

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: P299235

Luminaire Tested: **GLNA-AF-04-LED-E1-SL2-8030-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299235
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24286)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-04-LED-E1-SL2-8030-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 3000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type V
Narrow OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12601.8 lumens
Efficiency: N/A
Efficacy: 97.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B2 - U0 - G3

Input Watts (W): 129
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

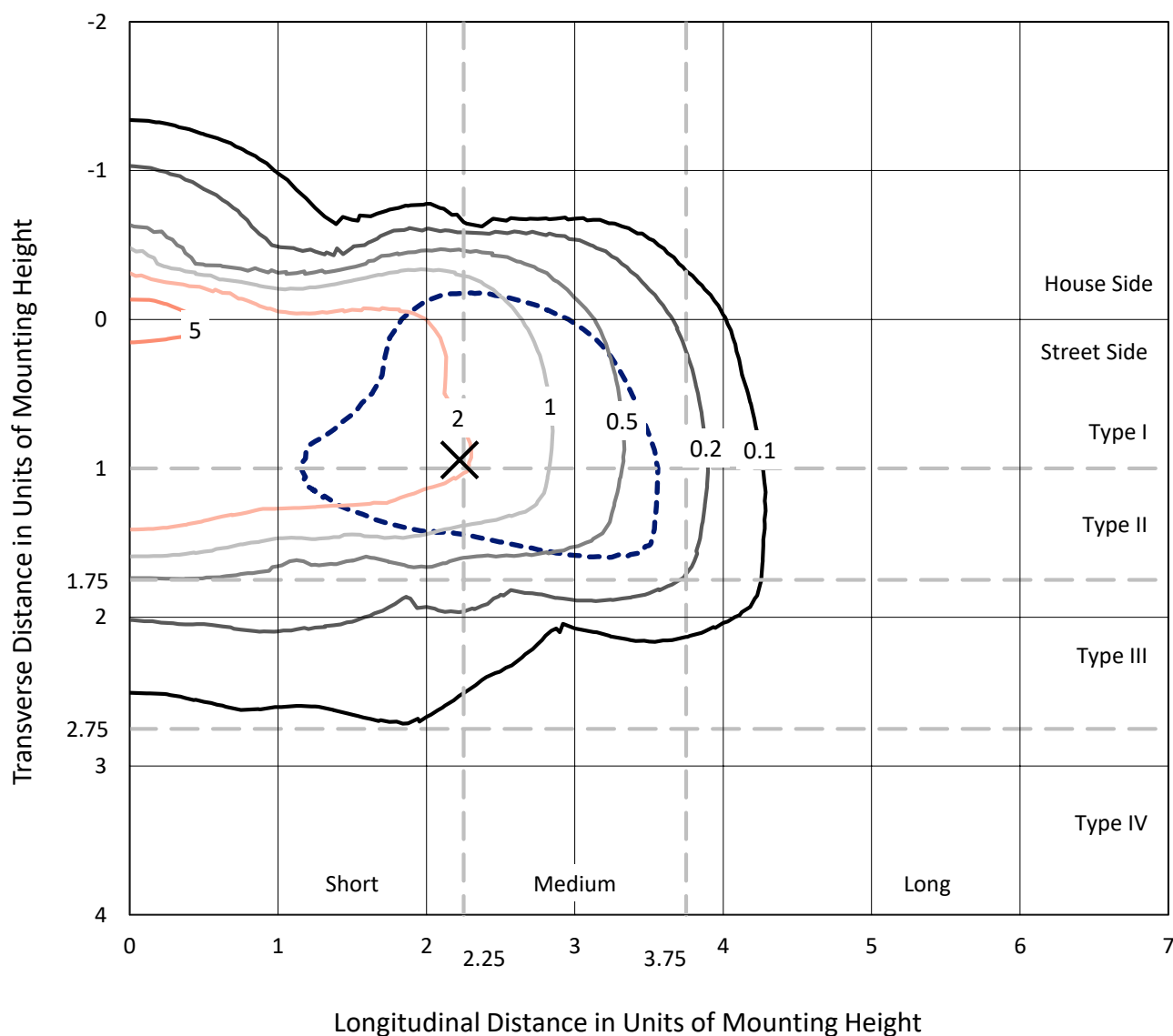


