

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: P299887

Luminaire Tested: **GLNA-AF-03-LED-E1-SL3-7027-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299887
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24288)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-03-LED-E1-SL3-7027-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(3) 70 CRI, 2700K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type V
Square Medium OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12712.4 lumens
Efficiency: N/A
Efficacy: 102.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Medium - Non-Cutoff
BUG Rating: B2 - U0 - G3

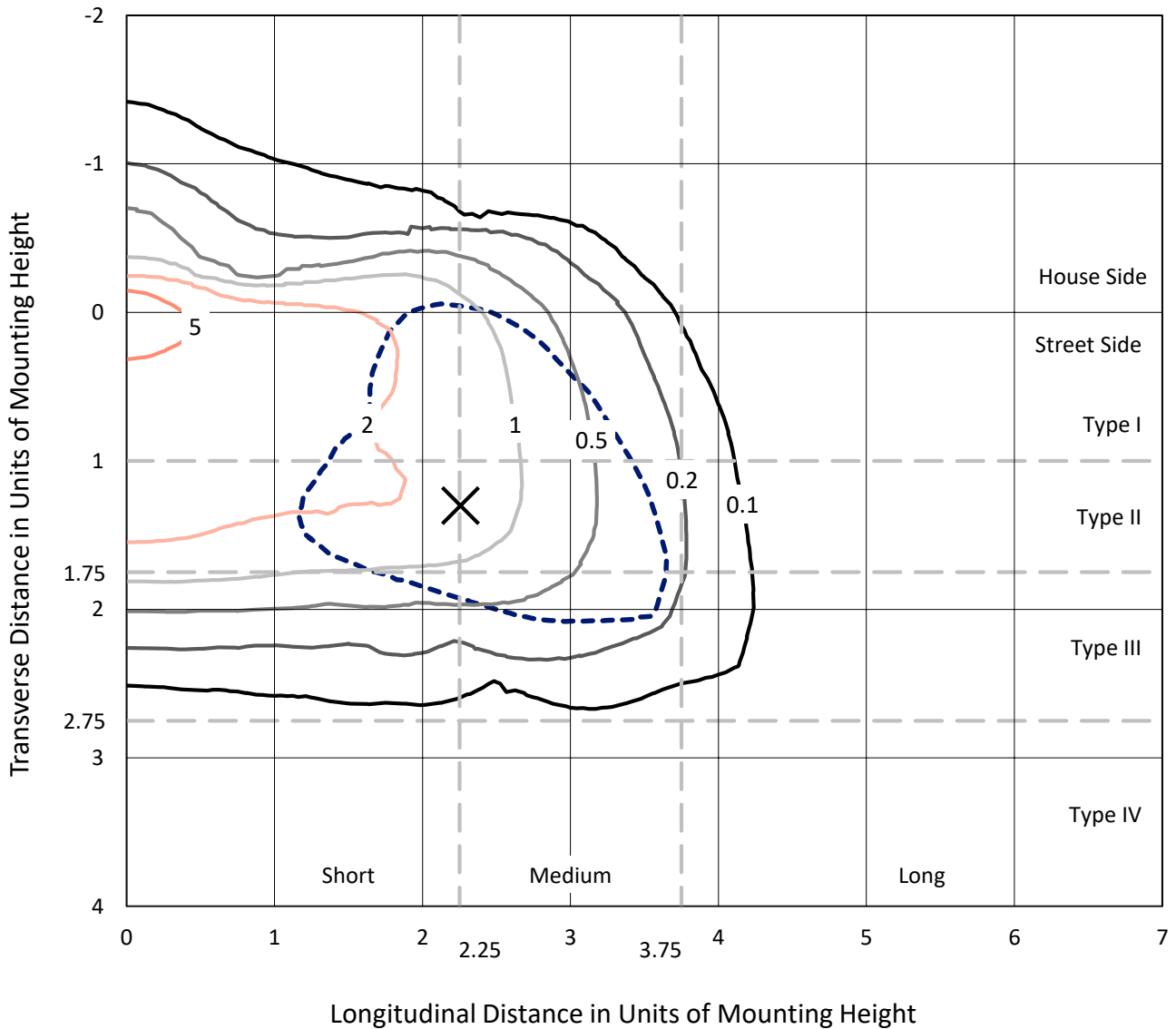
Input Watts (W): 124
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P299887
 CATALOG NUMBER: GLNA-AF-03-LED-E1-SL3-7027-800

