

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: P300441

Luminaire Tested: **GLNA-AF-05-LED-E1-T4FT-7030-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300441
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-7030-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(5) 70 CRI, 3000K 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: 19006.7 lumens
Efficiency: N/A
Efficacy: 117.3 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B2 - U0 - G4

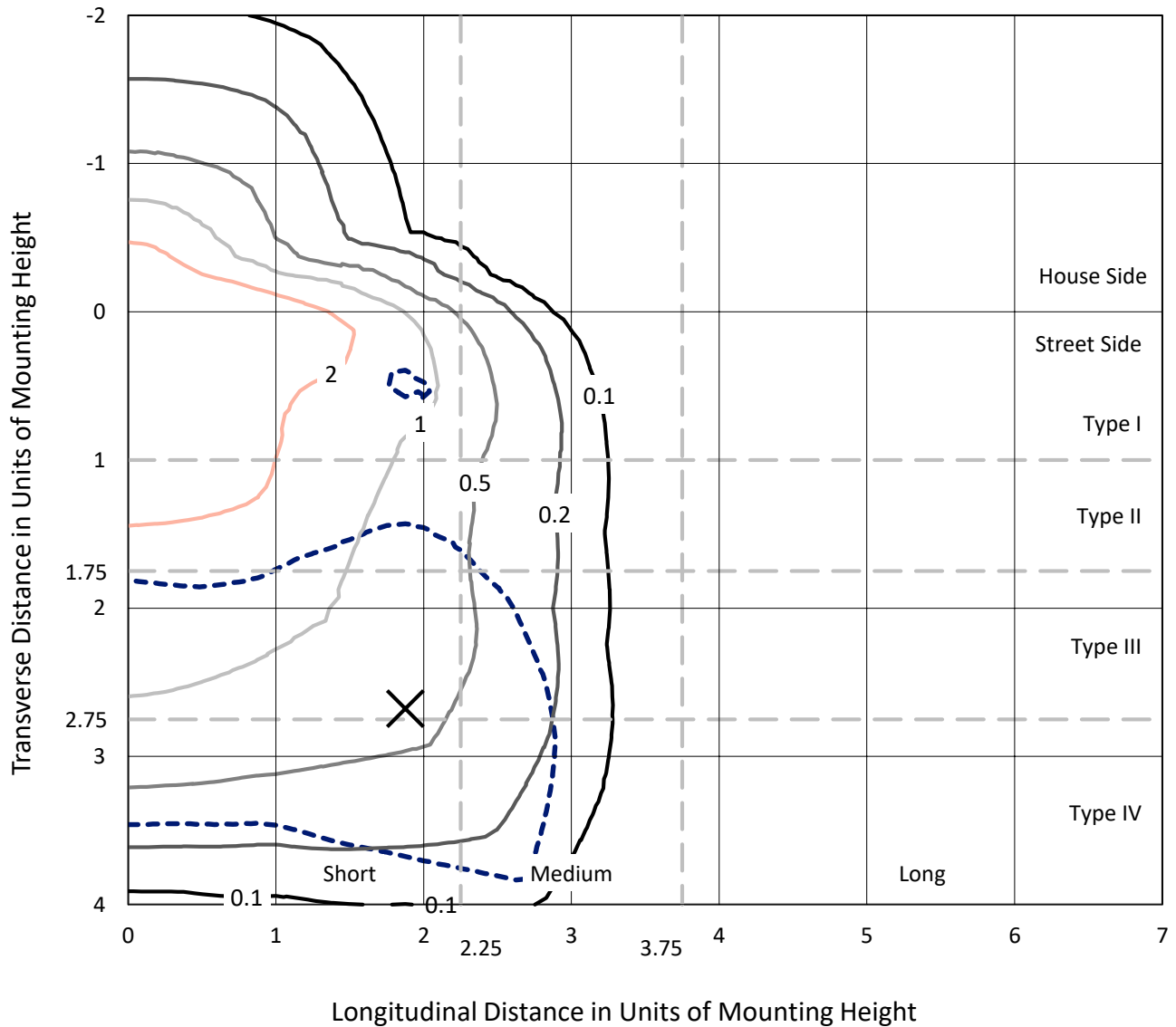
Input Watts (W): 162
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

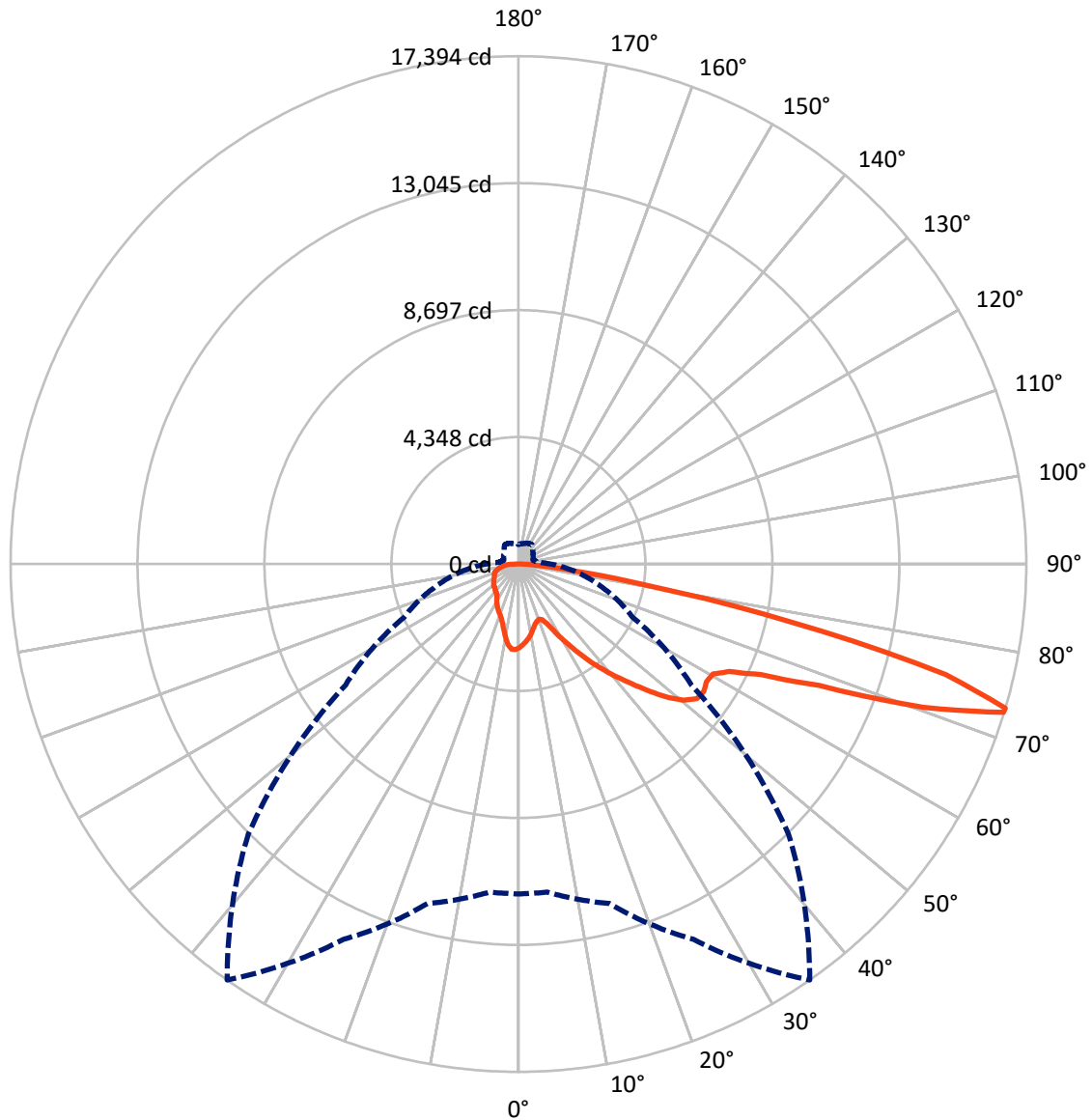
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.6 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	3625.1	0.0	3625.1
	% Fixture	19.1	0.0	19.1
Street Side	Lumens	15381.6	0.0	15381.6
	% Fixture	80.9	0.0	80.9
Total	Lumens	19006.7	0.0	19006.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	259.7	1.4
10°-20°	648.2	3.4
20°-30°	1047.9	5.5
30°-40°	1757.1	9.2
40°-50°	2708.5	14.3
50°-60°	3633.8	19.1
60°-70°	4840.9	25.5
70°-80°	3692.2	19.4
80°-90°	418.5	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°	19006.7	100.0
0°-180°	19006.7	100.0

Coefficient of Utilization



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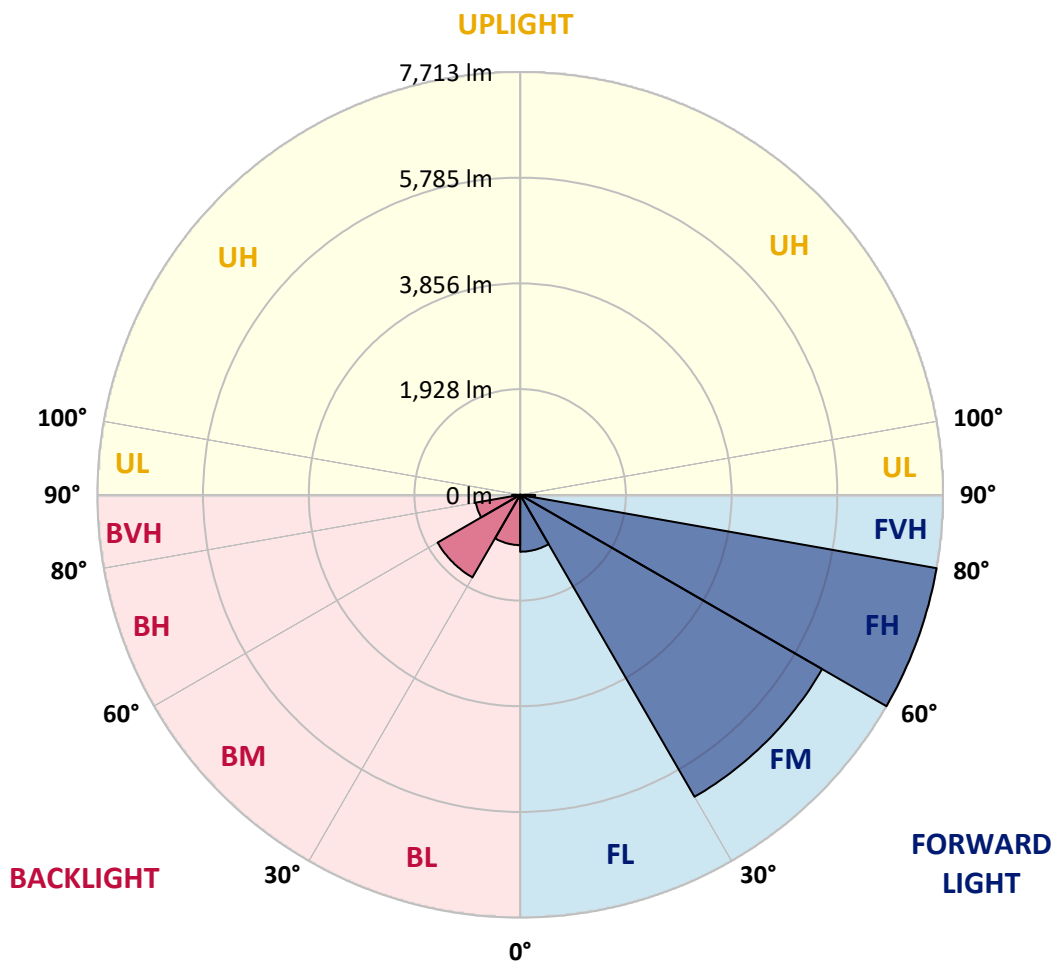
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1038.4	5.5			
FM	(30°-60°)	6359.8	33.5			
FH	(60°-80°)	7712.9	40.6			G4/12000
FVH	(80°-90°)	270.5	1.4			G3/500