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

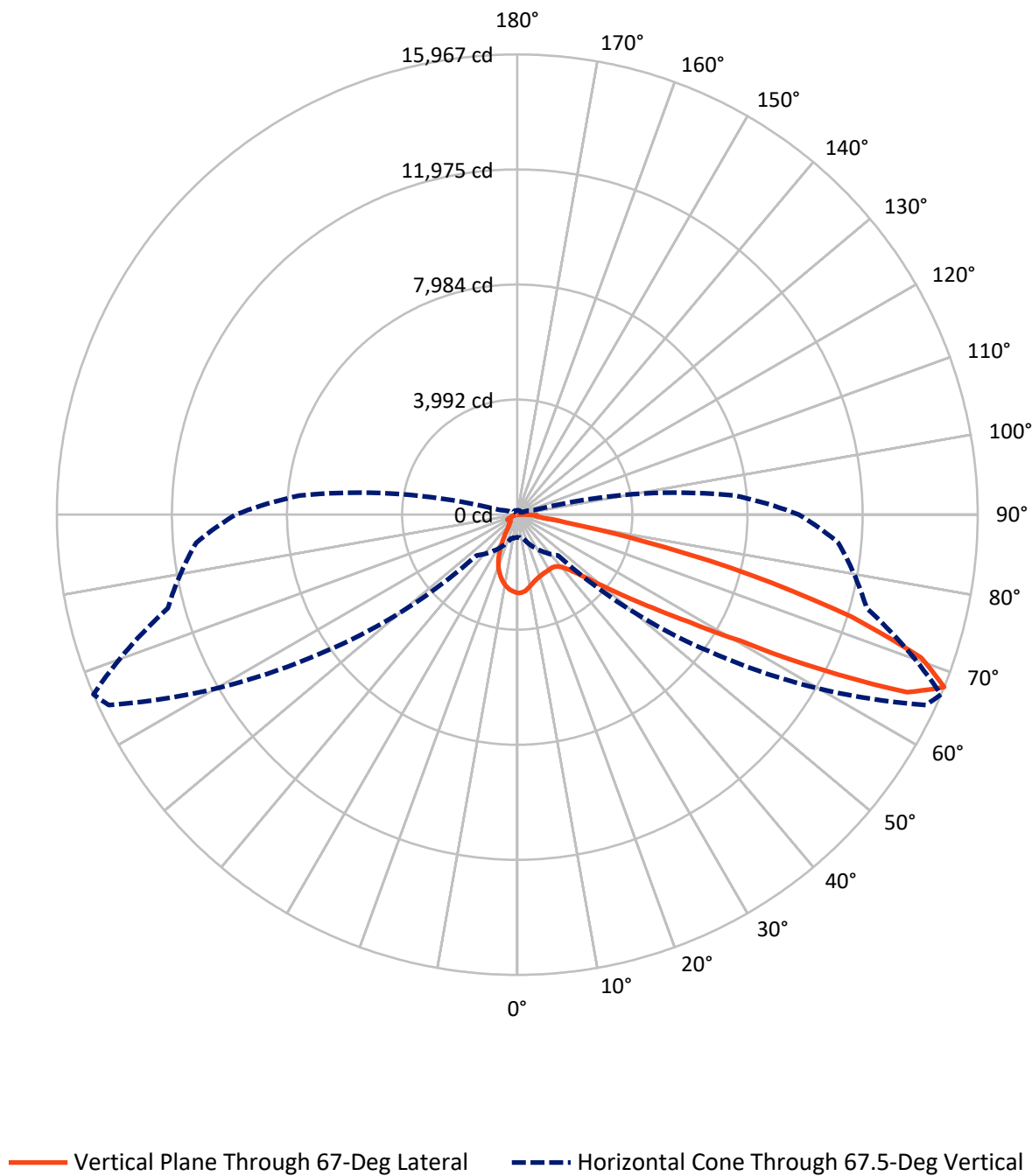


Based on 20 foot mounting height. Maximum calculated value = 6.8 fc
 Type II - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2088.0	0.0	2088.0
	% Fixture	16.6	0.0	16.6
Street Side	Lumens	10513.8	0.0	10513.8
	% Fixture	83.4	0.0	83.4
Total	Lumens	12601.8	0.0	12601.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	231.9	1.8
10°-20°	536.6	4.3
20°-30°	727.3	5.8
30°-40°	1034.0	8.2
40°-50°	1729.9	13.7
50°-60°	2736.7	21.7
60°-70°	3486.3	27.7
70°-80°	1826.1	14.5
80°-90°	292.9	2.3
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°	12601.8	100.0
0°-180°	12601.8	100.0

