

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: P300699

Luminaire Tested: **GAA-AF-07-LED-U-AFL-800-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300699
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-07-LED-U-AFL-800-HSS
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE
(7) 70 CRI, 4000K 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: 25296.1 lumens
Efficiency: N/A
Efficacy: 85.7 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B2 - U0 - G2

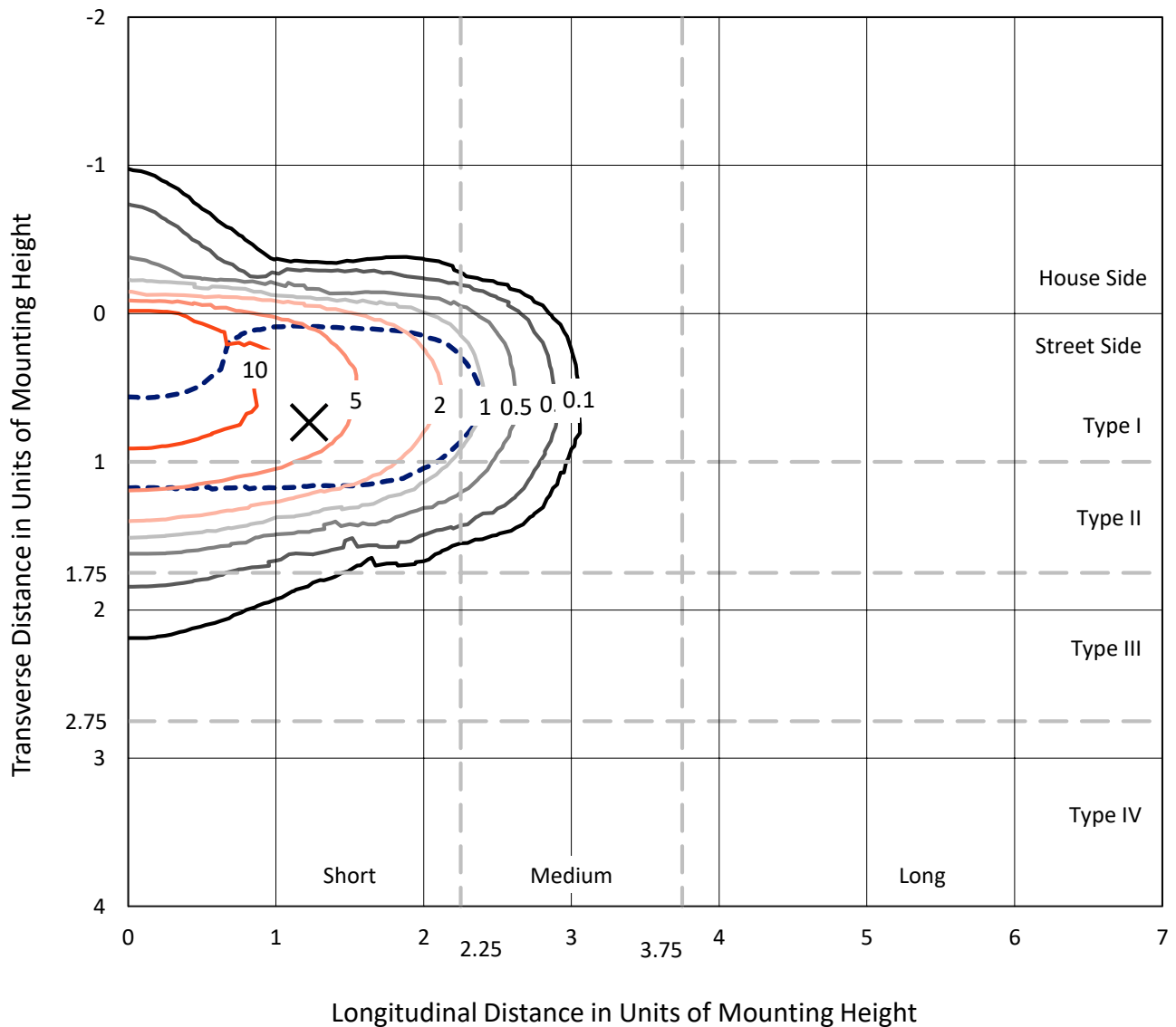
Input Watts (W): 295
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

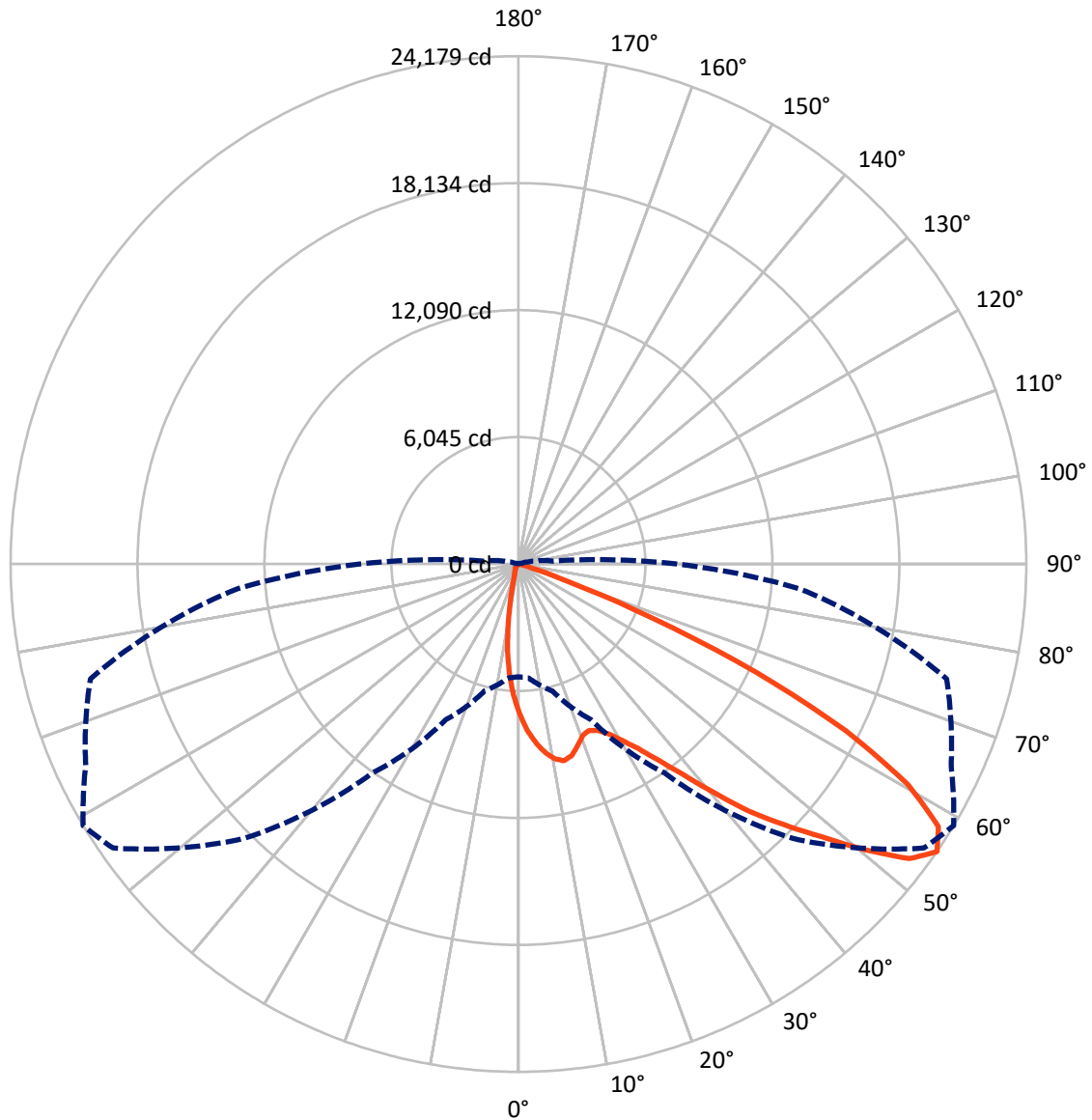
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 14.2 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



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

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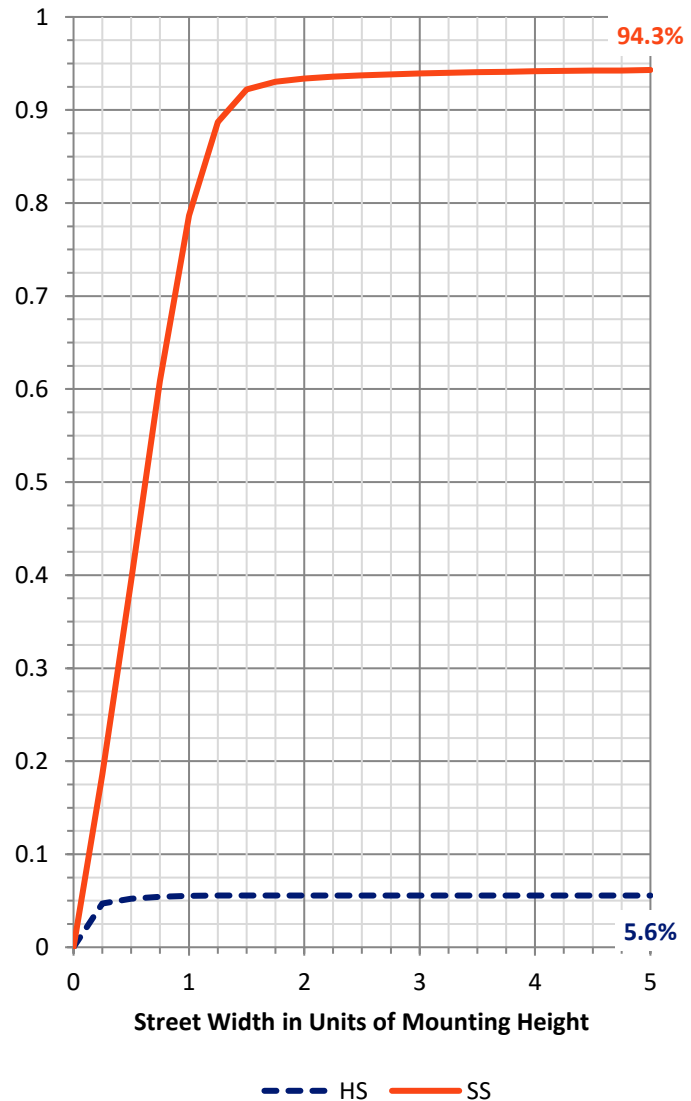
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1412.9	0.0	1412.9
	% Fixture	5.6	0.0	5.6
Street Side	Lumens	23883.2	0.0	23883.2
	% Fixture	94.4	0.0	94.4
Total	Lumens	25296.1	0.0	25296.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	596.4	2.4
10°-20°	1428.0	5.6
20°-30°	2430.0	9.6
30°-40°	4179.0	16.5
