

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: P321223

Luminaire Tested: **GAN-SA9D-727-U-T2R-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P321223
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-SA9D-727-U-T2R-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 70 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: 46824 lumens
Efficiency: N/A
Efficacy: 81.4 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G5

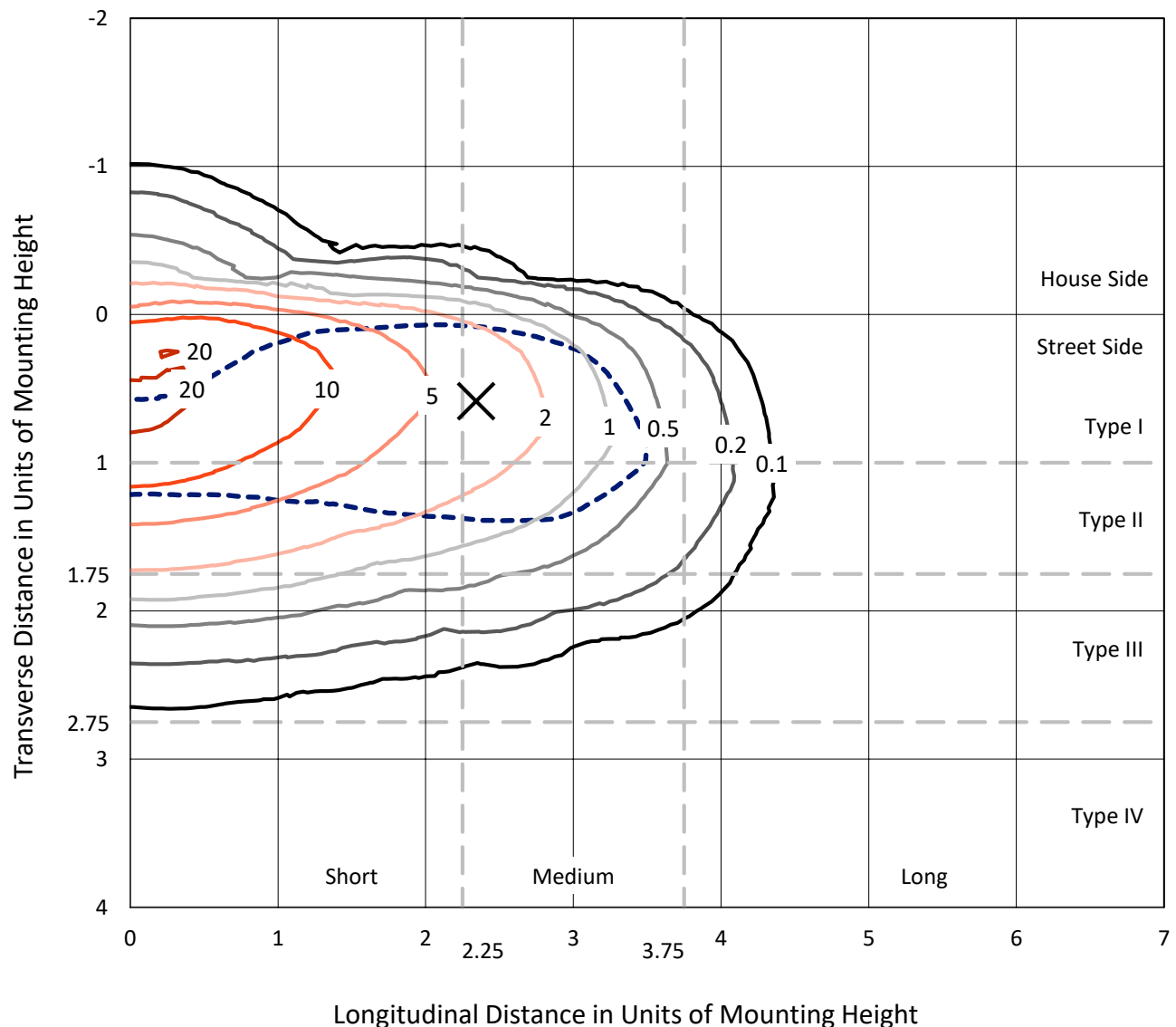
Input Watts (W): 575
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

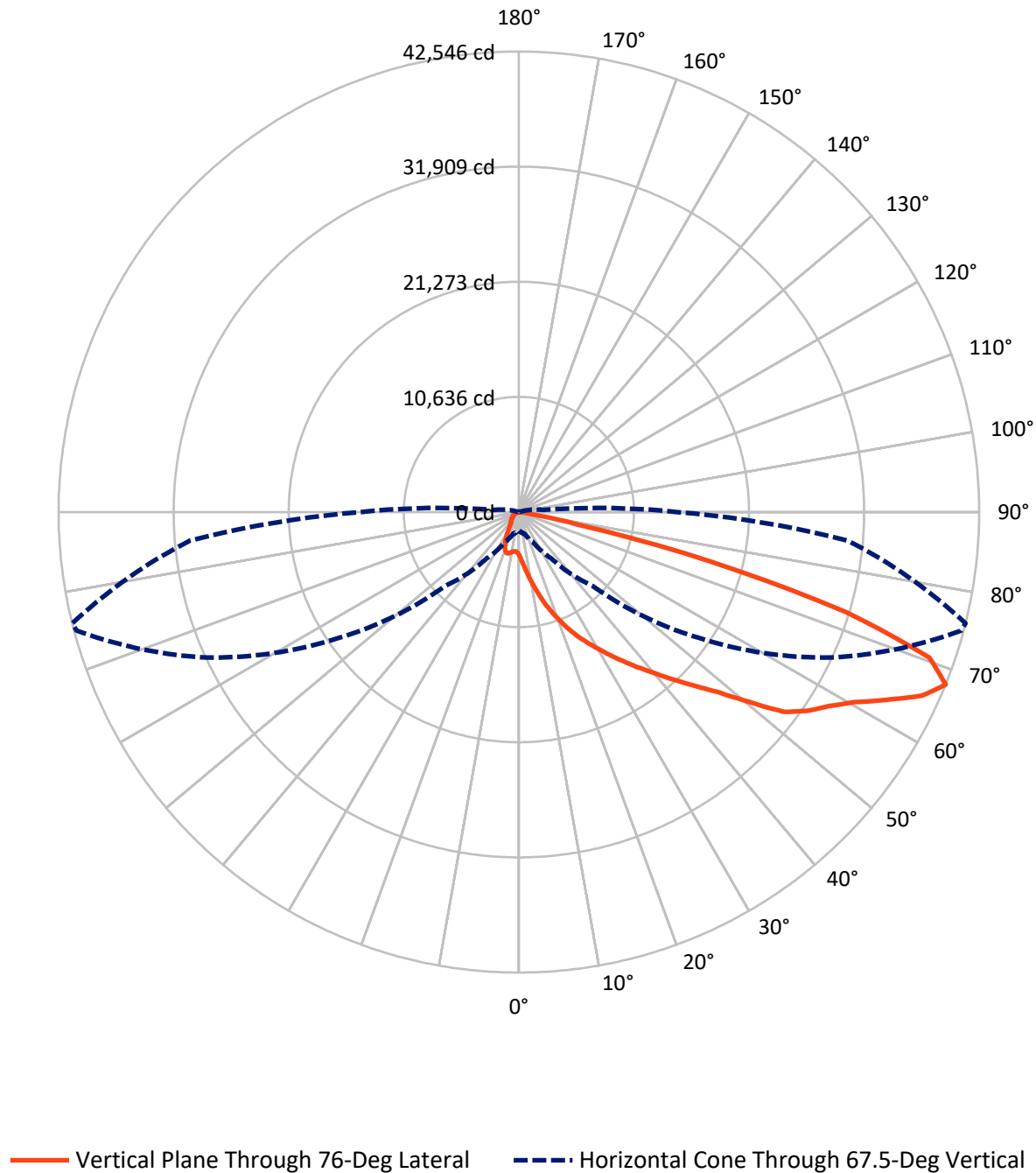
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 22.4 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	2325.2	0.0	2325.2
	% Fixture	5.0	0.0	5.0
Street Side	Lumens	44498.8	0.0	44498.8
	% Fixture	95.0	0.0	95.0
Total	Lumens	46824.0	0.0	46824.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	493.9	1.1
10°-20°	1958.0	4.2
20°-30°	3983.8	8.5
30°-40°	6914.6	14.8
40°-50°	9769.4	20.9
50°-60°	11079.0	23.7
60°-70°	9189.0	19.6
70°-80°	3328.5	7.1
80°-90°	107.9	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°	46824.0	100.0
0°-180°	46824.0	100.0

Coefficient of Utilization



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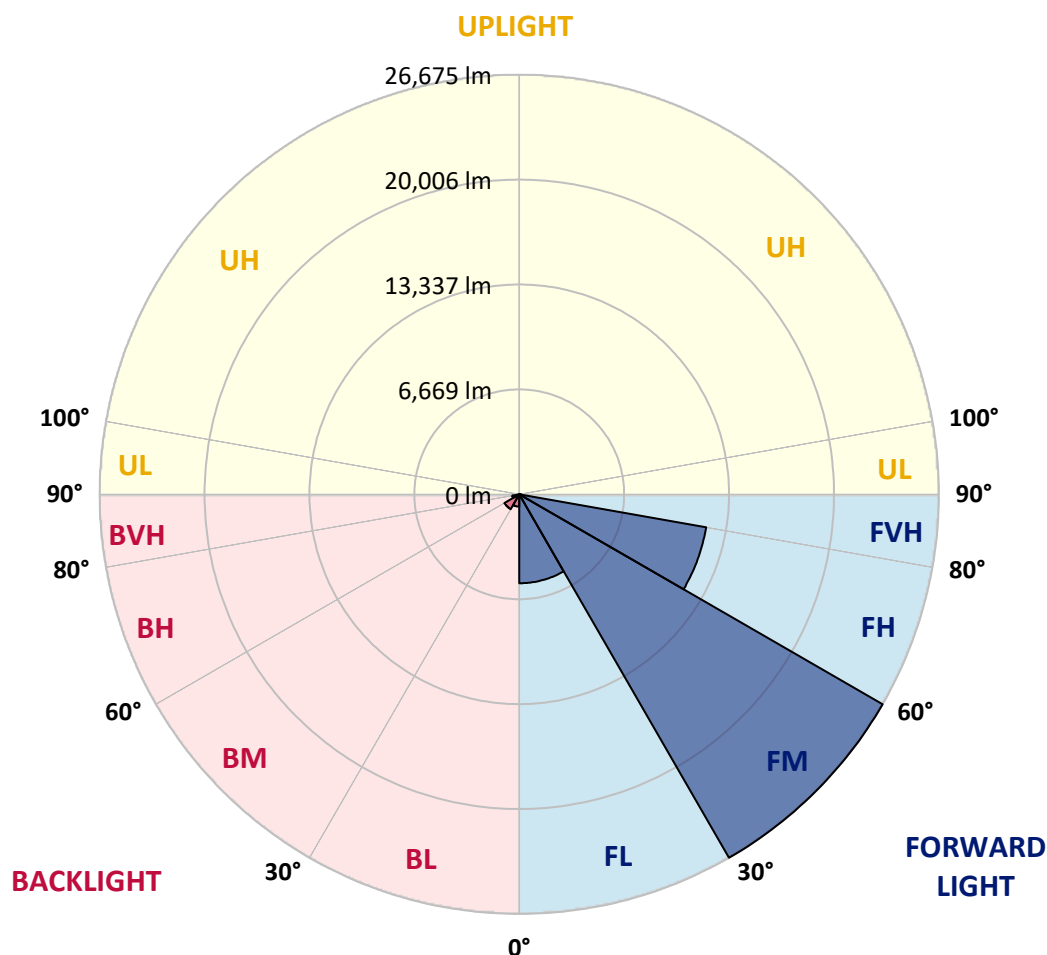
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	5651.5	12.1			
FM	(30°-60°)	26674.7	57.0			
FH	(60°-80°)	12068.1	25.8			G5
FVH	(80°-90°)	104.5	0.2			G2/225
BL	(0°-30°)	784.2	1.7	B2/1000		
