

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: P191197

Luminaire Tested: **GAN-AF-09-LED-U-SL4-600-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191197
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24301)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GAN-AF-09-LED-U-SL4-600-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 70 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV SPILL
LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 29109.1 lumens
Efficiency: N/A
Efficacy: 100.4 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B2 - U0 - G5

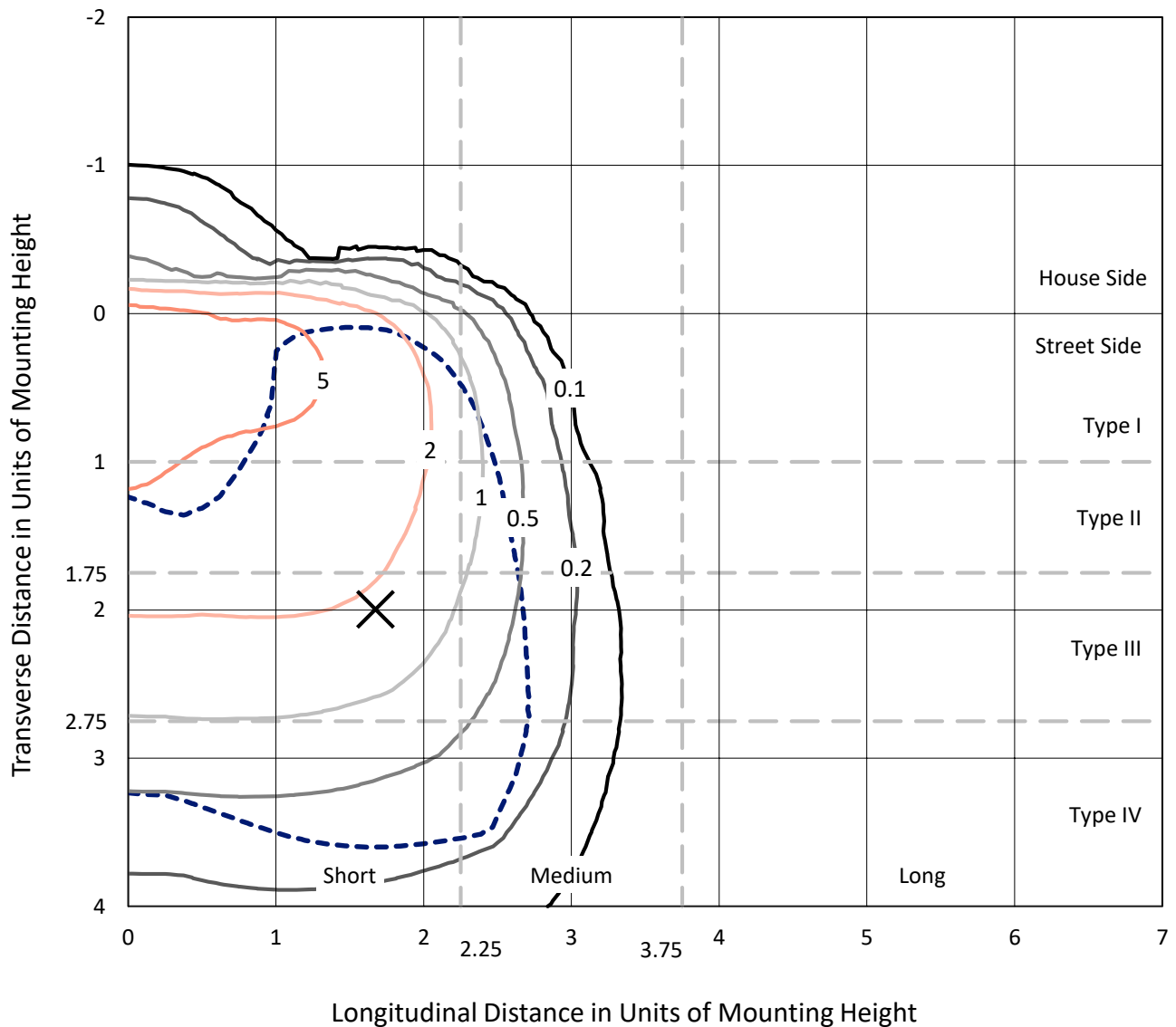
Input Watts (W): 290
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

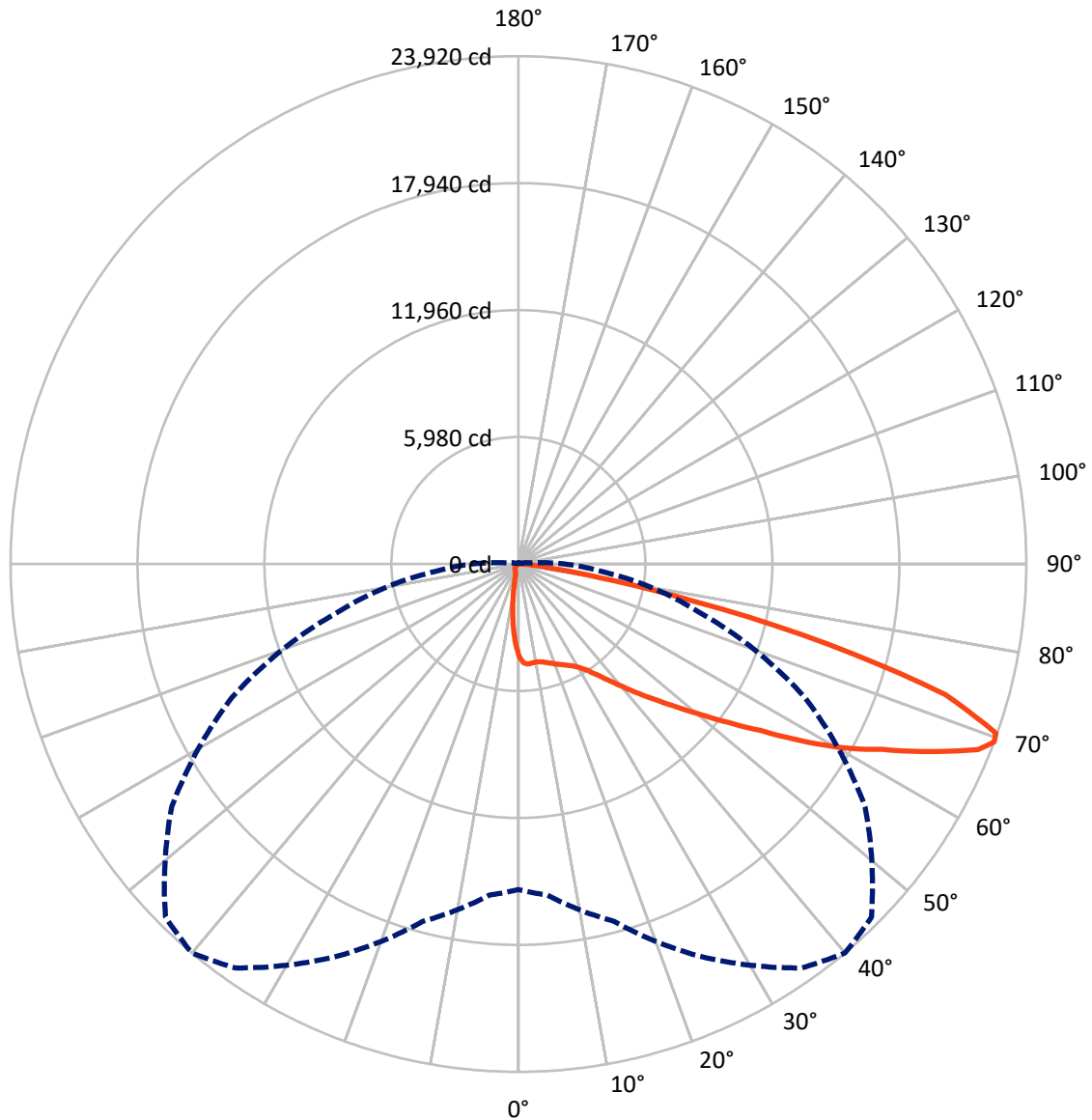
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.6 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1703.0	0.0	1703.0
	% Fixture	5.9	0.0	5.9
Street Side	Lumens	27406.0	0.0	27406.0
	% Fixture	94.1	0.0	94.1
Total	Lumens	29109.1	0.0	29109.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	352.6	1.2
10°-20°	867.2	3.0
20°-30°	1460.6	5.0
30°-40°	2391.0	8.2
40°-50°	4140.0	14.2
50°-60°	6520.9	22.4
60°-70°	8516.1	29.3
70°-80°	4386.2	15.1
80°-90°	474.5	1.6
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°	29109.1	100.0
0°-180°	29109.1	100.0

Coefficient of Utilization



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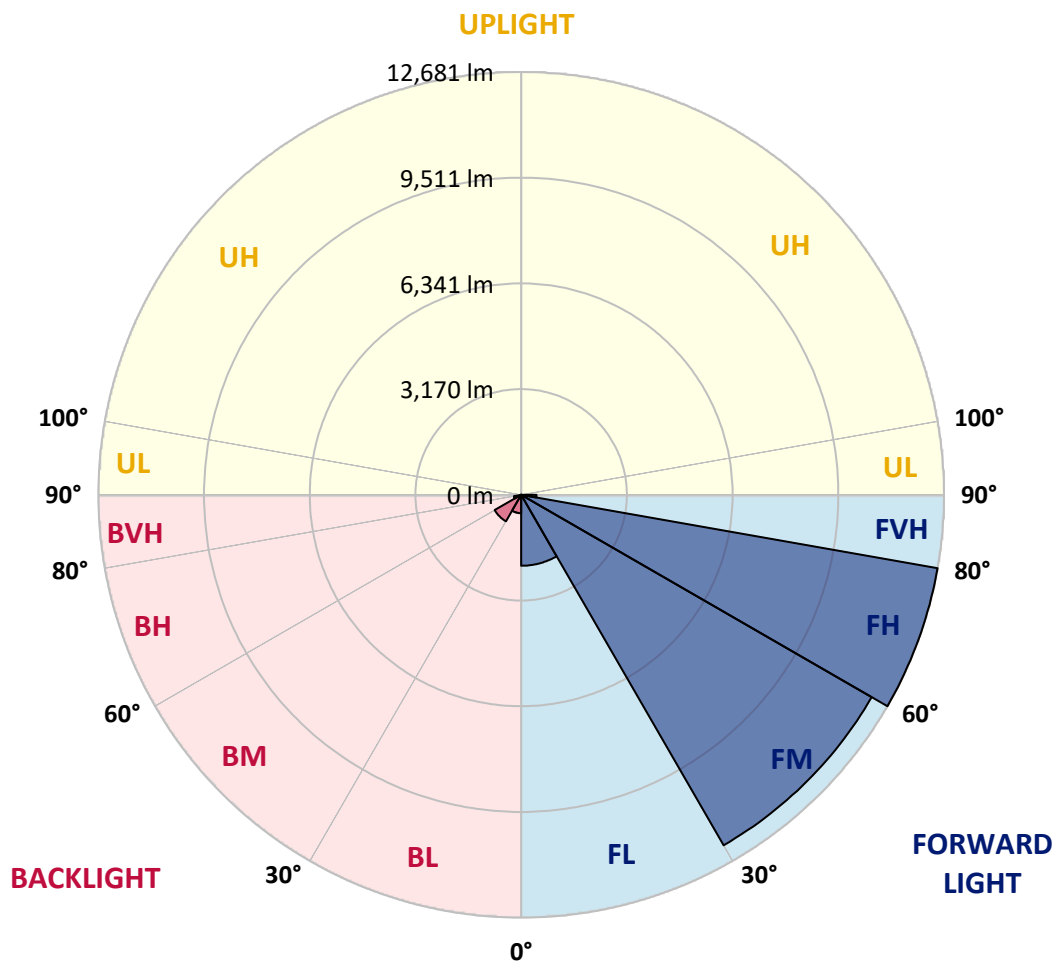
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2128.7	7.3			
FM	(30°-60°)	12136.7	41.7			