Coefficient of Utilization



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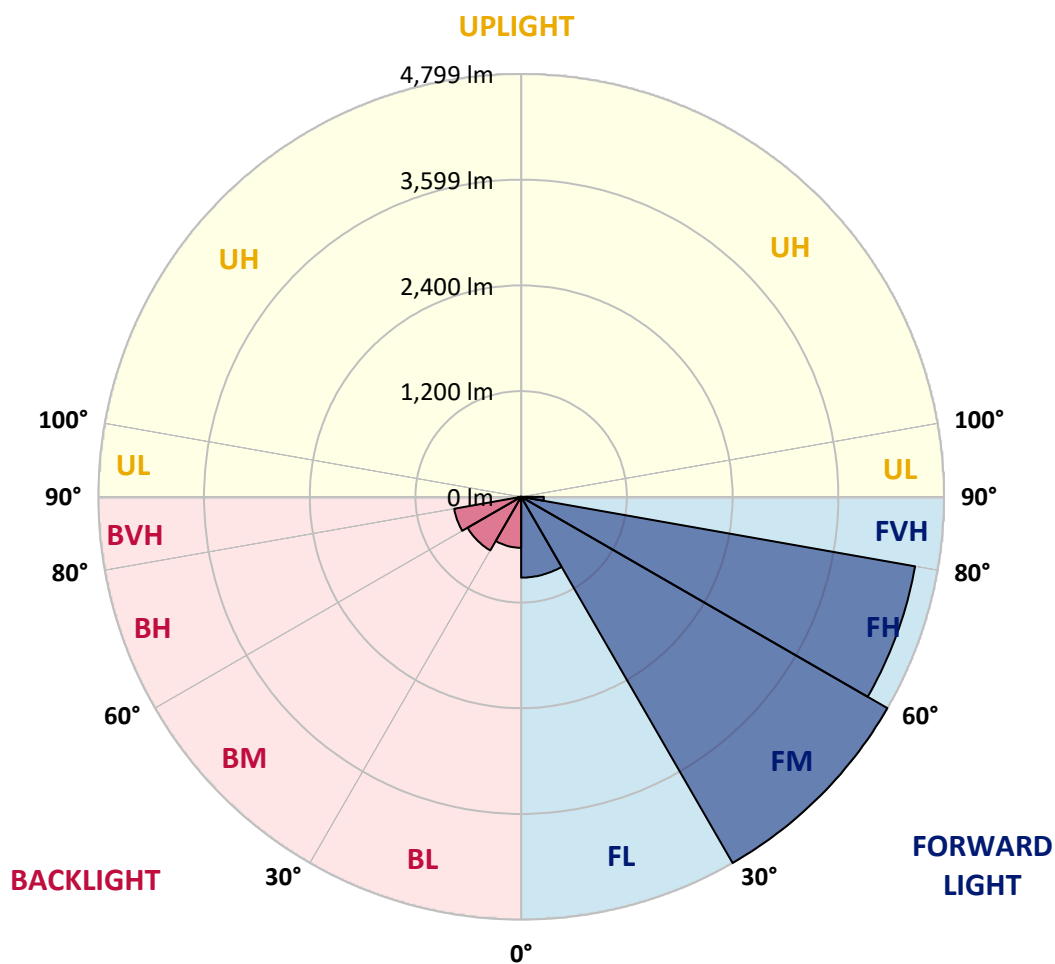
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	917.1	7.3			
FM	(30°-60°)	4799.0	38.1			
FH	(60°-80°)	4540.1	36.0			G2/5000
FVH	(80°-90°)	257.5	2.0			G3/500
BL	(0°-30°)	578.7	4.6	B2/1000		
BM	(30°-60°)	701.6	5.6	B1/1000		
BH	(60°-80°)	772.3	6.1	B2/1000		G2/1000
BVH	(80°-90°)	35.4	0.3			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 II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	2718.2	2718.2	2718.2	2718.2	2718.2	2718.2	2718.2	2718.2	2718.2	2718.2	2718.2
2.5°	2606.3	2610.7	2624.3	2633.0	2672.2	2689.0	2700.8	2712.6	2714.4	2720.0	2714.4
5°	2332.9	2342.2	2367.7	2396.3	2472.1	2531.7	2594.5	2659.8	2671.6	2713.8	2725.6
7.5°	2121.0	2118.5	2139.6	2173.8	2251.5	2334.1	2444.1	2574.0	2599.5	2694.6	2740.5
10°	1966.2	1964.4	1986.7	2022.2	2096.1	2174.4	2298.7	2476.4	2512.5	2664.1	2754.8
12.5°	1851.9	1852.5	1874.9	1914.0	1989.2	2068.1	2194.3	2382.0	2428.0	2628.7	2769.7
15°	1776.1	1781.0	1799.1	1840.7	1914.0	1992.9	2116.6	2311.1	2362.7	2600.7	2786.5
17.5°	1750.6	1758.7	1764.9	1795.3	1858.1	1937.0	2058.2	2258.9	2313.6	2581.5	2801.4
20°	1774.2	1783.5	1771.7	1782.3	1822.1	1891.7	2012.2	2217.9	2273.8	2559.7	2803.3
22.5°	1875.5	1884.2	1849.4	1818.9	1816.5	1858.7	1974.3	2185.6	2243.4	2543.5	2803.9
25°	2053.9	2059.4	2001.0	1930.2	1861.2	1846.9	1947.6	2163.2	2224.7	2529.3	2792.1
27.5°	2272.6	2276.9	2209.8	2105.4	1966.8	1874.9	1938.3	2150.2	2214.2	2516.8	2772.2
30°	2538.6	2559.1	2469.0	2337.2	2135.3	1957.5	1956.9	2143.3	2202.4	2495.7	2733.1
32.5°	2810.8	2819.5	2757.3	2623.7	2362.1	2102.9	2009.1	2148.3	2199.3	2470.2	2683.4
35°	3086.7	3097.9	3057.5	2950.0	2672.2	2316.1	2111.0	2177.5	2218.5	2461.5	2648.6
37.5°	3444.0	3458.9	3403.0	3278.7	3049.4	2605.1	2280.7	2250.8	2277.6	2486.4	2638.0
40°	4008.9	4002.1	3838.6	3653.4	3462.0	2974.8	2523.0	2375.1	2390.7	2566.5	2670.3
42.5°	4666.4	4649.6	4368.1	4077.3	3915.7	3422.3	2843.7	2590.8	2587.7	2724.4	2784.0
45°	5190.9	5177.2	4923.6	4565.1	4435.8	3931.8	3258.2	2912.1	2889.1	2974.8	2994.1