BM	(30°-60°)	1088.2	2.3	B2/2500		
BH	(60°-80°)	449.4	1.0	B1/500		G1/500
BVH	(80°-90°)	3.4	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-G5

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	3972.0	3972.0	3972.0	3972.0	3972.0	3972.0	3972.0	3972.0	3972.0	3972.0	3972.0
2.5°	5929.3	5796.0	5826.7	5740.6	5584.6	5264.6	4991.7	4733.2	4431.6	4421.3	4173.1
5°	7995.4	7882.5	7868.2	7693.8	7410.6	6866.9	6337.6	5734.4	5061.5	5012.2	4484.9
7.5°	9870.6	9780.3	9747.5	9540.3	9013.0	8483.7	7794.3	6908.0	5855.5	5765.2	4905.5
10°	11310.9	11267.8	11276.0	11128.3	10676.9	10184.5	9279.7	8149.2	6756.1	6616.6	5410.3
12.5°	12402.3	12412.6	12486.5	12396.2	12143.8	11778.6	10812.3	9472.6	7753.3	7562.5	5986.8
15°	13204.5	13255.8	13391.2	13504.1	13485.6	13169.7	12283.3	10816.4	8811.9	8600.6	6628.9
17.5°	13723.6	13781.1	13978.0	14228.3	14458.1	14384.3	13703.1	12113.1	9882.9	9638.7	7316.3
20°	14179.1	14246.8	14458.1	14788.4	15217.2	15309.6	14862.3	13370.7	10951.8	10654.3	8026.1
22.5°	15165.9	15163.9	15293.1	15486.0	15894.3	16132.3	15849.1	14538.1	12008.4	11698.6	8750.4
25°	16950.9	16883.2	16838.0	16686.2	16776.5	16924.2	16766.2	15629.6	13071.2	12757.3	9484.9
27.5°	19072.3	19113.3	18748.2	18339.9	18023.9	17872.1	17613.6	16641.1	14092.9	13748.2	10203.0
30°	21310.7	21323.0	20892.1	20371.0	19675.5	19099.0	18651.7	17607.4	15143.4	14767.9	10900.5
32.5°	23329.5	23249.5	22822.8	22112.9	21234.8	20586.4	19657.0	18686.6	16255.4	15892.2	11676.0
35°	24929.8	24835.5	24316.4	23670.1	22759.2	22106.7	20988.6	19763.7	17424.8	17069.9	12453.6
