

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: P836747

Luminaire Tested: **ARCH3-70-727-U-T2R-HSS**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836747
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-2)
Test Lab: INNOVATION CENTER
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH3-70-727-U-T2R-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 580mA LIGHTSQUARE WITH 40 LEDS AND TYPE II ROADWAY
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8046 lumens
Efficiency: N/A
Efficacy: 110.1 lumens/watt
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

Input Watts (W): 73.1
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

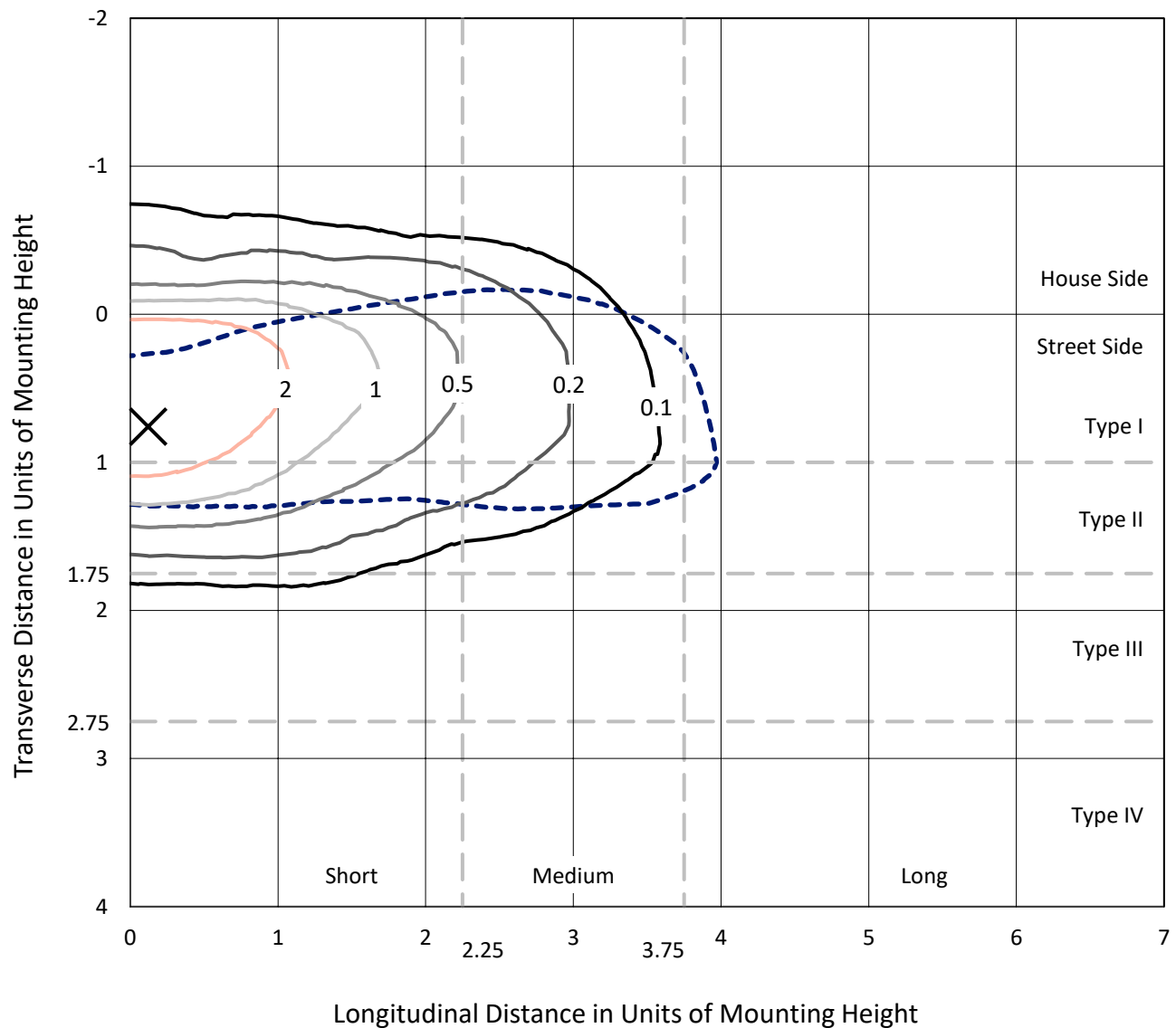


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Iso-Footcandle Lines of Horizontal Illumination

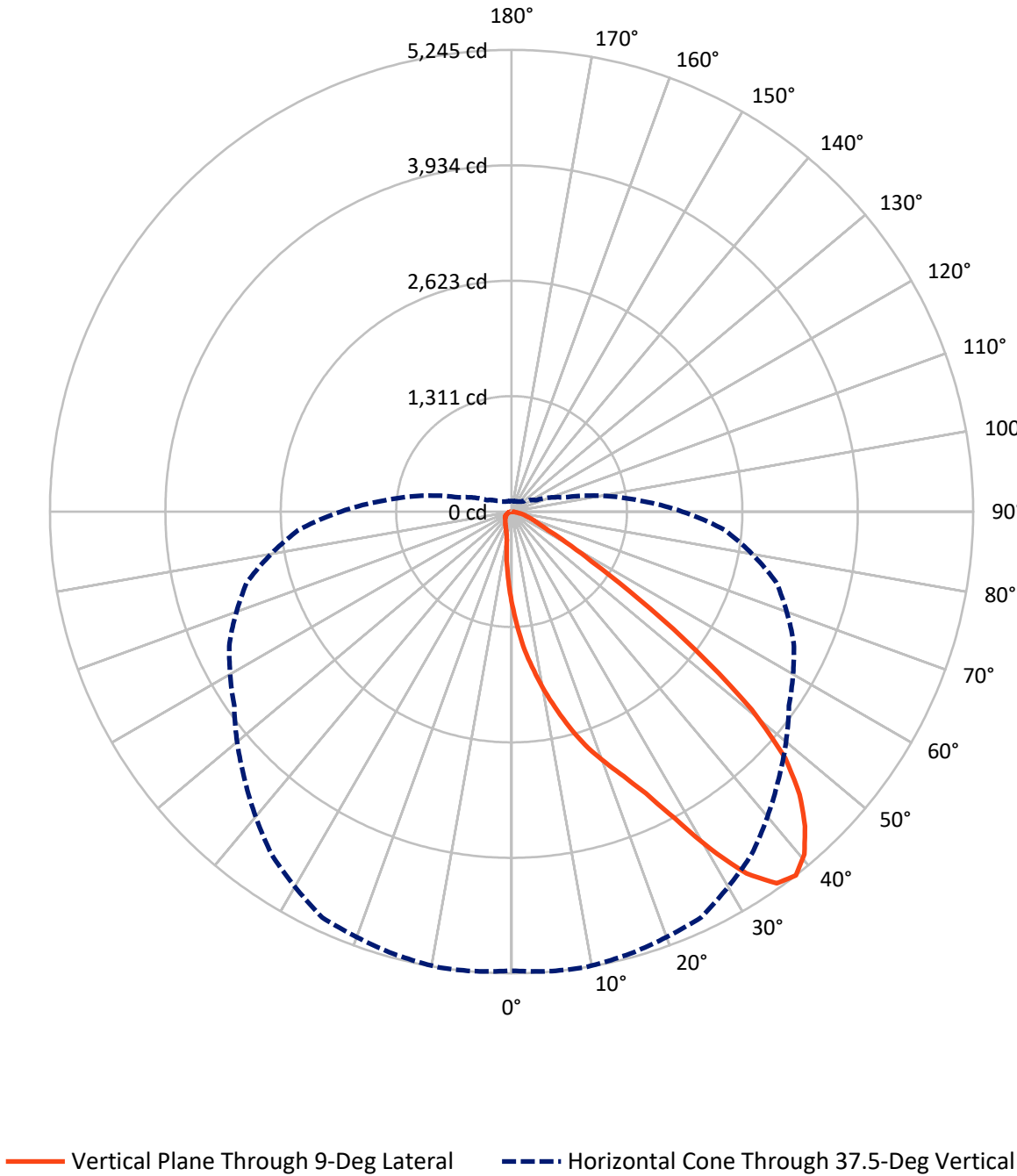
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.7 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	978.6	0.0	978.6
	% Fixture	12.2	0.0	12.2
Street Side	Lumens	7067.5	0.0	7067.5
	% Fixture	87.8	0.0	87.8
Total	Lumens	8046.0	0.0	8046.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.9	1.3
10°-20°	371.6	4.6
20°-30°	763.5	9.5
30°-40°	1349.5	16.8
40°-50°	1792.7	22.3
50°-60°	1700.3	21.1
60°-70°	1297.2	16.1
70°-80°	628.9	7.8
80°-90°	35.4	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°	8046.0	100.0
0°-180°	8046.0	100.0

Coefficient of Utilization



