

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: P453731

Luminaire Tested: **GALN-SA4D-740-U-AFL-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P453731  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-25)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA4D-740-U-AFL-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 70 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 25073 lumens  
Efficiency: N/A  
Efficacy: 102.3 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G2

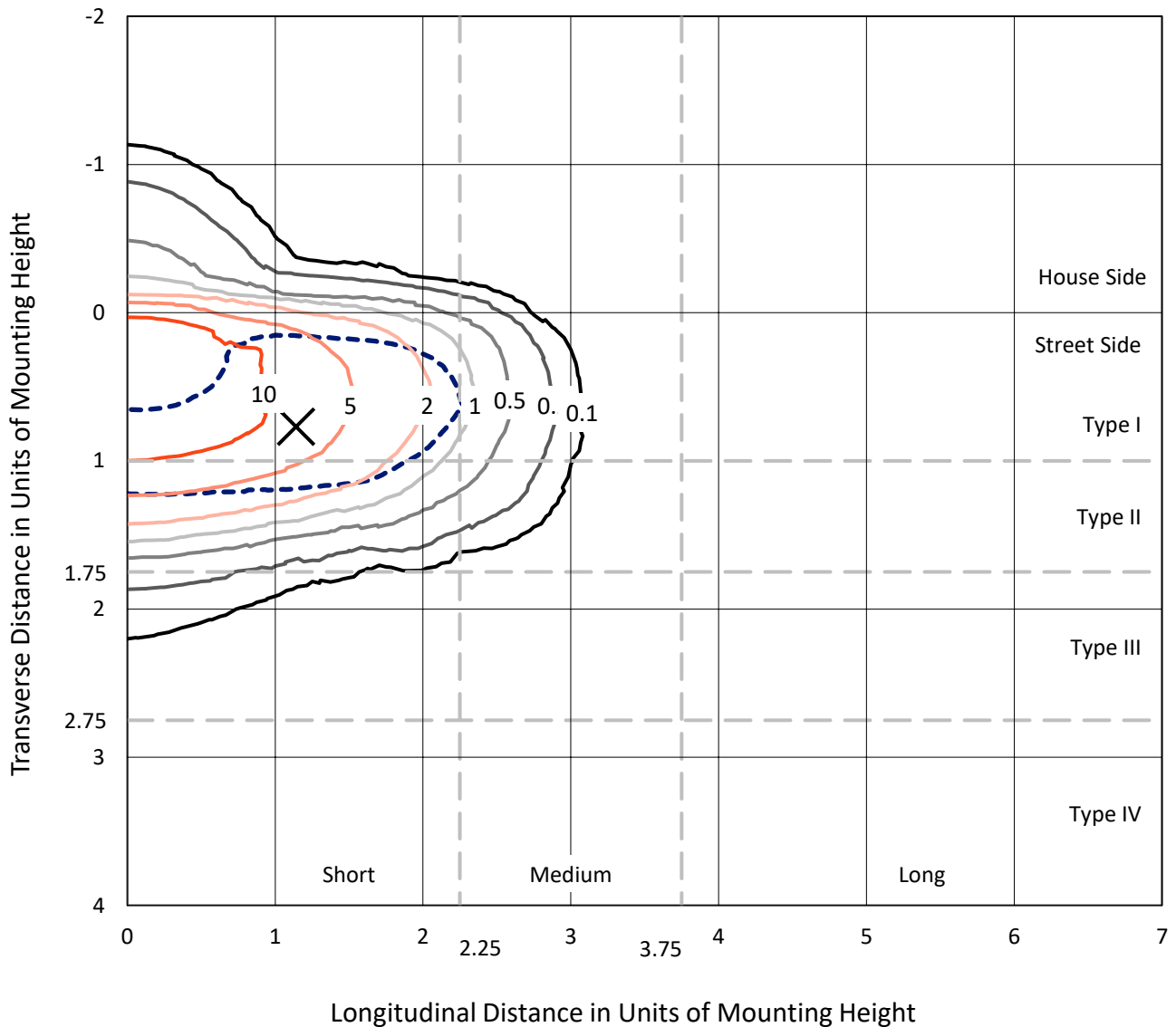
Input Watts (W): 245  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

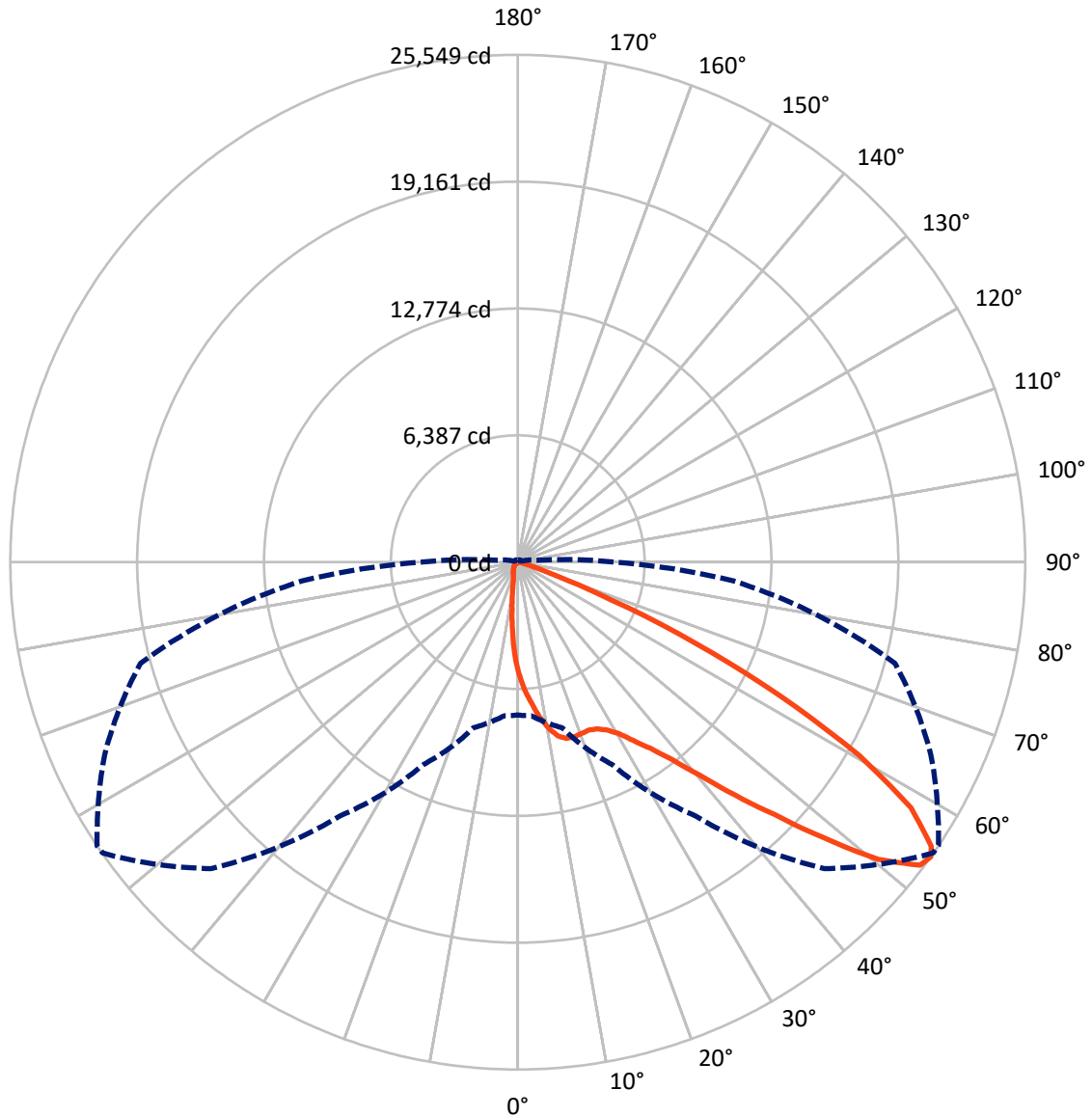
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 13.4 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 56-Deg Lateral    - - - Horizontal Cone Through 54-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1185.6	0.0	1185.6
	% Fixture	4.7	0.0	4.7
<b>Street Side</b>	Lumens	23887.4	0.0	23887.4
	% Fixture	95.3	0.0	95.3
<b>Total</b>	Lumens	25073.0	0.0	25073.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	492.2	2.0
10°-20°	1330.7	5.3
20°-30°	2304.6	9.2
30°-40°	3978.2	15.9
40°-50°	6771.0	27.0
50°-60°	6700.8	26.7
60°-70°	3058.4	12.2
70°-80°	392.8	1.6
80°-90°	44.3	0.2
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°	25073.0	100.0
0°-180°	25073.0	100.0

**Coefficient of Utilization**



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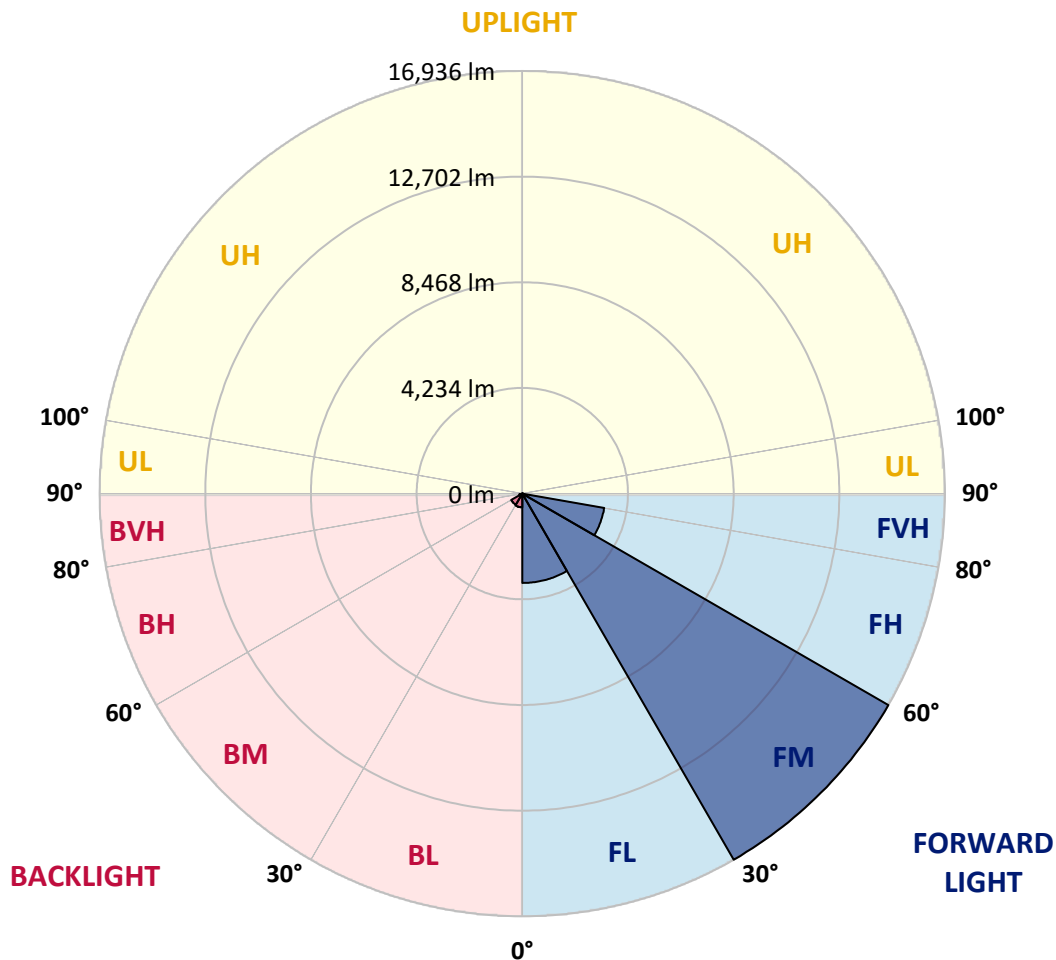
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3579.3	14.3			
