

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: P300380

Luminaire Tested: **GLNA-AF-05-LED-E1-T4FT-7027-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300380
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-05-LED-E1-T4FT-7027-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(5) 70 CRI, 2700K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV
Forward Throw OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20936.8 lumens
Efficiency: N/A
Efficacy: 99.7 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B3 - U0 - G4

Input Watts (W): 210
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

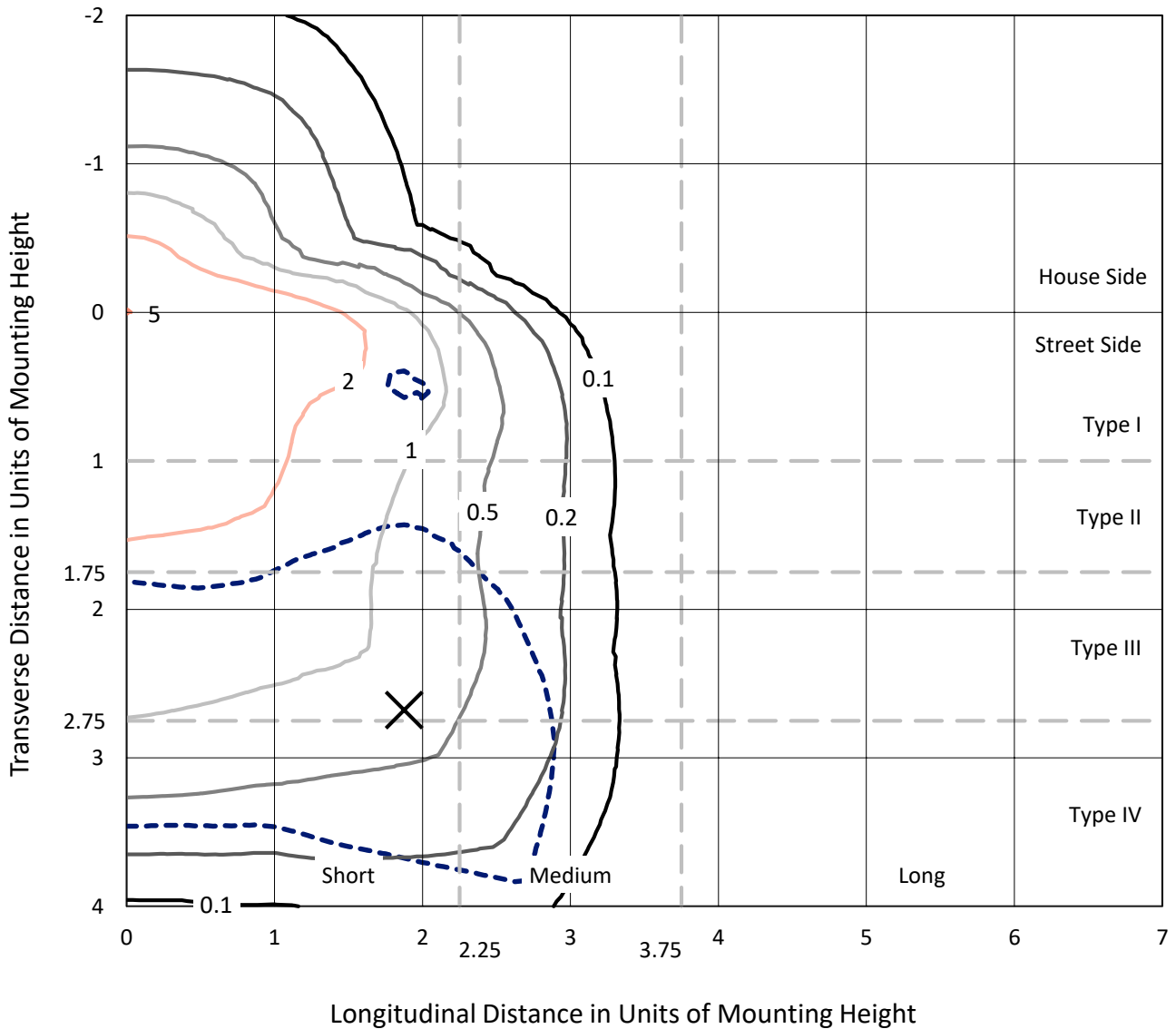


REPORT NUMBER: P300380

CATALOG NUMBER: GLNA-AF-05-LED-E1-T4FT-7027-800

Iso-Footcandle Lines of Horizontal Illumination

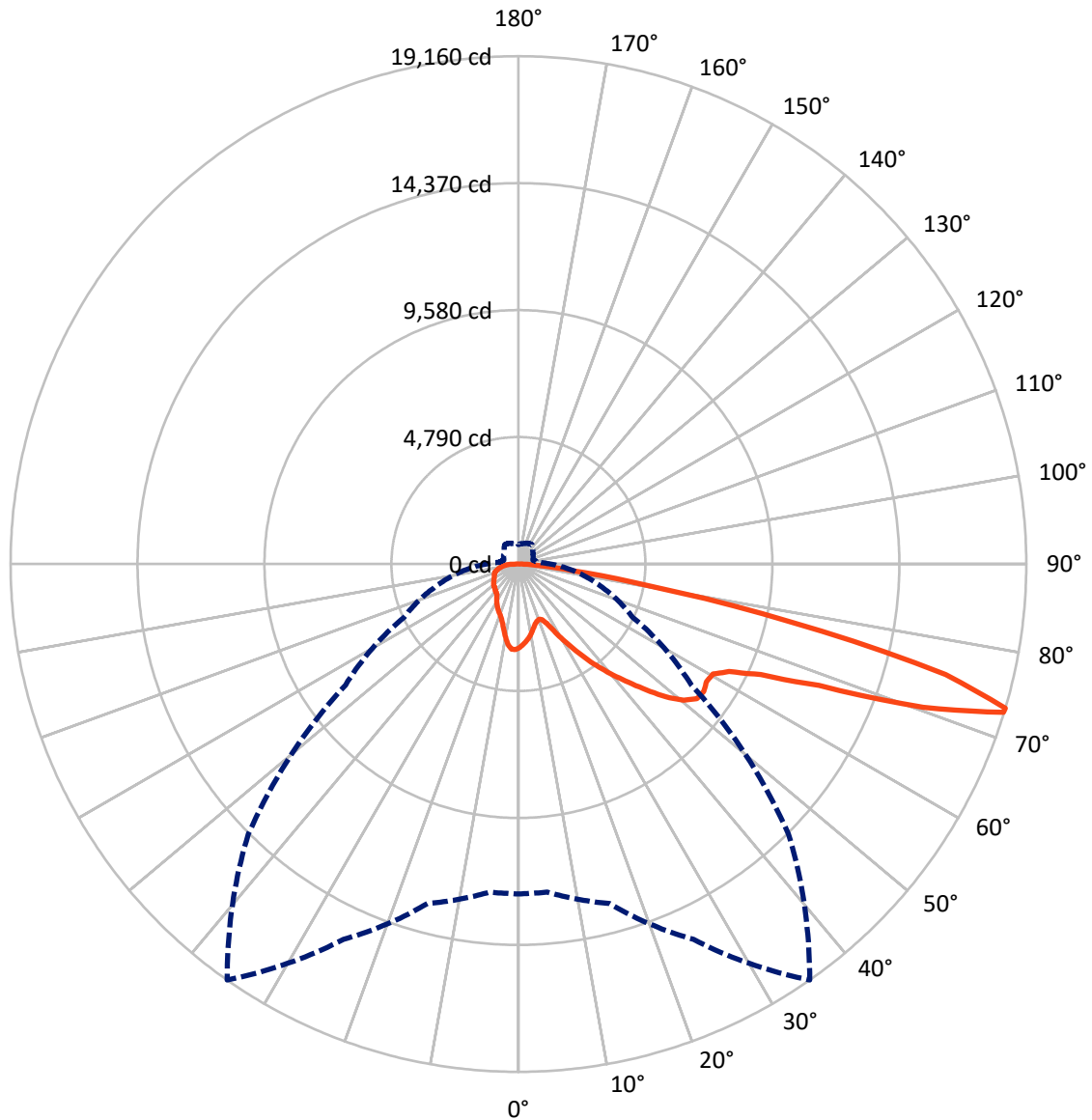
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.1 fc
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P300380
CATALOG NUMBER: GLNA-AF-05-LED-E1-T4FT-7027-800

