

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: STREETWORKS

Report Number: P300606

Luminaire Tested: **GAA-AF-02-LED-U-AFL-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300606
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24297)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GAA-AF-02-LED-U-AFL-7027-HSS
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE
(2) 70 CRI, 2700K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Automotive Frontline WITH HOUSESIDE SHIELD OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7869 lumens
Efficiency: N/A
Efficacy: 69.6 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

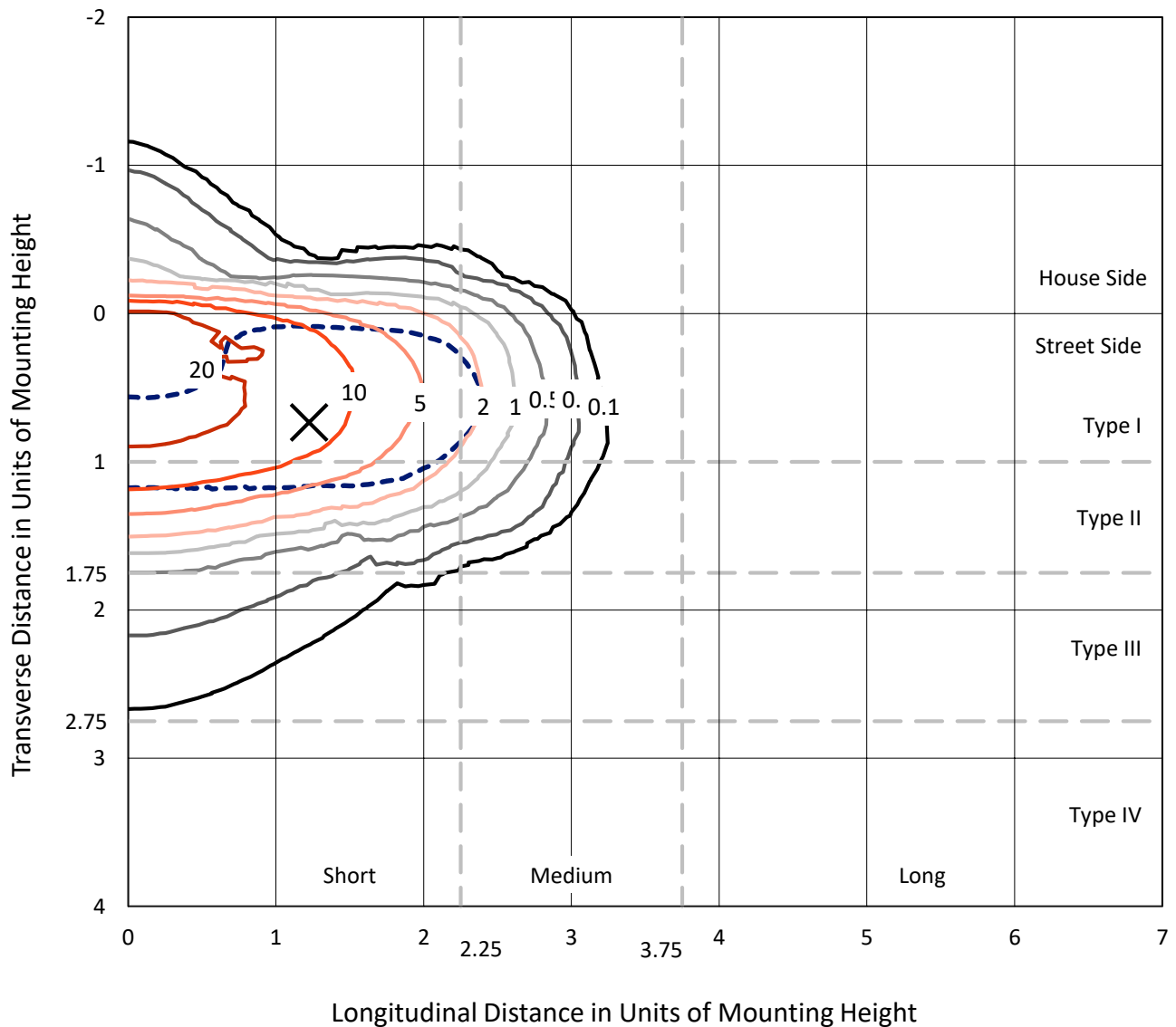
Input Watts (W): 113
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P300606
 CATALOG NUMBER: GAA-AF-02-LED-U-AFL-7027-HSS

