

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: P453036

Luminaire Tested: **GALN-SA4A-740-U-AFL**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P453036  
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-740-U-AFL  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 70 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 18268.1 lumens  
Efficiency: N/A  
Efficacy: 151.0 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G2

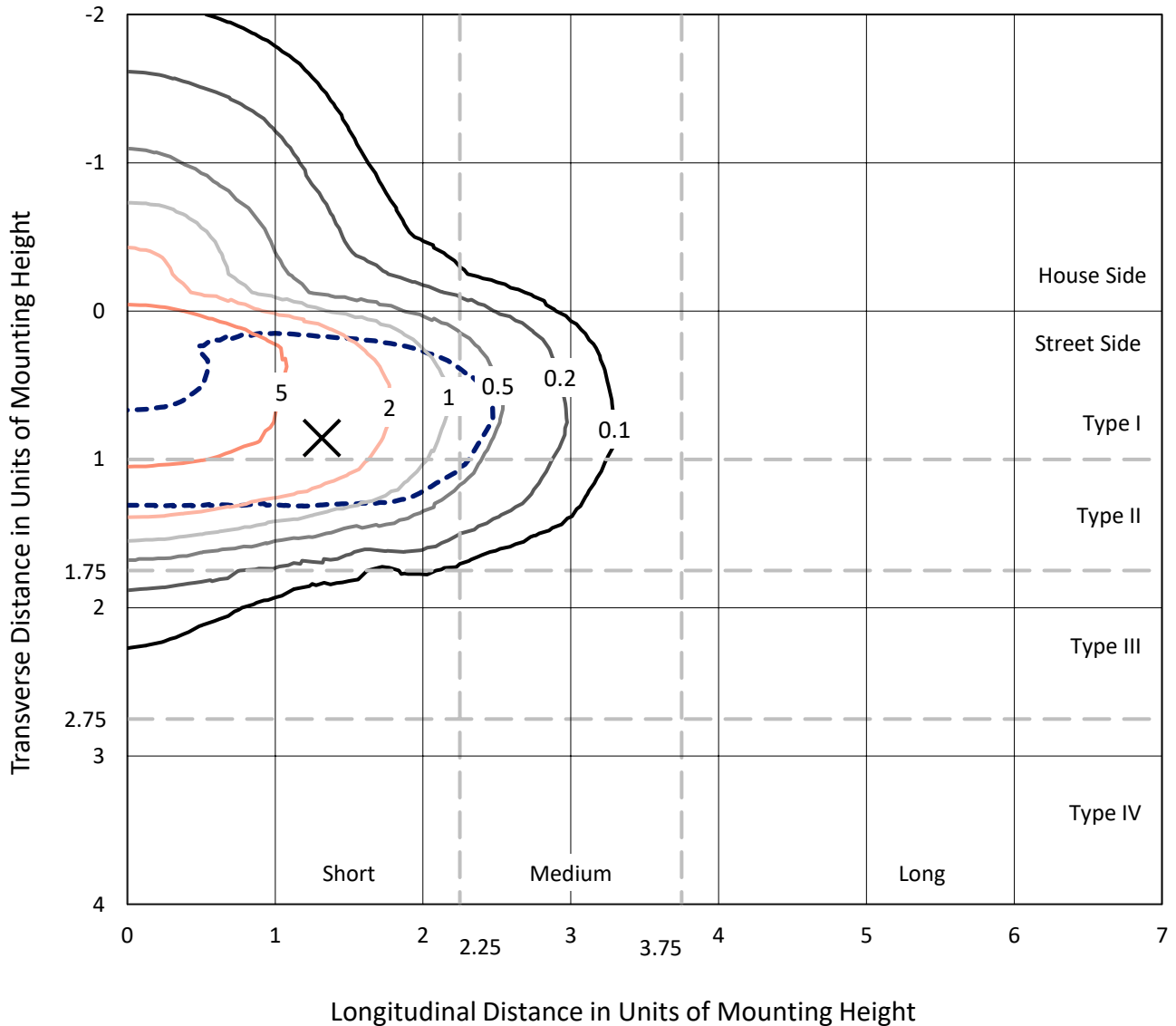
Input Watts (W): 121  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

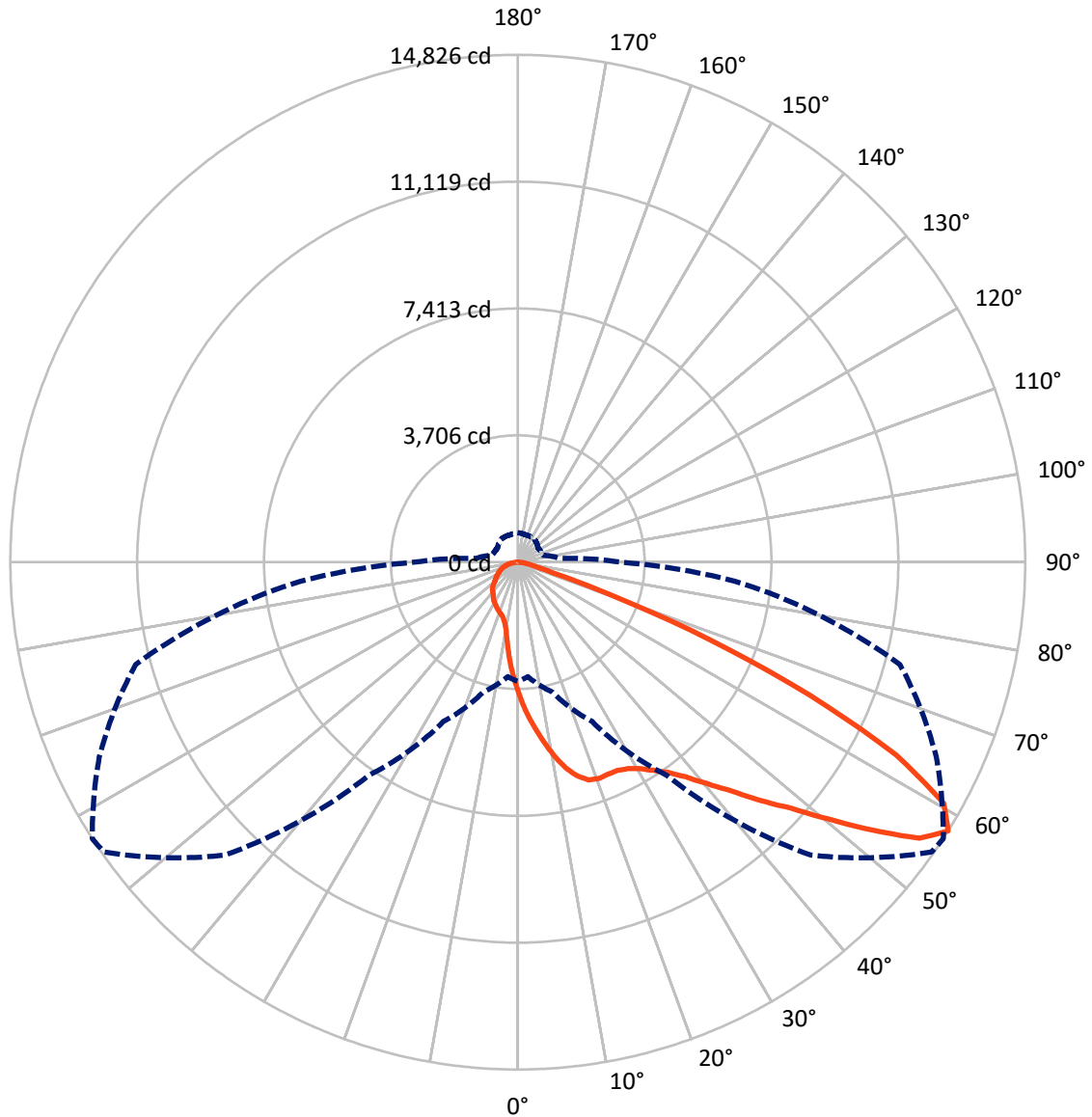
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.3 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	2778.1	0.0	2778.1
	% Fixture	15.2	0.0	15.2
<b>Street Side</b>	Lumens	15490.0	0.0	15490.0
	% Fixture	84.8	0.0	84.8
<b>Total</b>	Lumens	18268.1	0.0	18268.1
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	368.9	2.0
10°-20°	1087.1	6.0
20°-30°	1805.1	9.9
30°-40°	2719.0	14.9
40°-50°	4082.3	22.3
50°-60°	4575.7	25.0
60°-70°	2677.9	14.7
70°-80°	792.1	4.3
80°-90°	160.1	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°	18268.1	100.0
0°-180°	18268.1	100.0

**Coefficient of Utilization**



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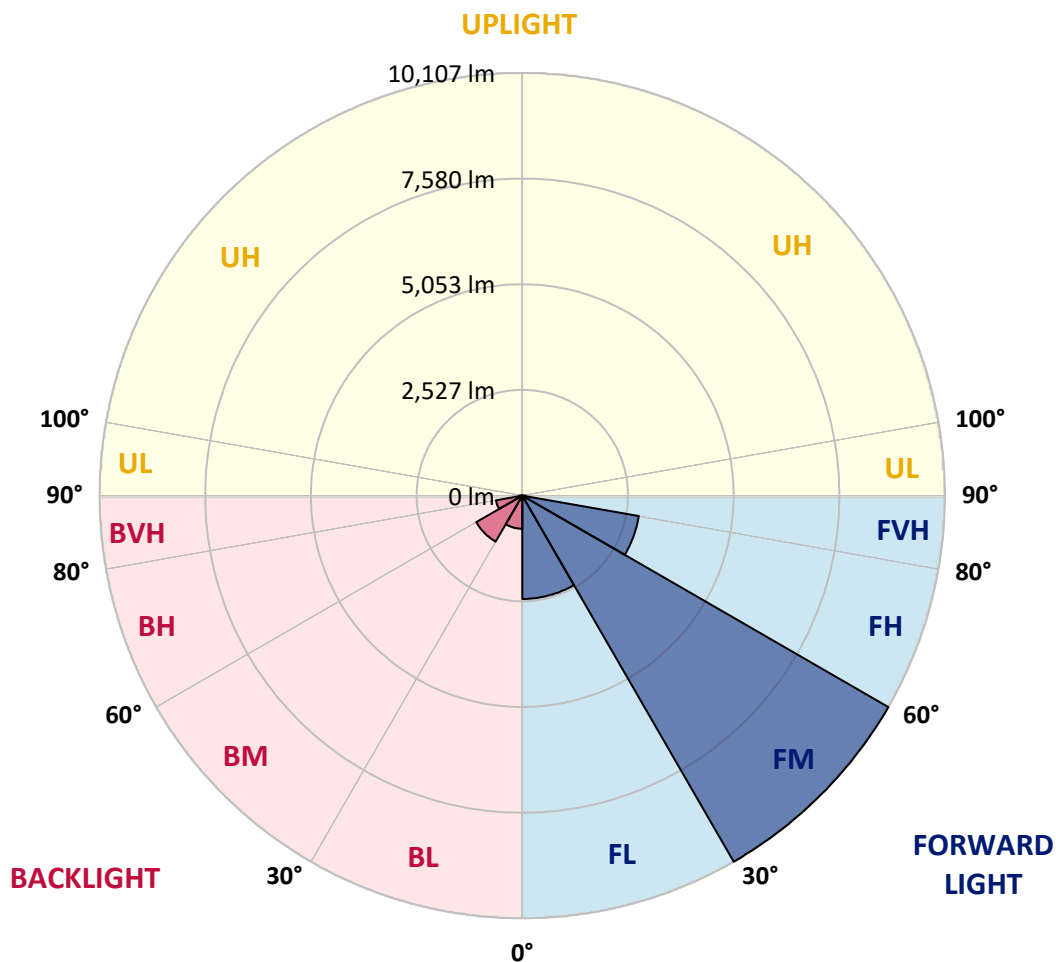
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2469.4	13.5			
FM	(30°-60°)	10106.7	55.3			
FH	(60°-80°)	2830.8	15.5			G2/5000
FVH	(80°-90°)	83.1	0.5			G1/100
