

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: P300458

Luminaire Tested: **GLNA-AF-08-LED-E1-T4FT-7027-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300458
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24295)
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-T4FT-7027-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(8) 70 CRI, 2700K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV Forward Throw OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27375.4 lumens
Efficiency: N/A
Efficacy: 106.5 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type IV - Short - Non-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

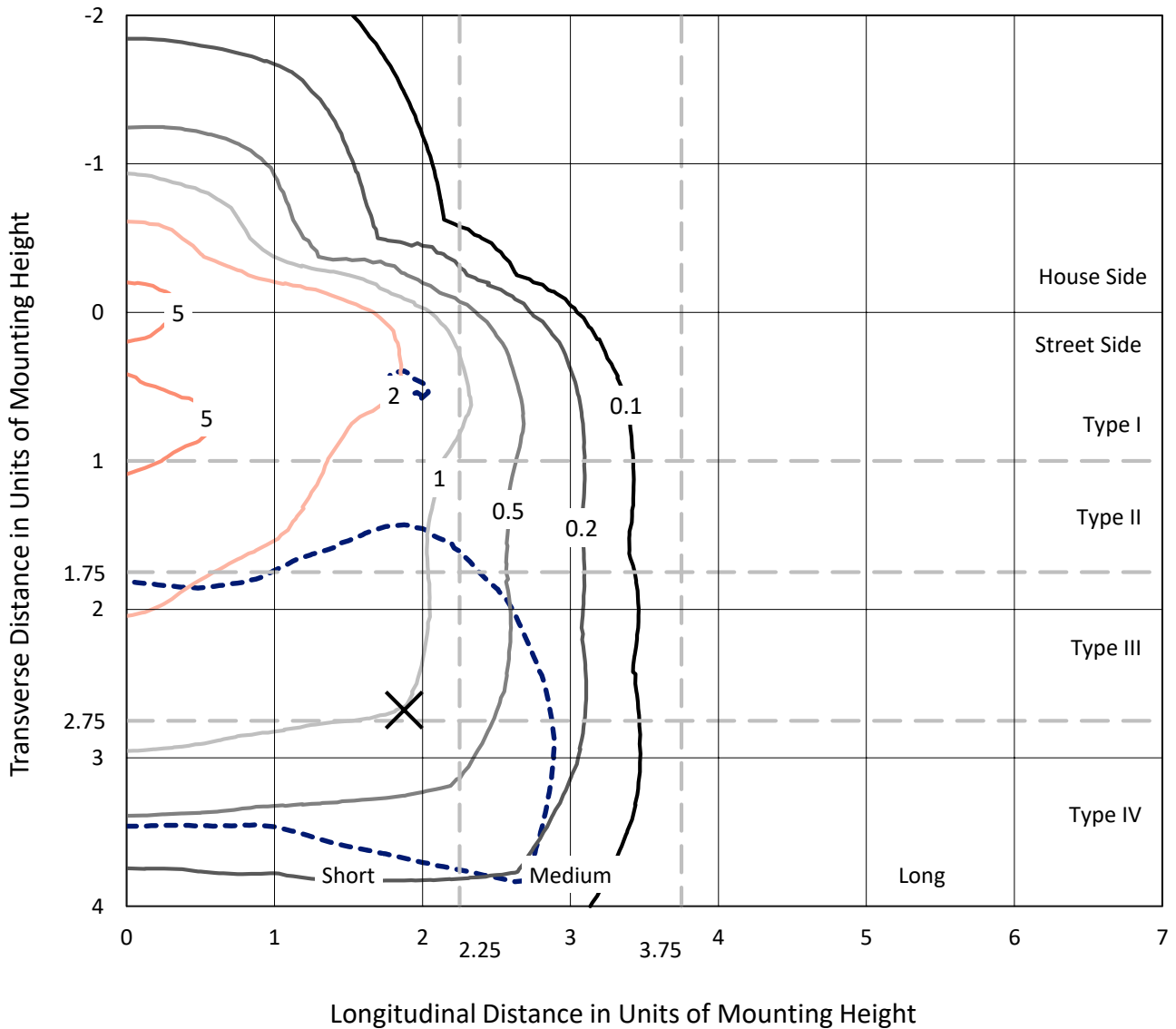


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Iso-Footcandle Lines of Horizontal Illumination

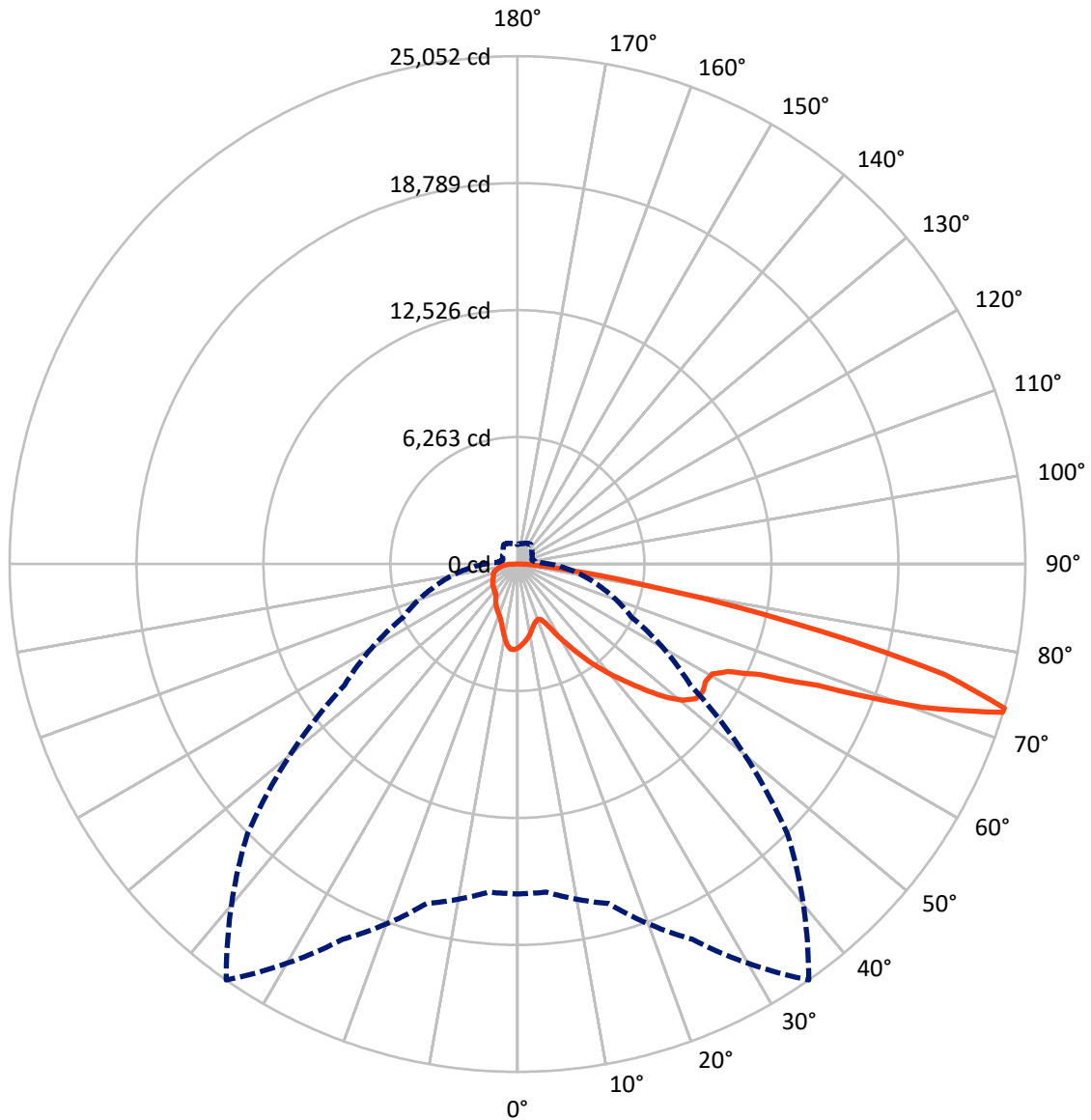
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.6 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 73-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5221.2	0.0	5221.2
	% Fixture	19.1	0.0	19.1
Street Side	Lumens	22154.2	0.0	22154.2
	% Fixture	80.9	0.0	80.9
Total	Lumens	27375.4	0.0	27375.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	374.0	1.4
10°-20°	933.6	3.4
20°-30°	1509.2	5.5
30°-40°	2530.8	9.2
40°-50°	3901.1	14.3
50°-60°	5233.7	19.1
60°-70°	6972.4	25.5
70°-80°	5317.8	19.4
80°-90°	602.7	2.2
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°	27375.4	100.0
0°-180°	27375.4	100.0



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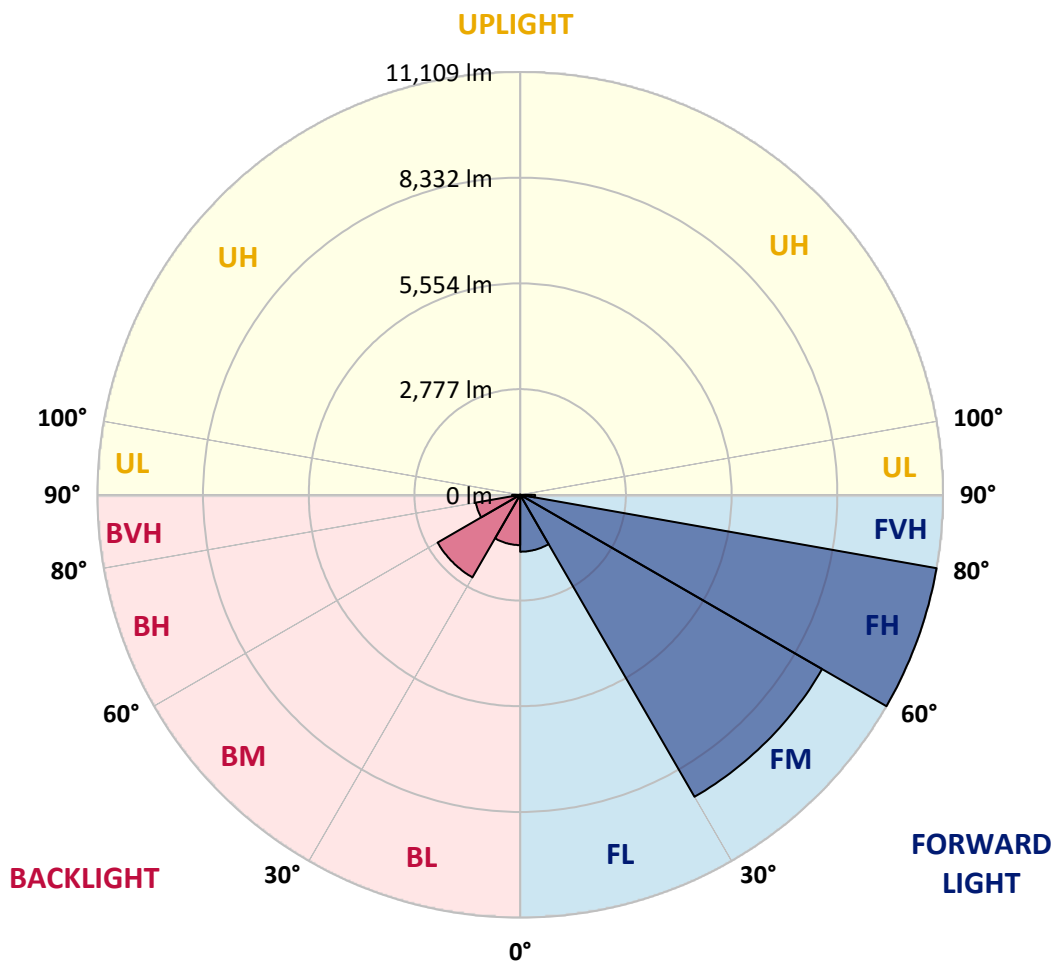