BL	(0°-30°)	917.3	4.8	B2/1000		
BM	(30°-60°)	1739.6	9.2	B2/2500		
BH	(60°-80°)	820.2	4.3	B2/1000		G2/1000
BVH	(80°-90°)	148.0	0.8			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G4

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2868.7	2868.7	2868.7	2868.7	2868.7	2868.7	2868.7	2868.7	2868.7	2868.7	2868.7
2.5°	2755.5	2761.0	2754.6	2762.8	2776.5	2791.1	2801.2	2815.8	2832.2	2855.0	2860.5
5°	2625.9	2634.1	2634.1	2648.7	2675.2	2698.9	2720.8	2744.6	2779.3	2818.5	2834.0
7.5°	2483.5	2488.1	2496.3	2518.2	2556.5	2590.3	2621.4	2659.7	2707.1	2759.2	2786.6
10°	2311.9	2318.3	2331.1	2362.1	2414.2	2460.7	2505.4	2558.4	2618.6	2683.4	2718.1
12.5°	2190.5	2188.7	2194.2	2217.0	2262.6	2319.2	2384.0	2451.6	2525.5	2601.3	2643.3
15°	2149.5	2139.4	2118.4	2113.0	2137.6	2194.2	2269.0	2352.1	2440.6	2531.9	2583.9
17.5°	2175.0	2157.7	2100.2	2058.2	2054.5	2097.4	2176.9	2270.0	2372.2	2483.5	2548.3
20°	2335.7	2294.6	2153.1	2055.5	2021.7	2042.7	2112.0	2210.6	2331.1	2479.0	2562.0
22.5°	2719.9	2659.7	2359.4	2177.8	2063.7	2038.1	2090.1	2195.1	2335.7	2535.6	2641.4
25°	3279.4	3193.6	2713.5	2482.6	2247.1	2111.1	2123.0	2230.7	2400.5	2667.0	2794.8
27.5°	3721.2	3665.5	3176.3	2912.5	2581.2	2308.3	2229.8	2320.2	2532.8	2882.4	3012.9
30°	3984.1	3950.3	3671.0	3399.9	3007.4	2622.3	2434.2	2488.1	2740.0	3180.9	3288.6
32.5°	4288.9	4268.8	4131.9	3882.7	3467.4	3034.8	2758.3	2739.1	3017.5	3539.6	3588.8
35°	4604.7	4598.3	4518.0	4339.1	3961.2	3578.8	3188.2	3058.5	3319.6	3911.9	3880.9
