

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: P842594

Luminaire Tested: **ARCH4-70-727-U-T2R-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842594
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-2)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-70-727-U-T2R-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 605mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8617 lumens
Efficiency: N/A
Efficacy: 116.8 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

Input Watts (W): 73.8
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



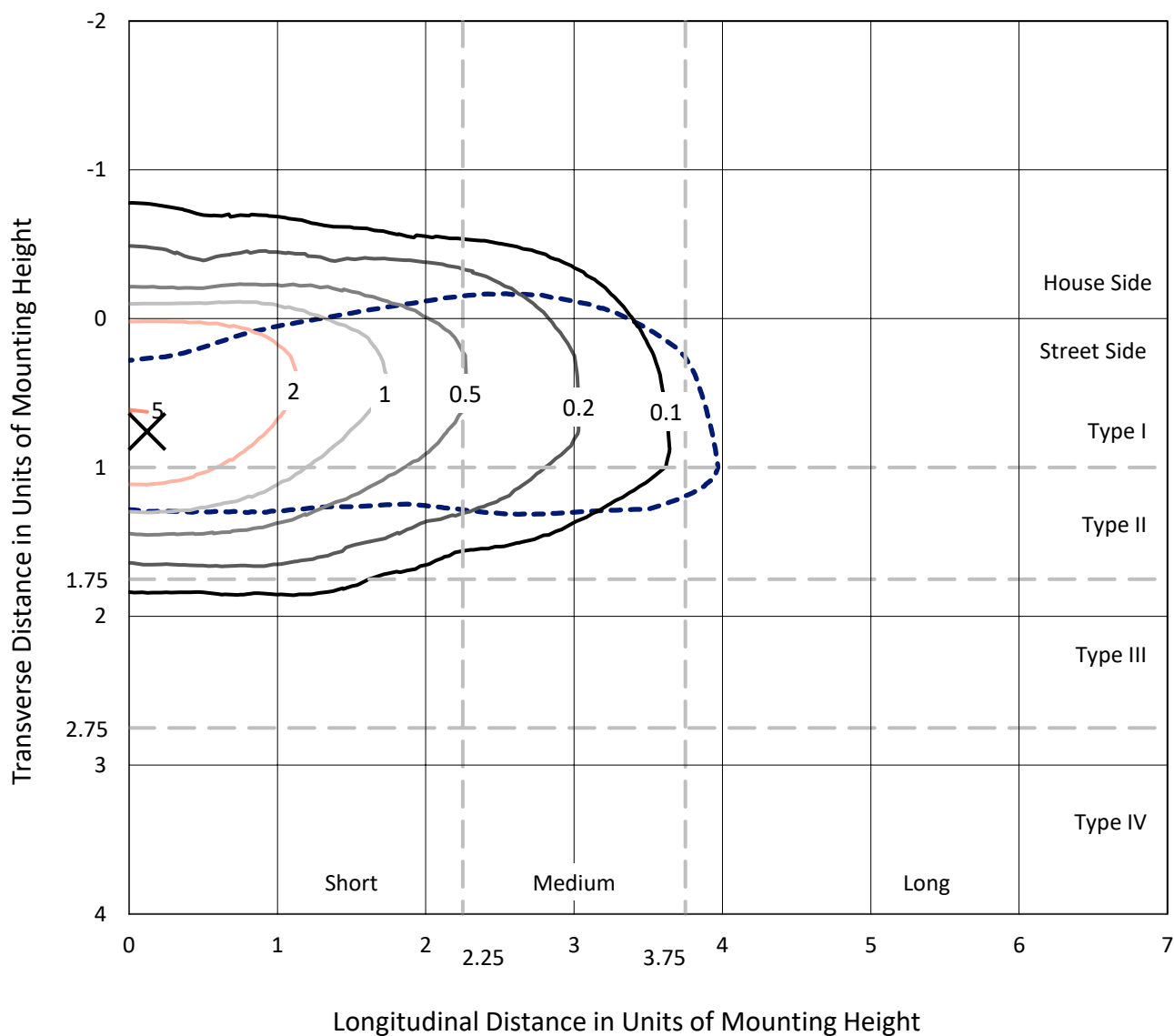
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

