

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: P300709

Luminaire Tested: **GAA-AF-09-LED-U-AFL-7030-800-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P300709  
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-09-LED-U-AFL-7030-800-HSS  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(9) 70 CRI, 3000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Automotive Frontline WITH HOUSESIDE SHIELD OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 30925.9 lumens  
Efficiency: N/A  
Efficacy: 82.7 lumens/watt  
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B2 - U0 - G2  
  
Input Watts (W): 374  
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

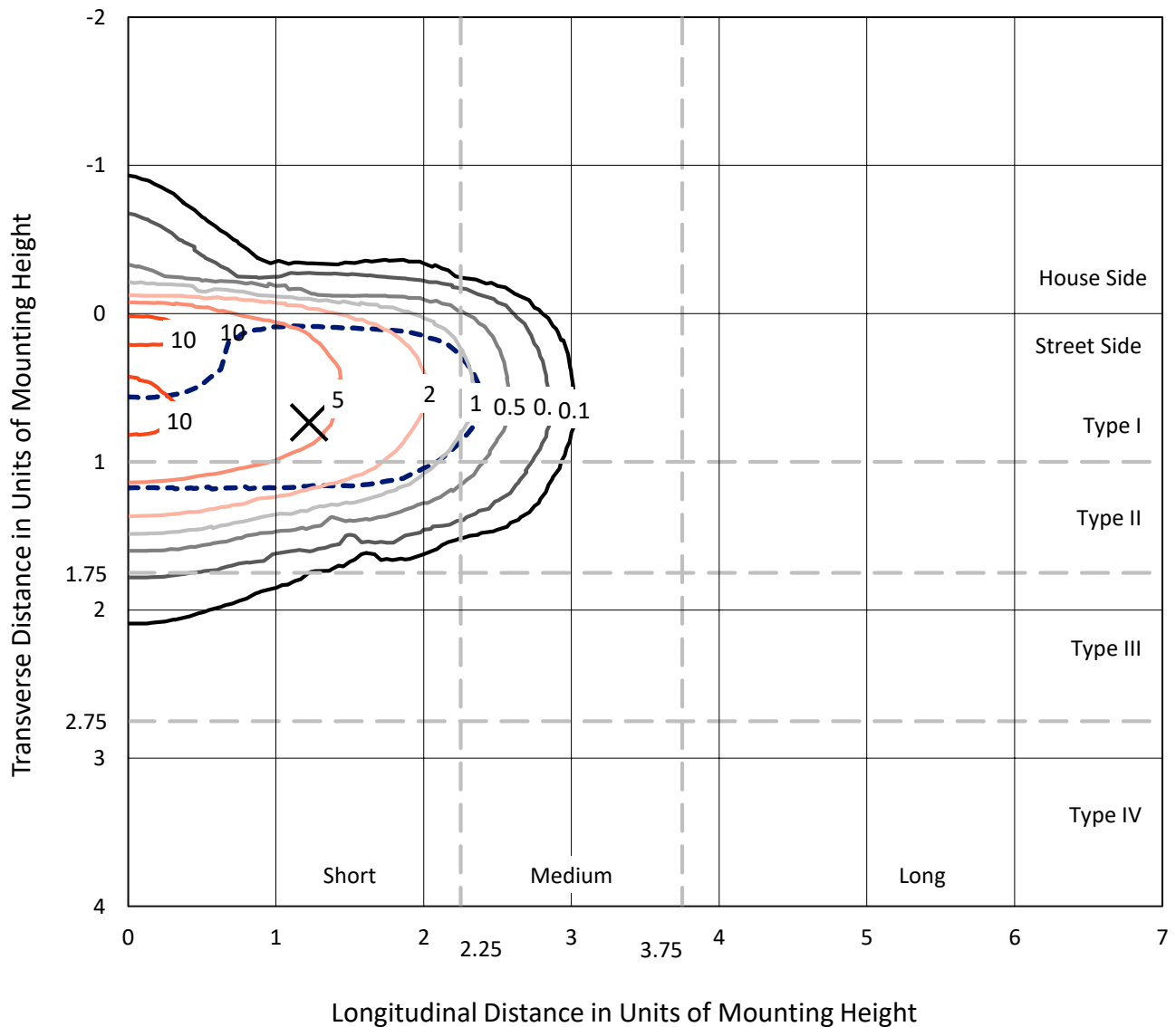


REPORT NUMBER: P300709

CATALOG NUMBER: GAA-AF-09-LED-U-AFL-7030-800-HSS

### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

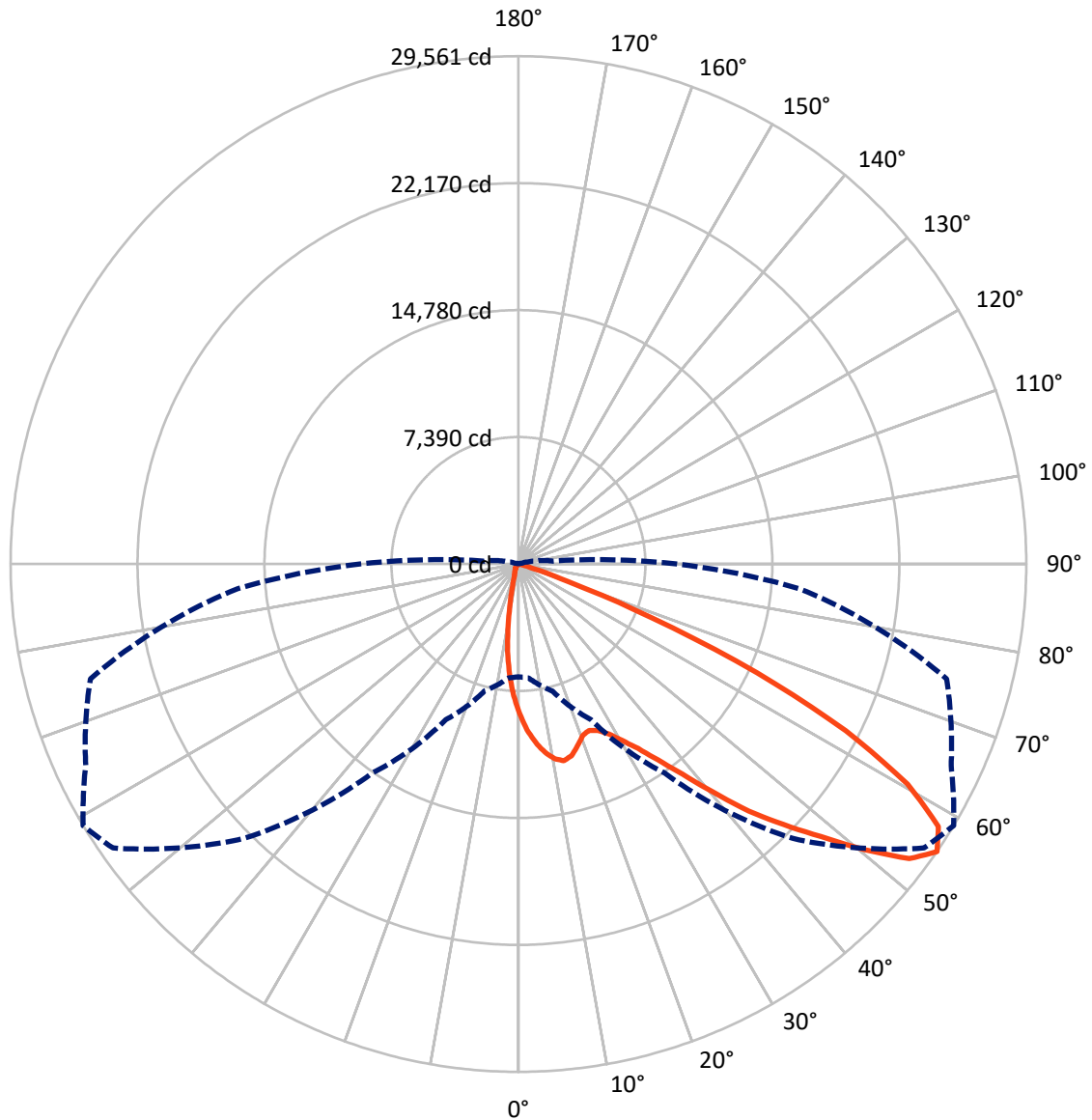


Based on 30 foot mounting height. Maximum calculated value = 12 fc  
 Type II - Short - Full Cutoff

