

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: P299257

Luminaire Tested: **GLNA-AF-08-LED-E1-T3-7027-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299257  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24140)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLNA-AF-08-LED-E1-T3-7027-600  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(8) 70 CRI, 2700K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 27215.9 lumens  
Efficiency: N/A  
Efficacy: 105.9 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type III - Short - Full Cutoff  
BUG Rating: B3 - U0 - G4

Input Watts (W): 257  
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: 25 FT

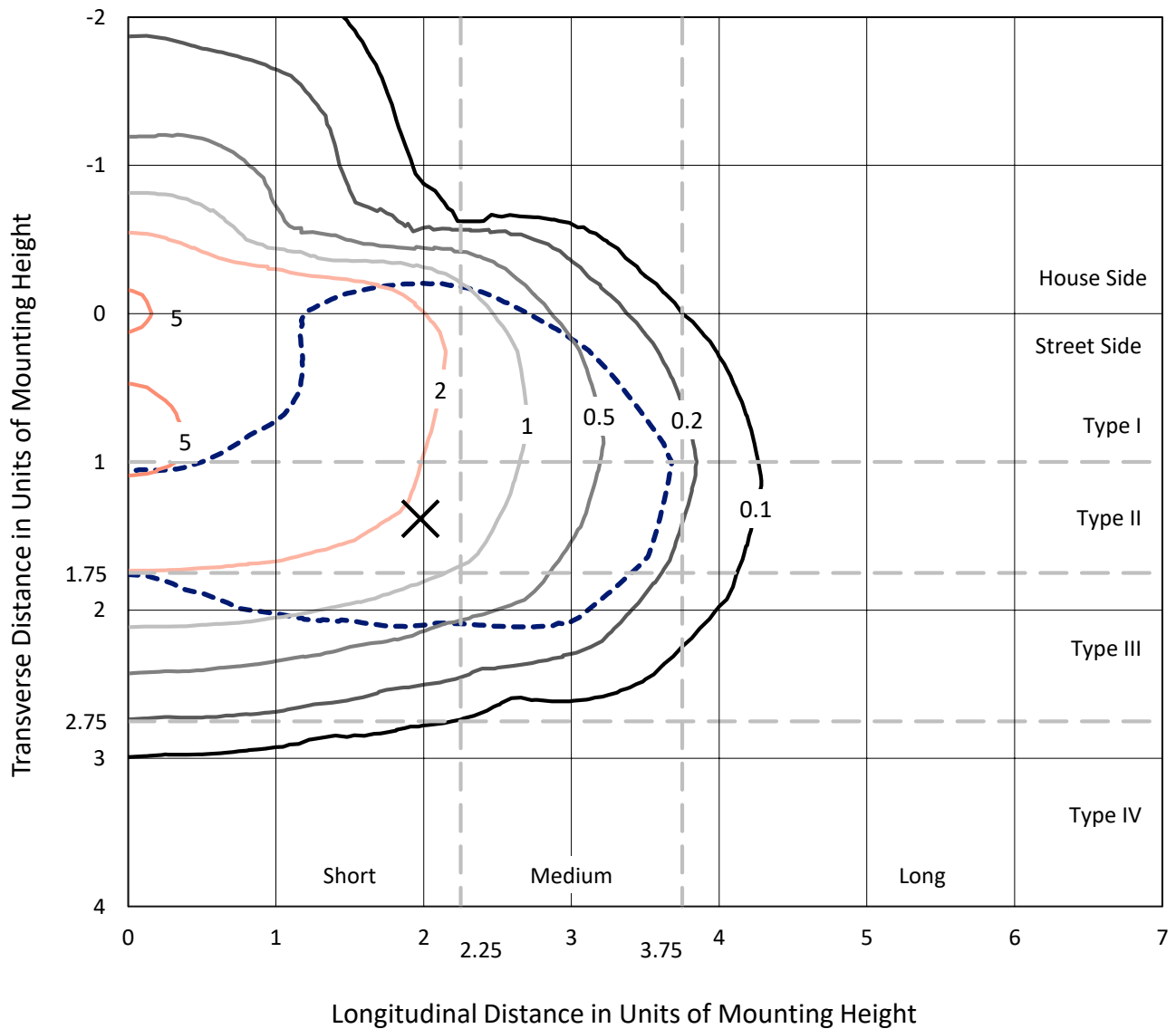


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

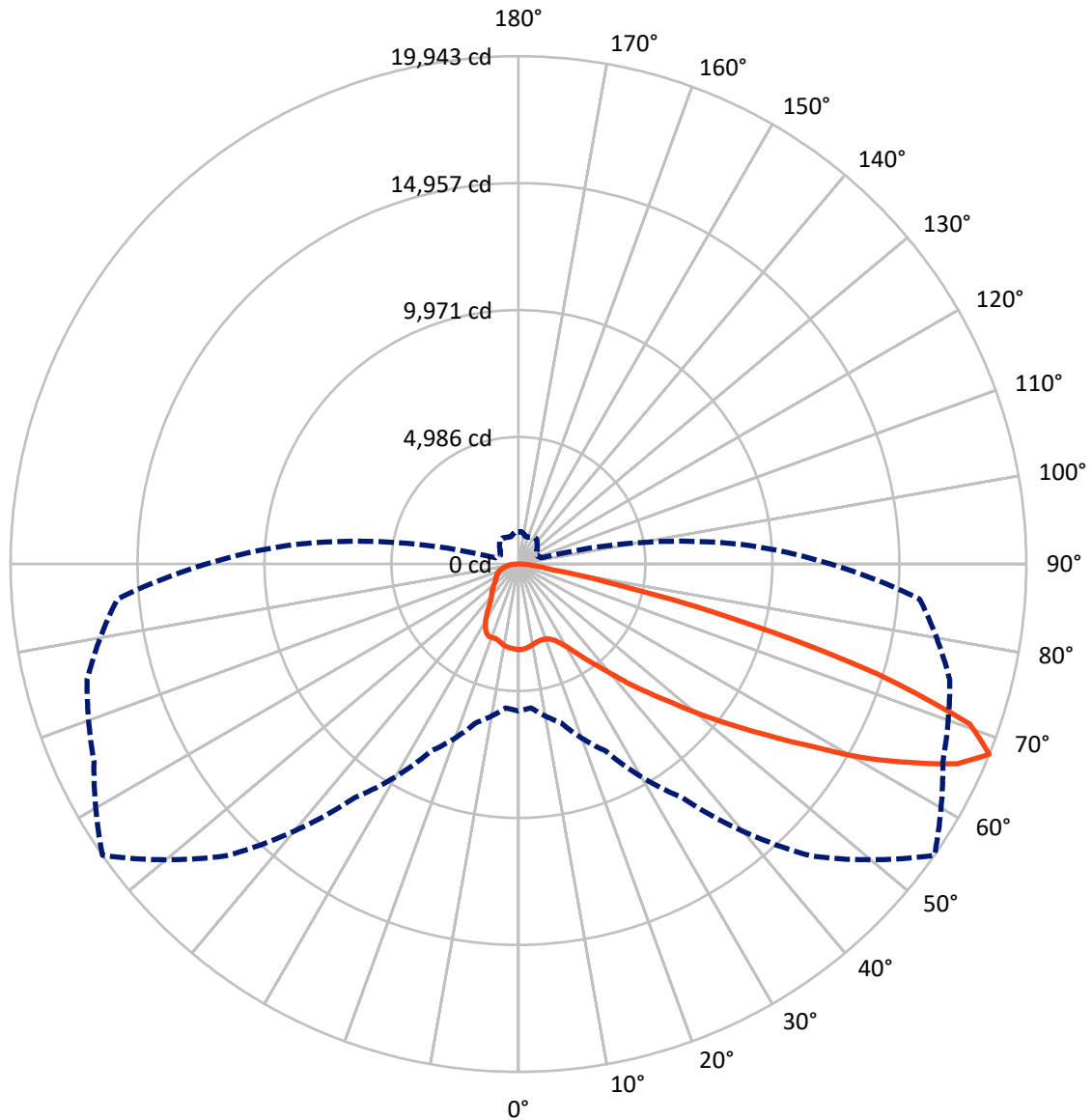


Based on 25 foot mounting height. Maximum calculated value = 5.5 fc  
 Type III - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5879.2	0.0	5879.2
	% Fixture	21.6	0.0	21.6
<b>Street Side</b>	Lumens	21336.7	0.0	21336.7
	% Fixture	78.4	0.0	78.4
<b>Total</b>	Lumens	27215.9	0.0	27215.9
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	313.2	1.2
10°-20°	887.2	3.3
20°-30°	1486.1	5.5
30°-40°	2443.8	9.0
40°-50°	4113.7	15.1
50°-60°	6474.6	23.8
60°-70°	7726.8	28.4
70°-80°	3318.0	12.2
80°-90°	452.4	1.7
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°	27215.9	100.0
0°-180°	27215.9	100.0



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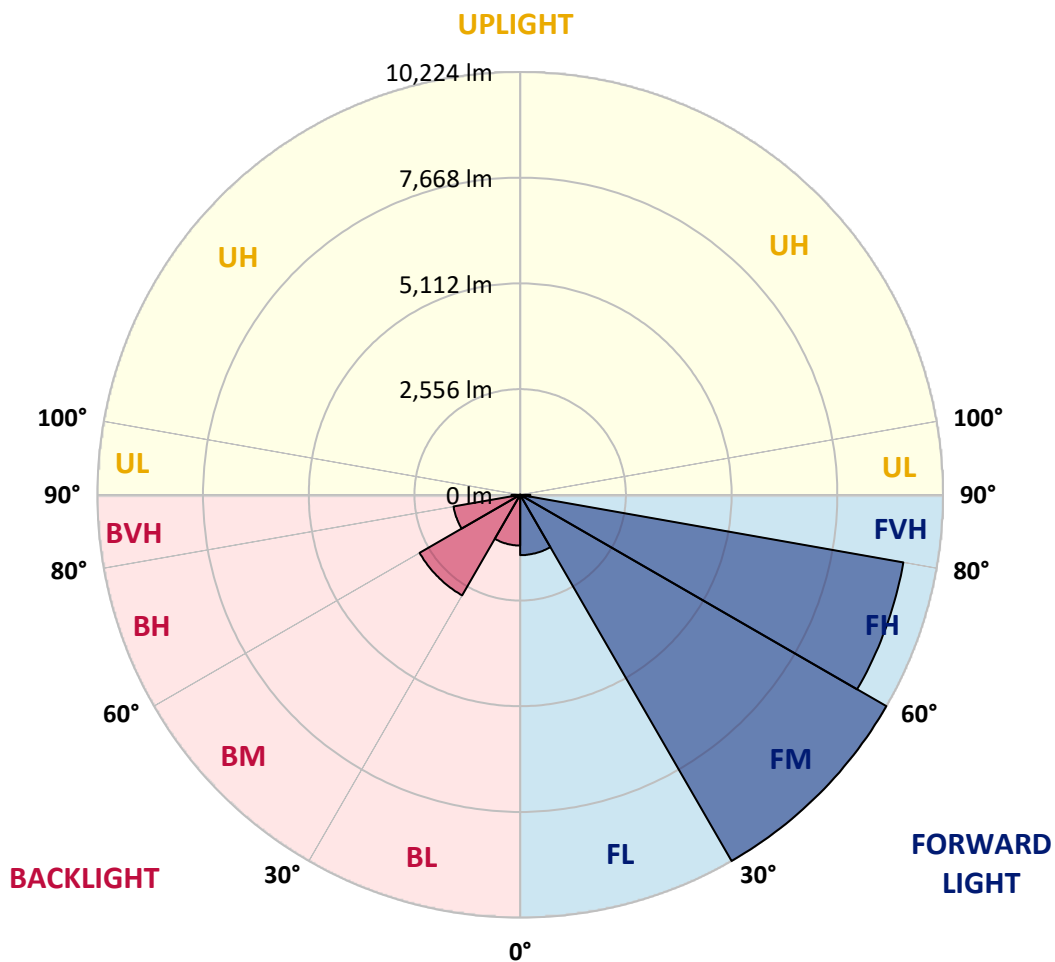