37.5°	4898.6	4887.6	4841.1	4737.0	4477.8	4162.9	3626.3	3386.2	3645.4	4267.9	4130.1
40°	5439.8	5354.1	5194.3	5115.8	4999.9	4654.9	3974.0	3692.0	3983.1	4607.4	4345.5
42.5°	6099.8	5960.1	5662.6	5554.9	5538.4	5042.8	4211.3	3988.6	4323.6	4944.2	4557.2
45°	6619.1	6487.7	6231.2	6095.2	6155.4	5394.2	4449.5	4305.3	4674.1	5297.5	4775.4
47.5°	7173.1	6966.8	6627.3	6668.4	6799.8	5726.4	4692.3	4645.8	5058.3	5692.7	5046.5
50°	7193.2	7035.3	6886.5	7132.0	7336.5	6032.2	4996.3	5002.7	5528.4	6190.1	5407.0
52.5°	6776.1	6742.3	6978.7	7364.8	7659.6	6274.1	5342.2	5371.4	6129.9	6761.5	5803.1
55°	6630.0	6591.7	6864.6	7283.6	7703.4	6474.0	5717.3	5770.3	6857.3	7363.9	6189.2
57.5°	6986.0	6901.1	6919.4	7245.2	7596.6	6693.0	6126.2	6233.0	7647.7	7890.5	6437.5
60°	7980.9	7799.2	7454.2	7446.0	7654.1	7021.6	6599.0	6729.5	8469.2	8142.4	6340.7
62.5°	9376.4	9194.8	8548.6	8127.8	8096.8	7563.8	7179.5	7214.2	8943.8	7801.1	5750.2
65°	10887.0	10724.5	10002.6	9408.4	9121.8	8461.9	7854.0	7430.5	8788.6	6861.9	4717.0
67.5°	12720.7	12546.3	11925.7	11377.1	11101.5	9911.3	8327.7	7223.3	7803.8	5315.7	3390.8
70°	14003.0	13825.1	13580.5	14025.0	14699.5	12002.4	8388.9	6380.9	5828.7	3533.2	2040.9
72.5°	12330.0	12247.0	12693.3	14565.3	17374.7	13271.0	7582.9	4645.8	3385.3	1875.7	1181.1
73°	11296.8	11278.6	12039.8	14186.5	17393.8	13075.7	7229.7	4318.1	2903.4	1659.3	1079.8
75°	5101.2	5248.2	6916.6	10835.9	15112.0	10774.7	5088.4	2477.1	1640.2	1146.4	815.1
77.5°	1225.8	1276.9	2164.1	5146.0	9543.5	6421.0	2305.5	1224.9	1048.7	809.6	595.1