Iso-Footcandle Lines of Horizontal Illumination

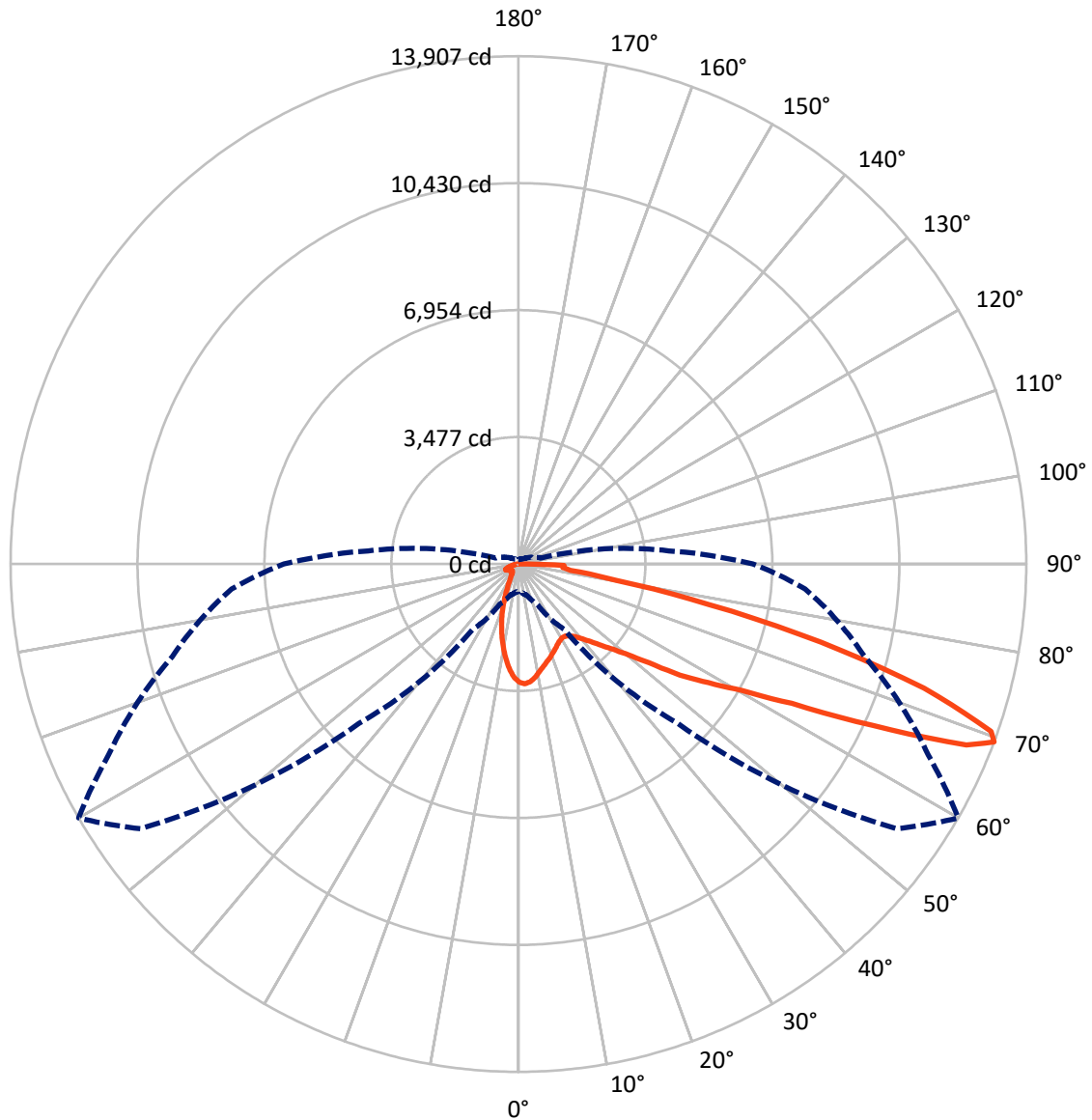
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 8.1 fc
 Type III - Medium - Non-Cutoff