Iso-Footcandle Lines of Horizontal Illumination

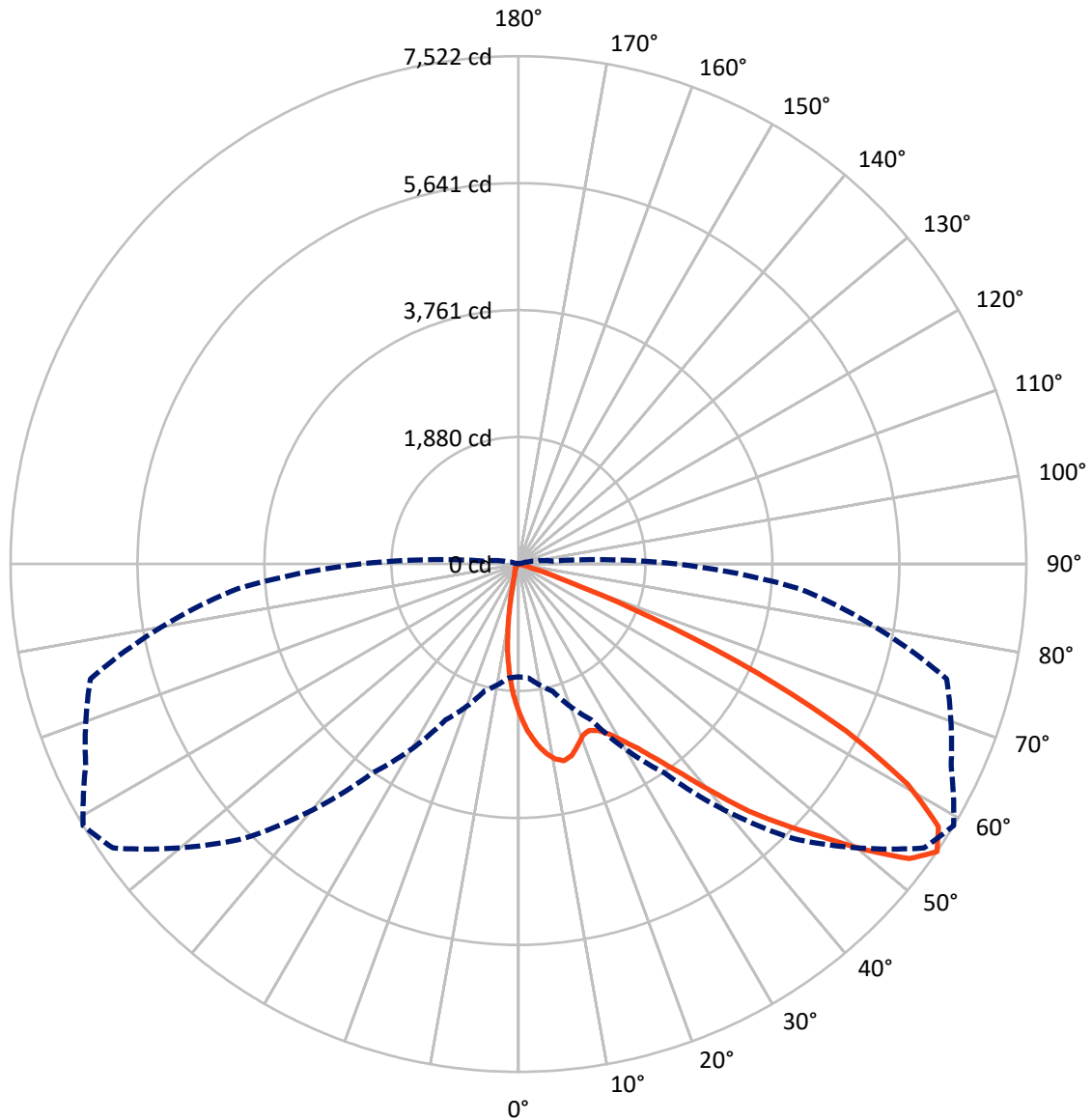
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 27.6 fc
 Type II - Short - Full Cutoff