80°	522.1	539.4	833.3	1901.2	4493.4	2585.8	1062.4	820.5	725.6	565.0	417.1
82.5°	290.2	308.5	472.8	862.5	1813.6	881.7	648.0	571.4	477.4	340.4	271.1
85°	164.3	174.3	276.6	481.9	768.5	354.1	387.9	379.7	269.3	175.2	133.3
87.5°	77.6	84.0	133.3	223.6	301.2	138.7	197.1	217.2	168.9	106.8	69.4
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°	2868.7	2868.7	2868.7	2868.7	2868.7	2868.7	2868.7	2868.7	2868.7	2868.7
2.5°	2866.9	2883.3	2902.5	2912.5	2921.6	2932.6	2943.5	2943.5	2945.4	2946.3
5°	2846.8	2880.6	2910.7	2923.5	2926.2	2926.2	2923.5	2908.9	2896.1	2901.6
7.5°	2804.8	2854.1	2879.7	2875.1	2840.4	2800.2	2766.5	2725.4	2704.4	2700.8
10°	2744.6	2801.2	2805.7	2760.1	2674.3	2588.5	2517.3	2447.9	2415.1	2406.9
12.5°	2677.9	2730.0	2700.8	2606.7	2468.9	2343.9	2253.5	2183.2	2152.2	2144.0
15°	2624.1	2659.7	2585.8	2437.9	2264.5	2132.1	2057.3	2005.3	1983.4	1977.0
17.5°	2595.8	2603.1	2468.0	2268.1	2083.8	1973.3	1926.8	1902.1	1893.9	1889.3
20°	2609.5	2558.4	2355.7	2110.2	1935.9	1858.3	1847.4	1841.0	1839.1	1836.4
22.5°	2677.9	2544.7	2252.6	1960.5	1806.3	1772.5	1781.6	1780.7	1778.9	1777.1
25°	2800.2	2556.5	2152.2	1818.2	1697.7	1690.4	1706.8	1706.8	1699.5	1699.5
27.5°	2961.8	2581.2	2039.9	1683.1	1599.1	1600.0	1612.8	1609.1	1600.9	1595.4
30°	3158.9	2596.7	1908.5	1561.7	1506.9	1503.3	1506.9	1491.4	1466.8	1464.9
32.5°	3360.7	2577.5	1756.1	1454.0	1409.2	1401.0	1398.3	1376.4	1348.1	1339.9
35°	3543.2	2507.3	1600.9	1368.2	1316.2	1297.9	1310.7	1303.4	1277.8	1271.4
37.5°	3676.5	2376.7	1461.3	1292.4	1249.5	1245.0	1253.2	1255.9	1225.8	1219.4
