

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: P300424

Luminaire Tested: **GLNA-AF-02-LED-E1-AFL-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P300424  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24165)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLNA-AF-02-LED-E1-AFL-600  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(2) 70 CRI, 4000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Automotive Frontline OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

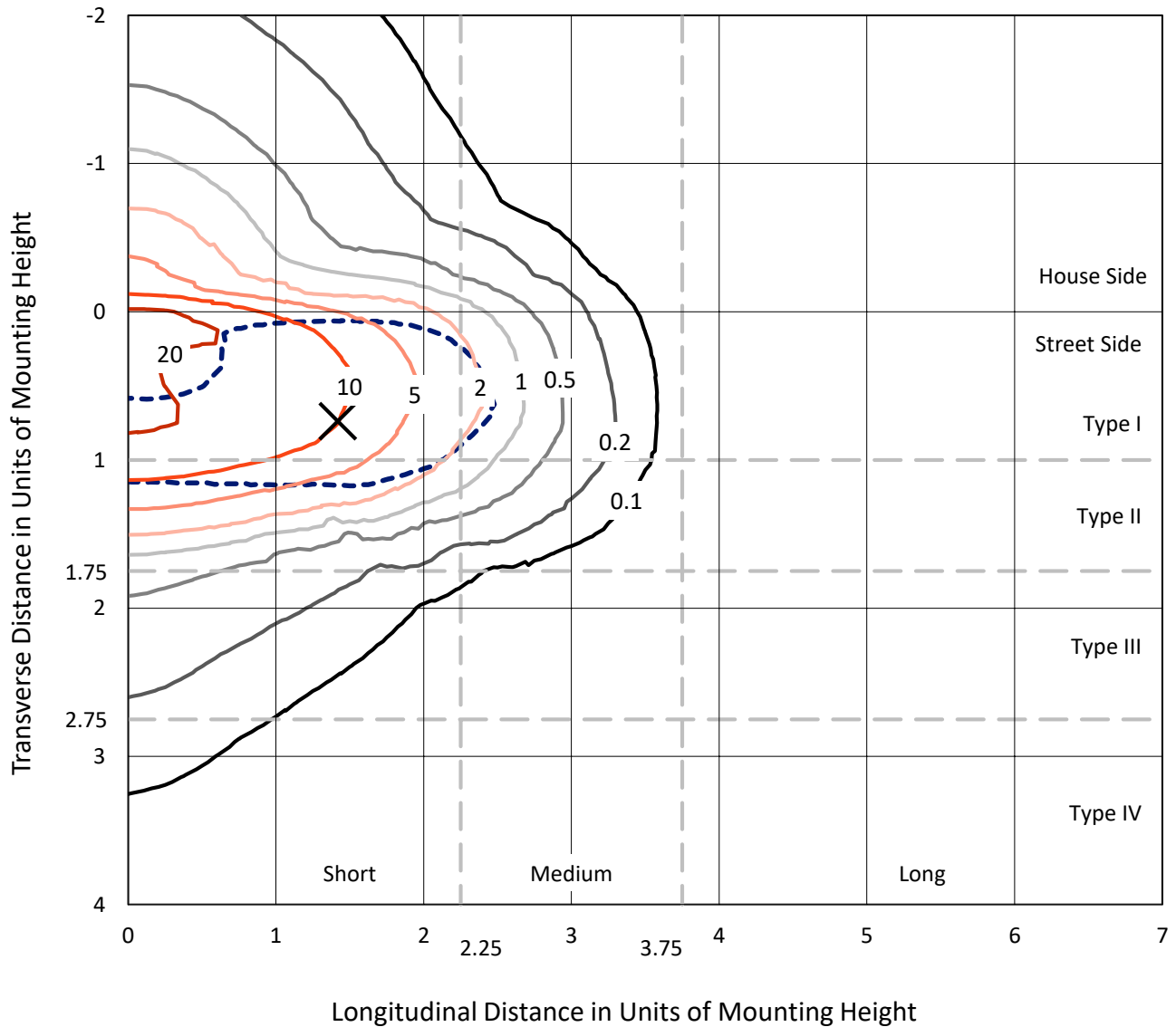
Lumens per Lamp: N/A  
Luminaire Lumens: 8202.5 lumens  
Efficiency: N/A  
Efficacy: 124.3 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B1 - U0 - G1  
  
