

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: P300769

Luminaire Tested: **GAA-AF-09-LED-U-AFL-7030-600-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P300769  
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-7030-600-HSS  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(9) 70 CRI, 3000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Automotive Frontline WITH HOUSESIDE SHIELD OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 25217.6 lumens  
Efficiency: N/A  
Efficacy: 87.0 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): 290  
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

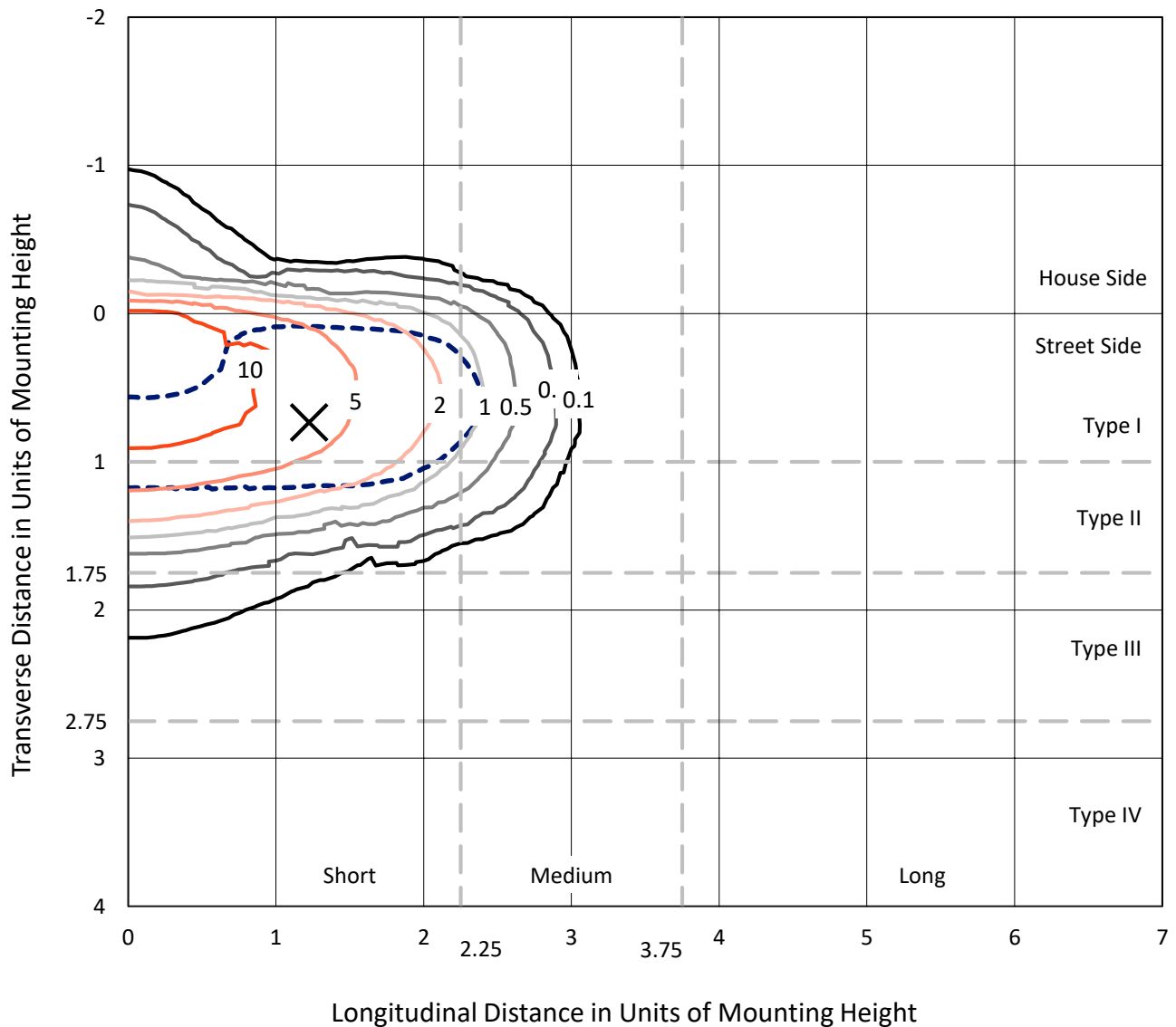


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

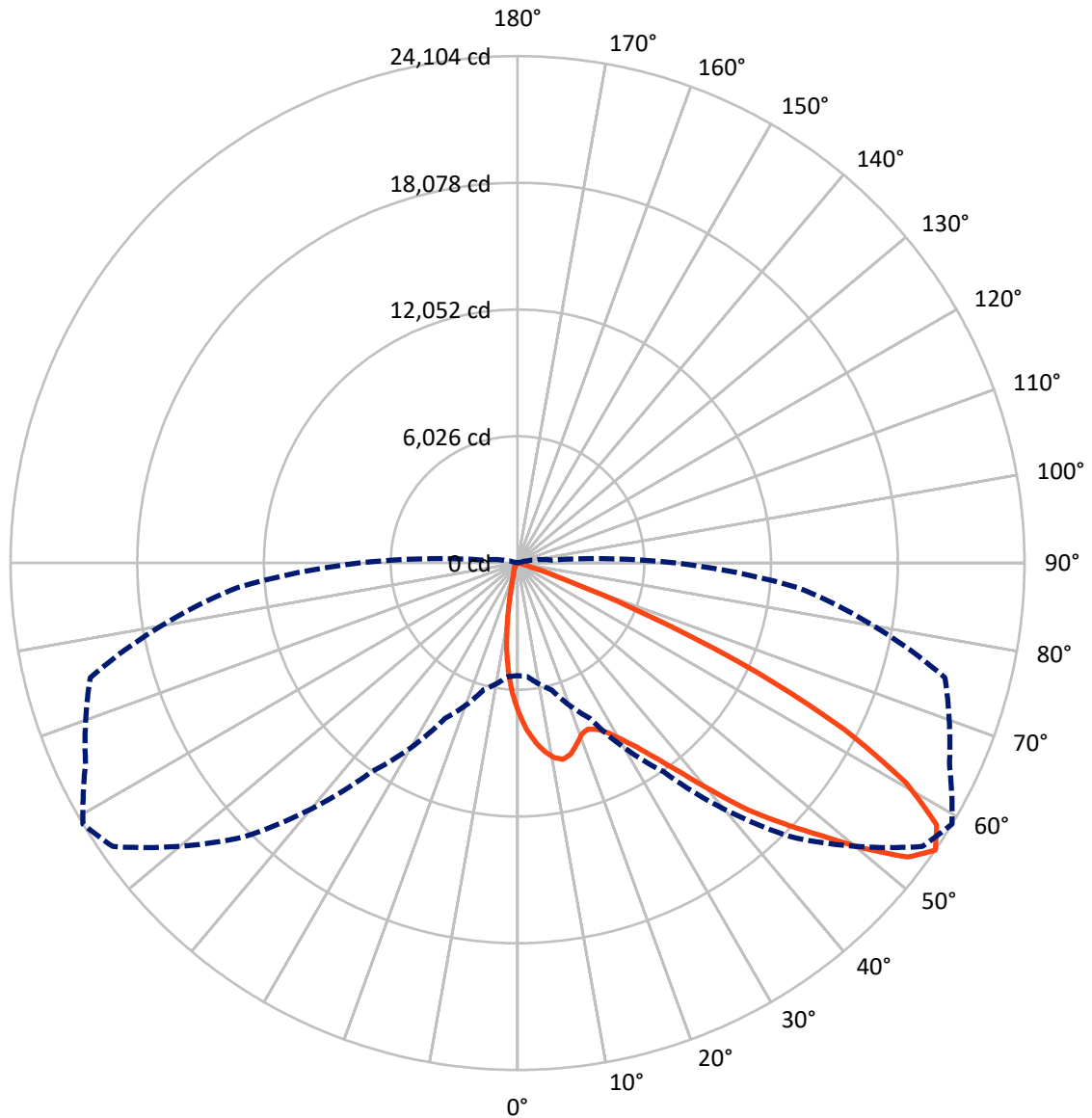


Based on 25 foot mounting height. Maximum calculated value = 14.1 fc  
 Type II - Short - Full Cutoff

