

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: P842738

Luminaire Tested: **ARCH4-90-727-U-T2R-HSS**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P842738
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: ARCH4-90-727-U-T2R-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 765mA 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: 10747 lumens
Efficiency: N/A
Efficacy: 115.4 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 93.1
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

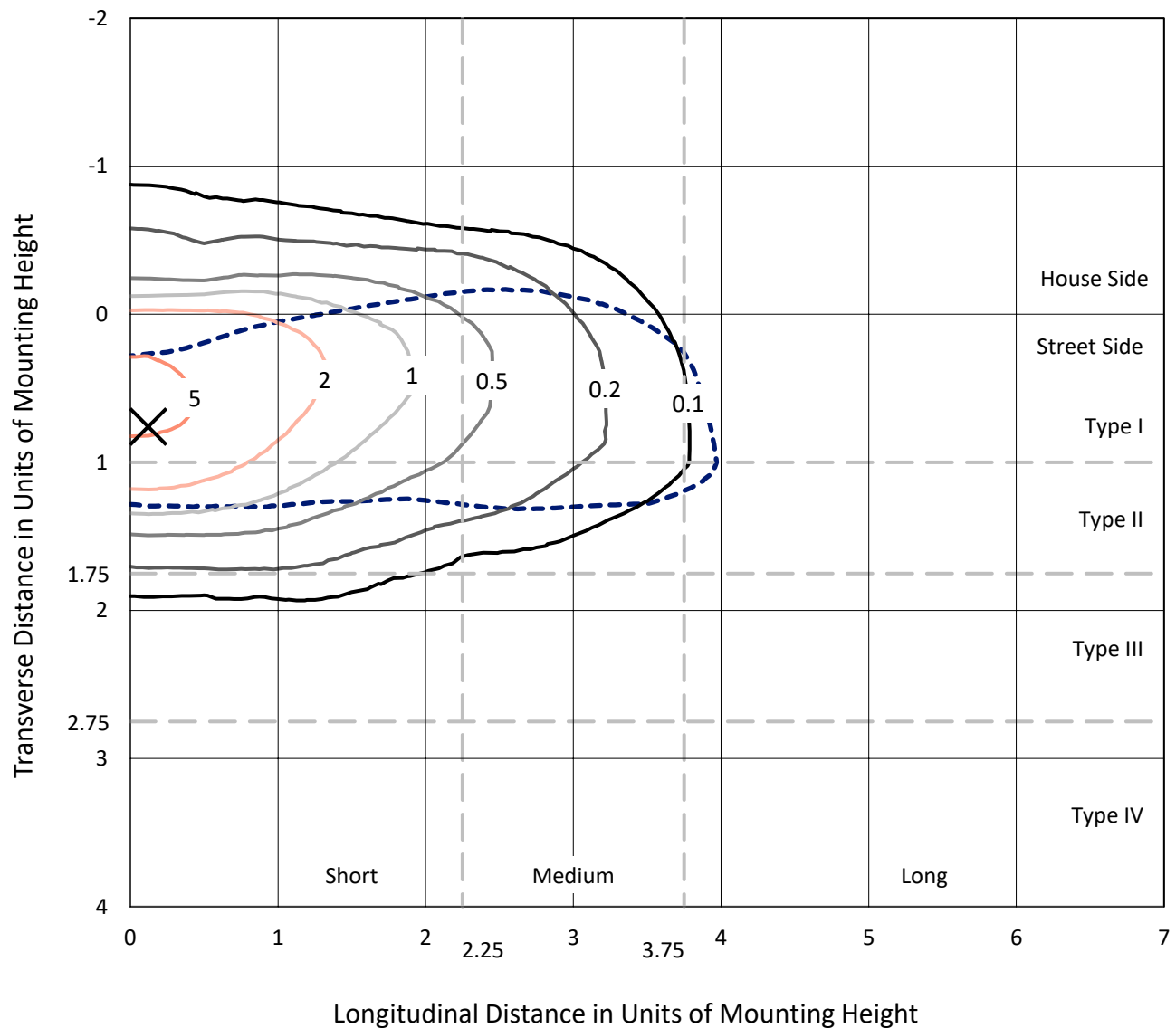


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Iso-Footcandle Lines of Horizontal Illumination

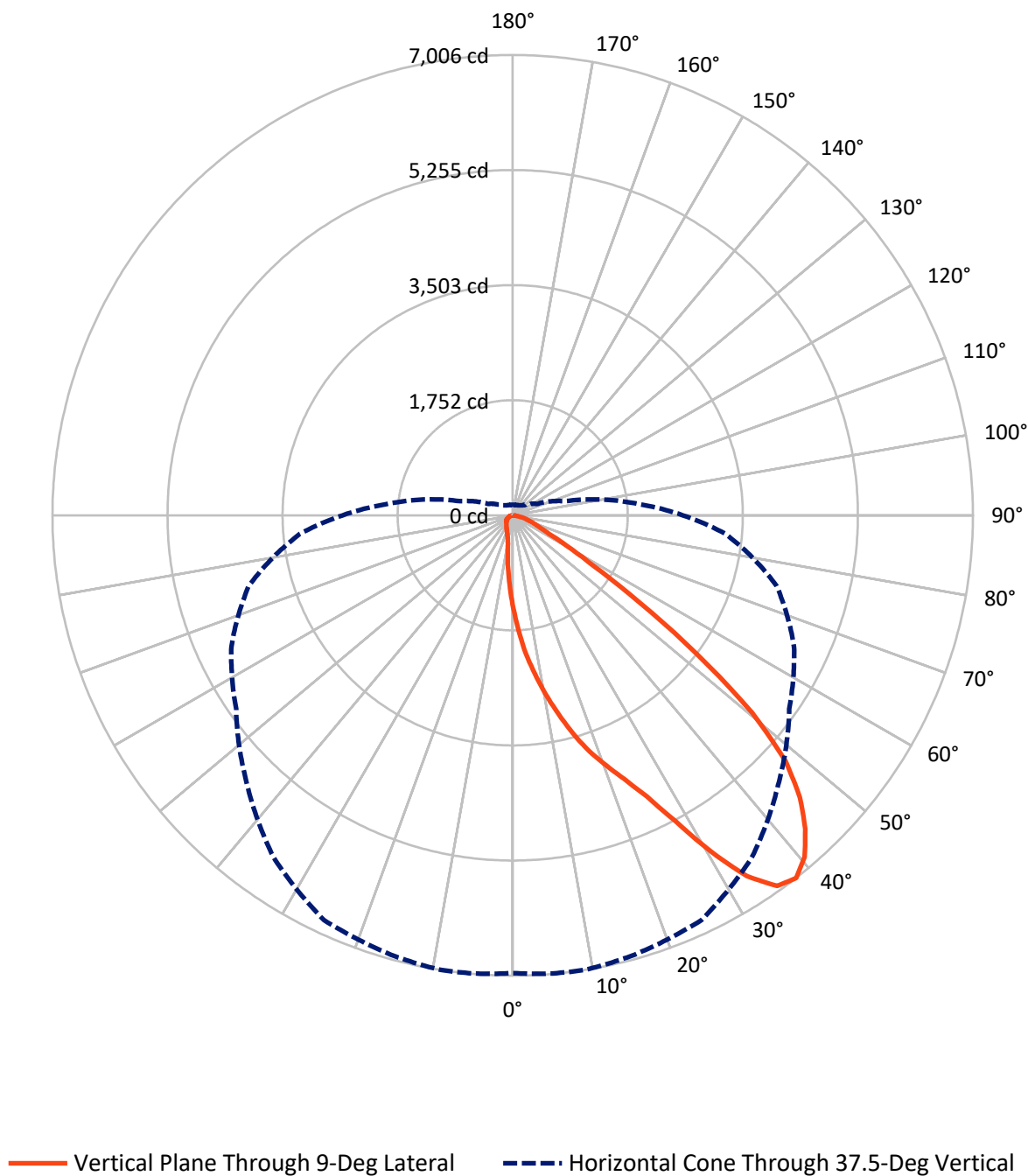
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.3 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	1307.0	0.0	1307.0
	% Fixture	12.2	0.0	12.2
Street Side	Lumens	9440.0	0.0	9440.0
	% Fixture	87.8	0.0	87.8
Total	Lumens	10747.0	0.0	10747.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.8	1.3
10°-20°	496.3	4.6
20°-30°	1019.8	9.5
30°-40°	1802.6	16.8
40°-50°	2394.6	22.3
50°-60°	2271.1	21.1
60°-70°	1732.6	16.1
70°-80°	840.0	7.8
80°-90°	47.3	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°	10747.0	100.0
0°-180°	10747.0	100.0

Coefficient of Utilization



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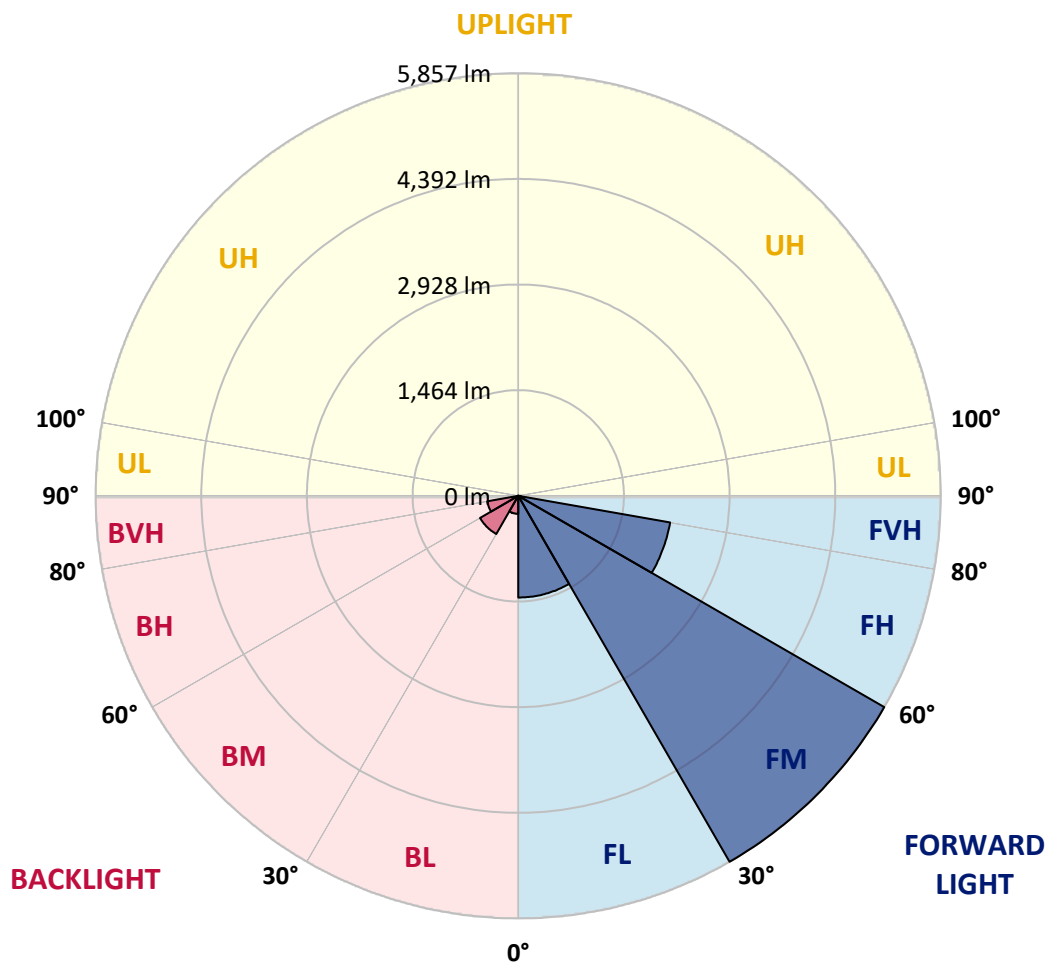
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1409.5	13.1			