REPORT NUMBER: P300606
CATALOG NUMBER: GAA-AF-02-LED-U-AFL-7027-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral - - - Horizontal Cone Through 55-Deg Vertical



REPORT NUMBER: P300606

CATALOG NUMBER: GAA-AF-02-LED-U-AFL-7027-HSS

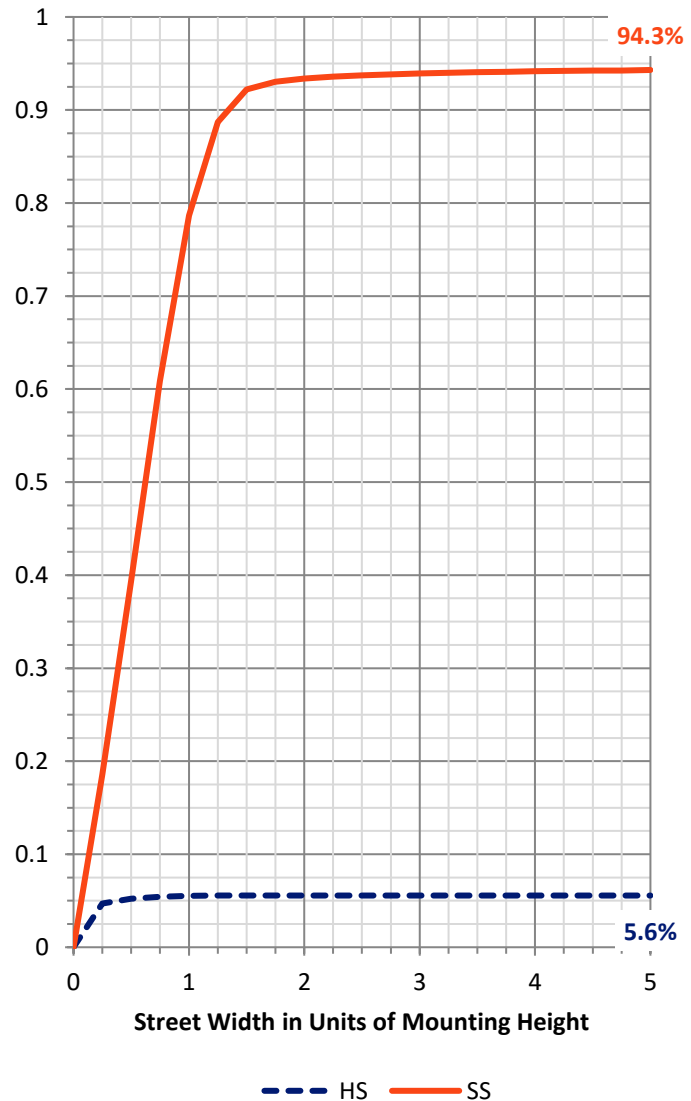
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	439.5	0.0	439.5
	% Fixture	5.6	0.0	5.6
Street Side	Lumens	7429.5	0.0	7429.5
	% Fixture	94.4	0.0	94.4
Total	Lumens	7869.0	0.0	7869.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	185.5	2.4
10°-20°	444.2	5.6
20°-30°	755.9	9.6
30°-40°	1300.0	16.5
40°-50°	2007.1	25.5
50°-60°	2017.7	25.6
60°-70°	1034.7	13.1
70°-80°	112.1	1.4
80°-90°	11.7	0.1
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°	7869.0	100.0
0°-180°	7869.0	100.0