Luminous Intensity Polar Plot



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

REPORT NUMBER: P300380

CATALOG NUMBER: GLNA-AF-05-LED-E1-T4FT-7027-800

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3993.2	0.0	3993.2
	% Fixture	19.1	0.0	19.1
Street Side	Lumens	16943.6	0.0	16943.6
	% Fixture	80.9	0.0	80.9
Total	Lumens	20936.8	0.0	20936.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	286.1	1.4
10°-20°	714.0	3.4
20°-30°	1154.3	5.5
30°-40°	1935.6	9.2
40°-50°	2983.6	14.3
50°-60°	4002.8	19.1
60°-70°	5332.5	25.5
70°-80°	4067.1	19.4
80°-90°	461.0	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°	20936.8	100.0
0°-180°	20936.8	100.0

Coefficient of Utilization



REPORT NUMBER: P300380

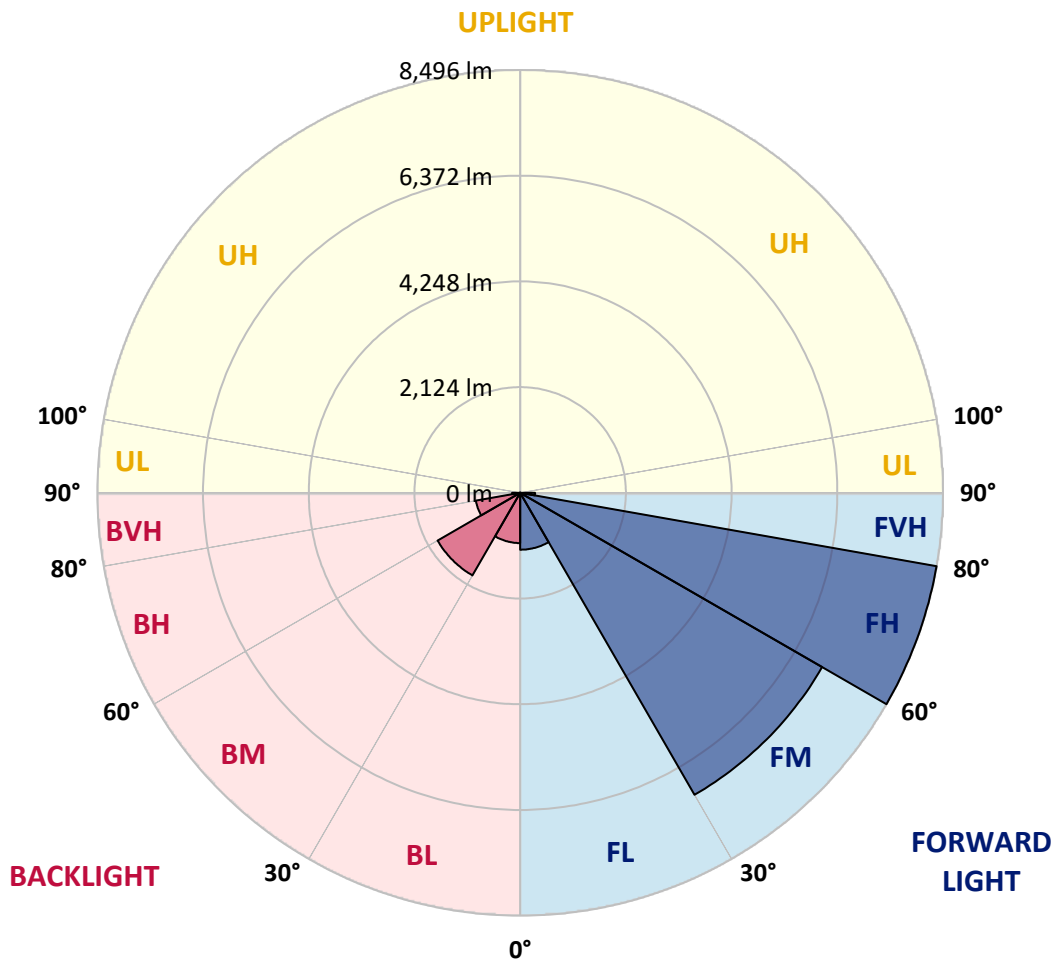
CATALOG NUMBER: GLNA-AF-05-LED-E1-T4FT-7027-800