37.5°	26099.3	25988.5	25455.1	24790.3	24004.5	23625.0	22533.5	20935.2	18701.0	18319.4	13272.2
40°	26505.5	26409.1	26074.7	25588.4	24956.5	24870.3	24172.8	22283.2	20089.9	19683.7	14199.6
42.5°	26263.4	26169.0	26050.0	25885.9	25623.3	25705.4	25719.7	23819.9	21632.8	21232.7	15223.4
45°	25303.2	25219.1	25342.2	25582.3	25908.5	26314.7	27131.3	25471.5	23356.2	22929.5	16407.2
47.5°	23889.6	23828.1	24168.7	24767.7	25721.8	26842.0	28421.8	27207.2	25290.9	24895.0	17884.4
50°	21879.0	21868.7	22549.9	23643.4	25110.4	27096.4	29755.4	29180.9	27978.6	27562.1	19938.1
52.5°	18748.2	18768.7	20108.4	21858.5	24037.4	26924.1	30613.0	31716.8	31105.4	30672.5	21716.9
55°	15767.1	15890.2	16840.1	19363.7	22391.9	26283.9	30908.4	32900.6	32830.8	32420.5	22705.8
57.5°	12847.6	13071.2	13986.2	16343.6	19989.4	24808.8	30746.3	33413.5	34115.2	33801.2	24010.7
60°	9683.9	9786.5	10841.0	13044.5	16905.8	22117.0	29570.7	33692.5	35871.4	35653.9	25904.4
62.5°	6161.2	6417.6	7353.2	9478.7	13163.5	18378.9	27588.8	33688.4	38068.7	38187.7	28347.9
65°	3245.7	3545.3	4041.8	5873.9	9045.8	14203.7	24607.7	33372.4	40764.6	40930.8	30258.0
67.5°	1750.1	1836.2	2098.9	3048.8	5246.1	9622.3	20227.4	31813.2	42325.9	42545.5	30524.7
70°	1280.2	1327.4	1425.9	1686.5	2640.5	5588.7	14759.7	28278.2	40313.2	40231.2	27121.0
72.5°	982.7	1056.6	1130.5	1235.1	1518.2	2983.1	9189.4	22143.7	32166.1	31624.4	20272.5
75°	775.5	787.8	892.5	986.9	1138.7	1698.8	4080.8	12896.8	19632.4	18350.1	10512.8
