

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: P302915

Luminaire Tested: **GLNA-AF-06-LED-E1-T4W-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P302915
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P191569)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-06-LED-E1-T4W-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(6) 70 CRI, 4000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV
Wide OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23210.2 lumens
Efficiency: N/A
Efficacy: 120.3 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B3 - U0 - G4

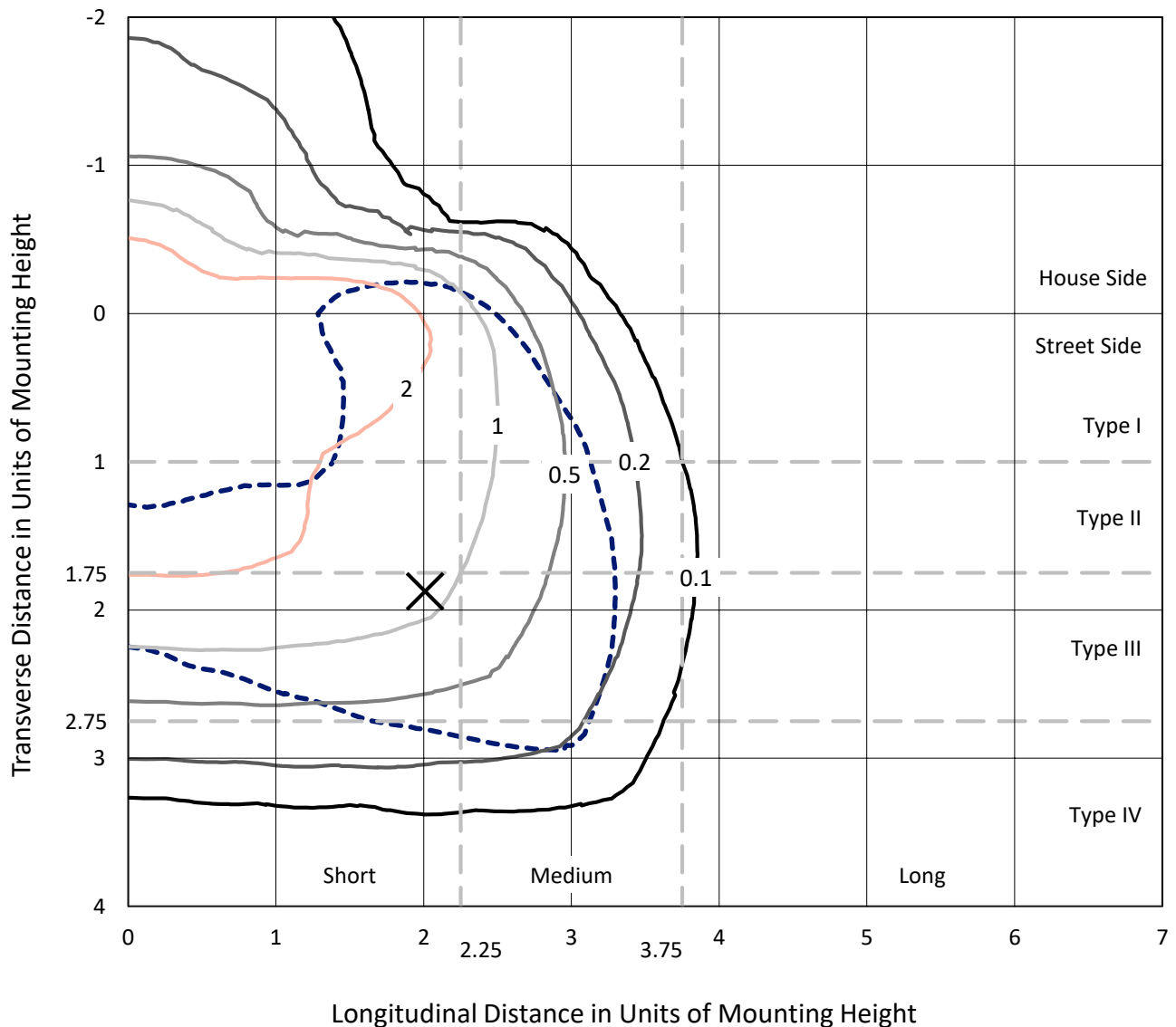
Input Watts (W): 193
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

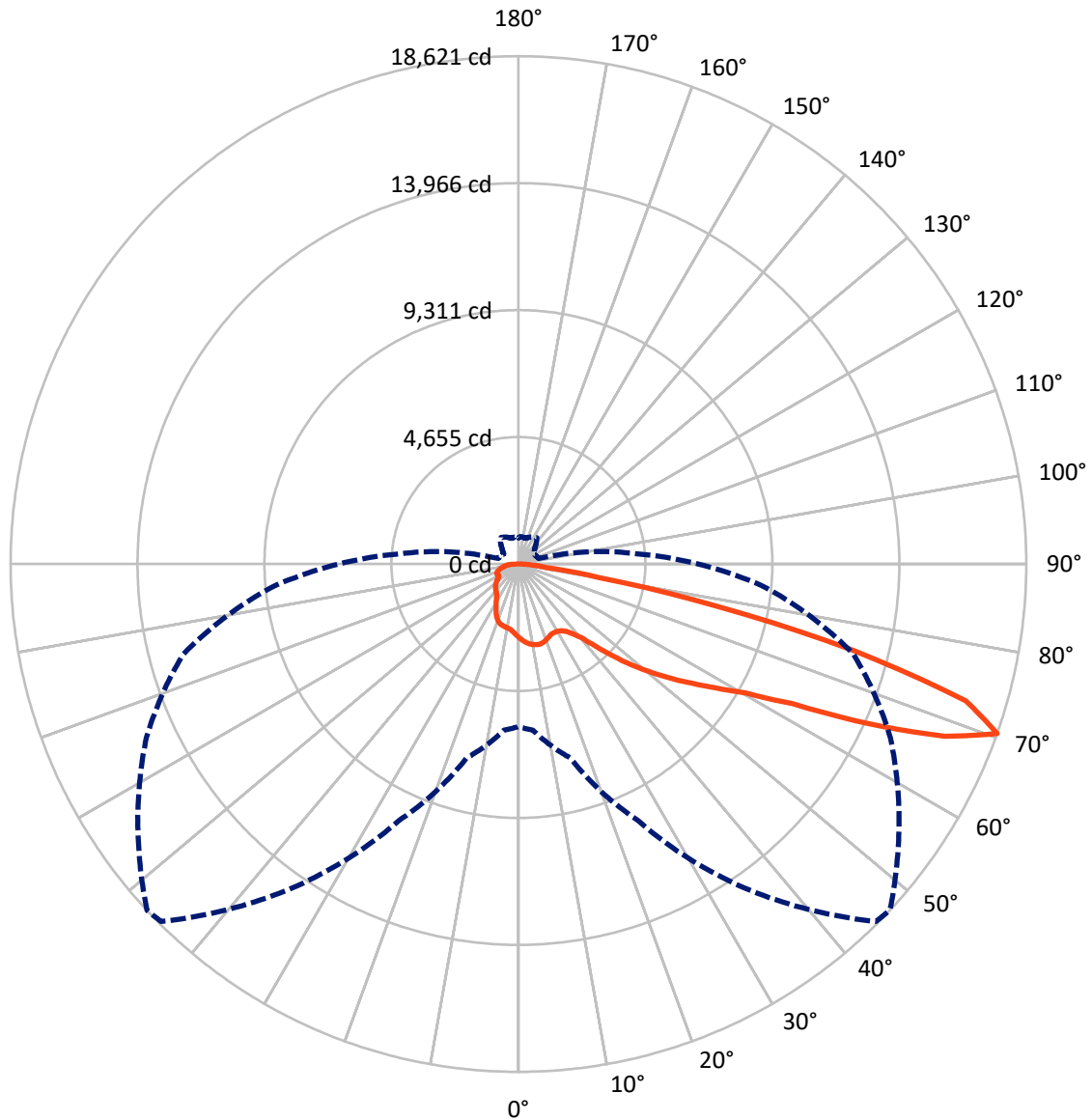
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 47-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4842.1	0.0	4842.1
	% Fixture	20.9	0.0	20.9
Street Side	Lumens	18368.1	0.0	18368.1
	% Fixture	79.1	0.0	79.1
Total	Lumens	23210.2	0.0	23210.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	258.0	1.1
10°-20°	757.0	3.3
20°-30°	1117.9	4.8
30°-40°	1624.9	7.0
40°-50°	2924.2	12.6
50°-60°	5066.0	21.8
60°-70°	7230.6	31.2
70°-80°	3711.8	16.0
80°-90°	519.7	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°	23210.2	100.0
0°-180°	23210.2	100.0



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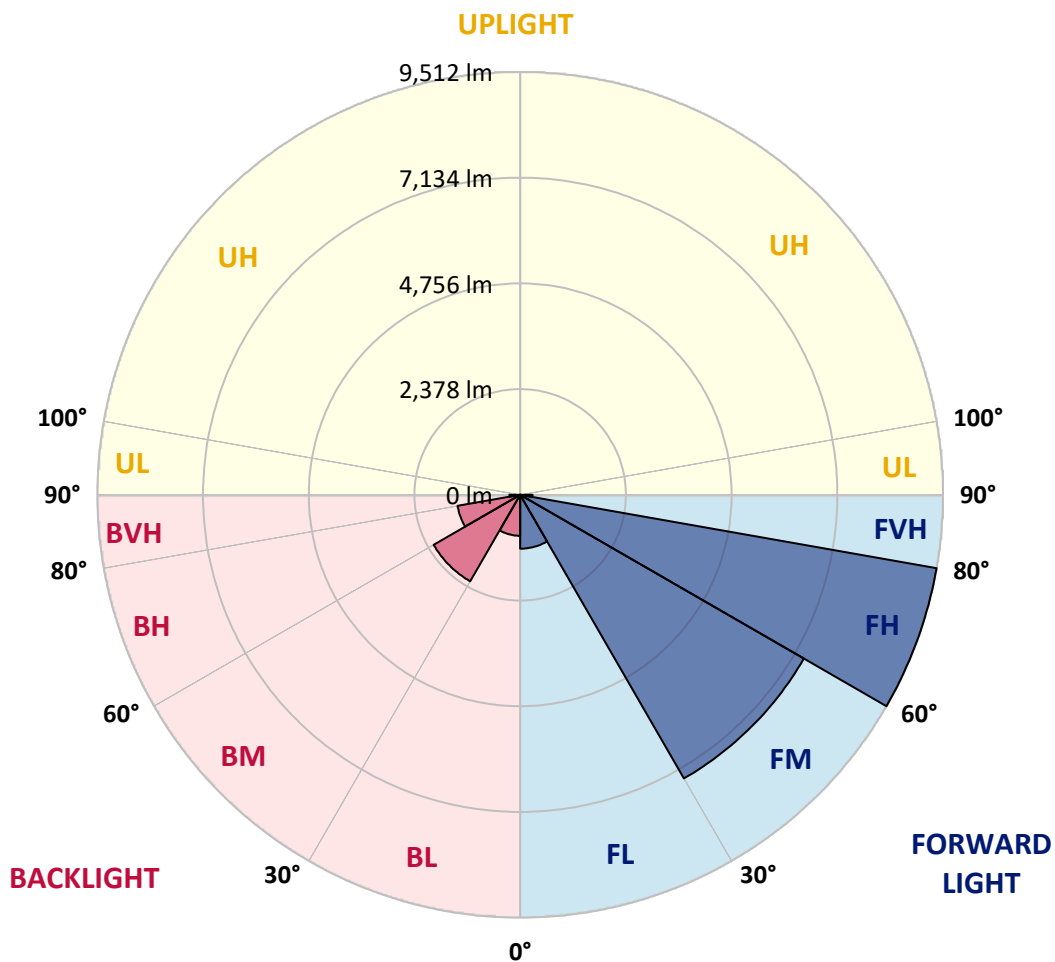
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1211.1	5.2			
FM	(30°-60°)	7367.5	31.7			
FH	(60°-80°)	9512.2	41.0			G4/12000