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1495.6	5.5			
FM (30°-60°)	9160.0	33.5			
FH (60°-80°)	11108.9	40.6			G4/12000
FVH (80°-90°)	389.6	1.4			G3/500
BL (0°-30°)	1321.2	4.8	B3/2500		
BM (30°-60°)	2505.6	9.2	B3/5000		
BH (60°-80°)	1181.3	4.3	B3/2500		G3/2500
BVH (80°-90°)	213.1	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 IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	4131.8	4131.8	4131.8	4131.8	4131.8	4131.8	4131.8	4131.8	4131.8	4131.8	4131.8
2.5°	3968.8	3976.7	3967.5	3979.3	3999.0	4020.1	4034.5	4055.6	4079.2	4112.1	4120.0
5°	3782.1	3793.9	3793.9	3815.0	3853.1	3887.3	3918.8	3953.0	4003.0	4059.5	4081.8
7.5°	3577.0	3583.6	3595.4	3627.0	3682.2	3730.8	3775.5	3830.8	3899.1	3974.0	4013.5
10°	3329.9	3339.1	3357.5	3402.2	3477.1	3544.2	3608.6	3684.8	3771.6	3864.9	3914.9
12.5°	3155.1	3152.4	3160.3	3193.2	3258.9	3340.4	3433.7	3531.0	3637.5	3746.6	3807.1
15°	3095.9	3081.4	3051.2	3043.3	3078.8	3160.3	3268.1	3387.7	3515.3	3646.7	3721.6
17.5°	3132.7	3107.7	3024.9	2964.4	2959.2	3021.0	3135.3	3269.4	3416.7	3577.0	3670.4
20°	3364.1	3304.9	3101.2	2960.5	2911.8	2942.1	3042.0	3184.0	3357.5	3570.5	3690.1
22.5°	3917.5	3830.8	3398.3	3136.6	2972.3	2935.5	3010.4	3161.6	3364.1	3652.0	3804.5
25°	4723.4	4599.8	3908.3	3575.7	3236.6	3040.7	3057.8	3212.9	3457.4	3841.3	4025.3
27.5°	5359.6	5279.5	4574.8	4194.9	3717.7	3324.6	3211.6	3341.7	3648.0	4151.5	4339.5
30°	5738.2	5689.6	5287.3	4896.9	4331.6	3776.9	3506.1	3583.6	3946.4	4581.4	4736.5
32.5°	6177.3	6148.4	5951.2	5592.3	4994.2	4371.1	3972.7	3945.1	4346.1	5098.0	5169.0