40°-50°	6452.0	25.5
50°-60°	6486.3	25.6
60°-70°	3326.2	13.1
70°-80°	360.5	1.4
80°-90°	37.7	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°	25296.1	100.0
0°-180°	25296.1	100.0



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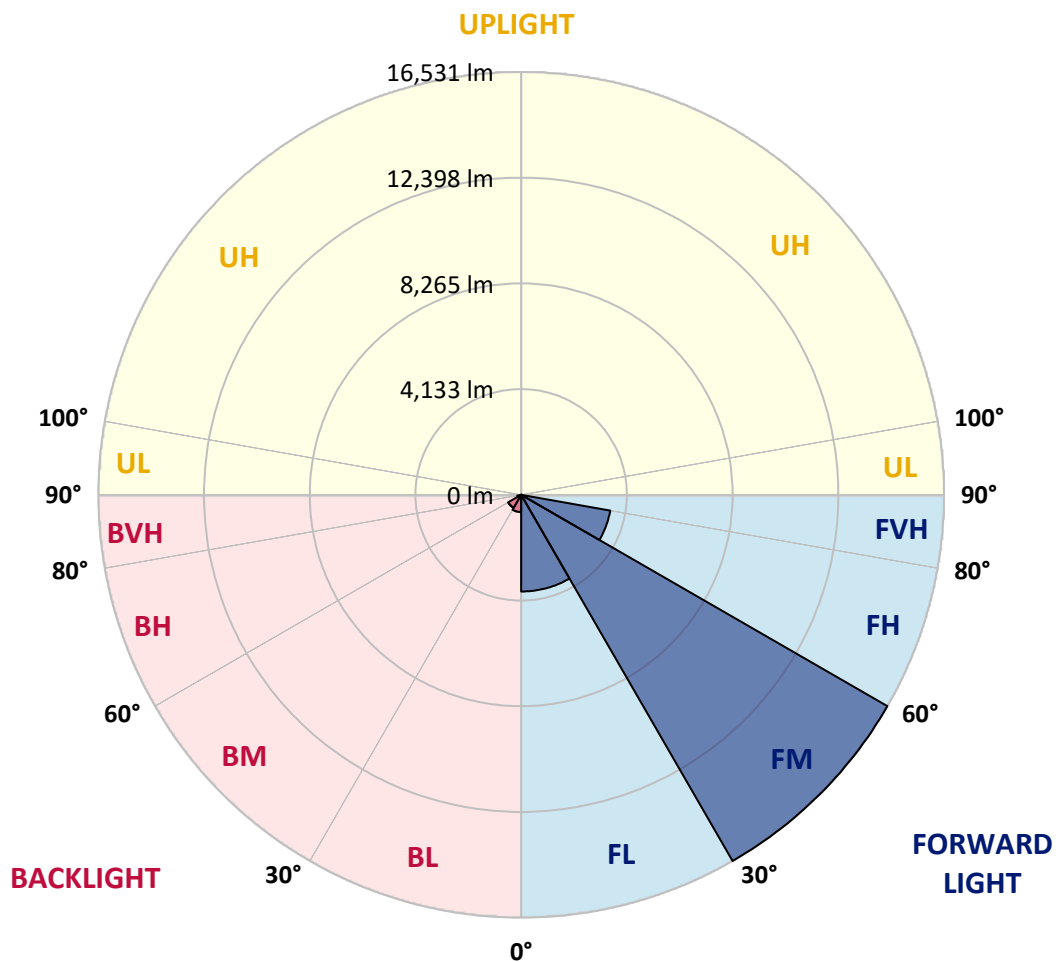
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3780.1	14.9			
FM	(30°-60°)	16530.9	65.3			
FH	(60°-80°)	3535.3	14.0			G2/5000
FVH	(80°-90°)	36.9	0.1			G1/100
BL	(0°-30°)	674.4	2.7	B2/1000		
BM	(30°-60°)	586.4	2.3	B1/1000		
BH	(60°-80°)	151.4	0.6	B1/500		G1/500
BVH	(80°-90°)	0.8	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	7120.8	7120.8	7120.8	7120.8	7120.8	7120.8	7120.8	7120.8	7120.8	7120.8	7120.8
2.5°	8425.5	8335.9	8309.1	8291.1	8209.0	8106.0	7965.7	7900.0	7765.7	7549.2	7283.5
5°	9197.3	9180.9	9121.1	9088.3	9000.2	8853.9	8630.0	8522.5	8309.1	7944.8	7468.6
7.5°	8859.9	8962.9	9045.0	9182.4	9355.5	9349.5	9161.5	9049.5	8810.6	8330.0	7674.6
10°	7556.7	7640.3	7774.6	8086.6	8722.6	9283.9	9504.8	9424.2	9233.1	8683.7	7873.1
12.5°	7301.4	7292.4	7316.3	7407.4	7740.3	8540.4	9446.6	9609.3	9570.5	9007.7	8061.2
15°	7437.2	7426.8	7423.8	7455.2	7535.8	7873.1	9009.2	9476.4	9776.5	9307.7	8221.0
