

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: P300446

Luminaire Tested: **GLNA-AF-06-LED-E1-T4FT-7027-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300446
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-06-LED-E1-T4FT-7027-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(6) 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: 20430.1 lumens
Efficiency: N/A
Efficacy: 105.9 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

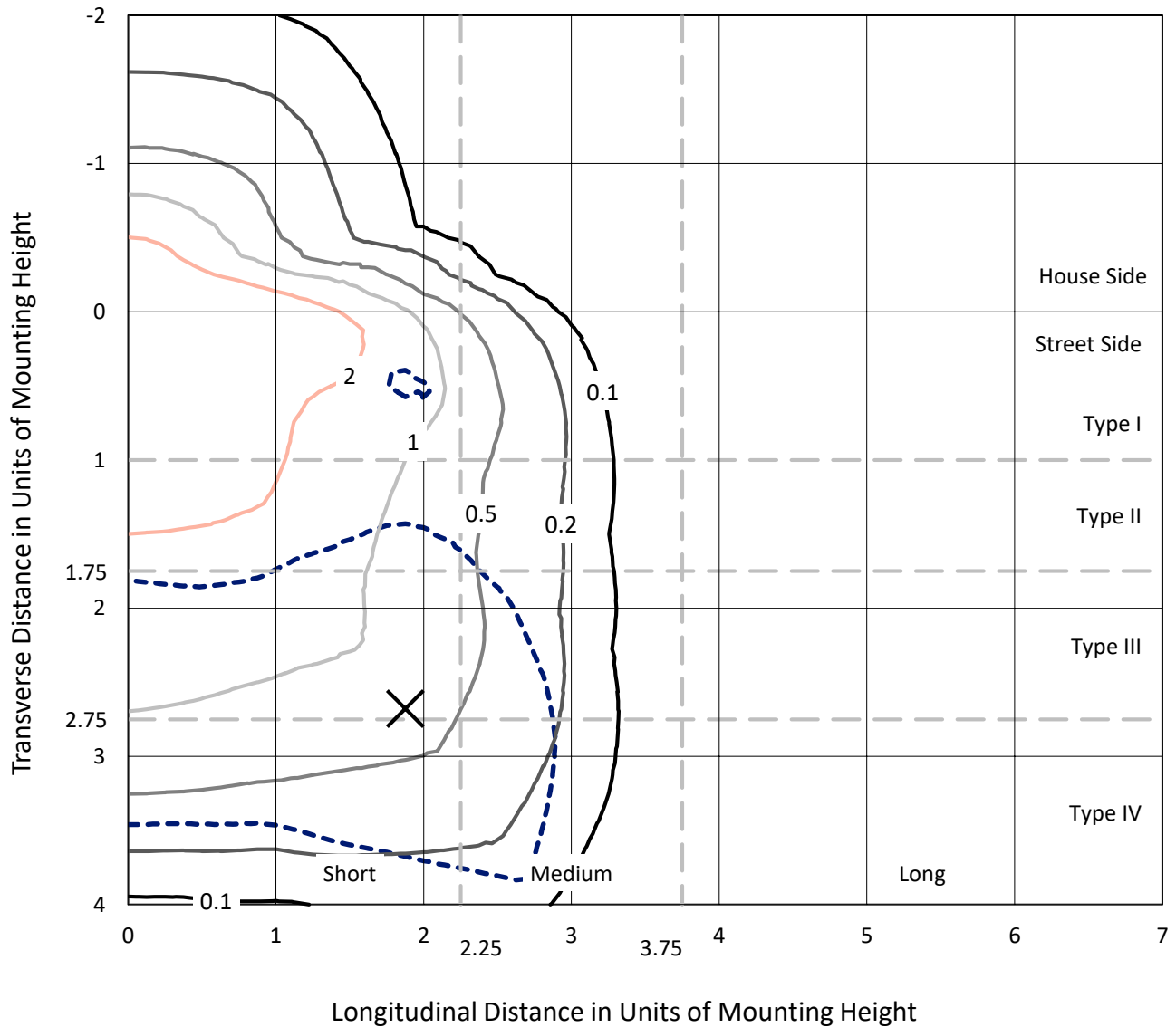
Input Watts (W): 193
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

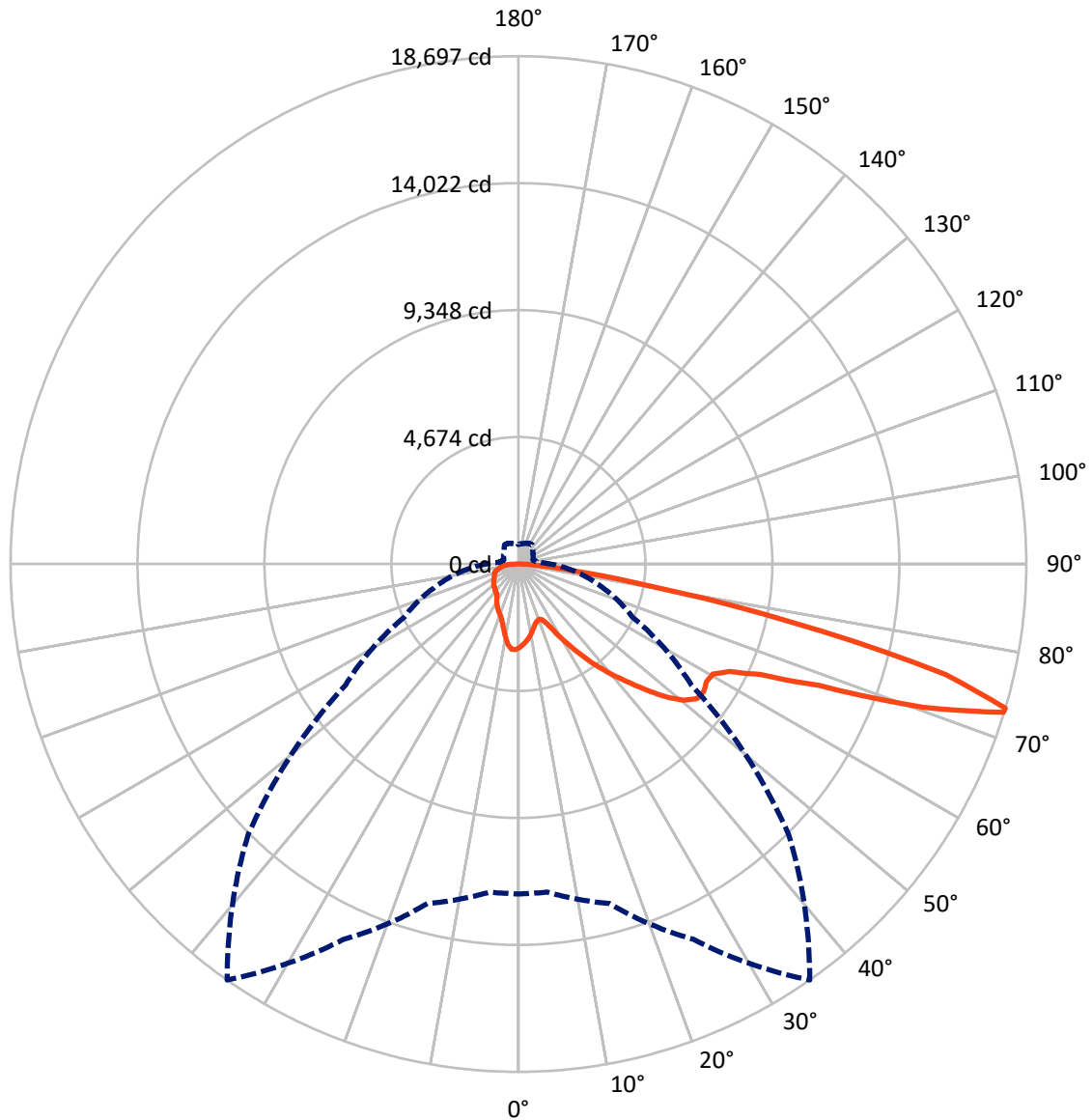
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.9 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	3896.6	0.0	3896.6
	% Fixture	19.1	0.0	19.1
Street Side	Lumens	16533.5	0.0	16533.5
	% Fixture	80.9	0.0	80.9
Total	Lumens	20430.1	0.0	20430.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	279.1	1.4
10°-20°	696.7	3.4
20°-30°	1126.3	5.5
30°-40°	1888.7	9.2
40°-50°	2911.4	14.3
50°-60°	3905.9	19.1
60°-70°	5203.5	25.5
70°-80°	3968.7	19.4
80°-90°	449.8	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°	20430.1	100.0
0°-180°	20430.1	100.0

Coefficient of Utilization



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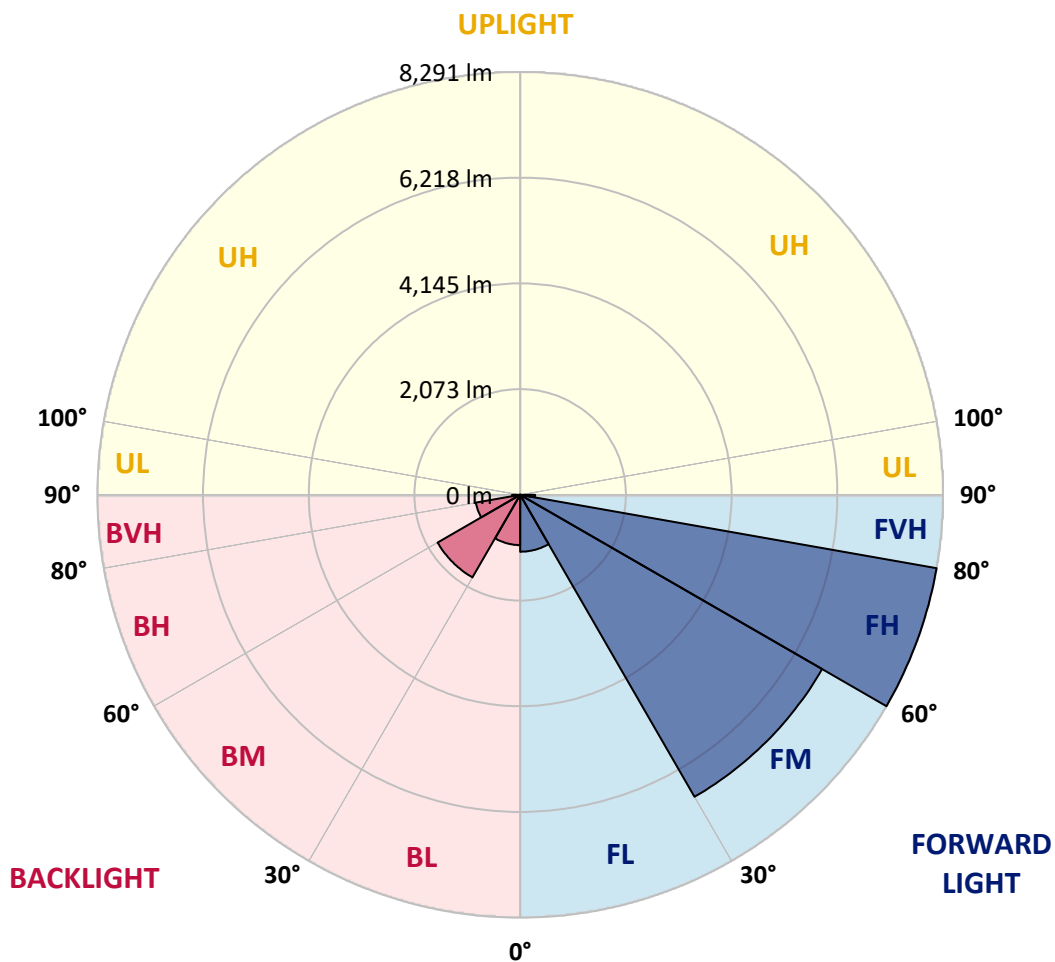
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1116.2	5.5			
FM	(30°-60°)	6836.0	33.5			
FH	(60°-80°)	8290.5	40.6			G4/12000
FVH	(80°-90°)	290.8	1.4			G3/500
BL	(0°-30°)	986.0	4.8	B2/1000		