35°	6632.2	6623.0	6507.3	6249.6	5705.4	5154.6	4591.9	4405.2	4781.2	5634.4	5589.7
37.5°	7055.5	7039.7	6972.7	6822.8	6449.5	5995.9	5222.9	4877.2	5250.5	6147.1	5948.6
40°	7835.0	7711.5	7481.4	7368.4	7201.4	6704.5	5723.8	5317.6	5736.9	6636.1	6258.8
42.5°	8785.5	8584.4	8155.8	8000.7	7977.0	7263.2	6065.6	5744.8	6227.3	7121.2	6563.8
45°	9533.5	9344.2	8974.8	8778.9	8865.7	7769.3	6408.7	6201.0	6732.1	7630.0	6878.0
47.5°	10331.5	10034.4	9545.3	9604.5	9793.8	8247.8	6758.4	6691.3	7285.5	8199.2	7268.4
50°	10360.4	10133.0	9918.7	10272.3	10566.8	8688.2	7196.1	7205.3	7962.6	8915.6	7787.7
52.5°	9759.6	9711.0	10051.5	10607.5	11032.2	9036.6	7694.4	7736.4	8828.9	9738.6	8358.3
55°	9549.3	9494.1	9887.1	10490.5	11095.3	9324.5	8234.7	8310.9	9876.6	10606.2	8914.3
57.5°	10062.0	9939.7	9966.0	10435.3	10941.5	9640.0	8823.6	8977.4	11015.1	11364.8	9271.9
60°	11494.9	11233.3	10736.4	10724.5	11024.3	10113.3	9504.6	9692.6	12198.2	11727.6	9132.6
62.5°	13504.9	13243.3	12312.6	11706.6	11661.9	10894.1	10340.7	10390.6	12881.8	11235.9	8282.0
65°	15680.6	15446.6	14406.8	13550.9	13138.2	12187.7	11312.2	10702.2	12658.3	9883.2	6793.9
67.5°	18321.6	18070.6	17176.6	16386.5	15989.5	14275.3	11994.5	10403.8	11239.9	7656.3	4883.8
70°	20168.7	19912.3	19560.0	20200.2	21171.7	17287.1	12082.5	9190.4	8395.1	5088.8	2939.5
72.5°	17759.0	17639.4	18282.2	20978.5	25024.8	19114.4	10921.7	6691.3	4875.9	2701.5	1701.1
73°	16270.9	16244.6	17340.9	20432.9	25052.4	18833.0	10413.0	6219.4	4181.8	2390.0	1555.2
75°	7347.3	7559.0	9962.1	15607.0	21765.9	15518.9	7328.9	3567.8	2362.3	1651.1	1173.9
77.5°	1765.5	1839.1	3116.9	7411.7	13745.5	9248.2	3320.7	1764.2	1510.5	1166.1	857.1