REPORT NUMBER: P299887
CATALOG NUMBER: GLNA-AF-03-LED-E1-SL3-7027-800

Luminous Intensity Polar Plot



— Vertical Plane Through 60-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

REPORT NUMBER: P299887

CATALOG NUMBER: GLNA-AF-03-LED-E1-SL3-7027-800

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1808.6	0.0	1808.6
	% Fixture	14.2	0.0	14.2
Street Side	Lumens	10903.8	0.0	10903.8
	% Fixture	85.8	0.0	85.8
Total	Lumens	12712.4	0.0	12712.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	273.9	2.2
10°-20°	583.6	4.6
20°-30°	743.6	5.8
30°-40°	1022.2	8.0
40°-50°	1658.6	13.0
50°-60°	2660.0	20.9
60°-70°	3540.2	27.8
70°-80°	1911.5	15.0
80°-90°	318.9	2.5
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°	12712.4	100.0
0°-180°	12712.4	100.0

Coefficient of Utilization



REPORT NUMBER: P299887

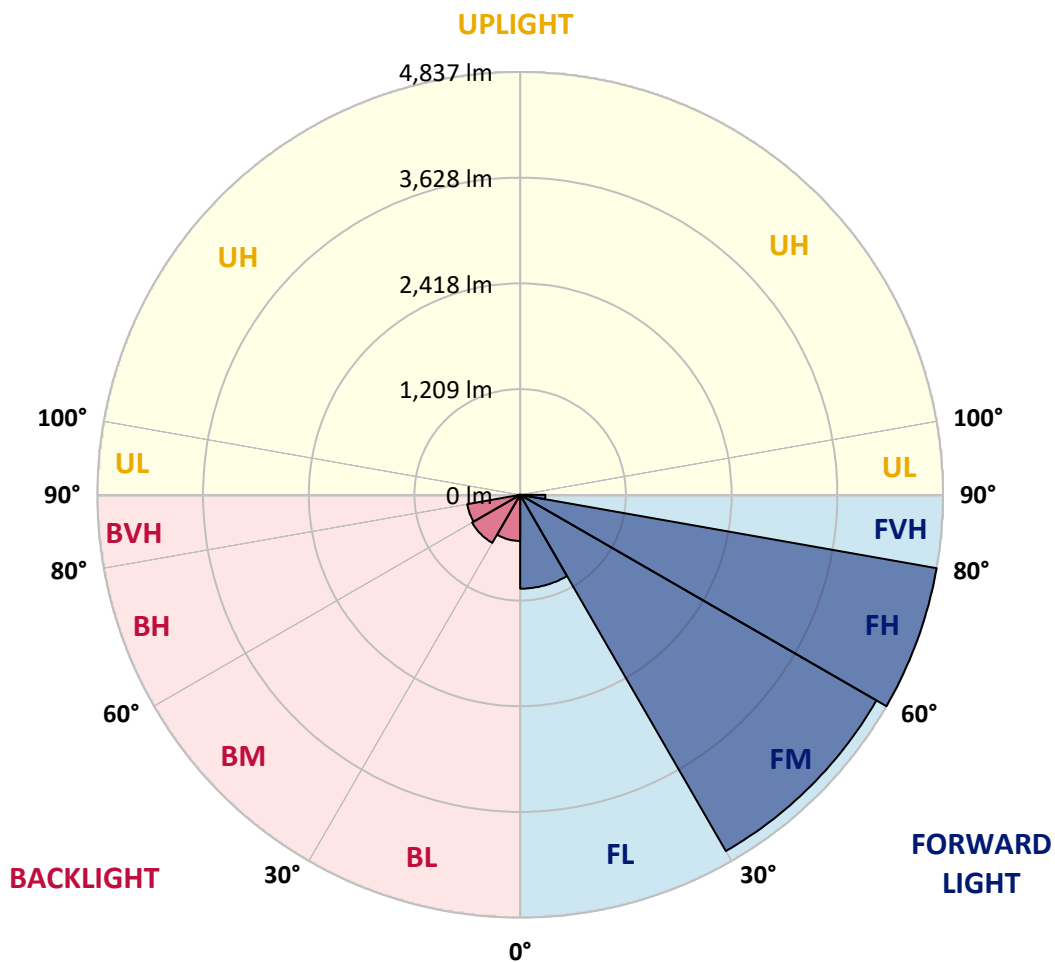
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1073.4	8.4			
FM (30°-60°)	4705.4	37.0			
FH (60°-80°)	4836.8	38.0			G2/5000
FVH (80°-90°)	288.2	2.3			G3/500
BL (0°-30°)	527.6	4.2	B2/1000		
BM (30°-60°)	635.4	5.0	B1/1000		
BH (60°-80°)	614.9	4.8	B2/1000		G2/1000
BVH (80°-90°)	30.7	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type III Medium





