

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: P836639

Luminaire Tested: **ARCH3-50-750-U-T2R-HSS**

Issue Date: 5/16/2024

Test Information

Test Method: LM-79-08
Report Number: P836639
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: ARCH3-50-750-U-T2R-HSS
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 425mA 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: 6558 lumens
Efficiency: N/A
Efficacy: 122.4 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

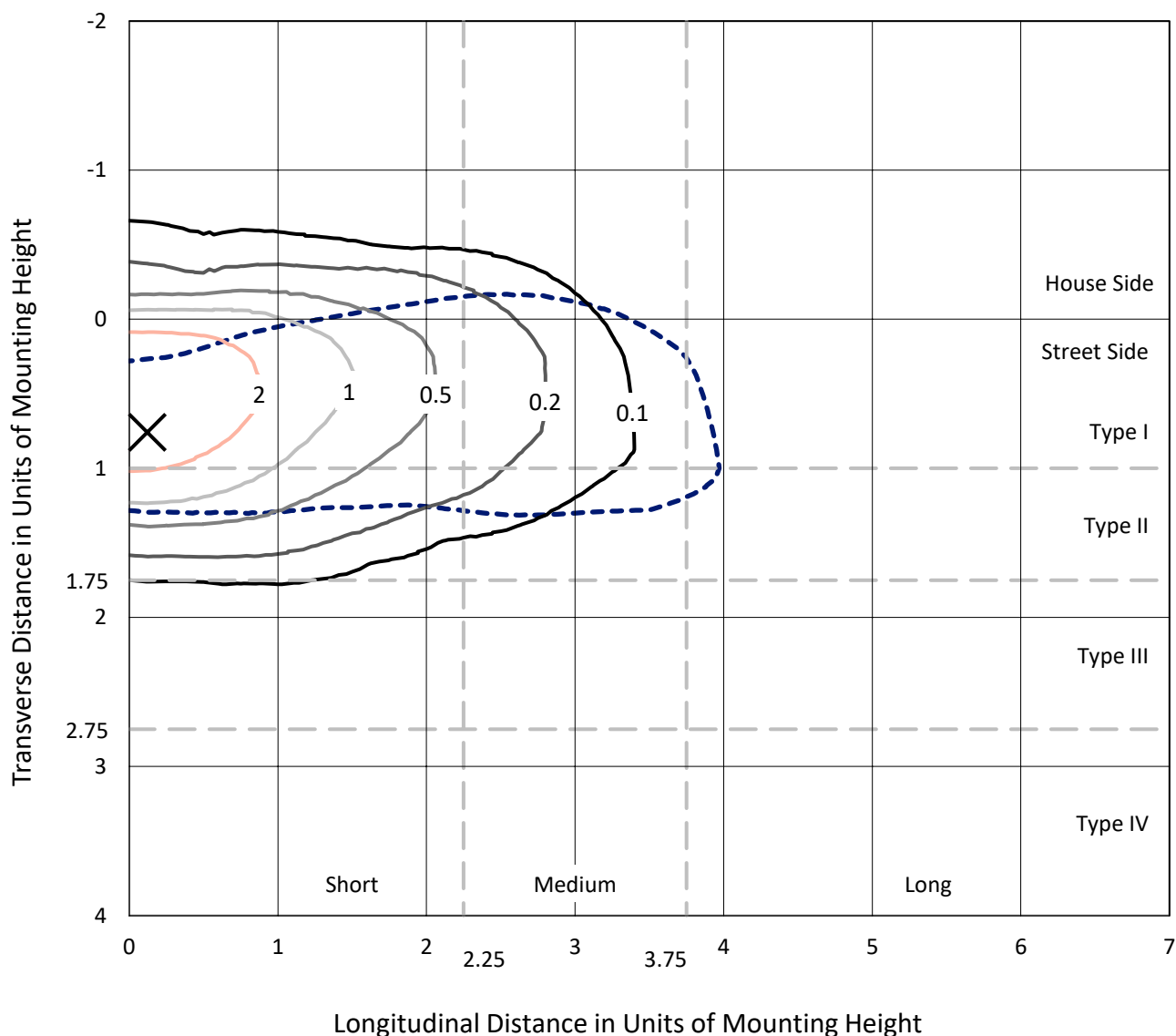
Input Watts (W): 53.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