77.5°	619.6	627.8	689.4	771.4	915.0	1116.1	1263.8	5073.8	6267.8	5592.8	2281.5
80°	367.2	387.8	512.9	595.0	759.1	703.7	461.6	1101.7	978.6	886.3	383.7
82.5°	205.2	221.6	289.3	469.8	529.3	336.5	229.8	297.5	229.8	223.6	108.7
85°	0.0	10.3	186.7	291.3	215.4	73.9	96.4	98.5	67.7	63.6	43.1
87.5°	0.0	0.0	57.4	55.4	8.2	12.3	22.6	32.8	26.7	26.7	22.6
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°	3972.0	3972.0	3972.0	3972.0	3972.0	3972.0	3972.0	3972.0	3972.0	3972.0	3972.0
2.5°	4050.0	3939.2	3729.9	3524.8	3352.4	3210.9	3083.7	3032.4	2991.3	2985.2	2952.4
5°	4230.5	4006.9	3606.8	3278.6	3059.0	2903.1	2769.8	2687.7	2624.1	2599.5	2576.9
7.5°	4503.4	4164.9	3590.4	3212.9	2950.3	2687.7	2441.5	2174.8	2008.6	1945.0	1908.1
10°	4835.8	4374.2	3652.0	3194.4	2734.9	2180.9	1772.6	1434.1	1296.7	1251.5	1239.2
12.5°	5223.5	4634.7	3758.7	3079.6	2275.3	1549.0	1222.8	1107.9	1077.1	1062.8	1062.8
15°	5668.8	4919.9	3834.6	2747.2	1682.4	1171.5	1058.7	1005.3	972.5	954.0	956.1
17.5°	6124.2	5198.9	3797.6	2265.0	1241.3	1042.2	958.1	900.7	855.5	837.1	833.0
20°	6583.8	5457.4	3592.5	1686.5	1050.5	945.8	851.4	787.8	742.7	724.2	720.1
22.5°	7059.8	5677.0	3231.4	1237.2	943.8	839.1	746.8	683.2	640.1	623.7	615.5
25°	7523.5	5855.5	2726.7	1001.2	843.2	738.6	650.4	590.9	551.9	535.5	533.4
27.5°	7956.4	5968.3	2141.9	884.3	755.0	648.3	568.3	515.0	482.1	469.8	467.8
30°	8346.2	5978.6	1583.9	798.1	677.1	570.4	496.5	449.3	420.6	408.3	404.2
32.5°	8740.1	5892.4	1153.0	720.1	605.2	502.7	430.9	393.9	373.4	363.1	363.1