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1458.8	5.4			
FM	(30°-60°)	10224.3	37.6			
FH	(60°-80°)	9408.7	34.6			G4/12000
FVH	(80°-90°)	244.9	0.9			G3/500
BL	(0°-30°)	1227.7	4.5	B3/2500		
BM	(30°-60°)	2807.9	10.3	B3/5000		
BH	(60°-80°)	1636.2	6.0	B3/2500		G3/2500
BVH	(80°-90°)	207.5	0.8			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G4**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3356.0	3356.0	3356.0	3356.0	3356.0	3356.0	3356.0	3356.0	3356.0	3356.0	3356.0
2.5°	3327.1	3328.4	3331.0	3341.6	3350.8	3348.1	3349.4	3344.2	3342.9	3335.0	3342.9
5°	3285.0	3289.0	3290.3	3307.4	3317.9	3320.5	3316.6	3310.0	3302.1	3294.2	3298.2
7.5°	3189.1	3199.6	3200.9	3224.6	3241.7	3264.0	3265.3	3266.6	3262.7	3257.4	3265.3
10°	3128.6	3131.2	3129.9	3147.0	3160.2	3185.1	3199.6	3224.6	3235.1	3237.7	3243.0
12.5°	3124.7	3122.0	3118.1	3118.1	3114.1	3124.7	3151.0	3186.4	3211.4	3219.3	3225.9
15°	3166.7	3165.4	3152.3	3132.5	3107.6	3099.7	3122.0	3161.5	3194.3	3211.4	3218.0
17.5°	3261.4	3253.5	3232.5	3187.8	3133.9	3112.8	3115.5	3148.3	3186.4	3208.8	3215.4
20°	3434.9	3434.9	3390.2	3306.1	3210.1	3160.2	3136.5	3156.2	3193.0	3223.2	3232.5
22.5°	3734.6	3737.2	3662.3	3524.3	3362.6	3256.1	3197.0	3193.0	3236.4	3270.6	3281.1
25°	4159.2	4148.7	4043.5	3846.3	3600.5	3424.4	3321.8	3298.2	3335.0	3373.1	3386.3
27.5°	4653.5	4615.3	4490.5	4252.5	3934.4	3676.8	3519.0	3480.9	3516.4	3559.8	3572.9
30°	5142.5	5103.0	4954.5	4694.2	4340.6	4014.6	3788.5	3726.7	3776.7	3838.5	3846.3
32.5°	5631.5	5631.5	5465.9	5162.2	4777.0	4418.2	4147.4	4073.8	4156.6	4231.5	4248.6
