

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: P321421

Luminaire Tested: **GAN-SA7D-827-U-T2R-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P321421
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-9)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GAN-SA7D-827-U-T2R-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(7) 80 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 32565 lumens
Efficiency: N/A
Efficacy: 72.7 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G4

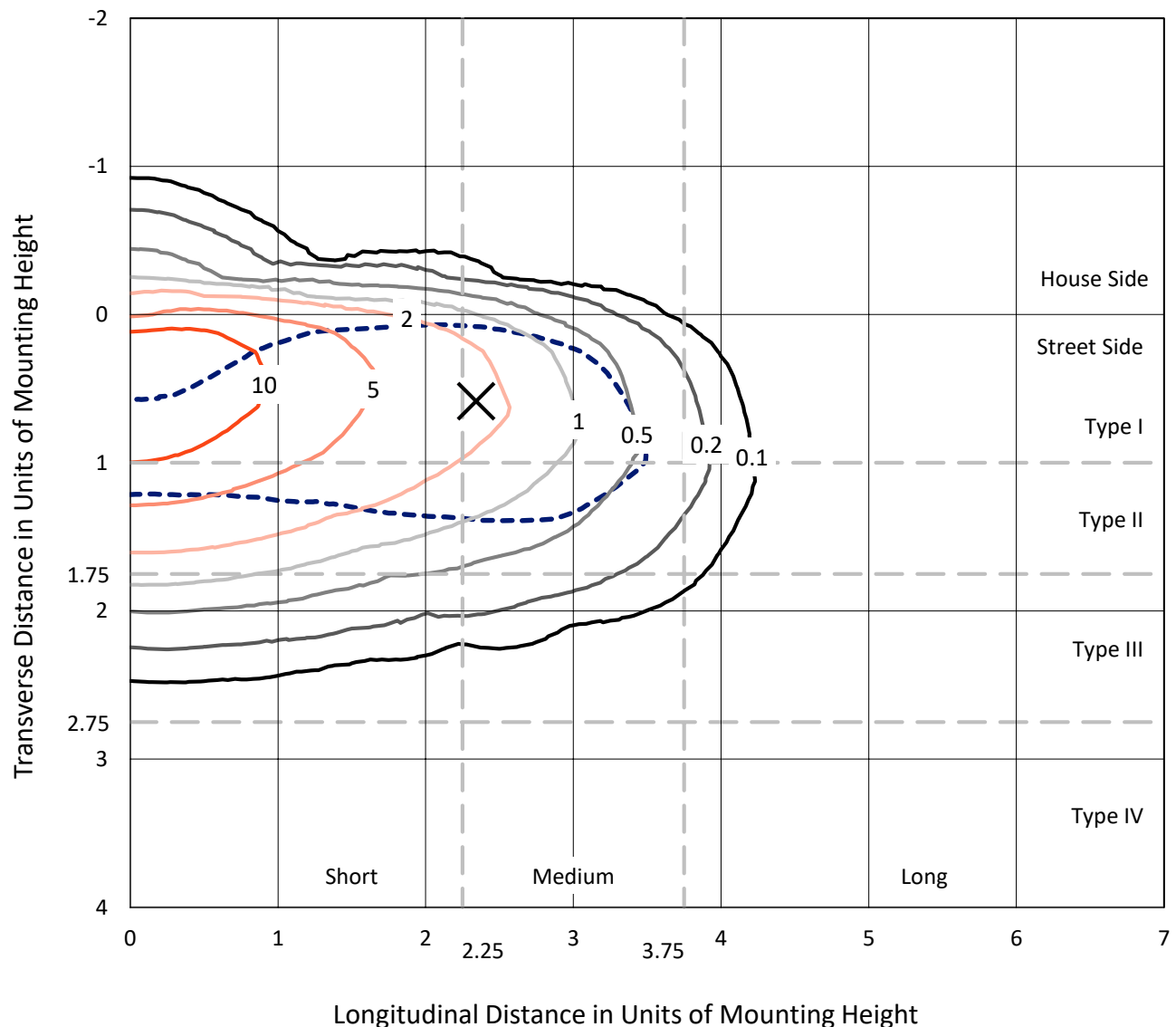
Input Watts (W): 448
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

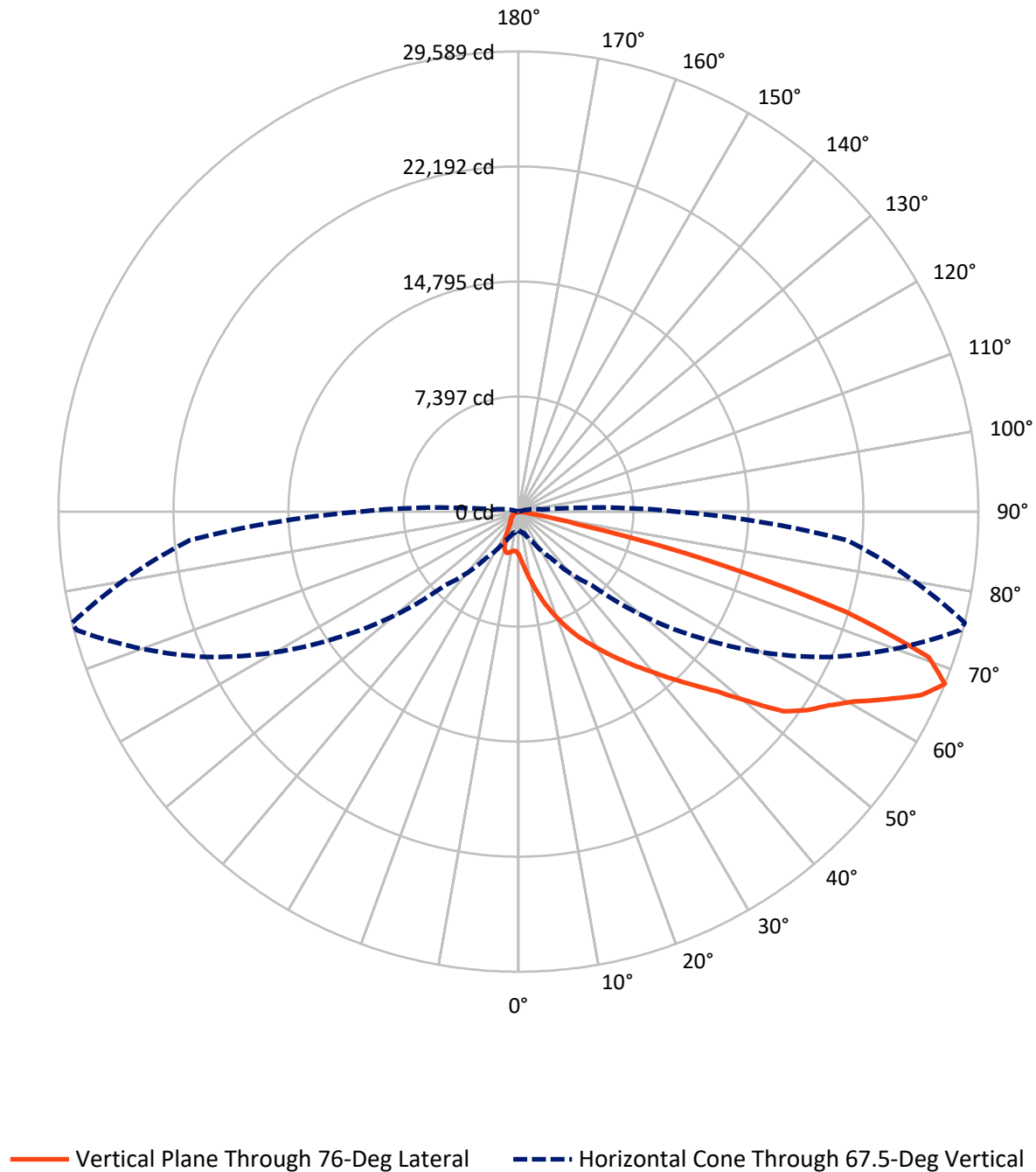
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 15.6 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1617.1	0.0	1617.1
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	30947.9	0.0	30947.9
	% Fixture	95.0	0.0	95.0
Total	Lumens	32565.0	0.0	32565.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	343.5	1.1
10°-20°	1361.7	4.2
20°-30°	2770.6	8.5
30°-40°	4808.9	14.8
40°-50°	6794.4	20.9
50°-60°	7705.2	23.7
60°-70°	6390.7	19.6
70°-80°	2314.9	7.1
80°-90°	75.1	0.2
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°	32565.0	100.0
0°-180°	32565.0	100.0

Coefficient of Utilization



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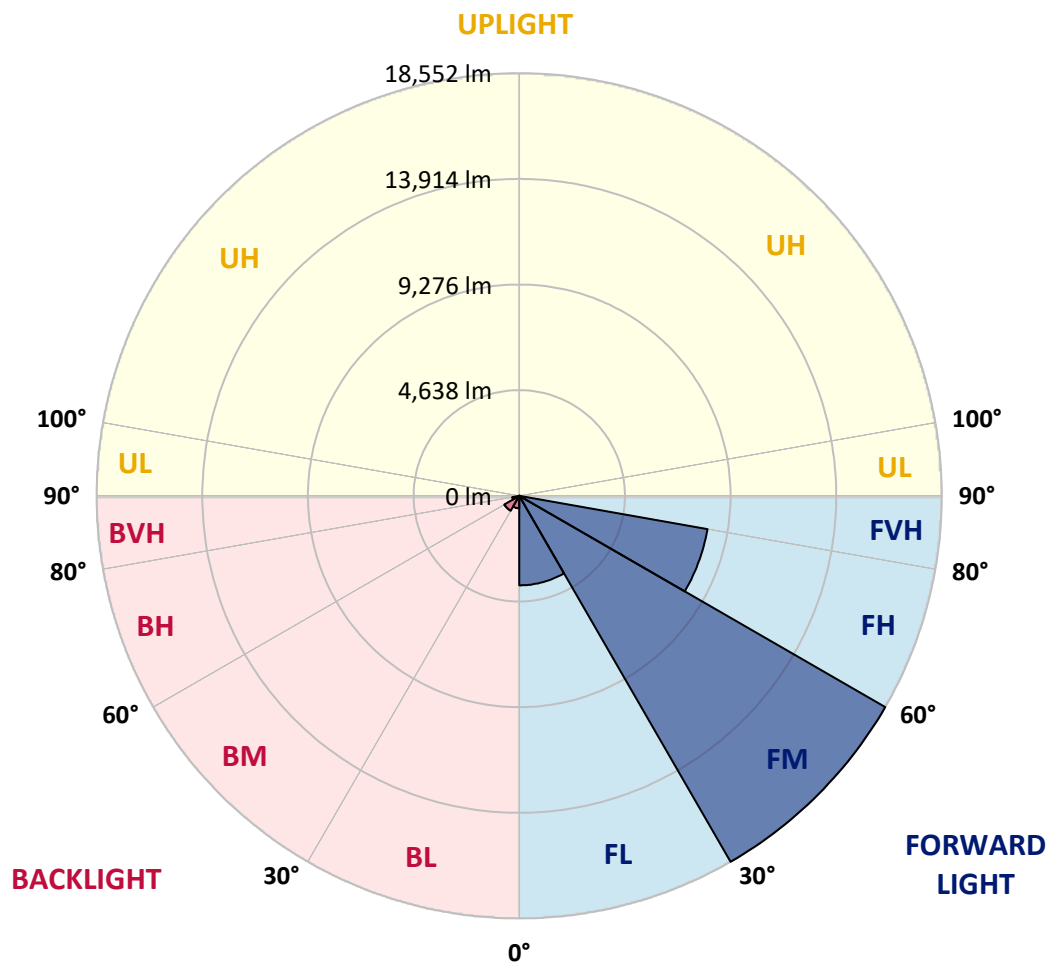
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3930.5	12.1			
FM	(30°-60°)	18551.6	57.0			
FH	(60°-80°)	8393.1	25.8			G4/12000