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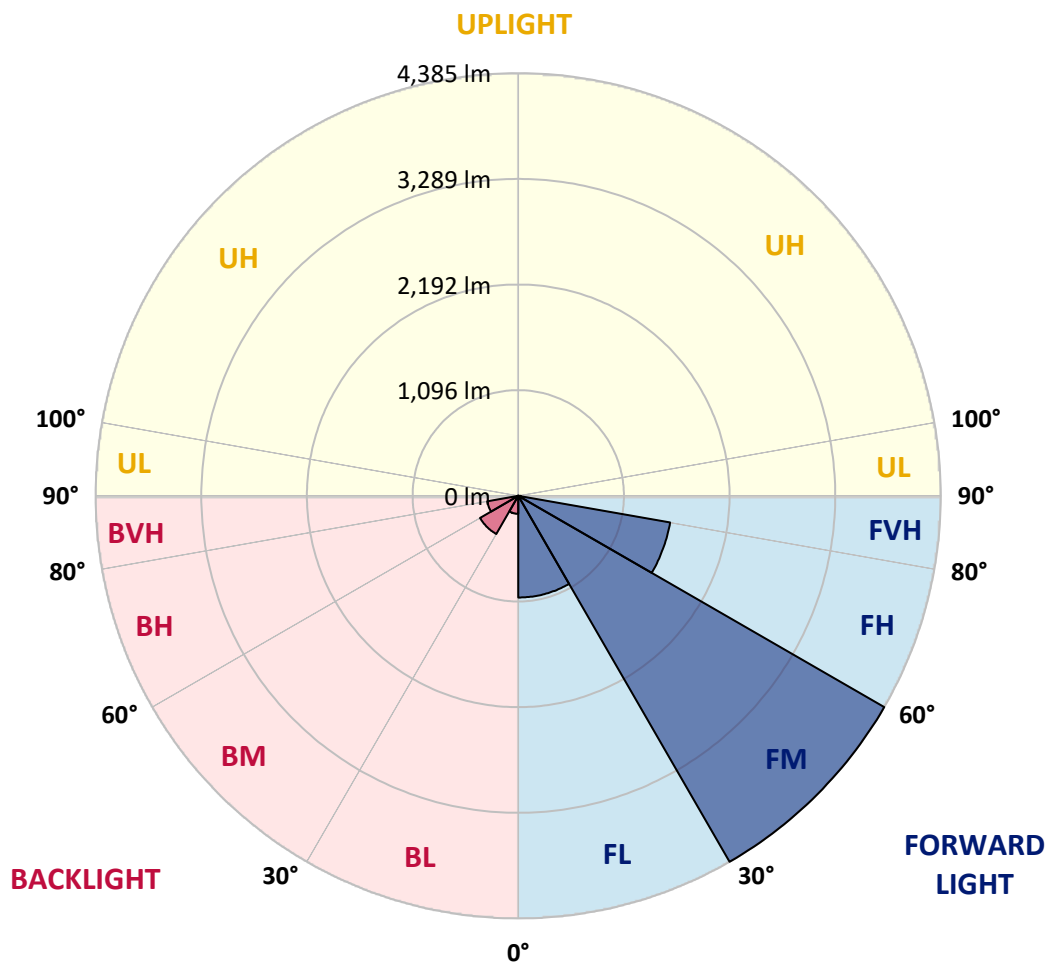
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1055.2	13.1			
FM	(30°-60°)	4384.7	54.5			
FH	(60°-80°)	1599.5	19.9			G1/1800
FVH	(80°-90°)	28.0	0.3			G1/100
BL	(0°-30°)	186.7	2.3	B1/500		
BM	(30°-60°)	457.9	5.7	B1/1000		
BH	(60°-80°)	326.5	4.1	B1/500		G1/500
BVH	(80°-90°)	7.4	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°	1063.6	1063.6	1063.6	1063.6	1063.6	1063.6	1063.6	1063.6	1063.6	1063.6	1063.6
2.5°	1317.9	1294.8	1321.2	1317.9	1294.8	1279.9	1233.7	1218.8	1164.3	1124.7	1090.0
5°	1588.8	1565.6	1588.8	1582.2	1549.1	1512.8	1436.8	1387.3	1289.8	1204.0	1126.3
7.5°	1813.4	1813.4	1823.3	1824.9	1785.3	1729.1	1635.0	1560.7	1423.6	1291.5	1167.6
10°	2056.2	2057.8	2079.3	2064.4	2011.6	1935.6	1816.7	1722.5	1557.4	1384.0	1207.3
12.5°	2315.4	2317.1	2323.7	2317.1	2254.3	2156.9	2013.2	1889.3	1699.4	1489.7	1261.8
15°	2574.7	2576.4	2584.6	2573.1	2503.7	2389.8	2226.3	2074.3	1849.7	1608.6	1327.8
17.5°	2817.5	2820.8	2827.4	2812.6	2739.9	2604.5	2437.7	2254.3	2009.9	1735.8	1402.1
20°	3035.5	3038.8	3043.8	3023.9	2951.3	2815.9	2635.8	2444.3	2173.4	1866.2	1483.1
22.5°	3255.2	3258.5	3266.7	3240.3	3159.4	3004.1	2827.4	2629.2	2346.8	2009.9	1577.2
25°	3535.9	3539.2	3545.8	3507.8	3397.2	3215.5	3028.9	2825.8	2535.1	2171.8	1692.8
27.5°	3947.2	3943.8	3943.8	3874.5	3684.6	3448.4	3232.0	3025.6	2738.2	2345.2	1820.0
30°	4455.8	4447.6	4442.6	4348.5	4077.6	3711.0	3440.1	3212.2	2933.1	2528.5	1957.1