35°	6216.5	6219.1	6058.7	5693.3	5279.2	4899.3	4600.9	4547.0	4671.9	4724.5	4765.2
37.5°	6935.5	6950.0	6743.6	6301.9	5848.4	5448.8	5093.8	5020.2	5145.1	5288.4	5419.8
40°	7712.4	7730.8	7503.4	6959.2	6505.7	6087.6	5703.8	5571.0	5778.7	6052.1	6221.7
42.5°	8453.8	8548.4	8328.9	7768.9	7281.2	6848.7	6459.6	6266.4	6526.7	6939.5	7086.7
45°	9525.2	9593.5	9211.0	8703.6	8244.8	7761.0	7245.7	7042.0	7406.1	7926.7	7956.9
47.5°	10238.9	10187.7	9993.1	9677.6	9387.1	8934.9	8159.3	7935.9	8419.6	9032.2	8862.6
50°	10618.8	10634.6	10608.3	10626.7	10637.3	10353.3	9279.3	8973.0	9550.1	10290.2	9899.8
52.5°	10973.8	10868.6	10955.4	11386.5	11907.1	11801.9	10497.9	10178.5	10762.1	11686.3	10996.1
55°	10965.9	10805.5	11088.1	11849.3	12978.4	13099.4	11866.3	11498.3	12043.8	13183.5	12158.2
57.5°	10578.1	10586.0	11021.1	12017.5	13725.1	14319.3	13454.3	12902.2	13403.0	14700.5	13219.0
60°	10044.4	10116.7	10743.7	11989.9	14323.2	15319.6	15402.5	14415.2	14734.7	16079.4	14097.1
62.5°	9183.4	9259.6	10124.6	11703.3	14232.5	16283.2	17163.9	16132.0	16126.8	16915.5	14354.8
65°	7825.5	7803.1	8711.5	10632.0	13471.4	16995.7	18913.6	17616.1	17175.8	16928.6	13836.8
67.5°	5770.8	5670.9	6450.4	8097.6	11197.2	16197.8	19942.9	18389.1	17533.3	15815.2	12254.1
70°	2994.5	2894.6	3525.6	4728.4	7364.0	12641.9	18803.2	17989.5	16743.3	13257.1	9600.1
72.5°	1280.4	1263.3	1519.6	2074.3	3562.4	7291.7	14743.9	15570.7	14366.6	9877.4	6600.3
75°	861.0	855.8	951.7	1130.5	1602.4	2959.0	9226.8	11052.6	10511.1	6124.4	3712.3
77.5°	675.7	669.1	725.6	812.4	1038.5	1167.3	4094.8	5933.8	5492.1	2665.9	1624.8