17.5°	7817.9	7773.1	7749.2	7723.9	7700.0	7783.6	8483.7	9104.7	9807.8	9570.5	8353.8
20°	8470.3	8395.6	8307.6	8164.2	8029.9	7988.1	8262.8	8722.6	9695.9	9770.5	8440.4
22.5°	9289.8	9194.3	9042.0	8780.8	8507.6	8349.4	8371.7	8601.6	9528.7	9988.5	8480.7
25°	10210.9	10088.5	9885.5	9522.7	9121.1	8840.5	8694.2	8774.8	9452.6	10243.7	8527.0
27.5°	11197.7	11061.8	10796.1	10302.0	9846.7	9467.5	9168.9	9158.5	9582.4	10578.1	8601.6
30°	12175.5	12154.6	11808.2	11285.7	10682.6	10221.4	9791.4	9736.2	9945.2	11040.9	8749.4
32.5°	13480.2	13323.4	12899.5	12362.1	11666.4	11112.6	10603.5	10475.1	10502.0	11579.8	8977.8
35°	15125.3	14953.6	14356.5	13614.5	12836.8	12182.9	11620.1	11445.5	11379.8	12462.1	9363.0
37.5°	16188.2	16185.2	15810.5	15055.1	14220.6	13499.6	12887.5	12683.0	12550.2	13528.0	9960.1
40°	16216.5	16286.7	16336.0	16328.5	15734.4	15070.0	14526.7	14274.4	13965.4	14952.1	10731.9
42.5°	15346.2	15526.8	15961.3	16698.7	17051.0	16786.8	16328.5	16080.7	15620.9	16476.3	11672.4
45°	14169.9	14295.3	15055.1	16413.6	17764.6	18488.6	18139.3	17695.9	17089.8	18066.1	12515.8
47.5°	13642.9	13665.3	14156.4	15647.8	17818.3	19882.9	20094.9	19373.9	18424.4	19347.0	13175.7
50°	12068.0	12108.3	12786.0	14320.6	17188.4	20541.2	22059.4	21375.7	19879.9	20333.7	13416.0