FH	(60°-80°)	12681.1	43.6			G5
FVH	(80°-90°)	459.6	1.6			G3/500
BL	(0°-30°)	551.7	1.9	B2/1000		
BM	(30°-60°)	915.3	3.1	B1/1000		
BH	(60°-80°)	221.1	0.8	B1/500		G1/500
BVH	(80°-90°)	14.9	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G5

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	40°	45°	55°	65°	75°	85°
0°	4349.1	4349.1	4349.1	4349.1	4349.1	4349.1	4349.1	4349.1	4349.1	4349.1	4349.1
2.5°	4775.3	4749.3	4733.7	4712.9	4687.0	4664.3	4655.8	4591.6	4531.0	4447.8	4352.6
5°	4863.6	4855.0	4827.3	4799.6	4768.4	4733.7	4714.7	4638.4	4551.7	4430.5	4264.2
7.5°	4872.3	4861.9	4827.3	4789.1	4745.9	4704.2	4671.3	4595.1	4515.4	4392.3	4189.6
10°	4858.5	4846.3	4820.3	4778.7	4725.0	4685.2	4652.3	4579.4	4511.9	4401.0	4175.8
12.5°	4842.9	4830.8	4818.6	4797.8	4751.0	4723.3	4695.5	4626.3	4565.6	4472.0	4226.0
15°	4858.5	4851.5	4865.4	4856.8	4830.8	4806.4	4778.7	4716.4	4661.0	4582.9	4317.9
17.5°	4924.3	4924.3	4967.7	4972.8	4948.5	4913.9	4874.1	4811.7	4764.9	4699.0	4427.0
20°	5078.5	5073.3	5128.8	5139.2	5080.3	5026.6	4967.7	4891.3	4855.0	4813.4	4534.4
22.5°	5343.6	5319.3	5352.3	5341.8	5225.7	5142.6	5069.8	4976.2	4957.2	4938.2	4654.0
25°	5688.4	5674.5	5697.1	5594.8	5390.4	5277.8	5191.2	5085.4	5085.4	5104.5	4789.1
27.5°	6189.2	6137.2	6061.0	5880.7	5574.1	5430.2	5336.6	5224.0	5253.5	5324.6	4967.7
30°	6702.1	6644.9	6469.9	6192.6	5797.6	5646.8	5537.6	5419.8	5489.2	5619.1	5206.7
32.5°	7208.0	7143.9	6896.1	6546.1	6118.2	5967.4	5861.7	5731.7	5847.8	6066.1	5556.8
35°	7698.3	7641.1	7355.2	6942.9	6544.3	6419.6	6322.6	6209.9	6359.0	6663.9	6050.5