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1143.9	5.5			
FM	(30°-60°)	7005.6	33.5			
FH	(60°-80°)	8496.2	40.6			G4/12000
FVH	(80°-90°)	298.0	1.4			G3/500
BL	(0°-30°)	1010.5	4.8	B3/2500		
BM	(30°-60°)	1916.3	9.2	B2/2500		
BH	(60°-80°)	903.4	4.3	B2/1000		G2/1000
BVH	(80°-90°)	163.0	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





REPORT NUMBER: P300380

CATALOG NUMBER: GLNA-AF-05-LED-E1-T4FT-7027-800

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3160.0	3160.0	3160.0	3160.0	3160.0	3160.0	3160.0	3160.0	3160.0	3160.0	3160.0
2.5°	3035.3	3041.4	3034.3	3043.4	3058.5	3074.6	3085.6	3101.7	3119.8	3144.9	3151.0
5°	2892.6	2901.6	2901.6	2917.7	2946.9	2973.0	2997.1	3023.3	3061.5	3104.7	3121.8
7.5°	2735.7	2740.8	2749.8	2773.9	2816.2	2853.4	2887.6	2929.8	2982.1	3039.4	3069.5
10°	2546.7	2553.8	2567.8	2602.0	2659.3	2710.6	2759.9	2818.2	2884.5	2955.9	2994.1
12.5°	2413.0	2411.0	2417.0	2442.2	2492.4	2554.8	2626.1	2700.5	2782.0	2865.4	2911.7
15°	2367.8	2356.7	2333.6	2327.5	2354.7	2417.0	2499.5	2591.0	2688.5	2789.0	2846.3
17.5°	2395.9	2376.8	2313.5	2267.2	2263.2	2310.4	2397.9	2500.5	2613.1	2735.7	2807.1
20°	2572.9	2527.6	2371.8	2264.2	2227.0	2250.1	2326.5	2435.1	2567.8	2730.7	2822.2
22.5°	2996.1	2929.8	2599.0	2398.9	2273.2	2245.1	2302.4	2418.0	2572.9	2793.0	2909.7
25°	3612.5	3517.9	2989.1	2734.7	2475.3	2325.5	2338.6	2457.2	2644.2	2937.8	3078.6
27.5°	4099.1	4037.7	3498.8	3208.3	2843.3	2542.7	2456.2	2555.8	2790.0	3175.1	3318.9
30°	4388.6	4351.4	4043.8	3745.2	3312.8	2888.6	2681.4	2740.8	3018.3	3503.9	3622.5
32.5°	4724.4	4702.3	4551.5	4277.0	3819.6	3343.0	3038.4	3017.3	3323.9	3899.0	3953.3
35°	5072.3	5065.3	4976.8	4779.7	4363.5	3942.2	3511.9	3369.1	3656.7	4309.2	4275.0
37.5°	5396.1	5384.0	5332.7	5218.1	4932.6	4585.7	3994.5	3730.1	4015.6	4701.3	4549.5