REPORT NUMBER: P300709

CATALOG NUMBER: GAA-AF-09-LED-U-AFL-7030-800-HSS

### Luminous Intensity Polar Plot



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



REPORT NUMBER: P300709

CATALOG NUMBER: GAA-AF-09-LED-U-AFL-7030-800-HSS

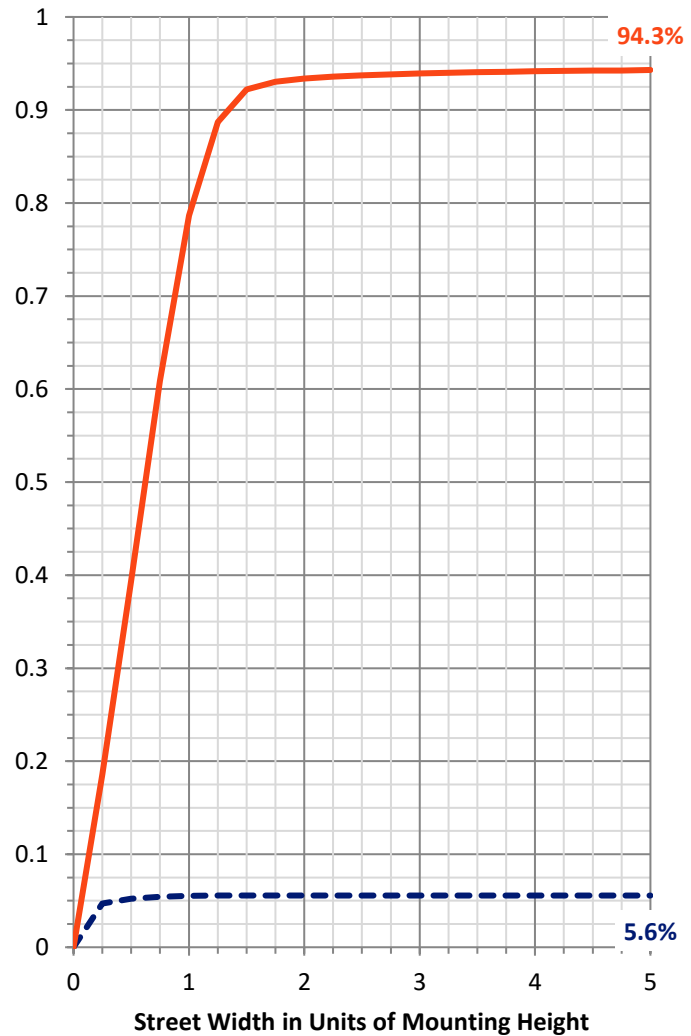
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1727.4	0.0	1727.4
	% Fixture	5.6	0.0	5.6
<b>Street Side</b>	Lumens	29198.5	0.0	29198.5
	% Fixture	94.4	0.0	94.4
<b>Total</b>	Lumens	30925.9	0.0	30925.9
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	729.2	2.4
10°-20°	1745.9	5.6
20°-30°	2970.8	9.6
30°-40°	5109.1	16.5
40°-50°	7887.9	25.5
50°-60°	7929.8	25.6
60°-70°	4066.5	13.1
70°-80°	440.7	1.4
80°-90°	46.1	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°	30925.9	100.0
0°-180°	30925.9	100.0