REPORT NUMBER: P299887

CATALOG NUMBER: GLNA-AF-03-LED-E1-SL3-7027-800

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	60°	65°	75°	85°
0°	3239.3	3239.3	3239.3	3239.3	3239.3	3239.3	3239.3	3239.3	3239.3	3239.3	3239.3
2.5°	3305.6	3313.0	3309.9	3308.1	3313.6	3305.0	3287.2	3281.7	3273.1	3252.8	3218.4
5°	3181.6	3203.7	3202.5	3219.0	3246.7	3254.0	3246.1	3247.3	3231.3	3206.1	3149.0
7.5°	2967.3	2976.5	2981.4	3017.6	3068.0	3108.5	3142.9	3153.9	3146.6	3125.1	3051.4
10°	2746.2	2753.6	2765.2	2807.6	2871.5	2927.4	2992.4	3029.9	3045.9	3042.2	2959.9
12.5°	2556.4	2563.8	2579.2	2627.1	2703.2	2772.0	2866.6	2913.2	2951.3	2974.0	2885.6
15°	2386.3	2402.3	2417.0	2472.3	2557.7	2647.9	2754.8	2813.7	2872.7	2923.7	2819.9
17.5°	2253.7	2269.7	2278.3	2328.6	2419.5	2530.0	2655.3	2724.7	2798.4	2881.9	2754.8
20°	2176.9	2184.3	2180.6	2208.9	2290.5	2407.8	2556.4	2636.9	2725.9	2842.6	2689.7
22.5°	2155.4	2156.1	2142.5	2139.5	2192.3	2291.2	2450.8	2548.5	2657.8	2816.8	2633.8
25°	2207.6	2205.8	2169.0	2138.9	2144.4	2202.1	2348.9	2462.5	2600.7	2811.3	2590.8
27.5°	2323.7	2329.2	2274.6	2218.1	2162.2	2160.4	2271.5	2391.3	2554.0	2836.5	2572.4
30°	2486.4	2495.6	2437.3	2365.5	2260.5	2173.9	2241.4	2348.9	2525.1	2888.7	2569.3
32.5°	2664.5	2674.3	2630.1	2554.6	2417.0	2257.4	2262.3	2352.6	2523.9	2961.7	2590.2
35°	2854.3	2865.3	2842.6	2778.7	2625.8	2411.5	2342.1	2412.1	2563.8	3073.5	2646.1
37.5°	3066.1	3083.3	3089.5	3028.7	2865.3	2614.8	2472.9	2525.1	2654.1	3228.9	2748.7
40°	3371.3	3395.3	3393.4	3306.2	3139.8	2889.3	2675.0	2688.5	2794.7	3436.4	2912.6
42.5°	3955.9	3960.9	3808.0	3618.2	3442.0	3177.9	2913.2	2902.2	2988.8	3699.3	3153.9