52.5°	9095.8	9152.5	10012.4	12139.6	15456.7	20260.6	23465.7	23300.0	21474.3	20815.9	13429.4
55°	5366.7	5441.3	6262.4	8171.7	12157.5	18475.2	23570.2	24179.2	22732.7	21101.0	13408.5
57.5°	2506.4	2558.7	3028.9	4209.8	7561.1	14601.3	21996.7	23576.1	23426.9	21251.8	13556.3
60°	1331.6	1346.5	1460.0	1822.7	3417.1	9258.5	18926.0	21289.1	22793.9	21460.8	13737.0
62.5°	1018.1	1022.6	1016.6	1059.9	1436.1	4109.7	14305.7	17501.9	20245.7	21304.1	13536.9
65°	882.3	889.7	847.9	837.5	921.1	1466.0	8498.6	12475.5	15909.0	19188.7	12174.0
67.5°	791.2	794.2	743.4	700.1	715.1	792.7	3352.9	6829.7	10530.4	14065.4	8824.1
70°	728.5	725.5	670.3	601.6	582.2	541.9	1065.9	2503.5	5032.3	7132.7	4103.8
72.5°	644.9	646.4	619.5	530.0	483.7	379.2	494.1	730.0	1501.8	1943.7	961.4
75°	571.8	564.3	531.4	474.7	398.6	249.3	244.8	325.4	462.8	459.8	207.5
77.5°	413.5	406.0	416.5	389.6	306.0	161.2	122.4	156.7	188.1	182.1	58.2
80°	303.0	298.6	268.7	323.9	270.2	110.5	76.1	83.6	97.0	82.1	17.9
82.5°	207.5	206.0	189.6	179.1	153.8	67.2	47.8	52.2	62.7	46.3	9.0
85°	32.8	37.3	137.3	109.0	91.1	29.9	32.8	35.8	41.8	25.4	3.0
87.5°	0.0	0.0	64.2	56.7	17.9	11.9	19.4	20.9	20.9	13.4	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