80°	528.4	523.2	558.7	606.0	746.7	736.1	1347.4	2360.9	1827.2	1021.4	790.0
82.5°	416.7	416.7	445.6	446.9	529.8	502.2	703.3	1039.8	912.3	595.5	483.8
85°	381.2	381.2	411.5	333.9	345.7	316.8	436.4	616.5	578.4	244.5	210.3
87.5°	191.9	186.7	345.7	295.8	188.0	168.3	213.0	298.4	320.7	135.4	105.2
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):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3356.0	3356.0	3356.0	3356.0	3356.0	3356.0	3356.0	3356.0	3356.0	3356.0
2.5°	3340.2	3338.9	3341.6	3342.9	3353.4	3367.8	3374.4	3383.6	3388.9	3386.3
5°	3300.8	3303.4	3314.0	3321.8	3340.2	3363.9	3377.1	3387.6	3396.8	3392.8
7.5°	3267.9	3274.5	3290.3	3296.9	3307.4	3314.0	3312.6	3316.6	3324.5	3315.3
10°	3249.5	3257.4	3269.3	3260.1	3235.1	3199.6	3166.7	3149.6	3154.9	3148.3
12.5°	3231.1	3241.7	3232.5	3189.1	3119.4	3073.4	3048.4	3051.0	3062.9	3065.5
15°	3220.6	3224.6	3185.1	3103.6	3032.6	3026.1	3039.2	3036.6	3037.9	3037.9
17.5°	3220.6	3210.1	3136.5	3055.0	3024.8	3012.9	2972.2	2920.9	2898.6	2890.7
20°	3237.7	3210.1	3120.7	3066.8	3001.1	2899.9	2792.1	2697.4	2655.4	2643.5
22.5°	3289.0	3241.7	3165.4	3072.1	2885.4	2715.8	2544.9	2431.9	2355.7	2342.5
25°	3392.8	3340.2	3253.5	3002.4	2701.4	2459.5	2265.0	2138.8	2062.5	2052.0
27.5°	3574.2	3540.1	3300.8	2848.6	2456.9	2197.9	2017.8	1920.5	1864.0	1860.1
30°	3847.7	3830.6	3277.1	2621.2	2155.8	1944.2	1857.4	1800.9	1758.9	1757.5
32.5°	4284.1	4146.1	3199.6	2343.8	1881.1	1764.1	1728.6	1694.4	1661.6	1661.6
35°	4845.4	4401.1	3052.4	2046.7	1714.2	1664.2	1619.5	1565.6	1522.2	1519.6