32.5°	4911.6	4911.6	4901.7	4802.6	4515.3	4064.4	3661.4	3393.9	3121.4	2713.5	2099.1
35°	5180.8	5192.4	5187.4	5113.1	4903.4	4444.3	3960.4	3611.9	3319.6	2906.7	2269.2
37.5°	5217.2	5240.3	5245.3	5200.7	5090.0	4754.7	4292.3	3848.1	3537.6	3114.8	2434.4
40°	5070.2	5119.7	5119.7	5113.1	5073.5	4901.7	4571.4	4122.2	3762.2	3331.1	2601.2
42.5°	4843.9	4895.1	4888.5	4913.3	4903.4	4867.1	4728.3	4378.2	3986.8	3554.1	2753.1
45°	4548.3	4601.2	4587.9	4632.5	4652.4	4692.0	4711.8	4556.6	4208.1	3796.9	2923.2
47.5°	4074.3	4163.5	4183.3	4262.6	4345.2	4469.0	4563.2	4621.0	4414.5	4057.8	3108.2
50°	3374.1	3499.6	3539.2	3706.0	3932.3	4188.3	4340.2	4541.7	4559.9	4325.4	3308.0
52.5°	2416.2	2561.5	2622.6	2896.8	3362.5	3808.4	4082.6	4366.6	4616.0	4581.3	3524.4
55°	1562.3	1686.2	1745.7	2003.3	2622.6	3322.9	3778.7	4140.4	4584.6	4815.9	3772.1
57.5°	962.8	1033.9	1073.5	1294.8	1864.6	2700.2	3380.7	3932.3	4488.9	5019.0	4029.7
60°	649.1	690.3	710.2	814.2	1266.7	2018.2	2834.0	3714.3	4363.3	5156.1	4264.2
62.5°	431.0	444.3	464.1	528.5	835.7	1417.0	2176.7	3324.5	4269.2	5164.3	4437.7
65°	333.6	340.2	348.5	376.5	515.3	990.9	1531.0	2693.6	4128.8	4989.3	4492.2
67.5°	262.6	269.2	279.1	294.0	373.2	672.2	1042.1	1973.6	3841.5	4715.1	4403.0
70°	206.4	211.4	218.0	231.2	290.7	487.2	688.7	1311.3	3261.8	4454.2	4122.2
72.5°	163.5	168.5	175.1	188.3	236.2	356.7	472.3	817.5	2515.3	4135.4	3582.2
75°	128.8	132.1	137.1	150.3	189.9	277.5	320.4	488.9	1709.3	3552.4	2791.1