FM (30°-60°)	16936.2	67.5			
FH (60°-80°)	3332.4	13.3			G2/5000
FVH (80°-90°)	39.5	0.2			G1/100
BL (0°-30°)	548.3	2.2	B2/1000		
BM (30°-60°)	513.8	2.0	B1/1000		
BH (60°-80°)	118.7	0.5	B1/500		G1/500
BVH (80°-90°)	4.7	0.0			G0/10
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°	56°	65°	75°	85°
0°	5570.5	5570.5	5570.5	5570.5	5570.5	5570.5	5570.5	5570.5	5570.5	5570.5	5570.5
2.5°	7079.4	7030.4	6962.7	6910.3	6786.8	6609.2	6421.4	6421.4	6240.4	5988.3	5731.2
5°	8165.4	8133.3	8067.3	7932.0	7793.3	7544.6	7167.4	7101.4	6778.3	6321.6	5841.2
7.5°	8607.0	8622.2	8625.6	8590.0	8524.1	8278.8	7904.9	7859.3	7343.3	6731.0	5984.9
10°	8184.1	8258.5	8331.2	8478.4	8686.5	8745.7	8534.2	8486.9	7979.4	7145.4	6140.6
12.5°	7554.8	7595.4	7636.0	7867.7	8285.5	8764.3	8985.9	8984.2	8554.5	7558.2	6338.5
15°	7262.1	7297.6	7301.0	7404.2	7766.2	8463.2	9178.7	9204.1	9116.1	8067.3	6551.6
17.5°	7323.0	7351.8	7328.1	7353.5	7542.9	8131.6	9156.7	9241.3	9571.2	8556.2	6744.5
20°	7720.5	7776.4	7685.0	7614.0	7671.5	8043.6	9082.3	9200.7	9892.6	9033.2	6920.4
22.5°	8434.4	8464.9	8349.8	8155.3	8053.8	8228.0	9062.0	9178.7	10166.6	9424.0	7021.9
25°	9227.8	9217.6	9090.8	8872.5	8659.4	8600.2	9195.6	9300.5	10393.3	9775.9	7052.4
27.5°	10021.1	10051.6	9838.5	9567.8	9312.4	9158.4	9495.1	9572.9	10648.7	10176.8	7089.6
30°	10943.1	10894.0	10684.3	10374.7	10082.0	9867.2	9977.2	9999.2	11000.6	10707.9	7187.7
32.5°	12142.4	12007.1	11772.0	11230.7	11020.9	10657.2	10684.3	10711.3	11428.6	11234.0	7306.1