40°	5992.3	5897.8	5721.8	5635.4	5507.7	5127.6	4377.6	4066.9	4387.6	5075.3	4786.8
42.5°	6719.2	6565.4	6237.6	6119.0	6100.9	5554.9	4639.0	4393.7	4762.7	5446.3	5020.0
45°	7291.3	7146.5	6864.0	6714.2	6780.5	5942.0	4901.4	4742.5	5148.7	5835.4	5260.3
47.5°	7901.6	7674.3	7300.3	7345.6	7490.3	6308.0	5168.8	5117.6	5572.0	6270.8	5558.9
50°	7923.7	7749.7	7585.9	7856.3	8081.5	6644.8	5503.6	5510.7	6089.8	6818.7	5956.1
52.5°	7464.2	7427.0	7687.4	8112.7	8437.4	6911.2	5884.7	5916.9	6752.4	7448.1	6392.4
55°	7303.3	7261.1	7561.7	8023.2	8485.7	7131.4	6297.9	6356.2	7553.7	8111.7	6817.7
57.5°	7695.4	7601.9	7622.1	7981.0	8368.1	7372.7	6748.3	6866.0	8424.4	8691.8	7091.2
60°	8791.4	8591.3	8211.2	8202.2	8431.4	7734.7	7269.2	7412.9	9329.2	8969.3	6984.6
62.5°	10328.6	10128.6	9416.7	8953.2	8919.0	8331.9	7908.6	7946.8	9852.1	8593.3	6334.1
65°	11992.6	11813.6	11018.3	10363.8	10048.1	9321.2	8651.6	8185.1	9681.1	7558.7	5196.0
67.5°	14012.5	13820.4	13136.8	12532.5	12228.9	10917.8	9173.4	7956.9	8596.3	5855.5	3735.1
70°	15425.1	15229.0	14959.6	15449.2	16192.2	13221.2	9240.8	7028.9	6420.6	3892.0	2248.1
72.5°	13582.2	13490.7	13982.3	16044.4	19139.1	14618.7	8353.0	5117.6	3729.1	2066.1	1301.0
73°	12444.0	12423.9	13262.4	15627.2	19160.2	14403.6	7963.9	4756.6	3198.2	1827.8	1189.4
75°	5619.3	5781.1	7619.0	11936.3	16646.7	11868.9	5605.2	2728.7	1806.7	1262.8	897.8
77.5°	1350.3	1406.6	2383.8	5668.5	10512.6	7073.1	2539.7	1349.3	1155.2	891.8	655.5
80°	575.1	594.2	917.9	2094.3	4949.7	2848.3	1170.3	903.9	799.3	622.4	459.5
82.5°	319.7	339.8	520.8	950.1	1997.8	971.2	713.8	629.4	525.8	375.0	298.6
85°	181.0	192.0	304.6	530.9	846.6	390.1	427.3	418.3	296.6	193.0	146.8
87.5°	85.5	92.5	146.8	246.3	331.8	152.8	217.2	239.3	186.0	117.6	76.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P300380