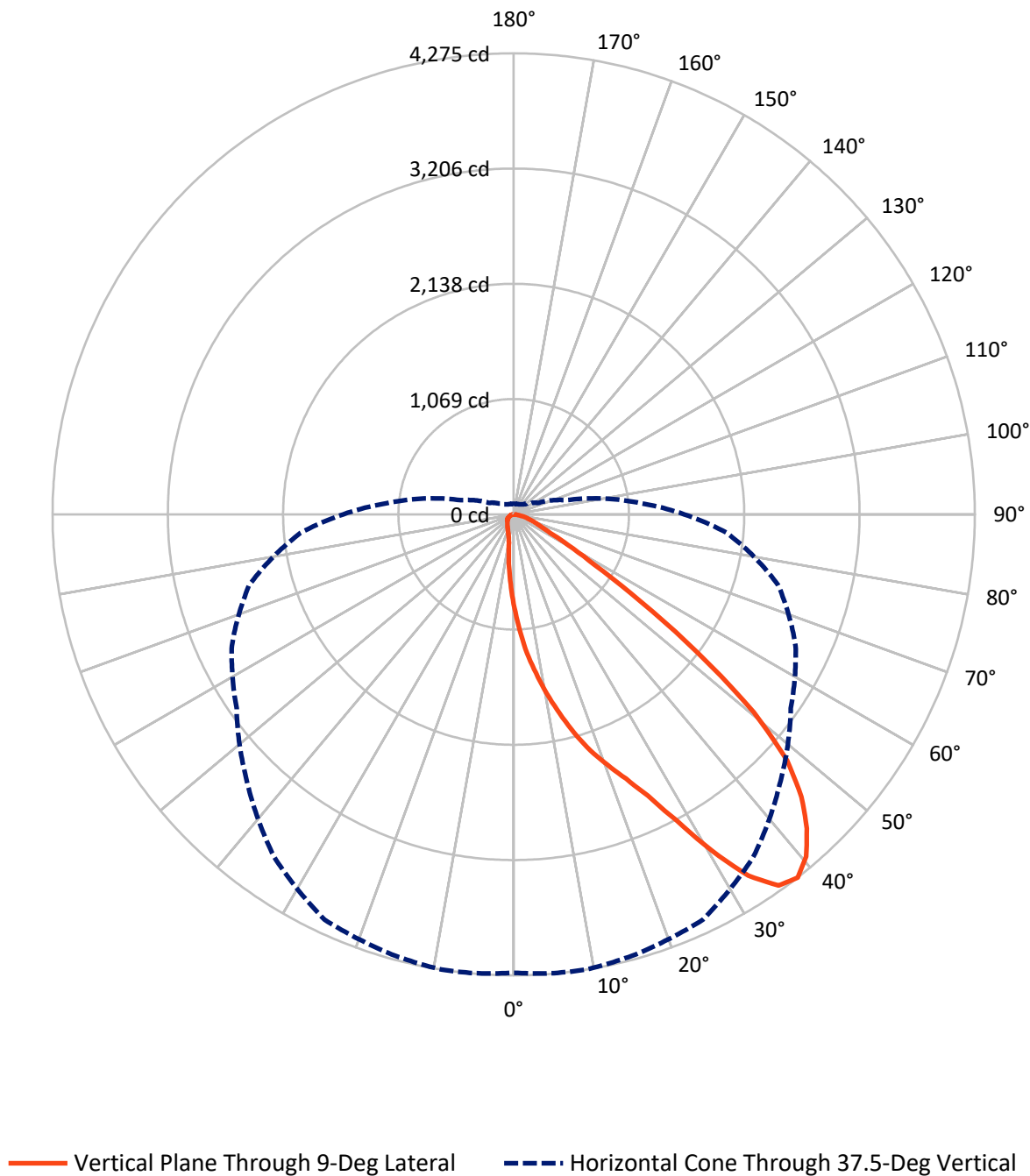
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.8 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	797.6	0.0	797.6
	% Fixture	12.2	0.0	12.2
Street Side	Lumens	5760.4	0.0	5760.4
	% Fixture	87.8	0.0	87.8
Total	Lumens	6558.0	0.0	6558.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.1	1.3
10°-20°	302.9	4.6
20°-30°	622.3	9.5
30°-40°	1100.0	16.8
40°-50°	1461.2	22.3
50°-60°	1385.9	21.1
60°-70°	1057.3	16.1
70°-80°	512.6	7.8
80°-90°	28.8	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°	6558.0	100.0
0°-180°	6558.0	100.0