BL	(0°-30°)	791.6	4.3	B2/1000		
BM	(30°-60°)	1270.3	7.0	B2/2500		
BH	(60°-80°)	639.2	3.5	B2/1000		G2/1000
BVH	(80°-90°)	77.0	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°	3837.9	3837.9	3837.9	3837.9	3837.9	3837.9	3837.9	3837.9	3837.9	3837.9	3837.9
2.5°	4768.9	4716.9	4675.9	4639.9	4592.9	4465.9	4338.9	4336.9	4235.9	4079.9	3919.9
5°	5545.9	5475.9	5484.9	5372.9	5260.9	5076.9	4807.9	4793.9	4578.9	4286.9	3989.9
7.5°	6051.8	6052.8	6024.8	5960.8	5839.8	5630.8	5325.9	5256.9	4957.9	4514.9	4069.9
10°	6025.8	6052.8	6099.8	6154.8	6191.8	6088.8	5810.8	5726.8	5337.9	4790.9	4158.9
12.5°	5679.8	5721.8	5788.8	5926.8	6149.8	6319.8	6224.8	6156.8	5777.8	5065.9	4256.9
15°	5463.9	5488.9	5525.9	5618.9	5858.8	6265.8	6511.8	6475.8	6192.8	5376.9	4366.9
17.5°	5397.9	5422.9	5434.9	5491.9	5662.8	6079.8	6624.8	6688.8	6560.8	5662.8	4477.9
20°	5463.9	5475.9	5475.9	5509.9	5643.8	5970.8	6619.8	6748.8	6862.8	6005.8	4581.9
22.5°	5636.8	5641.8	5634.8	5646.8	5746.8	6000.8	6572.8	6732.8	7106.8	6296.8	4662.9
25°	5917.8	5925.8	5879.8	5851.8	5924.8	6132.8	6598.8	6745.8	7297.8	6574.8	4716.9
27.5°	6236.8	6246.8	6190.8	6125.8	6159.8	6295.8	6700.8	6832.8	7440.8	6848.8	4750.9
30°	6627.8	6631.8	6537.8	6459.8	6437.8	6538.8	6874.8	6997.8	7618.8	7171.8	4801.9
32.5°	7027.8	7057.8	6936.8	6826.8	6789.8	6820.8	7131.8	7250.8	7830.8	7518.8	4883.9
35°	7571.8	7576.8	7431.8	7297.8	7175.8	7215.8	7460.8	7546.8	8123.8	7919.8	4999.9
37.5°	8250.8	8296.8	8096.8	7846.8	7696.8	7638.8	7858.8	7952.8	8534.8	8411.8	5174.9