FVH	(80°-90°)	72.7	0.2			G1/100
BL	(0°-30°)	545.4	1.7	B2/1000		
BM	(30°-60°)	756.9	2.3	B1/1000		
BH	(60°-80°)	312.5	1.0	B1/500		G1/500
BVH	(80°-90°)	2.4	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-G4

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	2762.5	2762.5	2762.5	2762.5	2762.5	2762.5	2762.5	2762.5	2762.5	2762.5	2762.5
2.5°	4123.7	4031.0	4052.4	3992.4	3884.0	3661.4	3471.6	3291.8	3082.1	3074.9	2902.3
5°	5560.6	5482.1	5472.1	5350.8	5153.9	4775.8	4407.7	3988.2	3520.1	3485.9	3119.2
7.5°	6864.8	6802.0	6779.1	6635.0	6268.3	5900.2	5420.7	4804.3	4072.3	4009.6	3411.7
10°	7866.4	7836.5	7842.2	7739.4	7425.5	7083.1	6453.8	5667.6	4698.7	4601.7	3762.7
12.5°	8625.5	8632.7	8684.0	8621.3	8445.8	8191.8	7519.7	6587.9	5392.2	5259.5	4163.7
15°	9183.5	9219.1	9313.3	9391.8	9378.9	9159.2	8542.8	7522.6	6128.5	5981.5	4610.3
17.5°	9544.5	9584.4	9721.4	9895.5	10055.3	10003.9	9530.2	8424.3	6873.3	6703.5	5088.3
20°	9861.2	9908.3	10055.3	10285.0	10583.2	10647.4	10336.4	9299.0	7616.7	7409.8	5582.0
22.5°	10547.6	10546.1	10636.0	10770.2	11054.1	11219.6	11022.7	10110.9	8351.6	8136.1	6085.7
25°	11788.9	11741.9	11710.5	11604.9	11667.7	11770.4	11660.5	10870.0	9090.7	8872.4	6596.5
27.5°	13264.4	13292.9	13038.9	12755.0	12535.2	12429.6	12249.8	11573.5	9801.3	9561.6	7095.9
30°	14821.1	14829.6	14530.0	14167.6	13683.9	13282.9	12971.8	12245.6	10531.9	10270.7	7581.1
32.5°	16225.1	16169.5	15872.7	15379.0	14768.3	14317.4	13671.0	12996.1	11305.2	11052.7	8120.4