Input Watts (W): 66  
Input Voltage (V): NR  
Input Current (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: P300424  
 CATALOG NUMBER: GLNA-AF-02-LED-E1-AFL-600

### Iso-Footcandle Lines of Horizontal Illumination

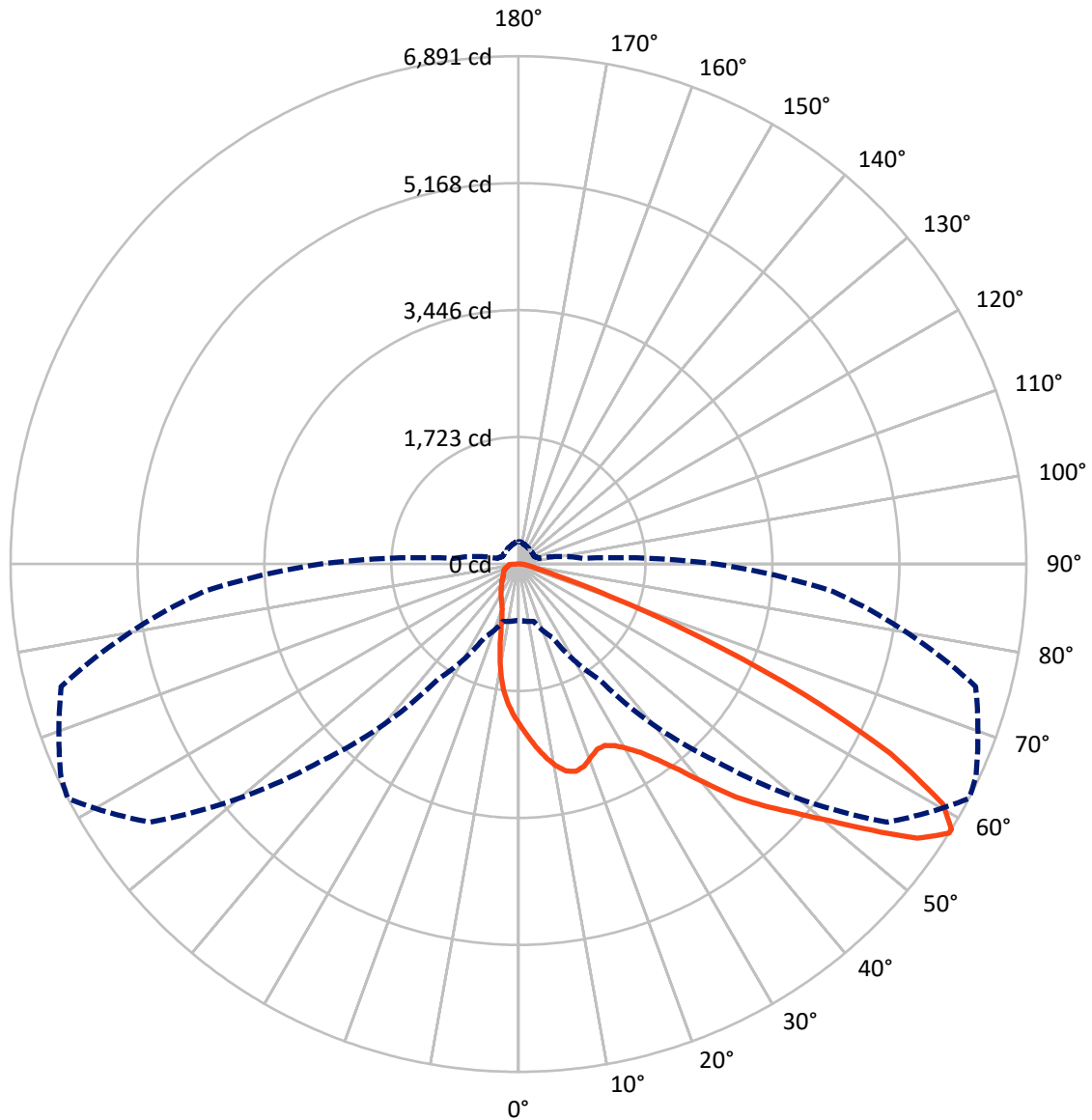
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 26.6 fc  
 Type II - Short - Full Cutoff