40°	3765.9	2199.7	1341.7	1228.5	1236.7	1219.4	1192.0	1172.9	1163.7	1161.0
42.5°	3838.0	2015.3	1241.3	1198.4	1239.5	1189.3	1130.0	1098.9	1115.4	1122.7
45°	3921.1	1835.5	1157.3	1161.0	1225.8	1154.6	1087.1	1056.9	1063.3	1065.2
47.5°	4035.2	1616.4	1067.0	1100.7	1180.2	1130.9	1060.6	1017.7	987.6	973.9
50°	4193.1	1357.2	973.0	1033.2	1135.4	1113.5	1019.5	973.9	918.2	905.4
52.5°	4302.6	1115.4	895.4	976.6	1095.3	1078.8	986.7	927.3	868.9	858.0
55°	4243.3	926.4	827.8	913.6	1042.3	1035.9	959.3	879.9	834.2	825.1
57.5°	3946.6	806.9	775.8	854.3	977.5	999.4	922.8	839.7	806.9	800.5
60°	3380.7	732.0	743.0	814.2	924.6	962.9	886.3	817.8	795.9	791.3
62.5°	2623.2	681.8	718.3	784.9	883.5	937.4	866.2	815.1	806.9	801.4
65°	1879.3	641.6	691.8	755.7	846.1	913.6	858.9	811.4	813.2	808.7
67.5°	1276.9	606.1	659.9	722.9	809.6	892.6	848.8	798.6	821.5	816.0
70°	893.6	571.4	622.5	680.9	764.0	863.4	830.6	779.5	777.6	755.7
72.5°	697.3	525.7	571.4	622.5	705.5	822.4	794.1	736.6	706.5	683.6
73°	665.4	514.8	558.6	609.7	692.8	812.3	784.0	724.7	690.9	669.9
75°	550.4	467.3	507.5	553.1	638.0	764.9	734.7	670.9	628.0	615.2
77.5°	432.6	399.8	438.1	479.2	562.2	695.5	661.7	600.6	576.8	565.9
80°	320.4	331.3	365.1	401.6	487.4	621.6	591.4	530.3	636.2	609.7
82.5°	225.4	251.0	282.0	314.9	408.9	549.5	513.0	450.0	465.5	387.0
85°	133.3	164.3	193.5	221.8	294.8	455.5	423.5	358.7	293.9	280.2
87.5°	77.6	91.3	99.5	128.7	202.6	343.2	298.5	265.6	152.4	103.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)