35°	17338.1	17272.5	16911.5	16462.0	15828.5	15374.7	14597.1	13745.2	12118.6	11871.7	8661.2
37.5°	18151.4	18074.4	17703.4	17241.1	16694.6	16430.6	15671.5	14560.0	13006.1	12740.7	9230.5
40°	18434.0	18366.9	18134.3	17796.1	17356.7	17296.7	16811.6	15497.4	13972.1	13689.6	9875.5
42.5°	18265.6	18200.0	18117.2	18003.0	17820.4	17877.5	17887.5	16566.2	15045.1	14766.9	10587.5
45°	17597.8	17539.3	17624.9	17791.9	18018.7	18301.3	18869.2	17714.8	16243.7	15946.9	11410.8
47.5°	16614.7	16571.9	16808.7	17225.4	17888.9	18668.0	19766.7	18922.0	17589.2	17313.9	12438.2
50°	15216.3	15209.2	15682.9	16443.5	17463.7	18844.9	20694.2	20294.6	19458.5	19168.8	13866.5
52.5°	13038.9	13053.2	13984.9	15202.1	16717.4	18725.1	21290.6	22058.3	21633.0	21332.0	15103.6
55°	10965.6	11051.2	11711.9	13467.0	15573.1	18279.9	21496.1	22881.6	22833.1	22547.7	15791.4
57.5°	8935.2	9090.7	9727.1	11366.6	13902.2	17253.9	21383.3	23238.3	23726.3	23508.0	16698.9
60°	6734.9	6806.3	7539.7	9072.2	11757.6	15381.9	20565.7	23432.4	24947.7	24796.5	18015.9
62.5°	4284.9	4463.3	5114.0	6592.2	9154.9	12782.1	19187.4	23429.5	26475.9	26558.7	19715.3
65°	2257.3	2465.7	2811.0	4085.2	6291.1	9878.3	17114.1	23209.8	28350.8	28466.4	21043.7
67.5°	1217.1	1277.1	1459.7	2120.4	3648.6	6692.1	14067.7	22125.3	29436.7	29589.4	21229.2
70°	890.4	923.2	991.7	1172.9	1836.4	3886.8	10265.0	19666.8	28036.9	27979.8	18862.0
72.5°	683.5	734.8	786.2	859.0	1055.9	2074.7	6391.0	15400.4	22370.8	21994.1	14099.1