37.5°	8249.3	8187.0	7838.7	7391.6	7062.5	6972.3	6901.3	6788.7	7048.5	7495.6	6738.4
40°	8926.8	8821.1	8351.6	7906.3	7661.9	7618.6	7570.1	7554.5	7958.3	8576.8	7655.0
42.5°	9703.1	9529.8	8888.7	8448.6	8320.4	8351.6	8339.4	8408.8	9096.6	9921.4	8770.9
45°	10479.3	10255.8	9486.4	9027.3	9044.6	9153.8	9221.4	9498.6	10522.6	11463.5	9971.6
47.5°	11137.7	10917.6	10060.0	9652.8	9860.7	10075.6	10259.3	10784.3	11988.5	12981.3	10905.6
50°	11700.8	11493.0	10668.1	10340.7	10808.5	11155.1	11453.1	12231.0	13565.2	14137.0	11560.5
52.5°	12161.8	12023.2	11298.9	11129.1	11891.4	12399.1	12835.8	13767.9	14961.8	15076.1	12069.9
55°	12610.5	12511.7	11976.3	12066.4	13163.2	13854.5	14407.3	15398.4	16164.3	15859.3	12558.6
57.5°	13126.8	13036.8	12749.1	13255.1	14835.2	15705.1	16308.1	16843.5	17222.9	16659.8	13019.4
60°	13653.6	13601.6	13608.5	14575.4	16755.1	17590.3	17922.9	18061.5	18262.5	17413.5	13045.4
62.5°	14156.1	14254.8	14591.0	16044.7	18593.5	19234.5	19402.6	19539.5	19303.9	17533.1	12052.6
65°	15006.8	15167.9	15970.2	18011.3	20615.5	21301.6	21474.9	21005.4	19468.5	15987.5	9803.6
67.5°	15422.6	15717.2	17148.4	19844.4	22576.9	23339.3	23275.2	21100.7	17470.7	12191.2	6291.4
69°	15336.0	15649.6	17420.4	20405.8	23228.5	23919.8	23512.6	19934.5	14883.8	8831.5	3862.2
70°	14993.0	15310.0	17280.1	20385.1	23311.6	23859.1	23072.5	18494.7	12584.5	6457.7	2415.4
72.5°	12520.4	12794.1	15341.2	18425.4	21474.9	21029.6	19302.2	12813.3	6132.0	1758.7	544.1
75°	7707.0	7859.4	11007.8	13880.5	16219.7	15076.1	12860.0	6374.5	1828.0	497.3	301.5