BM	(30°-60°)	1869.9	9.2	B2/2500		
BH	(60°-80°)	881.6	4.3	B2/1000		G2/1000
BVH	(80°-90°)	159.1	0.8			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: 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°	3083.5	3083.5	3083.5	3083.5	3083.5	3083.5	3083.5	3083.5	3083.5	3083.5	3083.5
2.5°	2961.9	2967.8	2960.9	2969.7	2984.4	3000.1	3010.9	3026.6	3044.3	3068.8	3074.7
5°	2822.6	2831.4	2831.4	2847.1	2875.5	2901.1	2924.6	2950.1	2987.4	3029.6	3046.3
7.5°	2669.5	2674.4	2683.3	2706.8	2748.0	2784.3	2817.7	2858.9	2909.9	2965.8	2995.2
10°	2485.1	2491.9	2505.7	2539.0	2595.0	2645.0	2693.1	2750.0	2814.7	2884.4	2921.7
12.5°	2354.6	2352.6	2358.5	2383.0	2432.1	2492.9	2562.6	2635.2	2714.7	2796.1	2841.2
15°	2310.4	2299.7	2277.1	2271.2	2297.7	2358.5	2439.0	2528.2	2623.4	2721.5	2777.4
17.5°	2337.9	2319.3	2257.5	2212.3	2208.4	2254.5	2339.9	2439.9	2549.8	2669.5	2739.2
20°	2510.6	2466.4	2314.4	2209.4	2173.1	2195.7	2270.2	2376.2	2505.7	2664.6	2753.9
22.5°	2923.6	2858.9	2536.1	2340.9	2218.2	2190.8	2246.7	2359.5	2510.6	2725.4	2839.2
25°	3525.0	3432.8	2916.8	2668.5	2415.4	2269.2	2282.0	2397.8	2580.2	2866.7	3004.1
27.5°	3999.9	3940.0	3414.2	3130.6	2774.5	2481.2	2396.8	2493.9	2722.5	3098.3	3238.5
30°	4282.4	4246.1	3945.9	3654.5	3232.7	2818.6	2616.5	2674.4	2945.2	3419.1	3534.8
32.5°	4610.1	4588.5	4441.4	4173.5	3727.1	3262.1	2964.8	2944.2	3243.5	3804.6	3857.6
35°	4949.6	4942.7	4856.4	4664.1	4257.9	3846.8	3426.9	3287.6	3568.2	4204.9	4171.6
37.5°	5265.5	5253.7	5203.7	5091.8	4813.2	4474.7	3897.8	3639.8	3918.4	4587.5	4439.4
