12.5°	5291.2	5330.3	5392.7	5521.3	5729.0	5887.4	5798.9	5735.6	5382.5	4719.2	3965.6
15°	5090.0	5113.3	5147.7	5234.4	5457.9	5837.1	6066.3	6032.7	5769.1	5008.9	4068.1
17.5°	5028.5	5051.8	5063.0	5116.1	5275.4	5663.8	6171.5	6231.1	6111.9	5275.4	4171.5
20°	5090.0	5101.2	5101.2	5132.8	5257.7	5562.3	6166.9	6287.0	6393.2	5594.9	4268.4
22.5°	5251.1	5255.8	5249.3	5260.5	5353.6	5590.2	6123.1	6272.1	6620.5	5866.0	4343.8
25°	5512.9	5520.4	5477.5	5451.4	5519.4	5713.2	6147.3	6284.2	6798.4	6124.9	4394.1
27.5°	5810.1	5819.4	5767.2	5706.7	5738.3	5865.0	6242.3	6365.3	6931.7	6380.2	4425.8
30°	6174.3	6178.0	6090.5	6017.8	5997.3	6091.4	6404.4	6519.0	7097.5	6681.1	4473.3
32.5°	6546.9	6574.9	6462.2	6359.7	6325.2	6354.1	6643.8	6754.7	7295.0	7004.3	4549.7
35°	7053.7	7058.4	6923.3	6798.4	6684.8	6722.1	6950.3	7030.4	7567.9	7377.9	4657.7
37.5°	7686.2	7729.1	7542.8	7309.9	7170.1	7116.1	7321.0	7408.6	7950.8	7836.2	4820.8
40°	8388.6	8404.4	8245.1	8099.8	7844.6	7688.1	7829.7	7924.7	8423.1	8383.0	5009.9
42.5°	8830.2	8864.6	8876.7	8861.8	8669.9	8407.2	8461.3	8506.0	8982.0	8896.3	5203.6
45°	8979.2	9030.4	9203.7	9570.7	9591.2	9332.3	9206.5	9249.4	9591.2	9414.2	5389.0
47.5°	8732.3	8819.9	9139.4	9892.1	10455.7	10475.3	10096.1	10002.0	10146.4	9843.7	5523.2
50°	8094.2	8112.9	8601.9	9691.8	10860.9	11568.0	11175.8	11000.7	10673.7	10161.3	5615.4
52.5°	7106.8	7128.2	7538.1	8761.2	10611.3	12331.9	12439.0	12126.0	11209.3	10408.2	5675.9
55°	5275.4	5399.3	5850.1	7032.3	9428.2	12260.1	13443.2	13265.3	11856.8	10603.8	5770.9
57.5°	3243.7	3130.0	3664.7	4784.4	7091.0	11274.5	13753.4	13811.2	12569.4	10767.8	5930.2
60°	1492.3	1514.7	1735.5	2467.7	4322.4	8819.9	12954.1	13319.3	12963.4	10762.2	5970.3
62.5°	1028.4	1007.9	952.0	1083.4	1971.2	5578.1	10942.0	11560.5	12173.5	10427.8	5811.0
65°	919.4	898.9	790.9	754.6	905.5	2431.3	7954.5	8735.1	10249.8	9583.8	5414.2
67.5°	858.9	830.9	719.2	648.4	646.5	967.9	4690.4	5630.3	7602.4	8102.6	4691.3
70°	795.5	773.2	662.3	584.1	550.5	608.3	2061.5	2698.7	4936.3	5839.0	3654.5
72.5°	732.2	706.1	606.4	522.6	478.8	455.5	790.0	1027.5	2789.1	3500.8	2240.4
75°	640.0	626.9	542.2	473.2	425.7	368.0	501.2	572.0	1334.0	1607.9	1124.4
77.5°	559.9	545.9	481.6	413.6	379.1	299.0	355.9	388.5	562.7	652.1	507.7
80°	409.9	423.9	406.2	365.2	338.2	234.8	239.4	266.4	334.4	369.8	310.2
82.5°	259.9	286.0	313.0	281.3	256.2	185.4	165.8	176.1	228.2	242.2	137.9
85°	109.0	110.9	181.7	171.4	146.3	109.9	99.7	105.3	122.0	127.6	64.3
87.5°	41.9	41.0	64.3	59.6	45.6	31.7	31.7	35.4	48.4	44.7	20.5
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°	3575.3	3575.3	3575.3	3575.3	3575.3	3575.3	3575.3	3575.3	3575.3	3575.3	3575.3
2.5°	3587.4	3521.3	3389.9	3226.9	3107.6	2973.5	2855.2	2770.4	2738.8	2723.9	2695.9