FM	(30°-60°)	5856.6	54.5			
FH	(60°-80°)	2136.5	19.9			G2/5000
FVH	(80°-90°)	37.4	0.3			G1/100
BL	(0°-30°)	249.4	2.3	B1/500		
BM	(30°-60°)	611.6	5.7	B1/1000		
BH	(60°-80°)	436.2	4.1	B1/500		G1/500
BVH	(80°-90°)	9.8	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-G2

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	9°	15°	25°	35°	45°	55°	65°	75°	85°
0°	1420.6	1420.6	1420.6	1420.6	1420.6	1420.6	1420.6	1420.6	1420.6	1420.6	1420.6
2.5°	1760.3	1729.5	1764.7	1760.3	1729.5	1709.6	1647.8	1628.0	1555.2	1502.2	1455.9
5°	2122.1	2091.2	2122.1	2113.3	2069.2	2020.6	1919.2	1853.0	1722.8	1608.1	1504.4
7.5°	2422.1	2422.1	2435.4	2437.6	2384.6	2309.6	2183.9	2084.6	1901.5	1725.0	1559.6
10°	2746.4	2748.6	2777.3	2757.4	2686.8	2585.4	2426.5	2300.8	2080.2	1848.6	1612.5
12.5°	3092.7	3094.9	3103.8	3094.9	3011.1	2881.0	2689.0	2523.6	2269.9	1989.8	1685.3
15°	3439.1	3441.3	3452.3	3436.8	3344.2	3192.0	2973.6	2770.7	2470.6	2148.6	1773.6
17.5°	3763.3	3767.7	3776.6	3756.7	3659.6	3478.8	3256.0	3011.1	2684.6	2318.4	1872.8
20°	4054.5	4058.9	4065.5	4039.1	3942.0	3761.1	3520.7	3264.8	2903.0	2492.7	1980.9
22.5°	4347.9	4352.3	4363.3	4328.0	4220.0	4012.6	3776.6	3511.9	3134.6	2684.6	2106.7
25°	4722.9	4727.3	4736.1	4685.4	4537.6	4295.0	4045.7	3774.4	3386.1	2900.8	2261.1
27.5°	5272.2	5267.8	5267.8	5175.1	4921.4	4606.0	4317.0	4041.3	3657.4	3132.4	2430.9
30°	5951.6	5940.6	5934.0	5808.2	5446.5	4956.7	4595.0	4290.5	3917.7	3377.3	2614.0