40°	9004.8	9021.8	8850.8	8694.8	8420.8	8252.8	8404.8	8506.8	9041.8	8998.8	5377.9
42.5°	9478.7	9515.7	9528.7	9512.7	9306.8	9024.8	9082.8	9130.8	9641.7	9549.7	5585.9
45°	9638.7	9693.7	9879.7	10273.7	10295.7	10017.7	9882.7	9928.7	10295.7	10105.7	5784.8
47.5°	9373.8	9467.7	9810.7	10618.7	11223.7	11244.7	10837.7	10736.7	10891.7	10566.7	5928.8
50°	8688.8	8708.8	9233.8	10403.7	11658.7	12417.7	11996.7	11808.7	11457.7	10907.7	6027.8
52.5°	7628.8	7651.8	8091.8	9404.7	11390.7	13237.6	13352.6	13016.7	12032.7	11172.7	6092.8
55°	5662.8	5795.8	6279.8	7548.8	10120.7	13160.6	14430.6	14239.6	12727.7	11382.7	6194.8
57.5°	3481.9	3359.9	3933.9	5135.9	7611.8	12102.7	14763.6	14825.6	13492.6	11558.7	6365.8
60°	1602.0	1626.0	1863.0	2648.9	4639.9	9467.7	13905.6	14297.6	13915.6	11552.7	6408.8
62.5°	1104.0	1082.0	1022.0	1163.0	2115.9	5987.8	11745.7	12409.7	13067.7	11193.7	6237.8
65°	987.0	965.0	849.0	810.0	972.0	2609.9	8538.8	9376.8	11002.7	10287.7	5811.8
67.5°	922.0	892.0	772.0	696.0	694.0	1039.0	5034.9	6043.8	8160.8	8697.8	5035.9
70°	854.0	830.0	711.0	627.0	591.0	653.0	2212.9	2896.9	5298.9	6267.8	3922.9
72.5°	786.0	758.0	651.0	561.0	514.0	489.0	848.0	1103.0	2993.9	3757.9	2404.9
75°	687.0	673.0	582.0	508.0	457.0	395.0	538.0	614.0	1432.0	1726.0	1207.0
77.5°	601.0	586.0	517.0	444.0	407.0	321.0	382.0	417.0	604.0	700.0	545.0
80°	440.0	455.0	436.0	392.0	363.0	252.0	257.0	286.0	359.0	397.0	333.0
82.5°	279.0	307.0	336.0	302.0	275.0	199.0	178.0	189.0	245.0	260.0	148.0