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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
<b>House Side</b>	Lumens	1408.5	0.0	1408.5
	% Fixture	5.6	0.0	5.6
<b>Street Side</b>	Lumens	23809.1	0.0	23809.1
	% Fixture	94.4	0.0	94.4
<b>Total</b>	Lumens	25217.6	0.0	25217.6
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	594.6	2.4
10°-20°	1423.6	5.6
20°-30°	2422.4	9.6
30°-40°	4166.1	16.5
40°-50°	6432.0	25.5
50°-60°	6466.2	25.6
60°-70°	3315.9	13.1
70°-80°	359.3	1.4
80°-90°	37.6	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°	25217.6	100.0
0°-180°	25217.6	100.0

**Coefficient of Utilization**



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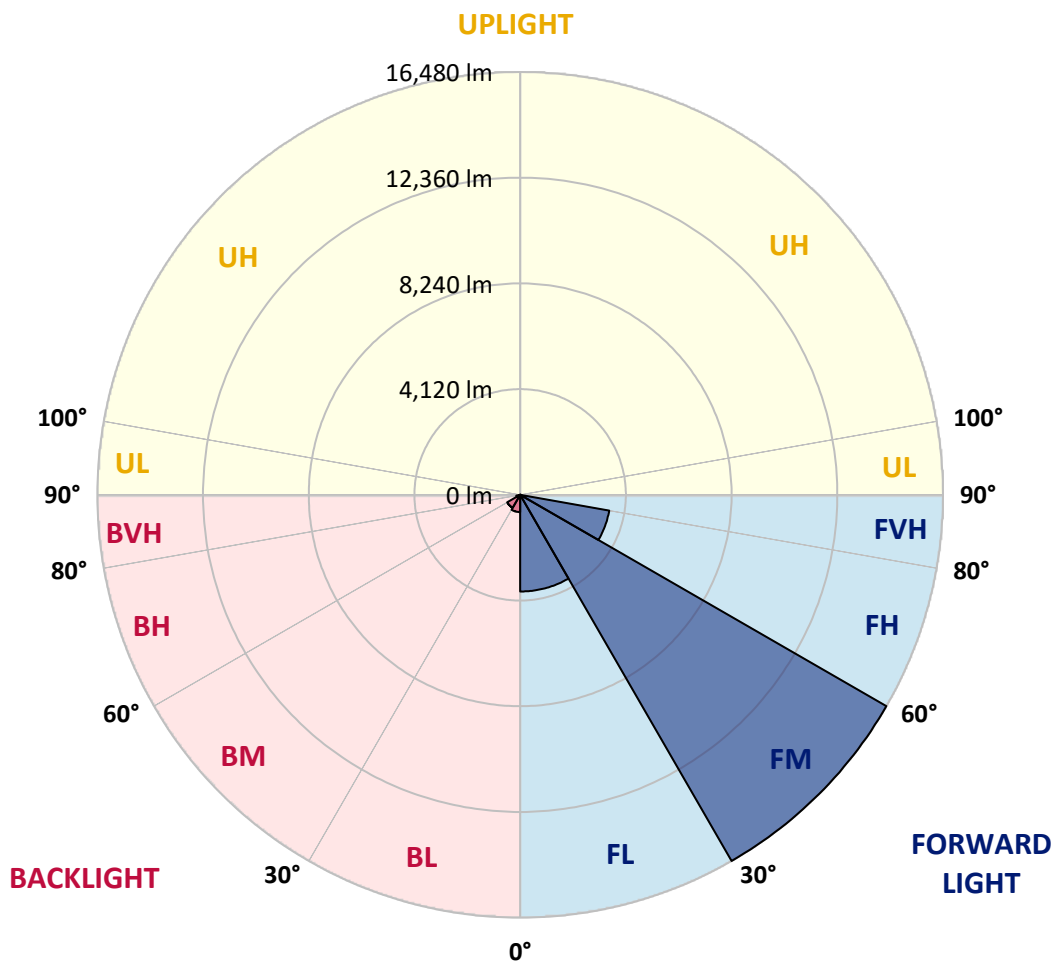
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3768.3	14.9			
FM	(30°-60°)	16479.6	65.3			
FH	(60°-80°)	3524.3	14.0			G2/5000
FVH	(80°-90°)	36.8	0.1			G1/100
BL	(0°-30°)	672.3	2.7	B2/1000		
BM	(30°-60°)	584.6	2.3	B1/1000		
BH	(60°-80°)	150.9	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°	7098.7	7098.7	7098.7	7098.7	7098.7	7098.7	7098.7	7098.7	7098.7	7098.7	7098.7
2.5°	8399.4	8310.1	8283.3	8265.4	8183.6	8080.9	7941.0	7875.5	7741.6	7525.8	7260.9
5°	9168.8	9152.4	9092.9	9060.1	8972.3	8826.5	8603.2	8496.1	8283.3	7920.2	7445.4
7.5°	8832.4	8935.1	9017.0	9153.9	9326.5	9320.5	9133.0	9021.4	8783.3	8304.1	7650.8
10°	7533.2	7616.6	7750.5	8061.5	8695.5	9255.1	9475.3	9395.0	9204.5	8656.8	7848.7
12.5°	7278.7	7269.8	7293.6	7384.4	7716.3	8513.9	9417.3	9579.5	9540.8	8979.8	8036.2
15°	7414.2	7403.8	7400.8	7432.0	7512.4	7848.7	8981.2	9447.0	9746.2	9278.9	8195.5
17.5°	7793.7	7749.0	7725.2	7699.9	7676.1	7759.4	8457.4	9076.5	9777.4	9540.8	8327.9
20°	8444.0	8369.6	8281.8	8138.9	8005.0	7963.3	8237.1	8695.5	9665.8	9740.2	8414.2
22.5°	9261.0	9165.8	9014.0	8753.5	8481.2	8323.5	8345.8	8575.0	9499.1	9957.5	8454.4
25°	10179.2	10057.2	9854.8	9493.2	9092.9	8813.1	8667.2	8747.6	9423.2	10212.0	8500.6
27.5°	11162.9	11027.5	10762.6	10270.0	9816.1	9438.1	9140.5	9130.1	9552.7	10545.3	8575.0
30°	12137.7	12116.9	11771.6	11250.7	10649.5	10189.7	9761.1	9706.0	9914.3	11006.7	8722.3