47.5°	5474.9	5475.5	5329.4	5036.8	5033.6	4579.4	3790.8	3376.9	3337.1	3377.5	3357.0
50°	5375.4	5388.5	5372.9	5279.7	5579.3	5428.3	4486.2	4025.1	3944.9	3984.7	3905.7
52.5°	4894.4	4911.2	5003.2	5146.1	5808.6	6454.2	5507.8	4830.4	4737.2	4722.9	4635.3
55°	4041.8	4062.3	4250.0	4638.4	5617.8	7143.4	7119.8	5857.0	5708.5	5573.7	5536.4
57.5°	2785.9	2820.1	3122.1	3698.8	5000.7	7351.6	9039.4	7320.5	7018.5	6547.5	6556.2
60°	1570.4	1610.1	1966.2	2490.1	3755.3	7125.4	10499.8	9537.2	8899.6	7687.8	7752.4
62.5°	998.6	1041.5	1311.9	1730.1	2253.3	5907.4	11098.3	12618.9	11809.2	9093.5	9156.9
65°	808.5	827.1	954.5	1428.1	1636.2	3559.0	10644.0	15157.5	14855.5	10877.6	10581.8
67.5°	789.2	795.4	861.3	1198.8	1569.1	2000.4	8490.1	15632.3	15967.2	12543.7	11175.3
70°	779.9	801.7	970.7	1144.1	1502.6	1687.2	5102.0	14331.0	14859.8	12979.3	10385.5
72.5°	378.5	377.2	488.4	1034.7	1692.8	1750.0	2621.2	11595.4	12126.1	11244.9	8534.2
75°	305.1	279.0	266.6	379.1	1627.5	1807.1	1670.4	7978.6	8362.7	7539.3	5246.2
77.5°	289.6	258.5	236.8	237.4	687.9	1916.5	1415.0	4415.9	4527.8	3405.5	1437.4
80°	239.9	211.3	195.8	220.6	333.1	1825.2	1530.0	1998.5	1833.9	836.5	478.5
82.5°	166.5	151.6	147.3	185.2	266.6	1300.7	1779.2	1073.8	900.5	418.8	295.2
85°	106.3	90.7	100.7	134.9	207.6	600.3	1832.6	837.1	665.6	266.0	166.5
87.5°	49.1	39.8	49.7	74.6	135.5	206.9	1743.8	940.2	685.4	140.4	105.0
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°	2718.2	2718.2	2718.2	2718.2	2718.2	2718.2	2718.2	2718.2	2718.2	2718.2	2718.2
2.5°	2719.4	2707.6	2698.3	2680.9	2661.6	2643.0	2626.2	2605.1	2598.9	2593.3	2602.0
5°	2728.1	2716.3	2682.1	2628.7	2569.6	2514.3	2459.0	2411.8	2382.6	2366.4	2375.8
7.5°	2741.2	2724.4	2653.5	2555.4	2449.1	2352.1	2252.1	2171.9	2112.9	2084.9	2093.0
10°	2753.0	2720.7	2605.1	2457.8	2302.4	2158.3	2000.4	1869.9	1773.0	1722.0	1734.4
12.5°	2757.9	2706.4	2537.3	2336.0	2122.8	1911.5	1679.1	1484.0	1344.8	1293.8	1283.3
15°	2762.9	2690.2	2462.8	2197.4	1905.9	1607.0	1281.4	1047.7	932.2	906.7	901.1
17.5°	2764.2	2662.2	2378.2	2047.0	1651.8	1244.7	876.2	727.7	728.3	769.3	774.3