80°	752.0	776.9	1200.2	2738.3	6471.8	3724.3	1530.2	1181.8	1045.1	813.7	600.8
82.5°	418.0	444.3	681.0	1242.3	2612.1	1269.9	933.4	822.9	687.5	490.3	390.4
85°	236.6	251.1	398.3	694.1	1106.9	510.1	558.7	546.9	387.8	252.4	191.9
87.5°	111.7	120.9	191.9	322.1	433.8	199.8	284.0	312.9	243.2	153.8	99.9
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°	4131.8	4131.8	4131.8	4131.8	4131.8	4131.8	4131.8	4131.8	4131.8	4131.8
2.5°	4129.2	4152.8	4180.4	4194.9	4208.0	4223.8	4239.6	4239.6	4242.2	4243.5
5°	4100.3	4148.9	4192.3	4210.7	4214.6	4214.6	4210.7	4189.6	4171.2	4179.1
7.5°	4039.8	4110.8	4147.6	4141.0	4091.0	4033.2	3984.6	3925.4	3895.2	3889.9
10°	3953.0	4034.5	4041.1	3975.4	3851.8	3728.2	3625.7	3525.8	3478.4	3466.6
12.5°	3857.0	3932.0	3889.9	3754.5	3556.0	3375.9	3245.8	3144.5	3099.8	3088.0
15°	3779.5	3830.8	3724.3	3511.3	3261.5	3070.9	2963.1	2888.2	2856.6	2847.4
17.5°	3738.7	3749.3	3554.7	3266.8	3001.2	2842.2	2775.1	2739.6	2727.8	2721.2
20°	3758.5	3684.8	3393.0	3039.4	2788.3	2676.5	2660.8	2651.6	2648.9	2645.0
22.5°	3857.0	3665.1	3244.4	2823.8	2601.6	2553.0	2566.1	2564.8	2562.2	2559.5
25°	4033.2	3682.2	3099.8	2618.7	2445.2	2434.6	2458.3	2458.3	2447.8	2447.8
27.5°	4265.9	3717.7	2938.1	2424.1	2303.2	2304.5	2322.9	2317.6	2305.8	2297.9
30°	4549.8	3740.1	2748.8	2249.3	2170.4	2165.2	2170.4	2148.1	2112.6	2109.9
32.5°	4840.4	3712.4	2529.3	2094.2	2029.7	2017.9	2014.0	1982.4	1941.7	1929.8
35°	5103.3	3611.2	2305.8	1970.6	1895.7	1869.4	1887.8	1877.3	1840.4	1831.2
37.5°	5295.2	3423.2	2104.7	1861.5	1799.7	1793.1	1805.0	1808.9	1765.5	1756.3