Coefficient of Utilization



REPORT NUMBER: P300606

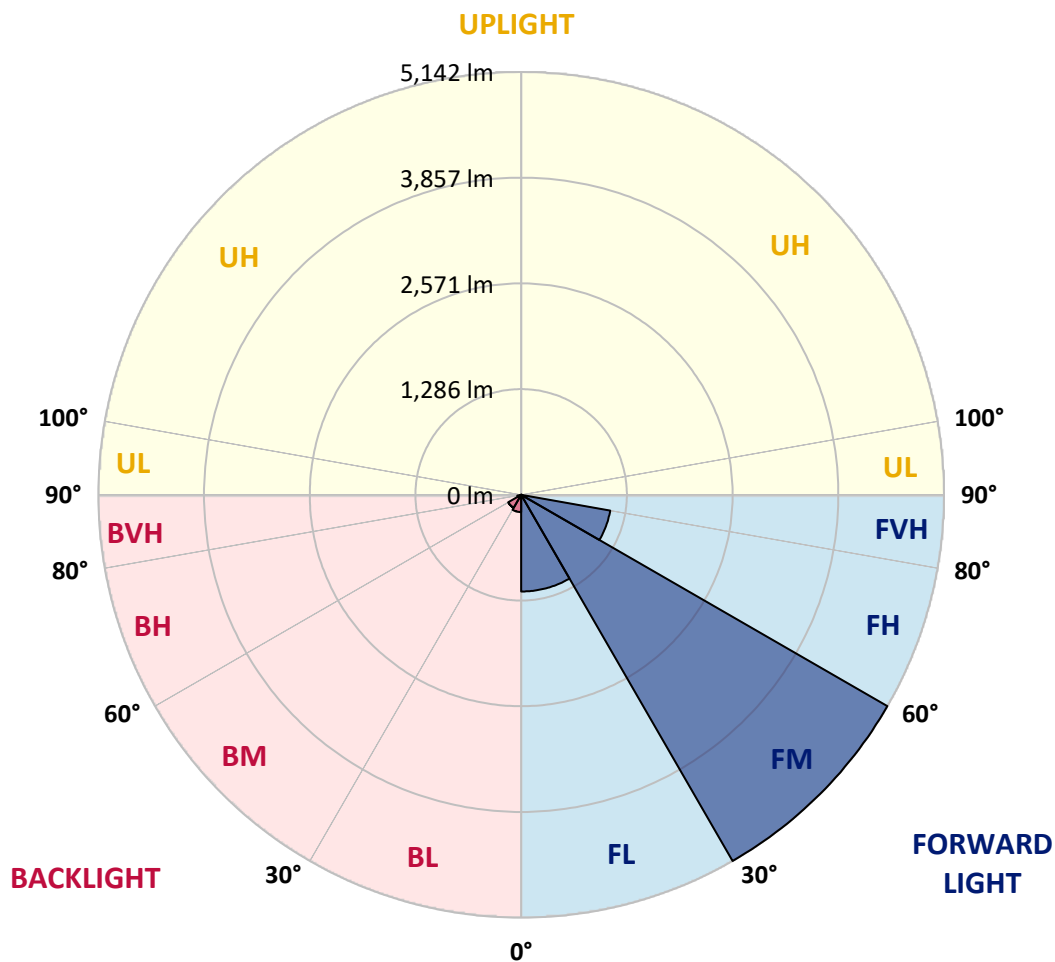
CATALOG NUMBER: GAA-AF-02-LED-U-AFL-7027-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1175.9	14.9			
FM	(30°-60°)	5142.4	65.3			
FH	(60°-80°)	1099.8	14.0			G1/1800
FVH	(80°-90°)	11.5	0.1			G1/100
BL	(0°-30°)	209.8	2.7	B1/500		
BM	(30°-60°)	182.4	2.3	B0/220		
BH	(60°-80°)	47.1	0.6	B0/110		G0/110
BVH	(80°-90°)	0.2	0.0			G0/10
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: P300606