75°	539.4	547.9	620.7	686.3	791.9	1181.5	2838.1	8969.4	13653.9	12762.1	7311.4
77.5°	430.9	436.6	479.4	536.5	636.4	776.2	879.0	3528.7	4359.1	3889.7	1586.7
80°	255.4	269.7	356.7	413.8	527.9	489.4	321.0	766.2	680.6	616.4	266.8
82.5°	142.7	154.1	201.2	326.8	368.1	234.0	159.8	206.9	159.8	155.5	75.6
85°	0.0	7.1	129.8	202.6	149.8	51.4	67.1	68.5	47.1	44.2	30.0
87.5°	0.0	0.0	40.0	38.5	5.7	8.6	15.7	22.8	18.5	18.5	15.7
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°	2762.5	2762.5	2762.5	2762.5	2762.5	2762.5	2762.5	2762.5	2762.5	2762.5	2762.5
2.5°	2816.7	2739.6	2594.1	2451.4	2331.5	2233.1	2144.6	2108.9	2080.4	2076.1	2053.3
5°	2942.2	2786.7	2508.5	2280.2	2127.5	2019.0	1926.3	1869.2	1825.0	1807.9	1792.2
7.5°	3132.0	2896.6	2497.1	2234.5	2051.9	1869.2	1698.0	1512.5	1396.9	1352.7	1327.0
10°	3363.2	3042.1	2539.9	2221.7	1902.0	1516.8	1232.8	997.4	901.8	870.4	861.8
12.5°	3632.9	3223.3	2614.1	2141.8	1582.4	1077.3	850.4	770.5	749.1	739.1	739.1
15°	3942.5	3421.7	2666.9	1910.6	1170.0	814.8	736.3	699.2	676.3	663.5	664.9
17.5°	4259.3	3615.7	2641.2	1575.3	863.3	724.9	666.4	626.4	595.0	582.2	579.3
20°	4578.9	3795.5	2498.5	1172.9	730.6	657.8	592.2	547.9	516.5	503.7	500.8
22.5°	4909.9	3948.2	2247.3	860.4	656.4	583.6	519.4	475.2	445.2	433.8	428.1
25°	5232.4	4072.3	1896.3	696.3	586.5	513.7	452.3	410.9	383.8	372.4	371.0
27.5°	5533.5	4150.8	1489.7	615.0	525.1	450.9	395.2	358.1	335.3	326.8	325.3
30°	5804.6	4158.0	1101.6	555.1	470.9	396.7	345.3	312.5	292.5	284.0	281.1
32.5°	6078.5	4098.0	801.9	500.8	420.9	349.6	299.6	274.0	259.7	252.6	252.6