77.5°	4071.9	4141.1	6026.3	8181.8	10281.8	8507.5	6591.2	2486.4	842.1	311.9	218.3
80°	2406.7	2458.7	3245.3	3740.8	4449.5	3716.6	2635.4	1526.4	602.9	195.8	194.1
82.5°	1377.5	1410.4	2353.0	2079.2	1753.4	1497.1	1311.6	1446.8	362.1	131.7	201.0
85°	506.0	512.9	1323.8	1582.0	1043.1	620.3	651.5	1199.0	97.1	83.2	157.6
87.5°	235.7	230.5	681.0	968.5	609.9	393.3	507.7	263.4	38.2	53.7	43.3
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°	4349.1	4349.1	4349.1	4349.1	4349.1	4349.1	4349.1	4349.1	4349.1	4349.1	4349.1
2.5°	4297.1	4233.0	4116.9	3997.3	3876.1	3782.5	3690.6	3617.9	3593.6	3548.5	3552.0
5°	4165.4	4047.5	3805.0	3558.9	3302.5	3091.2	2891.9	2730.8	2652.7	2573.0	2573.0
7.5°	4051.0	3879.4	3500.0	3099.7	2685.7	2337.4	2023.8	1788.1	1658.2	1554.3	1552.5
10°	4007.7	3775.5	3245.3	2671.8	2094.8	1620.0	1247.5	1008.4	885.4	805.7	802.2
12.5°	4026.7	3739.2	3049.5	2276.8	1552.5	1041.4	722.5	568.4	516.4	492.0	492.0
15°	4082.2	3728.8	2853.7	1890.4	1096.8	651.5	480.0	438.3	434.9	434.9	434.9
17.5°	4149.8	3732.2	2652.7	1514.4	746.8	466.1	414.1	408.9	412.4	412.4	412.4
20°	4219.1	3734.0	2436.2	1166.1	526.7	405.5	389.8	388.1	391.6	391.6	393.3
22.5°	4304.0	3742.6	2219.6	871.6	434.9	382.9	370.8	370.8	372.6	372.6	370.8
25°	4401.0	3760.0	1994.3	646.3	396.8	367.3	356.9	355.2	356.9	355.2	353.4
27.5°	4522.4	3784.2	1743.1	506.0	379.4	351.7	343.1	343.1	341.4	339.6	337.9
30°	4674.8	3811.9	1460.7	429.7	362.1	337.9	329.2	327.4	325.7	322.2	322.2
32.5°	4907.0	3872.6	1181.7	389.8	343.1	318.9	311.9	311.9	308.4	304.9	303.2
35°	5263.9	3992.1	932.2	365.6	322.2	298.0	289.4	289.4	285.9	284.2	282.4