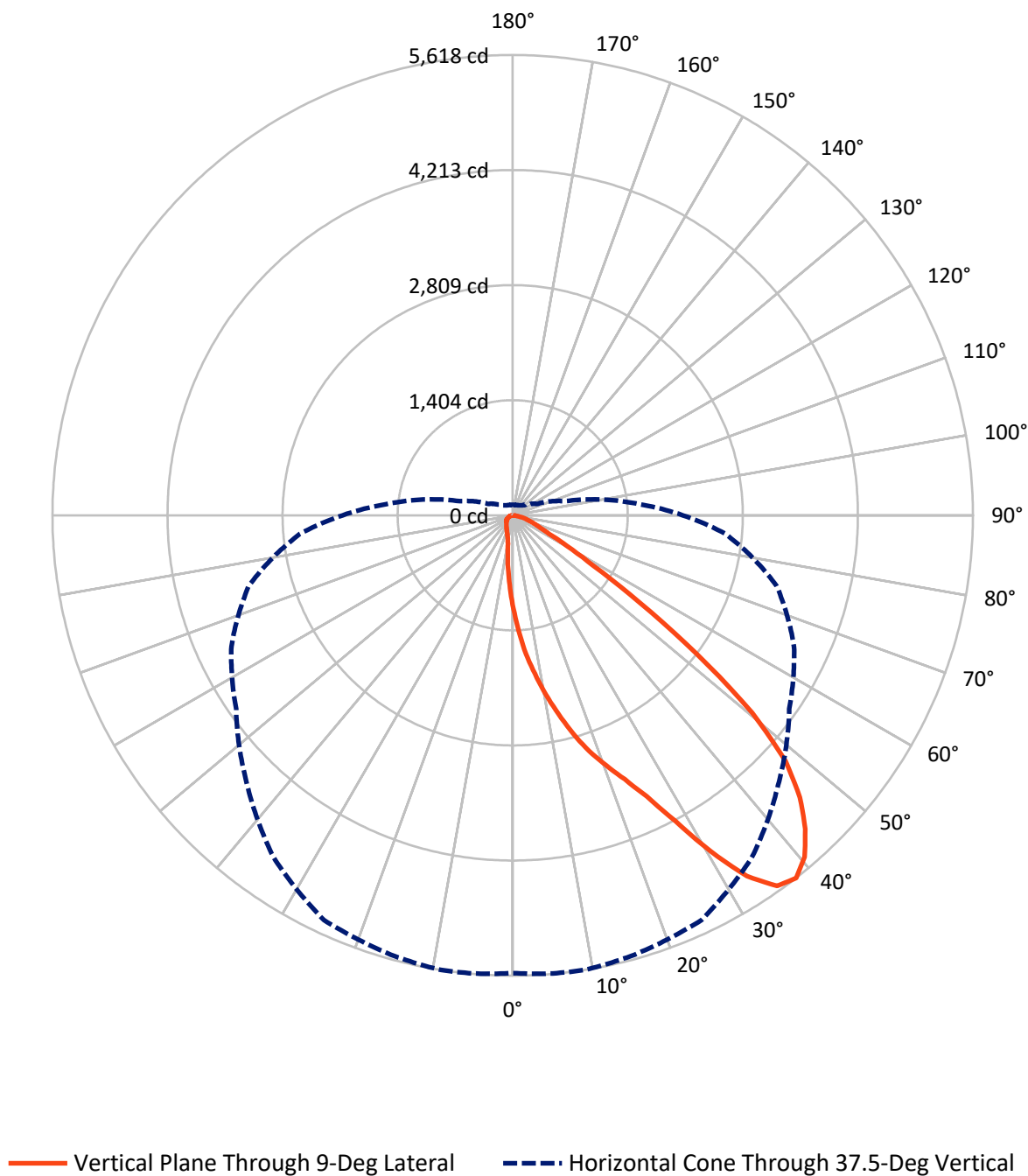


Based on 25 foot mounting height. Maximum calculated value = 5 fc

Type II - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1048.0	0.0	1048.0
	% Fixture	12.2	0.0	12.2
Street Side	Lumens	7569.0	0.0	7569.0
	% Fixture	87.8	0.0	87.8
Total	Lumens	8617.0	0.0	8617.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.5	1.3
10°-20°	397.9	4.6
20°-30°	817.7	9.5
30°-40°	1445.3	16.8
40°-50°	1920.0	22.3
50°-60°	1821.0	21.1
60°-70°	1389.2	16.1
70°-80°	673.5	7.8
80°-90°	37.9	0.4
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°	8617.0	100.0
0°-180°	8617.0	100.0