37.5°	5505.3	4558.8	2788.1	1807.5	1635.3	1597.2	1531.4	1451.3	1375.0	1361.9
40°	6171.8	4606.1	2416.1	1660.3	1585.3	1530.1	1449.9	1355.3	1281.7	1277.7
42.5°	6783.0	4515.4	2021.8	1559.0	1535.4	1461.8	1377.6	1293.5	1235.7	1234.4
45°	7295.7	4280.1	1690.5	1463.1	1482.8	1400.0	1325.1	1256.7	1212.0	1202.8
47.5°	7778.1	3947.6	1457.8	1361.9	1430.2	1365.8	1302.7	1238.3	1194.9	1188.3
50°	8338.1	3588.7	1294.8	1263.3	1384.2	1354.0	1321.1	1254.1	1181.8	1173.9
52.5°	9016.4	3278.5	1167.3	1176.5	1348.7	1369.7	1368.4	1298.8	1172.6	1162.1
55°	9773.6	2934.1	1071.3	1105.5	1334.3	1398.7	1380.3	1340.8	1180.5	1164.7
57.5°	10518.9	2531.8	1004.3	1051.6	1313.2	1396.0	1323.7	1267.2	1198.9	1176.5
60°	11077.6	1991.5	953.0	1004.3	1267.2	1352.7	1262.0	1187.0	1194.9	1177.8
62.5°	11114.4	1539.3	891.3	963.6	1197.5	1309.3	1221.2	1151.5	1212.0	1196.2
65°	10461.1	1163.4	832.1	914.9	1122.6	1281.7	1181.8	1131.8	1247.5	1230.4
67.5°	8807.4	936.0	782.2	865.0	1047.7	1223.8	1146.3	1113.4	1279.0	1248.8
70°	6358.4	797.9	733.5	804.5	980.6	1158.1	1114.7	1080.6	1193.6	1146.3
72.5°	3914.7	691.4	678.3	724.3	929.4	1089.8	1067.4	1018.8	1075.3	1037.2
75°	1954.7	599.4	616.5	645.4	857.1	1012.2	988.5	939.9	947.8	939.9
77.5°	936.0	512.7	544.2	566.6	763.7	924.1	899.1	849.2	840.0	841.3
80°	592.9	428.5	458.8	474.5	682.2	821.6	796.6	746.7	851.8	790.0
82.5°	370.7	348.4	356.2	385.2	594.2	715.1	682.2	637.6	767.7	607.3
85°	205.1	243.2	253.7	278.7	457.5	598.1	565.3	508.7	456.1	448.3
87.5°	122.3	144.6	148.5	166.9	307.6	432.5	382.5	362.8	301.0	299.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)