40°	5847.2	5755.0	5583.3	5499.0	5374.4	5003.5	4271.6	3968.5	4281.4	4952.5	4670.9
42.5°	6556.6	6406.5	6086.6	5970.9	5953.2	5420.5	4526.7	4287.3	4647.4	5314.5	4898.5
45°	7114.8	6973.5	6697.8	6551.7	6616.4	5798.2	4782.8	4627.8	5024.1	5694.2	5133.0
47.5°	7710.3	7488.6	7123.6	7167.8	7309.1	6155.3	5043.7	4993.7	5437.2	6119.0	5424.4
50°	7731.9	7562.2	7402.3	7666.2	7885.9	6484.0	5370.4	5377.3	5942.4	6653.7	5811.9
52.5°	7283.5	7247.2	7501.3	7916.3	8233.2	6744.0	5742.3	5773.7	6588.9	7267.9	6237.7
55°	7126.6	7085.4	7378.7	7829.0	8280.3	6958.8	6145.5	6202.4	7370.9	7915.4	6652.7
57.5°	7509.2	7418.0	7437.6	7787.8	8165.5	7194.3	6585.0	6699.8	8220.5	8481.4	6919.6
60°	8578.6	8383.3	8012.5	8003.7	8227.3	7547.5	7093.2	7233.5	9103.5	8752.2	6815.6
62.5°	10078.6	9883.4	9188.8	8736.5	8703.2	8130.2	7717.2	7754.5	9613.6	8385.3	6180.8
65°	11702.3	11527.7	10751.7	10113.0	9804.9	9095.6	8442.2	7987.0	9446.8	7375.8	5070.2
67.5°	13673.3	13485.9	12818.8	12229.2	11932.9	10653.6	8951.4	7764.3	8388.2	5713.8	3644.7
70°	15051.7	14860.4	14597.5	15075.3	15800.3	12901.2	9017.1	6858.7	6265.2	3797.8	2193.7
72.5°	13253.4	13164.1	13643.9	15656.1	18675.9	14264.9	8150.8	4993.7	3638.8	2016.1	1269.5
73°	12142.8	12123.2	12941.4	15248.9	18696.5	14055.0	7771.1	4641.5	3120.8	1783.6	1160.6
75°	5483.3	5641.2	7434.6	11647.4	16243.8	11581.7	5469.5	2662.7	1763.0	1232.2	876.1
77.5°	1317.6	1372.5	2326.1	5531.3	10258.2	6901.9	2478.2	1316.6	1127.3	870.2	639.7