85°	117.0	119.0	195.0	184.0	157.0	118.0	107.0	113.0	131.0	137.0	69.0
87.5°	45.0	44.0	69.0	64.0	49.0	34.0	34.0	38.0	52.0	48.0	22.0
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°	3837.9	3837.9	3837.9	3837.9	3837.9	3837.9	3837.9	3837.9	3837.9	3837.9	3837.9
2.5°	3850.9	3779.9	3638.9	3463.9	3335.9	3191.9	3064.9	2973.9	2939.9	2923.9	2893.9
5°	3847.9	3707.9	3415.9	3109.9	2863.9	2611.9	2398.9	2260.9	2248.9	2156.9	2147.9
7.5°	3848.9	3634.9	3169.9	2719.9	2344.9	2086.9	1910.9	1865.0	1810.0	1796.0	1803.0
10°	3851.9	3541.9	2905.9	2333.9	1970.9	1802.0	1736.0	1718.0	1720.0	1726.0	1727.0
12.5°	3855.9	3451.9	2631.9	2040.9	1761.0	1691.0	1684.0	1700.0	1717.0	1730.0	1733.0
15°	3860.9	3348.9	2364.9	1805.0	1656.0	1650.0	1673.0	1700.0	1724.0	1743.0	1746.0
17.5°	3854.9	3228.9	2140.9	1660.0	1598.0	1627.0	1665.0	1699.0	1721.0	1739.0	1741.0
20°	3840.9	3094.9	1924.9	1558.0	1562.0	1609.0	1650.0	1682.0	1706.0	1715.0	1722.0
22.5°	3786.9	2934.9	1737.0	1479.0	1519.0	1584.0	1633.0	1652.0	1625.0	1606.0	1611.0
25°	3694.9	2726.9	1562.0	1415.0	1480.0	1549.0	1599.0	1553.0	1531.0	1523.0	1527.0
27.5°	3579.9	2498.9	1430.0	1348.0	1430.0	1510.0	1496.0	1488.0	1478.0	1465.0	1468.0
30°	3455.9	2275.9	1318.0	1296.0	1376.0	1422.0	1428.0	1441.0	1430.0	1410.0	1418.0
32.5°	3340.9	2065.9	1233.0	1252.0	1338.0	1331.0	1376.0	1391.0	1340.0	1273.0	1276.0
35°	3242.9	1871.0	1169.0	1209.0	1273.0	1276.0	1321.0	1269.0	1214.0	1182.0	1184.0
37.5°	3168.9	1719.0	1127.0	1172.0	1190.0	1228.0	1204.0	1177.0	1170.0	1148.0	1149.0