35°	13769.8	13763.0	13302.9	12573.8	12062.9	11611.3	11492.9	11514.8	12076.5	12015.6	7568.3
37.5°	15728.7	15755.7	15231.3	14497.2	13556.6	12839.4	12595.8	12599.2	13061.0	13094.8	7967.5
40°	17323.9	17394.9	17082.0	16586.3	15657.6	14536.1	14126.7	14089.5	14444.7	14402.4	8537.6
42.5°	18010.7	18076.6	18193.4	18365.9	17855.0	16929.7	15963.8	16014.6	16122.8	15826.8	9177.0
45°	17674.0	17778.9	18237.3	19303.1	19783.5	19472.2	18320.2	18142.6	17684.2	17374.6	9819.8
47.5°	16271.7	16527.1	17293.4	19067.9	20749.4	21801.6	20979.5	20744.3	19247.2	18504.6	10229.2
50°	13966.0	13981.2	15048.6	17317.1	20248.7	23271.6	23694.5	23518.6	20703.7	19139.0	10435.6
52.5°	10124.3	10457.6	11435.3	14062.4	18080.0	23048.3	25425.0	25352.3	22205.9	19463.8	10733.3
54°	7696.9	7761.1	8630.6	11237.4	15588.3	21821.9	25531.6	25548.5	22951.9	19660.0	10909.2
55°	6309.7	6155.8	7069.3	9572.9	13888.2	20737.6	25183.1	25264.3	23286.8	19761.5	11039.5
57.5°	2990.8	2992.5	3691.1	5049.5	8698.3	16102.5	23053.4	23341.0	23324.0	19935.7	11440.4
60°	1514.0	1524.1	1678.1	2331.1	4296.7	10704.6	19061.2	19746.3	21529.2	19961.1	11572.4
62.5°	1059.0	1047.1	1021.7	1121.5	1808.3	5440.2	14191.0	14786.4	18291.5	18995.2	11152.8
65°	906.7	881.3	810.3	795.1	913.5	2167.0	8838.7	9809.7	13966.0	16447.6	9958.6
67.5°	774.8	764.6	700.3	661.4	646.2	943.9	4560.6	5071.5	9545.8	11822.7	7542.9
70°	658.0	653.0	614.1	565.0	522.7	565.0	1691.6	2095.9	5320.1	6365.6	3559.2
72.5°	534.6	539.6	546.4	483.8	439.8	400.9	722.3	840.7	2226.2	2275.2	1245.0