CATALOG NUMBER: GAA-AF-02-LED-U-AFL-7027-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	2215.1	2215.1	2215.1	2215.1	2215.1	2215.1	2215.1	2215.1	2215.1	2215.1	2215.1
2.5°	2621.0	2593.1	2584.8	2579.2	2553.6	2521.6	2477.9	2457.5	2415.7	2348.4	2265.7
5°	2861.1	2856.0	2837.4	2827.2	2799.8	2754.3	2684.6	2651.2	2584.8	2471.4	2323.3
7.5°	2756.1	2788.2	2813.7	2856.4	2910.3	2908.4	2849.9	2815.1	2740.8	2591.3	2387.4
10°	2350.7	2376.7	2418.5	2515.6	2713.4	2888.0	2956.7	2931.6	2872.2	2701.3	2449.2
12.5°	2271.3	2268.5	2275.9	2304.3	2407.8	2656.7	2938.6	2989.2	2977.2	2802.1	2507.7
15°	2313.6	2310.3	2309.4	2319.1	2344.2	2449.2	2802.5	2947.9	3041.2	2895.4	2557.4
17.5°	2432.0	2418.0	2410.6	2402.7	2395.3	2421.3	2639.1	2832.3	3051.0	2977.2	2598.7
20°	2634.9	2611.7	2584.3	2539.7	2497.9	2484.9	2570.4	2713.4	3016.2	3039.4	2625.6
22.5°	2889.9	2860.1	2812.8	2731.5	2646.5	2597.3	2604.3	2675.8	2964.2	3107.2	2638.2
25°	3176.4	3138.3	3075.1	2962.3	2837.4	2750.1	2704.6	2729.6	2940.5	3186.6	2652.6
27.5°	3483.3	3441.1	3358.4	3204.7	3063.1	2945.1	2852.2	2849.0	2980.9	3290.6	2675.8
30°	3787.5	3781.0	3673.3	3510.7	3323.1	3179.6	3045.9	3028.7	3093.7	3434.6	2721.7
32.5°	4193.4	4144.6	4012.7	3845.5	3629.1	3456.9	3298.5	3258.6	3266.9	3602.2	2792.8
35°	4705.1	4651.7	4466.0	4235.2	3993.2	3789.8	3614.8	3560.4	3540.0	3876.7	2912.6
37.5°	5035.8	5034.8	4918.3	4683.3	4423.7	4199.4	4009.0	3945.4	3904.1	4208.2	3098.4
40°	5044.6	5066.4	5081.7	5079.4	4894.6	4687.9	4518.9	4440.4	4344.3	4651.3	3338.4
42.5°	4773.8	4830.0	4965.2	5194.6	5304.2	5222.0	5079.4	5002.3	4859.3	5125.4	3631.0
45°	4407.9	4446.9	4683.3	5105.9	5526.1	5751.4	5642.7	5504.8	5316.2	5620.0	3893.4
47.5°	4244.0	4251.0	4403.7	4867.7	5542.9	6185.1	6251.0	6026.8	5731.4	6018.4	4098.6
50°	3754.1	3766.6	3977.4	4454.8	5346.9	6389.9	6862.2	6649.5	6184.2	6325.3	4173.4
52.5°	2829.5	2847.1	3114.6	3776.4	4808.2	6302.6	7299.6	7248.1	6680.1	6475.3	4177.6
55°	1669.5	1692.7	1948.1	2542.0	3781.9	5747.2	7332.1	7521.6	7071.6	6564.0	4171.1
57.5°	779.7	796.0	942.2	1309.6	2352.1	4542.1	6842.7	7334.0	7287.5	6610.9	4217.1
60°	414.2	418.9	454.2	567.0	1063.0	2880.1	5887.4	6622.6	7090.7	6676.0	4273.2
62.5°	316.7	318.1	316.2	329.7	446.7	1278.4	4450.2	5444.4	6298.0	6627.2	4211.0
65°	274.4	276.8	263.8	260.5	286.5	456.0	2643.7	3880.8	4948.9	5969.2	3787.0
67.5°	246.1	247.1	231.3	217.8	222.4	246.6	1043.0	2124.5	3275.8	4375.4	2745.0
70°	226.6	225.7	208.5	187.1	181.1	168.6	331.6	778.8	1565.4	2218.8	1276.6
72.5°	200.6	201.1	192.7	164.9	150.5	118.0	153.7	227.1	467.2	604.6	299.1
75°	177.9	175.5	165.3	147.7	124.0	77.6	76.2	101.2	144.0	143.0	64.5
77.5°	128.6	126.3	129.6	121.2	95.2	50.2	38.1	48.8	58.5	56.7	18.1