32.5°	13438.4	13282.1	12859.5	12323.7	11630.2	11078.1	10570.6	10442.6	10469.4	11543.9	8950.0
35°	15078.4	14907.2	14311.9	13572.3	12797.0	12145.1	11584.1	11410.0	11344.5	12423.4	9333.9
37.5°	16138.0	16135.0	15761.4	15008.4	14176.5	13457.7	12847.6	12643.7	12511.2	13486.0	9929.2
40°	16166.2	16236.2	16285.3	16277.8	15685.5	15023.3	14481.6	14230.1	13922.0	14905.7	10698.6
42.5°	15298.6	15478.7	15911.7	16646.9	16998.1	16734.7	16277.8	16030.8	15572.4	16425.2	11636.2
45°	14125.9	14250.9	15008.4	16362.7	17709.5	18431.3	18083.0	17641.0	17036.8	18010.1	12477.0
47.5°	13600.6	13622.9	14112.5	15599.2	17763.1	19821.2	20032.6	19313.8	18367.3	19287.0	13134.8
50°	12030.5	12070.7	12746.4	14276.2	17135.0	20477.5	21991.0	21309.4	19818.3	20270.7	13374.4
52.5°	9067.6	9124.1	9981.3	12102.0	15408.7	20197.7	23392.9	23227.7	21407.6	20751.3	13387.8
55°	5350.1	5424.5	6243.0	8146.4	12119.8	18417.9	23497.1	24104.2	22662.2	21035.6	13366.9
57.5°	2498.7	2550.8	3019.5	4196.7	7537.7	14556.0	21928.5	23503.0	23354.2	21185.9	13514.3
60°	1327.5	1342.3	1455.5	1817.1	3406.5	9229.8	18867.3	21223.1	22723.2	21394.2	13694.3
62.5°	1014.9	1019.4	1013.5	1056.6	1431.6	4097.0	14261.3	17447.6	20182.9	21238.0	13494.9
65°	879.5	887.0	845.3	834.9	918.2	1461.4	8472.3	12436.8	15859.7	19129.2	12136.2
67.5°	788.7	791.7	741.1	698.0	712.8	790.2	3342.5	6808.5	10497.7	14021.7	8796.7
70°	726.2	723.3	668.2	599.7	580.4	540.2	1062.6	2495.7	5016.7	7110.6	4091.0
72.5°	642.9	644.4	617.6	528.3	482.2	378.0	492.6	727.7	1497.1	1937.6	958.4
75°	570.0	562.5	529.8	473.2	397.3	248.5	244.1	324.4	461.3	458.4	206.9
77.5°	412.2	404.8	415.2	388.4	305.1	160.7	122.0	156.3	187.5	181.6	58.0
80°	302.1	297.6	267.9	322.9	269.4	110.1	75.9	83.3	96.7	81.9	17.9
82.5°	206.9	205.4	189.0	178.6	153.3	67.0	47.6	52.1	62.5	46.1	8.9
85°	32.7	37.2	136.9	108.6	90.8	29.8	32.7	35.7	41.7	25.3	3.0
87.5°	0.0	0.0	64.0	56.6	17.9	11.9	19.3	20.8	20.8	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°	7098.7	7098.7	7098.7	7098.7	7098.7	7098.7	7098.7	7098.7	7098.7	7098.7	7098.7
2.5°	7125.5	6976.6	6701.3	6417.1	6153.7	5839.7	5623.9	5461.7	5274.2	5223.6	5333.7
5°	7174.6	6893.3	6301.0	5656.6	5050.9	4379.7	3866.3	3460.0	3092.5	2967.5	3080.6