Coefficient of Utilization



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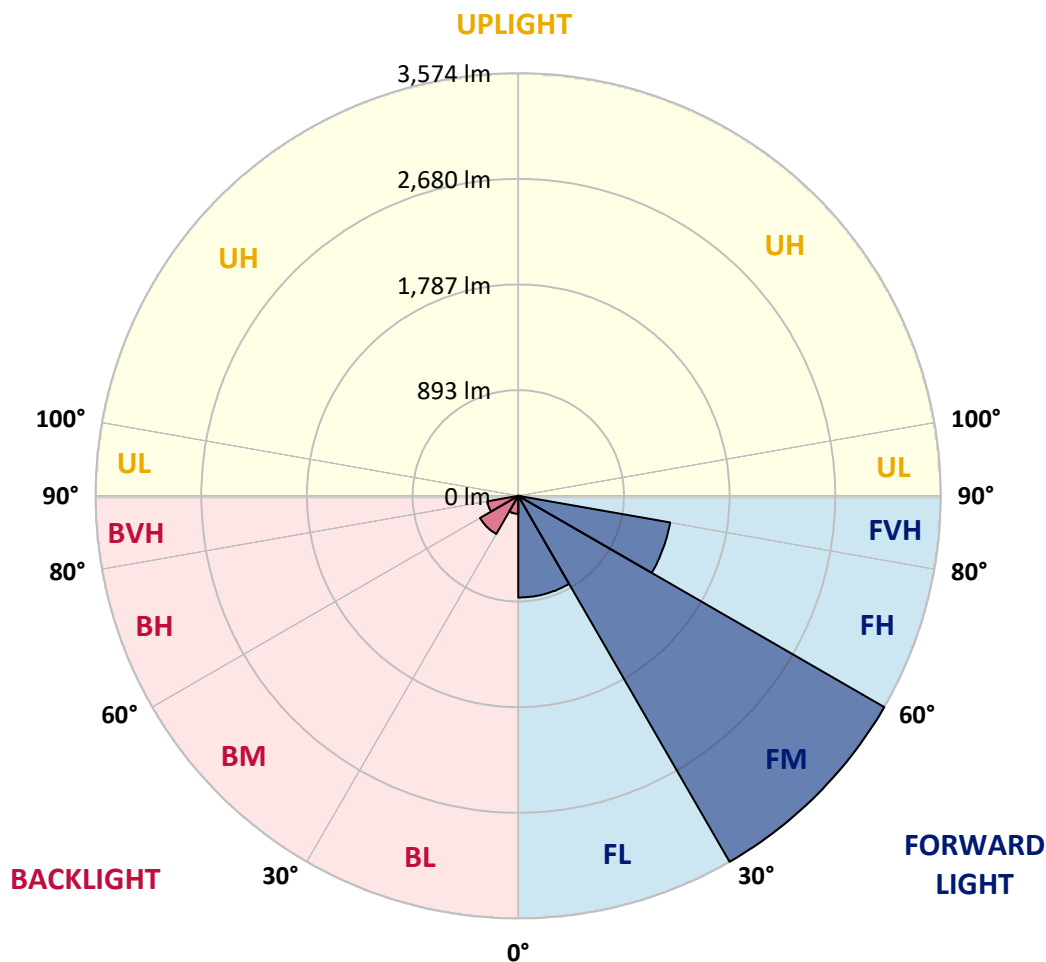
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	860.1	13.1			
FM	(30°-60°)	3573.8	54.5			
FH	(60°-80°)	1303.7	19.9			G1/1800
FVH	(80°-90°)	22.8	0.3			G1/100
BL	(0°-30°)	152.2	2.3	B1/500		
BM	(30°-60°)	373.2	5.7	B1/1000		
BH	(60°-80°)	266.1	4.1	B1/500		G1/500
BVH	(80°-90°)	6.0	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°	866.9	866.9	866.9	866.9	866.9	866.9	866.9	866.9	866.9	866.9	866.9
2.5°	1074.2	1055.3	1076.9	1074.2	1055.3	1043.2	1005.5	993.4	949.0	916.7	888.4
5°	1294.9	1276.1	1294.9	1289.6	1262.6	1233.0	1171.1	1130.7	1051.3	981.3	918.0
7.5°	1478.0	1478.0	1486.1	1487.4	1455.1	1409.4	1332.6	1272.1	1160.3	1052.7	951.7
10°	1675.9	1677.2	1694.7	1682.6	1639.5	1577.6	1480.7	1404.0	1269.4	1128.0	984.0
12.5°	1887.2	1888.6	1894.0	1888.6	1837.4	1758.0	1640.9	1539.9	1385.1	1214.2	1028.4
15°	2098.6	2099.9	2106.6	2097.2	2040.7	1947.8	1814.5	1690.7	1507.6	1311.1	1082.3
17.5°	2296.4	2299.1	2304.5	2292.4	2233.2	2122.8	1986.8	1837.4	1638.2	1414.8	1142.8
20°	2474.1	2476.8	2480.9	2464.7	2405.5	2295.1	2148.4	1992.2	1771.5	1521.1	1208.8
22.5°	2653.2	2655.9	2662.6	2641.0	2575.1	2448.6	2304.5	2143.0	1912.8	1638.2	1285.5
25°	2882.0	2884.7	2890.1	2859.1	2768.9	2620.9	2468.7	2303.2	2066.3	1770.1	1379.8
27.5°	3217.2	3214.5	3214.5	3158.0	3003.1	2810.7	2634.3	2466.1	2231.8	1911.5	1483.4
30°	3631.8	3625.0	3621.0	3544.3	3323.5	3024.7	2803.9	2618.2	2390.7	2060.9	1595.1
32.5°	4003.3	4003.3	3995.2	3914.5	3680.2	3312.8	2984.3	2766.2	2544.1	2211.6	1710.9
35°	4222.7	4232.1	4228.1	4167.5	3996.6	3622.4	3227.9	2943.9	2705.7	2369.1	1849.5
37.5°	4252.3	4271.2	4275.2	4238.9	4148.7	3875.4	3498.5	3136.4	2883.3	2538.7	1984.2
40°	4132.5	4172.9	4172.9	4167.5	4135.2	3995.2	3726.0	3359.9	3066.4	2715.1	2120.1
42.5°	3948.1	3989.8	3984.5	4004.6	3996.6	3967.0	3853.9	3568.5	3249.5	2896.8	2243.9