--- HS    — SS

REPORT NUMBER: P300709

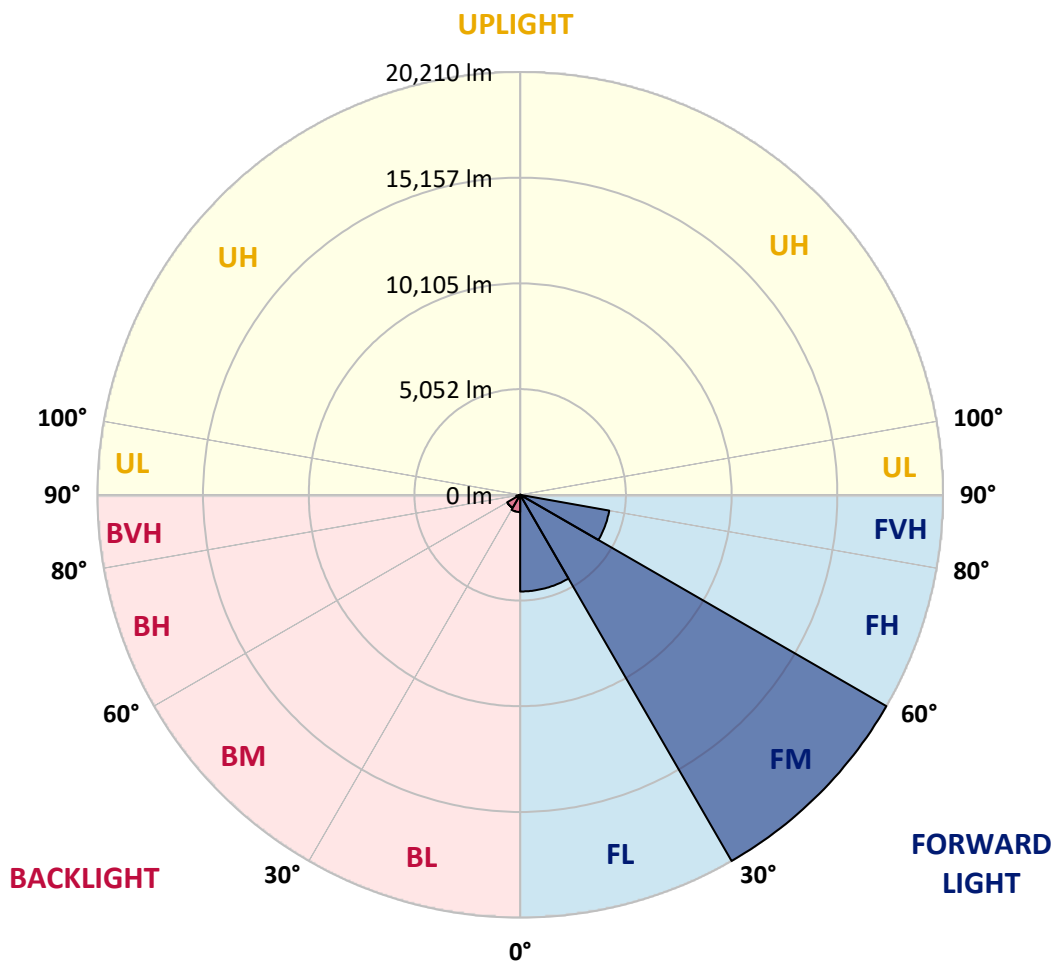
CATALOG NUMBER: GAA-AF-09-LED-U-AFL-7030-800-HSS

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4621.3	14.9			
FM	(30°-60°)	20209.9	65.3			
FH	(60°-80°)	4322.1	14.0			G2/5000
FVH	(80°-90°)	45.1	0.1			G1/100
BL	(0°-30°)	824.5	2.7	B2/1000		
BM	(30°-60°)	716.9	2.3	B1/1000		
BH	(60°-80°)	185.1	0.6	B1/500		G1/500
BVH	(80°-90°)	1.0	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**