37.5°	5757.7	4174.0	724.2	343.1	301.5	275.5	266.8	265.1	261.7	258.2	256.5
40°	6414.4	4399.3	570.1	322.2	280.7	253.0	246.0	242.5	235.7	230.5	230.5
42.5°	7239.2	4655.8	462.6	299.7	256.5	232.2	227.0	221.8	209.7	204.5	202.7
45°	8102.1	4886.2	391.6	273.7	232.2	211.3	208.0	199.3	183.6	178.5	178.5
47.5°	8724.1	4939.9	344.8	249.5	209.7	188.8	187.1	171.5	157.6	154.2	152.5
50°	9112.2	4834.2	306.7	225.3	188.8	168.1	162.9	143.8	135.1	131.7	129.9
52.5°	9373.8	4645.3	275.5	204.5	169.8	149.0	136.9	123.1	116.1	112.6	112.6
55°	9583.5	4378.5	244.3	185.4	154.2	133.4	116.1	105.7	98.7	95.3	95.3
57.5°	9642.4	4016.4	213.1	169.8	138.6	117.8	98.7	91.9	83.2	81.4	81.4
60°	9214.4	3363.2	188.8	150.8	124.8	102.2	86.6	77.9	69.4	67.6	65.9
62.5°	8086.4	2602.5	166.3	133.4	109.1	88.4	74.5	64.1	57.2	57.2	57.2
65°	6168.4	1744.8	145.6	116.1	95.3	74.5	64.1	52.0	48.5	48.5	50.2
67.5°	3692.3	949.5	124.8	98.7	81.4	62.4	53.7	45.0	43.3	45.0	45.0
69°	2164.2	557.9	112.6	88.4	71.0	55.4	46.7	39.9	43.3	45.0	45.0
70°	1335.9	376.0	103.9	79.7	64.1	50.2	43.3	38.2	41.6	43.3	43.3
72.5°	372.6	194.1	83.2	62.4	52.0	41.6	34.7	34.7	39.9	41.6	41.6
75°	242.5	143.8	64.1	46.7	39.9	32.9	29.5	32.9	38.2	39.9	39.9
77.5°	201.0	117.8	52.0	38.2	32.9	31.2	27.7	29.5	34.7	36.4	36.4
80°	183.6	83.2	41.6	34.7	29.5	27.7	26.0	24.2	31.2	32.9	32.9
82.5°	175.0	65.9	36.4	31.2	27.7	24.2	22.5	24.2	27.7	29.5	31.2
85°	109.1	43.3	32.9	29.5	24.2	22.5	22.5	22.5	26.0	27.7	27.7
87.5°	39.9	34.7	29.5	24.2	20.8	20.8	20.8	20.8	22.5	26.0	26.0
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)