Coefficient of Utilization



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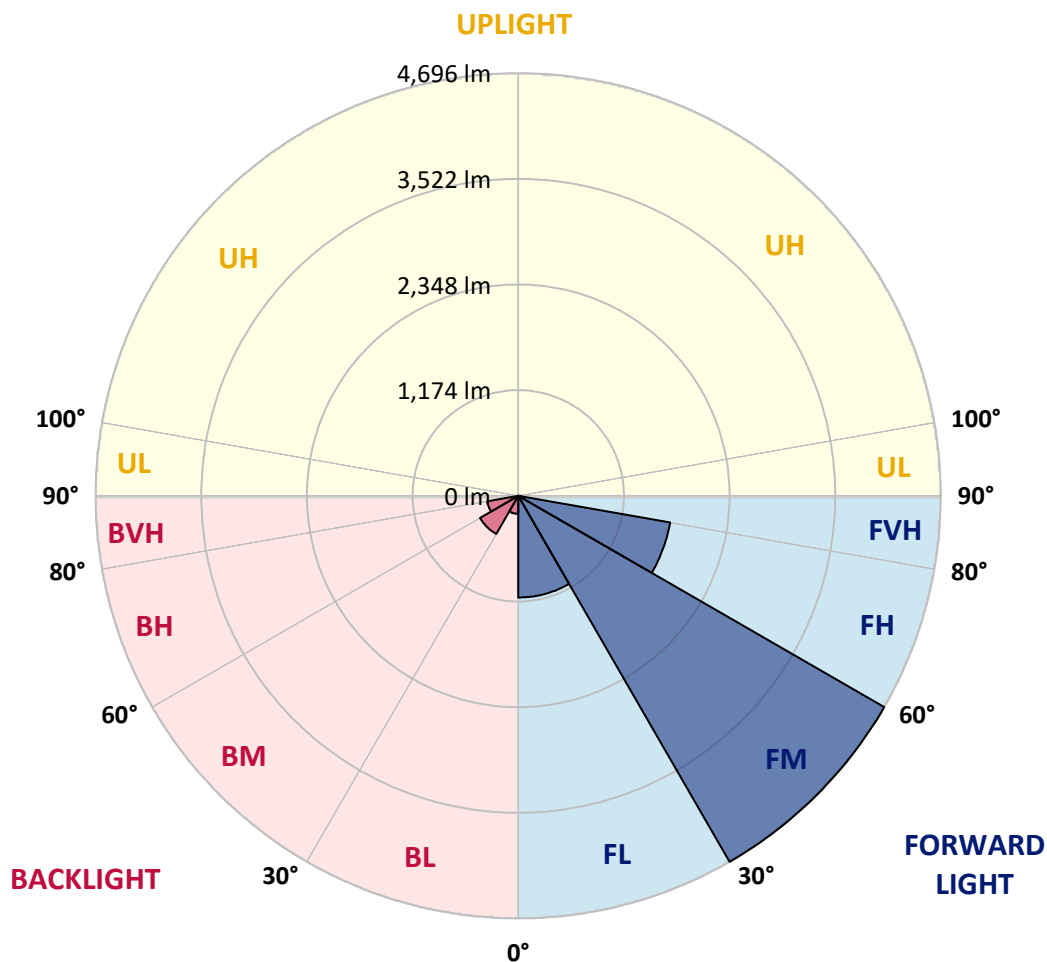
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1130.1	13.1			
FM	(30°-60°)	4695.8	54.5			
FH	(60°-80°)	1713.0	19.9			G1/1800
FVH	(80°-90°)	30.0	0.3			G1/100
BL	(0°-30°)	200.0	2.3	B1/500		
BM	(30°-60°)	490.4	5.7	B1/1000		
BH	(60°-80°)	349.7	4.1	B1/500		G1/500
BVH	(80°-90°)	7.9	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	9°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1139.1	1139.1	1139.1	1139.1	1139.1	1139.1	1139.1	1139.1	1139.1	1139.1	1139.1
2.5°	1411.4	1386.7	1415.0	1411.4	1386.7	1370.8	1321.2	1305.3	1247.0	1204.5	1167.4
5°	1701.5	1676.8	1701.5	1694.4	1659.1	1620.2	1538.8	1485.7	1381.4	1289.4	1206.3
7.5°	1942.1	1942.1	1952.7	1954.4	1912.0	1851.9	1751.0	1671.5	1524.6	1383.1	1250.5
10°	2202.1	2203.8	2226.8	2210.9	2154.3	2073.0	1945.6	1844.8	1667.9	1482.2	1292.9
12.5°	2479.8	2481.5	2488.6	2481.5	2414.3	2310.0	2156.1	2023.4	1820.0	1595.4	1351.3
15°	2757.5	2759.2	2768.1	2755.7	2681.4	2559.4	2384.3	2221.5	1981.0	1722.7	1422.1
17.5°	3017.5	3021.0	3028.1	3012.1	2934.3	2789.3	2610.6	2414.3	2152.5	1858.9	1501.7
20°	3250.9	3254.5	3259.8	3238.5	3160.7	3015.7	2822.9	2617.7	2327.7	1998.7	1588.3
22.5°	3486.2	3489.7	3498.6	3470.3	3383.6	3217.3	3028.1	2815.8	2513.4	2152.5	1689.1
25°	3786.9	3790.4	3797.5	3756.8	3638.3	3443.7	3243.9	3026.3	2715.0	2325.9	1812.9
27.5°	4227.3	4223.7	4223.7	4149.4	3946.0	3693.1	3461.4	3240.3	2932.6	2511.6	1949.1
30°	4772.0	4763.2	4757.9	4657.1	4367.0	3974.3	3684.3	3440.2	3141.3	2707.9	2095.9
32.5°	5260.2	5260.2	5249.6	5143.5	4835.7	4352.8	3921.3	3634.7	3342.9	2906.0	2248.1
35°	5548.5	5560.9	5555.6	5476.0	5251.4	4759.7	4241.4	3868.2	3555.2	3113.0	2430.2
37.5°	5587.4	5612.2	5617.5	5569.7	5451.2	5092.2	4596.9	4121.1	3788.6	3335.8	2607.1
40°	5430.0	5483.1	5483.1	5476.0	5433.5	5249.6	4895.8	4414.8	4029.2	3567.5	2785.8
42.5°	5187.7	5242.5	5235.4	5262.0	5251.4	5212.5	5063.9	4688.9	4269.7	3806.3	2948.5