77.5°	64.4	79.3	90.8	104.0	138.7	191.6	213.0	270.9	721.7	1823.3	1331.1
80°	38.0	46.2	49.5	57.8	90.8	115.6	115.6	109.0	227.9	700.2	543.4
82.5°	21.5	29.7	31.4	33.0	54.5	66.1	52.8	39.6	46.2	234.5	158.5
85°	6.6	9.9	11.6	13.2	18.2	19.8	18.2	16.5	13.2	23.1	14.9
87.5°	0.0	0.0	0.0	0.0	1.7	3.3	3.3	3.3	5.0	5.0	5.0
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°	1063.6	1063.6	1063.6	1063.6	1063.6	1063.6	1063.6	1063.6	1063.6	1063.6	1063.6
2.5°	1070.2	1048.7	1007.4	969.4	933.1	906.7	881.9	858.8	842.3	829.1	827.4
5°	1085.1	1042.1	962.8	888.5	820.8	764.7	716.8	678.8	650.7	630.9	629.2
7.5°	1104.9	1038.8	918.2	807.6	706.9	625.9	556.6	505.4	469.0	454.2	442.6
10°	1121.4	1035.5	873.7	726.7	594.5	492.2	409.6	358.4	332.0	322.0	317.1
12.5°	1149.5	1038.8	835.7	652.4	497.1	376.5	313.8	285.7	274.2	265.9	264.2
15°	1190.8	1053.7	799.3	579.7	398.0	303.9	267.5	249.4	237.8	236.2	234.5
17.5°	1232.0	1066.9	766.3	505.4	330.3	264.2	239.5	224.6	216.4	214.7	214.7
20°	1279.9	1083.4	730.0	434.4	282.4	237.8	218.0	206.4	196.5	194.9	194.9
22.5°	1336.1	1106.5	695.3	371.6	251.0	218.0	201.5	188.3	180.0	178.4	178.4
25°	1412.1	1141.2	667.2	325.4	229.6	201.5	186.6	175.1	168.5	165.2	165.2
27.5°	1496.3	1189.1	647.4	297.3	214.7	188.3	173.4	163.5	156.9	153.6	153.6
30°	1590.4	1241.9	634.2	285.7	206.4	176.7	163.5	153.6	145.3	143.7	143.7
32.5°	1694.5	1303.1	625.9	287.4	204.8	168.5	153.6	143.7	137.1	133.8	133.8
35°	1810.1	1370.8	621.0	297.3	208.1	161.8	145.3	135.4	128.8	125.5	125.5