CATALOG NUMBER: GLNA-AF-05-LED-E1-T4FT-7027-800

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3160.0	3160.0	3160.0	3160.0	3160.0	3160.0	3160.0	3160.0	3160.0	3160.0
2.5°	3158.0	3176.1	3197.2	3208.3	3218.3	3230.4	3242.5	3242.5	3244.5	3245.5
5°	3135.9	3173.1	3206.3	3220.3	3223.4	3223.4	3220.3	3204.3	3190.2	3196.2
7.5°	3089.6	3143.9	3172.1	3167.1	3128.9	3084.6	3047.4	3002.2	2979.0	2975.0
10°	3023.3	3085.6	3090.6	3040.4	2945.9	2851.4	2772.9	2696.5	2660.3	2651.3
12.5°	2949.9	3007.2	2975.0	2871.5	2719.6	2581.9	2482.4	2405.0	2370.8	2361.7
15°	2890.6	2929.8	2848.3	2685.5	2494.4	2348.7	2266.2	2208.9	2184.8	2177.7
17.5°	2859.4	2867.4	2718.6	2498.5	2295.4	2173.7	2122.4	2095.3	2086.2	2081.2
20°	2874.5	2818.2	2595.0	2324.5	2132.5	2047.0	2035.0	2027.9	2025.9	2022.9
22.5°	2949.9	2803.1	2481.4	2159.6	1989.7	1952.5	1962.6	1961.6	1959.6	1957.5
25°	3084.6	2816.2	2370.8	2002.8	1870.1	1862.0	1880.1	1880.1	1872.1	1872.1
27.5°	3262.6	2843.3	2247.1	1854.0	1761.5	1762.5	1776.6	1772.5	1763.5	1757.5
30°	3479.7	2860.4	2102.3	1720.3	1659.9	1659.9	1659.9	1642.8	1615.7	1613.7
32.5°	3701.9	2839.3	1934.4	1601.6	1552.4	1543.3	1540.3	1516.2	1485.0	1475.9
35°	3903.0	2761.9	1763.5	1507.1	1449.8	1429.7	1443.8	1435.7	1407.6	1400.5
37.5°	4049.8	2618.1	1609.7	1423.7	1376.4	1371.4	1380.4	1383.5	1350.3	1343.2
40°	4148.3	2423.1	1478.0	1353.3	1362.3	1343.2	1313.1	1292.0	1281.9	1278.9
42.5°	4227.8	2220.0	1367.4	1320.1	1365.4	1310.1	1244.7	1210.5	1228.6	1236.7
45°	4319.3	2021.9	1274.9	1278.9	1350.3	1271.9	1197.4	1164.3	1171.3	1173.3
47.5°	4444.9	1780.6	1175.3	1212.5	1300.0	1245.7	1168.3	1121.0	1087.9	1072.8
50°	4618.9	1495.1	1071.8	1138.1	1250.7	1226.6	1123.0	1072.8	1011.4	997.4
52.5°	4739.5	1228.6	986.3	1075.8	1206.5	1188.4	1086.9	1021.5	957.2	945.1
55°	4674.2	1020.5	911.9	1006.4	1148.2	1141.1	1056.7	969.2	918.9	908.9
57.5°	4347.4	888.8	854.6	941.1	1076.8	1100.9	1016.5	925.0	888.8	881.7
60°	3724.1	806.3	818.4	896.8	1018.5	1060.7	976.3	900.9	876.7	871.7
62.5°	2889.6	751.0	791.3	864.7	973.2	1032.6	954.1	897.8	888.8	882.8
65°	2070.1	706.8	762.1	832.5	932.0	1006.4	946.1	893.8	895.8	890.8
67.5°	1406.6	667.6	726.9	796.3	891.8	983.3	935.0	879.7	904.9	898.8
70°	984.3	629.4	685.7	750.0	841.5	951.1	914.9	858.6	856.6	832.5
72.5°	768.1	579.1	629.4	685.7	777.2	905.9	874.7	811.4	778.2	753.1
73°	732.9	567.1	615.3	671.6	763.1	894.8	863.7	798.3	761.1	738.0
75°	606.3	514.8	559.0	609.3	702.8	842.5	809.4	739.0	691.7	677.6
77.5°	476.6	440.4	482.6	527.8	619.3	766.1	728.9	661.6	635.4	623.4
80°	352.9	365.0	402.2	442.4	536.9	684.7	651.5	584.1	700.8	671.6
82.5°	248.3	276.5	310.7	346.9	450.4	605.3	565.0	495.7	512.8	426.3
85°	146.8	181.0	213.1	244.3	324.7	501.7	466.5	395.1	323.7	308.7
87.5°	85.5	100.5	109.6	141.8	223.2	378.0	328.8	292.6	167.9	113.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)