45°	4871.1	4927.7	4913.5	4961.3	4982.5	5025.0	5046.2	4879.9	4506.7	4066.3	3130.7
47.5°	4363.5	4459.0	4480.2	4565.1	4653.5	4786.2	4887.0	4948.9	4727.8	4345.8	3328.8
50°	3613.5	3747.9	3790.4	3969.0	4211.3	4485.5	4648.2	4864.0	4883.5	4632.3	3542.8
52.5°	2587.7	2743.3	2808.7	3102.4	3601.1	4078.7	4372.3	4676.5	4943.6	4906.5	3774.5
55°	1673.2	1805.9	1869.5	2145.5	2808.7	3558.7	4046.9	4434.2	4910.0	5157.6	4039.8
57.5°	1031.2	1107.2	1149.7	1386.7	1996.9	2891.9	3620.6	4211.3	4807.4	5375.2	4315.7
60°	695.1	739.3	760.6	872.0	1356.6	2161.4	3035.1	3977.9	4673.0	5522.0	4566.9
62.5°	461.6	475.8	497.0	566.0	895.0	1517.6	2331.2	3560.5	4572.2	5530.8	4752.6
65°	357.3	364.4	373.2	403.3	551.8	1061.2	1639.6	2884.8	4421.8	5343.3	4810.9
67.5°	281.2	288.3	298.9	314.8	399.7	719.9	1116.1	2113.6	4114.1	5049.7	4715.4
70°	221.1	226.4	233.5	247.6	311.3	521.8	737.6	1404.4	3493.2	4770.3	4414.8
72.5°	175.1	180.4	187.5	201.6	252.9	382.0	505.9	875.5	2693.8	4428.9	3836.4
75°	138.0	141.5	146.8	161.0	203.4	297.1	343.1	523.5	1830.6	3804.5	2989.2
77.5°	69.0	84.9	97.3	111.4	148.6	205.2	228.2	290.1	772.9	1952.7	1425.6
80°	40.7	49.5	53.1	61.9	97.3	123.8	123.8	116.7	244.1	749.9	581.9
82.5°	23.0	31.8	33.6	35.4	58.4	70.7	56.6	42.4	49.5	251.2	169.8
85°	7.1	10.6	12.4	14.1	19.5	21.2	19.5	17.7	14.1	24.8	15.9
87.5°	0.0	0.0	0.0	0.0	1.8	3.5	3.5	3.5	5.3	5.3	5.3
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°	1139.1	1139.1	1139.1	1139.1	1139.1	1139.1	1139.1	1139.1	1139.1	1139.1	1139.1
2.5°	1146.1	1123.1	1078.9	1038.2	999.3	971.0	944.5	919.7	902.1	887.9	886.1
5°	1162.1	1116.1	1031.2	951.6	879.1	818.9	767.6	726.9	696.9	675.7	673.9
7.5°	1183.3	1112.5	983.4	864.9	757.0	670.3	596.1	541.2	502.3	486.4	474.0
10°	1201.0	1109.0	935.7	778.2	636.7	527.1	438.6	383.8	355.5	344.9	339.6
12.5°	1231.0	1112.5	895.0	698.6	532.4	403.3	336.1	306.0	293.6	284.8	283.0
15°	1275.3	1128.5	856.1	620.8	426.3	325.4	286.5	267.1	254.7	252.9	251.2
17.5°	1319.5	1142.6	820.7	541.2	353.7	283.0	256.5	240.5	231.7	229.9	229.9