45°	3707.2	3750.2	3739.5	3775.8	3792.0	3824.3	3840.4	3713.9	3429.9	3094.7	2382.6
47.5°	3320.8	3393.5	3409.7	3474.3	3541.6	3642.5	3719.3	3766.4	3598.1	3307.4	2533.4
50°	2750.1	2852.4	2884.7	3020.6	3205.1	3413.7	3537.6	3701.8	3716.6	3525.4	2696.2
52.5°	1969.3	2087.8	2137.6	2361.1	2740.7	3104.1	3327.6	3559.1	3762.3	3734.1	2872.6
55°	1273.4	1374.4	1422.8	1632.8	2137.6	2708.4	3079.9	3374.7	3736.8	3925.2	3074.5
57.5°	784.8	842.7	875.0	1055.3	1519.7	2200.9	2755.5	3205.1	3658.7	4090.8	3284.5
60°	529.0	562.7	578.8	663.6	1032.5	1644.9	2309.9	3027.4	3556.4	4202.5	3475.6
62.5°	351.3	362.1	378.3	430.8	681.1	1155.0	1774.2	2709.7	3479.7	4209.3	3617.0
65°	271.9	277.3	284.0	306.9	420.0	807.7	1247.8	2195.5	3365.2	4066.6	3661.4
67.5°	214.0	219.4	227.5	239.6	304.2	547.9	849.4	1608.6	3131.0	3843.1	3588.7
70°	168.3	172.3	177.7	188.5	236.9	397.1	561.3	1068.8	2658.5	3630.4	3359.9
72.5°	133.3	137.3	142.7	153.5	192.5	290.8	385.0	666.3	2050.1	3370.6	2919.7
75°	105.0	107.7	111.7	122.5	154.8	226.1	261.1	398.4	1393.2	2895.5	2274.9
77.5°	52.5	64.6	74.0	84.8	113.1	156.1	173.6	220.8	588.2	1486.1	1085.0
80°	31.0	37.7	40.4	47.1	74.0	94.2	94.2	88.8	185.8	570.7	442.9
82.5°	17.5	24.2	25.6	26.9	44.4	53.8	43.1	32.3	37.7	191.1	129.2
85°	5.4	8.1	9.4	10.8	14.8	16.2	14.8	13.5	10.8	18.8	12.1
87.5°	0.0	0.0	0.0	0.0	1.3	2.7	2.7	2.7	4.0	4.0	4.0
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°	866.9	866.9	866.9	866.9	866.9	866.9	866.9	866.9	866.9	866.9	866.9
2.5°	872.3	854.8	821.1	790.2	760.5	739.0	718.8	700.0	686.5	675.7	674.4
5°	884.4	849.4	784.8	724.2	669.0	623.2	584.2	553.2	530.4	514.2	512.9
7.5°	900.5	846.7	748.4	658.2	576.1	510.2	453.6	411.9	382.3	370.2	360.8
10°	914.0	844.0	712.1	592.3	484.6	401.1	333.8	292.1	270.6	262.5	258.5
12.5°	936.9	846.7	681.1	531.7	405.2	306.9	255.8	232.9	223.5	216.7	215.4
15°	970.5	858.8	651.5	472.5	324.4	247.7	218.1	203.3	193.8	192.5	191.1
17.5°	1004.2	869.6	624.6	411.9	269.2	215.4	195.2	183.1	176.3	175.0	175.0