80°	561.2	579.8	895.7	2043.6	4829.9	2779.4	1142.0	882.0	780.0	607.3	448.4
82.5°	312.0	331.6	508.2	927.1	1949.4	947.7	696.6	614.2	513.1	365.9	291.4
85°	176.6	187.4	297.3	518.0	826.1	380.7	417.0	408.1	289.4	188.4	143.2
87.5°	83.4	90.3	143.2	240.4	323.8	149.1	211.9	233.5	181.5	114.8	74.6
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°	3083.5	3083.5	3083.5	3083.5	3083.5	3083.5	3083.5	3083.5	3083.5	3083.5
2.5°	3081.6	3099.2	3119.8	3130.6	3140.4	3152.2	3164.0	3164.0	3165.9	3166.9
5°	3060.0	3096.3	3128.7	3142.4	3145.3	3145.3	3142.4	3126.7	3113.0	3118.9
7.5°	3014.9	3067.8	3095.3	3090.4	3053.1	3010.0	2973.7	2929.5	2906.9	2903.0
10°	2950.1	3010.9	3015.8	2966.8	2874.6	2782.3	2705.8	2631.3	2595.9	2587.1
12.5°	2878.5	2934.4	2903.0	2802.0	2653.8	2519.4	2422.3	2346.7	2313.4	2304.6
15°	2820.6	2858.9	2779.4	2620.5	2434.1	2291.8	2211.4	2155.4	2131.9	2125.0
17.5°	2790.2	2798.0	2652.8	2438.0	2239.8	2121.1	2071.1	2044.6	2035.7	2030.8
20°	2804.9	2750.0	2532.2	2268.3	2080.9	1997.5	1985.7	1978.8	1976.9	1973.9
22.5°	2878.5	2735.3	2421.3	2107.4	1941.6	1905.3	1915.1	1914.1	1912.1	1910.2
25°	3010.0	2748.0	2313.4	1954.3	1824.8	1817.0	1834.6	1834.6	1826.8	1826.8
27.5°	3183.6	2774.5	2192.7	1809.1	1718.9	1719.8	1733.6	1729.6	1720.8	1714.9
30°	3395.5	2791.2	2051.4	1678.6	1619.8	1615.8	1619.8	1603.1	1576.6	1574.6
32.5°	3612.3	2770.6	1887.6	1562.9	1514.8	1506.0	1503.0	1479.5	1449.1	1440.2
35°	3808.6	2695.0	1720.8	1470.6	1414.7	1395.1	1408.8	1401.0	1373.5	1366.6
37.5°	3951.8	2554.7	1570.7	1389.2	1343.1	1338.2	1347.0	1350.0	1317.6	1310.7