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	7120.8	7120.8	7120.8	7120.8	7120.8	7120.8	7120.8	7120.8	7120.8	7120.8	7120.8
2.5°	7147.6	6998.4	6722.2	6437.1	6172.8	5857.8	5641.4	5478.7	5290.6	5239.8	5350.3
5°	7196.9	6914.8	6320.6	5674.2	5066.6	4393.4	3878.4	3470.8	3102.1	2976.7	3090.1
7.5°	7274.5	6855.0	5886.2	4821.8	3764.9	2714.0	1994.4	1521.2	1219.6	1130.1	1177.8
10°	7352.2	6768.5	5383.1	3812.7	2367.6	1321.1	859.9	686.7	622.5	609.1	616.5
12.5°	7416.3	6652.0	4769.6	2711.0	1265.9	707.6	562.8	534.4	525.5	525.5	528.5
15°	7455.2	6475.9	4042.6	1724.2	728.5	534.4	491.1	482.2	482.2	483.7	486.7
17.5°	7450.7	6251.9	3246.9	1043.5	544.9	473.2	447.8	440.4	438.9	441.9	443.4
20°	7395.4	5959.3	2448.2	688.2	474.7	431.4	406.0	392.6	391.1	394.1	397.1
22.5°	7290.9	5598.1	1751.1	530.0	428.4	391.1	359.8	347.8	347.8	350.8	353.8
25°	7164.1	5156.2	1197.2	449.3	386.6	347.8	318.0	307.5	310.5	318.0	319.5
27.5°	7005.8	4659.1	813.6	385.1	335.9	304.5	282.1	274.7	282.1	292.6	295.6
30°	6870.0	4141.1	580.7	332.9	285.1	262.7	249.3	249.3	259.8	279.2	283.6
32.5°	6765.5	3639.5	447.8	294.1	247.8	228.4	220.9	228.4	244.8	264.2	268.7
35°	6752.0	3226.0	379.2	262.7	220.9	201.5	198.5	212.0	228.4	243.3	246.3
37.5°	6855.0	2843.8	341.9	237.4	197.1	179.1	176.2	192.6	209.0	226.9	231.4