REPORT NUMBER: P300424  
CATALOG NUMBER: GLNA-AF-02-LED-E1-AFL-600

### Luminous Intensity Polar Plot



— Vertical Plane Through 62.5-Deg Lateral    - - - Horizontal Cone Through 58-Deg Vertical

REPORT NUMBER: P300424

CATALOG NUMBER: GLNA-AF-02-LED-E1-AFL-600

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1250.9	0.0	1250.9
	% Fixture	15.3	0.0	15.3
<b>Street Side</b>	Lumens	6951.6	0.0	6951.6
	% Fixture	84.7	0.0	84.7
<b>Total</b>	Lumens	8202.5	0.0	8202.5
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	194.9	2.4
10°-20°	498.1	6.1
20°-30°	805.2	9.8
30°-40°	1278.2	15.6
40°-50°	1870.3	22.8
50°-60°	1956.2	23.8
60°-70°	1155.7	14.1
70°-80°	325.6	4.0
80°-90°	118.2	1.4
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°	8202.5	100.0
0°-180°	8202.5	100.0



REPORT NUMBER: P300424

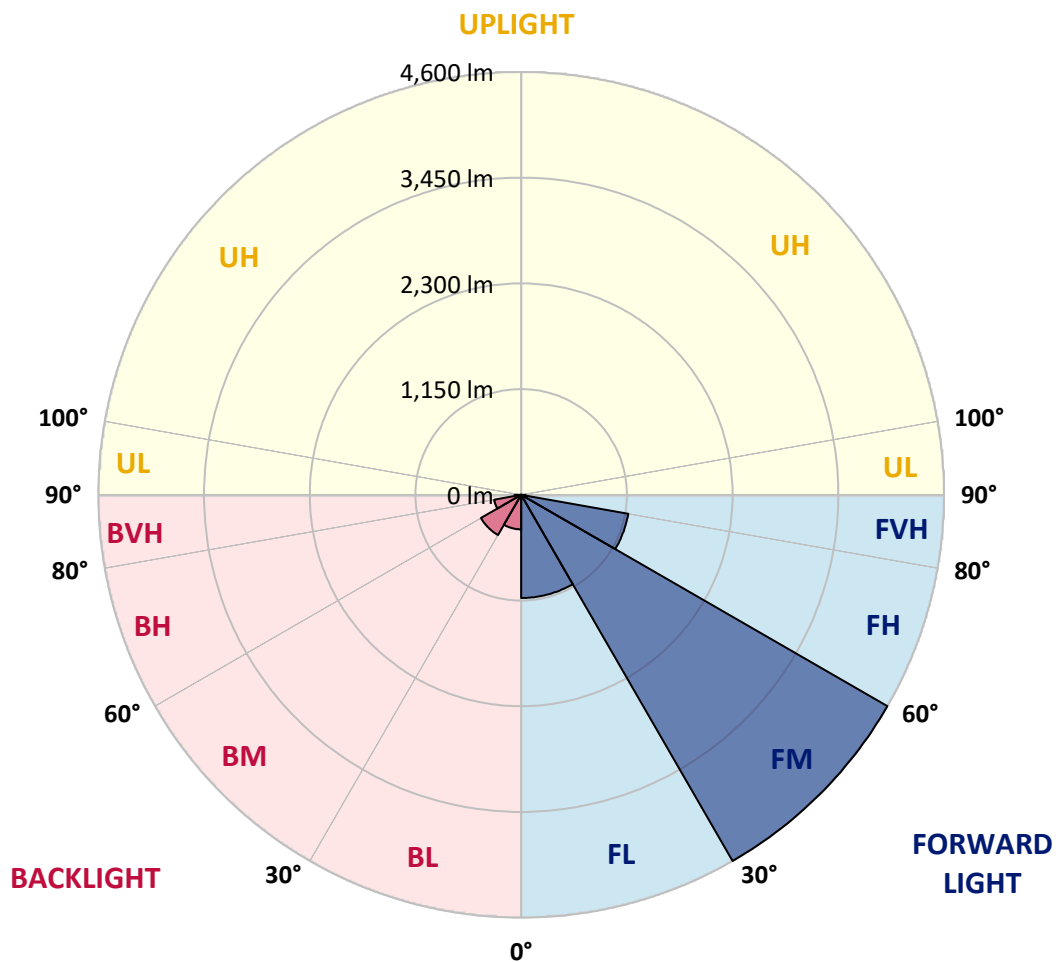
CATALOG NUMBER: GLNA-AF-02-LED-E1-AFL-600