32.5°	6560.5	6560.5	6547.2	6414.9	6031.0	5428.8	4890.6	4533.2	4169.2	3624.4	2803.7
35°	6920.0	6935.5	6928.8	6829.6	6549.4	5936.2	5289.8	4824.4	4433.9	3882.4	3031.0
37.5°	6968.6	6999.4	7006.1	6946.5	6798.7	6350.9	5733.2	5139.8	4725.1	4160.4	3251.6
40°	6772.2	6838.4	6838.4	6829.6	6776.6	6547.2	6106.0	5506.0	5025.1	4449.4	3474.4
42.5°	6470.0	6538.4	6529.6	6562.7	6549.4	6500.9	6315.6	5847.9	5325.1	4747.2	3677.3
45°	6075.2	6145.7	6128.1	6187.7	6214.1	6267.1	6293.5	6086.2	5620.7	5071.4	3904.5
47.5°	5442.0	5561.2	5587.6	5693.5	5803.8	5969.3	6095.0	6172.2	5896.5	5420.0	4151.6
50°	4506.7	4674.4	4727.3	4950.1	5252.3	5594.3	5797.2	6066.3	6090.6	5777.3	4418.5
52.5°	3227.3	3421.4	3503.0	3869.2	4491.3	5086.9	5453.1	5832.5	6165.6	6119.3	4707.5
55°	2086.8	2252.3	2331.7	2675.8	3503.0	4438.3	5047.2	5530.3	6123.7	6432.5	5038.4
57.5°	1286.1	1380.9	1433.9	1729.5	2490.5	3606.7	4515.6	5252.3	5995.7	6703.8	5382.5
60°	866.9	922.1	948.6	1087.5	1692.0	2695.7	3785.4	4961.2	5828.1	6886.9	5695.7
62.5°	575.7	593.4	619.9	705.9	1116.2	1892.7	2907.4	4440.6	5702.3	6898.0	5927.4
65°	445.6	454.4	465.5	503.0	688.3	1323.6	2044.9	3597.9	5514.8	6664.1	6000.1
67.5°	350.7	359.6	372.8	392.7	498.5	897.8	1391.9	2636.1	5131.0	6297.9	5881.0
70°	275.7	282.4	291.2	308.8	388.2	650.8	919.9	1751.5	4356.7	5949.4	5506.0
72.5°	218.4	225.0	233.8	251.5	315.4	476.5	630.9	1091.9	3359.6	5523.7	4784.7
75°	172.1	176.5	183.1	200.7	253.7	370.6	428.0	653.0	2283.1	4745.0	3728.0
77.5°	86.0	105.9	121.3	139.0	185.3	255.9	284.6	361.8	964.0	2435.4	1778.0