45°	4699.6	4679.3	4339.1	3972.5	3757.6	3509.5	3223.3	3169.3	3235.0	4019.8	3456.1
47.5°	5316.8	5270.1	4840.2	4334.2	4091.7	3870.0	3587.5	3492.9	3529.2	4383.4	3846.6
50°	5531.1	5496.1	5139.9	4635.1	4407.9	4309.7	4035.8	3901.9	3911.7	4816.9	4304.1
52.5°	5485.0	5480.1	5242.5	4833.5	4703.9	4771.5	4670.7	4489.6	4393.8	5298.3	4797.9
55°	5376.3	5386.8	5300.8	5064.4	5042.3	5217.3	5500.4	5366.5	5068.7	5784.1	5308.2
57.5°	4998.7	5025.7	5214.8	5354.8	5587.0	5847.3	6168.5	6130.4	5795.1	6309.1	5914.9
60°	4027.2	4089.8	4597.1	5298.3	6147.6	6961.9	7105.6	7017.2	6544.3	6960.7	6716.3
62.5°	2821.7	2886.8	3489.9	4587.2	6055.5	8220.8	8780.8	8399.5	7620.2	7920.5	7753.5
65°	1510.7	1542.0	2002.5	3182.8	5112.3	8480.5	11229.2	10648.9	9323.7	9103.8	8640.8
67.5°	833.3	850.5	1026.8	1607.1	3274.3	7467.9	12789.0	13227.4	11452.7	9891.7	8479.3
69°	753.5	769.5	884.9	1217.1	2191.1	6174.6	12636.7	13907.2	12386.1	9813.7	7882.4
70°	736.9	751.6	855.4	1121.9	1773.5	5089.6	12126.4	13733.4	12608.4	9534.3	7361.7
72.5°	663.2	679.2	779.9	1007.7	1515.6	2537.4	9605.5	11611.8	11447.2	8266.8	5583.9
75°	618.4	633.1	803.8	986.8	1451.1	1605.8	6332.5	8557.9	8414.8	5782.9	3010.9
77.5°	264.7	263.4	372.8	835.2	1472.6	1554.9	3402.7	5346.2	4877.7	2471.7	864.6
80°	176.9	173.8	176.9	245.6	1350.4	1563.5	1782.7	2713.6	2049.8	630.1	426.2
82.5°	152.3	149.8	155.4	149.8	474.7	1784.5	1515.6	1443.1	974.6	358.0	211.2
85°	102.6	98.3	133.9	134.5	224.1	1585.6	1707.2	1219.0	788.5	212.5	104.4
87.5°	49.1	47.9	78.0	95.2	131.4	644.2	1915.3	1249.1	795.2	108.7	49.7
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: P299887