40°	4047.9	2364.4	1442.2	1320.5	1329.4	1310.7	1281.3	1260.7	1250.9	1247.9
42.5°	4125.4	2166.2	1334.3	1288.2	1332.3	1278.3	1214.6	1181.2	1198.9	1206.7
45°	4214.7	1973.0	1244.0	1247.9	1317.6	1241.1	1168.5	1136.1	1143.0	1144.9
47.5°	4337.4	1737.5	1146.9	1183.2	1268.5	1215.6	1140.0	1093.9	1061.5	1046.8
50°	4507.1	1458.9	1045.8	1110.6	1220.5	1196.9	1095.9	1046.8	987.0	973.2
52.5°	4624.8	1198.9	962.4	1049.8	1177.3	1159.6	1060.5	996.8	934.0	922.2
55°	4561.0	995.8	889.8	982.1	1120.4	1113.5	1031.1	945.8	896.7	886.9
57.5°	4242.2	867.3	833.9	918.3	1050.7	1074.3	991.9	902.6	867.3	860.4
60°	3633.9	786.8	798.6	875.1	993.8	1035.0	952.6	879.0	855.5	850.6
62.5°	2819.6	732.9	772.1	843.7	949.7	1007.6	931.0	876.1	867.3	861.4
65°	2020.0	689.7	743.7	812.3	909.5	982.1	923.2	872.2	874.1	869.2
67.5°	1372.5	651.4	709.3	777.0	870.2	959.5	912.4	858.4	883.0	877.1
70°	960.5	614.2	669.1	731.9	821.2	928.1	892.8	837.8	835.9	812.3
72.5°	749.5	565.1	614.2	669.1	758.4	884.0	853.5	791.7	759.4	734.8
73°	715.2	553.3	600.4	655.4	744.6	873.2	842.7	779.0	742.7	720.1
75°	591.6	502.3	545.5	594.5	685.8	822.1	789.8	721.1	675.0	661.2
77.5°	465.0	429.7	470.9	515.1	604.3	747.6	711.3	645.6	620.0	608.3
80°	344.4	356.1	392.4	431.7	523.9	668.1	635.7	570.0	683.8	655.4
82.5°	242.3	269.8	303.2	338.5	439.5	590.6	551.4	483.7	500.4	416.0
85°	143.2	176.6	208.0	238.4	316.9	489.6	455.2	385.6	315.9	301.2
87.5°	83.4	98.1	106.9	138.3	217.8	368.9	320.8	285.5	163.8	110.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)