80°	50.7	61.8	66.2	77.2	121.3	154.4	154.4	145.6	304.4	935.3	725.8
82.5°	28.7	39.7	41.9	44.1	72.8	88.2	70.6	52.9	61.8	313.2	211.8
85°	8.8	13.2	15.4	17.6	24.3	26.5	24.3	22.1	17.6	30.9	19.9
87.5°	0.0	0.0	0.0	0.0	2.2	4.4	4.4	4.4	6.6	6.6	6.6
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°	1420.6	1420.6	1420.6	1420.6	1420.6	1420.6	1420.6	1420.6	1420.6	1420.6	1420.6
2.5°	1429.4	1400.8	1345.6	1294.9	1246.4	1211.1	1178.0	1147.1	1125.0	1107.4	1105.2
5°	1449.3	1391.9	1286.1	1186.8	1096.4	1021.3	957.4	906.6	869.1	842.7	840.5
7.5°	1475.8	1387.5	1226.5	1078.7	944.1	836.1	743.4	675.0	626.5	606.6	591.2
10°	1497.8	1383.1	1166.9	970.6	794.1	657.4	547.1	478.7	443.4	430.2	423.5
12.5°	1535.3	1387.5	1116.2	871.3	664.0	503.0	419.1	381.6	366.2	355.2	352.9
15°	1590.5	1407.4	1067.7	774.3	531.6	405.9	357.4	333.1	317.7	315.4	313.2
17.5°	1645.6	1425.0	1023.6	675.0	441.2	352.9	319.9	300.0	289.0	286.8	286.8
20°	1709.6	1447.1	975.0	580.2	377.2	317.7	291.2	275.7	262.5	260.3	260.3
22.5°	1784.6	1478.0	928.7	496.3	335.3	291.2	269.1	251.5	240.4	238.2	238.2
25°	1886.1	1524.3	891.2	434.6	306.6	269.1	249.3	233.8	225.0	220.6	220.6
27.5°	1998.6	1588.3	864.7	397.1	286.8	251.5	231.6	218.4	209.6	205.2	205.2
30°	2124.3	1658.9	847.1	381.6	275.7	236.0	218.4	205.2	194.1	191.9	191.9
32.5°	2263.3	1740.5	836.1	383.8	273.5	225.0	205.2	191.9	183.1	178.7	178.7
35°	2417.7	1830.9	829.4	397.1	277.9	216.2	194.1	180.9	172.1	167.7	167.7