40°	7050.6	2543.8	315.0	213.5	177.6	158.2	152.3	164.2	186.6	210.5	216.5
42.5°	7304.4	2296.0	285.1	189.6	158.2	131.4	123.9	137.3	161.2	186.6	194.1
45°	7546.2	2082.5	252.3	162.7	132.9	101.5	98.5	116.4	128.4	153.8	159.7
47.5°	7679.1	1894.4	223.9	132.9	103.0	82.1	82.1	86.6	98.5	128.4	134.4
50°	7634.3	1743.6	194.1	98.5	71.7	62.7	62.7	61.2	79.1	103.0	107.5
52.5°	7544.7	1657.0	167.2	76.1	49.3	44.8	40.3	44.8	55.2	65.7	67.2
55°	7531.3	1642.1	140.3	61.2	34.3	29.9	22.4	22.4	22.4	20.9	17.9
57.5°	7635.8	1666.0	117.9	49.3	25.4	19.4	11.9	0.0	0.0	0.0	0.0
60°	7743.3	1691.4	101.5	34.3	17.9	10.4	1.5	0.0	0.0	0.0	0.0
62.5°	7564.1	1634.6	85.1	20.9	13.4	4.5	0.0	0.0	0.0	0.0	0.0
65°	6644.6	1391.3	67.2	14.9	9.0	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	4726.3	931.5	44.8	9.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0
70°	2157.1	389.6	28.4	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	461.3	120.9	19.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	94.0	88.1	7.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	29.9	138.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	17.9	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	3.0	14.9	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)