35°	6336.8	3959.6	625.0	453.8	372.4	303.9	264.0	245.4	236.9	229.7	229.7
37.5°	6589.4	3761.3	530.8	412.4	326.8	265.4	232.6	221.2	214.0	206.9	206.9
40°	6846.2	3511.6	482.3	373.8	289.7	235.4	206.9	196.9	189.8	184.1	182.6
42.5°	7161.6	3223.3	450.9	338.2	256.8	208.3	182.6	171.2	165.5	159.8	157.0
45°	7526.8	2975.1	425.2	302.5	229.7	185.5	158.4	147.0	138.4	131.3	129.8
47.5°	8053.4	2795.3	391.0	264.0	204.0	161.2	137.0	124.1	111.3	104.2	102.7
50°	8725.4	2646.9	346.7	229.7	178.4	137.0	114.2	98.5	87.0	79.9	79.9
52.5°	9059.3	2452.8	306.8	199.8	149.8	115.6	92.7	74.2	68.5	61.4	61.4
55°	9193.4	2304.4	266.8	169.8	124.1	95.6	72.8	57.1	52.8	48.5	47.1
57.5°	9570.1	2261.6	232.6	144.1	102.7	75.6	55.6	42.8	40.0	34.2	34.2
60°	10176.6	2283.0	201.2	122.7	82.8	58.5	41.4	32.8	30.0	24.3	24.3
62.5°	10831.5	2255.9	169.8	105.6	64.2	42.8	28.5	24.3	24.3	14.3	12.8
65°	10957.1	2009.1	145.5	87.0	49.9	31.4	18.5	15.7	21.4	2.9	0.0
67.5°	10169.4	1558.2	125.6	67.1	37.1	24.3	14.3	7.1	18.5	0.0	0.0
70°	8131.8	990.3	101.3	48.5	28.5	20.0	11.4	2.9	14.3	0.0	0.0
72.5°	5750.4	575.0	79.9	34.2	24.3	15.7	8.6	0.0	8.6	0.0	0.0
75°	2908.0	306.8	49.9	25.7	18.5	11.4	5.7	0.0	1.4	0.0	0.0
77.5°	629.3	142.7	31.4	18.5	12.8	7.1	2.9	0.0	0.0	0.0	0.0
80°	137.0	62.8	20.0	11.4	7.1	4.3	0.0	0.0	0.0	0.0	0.0
82.5°	49.9	32.8	10.0	5.7	2.9	0.0	0.0	0.0	0.0	0.0	0.0
85°	27.1	17.1	5.7	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	14.3	5.7	1.4	1.4	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)