40°	3124.9	1586.0	1100.0	1143.0	1140.0	1166.0	1089.0	1116.0	1126.0	1119.0	1120.0
42.5°	3080.9	1492.0	1072.0	1103.0	1102.0	1051.0	1034.0	1057.0	1083.0	1086.0	1084.0
45°	3045.9	1419.0	1043.0	1042.0	1062.0	982.0	977.0	991.0	1028.0	1046.0	1045.0
47.5°	3006.9	1358.0	999.0	971.0	977.0	939.0	931.0	937.0	982.0	1011.0	1019.0
50°	2957.9	1297.0	944.0	906.0	881.0	899.0	901.0	902.0	947.0	980.0	987.0
52.5°	2918.9	1251.0	881.0	853.0	823.0	863.0	878.0	880.0	907.0	934.0	939.0
55°	2941.9	1225.0	819.0	799.0	772.0	826.0	855.0	859.0	865.0	885.0	888.0
57.5°	3010.9	1231.0	769.0	743.0	723.0	782.0	831.0	834.0	830.0	854.0	858.0
60°	3031.9	1228.0	732.0	681.0	669.0	735.0	796.0	802.0	801.0	836.0	843.0
62.5°	2943.9	1190.0	695.0	629.0	621.0	687.0	747.0	771.0	776.0	826.0	835.0
65°	2736.9	1112.0	646.0	574.0	574.0	636.0	700.0	733.0	747.0	814.0	824.0
67.5°	2463.9	1020.0	596.0	527.0	525.0	587.0	650.0	684.0	706.0	797.0	803.0
70°	2044.9	896.0	534.0	476.0	476.0	532.0	589.0	630.0	662.0	765.0	765.0
72.5°	1401.0	745.0	459.0	418.0	419.0	471.0	529.0	575.0	613.0	701.0	703.0
75°	886.0	582.0	377.0	356.0	360.0	409.0	469.0	517.0	593.0	693.0	696.0
77.5°	471.0	409.0	300.0	295.0	300.0	345.0	412.0	478.0	595.0	601.0	591.0
80°	305.0	290.0	237.0	227.0	229.0	278.0	367.0	454.0	478.0	484.0	462.0
82.5°	166.0	184.0	168.0	158.0	158.0	217.0	313.0	361.0	343.0	285.0	272.0
85°	71.0	86.0	87.0	76.0	73.0	134.0	210.0	197.0	183.0	175.0	173.0
87.5°	20.0	28.0	28.0	21.0	16.0	37.0	42.0	12.0	0.0	1.0	2.0
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)