5°	3584.6	3454.2	3182.2	2897.1	2668.0	2433.2	2234.8	2106.2	2095.1	2009.4	2001.0
7.5°	3585.5	3386.2	2953.0	2533.8	2184.5	1944.1	1780.2	1737.3	1686.1	1673.1	1679.6
10°	3588.3	3299.5	2707.1	2174.2	1836.1	1678.7	1617.2	1600.4	1602.3	1607.9	1608.8
12.5°	3592.1	3215.7	2451.8	1901.3	1640.5	1575.3	1568.7	1583.6	1599.5	1611.6	1614.4
15°	3596.7	3119.8	2203.1	1681.4	1542.6	1537.1	1558.5	1583.6	1606.0	1623.7	1626.5
17.5°	3591.1	3008.0	1994.4	1546.4	1488.6	1515.6	1551.0	1582.7	1603.2	1620.0	1621.8
20°	3578.1	2883.1	1793.2	1451.4	1455.1	1498.9	1537.1	1566.9	1589.2	1597.6	1604.1
22.5°	3527.8	2734.1	1618.1	1377.8	1415.0	1475.6	1521.2	1538.9	1513.8	1496.1	1500.7
25°	3442.1	2540.3	1455.1	1318.1	1378.7	1443.0	1489.5	1446.7	1426.2	1418.7	1422.5
27.5°	3334.9	2327.9	1332.1	1255.7	1332.1	1406.6	1393.6	1386.1	1376.8	1364.7	1367.5
30°	3219.4	2120.2	1227.8	1207.3	1281.8	1324.7	1330.3	1342.4	1332.1	1313.5	1320.9
32.5°	3112.3	1924.6	1148.6	1166.3	1246.4	1239.9	1281.8	1295.8	1248.3	1185.9	1188.7
35°	3021.0	1742.9	1089.0	1126.2	1185.9	1188.7	1230.6	1182.1	1130.9	1101.1	1103.0
37.5°	2952.1	1601.3	1049.9	1091.8	1108.5	1143.9	1121.6	1096.4	1089.9	1069.4	1070.4
40°	2911.1	1477.4	1024.7	1064.8	1062.0	1086.2	1014.5	1039.6	1048.9	1042.4	1043.3
42.5°	2870.1	1389.9	998.6	1027.5	1026.6	979.1	963.2	984.6	1008.9	1011.7	1009.8
45°	2837.5	1321.9	971.6	970.7	989.3	914.8	910.1	923.2	957.6	974.4	973.5
47.5°	2801.2	1265.0	930.6	904.5	910.1	874.7	867.3	872.9	914.8	941.8	949.2
50°	2755.5	1208.2	879.4	844.0	820.7	837.5	839.3	840.3	882.2	912.9	919.4
52.5°	2719.2	1165.4	820.7	794.6	766.7	803.9	817.9	819.8	844.9	870.1	874.7
55°	2740.6	1141.1	762.9	744.3	719.2	769.5	796.5	800.2	805.8	824.4	827.2
57.5°	2804.9	1146.7	716.4	692.1	673.5	728.5	774.1	776.9	773.2	795.5	799.3
60°	2824.5	1143.9	681.9	634.4	623.2	684.7	741.5	747.1	746.2	778.8	785.3
62.5°	2742.5	1108.5	647.4	585.9	578.5	640.0	695.9	718.2	722.9	769.5	777.8
65°	2549.7	1035.9	601.8	534.7	534.7	592.5	652.1	682.8	695.9	758.3	767.6
67.5°	2295.3	950.2	555.2	490.9	489.1	546.8	605.5	637.2	657.7	742.4	748.0
70°	1905.0	834.7	497.4	443.4	443.4	495.6	548.7	586.9	616.7	712.6	712.6
72.5°	1305.1	694.0	427.6	389.4	390.3	438.8	492.8	535.6	571.0	653.0	654.9
75°	825.4	542.2	351.2	331.6	335.4	381.0	436.9	481.6	552.4	645.6	648.4
77.5°	438.8	381.0	279.5	274.8	279.5	321.4	383.8	445.3	554.3	559.9	550.5
80°	284.1	270.1	220.8	211.5	213.3	259.0	341.9	422.9	445.3	450.9	430.4
82.5°	154.6	171.4	156.5	147.2	147.2	202.1	291.6	336.3	319.5	265.5	253.4
85°	66.1	80.1	81.0	70.8	68.0	124.8	195.6	183.5	170.5	163.0	161.2
87.5°	18.6	26.1	26.1	19.6	14.9	34.5	39.1	11.2	0.0	0.9	1.9
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)