20°	1370.8	1160.3	781.8	465.2	302.5	254.7	233.5	221.1	210.5	208.7	208.7
22.5°	1430.9	1185.1	744.6	398.0	268.8	233.5	215.8	201.6	192.8	191.0	191.0
25°	1512.3	1222.2	714.6	348.4	245.9	215.8	199.9	187.5	180.4	176.9	176.9
27.5°	1602.5	1273.5	693.3	318.4	229.9	201.6	185.7	175.1	168.0	164.5	164.5
30°	1703.3	1330.1	679.2	306.0	221.1	189.3	175.1	164.5	155.6	153.9	153.9
32.5°	1814.7	1395.5	670.3	307.8	219.3	180.4	164.5	153.9	146.8	143.3	143.3
35°	1938.5	1468.0	665.0	318.4	222.9	173.3	155.6	145.0	138.0	134.4	134.4
37.5°	2076.5	1552.9	665.0	329.0	231.7	171.6	146.8	136.2	130.9	127.3	127.3
40°	2205.6	1643.2	672.1	341.4	240.5	171.6	139.7	130.9	123.8	120.3	120.3
42.5°	2306.4	1694.4	677.4	353.7	245.9	169.8	132.7	123.8	118.5	115.0	115.0
45°	2421.4	1749.3	666.8	359.1	245.9	166.3	127.3	118.5	113.2	109.7	109.7
47.5°	2548.7	1816.5	665.0	362.6	240.5	159.2	122.0	113.2	109.7	106.1	106.1
50°	2677.9	1890.8	668.6	360.8	233.5	148.6	115.0	109.7	104.4	100.8	100.8
52.5°	2824.7	1968.6	675.7	357.3	217.6	136.2	109.7	104.4	99.0	95.5	93.7
55°	2987.4	2053.5	689.8	350.2	196.3	123.8	104.4	99.0	92.0	88.4	86.7
57.5°	3174.9	2157.9	705.7	336.1	173.3	113.2	99.0	92.0	81.4	76.1	74.3
60°	3353.5	2276.4	723.4	302.5	150.3	102.6	93.7	83.1	72.5	69.0	67.2
62.5°	3521.5	2393.1	732.3	242.3	127.3	93.7	88.4	76.1	65.4	61.9	60.1
65°	3629.4	2520.4	712.8	164.5	104.4	86.7	81.4	70.7	60.1	54.8	54.8
67.5°	3636.5	2580.6	645.6	107.9	84.9	77.8	74.3	63.7	53.1	49.5	47.8
70°	3457.9	2490.4	493.5	84.9	70.7	67.2	67.2	56.6	46.0	42.4	40.7
72.5°	3047.5	2205.6	314.8	69.0	60.1	56.6	56.6	47.8	40.7	35.4	33.6
75°	2405.5	1701.5	168.0	56.6	49.5	47.8	44.2	38.9	33.6	30.1	28.3
77.5°	1105.5	749.9	77.8	40.7	37.1	37.1	33.6	28.3	26.5	23.0	23.0
80°	436.9	254.7	38.9	26.5	24.8	24.8	24.8	19.5	19.5	15.9	14.1
82.5°	120.3	53.1	19.5	15.9	15.9	15.9	14.1	12.4	12.4	10.6	10.6
85°	12.4	8.8	8.8	8.8	8.8	7.1	7.1	5.3	3.5	3.5	3.5
87.5°	5.3	5.3	5.3	5.3	5.3	3.5	1.8	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)