FVH	(80°-90°)	277.3	1.2			G3/500
BL	(0°-30°)	922.0	4.0	B2/1000		
BM	(30°-60°)	2247.6	9.7	B2/2500		
BH	(60°-80°)	1430.2	6.2	B3/2500		G3/2500
BVH	(80°-90°)	242.4	1.0			G3/500
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°	47°	55°	65°	75°	85°
0°	2693.0	2693.0	2693.0	2693.0	2693.0	2693.0	2693.0	2693.0	2693.0	2693.0	2693.0
2.5°	2851.3	2845.7	2843.4	2838.9	2833.3	2804.8	2799.2	2778.9	2750.8	2721.2	2690.8
5°	3038.8	3037.7	3024.9	3002.4	2966.4	2904.2	2889.6	2840.0	2773.3	2708.8	2644.7
7.5°	3203.4	3193.3	3169.7	3124.3	3061.3	2976.6	2956.3	2887.3	2795.8	2707.7	2620.7
10°	3324.2	3318.6	3266.8	3204.6	3122.1	3028.3	3004.7	2927.8	2827.3	2715.5	2607.2
12.5°	3393.2	3382.0	3322.0	3247.7	3149.4	3057.9	3033.9	2956.3	2843.4	2715.5	2588.0
15°	3388.7	3380.8	3320.8	3239.4	3140.4	3060.2	3038.8	2960.8	2840.0	2704.3	2563.3
17.5°	3298.3	3301.7	3251.1	3170.8	3089.4	3028.3	3009.2	2937.2	2817.2	2681.8	2534.0
20°	3140.4	3156.2	3122.1	3051.2	3005.8	2964.2	2951.8	2890.7	2782.3	2649.2	2502.2
22.5°	2982.2	2996.8	2983.3	2923.3	2916.6	2891.8	2885.1	2841.2	2751.9	2628.9	2483.0
25°	2865.9	2879.4	2877.2	2825.0	2845.7	2844.5	2838.9	2817.2	2745.2	2628.9	2486.4
27.5°	2834.4	2838.9	2834.4	2786.8	2814.9	2837.8	2833.3	2829.5	2765.4	2661.5	2529.5
30°	2942.8	2936.1	2900.8	2804.8	2831.0	2862.5	2858.0	2860.3	2826.2	2747.4	2625.5
32.5°	3375.2	3344.5	3233.8	2964.2	2895.2	2912.1	2914.3	2951.8	2957.4	2879.4	2774.4
35°	4022.1	3988.4	3844.7	3391.0	3095.1	3036.6	3036.6	3092.8	3126.6	3069.2	3005.8
37.5°	4707.7	4670.2	4593.7	3982.7	3515.1	3252.2	3246.6	3286.0	3334.3	3348.2	3364.0