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1122.2	13.7			
FM	(30°-60°)	4599.9	56.1			
FH	(60°-80°)	1182.8	14.4			G1/1800
FVH	(80°-90°)	46.6	0.6			G1/100
BL	(0°-30°)	376.0	4.6	B1/500		
BM	(30°-60°)	504.9	6.2	B1/1000		
BH	(60°-80°)	298.5	3.6	B1/500		G1/500
BVH	(80°-90°)	71.6	0.9			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G1**

Type II Short





REPORT NUMBER: P300424

CATALOG NUMBER: GLNA-AF-02-LED-E1-AFL-600

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	62.5°	65°	75°	85°
0°	2178.8	2178.8	2178.8	2178.8	2178.8	2178.8	2178.8	2178.8	2178.8	2178.8	2178.8
2.5°	2489.8	2469.7	2456.9	2445.7	2431.0	2399.8	2357.7	2331.0	2317.5	2271.5	2217.1
5°	2733.9	2716.1	2703.0	2687.9	2661.6	2612.6	2544.6	2490.5	2463.9	2372.0	2263.0
7.5°	2676.7	2684.0	2706.8	2746.6	2780.6	2774.0	2713.4	2644.6	2609.5	2481.6	2316.3
10°	2332.2	2344.9	2384.3	2477.4	2628.0	2782.5	2829.7	2782.1	2746.6	2590.2	2371.2
12.5°	2263.0	2262.6	2265.7	2290.5	2380.1	2597.5	2833.5	2881.4	2860.2	2693.7	2427.2
15°	2291.2	2292.0	2289.7	2300.1	2327.9	2414.1	2715.3	2919.7	2934.7	2798.0	2485.1
17.5°	2365.4	2363.5	2354.6	2354.6	2364.6	2398.2	2576.3	2884.1	2953.6	2890.3	2536.1
20°	2489.8	2480.9	2457.3	2435.7	2424.9	2443.0	2519.1	2802.2	2920.8	2971.0	2578.2
22.5°	2640.4	2633.4	2595.2	2548.9	2511.4	2511.0	2548.5	2730.8	2864.0	3047.1	2613.7
25°	2835.1	2823.9	2767.1	2692.9	2627.3	2602.2	2612.6	2727.3	2833.1	3129.8	2645.4
27.5°	3063.7	3043.3	2976.0	2869.1	2772.5	2721.9	2706.8	2790.3	2861.3	3232.1	2689.4
30°	3341.0	3317.5	3231.4	3091.9	2955.6	2872.5	2840.5	2901.9	2954.8	3356.9	2760.1
32.5°	3656.6	3622.6	3523.0	3369.2	3190.0	3063.3	3011.2	3049.4	3091.5	3507.1	2848.6
35°	4092.7	4052.1	3908.1	3696.0	3493.6	3319.4	3236.0	3263.8	3304.7	3731.2	2976.4