20°	2751.1	2620.6	2275.7	1860.0	1347.3	860.7	601.6	576.1	669.9	772.4	784.9
22.5°	2721.3	2565.3	2159.5	1641.8	998.6	566.8	465.5	493.4	614.6	740.1	754.4
25°	2683.4	2498.2	2022.2	1388.9	661.2	405.2	390.3	424.4	506.5	590.4	598.4
27.5°	2631.8	2418.6	1868.0	1099.3	429.4	333.7	343.7	366.6	400.2	437.5	441.2
30°	2565.3	2323.6	1703.4	801.7	324.4	300.2	314.4	326.9	341.2	362.3	364.2
32.5°	2488.9	2232.2	1534.3	553.7	287.7	282.8	293.9	300.2	311.3	324.4	325.6
35°	2424.8	2145.2	1359.1	391.5	272.2	269.7	277.2	279.6	290.2	304.5	305.7
37.5°	2388.2	2074.4	1178.2	315.7	261.6	257.9	262.2	262.2	277.2	298.3	301.4
40°	2390.7	2035.2	997.4	285.2	252.9	248.0	248.6	248.6	267.8	290.8	292.7
42.5°	2458.4	2045.2	837.1	273.4	246.1	240.5	237.4	239.3	255.4	270.3	271.6
45°	2617.5	2115.4	686.7	266.0	239.3	237.4	230.6	229.9	236.1	243.0	243.0
47.5°	2878.5	2254.0	584.8	261.0	233.7	233.0	225.0	216.9	216.3	218.7	218.7
50°	3302.9	2492.6	516.4	255.4	229.9	225.0	215.6	203.2	198.9	200.7	200.7
52.5°	3939.3	2918.3	490.3	248.0	221.9	213.8	203.2	190.8	187.1	187.7	187.7
55°	4773.9	3572.0	486.6	239.3	213.2	200.1	191.4	182.1	177.7	179.0	179.0
57.5°	5793.7	4476.2	553.1	225.6	201.3	186.4	181.5	175.2	172.1	174.0	173.4
60°	7033.4	5659.4	820.3	211.3	189.5	174.0	174.0	169.0	166.5	168.4	167.8
62.5°	8461.5	7018.5	1153.4	200.7	177.1	164.1	166.5	164.1	161.6	162.8	162.2
65°	9728.0	7904.1	1080.1	192.6	164.7	154.7	159.1	157.8	156.0	157.2	156.6
67.5°	9764.6	7575.9	606.5	183.9	152.9	145.4	151.6	151.0	149.8	151.0	150.4
70°	8714.4	6397.1	341.8	167.8	140.4	134.2	142.9	142.3	141.1	143.6	142.9
72.5°	6981.8	4642.1	249.8	147.9	128.0	122.4	132.4	131.7	131.7	135.5	133.6
75°	4017.6	2388.8	199.5	126.8	115.0	110.6	119.3	119.9	121.2	126.2	122.4
77.5°	1145.3	744.5	162.8	107.5	98.8	96.9	105.6	106.9	107.5	113.1	108.1
80°	425.7	343.0	134.2	90.1	80.8	81.4	89.5	91.4	92.0	97.6	91.4
82.5°	271.6	226.2	108.8	69.6	63.4	62.8	72.7	75.2	75.2	75.8	72.1
85°	158.5	135.5	82.0	50.3	44.7	42.9	54.1	58.4	56.6	55.3	52.8
87.5°	106.3	93.2	50.3	28.0	24.2	23.0	31.7	34.8	33.6	31.7	29.8
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)