80°	94.3	92.9	83.6	100.8	84.1	34.4	23.7	26.0	30.2	25.5	5.6
82.5°	64.5	64.1	59.0	55.7	47.8	20.9	14.9	16.3	19.5	14.4	2.8
85°	10.2	11.6	42.7	33.9	28.3	9.3	10.2	11.1	13.0	7.9	0.9
87.5°	0.0	0.0	20.0	17.6	5.6	3.7	6.0	6.5	6.5	4.2	0.0
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: P300606
 CATALOG NUMBER: GAA-AF-02-LED-U-AFL-7027-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2215.1	2215.1	2215.1	2215.1	2215.1	2215.1	2215.1	2215.1	2215.1	2215.1	2215.1
2.5°	2223.5	2177.0	2091.1	2002.4	1920.2	1822.2	1754.9	1704.3	1645.8	1630.0	1664.3
5°	2238.8	2151.0	1966.2	1765.1	1576.1	1366.7	1206.5	1079.7	965.0	926.0	961.3
7.5°	2262.9	2132.4	1831.1	1500.0	1171.2	844.2	620.4	473.2	379.4	351.5	366.4
10°	2287.1	2105.5	1674.6	1186.0	736.5	411.0	267.5	213.6	193.6	189.5	191.8
12.5°	2307.1	2069.3	1483.7	843.3	393.8	220.1	175.1	166.2	163.5	163.5	164.4
15°	2319.1	2014.5	1257.5	536.4	226.6	166.2	152.8	150.0	150.0	150.5	151.4
17.5°	2317.7	1944.8	1010.0	324.6	169.5	147.2	139.3	137.0	136.5	137.5	137.9
20°	2300.5	1853.8	761.6	214.1	147.7	134.2	126.3	122.1	121.7	122.6	123.5
22.5°	2268.0	1741.4	544.7	164.9	133.3	121.7	111.9	108.2	108.2	109.1	110.1
25°	2228.6	1604.0	372.4	139.8	120.3	108.2	98.9	95.7	96.6	98.9	99.4
27.5°	2179.3	1449.3	253.1	119.8	104.5	94.7	87.8	85.4	87.8	91.0	91.9
30°	2137.1	1288.2	180.6	103.6	88.7	81.7	77.6	77.6	80.8	86.8	88.2
32.5°	2104.6	1132.2	139.3	91.5	77.1	71.1	68.7	71.1	76.2	82.2	83.6
35°	2100.4	1003.5	118.0	81.7	68.7	62.7	61.8	65.9	71.1	75.7	76.6
37.5°	2132.4	884.6	106.3	73.8	61.3	55.7	54.8	59.9	65.0	70.6	72.0
40°	2193.3	791.3	98.0	66.4	55.3	49.2	47.4	51.1	58.0	65.5	67.3
42.5°	2272.2	714.2	88.7	59.0	49.2	40.9	38.5	42.7	50.2	58.0	60.4
45°	2347.5	647.8	78.5	50.6	41.3	31.6	30.6	36.2	39.9	47.8	49.7
47.5°	2388.8	589.3	69.7	41.3	32.0	25.5	25.5	26.9	30.6	39.9	41.8
50°	2374.9	542.4	60.4	30.6	22.3	19.5	19.5	19.0	24.6	32.0	33.4
52.5°	2347.0	515.5	52.0	23.7	15.3	13.9	12.5	13.9	17.2	20.4	20.9
55°	2342.8	510.8	43.7	19.0	10.7	9.3	7.0	7.0	7.0	6.5	5.6
57.5°	2375.3	518.3	36.7	15.3	7.9	6.0	3.7	0.0	0.0	0.0	0.0
60°	2408.8	526.1	31.6	10.7	5.6	3.3	0.5	0.0	0.0	0.0	0.0
62.5°	2353.0	508.5	26.5	6.5	4.2	1.4	0.0	0.0	0.0	0.0	0.0
65°	2067.0	432.8	20.9	4.6	2.8	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	1470.2	289.8	13.9	2.8	0.5	0.0	0.0	0.0	0.0	0.0	0.0
70°	671.0	121.2	8.8	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	143.5	37.6	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	29.3	27.4	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	9.3	43.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	5.6	31.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.9	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)