7.5°	7252.0	6833.8	5867.9	4806.9	3753.2	2705.5	1988.2	1516.5	1215.9	1126.6	1174.2
10°	7329.3	6747.5	5366.4	3800.8	2360.3	1317.0	857.2	684.6	620.6	607.2	614.6
12.5°	7393.3	6631.4	4754.8	2702.6	1262.0	705.4	561.0	532.8	523.8	523.8	526.8
15°	7432.0	6455.8	4030.0	1718.9	726.2	532.8	489.6	480.7	480.7	482.2	485.2
17.5°	7427.6	6232.5	3236.8	1040.2	543.2	471.8	446.5	439.0	437.5	440.5	442.0
20°	7372.5	5940.9	2440.6	686.1	473.2	430.1	404.8	391.4	389.9	392.9	395.9
22.5°	7268.3	5580.7	1745.6	528.3	427.1	389.9	358.7	346.7	346.7	349.7	352.7
25°	7141.8	5140.2	1193.5	447.9	385.4	346.7	317.0	306.6	309.5	317.0	318.5
27.5°	6984.1	4644.6	811.1	384.0	334.8	303.6	281.3	273.8	281.3	291.7	294.7
30°	6848.7	4128.2	578.9	331.9	284.2	261.9	248.5	248.5	258.9	278.3	282.8
32.5°	6744.5	3628.2	446.5	293.2	247.0	227.7	220.3	227.7	244.1	263.4	267.9
35°	6731.1	3216.0	378.0	261.9	220.3	200.9	197.9	211.3	227.7	242.6	245.6
37.5°	6833.8	2835.0	340.8	236.6	196.4	178.6	175.6	192.0	208.3	226.2	230.7
40°	7028.7	2535.9	314.0	212.8	177.1	157.7	151.8	163.7	186.0	209.8	215.8
42.5°	7281.7	2288.8	284.2	189.0	157.7	131.0	123.5	136.9	160.7	186.0	193.5
45°	7522.8	2076.0	251.5	162.2	132.4	101.2	98.2	116.1	128.0	153.3	159.2
47.5°	7655.3	1888.5	223.2	132.4	102.7	81.9	81.9	86.3	98.2	128.0	133.9
50°	7610.6	1738.2	193.5	98.2	71.4	62.5	62.5	61.0	78.9	102.7	107.1
52.5°	7521.3	1651.9	166.7	75.9	49.1	44.6	40.2	44.6	55.1	65.5	67.0
55°	7507.9	1637.0	139.9	61.0	34.2	29.8	22.3	22.3	22.3	20.8	17.9
57.5°	7612.1	1660.8	117.6	49.1	25.3	19.3	11.9	0.0	0.0	0.0	0.0
60°	7719.3	1686.1	101.2	34.2	17.9	10.4	1.5	0.0	0.0	0.0	0.0
62.5°	7540.7	1629.6	84.8	20.8	13.4	4.5	0.0	0.0	0.0	0.0	0.0
65°	6623.9	1387.0	67.0	14.9	8.9	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	4711.6	928.6	44.6	8.9	1.5	0.0	0.0	0.0	0.0	0.0	0.0
70°	2150.4	388.4	28.3	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	459.9	120.5	19.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	93.8	87.8	7.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	29.8	138.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	17.9	99.7	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)