75°	468.6	463.5	463.5	421.2	367.1	297.7	397.5	428.0	681.7	632.7	289.3
77.5°	329.9	318.0	372.2	346.8	306.2	211.5	226.7	240.2	282.5	241.9	135.3
80°	228.4	228.4	238.5	311.3	275.7	153.9	138.7	148.9	167.5	143.8	77.8
82.5°	128.6	131.9	155.6	165.8	160.7	103.2	91.3	93.0	111.6	98.1	49.1
85°	15.2	25.4	89.7	88.0	66.0	45.7	50.7	52.4	69.4	60.9	28.8
87.5°	1.7	3.4	18.6	23.7	16.9	18.6	18.6	18.6	23.7	27.1	20.3
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°	5570.5	5570.5	5570.5	5570.5	5570.5	5570.5	5570.5	5570.5	5570.5	5570.5	5570.5
2.5°	5592.5	5463.9	5157.7	4802.5	4575.8	4207.1	3895.8	3670.8	3615.0	3506.7	3538.9
5°	5585.7	5318.4	4694.2	4034.5	3330.8	2806.4	2415.6	2107.8	1972.4	1882.8	1820.2
7.5°	5589.1	5171.3	4169.8	3119.3	2278.6	1764.4	1402.4	1214.6	1089.4	1037.0	1043.7
10°	5599.3	5005.5	3560.9	2310.8	1537.7	1140.2	918.5	828.9	786.6	779.8	778.1
12.5°	5622.9	4824.5	2978.9	1715.3	1075.9	828.9	744.3	713.9	700.3	700.3	695.3
15°	5648.3	4624.9	2495.1	1275.5	828.9	712.2	673.3	658.0	649.6	649.6	647.9
17.5°	5648.3	4394.8	2043.5	989.6	713.9	654.7	624.2	603.9	597.1	597.1	595.4
20°	5612.8	4127.5	1642.6	796.8	647.9	600.5	570.1	548.1	539.6	536.2	534.6
22.5°	5489.3	3770.6	1307.6	685.1	593.8	553.2	514.3	488.9	482.1	478.7	480.4
25°	5269.4	3368.0	1035.3	602.2	544.7	495.6	461.8	443.2	436.4	436.4	438.1
27.5°	5042.7	2946.8	820.4	539.6	485.5	441.5	414.4	402.6	400.9	406.0	407.7
30°	4833.0	2523.9	664.8	488.9	433.1	395.8	377.2	373.8	373.8	375.5	377.2
32.5°	4599.5	2153.4	556.5	444.9	390.8	358.6	348.5	348.5	351.9	351.9	355.2