40°	5486.6	5447.2	5468.6	4646.5	4101.3	3625.7	3545.5	3517.3	3648.2	3735.2	3862.0
42.5°	6339.4	6321.0	6328.9	5386.1	4768.4	4184.9	4070.9	3925.0	4083.2	4237.8	4503.3
45°	7128.4	7144.2	7136.3	6177.8	5511.7	4866.7	4745.9	4463.5	4618.4	4883.5	5316.3
47.5°	7819.6	7754.0	7855.6	7042.6	6343.9	5630.2	5481.0	5102.9	5259.7	5587.1	6318.8
50°	8658.5	8649.5	8500.6	8196.9	7349.7	6396.8	6201.4	5763.4	6007.1	6462.4	7582.6
52.5°	9540.6	9376.7	9240.2	9094.3	8417.0	7182.8	6943.2	6421.5	6885.8	7458.1	9122.8
55°	9721.0	9647.8	9817.0	10062.2	9445.7	7999.2	7720.2	7246.9	7875.1	8596.7	10898.9
57.5°	10107.2	10106.1	10456.4	10893.3	10504.8	8865.2	8583.9	8244.1	8987.0	9900.6	12784.5
60°	10368.3	10441.4	11092.1	11940.0	11544.7	9865.7	9607.0	9394.7	10252.0	11358.3	14541.5
62.5°	10504.8	10604.1	11491.8	12364.5	13014.8	11531.2	11272.8	10966.8	11925.4	12957.4	15569.1
65°	9937.0	10132.0	11429.6	12731.7	14302.2	14231.0	14114.7	13577.3	14017.6	14220.9	15197.8
67.5°	8364.9	8564.8	10075.7	12389.3	15221.4	16835.2	16859.9	15941.8	15305.1	14329.3	12777.8
70°	5959.9	6116.6	7367.0	10387.4	14521.3	18536.6	18621.4	17031.3	15048.5	12707.7	8927.4
72.5°	2829.5	2925.6	4109.1	6760.5	11523.3	16984.0	17147.9	15640.3	12795.8	9408.2	4870.0
75°	1039.9	1069.2	1388.7	2876.1	6683.7	12525.0	12718.2	11211.7	8482.3	4684.0	1855.2
77.5°	623.3	642.4	779.3	1213.9	2628.9	7159.2	7444.6	6097.5	3707.1	1743.5	912.4
80°	435.8	449.3	558.8	755.3	1242.1	2728.3	2982.2	2488.7	1476.8	1103.3	663.8
82.5°	294.8	301.5	393.0	510.4	825.4	974.3	1051.2	1106.7	996.1	820.9	421.2