Type II Short





REPORT NUMBER: P300709

CATALOG NUMBER: GAA-AF-09-LED-U-AFL-7030-800-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	8705.5	8705.5	8705.5	8705.5	8705.5	8705.5	8705.5	8705.5	8705.5	8705.5	8705.5
2.5°	10300.6	10191.1	10158.3	10136.4	10036.0	9910.1	9738.5	9658.2	9493.9	9229.3	8904.5
5°	11244.2	11224.1	11151.1	11110.9	11003.3	10824.4	10550.7	10419.3	10158.3	9713.0	9130.8
7.5°	10831.7	10957.6	11058.0	11225.9	11437.6	11430.3	11200.4	11063.5	10771.5	10183.8	9382.6
10°	9238.4	9340.6	9504.9	9886.3	10663.8	11350.0	11620.1	11521.6	11288.0	10616.4	9625.4
12.5°	8926.4	8915.4	8944.6	9055.9	9462.9	10441.2	11549.0	11747.9	11700.4	11012.4	9855.3
15°	9092.4	9079.7	9076.0	9114.3	9212.9	9625.4	11014.2	11585.5	11952.3	11379.2	10050.6
17.5°	9557.8	9503.1	9473.9	9442.8	9413.6	9515.8	10371.8	11131.0	11990.6	11700.4	10213.0
20°	10355.4	10264.1	10156.4	9981.2	9817.0	9765.9	10101.7	10663.8	11853.7	11945.0	10318.9
22.5°	11357.3	11240.5	11054.4	10735.0	10401.0	10207.5	10234.9	10516.0	11649.3	12211.5	10368.2
25°	12483.4	12333.7	12085.5	11642.0	11151.1	10808.0	10629.1	10727.7	11556.3	12523.5	10424.7
27.5°	13689.8	13523.7	13198.8	12594.7	12038.1	11574.5	11209.5	11196.7	11715.0	12932.4	10516.0
30°	14885.2	14859.6	14436.2	13797.4	13060.1	12496.2	11970.6	11903.0	12158.5	13498.1	10696.7
32.5°	16480.3	16288.6	15770.3	15113.3	14262.8	13585.7	12963.4	12806.4	12839.3	14157.0	10975.9
35°	18491.5	18281.6	17551.6	16644.5	15693.7	14894.3	14206.2	13992.7	13912.4	15235.6	11446.8
37.5°	19790.9	19787.3	19329.2	18405.7	17385.5	16504.0	15755.7	15505.7	15343.3	16538.7	12176.8
40°	19825.6	19911.4	19971.6	19962.5	19236.1	18424.0	17759.6	17451.2	17073.4	18279.8	13120.3
42.5°	18761.6	18982.4	19513.5	20415.1	20845.8	20522.8	19962.5	19659.5	19097.4	20143.2	14270.1
45°	17323.4	17476.8	18405.7	20066.5	21718.2	22603.3	22176.3	21634.2	20893.3	22086.8	15301.3
47.5°	16679.2	16706.6	17307.0	19130.3	21783.9	24307.9	24567.1	23685.6	22524.9	23652.7	16108.0
50°	14753.8	14803.0	15631.6	17507.8	21013.7	25112.8	26968.9	26133.0	24304.3	24859.1	16401.8
52.5°	11120.1	11189.4	12240.7	14841.4	18896.6	24769.7	28688.1	28485.5	26253.5	25448.6	16418.2
55°	6561.1	6652.3	7656.1	9990.4	14863.3	22586.9	28815.8	29560.5	27792.0	25797.2	16392.7
57.5°	3064.3	3128.1	3703.0	5146.7	9243.9	17850.9	26892.2	28823.1	28640.6	25981.5	16573.3
60°	1628.0	1646.2	1784.9	2228.4	4177.6	11319.0	23138.1	26027.1	27866.8	26237.0	16794.2
62.5°	1244.7	1250.2	1242.9	1295.8	1755.7	5024.4	17489.5	21397.0	24751.4	26045.4	16549.6
65°	1078.6	1087.7	1036.6	1023.9	1126.1	1792.2	10390.1	15252.0	19449.6	23459.3	14883.3
67.5°	967.3	970.9	908.9	856.0	874.2	969.1	4099.1	8349.6	12874.0	17195.7	10787.9
70°	890.6	887.0	819.5	735.5	711.8	662.5	1303.1	3060.6	6152.3	8720.1	5017.1
72.5°	788.4	790.2	757.4	647.9	591.3	463.6	604.1	892.5	1836.0	2376.2	1175.3
75°	699.0	689.9	649.7	580.4	487.3	304.8	299.3	397.9	565.8	562.1	253.7
77.5°	505.5	496.4	509.2	476.3	374.1	197.1	149.7	191.6	230.0	222.7	71.2
80°	370.5	365.0	328.5	396.0	330.3	135.1	93.1	102.2	118.6	100.4	21.9
82.5°	253.7	251.9	231.8	219.0	188.0	82.1	58.4	63.9	76.7	56.6	11.0
85°	40.2	45.6	167.9	133.2	111.3	36.5	40.2	43.8	51.1	31.0	3.7
87.5°	0.0	0.0	78.5	69.4	21.9	14.6	23.7	25.6	25.6	16.4	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: P300709