35°	9111.5	5693.4	898.6	652.4	535.5	437.0	379.6	352.9	340.6	330.3	330.3
37.5°	9474.6	5408.2	763.2	592.9	469.8	381.6	334.4	318.0	307.8	297.5	297.5
40°	9843.9	5049.2	693.5	537.5	416.5	338.5	297.5	283.1	272.9	264.7	262.6
42.5°	10297.3	4634.7	648.3	486.2	369.3	299.5	262.6	246.2	238.0	229.8	225.7
45°	10822.6	4277.7	611.4	435.0	330.3	266.7	227.7	211.3	199.0	188.8	186.7
47.5°	11579.6	4019.2	562.2	379.6	293.4	231.8	197.0	178.5	160.0	149.8	147.7
50°	12546.0	3805.8	498.6	330.3	256.5	197.0	164.1	141.6	125.2	114.9	114.9
52.5°	13026.0	3526.8	441.1	287.2	215.4	166.2	133.4	106.7	98.5	88.2	88.2
55°	13218.9	3313.4	383.7	244.1	178.5	137.5	104.6	82.1	75.9	69.8	67.7
57.5°	13760.5	3251.9	334.4	207.2	147.7	108.7	80.0	61.6	57.4	49.2	49.2
60°	14632.5	3282.7	289.3	176.4	119.0	84.1	59.5	47.2	43.1	34.9	34.9
62.5°	15574.2	3243.7	244.1	151.8	92.3	61.6	41.0	34.9	34.9	20.5	18.5
65°	15754.8	2888.8	209.3	125.2	71.8	45.1	26.7	22.6	30.8	4.1	0.0
67.5°	14622.2	2240.4	180.5	96.4	53.3	34.9	20.5	10.3	26.7	0.0	0.0
70°	11692.5	1423.9	145.7	69.8	41.0	28.7	16.4	4.1	20.5	0.0	0.0
72.5°	8268.2	826.8	114.9	49.2	34.9	22.6	12.3	0.0	12.3	0.0	0.0
75°	4181.3	441.1	71.8	36.9	26.7	16.4	8.2	0.0	2.1	0.0	0.0
77.5°	904.8	205.2	45.1	26.7	18.5	10.3	4.1	0.0	0.0	0.0	0.0
80°	197.0	90.3	28.7	16.4	10.3	6.2	0.0	0.0	0.0	0.0	0.0
82.5°	71.8	47.2	14.4	8.2	4.1	0.0	0.0	0.0	0.0	0.0	0.0
85°	39.0	24.6	8.2	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	20.5	8.2	2.1	2.1	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)