85°	193.1	199.9	266.6	336.4	525.0	503.7	514.9	651.4	727.2	557.7	233.6
87.5°	110.6	115.1	160.5	179.6	257.6	213.4	215.6	343.1	465.4	376.1	142.1
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°	2693.0	2693.0	2693.0	2693.0	2693.0	2693.0	2693.0	2693.0	2693.0	2693.0	2693.0
2.5°	2682.9	2668.3	2635.7	2615.0	2595.9	2591.4	2583.5	2582.4	2581.3	2581.3	2577.9
5°	2622.9	2598.2	2547.5	2519.0	2495.4	2493.2	2492.0	2497.7	2499.9	2502.2	2498.8
7.5°	2584.7	2550.9	2487.5	2447.0	2418.9	2411.8	2423.4	2449.3	2466.2	2472.9	2469.5
10°	2561.0	2519.0	2445.9	2401.6	2378.0	2374.6	2389.3	2420.0	2454.9	2468.4	2467.3
12.5°	2534.0	2486.4	2408.4	2362.3	2348.8	2355.5	2374.6	2402.8	2439.1	2460.5	2461.7
15°	2506.7	2451.5	2371.3	2330.8	2325.1	2334.1	2352.1	2373.5	2401.6	2423.4	2425.6
17.5°	2474.0	2416.3	2336.4	2294.4	2289.9	2294.4	2295.5	2306.8	2325.1	2345.4	2351.0
20°	2439.1	2380.3	2296.6	2255.0	2234.8	2216.8	2196.1	2198.4	2204.0	2224.6	2229.1
22.5°	2414.0	2355.5	2266.3	2208.5	2154.5	2100.1	2059.6	2054.0	2056.3	2073.1	2078.8
25°	2416.3	2354.4	2258.4	2159.0	2040.5	1953.5	1899.1	1890.1	1889.0	1901.4	1909.6
27.5°	2460.5	2398.3	2287.6	2108.0	1916.4	1787.4	1730.0	1723.2	1714.2	1717.6	1726.6
30°	2558.8	2501.0	2358.9	2056.3	1781.7	1625.0	1565.0	1558.2	1545.8	1540.2	1547.0
32.5°	2718.9	2671.7	2462.8	2006.4	1647.5	1485.8	1425.1	1410.5	1402.6	1395.8	1401.5
35°	2985.6	2965.3	2601.5	1952.4	1529.0	1378.6	1323.5	1301.0	1289.7	1302.1	1311.1
37.5°	3403.3	3414.6	2783.4	1867.6	1437.5	1307.7	1261.2	1235.3	1218.4	1228.6	1238.7
40°	3995.1	4003.0	2984.4	1748.0	1358.3	1265.7	1216.2	1192.6	1168.6	1150.6	1149.4