CATALOG NUMBER: GAA-AF-09-LED-U-AFL-7030-800-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	8705.5	8705.5	8705.5	8705.5	8705.5	8705.5	8705.5	8705.5	8705.5	8705.5	8705.5
2.5°	8738.4	8555.9	8218.2	7869.6	7546.6	7161.5	6896.9	6698.0	6468.0	6406.0	6541.0
5°	8798.6	8453.7	7727.3	6937.0	6194.2	5371.1	4741.5	4243.3	3792.5	3639.2	3777.9
7.5°	8893.5	8380.7	7196.2	5894.9	4602.8	3318.0	2438.3	1859.7	1491.1	1381.6	1440.0
10°	8988.4	8274.8	6581.2	4661.2	2894.5	1615.2	1051.2	839.5	761.0	744.6	753.7
12.5°	9066.9	8132.5	5831.1	3314.3	1547.6	865.1	688.0	653.4	642.4	642.4	646.1
15°	9114.3	7917.1	4942.3	2107.9	890.6	653.4	600.4	589.5	589.5	591.3	595.0
17.5°	9108.9	7643.3	3969.5	1275.7	666.1	578.5	547.5	538.4	536.6	540.2	542.0
20°	9041.3	7285.6	2993.1	841.4	580.4	527.4	496.4	480.0	478.2	481.8	485.5
22.5°	8913.6	6844.0	2140.8	647.9	523.8	478.2	439.8	425.2	425.2	428.9	432.5
25°	8758.5	6303.7	1463.7	549.3	472.7	425.2	388.7	376.0	379.6	388.7	390.6
27.5°	8565.0	5696.0	994.7	470.9	410.6	372.3	344.9	335.8	344.9	357.7	361.4
30°	8398.9	5062.7	709.9	407.0	348.6	321.2	304.8	304.8	317.6	341.3	346.8
32.5°	8271.2	4449.5	547.5	359.5	303.0	279.2	270.1	279.2	299.3	323.0	328.5
35°	8254.7	3943.9	463.6	321.2	270.1	246.4	242.7	259.2	279.2	297.5	301.1
37.5°	8380.7	3476.7	417.9	290.2	240.9	219.0	215.4	235.4	255.5	277.4	282.9
40°	8619.7	3109.9	385.1	261.0	217.2	193.5	186.2	200.8	228.1	257.3	264.6
42.5°	8930.0	2806.9	348.6	231.8	193.5	160.6	151.5	167.9	197.1	228.1	237.3
45°	9225.7	2546.0	308.4	198.9	162.4	124.1	120.5	142.4	157.0	188.0	195.3
47.5°	9388.1	2316.0	273.8	162.4	125.9	100.4	100.4	105.9	120.5	157.0	164.3
50°	9333.3	2131.7	237.3	120.5	87.6	76.7	76.7	74.8	96.7	125.9	131.4
52.5°	9223.8	2025.8	204.4	93.1	60.2	54.8	49.3	54.8	67.5	80.3	82.1
55°	9207.4	2007.6	171.6	74.8	42.0	36.5	27.4	27.4	27.4	25.6	21.9
57.5°	9335.2	2036.8	144.2	60.2	31.0	23.7	14.6	0.0	0.0	0.0	0.0
60°	9466.6	2067.8	124.1	42.0	21.9	12.8	1.8	0.0	0.0	0.0	0.0
62.5°	9247.6	1998.4	104.0	25.6	16.4	5.5	0.0	0.0	0.0	0.0	0.0
65°	8123.3	1701.0	82.1	18.3	11.0	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	5778.1	1138.8	54.8	11.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0
70°	2637.2	476.3	34.7	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	563.9	147.8	23.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	115.0	107.7	9.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	36.5	169.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	21.9	122.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	3.7	18.3	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)