CATALOG NUMBER: GLNA-AF-03-LED-E1-SL3-7027-800

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3239.3	3239.3	3239.3	3239.3	3239.3	3239.3	3239.3	3239.3	3239.3	3239.3	3239.3
2.5°	3208.0	3182.8	3158.2	3128.8	3098.1	3063.7	3046.5	3029.3	3025.0	3020.1	3002.9
5°	3119.6	3083.9	3022.5	2955.0	2883.8	2814.4	2761.5	2728.4	2703.2	2690.3	2667.6
7.5°	3005.3	2953.1	2845.7	2729.0	2609.3	2499.9	2405.4	2345.8	2289.3	2262.9	2232.8
10°	2896.6	2818.7	2651.6	2479.7	2307.7	2142.5	1987.2	1877.3	1779.6	1725.0	1686.3
12.5°	2803.3	2696.5	2464.9	2232.2	1996.4	1761.2	1528.5	1345.5	1192.6	1112.1	1071.0
15°	2712.4	2583.5	2287.5	1992.1	1689.4	1369.4	1063.6	856.0	729.5	679.2	662.0
17.5°	2630.1	2464.9	2109.4	1750.1	1372.5	985.6	714.8	600.6	552.1	535.5	530.0
20°	2541.1	2345.2	1924.5	1497.1	1042.1	689.0	558.2	507.8	488.2	483.3	480.8
22.5°	2455.1	2227.3	1747.7	1226.3	748.6	531.8	479.6	458.7	455.7	460.0	460.0
25°	2382.0	2121.7	1556.7	943.2	549.6	447.7	429.2	424.3	436.0	452.0	455.0
27.5°	2327.4	2035.1	1353.4	696.4	437.8	389.3	388.7	396.7	425.6	456.3	462.4
30°	2289.9	1952.8	1136.1	502.3	367.2	342.7	352.5	369.7	412.1	455.7	467.3
32.5°	2270.9	1892.0	909.5	388.7	314.4	300.9	317.5	338.4	380.1	420.6	436.0
35°	2285.6	1847.2	695.8	324.2	277.6	267.1	284.3	304.6	329.2	346.3	358.0
37.5°	2340.9	1829.4	525.0	290.5	252.4	242.6	256.1	267.7	277.6	282.5	288.0
40°	2460.0	1848.4	420.6	273.3	238.3	226.0	231.5	235.8	242.0	246.9	249.3
42.5°	2635.7	1905.5	377.0	266.5	230.9	213.1	211.9	213.7	221.7	230.9	232.7
45°	2881.3	2006.2	374.0	270.8	227.2	202.6	197.1	199.6	211.9	226.0	228.4
47.5°	3195.1	2159.7	398.5	283.7	230.3	197.1	187.9	191.0	206.3	225.4	228.4
50°	3575.2	2374.1	439.7	302.7	243.8	198.4	184.8	186.7	202.6	223.5	226.6
52.5°	4024.1	2678.0	484.5	321.2	257.9	206.3	187.3	183.0	197.7	216.2	219.8
55°	4523.4	3068.0	530.6	337.7	265.3	216.2	192.2	178.1	188.5	203.9	206.9
57.5°	5136.2	3613.3	610.4	353.7	270.2	222.9	197.1	173.2	176.9	187.9	190.4
60°	5965.9	4384.6	751.0	380.1	281.3	225.4	196.5	168.9	165.2	171.3	172.6
62.5°	6960.1	5222.2	868.3	413.3	299.7	227.2	192.8	165.8	155.4	155.4	156.6
65°	7550.2	5446.3	803.2	440.9	315.0	225.4	188.5	162.7	148.0	141.2	141.9
67.5°	7049.7	4789.9	688.4	446.4	314.4	216.8	181.8	157.2	140.6	130.2	129.6
69°	6422.7	4132.8	636.8	431.7	299.7	205.7	173.2	151.1	135.1	124.0	123.4
70°	5917.3	3731.8	603.0	415.7	283.7	197.7	166.4	145.5	130.8	120.4	119.1
72.5°	4302.3	2445.3	515.2	357.4	234.0	165.8	143.7	127.7	116.7	110.5	109.3
75°	2149.9	1166.2	418.2	289.8	179.3	132.6	117.9	106.9	101.3	100.1	99.5
77.5°	706.2	534.3	299.1	216.2	133.3	103.8	95.2	87.2	86.0	89.7	88.4
80°	388.1	310.7	189.8	143.1	90.9	76.1	74.9	70.6	72.5	78.6	77.4
82.5°	197.7	161.5	117.3	86.0	61.4	54.7	59.6	57.1	59.6	65.1	64.5
85°	97.6	88.4	74.3	52.2	40.5	35.0	42.4	44.2	45.4	49.7	49.7
87.5°	56.5	52.2	39.3	24.6	20.3	18.4	24.6	23.9	28.2	30.7	30.1
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)