42.5°	4771.8	4691.9	3182.1	1618.2	1266.8	1239.8	1184.7	1155.1	1119.1	1069.2	1059.1
45°	5693.2	5412.3	3332.1	1469.0	1164.1	1208.3	1149.4	1108.9	1052.3	998.3	992.7
47.5°	6754.9	6185.6	3405.6	1314.5	1068.1	1161.8	1106.7	1042.2	970.9	943.9	940.6
50°	8051.0	7103.7	3440.5	1164.1	984.8	1101.1	1044.4	968.7	909.1	903.4	900.1
52.5°	9527.1	8208.1	3452.1	1041.1	915.8	1021.9	993.8	920.3	872.7	877.6	877.6
55°	11071.8	9348.6	3298.3	951.8	852.4	940.6	959.7	901.2	861.4	879.8	886.6
57.5°	12489.8	10359.3	2814.9	883.2	792.8	878.7	947.3	919.2	892.2	965.3	969.8
60°	13578.5	10956.3	2102.4	820.9	748.5	856.9	980.3	988.2	994.9	1169.7	1193.7
62.5°	13806.5	10757.9	1445.3	772.5	728.3	875.3	1039.9	1041.1	1033.2	1155.1	1169.7
65°	12759.8	9500.8	1051.2	745.2	711.4	907.9	1090.9	1066.9	1015.2	1107.8	1080.4
67.5°	10133.1	7158.1	875.3	724.9	686.7	905.7	1144.9	1090.9	1005.1	1085.3	1041.1
70°	6577.5	4328.1	779.3	708.0	657.0	862.6	1176.4	1088.7	975.4	1009.6	957.4
72.5°	3209.1	1935.5	714.8	683.3	626.7	802.9	1175.3	1068.1	945.1	942.8	914.7
75°	1255.6	886.6	655.9	645.8	574.9	735.0	1143.8	1038.8	909.1	872.7	862.6
77.5°	735.0	632.3	581.7	590.7	512.7	667.2	1097.7	988.2	859.2	816.4	805.2
80°	535.2	473.3	495.8	510.4	438.0	599.7	1035.4	925.9	804.0	825.4	809.7
82.5°	343.1	304.9	402.0	416.7	364.9	530.7	967.6	860.3	726.0	659.3	643.5
85°	175.1	193.1	299.3	317.3	281.3	435.8	885.4	773.7	637.9	548.7	557.7
87.5°	98.3	132.0	190.9	213.4	198.8	335.3	718.2	637.9	520.5	423.4	372.8
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)