20°	1043.2	883.0	595.0	354.0	230.2	193.8	177.7	168.3	160.2	158.8	158.8
22.5°	1089.0	901.9	566.7	302.9	204.6	177.7	164.2	153.5	146.7	145.4	145.4
25°	1150.9	930.2	543.8	265.2	187.1	164.2	152.1	142.7	137.3	134.6	134.6
27.5°	1219.6	969.2	527.7	242.3	175.0	153.5	141.3	133.3	127.9	125.2	125.2
30°	1296.3	1012.3	516.9	232.9	168.3	144.0	133.3	125.2	118.5	117.1	117.1
32.5°	1381.1	1062.1	510.2	234.2	166.9	137.3	125.2	117.1	111.7	109.0	109.0
35°	1475.3	1117.3	506.1	242.3	169.6	131.9	118.5	110.4	105.0	102.3	102.3
37.5°	1580.3	1181.9	506.1	250.4	176.3	130.6	111.7	103.6	99.6	96.9	96.9
40°	1678.6	1250.5	511.5	259.8	183.1	130.6	106.3	99.6	94.2	91.5	91.5
42.5°	1755.3	1289.6	515.6	269.2	187.1	129.2	101.0	94.2	90.2	87.5	87.5
45°	1842.8	1331.3	507.5	273.3	187.1	126.5	96.9	90.2	86.2	83.5	83.5
47.5°	1939.7	1382.4	506.1	276.0	183.1	121.1	92.9	86.2	83.5	80.8	80.8
50°	2038.0	1439.0	508.8	274.6	177.7	113.1	87.5	83.5	79.4	76.7	76.7
52.5°	2149.7	1498.2	514.2	271.9	165.6	103.6	83.5	79.4	75.4	72.7	71.3
55°	2273.6	1562.8	525.0	266.5	149.4	94.2	79.4	75.4	70.0	67.3	66.0
57.5°	2416.2	1642.2	537.1	255.8	131.9	86.2	75.4	70.0	61.9	57.9	56.5
60°	2552.2	1732.4	550.6	230.2	114.4	78.1	71.3	63.3	55.2	52.5	51.2
62.5°	2680.1	1821.3	557.3	184.4	96.9	71.3	67.3	57.9	49.8	47.1	45.8
65°	2762.2	1918.2	542.5	125.2	79.4	66.0	61.9	53.8	45.8	41.7	41.7
67.5°	2767.6	1964.0	491.3	82.1	64.6	59.2	56.5	48.5	40.4	37.7	36.3
70°	2631.6	1895.3	375.6	64.6	53.8	51.2	51.2	43.1	35.0	32.3	31.0
72.5°	2319.3	1678.6	239.6	52.5	45.8	43.1	43.1	36.3	31.0	26.9	25.6
75°	1830.7	1294.9	127.9	43.1	37.7	36.3	33.7	29.6	25.6	22.9	21.5
77.5°	841.3	570.7	59.2	31.0	28.3	28.3	25.6	21.5	20.2	17.5	17.5
80°	332.5	193.8	29.6	20.2	18.8	18.8	18.8	14.8	14.8	12.1	10.8
82.5°	91.5	40.4	14.8	12.1	12.1	12.1	10.8	9.4	9.4	8.1	8.1
85°	9.4	6.7	6.7	6.7	6.7	5.4	5.4	4.0	2.7	2.7	2.7
87.5°	4.0	4.0	4.0	4.0	4.0	2.7	1.3	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)