37.5°	4390.1	4371.9	4276.2	4076.9	3856.7	3656.2	3527.2	3543.4	3566.6	4011.2	3140.2
40°	4387.4	4394.7	4396.7	4398.6	4248.7	4056.8	3918.1	3901.1	3896.5	4318.6	3326.4
42.5°	4167.6	4197.7	4295.1	4492.5	4583.6	4495.5	4368.5	4319.4	4295.1	4680.9	3523.7
45°	3831.2	3847.4	4029.7	4415.2	4755.1	4930.1	4833.9	4679.4	4635.4	5013.9	3687.5
47.5°	3657.8	3675.5	3790.3	4210.5	4753.2	5281.2	5336.8	5042.5	4963.7	5303.6	3828.9
50°	3244.9	3282.0	3426.4	3854.4	4579.7	5442.6	5862.5	5475.1	5312.1	5585.5	3970.6
52.5°	2486.7	2543.8	2705.7	3268.8	4139.8	5362.7	6283.1	5999.6	5769.4	5877.5	4092.3
55°	1568.6	1611.0	1747.0	2308.6	3311.7	4946.7	6442.6	6567.0	6362.3	6154.1	4197.7
57.5°	852.8	871.8	922.7	1274.6	2154.1	4027.0	6210.1	6889.9	6804.9	6388.9	4277.3
58°	763.2	776.0	807.6	1104.7	1910.4	3775.6	6107.0	6891.1	6848.6	6423.3	4283.5
60°	566.2	559.7	531.5	630.4	1063.3	2608.3	5483.6	6615.3	6740.0	6465.4	4253.4
62.5°	497.5	481.7	424.1	417.5	517.2	1201.6	4195.8	5666.7	5961.4	6225.2	4070.3
65°	467.4	450.4	376.2	352.3	373.1	508.3	2471.6	4249.9	4619.5	5496.7	3602.2
67.5°	445.0	422.9	345.7	312.9	314.4	336.0	990.7	2676.7	3092.7	4173.4	2801.8
70°	423.3	399.4	319.8	282.0	273.1	265.7	394.0	1339.9	1717.3	2636.1	1786.4
72.5°	400.2	376.6	297.0	257.6	240.2	215.9	257.2	548.1	765.5	1247.2	810.3
75°	366.5	345.3	274.2	236.0	211.3	178.8	194.3	286.2	343.4	496.7	390.5
77.5°	325.2	307.8	248.7	218.2	187.3	145.2	149.5	198.5	220.2	284.3	232.1
80°	233.7	239.9	221.3	196.2	166.9	117.8	114.7	144.8	156.4	182.7	151.0
82.5°	164.2	167.6	183.1	160.3	137.9	92.7	84.6	102.0	108.9	120.1	81.5
85°	113.2	109.3	125.5	111.6	99.7	61.8	57.9	69.1	73.4	74.5	42.1
87.5°	68.0	68.0	72.6	59.9	53.7	32.1	31.3	39.4	42.1	40.2	23.2
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: P300424