40°	5424.1	3168.2	1932.5	1769.5	1781.3	1756.3	1716.9	1689.3	1676.1	1672.2
42.5°	5527.9	2902.6	1787.9	1726.1	1785.2	1712.9	1627.5	1582.8	1606.4	1617.0
45°	5647.5	2643.7	1666.9	1672.2	1765.5	1663.0	1565.7	1522.3	1531.5	1534.1
47.5°	5811.9	2328.2	1536.8	1585.4	1699.8	1628.8	1527.6	1465.8	1422.4	1402.7
50°	6039.3	1954.8	1401.4	1488.1	1635.4	1603.8	1468.4	1402.7	1322.5	1304.1
52.5°	6197.0	1606.4	1289.6	1406.6	1577.5	1553.9	1421.1	1335.6	1251.5	1235.7
55°	6111.6	1334.3	1192.3	1315.9	1501.3	1492.1	1381.6	1267.3	1201.5	1188.4
57.5°	5684.4	1162.1	1117.4	1230.5	1407.9	1439.5	1329.1	1209.4	1162.1	1152.9
60°	4869.3	1054.3	1070.1	1172.6	1331.7	1386.9	1276.5	1177.9	1146.3	1139.8
62.5°	3778.2	982.0	1034.6	1130.6	1272.5	1350.1	1247.6	1173.9	1162.1	1154.2
65°	2706.8	924.2	996.5	1088.5	1218.6	1315.9	1237.0	1168.7	1171.3	1164.7
67.5°	1839.1	872.9	950.5	1041.2	1166.1	1285.7	1222.6	1150.3	1183.1	1175.3
70°	1287.0	822.9	896.6	980.7	1100.3	1243.6	1196.3	1122.7	1120.0	1088.5
72.5°	1004.4	757.2	822.9	896.6	1016.2	1184.5	1143.7	1060.9	1017.5	984.6
73°	958.3	741.4	804.5	878.2	997.8	1170.0	1129.2	1043.8	995.2	964.9
75°	792.7	673.1	730.9	796.7	918.9	1101.6	1058.3	966.2	904.4	886.0
77.5°	623.1	575.8	631.0	690.2	809.8	1001.7	953.1	865.0	830.8	815.1
80°	461.4	477.2	525.8	578.4	702.0	895.2	851.9	763.8	916.3	878.2
82.5°	324.7	361.5	406.2	453.5	588.9	791.4	738.8	648.1	670.4	557.4
85°	191.9	236.6	278.7	319.4	424.6	656.0	610.0	516.6	423.3	403.6
87.5°	111.7	131.5	143.3	185.4	291.8	494.3	429.9	382.5	219.5	148.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)