37.5°	1938.9	1450.0	621.0	307.2	216.4	160.2	137.1	127.2	122.2	118.9	118.9
40°	2059.5	1534.3	627.6	318.7	224.6	160.2	130.5	122.2	115.6	112.3	112.3
42.5°	2153.6	1582.2	632.5	330.3	229.6	158.5	123.9	115.6	110.7	107.3	107.3
45°	2260.9	1633.4	622.6	335.3	229.6	155.2	118.9	110.7	105.7	102.4	102.4
47.5°	2379.9	1696.1	621.0	338.6	224.6	148.6	114.0	105.7	102.4	99.1	99.1
50°	2500.4	1765.5	624.3	336.9	218.0	138.7	107.3	102.4	97.4	94.1	94.1
52.5°	2637.5	1838.2	630.9	333.6	203.1	127.2	102.4	97.4	92.5	89.2	87.5
55°	2789.4	1917.4	644.1	327.0	183.3	115.6	97.4	92.5	85.9	82.6	80.9
57.5°	2964.5	2014.9	659.0	313.8	161.8	105.7	92.5	85.9	76.0	71.0	69.4
60°	3131.3	2125.5	675.5	282.4	140.4	95.8	87.5	77.6	67.7	64.4	62.8
62.5°	3288.2	2234.5	683.7	226.3	118.9	87.5	82.6	71.0	61.1	57.8	56.2
65°	3388.9	2353.4	665.6	153.6	97.4	80.9	76.0	66.1	56.2	51.2	51.2
67.5°	3395.5	2409.6	602.8	100.7	79.3	72.7	69.4	59.5	49.5	46.2	44.6
70°	3228.7	2325.4	460.8	79.3	66.1	62.8	62.8	52.8	42.9	39.6	38.0
72.5°	2845.6	2059.5	294.0	64.4	56.2	52.8	52.8	44.6	38.0	33.0	31.4
75°	2246.1	1588.8	156.9	52.8	46.2	44.6	41.3	36.3	31.4	28.1	26.4
77.5°	1032.2	700.2	72.7	38.0	34.7	34.7	31.4	26.4	24.8	21.5	21.5
80°	407.9	237.8	36.3	24.8	23.1	23.1	23.1	18.2	18.2	14.9	13.2
82.5°	112.3	49.5	18.2	14.9	14.9	14.9	13.2	11.6	11.6	9.9	9.9
85°	11.6	8.3	8.3	8.3	8.3	6.6	6.6	5.0	3.3	3.3	3.3
87.5°	5.0	5.0	5.0	5.0	5.0	3.3	1.7	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)