35°	4452.3	1835.4	488.9	402.6	358.6	331.6	324.8	326.5	331.6	338.3	341.7
37.5°	4372.8	1581.7	444.9	368.8	328.2	309.6	302.8	306.2	318.0	329.9	331.6
40°	4379.6	1390.5	409.4	340.0	304.5	284.2	279.1	289.3	301.1	312.9	314.6
42.5°	4454.0	1248.4	375.5	306.2	284.2	255.4	253.7	263.9	269.0	280.8	282.5
45°	4542.0	1145.2	340.0	270.7	247.0	221.6	223.3	231.8	238.5	257.1	260.5
47.5°	4569.1	1074.2	299.4	230.1	203.0	194.5	196.2	201.3	214.8	231.8	233.4
50°	4599.5	1030.2	260.5	194.5	172.5	170.9	172.5	175.9	184.4	191.2	189.5
52.5°	4729.8	1028.5	228.4	169.2	147.2	150.6	152.2	150.6	143.8	133.6	130.3
54°	4851.6	1033.6	213.1	157.3	135.3	140.4	138.7	130.3	113.3	103.2	98.1
55°	4949.7	1038.7	204.7	148.9	128.6	130.3	131.9	115.0	93.0	82.9	79.5
57.5°	5142.5	1026.8	184.4	130.3	113.3	106.6	104.9	76.1	50.7	44.0	40.6
60°	5046.1	927.0	167.5	111.6	96.4	86.3	71.0	42.3	25.4	18.6	18.6
62.5°	4667.2	786.6	148.9	91.3	79.5	66.0	37.2	23.7	11.8	6.8	5.1
65°	4174.9	661.4	133.6	72.7	62.6	42.3	20.3	15.2	5.1	0.0	0.0
67.5°	3104.1	490.6	113.3	57.5	47.4	27.1	13.5	8.5	1.7	0.0	0.0
70°	1437.9	299.4	96.4	44.0	33.8	20.3	10.1	5.1	0.0	0.0	0.0
72.5°	412.8	187.8	79.5	32.1	23.7	16.9	8.5	3.4	1.7	0.0	0.0
75°	143.8	150.6	59.2	23.7	18.6	11.8	6.8	3.4	1.7	0.0	0.0
77.5°	86.3	121.8	37.2	20.3	15.2	10.1	6.8	3.4	1.7	1.7	0.0
80°	49.1	81.2	23.7	16.9	13.5	8.5	5.1	3.4	1.7	1.7	0.0
82.5°	27.1	38.9	18.6	15.2	11.8	8.5	5.1	3.4	1.7	1.7	1.7
85°	22.0	20.3	15.2	13.5	10.1	6.8	5.1	1.7	0.0	0.0	0.0
87.5°	16.9	13.5	13.5	13.5	10.1	6.8	5.1	1.7	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)