37.5°	2589.8	1936.8	829.4	410.3	289.0	214.0	183.1	169.9	163.2	158.8	158.8
40°	2750.8	2049.3	838.3	425.7	300.0	214.0	174.3	163.2	154.4	150.0	150.0
42.5°	2876.5	2113.3	844.9	441.2	306.6	211.8	165.4	154.4	147.8	143.4	143.4
45°	3019.9	2181.7	831.6	447.8	306.6	207.4	158.8	147.8	141.2	136.8	136.8
47.5°	3178.8	2265.5	829.4	452.2	300.0	198.5	152.2	141.2	136.8	132.4	132.4
50°	3339.8	2358.1	833.8	450.0	291.2	185.3	143.4	136.8	130.2	125.7	125.7
52.5°	3522.9	2455.2	842.7	445.6	271.3	169.9	136.8	130.2	123.5	119.1	116.9
55°	3725.8	2561.1	860.3	436.8	244.9	154.4	130.2	123.5	114.7	110.3	108.1
57.5°	3959.7	2691.2	880.2	419.1	216.2	141.2	123.5	114.7	101.5	94.9	92.6
60°	4182.5	2839.0	902.2	377.2	187.5	127.9	116.9	103.7	90.4	86.0	83.8
62.5°	4392.0	2984.6	913.3	302.2	158.8	116.9	110.3	94.9	81.6	77.2	75.0
65°	4526.6	3143.5	889.0	205.2	130.2	108.1	101.5	88.2	75.0	68.4	68.4
67.5°	4535.4	3218.5	805.2	134.6	105.9	97.1	92.6	79.4	66.2	61.8	59.6
70°	4312.6	3106.0	615.5	105.9	88.2	83.8	83.8	70.6	57.4	52.9	50.7
72.5°	3800.8	2750.8	392.7	86.0	75.0	70.6	70.6	59.6	50.7	44.1	41.9
75°	3000.1	2122.1	209.6	70.6	61.8	59.6	55.1	48.5	41.9	37.5	35.3
77.5°	1378.7	935.3	97.1	50.7	46.3	46.3	41.9	35.3	33.1	28.7	28.7
80°	544.9	317.7	48.5	33.1	30.9	30.9	30.9	24.3	24.3	19.9	17.6
82.5°	150.0	66.2	24.3	19.9	19.9	19.9	17.6	15.4	15.4	13.2	13.2
85°	15.4	11.0	11.0	11.0	11.0	8.8	8.8	6.6	4.4	4.4	4.4
87.5°	6.6	6.6	6.6	6.6	6.6	4.4	2.2	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)