CATALOG NUMBER: GLNA-AF-02-LED-E1-AFL-600

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2178.8	2178.8	2178.8	2178.8	2178.8	2178.8	2178.8	2178.8	2178.8	2178.8	2178.8
2.5°	2184.6	2157.2	2098.9	2052.1	1993.0	1931.6	1897.3	1860.6	1835.5	1817.3	1846.3
5°	2201.2	2145.2	2024.7	1910.4	1784.1	1652.8	1553.1	1460.4	1395.9	1355.7	1393.6
7.5°	2227.5	2141.4	1949.4	1754.0	1527.2	1308.6	1113.2	990.7	919.3	884.1	906.1
10°	2257.6	2135.2	1860.9	1541.9	1217.5	942.1	796.1	746.6	730.4	723.8	726.9
12.5°	2282.7	2122.0	1752.4	1285.4	914.2	743.9	701.8	700.7	704.1	704.9	706.1
15°	2300.5	2102.7	1591.3	1018.2	731.2	677.9	675.5	682.5	689.1	691.8	693.3
17.5°	2312.5	2063.0	1409.4	804.9	655.1	645.8	651.2	660.1	667.1	669.0	670.5
20°	2311.3	2004.6	1192.7	671.3	613.7	613.7	623.0	630.0	630.4	628.0	629.2
22.5°	2299.3	1924.7	982.6	600.2	577.1	583.6	592.9	586.3	559.3	541.5	542.7
25°	2279.3	1829.3	802.6	555.0	543.1	554.7	551.9	502.5	463.9	446.5	446.5
27.5°	2261.5	1716.5	664.3	515.6	509.1	523.4	475.5	430.7	414.4	406.3	403.6
30°	2248.7	1594.8	572.0	477.8	477.0	466.6	412.5	400.2	397.4	390.9	388.6
32.5°	2251.8	1471.6	512.9	444.6	447.3	399.4	382.4	385.1	382.8	375.8	372.7
35°	2277.3	1354.6	474.3	414.4	406.3	360.8	364.6	369.6	368.9	359.2	356.1
37.5°	2322.9	1243.7	448.8	389.3	354.6	341.4	347.6	355.3	353.4	346.9	344.5
40°	2370.8	1139.4	428.0	369.6	324.1	328.3	333.7	338.0	339.9	341.8	340.3
42.5°	2417.5	1030.5	402.5	349.6	311.3	316.0	318.3	322.5	332.9	340.3	339.9
45°	2445.3	928.2	376.2	321.0	301.3	304.0	302.4	310.9	323.7	335.6	336.0
47.5°	2476.2	848.6	355.3	294.7	291.6	293.5	288.9	297.4	309.0	323.7	325.2
50°	2513.7	801.1	338.7	273.9	278.5	278.5	277.3	285.1	301.3	318.3	321.4
52.5°	2556.2	791.8	324.8	258.8	265.4	265.0	266.1	277.7	295.5	312.1	314.8
55°	2607.9	816.9	309.8	247.6	252.6	254.2	258.0	271.1	286.2	305.1	306.3
57.5°	2668.2	867.9	297.8	238.7	241.0	246.0	252.2	264.2	280.4	301.3	302.4
58°	2678.2	878.7	295.9	237.9	238.7	244.5	251.4	263.0	279.3	302.0	303.2
60°	2678.6	914.6	291.6	234.5	229.8	239.5	247.2	258.8	277.3	304.7	307.5
62.5°	2583.6	914.2	288.5	229.4	220.5	232.5	241.4	254.9	275.4	311.3	316.7
65°	2275.0	830.8	273.9	221.7	213.2	226.3	236.4	252.2	280.8	339.9	343.4
67.5°	1779.4	681.0	246.4	210.9	203.6	220.2	233.3	251.8	286.6	346.5	348.8
70°	1176.5	509.5	216.3	198.5	193.5	212.8	234.8	265.0	280.0	332.6	326.4
72.5°	610.7	357.7	192.0	183.1	181.9	206.3	257.2	263.4	273.5	312.9	305.1
75°	320.6	248.4	170.7	166.1	168.0	204.7	303.6	256.5	265.0	299.3	314.0
77.5°	196.2	200.5	152.6	150.6	154.5	200.1	303.2	247.6	252.6	275.4	291.6
80°	131.3	162.6	138.7	139.0	141.8	183.1	272.3	233.7	237.5	260.3	276.9
82.5°	83.0	96.2	125.9	132.5	129.0	151.0	231.4	212.8	218.2	297.8	314.8
85°	42.1	60.3	109.3	127.5	116.3	105.8	187.7	186.6	189.3	214.8	224.4
87.5°	19.3	33.2	85.4	111.2	87.7	66.0	136.3	138.3	149.1	152.6	152.6
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)